APPENDIX C

College of the Desert
West Valley Campus Master Plan and Phase 1 Project

Traffic Impact Study

Prepared by

Endo Engineering
28811 Woodcock Drive
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July 15, 2015

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Mr. John Criste
Terra Nova Planning and Research
42635 Melanie Place
Palm Desert, California 92211

SUBJECT: College of the Desert West Valley Campus Master Plan and Phase I Project Traffic Impact Study

Dear Mr. Criste;

Endo Engineering is pleased to submit this evaluation of the transportation impacts associated with the College of the Desert West Valley Campus (COD WVC) Master Plan and Phase I Project proposed for 29.27 acres previously developed as the Palm Springs Mall. The College of the Desert West Valley Campus would be located in the heart of Palm Springs and designed to serve 200 full-time equivalent students (FTES) upon opening in the year 2018. Upon full implementation of the West Valley Campus Master Plan in the year 2030, the facilities would be designed to serve approximately 3,000 FTES from the western Coachella Valley area of Riverside County, California.

The project site is located north of Baristo Road and the Palm Springs High School, south of Tahquitz Canyon Way, east of Sunset Way, and west of Farrell Drive. The Palm Spring Mall site is zoned C-S-C (Community Shopping Center) and has entitlements for approximately 315,119 square feet of GLA within the mall building, but is largely unoccupied. To implement the campus master plan, the existing building space within the mall would be demolished and Kaplan College, a private two-year career college that occupies 20,080 square feet of GFA, would be displaced. The free-standing Jack in the Box fast-food restaurant in the northeast corner of the site and the Camelot Festival Theaters, located on 1.3 acres at the southwest corner of the site, would remain.

The WVC Campus Master Plan would provide up to 250,000 S.F. of building floor area for educational facilities (classrooms, lecture halls, labs, etc.) and other instructional support uses. In addition, ancillary uses are proposed including a 40,000 S.F. conference center and 10,000 S.F. of college retail facilities (e.g., a bookstore, a food court, a copy center, convenience goods and services). The project would also make provision for a 30,000 S.F. library, which may be a City, COD, or joint City/COD facility.

The information necessary to identify the transportation-related implications of the project and focus on those determined to be potentially significant has been documented within this report. Fifteen existing key intersections and the site access intersections were analyzed. Seven scenarios were evaluated including: (1) existing conditions; (2) existing plus Phase I Project conditions; (3) existing plus Campus Master Plan buildout conditions; (4) opening year 2018 plus cumulative conditions; (5) opening year 2018 plus cumulative and Phase I Project conditions; (6) General Plan buildout conditions; and (7) General Plan plus Campus Master Plan buildout conditions. These analyses were conducted to identify the improvements necessary to alleviate any deficiencies identified and ensure that acceptable traffic operations are maintained.

The unique travel patterns in the area and the transportation needs of the campus population have been taken into account in the development of appropriate provisions for direct and easy to identify site access locations and internal circulation. The surrounding street system provides direct access for transit, emergency, and service vehicles as well as adequate capacity to handle the anticipated peak traffic demands. To minimize congestion, the proposed 1,330 off-street parking spaces would be accessible from the various approach routes and distributed in relation to the major vehicle entry points and the directional distribution of vehicular approach. Safe and convenient pedestrian and bicycle access connections link transit stops and the surrounding four-lane thoroughfares to the campus in a manner designed to provide continuity, minimize traffic conflicts, and incorporate provisions for the mobility impaired.

It has been a pleasure to assist you in defining and evaluating this project, which will be of lasting value to the community. We trust that the information provided herein will be of immediate and lasting value to you and the Desert Community College District in the preparation and processing of the environmental documentation required for the West Valley Campus Master Plan and Phase I Project. If questions or comments arise regarding the findings and recommendations within this report, please do not hesitate to contact our offices. We look forward to discussing our analyses and conclusions with you.

Cordially,
ENDO ENGINEERING

Vicki Lee Endo, P.E., T.E.
Registered Professional
Traffic Engineer TR 1161

TRAFFIC IMPACT STUDY

COLLEGE OF THE DESERT
WEST VALLEY CAMPUS MASTER PLAN
AND PHASE I PROJECT

SOUTH OF TAHQUITZ CANYON WAY AND NORTH OF BARISTO ROAD
WEST OF FARRELL DRIVE AND EAST OF SUNSET WAY

CITY OF PALM SPRINGS, CALIFORNIA

JULY 15, 2015

Prepared For:

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ES EXECUTIVE SUMMARY

1. Purpose and Objectives

This traffic impact study was developed for use in the preparation of the environmental documentation required to process the College of the Desert (COD) West Valley Campus (WVC) Master Plan and Phase I Project. The study was conducted to provide an objective and factually supported full-disclosure analysis of the potentially significant transportation consequences associated with implementation of the proposed project. In the process, potential cumulative transportation impacts associated with other future development within the study area and throughout the City of Palm Springs were evaluated. To achieve the objective, information was obtained from field observations in the study area, discussions with representatives of affected agencies and the project design team. Adopted plans and policies were analyzed. Available studies, reports, data, literature, and relevant local and regional transportation models were also reviewed.

The analyses summarized herein were designed to achieve the following objectives.

- Describe the thresholds used to determine if a significant impact would occur.
- Collect and analyze the data necessary to identify, disclose, and focus on those impacts determined to be potentially significant.
- Identify feasible transportation and/or access improvements that would either avoid significant adverse effects through the project design process or reduce them to acceptable levels through the incorporation of appropriate mitigation.
- Foster coordination during the development review process.
- Clearly document the study methodology, assumptions, findings, and recommendations to support informed decision making.

2. Project Location

The project site is located within the western Coachella Valley portion of Riverside County, California. It is south of Interstate 10 and west of the Palm Springs International Airport, within the heart of the City of Palm Springs. The project site is comprised of 29.27 acres previously developed as the Palm Springs Mall, a community shopping center located on the southwest corner of the intersection of Farrell Drive and Tahquitz Canyon Way. The site extends south of Tahquitz Canyon Way to Baristo Road and west of Farrell Drive to Sunset Way.

3. Surrounding Land Uses

The project site is located north of the Palm Springs High School and east of a single-family residential neighborhood with single-story homes. Multiple-story apartments occupy the area north of Tahquitz Canyon Way, opposite the project site. A medical office building occupies the southeast corner at the intersection of Farrell Drive and Tahquitz Canyon Way. The vacant land east of Farrell Drive, opposite the project site is the cumulative Jul Residential Development site. The single-story Plaza East professional office building occupies the southwest corner at the intersection of Sunset Way and Tahquitz Canyon Way and shares access to this signalized intersection with the project site.

4. Existing Land Uses and Entitlements

The project site has entitlements for approximately 315,119 square feet of gross leasable area (GLA) within the main mall building. The Palm Spring Mall is largely unoccupied. Kaplan College, a private two-year career college, occupies 20,080 square feet of GLA within the mall building. The Camelot Festival Theatres (the venue for the annual Palm Springs Film Festival) provide three screens and 862 seats located at the southwest corner of the site within the 1.3-acre Parcel 1. Parcel 2 includes 1.12 acres located on the northwest corner of the intersection of Farrell Drive and Baristo Road currently developed as off-street parking serving the project site. A free-standing Jack in the Box fast food restaurant with 2,736 SF of building floor area and a drive-through service window is located in the northeast corner of the site where it occupies the 1.1-acre Parcel 3.

5. Project Description

The Desert Community College District is proposing the development of a College of the Desert West Valley Campus within the project site. Phase I of the College of the Desert West Valley Campus would provide up to 50,000 square feet of educational facilities designed to serve 786 enrolled students (200 full-time equivalent students) upon opening in December of the year 2018. Upon full implementation of the West Valley Campus Master Plan (which was assumed to occur in the year 2030), the academic facilities would occupy up to 250,000 square feet of floor space designed to serve approximately 8,040 enrolled students (3,000 full-time equivalent students). Ancillary uses are proposed including a 40,000 S.F. conference center and 10,000 S.F. of college retail facilities (e.g., a bookstore, a food court, a copy center, convenience goods and services). The project would also make provisions for a future 30,000 S.F. library, which may be a City, COD, or joint City/COD facility.

To implement the West Valley Campus Master Plan, the existing building space within the centrally located mall building would be demolished, displacing the only current tenant, the Kaplan College. The Jack in the Box fast food restaurant located in the northeast corner of the site and the Camelot Festival Theaters located at the southwest corner of the site, are expected to remain upon implementation of the proposed project. The Phase I Project and WVC Master Plan do not include any modifications to the existing access connections on Tahquitz Canyon Way, Farrell Drive, or Baristo Road adjacent to these two existing businesses.

The proposed project would take access from all three of the abutting roadways: Tahquitz Canyon Way, Farrell Drive, and Baristo Road. Signalized site access for the proposed project would be provided via the two existing signalized site access intersections: (1) Sunset Way at Tahquitz Canyon Way, and (2) the Palm Springs High School Access at Baristo Road. No additional signalized access is required or proposed.

Upon implementation of the WVC Master Plan, three of the existing unsignalized site access connections would be closed, one on each abutting roadway. The 28-foot wide right-in/right-out driveway located on Tahquitz Canyon Way, approximately 340 feet east of Sunset Way, would be closed. The 36-foot wide full-turn access located on Farrell Drive, approximately 375 feet north of Baristo Road would also be closed. The 40-foot wide full-turn driveway located on Baristo Road, approximately 230 feet west of west of Farrell Drive, would be closed to reduce the number of conflicting movements and separate conflict areas on Baristo Road in the vicinity of the Palm Springs High School access connections and the existing transit bus pull-out and bus stops.

The existing 40-foot wide full-turn northern site driveway located on Farrell Drive, 200 feet south of Tahquitz Canyon Way, is a shared/joint use access serving the adjacent Jack in the Box restaurant that would be retained with the proposed project. The existing central site driveway on Farrell Drive, located approximately 500 feet south of Tahquitz Canyon Way, would be relocated at the center of the site frontage and reconstructed as a multilane divided main campus entry. The new location would increase the separation between the main site access and the existing bus turnout at the bus stop located south of the Jack in the Box access. The proposed location at the midpoint between Tahquitz Canyon Way and Baristo Road, would ensure that the main site access would not interfere with the progression of traffic from one signalized intersection to the next on Farrell Drive, should traffic signal control ever be needed at the main site access. It would also ensure that the main site access is located as far as possible from the functional areas of the existing signalized intersections on Farrell Drive to the north and south.

A total of 160 off-street parking spaces would be provided for the Phase I Project with temporary overflow parking for an additional 50 vehicles. A total of 1,330 off-street parking spaces would be provided upon buildout of the WVC Master Plan.

6. Study Area and Scenarios Evaluated

The study area and the fifteen existing key intersections that were evaluated are shown in Figure 1-2. The study area extends from Alejo Road south to Ramon Road and from Sunrise Way east to El Cielo Road. The traffic impact analysis addressed seven scenarios including: (1) existing conditions; (2) existing plus Phase I Project conditions; (3) existing plus the WVC Campus Master Plan buildout conditions; (4) opening year 2018 plus cumulative conditions; (5) opening year 2018 plus cumulative and Phase I Project conditions; (6) General Plan buildout conditions without the Palm Springs Mall building (315,119 SF of GLA); and (7) General Plan plus the WVC Campus Master Plan buildout conditions.

Peak season traffic volumes were evaluated based on new 24-hour and peak hour traffic count data collected on January 13-15, 2015 (Tuesday, Wednesday and Thursday). New directional 24-hour traffic counts were made at three locations: (1) Tahquitz Canyon Way, west of Farrell Drive, (2) Farrell Drive, south of Tahquitz Canyon Way, and (3) Ramon Road, west of Farrell Drive. The new 24-hour traffic counts were compared to available 24-hour count data published by Coachella Valley Association of Governments (CVAG) in the *2013 Traffic Census Report* and the recently released *2015 Traffic Census Report* to verify that the new count data reflects peak season conditions in the study area. The new counts were also used to identify an appropriate factor for the study area for use in estimating daily traffic volumes from the new peak hour traffic count data collected at the fifteen key intersections.

New intersection turning movement traffic counts were made at the intersection of Farrell Drive with Ramon Road and the four existing signalized key intersections adjacent to the site in the morning (between 6:30 AM and 9:00 AM) during the midday (between 11:00 AM and 1:00 PM) and during the afternoon (between 2:30 PM and 5:00 PM). At the remaining ten key intersections, new intersection turning movement traffic counts were made during the midday (between 11:00 AM and 1:00 PM) and during the afternoon (between 3:00 PM and 5:00 PM). The traffic volume during the highest volume hour associated with each traffic count interval was evaluated. The peak hour factors determined from the intersection counts were used for the operational analysis of each intersection to ensure that the peak 15-minute flow rate was analyzed.

7. Existing Traffic Conditions

The project site is located within a suburban area characterized by medium to long block lengths. Abutting rodways have posted speed limits of either 40 MPH or 45 MPH and design speeds of 50 MPH or 55 MPH. A raised (nontraversable) landscape median exists on Tahquitz Canyon Way, a four-lane divided Major Thoroughfare. Adjacent to the project site, both Farrell Drive and Baristo Road have continuous two-way left-turn lanes. Transportation infrastructure exists at the project site that was constructed to serve the Palm Springs Mall when fully occupied per the existing entitlements. The project can realize cost efficiencies by taking advantage of the existing transportation infrastructure.

The site has more than enough access capacity to accommodate the proposed project. The site has extensive frontage on three General Plan Streets including: 1,220 feet of frontage on Farrell Drive and 1,050 feet of frontage on both Tahquitz Canyon Way and Baristo Road. There is a signalized site access intersection at the northwest corner of the site (Sunset Way at Tahquitz Canyon Way) and on the southern site boundary, 690 feet west of Farrell Drive (at the Palm Springs High School/Palm Springs Mall Access at Baristo Road). The site currently has nine unsignalized access connections on three General Plan Streets including three on Tahquitz Canyon Way, three on Farrell Drive, and three on Baristo Road.

Trip Generation

The three existing land uses within the Palm Springs Mall site are currently generating approximately 2,410 weekday trips (entering plus exiting). These uses generate the most trips during the midday peak hour when 257 trips are generated (136 inbound and 121 outbound). During the morning and evening peak hour, the existing uses within the site generate approximately 164 trips and 199 trips, respectively.

Assuming full occupancy of the site per the existing entitlements (including the Jack in the Box restaurant and the Camelot Theatres but not the Kaplan College) the site-generated traffic volumes would total 13,640 weekday trips. Approximately 8.5 percent of the weekday trips (1,166 entering plus exiting trips) would occur during the PM peak hour. A total of 1,084 trips (7.9 percent) would occur during the midday peak hour. Only 440 inbound plus outbound trips (3.2 percent of the site-generated weekday trips) would occur during the morning peak hour.

Minimum Performance Standard

The Circulation Element of the *Palm Springs 2007 General Plan* includes as a policy, the provision and maintenance of level of service (LOS) D operation for the City's circulation network, based upon average weekday conditions during the peak month of March. The peak hour delay and levels of service were determined for the existing key intersections with the operational methodologies outlined in the *Highway Capacity Manual* (HCM 2000).

The application of the City of Palm Springs minimum performance standard is straightforward for signalized and all-way stop-controlled (AWSC) intersections. The HCM 2000 defines a single overall level of service for intersections that are signalized or all-way STOP controlled, based on the average control delay during the peak hour. However, a single overall level of service for unsignalized intersections with two-way STOP control (TWSC) is not defined in the HCM 2000. For these intersections, the LOS is defined in terms of the average control delay associated with the minor-street approaches and the conflicting left-turn movements from the major street.

The City Engineer reviews on an individual basis intersections with TWSC that are projected to exhibit excessive control delay and a poor level of service (i.e., LOS E or LOS F) on one or both the minor-street approaches to determine the appropriate mitigation to meet the Palm Springs minimum intersection performance standard. Since traffic control signals may be one mitigation option, the location of the intersection under review in relation to other signalized intersections in the area is taken into consideration to determine if it would interfere with the progression of traffic on the major road from one signalized intersection to the next. The review process also takes into consideration the number of vehicles affected by the excessive delay on the approach with a poor LOS and whether or not alternative routes are available to satisfy the mobility needs of these motorists.

Current Peak Hour Traffic Operations

Traffic volumes vary by season within the study area as a result of the seasonal influx of "snow birds" that begins in October each year. By the end of May, most of the snow birds have left the area and traffic volumes have returned to normal in the study area. Based on these unique travel characteristics, the analysis summarized herein addressed peak season traffic conditions. Peak hour traffic creates the heaviest demand on the circulation system and the lane configuration at intersections is the limiting factor in roadway capacity. Consequently, peak hour intersection capacity analyses are useful indicators of worst-case conditions.

Conditions during the highest volume hour in the midday (11:00 AM to 1:00 PM) and afternoon (3:00 PM to 5:00 PM) were evaluated for all fifteen key intersections. In addition, a morning peak hour (6:30 AM to 9:00 AM) analysis was performed for five of the signalized key intersections, including the four signalized intersections adjacent to the Palm Springs Mall site and the intersection of Farrell Drive with Ramon Road. The PM peak hour traffic counts were started thirty minutes earlier at these five intersections (2:30 PM to 5:00 PM) to ensure that the school traffic generated when classes are dismissed for the day was reflected in the traffic volumes counted.

At some of the key intersections within the study area, the traffic volumes peak in the morning as well as during the midday and afternoon peak commuter travel periods. This reflects the traffic flows generated by the Palm Springs High School and Saint Theresa Elementary School as well as the commuter trips generated by the professional offices along Tahquitz Canyon Way and the existing residential land uses within the study area. Consequently, the morning peak hour volumes were also evaluated at these five key intersections in the immediate vicinity of the project site.

All ten of the signalized key intersections evaluated are currently providing LOS C or better levels of service during the peak hours. The all-way stop-controlled key intersection of Cerritos Drive with Baristo Road currently provides LOS B operation during the midday and evening peak hour. The Baristo Road approaches at this intersection exhibit the most control delay and operate at LOS B during the peak hours.

The current levels of control delay at the four unsignalized key intersections with two-way stop control are within the range considered acceptable by the City of Palm Springs. The majority of the motorists at these intersections are using the major streets and experience LOS A with relatively little control delay. The minor-street approaches at three of these intersections currently operate at LOS B or LOS C during the peak hours.

At the intersection of Civic Drive and Tahquitz Canyon Way, motorists on the northbound Civic Drive approach currently experience the most control delay (31.7 seconds/vehicle during the midday peak hour and 26.9 seconds/vehicle during the evening peak hour). This level of delay is consistent with LOS D operation. Current traffic volumes at this intersection do not meet or exceed the urban peak hour traffic signal volume warrants provided in the 2012 *California Manual of Uniform Traffic Control Devices* (CA MUTCD) for use in determining if the need for traffic control signals should be considered.

General Plan Circulation System

Tahquitz Canyon Way is a four-lane divided Major Thoroughfare adjacent to the project site with a raised (nontraversable) landscape median. Farrell Drive is classified as a four-lane divided Secondary Thoroughfare between Tahquitz Canyon Way and Ramon Road. Divided Secondary Thoroughfares may provide a raised landscaped median or a shared two-way left-turn center lane. The Circulation Element indicates that: *"It is the City's preference that landscape medians be used wherever divided roadway designations are shown unless traffic conditions dictate that the shared center left-turn lane is necessary."* The existing flush median on Farrell Drive, opposite the project site, is traversable (i.e., non-restrictive), 12 feet wide, and marked as a continuous two-way left-turn lane.

Baristo Road is classified as a four-lane undivided Secondary Thoroughfare within the study area. Baristo Road is currently improved in the vicinity of the project site with one through travel lane in each direction and a shared two-way left-turn center lane. This accommodates a Class II bike lane on both sides of Baristo Road and allows on-street parking in areas where there is direct residential frontage. The existing continuous two-way left-turn lane (TWLTL) adjacent to the project site improves traffic safety and operations by removing left-turning vehicles associated with the Palm Springs High School and the project site from the through travel lanes.

Public Transportation

The site has excellent access to public transportation. Two local transit lines (Line 14 and Line 24) are routed along Farrell Drive adjacent to the site. Three local transit lines (Line 14, 24 and 30) are routed along Baristo Road adjacent to the site. Two bus stops with transit shelters and transit bus turnouts are located on the perimeter of the site. One is located on the west side of Farrell Drive, approximately 315 feet south of the centerline of Tahquitz Canyon Way. The other is located on the north side of Baristo Road, approximately 325 feet west of the centerline of Farrell Drive.

8. Traffic Impacts

The proposed Phase I Project would generate approximately 970 weekday trips (entering and exiting). Approximately 9.7 percent of the weekday trips are projected to occur during the peak hours. The highest hourly entering volume (79 VPH) is expected to occur during the morning peak hour. The highest hourly exiting volume (35 VPH) is expected to occur during the evening peak hour. Upon implementation of the WVC Master Plan, approximately 9,880 weekday trips (entering and exiting) would be generated by the academic facilities. Of that total, 11.5 to 12 percent of the trips generated would occur during the peak hours. The highest hourly entering volume (954 VPH) is expected to occur during the morning peak hour. The highest hourly exiting volume (437 VPH) is expected to occur during the evening peak hour. The library would generate approximately 1,640 weekday trips, of which 34 would occur in the morning peak hour, 121 would occur during the midday peak hour, and 204 would occur during the evening peak hour.

Existing Plus Project Levels of Service

The evaluation of the existing plus Phase I Project scenario determined that all of the key intersections would operate at acceptable levels of service during the peak hours without mitigation. The Phase I Project traffic would not change the peak hour LOS at any of the key intersections evaluated.

The evaluation of the existing plus WVC Master Plan buildout scenario determined that all of the signalized key intersections would operate at acceptable levels of service during the peak hours without mitigation. The addition of project traffic would change the peak hour LOS at four of the signalized key intersections, but they would all continue to operate at LOS C or better during the peak hours. Four of the five unsignalized key intersections would operate at acceptable levels of service during the peak hours without mitigation. Project-related traffic would change the peak hour LOS on the minor-street approach at three of the unsignalized key intersections.

The midday peak hour operation of the northbound approach to the unsignalized intersection of Civic Drive and Tahquitz Canyon Way, would drop from LOS D to LOS E with the existing plus WVC Master Plan buildout scenario. The project would not add traffic to the northbound approach but would contribute to the conflicting traffic volumes on Tahquitz Canyon Way. A less direct alternative route is available via Baristo Road to satisfy the northbound travel demand at this intersection. The traffic volumes at this intersection would not be sufficient to meet urban peak hour traffic signal volume warrants.

Opening Year 2018 Levels of Service

Upon opening of the Phase I Project in the year 2018, all of the key intersections are projected to operate at acceptable levels of service during the peak hours except one. The Phase I Project traffic is not projected to change the peak hour LOS at any of the key intersections evaluated except one. The midday peak hour operation of the northbound approach to the unsignalized intersection of Civic Drive and Tahquitz Canyon Way, would drop from LOS D to LOS E following the addition of Phase I Project traffic to the conflicting traffic volumes on Tahquitz Canyon Way. The project would not add traffic to the northbound approach. The average delay on the northbound approach would increase by 0.3 seconds per vehicle, following the addition of Phase I Project traffic. A less direct alternative route via Baristo Road is available to meet the northbound travel demand at this intersection. The projected traffic volumes at this intersection would not be sufficient to meet urban peak hour traffic signal volume warrants in the year 2018.

Future Year 2030 Levels of Service

All of the signalized key intersections would operate at acceptable levels of service during the peak hours without mitigation in the year 2030 following implementation of the WVC Master Plan. The addition of project traffic would change the peak hour LOS at five of the ten signalized key intersections, but they would all continue to operate at LOS C or better during the peak hours.

The unsignalized key intersection with all-way stop control (Cerritos Drive at Baristo Road) would operate at acceptable levels of service during the peak hours without mitigation in the year 2030 following implementation of the WVC Master Plan. Project-related traffic is projected to result in the peak hour LOS at this intersection dropping from LOS A to LOS B during the midday and evening peak hours.

Three of the four key intersections with two-way stop control would operate at acceptable levels of service during the peak hours without mitigation in the year 2030 following implementation of the WVC Master Plan. The addition of project-related traffic would result in a decrease the peak hour LOS on the minor-street approach at all four of these intersections.

Civic Drive at Tahquitz Canyon Way

Upon implementation and full occupancy of the WVC Master Plan in the year 2030, the northbound Civic Drive approach at the intersection of Tahquitz Canyon Way is projected to operate at LOS E with an average control delay of 35.9 seconds per vehicle during the midday peak and 35.5 seconds per vehicle during the evening peak hour. Northbound vehicles will experience an average control delay that exceeds LOS D by 0.9 seconds per vehicle during the midday peak hour and 0.5 seconds per vehicle during the evening peak hour in the peak season. The projected year 2030+WVC Master Plan buildout peak hour traffic volumes on Civic Drive at the intersection of Tahquitz Canyon Way would not be sufficient to meet or exceed the urban peak hour traffic signal volume warrants**.** The intersection of Civic Drive and Tahquitz Canyon Way is located less than 600 feet west of the signalized intersection at El Cielo Road and Tahquitz Canyon Way.

There are feasible alternative routes available with the capacity to accommodate these movements if the delay becomes excessive. The increase in control delay that would be experienced by the through traffic on Tahquitz Canyon Way if a traffic signal control were introduced at this intersection would exceed the benefit (the reduction in the Civic Drive control delay) by a substantial margin. In view of these considerations, a traffic control signal would not be recommended as an appropriate form of mitigation for this intersection.

Unsignalized Site Access LOS

By closing three existing site access connections, including one on Tahquitz Canyon Way, one on Farrell Drive, and one on Baristo Road, the proposed project would improve traffic operations and traffic safety on these facilities in the vicinity of the site over the long term. All of the proposed unsignalized site access intersections are projected to provide acceptable levels of service during the peak hours in the year 2030. The proposed main site access on Farrell Drive (Intersection 20) is projected to provide acceptable levels of service during the peak hours with two-way stop control and the existing continuous two-way left-turn lane on Farrell Drive. The existing TWLTL would function as a refuge for left-turning vehicles entering and exiting the main site access drive, allowing two-stage left-turn maneuvers.

Two existing driveways on Tahquitz Canyon Way (Access A at Intersection 16 and Access B at Intersection 17) will be consolidated into a single site driveway located 500 feet west of Farrell Drive at the conference center. This driveway should provide a throat width of 26 feet (minimum) to accommodate a 14-foot wide entry lane and a 12-foot wide exit lane that will permit the simultaneous entry and exit of passenger vehicles. The throat length should provide a minimum of 75 feet of non-conflicted reservoir space for entering and exiting passenger vehicles.

9. Recommendations

A list of the standard mitigation that apply to all developments as conditions of approval and other recommendations suggested to minimize potential impacts are provided in Section 4.5 and Section 4.6.

1.0 PROPOSED DEVELOPMENT

1.1 Project Location

The project site is located within the City of Palm Springs, which is in the western portion of the Coachella Valley, in Riverside County, California. Figure 1-1 (Regional Location) shows the project site in its regional context. The project site is located south of Interstate 10, between the interchanges at Indian Avenue/Indian Canyon Drive and Gene Autry Trail. The site is south of Vista Chino (State Route 111), north of Ramon Road, 0.69 miles west of the Palm Springs International Airport. At its closest point, the centerline of the Palm Springs International Airport main runway is located approximately 3,650 feet east of the eastern site boundary.

The project site is currently developed as the Palm Springs Mall, which is largely vacant and bounded on the south by Baristo Road, on the north by Tahquitz Canyon Way, and on the east by Farrell Drive. As shown in Figure 1-2, (Study Area and Key Intersections) the western site boundary is aligned parallel to and extends south of the terminus of Sunset Way. The project site is north of the Palm Springs High School.

Access to the site is currently provided by two existing signalized intersections: (1) Sunset Way at Tahquitz Canyon Way, and (2) Baristo Road at the Palm Springs High School/Palm Springs Mall access. In addition, nine unsignalized driveways, that were constructed to serve the Palm Springs Mall, provide access to the site. Three of the existing driveways are on the south side of Tahquitz Canyon Way, three are on the west side of Farrell Drive, and three on the north side of Baristo Road.

1.2 Existing Entitlements

The Palm Springs Mall site is an underutilized commercial development located adjacent to the south side of Tahquitz Canyon Way, one of the most important and visible east-west corridors in the City of Palm Springs. This corridor serves a mixed/multi-use area between Downtown Palm Springs and the Palm Springs International Airport. Land uses adjacent to Tahquitz Canyon Way include residential, professional office, and commercial uses.

The Palm Spring Mall site is largely unoccupied with entitlements for approximately 315,119 square feet of gross leasable area (GLA) within the main mall building. Figure 1-3 (Existing Palm Springs Mall Site Plan) illustrates the location of the existing mall building in relation to the eleven existing site access points and the currently occupied land uses within and adjacent to the project site.

A transit bus stop and bus turnout exists on the east side of Farrell Drive, south of the northern site access. A transit bus stop and bus turnout is also located on the north side of Baristo Road, at the middle of the southern site boundary. This location is adjacent to the signalized intersection on Baristo Road at the Palm Springs High School/Palm Springs Mall access. This intersection provides a protected crossing of Baristo Road for pedestrians who use SunLine Transit buses to travel to/from the Palm Springs High School.

1.3 Existing On-Site Land Uses

Kaplan College Palm Springs was founded in the fall of 2004 as a branch of the main Kaplan College campus in Vista, California, a provider of educational and career services for individuals and businesses. Located at 2475 East Tahquitz Canyon Way, Kaplan College Palm Springs is a private two-year career college that currently occupies approximately 20,080 square feet of gross floor area within the Palm Springs Mall building. The facilities include: classrooms, a library, student and staff lounges, business offices, and a reception area. The programs offered include a medical assistant program, a massage therapy program, a dental assistant program, and a criminal justice program. Each program is taught in specially built classrooms, fully equipped laboratories, and computer rooms.

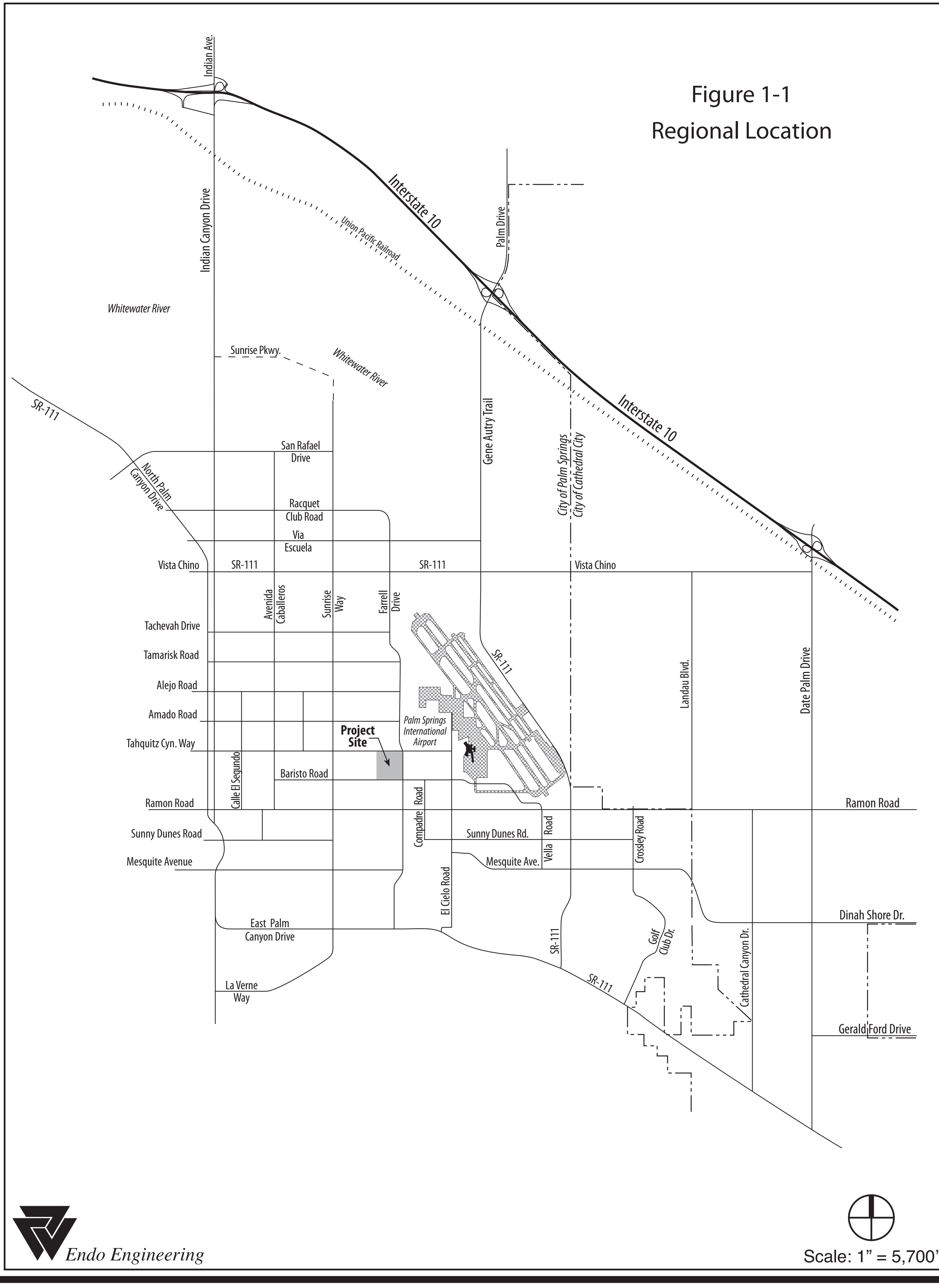


Figure 1-1
Regional Location

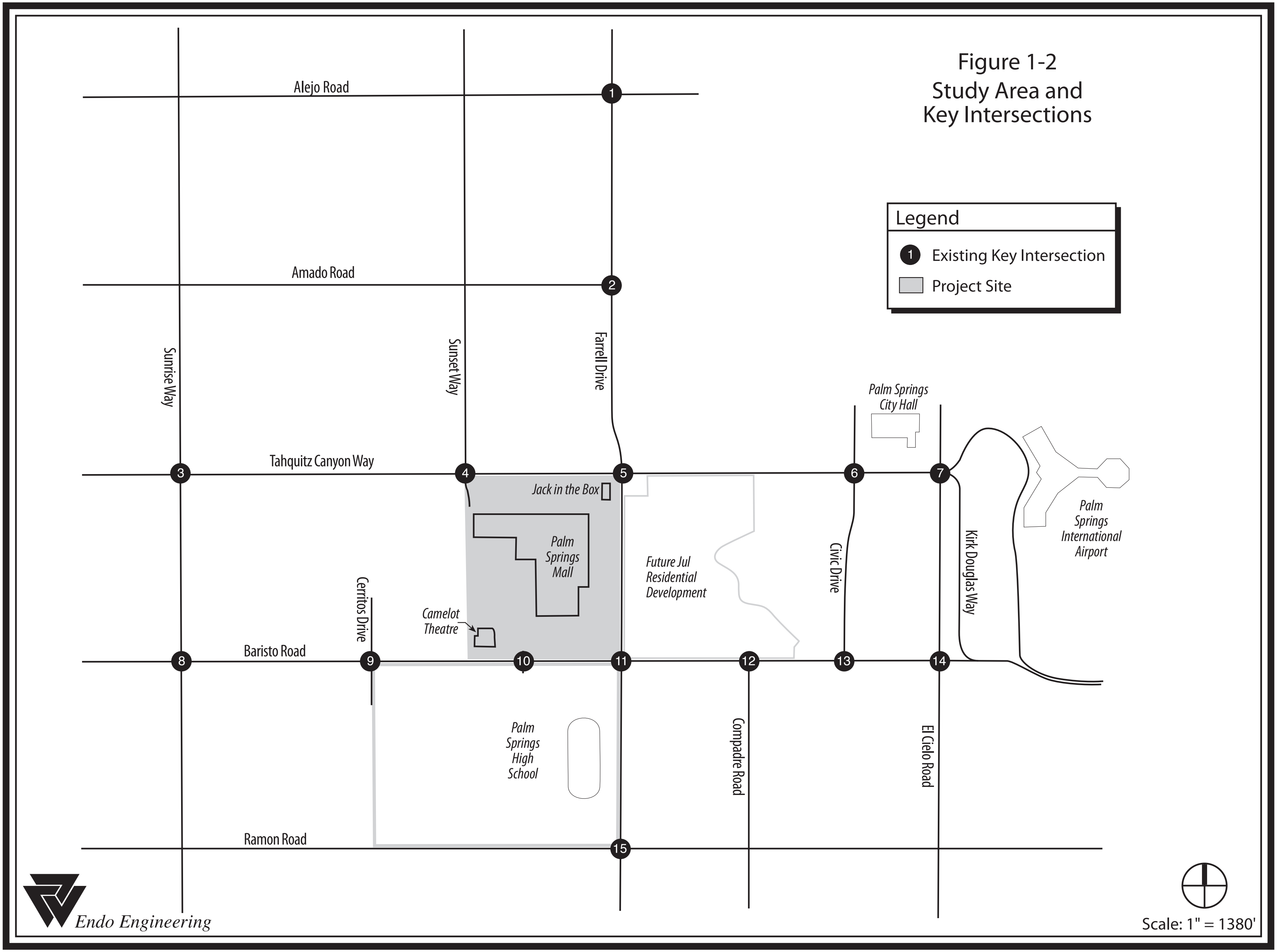
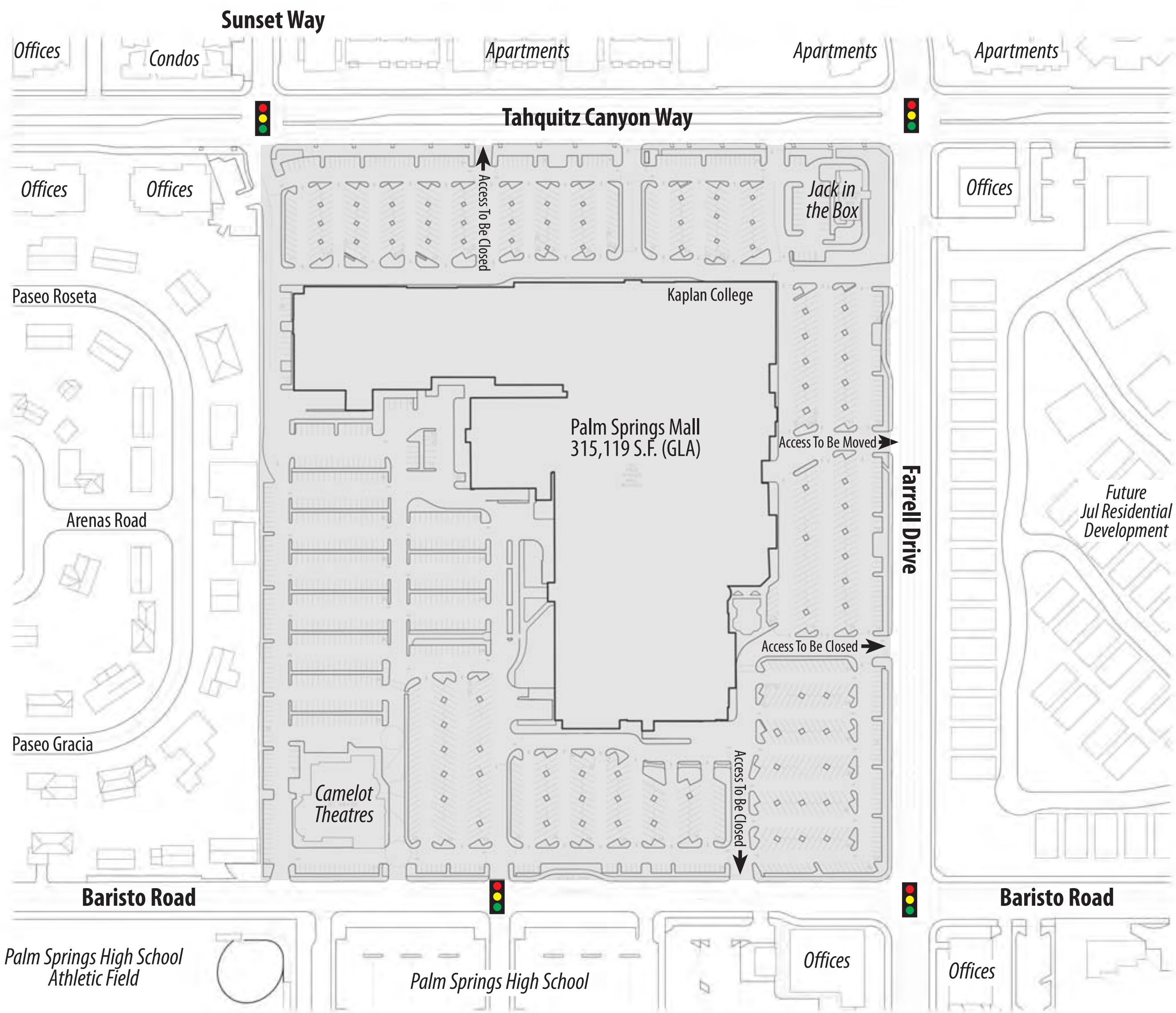


Figure 1-2
Study Area and
Key Intersections
Legend
1 Existing Key Intersection
Project Site
Alejo Road
Amado Road
Sunrise Way
Sunset Way
Farrell Drive
Tahquitz Canyon Way
Cerritos Drive
Baristo Road
Ramon Road
Civic Drive
Kirk Douglas Way
Compadre Road
El Cielo Road
Palm Springs City Hall
Palm Springs International Airport
Jack in the Box
Palm Springs Mall
Camelot Theatre
Future Jul Residential Development
Palm Springs High School
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Endo Engineering
Scale: 1" = 1380'

Figure 1-3
Palm Springs Mall
Existing Site Plan



Source: HMC Architects

Scale: 1" = 300'

A free-standing Jack in the Box fast food restaurant with drive-through service is located at on the southwest corner of the intersection of Farrell Drive with Tahquitz Canyon Way. This 2,736 S.F. restaurant has one access connection on Tahquitz Canyon Way, approximately 165 feet west of Farrell Drive, and another access connection on Farrell Drive, approximately 190 feet south of Tahquitz Canyon Way.

The original Camelot Theatre was an independent Palm Springs-based theatre that opened in 1967 at 2300 East Baristo Road, in the southwest corner of the Palm Springs Mall parking lot. The current Supple Holdings, LLC Camelot Festival Theatre is a triplex renovated in 1999 with state-of-the-art technically sophisticated sound and projection equipment specializing in first run art film, foreign film, and independent film features as well as special events. The Camelot Theatre is one venue for the annual Palm Springs Film Festival and the Festival of Arts. This theater provides three screens and 864 seats within a site occupying 56,640 SF (1.3 acres). The large theater provides 548 seats, Digital Cinema Projection and a performance platform for live performances. The small theater contains a lecture stage and 152 seats with 35 mm equipment. The theatre is programmed 52 weeks per year and available for group sales and rental. The theater offers complete catering services for groups and special events. Part of the facility is occupied by Ric's Café, which provides a large canopied outdoor patio offering salads, sandwiches, bakery goods, beer, wine and gourmet coffees.

1.4 Project Description

The project site includes 29.27 acres previously developed as and currently occupied by the Palm Springs Mall, which is underutilized and largely vacant. The Desert Community College District (the Applicant) is proposing the demolition of the Palm Springs Mall building, which encompasses 315,119 square feet (SF) of gross leasable area (GLA), to allow the development of the College of the Desert (COD) West Valley Campus Master Plan and Phase I Project.

To implement the WVC Master Plan, the existing building space within the mall would be demolished and Kaplan College, a private two-year career college that occupies 20,080 square feet of gross floor area (GFA), would be displaced. The free-standing Jack-in-the-Box fast food restaurant in the northeast corner of the site and the Camelot Festival Theatres, located on 1.3 acres at the southwest corner of the site, would remain with the proposed project.

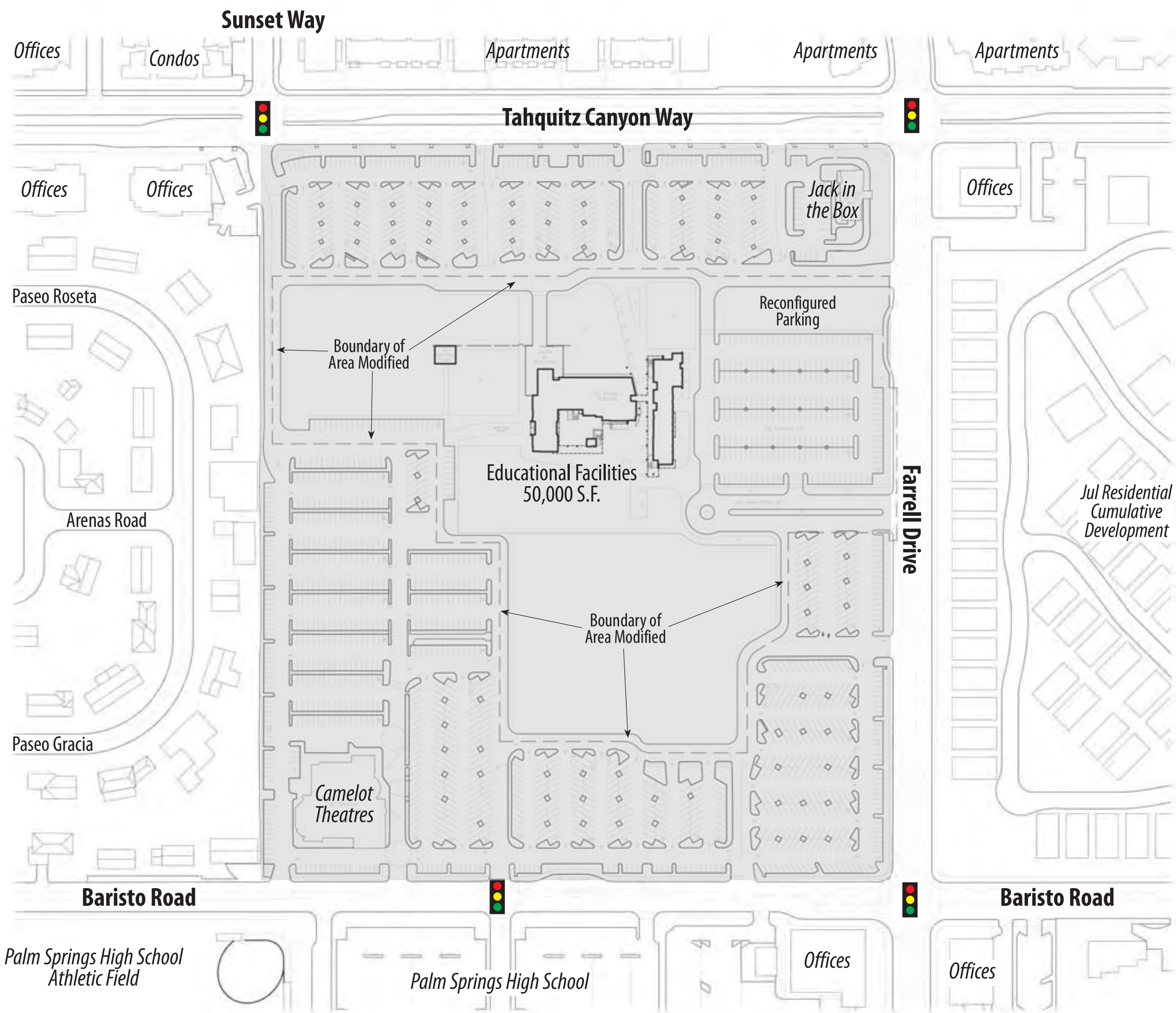
1.4.1 Phase I Project

Upon opening in the year 2018, the College of the Desert West Valley Campus Phase I Project would be designed to serve 200 full-time equivalent students (FTES) with a headcount of 786 students. Figure 1-4 shows the Site Plan for the Phase I Project. As shown therein, the Phase I Project would provide up to 50,000 square feet of new building space for classrooms, lecture halls, administrative offices, and other support facilities. A total of 160 parking spaces are proposed for the Phase I Project, with temporary overflow parking for an additional fifty vehicles.

The Phase I Project access would remain essentially the same as the existing site access, with one exception. The existing middle site access on Farrell Drive would be relocated approximately 115 feet to the south and widened from the existing 35-foot width to 57 feet in width (curb-to-curb) to serve as the main site access in conjunction with the Phase I Project. The main campus entry drive would extend 350 feet west of Farrell Drive and provide an entry pavement width of 24 feet and an exit pavement width of 24 feet, separated by a raised median approximately 9 feet in width. The new access location would be more closely aligned with the midpoint of the eastern site boundary. With approximately 1,245 feet of frontage on Farrell Drive, the midpoint of the eastern site boundary would be approximately 625 feet north of the north curb on Baristo Road and 625 feet south of the south curb on Tahquitz Canyon Way.

The Phase I Project main parking area would be located south of the Jack in the Box restaurant, between the new campus administration building and Farrell Drive. This parking lot would be reconfigured to align the aisles

Figure 1-4
College of the Desert - West Valley Campus
Phase I Project Site Plan



Source: HMC Architects

Scale: 1" = 300'

perpendicular to Farrell Drive. A student drop-off bay would be provided in front of the new administration building, where students could be dropped off from the passenger side of vehicles and enter the campus buildings without being required to cross vehicular travel ways.

1.4.2 Buildout of the WVC Master Plan

The COD WVC Master Plan would provide up to 250,000 S.F. of building floor area for educational facilities and other instructional support uses. Ancillary uses would also be provided including a 40,000 S.F. conference center and 10,000 S.F. of limited campus-oriented retail facilities (e.g., a bookstore, a food court, a copy center, convenience goods and services). The project would also make provision for a 30,000 S.F. library, which may be a City, District, or joint facility. A total of 1330 off-street parking spaces are proposed to serve the WVC Master Plan development.

The building locations and site access plan for the WVC Master Plan are shown in Figure 1-5 (COD West Valley Campus Master Plan). Upon full implementation of the WVC Master Plan, the facilities would be designed to serve approximately 3,000 FTES (8,040 headcount) from the western Coachella Valley. For the purposes of this analysis, the project buildout year was assumed to be the year 2030, which is also the buildout year assumed for the land uses in the *2007 City of Palm Springs General Plan*.

1.4.3 Proposed Site Access and Internal Circulation

The Phase I Project proposes the relocation of the central site access on Farrell Drive to the middle of the site frontage. The middle site access on Farrell Drive is currently located approximately 545 feet south of the centerline of Tahquitz Canyon Way. The Phase I Project would relocate this access to approximately 660 feet south of the centerline of Tahquitz Canyon Way and widen the access connection from approximately 30 feet to approximately 57 feet (measured curb to curb) to accommodate two entry lanes, two exit lanes, separated by a raised landscape median 9 feet wide.

The main campus entry would extend approximately 350 feet west of Farrell Drive with a traffic circle at the western terminus. The main entry drive would provide access to the reconfigured parking lot at two points located approximately 150 feet and 325 feet west of Farrell Drive.

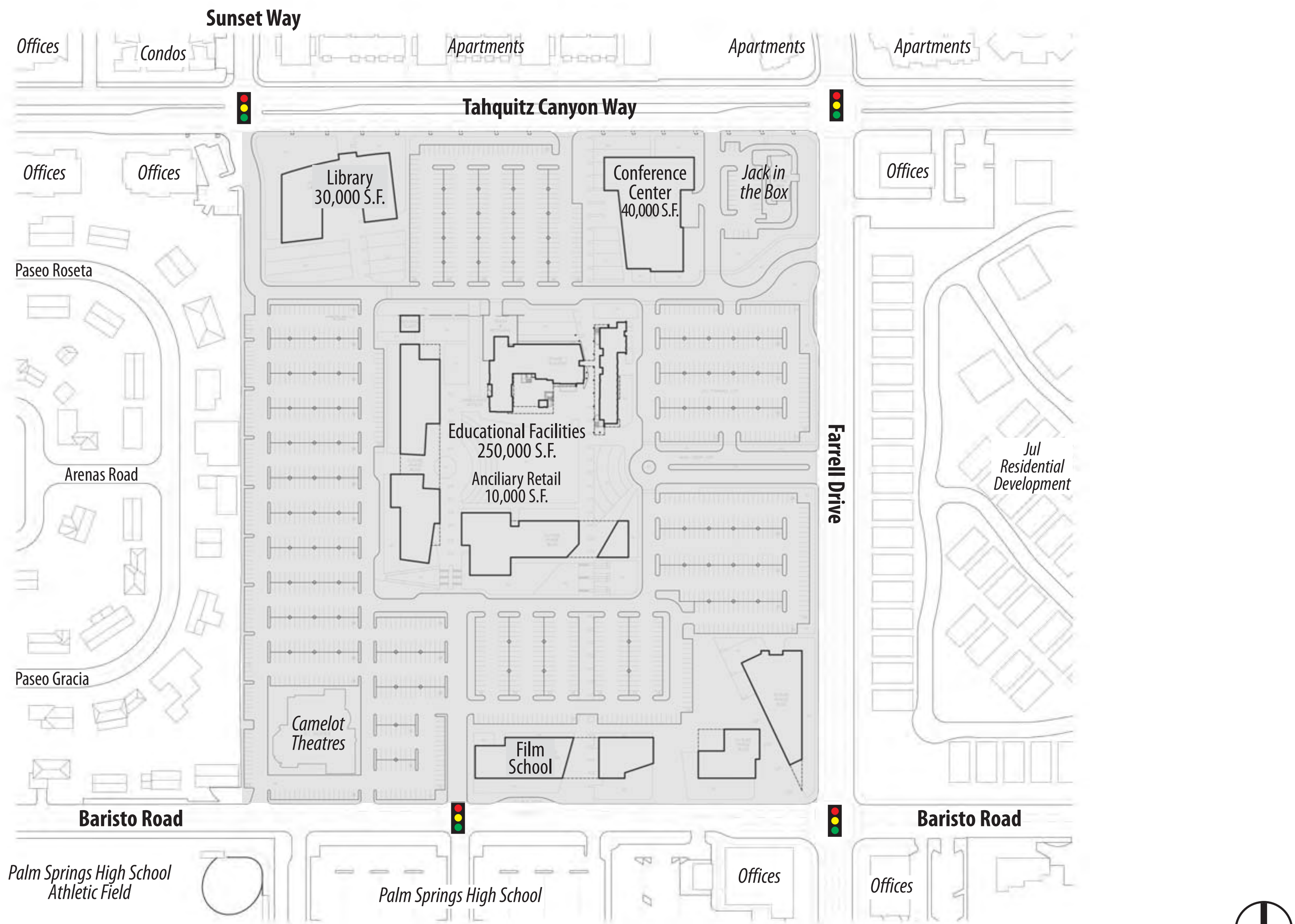
The implementation of the WVC Master Plan would include the consolidation of the two existing right-turn only site access connections on Tahquitz Canyon Way (Intersections 16 and 17) into a single access connection located west of the Conference Center. As proposed, this access would be approximately 24 feet in width.

The proposed project would not relocate the northern site access intersection on Farrell Drive (Intersection 19). This intersection provides direct access to the Jack in the Box drive-through lane without requiring motorists to drive through the surface parking lots associated with the WVC Master Plan. The existing site access connection is located north of a SunLine Transit Authority bus stop and bus bay that can accommodate two buses simultaneously and would be retained with the proposed project.

1.4.4 Construction Details

The Phase I Project would require the demolition of approximately 315,119 SF of GLA within the Palm Springs Mall building, which has a height that varies from 22 to 35 feet. Outdated utility lines would be excavated and removed. The site would be graded and trenching activities would facilitate the installation of new utility lines within the site. The demolition is expected to occur in the year 2017, followed by site grading and the construction of 50,000 square feet of building floor area to implement the Phase I Project before the end of the opening year 2018.

Figure 1-5
College of the Desert - West Valley Campus
Master Plan Site Plan



Source: HMC Architects

Scale: 1" = 300'

Approximately 21,073 tons of demolition debris would be removed from the site by haul trucks including 7,800 tons of demolished building materials and approximately 13,275 tons of concrete that would be broken up, excavated and loaded into haul trucks on-site, before being hauled away for disposal at a remote location.

Site grading is expected to require the importation of approximately 10,000 cubic yards of fill material for the Phase I Project. To implement the WVC Master Plan, 30,000 cubic yards of fill material is expected to be imported (including the 10,000 cubic yards required for the Phase I Project). The construction of approximately five additional future phases would be required to implement the WVC Master Plan. The construction activities would occur over a period of 15 to 20 years.

1.5 Cumulative Development

The Jul Residential Development was evaluated as a near-term cumulative project in the opening year 2018 with and without the Phase I Project traffic. This cumulative project will be constructed east of Farrell Drive, between Tahquitz Canyon Way and Baristo Road, as shown in Figure 1-2. The development would include 76 single-family detached residential dwelling units and 114 residential condominium dwelling units.

The traffic volumes associated with this development were taken from the *Jul Residential Development Traffic Impact Study Update* (dated November 15, 2013) prepared by Arch Beach Consulting. The trip generation forecast therein included 1,386 daily trips, of which 108 would occur during the morning peak hour (23 inbound and 85 outbound) and 136 would occur during the PM peak hour (88 inbound and 48 outbound). The primary access would be on Baristo Road, opposite the existing intersection of Compadre Road. A secondary access would be on Louella Road, south of Tahquitz Canyon Way.

The growth in background traffic volumes associated with cumulative development throughout the region was taken into account by using the General Plan buildout traffic projections developed in conjunction with the *Palm Springs 2007 General Plan*. These traffic projections represent the future horizon year 2030 and include the growth anticipated by the Land Use Element designations. The future opening year 2018 traffic projections include a portion of the regional growth in background traffic volumes that was incorporated in the General Plan buildout traffic projections.

2.0 EXISTING AREA CONDITIONS

2.1 Study Area and Key Intersections

To identify critical intersections for evaluation in traffic impact studies, Riverside County and the City of Palm Springs use a project-related increase of fifty or more peak hour trips on weekdays at intersections of General Plan streets as a screening criteria. Following coordination with Mr. Marcus Fuller, the Palm Springs Assistant City Manager/City Engineer, fifteen existing key intersections were identified for evaluation within a study area that extended north of Ramon Road to Alejo Road and east of Sunrise Way to El Cielo Road.

2.1.1 Key Intersections Evaluated

Ten of the key intersections are currently signalized, four have two-way stop control, and one is all-way stop controlled. The fifteen existing key intersections that were evaluated are shown in Figure 1-2 and include:

(1) Farrell Drive at Alejo Road,
(2) Farrell Drive at Amado Road,
(3) Sunrise Way at Tahquitz Canyon Way,
(4) Sunset Way at Tahquitz Canyon Way,
(5) Farrell Drive at Tahquitz Canyon Way,
(6) Civic Drive at Tahquitz Canyon Way,
(7) El Cielo Road at Tahquitz Canyon Way,
(8) Sunrise Way at Baristo Road,
(9) Cerritos Drive at Baristo Road,
(10) Palm Springs High School Access at Baristo Road,
(11) Farrell Drive at Baristo Road,
(12) Compadre Road at Baristo Road,
(13) Civic Drive at Baristo Road,
(14) El Cielo Road at Baristo Road, and
(15) Farrell Drive at Ramon Road.

2.1.2 Site Access Intersections Evaluated

The site is developed as the Palm Springs Mall with nine unsignalized site access intersections in addition to the two signalized site access intersections (Intersection 4 and Intersection 10) identified as key intersections above. Three of the unsignalized site access intersections would be eliminated upon implementation of the WVC Master Plan and two would be relocated and modified to better serve the proposed development.

Signalized Site Access Intersections

Peak hour traffic operations at both of the existing signalized site access intersections were evaluated to determine if mitigation would be required to maintain LOS D or better operation in the peak season with the Phase I Project or upon implementation of the WVC Master Plan. Conditions during the AM peak hour, the midday peak hour, and the PM peak hour were evaluated at the intersection of Sunset Way with Tahquitz Canyon Way (Intersection 4) and the intersection of the Palm Springs High School Access/Palm Springs Mall Access with Baristo Road (Intersection 10).

Unsignalized Site Access Intersections

The nine existing unsignalized site access intersections are shown in Figures 1-2 and 1-3. For ease of reference, the three existing unsignalized site driveways on Tahquitz Canyon Way were designated from west to east as Access A, Access B, and Access C. The three existing unsignalized site driveways on Farrell Drive were designated from north to south as Access D, Access E, and Access F. The three existing unsignalized site driveways on Baristo Road were designated from west to east as Access G, Access H and Access I. The nine unsignalized site access intersections were designated as Intersection 16 through Intersection24 (with the north-south street listed first) as shown below:

(16) Access A at Tahquitz Canyon Way,
(17) Access B at Tahquitz Canyon Way,
(21) Farrell Drive at Access F,
(22) Access G at Baristo Road,

(18) Access C at Tahquitz Canyon Way,
(19) Farrell Drive at Access D,
(20) Farrell Drive at Access E,
(23) Access H at Baristo Road, and
(24) Access I at Baristo Road.

Only four of the unsignalized site access intersections (Intersections 19, 20, 22, and 23) would allow full-turn ingress and egress movements upon implementation of the WVC Master Plan. Intersection 19 is located south of the Jack in the Box restaurant on Farrell Drive. Intersection 20 would be relocated to the south and widened to function as the main campus entry intersection on Farrell Drive. Intersection 22 and Intersection 23 are the two site access intersections on Baristo Road located west and east of the Camelot Theatres.

The highest volume hour conditions were evaluated at these four intersections upon build out of the WVC Master Plan to assure the adequacy of the proposed intersection design and traffic control. Future year 2030 traffic operations during the PM peak hour were evaluated in detail for Intersections 19, 20, 22, and 23 to identify and characterize the conditions expected to occur upon implementation and full occupancy of the WVC Master Plan.

2.1.3 Site Access Intersections Not Evaluated

The existing site development generates very little traffic (approximately 2,410 weekday trip-ends) distributed through eleven site access points. The two signalized site access intersections currently serve approximately 1,540 vehicles entering and exiting the site on a weekday in the peak season. The remaining 870 weekday trip-ends generated by the existing land uses within the site are using the nine unsignalized site access driveways.

Upon completion of the Phase I Project, the site development would generate fewer than 3,000 weekday trip-ends that would be distributed through eleven site access points. The existing unsignalized site access connections provide more than enough capacity to accommodate the future Phase I Project traffic demands as well as the Jack in the Box traffic and the Camelot Theatres traffic at excellent levels of service with very little control delay.

There are three unsignalized existing site access points on Tahquitz Canyon Way, between Sunset Way and Farrell Drive. The raised landscape median on Tahquitz Canyon Way opposite these three site access connections currently has no median openings and restricts the site ingress/egress movements at Intersections 16, 17, and 18 to right-turn movements only. The result is very low levels of control delay and very good levels of service on the northbound (minor-street) approaches at these intersections, which are used by vehicles to exit the project site. These three site driveways would be unchanged with the Phase I Project.

Upon implementation of the WVC Master Plan, Intersection 16 and Intersection 17 would be consolidated into a single access connection located just west of the existing Intersection 17. No median opening is proposed on Tahquitz Canyon Way at the future consolidated intersection, which is referred to as Intersection 17 in the evaluation of the future year 2030 traffic operations. With only right-turn site ingress and egress movements permitted, Intersection 17 would provide excellent levels of service in the future and the northbound (minor-street) approach would continue to operate with very low levels of control delay. Therefore, peak hour traffic operations at Intersections 16, 17, and 18 were not evaluated in detail.

Two of the existing full-turn site access intersections would be eliminated upon implementation of the WVC Master Plan. These intersections include Intersection 21 (Farrell Drive at Access F) and Intersection 24 (Access I at Baristo Road). Peak hour traffic operations at these two intersections were not evaluated as they will be closed.

2.2 Existing Study Area Land Use

The area north of the project site is developed as medium and high density residential land uses. Fourteen single-story Mid-Century Modern condominiums in the Desert Holly development occupy the northwest corner of the intersection of Sunset Way. Apartments occupy the area north of Tahquitz Canyon Way, between Sunset Way and Civic Drive. The Sage Courtyard Apartments are located west of Sunset Way. The three-story Airport Garden

Apartments are located west of Farrell Drive. The three-story Desert Crest Apartments are located east of Farrell Drive. The Mojave Blue Urban Apartments are located west of Civic Drive.

The Palm Springs City Hall is located north of Tahquitz Canyon Way and east of Civic Drive. Fire Station 442 is located east of the project site and north of Tahquitz Canyon Way, at 300 North El Cielo Road. The courthouse and police station are located south of Tahquitz Canyon Way and west of El Cielo Road. The Palm Springs International Airport occupies more than 930 acres located east of El Cielo Road and west of Gene Autry Trail, between Ramon Road and Vista Chino.

East of the project site, the Desert Advanced Imaging medical offices occupy the southeast corner at the intersection of Farrell Drive with Tahquitz Canyon Way. The site of the future medium density Jul Residential Development is currently vacant and located east of Farrell Drive, between Tahquitz Canyon Way and Baristo Road. Seventy-nine of the 202 approved Sundial condominiums are located east of the Jul Residential Development site and south of the professional office land uses that front on the south side of Tahquitz Canyon Way.

Residential land uses are located adjacent to the south side of Baristo Road, east and west of Compadre Road. Single-family detached residential land uses occupy the area west of the project site, between Baristo Road and the professional office uses that front on the south side of Tahquitz Canyon Way.

The Palm Springs Unified School District offices occupy the southwest corner at the intersection of Farrell Drive and Baristo Road. The Palm Springs High School is located south of the project site with a campus that extends west of Farrell Drive, between Baristo Road and Ramon Road. The surface parking area for the high school is located on the south side of Baristo Road, opposite the Palm Springs Mall site. The athletic field associated with the Palm Springs High School is located south of Baristo Road and west of the high school parking lot.

The Palm Springs High School serves students in grades 9 through 12 and has a current enrollment of approximately 2,164 students. The high school has a full-time faculty of approximately 80 teachers. The zero period starts at 7:00 AM and first period starts at 8:00 AM. Sixth period ends at 2:45 PM. With an enrollment of 2,164 students, the Palm Springs High School is projected to generate approximately 633 inbound and 298 outbound trips during the morning peak hour. The weekday traffic volumes on Baristo Road at Intersection 10 and Intersection 11 are highest between 7:15 and 8:15 AM, when the classes begin.

An office building housing the Automobile Club of Southern California occupies the southeast corner at the intersection of Farrell Drive and Baristo Road. The St. Theresa Catholic Church and Elementary School are located on the west side of Compadre Road, north of Ramon Road. A crosswalk that serves school-aged pedestrians is located on Baristo Road, on the west side of the intersection with Compadre Road, near the future Jul Residential Development access.

2.3 Existing Transportation System

2.3.1 Airport Facilities

Palm Springs International Airport is the largest of the three airports serving the Coachella Valley. The airport facilities are located north of Ramon Road and south of Vista Chino, between Gene Autry Trail and Farrell Drive. With connections throughout California and the continental United States, this commercial airport is the major facility for regional air passenger transportation in the project vicinity. It also handles air freight. Heliport access in Palm Springs is limited to medical evacuation flights between the Desert Regional Medical Center heliport and the Palm Springs International Airport.

The Palm Springs International Airport is located east of El Cielo Road. At its closest point, the eastern boundary of the project site is located approximately 0.69 miles west of the center of the primary runway at the Palm Springs International Airport.

The *Riverside County Airport Land Use Compatibility Plan* (ALUCP) outlines procedures and criteria for use is reviewing proposed developments for compatibility with airport activity.[1] It also provides airport noise contours and identifies Compatibility Zones within the Airport Influence Area based on the exposure of each area to aircraft noise, land use safety concerns, the protection of airport airspace, and general concerns related to over flights.

The Airport Influence Area surrounding the Palm Springs International Airport has been divided into Compatibility Zones (designated Zone A through Zone E) based upon factors related to potential noise impacts, over flights at low altitudes, safety concerns, and airspace protection. As required by state law, certain development proposals/land use actions within these Compatibility Zones are subject to review by the Riverside County Airport Land Use Commission (ALUC). The Riverside County ALUC review of such actions is advisory. Local jurisdictions may elect to approve a project without incorporating design changes suggested by the ALUC.

The project site is located within an area that is designated Airport Land Use Compatibility Zone E. Within this zone, the ALUCP identifies the noise impact as low (i.e., outside of the 55 Community Noise Equivalent Level contour) with occasional overflights intrusive to some outdoor activities. With only 10 percent to 15 percent of near-airport accidents located within Zone E, the safety risk level of the site is identified as low. The only safety risk concern identified is with uses for which potential consequences are severe (e.g., very high intensity activities in a confined area). No explicit upper limit on usage intensity is identified for Zone E in terms of the number of people permitted per acre. The only prohibited uses are those that represent hazards to flight, such as objects greater than 100 feet in height and visual or electronic forms of interference. Major spectator-oriented sports stadiums, amphitheaters, concert halls are discouraged beneath principal flight tracks.

2.3.2 Railroad Facilities

The Union Pacific Railroad provides freight rail service to Riverside County with up to fifty freight trains per day passing through the Coachella Valley enroute to and from major cities throughout the continental United States. Within Riverside County, freight rail is an important backbone of the goods movement industry. The California Department of Education requires the identification of railroads within 1,500 feet of a school site. The Union Pacific Railroad is located north of the study area, parallel to and south of Interstate 10. At its closest point, the railroad is approximately 3.3 miles northeast of the project site.

Amtrak provides regional passenger rail and regional Greyhound bus service (via the bus depot on Indian Canyon Drive near Amado Road) but does not currently provide commuter rail services in the Coachella Valley. The North Palm Springs Amtrak train station occupies 14 acres and is located northwest of the study area, approximately 0.6 miles south of Interstate 10, at the intersection of North Indian Canyon Drive and Palm Springs Station Road.

2.3.3 Existing Roadway and Highway Facilities

Regional access is provided by Interstate 10 (I-10), an eight-lane freeway with a 70 mph posted speed limit extending from Los Angeles County to Arizona and beyond. State Route 62 (Twenty Nine Palms Highway) connects to Interstate 10 from the north, providing additional regional access. Three grade-separated I-10 interchanges are located within the City of Palm Springs at State Route 111, Indian Canyon Drive, and Gene Autry Trail. The I-10 interchange at Indian Canyon Drive is located five miles north of downtown Palm Springs and six miles south of Desert Hot Springs. Ramon Road also provides access to I-10 via the Date Palm Drive interchange in Cathedral City and the Bob Hope Drive interchange in the City of Rancho Mirage.

With a four-lane divided cross-section, Highway 111 connects the City of Palm Springs to other cities within the Coachella Valley. Caltrans has jurisdiction over Interstate 10 and State Route 111, which extends along North Palm Canyon Drive, Vista Chino, Gene Autry Trail, and East Palm Canton Drive. Local access is primarily provided by Sunrise Way, Farrell Drive, Tahquitz Canyon Way, and Baristo Road. Direct site access is provided Tahquitz Canyon Way, Farrell Drive, and Baristo Road.

1. Riverside County. *Airport Land Use Compatibility Plan Policy Document,* Adopted March 2005 with noise compatibility contours from the Palm Springs International Airport Master Plan Study (May 2003).

The existing transportation system within the study area consists of a north-south and east-west 0.5-mile grid system of streets originally designed to facilitate land subdivision within the relatively flat developable portions of Palm Springs. Figure 2-1 (Surrounding Street System) shows the existing traffic control devices, posted speed limits, and number of mid-block through lanes in the study area as well as whether each roadway is a divided or undivided facility, based upon field reconnaissance in the project vicinity.

Divided facilities typically include a median that separates traffic lanes in opposite directions and provides space for left-turn bays at intersections. Undivided facilities typically require motorists making left turns to queue in a through lane, thereby reducing the capacity of the roadway. By prohibiting on-street parking near intersections, some undivided roadways can be flared to provide left-turn lanes at intersections.

Figure 2-2 shows the *Palm Springs 2007 General Plan* roadway classifications within the study area. Figure 2-3 illustrates the typical cross-sections associated with each roadway classification.

Ramon Road is a regional Major Thoroughfare with a four-lane divided cross-section west of El Cielo Road and a six-lane divided cross-section east of El Cielo Road. The posted speed limit on Ramon Road in the study area is 45 miles per hour (mph). The intersections on Ramon Road at Sunrise Way, Farrell Drive, Compadre Road, and El Cielo Road are controlled by traffic signals. An inter-connected traffic signal timing system has been implemented along Ramon Road in the study area that allows the signals to be coordinated to facilitate the progressive movement of eastbound and westbound vehicles. Ramon Road, east of Sunrise Way, will ultimately provide a six-lane divided cross-section that can accommodate 48,500 vehicles per day at the upper limit of LOS D. The ultimate four-lane divided cross-section on Ramon Road, west of Sunrise Way, can serve up to 32,300 vehicles per day (VPD) at the upper limit of LOS D.

Tahquitz Canyon Way is a four-lane divided Major Thoroughfare in the study area that abuts the northern site boundary. Tahquitz Canyon Way, between Indian Canyon Drive and the Palm Springs International Airport, is identified as a National Highway System connector. The posted speed limit is 40 miles per hour. Signalized intersections are located on Tahquitz Canyon Way at the northwest and northeast corners of the project site, at Sunset Way and at Farrell Drive. The closest signalized intersection to the project site along Tahquitz Canyon Way is located 0.38 miles to the west at Sunrise Way and 0.43 miles to the east at El Cielo Road. Major Thoroughfares have a daily capacity of approximately 35,900 VPD and can accommodate up to 32,300 VPD at the upper limit of LOS D.

Farrell Drive is a four-lane undivided Secondary Thoroughfare north of Tahquitz Canyon Way and south of Ramon Road. Between Tahquitz Canyon Way and Ramon Road, Farrell Drive is classified as a four-lane divided Secondary Thoroughfare. Farrell Drive, adjacent to the eastern site boundary currently has a 12-foot wide continuous two-way left-turn lane separating the northbound and southbound travel lanes. The posted speed limit on Farrell Drive is 45 miles per hour. The existing signalized intersections at Ramon Road, Baristo Road, and Tahquitz Canyon Way have uniform one-quarter mile spacing. The signalized intersection of Farrell Drive at Alejo Road is one-half mile north of Tahquitz Canyon Way. Secondary Thoroughfares have a daily capacity of 25,900 VPD and can accommodate up to 23,300 VPD without exceeding LOS D.

Baristo Road is classified as a four-lane undivided Secondary Thoroughfare in the *Palm Springs 2007 General Plan*. Between the western site boundary and Cerritos Drive, Baristo Road is striped as a two-lane undivided roadway with a painted left-turn pocket at Cerritos Drive and at the westernmost site driveway adjacent to the Camelot Theatres. In this area, Baristo Road has direct residential frontage and on-street parking is permitted north of the on-street bike lane, at the curb on the north side of the roadbed. West of Cerritos Drive, Baristo Road is improved as a two-lane divided roadway with a flush painted two-way left-turn lane and on-street parking permitted north of the on-street bike lane, on the north side of the roadbed.

Along the southern site frontage, the two-lane divided cross-section on Baristo Road provides a continuous two-way left-turn lane that removes left-turning vehicles from the through travel lanes. This improves traffic flow, capacity, and safety at the Palm Springs Mall driveways and at the Palm Springs High School access connections. As a two-lane divided roadway Baristo can accommodate a maximum of 18,000 VPD, with 16,200 VPD representing the upper limit of LOS D. The posted speed limit on Baristo Road is 40 mph in the study area. With one exception, signalized

Figure 2-1
Surrounding Street System

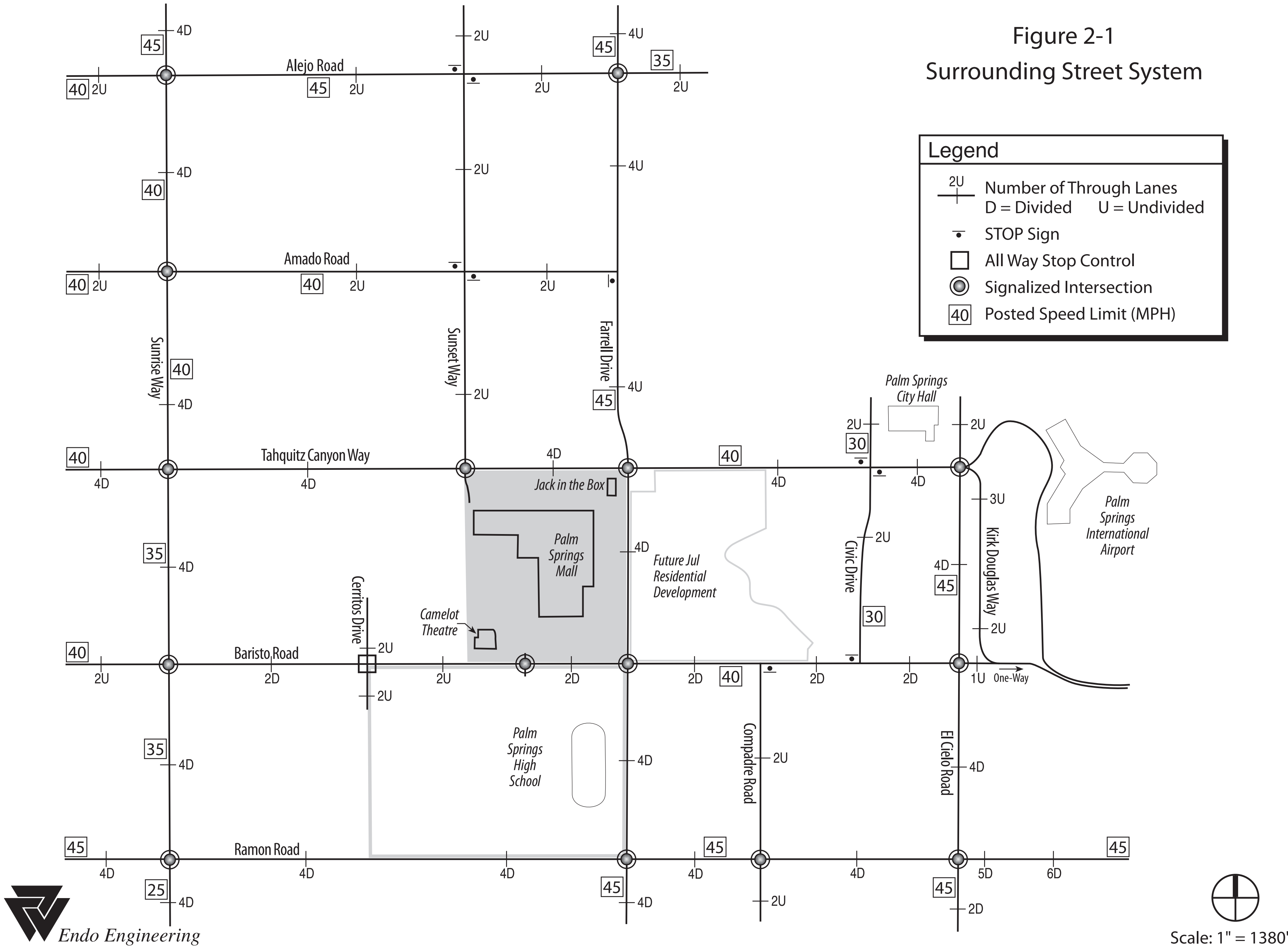


Figure 2-2
Anticipated Circulation System
(Palm Springs 2007 General Plan)

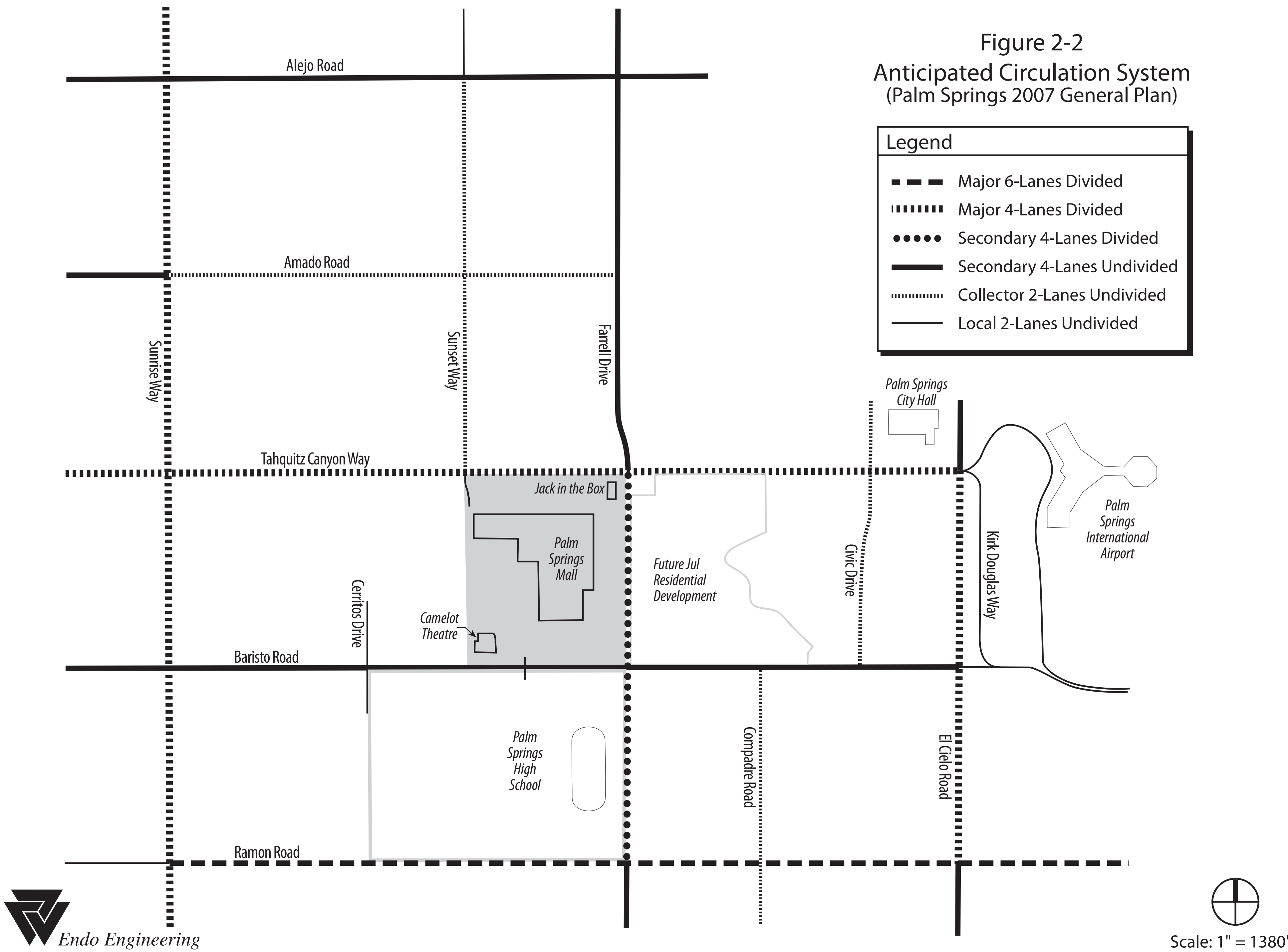
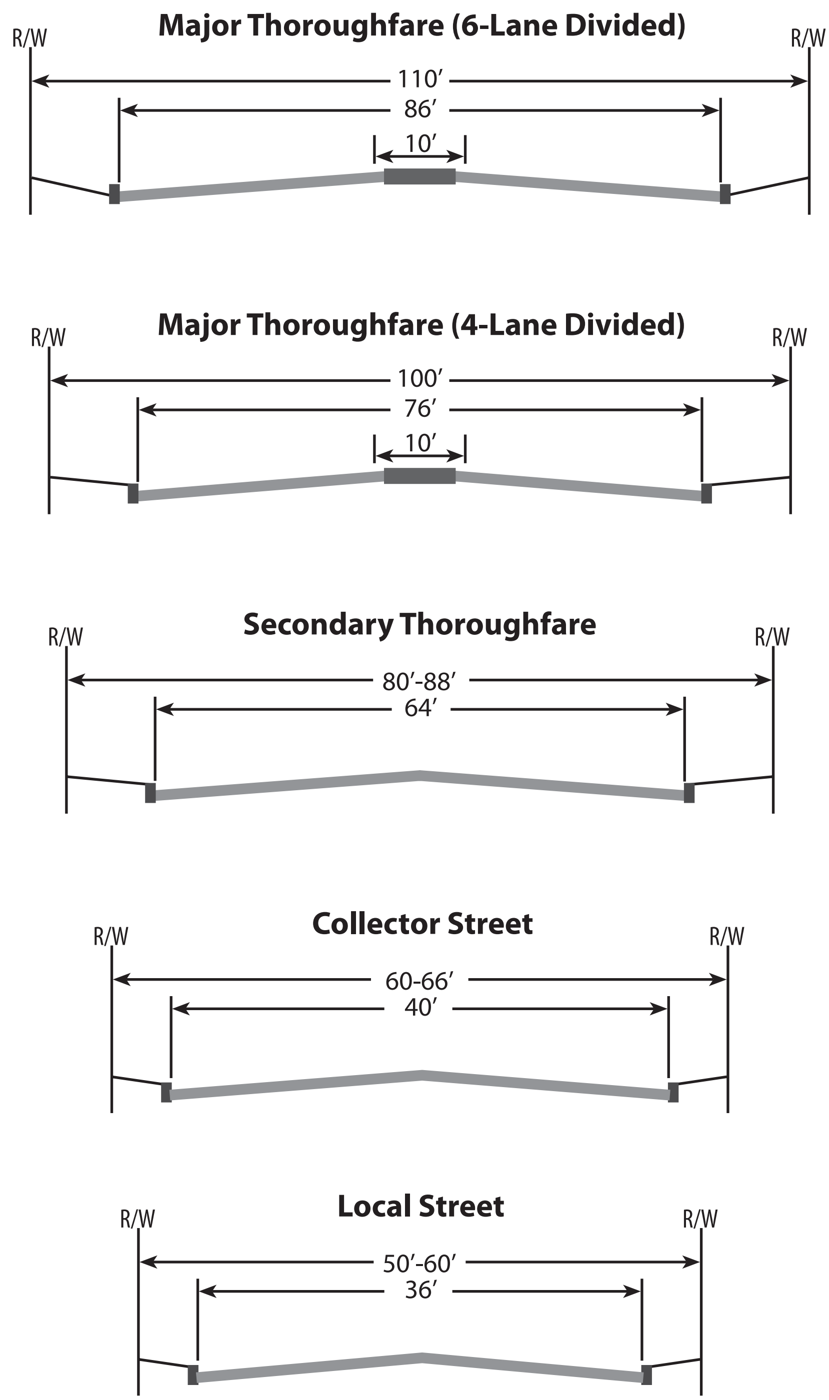


Figure 2-3

Typical Street Cross-Sections
(City of Palm Springs)



Additional right-of-way may be required for
sidewalks and bike lanes in some cases

intersections on Baristo Road are spaced at intervals greater than one-quarter mile. The exception is the traffic signal at the main access to the Palm Springs High School, which is aligned opposite the Palm Springs Mall access approximately 700 feet west of Farrell Drive (measured centerline to centerline).

Sunset Way is a two-lane undivided Collector street serving residential land uses located north of Tahquitz Canyon Way including the Desert Holly condominiums (to the west) and The Sage Courtyard Apartments (to the east). Sunset Way is signalized at the intersection of Tahquitz Canyon Way, opposite the existing Palm Springs Mall access located at the northwest corner of the project site. This signalized intersection also provides access to the surface parking lot for the professional offices (Plaza East) located west of the project site, on the south side of Tahquitz Canyon Way, as shown in Figure 1-3. Two-lane undivided Collector streets have a maximum capacity of 13,000 VPD and can accommodate up to 11,700 VPD at the upper limit of LOS D.

2.4 Existing Traffic Volumes

Traffic analyses focus on the peak hour traffic volume because it has the highest capacity requirements and represents the most critical period for operations. Typical weekday morning and evening peak hours are evident on urban commuter routes, with the evening peak generally being more intense. However, commuter travel patterns can vary in response to local travel habits and environments. The selection of an appropriate hour for planning, design, and operational purposes is critical in providing an adequate level of service. For urban roadways, a design hour for the repetitive weekday peak periods is common. However, to avoid substantial congestion during the highest-volume hours, local data is required on which to base informed judgments.

Weekday traffic volumes are known to peak during the midday along Tahquitz Canyon Way. However, the Palm Springs High School is a major trip generatorin the study area that generates substantial traffic volumes when classes begin in the morning and are dismissed in the afternoons. The regular bell schedule at the Palm Springs High School indicates that the zero period begins at 7:00 AM and the first period begins at 8:00 AM. Sixth period classes are dismissed at 2:45 PM. On approximately twelve late start days each year, the first period begins at 9:00 AM and the sixth period ends at 2:45 PM. The minimum day schedule includes a start time of 7:00 AM with the sixth period classes dismissed at 1:45 PM.

2.4.1 Peak Season Traffic Counts

Three 24-hour directional machine trafficcounts were made on January 15, 2015 within the study area. The locations of these traffic counts and the traffic count data are provided in Appendix B. One of the daily traffic counts was made on Ramon Road, west of Farrell Drive. A daily traffic count of 22,898 vehicles per day was available for this location in the CVAG *2015 Traffic Census Report*. The January 15, 2015 traffic count of 23,826 vehicles per day was 4 percent greater than the CVAG 2013 peak season traffic count. From this comparison, it was concluded that the new peak hour turning movement traffic counts made on January 14, 2015 at the key intersections reflected conditions during the peak season. Therefore, no seasonal adjustment was required.

New 24-hour traffic counts were also made at two locations adjacent to the project site to identify when the peak hours occur in the project vicinity. The first traffic count was made on Tahquitz Canyon Way, west of Farrell Drive. This east/west Major Thoroughfare typically accommodates the highest hourly volumes during the midday and evening peak hours. The second traffic count was made on Farrell Drive, south of Tahquitz Canyon Way. This north/south Secondary Thoroughfare was expected to more closely reflect the morning and afternoon peak hours associated with the Palm Springs High School. These 24-hour traffic counts provided the data needed to identify an appropriate factor for use in expanding the peak hour traffic counts to estimate daily traffic volumes.

2.4.2 Peak Hour Traffic Volumes

New midday peak hour (11:00 AM to 1:00 PM) and afternoon/evening peak hour (3:00 PM to 5:00 PM) traffic counts were made at the fifteen key intersections by Counts Unlimited, Inc. on January 14, 2015. In addition, morning peak hour traffic counts were made at five of the fifteen existing key intersections (Intersections 4, 5, 10, 11, and 15).

These intersections are located adjacent to the Palm Springs High School or the Palm Springs Mall. Longer manual turning movement counts were made at these five intersections (between 6:30 AM and 9:00 AM and between 2:30 PM and 5:00 PM) to identify the peak traffic demands generated by the adjacent Palm Springs High School.

The traffic count data is included in Appendix B. Figure 2-4 shows the year 2015 peak season weekday morning, midday, and afternoon peak hour turning movement traffic volumes at the key intersections. These traffic counts were completed during the peak traffic season.

At two of the key intersections on Baristo Road (Intersections 10 and 11) the highest volume hour occurred in the morning between 7:15 AM and 8:15 AM. At five of the key intersections (Intersections 3, 4, 6, 7, and 17) the highest volume hour occurred during the midday (11:30 AM to 12:23 PM). Four of these five intersections are located along Tahquitz Canyon Way.

At the remaining eight key intersections, the highest volume hour occurred in the afternoon, during the interval between 2:30 PM and 4:15 PM. Five of these intersections are located along Farrell Drive. At Intersection 5 (Farrell Drive @ Tahquitz Canyon Way) and Intersection 14 (El Cielo Road @ Baristo Road), the highest volume hour began at 2:30 PM and at 2:45 PM, respectively. The highest volume hour occurred between 3:00 and 4:00 PM at five intersections (Intersections 1, 2, 9, 12, and 13). The highest PM volume hour occurred latest (between 3:15 PM and 4:15 PM) at the intersection of Sunrise Way with Baristo Road (Intersection 8).

2.4.3 Daily Traffic Volumes

Peak season (winter) weekday traffic volumes have historically been determined with 24-hour machine counters placed at various locations throughout the Coachella Valley. The Coachella Valley Association of Governments (CVAG) compiles the 24-hour traffic count data and publishes traffic census reports biennially. The most recent CVAG traffic count data was collected in the peak season (winter) of 2013 and 2015. Table 2-1 provides the daily traffic volumes identified by CVAG in the *2015 Traffic Census Report* that were determined from 24-hour traffic counts made near the key intersections.

In the peak season of the year 2013, the CVAG 24-hour traffic count made on Ramon Road, west of Farrell Drive, was 22,898 vehicles per day (VPD). By comparison, the new 24-hour traffic count made at this location on January 15, 2015 identified 23,826 VPD. The new weekday traffic count was 4.1 percent greater than the 2013 CVAG peak season traffic volume and exceeded the 2015 CVAG peak season traffic volume on this roadway segment by 7.7 percent. Based on this finding, it was concluded that the peak hour traffic counts made at the key intersections within the study area on January 14, 2015 reflect peak season traffic conditions and do not require a seasonal adjustment.

Table 2-1 includes the 24-hour traffic count data collected on January 15, 2015 adjacent to the project site on Farrell Drive, south of Tahquitz Canyon Way. The weekday (two-way) traffic volume on this four-lane divided Secondary Thoroughfare was 11,263 vehicles per day. The 24-hour traffic count made on January 15, 2015 adjacent to the project site on Tahquitz Canyon Way, west of Farrell Drive, identified 11,407 vehicles per day on this four-lane divided Major Thoroughfare.

Table 2-1 provides the current peak season daily traffic volume estimates for comparison to the available CVAG 24-hour count data. The weekday traffic volume estimates shown in Table 2-1 were made by expanding the peak hour traffic volumes at the key intersections (shown in Figure 2-4). The expansion factor used to estimate the daily volumes from the peak hour intersection traffic counts was determined from the 24-hour traffic count data collected on January 15, 2015, which revealed that the sum of the two-way traffic volume that occurs during the evening peak hour and the midday peak hour on these roadway segments represents approximately 16 percent of the daily volume. Refer to Table 3-2 in Section 3.2.4 (pages 3-9 and 3-10) for all of the year 2015 peak season daily traffic volume estimates developed from the turning movement count data collected at the fifteen key intersections.

Figure 2-4

Existing Peak Hour Traffic Volumes

(Year 2015 Peak Season)

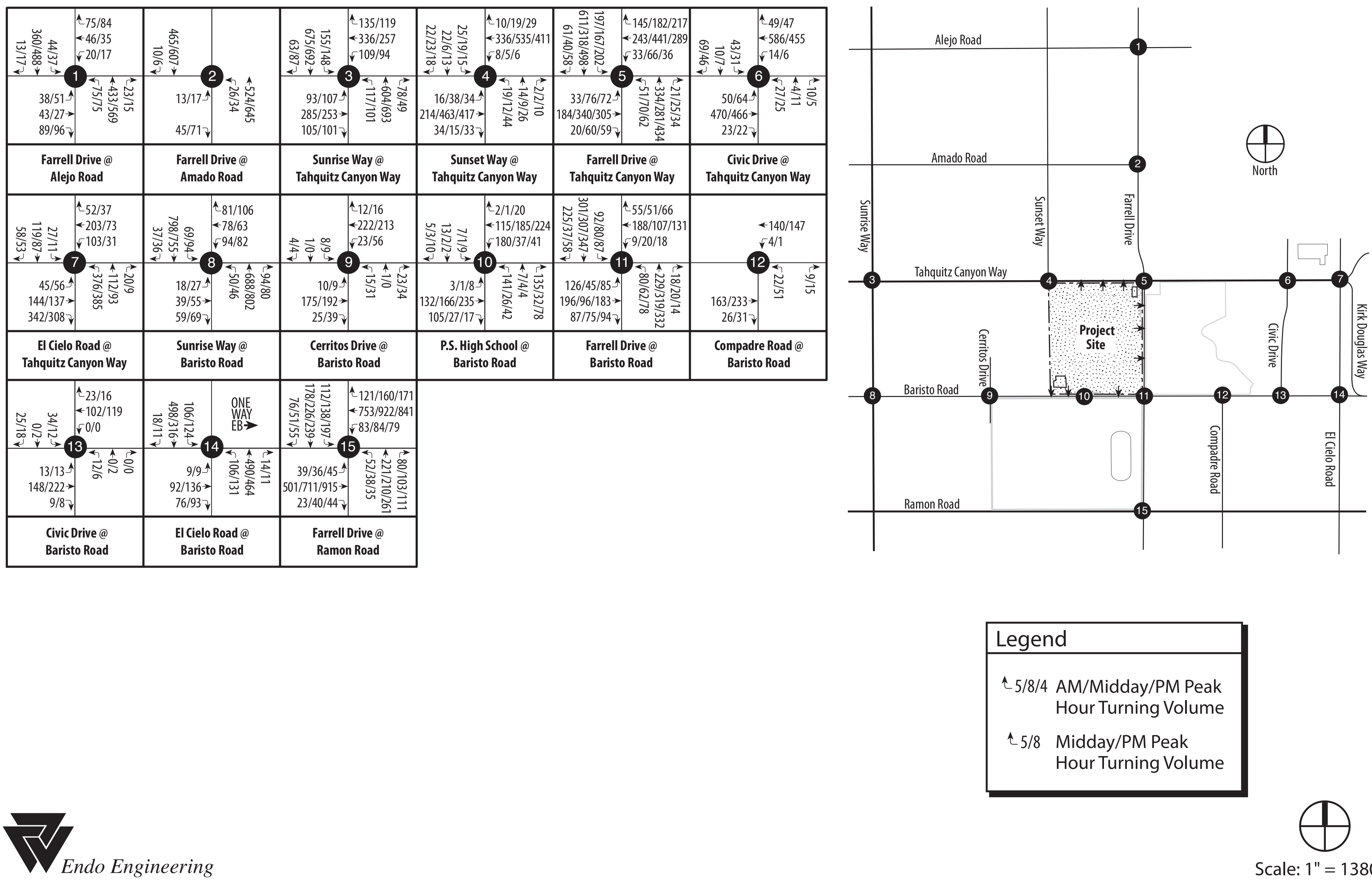


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Table 2-1
Existing Weekday Traffic Volumes

Roadway Link	CVAG Weekday 24-Hour Traffic Count[a] Year 2013	Year 2015	Year 2015 Peak Season[b] Daily Traffic Volume (2-Way)
Sunrise Way			
- North of Tahquitz Canyon Way	21,846	21,934	(22,320)
- South of Tahquitz Canyon Way	20,910	20,205	(21,360)
- North of Ramon Road	21,260	22,033	(22,610)[c]
- South of Ramon Road	18,143	19,954	Not Available
Farrell Drive			
- South of Tahquitz Canyon Way	Not Available	Not Available	11,263
Tahquitz Canyon Way			
- West of Farrell Drive	Not Available	Not Available	11,407
Ramon Road			
- West of Sunrise Way	20,897	20,403	Not Available
- West of Farrell Drive	22,898	22,128	23,826
- West of El Cielo Road	31,758	26,009	Not Available
- East of Paseo Dorotea	30,189	31,314	Not Available

a. The most recent available 24-hour traffic count data is shown for the closest count locations to the key intersections from the CVAG, *2013 Traffic Census Report and the 2015 Traffic Census Report*.
b. The daily volumes shown without parentheses are 24-hour machine counts made on January 15, 2015 by Counts Unlimited, Inc., which are included in Appendix B. The daily volumes shown in parentheses are estimates of the current peak season weekday volume, developed from the 2015 peak hour intersection traffic count data shown in Figure 2-4. The daily volume estimates shown were made using the expansion factor determined from the three 24-hour counts made when the peak hour counts were made.
c. This estimated daily volume was developed from the peak hour counts made at the intersection of Sunrise Way and Baristo Road and reflects the segment of Sunrise Way south of Baristo Road. New peak hour counts were not made at the intersection of Sunrise Way with Ramon Road.

2.4.4 Pedestrian Counts

Pedestrians and motor vehicles have equal status as road users. Consequently, some loss of motor vehicle capacity must be accepted in order to accommodate minimum pedestrian crossing times at intersections. The traffic control signals at the key intersections were timed to accommodate pedestrian crossing preemption with the analysis of the peak hour traffic operations at all of the key intersections.

Pedestrian counts were made at five of the key intersections (Intersections 4, 5, 10, 11, and 15) during the seven hours of peak hour turning movement traffic counts. The pedestrian counts are provided in Appendix B. The combined total of pedestrian crossings observed on all four approaches at these intersections during the counts included: 84 crossings at Intersection 4, 165 crossings at Intersection 5, 736 crossings at Intersection 10, 66 crossings at Intersection 11, and 207 pedestrian crossings at Intersection 15.

The intersection with the greatest number of pedestrian crossings by far was the Palm Springs High School Access at Baristo Road (Intersection 10). Throughout the seven-hour traffic count period (i.e., 6:30 AM to 9:00 AM, 11:00 AM to 1:00 PM, and 2:30 PM to 5:00 PM) a combined total of 736 pedestrian crossings were observed at this intersection. Of that total, 418 pedestrians crossed the east leg of Baristo Road at this intersection and 169 crossed the west leg. A total of 110 pedestrians crossed the Palm Springs Mall driveway at this intersection and 39 pedestrians crossed the high school driveway. Between 7:15 AM and 8:15 AM, 186 pedestrians crossed Baristo Road at this intersection. During the afternoon/PM peak hour (between 2:45 and 3:45 PM) 251 pedestrians crossed Baristo Road at this intersection.

Pedestrian movements at intersections conflict with motor vehicles on each intersection approach. During the highest volume peak hour at Intersection 10 (between 7:15 AM and 8:15 AM) 144 pedestrian crossings of Baristo Road conflict with the westbound vehicular movements and 42 pedestrian crossings conflict with the eastbound vehicular movements. During that same hour, 15 pedestrian crossings of the Palm Springs Mall driveway conflict with the southbound movements and 3 pedestrian crossings of the high school entry conflict with the northbound (exiting) movements.

To quantify the impact of these pedestrian crossings on traffic operations at this intersection, the HCS+ analysis of the morning peak hour (7:15 AM to 8:15 AM) conditions at this intersection was conducted both with and without the conflicting pedestrian crossing volumes. The addition of the pedestrian movements resulted in an increase in the overall average intersection control delay of 0.2 seconds/vehicle (from 12.4 to 12.6 seconds/vehicle) and an increase in the critical V/C ratio of 0.01 (from 0.51 to 0.52). There was no change in the overall intersection level of service, which was LOS B.

At the signalized key intersection of Sunset Way with Tahquitz Canyon Way, no pedestrian crossing is permitted on the west leg. This restriction improves pedestrian safety by minimizing the potential for conflicts between pedestrians and eastbound vehicles executing right-turn-on-red movements to enter the site from the dedicated right-turn lane on Tahquitz Canyon Way.

2.5 Existing Traffic Conditions

The degree of mobility provided by a roadway segment can be determined from the daily volume-to-capacity ratio, which can be used to characterize the vehicular level of service for a given direction of travel along an urban street segment. However, the preferred method of gauging congestion is to evaluate intersection operations during the peak hours, since the approach lane configuration at intersections represents the limiting factor in the capacity of the transportation system. A peak hour intersection analysis requires more data but can more clearly define the circulation system performance characteristics. Once these characteristics are known, the intersection approach lanes and traffic control required to accommodate the travel demands and meet the applicable intersection performance standards can be determined.

The *Highway Capacity Manual* (2000) operational methodology was used to determine the levels of service at the key intersections, as implemented by the Highway Capacity Software (HCS+ Version 5.3). The minimum acceptable performance standard used to determine if mitigation would be required was level of service (LOS) D operation at the key intersections, based upon average weekday conditions during the peak month of March. The upper limit of LOS D is reached at signalized intersections when the average control delay reaches 55 seconds per vehicle. For intersections with all-way stop control (AWSC), the upper limit of LOS D is reached when the average control delay reaches 35 seconds per vehicle. For unsignalized intersections with two-way stop control (TWSC), no single overall LOS is defined. For these intersections, the LOS is defined for each movement with conflicting movements and each intersection approach.

2.5.1 Peak Hour Intersection Operation

Figure 2-5 shows the existing approach lanes and traffic control devices at the key intersections that were assumed to evaluate the current peak hour intersection performance. The current operational performance of the key intersections is summarized by traffic control type in Table 2-2 (for intersections with two-way stop control), Table 2-3 (for the intersection with all-way stop control), and Table 2-4 (for signalized intersections). As shown therein, all of the fifteen existing key intersections are currently operating at acceptable levels of service during the peak hours in the peak season.

Figure 2-5
Existing Lane Geometrics at Key Intersections

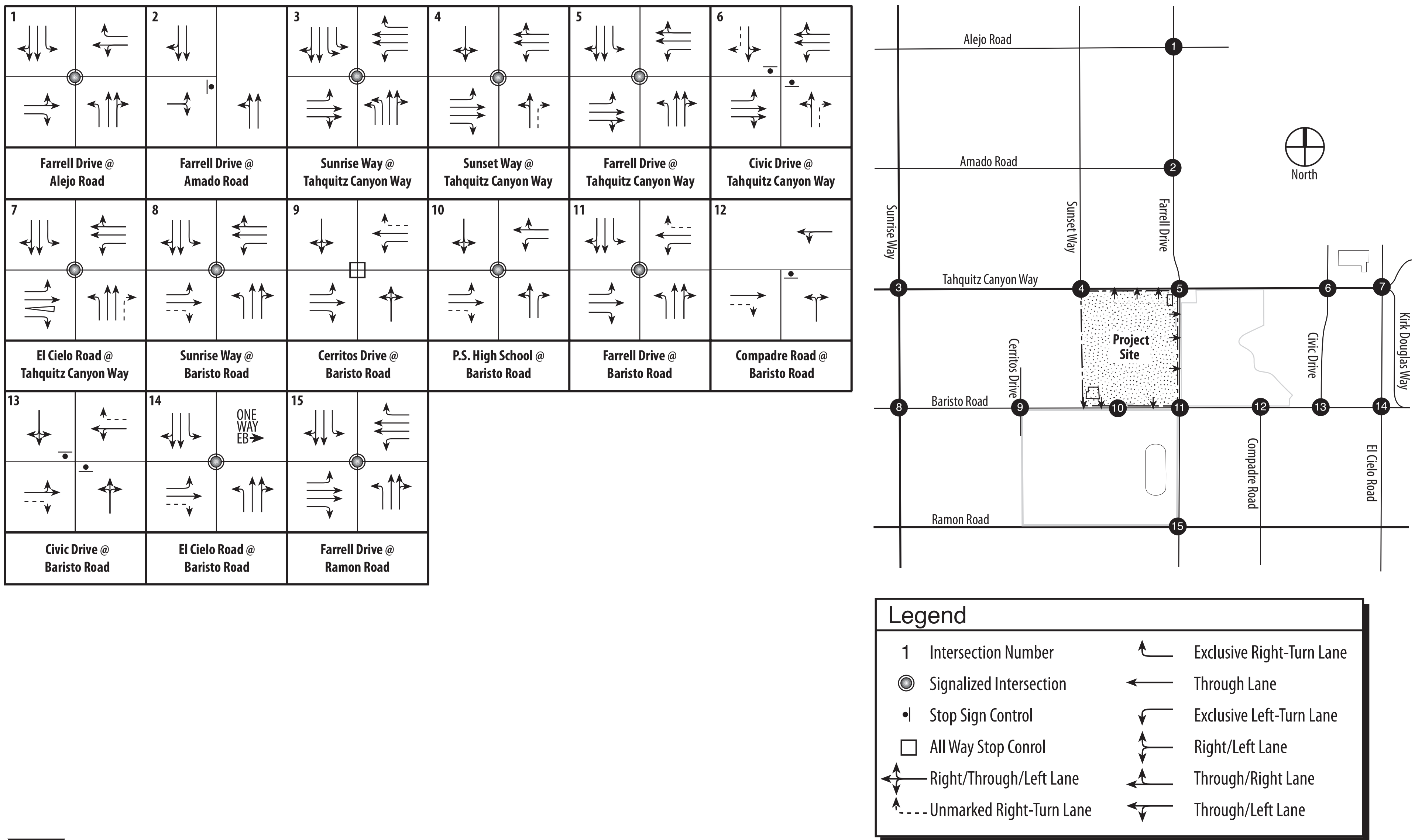

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Table 2-2
Existing Weekday Peak Hour Delay and Levels of Service
At the Key Intersections With Two-Way Stop Control[a]

Unsignalized Intersection [Intersection Number]	Existing Condition (Year 2015 Peak Season)				
	Left Turn From The Major Street		Minor-Street Approach With The Most Delay		
	Control Delay	Level of Service	Approach	Control Delay	Level of Service
Farrell Drive @ Amado Road [2]					
- Midday Peak Hour (PHF=0.964)	8.6	LOS A	Eastbound	12.0	LOS B
- Evening Peak Hour (PHF=0.839)	9.5	LOS A	Eastbound	16.4	LOS C
Civic Drive @ Tahquitz Canyon Way [6]					
- Midday Peak Hour (PHF=0.889)	9.6	LOS A	Northbound	31.7	LOS D
- Evening Peak Hour (PHF=0.946)	8.9	LOS A	Northbound	26.8	LOS D
Compadre Road @ Baristo Road [12]					
- Midday Peak Hour (PHF=0.901)	7.7	LOS A	Northbound	10.5	LOS B
- Evening Peak Hour (PHF=0.679)	8.2	LOS A	Northbound	13.6	LOS B
Civic Drive @ Baristo Road [13]					
- Midday Peak Hour (PHF=0.953)	7.6	LOS A	Northbound	11.1	LOS B
- Evening Peak Hour (PHF=0.731)	8.0	LOS A	Northbound	13.4	LOS B

a. Assumes intersection geometrics shown in Figure 2-5, and an 8 percent heavy vehicle mix. Appendix C includes the HCS unsignalized intersection worksheets. LOS was determined from the delay (0-10 sec./veh.=LOS A; 10-15 sec./veh.=LOS B; 15-25 sec./veh.=LOS C; 25-35 sec./veh.=LOS D; 35-50 sec./veh.=LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.

Table 2-3
Existing Weekday Peak Hour Delay and Levels of Service
At the Key Intersection With All-Way Stop Control[a]

Unsignalized Intersection [Intersection Number]	Existing Condition (Year 2015 - Peak Season)				
	Overall Intersection		Approach With The Most Delay		
	Control Delay	Level of Service	Approach	Control Delay	Level of Service
Cerritos Drive @ Baristo Road [9]					
- Midday Peak Hour (PHF=0.816)	10.23	LOS B	Westbound	10.68	LOS B
- Evening Peak Hour (PHF=0.815)	10.71	LOS B	Eastbound	11.17	LOS B

a. Assumes intersection geometrics shown in Figure 2-5, and an 8 percent heavy vehicle mix. Appendix C includes the HCS unsignalized intersection worksheets. LOS was determined from the delay (0-10 sec./veh.=LOS A; 10-15 sec./veh.=LOS B; 15-25 sec./veh.=LOS C; 25-35 sec./veh.=LOS D; 35-50 sec./veh.=LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.

Table 2-4
Existing Weekday Peak Hour Delay and Levels of Service
At the Signalized Key Intersections

Signalized Intersection [Intersection Number]	Year 2015 - Peak Season		
	Delay[a] (Sec./Veh.)	Critical V/C Ratio	Level of[b] Service
Farrell Drive @ Alejo Road [1]			
- Midday Peak Hour (PHF=0.887)	8.5	0.31	LOS A
- PM Peak Hour (PHF=0.841)	8.1	0.38	LOS A
Sunrise Way @ Tahquitz Canyon Way [3]			
- Midday Peak Hour (PHF=0.965)	23.2	0.56	LOS C
- PM Peak Hour (PHF=0.979)	22.1	0.55	LOS C
Sunset Way @ Tahquitz Canyon Way [4]			
- AM Peak Hour (PHF=0.778)	7.6	0.21	LOS A
- Midday Peak Hour (PHF=0.958)	5.7	0.23	LOS A
- PM Peak Hour (PHF=0.886)	6.9	0.22	LOS A
Farrell Drive @ Tahquitz Canyon Way [5]			
- AM Peak Hour (PHF=0.792)	20.8	0.60	LOS C
- Midday Peak Hour (PHF=0.948)	20.7	0.51	LOS C
- PM Peak Hour (PHF=0.899)	22.2	0.58	LOS C
El Cielo Road @ Tahquitz Canyon Way [7]			
- Midday Peak Hour (PHF=0.916)	13.4	0.51	LOS B
- PM Peak Hour (PHF=0.985)	11.1	0.43	LOS B
Sunrise Way @ Baristo Road [8]			
- Midday Peak Hour (PHF=0.943)	11.0	0.45	LOS B
- PM Peak Hour (PHF=0.955)	11.0	0.47	LOS B
Palm Springs High School @ Baristo Road [10]			
- AM Peak Hour (PHF=0.609)	12.4	0.51	LOS B
- Midday Peak Hour (PHF=0.772)	6.6	0.22	LOS A
- PM Peak Hour (PHF=0.698)	7.7	0.33	LOS A
Farrell Drive @ Baristo Road [11]			
- AM Peak Hour (PHF=0.660)	22.4	0.65	LOS C
- Midday Peak Hour (PHF=0.941)	17.2	0.31	LOS B
- PM Peak Hour (PHF=0.796)	19.4	0.48	LOS B
El Cielo Road @ Baristo Road [14]			
- Midday Peak Hour (PHF=0.883)	7.7	0.34	LOS A
- PM Peak Hour (PHF=0.868)	8.7	0.36	LOS A
Farrell Drive @ Ramon Road [15]			
- AM Peak Hour (PHF=0.805)	19.1	0.61	LOS B
- Midday Peak Hour (PHF=0.960)	18.6	0.60	LOS B
- PM Peak Hour (PHF=0.945)	21.1	0.68	LOS C

a. Delay = Average Intersection Control Delay (seconds per vehicle). The values shown assume an eight percent truck mix and the intersection approach lane geometrics shown in Figure 2-5. The signalized intersection HCS worksheets are provided in Appendix C.
b. LOS is the intersection level of service determined from the delay per the HCM 2000 (page10-16) with ≤10 sec./veh. = LOS A; >10 and ≤20 sec./veh. = LOS B; >20 and ≤35 sec./veh. = LOS C; >35 and ≤55 sec./veh. = LOS D; >55 and ≤80 sec./veh. = LOS E; >80 sec./veh. = LOS F).

Table 2-2 shows the midday and evening peak hour control delay and levels of service for the minor-street approaches with the most delay at the four unsignalized key intersections with two-way stop control. All of the left-turn movements from the major streets at these unsignalized intersections are operating at LOS A during the peak hours. The minor-street approaches with the most delay are currently operating at LOS D or better service levels. During the midday peak hour, three of the minor-street approaches operate at LOS B and one operates at LOS D. During the evening peak hour, two minor-street approaches operate at LOS B, one operates at LOS C, and one operates at LOS D.

The intersection of Civic Drive with Tahquitz Canyon Way is the only unsignalized key intersection that currently has a minor-street approach operating at LOS D during the midday and evening peak hours. The average control delay experienced by motorists on the northbound (Civic Drive) approach at this intersection is currently 31.7 seconds per vehicle during the midday peak hour and 26.9 seconds per vehicle during the evening peak hour. At unsignalized intersections, LOS D corresponds to an average control delay greater than 25.0 seconds per vehicle but no greater than 35.0 seconds per vehicle on the minor-street approach.

Table 2-3 summarizes the peak hour traffic operations at the intersection of Cerritos Drive with Baristo Road, which currently has all-way stop control. This intersection is currently operating at LOS B during the midday and evening peak hours. The Baristo Road approach with the most delay at this intersection is operating at LOS B during the peak hours.

Table 2-4 shows the average intersection control delay, critical volume-to-capacity (V/C) ratios, and levels of service at the signalized key intersections during the weekday morning, midday and evening peak hours evaluated. All ten of the signalized key intersections are currently operating at level of service C or better during the peak hours. The relatively low critical V/C ratios indicate that all of the signalized key intersections currently have sufficient approach lanes to accommodate the peak hour traffic demands. Three of the key intersections (Intersections 1, 4, and 14) operate at LOS A during all of the peak hours evaluated. Two of the intersections evaluated (Intersections 7 and 8) operate at LOS B during both of the peak hours evaluated. Two of the key intersections (Sunrise Way at Tahquitz Canyon Way and Farrell Drive at Tahquitz Canyon Way) provide LOS C operation during all of the peak hours evaluated.

The remaining three key intersections (Intersections 10, 11, and 15) operate at one service level lower during one of the three peak hours evaluated. The intersection of Farrell Drive with Baristo Road operates at LOS B during the midday and evening peak hour but provides LOS C operation during the morning peak hour (as a result of the heavy traffic generated by the Palm Springs High School during that hour). Similarly, the signalized intersection at the Palm Springs High School access on Baristo Road operates at LOS A during the midday and evening peak hour but provides LOS B operation during the morning peak hour (as a result of the heavy high school traffic generated during that hour). The intersection of Farrell Drive with Ramon Road operates at LOS B during the morning and midday peak hour but drops to LOS C during the afternoon peak hour, which occurs between 2:45 PM and 3:45 PM.

2.6 Relevant Circulation Plans

2.6.1 City of Palm Springs General Plan

Land Use Element

The Land Use Element of the *Palm Springs 2007 General Plan* identifies this site as an opportunity for more efficient land use that can complement the civic and office uses currently existing along this corridor. The Land Use Element identifies as the preferred mix of uses for the Palm Springs Mall site: 25 to 35 percent residential, 25 to 35 percent office, and 40 to 50 percent commercial use. The strategic introduction of mixed-use and multi-use infill projects in underutilized areas to create neighborhood activity centers serving the day-to-day needs of nearby residents, employees, and visitors is a goal included in the Land Use Element for the Palm Springs Mall site. Relevant policies include encouraging new uses that will provide new services that complement existing uses and the provision of pedestrian links from multi-use areas to minimize vehicular traffic.

Land Use Element Goal 5 is to provide lifelong learning opportunities for the residents of Palm Springs. A related policy is to allow for and encourage the development of land uses that provide educational opportunities for the City's residents. A related action is to pursue opportunities to establish higher education or college facilities in Palm Springs.

City Land Use Element policy LU 11.2 is to discourage sensitive uses such as schools from locating in close proximity to the airport. Policy 11.4 is to ensure that proposed land uses and developments around the airport comply with the policies set forth in the *Riverside County Airport Land Use Compatibility Plan*. Action LU 11.3 is to limit the height and intensity of nonresidential structures located adjacent to the airport to minimize airport-related safety issues.

Circulation Element

General Plan Street System

The Circulation Element of the *2007 City of Palm Springs General Plan* details the general location and extent of the circulation system required to serve future travel demands associated with buildout per the Land Use Element of the General Plan. It also details the roadway designation (i.e. major thoroughfare, secondary thoroughfare or collector street), truck routes, and bikeways. Figure 2-2 shows the circulation system classifications per the *City of Palm Springs 2007 General Plan.* Figure 2-3 shows the typical street cross-sections associated with each of the *City of Palm Springs 2007 General Plan* roadways.

Ramon Road is classified as six-lane divided Major Thoroughfares within the study area. Major thoroughfares are high capacity streets with a 110-foot right-of-way. Major thoroughfares have a limited number of cross streets and provide stacking and turning lanes at intersections.

Tahquitz Canyon Way, Sunrise Way, and El Cielo Road (between Tahquitz Canyon Way and Ramon Road) are classified as four-lane divided Major Thoroughfares within the study area. Four-lane divided Major Thoroughfares typically include a ten-foot wide median within a 76-foot wide roadbed and require a 100-foot right-of-way.

Farrell Drive is classified as a four-lane divided Secondary Thoroughfare between Tahquitz Canyon Way and Ramon Road. Baristo Road is classified as a four-lane undivided Secondary Thoroughfare within the study area. Secondary Thoroughfares typically require a right-of-way 88 feet in width and provide a roadbed 64-feet in width (measured curb-to-curb). Divided Secondary Thoroughfares may provide a raised landscaped median or a shared two-way left-turn center lane. Landscaped medians enhance traffic flow and create more attractive thoroughfares. The Circulation Element states: "It is the City's preference that landscape medians be used wherever divided roadway designations are shown unless traffic conditions dictate that the shared center left-turn lane is necessary."

Sunset Way is classified as a two-lane undivided Collector street. Collector streets are typically two-lane undivided roadways with a 40-foot pavement width (curb-to-curb) within a 60-foot right-of-way. Industrial Collectors require a 66-foot right-of-way.

Circulation Goals and Policies

The *Palm Springs 2007 General Plan* Circulation Element includes the following goals:

- CR1: Establish and maintain an efficient, interconnected circulation system that accommodates vehicular travel, walking, bicycling, public transit, and other forms of transportation.
- CR2: Establish improved levels of service for efficient traffic flow and provide a safe circulation system.
- CR3: Provide efficient circulation in the Downtown to support its role as the City's primary retail center.
- CR4: Reduce the City's dependence on the use of single-passenger vehicles by enhancing mass transit opportunities.
- CR5: Provide improved mobility for City residents to access local services.

CR6: Establish the City of Palm Springs as the premiere provider of recreational trails and bikeways in the Coachella Valley.
CR7: Create a pedestrian experience that is attractive to both residents and visitors.
CR8: Develop a system of parking facilities and operations that serve current and future commercial and residential uses and preserve the quality of life in residential neighborhoods.

City Policies Related to Vehicular Mobility Goals

- Provide travel choices to reduce traffic congestion.
- Continue to implement the City's *Transportation Demand Management* Ordinance.
- Continue to participation in the *Transportation Uniform Mitigation Fee* program.
- Require adequate drop-off and pick-up facilities at all new schools for safety and to prevent traffic congestion;
- Accommodate pedestrian access, including handicapped accessibility in accordance with current ADA regulations.
- Maintain LOS D or better for the City's circulation network, as measured using "in season" peak hour conditions.
- Upgrade and maintain traffic signal interconnect systems to efficiently coordinate and control traffic flow on arterial streets including the installation or removal of separate left-turn phasing where warranted. Traffic signal timing should adequately provide for safe pedestrian crossing.
- Establish roadway designs that complement the community character and contribute to the livability of neighborhoods and commercial districts (i.e., width, sidewalks, parking, landscaping, etc.),
- Strongly encourage developers to incorporate trails and pedestrian and bicycle linkages into their projects to reduce dependence on vehicular use.

City Policies Related to Pedestrian Mobility Goals

- Integrate sidewalks with the City's circulation system to connect residents to transit facilities.
- Provide barrier-free accessibility for all handicapped residents, employees and visitors, including special designs for rural street profiles to accommodate ADA-required path of travel separation from vehicular lanes.
- Periodically update the City's ADA compliance report to ensure adequate disability access improvements are identified and adequate financing and capital improvement plans are in place.
- Provide shade on sidewalks, particularly in the downtown, to make walking more appealing during the summer months.
- Provide and maintain trash receptacles, benches, shade structures, drinking fountains, and other amenities in pedestrian corridors throughout the City.
- Ensure that appropriate pedestrian facilities are provided as a component of new development.
- Provide incentives to developers to add pedestrian trails and infrastructure.

City Bikeway Policies

- Maintain widths, surfaces, and general maintenance of streets in a manner that will ensure the safety of the cyclists using them.
- Encourage proper design and maintenance of facilities and appropriate signing to ensure the safe use of the bikeway and trail systems
- Incorporate provisions within the Zoning Ordinance requiring private developers to construct recognized bikeways that abut developable property.
- Provide bike racks and other bicycle amenities throughout the City to encourage bicycle use as an alternative to vehicular use.

City Parking Policies

- Require sufficient parking to serve each use, including employee and visitor parking needs.

- Locate surface parking lots to the rear of businesses fronting main streets. Surface parking lots directly fronting on main streets interrupt the continuity of the building structures and the pedestrian walking experience.
- Provide parking spaces for bicycles, motorcycles, and similar vehicles as part of all parking facilities, public and private.
- Encourage the development and use of common parking facilities versus individual on-site parking facilities.
- Provide appropriate and consistent signage to direct motorists to public and private parking areas.
- Public and private parking lots should provide for electric vehicle recharging stations.

Designated Truck Routes

Throughout California, approximately 76 percent of all inbound and outbound freight is shipped by truck. The agricultural and industrial sectors of Riverside County's economy generate a significant amount of truck traffic and depend upon the safe and efficient movement of goods. The primary means of transporting goods and consumer products in Riverside County is large trucks. Between the year 2003 and the year 2020, truck volumes in the region are expected to increase by forty percent.

Interstate 10 is a primary corridor for the movement of goods within and through the Coachella Valley and the San Gorgonio Pass. I-10 and Highway 111 are part of the state highway truck route system. Both I-10 and SR-111 are included in the Surface Transportation Assistance Act (STAA) Network.[2] Roadways in the STAA Network allow larger trucks with no maximum overall length. The *2007 City of Palm Springs General Plan* identifies Interstate 10, State Route 111, Indian Canyon Drive (north of Alejo Road), Gene Autry Trail, Ramon Road, and Sunrise Way as designated truck routes.

Designated truck routes are designed to support the weight of heavier vehicles and provide intersections with sufficient room for turning movements by vehicles with large turning radii. They also provide efficient routes for through truck travel that avoid residential areas and congested streets. Trucks making local deliveries are allowed to divert from these routes to businesses.

Community Design Element

Figure 9-4 of the Community Design Element of the *Palm Springs 2007 General Plan* identifies designated "Scenic Corridors" that serve as entries to the City and provide dramatic mountain views that should be preserved and enhanced including: Tahquitz Canyon Way, Ramon Road, and Alejo Road, west of Sunrise Way. Intensified landscaping and other streetscape treatments along these scenic corridors should frame and enhance rather than block these views. The use of specialized trees, street furniture, and medians along these corridors can also be used to identify them. The "Scenic Corridor" designation may affect the future landscaping along the northern site boundary. City policy requires that all land uses and future development proposals respect and protect the scenic values of the desert and mountain terrain.

There are five streets within the study area designated as an "Enhanced Landscape Street" in Figure 9-4 of the Community Design Element of the *Palm Springs 2007 General Plan.* These streets include: (1) Alejo Road, east of Sunrise Way, (2) Baristo Road, between Sunrise Way and Farrell Drive, (3) El Cielo Road, south of Tahquitz Canyon Way, (4) Farrell Drive, and (5) Sunrise Way. Enhanced landscaping treatments should be used to frame the views along these streets. The "Enhanced Landscape Street" designation of Farrell Drive and Baristo Road adjacent to the project site may affect the future landscaping along the eastern and southern site boundary.

2. SR-111, between Gateway Drive and Gene Autry Trail, is not in the STAA Network but is designated as part of the California Legal Network.

2.6.2 Regional Transportation Improvement Plans

The Southern California Association of Governments (SCAG) prepared the *2012 Regional Transportation Plan* to address requirements set forth in SB 375. The *Regional Transportation Plan* (RTP) is a multi-modal long-range planning document prepared through coordination with federal, state and other regional, sub-regional, and local agencies in southern California. The RTP is prepared every three years and reflects the current future horizon, based on a 20-year projection of future needs. It includes programs and policies for congestion management, transit, bicycles, pedestrians, roadways, freight, and finances. It is used as a long-range plan for federally funded transportation projects.

The Capital Improvement Program (CIP) is a 7-year program including all regional and local capital improvement projects that maintain or improve the LOS for traffic and transit and conform to transportation-related emission air quality mitigation measures. Currently, regional projects are programmed in the Riverside County Transportation Improvement Plan (TIP), while locally funded projects (off the State Highway System) are identified in local agency CIPs. To comply with Congestion Management Program Statutes, CIP requirements shall be the same as and accomplished through the Riverside County Transportation Commission TIP development process. Projects in the CIP may be incorporated into the Regional Transportation Improvement Program (RTIP) for the programming of Flexible Congestion Relief (FCR) and Urban and Commuter Rail funds.

2.7 Non-Motorized Transportation

Mobility for all travel modes is an integral element of the transportation system. Providing an interconnected network of bikeways improves safety for all users and improves access for those who ride bicycles. Bicycling, walking and equestrian transportation modes represent non-motorized alternatives to the automobile. Bikeways and pathways are used by a wide variety of people including children on their way to school, commuters riding to work, and people exercising, racing or touring. While recreational riders seek routes leading to parks, through areas of interest, or racing circuits, commuters want the shortest, fastest, and safest route between two points.

2.7.1 Accommodations For Pedestrians

There are currently sidewalks (8 feet in width) along the site frontage on Tahquitz Canyon Way and Farrell Drive. The sidewalk on the south side of Tahquitz Canyon Way along the site frontage has numerous mature street trees and other obstructions and is crossed by motor vehicles at each of the three existing site driveways. The sidewalk on the west side of Farrell Drive along the site frontage has numerous obstructions and is crossed by motor vehicles at each of the three existing site driveways. The sidewalk on Baristo Road is six feet in width and crossed by four site driveways.

Pedestrian facilities are a critical component of the non-motorized transportation network within the City of Palm Springs. They include walkways, bridges, trails, crosswalks, signals, benches, and shade canopies. A non-motorized transportation facility may be part of a roadway (e.g., a shoulder) or separated from roadway traffic (such as a bike path) for exclusive non-motorized use. The arterial streets abutting the site accommodate pedestrian access adjacent to and crossing the streets. The sidewalks have accessible curb ramps at the arterial intersections aligned with the crosswalks to accommodate the pedestrian traffic generated by the Palm Springs High School.

The pedestrian facilities should provide a continuous route that is accessible for all users without the inclusion of features, such as vertical elements, that are difficult to navigate. Vertical curbs cannot be components of the primary pedestrian access routes. Sidewalks are the key element of a pedestrian access route at locations adjacent to arterial streets.

Sidewalks for an arterial street should be constructed with a maximum cross slope of 2 percent to enable all users to easily navigate the facility. At driveways locations, the slope of the driveway should match the 2 percent cross slope of the sidewalk. Drivers entering and exiting should have unobstructed sight distance for the sidewalk, the street and the driveway. Pedestrians should be provided similar unobstructed sight distance.

The absolute minimum width of a sidewalk is four feet where unobstructed and continuously maintained. A passing space (5 feet by 5 feet) should be incorporated every 200 feet on these minimum width sidewalks. Where possible, a typical sidewalk width of 6 feet is desirable to allow to pedestrians to walk comfortably side by side. At busy arterial locations with curb-attached sidewalks, the desirable minimum sidewalk width is 8 feet. This enables 4 feet of unobstructed access and room for light poles and street furniture. In locations with substantial pedestrian activity, the sidewalk width should be significantly wider.

Landscape buffers and planting strips between the sidewalk and the adjacent street are a component of the pedestrian infrastructure that can enhance safety by providing a physical separation between pedestrians and moving vehicles thereby enhancing the walking experience. Planting strips can provide space for traffic signs and street furniture. At locations without on-street parking or bicycle lanes, the ITE suggests that a buffer width should be 5 feet (minimum) with 6 feet (desirable). Where right-of-way constraints make it not possible to provide a landscape buffer, the use of a curb-attached sidewalk requires additional width.

At locations where the crosswalk includes a pedestrian refuge island or median, appropriate curb ramps are required so that the pedestrian has a continuous surface. Curb ramps should have a running slope of 5 percent (minimum) up to 8.3 percent (maximum). The length of the ramp should not exceed 15 feet. A landing (4 feet by 4 feet) should be provided at the top of the curb ramp. The pedestrian refuge space should be at least 6 feet long in the direction of pedestrian travel and accommodate passing. At bus stop locations, accessible connections suitable for loading and waiting should be provided in the buffer region.

2.7.2 Accommodations For Bicyclists

CVAG Non-Motorized Transportation Plan

Existing Bikeway Facilities

The CVAG *Non-Motorized Transportation Plan Update* (September 2010) identifies three existing bikeway facilities within the study area. An existing Class II bike lane on Tahquitz Canyon Way extends 1.7 miles west of Civic Drive. An existing Class III bike route on Ramon Road extends 2.2 miles west of El Cielo Road. An existing Class III bike route on Farrell Drive/Alejo Road/Civic Drive extends 1.3 miles north of Tahquitz Canyon Way.

Future Bikeway Facilities

The CVAG *Non-Motorized Transportation Plan Update* (September 2010) includes 47 proposed bikeway projects within the City of Palm Springs. Four second priority bikeway projects are identified within the study area. These include proposed Class III bike routes along Alejo Road (north of Sunrise Way) and along El Cielo Road (between Tahquitz Canyon Way and Ramon Road). Proposed Class II bike lane projects are identified along El Cielo Road, (south of Ramon Road) and along Baristo Road (between Avenida Caballeros and El Cielo Road). The second priority 1.5-mile Proposed Class II bike lane project identified for Baristo Road, from Avenida Caballeros to El Cielo Road, has been completed.

Two proposed third priority Class III bike route projects are identified within the study area in the CVAG *Non-Motorized Transportation Plan Update*. A proposed Class III bike route is shown for Ramon Road, east of El Cielo Road. A proposed Class III bike route is shown for Sunrise Way, north of Alejo Road. There are no proposed bike trails or future bikeway projects within or adjacent to the project site.

City of Palm Springs Bikeways

Opportunities for biking are afforded by more than 80 miles of recreational trails in the City of Palm Springs. The City's bike trails system includes bicycle trails within the study area along: Alejo Road, El Cielo Road, Farrell Drive, Sunrise Way, Tahquitz Canyon Way, and Ramon Road. A 6-foot wide Class II bike lane with markings and signage exists on both sides of Tahquitz Canyon Way within the study area. This bike lane extends across the frontage of the project site on Tahquitz Canyon Way.

Farrell Drive, south of Tahquitz Canyon Way, is identified in the *Palm Springs 2007 General Plan* as part of the Citywide Loop bicycle route. It is a Class III bike route adjacent to the project site, where the trail allows shared use with pedestrian or motor vehicle traffic.

The *Palm Springs 2007 General Plan* states that the City of Palm Springs has approximately eight miles of existing Class I bikeways, thirteen miles of existing Class II bikeways, and 35 miles of existing Class III bikeways. Figure 4-5, Bikeways, in the *Palm Springs 2007 General Plan* shows five existing Class I bike paths within the study area. They are shown at the following locations: (1) Alejo Road, from Sunrise Way to Civic Drive, (2) Civic Drive, from Tahquitz Canyon Way to Alejo Road, (3) Farrell Drive, south of Tahquitz Canyon Way, (4) Sunrise Way, south of Alejo Road, and (5) Tahquitz Canyon Way, from Farrell Drive to Civic Drive.[3]

The City of Palm Springs defines Class I bikeways as protected bikeways separated from vehicular traffic by a physical barrier. A Class I bicycle path or bicycle trail is a specifically designated area for bicycle travel which is physically separated from auto traffic or entirely outside the road right-of-way. The City also considers a "Pedestrian Safety Path" as a Class I bikeway. A "Pedestrian Safety Path" is any sidewalk or similar right-of-way shared by cyclists and pedestrians 12 feet wide, of which 8 feet is visually designated for pedestrians and 4 feet is visually designated for cyclists. This definition is not consistent with Caltrans standards for Class I bikeways in the *Highway Design Manual* (May 7, 2012) which state that sidewalks are not to be designated for bicycle travel and identify the minimum paved width of travel way for a two-way bike path as 8 feet, with 10-feet preferred.

Several loop routes have been designated in the central portion of the City geared toward tourists and visitors. The Citywide Loop extends through the study area along Farrell Drive (south of Tahquitz Canyon Way), Tahquitz Canyon Way (between Farrell Drive and Civic Drive), Civic Drive (between Tahquitz Canyon Way and Alejo Road), Alejo Road (from Civic Drive to Sunrise Way) and Sunrise Way (north of Alejo Road).

On both sides of Farrell Drive, south of Baristo Road, the sidewalks are approximately 12-feet in width. Sidewalks approximately 8 feet in width exist along both sides of Farrell Drive, between Tahquitz Canyon Way and Baristo Road. Along the project frontage on Farrell Drive, there are obstructions at various locations within the 8-foot wide sidewalk. A SunLine Transit bus turnout and transit shelter are located approximately 315 feet south of the centerline of Tahquitz Canyon Way (south of Intersection 19) along the project frontage. No markings or signage on Farrell Drive indicate the presence of a Class I bikeway along the project frontage. A bike route sign is located on the east side of Farrell Drive, south of Tahquitz Canyon Way.

Class II bike lanes exist within the study area at the following locations: (1) Tahquitz Canyon Way, west of Farrell Drive, (2) Tahquitz Canyon Way, between Civic Drive and El Cielo Road, and (3) Baristo Road, throughout the study area. A 6-foot wide bike lane is currently striped on both sides of Tahquitz Canyon Way, west of Farrell Drive, that extends across the frontage of the project site. A 6-foot wide bike lane is currently striped on both sides of Baristo Road that extends across the frontage of the project site.

A Class III bike route exists at five following locations within the study area including: (1) Alejo Road, west of Sunrise Way, (2) El Cielo Road, south of Tahquitz Canyon Way, (3) Farrell Drive, north of Tahquitz Canyon Way, (4) Ramon Road, and (5) Sunrise Way, north of Alejo Road. None of these bike routes are located within or adjacent to the project site.

Bicycle parking facilities exist within the study area at the following locations: Sunrise Park, the City Hall and other City buildings, the Palm Springs Police Department, the Riverside County Administrative Center, the Palm Springs

3. Class I bike paths do not appear to exist at some of the locations indicated in Figure 4-5 of the *Palm Springs 2007 General Plan*. The project site has an 8-foot wide sidewalk with three driveways and a variety of obstructions (including a transit shelter) along Farrell Drive. An 8-foot wide sidewalk exists on the east side of Farrell Drive, adjacent to the Jul Residential Development, but no Class I bikeway exists at this location and the sidewalk is obstructed by a transit shelter located south of Tahquitz Canyon Way. Tahquitz Canyon Way, between Farrell Drive and Civic Drive, has a Class II on-street bike lane. The sidewalk has a variety of obstructions including street trees (mature palm trees) but no Class I bikeway is apparent at this location.

International Airport, and the Main Branch Library. A shower and clothing lockers exist at Sunrise Park. Bike racks and/or bike lockers are proposed by SunLine Transit Agency at select bus stop locations. Within the study area, these include: a bike rack for Line 24 at Bus Stop #182 on Tahquitz Canyon Way near Farrell Drive (near Intersection 19), and bike lockers for Line 14 and Line 30 at Bus Stop #780 and Bus Stop #889 on Baristo Road west of Farrell Drive (near Intersection 10).

Palm Springs Bikeway Standards

The City of Palm Springs requires bikeways to be designed and constructed in accordance with City standards, unless otherwise approved by the City Engineer. The *Palm Springs 2007 General Plan* suggests that consideration also be given to the design requirements in Chapter 1000, Bicycle Transportation Design, of the Caltrans *Highway Design Manual* (Revised May 7, 2012) and the CVAG *Non-Motorized Transportation Plan* (September 2010).

Class I bike paths or bike trails provide a right-of-way separate from any street or highway exclusively for use by bicyclists and pedestrians, with vehicular crossings minimized. The paths may be located along alignments parallel to streets, or unrelated alignments, as long as there is no encroachment from motor vehicle or pedestrian traffic except at-grade intersections. The *City of Palm Springs 2007 General Plan* identifies the Class I bike path area as including a minimum width of 8 feet for two-way bicycling and 4 feet for one-way cycling.

Class II bike lanes are unprotected bikeways with a minimum four-foot width for one-way bicycle traffic delineated by a stripe on the roadway. While bike lanes are within an exclusive right-of-way designated for use by bicyclists, cross traffic is permitted by motor vehicles entering and exiting driveways.

Class III bike routes are unprotected on-street bikeways sharing the roadway with vehicular traffic. These facilities include any type of bikeway (including streets signed as bikeways) that offer no other specific lane or other accommodation for bicycles. Bicycles and motor vehicle traffic share the same roadway surface area.

Caltrans Class I Bikeway Design Standards

The current design standards in the Caltrans *Highway Design Manual* (May 4, 2012) state that the design of projects should, when possible, expand the options for biking, walking, and transit use. As described therein, Class I bike paths should generally be used to serve corridors not served by streets and highways. Class I bike paths should be constructed away from the influence of parallel streets, at locations where cross flow by motor vehicles and pedestrian conflicts can be minimized. Common applications identified for Class I bike paths include: (1) as part of planned developments; (2) within school campuses; (3) within and between parks; (4) within utility rights of way; and (5) to close gaps to bicycle travel caused by barriers such as freeways, rivers, and mountains.

Section 21966 of the *California Vehicle Code* states that no pedestrian shall proceed along a bicycle path or lane where there is an adjacent adequate pedestrian facility. Unless adjacent to an adequate pedestrian facility, Class I bikeways are for the exclusive use of bicycles and pedestrians. Therefore, any facility serving pedestrians must meet applicable accessibility requirements per Caltrans *Design Information Bulletin 82-05, which reflects the 2010 Americans with Disabilities Act (ADA) Standards and the California Building Code 2013 (Title 24) published in July 2013.*[4] If regular pedestrian use is anticipated, separate facilities for pedestrians may be beneficial to minimize conflicts.

Guidance provided in Chapter 1000, Bicycle Transportation Design, of the Caltrans *Highway Design Manual* for the selection of an appropriate bikeway facility indicates that *"…sidewalks are not Class I bikeways because they are primarily intended to serve pedestrians, generally cannot meet the design standards of Class I bikeways, and do not minimize vehicle cross flows."* Issues associated with sidewalk bikeways are discussed in Index 1003.3 which states:

4. California Department of Transportation. *Design Information Bulletin 82-05: Pedestrian Accessibility Guidelines for Highway Projects.* October 1, 2013.

"Sidewalks are not to be designated for bicycle travel. Wide sidewalks that do not meet design standards for bicycle paths or bicycle routes also may not meet the safety and mobility needs of bicyclists. Wide sidewalks can encourage higher speed bicycle use and can increase the potential for conflicts with turning traffic at intersections as well as with pedestrians and fixed objects."

Mandatory Class I bikeway width standards in the Caltrans *Highway Design Manual* (May 7, 2012) identify the minimum paved width of travel way for a two-way bike path as 8 feet, with 10-feet preferred. The minimum paved width for a one-way bike path is 5 feet. Guidance therein indicates that it should be assumed that Class I bicycle paths will be used for two-way travel as one-way Class I bike paths are rare, except where two one-way paths that are parallel and adjacent to each other are provided within a wide right-of way. Enforcement of one-way travel is difficult, and there is rarely a situation where there is a need for bicycle travel in only one direction.

Shared pedestrian facilities that are part of non-motorized transportation facilities should be designed in accordance with the Caltrans *Highway Design Manual* requirements for the appropriate bikeway classification. Although a Class I bikeway may legally be used by pedestrians and bicycles, at certain segments of the path it may not be practical to design for both users. In such cases, a deviation from either the bicycle standard (in Chapter 1000 of the *Highway Design Manual*) or the pedestrian accessibility standard in *Design Information Bulletin (DIB) 82-05* would be necessary. Federal regulations allow the use of other accessibility standards if they provide substantially equivalent or greater access to the facility than the minimum Federal accessibility standards. The *California Building Code* allows the enforcing agency to make judgments as to equivalent designs. Local Agency standards that provide equivalent or greater accessibility may be used in lieu of the minimum standards in DIB 82-05.

Bike lanes on existing roadways should conform to Caltrans standards or be upgraded to meet Caltrans standards. Separate standards apply to each of the three bicycle facility classifications and each class of bikeway has its appropriate application, as discussed in the Caltrans *Highway Design Manual.*

2.8 Public Transportation

The SunLine Transit Agency provides public transportationservices to the Coachella Valley. There were 4.71 million boardings in the fiscal year 2012/2013 within a service area of 1,120 square miles. Based on the 2010 U.S. census data, the population of the Coachella Valley within 0.75 miles of the SunLine transit route network grew by 30 percent from 216,374 in 2000 to 281,189 in 2010. During that same period, the overall population of the Coachella Valley grew by 39 percent. The California Department of Finance January 2012 estimate of the population of the nine cities within the Coachella Valley was 361,124, one percent higher than the 355,986 population one year earlier. SCAG projections suggest that the population of the Coachella Valley will more than double between the year 2010 and the year 2035.[5]

The SunLine Transit Agency provides fixed-schedule public transit service between local communities with 69 SunBus fixed-route vehicles and fourteen local routes. The fleet of low-emission buses operates between 4:38 AM and 11:23 PM on weekdays and from 5:00 AM to 10:48 PM on weekends (excluding Thanksgiving and Christmas) along fixed-schedule SunBus transit routes to provide public transportation service to the nine cities and communities within the Coachella Valley. Based on a 2008 SunLine Transit Agency survey, fixed route riders include primarily workers, students, seniors, and visitors. School and work are the major trip generators, followed by shopping, medical care, and recreation.

SunLine Transit Agency buses are wheelchair accessible. They have bicycle racks that are convenient for cyclists to use and can accommodate either two or three bicycles per bus. Bike racks are proposed by SunLine Transit at select bus stop locations.

The SunLine Transit Agency also provides paratransit service (SunDial) for individuals within 0.75 miles on either side of the existing SunBus route network who have disabilities that prevent them from using accessible fixed-route public transportation services. A paratransit fleet of 31 SunDial vans provides curb-to-curb dial-a-ride next-day

5. SunLine Transit Agency. *SunLine Transit Agency Short Range Transit Plan FY 2014/15-FY 2016/17.*

complementary demand-response service that is ADA compliant and wheelchair accessible. A total of 136,208 trips were made on SunDial in the fiscal year 1012/13, an increase of 9.3 percent over the previous year ridership. SunDial is designed to serve seniors and those with disabilities on an appointment basis, based on fixed route service hours associated with the passenger's origin and destination. The service is available seven days per week (excluding Thanksgiving and Christmas). In addition to SunDial, a subscription-based transit service is available through agencies serving people with disabilities who need regular repetitive trips. The Desert Health Car Service transports seniors to City senior centers.

With five bus stops and two bus turnouts in the immediate vicinity, the Palm Springs Mall site has excellent access to public transportation services. As shown in Figure 2-6 (Public Transportation) three fixed SunBus transit routes currently operate adjacent to the project site with Farrell Drive and/or Baristo Road, as service corridors. There are existing transit bus turnouts at bus stops with transit shelters located on the west side of Farrell Drive and the north side of Baristo Road, adjacent to the eastern and southern site boundaries. The existing bus bays provide a protected area away from moving vehicles for the bus and transit patrons. Their location on the far side of signalized intersections minimizes the delay for general traffic while the bus is stopped and reduces conflicts with turning vehicles. These existing transit stop locations provide direct access to the site for transit patrons.

Transit bus turnouts are located: (1) on the west side of Farrell Drive, approximately 315 feet south of the centerline of Tahquitz Canyon Way, and (2) on the north side of Baristo Road, approximately 320 feet west of the centerline of Farrell Drive. A transit stop with shelter is located on the north side of Tahquitz Canyon Way, west of Farrell Drive. A transit stop with shelter is located south of Tahquitz Canyon Way, on the east side of Farrell Drive. A transit stop is located on the south side of Baristo Road, between Farrell Drive and the signalized Palm Springs High School/Palm Springs Mall access.

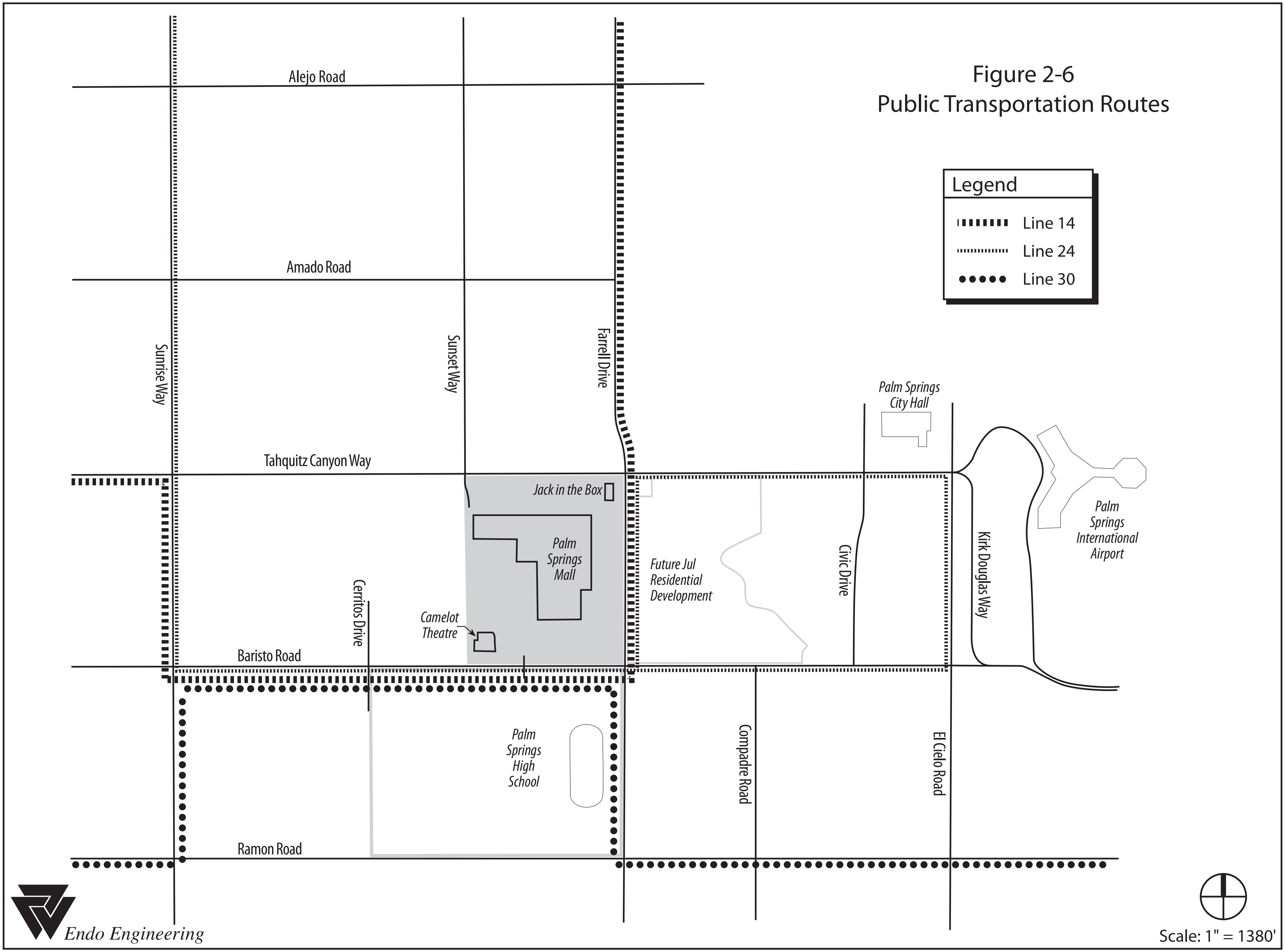
Local SunBus Line 14 connects Downtown Palm Springs with Desert Hot Springs via Tahquitz Canyon Way, Sunrise Way, Baristo Road, Farrell Drive, and Vista Chino. This route links riders with local shopping centers, middle schools and high schools, and other services. Line 14 was upgraded recently to operate at 20-minute headways during the daytime on weekdays with 30-minute headways during the evenings on weekdays. One extra morning and afternoon trip was added to accommodate the high volume of school students. The headway on weekends on Line 14 is 40 minutes.

Local Line 14 extends along the project site boundaries on both Farrell Drive and Baristo Road. Transit buses circulate on Line 14 on weekdays between 5:37 AM and 10:25 PM and on weekends and holidays between 6:25 AM and 9:50 PM. A bus stop and SunBus transit shelter is located on the west side of Farrell Drive, immediately south of Intersection 19. The bus turnout at this bus stop can accommodate two southbound SunBuses simultaneously and is located north of the proposed main site access connection on Farrell Drive. A bus stop and transit shelter for the northbound buses on Line 14 is located on the east side of Farrell Drive, south of Tahquitz Canyon Way.

Local Line 24 also extends along the project site boundaries on both Farrell Drive and Baristo Road with 21 round trips on weekdays and a 40-minute headway. There are 13 round trips during weekends on Line 24 with a 60-minute headway. One morning and three afternoon supplementary trips accommodate the student ridership. Line 24 connects the project site to the Desert Regional Hospital, the Palm Springs International Airport, the Palm Springs City Hall, the Desert Highland Community Center, high schools, and a number of retail outlets. It also allows a transfer to Line 111, which connects Palm Springs to Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, La Quinta, and Indio with 20-minute headways on weekdays. Line 24 operates on Sunrise Way, Baristo Road, El Cielo Road, Tahquitz Canyon Way, and Farrell Drive. Transit buses operate between 6:22 AM and 8:25 PM on weekdays. On weekends and holidays, buses on Line 24 operate between 6:23 AM and 7:44 PM. Line 24 is planned to extend to the large retail area at the intersection of San Luis Rey Drive and Ramon Road in the future.

Line 30 has the highest passenger boardings per hour of service and provides a key regional link between downtown Palm Springs and Cathedral City. Riders can access city libraries, city halls, senior centers, the Cathedral City High School and various commercial and industrial centers from Line 30. On weekdays, Line 30 operates between 5:54 AM and 10:10 PM with daytime headways of 20 minutes and three afternoon supplementary trips to

Figure 2-6
Public Transportation Routes



accommodate student riders. On weekday evenings, there is a 30-minute headway on Line 30. On weekends there is a 40-minute headway.

Ramon Road, west of Sunrise Way and east of Farrell Drive, is the service corridor for Line 30. Between Sunrise Way and Farrell Drive, Line 30 deviates from Ramon Road to extend along Baristo Road. Bus stops with SunBus transit shelters are located on both sides of Baristo Road, between the Palm Springs Mall site and the Palm Springs High School. This bus stop is located east of the signalized intersection of Baristo Road and the Palm Springs High School/Palm Springs Mall access.

Transit bus turnouts exist at the transit stops adjacent to the eastern and southern site boundaries, on the west side of Farrell Drive and the north side of Baristo Road. These existing bus turnouts provide a protected area away from moving vehicles for the bus and transit patrons. Their location on the far side of signalized intersections minimizes the delay for general traffic while the bus is stopped and reduces conflicts with turning vehicles. It also provides more direct access to the site for transit patrons.

SunLine Transit Agency's development review program works with local jurisdictions to determine where new developments are occurring and associated transit service needs and opportunities. SunLine works with school districts in the Coachella Valley to improve access to public transportation and coordinate bell times for routing and scheduling purposes. SunLine serves approximately 600 bus stops, which are cleaned and maintained on a regular basis.

2.9 Regulatory Setting

2.9.1 Access Rights

Laws governing access ensure freedom of movement, freedom of commerce, and freedom of access to and from private property. This provides security in ownership and attracts investment and development. Property owners have a right to reasonable or suitable or sufficient access to the abutting public roadway system. They do not have a legal right to left-turn access or access at every point along their property frontage on public streets.

The granting of access has associated consequences, such as increased risk of accidents, injuries, and interference with the flow of traffic. The public has a right to the safe and efficient movement of traffic on roadways. In limiting access, jurisdictions must maintain a balance between public and private interests.

The City of Palm Springs has the authority to require driveway permits for the construction of new driveways or modifications to existing driveways. In conjunction with the development review process, the City has the authority to manage access to private property by controlling the number, location, and configuration of access points connecting private properties to the abutting public roadways. This is supported by research illustrating damage to public safety and roadway efficiency without such controls. The City also has the authority to implement highway improvement projects, such as the installation of a raised landscape median, made in the furtherance of the public good to promote public health, safety and general welfare. The City has the authority to manage public travel between private properties on the public street system, where existing travel paths are changing as a result of a highway improvement project, without incurring liability for the resulting injury to private individuals.

Generally, the government does not have to pay a property owner when it regulates access in the interests of the public health safety and welfare, even when there has been a reduction in the value of the property. However, when access regulation becomes so intrusive that it becomes the "taking" of a property right, compensation may be due and the owner may initiate legal action.

The governing body has the right of eminent domain, which allows it to take private property for public use. When private property is taken for a roadway widening project, just compensation must be paid to the property owner. However, when a governing body exercises its police power to prevent harm and protect the public welfare, compensation may not be required unless the governing body goes too far in carrying out its objectives. Since no specific threshold is quantified in terms of a specific loss in value, terms such as “reasonable”, substantial”, limited, or “impaired” are used, making it difficult to determine when the threshold is crossed.

Legal precedents have resulted in the following general guidelines.[6] Complete loss of access is always a taking. A substantial loss of access may result in a taking and warrant compensation, although no physical appropriation of property has occurred. Loss of the most convenient access, or an increase in the circuity of access is not usually compensable when other suitable access continues to exist. Governmental actions that affect left-turn access through the installation of a nontraversable median are not a taking. Damages must be peculiar to that property and not common to the public at large for compensation to be paid. Recoverable damages are limited to the reduction in property value caused by the loss of access; but if the property is landlocked, the entire parcel may have to be purchased. Whether access has been substantially diminished is evaluated on a continuum from relatively minor route changes (which are not usually compensable) to extremely circuitous rerouting or complete denial of access to a public street (which are compensable).

2.9.2 Palm Springs Municipal Code

Off-Street Parking Requirements

Chapter 93 of the *Palm Springs Municipal Code* identifies the off-street parking requirements that apply upon construction of any main building, the alteration of any existing building, or establishment of any off-street parking. The regulations therein specify the required number of parking spaces but also address adequate capacity, circulation, and landscaping organized aesthetically to positively relate to the use being served, irrespective of the zone in which it occurs.

Standard ninety-degree parking stall dimensions are seventeen feet in length and nine feet in width. A driveway adjoining a double row of parking spaces shall be 26 feet wide. A driveway adjoining a single row of parking spaces shall be 24 feet wide. One-way drives shall be a minimum of 14 feet wide. All parking spaces shall be located within 300 feet of the uses they serve. Parking lot lighting must be provided in accordance with Section 93.21.00, Outdoor Lighting Standards. The delineation of the parking stalls is specified as well as the provision of continuous six inch concrete curbs to serve as wheel stops. Individual wheel stops are prohibited.

The number of off-street parking spaces required for colleges shall be no less than one parking space for each three enrolled daytime students plus one space for each employee (including teachers and professional staff). The square footage of theaters, meeting rooms, and assembly areas (based on one parking space for each 24 square feet of assembly area) or the number of seats (based on one parking space for every three seats) can be used to determine the parking required for the conference center. The Municipal Code does not identify parking requirements for libraries.

All parking areas are required to incorporate trees of suitable eventual size to shade a minimum of 50 percent of the total parking area. Peripheral planting areas are required every ten spaces. The planters shall have a minimum exterior width of nine feet and provide at least a six-foot minimum planting width. Median islands shall have a planting area six feet in width. Tree wells shall have a planting area a minimum of six feet in diameter.

Off-street parking adjacent to streets requires a landscaped buffer not less than ten feet in depth adjacent to the property line and a decorative solid masonry wall and/or landscaped berm at least four feet in height plus adequate landscaping between the property line and the paved parking area. The wall or berming shall be reduced to 30 inches in overall height within any corner cutoff area. Off-street parking abutting residential zones require the installation of a masonry wall six feet in height installed on the property line and a landscape border a minimum of five feet in width between the wall and the paved parking area.

6. Committee on Access Management, Transportation Research Board of the National Academies. *Access Management Manual*. Washington, DC, 2003.

Pedestrian walkways are required between the parking area and the buildings being served. Concrete walks with a minimum width of two feet shall be installed adjacent to end parking spaces or end spaces may be increased to eleven feet wide. Bicycle racks or bicycle parking facilities may be required. Accessible parking spaces are required in compliance with state and federal guidelines.

The *Palm Springs Municipal Code* allows up to 40 percent of the total parking provided to be compact spaces, subject to planning commission approval. Compact parking space dimensions are specified as eight feet in width and fifteen feet in length (90-degree parking). They are required to be properly marked for compact cars only.

Transportation Demand Ordinance

Chapter 84 of the *Palm Springs Municipal Code* is the trip reduction and Transportation Demand Management (TDM) Ordinance intended to reduce air pollution caused by vehicle trips and vehicle miles traveled as required by California Government Code Section 65089.3(b). This ordinance is applicable to all new non-residential developments which employ one hundred or more persons and changes of use which are owned and managed as one unit. It requires the preparation of a Transportation Demand Management Plan by a traffic engineer or other qualified professional identifying the impacts, design recommendations, and mitigation measures, as appropriate.

The TDM Plan shall establish a standard of reducing trips by ten percent from the average level indicated in the ITE *Trip Generation Manual*. It shall include specific strategies and guidelines to reduce the number of vehicular trips to achieve the mandatory ten percent reduction. Property owners shall include in their development provisions to address each of the following capital improvements to increase trips made by non-motorized modes: transit facilities, bicycle facilities, and rideshare facilities.

Operational standards must be established within 60 days after occupancy of the development to achieve the mandatory ten percent reduction. Numerous options are identified including: alternative work schedules/flex-time; telecommuting; bicycle facilities; on-site employee housing and shuttles; preferential parking for carpool vehicles; an information center for transportation alternatives; rideshare vehicle loading areas; vanpool vehicle accessibility; bus stop improvements; on-site child care facilities; electrical outlets for recharging electric vehicles; on-site amenities that eliminate the need for off-site travel (such as ancillary retail and restaurants, automated teller machines, the library, etc.); implement increased parking fees; provide a direct pedestrian path between the closest transit stops and the facilities proposed; implement bicycle lanes, etc.

2.9.3 Congestion Management Program

The Riverside County Transportation Commission (RCTC) is the designated Congestion Management Agency (CMA) that prepares the Riverside County Congestion Management Program updates in consultation with local agencies, the County of Riverside, transit agencies and sub-regional agencies like the Coachella Valley Association of Governments (CVAG). The RCTC has designated a CMP System of Highways and Roadways including all State Highway facilities within Riverside County and a number of principal arterials. It is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the CMP System of Highways and Roadways. The following facilities are designated as part of the Riverside CMP System of Highways and Roadways in the project vicinity: Interstate 10, State Route 111 (Vista Chino, west of Gene Autry Trail, and Gene Autry Trail, south of Vista Chino), and Ramon Road.

The minimum level of service standard for intersections and roadway segments along the CMP System of Highways and Roadways is LOS E unless the intersection or segment had a lower level of service or LOS F in 1991. The Riverside County Transportation Commission prepares deficiency plans on the State Highway System when deficiencies are identified by local jurisdictions.

2.9.4 Transportation Uniform Mitigation Fee (TUMF) Program

The Coachella Valley Association of Governments (CVAG) has developed a Transportation Uniform Mitigation Fee (TUMF) program that complements the objectives of the Congestion Management Program (CMP). The member agencies of CVAG collect a uniform development impact fee to help fund the construction of the regional system of roads, streets, and highways (excluding state or federal highways) needed to accommodate growth in the region. Under Section 6 of Ordinance 673.3 (the Coachella Valley Transportation Uniform Mitigation Fee Program) public buildings, public schools and public facilities are exempt from payment of the TUMF unless they are primarily leased to private, for-profit enterprises.

2.9.5 2010 ADA Accessibility Standards

1990 Americans With Disabilities Act

To ensure that buildings and facilities are accessible to and usable by people with disabilities, the 1990 *Americans With Disabilities Act* (ADA) established accessibility requirements for state and local government facilities and places of public accommodation. The U.S. Architectural and Transportation Barriers Compliance Board (U.S. Access Board) developed design guidelines for accessible buildings and facilities in the *ADA Accessibility Guidelines* (ADAAG) published in 1991 and updated in 2010. The ADAAG address among other topics, accessible routes, signage, protruding objects, and handrails at ramps and stairs. The ADAAG standards published as Appendix A to 28 CFR Part 36 have been adopted by the Department of Justice as its Standards for Accessible Design.

Titles II and III of the ADA require that newly constructed and altered public school buildings be readily accessible to and usable by individuals with disabilities. Any time a school building is altered or constructed, the building must meet the minimum standards in the *ADA Accessibility Guidelines* issued by the United States Access Board or the Uniform Federal Accessibility Standards (UFAS), 28 CFR Section 35.151. **Title II** of the ADA requires that state and local governments ensure that persons with disabilities have access to the pedestrian routes in the public right of way. Crosswalks constitute distinct elements of the right of way intended to facilitate pedestrian traffic. Without curb ramps, people who use wheelchairs, scooters, or other mobility devices may be forced to travel in roadways to reach their destinations because sidewalk travel is difficult and can be hazardous.

Under Title II of the ADA, newly constructed or altered streets, roadways, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street-level pedestrian walkway. Newly constructed or altered street-level pedestrian walkways must contain curb ramps or other sloped areas at intersections of streets, roadways, and highways.[7] Alterations of streets, roadways, and highways include activities such as reconstruction, rehabilitation, resurfacing, widening, and projects of similar scale and effect.

Curb ramps allow people with mobility disabilities to gain access to sidewalks and pass through raised medians. They are needed wherever a sidewalk or other pedestrian walkway crosses a curb. They must be located to ensure that a person with a mobility disability can travel from a sidewalk on one side of the street to the sidewalk on the other side of the street. However, the ADA does not require the installation of ramps or curb ramps in the absence of a pedestrian walkway with a prepared surface for pedestrian use or in the absence of a curb, elevation, or other barrier between the street and the walkway.

7. Source: 28CFR 35.151(i)(1) and 35.151(i)(2).

3.0 CIRCULATION IMPACT ANALYSIS

3.1 Construction-Related Impacts

Maintaining mobility and safety on the roads carrying traffic to and from the site of the proposed College of the Desert West Valley Campus is a complex challenge facing the Desert Community College District and the contractors responsible for implementing the proposed project. Even though all affected roadway, highway, and freeway segments are expected to operate at acceptable levels of service during the required demolition and construction activities, the increase in the number of large construction-related vehicles moving within and around the study area would be perceptible to residents and students at the adjacent Palm Springs High School and affect local circulation and access.

Project-related demolition and construction activities may result in an increase in congestion, delay, alternate routing for some road users, and the potential for adverse impacts on access to local businesses. It may require the use of shared access connections for construction vehicle access, the staging of construction-related vehicles, loading and off-loading of equipment and building materials, and haul truck access. It may require temporary lane closures or sidewalk closures. It may affect the operation of transit buses on Tahquitz Canyon Way, Farrell Drive and Baristo Road or make it more difficult for first responders to access the area in the event of an emergency. This should be considered in the development of construction staging plans to ensure the maintenance of traffic.

Areas along the abutting roadways where temporary construction activities will change road user conditions may require a temporary speed reduction during the construction activity when workers are present. These areas should be limited and sufficient advance warning signs should be provided to notify road users. The surrounding roadways have the available capacity to accommodate construction-related traffic without excessive congestion.

Three existing driveways will be eliminated and two access points will be relocated and constructed where sidewalks currently exist. If any sidewalk is closed due to construction and a temporary route is provided for use by the public, the various provisions for pedestrian accommodation set forth in Part 6 of the CA MUTCD must be followed. Prior to the beginning of work, the construction contractor must be informed of the temporary traffic control provisions for pedestrian accommodation to be followed.

The Jack in the Box fast food restaurant and the Camelot Theatres would remain operational within the site during the demolition and construction process. In addition, the Plaza East professional offices are located on the southeast corner of the intersection of Sunset Way and Tahquitz Canyon Way, with shared access to the south leg of this site access intersection. Access to and parking for these existing businesses must be maintained through the construction process.

Congestion may occur in the vicinity of the project site at times, particularly when Palm Springs High School students are arriving before classes begin and departing after classes are dismissed on weekdays. The Palm Springs High School traffic is highest on Baristo Road and Farrell Drive. The project site can be accessed directly from three General Plan roadways adjacent to the northern, eastern, and southern site boundaries (Tahquitz Canyon Way, Farrell Drive, and Baristo Road). The use of Tahquitz Canyon Way for site access during the peak pick-up and drop-off periods at the Palm Springs High School could reduce the potential for construction-related impacts on traffic generated by the high school.

Highway 111, Ramon Road, Gene Autry Trail, Vista Chino, Sunrise Way, Tahquitz Canyon Way, and Farrell Drive would most likely be used by vendors to deliver construction equipment and building materials to the site and haul building debris and excavated material from the site. Concrete mixer transport trucks would be used to import material from the Indio Rock Quarry to the site on the designated truck routes and streets providing direct access to the project site. The designated truck routes used for this purpose may include Interstate 10, Ramon Road, Vista Chino, Gene Autry Trail, and Date Palm Drive.

Large haul trucks (semi-truck and trailers) would be required to remove the building demolition debris and other excavated materials generated within the site as the existing Palm Springs Mall building is demolished. The volume of building demolition waste that would be loaded into trucks at the site for removal on a given day would be limited the physical constraints associated with heavy truck access to and from the debris loading area. The quantity of fill material required will determine the number of haul trips necessary and the number of construction-related trips generated locally to import the necessary fill material during construction activities.

The number and type of construction equipment required as well as the number of hours that construction activities occur on a given day are key parameters that would affect construction-related traffic impacts. The City of Palm Springs Municipal Code Section 8.04.220 limits the hours when construction is permitted to 7 AM to 7 PM on weekdays and 8 AM to 5 PM on Saturdays. Construction activities are not permitted on Sundays or holidays.

All necessary permits shall be secured prior to the initiation of demolition, grading, and building construction activities, as required by the City of Palm Springs. During the permit application process, all site-specific requirements shall be identified. The construction activities required to implement the project after all approvals have been issued and construction-related permits are received from regulatory authorities would occur over a period of approximately twenty-four months. The construction is expected to begin in January 2017 and be completed by December 2018.

3.2 Site-Generated Traffic Volumes

Site-generated traffic volumes are required to evaluate the implications of potential land use changes, identify site access and other design requirements, and estimate future traffic volumes for use in determining if off-site transportationimprovements would be necessary to accommodate the traffic that would be generated by the proposed Phase I Project or full occupancy of the WVC Master Plan development. Since the proposed project would change the land use types and intensities within the project site, it would also change the number of trips that would be entering and exiting the site access points in the opening year 2018 and the project buildout year 2030.

To evaluate the effects of the project-related change in site-generated traffic, the number of trips generated by the currently occupied developments within the site was required. Some of these existing trips would be eliminated when the Kaplan College is displaced to implement the WVC Master Plan. The number of trips that would be generated by the Phase I Project and implementation of the WVC Master Plan were estimated and added to the future ambient traffic volumes at the site access points and on the surrounding streets.

3.2.1 Trip Generation By Development Scenario

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* (Ninth Edition; 2012) is the principal source of data related to trip-generation rates used in most site traffic analyses. The trip-generation rates provided by the ITE reflect isolated single-use stand-alone developments and do not reflect internal trip interactions that occur between different land uses in multi-use developments. The ITE *Trip Generation Handbook* (June, 2004) provides guidance in the proper use of the trip-generationdata. The recommended protocolis sensitive to the quality of the trip-generation data and specifies the conditions under which the weighted average trip-generation rates should be used and when the regression equations should be used.

The most important elements when estimating the number of trips generated by a development site include: (1) the selection of an appropriate independent variable that matches the characteristics of the site being analyzed, and (2) the identification of the appropriate time period for analysis. The best independent variable is directly related to the variation in the number of trips generated and can be accurately projected for a proposed development. To estimate the trip generation associated with the existing on-site land uses, the building square footage was used as the independent variable with the rates reflecting a fast food restaurant with drive through window. The number of screens was used as the independent variable for the Camelot Theatres. The current Kaplan College enrollment is not known but the building floor area is known. For the proposed project, the projected number of students enrolled at the college (the headcount) and the gross floor area of the library were selected as the best independent variables for use in estimating the future project-related trip generation.

The ITE weighted average trip-generation rates and regression equations can be used to determine the traffic volumes generated by future development for use in identifying appropriate design requirements at the site access points. The time period that should be analyzed is that interval during which the combination of site-generated traffic and adjacent street traffic is at its maximum. This typically occurs on weekdays during the morning and evening peak hours of adjacent street traffic. The ITE defines these periods as the highest volume hour between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM. New AM, midday, and PM peak hour traffic counts were made within the study area to determine when the peak travel periods occur on the abutting streets and at the key intersections. To ensure that the highest combined peak hour volumes were addressed, the trips generated by the Phase I Project and WVC Master Plan were added to the highest 60-minute traffic volumes on the study area streets, as determined from the new 24-hour traffic counts and the AM, midday, and PM traffic counts at the key intersections.

Site-generated traffic volumes vary with the land use type and intensity within the site boundaries. Table 3-1 shows the estimated weekday (two-way daily) and peak hour site-generated entering and exiting trips associated with various existing and future land use scenarios including: (1) the three currently occupied on-site land uses; (2) full occupancy of the site per the existing Palm Springs Mall entitlements; (3) the on-site development upon completion of the proposed Phase I Project; and (4) the on-site development upon buildout of the proposed WVC Master Plan. To ensure a worst-case analysis, none of the trip-generation estimates shown within Table 3-1 were reduced to reflect potential internal trip interactions between the various on-site land uses. The trip-generation estimates associated with the near-term cumulative Jul Residential Development project site are also shown in Table 3-1.

The proposed conference center and ancillary campus retail uses are not uncommon complementary uses on community college campuses. At some campuses a performing arts center or theater is provided rather than a conference center that attracts patrons for limited periods and generates revenue. The conference center could also be used for graduation ceremonies and other student activities and gatherings. The limited retail space proposed would provide complementary on-site retail establishments providing copy services, books and laboratory supplies required for classes, stationary supplies, and convenience items (e.g., food services like a small sandwich shop, yogurt shop, or café serving coffee and bagels) to a captive market within walking distance. That would reduce the need for students, faculty, staff, and conference attendeesto leave the campus to meet these basic retail needs. This retail area is not designed to attract patrons from a market area beyond the campus. Since the site is somewhat remote from other commercial development, any new trips that the limited retail space would generate, such as employee trips and deliveries, were assumed to be offset by the number of off-site retail trips by students and others that it would eliminate.

The ITE provides trip-generation data for the typical weekday morning (7:00 AM - 9:00 AM) and evening (4:00 PM - 6:00 PM) peak commuter travel periods on adjacent streets. The data compiled by the ITE also identifies traffic peaking characteristics by land use type for a range of days of the week (i.e., average weekday, Saturday, Sunday) and for different time periods during those days. Trip-generation data is provided for the 60-minute interval when the land use generates the most trips both before and after noon. At two-year junior, community, and technical colleges, these "peak hours of the generator" occur between 8:00 AM and 9:00 AM and between 3:00 PM and 4:00 PM. Like the proposed project, a number of the two-year institutions studied have sizable evening programs that generate a second peak in trip generation between 6:00 PM and 7:00 PM.

Trips Generated By Existing Land Uses

Three land uses are currently occupied within the project site including the Kaplan College, the Camelot Theatres, and a Jack in the Box fast food restaurant with drive through window. These existing land uses currently generate inbound and outbound traffic volumes that are combined at the site access points and on the surrounding street system. Two of the three existing land uses will remain occupied and operational within the Palm Springs Mall site after the proposed project is implemented. The traffic volumes currently generated by the Kaplan College would be eliminated from the key intersections and surrounding streets when the Palm Springs Mall building is demolished, prior to the construction of the Phase I Project.

Table 3-1
Weekday Site Trip-Generation Forecast[a]

Land Use Category	Land Use Quantity	Morning Peak Hour			Midday Peak Hour			Evening Peak Hour			Daily
		In	Out	Total	In	Out	Total	In	Out	Total	2-Way
Existing Land Uses											
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Kaplan College	20.08 TSF	32	6	38	25	13	38	24	14	38	390
- Subtotal		96	68	164	136	121	257	106	93	199	2,410
Existing Entitlements											
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Palm Springs Mall	315.12 TSF	195	119	314	516	349	865	477	528	1,005	11,620
- Subtotal		259	181	440	627	457	1,084	559	607	1,166	13,640
Development with Phase I Project											
- COD Phase I	786 Students	79	15	94	61	33	94	59	35	94	970
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Subtotal		143	77	220	172	141	313	141	114	255	2,990
WVC Master Plan Buildout											
- COD Master Plan Buildout	8040 Students	954	182	1,136	745	401	1,146	745	437	1,182	9,880
- Library	30.00 TSF	24	10	34	59	62	121	98	106	204	1,640
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Subtotal		1,042	254	1,296	915	571	1,486	925	622	1,547	13,540
Cumulative Project											
- Jul Residential Development	190 DU	23	85	108	25	84	109	88	48	136	1,386

a. Based upon trip-generation data published by the ITE in *Trip Generation* Manual (9th Edition, 2010).

As shown in Table 3-1, the three currently occupied on-site land uses generate an estimated 2,410 weekday trips (1,205 inbound and 1,205 outbound trips per day). When the trips generated by these land uses are combined, the highest hourly volume occurs during the midday peak hour, when approximately 136 vehicles per hour enter and 121 vehicles per hour exit the site. Approximately 23 percent fewer trips are generated during the PM peak hour. The number of trips generated during the morning peak hour (164 inbound plus outbound vehicles) represents approximately 64 percent of the existing midday peak hour site-generated trips.

The dominant trip generator within the site is currently the Jack in the Box restaurant, which generates 56 percent of the weekday trips. Kaplan College generates 16 percent of the weekday trips and fewer trips during the midday and PM peak hour than the other existing land uses. The Camelot Theatres generate a negligible number of trips during the morning peak hour but more than 80 percent of the Jack in the Box trips during the PM peak hour.

Trips Generated By Existing Entitlements

The Palm Springs Mall was originally constructed within the project site with approximately 315,119 S.F. of gross leasable building area (GLA) in the main mall structure in 1959. The Jack in the Box fast food restaurant with drive-through window (including 2,736 SF of building area) and the Camelot Theatres (three screens) were constructed later. The existing entitlements include the largely vacant mall, which is currently occupied only by the Kaplan College.

Upon full occupancy of the site per the existing entitlements (including the Jack in the Box restaurant, the Camelot Theatres, and the Palm Springs Mall main building) the site-generated traffic volumes would total 13,640 weekday trips (6,820 inbound and 6,820 outbound trips per day). It is estimated that 1,166 inbound plus outbound trips (8.5 percent of the weekday trips) would occur during the PM peak hour and 1,084 trips (7.9 percent) would occur during the midday peak hour. Only 440 inbound plus outbound trips (3.2 percent of the site-generated weekday trips) would be expected to occur during the morning peak hour.

Trips Generated With Phase I Project

To implement the proposed Phase I Project development, the existing Palm Springs Mall main building would be demolished. The required demolition would displace the Kaplan College but not affect the Jack in the Box restaurant or the Camelot Theatres, both of which are expected to remain occupied through all phases of the proposed development.

Up to 50,000 square feet of building floor space constructed for educational use as the Phase I Project would accommodate 786 enrolled students (headcount) and generate approximately 970 weekday trips entering and leaving the site. Approximately 94 of those trips (9.7 percent) are projected to occur during the morning, midday, and evening peak hours.[1] The highest hourly entering traffic volume is expected to occur during the AM peak hour, when the Phase I Project would generate 79 inbound and 15 outbound trips. The highest hourly exiting traffic volume is expected to occur during the PM peak hour, when the Phase I Project would generate 59 entering and 35 exiting trips.

Upon completion of the Phase I Project, the site would also generate trips associated with the existing Jack in the Box restaurant and the Camelot Theatres. As shown in Table 3-1, the combined weekday trip generation associated with all of these land uses would be 2,990 trips, including 1,495 entering and 1,495 exiting vehicles per day. This represents an increase of 580 weekday trips, compared to the 2,410 weekday trip generation associated with the existing on-site land uses. During each of the three peak hours evaluated, 56 more vehicles per hour would be generated by the site following completion of the Phase I Project than are currently generated. The impact of this additional traffic is addressed by evaluating the traffic operations at the key intersections with and without the Phase I Project.

1. The 9th Edition of the ITE *Trip Generation Manual Volume 1: User's Guide and Handbook (2010)* added a definition of the independent trip-generation variable "student" as the total number of persons enrolled at an institution (such as a college) on a full-time and part-time basis, not just those present at the time the trip generation study was conducted. The eight earlier editions of this publication did not distinguish between FTES and headcount.

Trips Generated Upon WVC Master Plan Buildout

Table 3-1 provides the peak hour and weekday trip generation forecast associated with buildout of the WVC Master Plan and full occupancy of the educational facilities shown therein to serve an enrollment of 8,040 students (headcount). The weekday trip generation is expected to total 9,880 entering and exiting trips on a typical weekday. The PM peak hour trip generation of 1,182 trips is expected to include 745 entering vehicles and 437 leaving vehicles. The highest hourly inbound volume is projected to occur during the morning peak hour, when 954 entering trips and 182 departing trips are expected to occur. During the midday peak hour, the entering volume would be similar to the entering volume during the PM peak hour, but the volume leaving the site would be approximately 8 percent lower.

The project would make provisions for a 30,000 S.F. library, which may be a City, District, or joint facility. Upon buildout of the WVC Master Plan, a new library of this size would generate approximately 1,640 weekday trips entering and exiting the site. The trip generation associated with the library would be highest during the PM peak hour, when 204 trips are expected including 98 entering and 106 departing vehicles.

The site would generate approximately 13,540 weekday trips upon buildout of the WVC Master Plan, assuming the new library is completed and the existing fast food restaurant and Camelot theatres remain. This trip generation is equivalent to the number of weekday trips that would be generated by the site upon full occupancy per the existing entitlements (13,640 trip-ends). During the weekday peak hours, however, the site would generate substantially more trips upon implementation of the proposed project than it would upon full occupancy per the existing entitlements.

During the morning peak hour, approximately 856 more trips would be generated by the site upon buildout of the WVC Master Plan and library than upon full occupancy of the site per the existing entitlements. This increase is more pronounced than the midday and PM peak hour increases because commercial shopping centers the size of the Palm Springs Mall typically have few stores open for retail business during the morning peak hour. Major retail stores located within a mall typically open for business when the mall opens at 10:00 AM.

During the midday peak hour, 402 more trips would be generated by the site upon buildout of the WVC Master Plan and library than upon full occupancy of the site per the existing entitlements. During the PM peak hour, 381 more trips would be generated by the site with the WVC Master Plan and library than development per the existing entitlements. The impact of these additional peak hour trips was addressed by evaluating the peak hour traffic operations upon buildout of the *Palm Springs 2007 General Plan* at the key intersections both with and without buildout of the WVC Master Plan.

3.2.2 Modal Split

The trip-generation data published by the ITE is based upon counts of motor vehicle trips associated with single-use developments where virtually all access is by private automobile and all parking is accommodated within the site. The growth of transit services in suburban areas, rising energy costs, and heightened public awareness of climate change and the need to reduce greenhouse gas emissions may affect future trip-generation rates. At the present time, adjustments for modal split are required only in those instances when a traffic study is being performed for urban areas such as Central Business Districts, where the use of non-automobile modes is significant.

The Coachella Valley Association of Governments (CVAG) *2004 Origin Destination Survey* found that 92 percent of all trips by Coachella Valley residents were made in private passenger automobiles. Less than one percent of the trips in the region were completed using public transportation. Four percent of the trips in the region were completed by walking. One percent of the trips were completed by riding a bicycle. The remaining trips were completed by school bus and other modes. More than fifty percent of all trips completed by residents of the Coachella Valley region had a vehicle occupancy of one person.

Even if alternative transportation modes account for six percent of all trips generated in the vicinity of the project, the variations from day-to-day in the current and future site-generated traffic volumes would exceed six percent. To ensure that the project-related impacts are not understated, no modal split adjustment was used to reduce the site-generated traffic volumes. Even though no modal split adjustment was made to reflect a future increase in trips made by alternative transportation modes, careful consideration should be given to the provision of design features within and adjacent to the site that encourage the use of public transportation, walking and cycling. Good geometric design means providing the appropriate level of mobility and access for motorists, transit buses, bicyclists, and pedestrians while maintaining a high degree of safety.

The provision of complementary on-site land uses within close proximity of the educational facilities will facilitate the use of alternative modes of travel within the site. People are more likely to walk or travel by bicycle where the available transportation infrastructure makes non-motorized forms of travel attractive, convenient, and safe. The use of alternative travel modes reduces the demand for roadway capacity.

3.2.3 Trip Distribution and Traffic Assignment

The trips generated by the proposed project were distributed to geographic origins and destinations and then assigned to specific routes. The directional orientation of this traffic is determined by the geographical location of the site in relation to the land uses that will serve as trip origins and destinations. The origin of trips inbound to the site can be affected by the size and type of on-site development generating the trip, the existing land uses in the surrounding area, the locations of competing developments, and the surrounding population, employment, and roadway conditions.

The basic factors affecting route selection are minimizing travel time and the distance traveled. The proposed site access locations, the location of signalized site access connections, anticipated left-turn restrictions at the proposed site driveways, and access to regional transportation facilities were also considered in the site traffic assignment.

Although the project site would attract trips from all directions and generate trips destined in all directions, north/south access is primarily provided by Farrell Drive and Sunrise Way. Primary east/west access is provided by Tahquitz Canyon Way, Baristo Road, and Ramon Road. Primary site access will be from three locations: (1) the signalized access at the intersection of Sunset Way and Tahquitz Canyon; (2) the proposed main campus driveway on Farrell Drive, at the midpoint between Tahquitz Canyon Way and Baristo Road; and (3) the signalized access for the Palm Springs High School on Baristo Road.

The composite (inbound plus outbound) traffic assignment throughout the study area assumed for the Phase I Project trips is shown in Figure 3-1. The composite (inbound plus outbound) traffic assignment throughout the study area assumed for trips generated upon buildout of the proposed WVC Master Plan is shown in Figure 3-2. While it is highly likely that some of the project-related traffic volumes would have origins or destinations within the residential areas located in close proximity to the project site, 98 percent of the project-related traffic volumes were assigned to the boundaries of the study area to ensure that project-related traffic impacts would not be under stated. Two percent of the college and library trip generation was assigned within the study area to the adjacent Palm Springs High School.

3.2.4 Project-Related Traffic Volumes

Figure 3-3 shows the AM, midday, and PM peak hour traffic volumes generated by the proposed Phase I Project. These volumes would be generated by 50,000 S.F. of building area occupied by educational facilities serving 786 enrolled students. The volumes shown in Figure 3-3 do not reflect any reduction for the removal of Kaplan College traffic, since the Kaplan College volumes were subtracted from the year 2018 ambient traffic volumes. Traffic generated by the existing Jack in the Box restaurant and the Camelot Theatres was not included in Figure 3-3 because this traffic was included in the existing traffic counts made at the key intersections and shown in Figure 2-4.

Figure 3-4 illustrates the project-related peak hour turning movement traffic volumes at the key intersections associated with the implementation of the WVC Master Plan and full occupancy. These volumes include college facilities serving 8,040 students as well as the 30,000 S.F. library.

Figure 3-1
Phase I Project Traffic Distibution

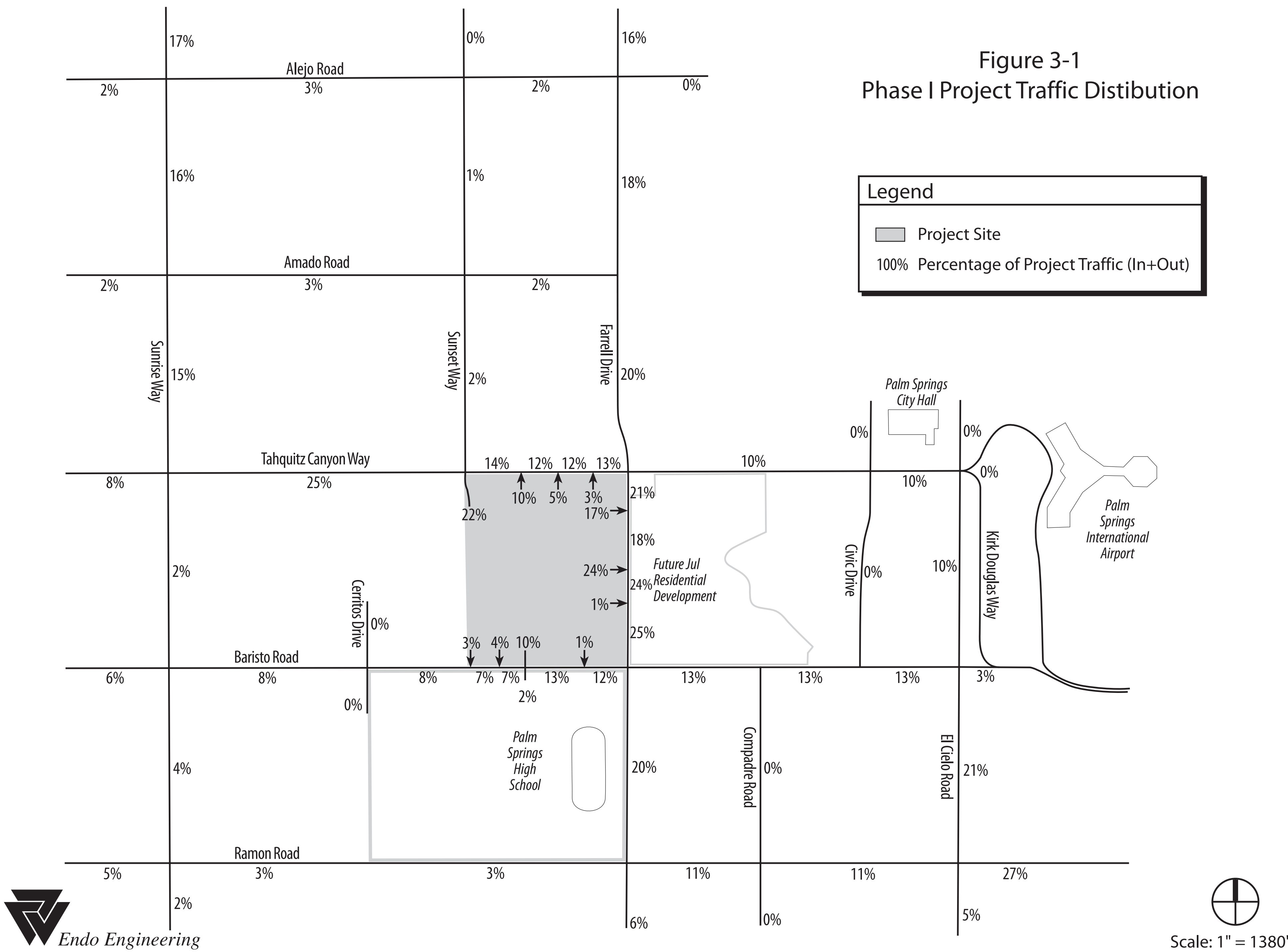


Figure 3-2
WVC Master Plan Buildout Traffic Distibution

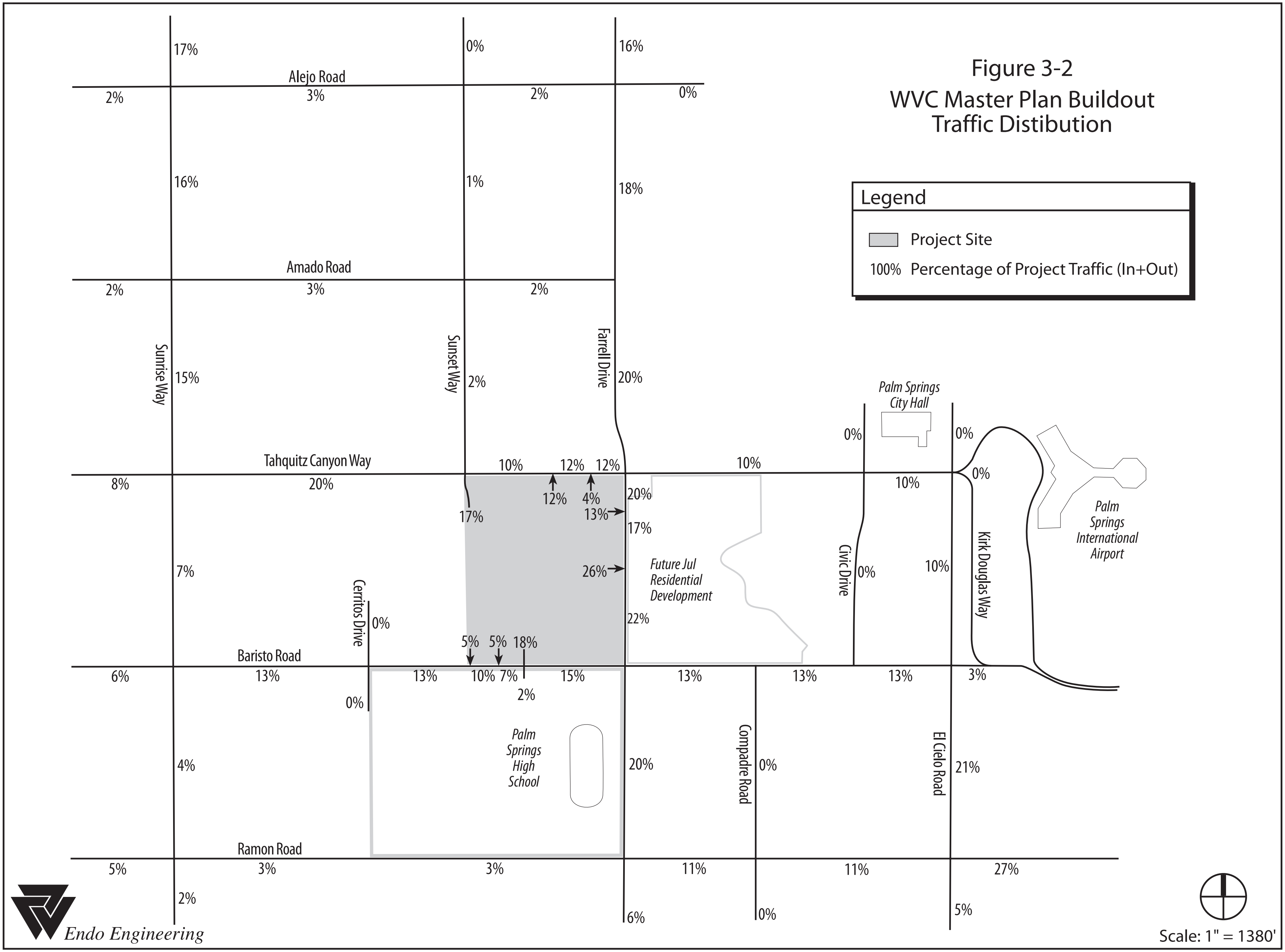


Figure 3-3
Phase I Project Traffic Volumes

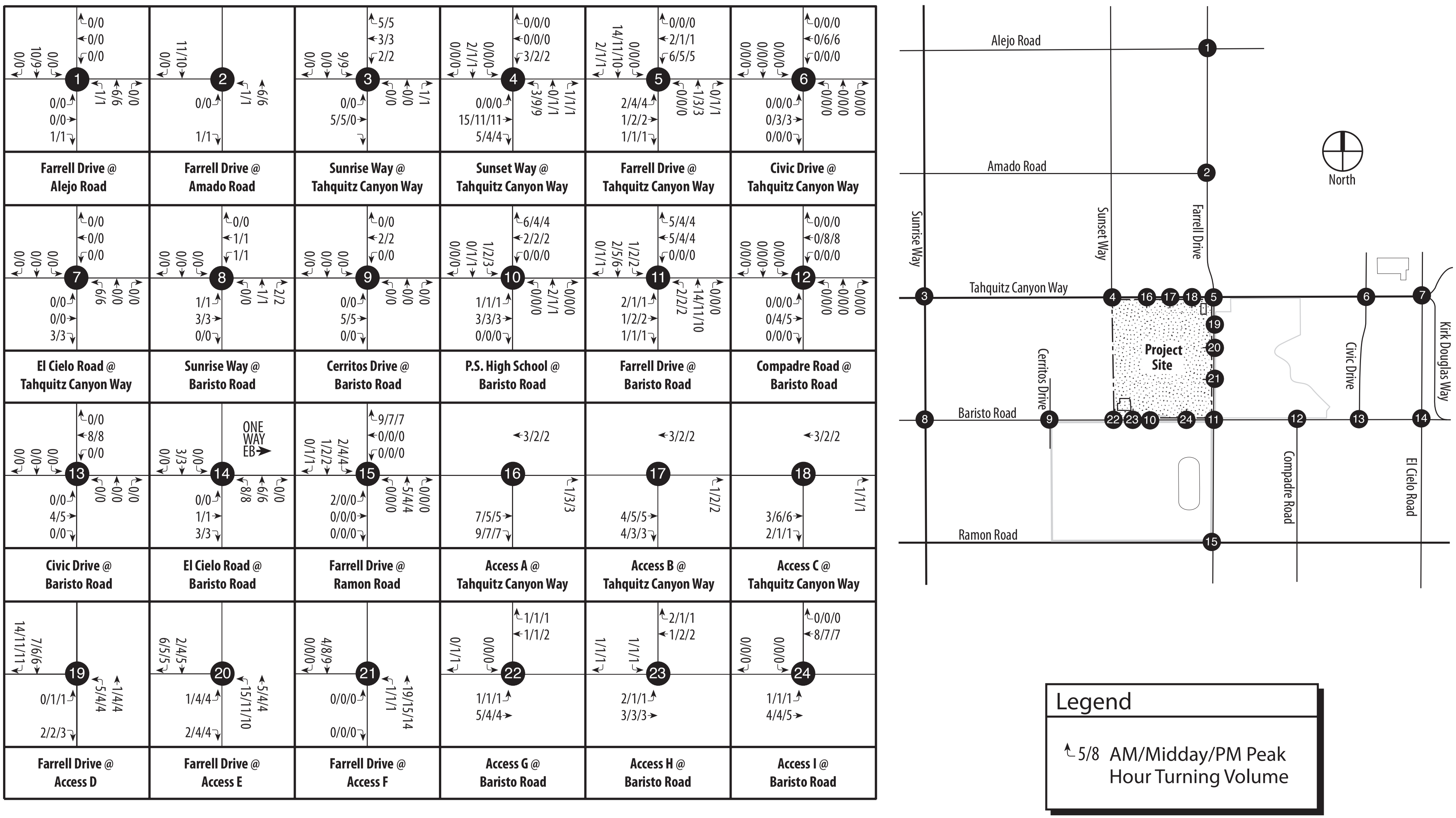


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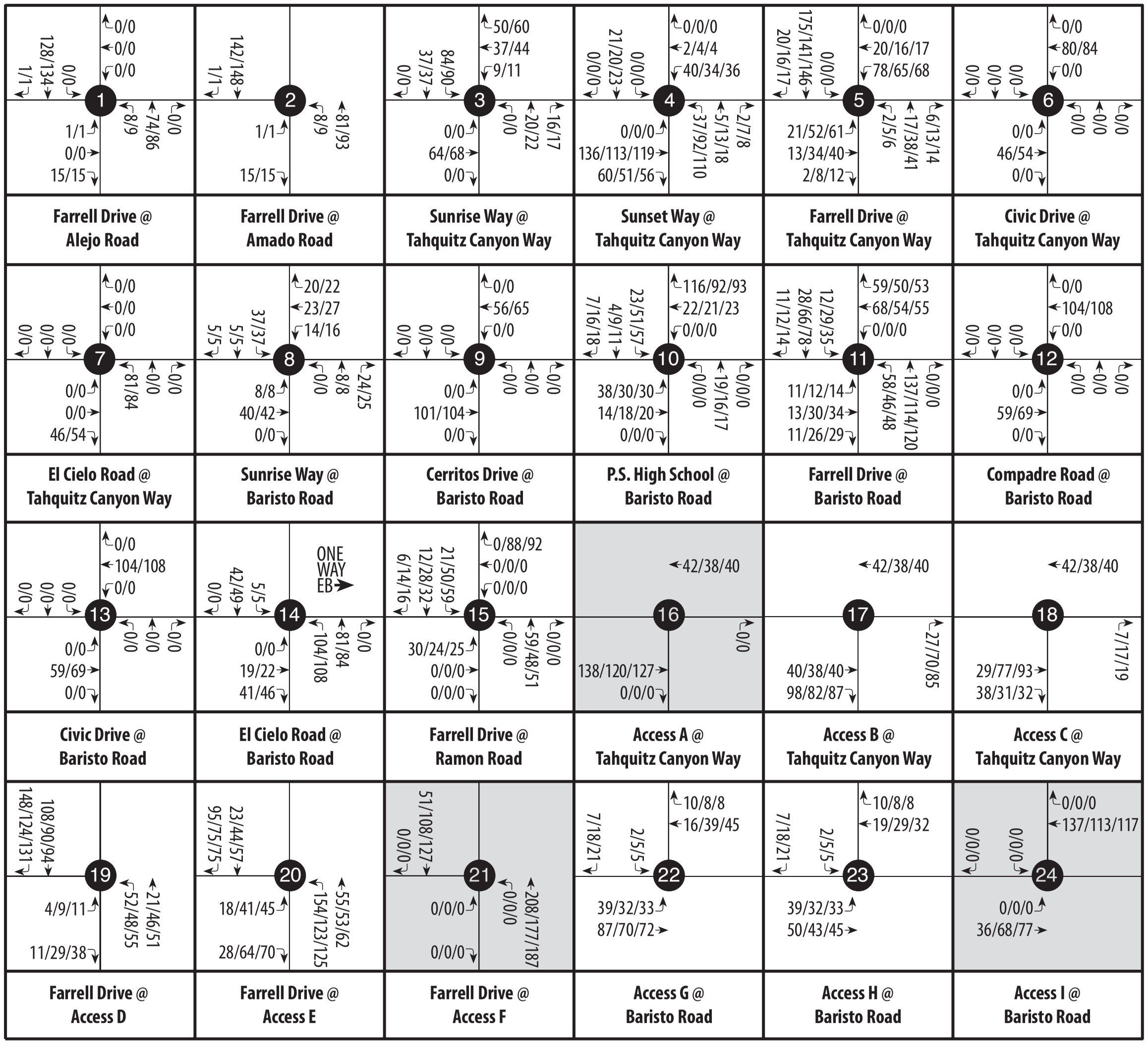
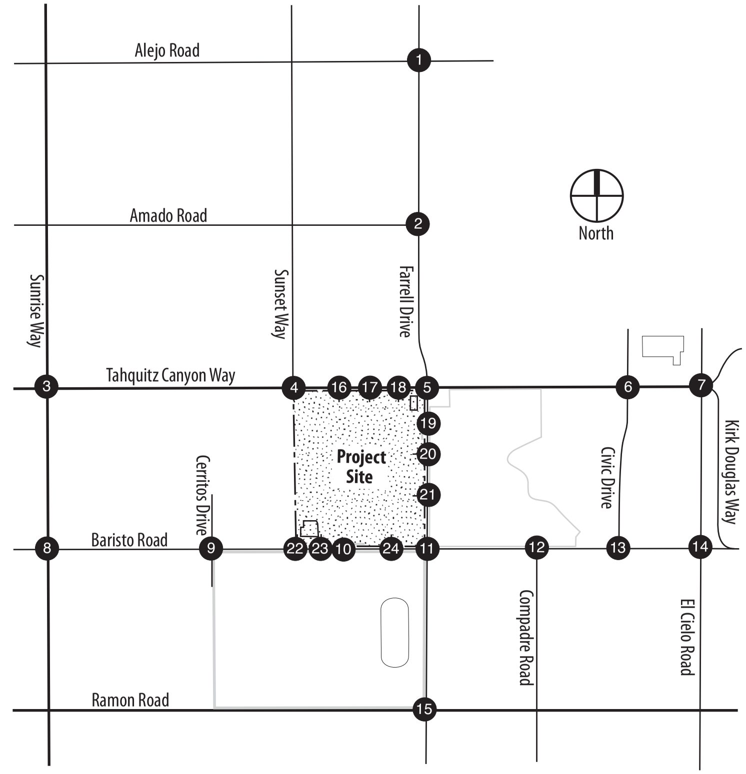
Figure 3-4
WVC Master Plan Buildout Traffic Volumes





Legend

5/8 AM/Midday/PM Peak Hour Turning Volume

Site Access Closed

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Table 3-2 shows the existing weekday traffic volumes on the roadway segments adjacent to the key intersections with and without the project-related traffic volumes upon completion of the Phase I Project and upon implementation of the WVC Master Plan and full occupancy. Comparing these volumes allows the significance of the existing plus Phase I Project traffic volumes to be seen as well as the existing plus project buildout traffic volumes.

3.3 Existing+Project Traffic Volumes

3.3.1 Existing+Phase I Traffic Volumes

Figure 3-5 shows the combined total of the existing and Phase I Project traffic volumes during the peak hours on weekdays in the peak season. The traffic volumes shown in Figure 3-5 were determined by adding the existing turning movement volumes at the key intersections (shown in Figure 2-4) to the Phase I Project traffic volumes during those same hours shown in Figure 3-3. The traffic volumes shown in Figure 3-5 do not include any growth in background traffic volumes associated with traffic increases resulting from local or regional cumulative development projects. Only the fifteen key intersections where new traffic counts were made on January 14, 2015 are shown in Figure 3-5.

3.3.2 Existing+WVC Master Plan Buildout Traffic Volumes

Figure 3-6 shows the combined total of the existing and WVC Master Plan buildout volumes during the peak hours on weekdays in the peak season. The traffic volumes shown in Figure 3-6 were determined by adding the existing turning movement volumes at the key intersections (shown in Figure 2-4) to the WVC Master Plan buildout traffic volumes during those same hours shown in Figure 3-4. Only the fifteen key intersections where new traffic counts were made on January 14, 2015 are shown in Figure 3-6.

3.4 Future Ambient (Non-Site) Traffic Volumes

Future General Plan buildout (year 2030) traffic projections are provided in the *City of Palm Springs 2007 General Plan.* These General Plan buildout traffic projections reflect development within the project site per the existing Palm Springs Mall entitlements (315,119 SF of GLA). These traffic projections do not include the Kaplan College traffic or the project-related traffic but do include the Jul Residential Development traffic.

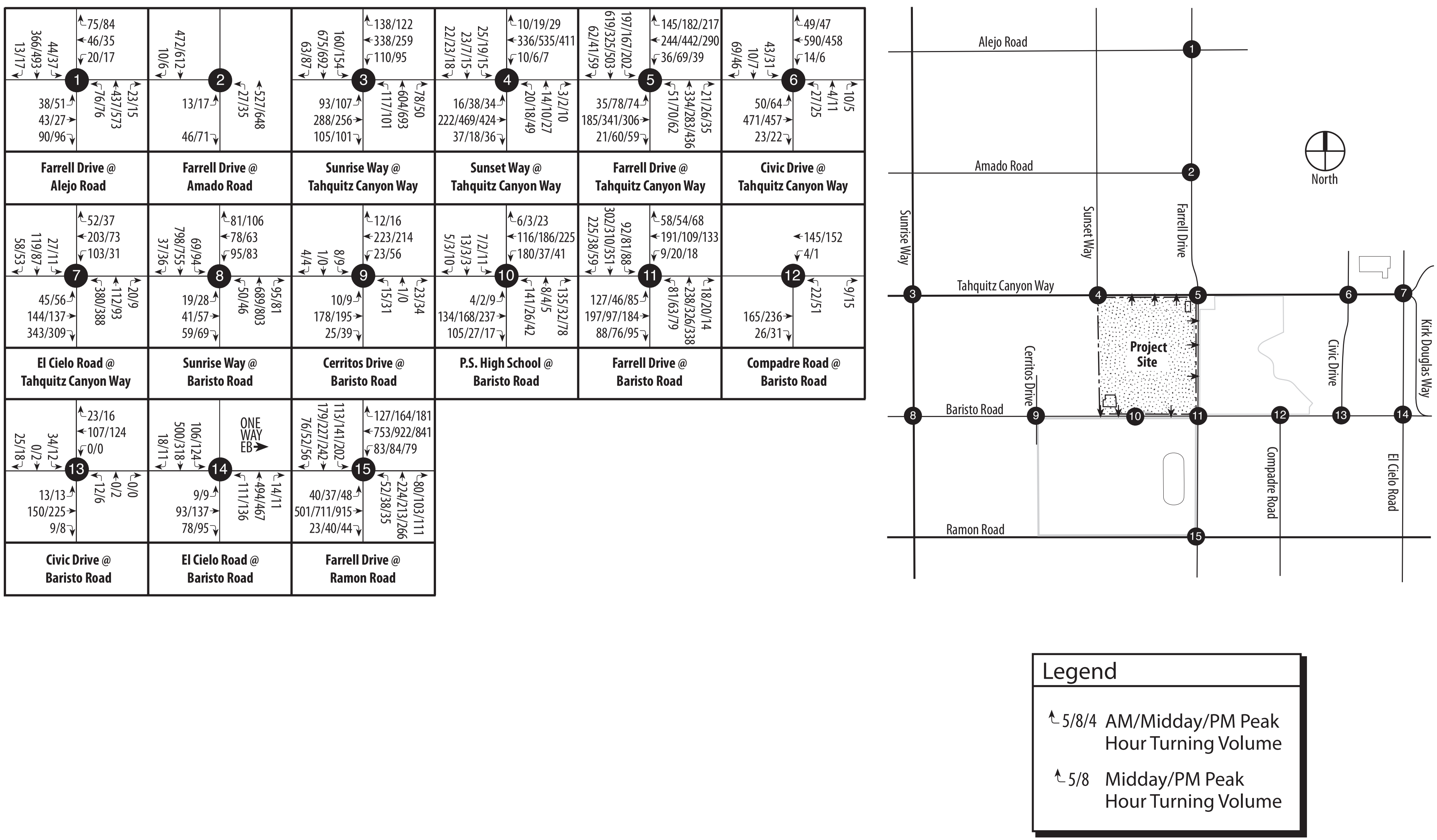
Since implementation of the WVC Master Plan would require the removal of the existing Palm Springs Mall building, the traffic volumes associated with the Palm Springs Mall existing entitlements were estimated then removed from the future General Plan buildout projections for the study area to identify the future year 2030 ambient (non-site) traffic projections. Based on the change in traffic volumes between the existing traffic levels and the year 2030 ambient traffic volumes, a constant rate of growth in future traffic volumes was identified for each leg of the key intersections. The project-related change in the future year 2030 daily traffic volumes within the study area was identified by adding the traffic expected to result from implementation of the WVC Master Plan to the year 2030 ambient traffic projections.

Future ambient (non-site) traffic projections for the opening year 2018 were developed by interpolating between the existing year 2015 daily traffic volumes and the future year 2030 ambient traffic projections, then adding the near-term cumulative traffic volumes associated with one project, the Jul Residential Development. This development is expected to be completed by the year 2018.

3.4.1 Kaplan College Traffic

Kaplan College is an existing on-site land use located within the northeastern portion of the Palm Springs Mall building occupying 20,080 square feet (40 percent of the floor area that would developed as the Phase I Project). Kaplan College will be displaced when the Palm Springs Mall is demolished to develop the Phase I Project. A technical college this size is so small that it is outside of the range of college sizes studied to develop the ITE trip-generation rates.

Figure 3-5
Existing + Phase I Project Traffic Volumes



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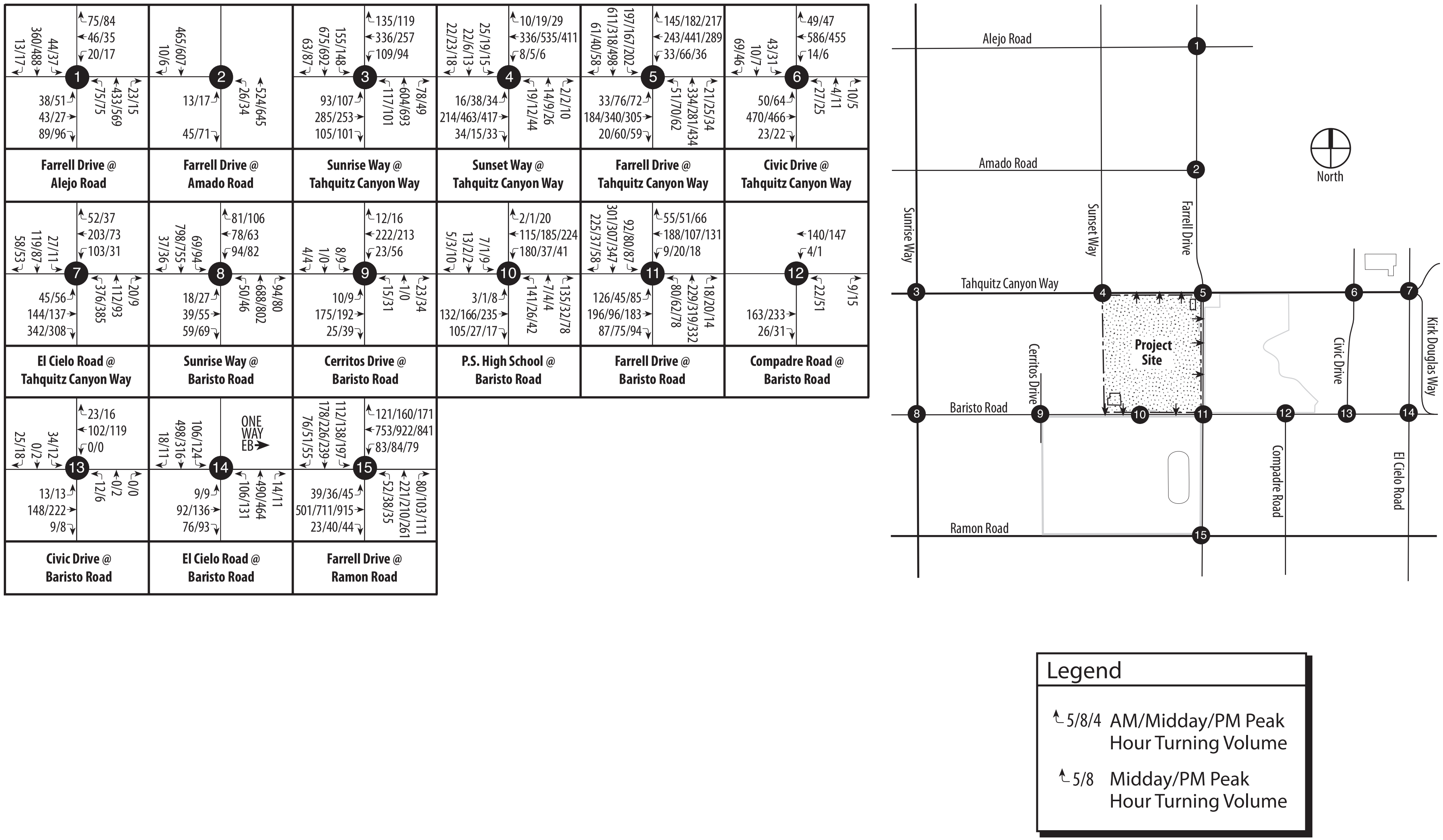
Scale: 1" = 1380'

Figure 3-6
Existing + WVC Master Plan Buildout Traffic Volumes



Endo Engineering

Scale: 1" = 1380'

Table 3-2
Existing Weekday Traffic Projections With and Without the Project

Roadway Segment	Existing ADT	Phase I ADT	Existing+ Phase I ADT	Project Buildout ADT	Existing+Project Buildout ADT
Sunrise Way					
- North of Tahquitz Canyon Way	22,320	150	22,470	1,730	24,050
- South of Tahquitz Canyon Way	21,360	20	21,380	720	22,080
- North of Baristo Road	21,940	20	21,960	720	22,660
- South of Baristo Road	22,610	30	22,640	460	23,070
Sunset Way					
- North of Tahquitz Canyon Way	1,560	20	1,580	330	1,890
- South of Tahquitz Canyon Way	1,130	220	1,350	2,190	3,320
Cerritos Drive					
- North of Baristo Road	460	0	460	0	460
- South of Baristo Road	1,550	0	1,550	0	1,550
PS High School Access					
- North of Baristo Road	410	100	510	1,880	2,290
- South of Baristo Road	1,950	20	1,970	230	2,180
Farrell Drive					
- North of Alejo Road	13,810	160	13,970	1,840	15,650
- South of Alejo Road	14,130	180	14,310	2,030	16,160
- North of Amado Road	14,290	180	14,470	2,030	16,320
- South of Amado Road	15,110	200	15,310	2,210	17,320
- North of Tahquitz Canyon Way	15,910	200	16,110	2,210	18,120
- South of Tahquitz Canyon Way	12,140	210	12,350	2,240	14,380
- North of Baristo Road	11,340	240	11,580	2,600	13,940
- South of Baristo Road	10,540	190	10,730	2,290	12,830
- North of Ramon Road	11,180	190	11,370	2,290	13,470
- South of Ramon Road	9,190	60	9,250	690	9,880
Compadre Road					
- North of Baristo Road	0	0	0	0	0
- South of Baristo Road	990	0	990	0	990
Civic Drive					
- North of Tahquitz Canyon Way	2,690	0	2,690	0	2,690
- South of Tahquitz Canyon Way	1,030	0	1,030	0	1,030
- North of Baristo Road	990	0	990	0	990
- South of Baristo Road	240	0	240	0	240
El Cielo Road					
- North of Tahquitz Canyon Way	4,690	0	4,690	0	4,690
- South of Tahquitz Canyon Way	12,410	100	12,510	1,160	13,570
- North of Baristo Road	12,780	100	12,880	1,160	13,940
- South of Baristo Road	13,740	200	13,940	2,330	16,070

Table 3-2 (Continued)
Existing Weekday Traffic Projections With and Without the Project

Roadway Segment	Existing ADT	Phase I ADT	Existing+ Phase I ADT	Project Buildout ADT	Existing+Project Buildout ADT
Alejo Road					
- West of Farrell Drive	3,780	20	3,800	220	4,000
- East of Farrell Drive	2,910	0	2,910	0	2,910
Amado Road					
- West of Farrell Drive	1,390	20	1,410	220	1,610
Tahquitz Canyon Way					
- West of Sunrise Way	11,910	80	11,990	920	12,830
- East of Sunrise Way	12,610	250	12,860	2,390	15,000
- West of Sunset Way	12,770	250	13,020	2,390	15,160
- East of Sunset Way	12,070	130	12,200	1,190	13,260
- West of Farrell Drive	11,700	130	11,830	1,470	13,170
- East of Farrell Drive	14,400	100	14,500	1,160	15,560
- West of Civic Drive	14,390	100	14,490	1,160	15,550
- East of Civic Drive	13,640	100	13,740	1,160	14,800
- West of El Cielo Road	13,630	100	13,730	1,160	14,790
- East of El Cielo Road	5,290	0	5,290	0	5,290
Baristo Road					
- West of Sunrise Way	3,610	50	3,660	690	4,300
- East of Sunrise Way	5,840	60	5,900	1,410	7,250
- West of Cerritos Drive	5,870	60	5,930	1,410	7,280
- East of Cerritos Drive	6,140	60	6,200	1,410	7,550
- West of PS High School	5,900	60	5,960	750	6,650
- East of PS High School	6,430	120	6,550	1,620	8,050
- West of Farrell Drive	6,570	120	6,690	1,620	8,190
- East of Farrell Drive	5,460	130	5,590	1,470	6,930
- West of Compadre Road	5,080	130	5,210	1,470	6,550
- East of Compadre Road	4,450	130	4,580	1,470	5,920
- West of Civic Drive	4,340	130	4,470	1,470	5,810
- East of Civic Drive	4,230	130	4,360	1,470	5,700
- West of El Cielo Road	4,260	130	4,390	1,470	5,730
- East of El Cielo Road	3,020	20	3,040	290	3,310
Ramon Road					
- West of Farrell Drive	23,330	30	23,360	350	23,680
- East of Farrell Drive	27,700	110	27,810	1,250	28,950

For consistency with the Phase I Project trip generation, the trip generation associated with the Kaplan College was assumed to be 40 percent of the trip generation associated with the 50,000 square-foot Phase I Project. The traffic projected from Kaplan College shown in Table 3-1 was subtracted from the surrounding street system to develop the opening year 2018 ambient traffic projections. The traffic assignment assumed for Kaplan College was similar to that developed for Phase I Project with minor adjustments to reflect the differences in the existing versus future proposed site access driveways.

3.4.2 Cumulative and Background Traffic Growth

The increase in travel demand associated with all future development anticipated by the Land Use Element of the *Palm Springs 2007 General Plan* was addressed by using the General Plan buildout traffic projections as the basis for the horizon year 2030 traffic volumes. Since implementation of the WVC Master Plan would require the removal of the existing Palm Springs Mall building, year 2030 ambient traffic volumes were developed by subtracting the Palm Springs Mall traffic from the *Palm Springs 2007 General Plan* buildout traffic projections. The trip generation associated with the existing Palm Springs Mall building was estimated from the gross leasable area of 315,119 S.F. Based on the change in traffic volumes between the existing traffic levels and the year 2030 ambient traffic volumes, a constant rate of growth in future traffic volumes was identified on each leg of the key intersections.

The trips generated by the near-term cumulative Jul Residential Development should be included in the General Plan buildout projections for the roadways throughout the study area. However, the key intersection of Compadre Road with Baristo Road is a three-leg intersection in the *Palm Springs 2007 General Plan* whereas the Jul Residential Development would take access opposite Compadre Road by constructs a four-leg intersection. The *Palm Springs 2007 General Plan* buildout traffic projections did not reflect the future access improvements at this intersection. As a result, the peak hour turning movement volumes associated with the Jul Residential Development were not included correctly in the future year 2030 ambient traffic projections for this intersection.

The Jul Residential Development will include 76 single-family detached dwelling units and 114 condominiums located east of the project site with access on both Tahquitz Canyon Way and Baristo Road. The intersection of Compadre Road and Baristo Road will be modified from the existing three-leg intersection to a four-leg intersection to provide access for the Jul Residential Development. The trip generation associated with the Jul Residential Development (shown in Table 3-1) was taken from the *Jul Residential Development Traffic impact Study Update* (November 15, 2013) prepared by Arch Beach Consulting. The trips generated by the Jul Residential Development were assigned to the street system (beyond the area addressed in the Arch Beach Consulting traffic study) in a manner consistent with the traffic assignment therein. These near-term cumulative traffic volumes were added to the future year 2018 ambient traffic volumes developed from the *Palm Springs 2007 General Plan* buildout projections. These volumes were also added to the year 2030 ambient traffic projections for the intersection of Compadre Road and Baristo Road.

3.4.3 Opening Year 2018 Ambient Traffic Volumes

Future year 2018 traffic volumes were estimated by interpolating between the existing traffic volumes and the year 2030 ambient traffic projections for both daily and peak hour volumes, with adjustments for cumulative projects. As noted above, the year ambient 2018 traffic volumes included the additional traffic associated with the Jul Residential Development and the removal of the traffic associated with the existing Kaplan College that would be displaced by the demolition of the Palm Springs Mall. Table 3-3 shows the current year 2015 weekday traffic volumes as well as the future year 2018 ambient weekday traffic projections on area roadways (without project-related traffic).

The year 2018 ambient peak hour traffic projections for the key intersections and site access intersections are shown in Figure 3-7. The year 2018 ambient traffic projections shown in Figure 3-7 for the unsignalized site access intersections include projected traffic volumes associated with the Jack in the Box restaurant and the Camelot Theatres (but not the Kaplan College traffic) based on the trip generation forecasts shown in Table 3-1.

3.4.4 General Plan Buildout Ambient Traffic Volumes

Year 2030 peak hour turning movement projections were developed by assuming that the increase in the peak hour traffic volumes between the year 2015 and the year 2030 would reflect the change in the daily volumes. Each existing turning movement volume was multiplied by the ratio of the future year 2030 weekday traffic volume divided by the current weekday traffic volume on both intersection legs associated with that turning movement.

Figure 3-7
Ambient Traffic Volumes
(Year 2018)

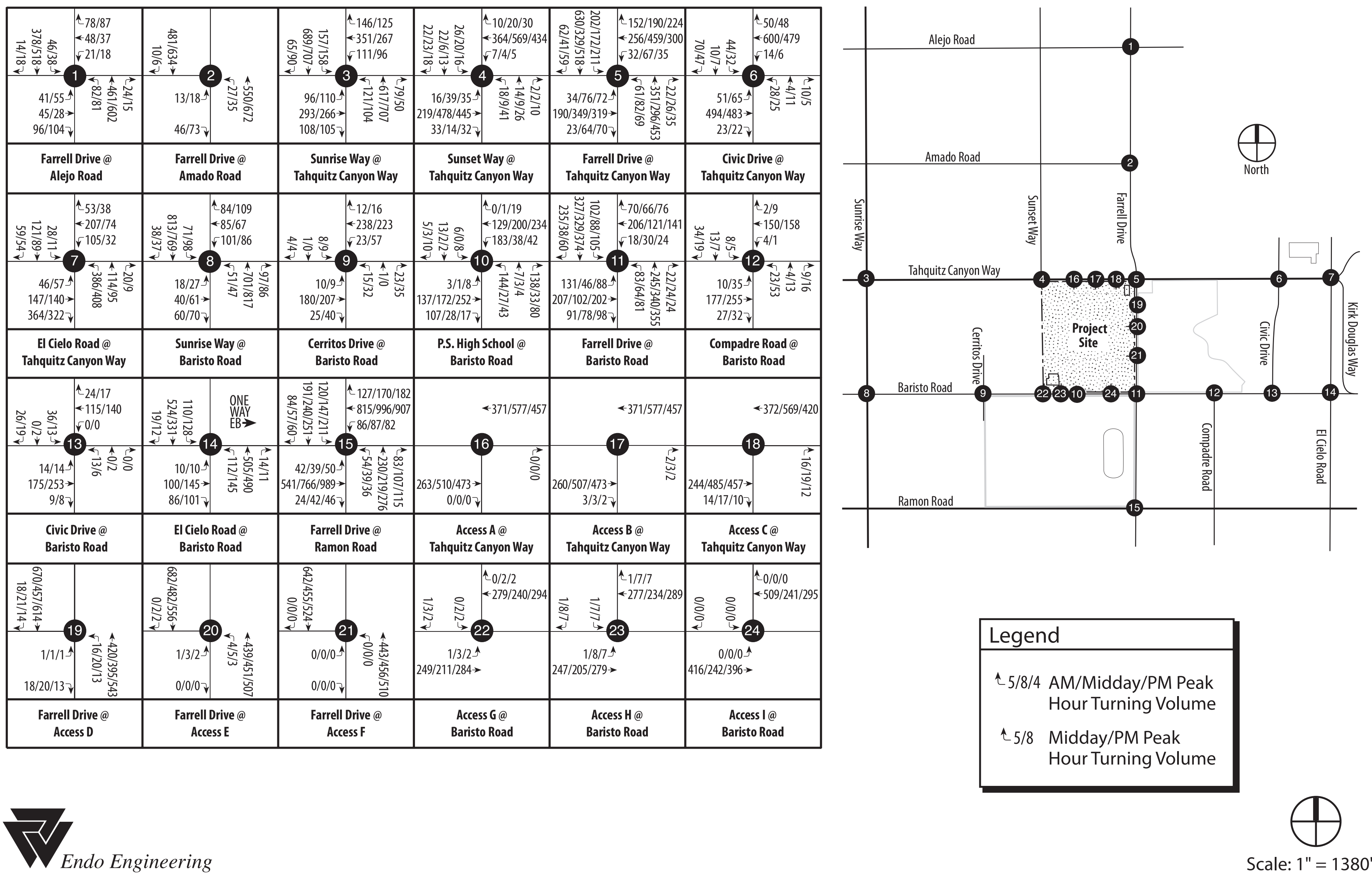


Table 3-3
Future Weekday Traffic Projections With and Without the Project

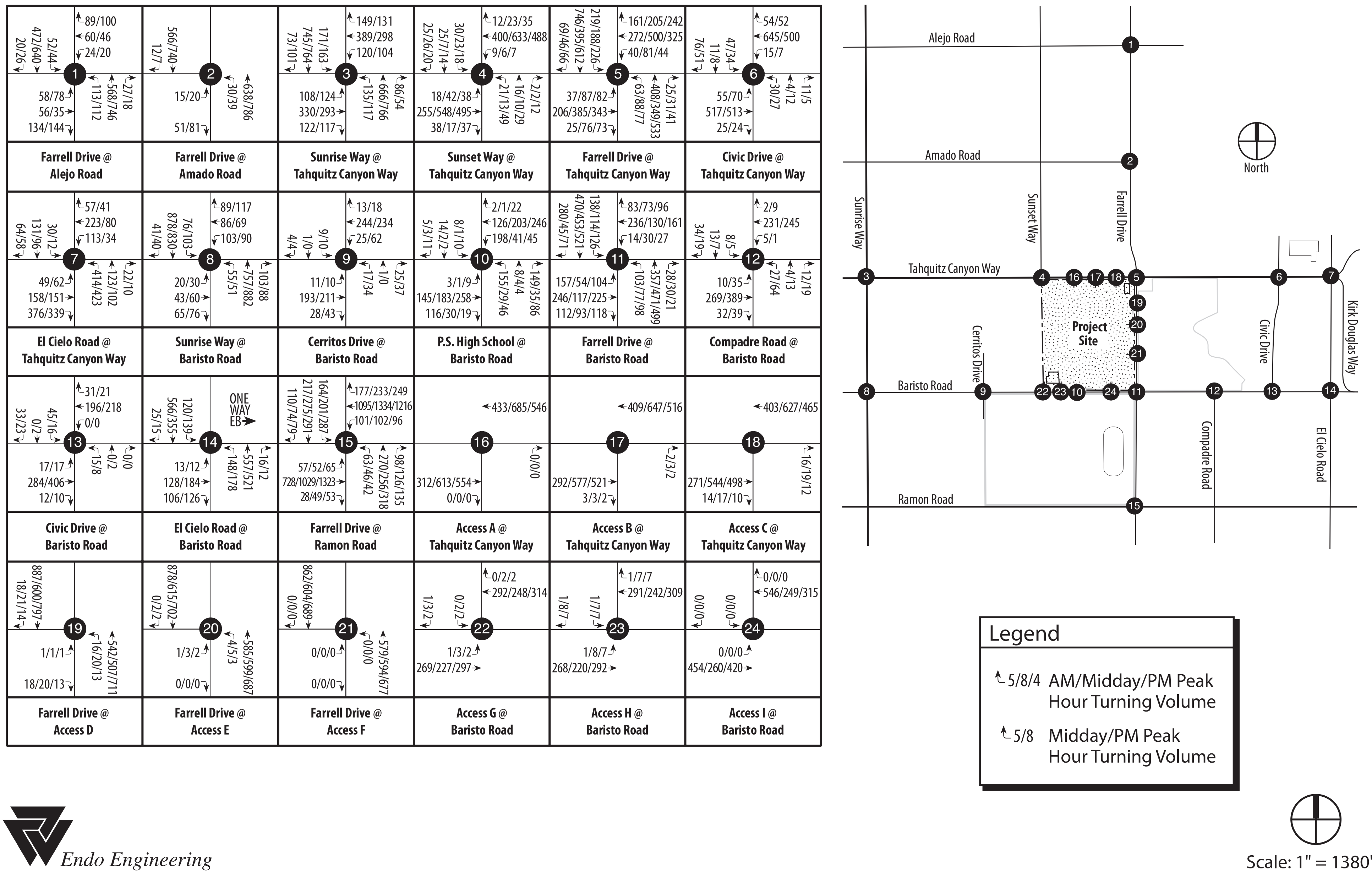
Roadway Segment	Existing ADT	Year 2018 Ambient ADT	Year 2018+ Phase I ADT	Year 2030 Ambient ADT	2030+Project Buildout ADT
Sunrise Way					
- North of Tahquitz Canyon Way	22,320	22,880	23,030	24,550	26,280
- South of Tahquitz Canyon Way	21,360	21,790	21,810	23,500	24,220
- North of Baristo Road	21,940	22,380	22,400	24,130	24,850
- South of Baristo Road	22,610	23,110	23,140	24,870	25,330
Sunset Way					
- North of Tahquitz Canyon Way	1,560	1,580	1,600	1,720	2,050
- South of Tahquitz Canyon Way	1,130	1,070	1,290	1,240	3,430
Cerritos Drive					
- North of Baristo Road	460	470	470	510	510
- South of Baristo Road	1,550	1,580	1,580	1,710	1,710
PS High School Access					
- North of Baristo Road	410	380	480	450	2,330
- South of Baristo Road	1,950	1,980	2,000	2,150	2,380
Farrell Drive					
- North of Alejo Road	13,810	14,610	14,770	18,040	19,880
- South of Alejo Road	14,130	14,870	15,050	18,000	20,030
- North of Amado Road	14,290	15,010	15,190	18,000	20,030
- South of Amado Road	15,110	15,660	15,860	17,770	19,980
- North of Tahquitz Canyon Way	15,910	16,310	16,510	17,770	19,980
- South of Tahquitz Canyon Way	12,140	13,050	13,260	16,770	19,010
- North of Baristo Road	11,340	12,220	12,460	15,840	18,440
- South of Baristo Road	10,540	11,590	11,780	16,080	18,370
- North of Ramon Road	11,180	12,070	12,260	16,080	18,370
- South of Ramon Road	9,190	9,440	9,500	10,110	10,800
Compadre Road					
- North of Baristo Road	0	900	900	900	900
- South of Baristo Road	990	1,220	1,220	1,320	1,320
Civic Drive					
- North of Tahquitz Canyon Way	2,690	2,740	2,740	2,960	2,960
- South of Tahquitz Canyon Way	1,030	1,050	1,050	1,130	1,130
- North of Baristo Road	990	1,010	1,010	1,090	1,090
- South of Baristo Road	240	240	240	260	260
El Cielo Road					
- North of Tahquitz Canyon Way	4,690	4,780	4,780	5,160	5,160
- South of Tahquitz Canyon Way	12,410	12,880	12,980	13,650	14,810
- North of Baristo Road	12,780	13,260	13,360	14,060	15,220
- South of Baristo Road	13,740	14,290	14,490	15,110	17,440

Table 3-3 (Continued)
Future Weekday Traffic Projections With and Without the Project

Roadway Segment	Existing ADT	Year 2018 Ambient ADT	Year 2018+ Phase I ADT	Year 2030 Ambient ADT	2030+Project Buildout ADT
Alejo Road					
- West of Farrell Drive	3,780	4,260	4,280	6,770	6,990
- East of Farrell Drive	2,910	2,970	2,970	3,200	3,200
Amado Road					
- West of Farrell Drive	1,390	1,430	1,450	1,530	1,750
Tahquitz Canyon Way					
- West of Sunrise Way	11,910	12,500	12,580	14,670	15,590
- East of Sunrise Way	12,610	13,040	13,290	13,870	16,260
- West of Sunset Way	12,770	13,210	13,460	14,050	16,440
- East of Sunset Way	12,070	12,860	12,990	15,370	16,560
- West of Farrell Drive	11,700	12,180	12,310	13,270	14,740
- East of Farrell Drive	14,400	14,850	14,950	15,840	17,000
- West of Civic Drive	14,390	14,900	15,000	15,830	16,990
- East of Civic Drive	13,640	14,130	14,230	15,000	16,160
- West of El Cielo Road	13,630	14,120	14,220	14,990	16,150
- East of El Cielo Road	5,290	5,390	5,390	5,820	5,820
Baristo Road					
- West of Sunrise Way	3,610	3,750	3,800	3,970	4,660
- East of Sunrise Way	5,840	6,120	6,180	6,420	7,830
- West of Cerritos Drive	5,870	6,150	6,210	6,460	7,870
- East of Cerritos Drive	6,140	6,430	6,490	6,750	8,160
- West of PS High School	5,900	6,190	6,250	6,490	7,240
- East of PS High School	6,430	6,710	6,830	7,070	8,690
- West of Farrell Drive	6,570	6,860	6,980	7,230	8,850
- East of Farrell Drive	5,460	6,280	6,410	7,790	9,260
- West of Compadre Road	5,080	5,960	6,090	7,790	9,260
- East of Compadre Road	4,450	5,060	5,190	7,790	9,260
- West of Civic Drive	4,340	4,960	5,090	7,790	9,260
- East of Civic Drive	4,230	4,860	4,990	7,790	9,260
- West of El Cielo Road	4,260	4,890	5,020	7,790	9,260
- East of El Cielo Road	3,020	3,100	3,120	3,320	3,610
Ramon Road					
- West of Farrell Drive	23,330	25,100	25,130	33,050	33,400
- East of Farrell Drive	27,700	29,830	29,940	39,920	41,170

The increase in peak hour turning volumes was normalized to the growth in daily traffic volumes to ensure that the future peak hour volumes would accurately reflect the overall increase in daily traffic volumes. In any instances where the current volume exceeded the future volume projection or a future projection was not available from the Palm Springs 2007 General Plan Traffic Model, the current volume was increased by ten percent and assumed to reflect the future year 2030 traffic volume. Figure 3-8 includes the year 2030 ambient peak hour traffic projections at the fifteen key intersections and site access intersections. The year 2030 ambient weekday traffic projections are provided in Table 3-3.

Figure 3-8
Ambient Traffic Volumes
(Year 2030)



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At one location the year 2030 traffic projection did not specifically include the traffic from the cumulative Jul Residential Development. This location was identified by comparing the 2030 ambient traffic projections to the year 2018 ambient traffic projections, which included the cumulative project traffic. The year 2030 non-site traffic projections were adjusted to include the cumulative traffic at Intersection 12 (Compadre Road at Baristo Road) since this intersection would be improved in conjunction with the Jul Residential Development to function as the primary access for the development.

3.5 Future Total Traffic Volumes

3.5.1 Opening Year 2018+Phase I Project Traffic Volumes

The opening year 2018 plus Phase I Project peak hour traffic projections are shown in Figure 3-9 for the key intersections and site access intersections. These projections represent the sum of the year 2018 ambient peak hour traffic projections shown in Figure 3-7 and the Phase I Project traffic projections shown in Figure 3-3. The opening year 2018 plus Phase I Project daily traffic projections are shown in Table 3-3.

3.5.2 Year 2030+WVC Master Plan Buildout Traffic Volumes

The year 2030 with WVC Master Plan buildout peak hour traffic projections are shown in Figure 3-10 for the key intersections and site access intersections. These projections represent the sum of the year 2030 ambient peak hour traffic projections shown in Figure 3-8 and the WVC Master Plan buildout traffic projections shown in Figure 3-4 for each peak hour. The year 2030 plus WVC Master Plan buildout daily traffic projections are provided in Table 3-3

3.6 Intersection Level of Service Analysis

The traffic operations at the key intersections were evaluated for each peak hour to determine if improvements would be necessary prior to the opening of the Phase I Project and prior to implementation of the WVC Master Plan. If mitigation is required to maintain acceptable levels of service for the existing plus project scenario, the mitigation should be implemented prior to the opening of the Phase I Project or the implementation of the WVC Master Plan, whichever results in the identified impact.

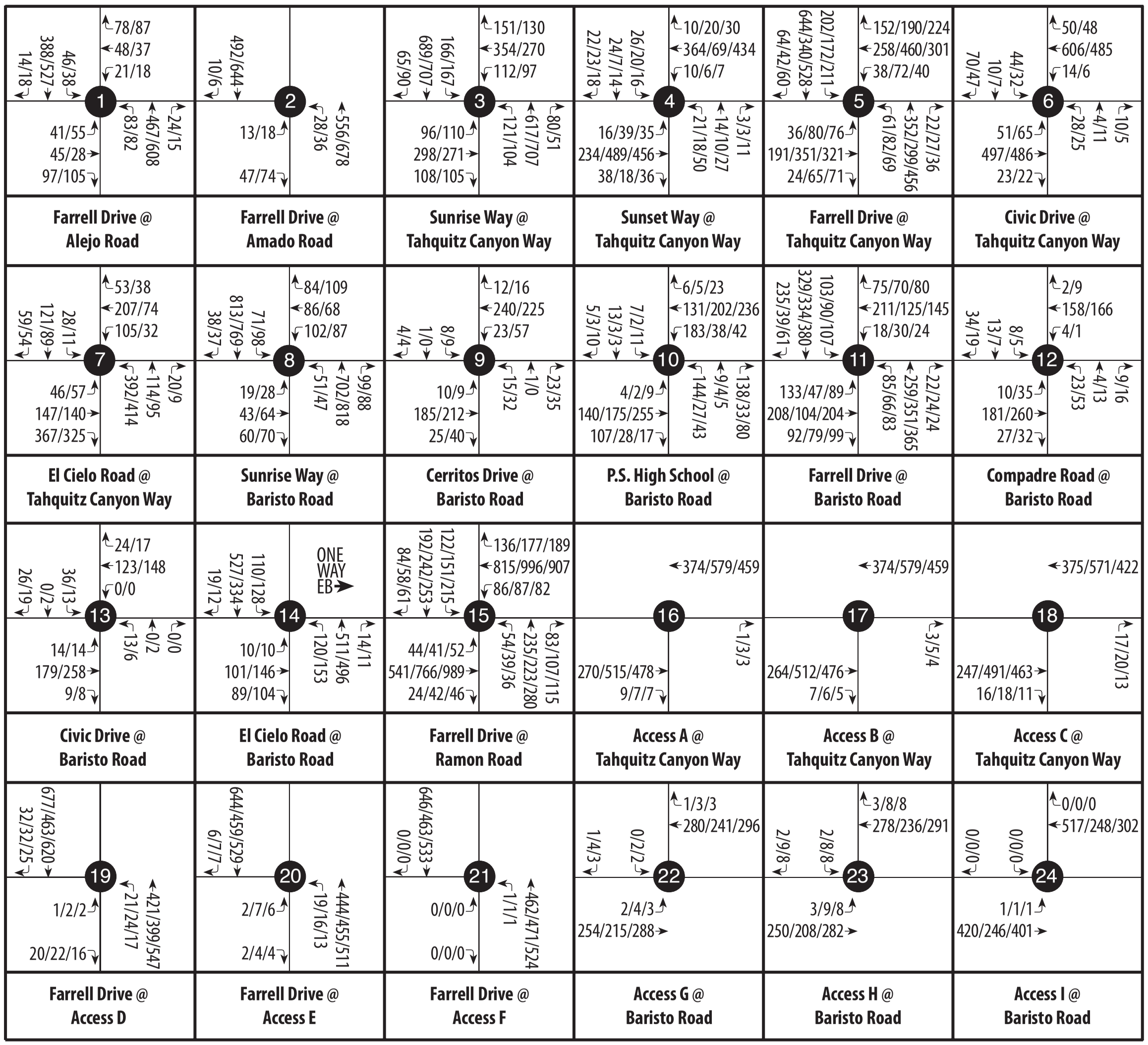
3.6.1 Existing+Phase I Project LOS

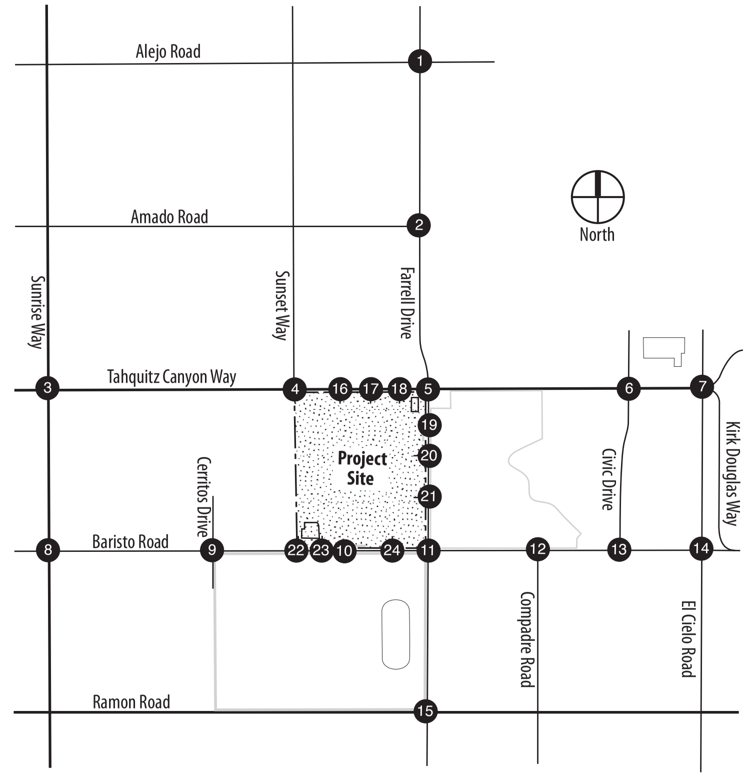
Table 3-4 summarizes the existing peak hour levels of service with and without the Phase I Project at the four key intersections with two-way stop control. As shown therein, all four of the intersections are projected to provide acceptable levels of service during the peak hours with the existing plus Phase I Project traffic volumes added. The Phase I Project would increase the average control delay on the minor-street approaches at these intersections by up to 0.3 seconds per vehicle. Projected increases in the average control delay of this magnitude would not be sufficient to change the peak hour levels of service on the minor-street approaches with the most delay at any of these intersections.

Table 3-5 shows the opening year 2018 peak hour levels of service with and without the Phase I Project at the intersection of Cerritos Drive with Baristo Road, which has all-way stop control. As shown therein, this intersection is projected to operate at LOS B during the peak hours with the existing plus Phase I Project traffic volumes added. The Phase I Project would increase the average control delay at this intersection by up to 0.05 seconds per vehicle. An increase in the overall average control delay of this magnitude would not change the peak hour level of service at this intersection.

Table 3-6 provides the existing peak hour levels of service with and without the Phase I Project at the ten signalized key intersections. As shown therein, all of the signalized key intersections are projected to operate at LOS C or better during the peak hours with the existing plus Phase I Project traffic volumes. The Phase I Project would increase the average control delay at the signalized key intersections by up to 0.2 seconds per vehicle. An increase of this magnitude would not change the peak hour levels of service at any of the ten signalized key intersections.

Figure 3-9
Total Traffic Volumes
(Year 2018)





Legend

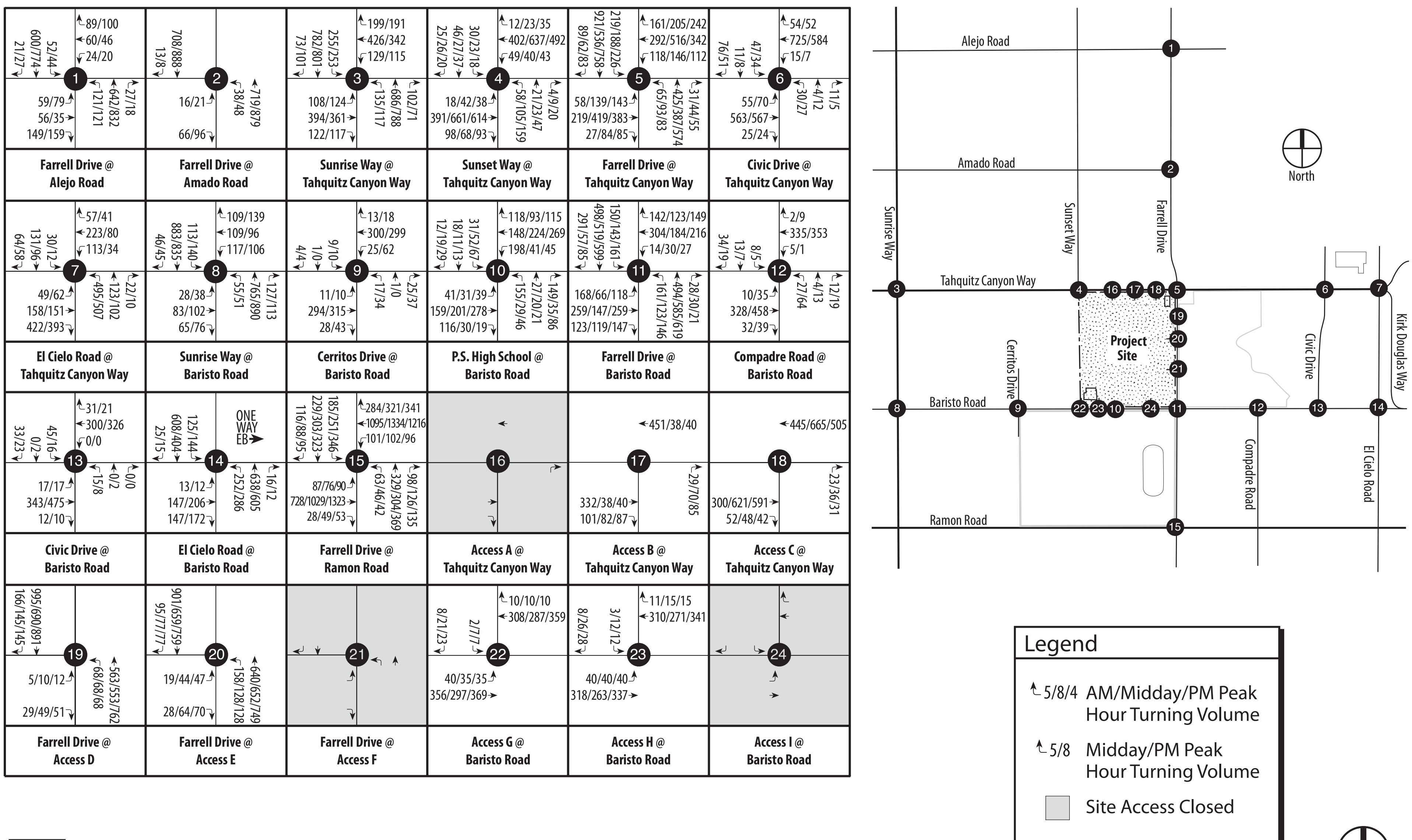
5/8/4 AM/Midday/PM Peak Hour Turning Volume

5/8 Midday/PM Peak Hour Turning Volume

Endo Engineering

Scale: 1" = 1380'

Figure 3-10
Total Traffic Volumes
(Year 2030)



Endo Engineering

Scale: 1" = 1380'

Table 3-4
Existing Weekday Peak Hour LOS With and Without Phase I Project[a]
At the Key Intersections with Two-Way Stop Control

Unsignalized Intersection [Intersection Number]	Existing Without Project			Existing Plus Phase I Project			Change In	
	Major Street Left Turn[b]	Minor-Street Approach[c]		Major Street Left Turn[b]	Minor-Street Approach[c]		Minor-Street Approach	
	Delay/LOS	Move	Delay/LOS	Delay/LOS	Move	Delay/LOS	Delay	LOS
Farrell Drive @ Amado Road [2]								
- Midday Peak Hour [PHF=0.96]	8.6/A	EB	12.0/B	8.6/A	EB	12.1/B	0.1	No
- Evening Peak Hour [PHF=0.84]	9.5/A	EB	16.4/C	9.6/A	EB	16.6/C	0.2	No
Civic Drive @ Tahquitz Canyon Way [6]								
- Midday Peak Hour [PHF=0.89]	9.6/A	NB	31.7/D	9.6/A	NB	32.0/D	0.3	No
- Evening Peak Hour [PHF=0.95]	8.9/A	NB	26.8/D	8.9/A	NB	26.9/D	0.1	No
Compadre Road @ Baristo Road [12]								
- Midday Peak Hour [PHF=0.90]	7.7/A	NB	10.5/B	7.7/A	NB	10.6/B	0.1	No
- Evening Peak Hour [PHF=0.68]	8.2/A	NB	13.6/B	8.2/A	NB	13.7/B	0.1	No
Civic Drive @ Baristo Road [13]								
- Midday Peak Hour [PHF=0.95]	7.6/A	NB	11.1/B	7.6/A	NB	11.1/B	0.0	No
- Evening Peak Hour [PHF=0.73]	8.0/A	NB	13.4/B	8.0/A	NB	13.6/B	0.2	No

a. Appendix C includes the HCS worksheets. The values shown assume an eight percent truck mix and the intersection geometrics shown in Figure 2-5.
b. Delay=average control delay (seconds/vehicle) for the left-turn move from the major street onto the minor street. LOS was determined from the delay (0-10 sec./veh. = LOS A; 10-15 sec./veh. = LOS B; 15-25 sec./veh. = LOS C; 25-35 sec./veh. = LOS D; 35-50 sec./veh. = LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.
c. EB= Eastbound. NB=Northbound. Delay=average approach control delay (seconds/vehicle) for the minor-street approach that exhibits the most delay at this intersection. LOS was determined per the HCM 2000 (page 17-2 and 17-32).

Table 3-5
Existing and Future Weekday Peak Hour LOS With and Without the Proposed Project
At the Key Intersection With All-Way Stop-Control[a]

Scenario Evaluated Unsignalized Intersection [Intersection Number]	Condition Without Project			Condition With Project			Change	
	Intersection Delay/LOS	Worst Approach Move	Worst Approach Delay/LOS	Intersection Delay/LOS	Worst Approach Move	Worst Approach Delay/LOS	Intersection Delay	Intersection LOS
EXISTING VERSUS EXISTING+PHASE I PROJECT								
Cerritos Drive @ Baristo Road [9]								
- Midday Peak Hour (PHF=0.816)	10.23/B	WB	10.68/B	10.24/B	WB	10.66/B	0.01	No
- Evening Peak Hour (PHF=0.815)	10.71/B	EB	11.17/B	10.76/B	EB	11.24/B	0.05	No
EXISTING VRS. EXISTING+PROJECT BUILDOUT								
Cerritos Drive @ Baristo Road [9]								
- Midday Peak Hour (PHF=0.816)	10.23/B	WB	10.68/B	12.38/B	EB	12.88/B	2.15	No
- Evening Peak Hour (PHF=0.815)	10.71/B	EB	11.17/B	13.74/B	EB	15.40/C	3.03	No
YEAR 2018 AMBIENT VRS. YEAR 2018+PHASE I								
Cerritos Drive @ Baristo Road [9]								
- Midday Peak Hour (PHF=0.816)	10.47/B	WB	11.03/B	10.54/B	WB	11.08/B	0.07	No
- Evening Peak Hour (PHF=0.815)	11.08/B	EB	11.66/B	11.18/B	EB	11.81/B	0.10	No
YEAR 2030 AMBIENT VRS. YEAR 2030+ WVC MASTER PLAN BUILDOUT								
Cerritos Drive @ Baristo Road [9]								
- Midday Peak Hour (PHF=1.00)	9.66/A	WB	10.01/B	11.12/B	EB	11.46/B	1.46	A-B
- Evening Peak Hour (PHF=1.00)	9.97/A	EB	10.29/B	11.83/B	EB	12.83/B	1.86	A-B

a. The overall average intersection control delay and LOS are shown for the all-way stop-controlled intersection as well as the delay and LOS for the approach with the most delay (shown under the heading "Worst Approach"). Delay=Average Control Delay (seconds/vehicle). LOS was determined from the delay (0-10 sec./veh.=LOS A; 10-15 sec./veh.=LOS B; 15-25 sec./veh.=LOS C; 25-35 sec./veh.=LOS D; 35-50 sec./veh.=LOS E; 50+ sec./veh.= LOS F) per HCM 2000 page 17-2. Appendix C includes all of the HCS+ unsignalized intersection peak hour worksheets. Assumes the lane geometrics shown in Figure 2-5. An eight percent truck mix was assumed for the existing and year 2018 scenarios. A five percent truck mix was assumed for the year 2030 scenarios.

Table 3-6
Existing Weekday Peak Hour LOS at the Signalized Key Intersections With and Without the Phase I Project[a]

Signalized Intersection [Intersection Number]	Existing Without Project			Existing+Phase I Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Alejo Road [1]								
- Midday Peak Hour [PHF=0.89	8.5	0.31	A	8.5	0.31	A	0.0	No
- Evening Peak Hour [PHF=0.84]	8.1	0.38	A	8.1	0.38	A	0.0	No
Sunrise Way @ Tahquitz Canyon Way [3]								
- Midday Peak Hour [PHF=0.96]	23.2	0.56	C	23.4	0.57	C	0.2	No
- Evening Peak Hour [PHF=0.98]	22.1	0.55	C	22.3	0.56	C	0.2	No
Sunset Way @ Tahquitz Canyon Way [4]								
- Morning Peak Hour [PHF=0.78]	7.6	0.21	A	7.6	0.21	A	0.0	No
- Midday Peak Hour [PHF=0.96]	5.7	0.23	A	5.8	0.23	A	0.1	No
- Evening Peak Hour [PHF=0.89]	6.9	0.22	A	7.1	0.23	A	0.2	No
Farrell Drive @ Tahquitz Canyon Way [5]								
- Morning Peak Hour [PHF=0.79]	20.8	0.60	C	20.8	0.61	C	0.0	No
- Midday Peak Hour [PHF=0.95]	20.7	0.51	C	20.8	0.52	C	0.1	No
- Evening Peak Hour [PHF=0.90]	22.2	0.58	C	22.3	0.59	C	0.1	No
El Cielo Road @ Tahquitz Canyon Way [7]								
- Midday Peak Hour [PHF=0.92]	13.4	0.51	B	13.5	0.51	B	0.1	No
- Evening Peak Hour [PHF=0.99]	11.1	0.43	B	11.1	0.44	B	0.0	No
Sunrise Way @ Baristo Road [8]								
- Midday Peak Hour [PHF=0.94]	11.0	0.45	B	11.0	0.45	B	0.0	No
- Evening Peak Hour [PHF=0.95]	11.0	0.47	B	11.1	0.47	B	0.1	No
Palm Springs High School @ Baristo Road [10]								
- Morning Peak Hour [PHF=0.61]	12.4	0.51	B	12.5	0.51	B	0.1	No
- Midday Peak Hour [PHF=0.77]	6.6	0.22	A	6.7	0.23	A	0.1	No
- Evening Peak Hour [PHF=0.70]	7.7	0.33	A	7.9	0.34	A	0.2	No

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 2-5 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

Table 3-6 (Continued)
Existing Weekday Peak Hour LOS at the Signalized Key Intersections[a]
With and Without the Phase I Project

Signalized Intersection [Intersection Number]	Existing Without Project			Existing+Phase I Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Baristo Road [11]								
- Morning Peak Hour [PHF=0.66]	22.4	0.65	C	22.4	0.65	C	0.0	No
- Midday Peak Hour [PHF=0.94]	17.2	0.31	B	17.3	0.32	B	0.1	No
- Evening Peak Hour [PHF=0.80]	19.4	0.48	B	19.5	0.48	B	0.1	No
El Cielo Road @ Baristo Road [14]								
- Midday Peak Hour [PHF=0.88]	7.7	0.34	A	7.7	0.34	A	0.0	No
- Evening Peak Hour [PHF=0.87]	8.7	0.36	A	8.7	0.36	A	0.0	No
Farrell Drive @ Ramon Road [15]								
- Morning Peak Hour [PHF=0.81]	19.1	0.61	B	19.1	0.62	B	0.0	No
- Midday Peak Hour [PHF=0.96]	18.6	0.60	B	18.6	0.61	B	0.0	No
- Evening Peak Hour [PHF=0.94]	21.1	0.68	C	21.2	0.69	C	0.1	No

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 2-5 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

3.6.2 Existing+Master Plan Buildout LOS

Table 3-7 summarizes the existing peak hour levels of service with and without buildout of the WVC Master Plan at the four key intersections with two-way stop control. As shown therein, three of these unsignalized intersections are projected to provide acceptable levels of service during the peak hours with the existing plus WVC Master Plan buildout traffic volumes. The WVC Master Plan traffic volumes are projected to increase the average control delay on the minor-street approaches at these three intersections by up to 5.2 seconds per vehicle. Projected increases in the average control delay would be sufficient to change the evening peak hour levels of service from LOS B to LOS C on the minor-street approaches at two intersections on Baristo Road located east of the project site including Intersection 12 (at Compadre Road) and Intersection 13 (at Civic Drive).

Following the addition of the traffic generated by implementation and full occupancy of the WVC Master Plan to the existing traffic volumes shown in Figure 2-4, the northbound Civic Drive approach to the intersection of Tahquitz Canyon Way is projected to drop from LOS D to LOS E during the midday peak hour. This represents a potentially significant impact that will be reviewed by the Palm Springs City Traffic Engineer to determine what mitigation, if any is appropriate. Buildout of the WVC Master Plan would increase the average control delay on the northbound Civic Drive approach at this intersection from 31.7 to 39.1 seconds per vehicle (an increase of 7.4 seconds per vehicle) during the midday peak hour. The upper limit of LOS D occurs at 35 seconds per vehicle.

The northbound volume during the midday peak hour on Civic Drive at the intersection of Tahquitz Canyon Way is currently 41 vehicles per hour, which includes 27 left-turning vehicles, 4 vehicles crossing Tahquitz Canyon Way, and 10 right-turning vehicles). The minor-street approach volume is not sufficient to warrant the consideration of traffic control signals at this intersection. Even if the volume were sufficient to justify signalization, a new traffic signal should not be installed if it would seriously disrupt progressive traffic flow. The proximity of the adjacent signalized intersection to the east (El Cielo Road at Tahquitz Canyon Way) makes Civic Drive a poor candidate for signalization from a traffic signal progression perspective.

The WVC Master Plan development is not expected to add any vehicles to the northbound movement at this intersection. The traffic generated by the WVC Master Plan development is expected to add 126 vehicles per hour (a 10.5 percent increase) to the conflicting eastbound plus westbound volume of 1,192 vehicles per hour during the midday peak hour at this intersection. There are feasible alternative routes available for motorists making this movement who determine that the delay during the midday peak hour in the peak season is not acceptable.

Table 3-5 shows the existing peak hour levels of service at the key intersection with all-way stop control both with and without the traffic that would be generated upon buildout and full occupancy of the WVC Master Plan. As shown therein, the intersection of Cerritos Drive with Baristo Road is projected to operate at LOS B during the peak hours with the existing plus WVC Master Plan traffic volumes. The WVC Master Plan traffic would increase the average control delay at this intersection by 2.15 seconds per vehicle during the midday peak hour and 3.03 seconds per vehicle during the PM peak hour. An increase in the overall average control delay of this magnitude would not change the peak hour level of service at this intersection.

Table 3-8 provides the existing peak hour levels of service with and without buildout of the WVC Master Plan at the ten signalized key intersections. As shown therein, all of the signalized key intersections are projected to operate at LOS C or better during the peak hours with the existing plus WVC Master Plan buildout traffic volumes. The project-related volumes would increase the control delay at these intersections by up to 8.8 seconds per vehicle.

The projected increase in the overall average intersection control delay would change the peak hour levels of service at four of the ten signalized key intersections (including the two signalized site access intersections). The intersection of Sunset Way with Tahquitz Canyon Way would drop from LOS A to LOS B during the PM peak hour. The signalized intersection of the Palm Springs High School Access with Baristo Road would drop from LOS A to LOS B during the midday peak hour and the PM peak hour. The signalized intersection of Farrell Drive with Baristo Road would drop from LOS B to LOS C during the PM peak hour. The signalized intersection of Farrell Drive with Ramon Road would drop from LOS B to LOS C during the morning peak hour.

Table 3-7
Existing Weekday Peak Hour LOS With and Without Buildout of the WVC Master Plan[a]
At the Key Intersections with Two-Way Stop Control

Unsignalized Intersection [Intersection Number]	Existing Without Project			Existing+WVC Master Plan Buildout			Change In	
	Major Street Left Turn[b]	Minor-Street Approach[c]		Major Street Left Turn[b]	Minor-Street Approach[c]		Minor-Street Approach	
	Delay/LOS	Move	Delay/LOS	Delay/LOS	Move	Delay/LOS	Delay	LOS
Farrell Drive @ Amado Road [2]								
- Midday Peak Hour [PHF=0.96]	8.6/A	EB	12.0/B	9.2/A	EB	13.6/B	1.6	No
- Evening Peak Hour [PHF=0.84]	9.5/A	EB	16.4/C	10.4/B	EB	21.6/C	5.2	No
Civic Drive @ Tahquitz Canyon Way [6]								
- Midday Peak Hour [PHF=0.89]	9.6/A	NB	31.7/D	10.0/A	NB	39.1/E	7.4	D-E
- Evening Peak Hour [PHF=0.95]	8.9/A	NB	26.9/D	9.2/A	NB	32.6/D	5.8	No
Compadre Road @ Baristo Road [12]								
- Midday Peak Hour [PHF=0.90]	7.7/A	NB	10.5/B	7.9/A	NB	11.8/B	1.3	No
- Evening Peak Hour [PHF=0.68]	8.2/A	NB	13.6/B	8.4/A	NB	17.7/C	4.1	B-C
Civic Drive @ Baristo Road [13]								
- Midday Peak Hour [PHF=0.95]	7.6/A	NB	11.1/B	7.8/A	NB	12.9/B	1.8	No
- Evening Peak Hour [PHF=0.73]	8.0/A	NB	13.4/B	8.2/A	NB	17.2/C	3.8	B-C

a. Appendix C includes the HCS worksheets. The values shown assume an eight percent truck mix and the intersection geometrics shown in Figure 2-5.
b. Delay=average control delay (seconds/vehicle) for the left-turn move from the major street onto the minor street. LOS was determined from the delay (0-10 sec./veh. = LOS A; 10-15 sec./veh. = LOS B; 15-25 sec./veh. = LOS C; 25-35 sec./veh. = LOS D; 35-50 sec./veh. = LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.
c. EB= Eastbound. NB=Northbound. Delay=average approach control delay (seconds/vehicle) for the minor-street approach that exhibits the most delay at this intersection. LOS was determined per the HCM 2000 (page 17-2 and 17-32).

Table 3-8
Existing Weekday Peak Hour LOS at the Signalized Key Intersections[a]
With and Without Implementation of the WVC Master Plan

Signalized Intersection [Intersection Number]	Existing Without Project			Existing+WVC Master Plan Buildout			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Alejo Road [1]								
- Midday Peak Hour [PHF=0.89]	8.5	0.31	A	8.3	0.34	A	-0.2	No
- Evening Peak Hour [PHF=0.84]	8.1	0.38	A	8.1	0.42	A	0.0	No
Sunrise Way @ Tahquitz Canyon Way [3]								
- Midday Peak Hour [PHF=0.96]	23.2	0.56	C	25.0	0.63	C	1.8	No
- Evening Peak Hour [PHF=0.98]	22.1	0.55	C	24.1	0.63	C	2.0	No
Sunset Way @ Tahquitz Canyon Way [4]								
- Morning Peak Hour [PHF=0.78]	7.6	0.21	A	8.3	0.24	A	0.7	No
- Midday Peak Hour [PHF=0.96]	5.7	0.23	A	7.8	0.30	A	2.1	No
- Evening Peak Hour [PHF=0.89]	6.9	0.22	A	10.8	0.38	B	3.9	A-B
Farrell Drive @ Tahquitz Canyon Way [5]								
- Morning Peak Hour [PHF=0.79]	20.8	0.60	C	22.5	0.75	C	1.7	No
- Midday Peak Hour [PHF=0.95]	20.7	0.51	C	21.4	0.59	C	0.7	No
- Evening Peak Hour [PHF=0.90]	22.2	0.58	C	23.5	0.67	C	1.3	No
El Cielo Road @ Tahquitz Canyon Way [7]								
- Midday Peak Hour [PHF=0.92]	13.4	0.51	B	14.0	0.60	B	0.6	No
- Evening Peak Hour [PHF=0.99]	11.1	0.43	B	11.1	0.51	B	0.0	No
Sunrise Way @ Baristo Road [8]								
- Midday Peak Hour [PHF=0.94]	11.0	0.45	B	12.2	0.48	B	1.2	No
- Evening Peak Hour [PHF=0.95]	11.0	0.47	B	12.3	0.50	B	1.3	No
Palm Springs High School @ Baristo Road [10]								
- Morning Peak Hour [PHF=0.61]	12.4	0.51	B	14.5	0.62	B	2.1	No
- Midday Peak Hour [PHF=0.77]	6.6	0.22	A	11.2	0.40	B	4.6	A-B
- Evening Peak Hour [PHF=0.70]	7.7	0.33	A	13.4	0.56	B	5.7	A-B

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 2-5 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

Table 3-8 (Continued)
Existing Weekday Peak Hour LOS at the Signalized Key Intersections With and Without Implementation of the WVC Master Plan[a]

Signalized Intersection [Intersection Number]	Existing Without Project			Existing+WVC Master Plan Buildout			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Baristo Road [11]								
- Morning Peak Hour [PHF=0.66]	22.4	0.65	C	31.2	0.86	C	8.8	No
- Midday Peak Hour [PHF=0.94]	17.2	0.31	B	18.3	0.40	B	1.1	No
- Evening Peak Hour [PHF=0.80]	19.4	0.48	B	20.5	0.55	C	1.1	B-C
El Cielo Road @ Baristo Road [14]								
- Midday Peak Hour [PHF=0.88]	7.7	0.34	A	7.8	0.38	A	0.9	No
- Evening Peak Hour [PHF=0.87]	8.7	0.36	A	8.9	0.41	A	0.2	No
Farrell Drive @ Ramon Road [15]								
- Morning Peak Hour [PHF=0.81]	19.1	0.61	B	20.4	0.67	C	1.3	B-C
- Midday Peak Hour [PHF=0.96]	18.6	0.60	B	19.8	0.65	B	1.2	No
- Evening Peak Hour [PHF=0.94]	21.1	0.68	C	23.6	0.76	C	2.5	No

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 2-5 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

3.6.3 Opening Year 2018+Phase I Project LOS

Table 3-9 summarizes the future year 2018 peak hour levels of service with and without the Phase I Project at the four key intersections with two-way stop control. As shown therein, three of the four of the intersections are projected to provide acceptable levels of service during the peak hours with the year 2018 plus Phase I Project traffic volumes added. The Phase I Project would increase the average control delay on the minor-street approaches at these intersections by up to 0.8 seconds per vehicle during the peak hour. The projected increases in the average control delay at three of these intersections would not be sufficient to change the peak hour levels of service.

However, following the addition of the traffic generated by the Phase I Project, the minor street (northbound Civic Drive) approach at the intersection of Tahquitz Canyon Way is projected to drop from LOS D to LOS E during the midday peak hour. This represents a potentially significant impact. The traffic volumes generated by the Phase I Project would increase the average control delay on the northbound approach at this intersection from 34.8 to 35.1 seconds per vehicle (an increase of 0.3 seconds per vehicle) during the midday peak hour. The upper limit of LOS D occurs at 35 seconds per vehicle.

Table 3-5 shows the year 2018 peak hour levels of service at the key intersection with all-way stop control both with and without the Phase I Project traffic. As shown therein, the intersection of Cerritos Drive with Baristo Road is projected to operate at LOS B during the peak hours in the opening year 2018 with and without the Phase I Project traffic volumes. The Phase I Project traffic would increase the average control delay at this intersection by 0.07 seconds per vehicle during the midday peak hour and 0.10 seconds per vehicle during the PM peak hour. An increase in the overall average control delay of this magnitude would not change the peak hour level of service at this intersection.

Table 3-10 provides the opening year 2018 peak hour levels of service with and without the traffic volumes generated by the Phase I Project at the ten signalized key intersections. As shown therein, all of the signalized key intersections are projected to operate at LOS C or better during the peak hours with the opening year 2018 traffic volumes generated by the Phase I Project. The traffic volumes generated by the Phase I Project would increase the average control delay at these intersections by up to 0.2 seconds per vehicle. The projected increase in the intersection control delay would not change the peak hour levels of service at any of the ten signalized key intersections.

3.6.4 Horizon Year 2030+WVC Master Plan Buildout Conditions

Table 3-11 provides the year 2030 peak hour levels of service with and without buildout of the WVC Master Plan at the four key intersections with two-way stop control. As shown therein, three of the four intersections are projected to provide acceptable levels of service during the peak hours in the year 2030 upon buildout of the WVC Master Plan. The WVC Master Plan traffic would increase the average control delay on the minor-street approaches at these intersections by up to 6.4 seconds per vehicle during the peak hours. The projected increases in the average control delay at all of these intersections would be sufficient to change the peak hour levels of service.

Following the addition of the traffic generated by implementing the WVC Master Plan, the level of service on the minor-street approach with the most delay at the intersection of Civic Drive with Tahquitz Canyon Way (i.e., northbound Civic Drive) is projected to drop from LOS D to LOS E during the midday and PM peak hour. This represents a potentially significant impact. The WVC Master Plan development is not projected to increase the traffic volumes on the northbound approach at this intersection.

During the midday peak hour, the traffic volumes generated by the campus on Tahquitz Canyon Way would result in the delay on the northbound approach at this intersection increasing from 29.7 to 35.9 seconds per vehicle (6.2 seconds per vehicle). During the PM peak hour, the traffic volumes generated by the campus on Tahquitz Canyon Way would result in the delay on the northbound approach at this intersection increasing from 29.1 to 35.5 seconds per vehicle (an increase of 6.4 seconds per vehicle). The upper limit of LOS D occurs at 35 seconds per vehicle.

Table 3-9
Year 2018 Weekday Peak Hour Levels of Service With and Without Phase I Project[a]
At the Key Intersections with Two-Way Stop Control

Unsignalized Intersection [Intersection Number]	Year 2018 Without Project			Year 2018 Plus Phase I Project			Change In	
	Major Street Left Turn[b]	Minor-Street Approach[c]		Major Street Left Turn[b]	Minor-Street Approach[c]		Minor-Street Approach	
	Delay/LOS	Move	Delay/LOS	Delay/LOS	Move	Delay/LOS	Delay	LOS
Farrell Drive @ Amado Road [2]								
- Midday Peak Hour (PHF=0.96)	8.7/A	EB	12.3/B	8.7/A	EB	12.4/B	0.1	No
- Evening Peak Hour (PHF=0.84)	9.7/A	EB	17.6/C	9.7/A	EB	17.8/C	0.2	No
Civic Drive @ Tahquitz Canyon Way [6]								
- Midday Peak Hour (PHF=0.89)	9.7/A	NB	34.8/D	9.7/A	NB	35.1/E	0.3	D-E
- Evening Peak Hour (PHF=0.95)	9.0/A	NB	28.6/D	9.0/A	NB	28.8/D	0.2	No
Compadre Road @ Baristo Road [12]								
- Midday Peak Hour (PHF=0.90)	7.8/A	NB	11.9/B	7.8/A	NB	12.1/B	0.2	No
- Evening Peak Hour (PHF=0.68)	8.3/A	NB	21.3/C	8.3/A	NB	22.1/C	0.8	No
Civic Drive @ Baristo Road [13]								
- Midday Peak Hour (PHF=0.95)	7.7/A	NB	11.5/B	7.7/A	NB	11.7/B	0.2	No
- Evening Peak Hour (PHF=0.73)	8.1/A	NB	14.5/B	8.1/A	NB	14.8/B	0.3	No

a. Appendix C includes the HCS worksheets. The values shown assume an eight percent truck mix and the intersection geometrics shown in Figure 4-1.

b. Delay=average control delay (seconds/vehicle) for the left-turn move from the major street onto the minor street. LOS was determined from the delay (0-10 sec./veh. = LOS A; 10-15 sec./veh. = LOS B; 15-25 sec./veh. = LOS C; 25-35 sec./veh. = LOS D; 35-50 sec./veh. = LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.

c. EB= Eastbound. NB=Northbound. Delay=average approach control delay (seconds/vehicle) for the minor-street approach that exhibits the most delay at this intersection. LOS was determined per the HCM 2000 (page 17-2 and 17-32).

Table 3-10
Year 2018 Weekday Peak Hour LOS at the Signalized Key Intersections With and Without the Phase I Project[a]

Signalized Intersection [Intersection Number]	Year 2018 Without Project			Year 2018+Phase I Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Alejo Road [1]								
- Midday Peak Hour [PHF=0.89]	8.6	0.33	A	8.5	0.33	A	-0.1	No
- Evening Peak Hour [PHF=0.84]	8.2	0.40	A	8.2	0.41	A	0.0	No
Sunrise Way @ Tahquitz Canyon Way [3]								
- Midday Peak Hour [PHF=0.96]	23.5	0.58	C	23.7	0.58	C	0.2	No
- Evening Peak Hour [PHF=0.98]	22.4	0.57	C	22.6	0.58	C	0.2	No
Sunset Way @ Tahquitz Canyon Way [4]								
- Morning Peak Hour [PHF=0.78]	7.5	0.22	A	7.6	0.22	A	0.1	No
- Midday Peak Hour [PHF=0.96]	5.6	0.24	A	5.8	0.24	A	0.2	No
- Evening Peak Hour [PHF=0.89]	6.8	0.23	A	7.0	0.24	A	0.2	No
Farrell Drive @ Tahquitz Canyon Way [5]								
- Morning Peak Hour [PHF=0.79]	21.2	0.62	C	21.3	0.63	C	0.1	No
- Midday Peak Hour [PHF=0.95]	21.0	0.50	C	21.0	0.54	C	0.0	No
- Evening Peak Hour [PHF=0.90]	22.5	0.62	C	22.6	0.62	C	0.1	No
El Cielo Road @ Tahquitz Canyon Way [7]								
- Midday Peak Hour [PHF=0.92]	13.4	0.52	B	13.5	0.53	B	0.1	No
- Evening Peak Hour [PHF=0.99]	11.2	0.46	B	11.2	0.47	B	0.0	No
Sunrise Way @ Baristo Road [8]								
- Midday Peak Hour [PHF=0.94]	11.2	0.46	B	11.3	0.46	B	0.1	No
- Evening Peak Hour [PHF=0.95]	11.2	0.48	B	11.3	0.48	B	0.1	No
Palm Springs High School @ Baristo Road [10]								
- Morning Peak Hour [PHF=0.61]	12.6	0.52	B	12.7	0.52	B	0.1	No
- Midday Peak Hour [PHF=0.77]	6.5	0.24	A	6.7	0.24	A	0.2	No
- Evening Peak Hour [PHF=0.70]	7.7	0.34	A	7.8	0.35	A	0.1	No

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 4-1 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

Table 3-10 (Continued)
Year 2018 Weekday Peak Hour LOS at the Signalized Key Intersections
With and Without the Phase I Project[a]

Signalized Intersection [Intersection Number]	Year 2018 Without Project			Year 2018+Phase I Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Baristo Road [11]								
- Morning Peak Hour [PHF=0.66]	23.4	0.66	C	23.4	0.66	C	0.0	No
- Midday Peak Hour [PHF=0.94]	17.6	0.34	B	17.7	0.34	B	0.1	No
- Evening Peak Hour [PHF=0.80]	19.7	0.51	B	19.8	0.52	B	0.1	No
El Cielo Road @ Baristo Road [14]								
- Midday Peak Hour [PHF=0.88]	7.8	0.35	A	7.8	0.35	A	0.0	No
- Evening Peak Hour [PHF=0.87]	9.0	0.37	A	8.9	0.38	A	-0.1	No
Farrell Drive @ Ramon Road [15]								
- Morning Peak Hour [PHF=0.81]	19.7	0.65	B	19.7	0.65	B	0.0	No
- Midday Peak Hour [PHF=0.96]	19.1	0.64	B	19.2	0.64	B	0.1	No
- Evening Peak Hour [PHF=0.94]	22.3	0.73	C	22.5	0.74	C	0.2	No

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 4-1 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

Table 3-11
Year 2030 Weekday Peak Hour LOS With and Without Buildout of the WVC Master Plan[a]
At the Key Intersections with Two-Way Stop Control

Unsignalized Intersection [Intersection Number]	Year 2030 Without Project			Year 2030+WVC Master Plan Buildout			Change In	
	Major Street Left Turn[b]	Minor-Street Approach[c]		Major Street Left Turn[b]	Minor-Street Approach[c]		Minor-Street Approach	
	Delay/LOS	Move	Delay/LOS	Delay/LOS	Move	Delay/LOS	Delay	LOS
Farrell Drive @ Amado Road [2]								
- Midday Peak Hour (PHF=0.00)	8.8/A	EB	13.2/B	9.4/A	EB	15.1/C	1.9	B-C
- Evening Peak Hour (PHF=0.00)	9.5/A	EB	16.6/C	10.2/B	EB	21.0/C	4.4	No
Civic Drive @ Tahquitz Canyon Way [6]								
- Midday Peak Hour (PHF=0.00)	9.4/A	NB	29.7/D	9.7/A	NB	35.9/E	6.2	D-E
- Evening Peak Hour (PHF=0.00)	8.9/A	NB	29.1/D	9.2/A	NB	35.5/E	6.4	D-E
Compadre Road @ Baristo Road [12]								
- Midday Peak Hour (PHF=0.00)	7.9/A	NB	13.4/B	8.1/A	NB	15.9/C	2.5	B-C
- Evening Peak Hour (PHF=0.00)	8.2/A	NB	18.8/C	8.4/A	NB	25.2/D	6.4	C-D
Civic Drive @ Baristo Road [13]								
- Midday Peak Hour (PHF=0.00)	7.9/A	NB	13.9/B	8.0/A	NB	16.6/C	2.7	B-C
- Evening Peak Hour (PHF=0.00)	8.2/A	NB	15.8/C	8.4/A	NB	19.3/C	3.5	No

a. Appendix C includes the HCS worksheets. The values shown assume an five percent truck mix and the intersection geometrics shown in Figure 4-2.
b. Delay=average control delay (seconds/vehicle) for the left-turn move from the major street onto the minor street. LOS was determined from the delay (0-10 sec./veh. = LOS A; 10-15 sec./veh. = LOS B; 15-25 sec./veh. = LOS C; 25-35 sec./veh. = LOS D; 35-50 sec./veh. = LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.
c. EB= Eastbound. NB=Northbound. Delay=average approach control delay (seconds/vehicle) for the minor-street approach that exhibits the most delay at this intersection. LOS was determined per the HCM 2000 (page 17-2 and 17-32).

Table 3-5 shows the year 2030 peak hour levels of service at the key intersection with all-way stop control both with and without the traffic that would be generated upon buildout and full occupancy of the WVC Master Plan. As shown therein, the intersection of Cerritos Drive with Baristo Road is projected to operate at LOS B during the peak hours with the year 2030 plus WVC Master Plan traffic volumes. The WVC Master Plan traffic would increase the average control delay at this intersection by 1.46 seconds per vehicle during the midday peak hour and 1.86 seconds per vehicle during the PM peak hour. An increase in the overall average control delay of this magnitude would change the peak hour level of service at this intersection from LOS A to LOS B.

Table 3-12 provides the year 2030 peak hour levels of service with and without buildout of the WVC Master Plan at the ten signalized key intersections. As shown therein, all of the signalized key intersections are projected to operate at LOS C or better during the peak hours with the year 2030 plus WVC Master Plan buildout traffic volumes. The WVC Master Plan buildout traffic volumes would increase the average control delay at these intersections by up to 4.4 seconds per vehicle.

The project-related increase in the overall average intersection control delay would change the peak hour levels of service at five of the ten signalized key intersections (including the two signalized site access intersections). The intersection of Sunset Way with Tahquitz Canyon Way would drop from LOS A to LOS B during the PM peak hour. The intersection of Farrell Drive with Tahquitz Canyon Way would drop from LOS B to LOS C during the morning peak hour. The signalized intersection of the Palm Springs High School Access with Baristo Road would drop from LOS A to LOS B during the midday peak hour and the PM peak hour. The signalized intersection of Farrell Drive with Baristo Road would drop from LOS B to LOS C during the PM peak hour. The signalized intersection of Farrell Drive with Ramon Road would drop from LOS B to LOS C during the morning peak hour.

3.7 Site Access and Internal Circulation

3.7.1 Unsignalized Full-Turn Access Intersection LOS

The highest volume (PM) peak hour traffic operations at the four unsignalized full-turn site access connections were evaluated with the projected traffic volumes upon implementation and full occupancy of the WVC Master Plan in the year 2030 to determine if mitigation would be required to meet the City of Palm Springs minimum intersection performance standard. Both of the site access intersections on Farrell Drive (Intersection 19 and 20) and the two existing site access connections on Baristo Road (Intersections 22 and 23) were evaluated. The results of that analysis are summarized in Table 3-13.

Intersection 19

The existing northern site access on Farrell Drive at Intersection 19 was evaluated assuming the existing two-way left-turn lane on Farrell Drive, which allows full-turn movements at this access connection. As shown in Table 3-13, the left-turning vehicles entering the site from Farrell Drive are projected to experience an average control delay of 11.2 seconds per vehicle, which is consistent with LOS B operation. The eastbound approach is also projected to operate at LOS B.

Intersection 20

The relocated Intersection 20 would be improved to function as the main site access to the West Valley Campus of the College of the Desert. It would provide an entry drive 350 feet in length with adequate storage space to accommodate all entering and exiting vehicles without congestion at the entry or interference with the internal circulation system. The proposed main site access drive would provide two entry lanes and two exit lanes separated by a raised median approximately 9 feet in width. It would provide access to the reconfigured parking lot located south of Intersection 19, between the new campus building entry and Farrell Drive.

Table 3-12
Year 2030 Weekday Peak Hour LOS at the Signalized Key Intersections[a]
With and Without Implementation of the WVC Master Plan[a]

Signalized Intersection [Intersection Number]	Year 2030 Without Project			Year 2030+WVC Master Plan			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Alejo Road [1]								
- Midday Peak Hour	8.7	0.36	A	8.6	0.38	A	-0.1	No
- Evening Peak Hour	8.4	0.42	A	8.4	0.45	A	0.0	No
Sunrise Way @ Tahquitz Canyon Way [3]								
- Midday Peak Hour	23.7	0.59	C	25.4	0.66	C	1.7	No
- Evening Peak Hour	22.8	0.59	C	24.7	0.66	C	1.9	No
Sunset Way @ Tahquitz Canyon Way [4]								
- Morning Peak Hour	7.7	0.19	A	8.0	0.20	A	0.5	No
- Midday Peak Hour	5.7	0.25	A	7.7	0.32	A	2.0	No
- Evening Peak Hour	6.8	0.23	A	10.1	0.36	B	3.3	A-B
Farrell Drive @ Tahquitz Canyon Way [5]								
- Morning Peak Hour	19.7	0.55	B	20.5	0.67	C	0.8	B-C
- Midday Peak Hour	21.3	0.52	C	22.1	0.62	C	0.8	No
- Evening Peak Hour	22.0	0.57	C	23.4	0.67	C	1.4	No
El Cielo Road @ Tahquitz Canyon Way [7]								
- Midday Peak Hour	13.4	0.50	B	13.7	0.58	B	0.3	No
- Evening Peak Hour	11.3	0.47	B	11.5	0.55	B	0.2	No
Sunrise Way @ Baristo Road [8]								
- Midday Peak Hour	11.0	0.45	B	14.1	0.48	B	3.1	No
- Evening Peak Hour	11.1	0.47	B	12.3	0.51	B	1.2	No
Palm Springs High School @ Baristo Road [10]								
- Morning Peak Hour	10.6	0.30	B	11.7	0.41	B	1.1	No
- Midday Peak Hour	6.4	0.18	A	10.2	0.31	B	3.6	A-B
- Evening Peak Hour	7.2	0.25	A	11.1	0.39	B	3.9	A-B

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 4-2, a peak hour factor of 1.0, and a five percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

Table 3-12 (Continued)
Year 2030 Weekday Peak Hour LOS at the Signalized Key Intersections With and Without Implementation of the WVC Master Plan[a]

Signalized Intersection [Intersection Number]	Year 2030 Without Project			Year 2030+WVC Master Plan			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Farrell Drive @ Baristo Road [11]								
- Morning Peak Hour	20.5	0.58	C	21.7	0.63	C	1.2	No
- Midday Peak Hour	16.9	0.37	B	18.2	0.46	B	1.3	No
- Evening Peak Hour	19.1	0.50	B	20.1	0.56	C	1.0	B-C
El Cielo Road @ Baristo Road [14]								
- Midday Peak Hour	8.0	0.35	A	8.0	0.41	A	0.0	No
- Evening Peak Hour	9.4	0.36	A	9.5	0.43	A	0.1	No
Farrell Drive @ Ramon Road [15]								
- Morning Peak Hour	19.6	0.66	B	20.2	0.69	C	0.6	B-C
- Midday Peak Hour	23.3	0.82	C	24.4	0.85	C	1.1	No
- Evening Peak Hour	27.5	0.82	C	32.0	0.89	C	4.5	No

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown in Figure 4-2, a peak hour factor of 1.0, and a five percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤10 sec./veh.=LOS A; >10 and ≤20 sec./veh.=LOS B; >20 and ≤35 sec./veh.=LOS C; >35 and ≤55 sec./veh.=LOS D; >55 and ≤80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix C for the signalized intersection HCS worksheets.

Table 3-13

Year 2030+Project Weekday Peak Hour Delay and Levels of Service

At the Site Access Intersections With Two-Way Stop Control[a]

Unsignalized Intersection [Intersection Number]	Year 2030 Peak Season With Buildout of the WVC Master Plan				
	Left Turn From The Major Street		Minor-Street Approach With The Most Delay		
	Control Delay	Level of Service	Approach	Control Delay	Level of Service
Farrell Drive With TWLTL @ Access D [19] - Evening Peak Hour (PHF=1.00)	11.2	LOS B	Eastbound	14.9	LOS B
Farrell Drive With TWLTL @ Access E [20] - Evening Peak Hour (PHF=1.00)	10.6	LOS B	1 Vehicle Storage Eastbound	16.8	LOS C[b]
Farrell Dr. (Raised Median) @ Access E [20] - Evening Peak Hour (PHF=1.00)	10.6	LOS B	No Median Storage Eastbound	34.0	LOS D[c]
Access G @ Baristo Road [22] - Evening Peak Hour (PHF=1.00)	8.2	LOS A	Southbound	11.2	LOS B
Access H @ Baristo Road [23] - Evening Peak Hour (PHF=1.00)	8.1	LOS A	Southbound	11.4	LOS B

a. Control delay and LOS values shown assume the intersection geometrics shown in Figure 4-2, a peak hour factor of 1.0, and a 5 percent heavy vehicle mix. Appendix C includes the HCS unsignalized intersection worksheets. LOS was determined from the delay (0-10 sec./veh.=LOS A; 10-15 sec./veh.=LOS B; 15-25 sec./veh.=LOS C; 25-35 sec./veh.=LOS D; 35-50 sec./veh.=LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.

b. The existing TWLTL on Farrell Drive provides a refuge with storage for one vehicle turning left out of the project site, thereby allowing two-stage gap acceptance. The eastbound minor-street approach includes an exiting left-turn movement with an average control delay of 24.7 seconds (LOS C). The eastbound right-turn movement exiting the project site would experience an average control delay of 11.5 seconds per vehicle and operate at LOS B.

c. The eastbound minor-street approach includes a left-turn movement exiting the site with an average control delay of 67.4 seconds of delay (LOS F). The 12-foot wide median on Farrell Drive does not provide sufficient width to accommodate a raised landscape median with a median acceleration lane to store a vehicle turning left out of the project site. Therefore, vehicles making eastbound left-turns from the site would be required to complete those turns in a single movement (single-stage gap acceptance) which would require longer gaps in the through traffic approaching from both directions on Farrell Drive. The eastbound right-turn movement exiting the project site would experience an average control delay of 11.5 seconds per vehicle and operate at LOS B.

The main entry drive would initially be constructed with a break in the raised median located approximately 150 feet west of Farrell Drive. This would allow motorists approaching the campus on Baristo Road and using the internal circulation system from the area south of the main site access on Farrell Drive to access the front of the Phase I Project building entrance and the adjacent reconfigured parking lot. The break in the separator would be closed, once the parking area south of the main site access on Farrell Drive is improved and the rotary at the western terminus of the entry drive is connected to the parking areas to the south.

Traversable Median With Two-Way Stop Control

The main site access intersection on Farrell Drive is projected to provide acceptable levels of service upon full development of the WVC Master Plan in the year 2030 with two-way stop control and the existing continuous two-way left-turn lane on Farrell Drive. The main site access on Farrell Drive (Intersection 20) is proposed as an unsignalized intersection with two exit lanes to reduce the delay experienced by motorists turning right from the site onto Farrell Drive. This configuration allows a vehicle turning left from a stop in the project driveway to cross the two near lanes on Farrell Drive, take refuge in the TWLTL, then merge into the northbound lanes. This "two-stage gap acceptance" is possible because storage space is available in the TWLTL for at least one vehicle to wait before merging into the northbound through lanes. This reduces the gap in through traffic required by vehicles turning left from a stop at the project driveway.

As shown in Figure 3-10, the projected volume of traffic making left turns onto Farrell Drive when exiting the main access would be relatively low in the year 2030 (19 VPH in the AM peak hour, 44 VPH in the midday peak hour, and 47 VPH in the PM peak hour). The proposed T-intersection would have more capacity and function better than a four-way intersection because motorists turning left out of the site would face no conflicting westbound movements and no conflicting southbound left-turn movements.

The STOP sign at the driveway would establish that vehicles turning left from the driveway would be required to yield the right-of-way to vehicles in the through lanes on Farrell Drive and to those motorists turning left into the main site access from the TWLTL on Farrell Drive. The eastbound approach is projected to operate at LOS C with an average control delay of 16.8 seconds per vehicle. The eastbound left-turn movement (exiting the site) is projected to operate at LOS C with an average delay of 24.7 seconds per vehicle in the year 2030.

Most of the left-turning vehicles at the main site access would be entering the site from the TWLTL on Farrell Drive. These motorists would be able to take refuge out of through travel lanes and wait for an adequate gap in the southbound traffic before entering the site. They are projected to experience an average control delay of 10.6 seconds per vehicle, which is consistent with LOS B operation.

NCHRP Report 395 is consistent with other research regarding the criteria for replacing a TWLTL with a nontraversable median when the average daily traffic volume exceeds 24,000 to 28,000 vehicles per day, depending on local conditions.[2] For a street with an odd number of lanes (three or five) the center lane is often used to provide a deceleration and storage lane for left-turning vehicles. TWLTLs work well at locations where there are no heavy concentrations of left-turning traffic and the speed on the arterial highway is relatively low (25 mph to 45 mph).[3]

As shown in Table 3-3, the future weekday traffic projection for Farrell Drive at Intersection 20 is 18,440 vehicles per day in the peak season upon General Plan buildout with the WVC Master Plan implemented. The northbound left-turn volume at Intersection 20 is projected to be 158 vehicles per hour during the morning peak hour and 128 vehicles during the midday and PM peak hour in the year 2030 upon project buildout, as shown in Figure 3-10. There are no conflicting left-turning southbound or westbound vehicles projected to be using the TWLTL on Farrell Drive at this location.

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2. Bonneson, J.A., and P.T. McCoy. NCHRP Report 395: *Capacity and Operational Effects of Midblock Left-Turn Lanes.* TRB, National Research Council, Washington, D.C., 1997.
3. AASHTO. *A Policy on Geometric Design of Streets and Highways*. Sixth Edition, 2011. [pg 7-31]

Nontraversable Median With Two-Way Stop Control

An additional analysis was performed to assess the operational impact of providing a raised landscape median on Farrell Drive at the main site driveway. Intersection 20 was evaluated as an unsignalized intersection with a raised (nontraversable) landscape median on Farrell Drive and a median opening at Intersection 20 allowing left-turn ingress and egress. No median storage or acceleration lane was assumed for vehicles turning left from the project site onto Farrell Drive because the limited right-of-way would constrain the median width. A raised median designed to protect passenger vehicles turning left onto Farrell Drive would require a width of 16 feet to provide a 12-foot lane and a minimum 4-foot curbed separator.

The northbound vehicles entering the site by turning left from Farrell Drive would experience the same average delay and LOS with a raised median as a TWLTL (10.6 seconds per vehicle and LOS B). However, the average control delay associated with the eastbound approach would increase to 34.0 seconds per vehicle and the LOS for this approach would drop to LOS D. This could be interpreted as meeting the City of Palm Springs minimum performance standard.

With no median storage, motorists turning left from the site onto Farrell Drive would be required to execute a single-stage left-turn maneuver. This would require a simultaneous gap of adequate length in the traffic on Farrell Drive approaching from both directions. As a result, the eastbound left-turn movement would experience an average control delay of 67.4 seconds per vehicle, which is consistent with LOS F. Motorists who determine that the eastbound left-turn delay is excessive, would have the option of turning right from one of the site access intersections along Tahquitz Canyon Way and then turning left onto Farrell Drive. This control delay was considered in the evaluation of the peak hour traffic signal warrants for this intersection in Section 3.8.

Median treatments can function as safety buffers by separating traffic moving in opposing directions. They can also be used for access management by restricting turns into or out of driveways. Medians can shelter left-turn lanes from through traffic moving in the same direction. They can be raised or flush (delineated and level with the adjacent pavement). Raised medians are preferred for new arterials. Research indicates that the safety advantage of a nontraversable median over a TWLTL increases when the average daily volume exceeds 24,000 to 28,000 vehicles per day.[4]

Intersections 22 and 23

Both of the existing unsignalized full-turn site access connections on Baristo Road (adjacent to the Camelot Theatres) are projected to operate at acceptable levels of service upon buildout of the WVC Master Plan. The left-turns from Baristo Road into the site are projected to operate at LOS A in the peak hours. The southbound approach used by exiting vehicles is projected to operate at LOS B.

3.7.2 Impact of Site Access Connections Eliminated or Relocated

Every driveway connection creates an intersection, which creates the potential for conflicts between motor vehicles and other road users including bicyclists, pedestrians, and transit passengers. The objective in accommodating anticipated future demands for travel and access is to find a balance that minimizes the actual conflicts. *NCHRP Report 420: Impacts of Access Management Techniques* (TRB; 1999) concluded that each additional unsignalized access driveway may add approximately 0.02 to the accident rate at low signal densities. In urban and suburban areas, each access point or driveway added would increase the annual accident rate by 0.09 to 0.13 on highways with TWLTLs or nontraversable medians.

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4. Committee on Access Management, Transportation Research Board of the National Academies. *Access Management Manual.* Washington, D.C., 2003. [pg. 211]

Three of the existing unsignalized site access connections would be closed in conjunction with the implementation of the WVC Master Plan. Access “A” at Tahquitz Canyon Way (Intersection 16), Farrell Drive at Access ”F” (Intersection 21), and Access “I” at Baristo Road (Intersection 24) would be eliminated after the Phase I Project is completed, as improvements are made in close proximity to these access connections. Longer spacing between unsignalized access points reduces the interference on through-traffic caused by vehicles turning in and out of driveways. It improves safety by reducing driver workload and allowing drivers to respond to potential conflicts associated with turning vehicles at one driveway at a time, rather than having to react to overlapping conflict situations. Closing three existing site access connections would improve traffic safety and traffic operations for all road users over the long term on the three abutting arterials.

Intersection 17

The project would consolidate Access “A” and Access “B” into a single access drive on Tahquitz Canyon Way that would be located 500 feet west of the centerline of Farrell Drive. The new consolidated access would eliminate an existing right-in/right-outdriveway on Tahquitz Canyon Way, thereby increasing the separation between Sunset Way and the adjacent unsignalized site access connection to the east. The elimination of one of the three unsignalized site access connections on Tahquitz Canyon Way would better serve the library and the conference center. More importantly, it would improve traffic safety and operations on Tahquitz Canyon Way over the long term, as traffic volumes increase adjacent to the project site.

The consolidated driveway proposed in front of the conference center on Tahquitz Canyon Way (see Figure 1-5) would provide a minimal 24-foot width and a minimal non-conflicted throat length of approximately 50 feet. A non-conflicted throat length of 75 feet beyond the sidewalk would be desirable at this site access. The total throat width should be 26 feet (minimum) to accommodate the simultaneous entry and exit of passenger vehicles with a 14-foot entry lane and a 12-foot exit lane.

Intersection 20

In conjunction with the Phase I Project, the existing central access connection on Farrell Drive (Access ”E” at Intersection 20) would be relocated southerly to the midpoint of the site frontage on Farrell Drive. A proven access management strategy is to place driveways that will serve left-turning inbound vehicles near the center of the block to minimize interactions with upstream and downstream intersection queues, thereby maximizing traffic safety by reducing the potential for collisions related to left turns.

At this location, the main site access would be optimized with respect to traffic operations and coordinated with traffic signal progression requirements, in the event that this access is signalized in the future. This location would provide longer access spacing along Farrell Drive for unfamiliar drivers who may require more time and distance to safely react. The reduction in the number of conflict points along Farrell Drive that would result from eliminating Intersection 21 would reduce driver workload and improve traffic safety along Farrell Drive, between the main site access at Intersection 20 and the signalized intersection on Farrell Drive approximately 660 feet to the south at Baristo Road.

Intersection 24

The unsignalized eastern site access connection on Baristo Road (Access “I” at Intersection 24) would be eliminated in conjunction with the future development of the WVC Master Plan. The closure of this site access would improve traffic safety and operations by reducing the number of conflicting pathways and the frequency of potential conflicts between motor vehicles turning in and out of the site and bicyclists in the Class II bike lane on Baristo Road as well as pedestrians who use the sidewalk on the north side of Baristo Road to access the Palm Springs High School and transit stop. It would also reduce the potential for conflicts with transit buses that routinely travel on Baristo Road and use the bus turnout. Numerous closely-spaced access connections exist on both sides of Baristo Road, west of Farrell Drive. The project would relocate some of these movements to the main site access on Farrell Drive (at Intersection 20) and the signalized site access on Baristo Road at Intersection 10.

3.7.3 Provisions for the Disabled

In accordance with the *Americans with Disabilities Act* of 1990, the U.S. Department of Justice has published guidelines and standards for the accessibility of parking areas and buildings. These standards include the design of accessible parking the number of accessible spaces to be provided (see Section 3.9.2), and the delineation of accessible routes or paths to and from parking facilities. All new facilities must meet the 2010 *ADA Accessibility Guidelines* by making access to work as well as patron areas accessible. The removal of physical barriers includes making doors, sidewalks, public transportation, and parking spaces accessible to the disabled.

3.8 Traffic Signal Warrant Analysis

Warrant 3 is the peak hour traffic signal warrant intended for use where traffic conditions are such that for at least one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. Peak hour signal warrants (see Appendix D) are used as a preliminary indication of the need for traffic signals in the future. These signal warrants should be considered in conjunction with the unsignalized intersection peak hour analysis to provide a more complete understanding of the need for signalization. The actual design and installation of signals should be based upon detailed studies, which include extensive traffic counts.

Since the installation of traffic signals typically increases the accident rate and the total vehicular delay, a traffic signal should not be installed, even though the traffic volume thresholds for signalization are reached, unless there is evidence of the need for right-of-way assignment beyond that which could be provided by a STOP sign. Where traffic signals are not warranted, but increases in future traffic will cause an unsignalized intersection to fail to meet the applicable minimum intersection performance standard, less restrictive forms of mitigation should be identified to address the operational deficiency. Traffic signals should be installed only when one or more signal warrants is met, lesser measures have failed to remedy the deficiency, and no other solution or form of control would be effective in assuring traffic safety and efficiency. Traffic signals should be installed only where the net effect expected to occur would be an improvement in the overall safety and/or operations at an intersection.

Rural volume warrants (70 percent of the urban warrants) apply when the 85th percentile speed of traffic on the major street exceeds 40 mph in either an urban or a rural area, or when the intersection lies within the built-up area of an isolated community with a population under 10,000. All other areas are considered to be urban.

3.8.1 Civic Drive at Tahquitz Canyon Way

Tahquitz Canyon Way has a posted speed limit of 40 MPH in the vicinity of Intersection 6. Urban peak hour signal warrants were checked for the intersection of Civic Drive and Tahquitz Canyon Way using traffic volumes projected for buildout of the WVC Master Plan in the year 2030, as shown in Appendix D.

Part B of Warrant 3 requires the sum of the two approach volumes on Tahquitz Canyon Way (1,437 VPH) to be plotted with the southbound approach volume (134 VPH) at Intersection6 during the same midday peak hour on Figure 4C-4. If the point that results falls above the curve for an intersection with two or more lanes on the major street approach and one lane on the minor street approach, the need for a traffic signal should be considered. The point determined by a minor-street approach volume of 134 VPH and a major street combined approach volume of 1,437 VPH would not fall above the relevant curve. Therefore, a traffic signal should not be installed at this location.

3.8.2 Farrell Drive At Main Site Access

Farrell Drive has a posted speed limit of 45 MPH in the vicinity of Intersection 20. Rural peak hour signal warrants were checked for the intersection of Farrell Drive and the main site access using traffic volumes projected for buildout of the WVC Master Plan in the year 2030, as shown in Appendix D.

Part B of Warrant 3 requires the sum of the two approach volumes on Farrell Drive (1,713 VPH) to be plotted with the eastbound approach volume (117 VPH) at Intersection 20 during the same PM peak hour on Figure 4C-4. If the point that results falls above the curve for an intersection with two or more lanes on all approaches, the need for a traffic signal should be considered. The point determined by a minor-street approach volume of 117 VPH and a major street combined approach volume of 1,713 VPH would fall above the curve for an intersection with two or more lanes on all approaches. Therefore, the need for a traffic signal should be considered if Intersection 20 fails to meet the minimum intersection performance standards.

The existing TWLTL or a painted (traversable) median that would provide storage space for at least one vehicle turning left from the project site onto Farrell Drive would not result in excessive day for any movement at Intersection 20. Therefore, the need for a traffic control signal should not be considered at Intersection 20 unless a raised median is installed in the future on Farrell Drive with a median opening at Intersection 20 that does not provide storage space within the median for at least one vehicle turning left from the project site onto Farrell Drive.

3.9 Other Considerations

3.9.1 Farrell Drive South of Tahquitz Canyon Way

Intersection 19

It is not always possible to locate access connections outside the functional area of an intersection or align driveways located on opposite sides of an undivided roadway to minimize the number of conflict points. As long as traffic speeds and volumes remain relatively low, this may not result in significant traffic conflicts. In retrofit or change of use situations, it is sometimes necessary to leave existing access connections unchanged.

The ability to provide efficient access is essential to small businesses. Adequate site access requires the provision of driveways that are properly located and designed to accommodate traffic movements and volumes 20 years in the future. The site access connection at Intersection 19 was constructed many years ago as far from Tahquitz Canyon Way as feasible. It functioned as a shared access when the Palm Springs Mall was fully occupied. Traffic volumes were substantially lower when this access was constructed and the northbound queues on Farrell Drive were substantially shorter.

Fast-food restaurants rely on high business volumes and fast customer turnover. A much higher percentage of their customers arrive by automobile than walk in. Corridor improvements and access control strategies that could improve traffic safety and operations in the future (such as a raised landscape median on Farrell Drive) could understandably be considered undesirable, from the perspective of a small fast-food restaurant offering convenient drive-through service, if they would also limit or restrict access.

Two existing closely-spaced unsignalized full-turn access connections are located on Farrell Drive within 200 feet south of the signalized intersection at Tahquitz Canyon Way. Intersection 19 and the driveway on the opposite side of Farrell Drive (serving the Desert Advanced Imaging medical offices) appear to be located at the property lines furthest away from the adjacent signalized intersection. These two driveways were located to provide a positive offset of 80 feet. This separates northbound left-turn maneuvers made from the TWLTL on Farrell Drive from southbound vehicles turning left into the medical office driveway. However, overlapping left-turn conflicts can still occur in the TWLTL on Farrell Drive when vehicles simultaneously turn left out of both driveways.

When the traffic signal at Tahquitz Canyon Way stops northbound traffic on Farrell Drive, the 95th-percentile northbound queue of vehicles in the PM peak hour currently extends approximately 250 feet (i.e., past Intersection 19) blocking access to and from the driveway serving the medical offices. The northbound queue of vehicles can block left-turn movements from both driveways. This increases the potential for right-of-way conflicts on Farrell Drive. In the future, the 95th-percentile northbound queue is projected to increase to 300 feet upon buildout of the proposed project. As traffic volumes increase on Farrell Drive, left-turn egress from the site at Intersection 19 will be more difficult during the peak fours.

The existing access configuration is likely to result in traffic flow problems and increase the potential for conflicts involving turning and weaving vehicles as traffic volumes and northbound queues generated by the adjacent traffic signal increase in the future. Additional sources of friction within this area, including a transit stop on the east side and a bus turnout and transit stop on the west side of Farrell Drive, make it more difficult to properly locate the driveways serving the properties on the southwest and southeast corners of Intersection 5.

Limiting the amount of access allowed at the two driveways located within the functional area of the intersection of Farrell Drive and Tahquitz Canyon Way would be desirable. It would reduce the number of decisions that motorists must make while traveling along Farrell Drive through this area. It could reduce the number and types of conflict points where the travel paths of vehicles cross as motorists turn left across Farrell Drive or make left turns into driveways near Tahquitz Canyon Way. The construction of a raised (nontraversable) median on Farrell Drive, south of Tahquitz Canyon Way, is one strategy to reduce the number of conflict points in this area by limiting the access to these existing driveways to right-in/right-out movements. While it may be possible to construct a channelizing island in the driveway at Access "D" to discourage left-turn movements at this access, experience has shown that without a nontraversable median on the mainline roadway, such treatments are rarely successful.[5]

Any changes that would limit or restrict access to the existing properties may impact business operations. In most cases, small corner parcel property owners prefer to have at least one direct full-movement access from their property on a major street with high traffic volumes. An existing Jack in the Box fast food restaurant with a drive-through window is located adjacent to and served by the full-turn site access at Intersection 19. This land use would remain with the proposed project and continue to rely heavily on traffic diverted from the traffic flow passing the site on Farrell Drive. The access on Tahquitz Canyon Way serving this fast food restaurant is restricted to right-in/right-out movements.

It may not be feasible for the proposed project to close or relocate Intersection 19. Although limiting or prohibiting left-turn movements at Intersection 19 may be desirable to reduce the potential for traffic conflicts, it would be difficult to achieve without constructing a nontraversable median on Farrell Drive. To minimize the number of conflicting left-turn movements at this intersection in the future, the site access and internal circulation system provides alternative routes within the site to accommodate these movements and does not provide a direct access between Intersection 19 and the reconfigured parking lot to be constructed in the conjunction with the Phase I Project.

Intersection 20

With year 2030 plus WVC Master Plan buildout traffic volumes, the rural peak hour traffic volume signal warrants would be met at Intersection 20, the proposed main site access on Farrell Drive. However, all movements at this intersection are projected to operateat acceptable levels of service (LOS C or better) with the existing continuous two-way left-turn lane on Farrell Drive and two-way stop control. The existing TWLTL provides a refuge for vehicles turning left to enter and exit the site.

The *Palm Springs 2007 General Plan* advocates a raised landscaped median for roadways that are designated as divided Secondary Thoroughfares including Farrell Drive, adjacent to the project site. A raised median that maintains the refuge for vehicles turning left to enter and exit the site would require a width of approximately 16 feet, four feet wider than the existing TWLTL. Although it may be feasible to replace the 12-foot travel lanes with 11-foot lanes to obtain the additional median width, the existing TWLTL appears to offer a better solution from the perspective of traffic operations. If the existing TWLTL were replaced by a raised median without storage space for the vehicles turning left onto Farrell Drive from the campus, the LOS for the eastbound left-turn lane would drop to LOS F. Therefore, the existing continuous TWLTL would be required to maintain acceptable levels of service at Intersection 20 with two-way stop control.

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5 Florida DOT Driveway Guidelines

While not required to meet the applicable traffic operation performance standard, a traffic control signal at this intersection, would provide protected left-turn ingress and egress movements. Signalization is not recommended as the appropriate form of traffic control because Intersection 20 would provide acceptable levels of service with less restrictive two-way stop control. The California MUTCD suggests that less restrictive forms of traffic control be used where feasible.

3.9.2 Off-Street Accessible Parking Space Requirements

Title 24 [11B-502] of the California Code of Regulations and the 2010 ADA Standards [208 and 502] include the following off-street accessible parking requirements. Parking facilities with 26-50 parking spaces require a minimum of 2 accessible spaces. Facilities with 151-200 parking spaces require a minimum of 6 accessible spaces. Parking facilities with 201-300 parking spaces require a minimum of 7 accessible spaces. Facilities with more than 1001 parking spaces require a minimum of 20 accessible spaces plus one accessible space for each 100 parking spaces (or fraction thereof) over 1,000.

For every six or fraction of six accessible parking spaces, at least one shall be a van parking space. Car and van parking spaces shall be a minimum of 216 inches (18 feet) long. Car parking spaces shall be a minimum of 108 inches (9 feet) wide. Van parking spaces shall be a minimum of 144 inches (12 feet) wide. These spaces shall be marked to define the width and have an adjacent access aisle. Where the access aisle is a minimum of 96 inches (8 feet) wide, van parking spaces shall be permitted to be a minimum of 108 inches (9 feet) wide.

Access aisles serving accessible car and van parking spaces shall be a minimum of 60 inches wide. Access aisles shall be at the same level as the parking spaces they serve. Parking spaces that serve a particular building or facility shall be located on the shortest accessible route from the parking to an entrance. Where parking serves more than one accessible entrance, parking spaces shall be dispersed and located on the shortest accessible route to the accessible entrances.

In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. The space shall be located such that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. Pedestrian ways which are accessible to persons with disabilities shall be provided from each such parking space to related facilities, including curb cuts or ramps, as needed. Ramps shall not encroach into any accessible parking space or the adjacent access aisle. Appropriate signing and striping for accessible off-street parking shall conform to the California MUTCD.

Phase I Project

A minimum of six accessible parking spaces (including one van accessible space) would be required for the 160 parking spaces proposed to serve the Phase I Project. If the 50 overflow parking spaces are in a separate parking facility, a minimum of two accessible parking spaces would be required in that parking facility, with one of those spaces a van accessible parking space. A single parking facility with 210 parking spaces would require a minimum of 7 accessible parking spaces with two of those spaces van accessible.

WVC Master Plan Buildout

Twenty accessible spaces would be required for a parking facility with 1000 parking spaces. One additional accessible parking space would be required for each 100, or fraction thereof, over 1,000 parking spaces in the parking facility. The 1330 off-street parking spaces proposed to serve the WVC Master Plan would require a minimum of 24 accessible parking spaces, of which a minimum of six shall be van parking spaces.

3.9.3 Minimum Accessibility Requirements

The pedestrian accessibility needs of the community and highway users, including those with disabilities, need to be considered in the project design to make the buildings and public facilities accessible in accordance with State and

Federal laws and regulatory standards. The Americans with Disabilities Act of 1990 and its implementing regulations along with Sections 4450 of the California Government Code prescribe that facilities shall be made accessible to persons with disabilities. Until the draft Public Rights-of-Way Accessibility Guidelines (PROWAG) are adopted and binding, the 2010 ADA Standards are the primary basis of accessibility standards for public rights-of-way.

Title 24 of the California Code of Regulations is similar to the 2010 ADA Standards. Title 24 prescribes accessibility design standards for the State of California in Part 2, the California Building Code. The Department of General Services – Division of the State Architect (DSA) oversees California Building Code compliance.

Minimum accessibility requirements applicable to newly constructed or altered streets (including any work that physically impacts existing curbs) include the mandatory provision of curb ramps or other sloped areas at any intersection having curbs or other barriers to entry to a sidewalk or pedestrian path from a street level pedestrian walkway. Existing nonstandard curb ramps will be required to be reconstructed to current standards. Where missing, curb ramps are required to be constructed where there are sidewalks or other pedestrian facilities. To the maximum extent feasible, at least one accessible route must be provided from one facility to another. If a more direct route exists that is not accessible, the accessible route must be in the same vicinity.

Colored pavement or paving units are not to be used in lieu of striping for marked crosswalks. The use of paving units, stamped concrete, or stamped asphalt concrete could lead to jarring vibrations to a wheelchair user. Therefore, cobblestone or similar treatments should not be used. All walkway surfaces should have a broom finish texture or an equivalent.

The California MUTCD requires a vertical clearance at pedestrian pathways to the bottom of signs to be at least 7 feet. Pedestrian pathways that are part of a shared facility with bicyclists shall follow the appropriate guidance in the *Highway Design Manual* (HDM). Index 105.2 provides a discussion of and minimum Advisory Design Standard for sidewalk width. If the City of Palm Springs sidewalk standards exceed the minimum standard in the HDM, they should be used to provide greater accessibility. Street furniture, signs, above ground utilities and poles, street landscaping, etc. should all be placed outside of the clear width of a sidewalk. The clear width for sidewalks and walks shall be 48 inches minimum, exclusive of the width of the curb. The profile of pedestrian pathways should be developed to ensure compliance with grade and other applicable design parameters for accessible routes. Raised medians and raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Continuous handrails shall be provided on both sides of stairs and ramps where ramp runs include a rise greater than six inches.

3.10 Project Alternatives

3.10.1 Future WVC Master Plan Alternative Trip-Generation Forecast

Four potentially feasible project alternatives were evaluated and compared to the proposed project. These alternatives included the No-Project Alternative, the More Intense Alternative, the North Campus Alternative, and the West Valley Campus Repurposed Mall Alternative. The trip-generation forecast for the future development associated with each of the four alternatives is provided in Table 3-14.

The No-Project Alternative

With the No-Project Alternative, the existing 315,119 S.F. of GLA within the Palm Springs Mall, the Jack in the Box restaurant, and the Camelot Theatres would remain on-site and be fully functional. Upon full occupancy of the site per the existing entitlements (including the Jack in the Box restaurant, the Camelot Theatres, and the Palm Springs Mall main building) the site-generated traffic volumes would total 13,640 weekday trips (6,820 inbound and 6,820 outbound trips per day). It is estimated that 1,166 inbound plus outbound trips (8.5 percent of the weekday trips) would occur during the PM peak hour and 1,084 trips (7.9 percent) would occur during the midday peak hour.

Table 3-14
Weekday Site Trip-Generation Forecast By Project Alternative[a]

Land Use Category	Land Use Quantity	Morning Peak Hour In	Morning Peak Hour Out	Morning Peak Hour Total	Midday Peak Hour In	Midday Peak Hour Out	Midday Peak Hour Total	Evening Peak Hour In	Evening Peak Hour Out	Evening Peak Hour Total	Daily 2-Way
No Project Alternative											
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Palm Springs Mall	315.12 TSF	195	119	314	516	349	865	477	528	1,005	11,620
- Subtotal		259	181	440	627	457	1,084	559	607	1,166	13,640
More Intense Alternative											
- COD Master Plan Buildout	10,211Students	1,127	215	1,342	897	483	1,380	868	510	1,378	12,560
- Library	37.50 TSF	31	13	44	68	71	139	120	130	250	1,900
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Subtotal		1,222	290	1,512	1,076	662	1,738	1,070	719	1,789	16,480
North Campus Alternative											
- COD Master Plan Buildout	8,040 Students	954	182	1,136	745	401	1,146	745	437	1,182	9,880
- Library	30.00 TSF	24	10	34	59	62	121	98	106	204	1,640
- Subtotal		978	192	1,170	804	463	1,267	843	543	1,386	11,520
West Valley Campus Repurposed Mall											
- COD Master Plan Buildout	8,040 Students	954	182	1,136	745	401	1,146	745	437	1,182	9,880
- Library	30.00 TSF	24	10	34	59	62	121	98	106	204	1,640
- Jack in the Box	2.736 TSF	63	61	124	75	72	147	46	43	89	1,360
- Camelot Theaters	3 Screens	1	1	2	36	36	72	36	36	72	660
- Subtotal		1,042	254	1,296	915	571	1,486	925	622	1,547	13,540

a. Based upon trip-generation data published by the ITE in *Trip Generation* Manual (9th Edition, 2010).

Only 440 inbound plus outbound trips (3.2 percent of the site-generated weekday trips) would be expected to occur during the morning peak hour. This alternative would result in a lower peak hour trip generation tan the proposed project but an equivalent weekday trip generation.

More Intense Alternative

The More Intense Alternative would be similar to the proposed project but the future uses would be 25 percent more intense. The number of enrolled college students would be 25 percent greater, and the floor area of the library would be increased by 25 percent. With this alternative, the site-generated traffic volumes would total 16,480 weekday trips, including 1,512 trips during the morning peak hour (1,222 inbound and 290 outbound), 1,738 trips during the midday peak hour (1,076 inbound and 662 outbound), and 1,738 trips during the evening peak hour (1,070 inbound and 719 outbound).

North Campus Alternative

The trip generation associated with the North Campus Alternative would be similar to that with the proposed project except it would not include the existing Jack in the Box or the Camelot Theatres. This alternative would be constructed in a different location with the potential to impact different streets. The site-generated traffic volumes would total 11,520 weekday trips, including 1,170 trips during the morning peak hour (978 inbound and 192 outbound), 1,267 trips during the midday peak hour (804 inbound and 463 outbound), and 1,386 trips during the evening peak hour (843 inbound and 543 outbound).

The *College Park Specific Plan Traffic Impact Study* addressed the College of the Desert West Valley Campus and determined that mitigation would be required at seven intersections, and possibly four roadways adjacent to the site. Although the potential trip generation may be similar, the North Campus Alternative is located in an area where the traffic volumes are increasing and more infrastructure improvements would be needed. The proposed project is located in an area where the reduction in traffic generated by the Palm Springs Mall partially offsets future traffic impacts associated with the proposed project.

West Valley Campus Repurposed Retail Mall Alternative

Future development with the West Valley Campus Repurposed Retail Mall Alternative would be the same as that with the proposed project. Table 3-14 shows the peak hour and weekday trip generation forecast associated with buildout of the West Valley Campus Repurposed Retail Mall Alternative and full occupancy of the educational facilities therein to serve an enrollment of 8,040 students (headcount). The site-generated traffic volumes would total 13,540 weekday trips, including 1,296 trips during the morning peak hour (1,042 inbound and 254 outbound), 1,486 trips during the midday peak hour (915 inbound and 571 outbound), and 1,547 trips during the evening peak hour (925 inbound and 622 outbound).

Although this alternative seeks to minimize costs by using the existing structures, the college would require the buildings to be upgraded to current seismic standards. In addition, the parking lot would need to be brought up to meet current ADA standards and improved to meet current design practices.

3.10.2 Comparison of Alternatives

The trip generation for the four alternatives would be similar, with the no-project alternative having the lowest traffic impact. The More Intense Alternative would increase the daily trip generation associated with the site by 21.7 percent. Most of the streets near the project site could accommodate the higher traffic volume. However, without mitigation, the drivers using the key intersections would experience additional delay.

The North Campus Alternative would generate the least amount of traffic of the four alternatives on weekdays. However, the site is located in an area where the surrounding street system would require more improvements. With this alternative the cost of both on-site and off-site transportation infrastructure would be substantial.

The proposed project and the West Valley Campus Repurposed Retail Mall Alternative would have the same land uses and would be located on the same site. Therefore the offsite traffic impacts would be very similar. However, the proposed project would eliminate three existing driveways and improve the internal circulation. Therefore, the proposed project would have a smaller traffic impact than the West Valley Campus Repurposed Retail Mall Alternative.

The No Project Alternative would have the fewest traffic impacts, but would not meet the objective of providing the educational facilities required. The proposed project would have the fewest traffic impacts compared to the other project alternatives.

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Existing Traffic Conditions

The project site is located within a suburban area characterized by medium to long block lengths. Abutting roadways have posted speed limits of either 40 MPH or 45 MPH and design speeds of 50 MPH or 55 MPH. A raised (nontraversable) landscape median exists on Tahquitz Canyon Way, a four-lane divided Major Thoroughfare. Adjacent to the project site, both Farrell Drive and Baristo Road have continuous two-way left-turn lanes. Transportation infrastructure exists at the project site that was constructed to serve the Palm Springs Mall when fully occupied per the existing entitlements. Two existing bus stop turnouts provide direct access to the site for transit patrons. The project can realize cost efficiencies by taking advantage of the existing transportation infrastructure to the maximum extent feasible.

There are sidewalks (8 feet in width) along the site frontage on two of the three abutting arterials. A sidewalk 6-feet in width exists along the north side of Baristo Road along the site frontage. Class II bike lanes exist along Tahquitz Canyon Way and Baristo Road, opposite the site. The *Palm Springs 2007 General Plan* identifies an existing Class I bike path on Farrell Drive, between Tahquitz Canyon Way and Baristo Road, that is part of the Citywide Loop. No information is provided therein regarding whether this bike path is located on the west or east side Farrell Drive. There are currently sidewalks (8 feet in width) on both sides of Farrell Drive in this area but no bike path is evident. The sidewalk on the east side of Farrell Drive has only one driveway located 125 feet south of Tahquitz Canyon Way. The sidewalk on the west side of Farrell Drive along the site frontage has numerous obstructions and is crossed by motor vehicles at each of the three existing site driveways.

Existing businesses operating within the parcels at the northeast and southwest corners of the site rely on the internal circulation system and on-site parking. These businesses are each served by two existing direct access connections on the abutting roadways. Modifying or eliminating the existing driveways on these properties may result in an adverse impact on business operations. Therefore, no changes to these existing access connections are proposed in conjunction with the WVC Master Plan or Phase I Project.

4.1.1 Existing Site-Generated Trips

Table 3-1 quantifies the trip generation associated with various development scenarios for the 29.27-acre Palm Springs Mall site. As shown therein, the three existing on-site land uses generate 2,410 inbound plus outbound weekday trips. The existing Palm Springs Mall building is underutilized and currently occupied by one tenant, the Kaplan College, which generates approximately 390 weekday two-way trips. The Kaplan College would be displaced by the demolition of the mall building required to implement the Phase I Project. The fast food restaurant currently generates an estimated 1,360 weekday trips and the Camelot Theatres generate approximately 660 weekday trips.

Existing businesses operating within two small parcels located at the northeast and southwest corners of the site (a fast food restaurant with drive-through service and the Camelot Theatres) rely on the internal circulation system and on-site parking. These two businesses are occupied and expected to continue operating through all phases of development of the proposed WVC Master Plan. Each of these businesses is served by two existing direct access connections on the abutting roadways. Modifying or eliminating the existing driveways on these properties may result in an adverse impact on business operations. Therefore, no changes to the existing access connections are proposed in conjunction with the WVC Master Plan or Phase I Project.

The existing entitlements include 315,119 square feet of gross leasable area within the Palm Springs mall building, which could generate approximately 11,620 weekday trips if fully occupied (not including the Kaplan College). With the trip generation associated with the existing fast food restaurant and the Camelot Theatres added, the site could generate 13,640 weekday trips if fully occupied under the existing entitlements.

4.1.2 Existing Levels of Service

All of the fifteen existing key intersections evaluated are currently operating at acceptable levels of service during the peak hours on weekdays in the peak season. The signalized intersections are operating at LOS C or better levels of service. The intersection with all-way stop control is operating at LOS B. The minor-street approaches with the most delay at three of the four key intersections with TWSC are operating at LOS C or better. The northbound and southbound approaches on Civic Drive at the intersection of Tahquitz Canyon Way are currently operating at LOS D during the midday and evening peak hours.

Civic Drive at Tahquitz Canyon Way (Intersection 6)

Based on the weighted average control delay associated with the left-turn, through, and right-turn movements, the northbound approach on Civic Drive at the intersection of Tahquitz Canyon Way is currently operating at LOS D during the midday and evening peak hour. The southbound approach on Civic Drive at this intersection is currently operating at LOS D during the midday and LOS C during the evening peak hour. These levels of service are consistent with the City of Palm Springs minimum intersection performance standard.

The northbound and southbound approaches on Civic Drive have sufficient pavement width to accommodate two vehicles queued side-by-side at the limit line. Motorists turning right from Civic Drive onto Tahquitz Canyon Way require smaller gaps in the traffic on Tahquitz Canyon Way to complete their turns than left-turns or crossing maneuvers. Therefore, the motorists making northbound and southbound right-turn movements experience an average control delay associated with LOS B or LOS A during the peak hours. However, the volume of cross traffic on Tahquitz Canyon Way provides few gaps of adequate length to permit vehicles on Civic Drive to cross or turn left during the peak hours in the peak season. As a result, northbound and southbound motorists making these movements experience average control delay levels of 38.8 and 47.8 seconds per vehicle, respectively, which is consistent with LOS E. The City has no LOS performance standards for individual movements. This situation will deteriorate in the future, as traffic volumes on Tahquitz Canyon Way increase.

The existing peak hour traffic volumes at the intersection of Civic Drive and Tahquitz Canyon Way are not sufficient to meet the urban peak hour traffic signal volume warrants. The 122 southbound vehicles on Civic Drive approaching Tahquitz Canyon Way during the midday peak hour represent 81 percent of the minimum volume threshold of 150 vehicles required on the higher-volume minor-street approach to meet the urban peak hour signal warrant where the major-street approaches have two or more lanes. The 40 mph posted speed limit on Tahquitz Canyon Way justifies the use of the urban signal warrant. The sum of the eastbound and westbound approach volumes in the midday peak hour on Tahquitz Canyon Way is currently 1,192 vehicles per hour. Since the projected traffic volumes do not meet urban signal warrants and the intersection is located less than 600 feet west of the signalized intersection of El Cielo Road and Tahquitz Canyon Way, a traffic signal is not recommended for this intersection.

North Site Access "D" on Farrell Drive (Intersection 19)

Corner clearance is the separation of access connections from roadway intersections to preserve adequate site distance at intersections and avoid conflicts between driveway traffic and vehicular stacking or turning at the intersection. Where no alternatives exist, common practice is to allow construction of an access connection along the property line farthest from the intersection. Agencies typically reserve the right to require directional connections or require corner parcels to share access with abutting properties.

At Intersection 19, the existing downstream corner clearance (approximately 200 feet) is less than desirable (330 feet) for a full-turn unsignalized access connection on a secondary thoroughfare adjacent to a signalized intersection. This access serves a corner parcel with limited frontage (<200 feet) on both Tahquitz Canyon Way and Farrell Drive. Even though this shared access appears to be located at the corner property line farthest from

Tahquitz Canyon Way, it is within the functional area of the signalized intersection of Farrell Drive and Tahquitz Canyon Way.

Driveway spacing is tied to the posted speed limits along arterials. If the alignment of driveways on opposite sides of undivided roadways to reduce left-turn conflict is not possible, offsetting them an adequate distance minimizes overlapping left turns and other maneuvers that may result in safety hazards or operational problems. The potential exists for overlapping left-turn conflicts on Farrell Drive between vehicles making simultaneous left turns from the north site access and from the driveway on the opposite side of Farrell Drive located 80 feet to the north (125 feet south of Tahquitz Canyon Way).

The adjacent signalized intersection of Farrell Drive with Tahquitz Canyon Way generates a 95th-percentile northbound queue in the through lanes that currently extends 200 feet during the AM and midday peak hour and 250 feet during the PM peak hour (beyond Access "D"). Conflicts may also occur when the southbound left-turn ingress or eastbound left-turn egress vehicles attempt to turn across the queue of northbound vehicles waiting on the approach to the adjacent signalized intersection.

The fast food restaurant occupying the parcel in the northeast corner of the site is expected to remain with the proposed project. This land use relies heavily on attracting patrons from the traffic passing the site on the two adjacent arterial streets. Any modification to the existing access serving this parcel may adversely affect business. The proposed project is committed to accommodating this existing land use to the maximum extent practicable and does not propose modifications to the existing configuration of Access "D" at Farrell Drive.

Existing Driveway Spacing

Driveway location issues include the need to locate and design connections so that drivers in exiting vehicles have an unobstructed intersection site distance and motorists on the major road have adequate stopping site distance. Additional considerations relate to the functional area of the adjacent intersections and corner clearance as well as driveway offsets and alignment.

Driveway spacing standards minimize curb cuts on a roadway by mandating a minimum separation distance between driveways. This reduces the potential for collisions by reducing the number of conflict points, separating conflict areas where drivers are entering or exiting the major roadway, and encouraging joint or shared access. Current Riverside County minimum intersection spacing standards for arterials with the same characteristics as the major and secondary thoroughfares abutting the site specify 660 feet and 330 feet full-turn access spacing, respectively.

4.2 Traffic Impact Findings

4.2.1 Construction-Related Impacts

The construction activities required to implement the proposed project would be a source of heavy truck traffic that could have a substantial, if temporary, impact on local circulation, depending upon the volume of construction traffic, the length of the construction activities, and the proportion of trucks in the vehicle mix at any specific location. Of the various construction activities, the period when demolished and excavated building materials are removed from the site in haul trucks is likely to generate the highest volume of large vehicles entering and exiting the site. Road users may be inconvenienced by additional delay, unexpected road conditions, and congestion, all of which may occur. The construction activities shall meet or exceed all federal, state and local statutory requirements for public safety. Access to and parking for existing businesses shall be maintained throughout the demolition and construction process.

Project-related demolition and construction activities may result in alternate routing for some road users, and the potential for temporary adverse impacts on access to local businesses. It may require the use of shared access connections for construction vehicle access and temporary lane closures or sidewalk closures. It may affect the operation of transit buses on Tahquitz Canyon Way, Farrell Drive and Baristo Road or make it more difficult for first responders to access the area in the event of an emergency. The preferential use of Tahquitz Canyon Way for site access during the peak pick-up and drop-off periods at the Palm Springs High School could reduce the potential for construction-related impacts on traffic generated by the high school. These factors should be considered in the development of construction staging plans to ensure the maintenance of traffic.

A critical part of the design process is demonstrating that the project can be constructed in a safe manner that meets the expectations of road users. This is accomplished through the design of a site-specific construction staging plan to maintain adequate levels of safety for all road users, adjacent residents, and construction personnel. The contractor performing the work shall be required to install and maintain the devices necessary to safeguard workers and facilitate the safe and efficient passage of all road users (including pedestrians and bicyclists) through and/or around the construction zone. The construction plans and specifications shall include site-specific provisions for the proper handling of traffic during construction. Temporary traffic control plans may include:

- Detour plans with signing and illumination.
- Restrictions on the hours during which traffic lanes may be closed.
- Restrictions on the number of traffic lanes that may be closed at any one time.
- Arrangements for the continuation of electric service for traffic signals and streetlights.
- Public information required during construction to ensure that the public is able to use alternate routes.
- Safety provisions to be employed at the construction site.
- Proper signing, signing and illumination to maintain safe traffic movements through the construction area per the California MUTCD.
- Traffic control techniques to be employed to alleviate traffic congestion during construction.
- Advance planning of emergency vehicle response routes that provide opportunities to avoid congestion (e.g. using Farrell Drive and Baristo Road, both of which provide a continuous TWLTL that can be used to maneuver around congestion).

All necessary permits shall be secured prior to the initiation of demolition, grading, and building construction activities, as required by the City of Palm Springs. During the permit application process, all site-specific requirements should be identified. The construction activities required to implement the project after all approvals have been issued and construction-related permits are received from regulatory authorities would occur over a period of approximately twenty-four months. The construction is expected to begin in January 2017 and be completed by December 2018.

4.2.2 Operational Impacts

Trip Generation

Table 3-1 quantifies the trip generation associated with various development scenarios for the 29.27-acre Palm Springs Mall site. As shown therein, the three existing on-site land uses generate 2,410 inbound plus outbound weekday trips. Upon completion of the Phase I Project, the development within the project site is projected to generate 2,990 entering plus exiting weekday trips. The Phase I Project would generate approximately 32 percent of those trips (970 weekday trips).

The development within the project site upon implementation and full occupancy of the WVC Master Plan is projected to generate 13,540 weekday trips. The educational facilities would generate 73 percent of those trips (9,880 weekday trips). The library would generate approximately 1,640 weekday trips (12 percent). The fast food restaurant and Camelot Theatres would generate 15 percent of the weekday trips. Development of the site per the existing entitlements would generate an equivalent number of weekday trips, but fewer trips during the peak hours. Retail mall traffic is low during the morning peak hour, compared to proposed project as shown in Table 3-1.

When completed and fully occupied the proposed development would generate approximately 13,540 weekday trip-ends. During the morning peak hour, 1,296 trip-ends would be generated (1,042 inbound and 254 outbound). During the midday peak hour, 1,486 trip-ends would be generated (915 inbound and 571 outbound). During the evening peak hour, 1,547 trip-ends would be generated (925 inbound and 622 outbound).

Levels of Service

Existing Plus Project Levels of Service

The evaluation of the existing plus Phase I Project scenario determined that all of the key intersections would operate at acceptable levels of service during the peak hours without mitigation. The Phase I Project traffic would not change the peak hour LOS at any of the key intersections evaluated.

The evaluation of the existing plus WVC Master Plan buildout scenario determined that all of the signalized key intersections would operate at acceptable levels of service during the peak hours without mitigation. The addition of project traffic would change the peak hour LOS at four of the signalized key intersections, but they would all continue to operate at LOS C or better during the peak hours. Four of the five unsignalized key intersections would operate at acceptable levels of service during the peak hours without mitigation. Project-related traffic would change the peak hour LOS on the minor-street approach at three of the unsignalized key intersections.

The midday peak hour operation of the northbound approach to the unsignalized intersection of Civic Drive and Tahquitz Canyon Way, would drop from LOS D to LOS E with the existing plus WVC Master Plan buildout scenario. The project would not add traffic to the northbound approach but would contribute to the conflicting traffic volumes on Tahquitz Canyon Way. A less direct alternative route is available via Baristo Road to satisfy the northbound travel demand at this intersection. The traffic volumes at this intersection would not be sufficient to meet urban peak hour traffic signal volume warrants.

Opening Year 2018 Levels of Service

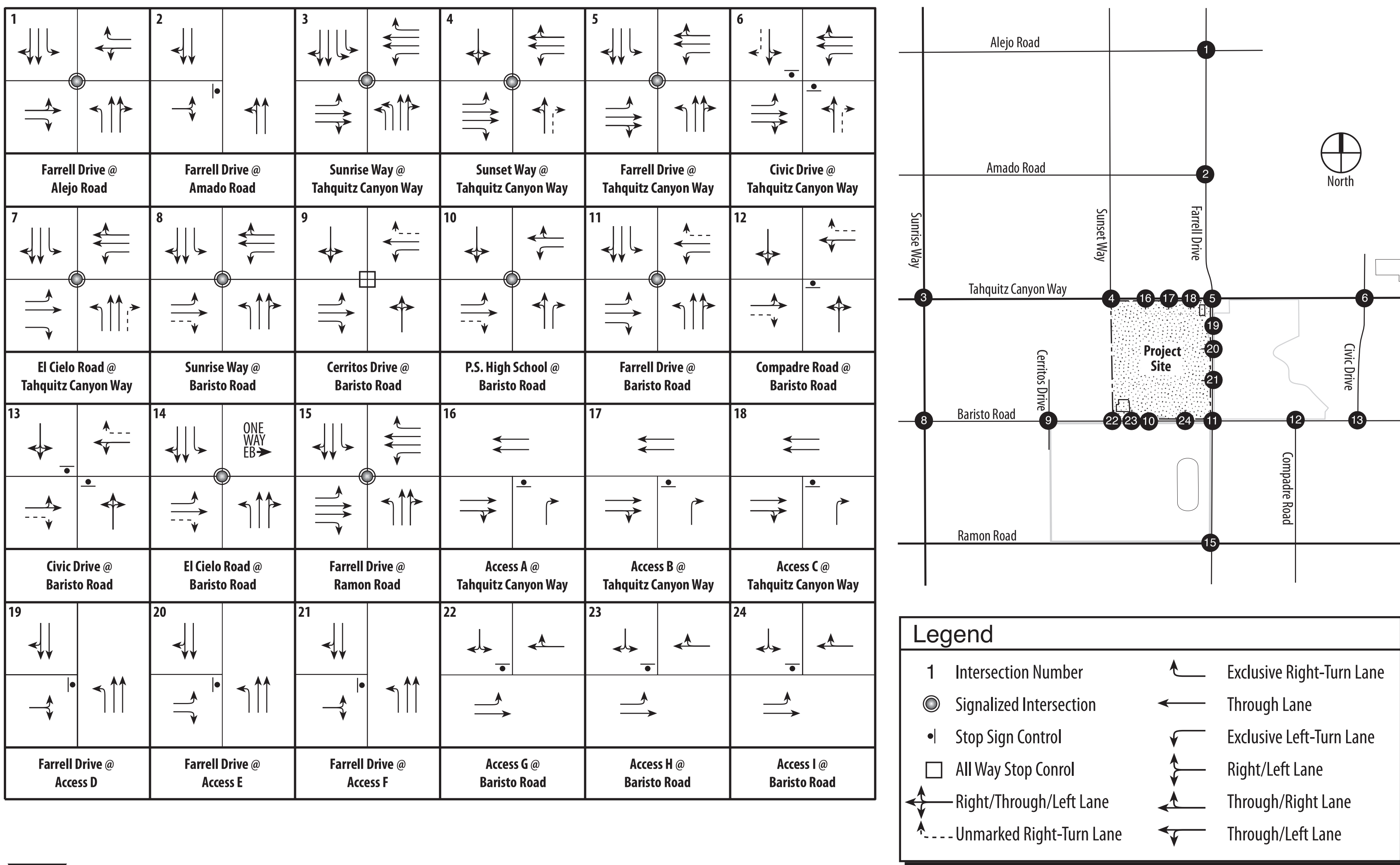
Upon opening of the Phase I Project in the year 2018, all of the key intersections are projected to operate at acceptable levels of service during the peak hours except one. The Phase I Project traffic is not projected to change the peak hour LOS at any of the key intersections evaluated except one. Figure 4-1 identifies the minimum lane geometrics and traffic controls required for opening year 2018 with the Phase I Project.

The midday peak hour operation of the northbound approach to the unsignalized intersection of Civic Drive and Tahquitz Canyon Way, would drop from LOS D to LOS E following the addition of Phase I Project traffic to the conflicting traffic volumes on Tahquitz Canyon Way. The project would not add traffic to the northbound approach. The average delay on the northbound approach would increase by 0.3 seconds per vehicle, following the addition of Phase I Project traffic. A less direct alternative route via Baristo Road is available to meet the northbound travel demand at this intersection. The projected traffic volumes at this intersection would not be sufficient to meet urban peak hour traffic signal volume warrants in the year 2018.

Future Year 2030 Levels of Service

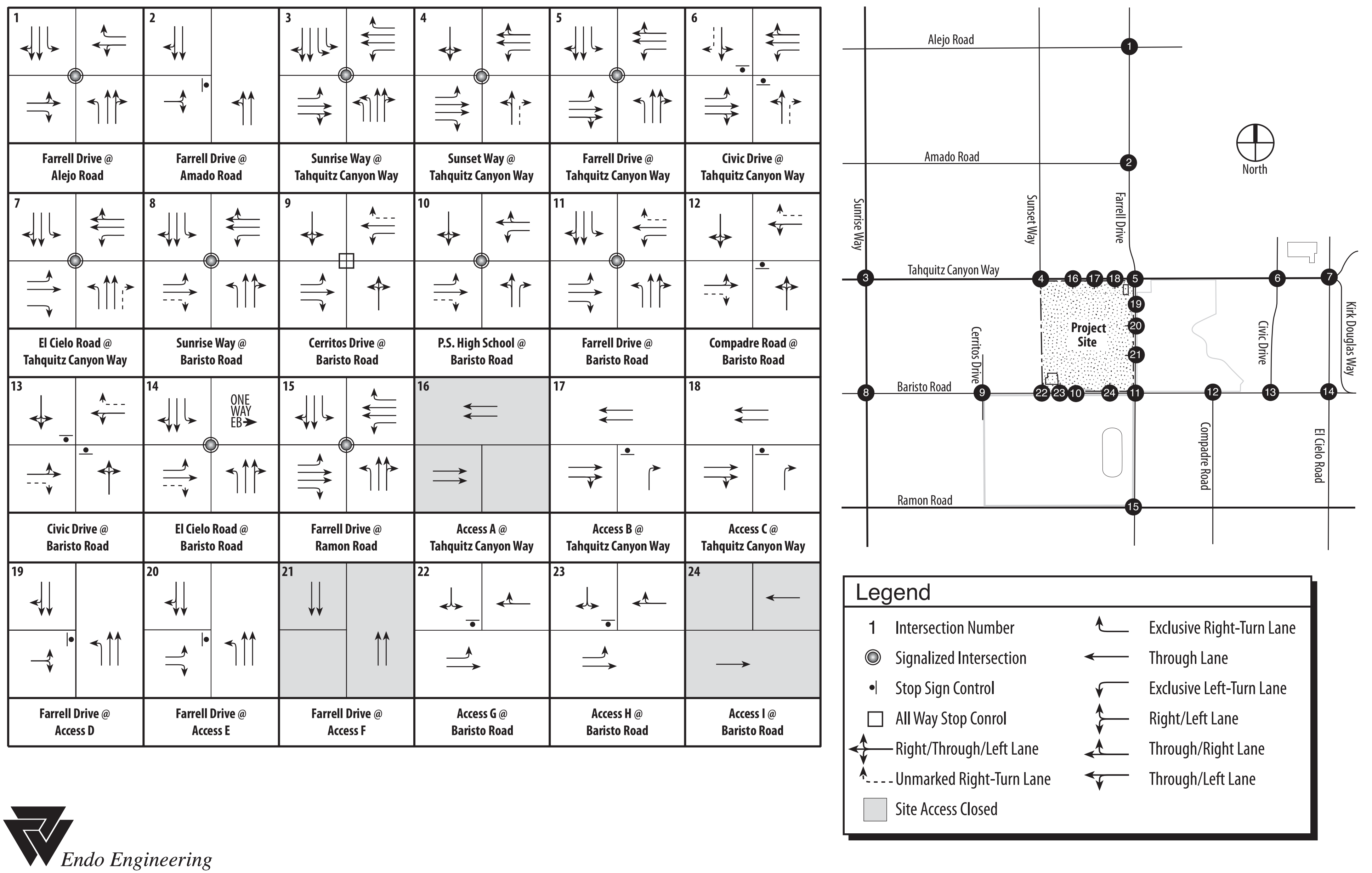
All of the signalized key intersections would operate at acceptable levels of service during the peak hours without mitigation in the year 2030 following implementation of the WVC Master Plan. The addition of project traffic would change the peak hour LOS at five of the ten signalized key intersections, but they would all continue to operate at LOS C or better during the peak hours. Figure 4-2 identifies the minimum lane geometrics and traffic controls required for the year 2030 with the WVC Master Plan.

Figure 4-1
Minimum Lane Geometrics and Traffic Controls Required for Year 2018



Endo Engineering

Figure 4-2
Minimum Lane Geometrics and Traffic Controls Required for Year 2030



The unsignalized key intersection with all-way stop control (Cerritos Drive at Baristo Road) would operate at acceptable levels of service during the peak hours without mitigation in the year 2030 following implementation of the WVC Master Plan. Project-related traffic is projected to result in the peak hour LOS at this intersection dropping from LOS A to LOS B during the midday and evening peak hours.

Three of the four key intersections with two-way stop control would operate at acceptable levels of service during the peak hours without mitigation in the year 2030 following implementation of the WVC Master Plan. The addition of project-related traffic would result in a decrease the peak hour LOS on the minor-street approach at all four of these intersections.

All of the proposed unsignalized site access intersections are projected to provide acceptable levels of service during the peak hours in the year 2030. The proposed main site access on Farrell Drive (Intersection 20) is projected to provide acceptable levels of service during the peak hours with two-way stop control and the existing continuous two-way left-turn lane on Farrell Drive. The existing TWLTL would function as a refuge for left-turning vehicles entering and exiting the main site access drive, allowing two-stage left-turn maneuvers. By closing three existing site access connections, including one on Tahquitz Canyon Way, one on Farrell Drive, and one on Baristo Road, the proposed project would improve traffic operations and traffic safety on these facilities in the vicinity of the site over the long term.

Civic Drive at Tahquitz Canyon Way (Intersection 6)

The *Highway Capacity Manual* (2000) defines levels of service based on the average control delay (seconds of delay per vehicle) for signalized intersections and intersections with all-way stop control. It is difficult to establish fixed significance thresholds for unsignalized intersections with stop control on the side street because the delay increases so dramatically once LOS F is reached. In general, mitigation may be required if a movement is at LOS F, the peak hour traffic signal warrant is met, and a minimum of ten vehicles is added to the critical movement by the project. However, consideration should also be given to the number of new trips added to all movements by a project, the feasibility of alternative routes to satisfy the movement found to have excessive delay, and the proximity of adjacent traffic signals. A new traffic signal should not be installed if it would seriously disrupt progressive traffic flow on the major road.

The level of service threshold between LOS D and LOS E for unsignalized intersections occurs at 35 seconds per vehicle. Upon implementation and full occupancy of the WVC Master Plan in the year 2030, the northbound Civic Drive approach at the intersection of Tahquitz Canyon Way is projected to operate at LOS E with an average control delay of 35.9 seconds per vehicle during the midday peak and 35.5 seconds per vehicle during the evening peak hour. Northbound vehicles will experience an average control delay that exceeds LOS D by 0.9 seconds per vehicle during the midday peak hour and 0.5 seconds per vehicle during the evening peak hour in the peak season.

The projected year 2030+WVC Master Plan buildout peak hour traffic volumes on Civic Drive at the intersection of Tahquitz Canyon Way would not be sufficient to meet or exceed the urban peak hour traffic signal volume warrants. The 134 vehicles per hour projected for the southbound Civic Drive approach at the intersection of Tahquitz Canyon Way, during the midday peak hour would be 91 percent of the minimum volume threshold of 150 vehicles required for the higher-volume minor-street approach to meet the urban peak hour signal warrant. The sum of the eastbound and westbound approach volumes in the midday peak hour on Tahquitz Canyon Way is projected to be 1,437 vehicles per hour.

The intersection of Civic Drive and Tahquitz Canyon Way is located less than 600 feet west of the signalized intersection at El Cielo Road and Tahquitz Canyon Way. This distance is less than one-half of a desirable traffic signal spacing of one-quarter mile. The year 2030+WVC Master Plan buildout northbound traffic volume on Civic Drive is projected to include 34 vehicles (30 vehicles turning left and four vehicles crossing Tahquitz Canyon Way) during the midday peak hour when the northbound approach delay is expected to exceed LOS D by 0.9 seconds per vehicle.

During the PM peak hour, 39 northbound vehicles (including 27 turning left and 12 crossing Tahquitz Canyon Way) are projected to be affected when the northbound approach delay is projected to exceed LOS D by 0.5 seconds per vehicle. There are feasible alternative routes available with the capacity to accommodate these movements if the delay becomes excessive. In view of these considerations, a traffic control signal would not be recommended as an appropriate form of mitigation for this intersection.

4.3 Site Access and Internal Circulation Findings

The project site has adequate access to accommodate the proposed project. The Site Plan has been reviewed and found to provide adequate internal circulation upon completion of the Phase I Project and implementation of the WVC Master Plan. Upon buildout of the WVC Master Plan, the two signalized access intersections (Sunset Way @ Tahquitz Canyon Way and the Palm Springs High School Access/Palm Springs Mall Access @ Baristo Road) would operate at LOS B or better during the peak hours in the peak season. The existing intersection approach lanes at the two signalized site access locations would be sufficient to accommodate traffic volumes upon buildout of the WVC Master Plan in the year 2030.

The right-turn only driveways on Tahquitz Canyon Way should provide sufficient capacity to operate at excellent levels of service with all scenarios. When the library and the northern part of the WVC Master Plan is constructed along Tahquitz Canyon Way, the two driveways on Tahquitz Canyon Way (Access A at Intersection 16 and Access B at Intersection 17) will be consolidated into a single site driveway. If driveways are too narrow or have an inadequate turning radius, vehicles will be unable to maneuver quickly and comfortably off Tahquitz Canyon Way and onto the site. The driveway throat length must be adequate to handle the anticipated storage of entering and exiting vehicles that would conflict with the through movement on Tahquitz Canyon Way. The provision of an adequate driveway throat length avoids on-site circulation hazards and congestion at the entry.

The northern site driveway on Farrell Drive is projected to operate at acceptable levels of service with two-way stop control. However, this driveway is located within the functional area of the adjacent signalized intersection at Tahquitz Canyon Way and the potential exists for overlapping left-turn and weaving conflicts on Farrell Drive between Intersection 5 and Intersection 19. As modification of this access may not be feasible, interparcel connections to alternate site access driveways are proposed to provide alternatives for left-turning vehicles exiting the site from this driveway. Motorists may travel north by using the main site access proposed on Farrell Drive or turn right onto Tahquitz Canyon Way.

In conjunction with the construction of Phase I Project, the existing middle driveway on Farrell Drive would be relocated and constructed as a multilane divided main entry to the project site. With project buildout traffic volumes, rural peak hour traffic volume signal warrants are expected to be met. However, all movements at the main site access on Farrell Drive would operate at acceptable levels of service in the year 2030 with the existing continuous two-way left-turn lane. The existing TWLTL on Farrell Drive provides a refuge area for vehicles waiting to complete left turns into the site. It also provides a refuge for vehicles making left turns out of the main site access. This allows the exit maneuver to be completed in two stages by crossing the near lanes and waiting in the TWLTL for a gap to merge into the northbound travel lanes. Roadways with a TWLTL are generally safer than undivided roadways with average accident rates 35% lower.

The western driveway on Baristo Road is aligned with the extension of Sunset Way through the project site and serves as a rear service vehicle access to the movie theater, existing Palm Springs Mall and future college development. Another driveway located 200 feet to the east provides access to the front of the movie theater. There is an existing continuous TWLTL on Baristo Road adjacent to the project site. Both driveways serve minimal traffic with Phase I Project traffic added and both will provide excellent levels of service with two-way stop control upon implementation of the WVC Master Plan.

The eastern driveway on Baristo Road is one of the three driveways that would be eliminated upon implementation of the WVC Master Plan. This driveway would serve minimal traffic upon completion of the

Phase I Project and would be eliminated in conjunction with adjacent development, in a subsequent development phase. This driveway is approximately 230 feet west of Farrell Drive and offset to the west of the Palm Springs Unified School District driveway located on the opposite side of Baristo Road.

Consolidated Access "A" and "B" on Tahquitz Canyon Way (Intersection 17)

The consolidated driveway proposed in front of the conference center on Tahquitz Canyon Way (see Figure 1-5) would provide a minimal 24-foot width and a minimal non-conflicted throat length of approximately 35 feet (on the entry lane) and 50 feet (on the exit lane). That throat length would provide non-conflicted storage clear of the sidewalk for only one entering and two exiting vehicles. The throat width of 24 feet would accommodate a 12-foot entry lane and a 12-foot exit lane, but would not permit simultaneous entry and exit by passenger vehicles.

When the throat length and width of an access are inadequate, poor traffic operations can result in the vicinity both on-site and on the abutting arterial. The access capacity may be limited by overlapping conflict areas that produce congestion and increase the potential for vehicle-pedestrian and vehicle-bicyclist conflicts. Entering drivers may feel pressured by following through traffic and are unlikely to see vehicles backing out of parking spaces into the entry lane until they have begun their entry maneuver. A non-conflicted throat length of 75 feet beyond the sidewalk would be desirable at this site access. The entry side of this driveway should have a 14-foot (minimum) width and a 25- to 30-foot radius. The exit side of this driveway should provide a 12-foot (minimum) width and a 25- to 30-foot radius. The total throat width should be 26 feet (minimum) to accommodate the simultaneous entry and exit of passenger vehicles. Wider throat widths and/or longer return radii must be used if trucks are expected to use this driveway to access the conference center or the library.

North Site Access "D" on Farrell Drive (Intersection 19)

The current weekday traffic volume of 12,140 vehicles per day (VPD) on Farrell Drive, south of Tahquitz Canyon Way is projected to increase to 16,770 VPD by the year 2030 without the proposed project and 19,010 VPD with the proposed project. This represents a 57 percent increase.

The 95th-percentile northbound left-turn back-of-queue length (100 feet) is not projected to extend beyond Access "D" upon implementation of the WVC Master Plan in the year 2030. However, in the year 2030 with the proposed project, the 95th-percentile back-of-queue lengths in the northbound through lanes on Farrell Drive during the AM, midday, and PM peak hour are projected to extend south of Tahquitz Canyon Way by 200 feet, 250 feet, and 325 feet, respectively. All of these standing queues would extend beyond Access "D", increasing the delay and potential for conflicts associated with left-turn egress movements at Access "D". These queues would block the existing intersection located 125 feet south of Tahquitz Canyon Way on the east side of Farrell Drive.

A raised (nontraversable) median may be constructed on Farrell Drive extending south of Tahquitz Canyon Way for approximately 400 feet. This would restrict left-turn movements entering and exiting the two unsignalized access connections on each side of Farrell Drive within the functional area of the signalized intersection at Tahquitz Canyon Way. The construction of a raised (nontraversable) median on Farrell Drive opposite Access "D" to control left-turn movements would also restrict access to the Desert Advanced Imaging access located on the east side of Farrell Drive. The reduction in access may be considered bad for business but would have a beneficial impact on customer safety as well as public safety on Farrell Drive, south of Tahquitz Canyon Way

To minimize the project-related increase in traffic volumes at Access "D", the project design does not include a direct connection from the new reconfigured parking lot constructed in conjunction with the Phase I Project to the access drive associated with Access "D". The proposed site access and internal circulation system provides alternate access routes to satisfy this travel demand using other site access connections with better operational characteristics on both Farrell Drive and Tahquitz Canyon Way. For example, the left-turn egress movement at Access "D" can be satisfied by making a right-turn movement onto Tahquitz Canyon Way from either Access "B" (at Intersection 17) or Access "C" (at Intersection 18). The left-turn entry movement at Access "D" could be satisfied by a northbound left-turn movement into the main site access on Farrell Drive (Access "E" at Intersection

20). An interparcel connection is provided between Intersection 20 and Intersection 19 to accommodate motorists looking for an alternative to a left-turn entry from Farrell Drive at Access “D”.

Main Site Access “E” on Farrell Drive (Intersection 20)

The new main campus access would be 59 feet wide with a median nine-feet in width and a throat 350-feet in length. Driveways that intersect arterial roads at traffic signals should have at least two outbound lanes including one for right turns and one for left turns. Access driveways more than 36 feet wide require lane delineation and medians to be provided and maintained. The main campus entry on Farrell Drive would provide two travel lanes in each direction that are delineated by proper signing, striping, and a raised median island separating entering and exiting traffic.

The existing TWLTL or a painted traversable median (providing storage space for at least one vehicle turning left from the project site onto Farrell Drive) would not result in excessive delay for any movement at Intersection 20. Therefore, the need for a traffic control signal should not be considered at Intersection 20 unless a raised median is installed in the future on Farrell Drive with a median opening at Intersection 20 that does not provide storage space within the median for at least one vehicle turning left from the project site onto Farrell Drive.

With year 2030 plus WVC Master Plan buildout traffic volumes, the rural peak hour traffic volume signal warrants would be met at Intersection 20. However, all movements at this intersection are projected to operate at acceptable levels of service with the existing continuous TWLTL on Farrell Drive and two-way stop control. The existing TWLTL provides a refuge for vehicles turning left to enter and exit the site.

The *Palm Springs 2007 General Plan* advocates a raised landscaped median for roadways that are designated as Divided Secondary Thoroughfares, including Farrell Drive, adjacent to the project site. A raised median that maintains the refuge for vehicles turning left to enter and exit the site would require a minimum width of approximately 16 feet, four feet wider than the existing TWLTL. Although it is feasible to replace the 12-foot lanes with 11-foot lanes to obtain the additional median width, the existing TWLTL appears to be adequate from a traffic operations perspective. If the existing TWLTL were replaced by a raised median without storage space for the exiting left-turn vehicles, the LOS for the eastbound left-turn lane would drop to LOS F. Without the storage space for the exiting left-turn vehicles afforded by the existing TWLTL, the main site access would require signalization to provide acceptable levels of service with year 2030+WVC Master Plan buildout traffic volumes.

While not required to meet the applicable traffic operation performance standard, a traffic control signal at this intersection, would provide protected left-turn ingress and egress movements. Signalization is not recommended as the appropriate form of traffic control because Intersection 20 would provide acceptable levels of service with two-way stop control. If the posted speed limit on Farrell Drive were reduced to 40 mph and urban warrants applied, the projected year 2030+WVC Master Plan buildout traffic volumes would not meet the urban signal warrants. The California MUTCD guidance indicates that less restrictive forms of traffic control be used, where feasible.

Phased Improvements

As future phases of the development are constructed, the internal circulation needs of each phase should be reviewed to ensure that mobility through the project site is maintained. The Phase I Project improvements include a four-way intersection in the middle of the main entry drive that would connect the parking lots on the south side of the main access drive to the Phase I Project academic facilities. This connection is necessary for the Phase I Project, but should be closed when the traffic circle at the western terminus of the main entry drive is connected to the internal circulation improvements south of the main entry in subsequent phases of the campus development. This four-way internal intersection would accommodate the minimal traffic volumes associated with the Phase I Project, but could result in congestion in later stages of development.

Speed on Farrell Drive

Driveways should be located outside the functional area of adjacent signalized intersections to optimize traffic operations and traffic safety. The adequate separation of access driveways from major roadway intersections preserves site distance at intersections and avoids conflicts between driveway traffic and vehicles stacking or turning at the major intersection. Drivers of exiting vehicles require unobstructed intersection sight distance and motorists on Farrell Drive require adequate stopping sight distance. Based on the design speed of Farrell Drive (~50 MPH) the northern site access driveway on Farrell Drive (Intersection 19) appears to have less than the minimum desirable corner clearance (330 feet). The horizontal curve on Farrell Drive, north of Tahquitz Canyon Way, may limit the sight distance of southbound motorists approaching Intersection 19, which has a downstream corner clearance of less than 200 feet. Where minimum corner clearance cannot be provided due to site-specific conditions, it may be desirable to require directional connections that prohibit or limit left turns from driveways.

As traffic volumes increase in the future, the current posted speed limit on Farrell Drive of 45 mph should be reviewed to determine if a lower posted speed limit (40 mph) would be appropriate and better accommodate the needs associated with all road users (i.e., three schools, transit vehicles and passengers, the transit bus turnout, pedestrians, and bicyclists sharing the Farrell Drive right-of-way with motorists and other road users. Closely-spaced access connections between Intersection 5 and Intersection 19, on the opposite sides of Farrell Drive, have less than desirable corner clearances that may result in overlapping left-turn conflicts. The transit stop located south of Intersection 19 limits sight distances. The increase in future traffic volumes and turning movements on Farrell Drive associated with the proposed project could result in an increase in the frequency of potential conflicts. Lower speeds on Farrell Drive would provide additional time for drivers to react to hazards and avoid collisions.

Accessibility

Federal law requires that facilities for pedestrian use, including curbs and adjacent sidewalks, be readily accessible to and usable by individuals with disabilities. Based upon the *Public Rights-of-Way Accessibility Guidelines*, the minimum curb ramp width should be 4 feet and the maximum curb ramp grade should be 8.33 percent.[1] Cross slopes on adjacent sidewalks should be no greater than 2 percent. A level landing area at the top of each curb ramp should be 4 feet by 4 feet, if no adjacent obstructions are present, and should have a maximum cross slope of 2 percent. Two-foot detectable warning strips that comply with the *Public Rights-of-Way Accessibility Guidelines* are required at the bottom of curb ramps to improve detectability by people with visual impairments.[2] Design guidance and recommendation related to pedestrian crosswalk markings is provided in the California MUTCD.

The proposed project shall be compliant with the 2010 *ADA Standards for Accessible Design* and compliant with the applicable *California Building Code* accessibility provisions related to path of travel elements. The Division of the State Architect shall verify compliance with path of travel elements, features, and components presented on the construction documents as part of the plan review process. This will assure that the accessibility provisions in the *California Building Code* (CBC) Title 24, Part 2 and the *Americans with Disabilities Act Standards for Accessible Design* for Title II and Title III construction projects in California are met.

4.4 Required Roadway Improvements

The operational analysis of the intersection of Civic Drive with Tahquitz Canyon Way (Intersection 6) shall be reviewed by the City Engineer to determine the appropriate mitigation, if any. No off-roadway improvements are required to maintain acceptable levels of service with year 2030 traffic volumes, other than the improvements proposed at the site access points to implement the Phase I Project and WVC Master Plan. Two-way stop control is recommended as the appropriate form of traffic control at the main site access on Farrell Drive

1. U.S. Access Board. *Public Rights-of-Way Accessibility Guidelines*. Revised 2005 Draft. U.S. Access Board, Washington, D.C., 2005.
2. AASHTO. *A Policy on Geometric Design of Highways and Streets*. Sixth Edition, 2011.

(Intersection 20). Acceptable levels of service and delay are projected for Intersection 20 in the year 2030 with two-way stop control and the existing TWLTL on Farrell Drive.

4.5 Standard Mitigation Required of All Developments

1. The construction activities shall meet or exceed all federal, state and local statutory requirements for public safety. Access to and parking for existing businesses shall be maintained throughout the demolition and construction activities.

2. All necessary permits shall be secured prior to the initiation of demolition, grading, and building construction activities, as required by the City of Palm Springs. During the permit application process, all site-specific requirements shall be identified.

3. The contractor shall be required to identify and promptly repair any project-related damage to existing public roads upon completion of the construction activities within the project site. The contractor shall monitor the condition of these routes throughout the construction process and, in the event of an accidental load spill, to arrange for the immediate clean up of any spilled material with street sweeping or other procedures, as needed.

4. The final location and design of the site access points and the internal circulation improvements shall comply with City of Palm Springs access and design standards, and be reviewed by the City Engineer. The applicant shall submit street improvement and striping plans to the City Engineer for review and approval, prior to the issuance of driveway permits.

5. Properly designed and maintained street, roadway, and walkway lighting shall be provided within the campus at every intersection on-site and at mid-block locations, as needed, to facilitate the safe movement of vehicular, pedestrian, and bicycle traffic and ensure good visibility under both daylight and nighttime conditions. Adequate and uniform illumination levels shall be provided throughout the off-street parking areas and along the walkways connecting the parking areas to the buildings.

6. The following *Palm Springs Municipal Code* or policy requirements apply to all developments in the City of Palm Springs:

   - Chapter 84 of the *Palm Springs Municipal Code* requires developments which employ one hundred or more persons to have a Transportation Demand Management (TDM) Plan prepared with specific strategies and guidelines to reduce the number of vehicular trips generated by the development to achieve a mandatory ten percent reduction.

   - Chapter 93 of the *Palm Springs Municipal Code* identifies off-street parking requirements including the required number of parking spaces, their dimensions, compact spaces, adequate capacity, circulation, landscaped buffers and landscaping. All parking areas are required to incorporate trees of suitable eventual size to shade a minimum of 50 percent of the total parking area. Peripheral planting areas are required every ten spaces.

7. The project proponent shall comply with City of Palm Springs requirements regarding master planned bikeways.

8. The project proponent shall contribute on a fair-share basis to the cost of any mitigation at the off-site key intersection of Civic Drive with Tahquitz Canyon Way.

9. The project proponent may have to contribute traffic impact mitigation fees, by participating in the Traffic Uniform Mitigation Fee (TUMF) Program, prior to the issuance of building permits.

10. The project proponent should coordinate with SunLine Transit Agency regarding required public transit facilities on and adjacent to the project site. Any required public transit facilities should be furnished, constructed and installed in conjunction with construction of the associated street improvements.

4.6 Other Recommendations

The mitigation measures below are recommended to minimize potential circulation and/or site access impacts associated with the proposed project.

Provide Adequate Sight Distances - Adequate intersection sight distances shall be provided at the proposed main site access intersection on Farrell Drive including clear departure sight triangles extending 530 feet to the north and 465 feet to the south on Farrell Drive from the centerline of the main site access driveway.

Maintain Emergency Response Efficiency - Construction projects can disrupt the ability to respond to emergencies. This should be considered when developing traffic staging plans, temporary detours, or changing access to residential and business areas. Continuous two-way left turn lanes on Farrell Drive and Baristo Road along the project frontage should be identified by lane and arrow markings placed in accordance with the California MUTCD.

Seasonal Traffic Volume Increase - Some highways experience significant increases in travel during certain seasonal recreational periods. If construction is scheduled on these roads during seasonally high volume times, more extensive traffic mitigation strategies could be required than during the off peak period. Strategies that might be appropriate could include enhanced traffic operations and control strategies, such as construction area screening, variable message signs, reduced travel speeds, temporary parking and turn restrictions, and pavement markings.

Significant Truck Volume - Projects with significant truck volumes can increase the need for traffic mitigation because they increase vehicle delay. Where truck traffic will be heavy, attention should be focused on construction and detour strategies to divert trucks and on incident management strategies that have the capacity to handle large trucks and load spills. The volume of trucks can also affect the use of and selection of alternate routes.

Impacts to Neighborhoods - Construction projects also can create significant problems for residents in neighborhoods near the construction area. As for business, construction activities may hinder access and reduce parking. Construction strategies and traffic control and operations strategies that minimize the flow of traffic through the area and/or reduce the duration of construction could be very appropriate.

Schools - A special effort should be made to safeguard school bus routes, school crossings, and other needs of school children. The preferential use of Tahquitz Canyon Way for site access during the peak pick-up and drop-off periods at the Palm Springs High School could reduce the potential for construction-related impacts on traffic generated by the high school. This should be considered in the development of the construction staging plan to ensure the maintenance of traffic.

Fire Lanes - Parking adjacent to the educational buildings should be prohibited to provide unobstructed visibility of pedestrians moving between the buildings and the parking area. This will also provide for rapid access by emergency service vehicles and first responders. Designation of the curb space immediately adjacent to the building faces as fire lanes would enable municipal enforcement of the no-parking restriction.

Conference Center Driveway Design – Adequate access requires the provision of driveways that are properly located and designed to safely and efficiently accommodate the anticipated traffic movements. The proposed driveway on Tahquitz Canyon Way located at the front of the conference center will also serve the library and the campus. It should allow passenger vehicles to enter and exit simultaneously by providing a 14-foot wide entry lane and a 12-foot wide exit lane as well as 75 feet of non-conflicted stacking space in the entry throat.

TWLTL on Farrell Drive - *The City prefers that "…landscape medians be used wherever divided roadway designations are shown unless traffic conditions dictate that the shared center left-turn lane is necessary."* Peak hour traffic operations at Intersection 20 were evaluated with the existing continuous two-way left-turn lane on Farrell Drive and with a raised nontraversable landscape median. The existing configuration on Farrell Drive is recommended with two-way stop control at the main site access connection (Intersection 20). It provides acceptable levels of service with the least restrictive form traffic control.

Speed Limit on Farrell Drive – As traffic volumes increase in the future, the current posted speed limit on Farrell Drive of 45 mph should be reviewed to determine if a lower posted speed limit (i.e., 40 mph) would be appropriate and better accommodate the needs associated with all road users.

Appendices

A. Methodology
B. Traffic Count Data
C. HCM 2000 Methodology and Worksheets
D. Traffic Signal Warrant Worksheets
E. List of Acronyms and Glossary

Appendix A

METHODOLOGY
Scenarios Evaluated
Seasonal Traffic Variations
Highest Volume Hours
Background Traffic Projections
Level of Service Definitions
Applicable Performance Standards
Intersection Operational Analysis Methodology

APPENDIX A
METHODOLOGY

This traffic study was designed to provide the information necessary to ensure an efficient, accessible, and safe transportation system within and adjacent to the project site. It is also designed to evaluate the potentially significant impacts and identify associated mitigation, as required. Existing facilities and improvements associated with alternative transportation modes (including walking, cycling, and public transit) are documented. The design of the site access and internal circulation system has been reviewed to assess its adequacy and ensure that complementary and effective improvements are proposed. The condition of the surrounding street system was reviewed to assess the potential for impacts associated with heavy-duty truck traffic that will be required to transport heavy construction equipment and building materials to the site to implement the proposed project as well as the haul truck trips that will be generated to remove demolition debris associated with the existing on-site structures and associated facilities.

1. Scenarios Evaluated

The project site is currently occupied a largely vacant retail mall (Palm Springs Mall), the Camelot Festival Theaters, and a Jack in the Box restaurant. Although the Kaplan College currently resides on site, the existing land use approvals are not consistent with the proposed campus and Phase I project. Therefore, the traffic study includes an evaluation of General Plan build-out conditions. The following seven scenarios were evaluated:

- Existing Conditions (Year 2015 Peak Season);
- Existing+Phase I Project Conditions;
- Existing+WVC Master Plan Buildout Conditions;
- Opening year 2018 Ambient Conditions (including near-term cumulative and background traffic growth);
- Opening year 2018+Phase I Project Conditions;
- Year 2030 Ambient Conditions; and
- Year 2030+WVC Master Plan Buildout Conditions.

The future year 2018 represents the project opening year. The future year 2030 represents the project buildout year and General Plan buildout. The seven scenarios were analyzed to identify the transportation-related implications of the project and any improvements necessary to ensure acceptable traffic operations in the future. Peak hour capacity and level of service analyses were performed for the fifteen existing key intersections that provide access for the current site and will continue to provide access with the proposed project. In addition, the remaining site access intersections with left-turn access were evaluated with year 2030+project conditions to ensure that all access driveways will continue to operate at acceptable levels of service upon completion of the Campus Master Plan.

2. Seasonal Traffic Variations

Seasonal fluctuations in traffic demand reflect trip purposes and the activity in the area served by the roadways. The Coachella Valley is relatively isolated from neighboring urbanized regions and is home to hundreds of resort facilities and retirement communities. In the Coachella Valley, a large tourist and retired population, supported by large service sector employment, generates travel patterns that are atypical of Southern California. Approximately 3.5 million people visit the Coachella Valley each year. The tourist season extends from October to May, with the tourist population peak beginning in January and extending through March and April.

Traffic volumes in the study area are subject to significant seasonal fluctuations, as the population swells in the winter and spring with tourists and "snow birds," then decreases as they leave to avoid the heat during the summer months. New peak hour manual turning movement traffic counts were made by Counts Unlimited, Inc. at the fifteen key intersections on January 14, 2015, and three 24-hour tube counts on January 15, 2015. Since the new traffic counts occurred during the peak season in the study area, no seasonal adjustments to the count data were required or applied.

3. Highest Volume Hours

The selection of the day of the week and time period that should be used to determine the appropriate design requirements for the proposed project are directly related to the type of land use to be constructed and the traffic characteristics on the adjacent street system. The time period that should be analyzed in a traffic impact assessment is that hour during the morning, midday, and afternoon/evening during which the combination of site-generated traffic and adjacent street traffic is at its maximum. The ITE database includes trip-generation rates for different days and time periods that can be examined to determine when the site generates its peak traffic flow. Traffic counts can be made to identify the peaking characteristics of the adjacent street system.

4. Peak Hours Evaluated

The traffic volumes on adjacent streets tend to be highest during the traditional commuting peak hours on weekdays (i.e., between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM). As shown in Appendix B, the traffic counts indicate that the highest volume occurs during the evening peak hour on two of the 24-hour counts (on Farrell Drive and Ramon Road), but the evening peak traffic hour in the area occurs earlier than the typical evening peak hour. The second highest peak hour in the area typically occurs during the midday peak hour. The midday peak hour volume was the highest volume hour based on the 24-hour count on Tahquitz Canyon Way, west of Farrell Drive. Although the morning peak traffic hour volumes are usually lower in the study area than the midday and evening peak hour volumes, the morning peak hour traffic volumes near the high school exceed the midday and afternoon peak hour volumes. The WVC Master Plan includes a college campus that would generate more trips during the morning peak hour than the retail uses at the Palm Springs Mall.

The hours for the peak hour counts were selected to incorporate the midday peak hour (11:00 AM to 1:00 PM), and the early evening peak hour (3:00 PM to 5:00 PM) at all fifteen existing key intersections. For the five existing key intersections located adjacent to the high school or project site, the manual turning movement counts also included morning peak hour counts (6:30 AM to 9:00 AM), and extended the evening peak hour counts to include 2:30 PM to 5:00 PM. The additional one-half hour in both the morning and evening counts at these intersections was added to include traffic from the high school that starts at 7:00 AM (start of zero period) and ends at 2:45 PM (end of 6th period).

5. Percentage of Daily Traffic Volume in Peak Hour

New 24-hour directional traffic counts were made in the study area on January 15, 2015 at the following three locations: (1) Farrell Drive, south of Tahquitz Canyon Way; (2) Tahquitz Canyon Way, west of Farrell Drive; and (3) Ramon Road, west of Farrell Drive. These three traffic count locations were selected to identify the portion of the study area traffic that occurs during the AM, midday, and PM peak hours. Since new midday and PM peak hour intersection traffic counts were made at all fifteen of the key intersections but AM peak hour counts were made at only five of the key intersections, the two-way traffic volume during the midday peak hour was added to the two-way traffic volume during the PM peak hour at each of the 24-hour traffic count locations. The combination of the traffic volumes during these two peak hours was compared to the 24-hour traffic volume at the same location to determine that approximately 16 percent of the daily volume occurs during the midday and PM peak hour. This 16 percent factor was used to estimate the daily traffic volumes on each leg of the key intersections from the new midday and PM peak hour traffic counts made at the fifteen key intersections.

6. Background Traffic Projections

Based on the change in traffic volumes between the existing traffic levels and the year 2030 ambient traffic volumes, a constant rate of growth in future traffic volumes was identified on each leg of the key intersections. Future year 2018 traffic volumes were estimated by interpolating between the current daily volumes and the year 2030 ambient daily traffic projections developed from the *Palm Springs 2007 General Plan* Traffic Model. Since the WVC Master Plan includes the removal of the existing Palm Springs Mall development, the year 2030 ambient traffic volumes were developed by subtracting the Palm Springs Mall traffic from the *Palm Springs 2007 General Plan* buildout traffic projections. The trip generation from the mall traffic was based on a gross leasable area of 315,119 S.F. and assumed that 23 percent of the entitlement trips would not be new trips on the road network, but rather trips attracted from the traffic passing the site on the three adjacent streets upon General Plan buildout. The proportion of pass-by trips decreases with the size of the development. A retail development of 100,000 S.F. of GLA could have 50 percent pass-by trips while a shopping center with a million square feet of GLA might have as little is 19 percent pass-by trips.[1]

Year 2030 peak hour turning movement projections were developed by assuming that the increase in peak hour volumes between the year 2015 and the year 2030 would mirror the change in the daily volumes. Each existing turning movement volume was multiplied by the ratio of the future year 2030 weekday traffic volume divided by the current weekday traffic volume on both intersection legs associated with that turning movement. The increase in peak hour turning volumes was normalized to the growth in daily traffic volumes to ensure that the future peak hour volumes would accurately reflect the overall increase in daily traffic volumes. In any instances where the current volume exceeded the future volume projection (or a future projection was not available) the current volume was increased by ten percent and assumed to reflect the future year 2030 traffic volume.

New peak hour turning movement traffic counts were not made at the nine existing unsignalized site access. The existing traffic volumes at these intersections are relatively small and in some cases negligible. The future traffic volumes are expected to remain well below the capacity of these intersections. Motorists using these driveways currently experience very little control delay and good levels of service are expected at these intersections in the future. Although the quantification of the existing site traffic volumes and current traffic distribution associated with the Kaplan College would have been useful in the analysis, no feasible method was identified to separate the Kaplan College traffic from the Jack in the Box and Camelot theatres traffic at the nine unsignalized site access intersections. The combined traffic volumes associated with all the three existing on-site land uses were documented in conjunction with the traffic counts made at the two signalized site access intersections and the thirteen off-site key intersections shown in Figure 2-4.

7. Level of Service Definitions

No scientific method exists for deciding the maximum degree of congestion that might be accepted as a basis for design. The level of congestion considered acceptable for a street or intersection will vary from one agency to another and from one community to another. The expectations of people using a street will also vary by facility type, day of the week, and time of the day. The degree of congestion that the public is willing to accept as reasonable remains a local decision.

Levels of service (LOS) are commonly used to describe how well a transportation facility operates from the traveler's perspective. Levels of service use a familiar scale ranging from LOS A (best) to LOS F (worst). Levels of service can be used to describe the performance of a highway segment or intersection with LOS A used to characterize essentially free flow operation and LOS F used to reflect substantial congestion, long delays and stop-and-go operation. LOS has been widely adopted as a standard or criterion on which decisions are based regarding the approval of land development, upgrading traffic control systems, and allocating costs for mitigating traffic impacts.

1. Stover, Vergil G and Frank J Koepke. Transportation and Land Development (2nd Edition) Institute of Transportation Engineers. 2002. Table 3-10, Trips Attracted from Passing Traffic.

8. Intersection Level of Service

Levels of service are defined by one or more measures of effectiveness such as: speed and travel time, traffic volume, geometric features, traffic interruptions, delays, the ability to move freely, driver comfort and convenience, and vehicle operating costs. For peak hour traffic operations at intersections, the six levels of service are based on relative levels of driver acceptability of delay. Since drivers are willing to accept more delay at signalized than unsignalized intersections, separate ranges of delay have been identified for levels of service based on the intersection control type, as shown in Table A-1.

9. Roadway Segment Vehicular Level of Service

An analysis of the daily volume-to-capacity ratio of roadway segments is a broad-brush tool used as an indication of when traffic congestion may be expected on a typical arterial street segment to determine if and when roadway widening between intersections may be needed. The roadways within the study area are fully improved, for the most part, and provide sufficient mid-block capacity to accommodate projected future traffic daily volumes.

The City of Palm Springs has adopted LOS "D" as the threshold for acceptable traffic operations on the circulation network. This threshold applies to both arterial segments and intersections. Since the key intersections are primarily signalized and/or located near other signalized intersections, their operation is constrained by the delay at the intersections, rather than the capacity of the roadway segments between the intersections.

The Riverside County *Traffic Impact Analysis Preparation Guide* requires traffic studies to address roadway segment levels of service only for general planning purposes where intersection operations are not the controlling factor. A roadway link daily volume-to-capacity analysis was not required for the study area and was not performed. However, the daily two-way traffic volumes at the upper limit of LOS C, LOS D, and LOS E are shown by roadway classification for informational purposes in Table A-2.

The maximum traffic volume thresholds shown in Table A-2 assume optimum conditions and have been applied for planning purposes at the General Plan level in relating the daily traffic volume to the number of lanes needed mid-block to serve that volume. The roadway segment capacity estimates shown as the upper limit of LOS E in Table A-2 are "rule-of-thumb" estimates affected by site-specific factors such as the number and configuration of intersections, the degree of access control, roadway grades, substandard design geometrics (horizontal and vertical alignment), sight distance, the level of truck and bus traffic, the percentage of turning movements, and the level of pedestrian and bicycle traffic. Where it is not feasible to add additional mid-block through lanes, localized mitigation may be utilized (e.g. additional turn lanes at intersections, access restrictions, signal synchronization, etc.) to ensure that acceptable peak hour levels of service are maintained.

10. Applicable Performance Standards

Peak hour traffic volumes typically create the heaviest demand on the circulation system. The approach lane configuration at intersections is the limiting factor in roadway capacity. Therefore, peak hour intersection capacity analyses are useful indicators of worst-case conditions.

The Circulation Element of the 2007 *Palm Springs General Plan* specifies that roadways and intersections that operate at LOS "D" or better shall be provided and maintained for the City's circulation network, using average weekday conditions during the peak month as a base. The average intersection control delay, as defined by the *Highway Capacity Manual* (HCM 2000), was used to determine the level of service at the key intersections.

The application of the City of Palm Springs minimum performance standard is straight forward for signalized and all-way stop-controlled (AWSC) intersections, where the HCM methodology identifies a single level of service that characterizes the overall intersection operation. However, a single overall intersection level of service is not defined for unsignalized intersections with two-way stop-control (TWSC). For intersections with TWSC, the HCM methodology identifies the LOS for the minor-street approaches and the left-turn moves from the major street.

Table A-1
Intersection Level of Service Criteria

Level of Service (LOS)	Average Control Delay (Seconds/Vehicle)		Traffic Flow Characteristics
	Signalized	Unsignalized	
A	≤ 10	≤ 10	Good progression, few stops, and short cycle lengths. Most vehicles arrive during the green phase and many do not stop. Little or no delay at unsignalized intersections.
B	> 10 and ≤ 20	> 10 and ≤ 15	Good progression, short cycle lengths or both. More vehicles stop than with LOS A, causing higher levels of average delay. Short delays at unsignalized intersections.
C	> 20 and ≤ 35	> 15 and ≤ 25	Satisfactory operation with fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles and overflow occurs. A significant number of vehicles stop but many pass through without stopping. Average delays at unsignalized intersections.
D	> 35 and ≤ 55	> 25 and ≤ 35	Tolerable delay, where congestion becomes more noticeable and many vehicles stop. Individual cycle failures are noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Long traffic delays at unsignalized intersections.
E	> 55 and ≤ 80	> 35 and ≤ 50	Unstable flow with poor progression, frequent cycle failures, long cycle lengths and high V/C ratios. Individual cycle failures and long queues are frequent occurrences. This is considered the limit of acceptable delay by many agencies. Very long traffic delays at unsignalized intersections.
F	> 80	> 50	Considered unacceptable to most drivers. Arrival flow rates exceed the discharge capacity of intersection with many individual cycle failures. Poor progression and long cycle lengths as well as high V/C ratios and high delay. Unacceptable traffic delays at unsignalized intersections.

Source: *Highway Capacity Manual,* Special Report 209, Transportation Research Board, Fourth Edition, 2000; pp. 10-16.

Table A-2
Daily Link Volume LOS Criteria by Roadway Classification

Classification	Typical Lane Configuration[a]	Maximum Daily Two-Way Volume By LOS[b]		
		LOS C	LOS D	LOS E
Major Thoroughfare	6-Lane Divided Roadway	43,100	48,500	53,900
Major Thoroughfare	4-Lane Divided Roadway	28,700	32,300	35,900
Secondary Thoroughfare	4-Lane Divided Roadway	20,700	23,300	25,900
Secondary Thoroughfare	4-Lane Undivided Roadway	20,700	23,300	25,900
Secondary Thoroughfare	2-Lane Divided Roadway	14,400	16,200	18,000
Collector Street	2-Lane Undivided Roadway	10,400	11,700	13,000

a. The number of mid-block through lanes is shown as well as whether each roadway is a divided or undivided facility. Divided roadways can typically accommodate left-turn lanes at intersections.

b. The daily values shown at the upper limit of LOS E have been applied by the City of Palm Springs in the *Palm Springs 2007 General Plan Traffic Impact Analysis* as guidelines relating the daily traffic volume to the number of lanes needed mid-block to serve that volume. Source: *Riverside County Transportation Department Traffic Impact Analysis Preparation Guide* (May 2002).

11. Significance Threshold Criteria

A significant impact is identified when project-related traffic increases result in the peak hour LOS at an intersection deteriorating to a level worse than LOS D. If the intersection being evaluated already operates at LOS E or LOS F, then a significant impact would be identified if the project results in a further decline. Mitigation measures are recommended when the overall peak hour control delay at a key intersection is predicted to be excessive and result in traffic operations associated with LOS E or LOS F.

The upper limit of LOS D is reached at signalized intersections when the average control delay reaches 55 seconds per vehicle. For intersections with all-way stop control (AWSC), the upper limit of LOS D is reached when the average control delay reaches 35 seconds per vehicle. For unsignalized intersections with two-way stop control, the upper limit of LOS D is reached on minor-street approach with the most delay when the average control delay reaches 35 seconds per vehicle. However, the LOS on the minor-street approach does not characterize the overall intersection operation. Most of the vehicles passing through an intersection with TWSC are likely to experience little, if any, control delay and experience excellent levels of service, even when traffic on the minor cross-street experiences excessive delay.

The Palm Springs City Engineer reviews each TWSC intersection where LOS D is projected to be exceeded on the approach with the most delay on an individual basis to determine the appropriate mitigation. The following factors are considered to ensure that the final decision regarding required intersection improvements and changes in traffic control are consistent with the City's system performance objectives:

- The number of vehicles that are expected to be making the movement with the most delay;
- The existing and appropriate future spacing of signalized intersections;
- Whether or not signal warrants are currently met or expected to be met in the future;
- Whether alternative routes are available to accommodate those motorists experiencing excessive delay and a poor LOS during the peak hours.

12. Intersection Operational Analysis Methodology

Peak hour traffic creates the heaviest demand on the circulation system and the lane configuration at intersections is the limiting factor in roadway capacity. Consequently, peak hour intersection capacity analyses are useful indicators of worst-case conditions. The *Highway Capacity Manual* (HCM) provides the best available techniques for determining capacity, control delay, and LOS for transportation facilities. A brief discussion of the HCM 2000 methodology is provided in Appendix B with the intersection delay worksheets.

The peak hour intersection control delay and levels of service were determined for the existing key intersections with the methodologies outlined in the HCM 2000. The HCM 2000 methodology addresses the capacity, V/C ratio, and LOS of intersection approaches as well as the LOS of the intersection as a whole. The analysis is undertaken in terms of the ratio of demand flow rate to capacity (V/C ratio) for individual movements or approach lane groups during the peak hour and the composite V/C ratio for the sum of the critical movements or lane groups within the intersection. The critical V/C ratio is an indicator of whether or not the physical geometry and signal design provide sufficient capacity for the movements.

A critical V/C ratio less than 1.00 indicates that all movements at the intersection can be accommodated within the defined cycle length and phase sequence by proportionally allocating green time. In other words, the total available green time in the phase sequence is adequate to handle all movements, if properly allocated. When V/C ratios are greater than 1.0 for either an individual lane group or for the overall intersection, departure volumes are less than arrival volumes.

The "Highway Capacity Software" (HCS+ Version 5.3) package was employed to perform the numerical calculations for the HCM operational analysis procedures. This commercial software implements the HCM 2000 procedures. It was developed under Federal Highway Administration sponsorship and is maintained by the McTrans Center at the University of Florida Transportation Research Center. Default values were assumed for the saturation flow rate (1,900 passenger cars per hour per lane) and the lost time (3-second clearance interval plus one second of “all red” time).

Peak Hour Factor

For both the existing and year 2018 scenarios, the peak hour factor (PHF) assumed was that determined from the peak hour traffic counts at the existing key intersections. A peak hour factor of 1.0 was assumed for year 2030 scenarios.

Heavy Vehicle Mix

An eight percent heavy vehicle mix was assumed for the existing and year 2018 scenarios. A five percent heavy vehicle mix was assumed for year 2030 scenarios.

Pedestrian Clearance Interval

The minimum pedestrian clearance time (in seconds) was calculated as the crossing distance (in feet) divided by the walking speed. The crossing distance was determined from the near curb to the far side of the traveled way by assuming standard twelve-foot wide lanes and including all approach lanes as well as the number of departure lanes to be crossed on each intersection leg. The control delay and LOS evaluations assumed a three-second pedestrian start-up time. A walk speed of 4.0 feet per second was assumed to determine the pedestrian crossing times. The traffic signal cycle lost time (the yellow change interval and all-red time) was included in satisfying the minimum pedestrian clearance time. This methodology was approved by the City of Palm Springs Traffic Engineer and utilized in analysis of the peak hour traffic operations upon General Plan buildout at the critical intersections for the *Palm Springs 2007 General Plan.*

Permitted/Protected Left-Turn Movements

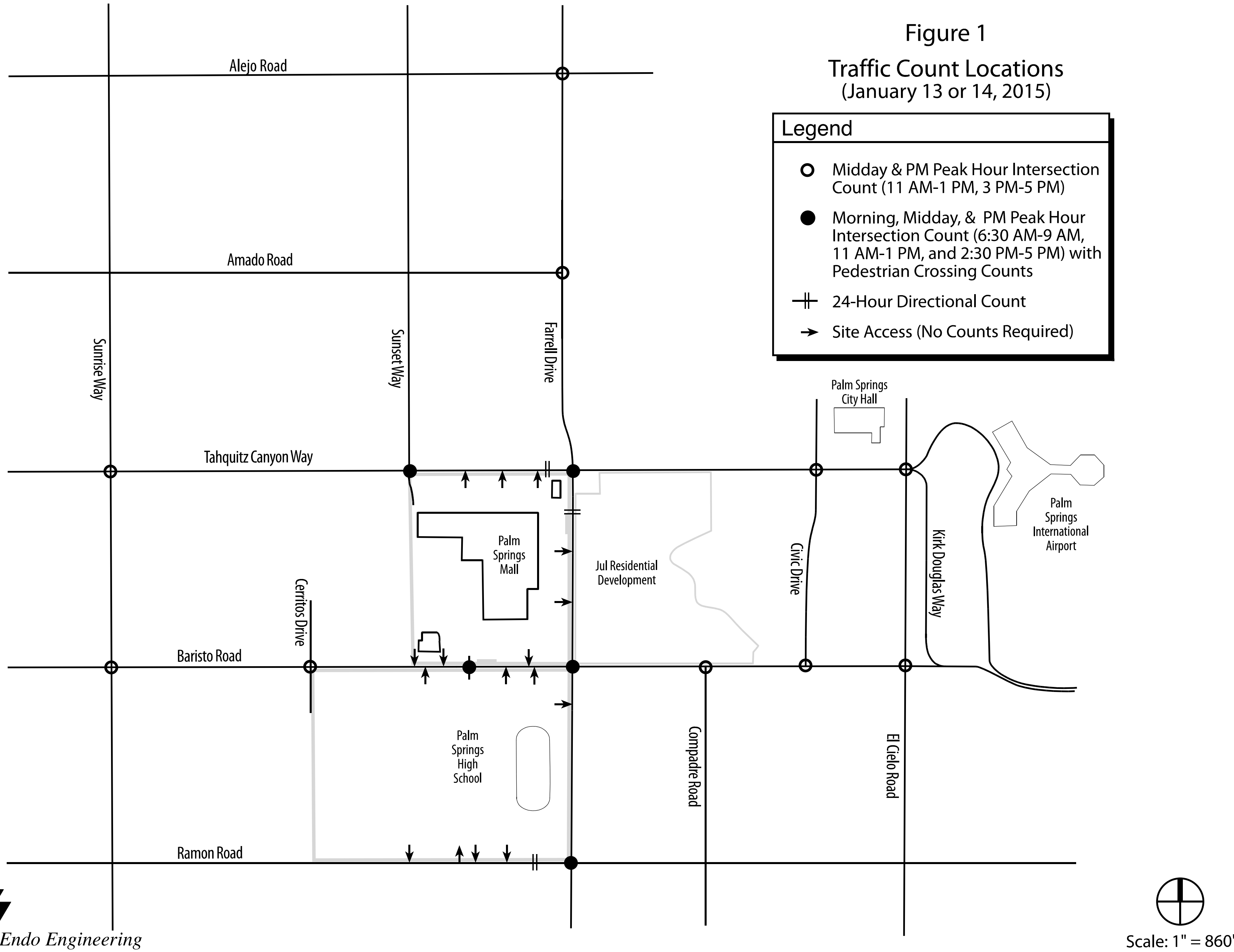
Several traffic signals at key intersections have a protected left-turn phase (green arrow) followed by a permitted phase that allows left-turns on a green ball indication. This permitted/protected phasing provides for a more efficient use of the intersection by: (1) allowing left-turn movements to occur during gaps in approaching through traffic, and (2) minimizing the time necessary for the less efficient protected left-turn phase. A minimum of five seconds was assumed for the protected left-turn phase. The protected left-turn phase ensures that there is sufficient left-turn movement capacity at signalized intersections.

Appendix B

TRAFFIC COUNT LOCATIONS
24-HOUR MACHINE COUNT DATA
PEAK HOUR TURNING MOVEMENT COUNT DATA

Figure 1

Traffic Count Locations
(January 13 or 14, 2015)



Counts Unlimited, Inc

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City of Palm Springs
Tahquitz Canyon Way
W/ Farrell Drive
24 Hour Directional Volume Count

PLS001
Site Code: 009-15014

Start Time	15-Jan-15 Thu	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		11	**128**			13	**138**				
12:15		14	**122**			5	**146**				
12:30		7	**115**			6	**104**				
12:45		9	**125**	41	490	6	**90**	30	478	71	968
01:00		3	118			0	100				
01:15		3	107			5	115				
01:30		10	116			3	122				
01:45		12	105	28	446	0	132	8	469	36	915
02:00		3	120			2	90				
02:15		5	110			1	95				
02:30		4	101			2	100				
02:45		5	107	17	438	5	107	10	392	27	830
03:00		3	113			0	111				
03:15		1	111			1	97				
03:30		2	116			1	126				
03:45		1	105	7	445	2	124	4	458	11	903
04:00		3	106			2	100				
04:15		2	90			3	89				
04:30		5	125			8	105				
04:45		12	97	22	418	9	117	22	411	44	829
05:00		8	115			15	110				
05:15		11	113			8	102				
05:30		13	77			14	104				
05:45		11	81	43	386	16	78	53	394	96	780
06:00		12	71			25	93				
06:15		23	70			25	69				
06:30		16	64			31	100				
06:45		21	84	72	289	26	60	107	322	179	611
07:00		39	55			43	66				
07:15		33	49			66	40				
07:30		52	57			59	44				
07:45		69	56	193	217	96	40	264	190	457	407
08:00		67	56			95	33				
08:15		39	54			102	34				
08:30		63	52			75	34				
08:45		78	51	247	213	89	17	361	118	608	331
09:00		86	40			100	31				
09:15		67	61			95	30				
09:30		74	43			86	26				
09:45		87	29	314	173	105	17	386	104	700	277
10:00		100	45			97	18				
10:15		98	56			122	24				
10:30		88	56			109	28				
10:45		102	52	388	209	136	20	464	90	852	299
11:00		**114**	40			**133**	22				
11:15		**109**	28			**139**	26				
11:30		**115**	21			**126**	12				
11:45		**114**	20	452	109	**143**	14	541	74	993	183
Total		1824	3833	1824	3833	2250	3500	2250	3500	4074	7333
Combined Total		5657		5657		5750		5750		11407	
AM Peak	-	11:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	452	-	-	-	541	-	-	-	-	-
P.H.F.		0.983				0.946					
PM Peak	-	-	12:00	-	-	-	12:00	-	-	-	-
Vol.	-	-	490	-	-	-	478	-	-	-	-
P.H.F.			0.957				0.818				
Percentage		32.2%	67.8%			39.1%	60.9%				
ADT/AADT		ADT 11,407		AADT 11,407							

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City of Palm Springs
Farrell Drive
S/ Tahquitz Canyon Way
24 Hour Directional Volume Count

PLS002
Site Code: 009-15014

Start	15-Jan-15	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	93			7	104				
12:15		3	115			5	113				
12:30		3	89			9	99				
12:45		3	111	17	408	7	107	28	423	45	831
01:00		1	115			2	120				
01:15		5	111			3	118				
01:30		1	89			6	109				
01:45		1	126	8	441	1	87	12	434	20	875
02:00		0	75			1	99				
02:15		5	93			2	105				
02:30		3	100			1	**161**				
02:45		13	**133**	21	401	2	**171**	6	536	27	937
03:00		2	**179**			2	**136**				
03:15		2	**115**			4	**125**				
03:30		1	**111**			1	112				
03:45		2	94	7	499	5	114	12	487	19	986
04:00		3	111			0	116				
04:15		1	141			3	93				
04:30		4	103			5	99				
04:45		4	109	12	464	13	125	21	433	33	897
05:00		5	125			12	109				
05:15		6	104			6	120				
05:30		11	116			13	94				
05:45		11	94	33	439	23	88	54	411	87	850
06:00		17	101			30	74				
06:15		24	63			21	62				
06:30		20	54			45	58				
06:45		51	59	112	277	75	61	171	255	283	532
07:00		63	51			84	52				
07:15		47	44			**94**	43				
07:30		**84**	31			**141**	35				
07:45		**133**	32	327	158	**223**	38	542	168	869	326
08:00		**136**	27			**149**	41				
08:15		**77**	32			85	37				
08:30		65	23			106	26				
08:45		78	37	356	119	128	34	468	138	824	257
09:00		61	25			82	18				
09:15		60	20			103	34				
09:30		92	15			109	22				
09:45		85	19	298	79	117	22	411	96	709	175
10:00		75	26			102	32				
10:15		85	27			85	18				
10:30		59	19			99	24				
10:45		86	12	305	84	85	21	371	95	676	179
11:00		86	9			96	9				
11:15		87	6			116	13				
11:30		81	6			114	7				
11:45		88	6	342	27	100	2	426	31	768	58
Total		1838	3396	1838	3396	2522	3507	2522	3507	4360	6903
Combined Total		5234		5234		6029		6029		11263	
AM Peak	-	07:30	-	-	-	07:15	-	-	-	-	-
Vol.	-	430	-	-	-	607	-	-	-	-	-
P.H.F.		0.790				0.680					
PM Peak	-	-	02:45	-	-	-	02:30	-	-	-	-
Vol.	-	-	538	-	-	-	593	-	-	-	-
P.H.F.			0.751				0.867				
Percentage		35.1%	64.9%			41.8%	58.2%				
ADT/AADT		ADT 11,263		AADT 11,263							

Counts Unlimited, Inc

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email: counts@countsunlimited.com

City of Palm Springs
Ramon Road
W/ Farrell Drive
24 Hour Directional Volume Count

PLS003
Site Code: 009-15014

Start	15-Jan-15	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		24	213			18	250				
12:15		26	196			15	235				
12:30		23	185			18	282				
12:45		14	200	87	794	12	247	63	1014	150	1808
01:00		16	170			12	246				
01:15		12	199			13	188				
01:30		14	218			5	210				
01:45		35	198	77	785	9	217	39	861	116	1646
02:00		21	216			4	187				
02:15		9	231			4	201				
02:30		6	219			9	242				
02:45		11	**254**	47	920	9	226	26	856	73	1776
03:00		6	**230**			8	219				
03:15		4	**246**			4	209				
03:30		14	**231**			5	238				
03:45		4	222	28	929	11	256	28	922	56	1851
04:00		2	195			7	243				
04:15		7	221			8	221				
04:30		7	215			9	**243**				
04:45		10	158	26	789	18	**267**	42	974	68	1763
05:00		7	225			17	**254**				
05:15		10	225			27	**251**				
05:30		24	193			31	237				
05:45		29	163	70	806	34	233	109	975	179	1781
06:00		31	165			42	226				
06:15		42	128			38	196				
06:30		51	140			74	170				
06:45		69	131	193	564	148	162	302	754	495	1318
07:00		80	122			156	146				
07:15		94	140			155	107				
07:30		113	139			196	110				
07:45		181	117	468	518	311	90	818	453	1286	971
08:00		148	129			233	88				
08:15		118	145			191	101				
08:30		130	142			189	99				
08:45		150	119	546	535	228	55	841	343	1387	878
09:00		146	122			168	67				
09:15		163	113			171	60				
09:30		147	103			169	52				
09:45		161	98	617	436	197	49	705	228	1322	664
10:00		153	106			225	45				
10:15		**189**	101			266	55				
10:30		**171**	91			205	49				
10:45		**187**	76	700	374	**236**	39	932	188	1632	562
11:00		**216**	58			**232**	35				
11:15		174	60			**222**	40				
11:30		184	43			**257**	30				
11:45		180	53	754	214	230	30	941	135	1695	349
Total		3613	7664	3613	7664	4846	7703	4846	7703	8459	15367
Combined Total		11277		11277		12549		12549		23826	
AM Peak	-	10:15	-	-	-	10:45	-	-	-	-	-
Vol.	-	763	-	-	-	947	-	-	-	-	-
P.H.F.		0.883				0.921					
PM Peak	-	-	02:45	-	-	-	04:30	-	-	-	-
Vol.	-	-	961	-	-	-	1015	-	-	-	-
P.H.F.			0.946				0.900				
Percentage		32.0%	68.0%			38.6%	61.4%				
ADT/AADT		ADT 23,826		AADT 23,826							

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92787
(951) 268-6268

City of Palm Springs
N/S: Farrell Drive
E/W: Alejo Road
Weather: Clear

File Name : PLSFAALMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound				Alejo Road Westbound				Farrell Drive Northbound				Alejo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	16	97	3	116	7	8	21	36	17	89	4	110	7	9	21	37	299
11:15 AM	17	84	4	105	7	4	28	39	4	93	0	97	7	9	18	34	275
11:30 AM	19	94	5	118	3	9	17	29	12	98	2	112	2	9	10	21	280
11:45 AM	14	90	12	116	8	6	21	35	7	80	7	94	8	12	15	35	280
Total	66	365	24	455	25	27	87	139	40	360	13	413	24	39	64	127	1134
12:00 PM	10	94	4	108	5	14	29	48	30	104	6	140	9	9	16	34	330
12:15 PM	6	80	1	87	7	10	11	28	19	108	6	133	7	7	23	37	285
12:30 PM	9	96	4	109	4	10	14	28	13	95	7	115	8	10	19	37	289
12:45 PM	19	90	4	113	4	12	21	37	13	126	4	143	14	17	31	62	355
Total	44	360	13	417	20	46	75	141	75	433	23	531	38	43	89	170	1259
Grand Total	110	725	37	872	45	73	162	280	115	793	36	944	62	82	153	297	2393
Apprch %	12.6	83.1	4.2		16.1	26.1	57.9		12.2	84	3.8		20.9	27.6	51.5		
Total %	4.6	30.3	1.5	36.4	1.9	3.1	6.8	11.7	4.8	33.1	1.5	39.4	2.6	3.4	6.4	12.4	

	Farrell Drive Southbound				Alejo Road Westbound				Farrell Drive Northbound				Alejo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	10	94	**4**	108	5	**14**	**29**	**48**	**30**	104	6	140	9	9	16	34	330
12:15 PM	6	80	1	87	**7**	10	11	28	19	108	6	133	7	7	23	37	285
12:30 PM	9	**96**	4	109	4	10	14	28	13	95	**7**	115	8	10	19	37	289
12:45 PM	**19**	90	4	**113**	4	12	21	37	13	**126**	4	**143**	**14**	**17**	**31**	**62**	**355**
Total Volume	44	360	13	417	20	46	75	141	75	433	23	531	38	43	89	170	1259
% App. Total	10.6	86.3	3.1		14.2	32.6	53.2		14.1	81.5	4.3		22.4	25.3	52.4		
PHF	.579	.938	.813	.923	.714	.821	.647	.734	.625	.859	.821	.928	.679	.632	.718	.685	.887

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City of Palm Springs
N/S: Farrell Drive
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Site Code : 00915014
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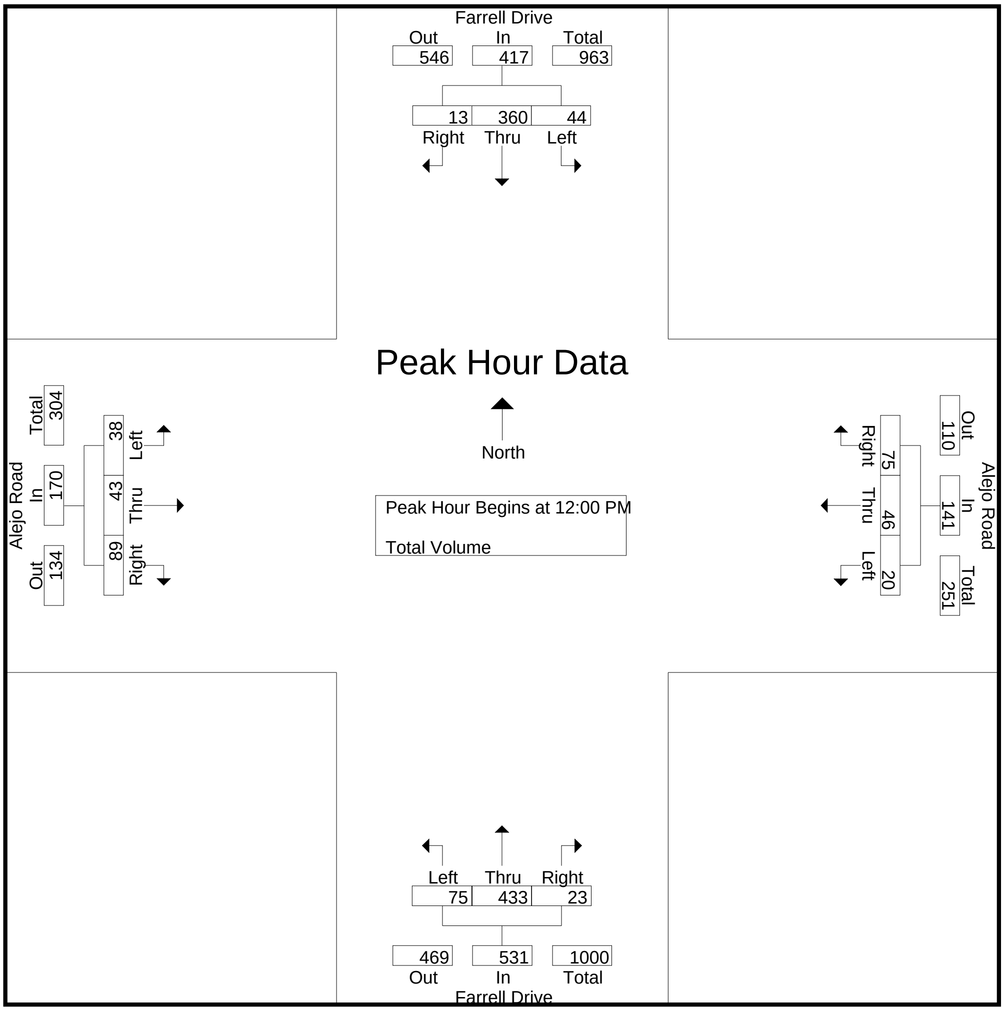

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:00 AM				11:15 AM				12:00 PM				12:00 PM			
+0 mins.	16	**97**	3	116	7	4	28	39	**30**	104	6	140	9	9	16	34
+15 mins.	17	84	4	105	3	9	17	29	19	108	6	133	7	7	23	37
+30 mins.	**19**	94	5	**118**	**8**	6	21	35	13	95	**7**	115	8	10	19	37
+45 mins.	14	90	**12**	116	5	**14**	**29**	**48**	13	**126**	4	**143**	**14**	**17**	**31**	**62**
Total Volume	66	365	24	455	23	33	95	151	75	433	23	531	38	43	89	170
% App. Total	14.5	80.2	5.3		15.2	21.9	62.9		14.1	81.5	4.3		22.4	25.3	52.4	
PHF	.868	.941	.500	.964	.719	.589	.819	.786	.625	.859	.821	.928	.679	.632	.718	.685

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City of Palm Springs
N/S: Farrell Drive
E/W: Alejo Road
Weather: Clear

File Name : PLSFAALPM
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	Farrell Drive Southbound				Alejo Road Westbound				Farrell Drive Northbound				Alejo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	15	110	5	130	4	16	19	39	24	205	5	234	12	9	25	46	449
03:15 PM	6	118	8	132	3	2	11	16	20	130	1	151	15	4	29	48	347
03:30 PM	8	127	3	138	7	5	31	43	12	127	6	145	12	7	18	37	363
03:45 PM	8	133	1	142	3	12	23	38	19	107	3	129	12	7	24	43	352
Total	37	488	17	542	17	35	84	136	75	569	15	659	51	27	96	174	1511
04:00 PM	9	107	13	129	1	9	29	39	28	128	4	160	17	3	26	46	374
04:15 PM	7	108	6	121	7	7	18	32	17	133	2	152	20	9	20	49	354
04:30 PM	12	111	3	126	5	18	23	46	24	146	2	172	18	7	16	41	385
04:45 PM	11	123	6	140	1	12	29	42	19	110	4	133	18	6	19	43	358
Total	39	449	28	516	14	46	99	159	88	517	12	617	73	25	81	179	1471
Grand Total	76	937	45	1058	31	81	183	295	163	1086	27	1276	124	52	177	353	2982
Apprch %	7.2	88.6	4.3		10.5	27.5	62		12.8	85.1	2.1		35.1	14.7	50.1		
Total %	2.5	31.4	1.5	35.5	1	2.7	6.1	9.9	5.5	36.4	0.9	42.8	4.2	1.7	5.9	11.8	

	Farrell Drive Southbound				Alejo Road Westbound				Farrell Drive Northbound				Alejo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	**15**	110	5	130	4	**16**	19	39	**24**	**205**	5	**234**	12	**9**	25	46	**449**
03:15 PM	6	118	**8**	132	3	2	11	16	20	130	1	151	**15**	4	**29**	**48**	347
03:30 PM	8	127	3	138	**7**	5	**31**	**43**	12	127	**6**	145	12	7	18	37	363
03:45 PM	8	**133**	1	**142**	3	12	23	38	19	107	3	129	12	7	24	43	352
Total Volume	37	488	17	542	17	35	84	136	75	569	15	659	51	27	96	174	1511
% App. Total	6.8	90	3.1		12.5	25.7	61.8		11.4	86.3	2.3		29.3	15.5	55.2		
PHF	.617	.917	.531	.954	.607	.547	.677	.791	.781	.694	.625	.704	.850	.750	.828	.906	.841

Counts Unlimited, Inc.
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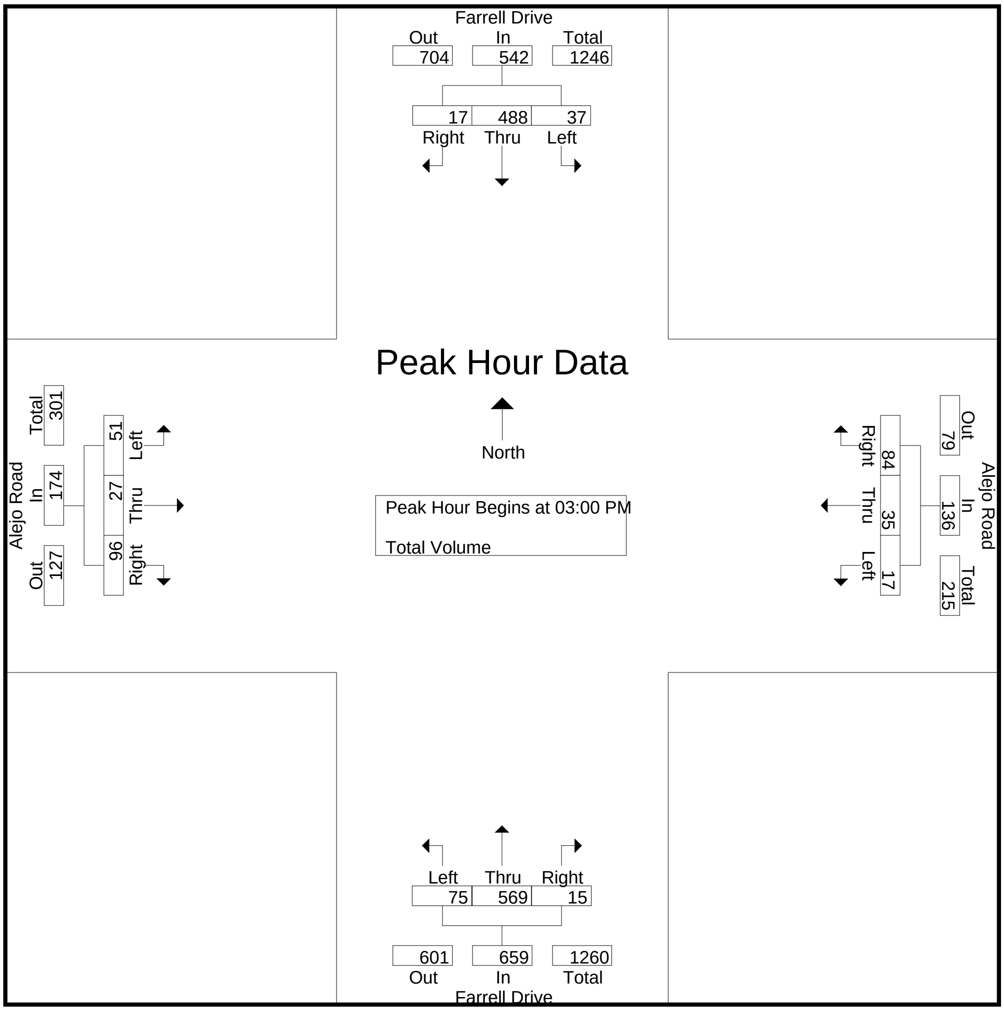
City of Palm Springs
N/S: Farrell Drive
E/W: Alejo Road
Weather: Clear

File Name : PLSFAALPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				04:00 PM				03:00 PM				03:45 PM			
+0 mins.	**15**	110	5	130	1	9	**29**	39	**24**	**205**	5	**234**	12	7	24	43
+15 mins.	6	118	**8**	132	**7**	7	18	32	20	130	1	151	17	3	**26**	46
+30 mins.	8	127	3	138	5	**18**	23	**46**	12	127	**6**	145	**20**	**9**	20	**49**
+45 mins.	8	**133**	1	**142**	1	12	29	42	19	107	3	129	18	7	16	41
Total Volume	37	488	17	542	14	46	99	159	75	569	15	659	67	26	86	179
% App. Total	6.8	90	3.1		8.8	28.9	62.3		11.4	86.3	2.3		37.4	14.5	48	
PHF	.617	.917	.531	.954	.500	.639	.853	.864	.781	.694	.625	.704	.838	.722	.827	.913

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City of Palm Springs
N/S: Farrell Drive
E/W: Amado Road
Weather: Clear

File Name : PLSFAAMMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound			Farrell Drive Northbound			Amado Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
11:00 AM	114	0	114	7	114	121	2	18	20	255
11:15 AM	122	2	124	8	106	114	2	17	19	257
11:30 AM	118	1	119	10	116	126	7	16	23	268
11:45 AM	116	1	117	14	119	133	5	14	19	269
Total	470	4	474	39	455	494	16	65	81	1049
12:00 PM	114	6	120	5	137	142	5	8	13	275
12:15 PM	105	1	106	6	130	136	4	15	19	261
12:30 PM	124	1	125	9	119	128	1	12	13	266
12:45 PM	122	2	124	6	138	144	3	10	13	281
Total	465	10	475	26	524	550	13	45	58	1083
Grand Total	935	14	949	65	979	1044	29	110	139	2132
Apprch %	98.5	1.5		6.2	93.8		20.9	79.1		
Total %	43.9	0.7	44.5	3	45.9	49	1.4	5.2	6.5	

	Farrell Drive Southbound			Farrell Drive Northbound			Amado Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	114	**6**	120	5	137	142	**5**	8	13	275
12:15 PM	105	1	106	6	130	136	4	**15**	**19**	261
12:30 PM	**124**	1	**125**	**9**	119	128	1	12	13	266
12:45 PM	122	2	124	6	**138**	**144**	3	10	13	**281**
Total Volume	465	10	475	26	524	550	13	45	58	1083
% App. Total	97.9	2.1		4.7	95.3		22.4	77.6		
PHF	.938	.417	.950	.722	.949	.955	.650	.750	.763	.964

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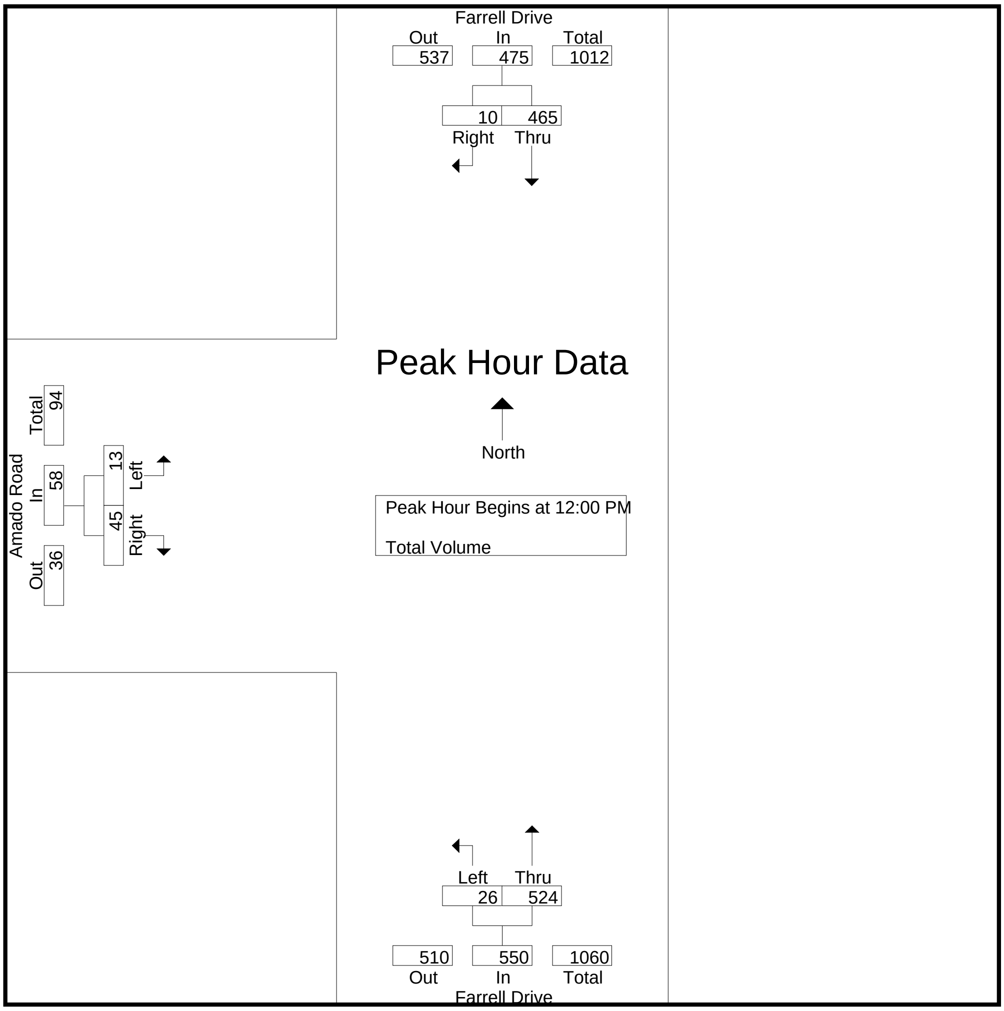
City of Palm Springs
N/S: Farrell Drive
E/W: Amado Road
Weather: Clear

File Name : PLSFAAMMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:15 AM			12:00 PM			11:00 AM		
+0 mins.	**122**	2	**124**	5	137	142	2	**18**	20
+15 mins.	118	1	119	6	130	136	2	17	19
+30 mins.	116	1	117	**9**	119	128	**7**	16	**23**
+45 mins.	114	**6**	120	6	**138**	**144**	5	14	19
Total Volume	470	10	480	26	524	550	16	65	81
% App. Total	97.9	2.1		4.7	95.3		19.8	80.2	
PHF	.963	.417	.968	.722	.949	.955	.571	.903	.880

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City of Palm Springs
N/S: Farrell Drive
E/W: Amado Road
Weather: Clear

File Name : PLSFAAMPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound			Farrell Drive Northbound			Amado Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
03:00 PM	145	0	145	15	229	244	5	17	22	411
03:15 PM	148	2	150	4	153	157	3	20	23	330
03:30 PM	154	2	156	7	137	144	4	18	22	322
03:45 PM	160	2	162	8	126	134	5	16	21	317
Total	607	6	613	34	645	679	17	71	88	1380
04:00 PM	132	4	136	8	159	167	3	18	21	324
04:15 PM	130	3	133	13	153	166	4	14	18	317
04:30 PM	137	4	141	13	173	186	5	21	26	353
04:45 PM	144	4	148	11	124	135	5	19	24	307
Total	543	15	558	45	609	654	17	72	89	1301
Grand Total	1150	21	1171	79	1254	1333	34	143	177	2681
Apprch %	98.2	1.8		5.9	94.1		19.2	80.8		
Total %	42.9	0.8	43.7	2.9	46.8	49.7	1.3	5.3	6.6	

	Farrell Drive Southbound			Farrell Drive Northbound			Amado Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	145	0	145	**15**	**229**	**244**	**5**	17	22	**411**
03:15 PM	148	**2**	150	4	153	157	3	**20**	**23**	330
03:30 PM	154	2	156	7	137	144	4	18	22	322
03:45 PM	**160**	2	**162**	8	126	134	5	16	21	317
Total Volume	607	6	613	34	645	679	17	71	88	1380
% App. Total	99	1		5	95		19.3	80.7		
PHF	.948	.750	.946	.567	.704	.696	.850	.888	.957	.839

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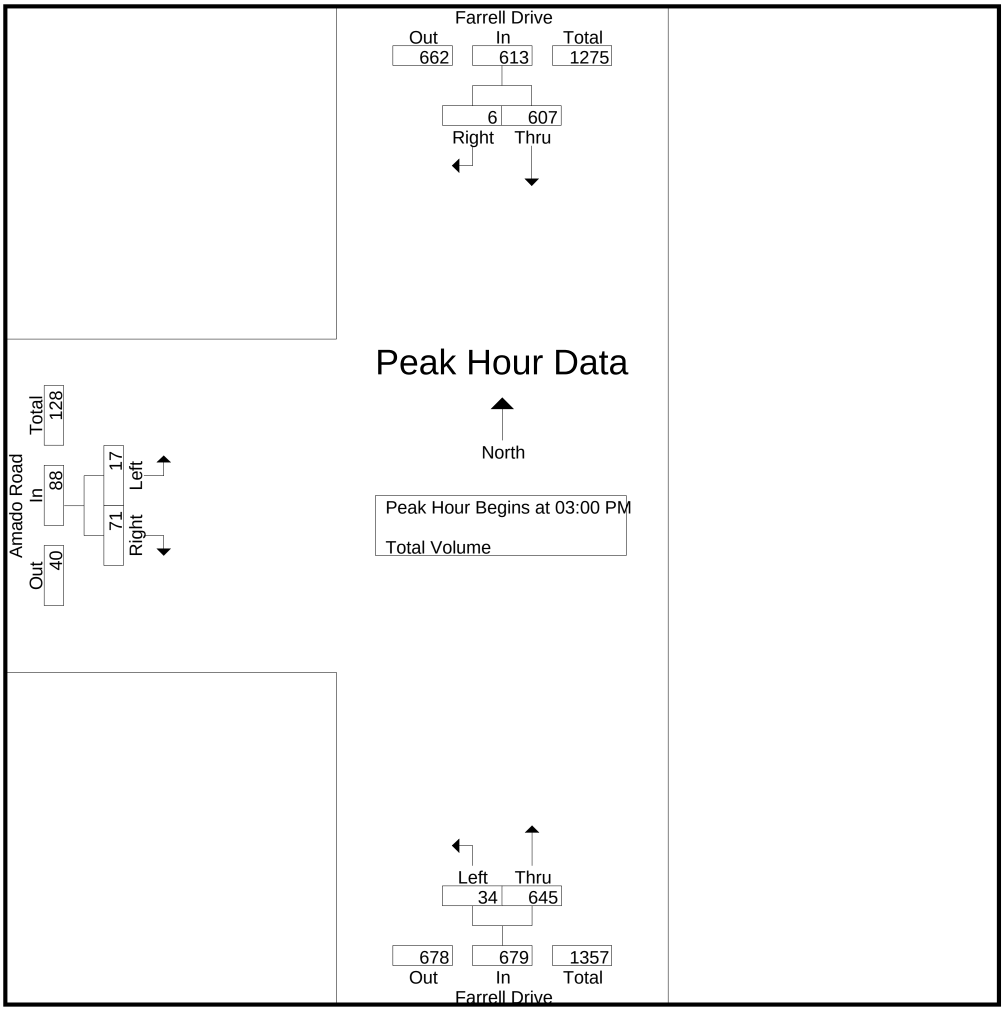
City of Palm Springs
N/S: Farrell Drive
E/W: Amado Road
Weather: Clear

File Name : PLSFAAMPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			04:00 PM		
+0 mins.	145	0	145	**15**	**229**	**244**	3	18	21
+15 mins.	148	**2**	150	4	153	157	4	14	18
+30 mins.	154	2	156	7	137	144	**5**	**21**	**26**
+45 mins.	**160**	2	**162**	8	126	134	5	19	24
Total Volume	607	6	613	34	645	679	17	72	89
% App. Total	99	1		5	95		19.1	80.9	
PHF	.948	.750	.946	.567	.704	.696	.850	.857	.856

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City of Palm Springs
N/S: Sunrise Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSUTCMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Sunrise Way Southbound				Tahquitz Canyon Way Westbound				Sunrise Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	48	155	14	217	34	68	33	135	25	159	12	196	21	63	26	110	658
11:15 AM	35	143	12	190	31	89	34	154	33	141	14	188	25	53	13	91	623
11:30 AM	30	165	19	214	21	86	31	138	28	170	18	216	21	78	21	120	688
11:45 AM	35	140	15	190	33	81	41	155	33	142	17	192	26	63	23	112	649
Total	148	603	60	811	119	324	139	582	119	612	61	792	93	257	83	433	2618
12:00 PM	41	179	20	240	30	88	30	148	25	131	24	180	21	76	39	136	704
12:15 PM	49	191	9	249	25	81	33	139	31	161	19	211	25	68	22	115	714
12:30 PM	22	156	18	196	32	48	27	107	25	155	26	206	32	70	14	116	625
12:45 PM	45	141	7	193	28	60	23	111	41	165	29	235	17	53	22	92	631
Total	157	667	54	878	115	277	113	505	122	612	98	832	95	267	97	459	2674
Grand Total	305	1270	114	1689	234	601	252	1087	241	1224	159	1624	188	524	180	892	5292
Apprch %	18.1	75.2	6.7		21.5	55.3	23.2		14.8	75.4	9.8		21.1	58.7	20.2		
Total %	5.8	24	2.2	31.9	4.4	11.4	4.8	20.5	4.6	23.1	3	30.7	3.6	9.9	3.4	16.9	

	Sunrise Way Southbound				Tahquitz Canyon Way Westbound				Sunrise Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	30	165	19	214	21	86	31	138	28	**170**	18	**216**	21	**78**	21	120	688
11:45 AM	35	140	15	190	**33**	81	**41**	**155**	**33**	142	17	192	**26**	63	23	112	649
12:00 PM	41	179	**20**	240	30	**88**	30	148	25	131	**24**	180	21	76	**39**	**136**	704
12:15 PM	**49**	**191**	9	**249**	25	81	33	139	31	161	19	211	25	68	22	115	**714**
Total Volume	155	675	63	893	109	336	135	580	117	604	78	799	93	285	105	483	2755
% App. Total	17.4	75.6	7.1		18.8	57.9	23.3		14.6	75.6	9.8		19.3	59	21.7		
PHF	.791	.884	.788	.897	.826	.955	.823	.935	.886	.888	.813	.925	.894	.913	.673	.888	.965

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City of Palm Springs
N/S: Sunrise Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSUTCMD
Site Code : 00915014
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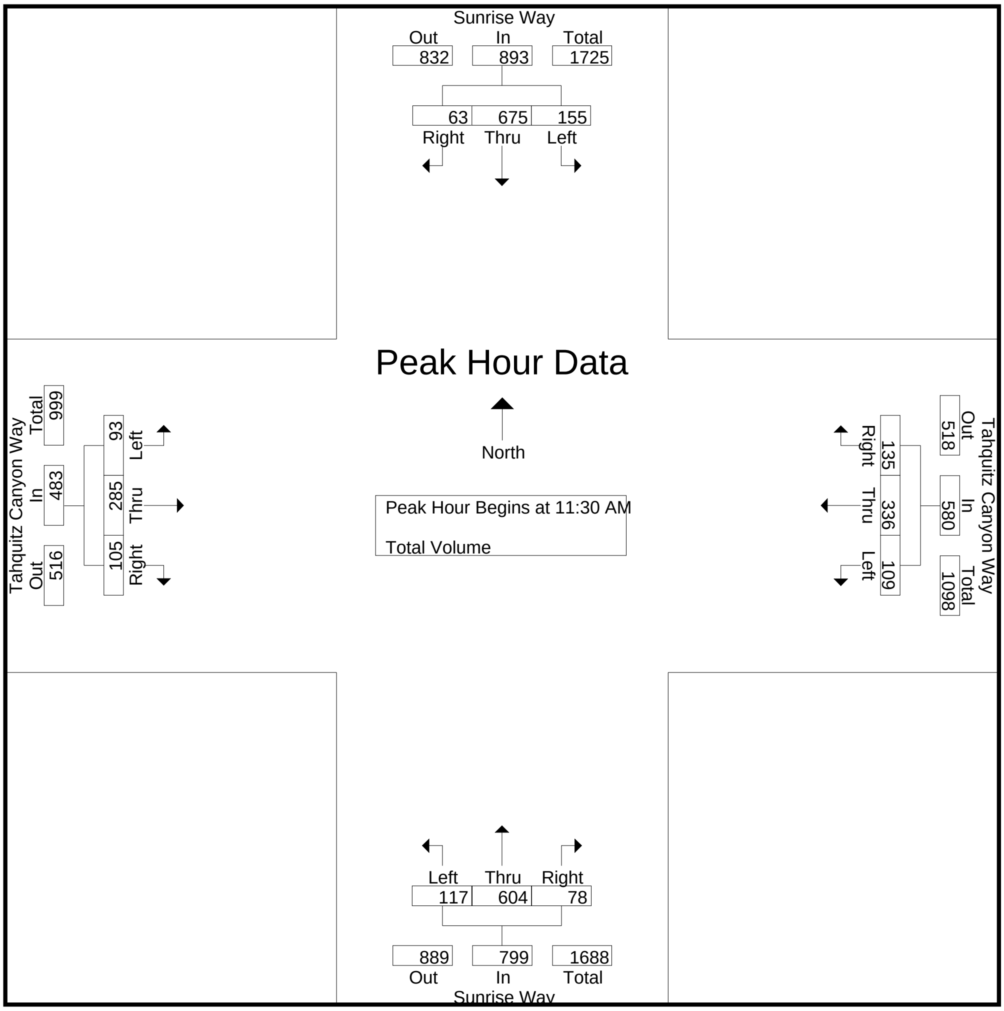

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:30 AM				11:15 AM				12:00 PM				11:30 AM			
+0 mins.	30	165	19	214	31	**89**	34	154	25	131	24	180	21	**78**	21	120
+15 mins.	35	140	15	190	21	86	31	138	31	161	19	211	**26**	63	23	112
+30 mins.	41	179	**20**	240	**33**	81	**41**	**155**	25	155	26	206	21	76	**39**	**136**
+45 mins.	**49**	**191**	9	**249**	30	88	30	148	**41**	**165**	**29**	**235**	25	68	22	115
Total Volume	155	675	63	893	115	344	136	595	122	612	98	832	93	285	105	483
% App. Total	17.4	75.6	7.1		19.3	57.8	22.9		14.7	73.6	11.8		19.3	59	21.7	
PHF	.791	.884	.788	.897	.871	.966	.829	.960	.744	.927	.845	.885	.894	.913	.673	.888

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City of Palm Springs
N/S: Sunrise Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSUTCPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Sunrise Way Southbound				Tahquitz Canyon Way Westbound				Sunrise Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	24	151	18	193	20	50	32	102	19	192	12	223	33	65	26	124	642
03:15 PM	41	144	17	202	26	60	29	115	30	155	19	204	24	66	27	117	638
03:30 PM	42	162	14	218	30	70	34	134	22	176	14	212	31	64	26	121	685
03:45 PM	44	167	25	236	22	70	28	120	23	171	12	206	23	72	24	119	681
Total	151	624	74	849	98	250	123	471	94	694	57	845	111	267	103	481	2646
04:00 PM	33	199	26	258	28	58	24	110	22	185	7	214	28	61	19	108	690
04:15 PM	29	164	22	215	14	59	33	106	34	161	16	211	25	56	32	113	645
04:30 PM	34	169	14	217	30	54	32	116	28	190	13	231	25	68	21	114	678
04:45 PM	42	177	41	260	26	55	32	113	22	165	14	201	27	49	21	97	671
Total	138	709	103	950	98	226	121	445	106	701	50	857	105	234	93	432	2684
Grand Total	289	1333	177	1799	196	476	244	916	200	1395	107	1702	216	501	196	913	5330
Apprch %	16.1	74.1	9.8		21.4	52	26.6		11.8	82	6.3		23.7	54.9	21.5		
Total %	5.4	25	3.3	33.8	3.7	8.9	4.6	17.2	3.8	26.2	2	31.9	4.1	9.4	3.7	17.1	

	Sunrise Way Southbound				Tahquitz Canyon Way Westbound				Sunrise Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	42	162	14	218	**30**	**70**	**34**	**134**	22	176	14	212	**31**	64	26	**121**	685
03:45 PM	**44**	167	25	236	22	70	28	120	23	171	12	206	23	**72**	24	119	681
04:00 PM	33	**199**	**26**	**258**	28	58	24	110	22	**185**	7	**214**	28	61	19	108	**690**
04:15 PM	29	164	22	215	14	59	33	106	**34**	161	**16**	211	25	56	**32**	113	645
Total Volume	148	692	87	927	94	257	119	470	101	693	49	843	107	253	101	461	2701
% App. Total	16	74.6	9.4		20	54.7	25.3		12	82.2	5.8		23.2	54.9	21.9		
PHF	.841	.869	.837	.898	.783	.918	.875	.877	.743	.936	.766	.985	.863	.878	.789	.952	.979

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City of Palm Springs
N/S: Sunrise Way
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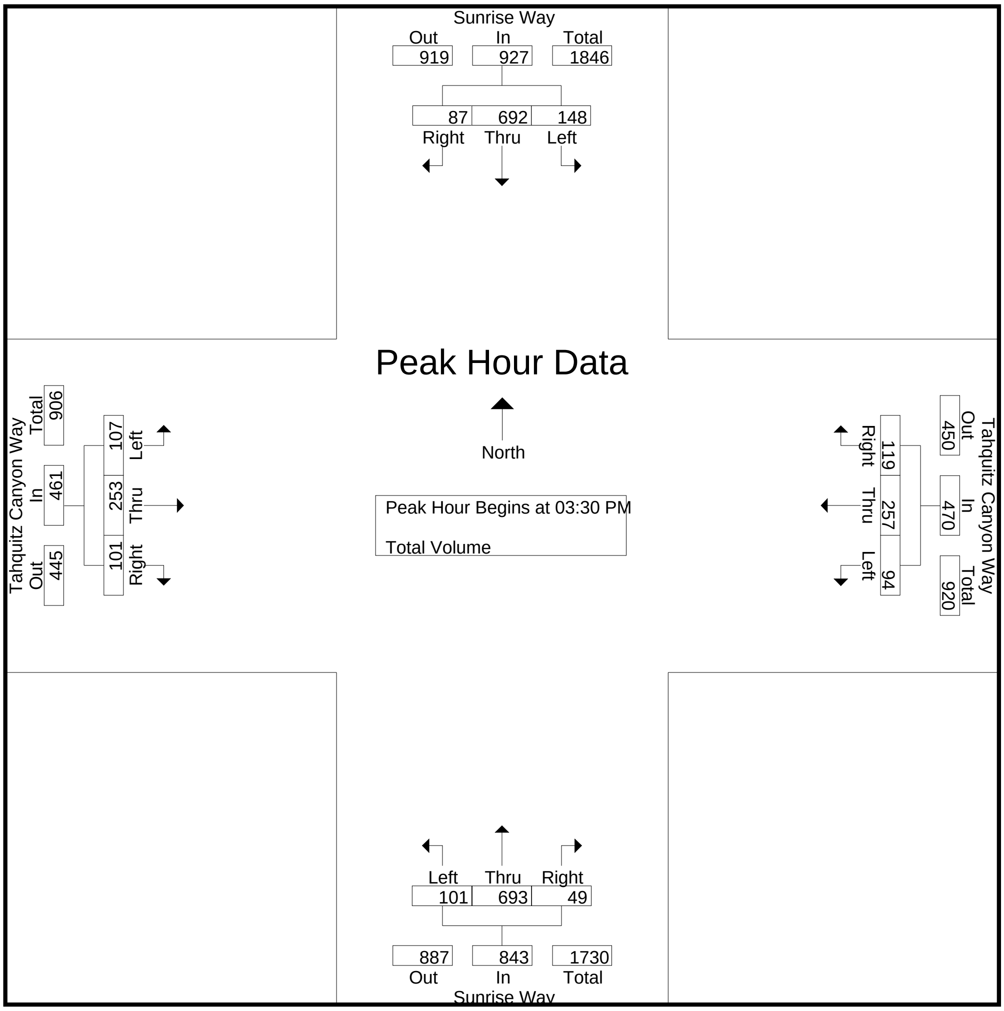
Weather: Clear

File Name : PLSSUTCPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				03:15 PM				03:45 PM				03:00 PM			
+0 mins.	33	**199**	26	258	26	60	29	115	23	171	12	206	**33**	65	26	**124**
+15 mins.	29	164	22	215	**30**	**70**	**34**	**134**	22	185	7	214	24	66	**27**	117
+30 mins.	34	169	14	217	22	70	28	120	**34**	161	**16**	211	31	64	26	121
+45 mins.	**42**	177	**41**	**260**	28	58	24	110	28	**190**	13	**231**	23	**72**	24	119
Total Volume	138	709	103	950	106	258	115	479	107	707	48	862	111	267	103	481
% App. Total	14.5	74.6	10.8		22.1	53.9	24		12.4	82	5.6		23.1	55.5	21.4	
PHF	.821	.891	.628	.913	.883	.921	.846	.894	.787	.930	.750	.933	.841	.927	.954	.970

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City of Palm Springs
N/S: Sunset Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSSTCAM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Sunset Way Southbound				Tahquitz Canyon Way Westbound				Sunset Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	3	0	0	3	0	31	0	31	1	0	0	1	0	14	0	14	49
06:45 AM	1	1	0	2	1	24	1	26	2	0	1	3	1	22	1	24	55
Total	4	1	0	5	1	55	1	57	3	0	1	4	1	36	1	38	104
07:00 AM	3	2	3	8	1	39	3	43	1	0	0	1	3	33	0	36	88
07:15 AM	0	1	5	6	1	59	3	63	2	0	0	2	1	31	3	35	106
07:30 AM	3	6	4	13	2	62	2	66	2	3	0	5	3	54	9	66	150
07:45 AM	14	14	6	34	2	88	2	92	9	10	1	20	3	62	21	86	232
Total	20	23	18	61	6	248	10	264	14	13	1	28	10	180	33	223	576
08:00 AM	3	0	4	7	0	93	2	95	4	1	1	6	5	59	1	65	173
08:15 AM	5	2	8	15	4	93	4	101	4	0	0	4	5	39	3	47	167
08:30 AM	0	0	3	3	0	66	6	72	1	0	0	1	5	58	3	66	142
08:45 AM	2	1	4	7	0	88	1	89	0	0	0	0	4	72	0	76	172
Total	10	3	19	32	4	340	13	357	9	1	1	11	19	228	7	254	654
Grand Total	34	27	37	98	11	643	24	678	26	14	3	43	30	444	41	515	1334
Apprch %	34.7	27.6	37.8		1.6	94.8	3.5		60.5	32.6	7		5.8	86.2	8		
Total %	2.5	2	2.8	7.3	0.8	48.2	1.8	50.8	1.9	1	0.2	3.2	2.2	33.3	3.1	38.6	

	Sunset Way Southbound				Tahquitz Canyon Way Westbound				Sunset Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	6	4	13	2	62	2	66	2	3	0	5	3	54	9	66	150
07:45 AM	**14**	**14**	6	**34**	2	88	2	92	**9**	**10**	**1**	**20**	3	**62**	**21**	**86**	**232**
08:00 AM	3	0	4	7	0	**93**	2	95	4	1	1	6	**5**	59	1	65	173
08:15 AM	5	2	**8**	15	**4**	93	**4**	**101**	4	0	0	4	5	39	3	47	167
Total Volume	25	22	22	69	8	336	10	354	19	14	2	35	16	214	34	264	722
% App. Total	36.2	31.9	31.9		2.3	94.9	2.8		54.3	40	5.7		6.1	81.1	12.9		
PHF	.446	.393	.688	.507	.500	.903	.625	.876	.528	.350	.500	.438	.800	.863	.405	.767	.778

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City of Palm Springs
N/S: Sunset Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSSTCAM
Site Code : 00915014
Start Date : 1/14/2015
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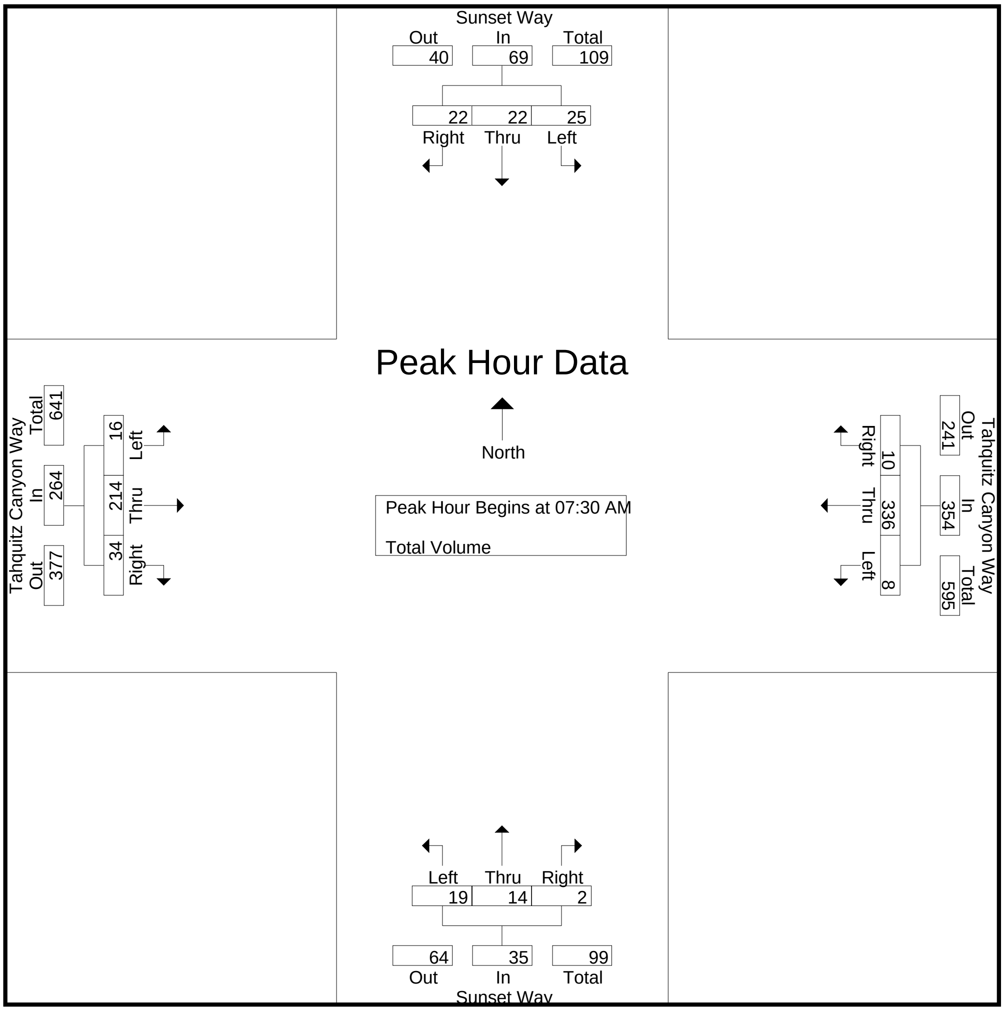

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:30 AM				07:30 AM			
+0 mins.	3	6	4	13	2	88	2	92	2	3	0	5	3	54	9	66
+15 mins.	**14**	**14**	6	**34**	0	**93**	2	95	**9**	**10**	**1**	**20**	3	**62**	**21**	**86**
+30 mins.	3	0	4	7	**4**	93	4	**101**	4	1	1	6	**5**	59	1	65
+45 mins.	5	2	**8**	15	0	66	**6**	72	4	0	0	4	5	39	3	47
Total Volume	25	22	22	69	6	340	14	360	19	14	2	35	16	214	34	264
% App. Total	36.2	31.9	31.9		1.7	94.4	3.9		54.3	40	5.7		6.1	81.1	12.9	
PHF	.446	.393	.688	.507	.375	.914	.583	.891	.528	.350	.500	.438	.800	.863	.405	.767

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City of Palm Springs
N/S: Sunset Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSSTCMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Sunset Way Southbound				Tahquitz Canyon Way Westbound				Sunset Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	2	1	5	8	3	123	5	131	4	0	0	4	9	106	4	119	262
11:15 AM	8	0	11	19	2	122	10	134	4	1	0	5	10	88	6	104	262
11:30 AM	2	0	8	10	1	124	3	128	1	1	1	3	13	116	2	131	272
11:45 AM	2	2	5	9	2	139	3	144	2	2	0	4	14	109	4	127	284
Total	14	3	29	46	8	508	21	537	11	4	1	16	46	419	16	481	1080
12:00 PM	7	2	5	14	1	132	7	140	5	2	1	8	6	118	5	129	291
12:15 PM	8	2	5	15	1	140	6	147	4	4	0	8	5	120	4	129	299
12:30 PM	3	2	5	10	5	96	3	104	5	1	1	7	8	102	2	112	233
12:45 PM	2	2	10	14	3	79	6	88	7	0	1	8	9	114	4	127	237
Total	20	8	25	53	10	447	22	479	21	7	3	31	28	454	15	497	1060
Grand Total	34	11	54	99	18	955	43	1016	32	11	4	47	74	873	31	978	2140
Apprch %	34.3	11.1	54.5		1.8	94	4.2		68.1	23.4	8.5		7.6	89.3	3.2		
Total %	1.6	0.5	2.5	4.6	0.8	44.6	2	47.5	1.5	0.5	0.2	2.2	3.5	40.8	1.4	45.7	

	Sunset Way Southbound				Tahquitz Canyon Way Westbound				Sunset Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	2	0	**8**	10	1	124	3	128	1	1	**1**	3	13	116	2	**131**	272
11:45 AM	2	**2**	5	9	**2**	139	3	144	2	2	0	4	**14**	109	4	127	284
12:00 PM	7	2	5	14	1	132	**7**	140	**5**	2	1	**8**	6	118	**5**	129	291
12:15 PM	**8**	2	5	**15**	1	**140**	6	**147**	4	**4**	0	8	5	**120**	4	129	**299**
Total Volume	19	6	23	48	5	535	19	559	12	9	2	23	38	463	15	516	1146
% App. Total	39.6	12.5	47.9		0.9	95.7	3.4		52.2	39.1	8.7		7.4	89.7	2.9		
PHF	.594	.750	.719	.800	.625	.955	.679	.951	.600	.563	.500	.719	.679	.965	.750	.985	.958

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City of Palm Springs
N/S: Sunset Way
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File Name : PLSSSTCMD
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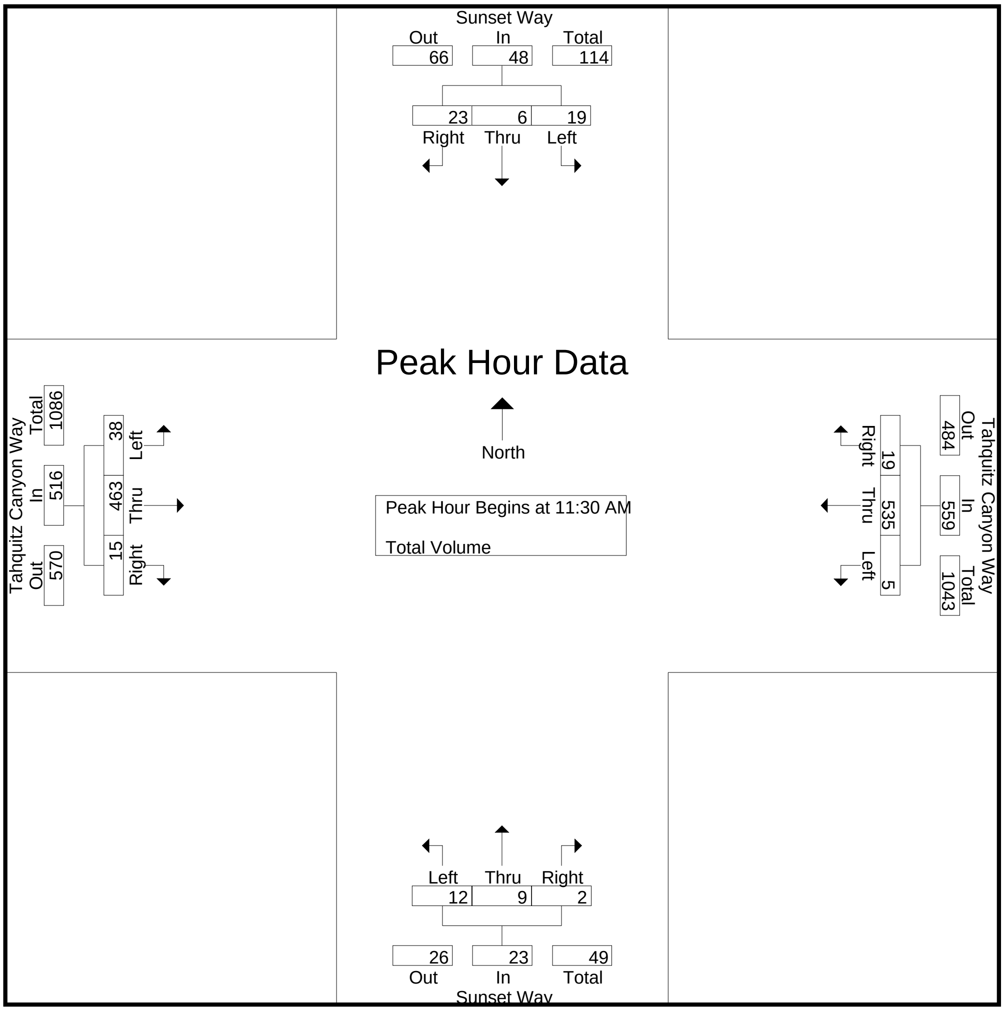

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:00 PM				11:30 AM				12:00 PM				11:30 AM			
+0 mins.	7	**2**	5	14	1	124	3	128	5	2	**1**	**8**	13	116	2	**131**
+15 mins.	**8**	2	5	**15**	**2**	139	3	144	4	**4**	0	8	**14**	109	4	127
+30 mins.	3	2	5	10	1	132	**7**	140	5	1	1	7	6	118	**5**	129
+45 mins.	2	2	**10**	14	1	**140**	6	**147**	**7**	0	1	8	5	**120**	4	129
Total Volume	20	8	25	53	5	535	19	559	21	7	3	31	38	463	15	516
% App. Total	37.7	15.1	47.2		0.9	95.7	3.4		67.7	22.6	9.7		7.4	89.7	2.9	
PHF	.625	1.000	.625	.883	.625	.955	.679	.951	.750	.438	.750	.969	.679	.965	.750	.985

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E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSSTCPM
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	Sunset Way Southbound				Tahquitz Canyon Way Westbound				Sunset Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	2	3	4	9	2	97	4	103	2	1	2	5	10	97	7	114	231
02:45 PM	5	6	4	15	2	100	8	110	20	15	4	39	10	107	17	134	298
Total	7	9	8	24	4	197	12	213	22	16	6	44	20	204	24	248	529
03:00 PM	3	2	4	9	1	100	10	111	9	7	3	19	6	99	8	113	252
03:15 PM	0	2	2	4	1	92	8	101	12	0	3	15	10	109	5	124	244
03:30 PM	7	3	8	18	2	119	3	124	3	4	0	7	8	102	3	113	262
03:45 PM	6	0	8	14	2	111	8	121	5	1	1	7	7	105	6	118	260
Total	16	7	22	45	6	422	29	457	29	12	7	48	31	415	22	468	1018
04:00 PM	0	0	5	5	1	87	11	99	3	1	0	4	11	102	3	116	224
04:15 PM	2	1	6	9	0	85	4	89	5	3	1	9	11	91	1	103	210
04:30 PM	2	2	9	13	2	102	5	109	2	0	2	4	4	110	0	114	240
04:45 PM	3	2	9	14	0	109	10	119	2	2	1	5	10	98	3	111	249
Total	7	5	29	41	3	383	30	416	12	6	4	22	36	401	7	444	923
Grand Total	30	21	59	110	13	1002	71	1086	63	34	17	114	87	1020	53	1160	2470
Apprch %	27.3	19.1	53.6		1.2	92.3	6.5		55.3	29.8	14.9		7.5	87.9	4.6		
Total %	1.2	0.9	2.4	4.5	0.5	40.6	2.9	44	2.6	1.4	0.7	4.6	3.5	41.3	2.1	47	

	Sunset Way Southbound				Tahquitz Canyon Way Westbound				Sunset Way Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:45 PM																	
02:45 PM	5	**6**	4	15	**2**	100	8	110	**20**	**15**	**4**	**39**	**10**	107	**17**	**134**	**298**
03:00 PM	3	2	4	9	1	100	**10**	111	9	7	3	19	6	99	8	113	252
03:15 PM	0	2	2	4	1	92	8	101	12	0	3	15	10	**109**	5	124	244
03:30 PM	**7**	3	**8**	**18**	2	**119**	3	**124**	3	4	0	7	8	102	3	113	262
Total Volume	15	13	18	46	6	411	29	446	44	26	10	80	34	417	33	484	1056
% App. Total	32.6	28.3	39.1		1.3	92.2	6.5		55	32.5	12.5		7	86.2	6.8		
PHF	.536	.542	.563	.639	.750	.863	.725	.899	.550	.433	.625	.513	.850	.956	.485	.903	.886

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City of Palm Springs
N/S: Sunset Way
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSSSTCPM
Site Code : 00915014
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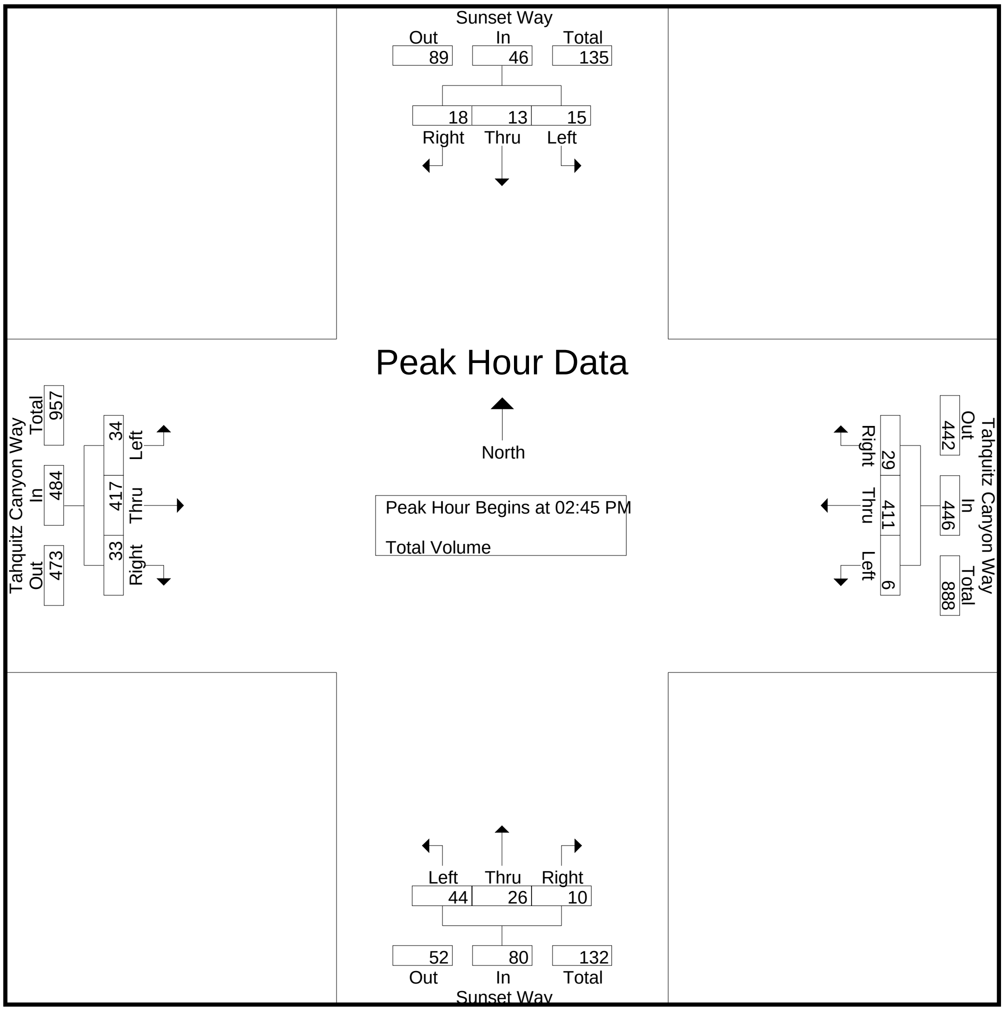

Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	02:45 PM				03:00 PM				02:45 PM				02:30 PM			
+0 mins.	5	**6**	4	15	1	100	**10**	111	**20**	**15**	**4**	**39**	**10**	97	7	114
+15 mins.	3	2	4	9	1	92	8	101	9	7	3	19	10	107	**17**	**134**
+30 mins.	0	2	2	4	**2**	**119**	3	**124**	12	0	3	15	6	99	8	113
+45 mins.	**7**	3	**8**	**18**	2	111	8	121	3	4	0	7	10	**109**	5	124
Total Volume	15	13	18	46	6	422	29	457	44	26	10	80	36	412	37	485
% App. Total	32.6	28.3	39.1		1.3	92.3	6.3		55	32.5	12.5		7.4	84.9	7.6	
PHF	.536	.542	.563	.639	.750	.887	.725	.921	.550	.433	.625	.513	.900	.945	.544	.905

Location:	Palm Springs	Date:	1/14/2015
N/S:	Sunset Way	File :	PLSSSTC
E/W:	Tahquitz Canyon Way		

WEEKDAY

	North Leg Sunset Way	East Leg Tahquitz Canyon Way	South Leg Sunset Way	West Leg Tahquitz Canyon Way	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
6:30 AM	0	1	1	0	2
6:45 AM	2	0	1	0	3
7:00 AM	1	0	0	0	1
7:15 AM	1	1	0	0	2
7:30 AM	0	2	0	0	2
7:45 AM	0	1	0	0	1
8:00 AM	0	0	2	0	2
8:15 AM	1	0	3	0	4
8:30 AM	3	1	4	0	8
8:45 AM	3	3	1	0	7
TOTAL VOLUMES:	11	9	12	0	32

	North Leg Sunset Way	East Leg Tahquitz Canyon Way	South Leg Sunset Way	West Leg Tahquitz Canyon Way	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
11:00 AM	0	1	0	0	1
11:15 AM	1	0	1	0	2
11:30 AM	0	0	1	0	1
11:45 AM	0	0	1	0	1
12:00 PM	0	1	1	0	2
12:15 PM	1	1	0	0	2
12:30 PM	2	1	0	0	3
12:45 PM	0	1	1	0	2
TOTAL VOLUMES:	4	5	5	0	14

	North Leg Sunset Way	East Leg Tahquitz Canyon Way	South Leg Sunset Way	West Leg Tahquitz Canyon Way	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
2:30 PM	1	0	0	0	1
2:45 PM	0	1	1	1	3
3:00 PM	0	5	3	0	8
3:15 PM	0	1	1	0	2
3:30 PM	2	5	0	0	7
3:45 PM	0	2	2	0	4
4:00 PM	0	3	3	0	6
4:15 PM	0	0	0	0	0
4:30 PM	1	1	1	0	3
4:45 PM	2	1	1	0	4
TOTAL VOLUMES:	6	19	12	1	38

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City of Palm Springs
N/S: Farrell Drive
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSFATCAM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound				Tahquitz Canyon Way Westbound				Farrell Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	18	44	3	65	0	19	7	26	4	14	3	21	2	14	2	18	130
06:45 AM	36	80	5	121	4	23	13	40	4	38	4	46	4	16	0	20	227
Total	54	124	8	186	4	42	20	66	8	52	7	67	6	30	2	38	357
07:00 AM	27	66	3	96	5	31	33	69	5	55	4	64	8	28	2	38	267
07:15 AM	37	101	12	150	4	44	27	75	7	35	3	45	7	24	0	31	301
07:30 AM	46	151	4	201	10	51	30	91	8	70	7	85	7	38	2	47	424
07:45 AM	49	239	13	301	9	61	42	112	11	103	9	123	9	56	9	74	610
Total	159	557	32	748	28	187	132	347	31	263	23	317	31	146	13	190	1602
08:00 AM	44	142	22	208	10	66	46	122	18	107	4	129	9	55	6	70	529
08:15 AM	58	79	22	159	4	65	27	96	14	54	1	69	8	35	3	46	370
08:30 AM	57	100	14	171	7	47	42	96	10	48	2	60	8	44	9	61	388
08:45 AM	64	109	14	187	12	60	34	106	17	53	6	76	9	55	11	75	444
Total	223	430	72	725	33	238	149	420	59	262	13	334	34	189	29	252	1731
Grand Total	436	1111	112	1659	65	467	301	833	98	577	43	718	71	365	44	480	3690
Apprch %	26.3	67	6.8		7.8	56.1	36.1		13.6	80.4	6		14.8	76	9.2		
Total %	11.8	30.1	3	45	1.8	12.7	8.2	22.6	2.7	15.6	1.2	19.5	1.9	9.9	1.2	13	

	Farrell Drive Southbound				Tahquitz Canyon Way Westbound				Farrell Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	46	151	4	201	**10**	51	30	91	8	70	7	85	7	38	2	47	424
07:45 AM	49	**239**	13	**301**	9	61	42	112	11	103	**9**	123	**9**	**56**	**9**	**74**	**610**
08:00 AM	44	142	**22**	208	10	**66**	**46**	**122**	**18**	**107**	4	**129**	9	55	6	70	529
08:15 AM	**58**	79	22	159	4	65	27	96	14	54	1	69	8	35	3	46	370
Total Volume	197	611	61	869	33	243	145	421	51	334	21	406	33	184	20	237	1933
% App. Total	22.7	70.3	7		7.8	57.7	34.4		12.6	82.3	5.2		13.9	77.6	8.4		
PHF	.849	.639	.693	.722	.825	.920	.788	.863	.708	.780	.583	.787	.917	.821	.556	.801	.792

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City of Palm Springs
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File Name : PLSFATCAM
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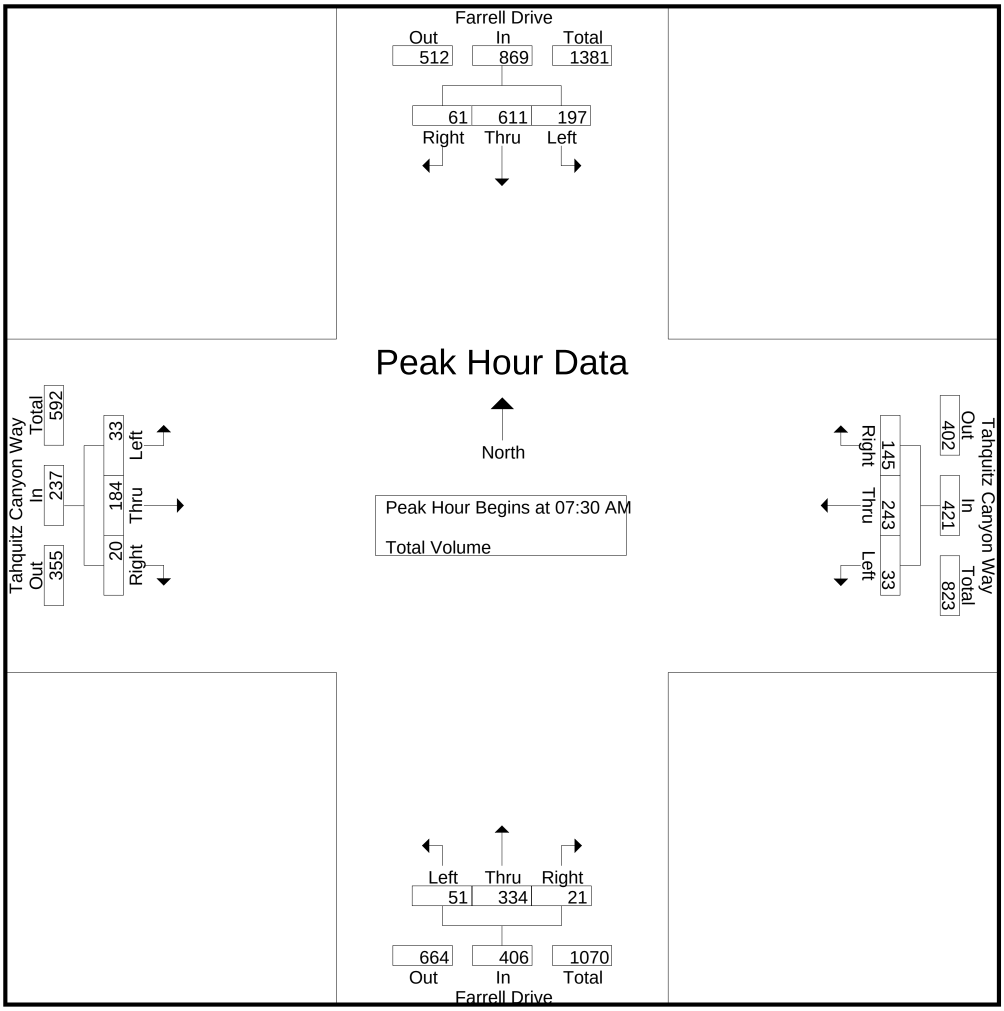

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:30 AM				08:00 AM			
+0 mins.	46	151	4	201	9	61	42	112	8	70	7	85	**9**	**55**	6	70
+15 mins.	49	**239**	13	**301**	**10**	**66**	**46**	**122**	11	103	**9**	123	8	35	3	46
+30 mins.	44	142	**22**	208	4	65	27	96	**18**	**107**	4	**129**	8	44	9	61
+45 mins.	**58**	79	22	159	7	47	42	96	14	54	1	69	9	55	**11**	**75**
Total Volume	197	611	61	869	30	239	157	426	51	334	21	406	34	189	29	252
% App. Total	22.7	70.3	7		7	56.1	36.9		12.6	82.3	5.2		13.5	75	11.5	
PHF	.849	.639	.693	.722	.750	.905	.853	.873	.708	.780	.583	.787	.944	.859	.659	.840

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File Name : PLSFATCMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound				Tahquitz Canyon Way Westbound				Farrell Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	40	77	11	128	12	97	53	162	21	58	8	87	16	93	9	118	495
11:15 AM	47	95	8	150	11	112	40	163	14	62	9	85	8	78	22	108	506
11:30 AM	42	90	5	137	18	101	43	162	17	69	3	89	16	78	11	105	493
11:45 AM	37	73	18	128	11	115	48	174	13	57	6	76	19	87	13	119	497
Total	166	335	42	543	52	425	184	661	65	246	26	337	59	336	55	450	1991
12:00 PM	36	79	8	123	22	124	52	198	16	70	8	94	23	86	21	130	545
12:15 PM	52	76	9	137	15	101	39	155	24	85	8	117	18	89	15	122	531
12:30 PM	46	90	10	146	7	81	50	138	16	59	8	83	13	89	17	119	486
12:45 PM	41	80	8	129	10	63	44	117	15	77	5	97	24	97	9	130	473
Total	175	325	35	535	54	369	185	608	71	291	29	391	78	361	62	501	2035
Grand Total	341	660	77	1078	106	794	369	1269	136	537	55	728	137	697	117	951	4026
Apprch %	31.6	61.2	7.1		8.4	62.6	29.1		18.7	73.8	7.6		14.4	73.3	12.3		
Total %	8.5	16.4	1.9	26.8	2.6	19.7	9.2	31.5	3.4	13.3	1.4	18.1	3.4	17.3	2.9	23.6	

	Farrell Drive Southbound				Tahquitz Canyon Way Westbound				Farrell Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	42	**90**	5	**137**	18	101	43	162	17	69	3	89	16	78	11	105	493
11:45 AM	37	73	**18**	128	11	115	48	174	13	57	6	76	19	87	13	119	497
12:00 PM	36	79	8	123	**22**	**124**	**52**	**198**	16	70	**8**	94	**23**	86	**21**	**130**	**545**
12:15 PM	**52**	76	9	137	15	101	39	155	**24**	**85**	8	**117**	18	**89**	15	122	531
Total Volume	167	318	40	525	66	441	182	689	70	281	25	376	76	340	60	476	2066
% App. Total	31.8	60.6	7.6		9.6	64	26.4		18.6	74.7	6.6		16	71.4	12.6		
PHF	.803	.883	.556	.958	.750	.889	.875	.870	.729	.826	.781	.803	.826	.955	.714	.915	.948

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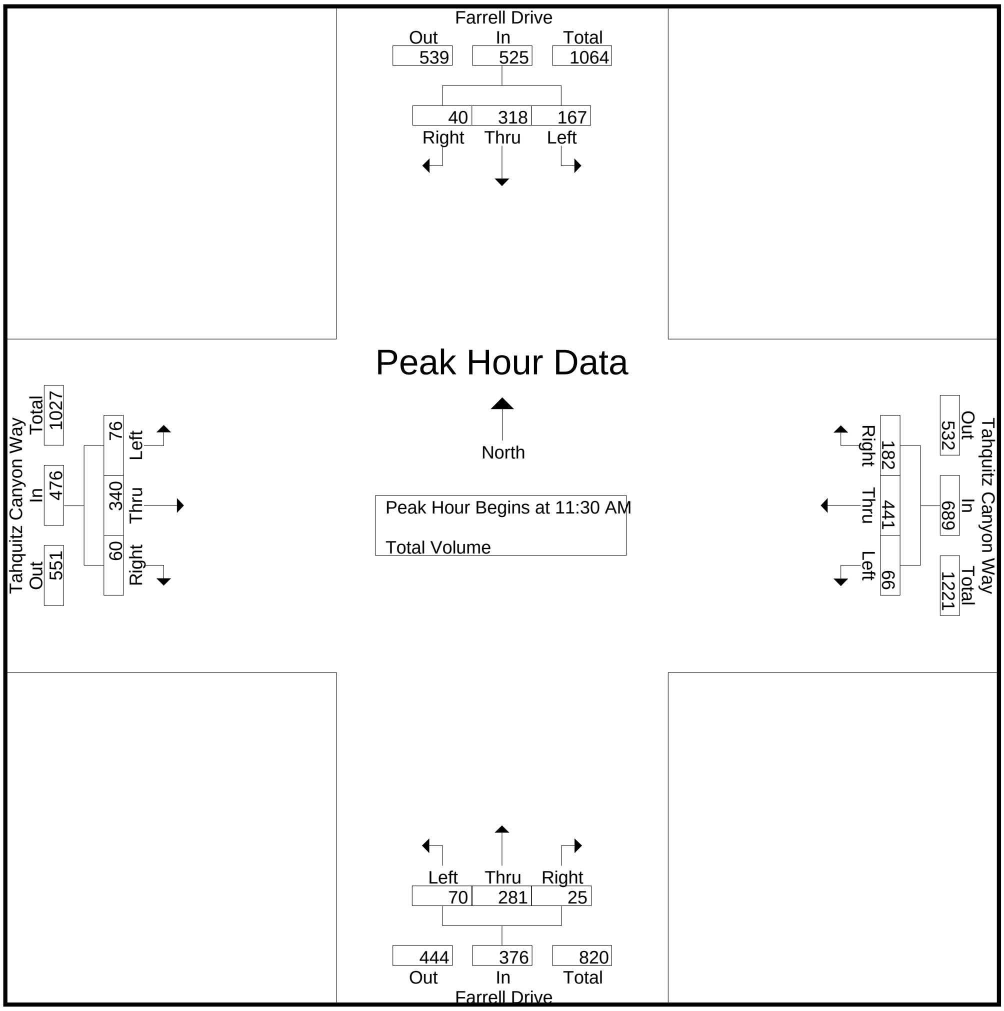

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:00 AM				11:15 AM				12:00 PM				12:00 PM			
+0 mins.	40	77	11	128	11	112	40	163	16	70	**8**	94	23	86	**21**	**130**
+15 mins.	**47**	**95**	8	**150**	18	101	43	162	**24**	**85**	8	**117**	18	89	15	122
+30 mins.	42	90	5	137	11	115	48	174	16	59	8	83	13	89	17	119
+45 mins.	37	73	**18**	128	**22**	**124**	**52**	**198**	15	77	5	97	**24**	**97**	9	130
Total Volume	166	335	42	543	62	452	183	697	71	291	29	391	78	361	62	501
% App. Total	30.6	61.7	7.7		8.9	64.8	26.3		18.2	74.4	7.4		15.6	72.1	12.4	
PHF	.883	.882	.583	.905	.705	.911	.880	.880	.740	.856	.906	.835	.813	.930	.738	.963

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File Name : PLSFATCPM
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	Farrell Drive Southbound				Tahquitz Canyon Way Westbound				Farrell Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	50	140	12	202	10	78	57	145	10	80	5	95	9	59	13	81	523
02:45 PM	52	144	14	210	10	75	49	134	14	111	6	131	12	81	15	108	583
Total	102	284	26	412	20	153	106	279	24	191	11	226	21	140	28	189	1106
03:00 PM	50	106	17	173	10	67	62	139	23	145	13	181	32	88	17	137	630
03:15 PM	50	108	15	173	6	69	49	124	15	98	10	123	19	77	14	110	530
03:30 PM	51	81	24	156	7	83	42	132	15	77	15	107	18	75	15	108	503
03:45 PM	47	95	22	164	10	76	38	124	15	81	4	100	18	72	12	102	490
Total	198	390	78	666	33	295	191	519	68	401	42	511	87	312	58	457	2153
04:00 PM	41	108	16	165	11	72	47	130	18	94	10	122	23	77	10	110	527
04:15 PM	41	81	9	131	4	65	42	111	14	109	11	134	17	75	7	99	475
04:30 PM	60	84	13	157	11	79	60	150	11	86	5	102	27	90	7	124	533
04:45 PM	41	104	12	157	10	76	40	126	22	85	10	117	22	71	13	106	506
Total	183	377	50	610	36	292	189	517	65	374	36	475	89	313	37	439	2041
Grand Total	483	1051	154	1688	89	740	486	1315	157	966	89	1212	197	765	123	1085	5300
Apprch %	28.6	62.3	9.1		6.8	56.3	37		13	79.7	7.3		18.2	70.5	11.3		
Total %	9.1	19.8	2.9	31.8	1.7	14	9.2	24.8	3	18.2	1.7	22.9	3.7	14.4	2.3	20.5	

	Farrell Drive Southbound				Tahquitz Canyon Way Westbound				Farrell Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	50	140	12	202	**10**	**78**	57	**145**	10	80	5	95	9	59	13	81	523
02:45 PM	**52**	**144**	14	**210**	10	75	49	134	14	111	6	131	12	81	15	108	583
03:00 PM	50	106	**17**	173	10	67	**62**	139	**23**	**145**	**13**	**181**	**32**	**88**	**17**	**137**	**630**
03:15 PM	50	108	15	173	6	69	49	124	15	98	10	123	19	77	14	110	530
Total Volume	202	498	58	758	36	289	217	542	62	434	34	530	72	305	59	436	2266
% App. Total	26.6	65.7	7.7		6.6	53.3	40		11.7	81.9	6.4		16.5	70	13.5		
PHF	.971	.865	.853	.902	.900	.926	.875	.934	.674	.748	.654	.732	.563	.866	.868	.796	.899

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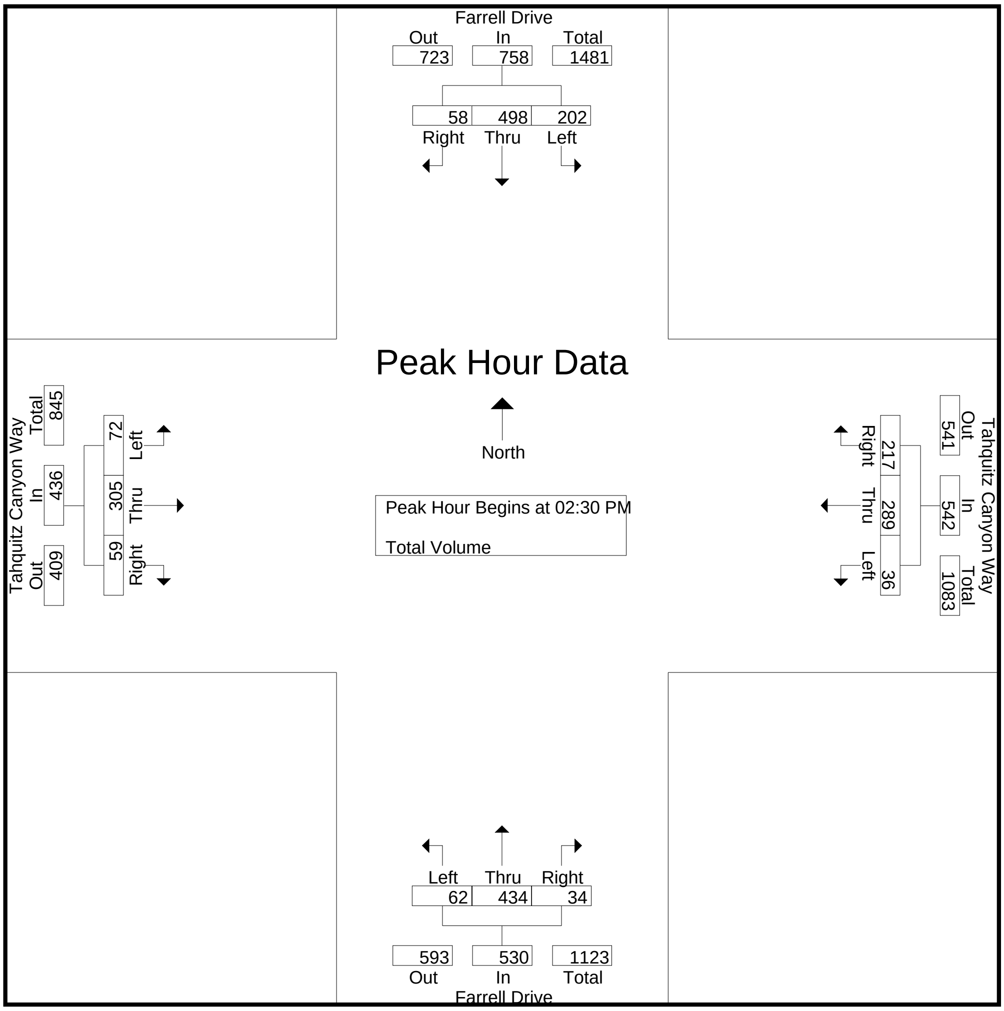

Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	02:30 PM				02:30 PM				02:45 PM				02:45 PM			
+0 mins.	50	140	12	202	**10**	**78**	57	**145**	14	111	6	131	12	81	15	108
+15 mins.	**52**	**144**	14	**210**	10	75	49	134	**23**	**145**	13	**181**	**32**	**88**	**17**	**137**
+30 mins.	50	106	**17**	173	10	67	**62**	139	15	98	10	123	19	77	14	110
+45 mins.	50	108	15	173	6	69	49	124	15	77	**15**	107	18	75	15	108
Total Volume	202	498	58	758	36	289	217	542	67	431	44	542	81	321	61	463
% App. Total	26.6	65.7	7.7		6.6	53.3	40		12.4	79.5	8.1		17.5	69.3	13.2	
PHF	.971	.865	.853	.902	.900	.926	.875	.934	.728	.743	.733	.749	.633	.912	.897	.845

Location: Palm Springs
N/S: Farrell Drive
E/W: Tahquitz Canyon Way

Date: 1/14/2015
File : PLSFATC

WEEKDAY

	North Leg Farrell Drive **Pedestrians**	East Leg Tahquitz Canyon Way **Pedestrians**	South Leg Farrell Drive **Pedestrians**	West Leg Tahquitz Canyon Way **Pedestrians**	TOTAL
6:30 AM	0	1	1	1	3
6:45 AM	1	0	0	1	2
7:00 AM	1	0	0	2	3
7:15 AM	2	0	2	3	7
7:30 AM	2	2	5	1	10
7:45 AM	0	1	2	0	3
8:00 AM	0	0	2	2	4
8:15 AM	0	3	6	0	9
8:30 AM	4	1	2	1	8
8:45 AM	1	1	0	1	3
TOTAL VOLUMES:	11	9	20	12	52

	North Leg Farrell Drive **Pedestrians**	East Leg Tahquitz Canyon Way **Pedestrians**	South Leg Farrell Drive **Pedestrians**	West Leg Tahquitz Canyon Way **Pedestrians**	TOTAL
11:00 AM	0	0	0	0	0
11:15 AM	0	2	4	0	6
11:30 AM	0	3	1	0	4
11:45 AM	0	1	5	0	6
12:00 PM	1	0	1	0	2
12:15 PM	0	1	4	0	5
12:30 PM	3	0	2	1	6
12:45 PM	0	0	1	3	4
TOTAL VOLUMES:	4	7	18	4	33

	North Leg Farrell Drive **Pedestrians**	East Leg Tahquitz Canyon Way **Pedestrians**	South Leg Farrell Drive **Pedestrians**	West Leg Tahquitz Canyon Way **Pedestrians**	TOTAL
2:30 PM	1	1	8	0	10
2:45 PM	2	0	2	1	5
3:00 PM	3	1	5	3	12
3:15 PM	0	1	4	0	5
3:30 PM	2	2	3	2	9
3:45 PM	0	1	9	0	10
4:00 PM	1	0	4	0	5
4:15 PM	2	3	5	2	12
4:30 PM	2	0	1	4	7
4:45 PM	3	1	1	0	5
TOTAL VOLUMES:	16	10	42	12	80

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City of Palm Springs
N/S: Civic Drive
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSCITCMD
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	Civic Drive Southbound				Tahquitz Canyon Way Westbound				Civic Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	6	0	10	16	4	134	4	142	24	2	9	35	16	118	3	137	330
11:15 AM	6	0	9	15	8	154	4	166	11	0	1	12	14	110	7	131	324
11:30 AM	11	4	18	33	5	150	14	169	8	1	0	9	12	128	8	148	359
11:45 AM	10	1	11	22	1	132	10	143	6	0	2	8	9	99	3	111	284
Total	33	5	48	86	18	570	32	620	49	3	12	64	51	455	21	527	1297
12:00 PM	14	2	26	42	5	170	11	186	9	2	5	16	12	122	3	137	381
12:15 PM	8	3	14	25	3	134	14	151	4	1	3	8	17	121	9	147	331
12:30 PM	8	2	13	23	2	107	7	116	9	4	0	13	17	118	6	141	293
12:45 PM	10	0	9	19	4	101	13	118	5	3	2	10	14	106	14	134	281
Total	40	7	62	109	14	512	45	571	27	10	10	47	60	467	32	559	1286
Grand Total	73	12	110	195	32	1082	77	1191	76	13	22	111	111	922	53	1086	2583
Apprch %	37.4	6.2	56.4		2.7	90.8	6.5		68.5	11.7	19.8		10.2	84.9	4.9		
Total %	2.8	0.5	4.3	7.5	1.2	41.9	3	46.1	2.9	0.5	0.9	4.3	4.3	35.7	2.1	42	

	Civic Drive Southbound				Tahquitz Canyon Way Westbound				Civic Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	11	**4**	18	33	**5**	150	**14**	169	8	1	0	9	12	**128**	8	**148**	359
11:45 AM	10	1	11	22	1	132	10	143	6	0	2	8	9	99	3	111	284
12:00 PM	**14**	2	**26**	**42**	5	**170**	11	**186**	**9**	**2**	**5**	**16**	12	122	3	137	**381**
12:15 PM	8	3	14	25	3	134	14	151	4	1	3	8	**17**	121	**9**	147	331
Total Volume	43	10	69	122	14	586	49	649	27	4	10	41	50	470	23	543	1355
% App. Total	35.2	8.2	56.6		2.2	90.3	7.6		65.9	9.8	24.4		9.2	86.6	4.2		
PHF	.768	.625	.663	.726	.700	.862	.875	.872	.750	.500	.500	.641	.735	.918	.639	.917	.889

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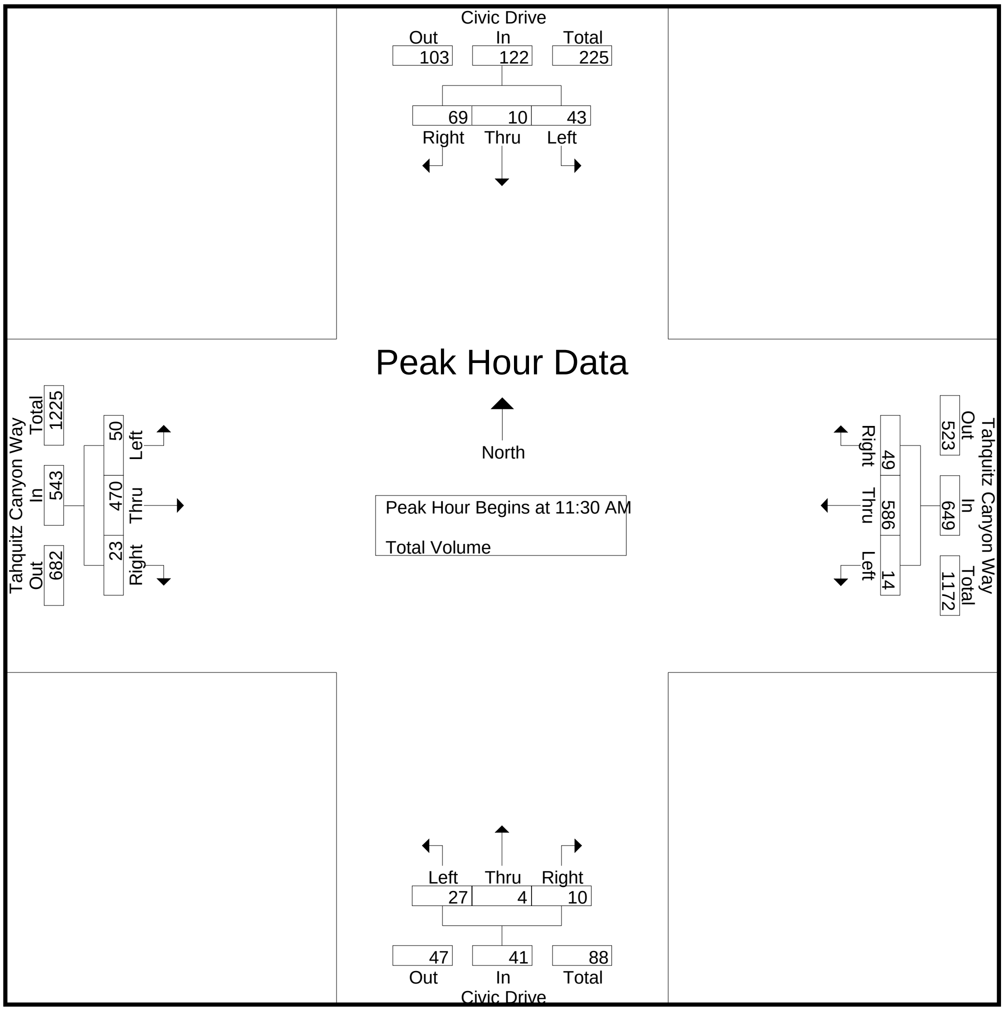
City of Palm Springs
N/S: Civic Drive
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSCITCMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:30 AM				11:15 AM				11:00 AM				12:00 PM			
+0 mins.	11	**4**	18	33	**8**	154	4	166	**24**	**2**	**9**	**35**	12	**122**	3	137
+15 mins.	10	1	11	22	5	150	**14**	169	11	0	1	12	**17**	121	9	**147**
+30 mins.	**14**	2	**26**	**42**	1	132	10	143	8	1	0	9	17	118	6	141
+45 mins.	8	3	14	25	5	**170**	11	**186**	6	0	2	8	14	106	**14**	134
Total Volume	43	10	69	122	19	606	39	664	49	3	12	64	60	467	32	559
% App. Total	35.2	8.2	56.6		2.9	91.3	5.9		76.6	4.7	18.8		10.7	83.5	5.7	
PHF	.768	.625	.663	.726	.594	.891	.696	.892	.510	.375	.333	.457	.882	.957	.571	.951

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City of Palm Springs
N/S: Civic Drive
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSCITCPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Civic Drive Southbound				Tahquitz Canyon Way Westbound				Civic Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	6	1	10	17	1	130	14	145	13	1	1	15	14	118	4	136	313
03:15 PM	8	2	13	23	2	99	13	114	2	1	1	4	14	124	6	144	285
03:30 PM	10	3	13	26	1	111	7	119	4	3	1	8	18	112	5	135	288
03:45 PM	7	1	10	18	2	115	13	130	6	6	2	14	18	112	7	137	299
Total	31	7	46	84	6	455	47	508	25	11	5	41	64	466	22	552	1185
04:00 PM	7	5	11	23	4	96	7	107	7	4	4	15	11	101	10	122	267
04:15 PM	12	0	15	27	4	88	10	102	9	0	1	10	18	101	6	125	264
04:30 PM	13	5	16	34	3	125	6	134	12	1	2	15	11	126	13	150	333
04:45 PM	7	0	15	22	2	121	7	130	5	1	3	9	11	104	9	124	285
Total	39	10	57	106	13	430	30	473	33	6	10	49	51	432	38	521	1149
Grand Total	70	17	103	190	19	885	77	981	58	17	15	90	115	898	60	1073	2334
Apprch %	36.8	8.9	54.2		1.9	90.2	7.8		64.4	18.9	16.7		10.7	83.7	5.6		
Total %	3	0.7	4.4	8.1	0.8	37.9	3.3	42	2.5	0.7	0.6	3.9	4.9	38.5	2.6	46	

	Civic Drive Southbound				Tahquitz Canyon Way Westbound				Civic Drive Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	6	1	10	17	1	**130**	**14**	**145**	**13**	1	1	**15**	14	118	4	136	**313**
03:15 PM	8	2	**13**	23	**2**	99	13	114	2	1	1	4	14	**124**	6	**144**	285
03:30 PM	**10**	**3**	13	**26**	1	111	7	119	4	3	1	8	**18**	112	5	135	288
03:45 PM	7	1	10	18	2	115	13	130	6	**6**	**2**	14	18	112	**7**	137	299
Total Volume	31	7	46	84	6	455	47	508	25	11	5	41	64	466	22	552	1185
% App. Total	36.9	8.3	54.8		1.2	89.6	9.3		61	26.8	12.2		11.6	84.4	4		
PHF	.775	.583	.885	.808	.750	.875	.839	.876	.481	.458	.625	.683	.889	.940	.786	.958	.946

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City of Palm Springs
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File Name : PLSCITCPM
Site Code : 00915014
Start Date : 1/14/2015
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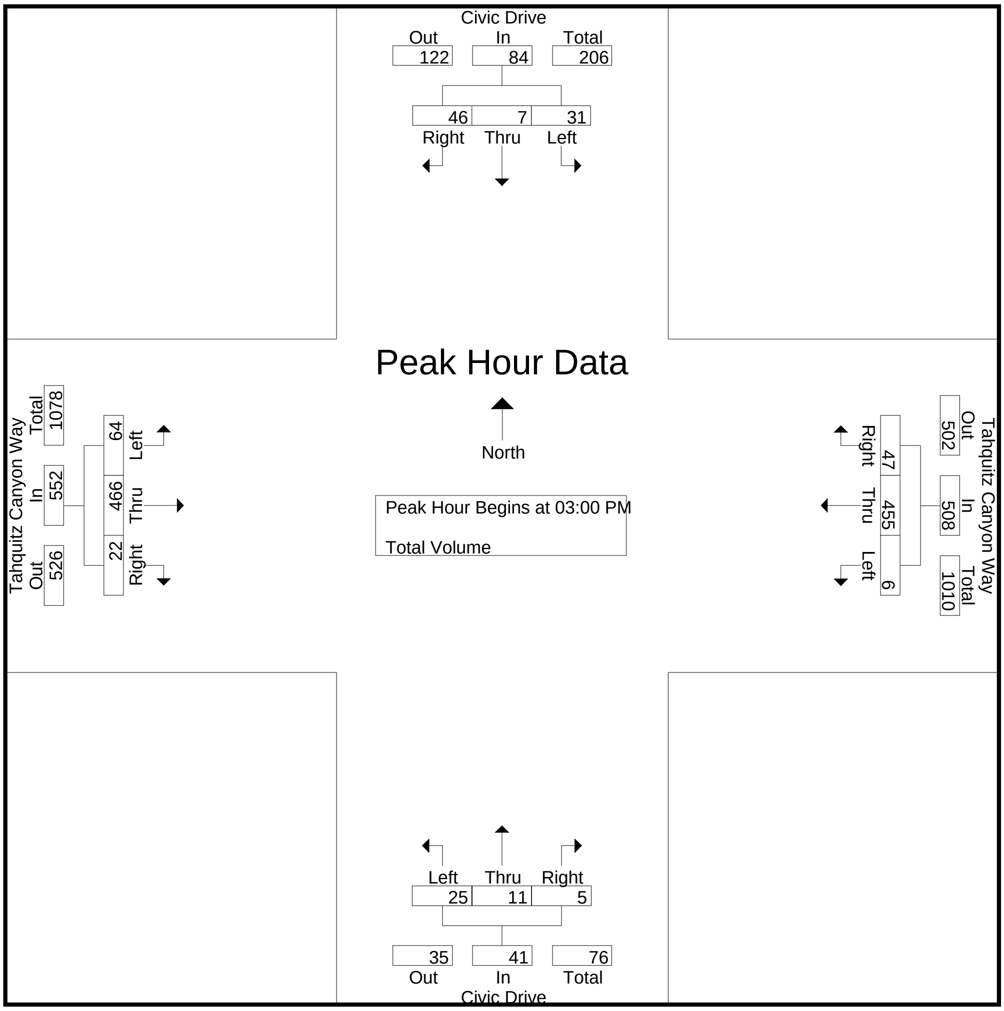

Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				03:00 PM				03:45 PM				03:00 PM			
+0 mins.	7	**5**	11	23	1	**130**	**14**	**145**	6	**6**	2	14	14	118	4	136
+15 mins.	12	0	15	27	**2**	99	13	114	7	4	**4**	**15**	14	**124**	6	**144**
+30 mins.	**13**	5	**16**	**34**	1	111	7	119	9	0	1	10	**18**	112	5	135
+45 mins.	7	0	15	22	2	115	13	130	**12**	1	2	15	18	112	**7**	137
Total Volume	39	10	57	106	6	455	47	508	34	11	9	54	64	466	22	552
% App. Total	36.8	9.4	53.8		1.2	89.6	9.3		63	20.4	16.7		11.6	84.4	4	
PHF	.750	.500	.891	.779	.750	.875	.839	.876	.708	.458	.563	.900	.889	.940	.786	.958

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City of Palm Springs
N/S: El Cielo Road
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSECTCMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	5	20	17	42	27	49	13	89	73	30	6	109	17	42	82	141	381
11:15 AM	3	27	16	46	36	79	14	129	66	16	3	85	13	37	67	117	377
11:30 AM	3	30	14	47	31	52	13	96	85	23	3	111	6	33	91	130	384
11:45 AM	6	26	10	42	27	53	8	88	94	24	4	122	14	39	72	125	377
Total	17	103	57	177	121	233	48	402	318	93	16	427	50	151	312	513	1519
12:00 PM	8	39	17	64	23	59	13	95	99	32	7	138	11	31	98	140	437
12:15 PM	10	24	17	51	22	39	18	79	98	33	6	137	14	41	81	136	403
12:30 PM	9	22	11	42	11	21	16	48	86	26	2	114	18	31	75	124	328
12:45 PM	6	19	11	36	18	24	18	60	81	46	4	131	19	31	64	114	341
Total	33	104	56	193	74	143	65	282	364	137	19	520	62	134	318	514	1509
Grand Total	50	207	113	370	195	376	113	684	682	230	35	947	112	285	630	1027	3028
Apprch %	13.5	55.9	30.5		28.5	55	16.5		72	24.3	3.7		10.9	27.8	61.3		
Total %	1.7	6.8	3.7	12.2	6.4	12.4	3.7	22.6	22.5	7.6	1.2	31.3	3.7	9.4	20.8	33.9	

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	3	30	14	47	**31**	52	13	**96**	85	23	3	111	6	33	91	130	384
11:45 AM	6	26	10	42	27	53	8	88	94	24	4	122	**14**	39	72	125	377
12:00 PM	8	**39**	**17**	**64**	23	**59**	13	95	**99**	32	**7**	**138**	11	31	**98**	**140**	**437**
12:15 PM	**10**	24	17	51	22	39	**18**	79	98	**33**	6	137	14	**41**	81	136	403
Total Volume	27	119	58	204	103	203	52	358	376	112	20	508	45	144	342	531	1601
% App. Total	13.2	58.3	28.4		28.8	56.7	14.5		74	22	3.9		8.5	27.1	64.4		
PHF	.675	.763	.853	.797	.831	.860	.722	.932	.949	.848	.714	.920	.804	.878	.872	.948	.916

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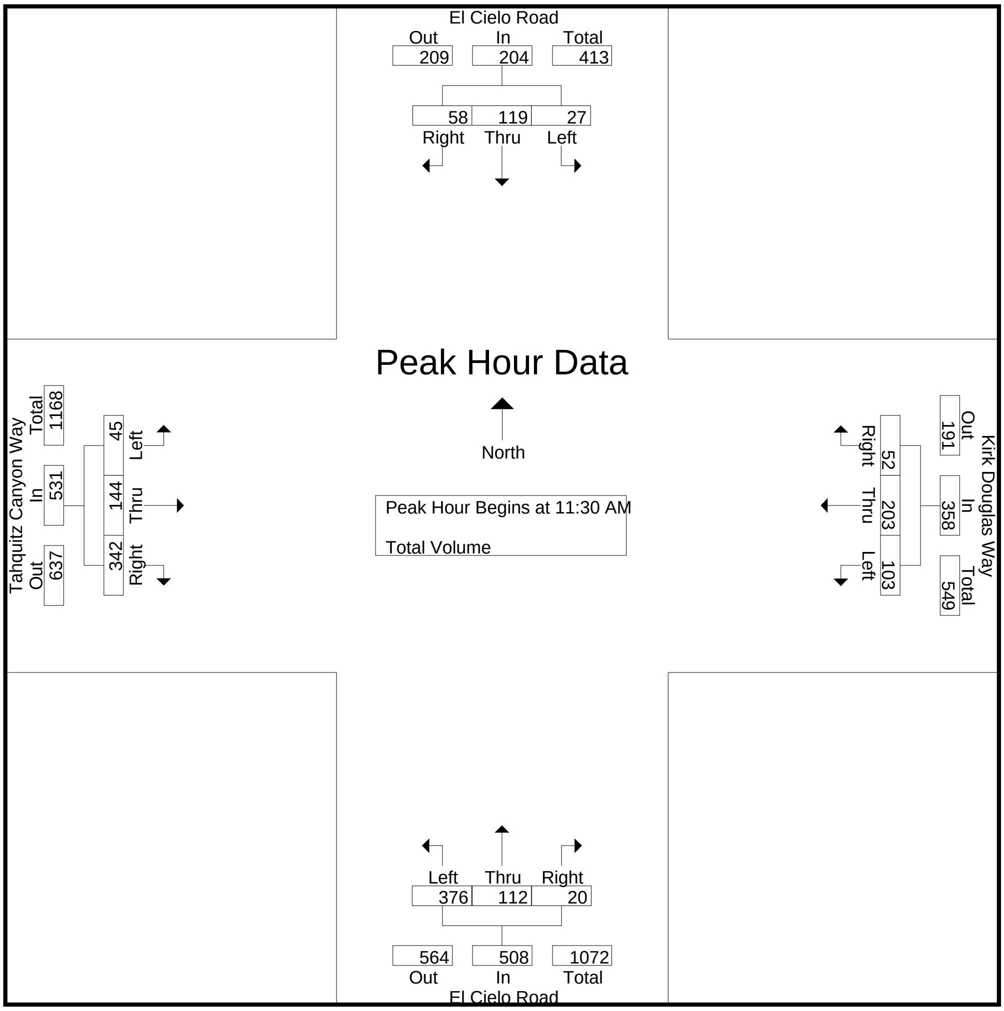
City of Palm Springs
N/S: El Cielo Road
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSECTCMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:30 AM				11:15 AM				12:00 PM				11:30 AM			
+0 mins.	3	30	14	47	**36**	**79**	**14**	**129**	**99**	32	**7**	**138**	6	33	91	130
+15 mins.	6	26	10	42	31	52	13	96	98	33	6	137	**14**	39	72	125
+30 mins.	8	**39**	**17**	**64**	27	53	8	88	86	26	2	114	11	31	**98**	**140**
+45 mins.	**10**	24	17	51	23	59	13	95	81	**46**	4	131	14	**41**	81	136
Total Volume	27	119	58	204	117	243	48	408	364	137	19	520	45	144	342	531
% App. Total	13.2	58.3	28.4		28.7	59.6	11.8		70	26.3	3.7		8.5	27.1	64.4	
PHF	.675	.763	.853	.797	.813	.769	.857	.791	.919	.745	.679	.942	.804	.878	.872	.948

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City of Palm Springs
N/S: El Cielo Road
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSECTCPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	1	23	13	37	8	23	5	36	100	24	1	125	15	39	73	127	325
03:15 PM	3	26	12	41	5	10	8	23	99	26	4	129	14	33	83	130	323
03:30 PM	4	27	13	44	2	12	12	26	97	21	1	119	14	36	82	132	321
03:45 PM	3	11	15	29	16	28	12	56	89	22	3	114	13	29	70	112	311
Total	11	87	53	151	31	73	37	141	385	93	9	487	56	137	308	501	1280
04:00 PM	4	27	10	41	5	14	12	31	82	21	2	105	7	31	85	123	300
04:15 PM	5	25	8	38	4	16	12	32	78	17	4	99	12	31	72	115	284
04:30 PM	6	32	19	57	18	30	13	61	86	13	4	103	7	51	85	143	364
04:45 PM	5	16	5	26	17	32	7	56	91	14	0	105	4	31	76	111	298
Total	20	100	42	162	44	92	44	180	337	65	10	412	30	144	318	492	1246
Grand Total	31	187	95	313	75	165	81	321	722	158	19	899	86	281	626	993	2526
Apprch %	9.9	59.7	30.4		23.4	51.4	25.2		80.3	17.6	2.1		8.7	28.3	63		
Total %	1.2	7.4	3.8	12.4	3	6.5	3.2	12.7	28.6	6.3	0.8	35.6	3.4	11.1	24.8	39.3	

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Tahquitz Canyon Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	1	23	13	37	8	23	5	36	**100**	24	1	125	**15**	**39**	73	127	**325**
03:15 PM	3	26	12	41	5	10	8	23	99	**26**	**4**	**129**	14	33	**83**	130	323
03:30 PM	**4**	**27**	13	**44**	2	12	**12**	26	97	21	1	119	14	36	82	**132**	321
03:45 PM	3	11	**15**	29	**16**	**28**	12	**56**	89	22	3	114	13	29	70	112	311
Total Volume	11	87	53	151	31	73	37	141	385	93	9	487	56	137	308	501	1280
% App. Total	7.3	57.6	35.1		22	51.8	26.2		79.1	19.1	1.8		11.2	27.3	61.5		
PHF	.688	.806	.883	.858	.484	.652	.771	.629	.963	.894	.563	.944	.933	.878	.928	.949	.985

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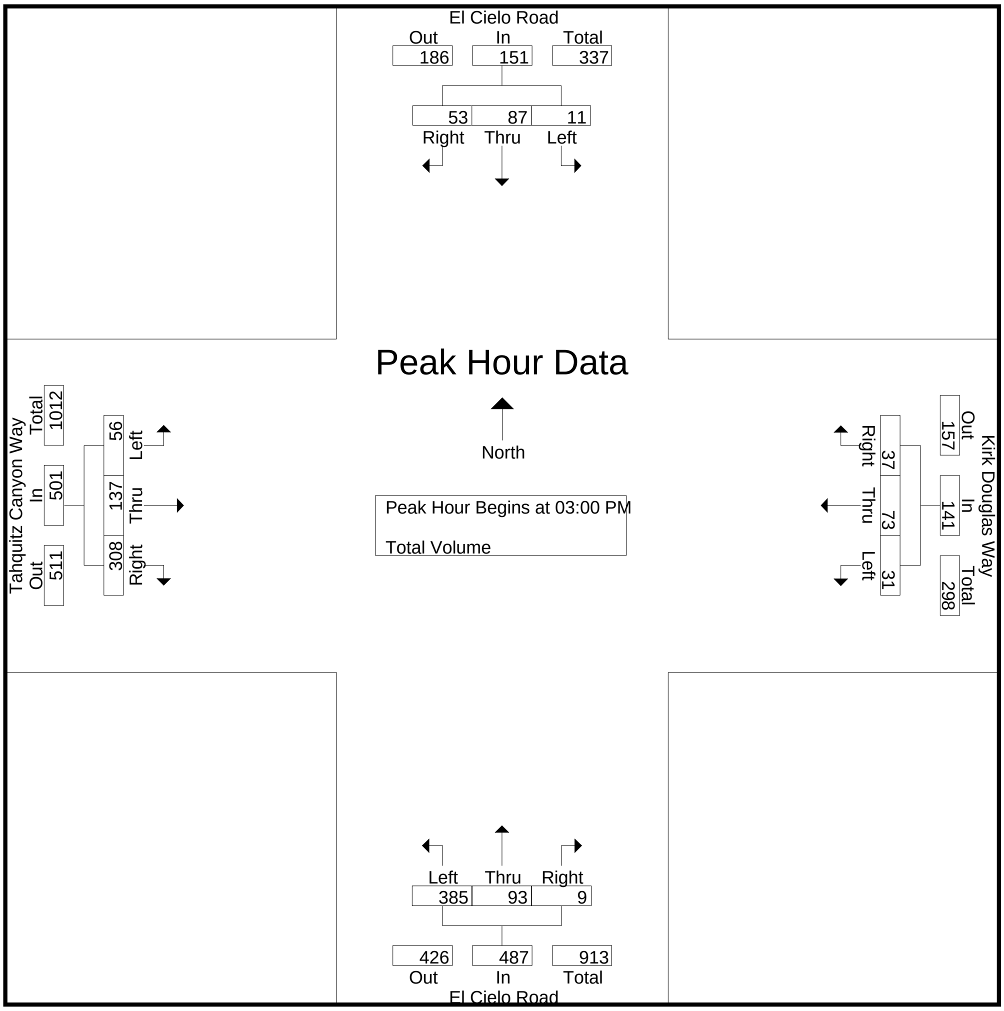
City of Palm Springs
N/S: El Cielo Road
E/W: Tahquitz Canyon Way
Weather: Clear

File Name : PLSECTCPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:45 PM				03:45 PM				03:00 PM				03:00 PM			
+0 mins.	3	11	15	29	16	28	12	56	**100**	24	1	125	**15**	**39**	73	127
+15 mins.	4	27	10	41	5	14	12	31	99	**26**	**4**	**129**	14	33	**83**	130
+30 mins.	5	25	8	38	4	16	12	32	97	21	1	119	14	36	82	**132**
+45 mins.	**6**	**32**	**19**	**57**	**18**	**30**	**13**	**61**	89	22	3	114	13	29	70	112
Total Volume	18	95	52	165	43	88	49	180	385	93	9	487	56	137	308	501
% App. Total	10.9	57.6	31.5		23.9	48.9	27.2		79.1	19.1	1.8		11.2	27.3	61.5	
PHF	.750	.742	.684	.724	.597	.733	.942	.738	.963	.894	.563	.944	.933	.878	.928	.949

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City of Palm Springs
N/S: Sunrise Way
E/W: Baristo Road
Weather: Clear

File Name : PLSSUBAMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Sunrise Way Southbound				Baristo Road Westbound				Sunrise Way Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	16	196	3	215	13	10	16	39	7	195	17	219	4	10	13	27	500
11:15 AM	12	186	5	203	29	12	8	49	2	179	12	193	5	12	12	29	474
11:30 AM	17	186	7	210	17	15	16	48	13	199	15	227	4	13	11	28	513
11:45 AM	16	190	12	218	22	19	22	63	13	170	17	200	3	12	14	29	510
Total	61	758	27	846	81	56	62	199	35	743	61	839	16	47	50	113	1997
12:00 PM	16	236	6	258	25	18	12	55	9	151	22	182	3	12	13	28	523
12:15 PM	18	200	9	227	32	28	27	87	14	177	28	219	6	8	11	25	558
12:30 PM	19	172	10	201	15	13	20	48	14	190	27	231	6	7	21	34	514
12:45 PM	9	163	7	179	17	15	15	47	15	213	12	240	5	14	12	31	497
Total	62	771	32	865	89	74	74	237	52	731	89	872	20	41	57	118	2092
Grand Total	123	1529	59	1711	170	130	136	436	87	1474	150	1711	36	88	107	231	4089
Apprch %	7.2	89.4	3.4		39	29.8	31.2		5.1	86.1	8.8		15.6	38.1	46.3		
Total %	3	37.4	1.4	41.8	4.2	3.2	3.3	10.7	2.1	36	3.7	41.8	0.9	2.2	2.6	5.6	

	Sunrise Way Southbound				Baristo Road Westbound				Sunrise Way Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	16	190	**12**	218	22	19	22	63	13	170	17	200	3	**12**	14	29	510
12:00 PM	16	**236**	6	**258**	25	18	12	55	9	151	22	182	3	12	13	28	523
12:15 PM	18	200	9	227	**32**	**28**	**27**	**87**	**14**	177	**28**	219	**6**	8	11	25	**558**
12:30 PM	**19**	172	10	201	15	13	20	48	14	**190**	27	**231**	6	7	**21**	**34**	514
Total Volume	69	798	37	904	94	78	81	253	50	688	94	832	18	39	59	116	2105
% App. Total	7.6	88.3	4.1		37.2	30.8	32		6	82.7	11.3		15.5	33.6	50.9		
PHF	.908	.845	.771	.876	.734	.696	.750	.727	.893	.905	.839	.900	.750	.813	.702	.853	.943

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City of Palm Springs
N/S: Sunrise Way
E/W: Baristo Road
Weather: Clear

File Name : PLSSUBAMD
Site Code : 00915014
Start Date : 1/14/2015
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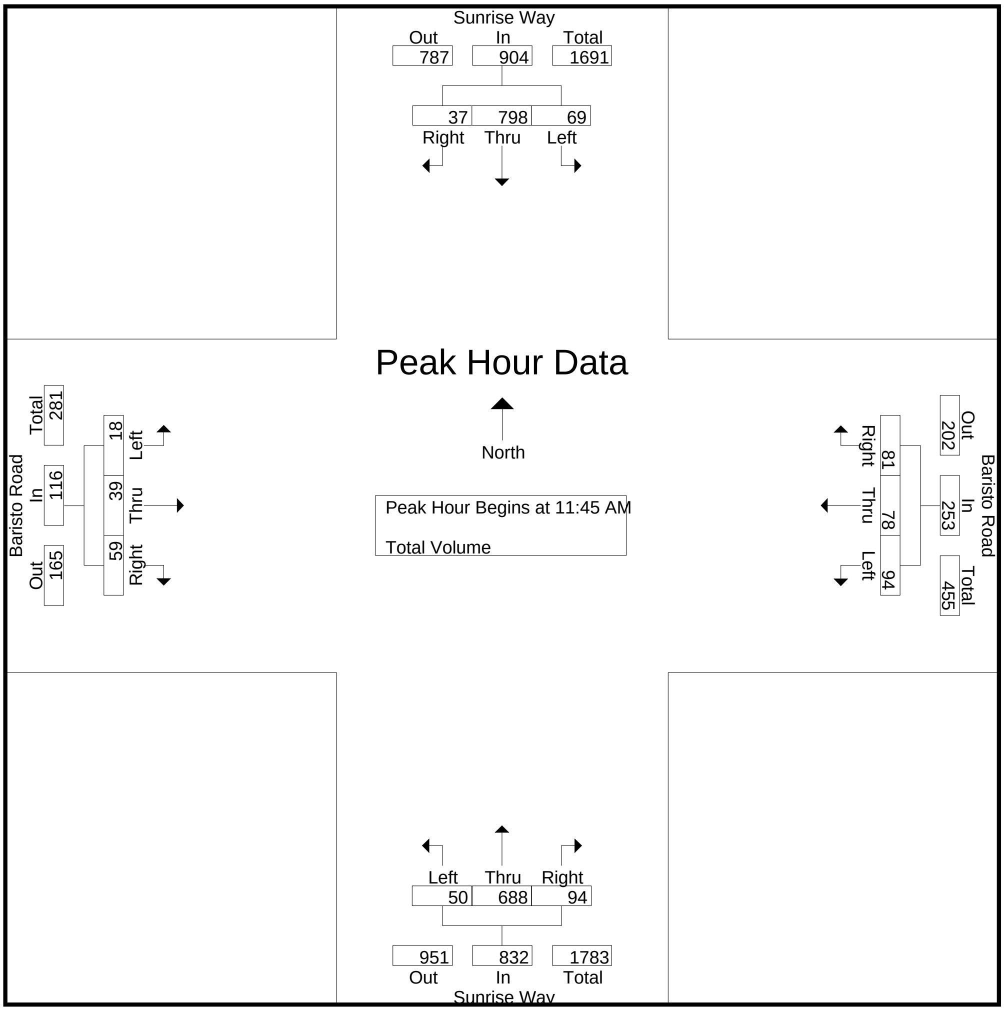

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:30 AM				11:30 AM				12:00 PM				12:00 PM			
+0 mins.	17	186	7	210	17	15	16	48	9	151	22	182	3	12	13	28
+15 mins.	16	190	**12**	218	22	19	22	63	14	177	**28**	219	**6**	8	11	25
+30 mins.	16	**236**	6	**258**	25	18	12	55	14	190	27	231	6	7	**21**	**34**
+45 mins.	**18**	200	9	227	**32**	**28**	**27**	**87**	**15**	**213**	12	**240**	5	**14**	12	31
Total Volume	67	812	34	913	96	80	77	253	52	731	89	872	20	41	57	118
% App. Total	7.3	88.9	3.7		37.9	31.6	30.4		6	83.8	10.2		16.9	34.7	48.3	
PHF	.931	.860	.708	.885	.750	.714	.713	.727	.867	.858	.795	.908	.833	.732	.679	.868

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Groups Printed- Total Volume

	Sunrise Way Southbound				Baristo Road Westbound				Sunrise Way Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	29	156	10	195	25	23	37	85	6	178	37	221	7	22	15	44	545
03:15 PM	25	169	9	203	19	12	27	58	8	213	20	241	6	11	21	38	540
03:30 PM	21	190	8	219	21	15	25	61	14	204	16	234	7	17	14	38	552
03:45 PM	25	176	8	209	20	18	24	62	11	193	21	225	8	20	19	47	543
Total	100	691	35	826	85	68	113	266	39	788	94	921	28	70	69	167	2180
04:00 PM	23	220	11	254	22	18	30	70	13	192	23	228	6	7	15	28	580
04:15 PM	18	181	9	208	17	17	18	52	12	182	23	217	8	15	12	35	512
04:30 PM	21	199	5	225	22	17	30	69	10	186	13	209	6	22	13	41	544
04:45 PM	18	197	9	224	14	22	29	65	13	158	19	190	5	19	9	33	512
Total	80	797	34	911	75	74	107	256	48	718	78	844	25	63	49	137	2148
Grand Total	180	1488	69	1737	160	142	220	522	87	1506	172	1765	53	133	118	304	4328
Apprch %	10.4	85.7	4		30.7	27.2	42.1		4.9	85.3	9.7		17.4	43.8	38.8		
Total %	4.2	34.4	1.6	40.1	3.7	3.3	5.1	12.1	2	34.8	4	40.8	1.2	3.1	2.7	7	

	Sunrise Way Southbound				Baristo Road Westbound				Sunrise Way Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:15 PM																	
03:15 PM	**25**	169	9	203	19	12	27	58	8	**213**	20	**241**	6	11	**21**	38	540
03:30 PM	21	190	8	219	21	15	25	61	**14**	204	16	234	7	17	14	38	552
03:45 PM	25	176	8	209	20	**18**	24	62	11	193	21	225	**8**	**20**	19	**47**	543
04:00 PM	23	**220**	**11**	**254**	**22**	18	**30**	**70**	13	192	**23**	228	6	7	15	28	**580**
Total Volume	94	755	36	885	82	63	106	251	46	802	80	928	27	55	69	151	2215
% App. Total	10.6	85.3	4.1		32.7	25.1	42.2		5	86.4	8.6		17.9	36.4	45.7		
PHF	.940	.858	.818	.871	.932	.875	.883	.896	.821	.941	.870	.963	.844	.688	.821	.803	.955

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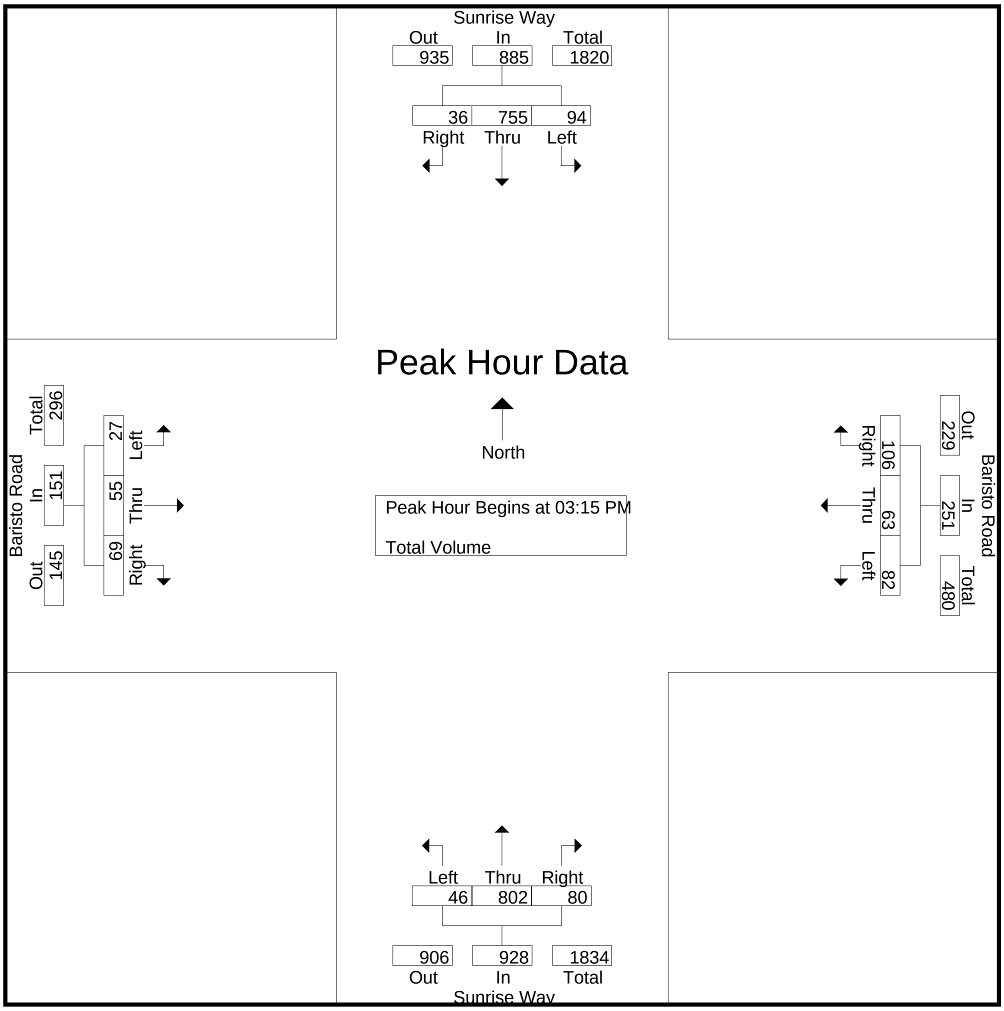

Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				03:00 PM				03:15 PM				03:00 PM			
+0 mins.	**23**	**220**	**11**	**254**	**25**	**23**	**37**	**85**	8	**213**	20	**241**	7	**22**	15	44
+15 mins.	18	181	9	208	19	12	27	58	**14**	204	16	234	6	11	**21**	38
+30 mins.	21	199	5	225	21	15	25	61	11	193	21	225	7	17	14	38
+45 mins.	18	197	9	224	20	18	24	62	13	192	**23**	228	**8**	20	19	**47**
Total Volume	80	797	34	911	85	68	113	266	46	802	80	928	28	70	69	167
% App. Total	8.8	87.5	3.7		32	25.6	42.5		5	86.4	8.6		16.8	41.9	41.3	
PHF	.870	.906	.773	.897	.850	.739	.764	.782	.821	.941	.870	.963	.875	.795	.821	.888

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File Name : PLSCEBAMD
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Groups Printed- Total Volume

	Cerritos Drive Southbound				Baristo Road Westbound				Cerritos Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	3	0	0	3	2	36	1	39	3	0	3	6	0	35	2	37	85
11:15 AM	0	0	0	0	5	42	3	50	0	0	2	2	1	33	5	39	91
11:30 AM	0	0	1	1	7	29	4	40	2	0	2	4	1	34	7	42	87
11:45 AM	2	0	2	4	8	59	8	75	4	0	2	6	9	54	11	74	159
Total	5	0	3	8	22	166	16	204	9	0	9	18	11	156	25	192	422
12:00 PM	1	1	0	2	5	45	0	50	4	0	7	11	0	28	2	30	93
12:15 PM	1	0	0	1	8	81	2	91	3	0	5	8	1	50	6	57	157
12:30 PM	4	0	2	6	2	37	2	41	4	1	9	14	0	43	6	49	110
12:45 PM	4	0	0	4	2	33	1	36	5	0	2	7	0	27	6	33	80
Total	10	1	2	13	17	196	5	218	16	1	23	40	1	148	20	169	440
Grand Total	15	1	5	21	39	362	21	422	25	1	32	58	12	304	45	361	862
Apprch %	71.4	4.8	23.8		9.2	85.8	5		43.1	1.7	55.2		3.3	84.2	12.5		
Total %	1.7	0.1	0.6	2.4	4.5	42	2.4	49	2.9	0.1	3.7	6.7	1.4	35.3	5.2	41.9	

	Cerritos Drive Southbound				Baristo Road Westbound				Cerritos Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	2	0	**2**	4	**8**	59	**8**	75	**4**	0	2	6	**9**	**54**	**11**	**74**	**159**
12:00 PM	1	**1**	0	2	5	45	0	50	4	0	7	11	0	28	2	30	93
12:15 PM	1	0	0	1	8	**81**	2	**91**	3	0	5	8	1	50	6	57	157
12:30 PM	**4**	0	2	**6**	2	37	2	41	4	**1**	**9**	**14**	0	43	6	49	110
Total Volume	8	1	4	13	23	222	12	257	15	1	23	39	10	175	25	210	519
% App. Total	61.5	7.7	30.8		8.9	86.4	4.7		38.5	2.6	59		4.8	83.3	11.9		
PHF	.500	.250	.500	.542	.719	.685	.375	.706	.938	.250	.639	.696	.278	.810	.568	.709	.816

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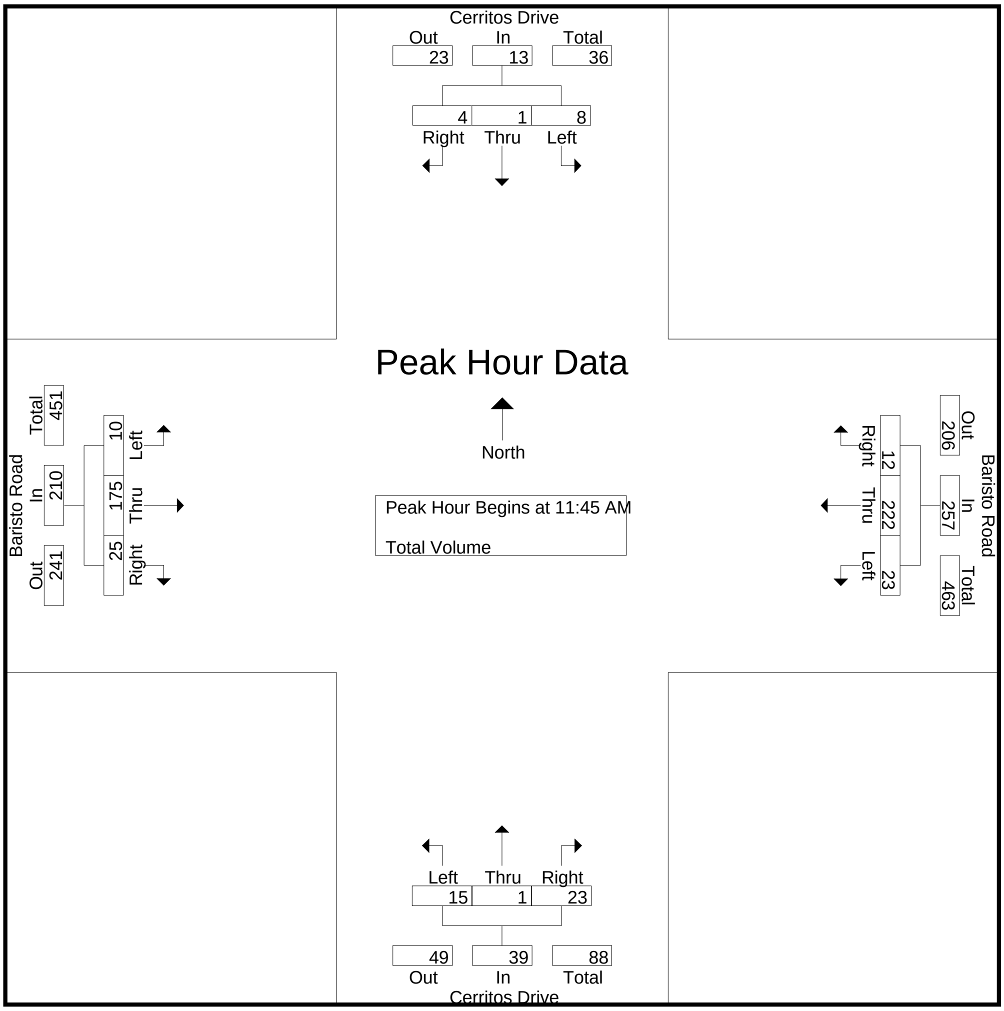

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:45 AM				11:45 AM				12:00 PM				11:45 AM			
+0 mins.	2	0	**2**	4	**8**	59	**8**	75	4	0	7	11	**9**	**54**	**11**	**74**
+15 mins.	1	**1**	0	2	5	45	0	50	3	0	5	8	0	28	2	30
+30 mins.	1	0	0	1	8	**81**	2	**91**	4	**1**	**9**	**14**	1	50	6	57
+45 mins.	**4**	0	2	**6**	2	37	2	41	**5**	0	2	7	0	43	6	49
Total Volume	8	1	4	13	23	222	12	257	16	1	23	40	10	175	25	210
% App. Total	61.5	7.7	30.8		8.9	86.4	4.7		40	2.5	57.5		4.8	83.3	11.9	
PHF	.500	.250	.500	.542	.719	.685	.375	.706	.800	.250	.639	.714	.278	.810	.568	.709

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Groups Printed- Total Volume

	Cerritos Drive Southbound				Baristo Road Westbound				Cerritos Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	2	0	0	2	15	68	2	85	10	0	9	19	2	60	17	79	185
03:15 PM	3	0	0	3	15	49	1	65	10	0	10	20	2	48	6	56	144
03:30 PM	0	0	1	1	5	57	2	64	5	0	7	12	1	44	5	50	127
03:45 PM	4	0	3	7	21	39	11	71	6	0	8	14	4	40	11	55	147
Total	9	0	4	13	56	213	16	285	31	0	34	65	9	192	39	240	603
04:00 PM	3	0	1	4	8	43	3	54	11	1	18	30	0	41	9	50	138
04:15 PM	4	0	0	4	15	38	1	54	5	2	18	25	1	47	15	63	146
04:30 PM	2	0	2	4	11	48	3	62	16	0	9	25	0	62	5	67	158
04:45 PM	2	9	0	11	19	47	0	66	10	4	12	26	1	41	15	57	160
Total	11	9	3	23	53	176	7	236	42	7	57	106	2	191	44	237	602
Grand Total	20	9	7	36	109	389	23	521	73	7	91	171	11	383	83	477	1205
Apprch %	55.6	25	19.4		20.9	74.7	4.4		42.7	4.1	53.2		2.3	80.3	17.4		
Total %	1.7	0.7	0.6	3	9	32.3	1.9	43.2	6.1	0.6	7.6	14.2	0.9	31.8	6.9	39.6	

	Cerritos Drive Southbound				Baristo Road Westbound				Cerritos Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	2	0	0	2	15	**68**	2	**85**	**10**	0	9	19	2	**60**	**17**	**79**	**185**
03:15 PM	3	0	0	3	15	49	1	65	10	0	**10**	**20**	2	48	6	56	144
03:30 PM	0	0	1	1	5	57	2	64	5	0	7	12	1	44	5	50	127
03:45 PM	**4**	0	**3**	**7**	**21**	39	**11**	71	6	0	8	14	**4**	40	11	55	147
Total Volume	9	0	4	13	56	213	16	285	31	0	34	65	9	192	39	240	603
% App. Total	69.2	0	30.8		19.6	74.7	5.6		47.7	0	52.3		3.8	80	16.2		
PHF	.563	.000	.333	.464	.667	.783	.364	.838	.775	.000	.850	.813	.563	.800	.574	.759	.815

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File Name : PLSCEBAPM
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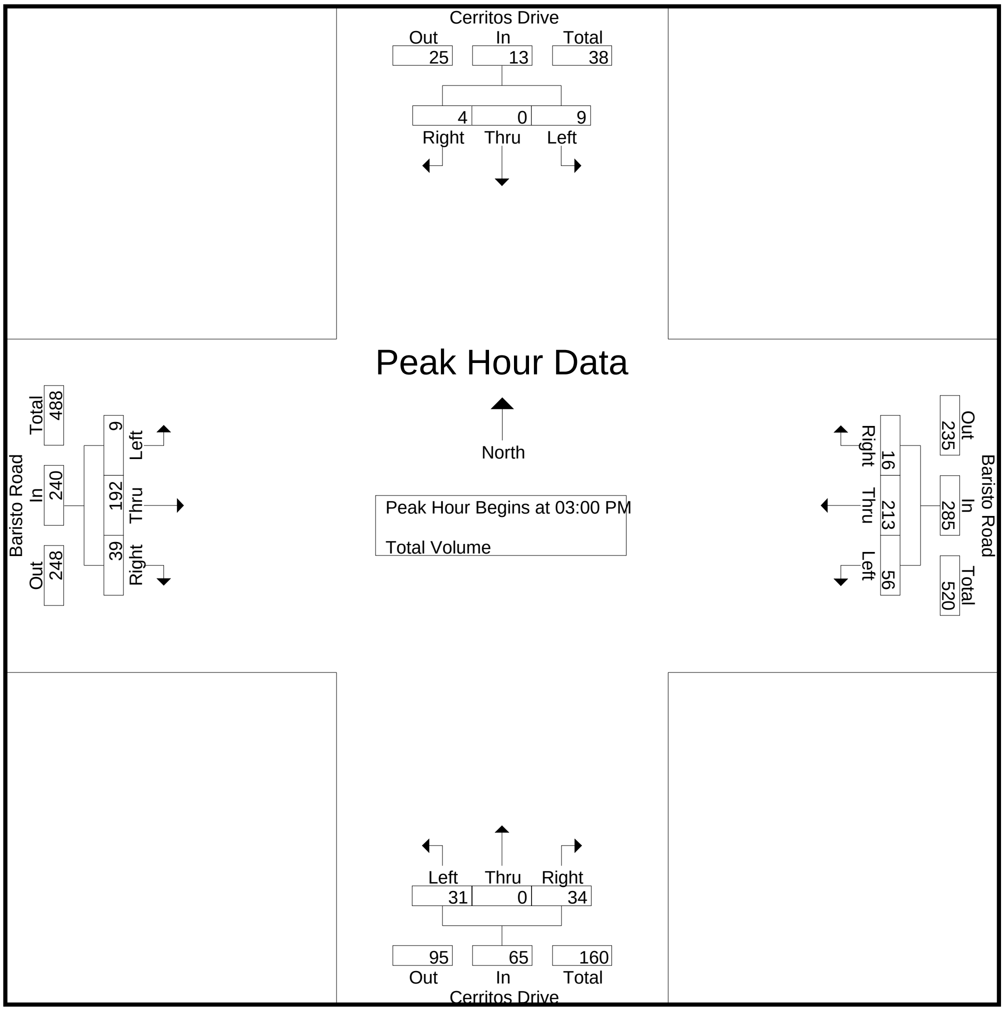

Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				03:00 PM				04:00 PM				03:00 PM			
+0 mins.	3	0	1	4	15	**68**	2	**85**	11	1	**18**	**30**	2	**60**	**17**	**79**
+15 mins.	**4**	0	0	4	15	49	1	65	5	2	18	25	2	48	6	56
+30 mins.	2	0	**2**	4	5	57	2	64	**16**	0	9	25	1	44	5	50
+45 mins.	2	**9**	0	**11**	**21**	39	**11**	71	10	**4**	12	26	**4**	40	11	55
Total Volume	11	9	3	23	56	213	16	285	42	7	57	106	9	192	39	240
% App. Total	47.8	39.1	13		19.6	74.7	5.6		39.6	6.6	53.8		3.8	80	16.2	
PHF	.688	.250	.375	.523	.667	.783	.364	.838	.656	.438	.792	.883	.563	.800	.574	.759

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City of Palm Springs
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File Name : PLSPSBAAM
Site Code : 00915014
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Groups Printed- Total Volume

	Palm Springs Mall Southbound				Baristo Road Westbound				Palm Springs High School Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	1	0	1	2	18	10	0	28	4	0	5	9	0	12	9	21	60
06:45 AM	0	1	1	2	44	25	1	70	25	3	21	49	0	15	21	36	157
Total	1	1	2	4	62	35	1	98	29	3	26	58	0	27	30	57	217
07:00 AM	0	0	0	0	17	21	1	39	11	0	11	22	0	11	10	21	82
07:15 AM	1	1	0	2	19	25	1	45	15	0	19	34	1	20	21	42	123
07:30 AM	2	2	1	5	49	27	1	77	47	1	33	81	1	36	36	73	236
07:45 AM	1	10	4	15	87	34	0	121	58	4	58	120	1	49	41	91	347
Total	4	13	5	22	172	107	3	282	131	5	121	257	3	116	108	227	788
08:00 AM	3	0	0	3	25	29	0	54	21	2	25	48	0	27	7	34	139
08:15 AM	0	0	0	0	5	28	0	33	1	0	1	2	1	16	1	18	53
08:30 AM	0	0	0	0	5	35	0	40	2	0	3	5	0	24	5	29	74
08:45 AM	0	0	1	1	11	29	0	40	1	0	4	5	0	27	2	29	75
Total	3	0	1	4	46	121	0	167	25	2	33	60	1	94	15	110	341
Grand Total	8	14	8	30	280	263	4	547	185	10	180	375	4	237	153	394	1346
Apprch %	26.7	46.7	26.7		51.2	48.1	0.7		49.3	2.7	48		1	60.2	38.8		
Total %	0.6	1	0.6	2.2	20.8	19.5	0.3	40.6	13.7	0.7	13.4	27.9	0.3	17.6	11.4	29.3	

	Palm Springs Mall Southbound				Baristo Road Westbound				Palm Springs High School Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	1	0	2	19	25	**1**	45	15	0	19	34	**1**	20	21	42	123
07:30 AM	2	2	1	5	49	27	1	77	47	1	33	81	1	36	36	73	236
07:45 AM	1	**10**	**4**	**15**	**87**	**34**	0	**121**	**58**	**4**	**58**	**120**	1	**49**	**41**	**91**	**347**
08:00 AM	**3**	0	0	3	25	29	0	54	21	2	25	48	0	27	7	34	139
Total Volume	7	13	5	25	180	115	2	297	141	7	135	283	3	132	105	240	845
% App. Total	28	52	20		60.6	38.7	0.7		49.8	2.5	47.7		1.2	55	43.8		
PHF	.583	.325	.313	.417	.517	.846	.500	.614	.608	.438	.582	.590	.750	.673	.640	.659	.609

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City of Palm Springs
N/S: Palm Springs Mall / Palm Springs HS
E/W: Baristo Road
Weather: Clear

File Name : PLSPSBAAM
Site Code : 00915014
Start Date : 1/14/2015
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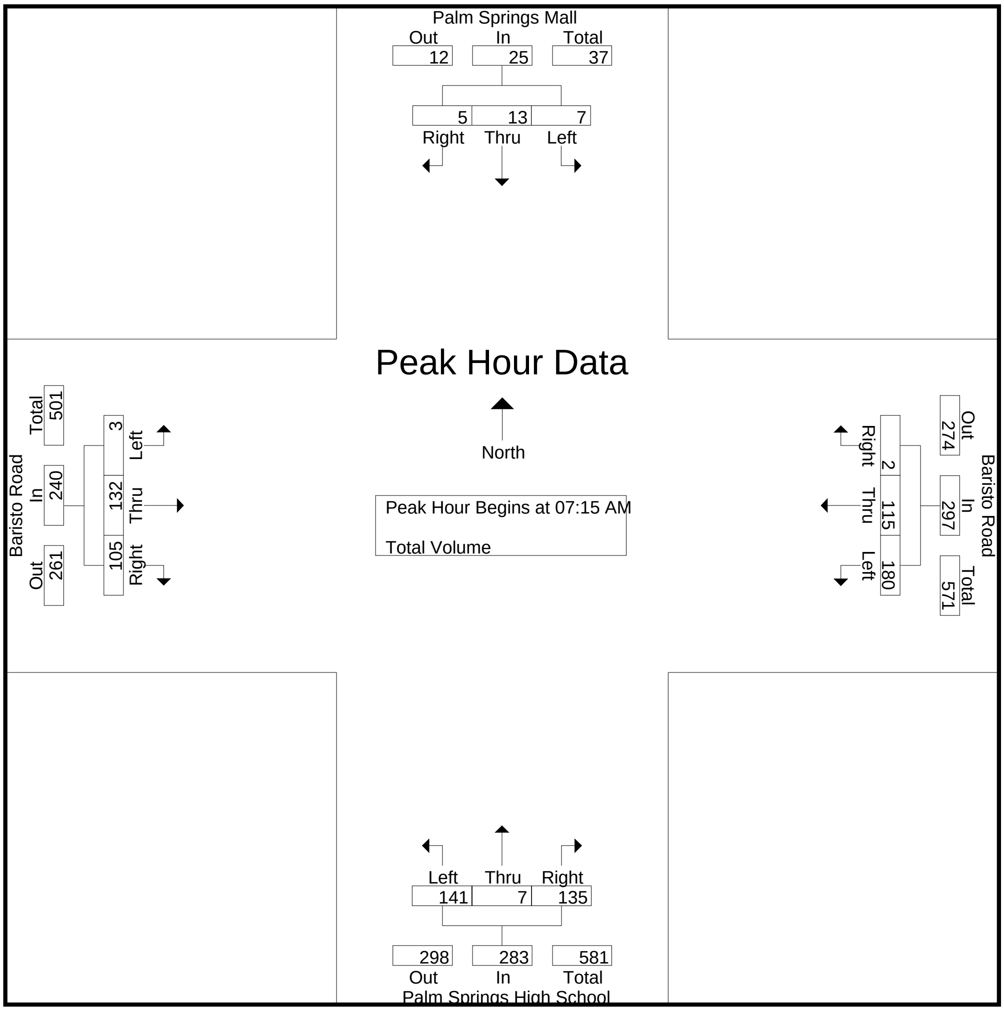

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	1	0	2	19	25	**1**	45	15	0	19	34	**1**	20	21	42
+15 mins.	2	2	1	5	49	27	1	77	47	1	33	81	1	36	36	73
+30 mins.	1	**10**	**4**	**15**	**87**	**34**	0	**121**	**58**	**4**	**58**	**120**	1	**49**	**41**	**91**
+45 mins.	**3**	0	0	3	25	29	0	54	21	2	25	48	0	27	7	34
Total Volume	7	13	5	25	180	115	2	297	141	7	135	283	3	132	105	240
% App. Total	28	52	20		60.6	38.7	0.7		49.8	2.5	47.7		1.2	55	43.8	
PHF	.583	.325	.313	.417	.517	.846	.500	.614	.608	.438	.582	.590	.750	.673	.640	.659

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City of Palm Springs
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E/W: Baristo Road
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File Name : PLSPSBAMD
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	Palm Springs Mall Southbound				Baristo Road Westbound				Palm Springs High School Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	0	0	0	0	3	33	2	38	3	0	4	7	0	35	4	39	84
11:15 AM	0	1	0	1	5	41	0	46	2	1	6	9	0	31	2	33	89
11:30 AM	0	0	1	1	3	39	1	43	2	0	1	3	1	35	2	38	85
11:45 AM	0	0	0	0	4	51	0	55	4	0	0	4	0	41	5	46	105
Total	0	1	1	2	15	164	3	182	11	1	11	23	1	142	13	156	363
12:00 PM	0	0	0	0	9	39	0	48	7	0	12	19	0	38	7	45	112
12:15 PM	1	1	3	5	13	58	0	71	11	4	14	29	1	41	10	52	157
12:30 PM	0	1	0	1	11	37	1	49	4	0	6	10	0	46	5	51	111
12:45 PM	2	0	1	3	7	31	0	38	1	0	10	11	1	35	1	37	89
Total	3	2	4	9	40	165	1	206	23	4	42	69	2	160	23	185	469
Grand Total	3	3	5	11	55	329	4	388	34	5	53	92	3	302	36	341	832
Apprch %	27.3	27.3	45.5		14.2	84.8	1		37	5.4	57.6		0.9	88.6	10.6		
Total %	0.4	0.4	0.6	1.3	6.6	39.5	0.5	46.6	4.1	0.6	6.4	11.1	0.4	36.3	4.3	41	

	Palm Springs Mall Southbound				Baristo Road Westbound				Palm Springs High School Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	0	0	0	0	4	51	0	55	4	0	0	4	0	41	5	46	105
12:00 PM	0	0	0	0	9	39	0	48	7	0	12	19	0	38	7	45	112
12:15 PM	**1**	**1**	**3**	**5**	**13**	**58**	0	**71**	**11**	**4**	**14**	**29**	**1**	41	**10**	**52**	**157**
12:30 PM	0	1	0	1	11	37	**1**	49	4	0	6	10	0	**46**	5	51	111
Total Volume	1	2	3	6	37	185	1	223	26	4	32	62	1	166	27	194	485
% App. Total	16.7	33.3	50		16.6	83	0.4		41.9	6.5	51.6		0.5	85.6	13.9		
PHF	.250	.500	.250	.300	.712	.797	.250	.785	.591	.250	.571	.534	.250	.902	.675	.933	.772

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File Name : PLSPSBAMD
Site Code : 00915014
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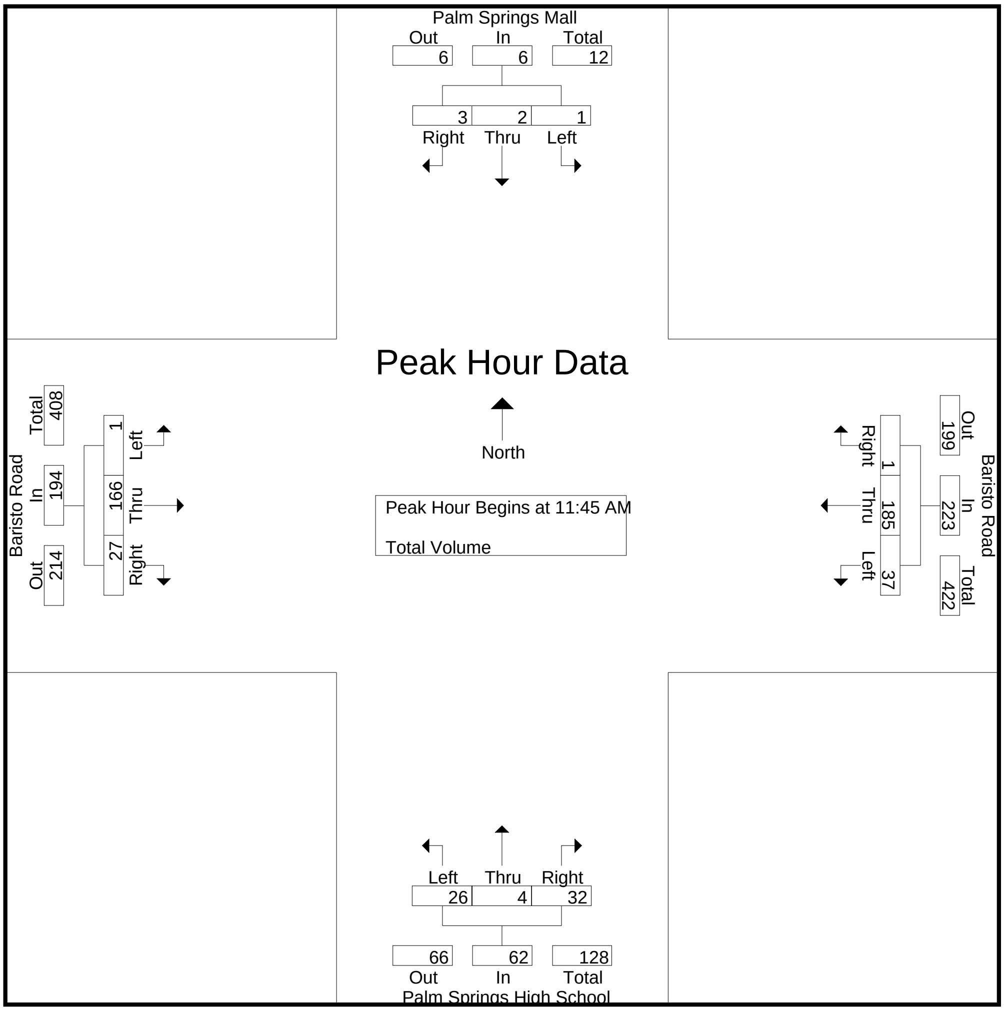

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:00 PM				11:45 AM				12:00 PM				11:45 AM			
+0 mins.	0	0	0	0	4	51	0	55	7	0	12	19	0	41	5	46
+15 mins.	1	**1**	**3**	**5**	9	39	0	48	**11**	**4**	**14**	**29**	0	38	7	45
+30 mins.	0	1	0	1	**13**	**58**	0	**71**	4	0	6	10	**1**	41	**10**	**52**
+45 mins.	**2**	0	1	3	11	37	**1**	49	1	0	10	11	0	**46**	5	51
Total Volume	3	2	4	9	37	185	1	223	23	4	42	69	1	166	27	194
% App. Total	33.3	22.2	44.4		16.6	83	0.4		33.3	5.8	60.9		0.5	85.6	13.9	
PHF	.375	.500	.333	.450	.712	.797	.250	.785	.523	.250	.750	.595	.250	.902	.675	.933

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File Name : PLSPSBAPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Palm Springs Mall Southbound				Baristo Road Westbound				Palm Springs High School Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	2	0	0	2	7	59	2	68	0	1	5	6	1	32	12	45	121
02:45 PM	4	0	7	11	23	61	12	96	19	2	32	53	4	79	4	87	247
Total	6	0	7	13	30	120	14	164	19	3	37	59	5	111	16	132	368
03:00 PM	4	2	3	9	9	52	4	65	13	1	27	41	3	52	5	60	175
03:15 PM	1	0	0	1	8	58	2	68	4	1	12	17	1	50	3	54	140
03:30 PM	0	0	0	0	1	53	2	56	6	0	7	13	0	54	5	59	128
03:45 PM	1	0	0	1	9	56	1	66	8	0	7	15	1	47	3	51	133
Total	6	2	3	11	27	219	9	255	31	2	53	86	5	203	16	224	576
04:00 PM	0	0	0	0	11	42	0	53	6	0	6	12	0	60	1	61	126
04:15 PM	0	0	1	1	4	43	1	48	5	0	5	10	0	64	1	65	124
04:30 PM	0	0	2	2	8	53	3	64	2	0	2	4	1	66	1	68	138
04:45 PM	0	0	1	1	9	47	0	56	4	0	5	9	0	54	6	60	126
Total	0	0	4	4	32	185	4	221	17	0	18	35	1	244	9	254	514
Grand Total	12	2	14	28	89	524	27	640	67	5	108	180	11	558	41	610	1458
Apprch %	42.9	7.1	50		13.9	81.9	4.2		37.2	2.8	60		1.8	91.5	6.7		
Total %	0.8	0.1	1	1.9	6.1	35.9	1.9	43.9	4.6	0.3	7.4	12.3	0.8	38.3	2.8	41.8	

	Palm Springs Mall Southbound				Baristo Road Westbound				Palm Springs High School Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:45 PM																	
02:45 PM	**4**	0	**7**	**11**	**23**	**61**	**12**	**96**	**19**	**2**	**32**	**53**	**4**	**79**	4	**87**	**247**
03:00 PM	4	**2**	3	9	9	52	4	65	13	1	27	41	3	52	**5**	60	175
03:15 PM	1	0	0	1	8	58	2	68	4	1	12	17	1	50	3	54	140
03:30 PM	0	0	0	0	1	53	2	56	6	0	7	13	0	54	5	59	128
Total Volume	9	2	10	21	41	224	20	285	42	4	78	124	8	235	17	260	690
% App. Total	42.9	9.5	47.6		14.4	78.6	7		33.9	3.2	62.9		3.1	90.4	6.5		
PHF	.563	.250	.357	.477	.446	.918	.417	.742	.553	.500	.609	.585	.500	.744	.850	.747	.698

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City of Palm Springs
N/S: Palm Springs Mall / Palm Springs HS
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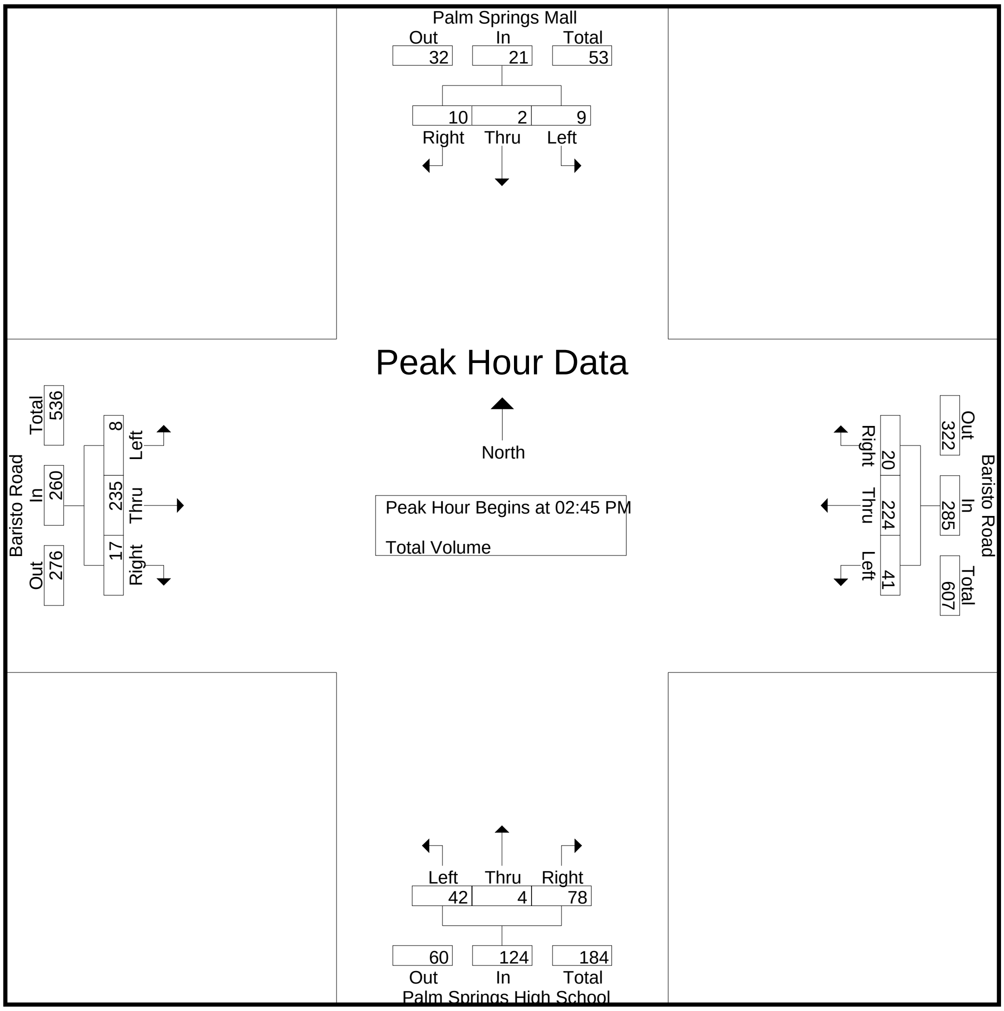
File Name : PLSPSBAPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	02:30 PM				02:30 PM				02:45 PM				02:45 PM			
+0 mins.	2	0	0	2	7	59	2	68	**19**	**2**	**32**	**53**	**4**	**79**	4	**87**
+15 mins.	**4**	0	**7**	**11**	**23**	**61**	**12**	**96**	13	1	27	41	3	52	**5**	60
+30 mins.	4	**2**	3	9	9	52	4	65	4	1	12	17	1	50	3	54
+45 mins.	1	0	0	1	8	58	2	68	6	0	7	13	0	54	5	59
Total Volume	11	2	10	23	47	230	20	297	42	4	78	124	8	235	17	260
% App. Total	47.8	8.7	43.5		15.8	77.4	6.7		33.9	3.2	62.9		3.1	90.4	6.5	
PHF	.688	.250	.357	.523	.511	.943	.417	.773	.553	.500	.609	.585	.500	.744	.850	.747

Location: Palm Springs
N/S: Palm Springs Mall / Palm Springs High
E/W: Tahquitz Canyon Way

Date: 1/14/2015
File : PLSPSBA

WEEKDAY

	North Leg Palm Springs Mall	East Leg Tahquitz Canyon Way	South Leg Palm Springs High School	West Leg Tahquitz Canyon Way	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
12:00 AM	1	16	0	0	17
6:45 AM	0	14	1	1	16
7:00 AM	0	1	0	0	1
7:15 AM	1	31	1	2	35
7:30 AM	7	89	0	13	109
7:45 AM	6	15	2	26	49
8:00 AM	1	9	0	1	11
8:15 AM	4	11	3	1	19
8:30 AM	0	7	1	0	8
8:45 AM	3	9	2	2	16
TOTAL VOLUMES:	23	202	10	46	281

	North Leg Palm Springs Mall	East Leg Tahquitz Canyon Way	South Leg Palm Springs High School	West Leg Tahquitz Canyon Way	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
11:00 AM	0	0	3	0	3
11:15 AM	1	5	2	1	9
11:30 AM	2	5	0	0	7
11:45 AM	1	2	0	0	3
12:00 PM	1	5	0	0	6
12:15 PM	0	4	1	1	6
12:30 PM	0	7	0	0	7
12:45 PM	4	10	0	2	16
TOTAL VOLUMES:	9	38	6	4	57

	North Leg Palm Springs Mall	East Leg Tahquitz Canyon Way	South Leg Palm Springs High School	West Leg Tahquitz Canyon Way	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
2:30 PM	2	2	2	0	6
2:15 PM	65	89	5	109	268
3:00 PM	7	16	4	6	33
3:15 PM	1	24	0	1	26
3:30 PM	1	5	4	1	11
3:45 PM	0	9	5	0	14
4:00 PM	2	11	0	2	15
4:15 PM	0	8	2	0	10
4:30 PM	0	7	1	0	8
4:45 PM	0	7	0	0	7
TOTAL VOLUMES:	78	178	23	119	398

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City of Palm Springs
N/S: Farrell Drive
E/W: Baristo Road
Weather: Clear

File Name : PLSFABAAM
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	Farrell Drive Southbound				Baristo Road Westbound				Farrell Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	11	25	12	48	0	15	2	17	7	17	0	24	5	10	6	21	110
06:45 AM	3	36	46	85	0	28	6	34	16	25	2	43	16	18	10	44	206
Total	14	61	58	133	0	43	8	51	23	42	2	67	21	28	16	65	316
07:00 AM	8	45	22	75	1	24	4	29	18	43	0	61	17	19	12	48	213
07:15 AM	10	56	31	97	1	22	6	29	15	29	4	48	14	20	11	45	219
07:30 AM	17	67	65	149	2	46	6	54	22	57	4	83	26	55	21	102	388
07:45 AM	46	83	96	225	3	93	17	113	27	70	5	102	53	82	33	168	608
Total	81	251	214	546	7	185	33	225	82	199	13	294	110	176	77	363	1428
08:00 AM	19	95	33	147	3	27	26	56	16	73	5	94	33	39	22	94	391
08:15 AM	9	65	5	79	1	16	9	26	10	61	3	74	3	13	12	28	207
08:30 AM	16	87	8	111	1	23	5	29	7	57	2	66	4	16	6	26	232
08:45 AM	19	90	20	129	3	21	10	34	11	62	3	76	3	19	11	33	272
Total	63	337	66	466	8	87	50	145	44	253	13	310	43	87	51	181	1102
Grand Total	158	649	338	1145	15	315	91	421	149	494	28	671	174	291	144	609	2846
Apprch %	13.8	56.7	29.5		3.6	74.8	21.6		22.2	73.6	4.2		28.6	47.8	23.6		
Total %	5.6	22.8	11.9	40.2	0.5	11.1	3.2	14.8	5.2	17.4	1	23.6	6.1	10.2	5.1	21.4	

	Farrell Drive Southbound				Baristo Road Westbound				Farrell Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	56	31	97	1	22	6	29	15	29	4	48	14	20	11	45	219
07:30 AM	17	67	65	149	2	46	6	54	22	57	4	83	26	55	21	102	388
07:45 AM	**46**	83	**96**	**225**	**3**	**93**	17	**113**	**27**	70	**5**	**102**	**53**	**82**	**33**	**168**	**608**
08:00 AM	19	**95**	33	147	3	27	**26**	56	16	**73**	5	94	33	39	22	94	391
Total Volume	92	301	225	618	9	188	55	252	80	229	18	327	126	196	87	409	1606
% App. Total	14.9	48.7	36.4		3.6	74.6	21.8		24.5	70	5.5		30.8	47.9	21.3		
PHF	.500	.792	.586	.687	.750	.505	.529	.558	.741	.784	.900	.801	.594	.598	.659	.609	.660

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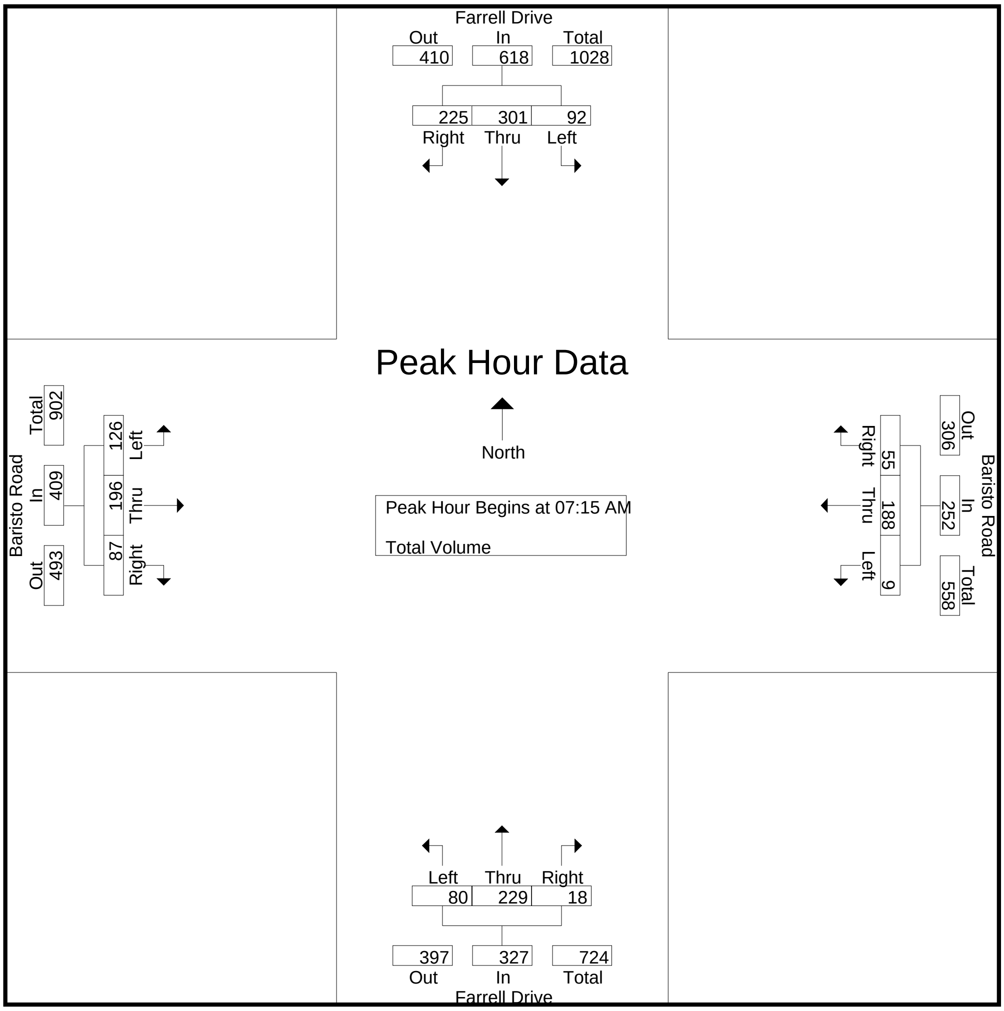

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	10	56	31	97	1	22	6	29	22	57	4	83	14	20	11	45
+15 mins.	17	67	65	149	2	46	6	54	**27**	70	**5**	**102**	26	55	21	102
+30 mins.	**46**	83	**96**	**225**	**3**	**93**	17	**113**	16	**73**	5	94	**53**	**82**	**33**	**168**
+45 mins.	19	**95**	33	147	3	27	**26**	56	10	61	3	74	33	39	22	94
Total Volume	92	301	225	618	9	188	55	252	75	261	17	353	126	196	87	409
% App. Total	14.9	48.7	36.4		3.6	74.6	21.8		21.2	73.9	4.8		30.8	47.9	21.3	
PHF	.500	.792	.586	.687	.750	.505	.529	.558	.694	.894	.850	.865	.594	.598	.659	.609

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City of Palm Springs
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Weather: Clear

File Name : PLSFABAMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound				Baristo Road Westbound				Farrell Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	8	81	6	95	5	20	5	30	13	70	2	85	2	20	14	36	246
11:15 AM	17	94	10	121	8	22	7	37	13	77	5	95	6	24	11	41	294
11:30 AM	14	81	15	110	4	22	11	37	14	72	5	91	5	21	12	38	276
11:45 AM	18	86	3	107	2	23	11	36	17	71	2	90	4	23	13	40	273
Total	57	342	34	433	19	87	34	140	57	290	14	361	17	88	50	155	1089
12:00 PM	18	78	14	110	5	26	13	44	14	72	3	89	8	20	16	44	287
12:15 PM	20	69	11	100	9	32	13	54	14	83	5	102	19	29	20	68	324
12:30 PM	18	85	8	111	3	28	12	43	20	69	5	94	12	19	20	51	299
12:45 PM	24	75	4	103	3	21	13	37	14	95	7	116	6	28	19	53	309
Total	80	307	37	424	20	107	51	178	62	319	20	401	45	96	75	216	1219
Grand Total	137	649	71	857	39	194	85	318	119	609	34	762	62	184	125	371	2308
Apprch %	16	75.7	8.3		12.3	61	26.7		15.6	79.9	4.5		16.7	49.6	33.7		
Total %	5.9	28.1	3.1	37.1	1.7	8.4	3.7	13.8	5.2	26.4	1.5	33	2.7	8	5.4	16.1	

	Farrell Drive Southbound				Baristo Road Westbound				Farrell Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	18	78	14	110	5	26	13	44	14	72	3	89	8	20	16	44	287
12:15 PM	20	69	11	100	9	32	13	54	14	83	5	102	19	29	20	68	324
12:30 PM	18	85	8	111	3	28	12	43	20	69	5	94	12	19	20	51	299
12:45 PM	24	75	4	103	3	21	13	37	14	95	7	116	6	28	19	53	309
Total Volume	80	307	37	424	20	107	51	178	62	319	20	401	45	96	75	216	1219
% App. Total	18.9	72.4	8.7		11.2	60.1	28.7		15.5	79.6	5		20.8	44.4	34.7		
PHF	.833	.903	.661	.955	.556	.836	.981	.824	.775	.839	.714	.864	.592	.828	.938	.794	.941

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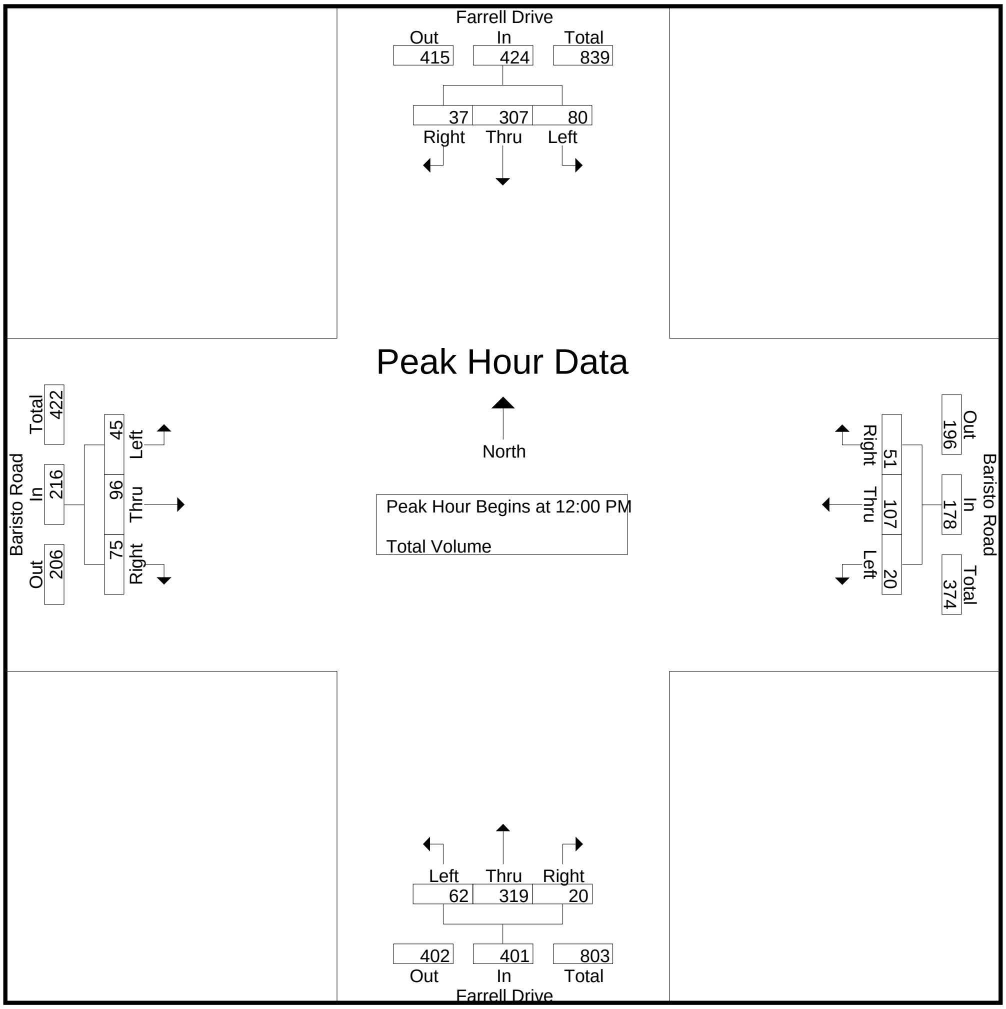

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:15 AM				12:00 PM				12:00 PM				12:00 PM			
+0 mins.	17	94	10	121	5	26	13	44	14	72	3	89	8	20	16	44
+15 mins.	14	81	15	110	9	32	13	54	14	83	5	102	19	29	20	68
+30 mins.	18	86	3	107	3	28	12	43	20	69	5	94	12	19	20	51
+45 mins.	18	78	14	110	3	21	13	37	14	95	7	116	6	28	19	53
Total Volume	67	339	42	448	20	107	51	178	62	319	20	401	45	96	75	216
% App. Total	15	75.7	9.4		11.2	60.1	28.7		15.5	79.6	5		20.8	44.4	34.7	
PHF	.931	.902	.700	.926	.556	.836	.981	.824	.775	.839	.714	.864	.592	.828	.938	.794

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Groups Printed- Total Volume

	Farrell Drive Southbound				Baristo Road Westbound				Farrell Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	36	84	23	143	3	32	25	60	19	100	3	122	36	80	28	144	469
02:45 PM	20	94	16	130	7	32	14	53	22	87	7	116	16	33	23	72	371
Total	56	178	39	273	10	64	39	113	41	187	10	238	52	113	51	216	840
03:00 PM	17	78	8	103	5	32	14	51	16	72	1	89	22	42	21	85	328
03:15 PM	14	91	11	116	3	35	13	51	21	73	3	97	11	28	22	61	325
03:30 PM	17	77	8	102	5	33	14	52	16	72	1	89	20	41	21	82	325
03:45 PM	14	90	13	117	3	35	13	51	21	73	3	97	11	31	22	64	329
Total	62	336	40	438	16	135	54	205	74	290	8	372	64	142	86	292	1307
04:00 PM	21	93	8	122	4	28	9	41	15	96	5	116	16	38	8	62	341
04:15 PM	18	56	11	85	1	27	17	45	18	89	3	110	26	44	14	84	324
04:30 PM	21	65	13	99	9	25	15	49	18	79	4	101	14	44	10	68	317
04:45 PM	13	102	19	134	6	30	11	47	18	91	4	113	7	34	11	52	346
Total	73	316	51	440	20	110	52	182	69	355	16	440	63	160	43	266	1328
Grand Total	191	830	130	1151	46	309	145	500	184	832	34	1050	179	415	180	774	3475
Apprch %	16.6	72.1	11.3		9.2	61.8	29		17.5	79.2	3.2		23.1	53.6	23.3		
Total %	5.5	23.9	3.7	33.1	1.3	8.9	4.2	14.4	5.3	23.9	1	30.2	5.2	11.9	5.2	22.3	

	Farrell Drive Southbound				Baristo Road Westbound				Farrell Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	36	84	23	143	3	32	25	60	19	100	3	122	36	80	28	144	469
02:45 PM	20	94	16	130	7	32	14	53	22	87	7	116	16	33	23	72	371
03:00 PM	17	78	8	103	5	32	14	51	16	72	1	89	22	42	21	85	328
03:15 PM	14	91	11	116	3	35	13	51	21	73	3	97	11	28	22	61	325
Total Volume	87	347	58	492	18	131	66	215	78	332	14	424	85	183	94	362	1493
% App. Total	17.7	70.5	11.8		8.4	60.9	30.7		18.4	78.3	3.3		23.5	50.6	26		
PHF	.604	.923	.630	.860	.643	.936	.660	.896	.886	.830	.500	.869	.590	.572	.839	.628	.796

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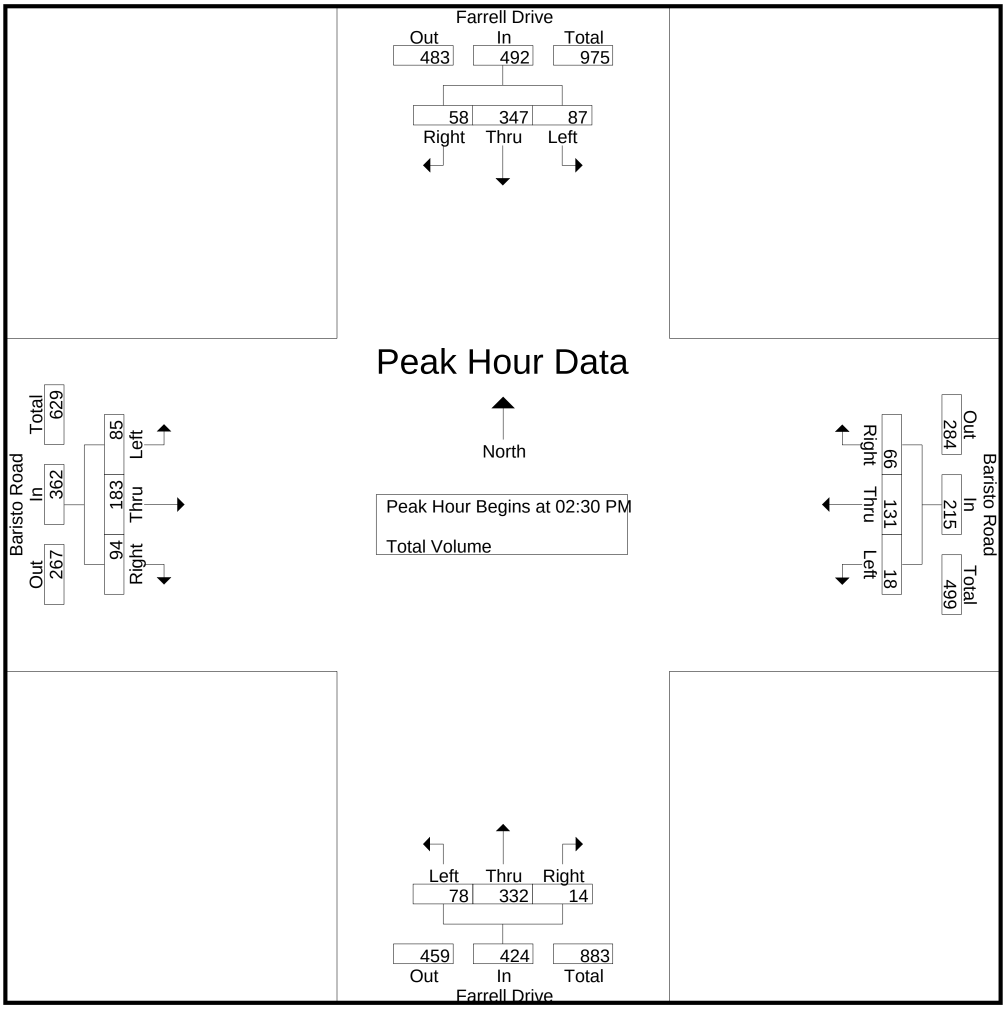

Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	02:30 PM				02:30 PM				04:00 PM				02:30 PM			
+0 mins.	36	84	23	143	3	32	25	60	15	96	5	116	36	80	28	144
+15 mins.	20	94	16	130	7	32	14	53	18	89	3	110	16	33	23	72
+30 mins.	17	78	8	103	5	32	14	51	18	79	4	101	22	42	21	85
+45 mins.	14	91	11	116	3	35	13	51	18	91	4	113	11	28	22	61
Total Volume	87	347	58	492	18	131	66	215	69	355	16	440	85	183	94	362
% App. Total	17.7	70.5	11.8		8.4	60.9	30.7		15.7	80.7	3.6		23.5	50.6	26	
PHF	.604	.923	.630	.860	.643	.936	.660	.896	.958	.924	.800	.948	.590	.572	.839	.628

Location: Palm Springs
N/S: Farrell Drive
E/W: Baristo Road

Date: 1/14/2015
File : PLSFABA

WEEKDAY

	North Leg Farrell Drive Pedestrians	East Leg Baristo Road Pedestrians	South Leg Farrell Drive Pedestrians	West Leg Baristo Road Pedestrians	TOTAL
6:30 AM	0	0	0	0	0
6:45 AM	2	3	0	2	7
7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	4	5
7:30 AM	0	1	0	0	1
7:45 AM	1	0	2	3	6
8:00 AM	1	1	0	1	3
8:15 AM	3	0	0	0	3
8:30 AM	2	1	2	0	5
8:45 AM	2	1	0	0	3
TOTAL VOLUMES:	11	7	5	10	33

	North Leg Farrell Drive Pedestrians	East Leg Baristo Road Pedestrians	South Leg Farrell Drive Pedestrians	West Leg Baristo Road Pedestrians	TOTAL
11:00 AM	0	0	3	0	3
11:15 AM	0	1	0	0	1
11:30 AM	2	3	0	0	5
11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	1	1
12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	0	0
12:45 PM	3	0	0	1	4
TOTAL VOLUMES:	5	4	3	2	14

	North Leg Farrell Drive Pedestrians	East Leg Baristo Road Pedestrians	South Leg Farrell Drive Pedestrians	West Leg Baristo Road Pedestrians	TOTAL
2:30 PM	0	0	2	0	2
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0
3:45 PM	0	2	2	2	6
4:00 PM	0	0	2	0	2
4:15 PM	2	0	0	0	2
4:30 PM	2	1	2	2	7
4:45 PM	0	0	0	0	0
TOTAL VOLUMES:	4	3	8	4	19

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Groups Printed- Total Volume

	Baristo Road Westbound			Compadre Road Northbound			Baristo Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
11:00 AM	0	21	21	3	0	3	27	4	31	55
11:15 AM	0	32	32	3	1	4	39	6	45	81
11:30 AM	0	27	27	6	5	11	37	3	40	78
11:45 AM	2	27	29	5	2	7	36	4	40	76
Total	2	107	109	17	8	25	139	17	156	290
12:00 PM	0	32	32	7	1	8	41	9	50	90
12:15 PM	2	40	42	10	2	12	41	6	47	101
12:30 PM	1	35	36	3	3	6	36	7	43	85
12:45 PM	1	33	34	2	3	5	45	4	49	88
Total	4	140	144	22	9	31	163	26	189	364
Grand Total	6	247	253	39	17	56	302	43	345	654
Apprch %	2.4	97.6		69.6	30.4		87.5	12.5		
Total %	0.9	37.8	38.7	6	2.6	8.6	46.2	6.6	52.8	

	Baristo Road Westbound			Compadre Road Northbound			Baristo Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	0	32	32	7	1	8	41	**9**	**50**	90
12:15 PM	**2**	**40**	**42**	**10**	2	**12**	41	6	47	**101**
12:30 PM	1	35	36	3	**3**	6	36	7	43	85
12:45 PM	1	33	34	2	3	5	**45**	4	49	88
Total Volume	4	140	144	22	9	31	163	26	189	364
% App. Total	2.8	97.2		71	29		86.2	13.8		
PHF	.500	.875	.857	.550	.750	.646	.906	.722	.945	.901

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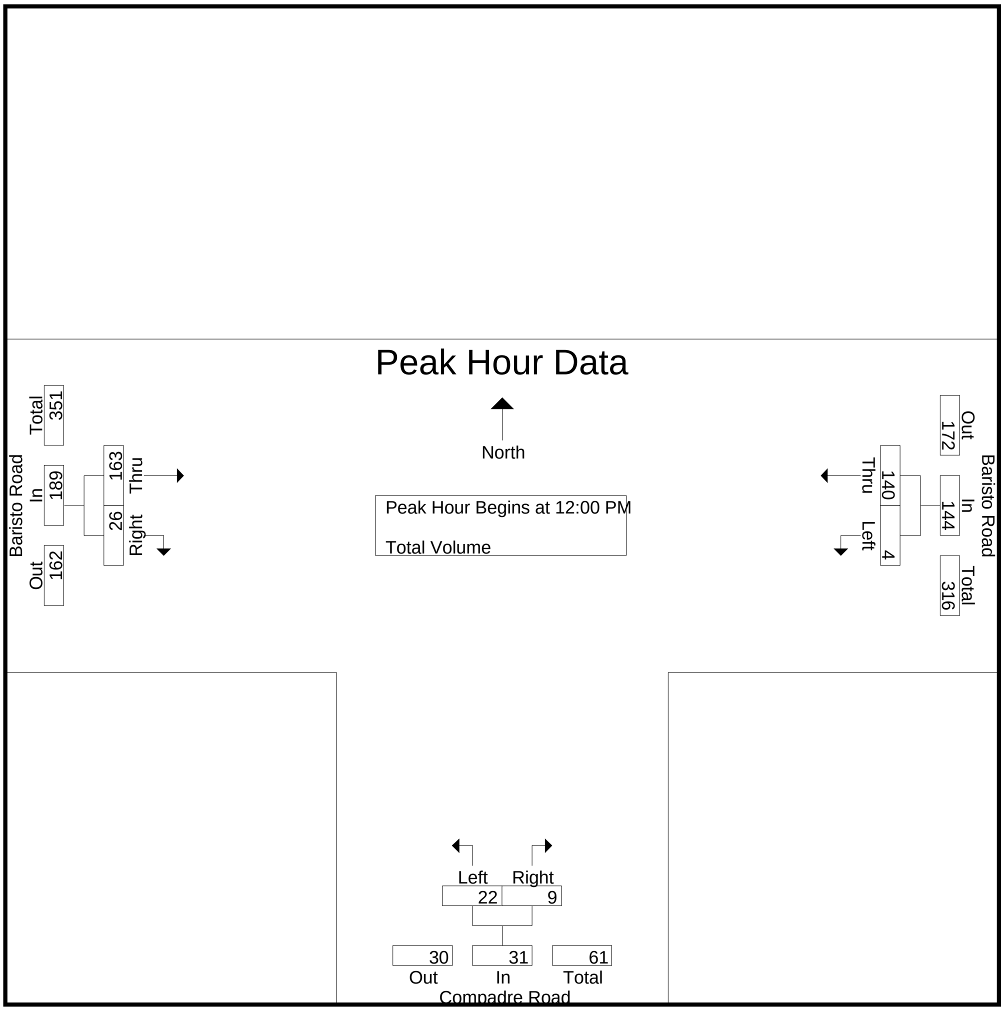

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:00 PM			11:30 AM			12:00 PM		
+0 mins.	0	32	32	6	**5**	11	41	**9**	**50**
+15 mins.	**2**	**40**	**42**	5	2	7	41	6	47
+30 mins.	1	35	36	7	1	8	36	7	43
+45 mins.	1	33	34	**10**	2	**12**	**45**	4	49
Total Volume	4	140	144	28	10	38	163	26	189
% App. Total	2.8	97.2		73.7	26.3		86.2	13.8	
PHF	.500	.875	.857	.700	.500	.792	.906	.722	.945

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Groups Printed- Total Volume

	Baristo Road Westbound			Compadre Road Northbound			Baristo Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:00 PM	0	44	44	23	8	31	88	13	101	176
03:15 PM	0	33	33	6	2	8	51	8	59	100
03:30 PM	1	35	36	13	4	17	49	6	55	108
03:45 PM	0	35	35	9	1	10	45	4	49	94
Total	1	147	148	51	15	66	233	31	264	478
04:00 PM	0	32	32	10	7	17	55	13	68	117
04:15 PM	0	32	32	11	4	15	58	8	66	113
04:30 PM	1	31	32	9	4	13	62	3	65	110
04:45 PM	1	36	37	10	1	11	47	5	52	100
Total	2	131	133	40	16	56	222	29	251	440
Grand Total	3	278	281	91	31	122	455	60	515	918
Apprch %	1.1	98.9		74.6	25.4		88.3	11.7		
Total %	0.3	30.3	30.6	9.9	3.4	13.3	49.6	6.5	56.1	

	Baristo Road Westbound			Compadre Road Northbound			Baristo Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	**44**	**44**	**23**	**8**	**31**	**88**	**13**	**101**	**176**
03:15 PM	0	33	33	6	2	8	51	8	59	100
03:30 PM	**1**	35	36	13	4	17	49	6	55	108
03:45 PM	0	35	35	9	1	10	45	4	49	94
Total Volume	1	147	148	51	15	66	233	31	264	478
% App. Total	0.7	99.3		77.3	22.7		88.3	11.7		
PHF	.250	.835	.841	.554	.469	.532	.662	.596	.653	.679

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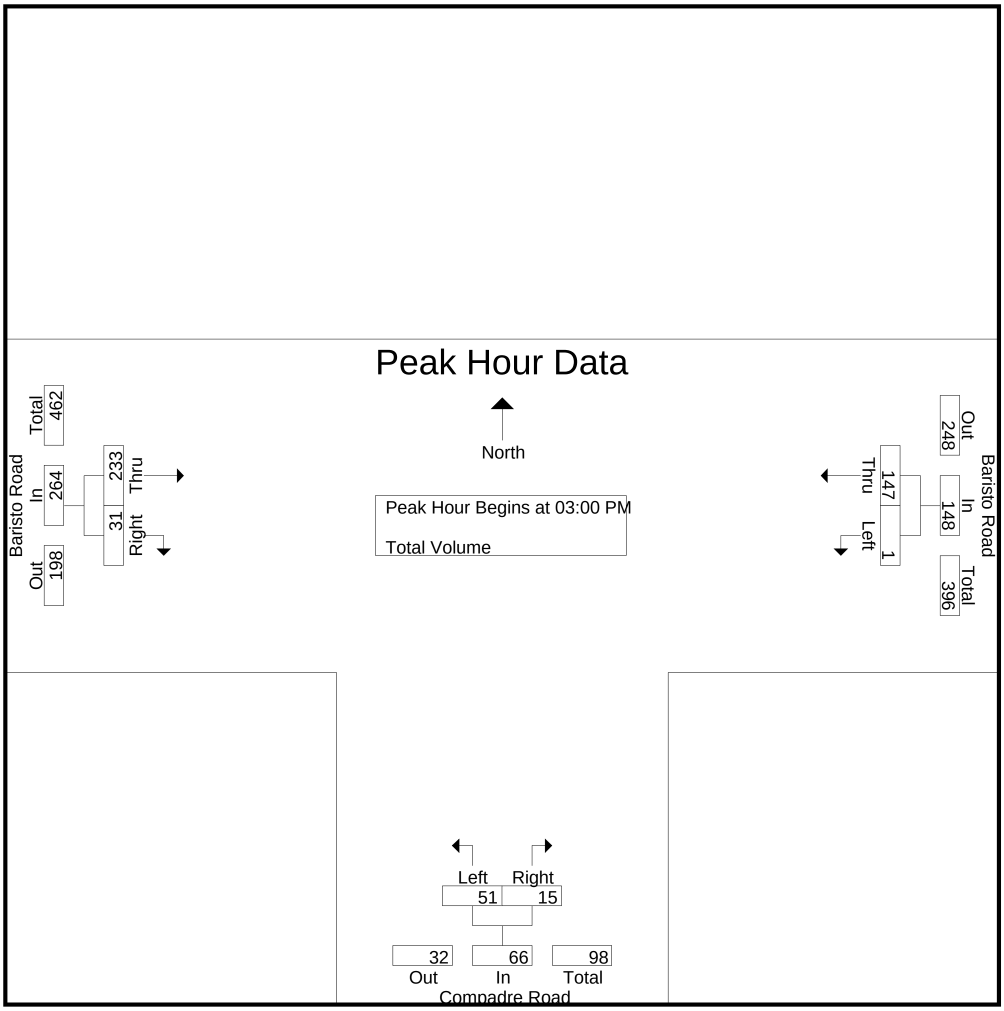

Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	0	**44**	**44**	**23**	**8**	**31**	**88**	**13**	**101**
+15 mins.	0	33	33	6	2	8	51	8	59
+30 mins.	**1**	35	36	13	4	17	49	6	55
+45 mins.	0	35	35	9	1	10	45	4	49
Total Volume	1	147	148	51	15	66	233	31	264
% App. Total	0.7	99.3		77.3	22.7		88.3	11.7	
PHF	.250	.835	.841	.554	.469	.532	.662	.596	.653

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Groups Printed- Total Volume

	Civic Drive Southbound				Baristo Road Westbound				Civic Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	11	0	3	14	0	21	5	26	1	0	0	1	3	27	0	30	71
11:15 AM	7	1	4	12	0	25	4	29	2	0	0	2	5	28	0	33	76
11:30 AM	7	0	3	10	1	19	4	24	1	1	0	2	3	33	1	37	73
11:45 AM	12	0	3	15	0	23	5	28	0	1	0	1	1	35	2	38	82
Total	37	1	13	51	1	88	18	107	4	2	0	6	12	123	3	138	302
12:00 PM	12	0	6	18	0	26	9	35	0	0	0	0	2	39	2	43	96
12:15 PM	4	0	8	12	0	28	6	34	6	0	0	6	2	37	2	41	93
12:30 PM	11	0	6	17	0	26	4	30	3	0	0	3	5	31	1	37	87
12:45 PM	7	0	5	12	0	22	4	26	3	0	0	3	4	41	4	49	90
Total	34	0	25	59	0	102	23	125	12	0	0	12	13	148	9	170	366
Grand Total	71	1	38	110	1	190	41	232	16	2	0	18	25	271	12	308	668
Apprch %	64.5	0.9	34.5		0.4	81.9	17.7		88.9	11.1	0		8.1	88	3.9		
Total %	10.6	0.1	5.7	16.5	0.1	28.4	6.1	34.7	2.4	0.3	0	2.7	3.7	40.6	1.8	46.1	

	Civic Drive Southbound				Baristo Road Westbound				Civic Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	**12**	0	6	**18**	0	26	**9**	**35**	0	0	0	0	2	39	2	43	**96**
12:15 PM	4	0	**8**	12	0	**28**	6	34	**6**	0	0	**6**	2	37	2	41	93
12:30 PM	11	0	6	17	0	26	4	30	3	0	0	3	**5**	31	1	37	87
12:45 PM	7	0	5	12	0	22	4	26	3	0	0	3	4	**41**	**4**	**49**	90
Total Volume	34	0	25	59	0	102	23	125	12	0	0	12	13	148	9	170	366
% App. Total	57.6	0	42.4		0	81.6	18.4		100	0	0		7.6	87.1	5.3		
PHF	.708	.000	.781	.819	.000	.911	.639	.893	.500	.000	.000	.500	.650	.902	.563	.867	.953

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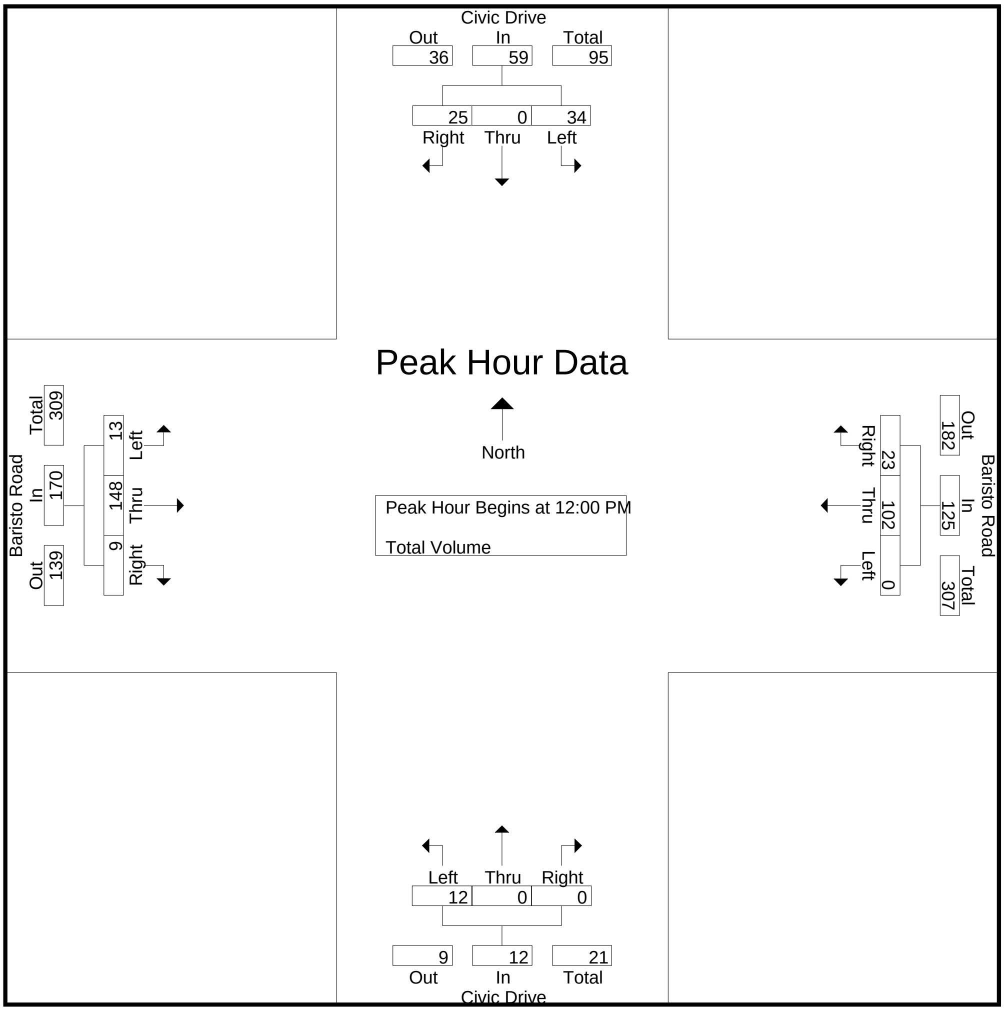

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:45 AM				11:45 AM				12:00 PM				12:00 PM			
+0 mins.	**12**	0	3	15	0	23	5	28	0	0	0	0	2	39	2	43
+15 mins.	12	0	6	**18**	0	26	**9**	**35**	**6**	0	0	**6**	2	37	2	41
+30 mins.	4	0	**8**	12	0	**28**	6	34	3	0	0	3	**5**	31	1	37
+45 mins.	11	0	6	17	0	26	4	30	3	0	0	3	4	**41**	**4**	**49**
Total Volume	39	0	23	62	0	103	24	127	12	0	0	12	13	148	9	170
% App. Total	62.9	0	37.1		0	81.1	18.9		100	0	0		7.6	87.1	5.3	
PHF	.813	.000	.719	.861	.000	.920	.667	.907	.500	.000	.000	.500	.650	.902	.563	.867

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Groups Printed- Total Volume

	Civic Drive Southbound				Baristo Road Westbound				Civic Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	1	5	6	0	37	5	42	0	0	0	0	2	92	1	95	143
03:15 PM	1	1	3	5	0	24	4	28	4	1	0	5	2	46	3	51	89
03:30 PM	6	0	7	13	0	29	5	34	1	0	0	1	4	45	3	52	100
03:45 PM	5	0	3	8	0	29	2	31	1	1	0	2	5	39	1	45	86
Total	12	2	18	32	0	119	16	135	6	2	0	8	13	222	8	243	418
04:00 PM	3	1	7	11	0	25	7	32	1	0	0	1	5	55	2	62	106
04:15 PM	3	1	7	11	0	22	5	27	1	0	0	1	4	51	3	58	97
04:30 PM	7	1	7	15	0	25	3	28	2	0	0	2	3	60	2	65	110
04:45 PM	6	0	4	10	0	32	1	33	1	0	0	1	3	43	1	47	91
Total	19	3	25	47	0	104	16	120	5	0	0	5	15	209	8	232	404
Grand Total	31	5	43	79	0	223	32	255	11	2	0	13	28	431	16	475	822
Apprch %	39.2	6.3	54.4		0	87.5	12.5		84.6	15.4	0		5.9	90.7	3.4		
Total %	3.8	0.6	5.2	9.6	0	27.1	3.9	31	1.3	0.2	0	1.6	3.4	52.4	1.9	57.8	

	Civic Drive Southbound				Baristo Road Westbound				Civic Drive Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	**1**	5	6	0	**37**	**5**	**42**	0	0	0	0	2	**92**	1	**95**	**143**
03:15 PM	1	1	3	5	0	24	4	28	**4**	**1**	0	**5**	2	46	**3**	51	89
03:30 PM	**6**	0	**7**	**13**	0	29	5	34	1	0	0	1	4	45	3	52	100
03:45 PM	5	0	3	8	0	29	2	31	1	1	0	2	**5**	39	1	45	86
Total Volume	12	2	18	32	0	119	16	135	6	2	0	8	13	222	8	243	418
% App. Total	37.5	6.2	56.2		0	88.1	11.9		75	25	0		5.3	91.4	3.3		
PHF	.500	.500	.643	.615	.000	.804	.800	.804	.375	.500	.000	.400	.650	.603	.667	.639	.731

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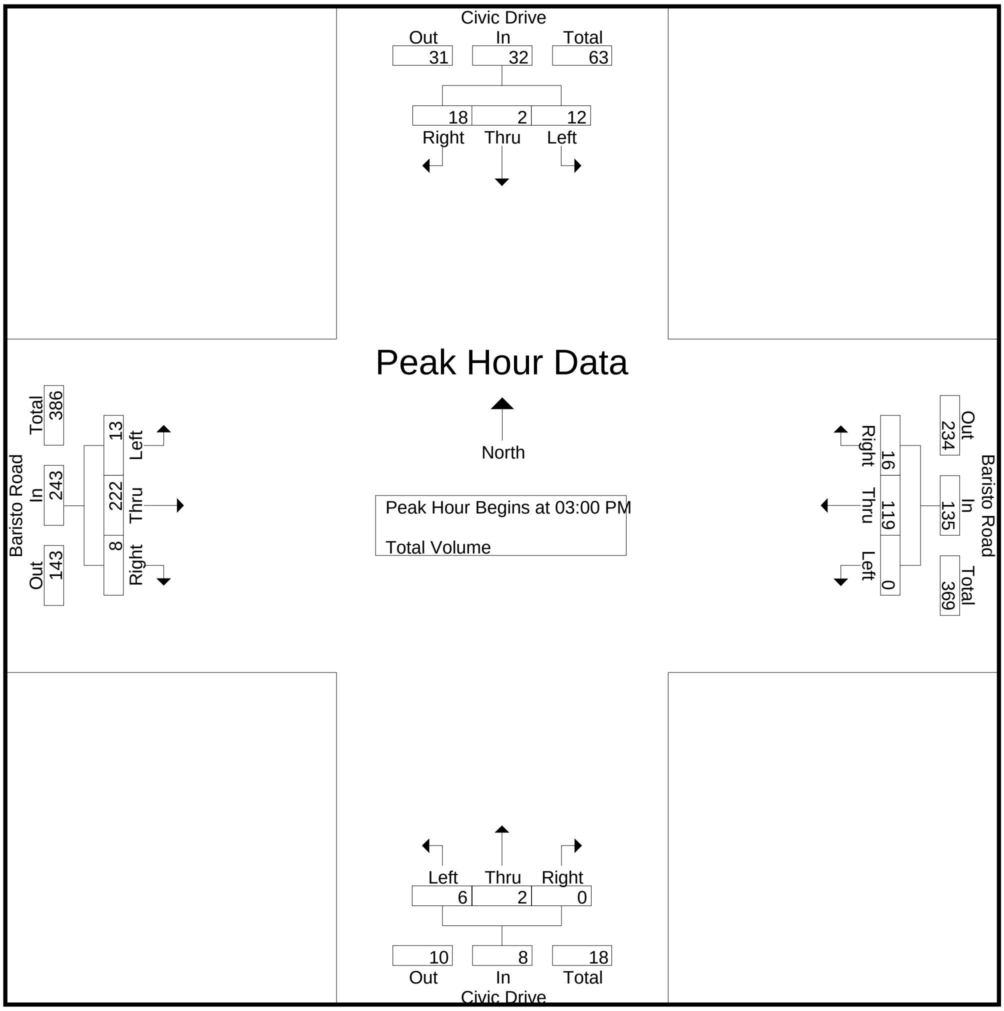
City of Palm Springs
N/S: Civic Drive
E/W: Baristo Road
Weather: Clear

File Name : PLSCIBAPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				03:00 PM				03:15 PM				03:00 PM			
+0 mins.	3	**1**	**7**	11	0	**37**	**5**	**42**	**4**	**1**	0	**5**	2	**92**	1	**95**
+15 mins.	3	1	7	11	0	24	4	28	1	0	0	1	2	46	**3**	51
+30 mins.	**7**	1	7	**15**	0	29	5	34	1	1	0	2	4	45	3	52
+45 mins.	6	0	4	10	0	29	2	31	1	0	0	1	**5**	39	1	45
Total Volume	19	3	25	47	0	119	16	135	7	2	0	9	13	222	8	243
% App. Total	40.4	6.4	53.2		0	88.1	11.9		77.8	22.2	0		5.3	91.4	3.3	
PHF	.679	.750	.893	.783	.000	.804	.800	.804	.438	.500	.000	.450	.650	.603	.667	.639

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City of Palm Springs
N/S: El Cielo Road
E/W: Baristo Road / Kirk Douglas Way
Weather: Clear

File Name : PLSECBAMD
Site Code : 00915014
Start Date : 1/14/2015

Groups Printed- Total Volume

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	29	110	3	142	0	0	0	0	20	101	2	123	2	21	15	38	303
11:15 AM	19	124	10	153	0	0	0	0	23	86	3	112	1	21	17	39	304
11:30 AM	28	118	8	154	0	0	0	0	17	116	5	138	1	22	22	45	337
11:45 AM	30	107	3	140	0	0	0	0	27	112	4	143	3	23	18	44	327
Total	106	459	24	589	0	0	0	0	87	415	14	516	7	87	72	166	1271
12:00 PM	30	148	4	182	0	0	0	0	33	134	3	170	3	26	18	47	399
12:15 PM	18	125	3	146	0	0	0	0	29	128	2	159	2	21	18	41	346
12:30 PM	31	83	4	118	0	0	0	0	28	108	3	139	2	28	16	46	303
12:45 PM	23	93	1	117	0	0	0	0	26	121	2	149	5	23	24	52	318
Total	102	449	12	563	0	0	0	0	116	491	10	617	12	98	76	186	1366
Grand Total	208	908	36	1152	0	0	0	0	203	906	24	1133	19	185	148	352	2637
Apprch %	18.1	78.8	3.1		0	0	0		17.9	80	2.1		5.4	52.6	42		
Total %	7.9	34.4	1.4	43.7	0	0	0	0	7.7	34.4	0.9	43	0.7	7	5.6	13.3	

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	28	118	**8**	154	0	0	0	0	17	116	**5**	138	1	22	**22**	45	337
11:45 AM	**30**	107	3	140	0	0	0	0	27	112	4	143	**3**	23	18	44	327
12:00 PM	30	**148**	4	**182**	0	0	0	0	**33**	**134**	3	**170**	3	**26**	18	**47**	**399**
12:15 PM	18	125	3	146	0	0	0	0	29	128	2	159	2	21	18	41	346
Total Volume	106	498	18	622	0	0	0	0	106	490	14	610	9	92	76	177	1409
% App. Total	17	80.1	2.9		0	0	0		17.4	80.3	2.3		5.1	52	42.9		
PHF	.883	.841	.563	.854	.000	.000	.000	.000	.803	.914	.700	.897	.750	.885	.864	.941	.883

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City of Palm Springs
N/S: El Cielo Road
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File Name : PLSECBAMD
Site Code : 00915014
Start Date : 1/14/2015
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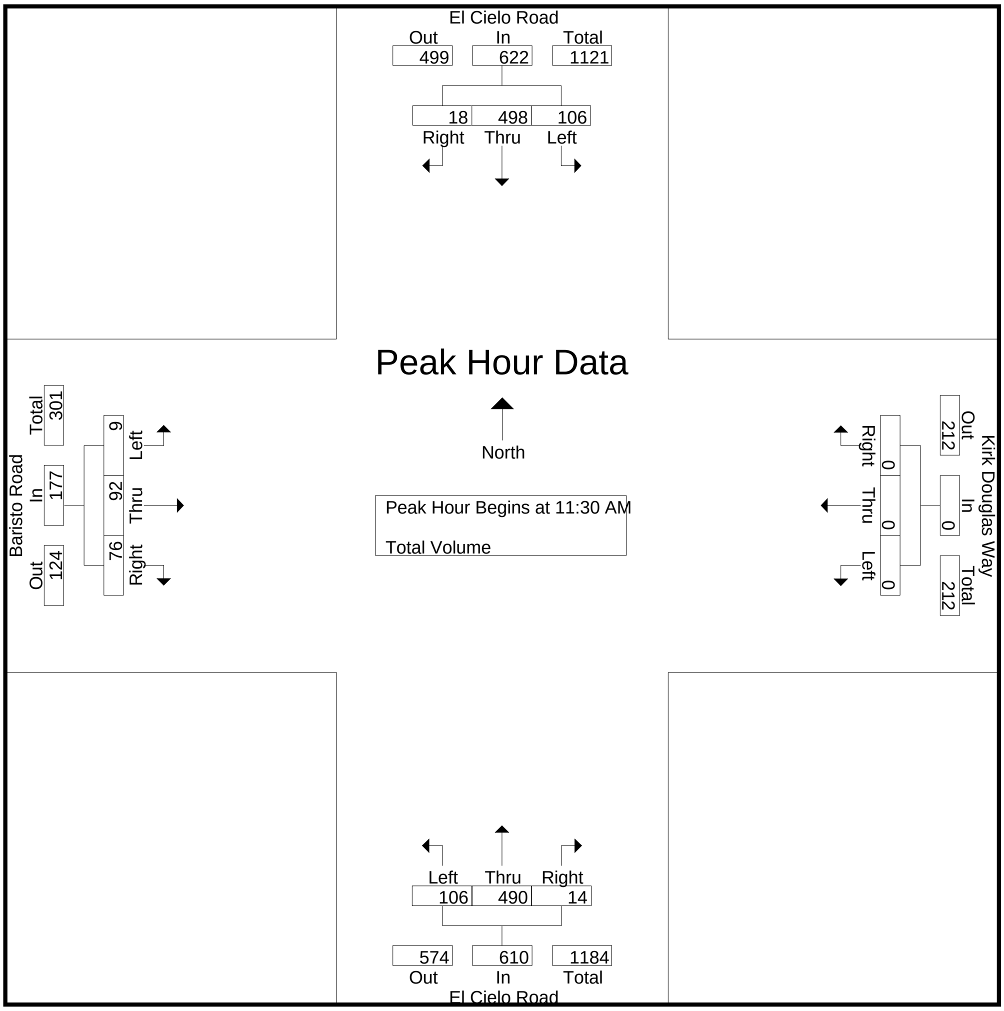

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:15 AM				11:00 AM				12:00 PM				12:00 PM			
+0 mins.	19	124	**10**	153	0	0	0	0	**33**	**134**	**3**	**170**	3	26	18	47
+15 mins.	28	118	8	154	0	0	0	0	29	128	2	159	2	21	18	41
+30 mins.	**30**	107	3	140	0	0	0	0	28	108	3	139	2	**28**	16	46
+45 mins.	30	**148**	4	**182**	0	0	0	0	26	121	2	149	**5**	23	**24**	**52**
Total Volume	107	497	25	629	0	0	0	0	116	491	10	617	12	98	76	186
% App. Total	17	79	4		0	0	0		18.8	79.6	1.6		6.5	52.7	40.9	
PHF	.892	.840	.625	.864	.000	.000	.000	.000	.879	.916	.833	.907	.600	.875	.792	.894

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City of Palm Springs
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File Name : PLSECBAPM
Site Code : 00915014
Start Date : 1/14/2015
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Groups Printed- Total Volume

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	33	72	2	107	0	0	0	0	43	122	2	167	1	63	35	99	373
03:15 PM	35	85	4	124	0	0	0	0	25	115	5	145	2	23	21	46	315
03:30 PM	26	87	2	115	0	0	0	0	31	111	1	143	4	25	22	51	309
03:45 PM	30	72	3	105	0	0	0	0	32	116	3	151	2	25	15	42	298
Total	124	316	11	451	0	0	0	0	131	464	11	606	9	136	93	238	1295
04:00 PM	34	95	2	131	0	0	0	0	29	108	6	143	3	34	15	52	326
04:15 PM	31	75	0	106	0	0	0	0	28	86	2	116	1	30	21	52	274
04:30 PM	42	115	0	157	0	0	0	0	22	88	4	114	2	40	25	67	338
04:45 PM	25	88	3	116	0	0	0	0	30	100	5	135	3	28	21	52	303
Total	132	373	5	510	0	0	0	0	109	382	17	508	9	132	82	223	1241
Grand Total	256	689	16	961	0	0	0	0	240	846	28	1114	18	268	175	461	2536
Apprch %	26.6	71.7	1.7		0	0	0		21.5	75.9	2.5		3.9	58.1	38		
Total %	10.1	27.2	0.6	37.9	0	0	0	0	9.5	33.4	1.1	43.9	0.7	10.6	6.9	18.2	

	El Cielo Road Southbound				Kirk Douglas Way Westbound				El Cielo Road Northbound				Baristo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	33	72	2	107	0	0	0	0	**43**	**122**	2	**167**	1	**63**	**35**	**99**	**373**
03:15 PM	**35**	85	**4**	**124**	0	0	0	0	25	115	**5**	145	2	23	21	46	315
03:30 PM	26	**87**	2	115	0	0	0	0	31	111	1	143	**4**	25	22	51	309
03:45 PM	30	72	3	105	0	0	0	0	32	116	3	151	2	25	15	42	298
Total Volume	124	316	11	451	0	0	0	0	131	464	11	606	9	136	93	238	1295
% App. Total	27.5	70.1	2.4		0	0	0		21.6	76.6	1.8		3.8	57.1	39.1		
PHF	.886	.908	.688	.909	.000	.000	.000	.000	.762	.951	.550	.907	.563	.540	.664	.601	.868

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File Name : PLSECBAPM
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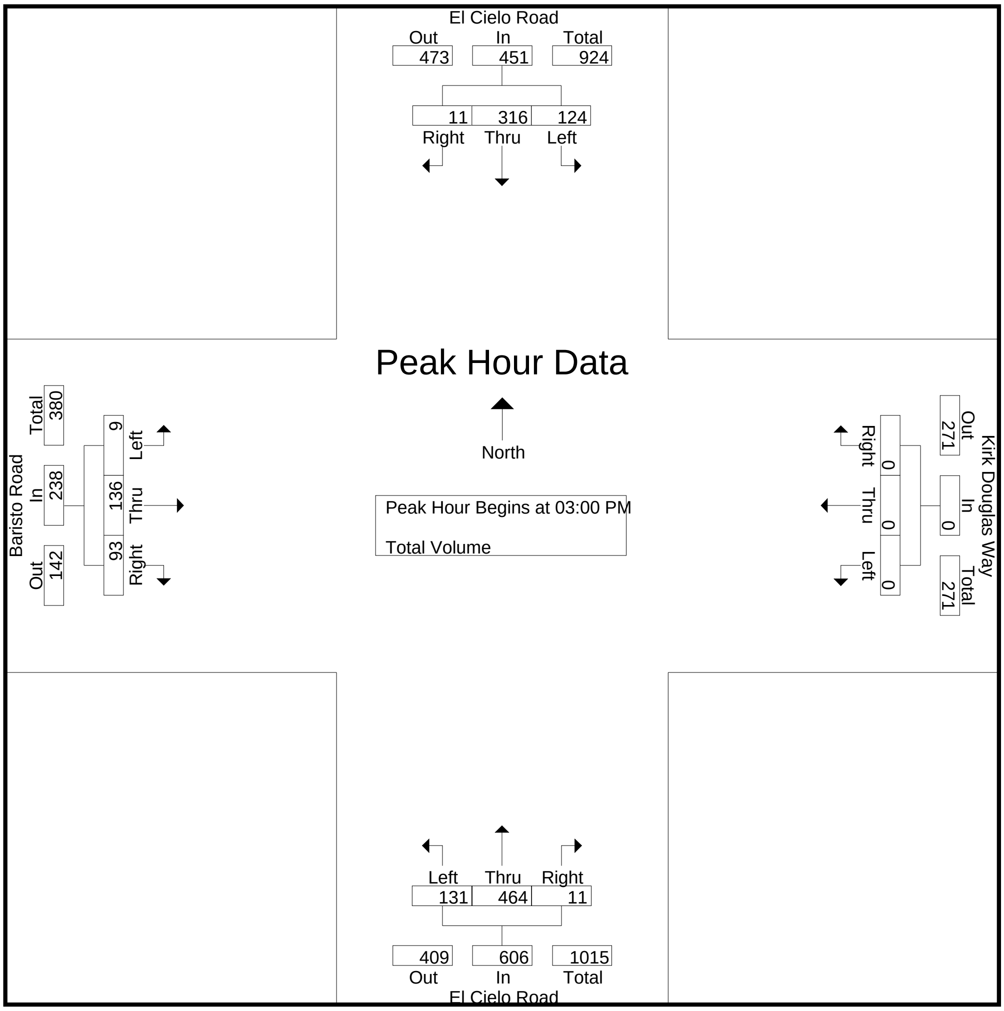

Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	34	95	2	131	0	0	0	0	**43**	**122**	2	**167**	1	**63**	**35**	**99**
+15 mins.	31	75	0	106	0	0	0	0	25	115	**5**	145	2	23	21	46
+30 mins.	**42**	**115**	0	**157**	0	0	0	0	31	111	1	143	**4**	25	22	51
+45 mins.	25	88	**3**	116	0	0	0	0	32	116	3	151	2	25	15	42
Total Volume	132	373	5	510	0	0	0	0	131	464	11	606	9	136	93	238
% App. Total	25.9	73.1	1		0	0	0		21.6	76.6	1.8		3.8	57.1	39.1	
PHF	.786	.811	.417	.812	.000	.000	.000	.000	.762	.951	.550	.907	.563	.540	.664	.601

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City of Palm Springs
N/S: Farrell Drive
E/W: Ramon Road
Weather: Clear

File Name : PLSFARAAM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound				Ramon Road Westbound				Farrell Drive Northbound				Ramon Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	15	15	4	34	8	71	10	89	7	21	4	32	1	52	2	55	210
06:45 AM	9	24	11	44	9	141	14	164	11	27	11	49	2	52	8	62	319
Total	24	39	15	78	17	212	24	253	18	48	15	81	3	104	10	117	529
07:00 AM	16	29	12	57	14	113	30	157	1	27	16	44	6	73	3	82	340
07:15 AM	17	27	14	58	9	149	19	177	4	23	14	41	4	81	3	88	364
07:30 AM	27	46	17	90	16	168	27	211	13	55	19	87	8	116	7	131	519
07:45 AM	34	38	31	103	17	232	35	284	26	68	26	120	12	171	5	188	695
Total	94	140	74	308	56	662	111	829	44	173	75	292	30	441	18	489	1918
08:00 AM	30	53	25	108	28	173	38	239	5	48	12	65	11	101	4	116	528
08:15 AM	21	41	3	65	22	180	21	223	8	50	23	81	8	113	7	128	497
08:30 AM	24	59	8	91	14	175	30	219	10	47	21	78	3	114	6	123	511
08:45 AM	31	47	11	89	24	199	28	251	5	38	26	69	9	128	2	139	548
Total	106	200	47	353	88	727	117	932	28	183	82	293	31	456	19	506	2084
Grand Total	224	379	136	739	161	1601	252	2014	90	404	172	666	64	1001	47	1112	4531
Apprch %	30.3	51.3	18.4		8	79.5	12.5		13.5	60.7	25.8		5.8	90	4.2		
Total %	4.9	8.4	3	16.3	3.6	35.3	5.6	44.4	2	8.9	3.8	14.7	1.4	22.1	1	24.5	

	Farrell Drive Southbound				Ramon Road Westbound				Farrell Drive Northbound				Ramon Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	27	46	17	90	16	168	27	211	13	55	19	87	8	116	**7**	131	519
07:45 AM	**34**	38	**31**	103	17	**232**	35	**284**	**26**	**68**	**26**	**120**	**12**	**171**	5	**188**	**695**
08:00 AM	30	**53**	25	**108**	**28**	173	**38**	239	5	48	12	65	11	101	4	116	528
08:15 AM	21	41	3	65	22	180	21	223	8	50	23	81	8	113	7	128	497
Total Volume	112	178	76	366	83	753	121	957	52	221	80	353	39	501	23	563	2239
% App. Total	30.6	48.6	20.8		8.7	78.7	12.6		14.7	62.6	22.7		6.9	89	4.1		
PHF	.824	.840	.613	.847	.741	.811	.796	.842	.500	.813	.769	.735	.813	.732	.821	.749	.805

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City of Palm Springs
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File Name : PLSFARAAM
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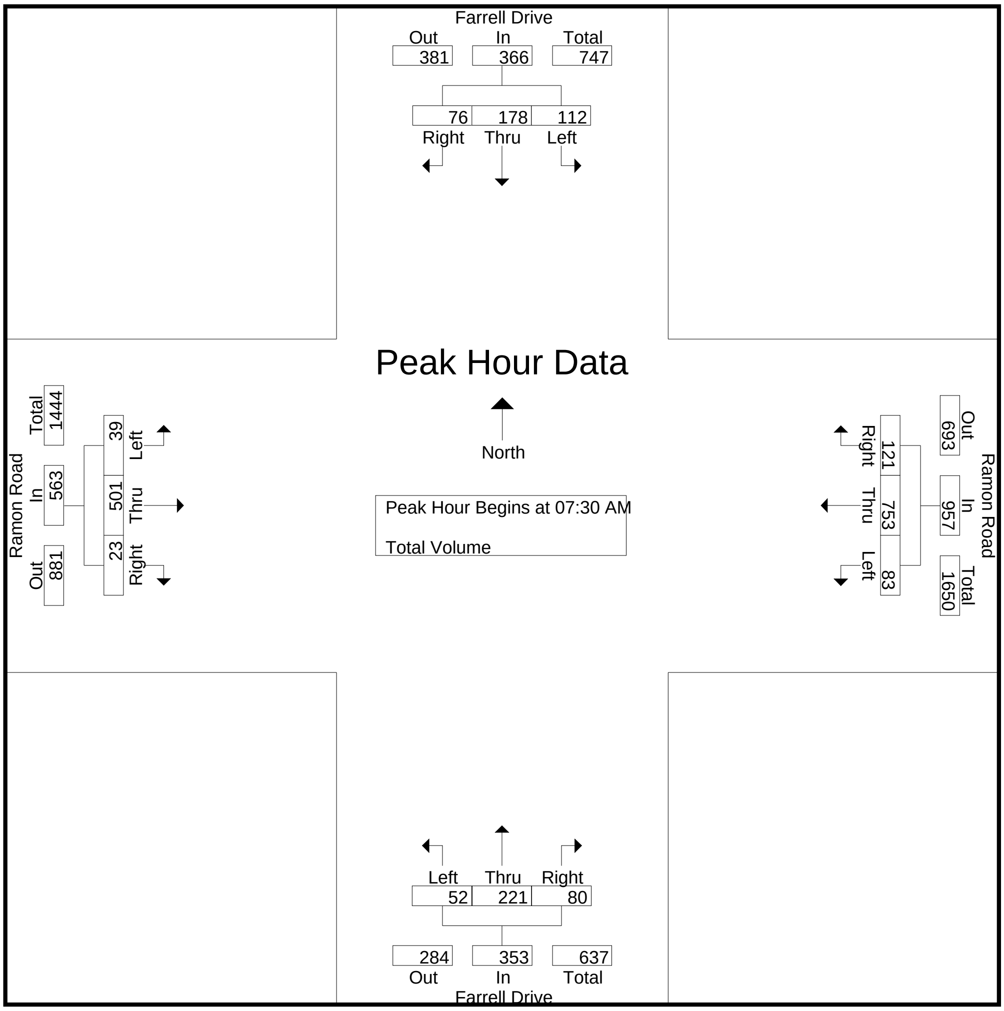

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:30 AM				07:30 AM			
+0 mins.	**34**	38	**31**	103	17	**232**	35	**284**	13	55	19	87	8	116	**7**	131
+15 mins.	30	53	25	**108**	**28**	173	**38**	239	**26**	**68**	**26**	**120**	**12**	**171**	5	**188**
+30 mins.	21	41	3	65	22	180	21	223	5	48	12	65	11	101	4	116
+45 mins.	24	**59**	8	91	14	175	30	219	8	50	23	81	8	113	7	128
Total Volume	109	191	67	367	81	760	124	965	52	221	80	353	39	501	23	563
% App. Total	29.7	52	18.3		8.4	78.8	12.8		14.7	62.6	22.7		6.9	89	4.1	
PHF	.801	.809	.540	.850	.723	.819	.816	.849	.500	.813	.769	.735	.813	.732	.821	.749

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City of Palm Springs
N/S: Farrell Drive
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File Name : PLSFARAMD
Site Code : 00915014
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Groups Printed- Total Volume

	Farrell Drive Southbound				Ramon Road Westbound				Farrell Drive Northbound				Ramon Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	40	57	16	113	13	210	40	263	9	41	23	73	4	185	11	200	649
11:15 AM	46	50	14	110	18	214	43	275	10	53	25	88	4	167	11	182	655
11:30 AM	41	54	10	105	21	228	33	282	8	44	26	78	7	170	8	185	650
11:45 AM	33	50	10	93	19	234	39	292	6	42	21	69	9	175	12	196	650
Total	160	211	50	421	71	886	155	1112	33	180	95	308	24	697	42	763	2604
12:00 PM	33	64	14	111	21	203	34	258	9	55	19	83	6	182	9	197	649
12:15 PM	34	56	15	105	20	238	33	291	10	51	26	87	6	180	9	195	678
12:30 PM	37	62	10	109	20	238	46	304	9	44	24	77	15	167	12	194	684
12:45 PM	34	44	12	90	23	243	47	313	10	60	34	104	9	182	10	201	708
Total	138	226	51	415	84	922	160	1166	38	210	103	351	36	711	40	787	2719
Grand Total	298	437	101	836	155	1808	315	2278	71	390	198	659	60	1408	82	1550	5323
Apprch %	35.6	52.3	12.1		6.8	79.4	13.8		10.8	59.2	30		3.9	90.8	5.3		
Total %	5.6	8.2	1.9	15.7	2.9	34	5.9	42.8	1.3	7.3	3.7	12.4	1.1	26.5	1.5	29.1	

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:00 PM

	Farrell Drive Southbound				Ramon Road Westbound				Farrell Drive Northbound				Ramon Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
12:00 PM	33	**64**	14	**111**	21	203	34	258	9	55	19	83	6	**182**	9	197	649
12:15 PM	34	56	**15**	105	20	238	33	291	**10**	51	26	87	6	180	9	195	678
12:30 PM	**37**	62	10	109	20	238	46	304	9	44	24	77	**15**	167	**12**	194	684
12:45 PM	34	44	12	90	**23**	**243**	**47**	**313**	10	**60**	**34**	**104**	9	182	10	**201**	**708**
Total Volume	138	226	51	415	84	922	160	1166	38	210	103	351	36	711	40	787	2719
% App. Total	33.3	54.5	12.3		7.2	79.1	13.7		10.8	59.8	29.3		4.6	90.3	5.1		
PHF	.932	.883	.850	.935	.913	.949	.851	.931	.950	.875	.757	.844	.600	.977	.833	.979	.960

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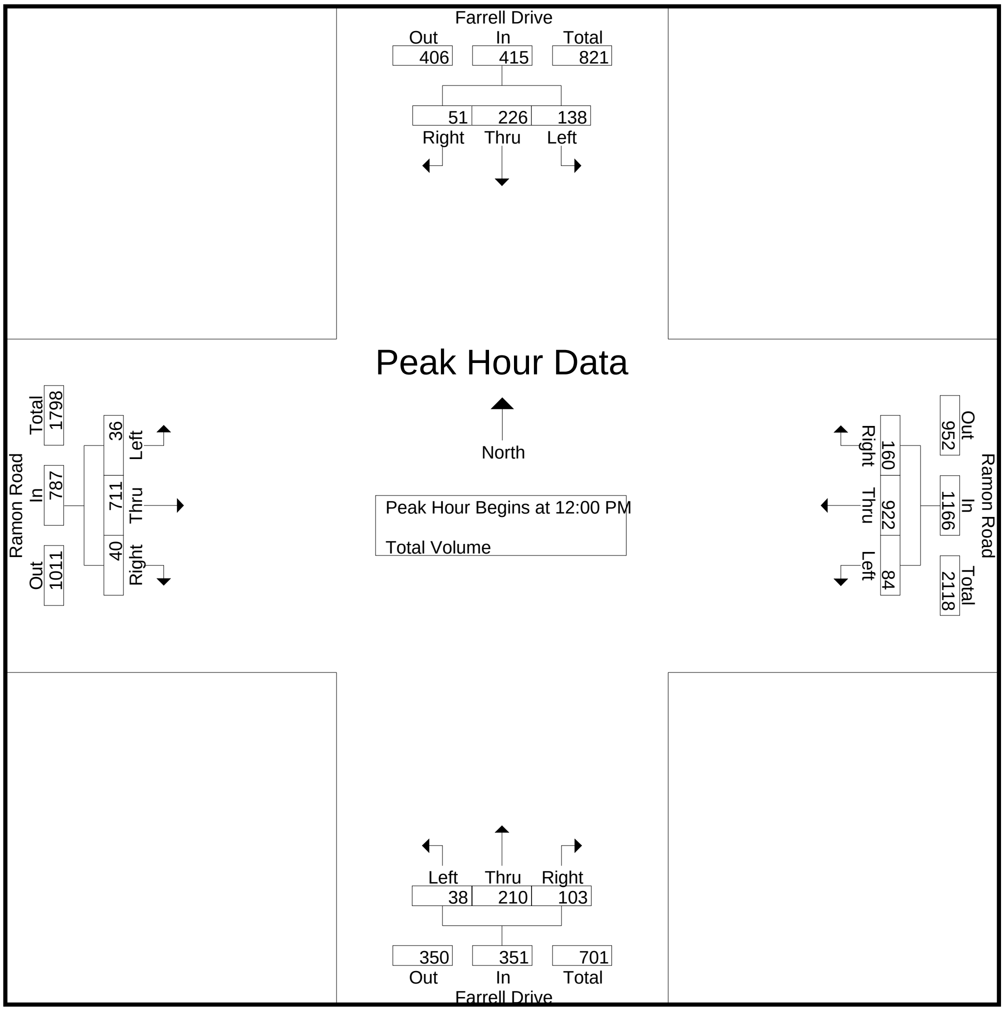
City of Palm Springs
N/S: Farrell Drive
E/W: Ramon Road
Weather: Clear

File Name : PLSFARAMD
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:00 AM				12:00 PM				12:00 PM				12:00 PM			
+0 mins.	40	**57**	**16**	**113**	21	203	34	258	9	55	19	83	6	**182**	9	197
+15 mins.	**46**	50	14	110	20	238	33	291	**10**	51	26	87	6	180	9	195
+30 mins.	41	54	10	105	20	238	46	304	9	44	24	77	**15**	167	**12**	194
+45 mins.	33	50	10	93	**23**	**243**	**47**	**313**	10	**60**	**34**	**104**	9	182	10	**201**
Total Volume	160	211	50	421	84	922	160	1166	38	210	103	351	36	711	40	787
% App. Total	38	50.1	11.9		7.2	79.1	13.7		10.8	59.8	29.3		4.6	90.3	5.1	
PHF	.870	.925	.781	.931	.913	.949	.851	.931	.950	.875	.757	.844	.600	.977	.833	.979

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City of Palm Springs
N/S: Farrell Drive
E/W: Ramon Road
Weather: Clear

File Name : PLSFARAPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 1

Groups Printed- Total Volume

	Farrell Drive Southbound				Ramon Road Westbound				Farrell Drive Northbound				Ramon Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	48	57	18	123	18	214	57	289	5	48	19	72	9	224	7	240	724
02:45 PM	64	61	11	136	21	203	55	279	9	74	30	113	14	239	11	264	792
Total	112	118	29	259	39	417	112	568	14	122	49	185	23	463	18	504	1516
03:00 PM	44	54	22	120	29	222	43	294	8	56	19	83	11	239	12	262	759
03:15 PM	55	67	14	136	13	176	44	233	10	71	25	106	10	212	13	235	710
03:30 PM	34	57	8	99	16	240	29	285	8	60	37	105	10	225	8	243	732
03:45 PM	30	66	12	108	13	244	37	294	7	40	27	74	9	181	8	198	674
Total	163	244	56	463	71	882	153	1106	33	227	108	368	40	857	41	938	2875
04:00 PM	37	53	12	102	23	223	38	284	12	70	21	103	14	215	10	239	728
04:15 PM	38	37	13	88	10	188	27	225	13	63	23	99	11	167	9	187	599
04:30 PM	27	42	14	83	24	233	34	291	7	53	20	80	9	223	6	238	692
04:45 PM	35	67	24	126	10	228	24	262	12	67	24	103	5	146	11	162	653
Total	137	199	63	399	67	872	123	1062	44	253	88	385	39	751	36	826	2672
Grand Total	412	561	148	1121	177	2171	388	2736	91	602	245	938	102	2071	95	2268	7063
Apprch %	36.8	50	13.2		6.5	79.3	14.2		9.7	64.2	26.1		4.5	91.3	4.2		
Total %	5.8	7.9	2.1	15.9	2.5	30.7	5.5	38.7	1.3	8.5	3.5	13.3	1.4	29.3	1.3	32.1	

	Farrell Drive Southbound				Ramon Road Westbound				Farrell Drive Northbound				Ramon Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:45 PM																	
02:45 PM	**64**	61	11	**136**	21	203	**55**	279	9	**74**	30	**113**	**14**	**239**	11	**264**	**792**
03:00 PM	44	54	**22**	120	**29**	222	43	**294**	8	56	19	83	11	239	12	262	759
03:15 PM	55	**67**	14	136	13	176	44	233	**10**	71	25	106	10	212	**13**	235	710
03:30 PM	34	57	8	99	16	**240**	29	285	8	60	**37**	105	10	225	8	243	732
Total Volume	197	239	55	491	79	841	171	1091	35	261	111	407	45	915	44	1004	2993
% App. Total	40.1	48.7	11.2		7.2	77.1	15.7		8.6	64.1	27.3		4.5	91.1	4.4		
PHF	.770	.892	.625	.903	.681	.876	.777	.928	.875	.882	.750	.900	.804	.957	.846	.951	.945

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City of Palm Springs
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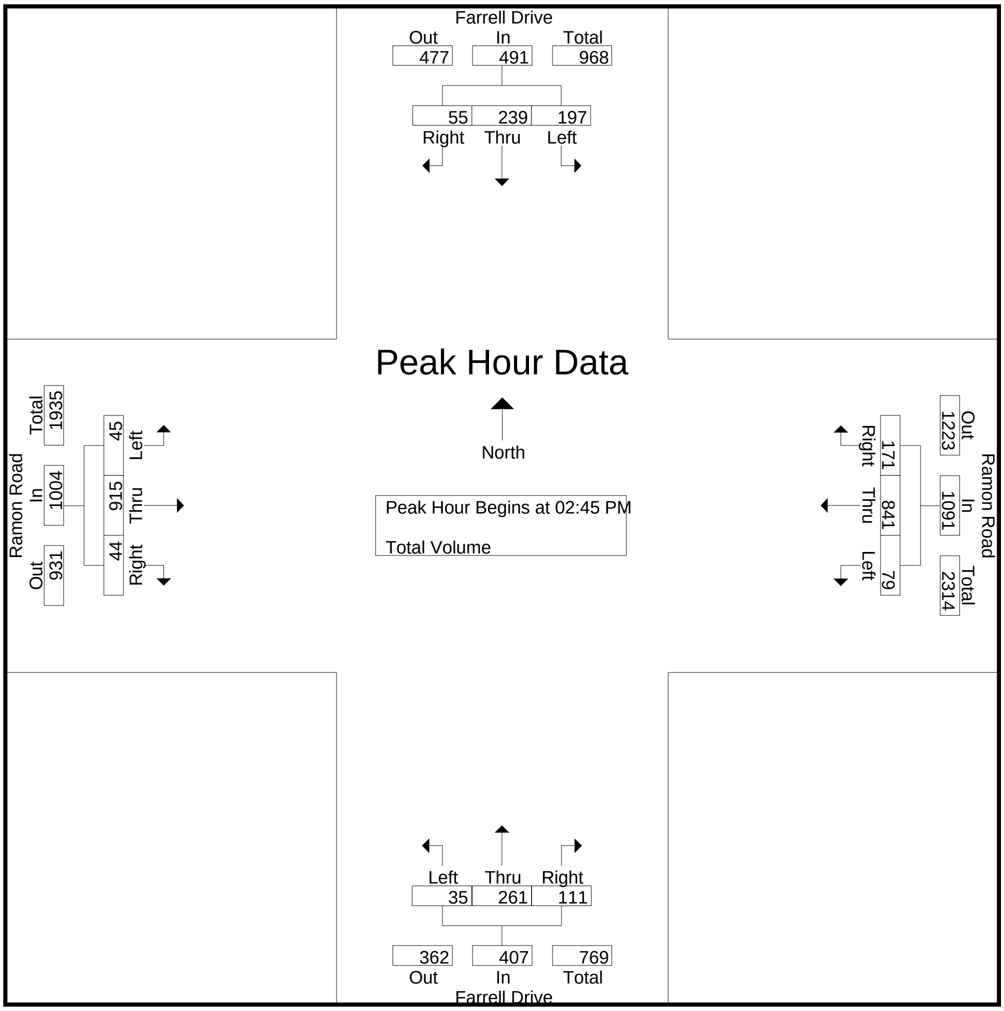
File Name : PLSFARAPM
Site Code : 00915014
Start Date : 1/14/2015
Page No : 2



Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	02:30 PM				03:00 PM				02:45 PM				02:45 PM			
+0 mins.	48	57	18	123	**29**	222	43	**294**	9	**74**	30	**113**	**14**	**239**	11	**264**
+15 mins.	**64**	61	11	**136**	13	176	**44**	233	8	56	19	83	11	239	12	262
+30 mins.	44	54	**22**	120	16	240	29	285	**10**	71	25	106	10	212	**13**	235
+45 mins.	55	**67**	14	136	13	**244**	37	294	8	60	**37**	105	10	225	8	243
Total Volume	211	239	65	515	71	882	153	1106	35	261	111	407	45	915	44	1004
% App. Total	41	46.4	12.6		6.4	79.7	13.8		8.6	64.1	27.3		4.5	91.1	4.4	
PHF	.824	.892	.739	.947	.612	.904	.869	.940	.875	.882	.750	.900	.804	.957	.846	.951

Location: Palm Springs
N/S: Farrell Drive
E/W: Ramon Road

Date: 1/14/2015
File : PLSFARA

WEEKDAY

	North Leg Farrell Drive	East Leg Ramon Road	South Leg Farrell Drive	West Leg Ramon Road	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
6:30 AM	2	1	1	0	4
6:45 AM	0	0	0	3	3
7:00 AM	2	0	0	0	2
7:15 AM	6	7	3	1	17
7:30 AM	4	5	2	5	16
7:45 AM	9	2	5	2	18
8:00 AM	0	3	1	0	4
8:15 AM	1	0	4	0	5
8:30 AM	1	4	5	8	18
8:45 AM	1	0	0	1	2
TOTAL VOLUMES:	26	22	21	20	89

	North Leg Farrell Drive	East Leg Ramon Road	South Leg Farrell Drive	West Leg Ramon Road	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
11:00 AM	0	3	0	0	3
11:15 AM	0	0	0	0	0
11:30 AM	0	0	3	2	5
11:45 AM	1	2	0	0	3
12:00 PM	3	2	0	1	6
12:15 PM	5	0	1	2	8
12:30 PM	0	1	2	2	5
12:45 PM	1	4	0	1	6
TOTAL VOLUMES:	10	12	6	8	36

	North Leg Farrell Drive	East Leg Ramon Road	South Leg Farrell Drive	West Leg Ramon Road	
	Pedestrians	**Pedestrians**	**Pedestrians**	**Pedestrians**	TOTAL
2:30 PM	3	2	1	1	7
2:45 PM	15	2	3	6	26
3:00 PM	13	1	1	1	16
3:15 PM	1	0	1	5	7
3:30 PM	1	1	1	1	4
3:45 PM	2	1	2	0	5
4:00 PM	1	2	2	7	12
4:15 PM	0	1	0	0	1
4:30 PM	2	1	0	0	3
4:45 PM	0	0	1	0	1
TOTAL VOLUMES:	38	11	12	21	82

Appendix C

HCM 2000 INTERSECTION ANALYSIS
METHODOLOGY AND WORKSHEETS

Appendix C
Highway Capacity Manual
Unsignalized Intersection Methodology

Some of the key intersections in the study area are unsignalized and controlled by STOP signs on one or more of the approaches. Unsignalized intersections are typically categorized as either two-way stop-controlled (TWSC) or all-way stop-controlled (AWSC) intersections. At TWSC intersections, the approaches controlled by the STOP signs (either public streets or private driveways) are referred to as the minor-street approaches. The intersection approaches that are not controlled by STOP signs are called the major-street approaches.

To evaluate the ability of these intersections to serve traffic demands during peak hours, the capacity is determined for each minor approach movement and the left-turn movements from the major street onto the minor street, and then compared to the demand for each movement. The methodology utilized to determine the maximum capacity of the minor approach movements and the left turn onto the minor street (in passenger car equivalents per hour or PCPH) accounts for approach grade and speed, heavy vehicle mix, lane configuration, and type of traffic control. It allows the maximum potential capacity to be determined from the conflicting volumes and the critical gap associated with each type of vehicle maneuver. Once the capacity of each of the critical movements is calculated, the anticipated delay and the level of service for each of the intersection movements and each minor approach can be evaluated. Table C-1 shows the average control delay range associated with each level of service at unsignalized intersections.

Table C-1
Unsignalized Intersection Level of Service Criteria[a]

Level of Service[b]	Average Control Delay (Seconds/Vehicle)
A	≤ 10.0
B	>10.0 and ≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤35.0
E	>35.0 and ≤50.0
F	> 50.0

a. Source: *Highway Capacity Manual,* Special Report 209", Transportation Research Board, 2000; pg. 17-2 and 17-32.
b. Note that a level of service is not defined for the overall TWSC intersection, but rather for individual movements and intersection approaches.

Typically, the movement with the longest average control delay or worst level or service defines the overall intersection evaluation; however, this may be tempered by engineering judgment, when conditions warrant it. Although the level of service is primarily related to the average control delay, which is given in terms of seconds of delay per vehicle by minor movement and intersection approach, other performance measures for TWSC and AWSC intersections include: delay to major street through vehicles, queue length, and volume-to-capacity ratio.

Left turns from the minor leg may experience delay consistent with LOS F operation, while the major street through movements experience little or no delay and LOS A. Since the major-street through movements typically accommodate the majority of the traffic demand at the intersection, the overall intersection LOS would most likely be LOS A or LOS B. If the delay for the traffic on the minor leg is reduced by installing a traffic signal, the overall intersection delay will increase, as large numbers of vehicles on the major through moves are delayed by the new signal. The increase in total delay may lower the overall intersection LOS. For this reason, excessive delays on the minor legs of two-way stop intersections are only mitigated with a traffic signal when the minor street can no longer effectively provide access, as evidenced by traffic signal warrants being met. This eliminates situations where a large number of motorists are delayed for the benefit of only a few cars.

A two-way left-turn lane (TWLTL) or a raised or striped median allows a minor stream vehicle to cross one major traffic stream at a time. It results in two-stage gap acceptance, provided that sufficient storage space is available in the median or TWLTL to store vehicles. It reduces the critical gap (the minimum gap that would be acceptable to a driver on the minor approach) in the stream of traffic on the major street and increases the capacity of the minor approach.

A flared approach on the minor street increases the capacity of the minor street approach. It allows more vehicles to be served simultaneously. Increasing the length of the flared pavement improves access to the additional lane. Even with a flared approach, vehicles seeking to use the flared lane may be delayed by queued vehicles blocking access to the additional lane. Therefore, flaring does not increase the capacity of the approach to the extent that an additional lane would.

The presence of traffic signals upstream from the intersection on the major street will produce platoons and affect the capacity of the minor street approaches if the signal is located within 0.25 mile of the intersection. Four flow regimes can result: no platoons, platoons from the left only, platoons from the right only and platoons from both directions.

Appendix C
Highway Capacity Manual
Signalized Intersection Methodology

The *Highway Capacity Manual* (HCM 2000) signalized intersection capacity and level of service methodology addresses the capacity and level of service of intersection approach land groups as well as the level of service of the intersection as a whole. The analysis is undertaken in terms of the ratio of demand flow rate to capacity (V/C ratio) for individual movements during a peak 15-minute interval and the composite V/C ratio for the sum of critical movements or lane groups within the intersection. The level of service is determined based upon average control delay per vehicle, as shown in Table C-2 below.

Table C-2
2000 HCM Signalized Intersection LOS Criteria

Level of Service	Traffic Flow Characteristics	Avg. Control Delay (Seconds/Vehicle)
A	Extremely favorable progression with very low control delay. Most vehicles arrive during the green phase and do not stop.	≤ 10
B	Good progression and short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10 and ≤ 20
C	Satisfactory operation with fair progression and longer cycle lengths. Individual cycle failures may begin to appear. A significant number of vehicles stop but many pass through without stopping.	> 20 and ≤ 35
D	Tolerable delay where congestion becomes more noticeable and many vehicles stop. Many vehicles stop. Individual cycle failures are noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios.	> 35 and ≤ 55
E	Unstable flow with poor progression, frequent cycle failures, long cycle lengths and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered the limit of acceptable delay by many agencies.	> 55 and ≤ 80
F	Oversaturation with arrival flow rates exceeding the capacity of the intersection and many individual cycle failures. Poor progression and long cycle lengths as well as high V/C ratios and high delay values occur at LOS F. Considered unacceptable to most drivers.	> 80

Source: *Highway Capacity Manual,* Special Report 209, Transportation Research Board, Fourth Edition, 2000; pp. 10-16.

SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	38	43	89	20	46	75	75	433	23	44	360	13
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		91	100		74	84	84	513		49	419	
Lane Group Capacity		228	1495		247	1495	675	2179		614	2184	
v/c Ratio		0.40	0.07		0.30	0.06	0.12	0.24		0.08	0.19	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.2	0.0		33.7	0.0	2.9	6.3		2.9	6.1	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.1	0.0		0.7	0.0	0.1	0.1		0.1	0.0	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		35.4	0.0		34.3	0.0	3.0	6.4		3.0	6.1	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.9			16.1			5.9			5.8		
Approach LOS	B			B			A			A		
Intersection Delay	8.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	51	27	96	17	35	84	75	569	15	37	488	17
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		93	114		62	100	89	695		44	600	
Lane Group Capacity		210	1495		246	1495	563	2188		511	2185	
v/c Ratio		0.44	0.08		0.25	0.07	0.16	0.32		0.09	0.27	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.5	0.0		33.4	0.0	3.1	6.7		3.1	6.5	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.5	0.0		0.5	0.0	0.1	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.0	0.0		33.9	0.0	3.2	6.8		3.2	6.6	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.2			13.0			6.4			6.3		
Approach LOS	B			B			A			A		
Intersection Delay	8.1			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	38	43	90	20	46	75	76	437	23	44	366	13
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		91	101		74	84	85	517		49	426	
Lane Group Capacity		228	1495		247	1495	670	2179		612	2184	
v/c Ratio		0.40	0.07		0.30	0.06	0.13	0.24		0.08	0.20	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.2	0.0		33.7	0.0	3.0	6.3		2.9	6.1	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.1	0.0		0.7	0.0	0.1	0.1		0.1	0.0	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		35.4	0.0		34.3	0.0	3.0	6.4		3.0	6.2	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.8			16.1			5.9			5.8		
Approach LOS	B			B			A			A		
Intersection Delay	8.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	51	27	96	17	35	84	76	573	15	37	493	17
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		93	114		62	100	90	700		44	607	
Lane Group Capacity		210	1495		246	1495	558	2188		508	2185	
v/c Ratio		0.44	0.08		0.25	0.07	0.16	0.32		0.09	0.28	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.5	0.0		33.4	0.0	3.1	6.8		3.1	6.5	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.5	0.0		0.5	0.0	0.1	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.0	0.0		33.9	0.0	3.3	6.8		3.2	6.6	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.2			13.0			6.4			6.4		
Approach LOS	B			B			A			A		
Intersection Delay	8.1			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Alejo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	39	43	104	20	46	75	83	505	23	44	484	14
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		92	117		74	84	93	593		49	560	
Lane Group Capacity		227	1495		247	1495	586	2182		566	2186	
v/c Ratio		0.41	0.08		0.30	0.06	0.16	0.27		0.09	0.26	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.2	0.0		33.7	0.0	3.1	6.5		3.0	6.4	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.2	0.0		0.7	0.0	0.1	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		35.4	0.0		34.3	0.0	3.2	6.6		3.1	6.5	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	15.6			16.1			6.1			6.2		
Approach LOS	B			B			A			A		
Intersection Delay	8.3			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	52	27	110	17	35	84	84	653	15	37	618	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		94	131		62	100	100	795		44	757	
Lane Group Capacity		210	1495		246	1495	480	2188		462	2187	
v/c Ratio		0.45	0.09		0.25	0.07	0.21	0.36		0.10	0.35	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.5	0.0		33.4	0.0	3.4	7.0		3.3	6.9	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.5	0.0		0.5	0.0	0.2	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.0	0.0		33.9	0.0	3.6	7.1		3.4	7.0	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	15.1			13.0			6.7			6.8		
Approach LOS	B			B			A			A		
Intersection Delay	8.1			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	41	45	96	21	48	78	82	461	24	46	378	14
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		97	108		78	88	92	545		52	441	
Lane Group Capacity		226	1495		245	1495	660	2180		594	2184	
v/c Ratio		0.43	0.07		0.32	0.06	0.14	0.25		0.09	0.20	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.4	0.0		33.8	0.0	3.0	6.4		3.0	6.2	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.3	0.0		0.8	0.0	0.1	0.1		0.1	0.0	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		35.7	0.0		34.5	0.0	3.1	6.4		3.0	6.2	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.9			16.2			6.0			5.9		
Approach LOS	B			B			A			A		
Intersection Delay	8.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	55	28	104	18	37	87	81	602	15	38	518	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		98	124		65	104	96	735		45	638	
Lane Group Capacity		208	1495		245	1495	541	2188		491	2185	
v/c Ratio		0.47	0.08		0.27	0.07	0.18	0.34		0.09	0.29	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.6	0.0		33.5	0.0	3.2	6.8		3.2	6.6	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.7	0.0		0.6	0.0	0.2	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.3	0.0		34.1	0.0	3.3	6.9		3.3	6.7	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.0			13.1			6.5			6.5		
Approach LOS	B			B			A			A		
Intersection Delay	8.2			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Alejo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	41	45	97	21	48	78	83	467	24	46	388	14
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		97	109		78	88	93	552		52	452	
Lane Group Capacity		226	1495		245	1495	653	2180		591	2184	
v/c Ratio		0.43	0.07		0.32	0.06	0.14	0.25		0.09	0.21	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.4	0.0		33.8	0.0	3.0	6.4		3.0	6.2	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.3	0.0		0.8	0.0	0.1	0.1		0.1	0.0	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		35.7	0.0		34.5	0.0	3.1	6.5		3.1	6.2	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.8			16.2			6.0			5.9		
Approach LOS	B			B			A			A		
Intersection Delay	8.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	55	28	105	18	37	87	82	608	15	38	527	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		98	125		65	104	98	742		45	648	
Lane Group Capacity		208	1495		245	1495	536	2188		487	2185	
v/c Ratio		0.47	0.08		0.27	0.07	0.18	0.34		0.09	0.30	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.6	0.0		33.5	0.0	3.2	6.9		3.2	6.6	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.7	0.0		0.6	0.0	0.2	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.3	0.0		34.1	0.0	3.4	7.0		3.3	6.7	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.0			13.1			6.5			6.5		
Approach LOS	B			B			A			A		
Intersection Delay	8.2			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	58	56	134	24	60	89	113	568	27	52	472	20
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		114	134		84	89	113	595		52	492	
Lane Group Capacity		226	1538		253	1538	645	2243		582	2245	
v/c Ratio		0.50	0.09		0.33	0.06	0.18	0.27		0.09	0.22	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.8	0.0		33.8	0.0	3.1	6.5		3.0	6.2	
Delay Factor k		0.11	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		1.8	0.0		0.8	0.0	0.1	0.1		0.1	0.0	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.6	0.0		34.6	0.0	3.2	6.5		3.1	6.3	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.9			16.8			6.0			6.0		
Approach LOS	B			B			A			A		
Intersection Delay	8.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	78	35	144	20	46	100	112	746	18	44	640	26
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		113	144		66	100	112	764		44	666	
Lane Group Capacity		212	1538		253	1538	541	2251		490	2245	
v/c Ratio		0.53	0.09		0.26	0.07	0.21	0.34		0.09	0.30	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		35.0	0.0		33.4	0.0	3.2	6.9		3.2	6.6	
Delay Factor k		0.14	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		2.6	0.0		0.6	0.0	0.2	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		37.6	0.0		34.0	0.0	3.4	7.0		3.3	6.7	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.5			13.5			6.5			6.5		
Approach LOS	B			B			A			A		
Intersection Delay	8.4			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Alejo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	59	56	149	24	60	89	121	642	27	52	600	21
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		115	149		84	89	121	669		52	621	
Lane Group Capacity		225	1538		253	1538	566	2245		540	2247	
v/c Ratio		0.51	0.10		0.33	0.06	0.21	0.30		0.10	0.28	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		34.9	0.0		33.8	0.0	3.2	6.6		3.1	6.5	
Delay Factor k		0.12	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		2.0	0.0		0.8	0.0	0.2	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		36.8	0.0		34.6	0.0	3.4	6.7		3.2	6.6	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	16.1			16.8			6.2			6.3		
Approach LOS	B			B			A			A		
Intersection Delay	8.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Alejo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Lane Group		LT	R		LT	R	L	TR		L	TR	
Volume (vph)	79	35	159	20	46	100	121	832	18	44	774	27
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green		2.0	2.0		2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type		3	3		3	3	3	3		3	3	
Unit Extension		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0	0		0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		114	159		66	100	121	850		44	801	
Lane Group Capacity		212	1538		253	1538	473	2251		449	2247	
v/c Ratio		0.54	0.10		0.26	0.07	0.26	0.38		0.10	0.36	
Green Ratio		0.16	1.00		0.16	1.00	0.76	0.66		0.76	0.66	
Uniform Delay d_1		35.0	0.0		33.4	0.0	3.5	7.1		3.4	7.0	
Delay Factor k		0.14	0.11		0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2		2.7	0.0		0.6	0.0	0.3	0.1		0.1	0.1	
PF Factor		1.000	0.950		1.000	0.950	1.000	1.000		1.000	1.000	
Control Delay		37.7	0.0		34.0	0.0	3.8	7.2		3.5	7.1	
Lane Group LOS		D	A		C	A	A	A		A	A	
Approach Delay	15.8			13.5			6.8			6.9		
Approach LOS	B			B			A			A		
Intersection Delay	8.4			Intersection LOS						A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Amado Road
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/3/2015	Analysis Year	Existing
Analysis Time Period	Midday Peak Hour		
Project Description	COD PSM		
East/West Street:	Amado Road	North/South Street:	Farrell Drive
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	26	524			465	10
Peak-Hour Factor, PHF	0.96	0.96	1.00	1.00	0.96	0.96
Hourly Flow Rate, HFR (veh/h)	27	545	0	0	484	10
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13		45			
Peak-Hour Factor, PHF	0.96	1.00	0.96	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	13	0	46	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	27						59	
C (m) (veh/h)	1025						570	
v/c	0.03						0.10	
95% queue length	0.08						0.34	
Control Delay (s/veh)	8.6						12.0	
LOS	A						B	
Approach Delay (s/veh)	--	--				12.0		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*34*	*645*			*607*	*6*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*1.00*	*1.00*	*0.84*	*0.84*
Hourly Flow Rate, HFR (veh/h)	*40*	*767*	*0*	*0*	*722*	*7*
Percent Heavy Vehicles	*8*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration	*LT*	*T*			*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*17*		*71*			
Peak-Hour Factor, PHF	*0.84*	*1.00*	*0.84*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*20*	*0*	*84*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*0*	*8*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*40*						*104*	
C (m) (veh/h)	*832*						*418*	
v/c	*0.05*						*0.25*	
95% queue length	*0.15*						*0.97*	
Control Delay (s/veh)	*9.5*						*16.4*	
LOS	*A*						*C*	
Approach Delay (s/veh)	*--*	*--*				*16.4*		
Approach LOS	*--*	*--*				*C*		

 *HCS+*TM Version 5.3 Generated: 5/21/2015 10:47 PM

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Amado Road*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Existing*
Analysis Time Period	*PM Peak Hour*		

Project Description *COD PSM*	
East/West Street: *Amado Road*	North/South Street: *Farrel Drive*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*34*	*645*			*607*	*6*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*1.00*	*1.00*	*0.84*	*0.84*
Hourly Flow Rate, HFR (veh/h)	*40*	*767*	*0*	*0*	*722*	*7*
Percent Heavy Vehicles	*8*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration	*LT*	*T*			*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*17*		*71*			
Peak-Hour Factor, PHF	*0.84*	*1.00*	*0.84*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*20*	*0*	*84*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*0*	*8*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*40*						*104*	
C (m) (veh/h)	*832*						*418*	
v/c	*0.05*						*0.25*	
95% queue length	*0.15*						*0.97*	
Control Delay (s/veh)	*9.5*						*16.4*	
LOS	*A*						*C*	
Approach Delay (s/veh)	--	--				*16.4*		
Approach LOS	--	--				*C*		

 *HCS+*TM Version 5.3 Generated: 5/16/2015 10:51 PM

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	27	527			472	10
Peak-Hour Factor, PHF	0.96	0.96	1.00	1.00	0.96	0.96
Hourly Flow Rate, HFR (veh/h)	28	548	0	0	491	10
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13		46			
Peak-Hour Factor, PHF	0.96	1.00	0.96	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	13	0	47	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	28						60	
C (m) (veh/h)	1019						567	
v/c	0.03						0.11	
95% queue length	0.08						0.35	
Control Delay (s/veh)	8.6						12.1	
LOS	A						B	
Approach Delay (s/veh)	--	--				12.1		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	35	648			612	6
Peak-Hour Factor, PHF	0.84	0.84	1.00	1.00	0.84	0.84
Hourly Flow Rate, HFR (veh/h)	41	771	0	0	728	7
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	17		71			
Peak-Hour Factor, PHF	0.84	1.00	0.84	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	20	0	84	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	41						104	
C (m) (veh/h)	828						414	
v/c	0.05						0.25	
95% queue length	0.16						0.98	
Control Delay (s/veh)	9.6						16.6	
LOS	A						C	
Approach Delay (s/veh)	--	--				16.6		
Approach LOS	--	--				C		

 HCS+^{TM} Version 5.3 Generated: 5/21/2015 10:44 PM

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Amado Road*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Existing+Project BO*
Analysis Time Period	*Midday Peak Hour*		

Project Description *COD PSM*	
East/West Street: *Amado Road*	North/South Street: *Farrell Drive*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*34*	*602*			*603*	*11*
Peak-Hour Factor, PHF	*0.96*	*0.96*	*1.00*	*1.00*	*0.96*	*0.96*
Hourly Flow Rate, HFR (veh/h)	*35*	*627*	*0*	*0*	*628*	*11*
Percent Heavy Vehicles	*8*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration	*LT*	*T*			*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*14*		*60*			
Peak-Hour Factor, PHF	*0.96*	*1.00*	*0.96*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*14*	*0*	*62*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*0*	*8*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*35*						*76*	
C (m) (veh/h)	*901*						*495*	
v/c	*0.04*						*0.15*	
95% queue length	*0.12*						*0.54*	
Control Delay (s/veh)	*9.2*						*13.6*	
LOS	*A*						*B*	
Approach Delay (s/veh)	--	--				*13.6*		
Approach LOS	--	--				*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Project BO*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*43*	*735*			*750*	*7*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*1.00*	*1.00*	*0.84*	*0.84*
Hourly Flow Rate, HFR (veh/h)	*51*	*875*	*0*	*0*	*892*	*8*
Percent Heavy Vehicles	*8*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration	*LT*	*T*			*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*18*		*85*			
Peak-Hour Factor, PHF	*0.84*	*1.00*	*0.84*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*21*	*0*	*101*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*0*	*8*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*51*						*122*	
C (m) (veh/h)	*714*						*337*	
v/c	*0.07*						*0.36*	
95% queue length	*0.23*						*1.61*	
Control Delay (s/veh)	*10.4*						*21.6*	
LOS	*B*						*C*	
Approach Delay (s/veh)	*--*	*--*				*21.6*		
Approach LOS	*--*	*--*				*C*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 No Project*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	27	550			481	10
Peak-Hour Factor, PHF	0.96	0.96	1.00	1.00	0.96	0.96
Hourly Flow Rate, HFR (veh/h)	28	572	0	0	501	10
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13		46			
Peak-Hour Factor, PHF	0.96	1.00	0.96	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	13	0	47	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	28						60	
C (m) (veh/h)	1010						556	
v/c	0.03						0.11	
95% queue length	0.09						0.36	
Control Delay (s/veh)	8.7						12.3	
LOS	A						B	
Approach Delay (s/veh)	--	--				12.3		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Amado Road
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/3/2015	Analysis Year	Year 2018 No Project
Analysis Time Period	PM Peak Hour		

Project Description COD PSM	
East/West Street: Amado Road	North/South Street: Farrell Drive
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	35	672			634	6
Peak-Hour Factor, PHF	0.84	0.84	1.00	1.00	0.84	0.84
Hourly Flow Rate, HFR (veh/h)	41	800	0	0	754	7
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	18		73			
Peak-Hour Factor, PHF	0.84	1.00	0.84	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	21	0	86	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	41						107	
C (m) (veh/h)	809						393	
v/c	0.05						0.27	
95% queue length	0.16						1.09	
Control Delay (s/veh)	9.7						17.6	
LOS	A						C	
Approach Delay (s/veh)	--	--				17.6		
Approach LOS	--	--				C		

 HCS+™ Version 5.3 Generated: 5/22/2015 10:13 PM

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Amado Road* | North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	28	556			492	10
Peak-Hour Factor, PHF	0.96	0.96	1.00	1.00	0.96	0.96
Hourly Flow Rate, HFR (veh/h)	29	579	0	0	512	10
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13		47			
Peak-Hour Factor, PHF	0.96	1.00	0.96	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	13	0	48	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	29						61	
C (m) (veh/h)	1000						550	
v/c	0.03						0.11	
95% queue length	0.09						0.37	
Control Delay (s/veh)	8.7						12.4	
LOS	A						B	
Approach Delay (s/veh)	--	--				12.4		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	36	678			644	6
Peak-Hour Factor, PHF	0.84	0.84	1.00	1.00	0.84	0.84
Hourly Flow Rate, HFR (veh/h)	42	807	0	0	766	7
Percent Heavy Vehicles	8	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	18		74			
Peak-Hour Factor, PHF	0.84	1.00	0.84	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	21	0	88	0	0	0
Percent Heavy Vehicles	8	0	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	42						109	
C (m) (veh/h)	800						389	
v/c	0.05						0.28	
95% queue length	0.17						1.13	
Control Delay (s/veh)	9.7						17.8	
LOS	A						C	
Approach Delay (s/veh)	--	--				17.8		
Approach LOS	--	--				C		

 HCS+[TM] Version 5.3 Generated: 5/22/2015 10:12 PM

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Farrel Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project Description *COD PSM*

East/West Street: *Amado Road*
North/South Street: *Farrell Drive*

Intersection Orientation: *North-South*
Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*30*	*638*			*566*	*12*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*30*	*638*	*0*	*0*	*566*	*12*
Percent Heavy Vehicles	*5*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration	*LT*	*T*			*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*15*		*51*			
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*15*	*0*	*51*	*0*	*0*	*0*
Percent Heavy Vehicles	*5*	*0*	*5*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*30*						*66*	
C (m) (veh/h)	*971*						*507*	
v/c	*0.03*						*0.13*	
95% queue length	*0.10*						*0.45*	
Control Delay (s/veh)	*8.8*						*13.2*	
LOS	*A*						*B*	
Approach Delay (s/veh)	--	--				*13.2*		
Approach LOS	--	--				*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project Description *COD PSM*

East/West Street: *Amado Road* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	39	786			740	7
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	39	786	0	0	740	7
Percent Heavy Vehicles	5	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	20		81			
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	20	0	81	0	0	0
Percent Heavy Vehicles	5	0	5	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	39						101	
C (m) (veh/h)	838						411	
v/c	0.05						0.25	
95% queue length	0.15						0.95	
Control Delay (s/veh)	9.5						16.6	
LOS	A						C	
Approach Delay (s/veh)	--	--				16.6		
Approach LOS	--	--				C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Amado Road* | North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	38	719			708	13
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	38	719	0	0	708	13
Percent Heavy Vehicles	5	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	16		66			
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	16	0	66	0	0	0
Percent Heavy Vehicles	5	0	5	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	38						82	
C (m) (veh/h)	857						438	
v/c	0.04						0.19	
95% queue length	0.14						0.68	
Control Delay (s/veh)	9.4						15.1	
LOS	A						C	
Approach Delay (s/veh)	--	--				15.1		
Approach LOS	--	--				C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Farrell Drive @ Amado Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Amado Road* | North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	48	879			888	8
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	48	879	0	0	888	8
Percent Heavy Vehicles	5	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	21		96			
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	21	0	96	0	0	0
Percent Heavy Vehicles	5	0	5	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	48						117	
C (m) (veh/h)	735						341	
v/c	0.07						0.34	
95% queue length	0.21						1.49	
Control Delay (s/veh)	10.2						21.0	
LOS	B						C	
Approach Delay (s/veh)	--	--				21.0		
Approach LOS	--	--				C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	93	285	105	109	336	135	117	604	78	155	675	63
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 7.0	G = 39.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	97	406		114	350	141	122	710		161	769	
Lane Group Capacity	299	822		274	856	1279	252	1427		252	1433	
v/c Ratio	0.32	0.49		0.42	0.41	0.11	0.48	0.50		0.64	0.54	
Green Ratio	0.36	0.26		0.36	0.26	0.86	0.08	0.43		0.08	0.43	
Uniform Delay d_1	20.2	28.5		20.6	27.8	1.0	39.8	18.4		40.3	18.8	
Delay Factor k	0.11	0.11		0.11	0.11	0.11	0.11	0.11		0.22	0.14	
Incremental Delay d_2	0.6	0.5		1.0	0.3	0.0	1.5	0.3		5.3	0.4	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	20.8	29.0		21.6	28.2	1.1	41.2	18.7		45.6	19.2	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	27.4			20.6			22.0			23.8		
Approach LOS	C			C			C			C		
Intersection Delay	23.2			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	107	253	101	94	257	119	101	693	49	148	692	87
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 6.0	G = 44.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	109	361		96	262	121	103	757		151	795	
Lane Group Capacity	291	677		247	707	1279	216	1621		216	1610	
v/c Ratio	0.37	0.53		0.39	0.37	0.09	0.48	0.47		0.70	0.49	
Green Ratio	0.31	0.21		0.31	0.21	0.86	0.07	0.49		0.07	0.49	
Uniform Delay d_1	23.1	31.6		23.1	30.4	1.0	40.5	15.2		41.1	15.5	
Delay Factor k	0.11	0.14		0.11	0.11	0.11	0.11	0.11		0.27	0.11	
Incremental Delay d_2	0.8	0.8		1.0	0.3	0.0	1.7	0.2		9.6	0.2	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.9	32.4		24.1	30.7	1.1	42.1	15.4		50.7	15.7	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	30.4			21.9			18.6			21.3		
Approach LOS	C			C			B			C		
Intersection Delay	22.1			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	93	288	105	110	338	138	117	604	78	160	675	63
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 7.0	G = 39.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	97	409		115	352	144	122	710		167	769	
Lane Group Capacity	298	822		272	856	1279	252	1427		252	1433	
v/c Ratio	0.33	0.50		0.42	0.41	0.11	0.48	0.50		0.66	0.54	
Green Ratio	0.36	0.26		0.36	0.26	0.86	0.08	0.43		0.08	0.43	
Uniform Delay d_1	20.2	28.6		20.6	27.9	1.0	39.8	18.4		40.4	18.8	
Delay Factor k	0.11	0.11		0.11	0.11	0.11	0.11	0.11		0.24	0.14	
Incremental Delay d_2	0.6	0.5		1.1	0.3	0.0	1.5	0.3		6.4	0.4	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	20.8	29.0		21.7	28.2	1.1	41.2	18.7		46.7	19.2	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	27.5			20.6			22.0			24.1		
Approach LOS	C			C			C			C		
Intersection Delay	23.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	107	256	101	95	259	122	101	693	50	154	692	87
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 6.0	G = 44.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	109	364		97	264	124	103	758		157	795	
Lane Group Capacity	290	677		245	707	1279	216	1621		216	1610	
v/c Ratio	0.38	0.54		0.40	0.37	0.10	0.48	0.47		0.73	0.49	
Green Ratio	0.31	0.21		0.31	0.21	0.86	0.07	0.49		0.07	0.49	
Uniform Delay d_1	23.1	31.6		23.1	30.4	1.0	40.5	15.2		41.2	15.5	
Delay Factor k	0.11	0.14		0.11	0.11	0.11	0.11	0.11		0.29	0.11	
Incremental Delay d_2	0.8	0.9		1.1	0.3	0.0	1.7	0.2		11.6	0.2	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.9	32.4		24.2	30.7	1.1	42.1	15.5		52.8	15.7	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	30.5			21.8			18.6			21.9		
Approach LOS	C			C			B			C		
Intersection Delay	22.3			Intersection LOS						C		

 HCS+™ Version 5.3 Generated: 5/21/2015 10:50 PM

SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	93	347	105	118	372	183	117	624	93	235	712	63
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 9.0	G = 37.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	97	470		123	388	191	122	747		245	808	
Lane Group Capacity	281	826		248	856	1279	325	1350		325	1360	
v/c Ratio	0.35	0.57		0.50	0.45	0.15	0.38	0.55		0.75	0.59	
Green Ratio	0.36	0.26		0.36	0.26	0.86	0.10	0.41		0.10	0.41	
Uniform Delay d_1	20.3	29.2		20.9	28.2	1.1	37.9	20.2		39.4	20.6	
Delay Factor k	0.11	0.16		0.11	0.11	0.11	0.11	0.15		0.31	0.18	
Incremental Delay d_2	0.7	0.9		1.6	0.4	0.1	0.7	0.5		9.6	0.7	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	21.0	30.1		22.5	28.6	1.1	38.6	20.7		49.0	21.4	
Lane Group LOS	C	C		C	C	A	D	C		D	C	
Approach Delay	28.6			20.0			23.2			27.8		
Approach LOS	C			C			C			C		
Intersection Delay	25.0			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	107	319	101	105	300	177	101	715	66	235	729	87
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 9.0	G = 41.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	109	429		107	306	181	103	797		240	833	
Lane Group Capacity	270	682		219	707	1279	325	1507		325	1502	
v/c Ratio	0.40	0.63		0.49	0.43	0.14	0.32	0.53		0.74	0.55	
Green Ratio	0.31	0.21		0.31	0.21	0.86	0.10	0.46		0.10	0.46	
Uniform Delay d_1	23.1	32.3		23.5	30.8	1.1	37.6	17.6		39.4	17.8	
Delay Factor k	0.11	0.21		0.11	0.11	0.11	0.11	0.13		0.30	0.15	
Incremental Delay d_2	1.0	1.9		1.7	0.4	0.1	0.6	0.4		8.6	0.5	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	24.1	34.2		25.2	31.2	1.1	38.2	17.9		48.0	18.3	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	32.1			21.0			20.2			24.9		
Approach LOS	C			C			C			C		
Intersection Delay	24.1			Intersection LOS						C		

 HCS+TM Version 5.3 Generated: 5/24/2015 12:06 AM

SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	96	293	108	111	351	146	121	617	79	157	689	65
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 24.0	G =	G =	G = 7.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	100	418		116	366	152	126	725		164	786	
Lane Group Capacity	303	857		280	893	1279	252	1390		252	1396	
v/c Ratio	0.33	0.49		0.41	0.41	0.12	0.50	0.52		0.65	0.56	
Green Ratio	0.37	0.27		0.37	0.27	0.86	0.08	0.42		0.08	0.42	
Uniform Delay d_1	19.6	27.8		19.9	27.2	1.0	39.8	19.3		40.3	19.7	
Delay Factor k	0.11	0.11		0.11	0.11	0.11	0.11	0.13		0.23	0.16	
Incremental Delay d_2	0.6	0.4		1.0	0.3	0.0	1.6	0.4		5.8	0.5	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	20.2	28.3		20.9	27.5	1.1	41.4	19.6		46.2	20.2	
Lane Group LOS	C	C		C	C	A	D	B		D	C	
Approach Delay	26.7			20.0			22.8			24.7		
Approach LOS	C			B			C			C		
Intersection Delay	23.5			Intersection LOS						C		

 HCS+TM Version 5.3 Generated: 5/29/2015 11:09 PM

SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	110	266	105	96	267	125	104	707	50	158	707	90
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 7.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	112	378		98	272	128	106	772		161	813	
Lane Group Capacity	286	677		239	707	1279	252	1584		252	1573	
v/c Ratio	0.39	0.56		0.41	0.38	0.10	0.42	0.49		0.64	0.52	
Green Ratio	0.31	0.21		0.31	0.21	0.86	0.08	0.48		0.08	0.48	
Uniform Delay d_1	23.1	31.7		23.2	30.5	1.0	39.6	16.0		40.3	16.3	
Delay Factor k	0.11	0.16		0.11	0.11	0.11	0.11	0.11		0.22	0.12	
Incremental Delay d_2	0.9	1.0		1.1	0.3	0.0	1.1	0.2		5.3	0.3	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	24.0	32.8		24.3	30.8	1.1	40.7	16.2		45.6	16.6	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	30.8			21.9			19.2			21.4		
Approach LOS	C			C			B			C		
Intersection Delay	22.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	96	298	108	112	354	151	121	617	80	166	689	65
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 24.0	G =	G =	G = 7.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	100	423		117	369	157	126	726		173	786	
Lane Group Capacity	301	857		278	893	1279	252	1390		252	1396	
v/c Ratio	0.33	0.49		0.42	0.41	0.12	0.50	0.52		0.69	0.56	
Green Ratio	0.37	0.27		0.37	0.27	0.86	0.08	0.42		0.08	0.42	
Uniform Delay d_1	19.6	27.9		20.0	27.2	1.0	39.8	19.3		40.4	19.7	
Delay Factor k	0.11	0.11		0.11	0.11	0.11	0.11	0.13		0.26	0.16	
Incremental Delay d_2	0.7	0.4		1.0	0.3	0.0	1.6	0.4		7.6	0.5	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	20.2	28.3		21.0	27.5	1.1	41.4	19.6		48.0	20.2	
Lane Group LOS	C	C		C	C	A	D	B		D	C	
Approach Delay	26.8			19.9			22.8			25.2		
Approach LOS	C			B			C			C		
Intersection Delay	23.7			Intersection LOS						C		

 HCS+™ Version 5.3 Generated: 5/29/2015 11:10 PM

SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	110	271	105	97	270	130	104	707	51	167	707	90
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 7.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	112	384		99	276	133	106	773		170	813	
Lane Group Capacity	284	678		237	707	1279	252	1584		252	1573	
v/c Ratio	0.39	0.57		0.42	0.39	0.10	0.42	0.49		0.67	0.52	
Green Ratio	0.31	0.21		0.31	0.21	0.86	0.08	0.48		0.08	0.48	
Uniform Delay d_1	23.1	31.8		23.2	30.5	1.0	39.6	16.0		40.4	16.3	
Delay Factor k	0.11	0.16		0.11	0.11	0.11	0.11	0.11		0.25	0.12	
Incremental Delay d_2	0.9	1.1		1.2	0.4	0.0	1.1	0.2		7.0	0.3	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	24.0	32.9		24.4	30.9	1.1	40.7	16.2		47.4	16.6	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	30.9			21.8			19.2			21.9		
Approach LOS	C			C			B			C		
Intersection Delay	22.6			Intersection LOS						C		

 HCS+TM Version 5.3 Generated: 5/22/2015 10:30 PM

SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	108	330	122	120	389	149	135	666	86	171	745	73
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 7.0	G = 39.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	108	452		120	389	149	135	752		171	818	
Lane Group Capacity	290	845		262	880	1316	260	1467		260	1473	
v/c Ratio	0.37	0.53		0.46	0.44	0.11	0.52	0.51		0.66	0.56	
Green Ratio	0.36	0.26		0.36	0.26	0.86	0.08	0.43		0.08	0.43	
Uniform Delay d_1	20.4	28.9		20.8	28.1	1.0	39.9	18.6		40.3	19.0	
Delay Factor k	0.11	0.14		0.11	0.11	0.11	0.13	0.12		0.23	0.15	
Incremental Delay d_2	0.8	0.7		1.3	0.4	0.0	1.9	0.3		6.0	0.5	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	21.2	29.6		22.0	28.5	1.1	41.7	18.9		46.3	19.5	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	27.9			21.1			22.4			24.1		
Approach LOS	C			C			C			C		
Intersection Delay	23.7			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	124	293	117	104	298	131	117	766	54	163	764	101
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 20.0	G =	G =	G = 7.0	G = 42.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	124	410		104	298	131	117	820		163	865	
Lane Group Capacity	295	733		245	766	1316	260	1592		260	1580	
v/c Ratio	0.42	0.56		0.42	0.39	0.10	0.45	0.52		0.63	0.55	
Green Ratio	0.32	0.22		0.32	0.22	0.86	0.08	0.47		0.08	0.47	
Uniform Delay d_1	22.6	31.1		22.6	29.8	1.0	39.7	16.9		40.2	17.2	
Delay Factor k	0.11	0.16		0.11	0.11	0.11	0.11	0.12		0.21	0.15	
Incremental Delay d_2	1.0	1.0		1.2	0.3	0.0	1.2	0.3		4.7	0.4	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.5	32.1		23.8	30.1	1.1	40.9	17.1		45.0	17.6	
Lane Group LOS	C	C		C	C	A	D	B		D	B	
Approach Delay	30.1			21.7			20.1			21.9		
Approach LOS	C			C			C			C		
Intersection Delay	22.8			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	108	394	122	129	426	199	135	686	102	255	782	73
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 10.0	G = 36.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	108	516		129	426	199	135	788		255	855	
Lane Group Capacity	273	849		236	880	1316	371	1351		371	1360	
v/c Ratio	0.40	0.61		0.55	0.48	0.15	0.36	0.58		0.69	0.63	
Green Ratio	0.36	0.26		0.36	0.26	0.86	0.11	0.40		0.11	0.40	
Uniform Delay d_1	20.5	29.5		21.1	28.5	1.1	37.1	21.1		38.5	21.6	
Delay Factor k	0.11	0.19		0.15	0.11	0.11	0.11	0.17		0.26	0.21	
Incremental Delay d_2	0.9	1.3		2.7	0.4	0.1	0.6	0.7		5.3	0.9	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	21.5	30.8		23.8	28.9	1.1	37.7	21.8		43.8	22.6	
Lane Group LOS	C	C		C	C	A	D	C		D	C	
Approach Delay	29.2			20.7			24.1			27.4		
Approach LOS	C			C			C			C		
Intersection Delay	25.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	1	2	2	0	2	2	0
Lane Group	L	TR		L	T	R	L	TR		L	TR	
Volume (vph)	124	361	117	115	342	191	117	788	71	253	801	101
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3	3	3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08
Timing	G = 5.0	G = 20.0	G =	G =	G = 10.0	G = 39.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	124	478		115	342	191	117	859		253	902	
Lane Group Capacity	274	738		218	766	1316	371	1475		371	1468	
v/c Ratio	0.45	0.65		0.53	0.45	0.15	0.32	0.58		0.68	0.61	
Green Ratio	0.32	0.22		0.32	0.22	0.86	0.11	0.43		0.11	0.43	
Uniform Delay d_1	22.7	31.8		23.0	30.2	1.1	36.8	19.3		38.5	19.7	
Delay Factor k	0.11	0.23		0.13	0.11	0.11	0.11	0.17		0.25	0.20	
Incremental Delay d_2	1.2	2.0		2.4	0.4	0.1	0.5	0.6		5.1	0.8	
PF Factor	1.000	1.000		1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.9	33.8		25.4	30.6	1.1	37.3	19.9		43.5	20.5	
Lane Group LOS	C	C		C	C	A	D	B		D	C	
Approach Delay	31.7			21.0			22.0			25.5		
Approach LOS	C			C			C			C		
Intersection Delay	24.7			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	16	214	34	8	336	10	19	14	2	25	22	22
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	21	275	44	10	445			42	3		88	
Lane Group Capacity	628	2419	1495	741	2409			280	1495		285	
v/c Ratio	0.03	0.11	0.03	0.01	0.18			0.15	0.00		0.31	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	3.8	0.0	3.5	4.0			30.5	0.0		31.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.2	0.0		0.6	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	3.8	0.0	3.5	4.0			30.7	0.0		32.1	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.3			4.0			28.7			32.1		
Approach LOS	A			A			C			C		
Intersection Delay	7.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	38	463	15	5	535	19	12	9	2	19	6	23
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	40	483	16	5	578			22	2		50	
Lane Group Capacity	543	2419	1495	605	2406			292	1495		282	
v/c Ratio	0.07	0.20	0.01	0.01	0.24			0.08	0.00		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.2			30.0	0.0		30.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.1			0.1	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.3			30.1	0.0		30.9	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.9			4.2			27.6			30.9		
Approach LOS	A			A			C			C		
Intersection Delay	5.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	34	417	33	6	411	29	44	26	10	15	13	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	38	469	37	7	495			78	11		52	
Lane Group Capacity	597	2419	1495	614	2395			269	1495		288	
v/c Ratio	0.06	0.19	0.02	0.01	0.21			0.29	0.01		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	4.0	0.0	3.5	4.1			31.3	0.0		30.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.6	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.1			31.9	0.0		31.0	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.8			4.1			28.0			31.0		
Approach LOS	A			A			C			C		
Intersection Delay	6.9			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	16	222	37	10	336	10	20	14	3	25	23	22
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	21	285	47	13	444			44	4		89	
Lane Group Capacity	629	2419	1495	734	2409			277	1495		285	
v/c Ratio	0.03	0.12	0.03	0.02	0.18			0.16	0.00		0.31	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	3.8	0.0	3.5	4.0			30.5	0.0		31.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.3	0.0		0.6	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	3.8	0.0	3.5	4.0			30.8	0.0		32.1	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.3			4.0			28.2			32.1		
Approach LOS	A			A			C			C		
Intersection Delay	7.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	38	469	18	6	535	19	18	10	2	19	7	23
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	40	489	19	6	577			29	2		51	
Lane Group Capacity	544	2419	1495	601	2406			283	1495		283	
v/c Ratio	0.07	0.20	0.01	0.01	0.24			0.10	0.00		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.2			30.2	0.0		30.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.1			0.2	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.3			30.3	0.0		31.0	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.9			4.2			28.4			31.0		
Approach LOS	A			A			C			C		
Intersection Delay	5.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	34	424	36	7	411	29	49	27	10	15	14	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	40	476	40	8	495			85	11		53	
Lane Group Capacity	597	2419	1495	610	2395			265	1495		288	
v/c Ratio	0.07	0.20	0.03	0.01	0.21			0.32	0.01		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	4.0	0.0	3.5	4.1			31.5	0.0		30.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.7	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.1			32.2	0.0		31.0	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.8			4.1			28.5			31.0		
Approach LOS	A			A			C			C		
Intersection Delay	7.1			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	16	351	93	47	350	10	55	19	4	26	43	22
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	21	450	119	60	462			95	5		116	
Lane Group Capacity	618	2419	1495	625	2409			236	1495		289	
v/c Ratio	0.03	0.19	0.08	0.10	0.19			0.40	0.00		0.40	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	4.0	0.0	3.7	4.0			32.0	0.0		32.0	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.1	0.0			1.1	0.0		0.9	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	4.0	0.0	3.8	4.1			33.2	0.0		32.9	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.2			4.0			31.5			32.9		
Approach LOS	A			A			C			C		
Intersection Delay	8.3			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	38	571	65	38	539	19	101	22	8	19	26	23
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	40	595	68	40	581			128	8		71	
Lane Group Capacity	542	2419	1495	533	2406			248	1495		288	
v/c Ratio	0.07	0.25	0.05	0.08	0.24			0.52	0.01		0.25	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.2	0.0	3.7	4.2			32.8	0.0		31.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.12	0.11		0.11	
Incremental Delay d_2	0.1	0.1	0.0	0.1	0.1			1.9	0.0		0.4	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.3	0.0	3.7	4.3			34.7	0.0		31.5	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.8			4.2			32.6			31.5		
Approach LOS	A			A			C			C		
Intersection Delay	7.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	34	532	88	41	415	29	150	44	17	15	36	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 60.0	G =	G =	G =	G = 22.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	40	598	99	46	499			218	19		77	
Lane Group Capacity	541	2233	1495	481	2211			321	1495		383	
v/c Ratio	0.07	0.27	0.07	0.10	0.23			0.68	0.01		0.20	
Green Ratio	0.67	0.67	1.00	0.67	0.67			0.24	1.00		0.24	
Uniform Delay d_1	5.3	6.1	0.0	5.3	5.9			30.8	0.0		27.0	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.25	0.11		0.11	
Incremental Delay d_2	0.1	0.1	0.0	0.1	0.1			5.7	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	5.3	6.2	0.0	5.4	5.9			36.5	0.0		27.3	
Lane Group LOS	A	A	A	A	A			D	A		C	
Approach Delay	5.3			5.9			33.6			27.3		
Approach LOS	A			A			C			C		
Intersection Delay	10.8			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	16	219	33	7	364	10	18	14	2	26	22	22
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	21	281	42	9	480			41	3		89	
Lane Group Capacity	607	2419	1495	737	2409			281	1495		284	
v/c Ratio	0.03	0.12	0.03	0.01	0.20			0.15	0.00		0.31	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	3.8	0.0	3.5	4.1			30.4	0.0		31.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.2	0.0		0.6	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	3.8	0.0	3.5	4.1			30.7	0.0		32.1	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.3			4.1			28.6			32.1		
Approach LOS	A			A			C			C		
Intersection Delay	7.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	39	478	14	4	569	20	9	9	2	20	6	23
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	41	498	15	4	614			18	2		51	
Lane Group Capacity	521	2419	1495	595	2406			300	1495		282	
v/c Ratio	0.08	0.21	0.01	0.01	0.26			0.06	0.00		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.3			29.9	0.0		30.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.1			0.1	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.3			30.0	0.0		31.0	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	4.0			4.3			27.0			31.0		
Approach LOS	A			A			C			C		
Intersection Delay	5.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	35	445	32	5	434	30	41	26	10	16	13	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	41	500	36	6	522			75	11		53	
Lane Group Capacity	579	2419	1495	594	2396			271	1495		287	
v/c Ratio	0.07	0.21	0.02	0.01	0.22			0.28	0.01		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.1			31.2	0.0		30.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.0			0.6	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.2			31.8	0.0		31.0	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.8			4.2			27.7			31.0		
Approach LOS	A			A			C			C		
Intersection Delay	6.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	16	234	38	10	364	10	21	14	3	26	24	22
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	21	300	49	13	480			45	4		92	
Lane Group Capacity	607	2419	1495	723	2409			275	1495		285	
v/c Ratio	0.03	0.12	0.03	0.02	0.20			0.16	0.00		0.32	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	3.8	0.0	3.5	4.1			30.5	0.0		31.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.3	0.0		0.7	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	3.8	0.0	3.5	4.1			30.8	0.0		32.2	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.3			4.1			28.3			32.2		
Approach LOS	A			A			C			C		
Intersection Delay	7.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	39	489	18	6	569	20	18	10	3	20	7	23
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	41	509	19	6	614			29	3		52	
Lane Group Capacity	521	2419	1495	588	2406			283	1495		282	
v/c Ratio	0.08	0.21	0.01	0.01	0.26			0.10	0.00		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.3			30.2	0.0		30.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.1			0.2	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.3			30.3	0.0		31.0	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	4.0			4.3			27.5			31.0		
Approach LOS	A			A			C			C		
Intersection Delay	5.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	35	456	36	7	434	30	50	27	11	16	14	18
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB	
Adjusted Flow Rate	41	512	40	8	522			86	12		54
Lane Group Capacity	579	2419	1495	586	2396			264	1495		287
v/c Ratio	0.07	0.21	0.03	0.01	0.22			0.33	0.01		0.19
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.1			31.5	0.0		30.7
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.0			0.7	0.0		0.3
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000
Control Delay	3.7	4.1	0.0	3.5	4.2			32.3	0.0		31.0
Lane Group LOS	A	A	A	A	A			C	A		C
Approach Delay	3.8			4.2			28.3			31.0	
Approach LOS	A			A			C			C	
Intersection Delay	7.0			Intersection LOS						A	

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	18	255	38	9	400	12	21	16	2	30	25	25
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	18	255	38	9	412			37	2		80	
Lane Group Capacity	667	2488	1538	776	2477			291	1538		293	
v/c Ratio	0.03	0.10	0.02	0.01	0.17			0.13	0.00		0.27	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.5	3.7	0.0	3.5	3.9			30.3	0.0		31.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.2	0.0		0.5	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	3.8	0.0	3.5	4.0			30.5	0.0		31.7	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.3			4.0			29.0			31.7		
Approach LOS	A			A			C			C		
Intersection Delay	7.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	42	548	17	6	633	23	13	10	2	23	7	26
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	42	548	17	6	656			23	2		56	
Lane Group Capacity	511	2488	1538	578	2475			301	1538		289	
v/c Ratio	0.08	0.22	0.01	0.01	0.27			0.08	0.00		0.19	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.1	0.0	3.5	4.3			30.0	0.0		30.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.0	0.0	0.0	0.1			0.1	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.8	4.2	0.0	3.5	4.4			30.1	0.0		31.1	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	4.0			4.3			27.7			31.1		
Approach LOS	A			A			C			C		
Intersection Delay	5.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunset Way @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	38	495	37	7	488	35	49	29	12	18	14	20
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	38	495	37	7	523			78	12		52	
Lane Group Capacity	595	2488	1538	614	2463			277	1538		294	
v/c Ratio	0.06	0.20	0.02	0.01	0.21			0.28	0.01		0.18	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.6	4.1	0.0	3.5	4.1			31.3	0.0		30.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.6	0.0		0.3	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.7	4.1	0.0	3.5	4.1			31.8	0.0		30.9	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.8			4.1			27.6			30.9		
Approach LOS	A			A			C			C		
Intersection Delay	6.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	18	391	98	49	402	12	58	21	4	30	46	25
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	18	391	98	49	414			79	4		101	
Lane Group Capacity	667	2488	1538	681	2477			265	1538		299	
v/c Ratio	0.03	0.16	0.06	0.07	0.17			0.30	0.00		0.34	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.5	3.9	0.0	3.7	3.9			31.4	0.0		31.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.0	0.0	0.0	0.0			0.6	0.0		0.7	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.6	3.9	0.0	3.7	4.0			32.0	0.0		32.3	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.2			4.0			30.5			32.3		
Approach LOS	A			A			C			C		
Intersection Delay	8.0			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	42	661	68	40	637	23	105	23	9	23	27	26
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 65.0	G =	G =	G =	G = 17.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	42	661	68	40	660			128	9		76	
Lane Group Capacity	508	2488	1538	508	2475			251	1538		290	
v/c Ratio	0.08	0.27	0.04	0.08	0.27			0.51	0.01		0.26	
Green Ratio	0.72	0.72	1.00	0.72	0.72			0.19	1.00		0.19	
Uniform Delay d_1	3.7	4.3	0.0	3.7	4.3			32.8	0.0		31.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.12	0.11		0.11	
Incremental Delay d_2	0.1	0.1	0.0	0.1	0.1			1.7	0.0		0.5	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.8	4.4	0.0	3.7	4.4			34.5	0.0		31.6	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	3.9			4.3			32.2			31.6		
Approach LOS	A			A			C			C		
Intersection Delay	7.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunset Way @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	38	614	93	43	492	35	159	47	20	18	37	20
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 60.0	G =	G =	G =	G = 22.0	G =	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	38	614	93	43	527			206	20		75	
Lane Group Capacity	538	2297	1538	485	2274			332	1538		391	
v/c Ratio	0.07	0.27	0.06	0.09	0.23			0.62	0.01		0.19	
Green Ratio	0.67	0.67	1.00	0.67	0.67			0.24	1.00		0.24	
Uniform Delay d_1	5.2	6.1	0.0	5.3	5.9			30.3	0.0		27.0	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.20	0.11		0.11	
Incremental Delay d_2	0.1	0.1	0.0	0.1	0.1			3.5	0.0		0.2	
PF Factor	1.000	1.000	0.950	1.000	1.000			1.000	0.950		1.000	
Control Delay	5.3	6.1	0.0	5.4	6.0			33.8	0.0		27.2	
Lane Group LOS	A	A	A	A	A			C	A		C	
Approach Delay	5.3			5.9			30.8			27.2		
Approach LOS	A			A			C			C		
Intersection Delay	10.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	33	184	20	33	243	145	51	334	21	197	611	61
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	42	257		42	490		64	449		249	848	
Lane Group Capacity	218	770		318	738		299	1586		477	1579	
v/c Ratio	0.19	0.33		0.13	0.66		0.21	0.28		0.52	0.54	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.3	28.7		20.7	31.3		9.8	14.2		13.4	16.5	
Delay Factor k	0.11	0.11		0.11	0.24		0.11	0.11		0.13	0.14	
Incremental Delay d_2	0.4	0.3		0.2	2.3		0.4	0.1		1.0	0.4	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	21.7	28.9		20.9	33.6		10.2	14.3		14.4	16.9	
Lane Group LOS	C	C		C	C		B	B		B	B	
Approach Delay	27.9			32.6			13.8			16.3		
Approach LOS	C			C			B			B		
Intersection Delay	20.7			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	76	340	60	66	441	182	70	281	25	167	318	40
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 5.0	G = 26.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	80	422		70	657		74	322		176	377	
Lane Group Capacity	326	1383		436	1352		321	956		347	952	
v/c Ratio	0.25	0.31		0.16	0.49		0.23	0.34		0.51	0.40	
Green Ratio	0.52	0.42		0.52	0.42		0.39	0.29		0.39	0.29	
Uniform Delay d_1	11.7	17.2		11.0	18.9		18.0	25.2		22.4	25.7	
Delay Factor k	0.11	0.11		0.11	0.11		0.11	0.11		0.12	0.11	
Incremental Delay d_2	0.4	0.1		0.2	0.3		0.4	0.2		1.2	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	12.1	17.4		11.2	19.2		18.3	25.4		23.6	26.0	
Lane Group LOS	B	B		B	B		B	C		C	C	
Approach Delay	16.5			18.4			24.1			25.2		
Approach LOS	B			B			C			C		
Intersection Delay	20.7			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	72	305	59	36	289	217	62	434	34	202	498	58
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 6.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	80	405		40	562		69	521		225	619	
Lane Group Capacity	233	908		297	871		360	1399		405	1392	
v/c Ratio	0.34	0.45		0.13	0.65		0.19	0.37		0.56	0.44	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.42		0.53	0.42	
Uniform Delay d_1	19.3	26.8		18.3	28.6		11.0	17.8		16.1	18.5	
Delay Factor k	0.11	0.11		0.11	0.22		0.11	0.11		0.15	0.11	
Incremental Delay d_2	0.9	0.4		0.2	1.7		0.3	0.2		1.7	0.2	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	20.2	27.1		18.5	30.3		11.3	18.0		17.8	18.7	
Lane Group LOS	C	C		B	C		B	B		B	B	
Approach Delay	26.0			29.5			17.2			18.5		
Approach LOS	C			C			B			B		
Intersection Delay	22.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Exisitng+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	35	185	21	36	244	145	51	334	21	197	619	62
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	44	261		46	493		65	450		249	862	
Lane Group Capacity	217	770		316	738		294	1586		477	1579	
v/c Ratio	0.20	0.34		0.15	0.67		0.22	0.28		0.52	0.55	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.3	28.7		20.8	31.3		9.9	14.2		13.4	16.6	
Delay Factor k	0.11	0.11		0.11	0.24		0.11	0.11		0.13	0.15	
Incremental Delay d_2	0.5	0.3		0.2	2.3		0.4	0.1		1.0	0.4	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	21.8	29.0		21.0	33.7		10.3	14.3		14.4	17.0	
Lane Group LOS	C	C		C	C		B	B		B	B	
Approach Delay	27.9			32.6			13.8			16.4		
Approach LOS	C			C			B			B		
Intersection Delay	20.8			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	78	341	60	69	442	182	70	283	26	167	325	41
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 5.0	G = 26.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	82	422		73	657		74	325		176	385	
Lane Group Capacity	326	1383		436	1352		317	956		346	952	
v/c Ratio	0.25	0.31		0.17	0.49		0.23	0.34		0.51	0.40	
Green Ratio	0.52	0.42		0.52	0.42		0.39	0.29		0.39	0.29	
Uniform Delay d_1	11.8	17.2		11.1	18.9		18.0	25.2		22.4	25.8	
Delay Factor k	0.11	0.11		0.11	0.11		0.11	0.11		0.12	0.11	
Incremental Delay d_2	0.4	0.1		0.2	0.3		0.4	0.2		1.3	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	12.2	17.4		11.2	19.2		18.4	25.4		23.7	26.0	
Lane Group LOS	B	B		B	B		B	C		C	C	
Approach Delay	16.5			18.4			24.1			25.3		
Approach LOS	B			B			C			C		
Intersection Delay	20.8			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	74	306	59	39	290	217	62	436	35	202	503	59
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 6.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	82	406		43	563		69	523		224	625	
Lane Group Capacity	233	908		297	871		358	1398		404	1392	
v/c Ratio	0.35	0.45		0.14	0.65		0.19	0.37		0.55	0.45	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.42		0.53	0.42	
Uniform Delay d_1	19.3	26.8		18.3	28.6		11.0	17.8		16.1	18.5	
Delay Factor k	0.11	0.11		0.11	0.22		0.11	0.11		0.15	0.11	
Incremental Delay d_2	0.9	0.4		0.2	1.7		0.3	0.2		1.7	0.2	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	20.3	27.2		18.6	30.3		11.3	18.0		17.7	18.8	
Lane Group LOS	C	C		B	C		B	B		B	B	
Approach Delay	26.0			29.5			17.2			18.5		
Approach LOS	C			C			B			B		
Intersection Delay	22.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Exisitng+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	55	201	23	110	268	148	55	364	28	201	806	82
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	70	283		139	526		70	496		254	1124	
Lane Group Capacity	205	770		306	740		213	1583		452	1578	
v/c Ratio	0.34	0.37		0.45	0.71		0.33	0.31		0.56	0.71	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.8	28.9		24.2	31.7		11.8	14.4		14.3	18.6	
Delay Factor k	0.11	0.11		0.11	0.27		0.11	0.11		0.16	0.28	
Incremental Delay d_2	1.0	0.3		1.1	3.2		0.9	0.1		1.6	1.5	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	22.8	29.2		25.3	34.9		12.7	14.5		15.9	20.1	
Lane Group LOS	C	C		C	C		B	B		B	C	
Approach Delay	28.0			32.9			14.3			19.4		
Approach LOS	C			C			B			B		
Intersection Delay	22.5			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	126	373	67	129	457	182	75	318	38	167	455	56
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 37.0	G =	G =	G = 5.0	G = 27.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	133	464		136	673		79	375		176	538	
Lane Group Capacity	310	1346		404	1318		263	989		334	989	
v/c Ratio	0.43	0.34		0.34	0.51		0.30	0.38		0.53	0.54	
Green Ratio	0.51	0.41		0.51	0.41		0.40	0.30		0.40	0.30	
Uniform Delay d_1	12.8	18.2		12.2	19.8		17.9	24.9		22.3	26.4	
Delay Factor k	0.11	0.11		0.11	0.12		0.11	0.11		0.13	0.14	
Incremental Delay d_2	1.0	0.2		0.5	0.3		0.6	0.2		1.6	0.6	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	13.8	18.3		12.7	20.1		18.5	25.1		23.9	27.0	
Lane Group LOS	B	B		B	C		B	C		C	C	
Approach Delay	17.3			18.8			24.0			26.2		
Approach LOS	B			B			C			C		
Intersection Delay	21.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	131	344	70	102	306	217	68	474	48	202	639	75
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 6.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	146	460		113	581		76	580		224	793	
Lane Group Capacity	226	907		273	873		293	1395		377	1392	
v/c Ratio	0.65	0.51		0.41	0.67		0.26	0.42		0.59	0.57	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.42		0.53	0.42	
Uniform Delay d_1	26.0	27.3		19.3	28.8		11.8	18.2		17.1	19.8	
Delay Factor k	0.22	0.12		0.11	0.24		0.11	0.11		0.18	0.16	
Incremental Delay d_2	6.3	0.5		1.0	1.9		0.5	0.2		2.5	0.6	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	32.2	27.8		20.4	30.7		12.3	18.4		19.6	20.3	
Lane Group LOS	C	C		C	C		B	B		B	C	
Approach Delay	28.9			29.0			17.7			20.2		
Approach LOS	C			C			B			C		
Intersection Delay	23.5			Intersection LOS						C		

 HCS+™ Version 5.3 Generated: 5/24/2015 12:12 AM

SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	34	190	23	32	256	152	61	351	55	202	630	62
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	43	270		41	516		77	514		256	875	
Lane Group Capacity	208	769		312	738		289	1568		443	1579	
v/c Ratio	0.21	0.35		0.13	0.70		0.27	0.33		0.58	0.55	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.4	28.8		20.7	31.6		10.1	14.6		14.7	16.7	
Delay Factor k	0.11	0.11		0.11	0.27		0.11	0.11		0.17	0.15	
Incremental Delay d_2	0.5	0.3		0.2	2.9		0.5	0.1		1.9	0.4	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	21.9	29.1		20.9	34.6		10.6	14.7		16.5	17.1	
Lane Group LOS	C	C		C	C		B	B		B	B	
Approach Delay	28.1			33.5			14.1			17.0		
Approach LOS	C			C			B			B		
Intersection Delay	21.2			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	76	349	64	67	459	190	82	296	26	172	329	41
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 5.0	G = 26.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	80	434		71	683		86	339		181	389	
Lane Group Capacity	316	1382		430	1352		316	956		339	952	
v/c Ratio	0.25	0.31		0.17	0.51		0.27	0.35		0.53	0.41	
Green Ratio	0.52	0.42		0.52	0.42		0.39	0.29		0.39	0.29	
Uniform Delay d_1	11.8	17.3		11.1	19.1		18.1	25.4		22.9	25.8	
Delay Factor k	0.11	0.11		0.11	0.11		0.11	0.11		0.14	0.11	
Incremental Delay d_2	0.4	0.1		0.2	0.3		0.5	0.2		1.6	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	12.3	17.4		11.3	19.4		18.6	25.6		24.6	26.1	
Lane Group LOS	B	B		B	B		B	C		C	C	
Approach Delay	16.6			18.6			24.2			25.6		
Approach LOS	B			B			C			C		
Intersection Delay	21.0			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	72	319	70	35	300	224	69	453	35	211	518	59
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 7.0	G = 37.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	80	432		39	582		77	542		234	642	
Lane Group Capacity	226	905		285	871		360	1362		403	1356	
v/c Ratio	0.35	0.48		0.14	0.67		0.21	0.40		0.58	0.47	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.41		0.53	0.41	
Uniform Delay d_1	19.4	27.1		18.3	28.8		11.2	18.7		12.2	19.4	
Delay Factor k	0.11	0.11		0.11	0.24		0.11	0.11		0.17	0.11	
Incremental Delay d_2	1.0	0.4		0.2	2.0		0.3	0.2		2.1	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	20.4	27.5		18.6	30.8		11.5	18.9		14.3	19.6	
Lane Group LOS	C	C		B	C		B	B		B	B	
Approach Delay	26.3			30.0			17.9			18.2		
Approach LOS	C			C			B			B		
Intersection Delay	22.5			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	36	191	24	38	258	152	61	352	22	202	644	64
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	46	272		48	519		77	474		256	896	
Lane Group Capacity	207	769		311	738		282	1586		464	1579	
v/c Ratio	0.22	0.35		0.15	0.70		0.27	0.30		0.55	0.57	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.5	28.8		20.8	31.6		10.2	14.3		14.0	16.8	
Delay Factor k	0.11	0.11		0.11	0.27		0.11	0.11		0.15	0.16	
Incremental Delay d_2	0.5	0.3		0.2	3.0		0.5	0.1		1.4	0.5	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	22.0	29.1		21.0	34.7		10.7	14.4		15.4	17.3	
Lane Group LOS	C	C		C	C		B	B		B	B	
Approach Delay	28.1			33.5			13.9			16.9		
Approach LOS	C			C			B			B		
Intersection Delay	21.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	80	351	65	72	460	190	82	299	27	172	340	42
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 5.0	G = 26.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	84	437		76	684		86	343		181	402	
Lane Group Capacity	316	1381		429	1352		310	956		337	952	
v/c Ratio	0.27	0.32		0.18	0.51		0.28	0.36		0.54	0.42	
Green Ratio	0.52	0.42		0.52	0.42		0.39	0.29		0.39	0.29	
Uniform Delay d_1	11.9	17.3		11.1	19.1		18.2	25.4		23.0	25.9	
Delay Factor k	0.11	0.11		0.11	0.11		0.11	0.11		0.14	0.11	
Incremental Delay d_2	0.5	0.1		0.2	0.3		0.5	0.2		1.7	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	12.3	17.5		11.3	19.4		18.7	25.6		24.7	26.2	
Lane Group LOS	B	B		B	B		B	C		C	C	
Approach Delay	16.6			18.6			24.2			25.7		
Approach LOS	B			B			C			C		
Intersection Delay	21.0			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	76	321	71	40	301	224	69	456	36	211	528	60
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 7.0	G = 37.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	84	436		44	583		77	547		234	654	
Lane Group Capacity	226	905		283	871		355	1362		401	1356	
v/c Ratio	0.37	0.48		0.16	0.67		0.22	0.40		0.58	0.48	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.41		0.53	0.41	
Uniform Delay d_1	19.5	27.1		18.4	28.8		11.2	18.7		12.2	19.5	
Delay Factor k	0.11	0.11		0.11	0.24		0.11	0.11		0.18	0.11	
Incremental Delay d_2	1.0	0.4		0.3	2.0		0.3	0.2		2.2	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	20.5	27.5		18.7	30.8		11.6	18.9		14.4	19.7	
Lane Group LOS	C	C		B	C		B	B		B	B	
Approach Delay	26.4			30.0			18.0			18.3		
Approach LOS	C			C			B			B		
Intersection Delay	22.6			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	37	206	25	40	272	161	63	408	25	219	746	69
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	37	231		40	433		63	433		219	815	
Lane Group Capacity	247	791		341	759		320	1632		501	1625	
v/c Ratio	0.15	0.29		0.12	0.57		0.20	0.27		0.44	0.50	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.0	28.4		20.6	30.5		9.7	14.1		11.9	16.1	
Delay Factor k	0.11	0.11		0.11	0.16		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.2		0.2	1.0		0.3	0.1		0.6	0.2	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	21.3	28.6		20.8	31.5		10.0	14.1		12.5	16.4	
Lane Group LOS	C	C		C	C		A	B		B	B	
Approach Delay	27.6			30.6			13.6			15.6		
Approach LOS	C			C			B			B		
Intersection Delay	19.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	87	385	76	81	500	205	88	349	31	188	395	46
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 5.0	G = 26.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	87	461		81	705		88	380		188	441	
Lane Group Capacity	316	1419		428	1391		301	983		329	980	
v/c Ratio	0.28	0.32		0.19	0.51		0.29	0.39		0.57	0.45	
Green Ratio	0.52	0.42		0.52	0.42		0.39	0.29		0.39	0.29	
Uniform Delay d_1	12.0	17.4		11.2	19.1		18.3	25.6		23.7	26.2	
Delay Factor k	0.11	0.11		0.11	0.12		0.11	0.11		0.17	0.11	
Incremental Delay d_2	0.5	0.1		0.2	0.3		0.5	0.3		2.4	0.3	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	12.4	17.5		11.4	19.4		18.8	25.9		26.1	26.5	
Lane Group LOS	B	B		B	B		B	C		C	C	
Approach Delay	16.7			18.6			24.5			26.4		
Approach LOS	B			B			C			C		
Intersection Delay	21.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	82	343	73	44	325	242	77	533	41	226	612	66
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 5.0	G = 39.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	82	416		44	567		77	574		226	678	
Lane Group Capacity	238	932		301	896		337	1477		383	1471	
v/c Ratio	0.34	0.45		0.15	0.63		0.23	0.39		0.59	0.46	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.43		0.53	0.43	
Uniform Delay d_1	19.3	26.8		18.4	28.5		11.2	17.4		17.5	18.1	
Delay Factor k	0.11	0.11		0.11	0.21		0.11	0.11		0.18	0.11	
Incremental Delay d_2	0.9	0.3		0.2	1.5		0.3	0.2		2.4	0.2	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	20.2	27.1		18.6	29.9		11.6	17.5		19.9	18.3	
Lane Group LOS	C	C		B	C		B	B		B	B	
Approach Delay	26.0			29.1			16.8			18.7		
Approach LOS	C			C			B			B		
Intersection Delay	22.0			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	58	219	27	118	292	161	65	425	31	219	921	89
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	58	246		118	453		65	456		219	1010	
Lane Group Capacity	239	791		333	761		253	1629		488	1624	
v/c Ratio	0.24	0.31		0.35	0.60		0.26	0.28		0.45	0.62	
Green Ratio	0.33	0.23		0.33	0.23		0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.4	28.5		21.7	30.7		10.8	14.2		12.2	17.5	
Delay Factor k	0.11	0.11		0.11	0.18		0.11	0.11		0.11	0.21	
Incremental Delay d_2	0.5	0.2		0.7	1.3		0.5	0.1		0.7	0.7	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	21.9	28.7		22.3	32.0		11.3	14.3		12.8	18.2	
Lane Group LOS	C	C		C	C		B	B		B	B	
Approach Delay	27.4			30.0			13.9			17.2		
Approach LOS	C			C			B			B		
Intersection Delay	20.5			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Dr @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	139	419	84	146	516	205	93	387	44	188	536	62
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 37.0	G =	G =	G = 5.0	G = 27.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	139	503		146	721		93	431		188	598	
Lane Group Capacity	301	1381		396	1356		248	1018		317	1018	
v/c Ratio	0.46	0.36		0.37	0.53		0.38	0.42		0.59	0.59	
Green Ratio	0.51	0.41		0.51	0.41		0.40	0.30		0.40	0.30	
Uniform Delay d_1	13.1	18.4		12.3	20.0		18.2	25.3		23.8	26.8	
Delay Factor k	0.11	0.11		0.11	0.13		0.11	0.11		0.18	0.18	
Incremental Delay d_2	1.1	0.2		0.6	0.4		1.0	0.3		3.0	0.9	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	14.2	18.5		12.9	20.4		19.2	25.5		26.7	27.7	
Lane Group LOS	B	B		B	C		B	C		C	C	
Approach Delay	17.6			19.1			24.4			27.4		
Approach LOS	B			B			C			C		
Intersection Delay	22.1			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Dr @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Lane Group	L	TR		L	TR		L	TR		L	TR	
Volume (vph)	143	383	85	112	342	242	83	574	55	226	758	83
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 6.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	143	468		112	584		83	629		226	841	
Lane Group Capacity	232	931		278	898		284	1436		367	1433	
v/c Ratio	0.62	0.50		0.40	0.65		0.29	0.44		0.62	0.59	
Green Ratio	0.38	0.28		0.38	0.28		0.53	0.42		0.53	0.42	
Uniform Delay d_1	25.3	27.3		19.3	28.6		12.1	18.4		17.8	20.0	
Delay Factor k	0.20	0.11		0.11	0.23		0.11	0.11		0.20	0.18	
Incremental Delay d_2	4.9	0.4		1.0	1.7		0.6	0.2		3.1	0.6	
PF Factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	30.2	27.7		20.3	30.3		12.7	18.6		20.9	20.6	
Lane Group LOS	C	C		C	C		B	B		C	C	
Approach Delay	28.3			28.7			18.0			20.7		
Approach LOS	C			C			B			C		
Intersection Delay	23.4			Intersection LOS						C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*50*	*470*	*23*	*14*	*586*	*49*
Peak-Hour Factor, PHF	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
Hourly Flow Rate, HFR (veh/h)	*56*	*528*	*25*	*15*	*659*	*55*
Percent Heavy Vehicles	*8*	--	--	*8*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*27*	*4*	*10*	*43*	*10*	*69*
Peak-Hour Factor, PHF	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
Hourly Flow Rate, HFR (veh/h)	*30*	*4*	*11*	*48*	*11*	*77*
Percent Heavy Vehicles	*8*	*8*	*8*	*8*	*8*	*8*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*1*
Configuration	*LT*		*R*	*LT*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*LT*		*R*	*LT*		*R*
v (veh/h)	*56*	*15*	*34*		*11*	*59*		*77*
C (m) (veh/h)	*843*	*973*	*140*		*742*	*141*		*667*
v/c	*0.07*	*0.02*	*0.24*		*0.01*	*0.42*		*0.12*
95% queue length	*0.21*	*0.05*	*0.90*		*0.05*	*1.83*		*0.39*
Control Delay (s/veh)	*9.6*	*8.8*	*38.8*		*9.9*	*47.8*		*11.1*
LOS	*A*	*A*	*E*		*A*	*E*		*B*
Approach Delay (s/veh)	--	--	*31.7*			*27.0*		
Approach LOS	--	--	*D*			*D*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Civic Drive @ Tahquitz Canyon*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Existing*
Analysis Time Period	*PM Peak Hour*		

Project Description *COD PSM*	
East/West Street: *Civic Drive*	North/South Street: *Tahquitz Canyon Way*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*64*	*466*	*22*	*6*	*455*	*47*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*67*	*492*	*23*	*6*	*480*	*49*
Percent Heavy Vehicles	*8*	--	--	*8*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*25*	*11*	*5*	*31*	*7*	*46*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*26*	*11*	*5*	*32*	*7*	*48*
Percent Heavy Vehicles	*8*	*8*	*8*	*8*	*8*	*8*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*1*
Configuration	*LT*		*R*	*LT*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*LT*		*R*	*LT*		*R*
v (veh/h)	*67*	*6*	*37*		*5*	*39*		*48*
C (m) (veh/h)	*994*	*1006*	*185*		*760*	*193*		*754*
v/c	*0.07*	*0.01*	*0.20*		*0.01*	*0.20*		*0.06*
95% queue length	*0.22*	*0.02*	*0.72*		*0.02*	*0.73*		*0.20*
Control Delay (s/veh)	*8.9*	*8.6*	*29.3*		*9.8*	*28.3*		*10.1*
LOS	*A*	*A*	*D*		*A*	*D*		*B*
Approach Delay (s/veh)	--	--	*26.9*			*18.3*		
Approach LOS	--	--	*D*			*C*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	50	471	23	14	590	49
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Hourly Flow Rate, HFR (veh/h)	56	529	25	15	662	55
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	27	4	10	43	10	69
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Hourly Flow Rate, HFR (veh/h)	30	4	11	48	11	77
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	56	15	34		11	59		77
C (m) (veh/h)	841	972	139		741	140		666
v/c	0.07	0.02	0.24		0.01	0.42		0.12
95% queue length	0.21	0.05	0.91		0.05	1.85		0.39
Control Delay (s/veh)	9.6	8.8	39.1		9.9	48.3		11.1
LOS	A	A	E		A	E		B
Approach Delay (s/veh)	--	--	32.0			27.2		
Approach LOS	--	--	D			D		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	64	467	22	6	458	47
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	67	491	23	6	482	49
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	25	11	5	31	7	46
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	26	11	5	32	7	48
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	67	6	37		5	39		48
C (m) (veh/h)	992	1007	185		761	193		752
v/c	0.07	0.01	0.20		0.01	0.20		0.06
95% queue length	0.22	0.02	0.72		0.02	0.73		0.20
Control Delay (s/veh)	8.9	8.6	29.3		9.8	28.3		10.1
LOS	A	A	D		A	D		B
Approach Delay (s/veh)	--	--	26.9			18.3		
Approach LOS	--	--	D			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Project BO*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*50*	*514*	*23*	*14*	*664*	*49*
Peak-Hour Factor, PHF	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
Hourly Flow Rate, HFR (veh/h)	*56*	*577*	*25*	*15*	*746*	*55*
Percent Heavy Vehicles	*8*	*--*	*--*	*8*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*27*	*4*	*10*	*43*	*10*	*69*
Peak-Hour Factor, PHF	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
Hourly Flow Rate, HFR (veh/h)	*30*	*4*	*11*	*48*	*11*	*77*
Percent Heavy Vehicles	*8*	*8*	*8*	*8*	*8*	*8*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*1*
Configuration	*LT*		*R*	*LT*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*LT*		*R*	*LT*		*R*
v (veh/h)	*56*	*15*	*34*		*11*	*59*		*77*
C (m) (veh/h)	*780*	*931*	*116*		*718*	*115*		*630*
v/c	*0.07*	*0.02*	*0.29*		*0.02*	*0.51*		*0.12*
95% queue length	*0.23*	*0.05*	*1.12*		*0.05*	*2.36*		*0.42*
Control Delay (s/veh)	*10.0*	*8.9*	*48.4*		*10.1*	*65.4*		*11.5*
LOS	*A*	*A*	*E*		*B*	*F*		*B*
Approach Delay (s/veh)	--	--	*39.1*			*34.9*		
Approach LOS	--	--	*E*			*D*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Greg	Intersection	Civic Drive @ Tahquitz Canyon
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/3/2015	Analysis Year	Existing+Project BO
Analysis Time Period	PM Peak Hour		

Project Description COD PSM	
East/West Street: Civic Drive	North/South Street: Tahquitz Canyon Way
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	64	518	22	6	536	47
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	67	545	23	6	564	49
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	25	11	5	31	7	46
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	26	11	5	32	7	48
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	67	6	37		5	39		48
C (m) (veh/h)	922	960	154		735	158		714
v/c	0.07	0.01	0.24		0.01	0.25		0.07
95% queue length	0.23	0.02	0.89		0.02	0.93		0.22
Control Delay (s/veh)	9.2	8.8	35.6		9.9	35.1		10.4
LOS	A	A	E		A	E		B
Approach Delay (s/veh)	--	--	32.6			21.5		
Approach LOS	--	--	D			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 No Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	51	494	23	14	600	50
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Hourly Flow Rate, HFR (veh/h)	57	555	25	15	674	56
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	28	4	10	44	10	70
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Hourly Flow Rate, HFR (veh/h)	31	4	11	49	11	78
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	57	15	35		11	60		78
C (m) (veh/h)	831	950	130		729	133		660
v/c	0.07	0.02	0.27		0.02	0.45		0.12
95% queue length	0.22	0.05	1.02		0.05	2.02		0.40
Control Delay (s/veh)	9.7	8.9	42.6		10.0	52.6		11.2
LOS	A	A	E		B	F		B
Approach Delay (s/veh)	--	--	34.8			29.2		
Approach LOS	--	--	D			D		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 No Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	65	483	22	6	479	48
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	68	508	23	6	504	50
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	25	11	5	32	7	47
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	26	11	5	33	7	49
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	68	6	37		5	40		49
C (m) (veh/h)	972	992	174		752	182		741
v/c	0.07	0.01	0.21		0.01	0.22		0.07
95% queue length	0.23	0.02	0.78		0.02	0.81		0.21
Control Delay (s/veh)	9.0	8.7	31.2		9.8	30.3		10.2
LOS	A	A	D		A	D		B
Approach Delay (s/veh)	--	--	28.6			19.2		
Approach LOS	--	--	D			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*51*	*497*	*23*	*14*	*606*	*50*
Peak-Hour Factor, PHF	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
Hourly Flow Rate, HFR (veh/h)	*57*	*558*	*25*	*15*	*680*	*56*
Percent Heavy Vehicles	*8*	*--*	*--*	*8*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*28*	*4*	*10*	*44*	*10*	*70*
Peak-Hour Factor, PHF	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
Hourly Flow Rate, HFR (veh/h)	*31*	*4*	*11*	*49*	*11*	*78*
Percent Heavy Vehicles	*8*	*8*	*8*	*8*	*8*	*8*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*1*
Configuration	*LT*		*R*	*LT*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*LT*		*R*	*LT*		*R*
v (veh/h)	*57*	*15*	*35*		*11*	*60*		*78*
C (m) (veh/h)	*827*	*947*	*129*		*727*	*131*		*658*
v/c	*0.07*	*0.02*	*0.27*		*0.02*	*0.46*		*0.12*
95% queue length	*0.22*	*0.05*	*1.03*		*0.05*	*2.06*		*0.40*
Control Delay (s/veh)	*9.7*	*8.9*	*43.0*		*10.0*	*53.8*		*11.2*
LOS	*A*	*A*	*E*		*B*	*F*		*B*
Approach Delay (s/veh)	--	--	*35.1*			*29.7*		
Approach LOS	--	--	*E*			*D*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	65	486	22	6	485	48
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	68	511	23	6	510	50
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	25	11	5	32	7	47
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	26	11	5	33	7	49
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	68	6	37		5	40		49
C (m) (veh/h)	967	989	173		751	179		739
v/c	0.07	0.01	0.21		0.01	0.22		0.07
95% queue length	0.23	0.02	0.78		0.02	0.82		0.21
Control Delay (s/veh)	9.0	8.7	31.4		9.8	30.8		10.2
LOS	A	A	D		A	D		B
Approach Delay (s/veh)	--	--	28.8			19.5		
Approach LOS	--	--	D			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	55	517	25	15	645	54
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	55	517	25	15	645	54
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	30	4	11	47	11	76
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	30	4	11	47	11	76
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	55	15	34		11	58		76
C (m) (veh/h)	874	1002	149		757	151		682
v/c	0.06	0.01	0.23		0.01	0.38		0.11
95% queue length	0.20	0.05	0.84		0.04	1.64		0.37
Control Delay (s/veh)	9.4	8.6	36.2		9.8	43.0		10.9
LOS	A	A	E		A	E		B
Approach Delay (s/veh)	--	--	29.7			24.8		
Approach LOS	--	--	D			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Tahquitz Canyon*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* — North/South Street: *Tahquitz Canyon Way*

Intersection Orientation: *East-West* — Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	70	513	24	7	500	52
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	70	513	24	7	500	52
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	27	12	5	34	8	51
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	27	12	5	34	8	51
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	70	7	39		5	42		51
C (m) (veh/h)	994	1007	174		760	182		752
v/c	0.07	0.01	0.22		0.01	0.23		0.07
95% queue length	0.23	0.02	0.83		0.02	0.86		0.22
Control Delay (s/veh)	8.9	8.6	31.6		9.8	30.6		10.1
LOS	A	A	D		A	D		B
Approach Delay (s/veh)	--	--	29.1			19.4		
Approach LOS	--	--	D			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/3/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Civic Drive @ Tahquitz Canyon
Jurisdiction	Palm Springs
Analysis Year	Year 2030 W/ Project

Project Description COD PSM

East/West Street: Civic Drive — North/South Street: Tahquitz Canyon Way

Intersection Orientation: East-West — Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	55	563	25	15	725	54
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	55	563	25	15	725	54
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	30	4	11	47	11	76
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	30	4	11	47	11	76
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	55	15	34		11	58		76
C (m) (veh/h)	814	963	125		734	124		648
v/c	0.07	0.02	0.27		0.01	0.47		0.12
95% queue length	0.22	0.05	1.03		0.05	2.10		0.40
Control Delay (s/veh)	9.7	8.8	44.2		10.0	57.3		11.3
LOS	A	A	E		A	F		B
Approach Delay (s/veh)	--	--	35.9			31.2		
Approach LOS	--	--	E			D		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/3/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Civic Drive @ Tahquitz Canyon
Jurisdiction	Palm Springs
Analysis Year	Year 2030 W/ Project

Project Description *COD PSM*

East/West Street: *Civic Drive*	North/South Street: *Tahquitz Canyon Way*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	70	567	24	7	584	52
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	70	567	24	7	584	52
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	27	12	5	34	8	51
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	27	12	5	34	8	51
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	70	7	39		5	42		51
C (m) (veh/h)	923	960	145		732	148		712
v/c	0.08	0.01	0.27		0.01	0.28		0.07
95% queue length	0.25	0.02	1.02		0.02	1.10		0.23
Control Delay (s/veh)	9.2	8.8	38.7		10.0	38.7		10.4
LOS	A	A	E		A	E		B
Approach Delay (s/veh)	--	--	35.5			23.2		
Approach LOS	--	--	E			C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Rd @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	45	144	342	103	203	52	376	112	20	27	119	58
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 25.0	G =	G =	G =	G = 5.0	G = 48.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	157	372	112	278		409	122	22	29	192	
Lane Group Capacity	264	489	1495	293	902		704	2122	1495	633	1699	
v/c Ratio	0.19	0.32	0.25	0.38	0.31		0.58	0.06	0.01	0.05	0.11	
Green Ratio	0.28	0.28	1.00	0.28	0.28		0.63	0.63	1.00	0.53	0.53	
Uniform Delay d_1	24.7	25.8	0.0	26.3	25.7		10.4	6.3	0.0	10.0	10.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.17	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.8	0.2		1.2	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.1	26.2	0.1	27.1	25.9		11.6	6.3	0.0	10.1	10.5	
Lane Group LOS	C	C	A	C	C		B	A	A	B	B	
Approach Delay	9.3			26.2			10.0			10.4		
Approach LOS	A			C			A			B		
Intersection Delay	13.4			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	56	137	308	31	73	37	385	93	9	11	87	53
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 22.0	G =	G =	G =	G = 5.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	57	138	311	31	111		389	94	9	11	142	
Lane Group Capacity	293	430	1495	266	778		783	2233	1495	691	1790	
v/c Ratio	0.19	0.32	0.21	0.12	0.14		0.50	0.04	0.01	0.02	0.08	
Green Ratio	0.24	0.24	1.00	0.24	0.24		0.67	0.67	1.00	0.57	0.57	
Uniform Delay d_1	27.0	27.9	0.0	26.4	26.6		7.9	5.1	0.0	8.5	8.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.2	0.1		0.5	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	27.3	28.3	0.1	26.6	26.7		8.4	5.2	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		A	A	A	A	A	
Approach Delay	10.8			26.7			7.6			8.8		
Approach LOS	B			C			A			A		
Intersection Delay	11.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	45	144	343	103	203	52	380	112	20	27	119	58
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 25.0	G =	G =	G =	G = 5.0	G = 48.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	157	373	112	278		413	122	22	29	192	
Lane Group Capacity	264	489	1495	293	902		704	2122	1495	633	1699	
v/c Ratio	0.19	0.32	0.25	0.38	0.31		0.59	0.06	0.01	0.05	0.11	
Green Ratio	0.28	0.28	1.00	0.28	0.28		0.63	0.63	1.00	0.53	0.53	
Uniform Delay d_1	24.7	25.8	0.0	26.3	25.7		10.5	6.3	0.0	10.0	10.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.18	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.8	0.2		1.3	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.1	26.2	0.1	27.1	25.9		11.8	6.3	0.0	10.1	10.5	
Lane Group LOS	C	C	A	C	C		B	A	A	B	B	
Approach Delay	9.3			26.2			10.1			10.4		
Approach LOS	A			C			B			B		
Intersection Delay	13.5			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Rd @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	56	137	309	31	73	37	388	93	9	11	87	53
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 22.0	G =	G =	G =	G = 5.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	57	138	312	31	111		392	94	9	11	142	
Lane Group Capacity	293	430	1495	266	778		783	2233	1495	691	1790	
v/c Ratio	0.19	0.32	0.21	0.12	0.14		0.50	0.04	0.01	0.02	0.08	
Green Ratio	0.24	0.24	1.00	0.24	0.24		0.67	0.67	1.00	0.57	0.57	
Uniform Delay d_1	27.0	27.9	0.0	26.4	26.6		7.9	5.1	0.0	8.5	8.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.2	0.1		0.5	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	27.3	28.3	0.1	26.6	26.7		8.4	5.2	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		A	A	A	A	A	
Approach Delay	10.8			26.7			7.6			8.8		
Approach LOS	B			C			A			A		
Intersection Delay	11.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	45	144	386	103	203	52	455	112	20	27	119	58
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 25.0	G =	G =	G =	G = 5.0	G = 48.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	157	420	112	278		495	122	22	29	192	
Lane Group Capacity	264	489	1495	293	902		704	2122	1495	633	1699	
v/c Ratio	0.19	0.32	0.28	0.38	0.31		0.70	0.06	0.01	0.05	0.11	
Green Ratio	0.28	0.28	1.00	0.28	0.28		0.63	0.63	1.00	0.53	0.53	
Uniform Delay d_1	24.7	25.8	0.0	26.3	25.7		12.1	6.3	0.0	10.0	10.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.27	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.8	0.2		3.2	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.1	26.2	0.1	27.1	25.9		15.3	6.3	0.0	10.1	10.5	
Lane Group LOS	C	C	A	C	C		B	A	A	B	B	
Approach Delay	8.6			26.2			13.0			10.4		
Approach LOS	A			C			B			B		
Intersection Delay	14.0			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	56	137	360	31	73	37	466	93	9	11	87	53
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 21.0	G =	G =	G =	G = 6.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	57	138	364	31	111		471	94	9	11	142	
Lane Group Capacity	280	410	1495	252	742		801	2271	1495	691	1790	
v/c Ratio	0.20	0.34	0.24	0.12	0.15		0.59	0.04	0.01	0.02	0.08	
Green Ratio	0.23	0.23	1.00	0.23	0.23		0.68	0.68	1.00	0.57	0.57	
Uniform Delay d_1	27.8	28.7	0.0	27.2	27.4		8.2	4.8	0.0	8.5	8.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.18	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.4	0.5	0.1	0.2	0.1		1.1	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	28.1	29.2	0.1	27.5	27.5		9.4	4.8	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		A	A	A	A	A	
Approach Delay	10.1			27.5			8.5			8.8		
Approach LOS	B			C			A			A		
Intersection Delay	11.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	46	147	364	105	207	53	386	114	20	28	121	59
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 25.0	G =	G =	G =	G = 5.0	G = 48.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	50	160	396	114	283		420	124	22	30	196	
Lane Group Capacity	262	489	1495	290	902		701	2122	1495	632	1699	
v/c Ratio	0.19	0.33	0.26	0.39	0.31		0.60	0.06	0.01	0.05	0.12	
Green Ratio	0.28	0.28	1.00	0.28	0.28		0.63	0.63	1.00	0.53	0.53	
Uniform Delay d_1	24.8	25.8	0.0	26.3	25.7		10.7	6.3	0.0	10.1	10.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.19	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.4	0.4	0.1	0.9	0.2		1.4	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.1	26.2	0.1	27.2	25.9		12.1	6.3	0.0	10.1	10.5	
Lane Group LOS	C	C	A	C	C		B	A	A	B	B	
Approach Delay	9.1			26.3			10.3			10.4		
Approach LOS	A			C			B			B		
Intersection Delay	13.4			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Rd @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	57	140	322	32	74	38	408	95	9	11	89	54
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 22.0	G =	G =	G =	G = 5.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	58	141	325	32	113		412	96	9	11	145	
Lane Group Capacity	293	430	1495	264	778		780	2233	1495	690	1790	
v/c Ratio	0.20	0.33	0.22	0.12	0.15		0.53	0.04	0.01	0.02	0.08	
Green Ratio	0.24	0.24	1.00	0.24	0.24		0.67	0.67	1.00	0.57	0.57	
Uniform Delay d_1	27.0	27.9	0.0	26.5	26.6		8.2	5.1	0.0	8.5	8.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.13	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.2	0.1		0.7	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	27.3	28.4	0.1	26.7	26.7		8.8	5.2	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		A	A	A	A	A	
Approach Delay	10.7			26.7			8.0			8.9		
Approach LOS	B			C			A			A		
Intersection Delay	11.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Rd @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	46	147	367	105	207	53	392	114	20	28	121	59
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 25.0	G =	G =	G =	G = 5.0	G = 48.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	50	160	399	114	283		426	124	22	30	196	
Lane Group Capacity	262	489	1495	290	902		701	2122	1495	632	1699	
v/c Ratio	0.19	0.33	0.27	0.39	0.31		0.61	0.06	0.01	0.05	0.12	
Green Ratio	0.28	0.28	1.00	0.28	0.28		0.63	0.63	1.00	0.53	0.53	
Uniform Delay d_1	24.8	25.8	0.0	26.3	25.7		10.8	6.3	0.0	10.1	10.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.19	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.4	0.4	0.1	0.9	0.2		1.5	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.1	26.2	0.1	27.2	25.9		12.3	6.3	0.0	10.1	10.5	
Lane Group LOS	C	C	A	C	C		B	A	A	B	B	
Approach Delay	9.0			26.3			10.5			10.4		
Approach LOS	A			C			B			B		
Intersection Delay	13.5			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Rd @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	57	140	325	32	74	38	414	95	9	11	89	54
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 22.0	G =	G =	G =	G = 5.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	58	141	328	32	113		418	96	9	11	145	
Lane Group Capacity	293	430	1495	264	778		780	2233	1495	690	1790	
v/c Ratio	0.20	0.33	0.22	0.12	0.15		0.54	0.04	0.01	0.02	0.08	
Green Ratio	0.24	0.24	1.00	0.24	0.24		0.67	0.67	1.00	0.57	0.57	
Uniform Delay d_1	27.0	27.9	0.0	26.5	26.6		8.2	5.1	0.0	8.5	8.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.14	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.4	0.1	0.2	0.1		0.7	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	27.3	28.4	0.1	26.7	26.7		9.0	5.2	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		A	A	A	A	A	
Approach Delay	10.6			26.7			8.1			8.9		
Approach LOS	B			C			A			A		
Intersection Delay	11.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	49	158	376	113	223	57	414	123	22	30	131	64
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 24.0	G =	G =	G =	G = 5.0	G = 49.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	158	376	113	280		414	123	22	30	195	
Lane Group Capacity	258	483	1538	286	891		736	2220	1538	664	1784	
v/c Ratio	0.19	0.33	0.24	0.40	0.31		0.56	0.06	0.01	0.05	0.11	
Green Ratio	0.27	0.27	1.00	0.27	0.27		0.64	0.64	1.00	0.54	0.54	
Uniform Delay d_1	25.5	26.5	0.0	27.1	26.4		9.7	5.9	0.0	9.6	9.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.16	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.4	0.4	0.1	0.9	0.2		1.0	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.9	26.9	0.1	28.0	26.6		10.7	5.9	0.0	9.6	10.0	
Lane Group LOS	C	C	A	C	C		B	A	A	A	A	
Approach Delay	9.5			27.0			9.2			9.9		
Approach LOS	A			C			A			A		
Intersection Delay	13.4			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	62	151	339	34	80	41	423	102	10	12	96	58
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 22.0	G =	G =	G =	G = 5.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	62	151	339	34	121		423	102	10	12	154	
Lane Group Capacity	299	442	1538	263	799		796	2297	1538	705	1842	
v/c Ratio	0.21	0.34	0.22	0.13	0.15		0.53	0.04	0.01	0.02	0.08	
Green Ratio	0.24	0.24	1.00	0.24	0.24		0.67	0.67	1.00	0.57	0.57	
Uniform Delay d_1	27.1	28.0	0.0	26.5	26.7		8.2	5.2	0.0	8.5	8.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.13	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.5	0.1	0.2	0.1		0.7	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	27.4	28.5	0.1	26.8	26.8		8.9	5.2	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		A	A	A	A	A	
Approach Delay	10.9			26.8			8.0			8.9		
Approach LOS	B			C			A			A		
Intersection Delay	11.3			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Rd @ Tahquitz Canyon
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	49	158	422	113	223	57	495	123	22	30	131	64
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 24.0	G =	G =	G =	G = 5.0	G = 49.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	158	422	113	280		495	123	22	30	195	
Lane Group Capacity	258	483	1538	286	891		736	2220	1538	664	1784	
v/c Ratio	0.19	0.33	0.27	0.40	0.31		0.67	0.06	0.01	0.05	0.11	
Green Ratio	0.27	0.27	1.00	0.27	0.27		0.64	0.64	1.00	0.54	0.54	
Uniform Delay d_1	25.5	26.5	0.0	27.1	26.4		11.1	5.9	0.0	9.6	9.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.24	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.4	0.4	0.1	0.9	0.2		2.4	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	25.9	26.9	0.1	28.0	26.6		13.5	5.9	0.0	9.6	10.0	
Lane Group LOS	C	C	A	C	C		B	A	A	A	A	
Approach Delay	8.8			27.0			11.6			9.9		
Approach LOS	A			C			B			A		
Intersection Delay	13.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Rd @ Tahquitz Canyon*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	1	1	2	0
Lane Group	L	T	R	L	TR		L	T	R	L	TR	
Volume (vph)	62	151	393	34	80	41	507	102	10	12	96	58
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type	3	3	3	3	3		3	3	3	3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08
Timing	G = 22.0	G =	G =	G =	G = 5.0	G = 51.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	62	151	393	34	121		507	102	10	12	154	
Lane Group Capacity	299	442	1538	263	799		796	2297	1538	705	1842	
v/c Ratio	0.21	0.34	0.26	0.13	0.15		0.64	0.04	0.01	0.02	0.08	
Green Ratio	0.24	0.24	1.00	0.24	0.24		0.67	0.67	1.00	0.57	0.57	
Uniform Delay d_1	27.1	28.0	0.0	26.5	26.7		9.4	5.2	0.0	8.5	8.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.22	0.11	0.11	0.11	0.11	
Incremental Delay d_2	0.3	0.5	0.1	0.2	0.1		1.7	0.0	0.0	0.0	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000	0.950	1.000	1.000	
Control Delay	27.4	28.5	0.1	26.8	26.8		11.1	5.2	0.0	8.5	8.9	
Lane Group LOS	C	C	A	C	C		B	A	A	A	A	
Approach Delay	10.0			26.8			9.9			8.9		
Approach LOS	A			C			A			A		
Intersection Delay	11.5			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	18	39	59	94	78	81	50	688	94	69	798	37
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	19	41	63	100	169		53	830		73	885	
Lane Group Capacity	177	274	1495	200	481		421	2156		446	2181	
v/c Ratio	0.11	0.15	0.04	0.50	0.35		0.13	0.38		0.16	0.41	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.6	32.9	0.0	34.8	33.9		3.5	7.1		3.4	7.3	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.3	0.0	2.0	0.4		0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	32.9	33.1	0.0	36.8	34.4		3.6	7.3		3.6	7.4	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	16.1			35.3			7.0			7.1		
Approach LOS	B			D			A			A		
Intersection Delay	11.0			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	27	55	69	82	63	106	46	802	80	94	755	36
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	28	58	72	86	177		48	924		98	829	
Lane Group Capacity	173	274	1495	197	472		446	2166		405	2181	
v/c Ratio	0.16	0.21	0.05	0.44	0.38		0.11	0.43		0.24	0.38	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.9	33.2	0.0	34.4	34.1		3.4	7.4		3.7	7.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.4	0.4	0.0	1.5	0.5		0.1	0.1		0.3	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.4	33.6	0.0	36.0	34.6		3.5	7.5		4.1	7.2	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	18.2			35.0			7.3			6.9		
Approach LOS	B			D			A			A		
Intersection Delay	11.0			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	19	41	59	95	78	81	50	689	95	69	798	37
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	20	44	63	101	169		53	834		73	888	
Lane Group Capacity	177	274	1495	199	481		420	2156		444	2182	
v/c Ratio	0.11	0.16	0.04	0.51	0.35		0.13	0.39		0.16	0.41	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.7	32.9	0.0	34.8	33.9		3.5	7.2		3.4	7.3	
Delay Factor k	0.11	0.11	0.11	0.12	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.3	0.0	2.1	0.4		0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	32.9	33.2	0.0	37.0	34.4		3.6	7.3		3.6	7.4	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	16.7			35.4			7.1			7.1		
Approach LOS	B			D			A			A		
Intersection Delay	11.0			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	28	57	69	83	63	106	46	803	81	94	755	36
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	29	60	73	87	178		48	930		99	833	
Lane Group Capacity	173	274	1495	196	472		444	2166		402	2181	
v/c Ratio	0.17	0.22	0.05	0.44	0.38		0.11	0.43		0.25	0.38	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.9	33.2	0.0	34.5	34.1		3.4	7.4		3.8	7.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.4	0.0	1.6	0.5		0.1	0.1		0.3	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.4	33.6	0.0	36.1	34.6		3.5	7.6		4.1	7.2	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	18.4			35.1			7.4			6.9		
Approach LOS	B			D			A			A		
Intersection Delay	11.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	26	78	59	108	100	101	50	696	117	106	803	42
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	28	83	63	115	213		53	864		113	899	
Lane Group Capacity	157	274	1495	192	482		416	2149		430	2179	
v/c Ratio	0.18	0.30	0.04	0.60	0.44		0.13	0.40		0.26	0.41	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	33.0	33.7	0.0	35.4	34.5		3.5	7.2		3.6	7.3	
Delay Factor k	0.11	0.11	0.11	0.19	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.6	0.0	5.1	0.6		0.1	0.1		0.3	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.6	34.3	0.0	40.5	35.1		3.7	7.4		4.0	7.4	
Lane Group LOS	C	C	A	D	D		A	A		A	A	
Approach Delay	21.8			37.0			7.2			7.1		
Approach LOS	C			D			A			A		
Intersection Delay	12.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	35	96	69	98	89	128	46	810	104	131	760	41
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	37	101	73	103	229		48	962		138	843	
Lane Group Capacity	149	274	1495	182	475		439	2159		390	2179	
v/c Ratio	0.25	0.37	0.05	0.57	0.48		0.11	0.45		0.35	0.39	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	33.4	34.0	0.0	35.2	34.7		3.4	7.5		4.0	7.2	
Delay Factor k	0.11	0.11	0.11	0.16	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.9	0.8	0.0	4.1	0.8		0.1	0.1		0.6	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	34.3	34.9	0.0	39.3	35.5		3.5	7.7		4.6	7.3	
Lane Group LOS	C	C	A	D	D		A	A		A	A	
Approach Delay	22.7			36.6			7.5			6.9		
Approach LOS	C			D			A			A		
Intersection Delay	12.3			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	18	40	60	101	85	84	51	701	97	71	813	38
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	19	43	64	107	179		54	849		76	905	
Lane Group Capacity	173	274	1495	200	482		413	2156		437	2181	
v/c Ratio	0.11	0.16	0.04	0.54	0.37		0.13	0.39		0.17	0.41	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.6	32.9	0.0	35.0	34.1		3.5	7.2		3.5	7.3	
Delay Factor k	0.11	0.11	0.11	0.14	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.3	0.0	2.8	0.5		0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	32.9	33.2	0.0	37.8	34.5		3.7	7.3		3.7	7.5	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	16.3			35.8			7.1			7.2		
Approach LOS	B			D			A			A		
Intersection Delay	11.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	27	61	70	86	67	109	47	817	86	98	769	37
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	28	64	74	91	186		49	951		103	848	
Lane Group Capacity	169	274	1495	196	473		437	2165		394	2181	
v/c Ratio	0.17	0.23	0.05	0.46	0.39		0.11	0.44		0.26	0.39	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.9	33.3	0.0	34.6	34.2		3.4	7.5		3.8	7.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.4	0.0	1.7	0.5		0.1	0.1		0.4	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.4	33.7	0.0	36.3	34.7		3.5	7.6		4.2	7.3	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	18.6			35.2			7.4			6.9		
Approach LOS	B			D			A			A		
Intersection Delay	11.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	19	43	60	102	86	84	51	702	99	71	813	38
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	20	46	64	109	180		54	852		76	905	
Lane Group Capacity	172	274	1495	199	482		413	2155		436	2181	
v/c Ratio	0.12	0.17	0.04	0.55	0.37		0.13	0.40		0.17	0.41	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.7	32.9	0.0	35.1	34.1		3.5	7.2		3.5	7.3	
Delay Factor k	0.11	0.11	0.11	0.15	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.3	0.0	3.2	0.5		0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.0	33.2	0.0	38.3	34.6		3.7	7.3		3.7	7.5	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	16.8			36.0			7.1			7.2		
Approach LOS	B			D			A			A		
Intersection Delay	11.3			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	28	64	70	87	68	109	47	818	88	98	769	37
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	29	67	74	92	187		49	954		103	848	
Lane Group Capacity	169	274	1495	195	473		437	2164		393	2181	
v/c Ratio	0.17	0.24	0.05	0.47	0.40		0.11	0.44		0.26	0.39	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	33.0	33.4	0.0	34.6	34.2		3.4	7.5		3.9	7.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.5	0.0	1.8	0.5		0.1	0.1		0.4	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.5	33.8	0.0	36.4	34.7		3.5	7.7		4.2	7.3	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	19.0			35.3			7.5			6.9		
Approach LOS	B			D			A			A		
Intersection Delay	11.3			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	20	43	65	103	86	89	55	757	103	76	878	41
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	20	43	65	103	175		55	860		76	919	
Lane Group Capacity	180	282	1538	205	495		419	2218		445	2243	
v/c Ratio	0.11	0.15	0.04	0.50	0.35		0.13	0.39		0.17	0.41	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.7	32.9	0.0	34.8	34.0		3.6	7.2		3.5	7.3	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.3	0.0	2.0	0.4		0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	32.9	33.1	0.0	36.8	34.4		3.7	7.3		3.7	7.4	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	16.3			35.3			7.1			7.1		
Approach LOS	B			D			A			A		
Intersection Delay	11.0			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	30	60	76	90	69	117	51	882	88	103	830	40
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	30	60	76	90	186		51	970		103	870	
Lane Group Capacity	174	282	1538	202	485		440	2228		398	2243	
v/c Ratio	0.17	0.21	0.05	0.45	0.38		0.12	0.44		0.26	0.39	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	33.0	33.2	0.0	34.5	34.1		3.4	7.5		3.9	7.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.4	0.0	1.6	0.5		0.1	0.1		0.3	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.4	33.6	0.0	36.0	34.6		3.6	7.6		4.2	7.3	
Lane Group LOS	C	C	A	D	C		A	A		A	A	
Approach Delay	18.2			35.1			7.4			7.0		
Approach LOS	B			D			A			A		
Intersection Delay	11.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Sunrise Way @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	28	83	65	117	109	109	55	765	127	113	83	46
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	28	83	65	117	218		55	892		113	129	
Lane Group Capacity	159	282	1538	198	496		929	2211		431	2138	
v/c Ratio	0.18	0.29	0.04	0.59	0.44		0.06	0.40		0.26	0.06	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	33.0	33.6	0.0	35.3	34.4		2.8	7.3		3.7	5.6	
Delay Factor k	0.11	0.11	0.11	0.18	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.6	0.0	4.6	0.6		0.0	0.1		0.3	0.0	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	33.5	34.2	0.0	40.0	35.1		2.8	7.4		4.0	5.6	
Lane Group LOS	C	C	A	D	D		A	A		A	A	
Approach Delay	21.5			36.8			7.1			4.8		
Approach LOS	C			D			A			A		
Intersection Delay	14.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Sunrise Way @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	2	0	1	2	0	1	2	0
Lane Group	L	T	R	L	TR		L	TR		L	TR	
Volume (vph)	38	102	76	106	96	139	51	890	113	140	835	45
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3		3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EW Perm	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	38	102	76	106	235		51	1003		140	880	
Lane Group Capacity	151	282	1538	187	488		436	2220		385	2241	
v/c Ratio	0.25	0.36	0.05	0.57	0.48		0.12	0.45		0.36	0.39	
Green Ratio	0.16	0.16	1.00	0.16	0.16		0.76	0.66		0.76	0.66	
Uniform Delay d_1	33.4	34.0	0.0	35.2	34.7		3.5	7.6		4.2	7.2	
Delay Factor k	0.11	0.11	0.11	0.16	0.11		0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.9	0.8	0.0	4.0	0.8		0.1	0.1		0.6	0.1	
PF Factor	1.000	1.000	0.950	1.000	1.000		1.000	1.000		1.000	1.000	
Control Delay	34.3	34.8	0.0	39.2	35.4		3.6	7.7		4.8	7.3	
Lane Group LOS	C	C	A	D	D		A	A		A	A	
Approach Delay	22.5			36.6			7.5			7.0		
Approach LOS	C			D			A			A		
Intersection Delay	12.3			Intersection LOS						B		

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ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	Greg	Intersection	Cerritos Drive @ Baristo Road
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/5/2015	Analysis Year	Existing
Analysis Time Period	Midday Peak Hour		

Project ID COD PSM

East/West Street: Baristo Road | North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	175	25	23	222	12
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	15	1	23	8	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	0.82	0.82	0.82	0.82	0.82		0.82	
Flow Rate (veh/h)	12	244	28	286	47		14	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.0	0.6		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.22	0.02	0.25	0.04		0.01	
hd, final value (s)	5.56	4.98	5.51	4.98	5.10		5.40	
x, final value	0.02	0.34	0.04	0.40	0.07		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.3	2.7	3.2	2.7	3.1		3.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	262	494	278	536	297		264	
Delay (s/veh)	8.37	10.19	8.46	10.89	8.46		8.51	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	10.10		10.68		8.46		8.51	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.23							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Existing

Project ID COD PSM

East/West Street: Baristo Road

North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	192	39	56	213	16
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	31	0	34	9	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	0.81	0.81	0.81	0.81	0.81		0.81	
Flow Rate (veh/h)	11	285	69	281	79		15	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.25	0.06	0.25	0.07		0.01	
hd, final value (s)	5.74	5.12	5.67	5.12	5.35		5.68	
x, final value	0.02	0.41	0.11	0.40	0.12		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.4	2.8	3.4	2.8	3.3		3.7	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	535	319	531	329		265	
Delay (s/veh)	8.54	11.27	9.06	11.20	9.06		8.82	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	11.17		10.78		9.06		8.82	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.71							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Existing+Phase 1

Project ID COD PSM

East/West Street: Baristo Road | North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	178	25	23	223	12
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	15	1	23	8	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	0.82	0.82	0.82	0.82	0.82		0.82	
Flow Rate (veh/h)	12	247	28	285	47		14	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.0	0.6		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.1	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.22	0.02	0.25	0.04		0.01	
hd, final value (s)	5.56	4.98	5.51	4.98	5.11		5.40	
x, final value	0.02	0.34	0.04	0.39	0.07		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.3	2.7	3.2	2.7	3.1		3.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	262	497	278	535	297		264	
Delay (s/veh)	8.37	10.24	8.46	10.88	8.47		8.52	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	10.15		10.66		8.47		8.52	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.24							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Existing+Phase 1

Project ID COD PSM

East/West Street: Baristo Road

North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	195	39	56	214	16
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	31	0	34	9	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LR		LTR	
PHF	0.81	0.81	0.81	0.81	0.81		0.81	
Flow Rate (veh/h)	11	288	69	283	79		15	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.26	0.06	0.25	0.07		0.01	
hd, final value (s)	5.74	5.12	5.68	5.13	5.36		5.69	
x, final value	0.02	0.41	0.11	0.40	0.12		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.4	2.8	3.4	2.8	3.4		3.7	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	538	319	533	329		265	
Delay (s/veh)	8.55	11.34	9.07	11.25	9.07		8.83	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	11.24		10.82		9.07		8.83	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.76							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Existing+Project BO

Project ID COD PSM

East/West Street: Baristo Road North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	274	25	23	277	12
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	15	1	23	8	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	0.82	0.82	0.82	0.82	0.82		0.82	
Flow Rate (veh/h)	12	364	28	351	47		14	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.0	0.6		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.1	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.32	0.02	0.31	0.04		0.01	
hd, final value (s)	5.64	5.08	5.63	5.10	5.53		5.85	
x, final value	0.02	0.51	0.04	0.50	0.07		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.3	2.8	3.3	2.8	3.5		3.8	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	262	614	278	601	297		264	
Delay (s/veh)	8.45	13.03	8.59	12.74	8.96		8.98	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	12.88		12.43		8.96		8.98	
LOS	B		B		A		A	
Intersection Delay (s/veh)	12.38							
Intersection LOS	B							

 HCS+™ Version 5.3 Generated: 5/24/2015 12:22 AM

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Existing+Project BO

Project ID COD PSM

East/West Street: Baristo Road

North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	294	39	56	277	16
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	31	0	34	9	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LR		LTR	
PHF	0.81	0.81	0.81	0.81	0.81		0.81	
Flow Rate (veh/h)	11	410	69	360	79		15	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.1	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.1	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.36	0.06	0.32	0.07		0.01	
hd, final value (s)	5.86	5.27	5.82	5.28	5.83		6.20	
x, final value	0.02	0.60	0.11	0.53	0.13		0.03	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.6	3.0	3.5	3.0	3.8		4.2	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	660	319	610	329		265	
Delay (s/veh)	8.66	15.58	9.25	13.75	9.68		9.36	
LOS	A	C	A	B	A		A	
Approach: Delay (s/veh)	15.40		13.02		9.68		9.36	
LOS	C		B		A		A	
Intersection Delay (s/veh)	13.74							
Intersection LOS	B							

 HCS+™ Version 5.3 Generated: 5/24/2015 12:23 AM

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Year 2018 No Project

Project ID COD PSM

East/West Street: Baristo Road | North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	180	25	23	238	12
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	15	1	23	8	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	0.82	0.82	0.82	0.82	0.82		0.82	
Flow Rate (veh/h)	12	249	28	304	47		14	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.0	0.6		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.1	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.22	0.02	0.27	0.04		0.01	
hd, final value (s)	5.58	5.00	5.52	4.99	5.15		5.45	
x, final value	0.02	0.35	0.04	0.42	0.07		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.3	2.7	3.2	2.7	3.2		3.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	262	499	278	554	297		264	
Delay (s/veh)	8.39	10.31	8.47	11.26	8.53		8.57	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	10.22		11.03		8.53		8.57	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.47							
Intersection LOS	B							

 HCS+TM Version 5.3 Generated: 5/23/2015 2:57 PM

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Year 2018 No Project

Project ID *COD PSM*

East/West Street: *Baristo Road* North/South Street: *Cerritos Drive*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	207	40	57	223	16
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	32	0	35	9	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LR		LTR	
PHF	0.81	0.81	0.81	0.81	0.81		0.81	
Flow Rate (veh/h)	11	304	70	294	82		15	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.27	0.06	0.26	0.07		0.01	
hd, final value (s)	5.77	5.16	5.71	5.16	5.42		5.77	
x, final value	0.02	0.44	0.11	0.42	0.12		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.5	2.9	3.4	2.9	3.4		3.8	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	554	320	544	332		265	
Delay (s/veh)	8.58	11.77	9.12	11.56	9.18		8.91	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	11.66		11.09		9.18		8.91	
LOS	B		B		A		A	
Intersection Delay (s/veh)	11.08							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Year 2018 W/ Project

Project ID COD PSM

East/West Street: Baristo Road

North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	185	25	23	240	12
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	15	1	23	8	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	0.82	0.82	0.82	0.82	0.82		0.82	
Flow Rate (veh/h)	12	255	28	306	47		14	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.0	0.6		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.1	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.23	0.02	0.27	0.04		0.01	
hd, final value (s)	5.58	5.00	5.52	4.99	5.17		5.47	
x, final value	0.02	0.35	0.04	0.42	0.07		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.3	2.7	3.2	2.7	3.2		3.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	262	505	278	556	297		264	
Delay (s/veh)	8.39	10.42	8.47	11.32	8.55		8.59	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	10.33		11.08		8.55		8.59	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.54							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/5/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Cerritos Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project ID *COD PSM*

East/West Street: *Baristo Road* North/South Street: *Cerritos Drive*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	212	40	57	225	16
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	32	0	35	9	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LR		LTR	
PHF	0.81	0.81	0.81	0.81	0.81		0.81	
Flow Rate (veh/h)	11	310	70	296	82		15	
% Heavy Vehicles	8	8	8	8	8		8	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.1	0.1	0.1	0.1	0.1		0.1	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.1	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.28	0.06	0.26	0.07		0.01	
hd, final value (s)	5.78	5.16	5.71	5.17	5.44		5.79	
x, final value	0.02	0.44	0.11	0.42	0.12		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.5	2.9	3.4	2.9	3.4		3.8	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	560	320	546	332		265	
Delay (s/veh)	8.58	11.93	9.13	11.63	9.21		8.94	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	11.81		11.15		9.21		8.94	
LOS	B		B		A		A	
Intersection Delay (s/veh)	11.18							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Year 2030 No Project

Project ID COD PSM

East/West Street: Baristo Road | North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	11	193	28	25	244	13
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	17	1	25	9	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	11	221	25	257	43		14	
% Heavy Vehicles	5	5	5	5	5		5	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.1	0.6		0.3	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	-0.0	0.6	0.0	-0.2		0.0	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.20	0.02	0.23	0.04		0.01	
hd, final value (s)	5.46	4.87	5.42	4.88	4.92		5.19	
x, final value	0.02	0.30	0.04	0.35	0.06		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.2	2.6	3.1	2.6	2.9		3.2	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	471	275	507	293		264	
Delay (s/veh)	8.25	9.64	8.33	10.17	8.23		8.30	
LOS	A	A	A	B	A		A	
Approach: Delay (s/veh)	9.57		10.01		8.23		8.30	
LOS	A		B		A		A	
Intersection Delay (s/veh)	9.66							
Intersection LOS	A							

 HCS+™ Version 5.3 Generated: 5/20/2015 10:45 PM

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/5/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Cerritos Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project ID *COD PSM*

East/West Street: *Baristo Road* North/South Street: *Cerritos Drive*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	211	43	62	234	18
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	34	0	37	10	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	10	254	62	252	71		14	
% Heavy Vehicles	5	5	5	5	5		5	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	-0.0	0.6	0.0	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.23	0.06	0.22	0.06		0.01	
hd, final value (s)	5.60	4.98	5.54	4.99	5.12		5.41	
x, final value	0.02	0.35	0.10	0.35	0.10		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.3	2.7	3.2	2.7	3.1		3.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	260	504	312	502	321		264	
Delay (s/veh)	8.39	10.36	8.83	10.35	8.69		8.53	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	10.29		10.05		8.69		8.53	
LOS	B		B		A		A	
Intersection Delay (s/veh)	9.97							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	Greg	Intersection	Cerritos Drive @ Baristo Road
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/5/2015	Analysis Year	Year 2030 W/ Project
Analysis Time Period	Midday Peak Hour		

Project ID COD PSM

East/West Street: Baristo Road | North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	11	294	28	25	300	13
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	17	1	25	9	1	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	11	322	25	313	43		14	
% Heavy Vehicles	5	5	5	5	5		5	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.6	
Prop. Right-Turns	0.0	0.1	0.0	0.0	0.6		0.3	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.1	-0.2		0.0	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.29	0.02	0.28	0.04		0.01	
hd, final value (s)	5.52	4.96	5.51	4.98	5.28		5.57	
x, final value	0.02	0.44	0.04	0.43	0.06		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.2	2.7	3.2	2.7	3.3		3.6	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	261	572	275	563	293		264	
Delay (s/veh)	8.32	11.56	8.43	11.44	8.64		8.69	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	11.46		11.22		8.64		8.69	
LOS	B		B		A		A	
Intersection Delay (s/veh)	11.12							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/5/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Cerritos Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Year 2030 W/ Project

Project ID COD PSM

East/West Street: Baristo Road

North/South Street: Cerritos Drive

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	315	43	62	299	18
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	34	0	37	10	0	4
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	10	358	62	317	71		14	
% Heavy Vehicles	5	5	5	5	5		5	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.5		0.7	
Prop. Right-Turns	0.0	0.1	0.0	0.1	0.5		0.3	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	0.0	0.6	0.0	-0.1		0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.01	0.32	0.06	0.28	0.06		0.01	
hd, final value (s)	5.69	5.11	5.66	5.12	5.51		5.83	
x, final value	0.02	0.51	0.10	0.45	0.11		0.02	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t_s (s)	3.4	2.8	3.4	2.8	3.5		3.8	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	260	608	312	567	321		264	
Delay (s/veh)	8.48	12.95	8.97	11.95	9.18		8.96	
LOS	A	B	A	B	A		A	
Approach: Delay (s/veh)	12.83		11.46		9.18		8.96	
LOS	B		B		A		A	
Intersection Delay (s/veh)	11.83							
Intersection LOS	B							

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	3	132	105	180	115	2	141	7	135	7	13	5
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	5	216	172	295	192			242	221		40	
Lane Group Capacity	636	880	1279	615	878			387	1495		492	
v/c Ratio	0.01	0.25	0.13	0.48	0.22			0.63	0.15		0.08	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	7.4	12.8	1.1	11.6	12.6			26.5	0.0		21.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.21	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.6	0.1			3.2	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	7.4	13.0	1.1	12.2	12.8			29.7	0.0		22.0	
Lane Group LOS	A	B	A	B	B			C	A		C	
Approach Delay	7.7			12.4			15.5			22.0		
Approach LOS	A			B			B			C		
Intersection Delay	12.4			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	1	166	27	37	185	1	26	4	32	1	2	3
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	1	215	35	48	241			39	41		8	
Lane Group Capacity	827	1212	1279	851	1211			166	1495		196	
v/c Ratio	0.00	0.18	0.03	0.06	0.20			0.23	0.03		0.04	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.1	5.0	1.0	2.1	5.0			35.7	0.0		34.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			0.7	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.1	5.0	1.0	2.2	5.1			36.4	0.0		34.9	
Lane Group LOS	A	A	A	A	A			D	A		C	
Approach Delay	4.5			4.6			17.8			34.9		
Approach LOS	A			A			B			C		
Intersection Delay	6.6			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	8	235	17	41	224	20	42	4	78	9	2	10
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	11	337	24	59	350			66	112		30	
Lane Group Capacity	731	1212	1279	742	1197			156	1495		178	
v/c Ratio	0.02	0.28	0.02	0.08	0.29			0.42	0.07		0.17	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.3	5.4	1.0	2.3	5.5			36.6	0.0		35.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			1.8	0.0		0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.3	5.5	1.0	2.4	5.6			38.4	0.0		35.9	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	5.1			5.1			14.3			35.9		
Approach LOS	A			A			B			D		
Intersection Delay	7.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	4	134	105	180	116	6	141	8	135	7	13	5
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	7	220	172	295	200			244	221		40	
Lane Group Capacity	629	880	1279	611	873			388	1495		492	
v/c Ratio	0.01	0.25	0.13	0.48	0.23			0.63	0.15		0.08	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	7.4	12.9	1.1	11.7	12.7			26.5	0.0		21.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.21	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.6	0.1			3.2	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	7.4	13.0	1.1	12.3	12.8			29.8	0.0		22.0	
Lane Group LOS	A	B	A	B	B			C	A		C	
Approach Delay	7.8			12.5			15.7			22.0		
Approach LOS	A			B			B			C		
Intersection Delay	12.5			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	2	168	27	37	186	3	26	4	32	2	3	3
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	3	218	35	48	246			39	42		11	
Lane Group Capacity	823	1212	1279	848	1209			166	1495		194	
v/c Ratio	0.00	0.18	0.03	0.06	0.20			0.23	0.03		0.06	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.1	5.0	1.0	2.2	5.1			35.7	0.0		34.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			0.7	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.1	5.0	1.0	2.2	5.1			36.4	0.0		35.0	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	4.5			4.7			17.5			35.0		
Approach LOS	A			A			B			D		
Intersection Delay	6.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	9	237	17	41	225	23	42	5	78	11	3	10
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	13	339	24	59	354			67	111		34	
Lane Group Capacity	728	1212	1279	741	1195			156	1495		176	
v/c Ratio	0.02	0.28	0.02	0.08	0.30			0.43	0.07		0.19	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.3	5.4	1.0	2.3	5.5			36.6	0.0		35.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			1.9	0.0		0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.3	5.5	1.0	2.4	5.6			38.5	0.0		36.0	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	5.1			5.1			14.5			36.0		
Approach LOS	A			A			B			D		
Intersection Delay	7.9			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	41	148	107	183	138	116	144	26	138	29	17	12
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	59	211	153	261	363			243	197		82	
Lane Group Capacity	494	880	1279	619	820			394	1495		399	
v/c Ratio	0.12	0.24	0.12	0.42	0.44			0.62	0.13		0.21	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	8.2	12.8	1.0	10.8	14.4			26.4	0.0		22.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.20	0.11		0.11	
Incremental Delay d_2	0.1	0.1	0.0	0.5	0.4			2.9	0.0		0.3	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	8.3	12.9	1.1	11.2	14.8			29.3	0.0		23.1	
Lane Group LOS	A	B	A	B	B			C	A		C	
Approach Delay	8.0			13.3			16.2			23.1		
Approach LOS	A			B			B			C		
Intersection Delay	13.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	31	183	27	37	205	93	26	19	32	51	11	19
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 58.0	G =	G =	G = 15.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	40	238	35	48	387			59	42		105	
Lane Group Capacity	648	1134	1279	775	1081			245	1495		203	
v/c Ratio	0.06	0.21	0.03	0.06	0.36			0.24	0.03		0.52	
Green Ratio	0.74	0.64	0.86	0.74	0.64			0.17	1.00		0.17	
Uniform Delay d_1	3.5	6.6	1.0	3.2	7.4			32.6	0.0		34.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.12	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.2			0.5	0.0		2.3	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.5	6.7	1.0	3.2	7.6			33.1	0.0		36.5	
Lane Group LOS	A	A	A	A	A			C	A		D	
Approach Delay	5.6			7.1			19.3			36.5		
Approach LOS	A			A			B			D		
Intersection Delay	11.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	38	254	17	41	246	112	42	21	78	65	13	28
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 54.0	G =	G =	G = 19.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	54	363	24	59	511			90	111		152	
Lane Group Capacity	499	1055	1279	614	1006			282	1495		228	
v/c Ratio	0.11	0.34	0.02	0.10	0.51			0.32	0.07		0.67	
Green Ratio	0.70	0.60	0.86	0.70	0.60			0.21	1.00		0.21	
Uniform Delay d_1	5.4	9.1	1.0	4.7	10.4			30.0	0.0		32.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.12			0.11	0.11		0.24	
Incremental Delay d_2	0.1	0.2	0.0	0.1	0.4			0.7	0.0		7.2	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	5.5	9.3	1.0	4.8	10.8			30.7	0.0		39.8	
Lane Group LOS	A	A	A	A	B			C	A		D	
Approach Delay	8.4			10.2			13.8			39.8		
Approach LOS	A			B			B			D		
Intersection Delay	13.4			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	3	137	107	183	129	0	144	7	138	6	13	5
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	5	225	176	300	212			247	227		39	
Lane Group Capacity	618	880	1279	607	880			387	1495		495	
v/c Ratio	0.01	0.26	0.14	0.49	0.24			0.64	0.15		0.08	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	7.4	12.9	1.1	11.9	12.8			26.6	0.0		21.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.22	0.11		0.11	
Incremental Delay d_2	0.0	0.2	0.0	0.6	0.1			3.5	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	7.4	13.1	1.1	12.5	12.9			30.1	0.0		22.0	
Lane Group LOS	A	B	A	B	B			C	A		C	
Approach Delay	7.8			12.7			15.7			22.0		
Approach LOS	A			B			B			C		
Intersection Delay	12.6			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	P.S. High School @ Baristo Rd
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	1	172	28	38	200	1	27	3	33	0	2	3
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	1	223	36	49	261			39	43		7	
Lane Group Capacity	809	1212	1279	844	1211			165	1495		198	
v/c Ratio	0.00	0.18	0.03	0.06	0.22			0.24	0.03		0.04	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.1	5.0	1.0	2.2	5.1			35.7	0.0		34.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			0.7	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.1	5.1	1.0	2.2	5.2			36.4	0.0		34.9	
Lane Group LOS	A	A	A	A	A			D	A		C	
Approach Delay	4.5			4.7			17.3			34.9		
Approach LOS	A			A			B			C		
Intersection Delay	6.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	8	252	17	42	234	19	43	4	80	9	2	10
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	11	360	24	60	361			67	114		30	
Lane Group Capacity	722	1212	1279	723	1199			156	1495		178	
v/c Ratio	0.02	0.30	0.02	0.08	0.30			0.43	0.08		0.17	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.3	5.5	1.0	2.4	5.5			36.6	0.0		35.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			1.9	0.0		0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.3	5.6	1.0	2.4	5.6			38.5	0.0		35.9	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	5.2			5.2			14.3			35.9		
Approach LOS	A			A			B			D		
Intersection Delay	7.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	4	140	107	183	131	6	144	9	138	7	13	5
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	7	230	176	300	225			251	227		40	
Lane Group Capacity	607	880	1279	603	874			388	1495		491	
v/c Ratio	0.01	0.26	0.14	0.50	0.26			0.65	0.15		0.08	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	7.5	12.9	1.1	12.0	12.9			26.7	0.0		21.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.22	0.11		0.11	
Incremental Delay d_2	0.0	0.2	0.0	0.6	0.2			3.7	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	7.5	13.1	1.1	12.6	13.1			30.5	0.0		22.0	
Lane Group LOS	A	B	A	B	B			C	A		C	
Approach Delay	7.9			12.8			16.0			22.0		
Approach LOS	A			B			B			C		
Intersection Delay	12.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	2	175	28	38	202	5	27	4	33	2	3	3
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	3	227	36	49	268			40	43		11	
Lane Group Capacity	803	1212	1279	840	1208			165	1495		194	
v/c Ratio	0.00	0.19	0.03	0.06	0.22			0.24	0.03		0.06	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.1	5.0	1.0	2.2	5.1			35.7	0.0		34.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			0.8	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.1	5.1	1.0	2.2	5.2			36.5	0.0		35.0	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	4.5			4.8			17.6			35.0		
Approach LOS	A			A			B			D		
Intersection Delay	6.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	P.S. High School @ Baristo Rd
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	9	255	17	42	236	23	43	5	80	11	3	10
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	13	364	24	60	370			68	114		34	
Lane Group Capacity	715	1212	1279	719	1196			156	1495		176	
v/c Ratio	0.02	0.30	0.02	0.08	0.31			0.44	0.08		0.19	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.3	5.5	1.0	2.4	5.5			36.6	0.0		35.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.1	0.1			1.9	0.0		0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.3	5.6	1.0	2.4	5.7			38.6	0.0		36.0	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	5.2			5.2			14.4			36.0		
Approach LOS	A			A			B			D		
Intersection Delay	7.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	3	145	116	198	126	2	155	8	149	8	14	5
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	3	145	116	198	128			163	149		27	
Lane Group Capacity	714	905	1316	698	903			404	1538		516	
v/c Ratio	0.00	0.16	0.09	0.28	0.14			0.40	0.10		0.05	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	7.3	12.2	1.0	8.2	12.1			24.4	0.0		21.7	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.2	0.1			0.7	0.0		0.0	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	7.3	12.3	1.0	8.5	12.2			25.1	0.0		21.8	
Lane Group LOS	A	B	A	A	B			C	A		C	
Approach Delay	7.3			9.9			13.1			21.8		
Approach LOS	A			A			B			C		
Intersection Delay	10.6			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	P.S. High School @ Baristo Rd
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	1	183	30	41	203	1	29	4	35	1	2	3
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 62.0	G =	G =	G = 11.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	1	183	30	41	204			33	35		6	
Lane Group Capacity	887	1247	1316	907	1246			173	1538		200	
v/c Ratio	0.00	0.15	0.02	0.05	0.16			0.19	0.02		0.03	
Green Ratio	0.79	0.69	0.86	0.79	0.69			0.12	1.00		0.12	
Uniform Delay d_1	2.1	4.8	1.0	2.1	4.9			35.5	0.0		34.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			0.5	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.1	4.9	1.0	2.1	5.0			36.0	0.0		34.9	
Lane Group LOS	A	A	A	A	A			D	A		C	
Approach Delay	4.3			4.5			17.5			34.9		
Approach LOS	A			A			B			C		
Intersection Delay	6.4			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*P.S. High School @ Baristo Rd*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	9	258	19	45	246	22	46	4	86	10	2	11
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 63.0	G =	G =	G = 10.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	9	258	19	45	268			50	86		23	
Lane Group Capacity	840	1267	1316	849	1251			146	1538		167	
v/c Ratio	0.01	0.20	0.01	0.05	0.21			0.34	0.06		0.14	
Green Ratio	0.80	0.70	0.86	0.80	0.70			0.11	1.00		0.11	
Uniform Delay d_1	1.9	4.7	1.0	2.0	4.8			37.0	0.0		36.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			1.4	0.0		0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	1.9	4.8	1.0	2.0	4.9			38.4	0.0		36.5	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	4.5			4.4			14.1			36.5		
Approach LOS	A			A			B			D		
Intersection Delay	7.2			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	P.S. High School @ Baristo Rd
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	41	159	116	198	148	118	155	27	149	31	18	12
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 45.0	G =	G =	G = 28.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	41	159	116	198	266			182	149		61	
Lane Group Capacity	589	905	1316	685	845			406	1538		456	
v/c Ratio	0.07	0.18	0.09	0.29	0.31			0.45	0.10		0.13	
Green Ratio	0.60	0.50	0.86	0.60	0.50			0.31	1.00		0.31	
Uniform Delay d_1	7.7	12.3	1.0	8.3	13.4			24.8	0.0		22.3	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.1	0.1	0.0	0.2	0.2			0.8	0.0		0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	7.8	12.4	1.0	8.5	13.6			25.6	0.0		22.4	
Lane Group LOS	A	B	A	A	B			C	A		C	
Approach Delay	7.6			11.4			14.1			22.4		
Approach LOS	A			B			B			C		
Intersection Delay	11.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	P.S. High School @ Baristo Rd
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	31	201	30	41	224	93	29	20	35	52	11	19
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 61.0	G =	G =	G = 12.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	31	201	30	41	317			49	35		82	
Lane Group Capacity	768	1227	1316	875	1173			201	1538		170	
v/c Ratio	0.04	0.16	0.02	0.05	0.27			0.24	0.02		0.48	
Green Ratio	0.78	0.68	0.86	0.78	0.68			0.13	1.00		0.13	
Uniform Delay d_1	2.5	5.3	1.0	2.4	5.7			34.9	0.0		36.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.11	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.1			0.6	0.0		2.2	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	2.5	5.3	1.0	2.4	5.8			35.6	0.0		38.3	
Lane Group LOS	A	A	A	A	A			D	A		D	
Approach Delay	4.5			5.4			20.8			38.3		
Approach LOS	A			A			C			D		
Intersection Delay	10.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	P.S. High School @ Baristo Rd
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Lane Group	L	T	R	L	TR			LT	R		LTR	
Volume (vph)	39	278	19	45	269	115	46	21	86	67	13	29
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Arrival Type	3	3	3	3	3			3	3		3	
Unit Extension	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0			0	0		0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	NS Perm	06	07	08
Timing	G = 5.0	G = 58.0	G =	G =	G = 15.0	G =	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	39	278	19	45	384			67	86		109	
Lane Group Capacity	668	1166	1316	761	1114			238	1538		198	
v/c Ratio	0.06	0.24	0.01	0.06	0.34			0.28	0.06		0.55	
Green Ratio	0.74	0.64	0.86	0.74	0.64			0.17	1.00		0.17	
Uniform Delay d_1	3.4	6.7	1.0	3.2	7.3			32.8	0.0		34.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.11			0.11	0.11		0.15	
Incremental Delay d_2	0.0	0.1	0.0	0.0	0.2			0.7	0.0		3.3	
PF Factor	1.000	1.000	1.000	1.000	1.000			1.000	0.950		1.000	
Control Delay	3.5	6.8	1.0	3.2	7.5			33.4	0.0		37.7	
Lane Group LOS	A	A	A	A	A			C	A		D	
Approach Delay	6.1			7.1			14.7			37.7		
Approach LOS	A			A			B			D		
Intersection Delay	11.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	126	196	87	9	188	55	80	229	18	92	301	225
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 26.0	G =	G =	G = 5.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	191	297	132	14	285	83	121	374		139	797	
Lane Group Capacity	298	508	432	289	508	432	273	1399		462	1324	
v/c Ratio	0.64	0.58	0.31	0.05	0.56	0.19	0.44	0.27		0.30	0.60	
Green Ratio	0.39	0.29	0.29	0.39	0.29	0.29	0.52	0.42		0.52	0.42	
Uniform Delay d_1	25.5	27.4	25.0	17.8	27.2	24.1	12.8	16.9		11.5	20.1	
Delay Factor k	0.22	0.18	0.11	0.11	0.16	0.11	0.11	0.11		0.11	0.19	
Incremental Delay d_2	4.6	1.7	0.4	0.1	1.4	0.2	1.1	0.1		0.4	0.8	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	30.1	29.1	25.4	17.9	28.6	24.3	13.9	17.0		11.8	20.9	
Lane Group LOS	C	C	C	B	C	C	B	B		B	C	
Approach Delay	28.6			27.3			16.3			19.6		
Approach LOS	C			C			B			B		
Intersection Delay	22.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	45	96	75	20	107	51	62	319	20	80	307	37
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 17.0	G =	G =	G = 5.0	G = 47.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	48	102	80	21	114	54	66	360		85	366	
Lane Group Capacity	308	332	282	317	332	282	572	1734		575	1721	
v/c Ratio	0.16	0.31	0.28	0.07	0.34	0.19	0.12	0.21		0.15	0.21	
Green Ratio	0.29	0.19	0.19	0.29	0.19	0.19	0.62	0.52		0.62	0.52	
Uniform Delay d_1	23.6	31.4	31.3	23.2	31.7	30.7	6.8	11.5		6.9	11.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.2	0.5	0.6	0.1	0.6	0.3	0.1	0.1		0.1	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.8	32.0	31.8	23.2	32.3	31.0	6.9	11.6		7.0	11.6	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	30.2			30.9			10.9			10.8		
Approach LOS	C			C			B			B		
Intersection Delay	17.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	85	183	94	18	131	66	78	332	14	87	347	58
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 22.0	G =	G =	G = 5.0	G = 42.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	106	229	117	22	164	82	97	432		109	506	
Lane Group Capacity	338	430	365	287	430	365	436	1554		476	1530	
v/c Ratio	0.31	0.53	0.32	0.08	0.38	0.22	0.22	0.28		0.23	0.33	
Green Ratio	0.34	0.24	0.24	0.34	0.24	0.24	0.57	0.47		0.57	0.47	
Uniform Delay d_1	20.9	29.5	27.9	20.2	28.3	27.2	9.4	14.7		9.3	15.1	
Delay Factor k	0.11	0.14	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	1.3	0.5	0.1	0.6	0.3	0.3	0.1		0.2	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	21.5	30.8	28.4	20.3	28.9	27.5	9.7	14.8		9.6	15.3	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	28.0			27.8			13.9			14.3		
Approach LOS	C			C			B			B		
Intersection Delay	19.4			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	127	197	88	9	191	58	81	238	18	92	302	225
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 27.0	G =	G =	G = 5.0	G = 37.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	192	298	133	14	289	88	123	388		139	799	
Lane Group Capacity	309	528	449	302	528	449	263	1363		443	1289	
v/c Ratio	0.62	0.56	0.30	0.05	0.55	0.20	0.47	0.28		0.31	0.62	
Green Ratio	0.40	0.30	0.30	0.40	0.30	0.30	0.51	0.41		0.51	0.41	
Uniform Delay d_1	24.7	26.5	24.2	17.2	26.4	23.4	13.4	17.7		12.0	20.9	
Delay Factor k	0.20	0.16	0.11	0.11	0.15	0.11	0.11	0.11		0.11	0.20	
Incremental Delay d_2	3.8	1.4	0.4	0.1	1.2	0.2	1.3	0.1		0.4	0.9	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	28.5	27.9	24.6	17.3	27.6	23.6	14.7	17.8		12.4	21.9	
Lane Group LOS	C	C	C	B	C	C	B	B		B	C	
Approach Delay	27.4			26.3			17.1			20.5		
Approach LOS	C			C			B			C		
Intersection Delay	22.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	46	97	76	20	109	54	63	326	20	81	310	38
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 18.0	G =	G =	G = 5.0	G = 46.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	103	81	21	116	57	67	368		86	370	
Lane Group Capacity	320	352	299	331	352	299	557	1697		559	1684	
v/c Ratio	0.15	0.29	0.27	0.06	0.33	0.19	0.12	0.22		0.15	0.22	
Green Ratio	0.30	0.20	0.20	0.30	0.20	0.20	0.61	0.51		0.61	0.51	
Uniform Delay d_1	22.9	30.6	30.4	22.4	30.8	29.9	7.3	12.1		7.3	12.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.2	0.5	0.5	0.1	0.6	0.3	0.1	0.1		0.1	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.1	31.1	30.9	22.5	31.4	30.3	7.4	12.2		7.5	12.2	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	29.3			30.1			11.4			11.3		
Approach LOS	C			C			B			B		
Intersection Delay	17.3			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	85	184	95	18	133	68	79	338	14	88	351	59
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	106	230	119	22	166	85	99	439		110	513	
Lane Group Capacity	322	410	349	272	410	349	443	1591		483	1566	
v/c Ratio	0.33	0.56	0.34	0.08	0.40	0.24	0.22	0.28		0.23	0.33	
Green Ratio	0.33	0.23	0.23	0.33	0.23	0.23	0.58	0.48		0.58	0.48	
Uniform Delay d_1	21.7	30.4	28.7	20.8	29.2	28.0	9.0	14.1		8.9	14.5	
Delay Factor k	0.11	0.16	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.6	1.8	0.6	0.1	0.7	0.4	0.3	0.1		0.2	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	22.3	32.2	29.3	21.0	29.9	28.4	9.2	14.2		9.1	14.7	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	29.1			28.7			13.3			13.7		
Approach LOS	C			C			B			B		
Intersection Delay	19.5			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	142	218	102	10	263	117	141	383	20	111	356	246
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 6.0	G = 26.0	G =	G =	G = 6.0	G = 36.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	215	330	155	15	398	177	214	610		168	912	
Lane Group Capacity	233	508	432	283	508	432	236	1330		344	1258	
v/c Ratio	0.92	0.65	0.36	0.05	0.78	0.41	0.91	0.46		0.49	0.72	
Green Ratio	0.40	0.29	0.29	0.40	0.29	0.29	0.51	0.40		0.51	0.40	
Uniform Delay d_1	29.6	28.0	25.4	17.5	29.4	25.8	28.9	19.8		12.9	22.8	
Delay Factor k	0.44	0.23	0.11	0.11	0.33	0.11	0.43	0.11		0.11	0.29	
Incremental Delay d_2	38.5	2.9	0.5	0.1	7.9	0.6	34.7	0.3		1.1	2.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	68.2	30.9	25.9	17.6	37.3	26.4	63.6	20.1		14.0	24.9	
Lane Group LOS	E	C	C	B	D	C	E	C		B	C	
Approach Delay	41.3			33.5			31.4			23.2		
Approach LOS	D			C			C			C		
Intersection Delay	31.2			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	57	125	101	20	159	100	107	429	20	108	371	49
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 20.0	G =	G =	G = 5.0	G = 44.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	61	133	107	21	169	106	114	477		115	447	
Lane Group Capacity	306	391	332	335	391	332	490	1627		473	1609	
v/c Ratio	0.20	0.34	0.32	0.06	0.43	0.32	0.23	0.29		0.24	0.28	
Green Ratio	0.32	0.22	0.22	0.32	0.22	0.22	0.59	0.49		0.59	0.49	
Uniform Delay d_1	21.8	29.4	29.3	21.1	30.1	29.3	8.5	13.7		8.5	13.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.3	0.5	0.6	0.1	0.8	0.6	0.2	0.1		0.3	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	22.1	30.0	29.9	21.2	30.9	29.9	8.7	13.8		8.8	13.7	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	28.3			29.8			12.8			12.7		
Approach LOS	C			C			B			B		
Intersection Delay	18.3			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	98	216	123	18	184	117	125	448	14	121	423	72
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 5.0	G = 41.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	122	270	154	22	230	146	156	577		151	619	
Lane Group Capacity	300	450	382	269	450	382	373	1519		392	1493	
v/c Ratio	0.41	0.60	0.40	0.08	0.51	0.38	0.42	0.38		0.39	0.41	
Green Ratio	0.36	0.26	0.26	0.36	0.26	0.26	0.56	0.46		0.56	0.46	
Uniform Delay d_1	20.8	29.5	27.8	19.7	28.7	27.6	10.6	16.1		10.5	16.4	
Delay Factor k	0.11	0.19	0.11	0.11	0.12	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.9	2.2	0.7	0.1	1.0	0.6	0.8	0.2		0.6	0.2	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	21.7	31.7	28.5	19.9	29.7	28.3	11.4	16.3		11.1	16.6	
Lane Group LOS	C	C	C	B	C	C	B	B		B	B	
Approach Delay	28.5			28.6			15.2			15.5		
Approach LOS	C			C			B			B		
Intersection Delay	20.5			Intersection LOS						C		

 HCS+™ Version 5.3 Generated: 6/19/2015 12:53 AM

SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	131	207	91	18	206	70	83	245	22	102	327	235
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 26.0	G =	G =	G = 5.0	G = 38.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	198	314	138	27	312	106	126	404		155	851	
Lane Group Capacity	278	508	432	276	508	432	254	1397		446	1325	
v/c Ratio	0.71	0.62	0.32	0.10	0.61	0.25	0.50	0.29		0.35	0.64	
Green Ratio	0.39	0.29	0.29	0.39	0.29	0.29	0.52	0.42		0.52	0.42	
Uniform Delay d_1	26.9	27.7	25.1	18.1	27.7	24.5	13.2	17.1		11.6	20.6	
Delay Factor k	0.28	0.20	0.11	0.11	0.20	0.11	0.11	0.11		0.11	0.22	
Incremental Delay d_2	8.3	2.3	0.4	0.2	2.2	0.3	1.5	0.1		0.5	1.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	35.2	30.0	25.5	18.3	29.9	24.8	14.7	17.2		12.1	21.7	
Lane Group LOS	D	C	C	B	C	C	B	B		B	C	
Approach Delay	30.6			28.0			16.6			20.2		
Approach LOS	C			C			B			C		
Intersection Delay	23.4			Intersection LOS						C		

 HCS+™ Version 5.3 Generated: 6/20/2015 12:11 AM

SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	46	102	78	30	121	66	64	340	24	88	329	38
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 5.0	G = 45.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	109	83	32	129	70	68	388		94	390	
Lane Group Capacity	324	371	316	340	371	316	534	1658		535	1649	
v/c Ratio	0.15	0.29	0.26	0.09	0.35	0.22	0.13	0.23		0.18	0.24	
Green Ratio	0.31	0.21	0.21	0.31	0.21	0.21	0.60	0.50		0.60	0.50	
Uniform Delay d_1	22.2	29.9	29.6	21.9	30.2	29.4	7.7	12.7		7.8	12.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.2	0.4	0.4	0.1	0.6	0.4	0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	22.4	30.3	30.1	22.0	30.8	29.7	7.8	12.8		8.0	12.8	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	28.6			29.3			12.1			11.9		
Approach LOS	C			C			B			B		
Intersection Delay	17.6			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	88	202	98	24	141	76	81	355	24	105	374	60
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 5.0	G = 41.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	110	252	122	30	176	95	101	474		131	542	
Lane Group Capacity	342	450	382	283	450	382	408	1512		442	1494	
v/c Ratio	0.32	0.56	0.32	0.11	0.39	0.25	0.25	0.31		0.30	0.36	
Green Ratio	0.36	0.26	0.26	0.36	0.26	0.26	0.56	0.46		0.56	0.46	
Uniform Delay d_1	20.3	29.1	27.2	19.7	27.7	26.6	10.0	15.6		10.1	16.0	
Delay Factor k	0.11	0.16	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	1.6	0.5	0.2	0.6	0.3	0.3	0.1		0.4	0.2	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	20.9	30.7	27.6	19.9	28.3	27.0	10.3	15.7		10.4	16.1	
Lane Group LOS	C	C	C	B	C	C	B	B		B	B	
Approach Delay	27.7			27.0			14.7			15.0		
Approach LOS	C			C			B			B		
Intersection Delay	19.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	133	208	92	18	211	75	85	259	22	103	329	235
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 28.0	G =	G =	G = 5.0	G = 36.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	202	315	139	27	320	114	129	425		156	854	
Lane Group Capacity	299	547	465	303	547	465	236	1324		412	1256	
v/c Ratio	0.68	0.58	0.30	0.09	0.59	0.25	0.55	0.32		0.38	0.68	
Green Ratio	0.41	0.31	0.31	0.41	0.31	0.31	0.50	0.40		0.50	0.40	
Uniform Delay d_1	25.3	26.0	23.5	16.8	26.1	23.1	14.5	18.6		12.8	22.3	
Delay Factor k	0.25	0.17	0.11	0.11	0.18	0.11	0.15	0.11		0.11	0.25	
Incremental Delay d_2	5.9	1.5	0.4	0.1	1.6	0.3	2.7	0.1		0.6	1.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	31.3	27.5	23.9	17.0	27.7	23.4	17.1	18.7		13.4	23.8	
Lane Group LOS	C	C	C	B	C	C	B	B		B	C	
Approach Delay	27.9			26.0			18.4			22.2		
Approach LOS	C			C			B			C		
Intersection Delay	23.4			Intersection LOS						C		

 HCS+™ Version 5.3 Generated: 6/19/2015 12:57 AM

SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	47	104	79	30	125	70	66	351	24	90	334	39
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 5.0	G = 45.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	50	111	84	32	133	74	70	399		96	396	
Lane Group Capacity	321	371	316	339	371	316	530	1659		529	1649	
v/c Ratio	0.16	0.30	0.27	0.09	0.36	0.23	0.13	0.24		0.18	0.24	
Green Ratio	0.31	0.21	0.21	0.31	0.21	0.21	0.60	0.50		0.60	0.50	
Uniform Delay d_1	22.2	29.9	29.7	21.9	30.3	29.5	7.7	12.8		7.9	12.8	
Delay Factor k	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.2	0.5	0.5	0.1	0.6	0.4	0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	22.4	30.3	30.1	22.0	30.9	29.8	7.8	12.9		8.0	12.9	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	28.7			29.4			12.1			11.9		
Approach LOS	C			C			B			B		
Intersection Delay	17.7			Intersection LOS						B		

 HCS+™ Version 5.3 Generated: 6/19/2015 12:59 AM

SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	89	204	99	24	145	80	83	365	24	107	380	61
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 5.0	G = 41.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	111	255	124	30	181	100	104	486		134	551	
Lane Group Capacity	338	450	382	281	450	382	404	1512		436	1494	
v/c Ratio	0.33	0.57	0.32	0.11	0.40	0.26	0.26	0.32		0.31	0.37	
Green Ratio	0.36	0.26	0.26	0.36	0.26	0.26	0.56	0.46		0.56	0.46	
Uniform Delay d_1	20.4	29.2	27.2	19.7	27.8	26.7	10.0	15.6		10.1	16.0	
Delay Factor k	0.11	0.16	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.6	1.7	0.5	0.2	0.6	0.4	0.3	0.1		0.4	0.2	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	20.9	30.8	27.7	19.9	28.4	27.1	10.4	15.8		10.5	16.2	
Lane Group LOS	C	C	C	B	C	C	B	B		B	B	
Approach Delay	27.8			27.2			14.8			15.1		
Approach LOS	C			C			B			B		
Intersection Delay	19.8			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	157	246	112	14	236	83	103	357	28	138	470	280
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 23.0	G =	G =	G = 5.0	G = 41.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	157	246	112	14	236	83	103	385		138	750	
Lane Group Capacity	304	463	393	296	463	393	327	1553		505	1481	
v/c Ratio	0.52	0.53	0.28	0.05	0.51	0.21	0.31	0.25		0.27	0.51	
Green Ratio	0.36	0.26	0.26	0.36	0.26	0.26	0.56	0.46		0.56	0.46	
Uniform Delay d_1	24.4	28.9	26.9	19.5	28.7	26.4	10.7	15.0		9.9	17.3	
Delay Factor k	0.12	0.13	0.11	0.11	0.12	0.11	0.11	0.11		0.11	0.12	
Incremental Delay d_2	1.5	1.2	0.4	0.1	0.9	0.3	0.6	0.1		0.3	0.3	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	26.0	30.0	27.3	19.5	29.6	26.6	11.3	15.1		10.2	17.6	
Lane Group LOS	C	C	C	B	C	C	B	B		B	B	
Approach Delay	28.2			28.5			14.3			16.5		
Approach LOS	C			C			B			B		
Intersection Delay	20.5			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	54	117	93	30	130	73	77	471	30	114	453	45
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 15.0	G =	G =	G = 5.0	G = 49.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	54	117	93	30	130	73	77	501		114	498	
Lane Group Capacity	274	302	256	285	302	256	531	1859		529	1851	
v/c Ratio	0.20	0.39	0.36	0.11	0.43	0.29	0.15	0.27		0.22	0.27	
Green Ratio	0.27	0.17	0.17	0.27	0.17	0.17	0.64	0.54		0.64	0.54	
Uniform Delay d_1	25.2	33.4	33.3	24.8	33.7	32.8	6.3	10.9		6.4	10.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.4	0.8	0.9	0.2	1.0	0.6	0.1	0.1		0.2	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	25.5	34.2	34.1	24.9	34.7	33.4	6.4	11.0		6.6	11.0	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	32.4			33.0			10.4			10.2		
Approach LOS	C			C			B			B		
Intersection Delay	16.9			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	104	225	118	27	161	96	98	499	21	126	521	71
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 19.0	G =	G =	G = 5.0	G = 45.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	104	225	118	27	161	96	98	520		126	592	
Lane Group Capacity	307	382	325	256	382	325	437	1712		475	1692	
v/c Ratio	0.34	0.59	0.36	0.11	0.42	0.30	0.22	0.30		0.27	0.35	
Green Ratio	0.31	0.21	0.21	0.31	0.21	0.21	0.60	0.50		0.60	0.50	
Uniform Delay d_1	23.0	32.0	30.3	22.3	30.7	29.9	8.2	13.3		8.2	13.6	
Delay Factor k	0.11	0.18	0.11	0.11	0.11	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.7	2.4	0.7	0.2	0.8	0.5	0.3	0.1		0.3	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.7	34.4	31.0	22.5	31.5	30.4	8.5	13.4		8.5	13.8	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	31.0			30.3			12.6			12.8		
Approach LOS	C			C			B			B		
Intersection Delay	19.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	168	259	123	14	304	142	161	494	28	150	498	291
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 25.0	G =	G =	G = 5.0	G = 39.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	168	259	123	14	304	142	161	522		150	789	
Lane Group Capacity	279	503	427	314	503	427	293	1481		408	1411	
v/c Ratio	0.60	0.51	0.29	0.04	0.60	0.33	0.55	0.35		0.37	0.56	
Green Ratio	0.38	0.28	0.28	0.38	0.28	0.28	0.53	0.43		0.53	0.43	
Uniform Delay d_1	25.1	27.4	25.5	18.2	28.2	25.9	12.5	17.1		11.3	19.1	
Delay Factor k	0.19	0.12	0.11	0.11	0.19	0.11	0.15	0.11		0.11	0.16	
Incremental Delay d_2	3.6	0.9	0.4	0.1	2.1	0.5	2.2	0.1		0.6	0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	28.8	28.3	25.9	18.3	30.3	26.3	14.7	17.2		11.9	19.6	
Lane Group LOS	C	C	C	B	C	C	B	B		B	B	
Approach Delay	27.9			28.7			16.6			18.3		
Approach LOS	C			C			B			B		
Intersection Delay	21.7			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	66	147	119	30	184	123	123	585	30	143	519	57
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 18.0	G =	G =	G = 5.0	G = 46.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	66	147	119	30	184	123	123	615		143	576	
Lane Group Capacity	274	362	308	304	362	308	456	1748		437	1735	
v/c Ratio	0.24	0.41	0.39	0.10	0.51	0.40	0.27	0.35		0.33	0.33	
Green Ratio	0.30	0.20	0.20	0.30	0.20	0.20	0.61	0.51		0.61	0.51	
Uniform Delay d_1	23.3	31.3	31.2	22.7	32.1	31.3	7.9	13.1		8.1	13.0	
Delay Factor k	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.5	0.7	0.8	0.1	1.2	0.9	0.3	0.1		0.4	0.1	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	23.8	32.1	32.0	22.8	33.2	32.2	8.2	13.2		8.5	13.1	
Lane Group LOS	C	C	C	C	C	C	A	B		A	B	
Approach Delay	30.4			31.9			12.4			12.2		
Approach LOS	C			C			B			B		
Intersection Delay	18.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	118	259	147	27	216	149	146	619	21	161	599	85
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 21.0	G =	G =	G = 5.0	G = 43.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	118	259	147	27	216	149	146	640		161	684	
Lane Group Capacity	291	422	359	257	422	359	374	1638		394	1615	
v/c Ratio	0.41	0.61	0.41	0.11	0.51	0.42	0.39	0.39		0.41	0.42	
Green Ratio	0.33	0.23	0.23	0.33	0.23	0.23	0.58	0.48		0.58	0.48	
Uniform Delay d_1	22.0	30.9	29.2	21.1	30.0	29.3	9.7	15.1		9.7	15.4	
Delay Factor k	0.11	0.20	0.11	0.11	0.12	0.11	0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.9	2.7	0.8	0.2	1.1	0.8	0.7	0.2		0.7	0.2	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	22.9	33.5	30.0	21.3	31.1	30.1	10.4	15.2		10.4	15.6	
Lane Group LOS	C	C	C	C	C	C	B	B		B	B	
Approach Delay	30.2			30.0			14.3			14.6		
Approach LOS	C			C			B			B		
Intersection Delay	20.1			Intersection LOS						C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing*

Project Description *COD PSM*

East/West Street: *Compadre Road* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		163	26	4	140	
Peak-Hour Factor, PHF	1.00	0.90	0.90	0.90	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	0	181	28	4	155	0
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration		T	R	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	22	0	9			
Peak-Hour Factor, PHF	0.90	0.90	0.90	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	24	0	10	0	0	0
Percent Heavy Vehicles	8	8	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	0	0
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LTR				
v (veh/h)		4		34				
C (m) (veh/h)		1327		688				
v/c		0.00		0.05				
95% queue length		0.01		0.16				
Control Delay (s/veh)		7.7		10.5				
LOS		A		B				
Approach Delay (s/veh)	--	--	10.5					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing*

Project Description *COD PSM*

East/West Street: *Compadre Road* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*233*	*31*	*1*	*147*	
Peak-Hour Factor, PHF	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*
Hourly Flow Rate, HFR (veh/h)	*0*	*342*	*45*	*1*	*216*	*0*
Percent Heavy Vehicles	*8*	*--*	*--*	*8*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*0*
Configuration		*T*	*R*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*51*	*0*	*15*			
Peak-Hour Factor, PHF	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*
Hourly Flow Rate, HFR (veh/h)	*74*	*0*	*22*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*8*	*8*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LTR*				
v (veh/h)		*1*		*96*				
C (m) (veh/h)		*1139*		*515*				
v/c		*0.00*		*0.19*				
95% queue length		*0.00*		*0.68*				
Control Delay (s/veh)		*8.2*		*13.6*				
LOS		*A*		*B*				
Approach Delay (s/veh)	*--*	*--*	*13.6*					
Approach LOS	*--*	*--*	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Compadre Road* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*165*	*26*	*4*	*145*	
Peak-Hour Factor, PHF	*1.00*	*0.90*	*0.90*	*0.90*	*0.90*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*183*	*28*	*4*	*161*	*0*
Percent Heavy Vehicles	*8*	--	--	*8*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*0*
Configuration		*T*	*R*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*22*	*0*	*9*			
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*24*	*0*	*10*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*8*	*8*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LTR*				
v (veh/h)		*4*		*34*				
C (m) (veh/h)		*1325*		*682*				
v/c		*0.00*		*0.05*				
95% queue length		*0.01*		*0.16*				
Control Delay (s/veh)		*7.7*		*10.6*				
LOS		*A*		*B*				
Approach Delay (s/veh)	--	--	*10.6*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/3/2015
Analysis Time Period	PM Peak Hour

Site Information

Intersection	Compadre Road @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Existing+Phase 1

Project Description *COD PSM*

East/West Street: *Compadre Road* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		236	31	1	152	
Peak-Hour Factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Hourly Flow Rate, HFR (veh/h)	0	347	45	1	223	0
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration		T	R	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	51	0	15			
Peak-Hour Factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Hourly Flow Rate, HFR (veh/h)	74	0	22	0	0	0
Percent Heavy Vehicles	8	8	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	0	0
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LTR				
v (veh/h)		1		96				
C (m) (veh/h)		1135		508				
v/c		0.00		0.19				
95% queue length		0.00		0.69				
Control Delay (s/veh)		8.2		13.7				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.7					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Project BO*

Project Description *COD PSM*	
East/West Street: *Compadre Road*	North/South Street: *Baristo Road*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*220*	*26*	*4*	*241*	
Peak-Hour Factor, PHF	*1.00*	*0.90*	*0.90*	*0.90*	*0.90*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*244*	*28*	*4*	*267*	*0*
Percent Heavy Vehicles	*8*	*--*	*--*	*8*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*0*
Configuration		*T*	*R*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*22*	*0*	*9*			
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*24*	*0*	*10*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*8*	*8*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LTR*				
v (veh/h)		*4*		*34*				
C (m) (veh/h)		*1257*		*563*				
v/c		*0.00*		*0.06*				
95% queue length		*0.01*		*0.19*				
Control Delay (s/veh)		*7.9*		*11.8*				
LOS		*A*		*B*				
Approach Delay (s/veh)	*--*	*--*		*11.8*				
Approach LOS	*--*	*--*		*B*				

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Project BO*

Project Description *COD PSM*

East/West Street: *Compadre Road* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		300	31	1	252	
Peak-Hour Factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Hourly Flow Rate, HFR (veh/h)	0	441	45	1	370	0
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration		T	R	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	51	0	15			
Peak-Hour Factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Hourly Flow Rate, HFR (veh/h)	74	0	22	0	0	0
Percent Heavy Vehicles	8	8	8	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	0	0
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LTR				
v (veh/h)		1		96				
C (m) (veh/h)		1046		378				
v/c		0.00		0.25				
95% queue length		0.00		0.99				
Control Delay (s/veh)		8.4		17.7				
LOS		A		C				
Approach Delay (s/veh)	--	--	17.7					
Approach LOS	--	--	C					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 No Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	10	177	27	4	150	2
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR (veh/h)	11	196	30	4	166	2
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	23	4	9	8	13	34
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR (veh/h)	25	4	10	8	14	37
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	11	4		39			59	
C (m) (veh/h)	1374	1308		558			688	
v/c	0.01	0.00		0.07			0.09	
95% queue length	0.02	0.01		0.22			0.28	
Control Delay (s/veh)	7.6	7.8		11.9			10.7	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	11.9			10.7		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Compadre Road @ Baristo Road*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Year 2018 No Project*
Analysis Time Period	*PM Peak Hour*		

Project Description *COD PSM*

East/West Street: *Compadre Road*	North/South Street: *Baristo Road*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*35*	*255*	*32*	*1*	*158*	*9*
Peak-Hour Factor, PHF	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*
Hourly Flow Rate, HFR (veh/h)	*51*	*374*	*47*	*1*	*232*	*13*
Percent Heavy Vehicles	*8*	--	--	*8*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*1*
Configuration	*LT*		*R*	*LT*		*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*53*	*13*	*16*	*5*	*7*	*19*
Peak-Hour Factor, PHF	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*	*0.68*
Hourly Flow Rate, HFR (veh/h)	*77*	*19*	*23*	*7*	*10*	*27*
Percent Heavy Vehicles	*8*	*8*	*8*	*8*	*8*	*8*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*	*LT*		*LTR*			*LTR*	
v (veh/h)	*51*	*1*		*119*			*44*	
C (m) (veh/h)	*1287*	*1107*		*338*			*484*	
v/c	*0.04*	*0.00*		*0.35*			*0.09*	
95% queue length	*0.12*	*0.00*		*1.54*			*0.30*	
Control Delay (s/veh)	*7.9*	*8.3*		*21.3*			*13.2*	
LOS	*A*	*A*		*C*			*B*	
Approach Delay (s/veh)	--	--	*21.3*			*13.2*		
Approach LOS	--	--	*C*			*B*		

 HCS+™ Version 5.3 Generated: 6/19/2015 10:41 PM

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	10	181	27	4	158	2
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR (veh/h)	11	201	30	4	175	2
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	23	4	9	8	13	34
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR (veh/h)	25	4	10	8	14	37
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	11	4		39			59	
C (m) (veh/h)	1364	1302		546			678	
v/c	0.01	0.00		0.07			0.09	
95% queue length	0.02	0.01		0.23			0.28	
Control Delay (s/veh)	7.7	7.8		12.1			10.8	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	12.1			10.8		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	35	260	32	1	166	9
Peak-Hour Factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Hourly Flow Rate, HFR (veh/h)	51	382	47	1	244	13
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	53	13	16	5	7	19
Peak-Hour Factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Hourly Flow Rate, HFR (veh/h)	77	19	23	7	10	27
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	51	1		119			44	
C (m) (veh/h)	1274	1099		328			472	
v/c	0.04	0.00		0.36			0.09	
95% queue length	0.12	0.00		1.61			0.31	
Control Delay (s/veh)	7.9	8.3		22.1			13.4	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	22.1			13.4		
Approach LOS	--	--	C			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* — North/South Street: *Baristo Road*

Intersection Orientation: *East-West* — Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	10	269	32	5	231	2
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	10	269	32	5	231	2
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	27	4	12	8	13	34
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	27	4	12	8	13	34
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	10	5		43			55	
C (m) (veh/h)	1317	1243		470			599	
v/c	0.01	0.00		0.09			0.09	
95% queue length	0.02	0.01		0.30			0.30	
Control Delay (s/veh)	7.8	7.9		13.4			11.6	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	13.4			11.6		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 No Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	35	389	39	1	245	9
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	35	389	39	1	245	9
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	64	13	19	5	7	19
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	64	13	19	5	7	19
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	35	1		96			31	
C (m) (veh/h)	1294	1116		356			498	
v/c	0.03	0.00		0.27			0.06	
95% queue length	0.08	0.00		1.07			0.20	
Control Delay (s/veh)	7.9	8.2		18.8			12.7	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	18.8			12.7		
Approach LOS	--	--	C			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	10	328	32	5	335	2
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	10	328	32	5	335	2
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	27	4	12	8	13	34
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	27	4	12	8	13	34
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	10	5		43			55	
C (m) (veh/h)	1206	1182		373			496	
v/c	0.01	0.00		0.12			0.11	
95% queue length	0.03	0.01		0.39			0.37	
Control Delay (s/veh)	8.0	8.1		15.9			13.2	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	15.9			13.2		
Approach LOS	--	--	C			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Compadre Road @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Compadre Road* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	35	458	39	1	353	9
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	35	458	39	1	353	9
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	64	13	19	5	7	19
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	64	13	19	5	7	19
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	35	1		96			31	
C (m) (veh/h)	1180	1052		273			401	
v/c	0.03	0.00		0.35			0.08	
95% queue length	0.09	0.00		1.52			0.25	
Control Delay (s/veh)	8.1	8.4		25.2			14.7	
LOS	A	A		D			B	
Approach Delay (s/veh)	--	--		25.2			14.7	
Approach LOS	--	--		D			B	

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*13*	*148*	*9*	*0*	*102*	*23*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*13*	*155*	*9*	*0*	*107*	*24*
Percent Heavy Vehicles	*8*	--	--	*8*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*0*	*1*	*1*
Configuration	*LT*		*R*	*LT*		*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*12*	*0*	*0*	*34*	*0*	*25*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*12*	*0*	*0*	*35*	*0*	*26*
Percent Heavy Vehicles	*8*	*8*	*8*	*8*	*8*	*8*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*	*LT*		*LTR*			*LTR*	
v (veh/h)	*13*	*0*		*12*			*61*	
C (m) (veh/h)	*1418*	*1379*		*606*			*740*	
v/c	*0.01*	*0.00*		*0.02*			*0.08*	
95% queue length	*0.03*	*0.00*		*0.06*			*0.27*	
Control Delay (s/veh)	*7.6*	*7.6*		*11.1*			*10.3*	
LOS	*A*	*A*		*B*			*B*	
Approach Delay (s/veh)	--	--	*11.1*			*10.3*		
Approach LOS	--	--	*B*			*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Greg	Intersection	Civic Drive @ Baristo Road
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/3/2015	Analysis Year	Existing
Analysis Time Period	PM Peak Hour		

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	13	222	8	0	119	16
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	17	304	10	0	163	21
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	6	2	0	12	2	18
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	8	2	0	16	2	24
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		10			42	
C (m) (veh/h)	1355	1213		438			627	
v/c	0.01	0.00		0.02			0.07	
95% queue length	0.04	0.00		0.07			0.21	
Control Delay (s/veh)	7.7	8.0		13.4			11.2	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	13.4			11.2		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	13	150	9	0	107	23
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	13	157	9	0	112	24
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	12	0	0	34	0	25
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	12	0	0	35	0	26
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	13	0		12			61	
C (m) (veh/h)	1412	1376		599			734	
v/c	0.01	0.00		0.02			0.08	
95% queue length	0.03	0.00		0.06			0.27	
Control Delay (s/veh)	7.6	7.6		11.1			10.3	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	11.1			10.3		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Phase 1*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	13	225	8	0	124	16
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	17	308	10	0	169	21
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	6	2	0	12	2	18
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	8	2	0	16	2	24
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		10			42	
C (m) (veh/h)	1349	1209		431			619	
v/c	0.01	0.00		0.02			0.07	
95% queue length	0.04	0.00		0.07			0.22	
Control Delay (s/veh)	7.7	8.0		13.6			11.2	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	13.6			11.2		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Civic Drive @ Baristo Road*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Existing+Project BO*
Analysis Time Period	*Midday Peak Hour*		

Project Description *COD PSM*

East/West Street: *Civic Drive*	North/South Street: *Baristo Road*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	13	205	9	0	203	23
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	13	215	9	0	213	24
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	12	0	0	34	0	25
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	12	0	0	35	0	26
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	13	0		12			61	
C (m) (veh/h)	1296	1310		467			596	
v/c	0.01	0.00		0.03			0.10	
95% queue length	0.03	0.00		0.08			0.34	
Control Delay (s/veh)	7.8	7.7		12.9			11.7	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	12.9			11.7		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Existing+Project BO*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	13	289	8	0	224	16
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	17	395	10	0	306	21
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	6	2	0	12	2	18
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	8	2	0	16	2	24
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		10			42	
C (m) (veh/h)	1200	1122		305			469	
v/c	0.01	0.00		0.03			0.09	
95% queue length	0.04	0.00		0.10			0.29	
Control Delay (s/veh)	8.0	8.2		17.2			13.4	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	17.2			13.4		
Approach LOS	--	--	C			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 No Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* — North/South Street: *Baristo Road*

Intersection Orientation: *East-West* — Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	14	175	9	0	115	24
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	14	184	9	0	121	25
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13	0	0	36	0	26
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	13	0	0	37	0	27
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	14	0		13			64	
C (m) (veh/h)	1400	1345		563			702	
v/c	0.01	0.00		0.02			0.09	
95% queue length	0.03	0.00		0.07			0.30	
Control Delay (s/veh)	7.6	7.7		11.5			10.6	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	11.5			10.6		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 No Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	14	253	8	0	140	17
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	19	346	10	0	191	23
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	6	2	0	13	2	19
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	8	2	0	17	2	26
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	19	0		10			45	
C (m) (veh/h)	1321	1170		388			580	
v/c	0.01	0.00		0.03			0.08	
95% queue length	0.04	0.00		0.08			0.25	
Control Delay (s/veh)	7.8	8.1		14.5			11.7	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	14.5			11.7		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*Midday Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2018 W/ Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	14	179	9	0	123	24
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	14	188	9	0	129	25
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13	0	0	36	0	26
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	13	0	0	37	0	27
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	14	0		13			64	
C (m) (veh/h)	1391	1341		553			691	
v/c	0.01	0.00		0.02			0.09	
95% queue length	0.03	0.00		0.07			0.31	
Control Delay (s/veh)	7.6	7.7		11.7			10.7	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	11.7			10.7		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Civic Drive @ Baristo Road*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Year 2018 W/ Project*
Analysis Time Period	*PM Peak Hour*		

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	14	258	8	0	148	17
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	19	353	10	0	202	23
Percent Heavy Vehicles	8	--	--	8	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	6	2	0	13	2	19
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.73	0.73	0.73
Hourly Flow Rate, HFR (veh/h)	8	2	0	17	2	26
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	19	0		10			45	
C (m) (veh/h)	1309	1163		376			568	
v/c	0.01	0.00		0.03			0.08	
95% queue length	0.04	0.00		0.08			0.26	
Control Delay (s/veh)	7.8	8.1		14.8			11.9	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	14.8			11.9		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*Civic Drive @ Baristo Road*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Year 2030 No Project*
Analysis Time Period	*Midday Peak Hour*		

Project Description *COD PSM*

East/West Street: *Civic Drive* | North/South Street: *Baristo Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	17	284	12	0	196	31
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	17	284	12	0	196	31
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	15	0	0	45	0	33
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	15	0	0	45	0	33
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		15			78	
C (m) (veh/h)	1324	1248		421			566	
v/c	0.01	0.00		0.04			0.14	
95% queue length	0.04	0.00		0.11			0.48	
Control Delay (s/veh)	7.8	7.9		13.9			12.4	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	13.9			12.4		
Approach LOS	--	--	B			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Greg	Intersection	Civic Drive @ Baristo Road
Agency/Co.	Endo Engineering	Jurisdiction	Palm Springs
Date Performed	5/3/2015	Analysis Year	Year 2030 No Project
Analysis Time Period	PM Peak Hour		

Project Description COD PSM

East/West Street: Civic Drive | North/South Street: Baristo Road

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	17	406	10	0	218	21
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	17	406	10	0	218	21
Percent Heavy Vehicles	8	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8	2	0	16	2	23
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	8	2	0	16	2	23
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		10			41	
C (m) (veh/h)	1293	1127		344			523	
v/c	0.01	0.00		0.03			0.08	
95% queue length	0.04	0.00		0.09			0.25	
Control Delay (s/veh)	7.8	8.2		15.8			12.5	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	15.8			12.5		
Approach LOS	--	--	C			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	Greg
Agency/Co.	Endo Engineering
Date Performed	5/3/2015
Analysis Time Period	Midday Peak Hour

Site Information

Intersection	Civic Drive @ Baristo Road
Jurisdiction	Palm Springs
Analysis Year	Year 2030 W/ Project

Project Description COD PSM

East/West Street: Civic Drive | North/South Street: Baristo Road

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	17	343	12	0	300	31
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	17	343	12	0	300	31
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	15	0	0	45	0	33
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	15	0	0	45	0	33
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		15			78	
C (m) (veh/h)	1212	1187		325			453	
v/c	0.01	0.00		0.05			0.17	
95% queue length	0.04	0.00		0.14			0.62	
Control Delay (s/veh)	8.0	8.0		16.6			14.6	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	16.6			14.6		
Approach LOS	--	--	C			B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Civic Drive @ Baristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Civic Drive* North/South Street: *Baristo Road*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	17	475	10	0	326	21
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	17	475	10	0	326	21
Percent Heavy Vehicles	8	--	--	5	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	1
Configuration	LT		R	LT		R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8	2	0	16	2	23
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	8	2	0	16	2	23
Percent Heavy Vehicles	8	8	8	8	8	8
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT		LTR			LTR	
v (veh/h)	17	0		10			41	
C (m) (veh/h)	1179	1062		261			416	
v/c	0.01	0.00		0.04			0.10	
95% queue length	0.04	0.00		0.12			0.33	
Control Delay (s/veh)	8.1	8.4		19.3			14.6	
LOS	A	A		C			B	
Approach Delay (s/veh)	--	--	19.3			14.6		
Approach LOS	--	--	C			B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	9	92	76				106	490	14	106	498	18
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	10	104	86				120	571		120	584	
Lane Group Capacity	260	274	1495				572	2187		579	2184	
v/c Ratio	0.04	0.38	0.06				0.21	0.26		0.21	0.27	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.1	0.0				3.2	6.4		3.1	6.5	
Delay Factor k	0.11	0.11	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	0.9	0.0				0.2	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.3	35.0	0.0				3.3	6.5		3.3	6.5	
Lane Group LOS	C	C	A				A	A		A	A	
Approach Delay	19.8						6.0			6.0		
Approach LOS	B						A			A		
Intersection Delay	7.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	9	136	93				131	464	11	124	316	11
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	10	157	107				151	548		143	377	
Lane Group Capacity	260	274	1495				704	2188		593	2184	
v/c Ratio	0.04	0.57	0.07				0.21	0.25		0.24	0.17	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	35.2	0.0				3.1	6.4		3.2	6.0	
Delay Factor k	0.11	0.17	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	2.9	0.0				0.2	0.1		0.2	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.3	38.1	0.0				3.2	6.4		3.4	6.1	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	23.0						5.7			5.3		
Approach LOS	C						A			A		
Intersection Delay	8.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Road @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	9	93	78				111	494	14	106	500	18
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	10	106	89				126	577		120	588	
Lane Group Capacity	260	274	1495				569	2187		576	2185	
v/c Ratio	0.04	0.39	0.06				0.22	0.26		0.21	0.27	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.1	0.0				3.2	6.5		3.2	6.5	
Delay Factor k	0.11	0.11	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	0.9	0.0				0.2	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.3	35.1	0.0				3.4	6.5		3.3	6.5	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	19.7						6.0			6.0		
Approach LOS	B						A			A		
Intersection Delay	7.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	9	137	95				136	467	11	124	318	11
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	10	157	109				156	550		143	379	
Lane Group Capacity	260	274	1495				703	2188		591	2184	
v/c Ratio	0.04	0.57	0.07				0.22	0.25		0.24	0.17	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	35.2	0.0				3.1	6.4		3.2	6.0	
Delay Factor k	0.11	0.17	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	2.9	0.0				0.2	0.1		0.2	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.3	38.1	0.0				3.2	6.5		3.4	6.1	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	22.9						5.7			5.3		
Approach LOS	C						A			A		
Intersection Delay	8.7			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Road @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Existing+Project BO*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	9	111	116				207	569	14	111	539	18
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	10	126	132				235	663		126	633	
Lane Group Capacity	260	274	1495				544	2188		528	2186	
v/c Ratio	0.04	0.46	0.09				0.43	0.30		0.24	0.29	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.6	0.0				3.5	6.7		3.3	6.6	
Delay Factor k	0.11	0.11	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	1.2	0.0				0.6	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.3	35.8	0.0				4.1	6.7		3.5	6.7	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	18.0						6.0			6.1		
Approach LOS	B						A			A		
Intersection Delay	7.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	9	158	138				236	545	11	129	364	11
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	10	182	159				271	639		148	431	
Lane Group Capacity	260	274	1495				667	2189		541	2186	
v/c Ratio	0.04	0.66	0.11				0.41	0.29		0.27	0.20	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	35.8	0.0				3.4	6.6		3.3	6.1	
Delay Factor k	0.11	0.24	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	6.0	0.0				0.4	0.1		0.3	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.3	41.7	0.0				3.8	6.7		3.6	6.2	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	22.6						5.8			5.5		
Approach LOS	C						A			A		
Intersection Delay	8.9			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	10	100	86				112	505	14	110	524	19
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	11	114	98				127	590		125	617	
Lane Group Capacity	260	274	1495				553	2187		568	2184	
v/c Ratio	0.04	0.42	0.07				0.23	0.27		0.22	0.28	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.3	0.0				3.2	6.5		3.2	6.6	
Delay Factor k	0.11	0.11	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	1.0	0.0				0.2	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.4	35.3	0.0				3.4	6.6		3.4	6.6	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	19.7						6.0			6.1		
Approach LOS	B						A			A		
Intersection Delay	7.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Road @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	10	145	101				145	490	11	128	331	12
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	11	167	116				167	576		147	394	
Lane Group Capacity	260	274	1495				692	2188		576	2184	
v/c Ratio	0.04	0.61	0.08				0.24	0.26		0.26	0.18	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	35.4	0.0				3.1	6.5		3.2	6.1	
Delay Factor k	0.11	0.20	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	3.9	0.0				0.2	0.1		0.2	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.4	39.4	0.0				3.3	6.5		3.5	6.1	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	23.6						5.8			5.4		
Approach LOS	C						A			A		
Intersection Delay	9.0			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	10	101	89				120	511	14	110	527	19
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	11	115	101				136	597		125	621	
Lane Group Capacity	260	274	1495				551	2187		564	2184	
v/c Ratio	0.04	0.42	0.07				0.25	0.27		0.22	0.28	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.3	0.0				3.2	6.5		3.2	6.6	
Delay Factor k	0.11	0.11	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	1.0	0.0				0.2	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.4	35.4	0.0				3.5	6.6		3.4	6.6	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	19.5						6.0			6.1		
Approach LOS	B						A			A		
Intersection Delay	7.8			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Road @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	10	146	104				153	496	11	128	334	12
% Heavy Vehicles	8	8	8				8	8	8	8	8	8
PHF	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	11	168	120				176	583		147	398	
Lane Group Capacity	260	274	1495				689	2188		572	2184	
v/c Ratio	0.04	0.61	0.08				0.26	0.27		0.26	0.18	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	35.5	0.0				3.1	6.5		3.2	6.1	
Delay Factor k	0.11	0.20	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	4.0	0.0				0.2	0.1		0.2	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.4	39.5	0.0				3.3	6.5		3.5	6.1	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	23.4						5.8			5.4		
Approach LOS	C						A			A		
Intersection Delay	8.9			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Road @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	13	128	106				148	557	16	120	566	25
% Heavy Vehicles	5	5	5				5	5	5	5	5	5
PHF	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	13	128	106				148	573		120	591	
Lane Group Capacity	267	282	1538				584	2249		595	2244	
v/c Ratio	0.05	0.45	0.07				0.25	0.25		0.20	0.26	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.5	0.0				3.2	6.4		3.1	6.5	
Delay Factor k	0.11	0.11	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	1.2	0.0				0.2	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.4	35.7	0.0				3.5	6.5		3.3	6.5	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	20.2						5.9			6.0		
Approach LOS	C						A			A		
Intersection Delay	8.0			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	12	184	126				178	521	12	139	355	15
% Heavy Vehicles	5	5	5				5	5	5	5	5	5
PHF	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 15.0	G =	G =	G =	G = 5.0	G = 58.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	12	184	126				178	533		139	370	
Lane Group Capacity	287	302	1538				718	2213		609	2207	
v/c Ratio	0.04	0.61	0.08				0.25	0.24		0.23	0.17	
Green Ratio	0.17	0.17	1.00				0.74	0.64		0.74	0.64	
Uniform Delay d_1	31.5	34.8	0.0				3.4	6.7		3.4	6.4	
Delay Factor k	0.11	0.20	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	3.6	0.0				0.2	0.1		0.2	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	31.5	38.3	0.0				3.6	6.8		3.6	6.4	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	23.1						6.0			5.7		
Approach LOS	C						A			A		
Intersection Delay	9.4			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	El Cielo Road @ Baristo Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	13	147	147				252	638	16	125	608	25
% Heavy Vehicles	5	5	5				5	5	5	5	5	5
PHF	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 14.0	G =	G =	G =	G = 5.0	G = 59.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	13	147	147				252	654		125	633	
Lane Group Capacity	267	282	1538				560	2251		548	2245	
v/c Ratio	0.05	0.52	0.10				0.45	0.29		0.23	0.28	
Green Ratio	0.16	0.16	1.00				0.76	0.66		0.76	0.66	
Uniform Delay d_1	32.3	34.9	0.0				3.6	6.6		3.3	6.5	
Delay Factor k	0.11	0.13	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	1.7	0.0				0.6	0.1		0.2	0.1	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	32.4	36.7	0.0				4.1	6.7		3.5	6.6	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	18.9						6.0			6.1		
Approach LOS	B						A			A		
Intersection Delay	8.0			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*El Cielo Road @ Baristo Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	1				1	2	0	1	2	0
Lane Group	L	T	R				L	TR		L	TR	
Volume (vph)	12	206	172				286	605	12	144	404	15
% Heavy Vehicles	5	5	5				5	5	5	5	5	5
PHF	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A				A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0				2.0	2.0		2.0	2.0	
Arrival Type	3	3	3				3	3		3	3	
Unit Extension	3.0	3.0	3.0				3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	0	0	0	0
Lane Width	12.0	12.0	12.0				12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0				0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	02	03	04	Excl. Left	NS Perm	07	08
Timing	G = 15.0	G =	G =	G =	G = 5.0	G = 58.0	G =	G =
	Y = 4	Y =	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	12	206	172				286	617		144	419	
Lane Group Capacity	287	302	1538				683	2214		559	2209	
v/c Ratio	0.04	0.68	0.11				0.42	0.28		0.26	0.19	
Green Ratio	0.17	0.17	1.00				0.74	0.64		0.74	0.64	
Uniform Delay d_1	31.5	35.3	0.0				3.7	6.9		3.5	6.5	
Delay Factor k	0.11	0.25	0.11				0.11	0.11		0.11	0.11	
Incremental Delay d_2	0.1	6.2	0.0				0.4	0.1		0.2	0.0	
PF Factor	1.000	1.000	0.950				1.000	1.000		1.000	1.000	
Control Delay	31.5	41.4	0.0				4.1	7.0		3.8	6.5	
Lane Group LOS	C	D	A				A	A		A	A	
Approach Delay	22.9						6.1			5.8		
Approach LOS	C						A			A		
Intersection Delay	9.5			Intersection LOS						A		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	39	501	23	83	753	121	52	221	80	112	178	76
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	48	622	29	103	935	150	65	374		139	315	
Lane Group Capacity	277	1638	1279	401	1638	1279	279	715		253	711	
v/c Ratio	0.17	0.38	0.02	0.26	0.57	0.12	0.23	0.52		0.55	0.44	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	9.6	14.4	1.0	8.8	16.3	1.0	21.8	30.8		26.4	30.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.17	0.11	0.11	0.13		0.15	0.11	
Incremental Delay d_2	0.3	0.1	0.0	0.3	0.5	0.0	0.4	0.7		2.5	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	9.9	14.6	1.0	9.1	16.8	1.1	22.2	31.5		29.0	30.6	
Lane Group LOS	A	B	A	A	B	A	C	C		C	C	
Approach Delay	13.7			14.1			30.1			30.1		
Approach LOS	B			B			C			C		
Intersection Delay	19.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	36	711	40	84	922	160	38	210	103	138	226	51
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	38	741	42	88	960	167	40	326		144	288	
Lane Group Capacity	269	1638	1279	349	1638	1279	291	708		274	724	
v/c Ratio	0.14	0.45	0.03	0.25	0.59	0.13	0.14	0.46		0.53	0.40	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	9.7	15.1	1.0	9.1	16.5	1.1	21.4	30.3		26.0	29.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.18	0.11	0.11	0.11		0.13	0.11	
Incremental Delay d_2	0.2	0.2	0.0	0.4	0.5	0.0	0.2	0.5		1.9	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	9.9	15.3	1.0	9.4	17.0	1.1	21.6	30.8		27.9	30.2	
Lane Group LOS	A	B	A	A	B	A	C	C		C	C	
Approach Delay	14.3			14.3			29.8			29.4		
Approach LOS	B			B			C			C		
Intersection Delay	18.6			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	45	915	44	79	841	171	35	261	111	197	239	55
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 41.0	G =	G =	G = 5.0	G = 23.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	48	968	47	84	890	181	37	393		208	311	
Lane Group Capacity	267	1526	1279	242	1526	1279	317	818		279	832	
v/c Ratio	0.18	0.63	0.04	0.35	0.58	0.14	0.12	0.48		0.75	0.37	
Green Ratio	0.56	0.46	0.86	0.56	0.46	0.86	0.36	0.26		0.36	0.26	
Uniform Delay d_1	10.9	18.8	1.0	11.8	18.2	1.1	19.4	28.4		28.5	27.6	
Delay Factor k	0.11	0.21	0.11	0.11	0.17	0.11	0.11	0.11		0.30	0.11	
Incremental Delay d_2	0.3	0.9	0.0	0.9	0.6	0.1	0.2	0.4		10.4	0.3	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	11.3	19.6	1.0	12.7	18.7	1.1	19.5	28.9		38.9	27.9	
Lane Group LOS	B	B	A	B	B	A	B	C		D	C	
Approach Delay	18.4			15.5			28.1			32.3		
Approach LOS	B			B			C			C		
Intersection Delay	21.0			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	40	501	23	83	753	127	52	224	80	113	179	76
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	49	619	28	102	930	157	64	376		140	315	
Lane Group Capacity	279	1638	1279	402	1638	1279	279	715		252	711	
v/c Ratio	0.18	0.38	0.02	0.25	0.57	0.12	0.23	0.53		0.56	0.44	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	9.6	14.4	1.0	8.8	16.3	1.0	21.8	30.8		26.5	30.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.16	0.11	0.11	0.13		0.15	0.11	
Incremental Delay d_2	0.3	0.1	0.0	0.3	0.5	0.0	0.4	0.7		2.7	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	9.9	14.6	1.0	9.1	16.7	1.1	22.2	31.5		29.2	30.6	
Lane Group LOS	A	B	A	A	B	A	C	C		C	C	
Approach Delay	13.7			14.0			30.2			30.2		
Approach LOS	B			B			C			C		
Intersection Delay	19.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Phase 1

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	37	711	40	84	922	164	38	213	103	141	227	52
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	39	741	42	88	960	171	40	329		147	290	
Lane Group Capacity	269	1638	1279	349	1638	1279	290	708		272	724	
v/c Ratio	0.14	0.45	0.03	0.25	0.59	0.13	0.14	0.46		0.54	0.40	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	9.7	15.1	1.0	9.1	16.5	1.1	21.4	30.4		26.3	29.9	
Delay Factor k	0.11	0.11	0.11	0.11	0.18	0.11	0.11	0.11		0.14	0.11	
Incremental Delay d_2	0.2	0.2	0.0	0.4	0.5	0.0	0.2	0.5		2.2	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	10.0	15.3	1.0	9.4	17.0	1.1	21.6	30.8		28.5	30.2	
Lane Group LOS	A	B	A	A	B	A	C	C		C	C	
Approach Delay	14.3			14.2			29.8			29.6		
Approach LOS	B			B			C			C		
Intersection Delay	18.6			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Existing+Phase 1*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	48	915	44	79	841	181	35	266	111	202	242	56
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 41.0	G =	G =	G = 5.0	G = 23.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	51	973	47	84	895	193	37	401		215	317	
Lane Group Capacity	266	1526	1279	241	1526	1279	314	818		276	832	
v/c Ratio	0.19	0.64	0.04	0.35	0.59	0.15	0.12	0.49		0.78	0.38	
Green Ratio	0.56	0.46	0.86	0.56	0.46	0.86	0.36	0.26		0.36	0.26	
Uniform Delay d_1	11.0	18.8	1.0	11.9	18.2	1.1	19.4	28.5		29.1	27.6	
Delay Factor k	0.11	0.22	0.11	0.11	0.18	0.11	0.11	0.11		0.33	0.11	
Incremental Delay d_2	0.4	0.9	0.0	0.9	0.6	0.1	0.2	0.5		13.3	0.3	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	11.4	19.7	1.0	12.7	18.8	1.1	19.5	29.0		42.4	27.9	
Lane Group LOS	B	B	A	B	B	A	B	C		D	C	
Approach Delay	18.5			15.5			28.2			33.8		
Approach LOS	B			B			C			C		
Intersection Delay	21.2			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	71	540	24	86	812	234	54	287	83	141	197	88
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	88	667	30	106	1002	289	67	456		174	352	
Lane Group Capacity	256	1638	1279	380	1638	1279	262	719		220	710	
v/c Ratio	0.34	0.41	0.02	0.28	0.61	0.23	0.26	0.63		0.79	0.50	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	10.5	14.7	1.0	8.9	16.8	1.2	21.9	31.7		30.8	30.6	
Delay Factor k	0.11	0.11	0.11	0.11	0.20	0.11	0.11	0.21		0.34	0.11	
Incremental Delay d_2	0.8	0.2	0.0	0.4	0.7	0.1	0.5	1.8		17.6	0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	11.3	14.8	1.0	9.3	17.5	1.3	22.4	33.5		48.4	31.1	
Lane Group LOS	B	B	A	A	B	A	C	C		D	C	
Approach Delay	13.9			13.5			32.1			36.9		
Approach LOS	B			B			C			D		
Intersection Delay	20.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	59	711	40	84	922	245	38	257	103	187	253	65
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	61	741	42	88	960	255	40	375		195	332	
Lane Group Capacity	269	1638	1279	349	1638	1279	271	712		252	722	
v/c Ratio	0.23	0.45	0.03	0.25	0.59	0.20	0.15	0.53		0.77	0.46	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	9.9	15.1	1.0	9.1	16.5	1.1	21.5	30.8		30.3	30.3	
Delay Factor k	0.11	0.11	0.11	0.11	0.18	0.11	0.11	0.13		0.32	0.11	
Incremental Delay d_2	0.4	0.2	0.0	0.4	0.5	0.1	0.3	0.7		13.9	0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	10.3	15.3	1.0	9.4	17.0	1.2	21.8	31.6		44.2	30.8	
Lane Group LOS	B	B	A	A	B	A	C	C		D	C	
Approach Delay	14.2			13.4			30.6			35.8		
Approach LOS	B			B			C			D		
Intersection Delay	19.8			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Existing+Project BO

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	69	915	44	79	841	260	35	311	111	255	270	71
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 8.0	G = 23.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	73	973	47	84	895	277	37	449		271	363	
Lane Group Capacity	240	1414	1279	216	1414	1279	349	822		312	829	
v/c Ratio	0.30	0.69	0.04	0.39	0.63	0.22	0.11	0.55		0.87	0.44	
Green Ratio	0.52	0.42	0.86	0.52	0.42	0.86	0.39	0.26		0.39	0.26	
Uniform Delay d_1	12.9	21.2	1.0	13.6	20.5	1.2	17.6	29.0		29.0	28.1	
Delay Factor k	0.11	0.26	0.11	0.11	0.21	0.11	0.11	0.15		0.40	0.11	
Incremental Delay d_2	0.7	1.4	0.0	1.2	0.9	0.1	0.1	0.8		22.1	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	13.6	22.6	1.0	14.8	21.4	1.2	17.7	29.8		51.1	28.5	
Lane Group LOS	B	C	A	B	C	A	B	C		D	C	
Approach Delay	21.1			16.5			28.8			38.1		
Approach LOS	C			B			C			D		
Intersection Delay	23.6			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	42	541	24	86	815	127	54	230	83	120	191	84
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	52	668	30	106	1006	157	67	386		148	340	
Lane Group Capacity	254	1638	1279	380	1638	1279	267	715		248	710	
v/c Ratio	0.20	0.41	0.02	0.28	0.61	0.12	0.25	0.54		0.60	0.48	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	10.1	14.7	1.0	8.9	16.8	1.0	21.9	30.9		27.3	30.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.20	0.11	0.11	0.14		0.19	0.11	
Incremental Delay d_2	0.4	0.2	0.0	0.4	0.7	0.0	0.5	0.8		3.9	0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	10.5	14.8	1.0	9.3	17.5	1.1	22.4	31.8		31.2	31.0	
Lane Group LOS	B	B	A	A	B	A	C	C		C	C	
Approach Delay	14.0			14.8			30.4			31.0		
Approach LOS	B			B			C			C		
Intersection Delay	19.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	39	766	42	87	996	170	39	219	107	147	240	57
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	41	798	44	91	1038	177	41	339		153	309	
Lane Group Capacity	244	1638	1279	326	1638	1279	281	708		268	723	
v/c Ratio	0.17	0.49	0.03	0.28	0.63	0.14	0.15	0.48		0.57	0.43	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	10.2	15.4	1.0	9.3	17.0	1.1	21.5	30.5		26.8	30.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.21	0.11	0.11	0.11		0.17	0.11	
Incremental Delay d_2	0.3	0.2	0.0	0.5	0.8	0.0	0.2	0.5		2.9	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	10.5	15.7	1.0	9.8	17.8	1.1	21.7	31.0		29.7	30.5	
Lane Group LOS	B	B	A	A	B	A	C	C		C	C	
Approach Delay	14.7			15.0			30.0			30.2		
Approach LOS	B			B			C			C		
Intersection Delay	19.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	50	989	46	82	907	182	36	276	115	211	251	60
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 41.0	G =	G =	G = 6.0	G = 22.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	53	1052	49	87	965	194	38	416		224	331	
Lane Group Capacity	243	1526	1279	217	1526	1279	313	783		276	795	
v/c Ratio	0.22	0.69	0.04	0.40	0.63	0.15	0.12	0.53		0.81	0.42	
Green Ratio	0.56	0.46	0.86	0.56	0.46	0.86	0.36	0.24		0.36	0.24	
Uniform Delay d_1	11.5	19.4	1.0	12.6	18.7	1.1	19.4	29.5		29.4	28.6	
Delay Factor k	0.11	0.26	0.11	0.11	0.21	0.11	0.11	0.13		0.35	0.11	
Incremental Delay d_2	0.5	1.3	0.0	1.2	0.9	0.1	0.2	0.7		16.6	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	11.9	20.8	1.0	13.8	19.6	1.1	19.6	30.2		46.0	29.0	
Lane Group LOS	B	C	A	B	B	A	B	C		D	C	
Approach Delay	19.5			16.3			29.3			35.8		
Approach LOS	B			B			C			D		
Intersection Delay	22.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*AM Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	44	541	24	86	815	136	54	235	83	122	192	84
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	54	668	30	106	1006	168	67	392		151	341	
Lane Group Capacity	254	1638	1279	380	1638	1279	267	715		245	710	
v/c Ratio	0.21	0.41	0.02	0.28	0.61	0.13	0.25	0.55		0.62	0.48	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	10.1	14.7	1.0	8.9	16.8	1.1	21.9	31.0		27.6	30.5	
Delay Factor k	0.11	0.11	0.11	0.11	0.20	0.11	0.11	0.15		0.20	0.11	
Incremental Delay d_2	0.4	0.2	0.0	0.4	0.7	0.0	0.5	0.9		4.6	0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	10.6	14.8	1.0	9.3	17.5	1.1	22.4	31.9		32.3	31.0	
Lane Group LOS	B	B	A	A	B	A	C	C		C	C	
Approach Delay	14.0			14.7			30.5			31.4		
Approach LOS	B			B			C			C		
Intersection Delay	19.7			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2018 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	41	766	42	87	996	177	39	223	107	151	242	58
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	43	798	44	91	1038	184	41	343		157	312	
Lane Group Capacity	244	1638	1279	326	1638	1279	280	708		266	723	
v/c Ratio	0.18	0.49	0.03	0.28	0.63	0.14	0.15	0.48		0.59	0.43	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	10.2	15.4	1.0	9.3	17.0	1.1	21.5	30.5		27.2	30.1	
Delay Factor k	0.11	0.11	0.11	0.11	0.21	0.11	0.11	0.11		0.18	0.11	
Incremental Delay d_2	0.3	0.2	0.0	0.5	0.8	0.1	0.2	0.5		3.5	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	10.6	15.7	1.0	9.8	17.8	1.1	21.7	31.0		30.6	30.5	
Lane Group LOS	B	B	A	A	B	A	C	C		C	C	
Approach Delay	14.7			14.9			30.0			30.6		
Approach LOS	B			B			C			C		
Intersection Delay	19.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	PM Peak Hour	Analysis Year	Year 2018 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	52	989	46	82	907	189	36	280	115	215	253	61
% Heavy Vehicles	8	8	8	8	8	8	8	8	8	8	8	8
PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 41.0	G =	G =	G = 6.0	G = 22.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 90.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	55	1052	49	87	965	201	38	420		229	334	
Lane Group Capacity	243	1526	1279	217	1526	1279	312	783		275	795	
v/c Ratio	0.23	0.69	0.04	0.40	0.63	0.16	0.12	0.54		0.83	0.42	
Green Ratio	0.56	0.46	0.86	0.56	0.46	0.86	0.36	0.24		0.36	0.24	
Uniform Delay d_1	11.5	19.4	1.0	12.6	18.7	1.1	19.4	29.6		29.8	28.6	
Delay Factor k	0.11	0.26	0.11	0.11	0.21	0.11	0.11	0.14		0.37	0.11	
Incremental Delay d_2	0.5	1.3	0.0	1.2	0.9	0.1	0.2	0.7		19.2	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	12.0	20.8	1.0	13.8	19.6	1.1	19.6	30.3		49.0	29.0	
Lane Group LOS	B	C	A	B	B	A	B	C		D	C	
Approach Delay	19.5			16.2			29.4			37.1		
Approach LOS	B			B			C			D		
Intersection Delay	22.5			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 No Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	57	728	28	101	1095	177	63	270	98	164	217	110
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	57	728	28	101	1095	177	63	368		164	327	
Lane Group Capacity	235	1684	1316	365	1684	1316	281	735		263	727	
v/c Ratio	0.24	0.43	0.02	0.28	0.65	0.13	0.22	0.50		0.62	0.45	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	10.8	14.9	1.0	9.1	17.2	1.1	21.8	30.6		27.8	30.2	
Delay Factor k	0.11	0.11	0.11	0.11	0.23	0.11	0.11	0.11		0.21	0.11	
Incremental Delay d_2	0.5	0.2	0.0	0.4	0.9	0.0	0.4	0.5		4.6	0.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	11.4	15.1	1.0	9.5	18.1	1.1	22.2	31.2		32.4	30.7	
Lane Group LOS	B	B	A	A	B	A	C	C		C	C	
Approach Delay	14.3			15.3			29.9			31.2		
Approach LOS	B			B			C			C		
Intersection Delay	19.6			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*Midday Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	52	1029	49	102	1334	233	46	256	126	201	275	74
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 42.0	G =	G =	G = 11.0	G = 16.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	52	1029	49	102	1334	233	46	382		201	349	
Lane Group Capacity	176	1608	1316	239	1608	1316	337	582		323	593	
v/c Ratio	0.30	0.64	0.04	0.43	0.83	0.18	0.14	0.66		0.62	0.59	
Green Ratio	0.57	0.47	0.86	0.57	0.47	0.86	0.34	0.18		0.34	0.18	
Uniform Delay d_1	14.6	18.3	1.0	11.9	20.9	1.1	20.3	34.4		22.5	34.0	
Delay Factor k	0.11	0.22	0.11	0.11	0.37	0.11	0.11	0.23		0.21	0.18	
Incremental Delay d_2	0.9	0.9	0.0	1.2	3.8	0.1	0.2	2.7		3.7	1.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	15.5	19.1	1.0	13.2	24.7	1.2	20.5	37.1		26.2	35.5	
Lane Group LOS	B	B	A	B	C	A	C	D		C	D	
Approach Delay	18.2			20.7			35.3			32.1		
Approach LOS	B			C			D			C		
Intersection Delay	23.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 No Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	65	1323	53	96	1216	249	42	318	135	287	291	79
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 40.0	G =	G =	G = 12.0	G = 17.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	65	1323	53	96	1216	249	42	453		287	370	
Lane Group Capacity	177	1531	1316	177	1531	1316	359	622		327	630	
v/c Ratio	0.37	0.86	0.04	0.54	0.79	0.19	0.12	0.73		0.88	0.59	
Green Ratio	0.54	0.44	0.86	0.54	0.44	0.86	0.37	0.19		0.37	0.19	
Uniform Delay d_1	14.6	22.5	1.0	16.5	21.5	1.1	19.0	34.3		22.7	33.3	
Delay Factor k	0.11	0.39	0.11	0.14	0.34	0.11	0.11	0.29		0.40	0.18	
Incremental Delay d_2	1.3	5.4	0.0	3.4	3.0	0.1	0.1	4.3		22.6	1.4	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	15.9	28.0	1.0	19.9	24.5	1.2	19.1	38.6		45.3	34.7	
Lane Group LOS	B	C	A	B	C	A	B	D		D	C	
Approach Delay	26.4			20.5			37.0			39.4		
Approach LOS	C			C			D			D		
Intersection Delay	27.5			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	AM Peak Hour	Analysis Year	Year 2030 W/ Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	87	728	28	101	1095	284	63	329	98	185	229	116
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 44.0	G =	G =	G = 5.0	G = 20.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	87	728	28	101	1095	284	63	427		185	345	
Lane Group Capacity	235	1684	1316	365	1684	1316	273	739		238	727	
v/c Ratio	0.37	0.43	0.02	0.28	0.65	0.22	0.23	0.58		0.78	0.47	
Green Ratio	0.59	0.49	0.86	0.59	0.49	0.86	0.32	0.22		0.32	0.22	
Uniform Delay d_1	11.2	14.9	1.0	9.1	17.2	1.2	21.8	31.2		30.6	30.4	
Delay Factor k	0.11	0.11	0.11	0.11	0.23	0.11	0.11	0.17		0.33	0.11	
Incremental Delay d_2	1.0	0.2	0.0	0.4	0.9	0.1	0.4	1.1		15.0	0.5	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	12.2	15.1	1.0	9.5	18.1	1.2	22.3	32.4		45.5	30.9	
Lane Group LOS	B	B	A	A	B	A	C	C		D	C	
Approach Delay	14.3			14.3			31.1			36.0		
Approach LOS	B			B			C			D		
Intersection Delay	20.2			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	Greg	Intersection	Farrell Drive @ Ramon Road
Agency or Co.	Endo Engineering	Area Type	All other areas
Date Performed	5/3/2015	Jurisdiction	Palm Springs
Time Period	Midday Peak Hour	Analysis Year	Year 2030 W/Project

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	76	1029	49	102	1334	321	46	304	126	251	303	88
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 42.0	G =	G =	G = 11.0	G = 16.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	76	1029	49	102	1334	321	46	430		251	391	
Lane Group Capacity	176	1608	1316	239	1608	1316	320	586		305	592	
v/c Ratio	0.43	0.64	0.04	0.43	0.83	0.24	0.14	0.73		0.82	0.66	
Green Ratio	0.57	0.47	0.86	0.57	0.47	0.86	0.34	0.18		0.34	0.18	
Uniform Delay d_1	15.0	18.3	1.0	11.9	20.9	1.2	20.4	35.0		23.5	34.5	
Delay Factor k	0.11	0.22	0.11	0.11	0.37	0.11	0.11	0.29		0.36	0.24	
Incremental Delay d_2	1.7	0.9	0.0	1.2	3.8	0.1	0.2	4.8		16.5	2.7	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	16.7	19.1	1.0	13.2	24.7	1.3	20.6	39.7		40.0	37.2	
Lane Group LOS	B	B	A	B	C	A	C	D		D	D	
Approach Delay	18.2			19.8			37.9			38.3		
Approach LOS	B			B			D			D		
Intersection Delay	24.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*Greg*	Intersection	*Farrell Drive @ Ramon Road*
Agency or Co.	*Endo Engineering*	Area Type	*All other areas*
Date Performed	*5/3/2015*	Jurisdiction	*Palm Springs*
Time Period	*PM Peak Hour*	Analysis Year	*Year 2030 W/ Project*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Lane Group	L	T	R	L	T	R	L	TR		L	TR	
Volume (vph)	90	1323	53	96	1216	341	42	369	135	346	323	95
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Arrival Type	3	3	3	3	3	3	3	3		3	3	
Unit Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0	0	0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08
Timing	G = 5.0	G = 38.0	G =	G =	G = 15.0	G = 16.0	G =	G =
	Y = 4	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	90	1323	53	96	1216	341	42	504		346	418	
Lane Group Capacity	176	1455	1316	176	1455	1316	386	588		367	592	
v/c Ratio	0.51	0.91	0.04	0.55	0.84	0.26	0.11	0.86		0.94	0.71	
Green Ratio	0.52	0.42	0.86	0.52	0.42	0.86	0.39	0.18		0.39	0.18	
Uniform Delay d_1	16.3	24.4	1.0	17.7	23.2	1.2	17.8	35.9		22.4	34.8	
Delay Factor k	0.12	0.43	0.11	0.15	0.37	0.11	0.11	0.39		0.46	0.27	
Incremental Delay d_2	2.5	8.8	0.0	3.5	4.4	0.1	0.1	12.0		32.5	3.8	
PF Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	
Control Delay	18.8	33.1	1.0	21.2	27.6	1.3	18.0	47.9		54.9	38.6	
Lane Group LOS	B	C	A	C	C	A	B	D		D	D	
Approach Delay	31.1			21.8			45.6			46.0		
Approach LOS	C			C			D			D		
Intersection Delay	32.0			Intersection LOS						C		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Greg*	Intersection	*North Driveway @ Farrell Drive*
Agency/Co.	*Endo Engineering*	Jurisdiction	*Palm Springs*
Date Performed	*5/3/2015*	Analysis Year	*Year 2030 W/ Project*
Analysis Time Period	*PM Peak Hour*		

Project Description *COD PSM*	
East/West Street: *North Driveway*	North/South Street: *Farrell Drive*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	68	762			891	145
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	68	762	0	0	891	145
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	12		51			
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	12	0	51	0	0	0
Percent Heavy Vehicles	5	0	5	5	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L						LR	
v (veh/h)	68						63	
C (m) (veh/h)	649						428	
v/c	0.10						0.15	
95% queue length	0.35						0.51	
Control Delay (s/veh)	11.2						14.9	
LOS	B						B	
Approach Delay (s/veh)	--	--				14.9		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Mid Driveway @ Farrell Drive*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Mid Driveway* | North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	128	749			759	77
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	128	749	0	0	759	77
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	47		70			
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	47	0	70	0	0	0
Percent Heavy Vehicles	5	0	5	5	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	0	1	0	0	0
Configuration	L		R			

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (veh/h)	128					47		70
C (m) (veh/h)	775					229		624
v/c	0.17					0.21		0.11
95% queue length	0.59					0.75		0.38
Control Delay (s/veh)	10.6					24.7		11.5
LOS	B					C		B
Approach Delay (s/veh)	--	--				16.8		
Approach LOS	--	--				C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Mid Driveway @ Farrell Drive*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Mid Driveway* North/South Street: *Farrell Drive*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*128*	*749*			*759*	*77*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*128*	*749*	*0*	*0*	*759*	*77*
Percent Heavy Vehicles	*5*	--	--	*5*	--	--
Median Type	*Two Way Left Turn Lane* No Vehicle Storage in Median					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*0*	*2*	*0*
Configuration	*L*	*T*			*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*47*		*70*			
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*47*	*0*	*70*	*0*	*0*	*0*
Percent Heavy Vehicles	*5*	*0*	*5*	*5*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (veh/h)	*128*					*47*		*70*
C (m) (veh/h)	*775*					*102*		*624*
v/c	*0.17*					*0.46*		*0.11*
95% queue length	*0.59*					*1.99*		*0.38*
Control Delay (s/veh)	*10.6*					*67.4*		*11.5*
LOS	*B*					*F*		*B*
Approach Delay (s/veh)	--	--				*34.0*		
Approach LOS	--	--				*D*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*West Driveway @ Barristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Baristo Road* | North/South Street: *West Driveway*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	35	369			359	10
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	35	369	0	0	359	10
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				7		23
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	7	0	23
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L						LR	
v (veh/h)	35						30	
C (m) (veh/h)	1173						606	
v/c	0.03						0.05	
95% queue length	0.09						0.16	
Control Delay (s/veh)	8.2						11.2	
LOS	A						B	
Approach Delay (s/veh)	--	--				11.2		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Greg*
Agency/Co.	*Endo Engineering*
Date Performed	*5/3/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Movie Driveway @ Barristo Road*
Jurisdiction	*Palm Springs*
Analysis Year	*Year 2030 W/ Project*

Project Description *COD PSM*

East/West Street: *Baristo Road* North/South Street: *Movie Driveway*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	40	337			341	15
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	40	337	0	0	341	15
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				12		28
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	12	0	28
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L						LR	
v (veh/h)	40						40	
C (m) (veh/h)	1186						602	
v/c	0.03						0.07	
95% queue length	0.10						0.21	
Control Delay (s/veh)	8.1						11.4	
LOS	A						B	
Approach Delay (s/veh)	--	--				11.4		
Approach LOS	--	--				B		

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Appendix D

MUTCD TRAFFIC CONTROL SIGNAL WARRANTS
PEAK HOUR SIGNAL WARRANT WORKSHEETS

Appendix D
MUTCD Traffic Control Signal Warrants

The Federal Highway Administration (FHWA) publishes the *Manual on Uniform Traffic Control Devices* (MUTCD), which contains all national design, application, and placement standards for traffic control devices. The purpose of these devices, which include signs, signals, and pavement markings, is to promote highway safety, efficiency, and uniformity so that traffic can move efficiently on the Nation's streets and highways. All traffic control devices nationwide must conform to the MUTCD. Although the FHWA adopts the standards, the individual State and local highway agencies, not the FHWA, select, install, operate, and maintain traffic control devices on all roadways nationwide including the Interstate and the U.S. numbered systems.

A traffic signal assigns intersection right-of-way and promotes the orderly movement of pedestrians and vehicles. However, improper signal controls sometimes lead to intentional violations, unnecessary delays and traffic diversion to less desirable routes. Consequently, atraffic control signal should not be installed unless an engineering study indicates that it will improve the overall safety and/or operation of the intersection. Even then, it should not be installed if it would seriously disrupt progressive traffic flow.

The selection and use of traffic control signals should be based on an engineering study of roadway, traffic, and other conditions. A careful analysis of traffic operations, pedestrian and bicyclist needs, and other factors at a large number of signalized and unsignalized intersections, coupled with engineering judgment, has provided a series of signal warrants detailed in the FHWA MUTCD (2009 Edition)[1] that define the minimum conditions under which installing traffic control signals might be justified. As of November 7, 2014, Caltrans has adopted the *California Manual on Uniform Traffic Control Devices* (2014 Edition) which includes the FHWA 2009 MUTCD and Revisions 1 & 2 as amended for use in California to prescribe uniform standards for traffic control devices in California.

In order to justify the installation of a traffic control signal, a traffic control signal needs study is required that demonstrates delay, congestion, approach conditions, driver confusion, future land use, physical characteristics of the location, the factors contained in the traffic signal warrants, and/or other evidence of the need for right-of-way assignment beyond that which could be provided by a STOP sign. The FHWA MUTCD (2009 Edition)[2] and the California MUTCD (2014 Edition) provide guidance and signal warrant sheets for use in developing traffic control signal needs studies.

The following are warrants for installation of a traffic control signal.

Warrant 1 - <u>Eight Hour Vehicular Volume</u> (including minimum vehicle volume and interruption of continuous traffic warrants)

Warrant 2 - <u>Four-Hour Vehicular Volume</u>

Warrant 3 - <u>Peak Hour</u>

Warrant 4 - <u>Pedestrian Volume</u>

Warrant 5 - <u>School Crossing</u>

Warrant 6 - <u>Coordinated Signal System</u>

Warrant 7 - <u>Crash Experience</u>

Warrant 8 - <u>Roadway Network</u>

Warrant 9 - <u>Intersection Near A Grade Crossing</u>

Disadvantages of Signalization

Improperly designed or installed traffic signals, those that are poorly maintained, and unjustified traffic signals can result in one or more of the following disadvantages:

- Excessive delay;

1 U.S. Department of Transportation, Federal Highway Administration, *Manual on Uniform Traffic Control Devices for Streets and Highways,* (2009 Edition).
2 Ibid.

- Excessive disobedience of the signal indications;
- Increased use of less adequate routes (as road users attempt to avoid traffic signals); and
- Significant increases in the frequency of collisions (especially rear-end collisions).

Advantages of Signalization

Traffic signals that are properly designed, located, operated, and maintained have one or more of the following advantages:

- They provide for the orderly movement of vehicular and pedestrian traffic.
- They increase the traffic handling capacity of the intersection (if the signal operational parameters are reviewed and updated on a regular basis and when land use changes have occurred).
- They reduce the frequency and severity of certain types of crashes (especially right- angle collisions).
- They are coordinated to provide for continuous or nearly continuous movement of traffic at a definite speed along a given route under favorable conditions.
- They interrupt heavy traffic at intervals to permit other traffic (vehicular or pedestrian) to cross.

Alternatives to Signalization

Since vehicular delay and the frequency of some types of collisions can be greater under traffic signal control than under STOP sign control, consideration should be given to providing alternatives to traffic signals even if one or more of the signal warrants has been satisfied.

Alternatives for consideration may include:

- Improving the sight distance at the intersection by moving the stop line(s) and making other changes;
- Adding one or more lanes on a minor street approach to reduce the number of vehicles per lane on the approach;
- Channelizing vehicular movements;
- Installing roadway lighting if a disproportionate number of collisions occur at night;
- Restricting one or more turning movements, perhaps on a time-of-day basis, if alternative routes are available;
- Installing multiway STOP sign control if the warrant is satisfied;
- Installing a roundabout intersection;
- Installing warning signs on the major street regarding the approaching intersection;
- Installing flashing beacons on warning signs in advance of the intersection or at the intersection; and
- Installing measures designed to reduce speeds on the approaches.

General Notes

1. The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.
2. A traffic control signal should not be installed unless an engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection.
3. A signal should not be installed if it will seriously disrupt progressive traffic flow.
4. Bicycles may be counted as either vehicles or pedestrians for signal warrant analysis.
5. Pedestrian volume counts should be taken on each crosswalk during the same periods as the vehicular counts and during the hours of highest pedestrian volume.
6. Quantify pedestrian delay time for at least two 30 minute peak pedestrian delay periods of an average weekday or like periods of a Saturday or Sunday.
7. The posted or statutory speed limit or the 85th-percentile speed on the uncontrolled approaches to the location should be noted.
8. The distance to the nearest traffic control signals should be noted.
9. Where feasible, note the queue length on stop-controlled approaches.
10. For signal warrant analysis, a location with a wide median (even if the median is greater than 30 feet) should be considered as one intersection.

Appendix E

LIST OF ACRONYMS
TRAFFIC GLOSSARY

Appendix E
List of Acronyms

AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
ADT	Average Daily Traffic
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AWSC	All-Way Stop Control
BOQ	Back of queue
CDE	California Department of Education
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CMA	Congestion Management Agency
CMP	Congestion Management Program
COD	College of the Desert
CVAG	Coachella Valley Association of Governments
DSA	Division of the State Architect
FHWA	Federal Highway Administration
GLA	Gross Leasable Area
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
HOV	High Occupancy Vehicles
IDEA	Individuals with Disabilities Education Act
ITE	Institute of Transportation Engineers
LOS	Level of Service
MUTCD	Manual of Uniform Traffic Control Devices
PHF	Peak Hour Factor
RCTC	Riverside County Transportation Commission
RIVTAM	Riverside County Transportation Analysis Model
ROW	Right-Of-Way
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SR	State Route
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TRB	Transportation Research Board
TSF	Thousand Square Feet
TSM	Transportation Systems Management
TTC	Temporary Traffic Control
TUMF	Transportation Uniform Mitigation Fee
TWLTL	Two-Way Left-Turn Lane
TWSC	Two-Way Stop Control
UFAS	Uniform Federal Accessibility Standards
VMT	Vehicle Miles Traveled
VPD	Vehicles Per Day
VPH	Vehicles Per Hour
WVC	West Valley Campus

Appendix E
Traffic Glossary

Access point -- An intersection, driveway, or opening on the right-hand side of a roadway. An entry on the opposite side of a roadway or a median opening also can be considered as an access point if it is expected to influence traffic flow significantly in the direction of interest.

All-way stop control (AWSC) -- An intersection with stop signs at all approaches. The driver's decision to proceed is based on the rules of the road (e.g., the driver on the right has the right-of-way) and also on the traffic conditions of the other approaches.

Annual Average Daily Traffic (AADT) -- The total volume passing a point or segment of a highway facility in both directions for one year divided by the number of days in the year.

Average Daily Traffic (ADT) -- The total volume passing a point or segment of a highway facility in both directions on an average day during a specified interval (which can be the peak month or weekdays etc.).

Average Day -- A day representing traffic volumes normally and repeatedly found at a location, typically a weekday when volumes are influenced by employment or a weekend day when volumes are influenced by entertainment or recreation.

Approach -- All lanes of traffic moving towards an intersection of a midblock location from one direction including any adjacent parking lanes.

Arterial -- Signalized streets that serve primarily through traffic and provide access to abutting properties as a secondary function, having signal spacing of 2 miles or less and turn movements at intersections that usually do not exceed 20 percent of total traffic.

Average approach delay -- Average stopped-time delay at a signalized intersection plus average time lost because of deceleration to and acceleration from a stop, generally estimated as 1.3 times the average stopped time delay.

Average control delay -- the total time vehicles are stopped in an intersection approach during a specified time interval divided by the volume departing from the approach during the same time period. It does not include queue follow-up time (i.e. the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position).

Average stopped-time delay -- The total time vehicles are stopped in an intersection approach or lane group during a specified time interval divided by the volume departing from the approach or lane group during the same time period, in seconds per vehicle.

Average total delay -- The total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility divided by the volume departing from the corresponding cross section of the facility.

AWSC intersection -- an all-way stop-controlled intersection, which can be a three-way stop if the intersection has only three legs or a four-way stop if the intersection has four legs.

Bike lane -- A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles.

Bike path -- A bikeway physically separated from motorized traffic by an open space or barrier, either within the highway right-of-way or within an independent right-of-way.

Bikeway -- Any road, path, or way that in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicyclists or are to be shared with other vehicles.

Back of Queue (BOQ) – The distance between the stop line of a signalized intersection and the farthest reach of an upstream queue, expressed as the number of vehicles. Vehicles stopped at the front of the queue are counted even if they begin moving.

Capacity -- The maximum sustainable flow rate at which persons or vehicles can be reasonable expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions, usually expressed as vehicles per hour or persons per hour.

Clearance lost time -- The minimum possible time interval between the departure of one bus from a bus berth and the entrance of another.

Clearance time -- The time, in seconds, between signal phases during which an intersection is not used by any traffic.

Conflicting approach -- The approach at approximately 90 degrees to the subject approach at an all-way stop-controlled (AWSC) intersection.

Conflicting movements -- The traffic streams in conflict at an unsignalized intersection.

Conflicting traffic volume -- The volume of traffic that conflicts with a specific movement at an unsignalized intersection.

Control delay -- The component of delay that results when a control signal causes a lane group to reduce speed or to stop; it is measured by comparison with the uncontrolled condition.

CMP -- Congestion Management Program, designed to ensure that a balanced transportation system is developed that relates population growth, traffic growth, and land use decisions to transportation system level of service performance standards to help reduce traffic congestion and improve air quality.

Constrained operation -- An operating condition in a weaving area in which, because of geometric constraints, weaving vehicles are unable to occupy as large a portion of available lanes as required to achieve balanced operation.

Control Delay – The component of delay that results when a traffic control device causes a lane group to reduce speed or to stop as measured by comparison with the uncontrolled condition.

Critical gap -- The minimum time interval between vehicles in a major traffic stream that permits side-street vehicles in a stop-controlled approach to enter the intersection under prevailing traffic and roadway conditions, in seconds.

Critical lane group -- The lane groups that have the highest flow ratio for a given signal phase.

Critical volume-to-capacity ratio -- The proportion of available intersection capacity used by vehicles in critical lane groups.

Crosswalk -- That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs (or in the absence of curbs, from the edges of the traversable roadway) and in the absence of a sidewalk on one side of the roadway, the part of a roadway included within the extension of the lateral lines of the sidewalk at right angles to the centerline. Any portion of a roadway at an intersection or elsewhere distinctly indicated as a pedestrian crossing by lines on the surface, which may be supplemented by a contrasting pavement texture, style or color.

Cycle -- Any complete sequence of signal indications.

Cycle length -- The total time required for one complete sequence of signal indications.

Deceleration lane -- A paved auxiliary lane, including tapered areas, allowing vehicles leaving the through-traffic lane of the roadway to decelerate.

Delay -- Additional travel time experienced by a driver, passenger, or pedestrian beyond what would reasonably be desired for a given trip.

Demand volume -- The traffic volume expected to desire service past a point or segment of the highway system at some future time, or the traffic currently arriving or desiring service past such a point, usually expressed as vehicles per hour.

Effective green time -- The time allocated for a given traffic movement (green plus yellow) at a signalized intersection less the start-up and clearance lost times for the movement.

Exclusive turn lane -- A designated left- or right-turn lane or lanes used only by vehicles making those turns.

Expressway -- An arterial which increases vehicular capacity by reducing at-grade access and increased signal spacing.

Flared approach -- A shared right-turn lane that allows right-turning vehicles to complete their movement while other vehicles are occupying the lane.

Free flow speed -- (1) The theoretical speed of traffic when density is zero, that is, when no vehicles are present; (2) the average speed of vehicles over an arterial segment not close to signalized intersections under conditions of low volume.

Gap acceptance -- The process by which a minor-street vehicle accepts an available gap to maneuver.

GLA – Gross leasable area is the total floor area designated for tenant occupancy and exclusive use including basements, mezzanines, and upper floors measured from the centerline of joint partitions and from outside wall faces, not including the floor area of any parking garages within the building.

Green time -- The actual length of the green indication for a given movement at a signalized intersection.

HCM -- *Highway Capacity Manual.* HCM 2000 is the year 2000 *Highway Capacity Manual.*

HCS -- Highway Capacity Software implementing the *Highway Capacity Manual* procedures.

Ideal conditions-- Characteristics for a given type of facility that are assumed to be the best possible from the point of view of capacity, that is, characteristics that if further improved would not result increased capacity.

Intersection -- The area embraced within the prolongation or connection of the lateral curb lines, or if none the lateral boundary lines of the roadways of two highways that join one another at, or approximately at right angles, or the area within which vehicles traveling on different highways that join at any other angle might come into conflict. The junction of an alley or driveway with a roadway or highway does not constitute an intersection.

Intersection delay -- The total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility, divided by the volume departing from the corresponding cross section of the facility.

Interval -- The part of a signal cycle during which signal indications do not change.

Level of service (LOS) -- A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Lost time -- The time during which the intersection is not effectively used by any movement. Clearance lost time plus start-up lost time.

Major street -- The street not controlled by stop signs at a two-way stop-controlled intersection. The street normally carrying the higher volume of vehicular traffic.

Maximum service flow rate -- The highest 15-minute rate of flow that can be accommodated on a highway facility under ideal conditions while maintaining the operating characteristics for a stated level of service, expressed as passenger cars per hour per lane.

Minor Street -- The street controlled by stop signs at a two-way stop-controlled intersection; also referred to as a side street. The street normally carrying the lower volume of vehicular traffic.

Passenger car equivalent -- The number of passenger cars that are displaced by a single heavy vehicle of a particular type under prevailing roadway, traffic, and control conditions.

Peak hour -- The hour during which the greatest number of vehicles are traveling on a given facility.

Peak hour factor -- The hourly volume during the maximum volume hour of the day divided by the peak 15-minute rate of flow within the peak hour; a measure of traffic demand fluctuation within the peak hour.

Peak Hour of Adjacent Street – The 60-minute period during the highest volume occurs on the roadway abutting the site. Usually between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. in a weekday.

Peak Hour of the Generator – The 60-minute period in which the highest volume of traffic entering and leaving the site occurs.

Peak-hour trip generation -- The total number of vehicular trips to and from a site during a peak 60–minute period.

Pedestrian Clearance Time -- The time provided for a pedestrian crossing in a crosswalk, after leaving the curb or shoulder, to travel to the far side of the traveled way or to a median.

Performance measure -- A quantitative or qualitative characteristic describing the quality of service provided by a transportation facility or service.

Permitted plus protected -- Compound left-turn protection that displays the permitted phase before the protected phase.

Permitted turns -- Left or right turns at a signalized intersection that are made against an opposing or conflicting vehicular or pedestrian flow.

Phase -- The part of a signal cycle allocated to any combination of traffic movements receiving the right-of-way simultaneously during one or more intervals.

Planning analysis -- A use of capacity analysis procedures to estimate the number of lanes required by a facility in order to provide for a specified level of service based on approximate and general planning data in the early stages of project development.

Platoon -- A group of vehicles or pedestrians traveling together as a group, either voluntarily or involuntarily because of signal control, geometrics, or other factors.

Platoon -- A group of vehicles or pedestrians traveling together as a group, either voluntarily or involuntarily, because of traffic signal controls, geometrics, or other factors.

Protected turns -- Left or right turns at a signalized intersection made with no opposing or conflicting vehicular or pedestrian flow.

Queue -- A line of vehicles or persons waiting to be served by the system in which the rate of low from the front of the queue determines the average speed within the queue. Slowly moving vehicles or people joining the rear of the queue are usually considered a part of the queue. The internal queue dynamics may involve a series of starts and stops. A faster-moving line of vehicles is often referred to as a moving queue or a platoon.

Red Clearance Interval -- An optional interval that follows a yellow change interval and precedes the next conflicting green interval.

Right-of-Way Assignment -- The permitting of vehicles and/or pedestrians to proceed in a lawful manner in preference to other vehicles or pedestrians by the display of signal indications.

Roadway Network -- A geographical arrangement of intersecting roadways.

RTIP -- Regional Transportation Improvement Program is a list of transportation projects, their costs and projected funding sources, and their anticipated date of completion.

RTP -- Regional Transportation Plan is a plan adopted for the region's transit, highways, bicycle programs, commuter and inter-city rail lines.

Shared lane capacity -- The capacity of a lane at an unsignalized intersection that is shared by two or three movements, in passenger cars per hour.

Signal Coordination -- The establishment of timed relationships between adjacent traffic control signals.

Signal Phase -- the right-of-way, yellow change, and red clearance intervals in a cycle that are assigned to an independent traffic movement or combination of movements.

Signal System -- two or more traffic control signals operating in signal coordination.

Signal Timing -- the amount of time allocated for the display of a signal indication.

Signal Warrant -- a threshold condition that, if found to be satisfied as part of an engineering study, shall result in analysis of other traffic conditions or factors to determine whether a traffic control signal or other improvement is justified.

Student – a person enrolled in an institution such as a school, college, or university on either a full-time or part-time basis. The ITE trip-generation rates refer to the total number of persons enrolled at a facility, not just those present at the time the trip generation study was conducted.

TDM -- Transportation Demand Management is a program designed to decrease the demand for peak hour commute and truck travel and increase the use of alternative transportation modes.

TIS – Traffic impact study.

Total delay -- The sum of all components of delay for any lane group, including control delay, traffic delay, geometric delay, and incident delay.

Trip – a one-direction vehicle movement either to or from the site. A trip with either an origin or a destination inside the site.

Trip-end -- one end of a trip at either the origin or the destination; i.e. each trip has two trip-ends. The total number of trip ends generated by a land use is the sum of all entering trips plus all exiting trips.

Traffic -- pedestrians, bicyclists, ridden or herded animals, vehicles, streetcars, and other conveyances either singularly or together while using any highway for purposes of travel.

Traffic Control Signal -- any highway traffic signal by which traffic is alternately directed to stop and permitted to proceed.

Travel speed -- The average speed, in miles per hour, of a traffic stream computed as the length of a highway segment divided by the average travel time of the vehicles traversing the segment.

Travel time -- The average time spent by vehicles traversing a highway segment, including control delay, in seconds per vehicle or minutes per vehicle.

TSM -- Transportation Systems Management is a program to facilitate low cost traffic flow improvements like coordinating traffic signals, metering freeway ramps and incident management.

Two-way left-turn lane (TWLTL) -- The center lane on a three-lane or multi-lane highway that is used continuously for vehicles turning left in either direction of flow at mid-block locations.

Two-way stop-control (TWSC) -- The type of traffic control at an intersection where drivers on the minor street or a driver turning left from the major street wait for a gap in the major-street traffic to complete a maneuver.

Unconstrained Operation -- An operating condition in a weaving area where geometric constraints do not limit the ability of weaving vehicles to achieve balanced operation.

Unsignalized intersection -- Any intersection not controlled by traffic signals.

V/C ratio -- The ratio of demand flow rate to capacity for a traffic facility. The critical volume-to-capacity ratio is the proportion of available intersection capacity used by vehicles in critical lane groups.

Volume -- The number of persons or vehicles passing a point on a lane, roadway, sidewalk etc. during some time interval, often taken to be one hour, expressed in vehicles.

VMT -- Vehicle miles traveled.

Yellow Change Interval -- the first interval following the green interval during which the yellow signal indication is displayed.