LINSCOTT
LAW &
GREENSPAN
engineers

TECHNICAL APPENDICES

HARMONY GROVE VILLAGE SOUTH

County of San Diego, California
April 6, 2017

Prepared for the County of San Diego

PSD2015-SP-15-002

LLG Ref. 3-14-2314

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APPENDICES

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APPENDIX A

HARMONY GROVE VILLAGE CONDITIONS OF APPROVAL AND GRADING AND IMPROVEMENT PLAN FOR COUNTRY CLUB DRIVE

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Resolution No.07-021
02/07/07 (5)

RECEIVED
MAR 07 2012
DEPARTMENT OF PLANN
AND LAND USE

February 7, 2007

RESOLUTION OF SAN DIEGO COUNTY)
BOARD OF SUPERVISORS)
CONDITIONALLY APPROVING)
VESTING TENTATIVE MAP NO. 5365RPL^2)

WHEREAS, Vesting Tentative Map No. 5365RPL^2 proposing the division of property located on both sides of Harmony Grove Road at the intersection with Country Club Drive and generally described as:

> A portion of Section 30, a portion of the northeast quarter and the southeast quarter of Section 25, a portion of the southeast quarter of Section 24, and a portion of the southwest quarter of Section 19, all in Township 12 South, Range 2 West, San Bernardino Meridian;

was filed with the County of San Diego pursuant to the Subdivision Map Act and San Diego County Subdivision Ordinance on October 27, 2006; and

WHEREAS, on February 7, 2007, the Board of Supervisors of the County of San Diego pursuant to Section 81.307 of the San Diego County Subdivision Ordinance held a duly advertised public hearing on said Tentative Map and received for its consideration, documentation, written and oral testimony, recommendations from all affected public agencies, and heard from all interested parties present at said hearing; and

WHEREAS, the Board of Supervisors of the County of San Diego has determined that the conditions hereinafter enumerated are necessary to ensure that the subdivision and the improvement thereof will comply with the Subdivision Map Act and conform to all ordinances, plans, rules, standards, and improvement and design requirements of San Diego County.

IT IS RESOLVED, THEREFORE, that the Board of Supervisors of the County of San Diego hereby makes the following findings as supported by the minutes, maps, exhibits, and documentation of said Tentative Map all of which are herein incorporated by reference:

1. The Vesting Tentative Map is consistent with all elements of the San Diego County General Plan and with the (21) Specific Plan Area (1.6) Land Use Designation of the North County Metropolitan Subregional Plan because it proposes a mixed use rural village in accordance with the provision of the Harmony Grove Specific Plan (SP 04-003) with a residential density that does not exceed 1.6 dwelling units per acre and complies with the provisions of the State Subdivision Map Act and the Subdivision Ordinance of the San Diego County Code;

SDC DPLU RCVD 03-07-12
TM5365CS

IT IS FURTHER RESOLVED, DETERMINED, AND ORDERED, that based on these findings, said Vesting Tentative Map is hereby approved subject to the following conditions:

A. The approval of this Tentative Map TM 5365RPL^2 shall take effect and be in force on March 9, 2007, but only if GPA 07-001, SP 04-003 and R04-010, also are approved and become effective that day.

The approval of this Tentative Map expires on March 9, 2010 at 4:00 p.m., unless prior to that date a request for a Time Extension has been filed and is subsequently approved as provided by Section 81.308 of the County Subdivision Ordinance

PLEASE NOTE: Condition compliance, preparation of grading and improvement plans and final mapping may take a year or more to complete. Applicants are advised to begin this process at least one year prior to expiration of this Tentative Map.

PLEASE NOTE: Time Extension requests cannot be processed without updated project information including new Department of Environmental Health certification of septic systems. Since Department of Environmental Health review may take several months, applicants anticipating the need for Time Extensions for their projects are advised to submit applications for septic certification to the Department of Environmental Health several months prior to the expiration of their Tentative Maps.

B. The "Standard Conditions for Tentative Subdivision Maps" approved by the Board of Supervisors on June 16, 2000, and filed with the Clerk as Resolution No. 00-199, shall be made conditions of this Tentative Map approval. Only those exceptions to the Standard Conditions set forth in this Resolution or shown on the Tentative Map will be authorized.

C. The following conditions shall be complied with before a Final Map is approved by the Board of Supervisors and filed with the County Recorder of San Diego County (and, where specifically, indicated, shall also be complied with prior to issuance of grading or other permits as specified):

PLANS AND SPECIFICATIONS

(Street Improvements and Access)

1. Standard Conditions 1 through 12.

2. Specific Conditions:

a. Prior to approval of the First Final Map, improve or agree to improve and provide security for **Harmony Grove Road (SC 1370)**, on-site, within the project boundary, in accordance with Public Road Standards for a Town Collector, to a graded width of seventy-four feet (74') with fifty-four feet (54') of asphalt concrete pavement over approved base with Portland cement concrete curb and gutter with face of curb at twenty-seven feet (27') from centerline to the satisfaction of the Director of Public Works.

b. Prior to approval of the First Final Map, improve or agree to improve and provide security for Harmony Grove Road (SC 1370), from Country Club Drive easterly and northerly to Village Road northeast of POA 41, as an interim improvement, to a graded width of thirty-six feet (36') and an improved width of (28') of asphalt concrete pavement over approved base. The existing pavement may remain and shall be widened with asphalt concrete to provide a constant width of twenty-eight feet (28') to the satisfaction of the Director of Public Works. Where the twenty-eight foot improved width is infeasible, the applicant shall submit a design exception to the Satisfaction of the Director of Public Works.

c. Prior to approval of the First Final Map, improve or agree to improve and provide security for **Country Club Drive (SC 1375)**, within and along the project frontage north of Village Drive, in accordance with Public Road Standards for a Rural Light Collector, to a graded width of sixty feet (60') with forty-feet (40') of asphalt concrete pavement over approved base with Portland cement concrete curb, gutter and sidewalks with face of curb at twenty (20') from centerline to the satisfaction of the Director of Public Works. Where infeasible or inappropriate to meet the 40-mph design speed as specified in the Public Road Standards for a Rural Light Collector, the applicant may submit to the Director of Public Works a design exception that is in substantial conformance with the "Safety Enhancement Alternative" exhibit submitted to the Board of Supervisors February 7, 2007.

d. Prior to approval of the First Final Map, improve or agree to improve and provide security for **Village Road and Country Club Drive (SC 1375)**, from Harmony Grove Road northerly along existing Country Club Drive to the easterly subdivision boundary at existing Harmony Grove Road, in accordance with Public Road Standards for a Town Collector, to a graded width of seventy-four (74') with fifty-four feet (54') of asphalt concrete pavement over approved base with Portland cement concrete curb, gutter and sidewalks with face of curb at twenty-seven feet (27') from centerline to the satisfaction of the Director of Public Works.

e. **Improve roads or agree to improve and provide security for them, with the recordation of the Final Map for the Unit the road is within, abuts, or provides access to.**

f. Prior to approval of the Final Map for Unit 1, improve or agree to improve and provide security for **'R' Street**, from Country Club Drive to 'Q' Street in accordance with Public Road Standards for a modified Residential Collector, to a graded width of sixty feet (60') with thirty-six feet (36') of asphalt concrete pavement over approved base with Portland cement concrete curb, gutter and five foot (5') sidewalks to the satisfaction of the Director of Public Works.

g. Prior to approval of the Final Map for Unit 1, improve or agree to improve and provide security for **'Q' Street**, from Village Road to the cul-de-sac southwest of Lot 574 in accordance with Public Road Standards for a modified Residential Road, to a graded width of fifty-one feet (51') with thirty-six feet (36') of asphalt concrete pavement over approved base with Portland cement concrete curb, gutter and five foot (5') sidewalk to the satisfaction of the Director of Public Works.

h. 'Q' Street shall terminate with a cul-de-sac southwest of Lot 574, graded to a radius of forty-six feet (46') and surfaced to a radius of thirty-eight feet (38') with asphalt concrete pavement over approved base with Portland cement concrete curb gutter and sidewalk with face of curb at thirty-eight feet (38') from the radius point.

i. Prior to approval of the Final Map for Unit 1, improve or agree to improve and provide security for the unnamed private easement roads serving Lots 571 – 574, 576 – 625, 634 - 650 to an improved width of twenty-four feet (24') with asphalt concrete pavement over approved base with asphalt concrete dike at twelve feet (12') from centerline. The improvement and design standards of Section 3.1(C) of the County Standards for Private Streets for one hundred (100) or less trips shall apply to the satisfaction of DPLU Fire and the Director of Public Works.

j. Provide standard street knuckle (modified as necessary) in accordance with Regional Standard Drawing DS-15 for 'Q' Street at Lot 656 to the satisfaction of the Director of Public Works.

k. The unnamed private easement roads serving Lots 571 – 574, 576 – 625, 634 - 650 each shall terminate to the satisfaction of DPLU Fire and the County of San Diego, Director of Public Works.

uuuu. POA 39 shall terminate to the satisfaction of DPLU Fire and the County of San Diego, Director of Public Works.

vvvv. Prior to approval of the Final Map for Unit 11, improve or agree to improve and provide security for the unnamed private easement road serving Lots 1 and 2 to a graded width of twenty eight feet (28') and to an improved width of twenty-four feet (24') with asphalt concrete pavement over approved base with asphalt concrete curb and gutter at twelve feet (12') from centerline. The improvement and design standards of Section 3.1(C) of the County Standards for Private Streets for one hundred (100) or less trips shall apply to the satisfaction of the Director of Public Works.

wwww. The unnamed private easement road serving Lots 1 and 2 shall terminate to the satisfaction of DPLU Fire and the County of San Diego, Director of Public Works.

xxxx. Asphalt concrete surfacing material shall be hand-raked and compacted to form smooth tapered connections along all edges including those edges adjacent to soil. The edges of asphalt concrete shall be hand-raked at 45 degrees or flatter, so as to provide a smooth transition next to existing soil, including those areas scheduled for shoulder backing. The above shall be done to the satisfaction of the Director of Public Works.

yyyy. Adequate sight distance per County Standards shall be provided at all proposed intersections to the satisfaction of the Director of Public Works.

zzzz. Where height of fill bank for a 2:1 slope is greater than twelve feet (12'); or where height of fill bank for a 1.5:1 slope is greater than ten feet (10'), guardrail shall be installed per CALTRANS standards to the satisfaction of the Director of Public Works.

aaaaa. If pathways are dedicated, improve the pathway, or agree to improve and provide security for them, with the approval of the unit they are within. Contact the DPW Pathway Coordinator, CIP Project Development at (858) 694-2830 for design requirements within proposed public right-of-way.

3. <u>Off-Site Traffic Mitigations</u>:

a. Prior to approval of the First (1st) Final Map, contribute a fair share to the City of Escondido towards the future upgrade of Hale Avenue to City Local Collector Standards, between West 9th Street and Harmony Grove Road. Upgrade the road to City Local Collector Standards.

b. Prior to approval of the First (1st) Final Map, improve or agree to improve and provide security for an additional Northbound through-lane and a dedicated northbound right-turn lane at the Via Rancho Parkway / Valley Parkway intersection as depicted in Figure 1.1-31 of the Draft Environmental Impact Report dated June 21, 2006.

c. Prior to approval of the First (1st) Final Map, modify the traffic signal at the Citracado Parkway / Valley Parkway intersection to install left-turn phasing on all four approaches to the satisfaction of both the City of Escondido and the County of San Diego.

d. Prior to approval of the First (1st) Final Map, contribute a fair share to the County of San Diego and City of Escondido towards the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.

e. Prior to approval of the First (1st) Final Map, contribute a fair share toward the City of Escondido / Caltrans planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps.

f. Prior to approval of the First (1st) Final Map, contribute a fair share toward the City of Escondido's planned widening of Nordahl Road between SR-78 and East Mission Road to six lanes.

g. Prior to approval of the First (1st) Final Map, contribute a fair share to the City of Escondido towards the re-striping of eastbound West 9th Street at Auto Parkway to provide a right-turn lane, a shared through / right-turn lane, and left-turn lane.

h. Prior to approval of the First (1st) Final Map, modify the traffic signal at the West 9th Street / Autopark Way intersection to provide a right-turn overlap phasing at the eastbound approach.

i. Prior to approval of the First (1st) Final Map, contribute a fair share to the City of Escondido and Caltrans towards the future improvements of the I-15 / Via Rancho Parkway interchange.

j. Prior to approval of the First (1st) Final Map, contribute a fair share to the City of Escondido towards the future signalization of the Citracado Parkway / Country Club Drive intersection.

k. Prior to approval of the First (1st) Final Map, agree to construct and provide security for a traffic signal at the Harmony Grove Road / Village Road intersection when signal warrants are met.

l. Prior to approval of the First (1st) Final Map, construct or agree to construct and provide security for an eastbound left-turn lane on Harmony Grove Road at Village Road.

m. Prior to approval of the First (1st) Final Map, construct or agree to construct and provide security for a traffic signal at the Hale Avenue / Harmony Grove Road intersection.

n. Prior to approval of the First (1st) Final Map, contribute a fair share to the City of Escondido towards improvements to the Hale Avenue / Harmony Grove Road intersection (dual eastbound left-turn lanes).

o. Prior to approval of the First (1st) Final Map, construct or agree to construct and provide security for a traffic signal and an eastbound left-turn lane at the Hale Avenue / Avenida Del Diablo intersection to the satisfaction of the City Engineer, or cul-de-sac Avenida Del Diablo just east of Citracado Parkway to the satisfaction of the City Engineer.

p. Prior to approval of the First (1st) Final Map, agree to construct and provide security for a traffic signal at the Harmony Grove Road / 'V' Street (main project entrance) intersection when signal warrants are met.

q. Prior to approval of the First (1st) Final Map, construct or agree to construct and provide security for dedicated left-turn and right-turn lanes on Harmony Grove Road at the Harmony Grove Road / 'V' Street (main project entrance) intersection.

r. Prior to approval of the First (1st) Final Map, construct or agree to construct and provide security for dedicated left-turn and right-turn lanes in the southbound direction on 'V' Street at the Harmony Grove Road / 'V' Street (main project entrance) intersection.

s. Prior to approval of the First (1st) Final Map, provide or agree to provide and secure for the lane configuration depicted on Figure 15-1 of the approved Traffic Impact Analysis by Linscott, Law, and Greenspan dated July 18, 2006 to the Country Club Drive / Village Road road segments. Ensure that County intersection standards are met and agree to install and provide security of the installation of signals when warrants are met to the satisfaction of the Director of Public Works.

t. Prior to approval of the First (1st) Final Map, construct or agree to construct and provide security for an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / 'A' Street (Wilgen Road) intersection.

u. Prior to approval of the First (1st) Final Map, prepare traffic control plans to manage construction traffic and to identify designated truck routes to the satisfaction of the City of Escondido and Director of Public Works.

v. Prior to approval of the First (1st) Final Map, improve or agree to improve and provide security for **new Village Road**, from the proposed Village Road / Harmony Grove Road intersection to the future extension of Citracado Parkway as shown in Figure 2-3 of the Traffic Impact Analysis by Linscott, Law, and Greenspan, dated July 18, 2006 and Figure 1.1-30 of the Draft Environmental Impact Report dated June 21, 2006, consistent with the City of Escondido's Citracado Parkway Alignment Study to the satisfaction of the City of Escondido and the Director of Public Works.

w. Prior to approval of the First (1st) Final Map, improve or agree to improve and provide security for **Citracado Parkway**, from the future extension of Citracado Parkway to existing Citracado Parkway at Avenida Del Diablo as shown in Figure 2-3 of the Traffic Impact Analysis by Linscott, Law, and Greenspan, dated July 18, 2006 and Figure 1.1-30 of the Draft Environmental Impact Report dated June 21, 2006, consistent with the City of Escondido's Citracado Parkway Alignment Study to the satisfaction of the City of Escondido and the Director of Public Works.

x. Prior to approval of the First (1st) Final Map, improve or agree to improve and provide security for **Country Club Drive (SC 1375)**, from the northerly project boundary at existing Country Club Drive to Kauana Loa Drive, in accordance with Public Road Standards for a Rural Light Collector, to a minimum interim graded width of forty-eight feet (48') and a minimum interim improved width of twenty-eight feet (28') of asphalt concrete pavement over approved base. The existing pavement may remain and shall be widened with asphalt concrete to provide a constant minimum width of twenty-eight feet (28') to the satisfaction of the Director of Public Works. Where infeasible or inappropriate to meet the 40-mph design speed as specified in the Public Road Standards for a Rural Light Collector, the applicant may submit to the Director of Public Works a design speed exception that is in substantial conformance with the "Safety Enhancement Alternative" exhibit submitted to the Board of Supervisors February 7, 2007.

y. Prior to approval of the Final Map for the One Hundredth (100th) Unit, contribute a fair share to the City of Escondido toward the improvement of Harmony Grove Road between Enterprise Street and Howard Avenue to Local Collector Standards, including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.

z. Prior to approval of the Final Map for the One Hundredth (100th) Unit, contribute a fair share to the City of Escondido toward the improvement of Harmony Grove Road between Howard Avenue and Hale Avenue to Local Collector Standards, including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.

aa. Prior to approval of the Final Map for the One Hundredth (100th) Unit, contribute a fair share to the City of Escondido toward the restriping of eastbound West 9th Street at Auto Park Way to provide a right-turn lane, a shared through / right-turn lane and a left-turn lane.

bb. Prior to approval of the Final Map for the One Hundredth (100th) Unit, modify the signal at the Valley Parkway / Auto Park Way intersection to provide right-turn overlap phasing at the eastbound approach to the satisfaction of the City of Escondido.

cc. Prior to approval of the Final Map for the One Hundredth (100th) Unit, contribute a fair share to the City of Escondido toward the widening of Valley Parkway between West 11th Street and Avenida Del Diablo to 4 lanes.

dd. Prior to approval of the Final Map for the One Hundredth (100th) Unit, contribute a fair share to the County of San Diego toward an additional Northbound through lane and a dedicated Northbound right-turn lane at the Via Rancho Parkway / Valley Parkway intersection.

ee. Prior to approval of the Final Map for the One Hundredth (100th) Unit, contribute a fair share to the City of Escondido toward the signalization of the Hale Avenue / West 11th Street intersection.

ff. Prior to approval of the Final Map for the Two Hundredth (200th) Unit, contribute a fair share to the City of Escondido toward the City's planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes.

gg. Prior to approval of the Final Map for the Two Hundredth (200th) Unit, contribute a fair share to the City of Escondido toward the City's planned improvements of the Nordahl Road / East Mission Road intersection.

hh. Prior to approval of the Final Map for the Two Hundredth (200th) Unit, contribute a fair share to the City of Escondido toward the widening of West 9th Street to City of Escondido Collector Standards between Hale Avenue and Valley Parkway.

ii. Prior to approval of the Final Map for the Three-hundredth (300th) Unit, contribute a fair share to the City of Escondido towards the widening of Andreason Drive to City of Escondido 4-lane Collector Standards.

jj. Prior to approval of the Final Map for the Three-hundredth (300th) Unit, contribute a fair share to the City of Escondido towards the re-striping of the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right-turn lane, and a left-turn lane with the provision of a right-turn overlap phasing on the eastbound approach.

kk. Prior to approval of the Final Map for the Three-hundredth (300th) Unit, construct or agree to construct and provide security for a cul-de-sac or turn restrictions on Avenida Del Diablo, from Citracado Parkway to Hale Avenue, east of Citracado Parkway to the satisfaction of the City of Engineer.

ll. Prior to approval of the Final Map for the Three-hundredth (300th) Unit, contribute a fair share to the Caltrans towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.

mm. Prior to approval of the Final Map for the Five-hundredth (500th) Unit, contribute a fair share to the City of Escondido towards the signalization of the Harmony Grove Road / Enterprise Street intersection, the provision of dedicated left-turn lanes on each approach and northbound right-turn overlap phasing.

nn. Prior to approval of the Final Map for the Six-hundredth (600th) Unit, contribute a fair share to the City of Escondido / Caltrans towards the future improvements of the Valley Parkway / I-15 Interchange.

oo. Prior to approval of the Final Map for the Six-hundredth (600th) Unit, contribute a fair share to Caltrans towards the future improvement of I-15, between SR-78 and SR-56.

(Drainage and Flood Control)

4. Standard Conditions 13 through 18.

5. Specific Conditions:

GRADING AND IMPROVEMENT PLANS FOR:
HARMONY GROVE VILLAGE
COUNTY CLUB DRIVE (OFF-SITE)

GENERAL IMPROVEMENT NOTES

1. A PERMIT SHALL BE OBTAINED FROM THE COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS FOR ANY WORK WITHIN THE STREET RIGHT-OF-WAY.
2. THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH COUNTY OF SAN DIEGO STANDARDS AND AS APPROVED BY THE MATERIALS LABORATORY.
3. APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
4. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, CONNECTED AND TESTED PRIOR TO CONSTRUCTION OF SUBG, BCWA, CURB, CROSS-GUTTER AND PAVING.
5. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN HEREON AND ANY OTHER WHICH IS NOT ON RECORD OR NOT SHOWN ON THESE PLANS.
6. THE LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
7. THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS & ELECTRIC COMPANY PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. NOTICE: ALL ELECTRICAL AND GAS SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF ELECTRICAL CABLES AND GAS PIPING AND APPURTENANCES CONTACT THE SAN DIEGO GAS AND ELECTRIC COMPANY-TELEPHONE: 232-4352.
8. THE CONTRACTOR SHALL NOTIFY THE AT&T TELEPHONE COMPANY PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. NOTICE: ALL TELEPHONE SERVICES WITHIN THIS PROJECT BOUNDARY ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF CABLES AND APPURTENANCES CONTACT THE AT&T TELEPHONE COMPANY TELEPHONE: 1-800-422-4133.
9. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES, AVISE THEM OF THE PROPOSED IMPROVEMENTS, AND BEAR THE COST OF RELOCATIONS, IF NEEDED.
10. ALL TELEVISION SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF CABLES AND APPURTENANCES CONTACT: COX CABLE T.V. 292-0750 EXT. 5788
11. POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "REVISED PLAN" IMPROVEMENT DRAWINGS. ALL POWER SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT-OF-WAY, OR WITHIN EASEMENTS DEDICATED TO THE COUNTY OF SAN DIEGO
12. NO PAVING SHALL BE DONE UNLESS ALL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREA TO BE PAVED.
13. PRIVATE ROAD IMPROVEMENTS SHOWN HEREON ARE FOR INFORMATION ONLY. COUNTY OFFICIALS SIGNATURE HEREON DOES NOT CONSTITUTE APPROVAL OR RESPONSIBILITY OF ANY KIND FOR THE DESIGN OR CONSTRUCTION OF THESE PRIVATE IMPROVEMENTS, IF APPLICABLE.
14. ALL SIGNS TO BE ALUMINUM WITH 3M HIGH INTENSITY TYPE REFLECTIVE FACE OR EQUIVALENT.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY STRIPING, PAVEMENT MARKERS, OR LEGENDS OBLITERATED BY THE CONSTRUCTION OF THIS PROJECT.
16. ALL NEW STRIPING AND SANDBLASTING OF REDUNDANT STRIPING SHALL BE DONE BY THE CONTRACTOR.
17. ALL CUT AND FILL SLOPES OVER THREE (3) FEET CREATED BY GRADING FOR STREETS AND DRIVEWAYS SHALL BE HYDROSEEDED WITH SAN DIEGO COUNTY APPROVED MIXTURE. HYDROSEEDING SLOPES SHALL BE IRRIGATED BY WATER TRUCK UNTIL MATURE GERMINATION AND THIRD GROWTH IS ESTABLISHED.
18. ASPHALT CONCRETE SURFACING MATERIAL SHALL BE HAND-RAKED AND COMPACTED TO FORM SMOOTH TAPERED CONNECTIONS ALONG ALL EDGES ADJACENT TO SOIL. THE EDGES OF ASPHALT CONCRETE SHALL BE HAND-RAKED AT 45 DEGREES OR FLATTER, SO AS TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SOIL AND LOOSE TOPSOIL. WHERE REQUIRED FOR DRAINAGE REASONS, THE EDGES SHALL BE DONE TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
19. CONTRACTOR SHALL APPLY FOR A TRAFFIC CONTROL PERMIT TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. NO WORK SHALL COMMENCE UNTIL ISSUANCE OF SAID PERMIT. FOR INFORMATION CALL (858) 694-2033. THE TRAFFIC CONTROL PERMIT SHALL REQUIRE SPECIFICATIONS FOR THE INFORMATIONAL SIGNS.
20. STREET IMPROVEMENTS AND DRAINAGE STRUCTURES SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE COUNTY OF SAN DIEGO SPECIAL PROVISIONS AND SPECIFICATIONS FOR THE IMPROVEMENT OF NEW STREETS.

ASSESSORS PARCEL NUMBER

235-100-19,40; 235-152-05; 232-500-03; 232-511-16,15,18

ADDRESS

COUNTRY CLUB DRIVE FROM THE NORTHERLY PROJECT BOUNDARY (VTM NO. 5363) TO MT. WHITNEY ROAD.

OWNER'S CERTIFICATE

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE DEVELOPER SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES ARE NECESSARY AND DESIRABLE FOR THEIR PROPER COMPLETION OF THE IMPROVEMENTS.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN 60 DAYS AFTER ISSUANCE OF CONSTRUCTION PERMIT AND THE PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT UNDER MY CONTROL.

PROPERTY APN: _____ ACRES: _____

BY: _____ DATE: _____
PETER J. KIESDORF, SENIOR VP

STANDARD PACIFIC CORP.
18500 BARRANCA PARKWAY
IRVINE, CA 92618
PHONE: (949) 789-1600
FAX: (949) 789-1609

CONTRACTOR'S NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD COUNTY OF SAN DIEGO HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF COUNTY OF SAN DIEGO PROFESSIONALS.

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO AND RINCON DEL DIABLO MUNICIPAL WATER DISTRICT IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

TIMOTHY J. MURPHY
5620 FRANKS ROAD
SAN DIEGO, CA 92114
PHONE: 619-231-0707

BY: _____ DATE: _____
TIMOTHY J. MURPHY R.C.E. 52631

LEGAL DESCRIPTION

PORTION OF COUNTRY CLUB DRIVE SOUTH OF MT. WHITNEY ROAD, BEING A PORTION OF LOT 4 OF SECTION 30 AND A PORTION OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, ALL IN TOWNSHIP 12 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN.

ENGINEER'S NOTE

UNAUTHORIZED CHANGES & USES: THE ENGINEER OF WORK PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

SOILS ENGINEER'S CERTIFICATE

THIS PLAN HAS BEEN REVIEWED BY GEOCON INCORPORATED AND APPEARS TO BE IN GENERAL CONFORMANCE WITH THE INTENTIONS OF THE GEOTECH SOIL RELATED SPECIAL CONDITIONS AND RECOMMENDATIONS WHICH CAN BE VERIFIED ON THE PLAN AND WHICH ARE FOUND IN THE REPORT TITLED "GEOLOGIC RECONNAISSANCE HARMONY GROVE VILLAGE OFF-SITE IMPROVEMENTS FOR COUNTRY CLUB DRIVE (STATION 30+50 THROUGH 49+60), SAN DIEGO COUNTY, CALIFORNIA" DATED MAY 16, 2001.

BY: _____ DATE: _____
NAME: TROY N. REST GEO NO. 2408

BY: _____ DATE: _____
NAME: TREVOR MYERS RGE NO. 62775

VICINITY MAP

THOMAS GUIDE PG 1120, SECTION D-5

OWNER/PERMITEE

BY: _____ DATE: _____
PETER J. KIESDORF, SENIOR VP

STANDARD PACIFIC CORP.
18500 BARRANCA PARKWAY
IRVINE, CA 92618
PHONE: (949) 789-1600
FAX: (949) 789-1609

KEYMAP LEGEND

SHEET NUMBER
STREET LIGHT

DIGALERT 811
CALL 811 BEFORE YOU DIG

SHEET INDEX

DESCRIPTION	SHEET NO.
TITLE SHEET	1
NOTES, DETAILS, TYP. SECT.	2
* DETAILS	3
DEMOLITION PLANS	4
IMP. & GRADING PLANS	5-7
* DRIVEWAY DETAILS	8
* EROSION CONTROL PLANS	9-10
* SIGNING & STRIPING PLANS	11
* DETOUR PLAN	12

* NOT REVIEWED OR APPROVED BY RDDWMD

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, THE CURRENT SAN DIEGO COUNTY ENGINEER DEPARTMENT STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR IMPROVEMENT OF SUBDIVISION STREETS AND STANDARD DRAWINGS.

STANDARD SPECIFICATIONS:
1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2000 EDITION HOREENBOOK AND SUPPLEMENTS.
2. RINCON DEL DIABLO MUNICIPAL WATER DISTRICT-GENERAL SPECIFICATIONS FOR CONSTRUCTION OF WATER TRANSMISSION FACILITIES AND RECYCLED WATER SERVICE RULES AND REGULATIONS PER RESOLUTION 2001-101, 7TH EDITION.

STANDARD DRAWINGS:
1. SAN DIEGO REGIONAL STANDARD DRAWINGS (2000)
2. RINCON DEL DIABLO MUNICIPAL WATER DISTRICT STANDARD DRAWINGS

LEGEND

EXISTING IMPROVEMENTS

IMPROVEMENT	STANDARD DWG.	SYMBOL
EXISTING STORM DRAIN		
EXISTING MANHOLE/CLEANOUT		
EXISTING EDGE OF PAVEMENT		
EXISTING POWER POLE		
EXISTING FIRE HYDRANT		
EXISTING GATE VALVES		
EXISTING FENCE		

PROPOSED IMPROVEMENTS

IMPROVEMENT	STANDARD DWG.	SYMBOL
5' CONTOUR		
CUT SLOPE		
FILL SLOPE		
DAYLIGHT LINE		
BROW DITCH	MODIFIED D-75, SEE DET. 2	
VEGETATED SWALE		
TYPE 'F' CURB	D30-100, D-6	
AC PAVEMENT	PER SOILS ENGINEER	
AC OVERLAY (3" MIN.)		
REMOVE EXISTING PAVEMENT		
4"PVC WEEPER		
TYPE 4 RETAINING WALL	C-4	
STORM DRAIN		
TYPE 'B' STRAIGHT HEADWALL	D-30, D-35	
BOX TYPE HEADWALL	D-34, D-35	
RIP-RAP ENERGY DISSIPATOR	D30-100, D-40	
TYPE 'BIOFILT' MODIFIED W/ CLEANWATER FILTER INSERTS	D-6	
WATER MAIN		W
RECYCLED WATER MAIN		RW
2" COMBINATION AIR & VACUUM ASSEMBLY	RDDWMD W-06, W-10	
WATER CUP	RDDWMD W-18	
GATE VALVES	RDDWMD W-11	
CONCRETE THRUST BLOCK	RDDWMD W-19	
STREET SURVEY MONUMENT	LS-10	
STREET LIGHT (TYPE 'S')	D30-100,D-12,D-2	
WOOD/WIRE FENCE	(PVT)	
ASPHALT CONCRETE DRIVEWAY	D5-97	

PURPOSE OF IMPROVEMENTS

TO IMPROVE THE HORIZONTAL GEOMETRY OF COUNTRY CLUB DRIVE IN ACCORDANCE WITH THE CONDITIONS OF TM-4363 IN THE COUNTY OF SAN DIEGO, CALIFORNIA

CENTERLINE REFERENCE NOTE

CENTERLINE FOR THIS PROJECT IS INTENDED TO BE A CONSTRUCTION CENTERLINE AND IS NOT BASED ON PRIOR ROAD SURVEYS OR MAPS.

NOTICE:

THE ISSUANCE OF THIS PERMIT/APPROVAL BY THE COUNTY OF SAN DIEGO DOES NOT AUTHORIZE THE APPLICANT FOR SAID PERMIT/APPROVAL TO VIOLATE ANY FEDERAL, STATE, OR COUNTY LAWS, ORDINANCES, REGULATIONS, OR POLICIES INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT AND ANY AMENDMENTS THERETO.

J. - 10-01

SAN DIEGO GAS & ELECTRIC COMPANY

REVIEWED BY: _____ DATE: _____
JEFF SYKES
LEAD LAND MANAGER

VALID FOR 12 MONTHS FROM DATE OF SIGNATURE. SEE NOTES ON SHEET 2

RECORD PLAN

BY: _____ DATE: _____
NAME
R.C.E. _____
EXPIRES _____

DISTURBED AREA CALCS

SLOPES:	1.6 AC
PADS:	NA
ROADS:	1.5 AC
OTHER:	NA
TOTAL:	3.1 AC

STORMWATER TREATMENT CONTROL BMP

DESCRIPTION / TYPE	SHEET	MAINT. CATEGORY	REVISED
WP-1 / CLEANWATER BMP	5	FOURTH	
WP-2 / CLEANWATER BMP	5	FOURTH	
WP-3 / CLEANWATER BMP	7	FOURTH	
WP-4 / CLEANWATER BMP	7	FOURTH	

* BMP's APPROVED AS PART OF STORM WATER MANAGEMENT PLAN (SWMP) DATED / / ON FILE WITH DPW. ANY CHANGES TO THE SWMP BMP'S WILL REQUIRE SWMP REVISION AND PLAN CHANGE APPROVAL

COUNTY OF SAN DIEGO-DPW WASTEWATER MANAGEMENT

REVIEWED BY: _____ DATE: _____

PLAN SHALL BE VALID TWO YEARS FROM DATE APPROVED

COUNTY APPROVED CHANGES

NO.	DESCRIPTION	APPROVED BY:	DATE:

PERMITS

REZONE PERMIT NO. N/A
SPECIAL USE PERMIT NO. P-74-00065
TENTATIVE MAP NO. VTM 5363 RPL2
LANDSCAPE & IRRIGATION LP # 10-045
NOTICE OF INTENT WDCR

BENCH MARK

DESCRIPTION: THE BENCH MARK FOR THIS SURVEY IS THE A.S.C. 1988 STANDARD BRASS DISK STAMPED "VMB 87" 1988 ON WEST END OF NORTH PEDESTAL BULLETIN SIGNALS ON THE NORTH SIDE OF MAHONEY DRIVE PG. 200 FEET WEST OF COUNTRY CLUB RD. BENCH MARK DESIGNATION: 1988 BRASS DISK COUNTY OF SAN DIEGO VERTICAL CONTROL

RECORD FROM: "SAN DIEGO COUNTY VERTICAL BENCHMARK CONTROL"

ELEVATION: 519.908 DATUM: NGVD 29

PRIVATE CONTRACT

SHEET 1 | COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS | 12 SHEETS

OFFSITE IMPROVEMENT PLANS FOR:
HARMONY GROVE VILLAGE
COUNTRY CLUB DRIVE

CALIFORNIA COORDINATE INDEX: 224-1786

APPROVED FOR: BERNARD K. ENGEBRIGHT, DYNAMIC ENGINEER
BY: _____ DATE: _____

ENGINEER OF WORK
R.C.E. _____ DATE: _____
02-4779
CLARK GRADE PERMIT NO.

RINCON DEL DIABLO MUNICIPAL WATER DISTRICT

REVIEWED BY: _____
DATE: _____
REVIEWED BY: _____
DATE: _____
NOTE SIGNATURES EXPIRE AFTER TWO YEARS

SAN DIEGO COUNTY FIRE AUTHORITY

APPROVED BY: _____
DATE: _____

ENVIRONMENTAL SERVICES UNIT

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW.
APPROVED BY: _____
DATE: _____

REGISTERED PROFESSIONAL ENGINEER
BERNARD K. ENGEBRIGHT
No. 38171
EXP. 6/30/03
STATE OF CALIFORNIA

RICK
RICK ENGINEERING COMPANY
SAN DIEGO
9245 SKYPARK COURT
SAN DIEGO, CA 92123
(619) 291-0707
FAX (619) 291-0707
WWW.RICKENG.COM

RICK ENGINEERING CO. (619) 291-0707

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APPENDIX B

INTERSECTION AND SEGMENT MANUAL COUNT SHEETS, CALTRANS PEMS VOLUMES, HARMONY GROVE VILLAGE ASSIGNMENT

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Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

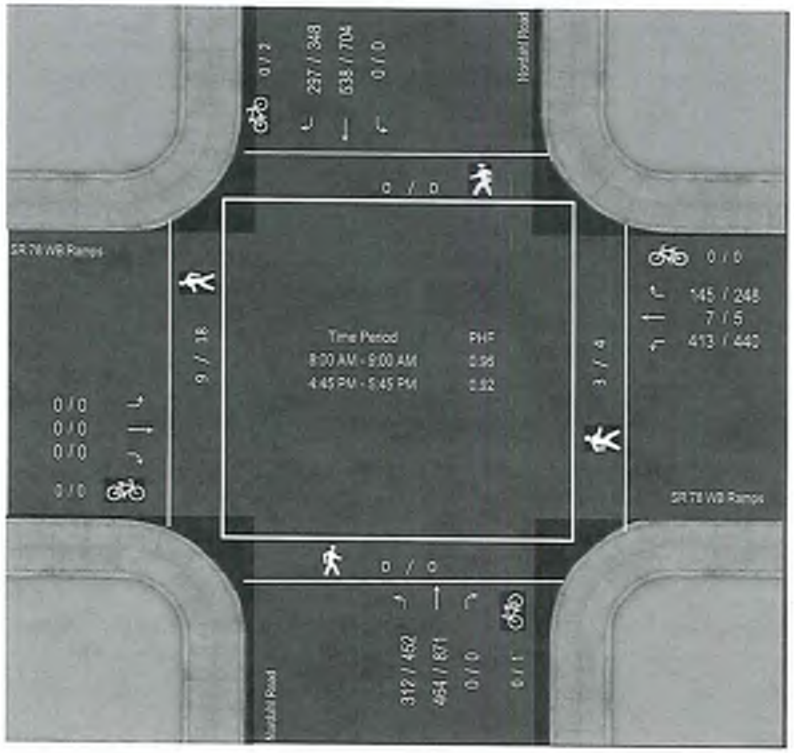
Location: SR 78 WB Ramps @ Nordahl Road

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR 78 WB Ramps @ Nordahl Road

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	77	107	0	19	1	125	0	72	75	0	0	0	476
7:15 AM	80	109	0	19	2	89	0	80	84	0	0	0	463
7:30 AM	80	138	0	23	2	107	0	103	79	0	0	0	532
7:45 AM	69	148	0	21	0	108	0	110	94	0	0	0	550
8:00 AM	73	138	0	20	0	100	0	127	85	0	0	0	543
8:15 AM	63	131	0	41	2	102	0	114	63	0	0	0	516
8:30 AM	80	126	0	40	3	99	0	107	93	0	0	0	548
8:45 AM	81	143	0	44	2	112	0	116	71	0	0	0	569
Total	603	1,040	0	227	12	842	0	829	644	0	0	0	4,197

AM Intersection Peak Hour: 8:00 AM - 9:00 AM Intersection PHF: 0.96

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	297	538	0	145	7	413	0	464	312	0	0	0	2,176
PHF	0.92	0.94	#####	0.82	0.58	0.92	#####	0.91	0.84	#####	#####	#####	0.96
Movement PHF	0.93			0.89			0.92			#DIV/0!			0.96

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	111	136	0	63	0	90	0	162	115	0	0	0	677
4:15 PM	89	156	0	54	0	60	0	189	108	0	0	0	656
4:30 PM	94	154	0	42	0	103	0	196	125	0	0	0	714
4:45 PM	75	178	0	61	0	108	0	227	107	0	0	0	756
5:00 PM	86	199	0	58	1	134	0	222	134	0	0	0	834
5:15 PM	83	195	0	65	0	84	0	212	111	0	0	0	750
5:30 PM	104	132	0	64	4	114	0	210	100	0	0	0	728
5:45 PM	98	188	0	64	1	91	0	181	86	0	0	0	709
Total	740	1338	0	451	6	784	0	1,599	886	0	0	0	5,804

PM Intersection Peak Hour: 4:45 PM - 5:45 PM Intersection PHF: 0.92

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	348	704	0	248	5	440	0	871	452	0	0	0	3068
PHF	0.84	0.884	#####	0.954	0.313	0.821	#####	0.959	0.843	#####	#####	#####	0.92
Movement PHF	0.92			0.90			0.93			#DIV/0!			0.92

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

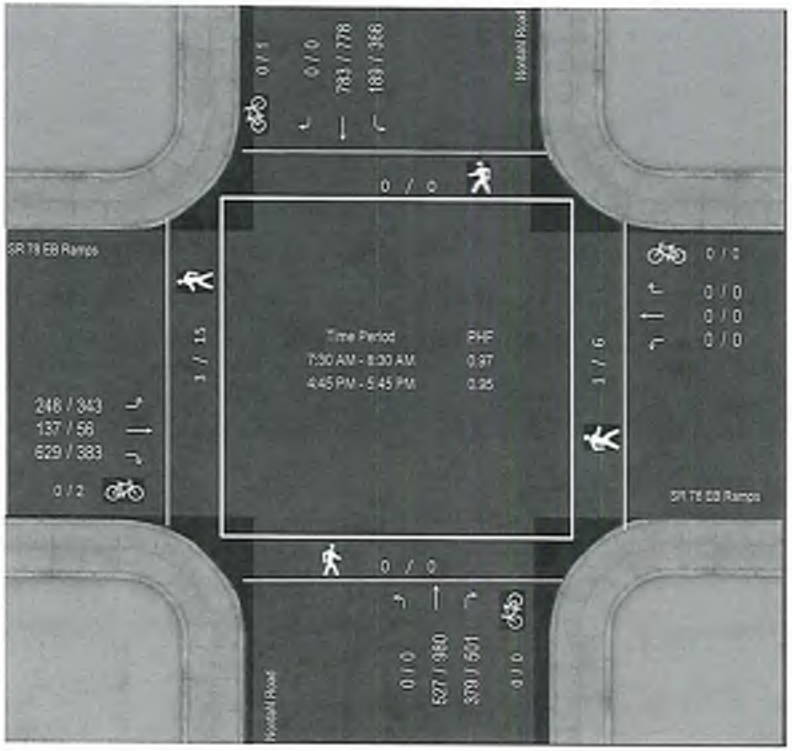
Location: SR 78 EB Ramps @ Nordahl Road

Date of Count: Wednesday, June 04, 2014

Analysts: LI/CD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR 78 EB Ramps @ Nordahl Road

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	194	38	0	0	0	93	101	0	189	38	46	699
7:15 AM	0	154	44	0	0	0	117	105	0	133	66	59	678
7:30 AM	0	183	62	0	0	0	105	128	0	166	47	54	745
7:45 AM	0	212	44	0	0	0	94	128	0	145	30	76	729
8:00 AM	0	193	45	0	0	0	87	140	0	136	27	72	700
8:15 AM	0	195	38	0	0	0	93	131	0	182	33	46	718
8:30 AM	0	181	44	0	0	0	89	132	0	133	32	68	679
8:45 AM	0	177	38	0	0	0	98	111	0	111	1	76	652
Total	0	1,489	393	0	0	0	776	976	0	1,195	274	497	5,600

AM Intersection Peak Hour : 7:30 AM - 8:30 AM Intersection PHF : 0.97

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	783	189	0	0	0	379	527	0	629	137	248	2,892
PHF	#####	0.92	0.76	#####	#####	#####	0.90	0.94	#####	0.86	0.73	0.82	0.97
Movement PHF		0.95			#DIV/0!			0.97			0.95		0.97

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	144	82	0	0	0	180	205	0	73	3	72	759
4:15 PM	0	112	104	0	0	0	136	210	0	65	5	87	719
4:30 PM	0	151	106	0	0	0	132	221	0	78	4	100	792
4:45 PM	0	168	118	0	0	0	140	233	0	55	2	101	817
5:00 PM	0	234	99	0	0	0	131	253	0	67	6	103	893
5:15 PM	0	164	115	0	0	0	130	236	0	71	4	87	807
5:30 PM	0	212	34	0	0	0	100	258	0	190	44	52	890
5:45 PM	0	174	105	0	0	0	103	184	0	38	1	83	688
Total	0	1359	763	0	0	0	1,052	1,800	0	637	69	685	6,365

PM Intersection Peak Hour : 4:45 PM - 5:45 PM Intersection PHF : 0.95

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	778	366	0	0	0	501	980	0	383	56	343	3407
PHF	#####	0.831	0.775	#####	#####	#####	0.895	0.95	#####	0.504	0.318	0.833	0.95
Movement PHF		0.86			#DIV/0!			0.96			0.68		0.95

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

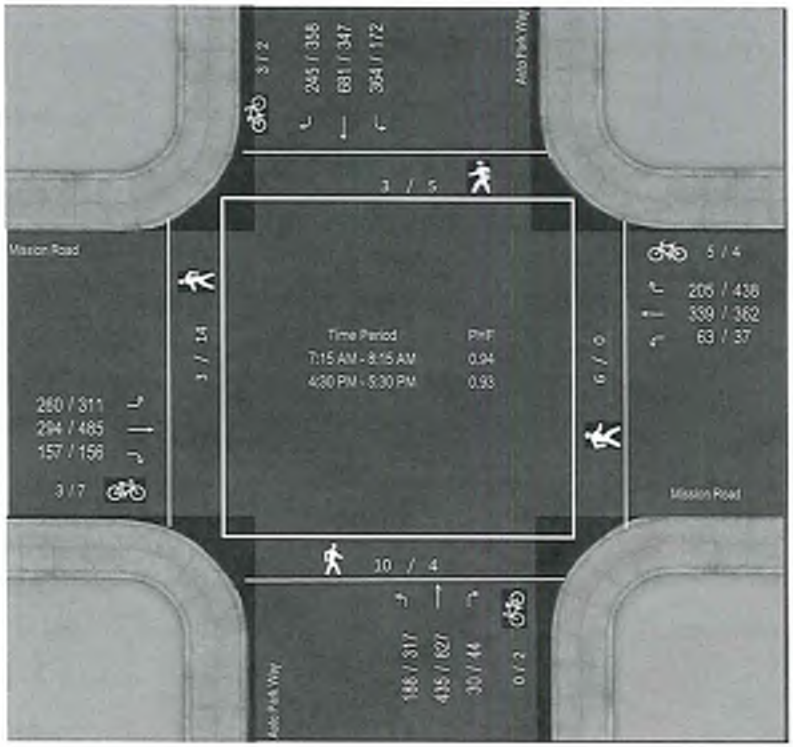
Location: Mission Road @ Auto Park Way

Date of Count: Wednesday, June 04, 2014

Analysts: LVCD

Weather: Sunny

AVC Proj No: 14-0013



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Mission Road @ Auto Park Way

AM Period (7:00 AM - 9:00 AM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	51	205	95	43	60	11	7	77	21	35	47	80	732
7:15 AM	57	166	87	61	70	11	9	104	32	40	70	65	772
7:30 AM	68	155	81	46	111	13	4	113	51	41	74	74	831
7:45 AM	60	156	98	53	87	25	7	124	61	39	85	68	863
8:00 AM	60	204	98	45	71	14	10	94	44	37	65	53	795
8:15 AM	59	136	89	54	80	12	12	87	41	46	67	66	749
8:30 AM	63	117	62	73	60	9	8	96	36	26	63	53	666
8:45 AM	49	156	64	77	56	7	5	86	34	32	51	45	662
Total	467	1,295	674	452	595	102	62	781	320	296	522	504	6,070

AM Intersection Peak Hour: 7:15 AM - 8:15 AM Intersection PHF: 0.94

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	245	681	364	205	339	63	30	435	188	157	294	260	3,261
PHF	0.90	0.83	0.93	0.84	0.76	0.63	0.75	0.88	0.77	0.96	0.86	0.88	0.94
Movement PHF		0.89			0.89			0.85			0.93		0.94

PM Period (4:00 PM - 6:00 PM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	56	110	46	91	84	11	8	216	62	31	109	87	911
4:15 PM	50	90	48	81	97	12	10	184	72	44	108	86	882
4:30 PM	75	99	45	117	80	10	18	222	83	32	123	73	977
4:45 PM	96	89	34	102	76	7	6	194	74	36	106	87	907
5:00 PM	100	88	47	119	100	11	11	252	89	42	115	63	1,037
5:15 PM	87	71	46	100	106	9	9	159	71	46	141	88	933
5:30 PM	79	86	29	73	72	10	13	178	70	41	108	84	843
5:45 PM	79	79	31	55	81	6	10	124	59	33	100	84	741
Total	622	712	326	738	696	76	85	1,529	580	305	910	652	7,231

PM Intersection Peak Hour: 4:30 PM - 5:30 PM Intersection PHF: 0.93

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	358	347	172	438	362	37	44	827	317	156	485	311	3854
PHF	0.90	0.876	0.915	0.92	0.854	0.841	0.611	0.82	0.89	0.848	0.86	0.884	0.93
Movement PHF		0.93			0.91			0.84			0.87		0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

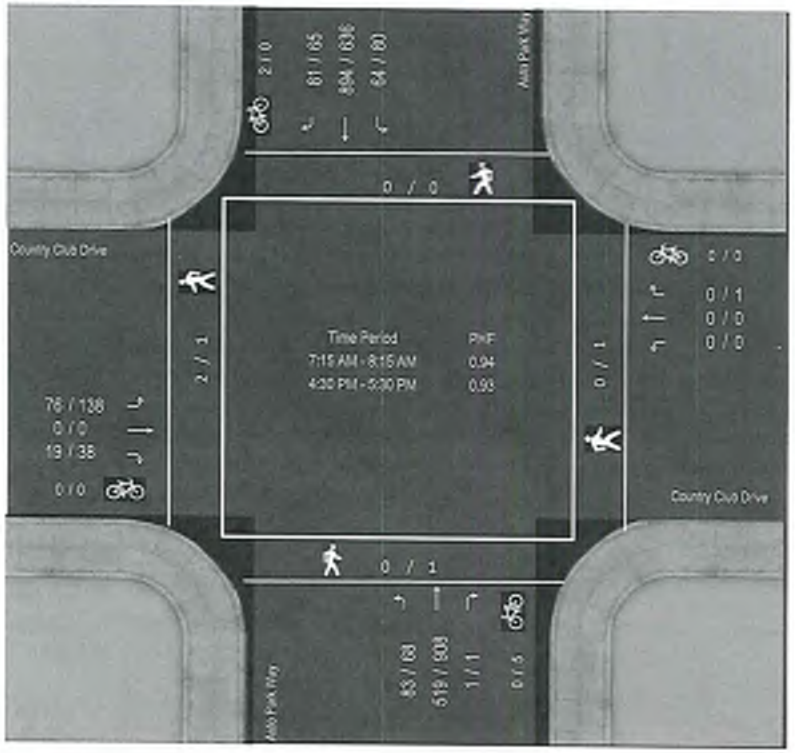
Location: Country Club Drive @ Auto Park Way

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Country Club Drive @ Auto Park Way

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	20	238	18	0	0	0	0	83	15	11	0	17	402
7:15 AM	17	213	15	0	0	0	0	102	7	6	0	19	379
7:30 AM	16	225	8	0	0	0	0	154	20	6	0	21	450
7:45 AM	11	229	26	0	0	0	1	139	27	5	0	22	460
8:00 AM	37	227	15	0	0	0	0	124	29	2	0	14	448
8:15 AM	18	180	16	0	0	0	0	106	14	4	0	16	354
8:30 AM	14	156	26	2	0	0	1	101	10	11	0	17	338
8:45 AM	20	176	17	0	0	0	0	92	19	10	0	17	351
Total	153	1,644	141	2	0	0	2	901	141	55	0	143	3,182

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.94

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	81	894	64	0	0	0	1	519	83	19	0	76	1,737
PHF	0.55	0.98	0.62	#####	#####	#####	0.25	0.84	0.72	0.79	#####	0.86	0.94
Movement PHF	0.93			#DIV/0!			0.87			0.88			0.94

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	21	148	17	0	0	1	0	218	21	5	0	35	466
4:15 PM	20	152	27	0	0	0	0	179	18	7	0	31	434
4:30 PM	22	150	21	0	0	0	0	222	13	8	0	33	469
4:45 PM	11	155	23	0	0	0	1	237	23	13	0	38	501
5:00 PM	14	166	26	0	0	0	0	251	13	11	0	40	521
5:15 PM	18	165	10	1	0	0	0	198	19	6	0	27	444
5:30 PM	21	122	24	0	0	0	0	175	18	10	0	21	391
5:45 PM	11	138	13	0	0	1	0	163	15	4	0	22	367
Total	138	1196	161	1	0	2	1	1,643	140	64	0	247	3,593

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.93

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	65	636	80	1	0	0	1	908	68	38	0	138	1935
PHF	0.74	0.958	0.769	0.25	#####	#####	0.25	0.904	0.739	0.731	#####	0.863	0.93
Movement PHF	0.95			-0.25			0.93			0.86			0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

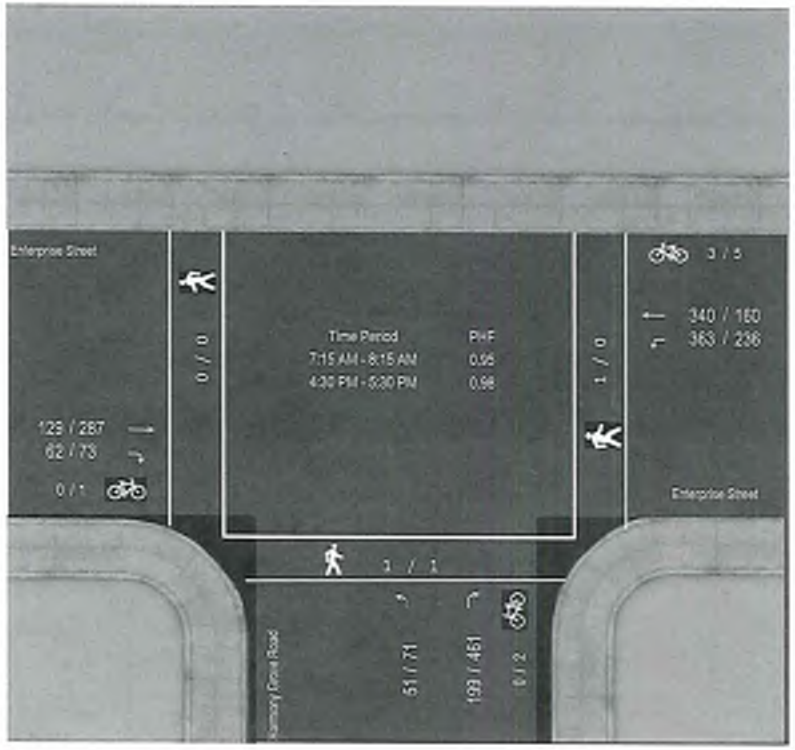
Location: Enterprise Street @ Harmony Grove Road

Date of Count: Tuesday, June 03, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-01213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Enterprise Street @ Harmony Grove Road

AM Period (7:00 AM - 9:00 AM)

		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		58	77	35	8	22	30	230
7:15 AM		70	74	48	12	17	32	253
7:30 AM		92	92	50	16	17	24	291
7:45 AM		90	96	53	16	16	28	299
8:00 AM		88	101	48	7	12	45	301
8:15 AM		51	80	41	16	15	18	221
8:30 AM		77	61	37	6	20	18	219
8:45 AM		59	67	30	14	19	15	204
Total		585	648	342	95	138	210	2,018

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.95

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		340	363	199	51	62	129	1,144
PHF		0.92	0.90	0.94	0.80	0.91	0.72	0.95
Movement PHF		0.93		0.91		0.84		0.95

PM Period (4:00 PM - 6:00 PM)

		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		29	34	94	20	16	62	255
4:15 PM		33	38	104	13	13	52	253
4:30 PM		44	67	97	21	21	80	330
4:45 PM		50	61	126	18	15	58	328
5:00 PM		29	57	124	18	19	75	322
5:15 PM		37	51	114	14	18	74	308
5:30 PM		30	51	85	11	16	56	249
5:45 PM		32	56	91	7	8	44	238
Total		284	415	835	122	126	501	2,283

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.98

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		160	236	461	71	73	287	1288
PHF		0.8	0.883	0.915	0.845	0.869	0.897	0.98
Movement PHF		0.89		0.92		0.89		0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

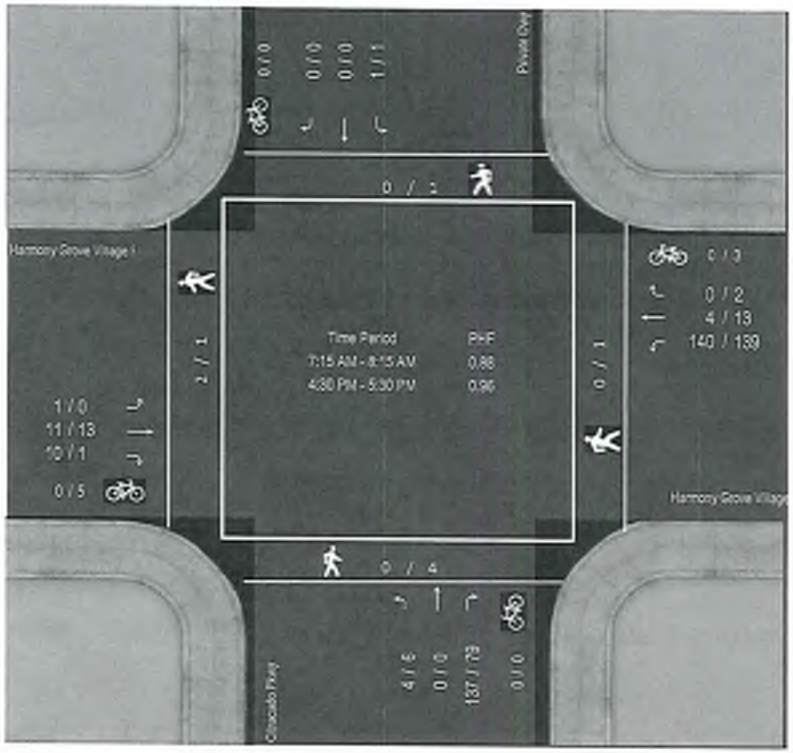
Location: Harmony Grove Village Parkway @ Avenida Del Diablo and Citracado Park

Date of Count: Wednesday, June 04, 2014

Analysts: LM/CD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Harmony Grove Village Parkway @ Avenida Del Diablo and Citracado

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	39	26	0	0	0	1	0	66
7:15 AM	0	0	1	0	1	36	22	0	0	3	2	1	66
7:30 AM	0	0	0	0	1	38	32	0	2	5	3	0	81
7:45 AM	0	0	0	0	1	29	37	0	1	2	3	0	73
8:00 AM	0	0	0	0	1	37	46	0	1	0	3	0	88
8:15 AM	0	0	0	0	0	25	24	0	0	1	2	0	52
8:30 AM	0	0	0	0	0	10	14	0	1	1	2	0	28
8:45 AM	0	0	0	0	1	12	19	0	1	1	3	0	37
Total	0	0	1	0	5	226	220	0	6	13	19	1	491

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.88

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	1	0	4	140	137	0	4	10	11	1	308
PHF	#####	#####	0.25	#####	1.00	0.92	0.74	#####	0.50	0.50	0.92	0.25	0.88
Movement PHF	0.25			0.92			0.75			0.69			0.88

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	3	32	21	0	1	0	6	1	65
4:15 PM	0	0	0	0	2	33	26	0	0	0	2	0	63
4:30 PM	0	0	0	0	4	33	19	0	1	0	3	0	60
4:45 PM	0	0	1	1	4	33	18	0	1	1	5	0	64
5:00 PM	0	0	0	1	3	36	21	0	2	0	1	0	64
5:15 PM	0	0	0	0	2	37	21	0	2	0	4	0	66
5:30 PM	0	0	0	0	5	31	19	0	0	0	3	0	58
5:45 PM	0	0	0	0	0	30	30	0	0	0	4	0	64
Total	0	1	1	2	23	265	175	0	7	1	28	1	504

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.96

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	1	2	13	139	79	0	6	1	13	0	254
PHF	#####	#####	0.25	0.5	0.813	0.939	0.94	#####	0.75	0.25	0.65	#####	0.96
Movement PHF	0.25			0.96			0.92			0.58			0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

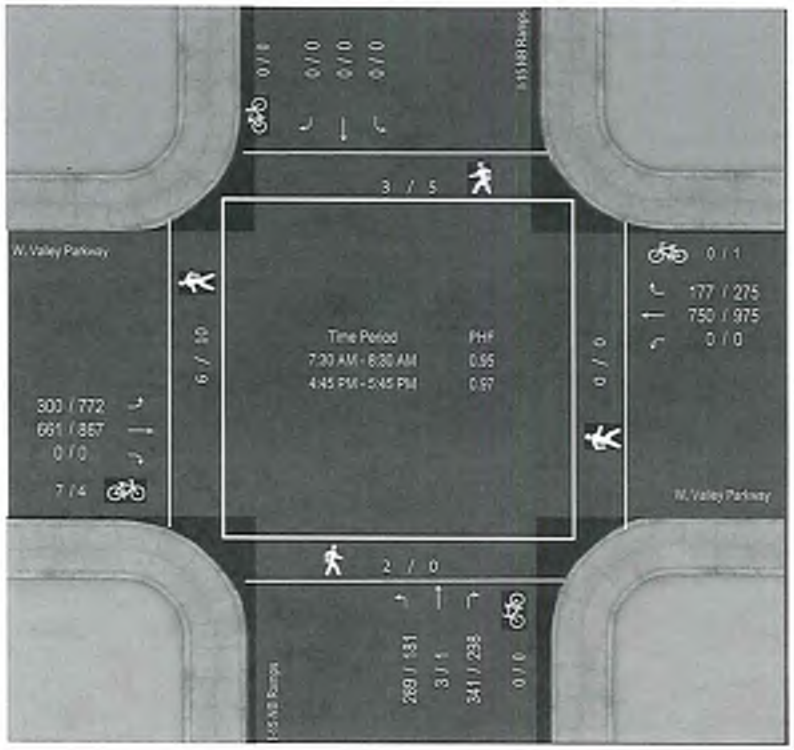
Location: W. Valley Parkway @ I-15 NB Ramps

Date of Count: Tuesday, August 19, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0244



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: W. Valley Parkway @ I-15 NB Ramps

AM Period (7:00 AM - 9:00 AM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	52	173	0	68	0	53	0	113	77	536
7:15 AM	0	0	0	39	206	0	86	0	73	0	140	74	618
7:30 AM	0	0	0	54	187	0	90	0	88	0	135	69	623
7:45 AM	0	0	0	38	183	0	90	0	79	0	190	48	628
8:00 AM	0	0	0	45	178	0	78	1	60	0	163	83	608
8:15 AM	0	0	0	40	202	0	83	2	62	0	173	100	662
8:30 AM	0	0	0	46	133	0	95	0	57	0	141	95	567
8:45 AM	0	0	0	46	163	0	85	1	48	0	192	84	619
Total	0	0	0	360	1,425	0	675	4	520	0	1,247	630	4,861

AM Intersection Peak Hour : 7:30 AM - 8:30 AM Intersection PHF : 0.95

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	177	750	0	341	3	289	0	661	300	2,521
PHF	#####	#####	#####	0.82	0.93	#####	0.95	0.38	0.82	#####	0.87	0.75	0.95
Movement PHF	#DIV/0!			0.96			0.89			0.88			0.95

PM Period (4:00 PM - 6:00 PM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	70	216	0	83	0	33	0	284	182	868
4:15 PM	0	0	0	84	236	0	72	0	46	0	210	205	853
4:30 PM	0	0	0	78	223	0	69	1	29	0	166	234	800
4:45 PM	0	0	0	61	222	0	84	0	39	0	205	233	844
5:00 PM	0	0	0	75	249	0	56	1	55	0	218	188	842
5:15 PM	0	0	0	59	236	0	71	0	51	0	222	180	819
5:30 PM	0	0	0	80	268	0	87	0	36	0	222	171	864
5:45 PM	0	0	0	65	209	0	63	0	44	0	164	219	764
Total	0	0	0	572	1,859	0	585	2	333	0	1,691	1,612	6,654

PM Intersection Peak Hour : 4:45 PM - 5:45 PM Intersection PHF : 0.97

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	275	975	0	298	1	181	0	867	772	3369
PHF	#####	#####	#####	0.859	0.91	#####	0.856	0.25	0.823	#####	0.936	0.828	0.97
Movement PHF	#DIV/0!			0.90			0.98			0.94			0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

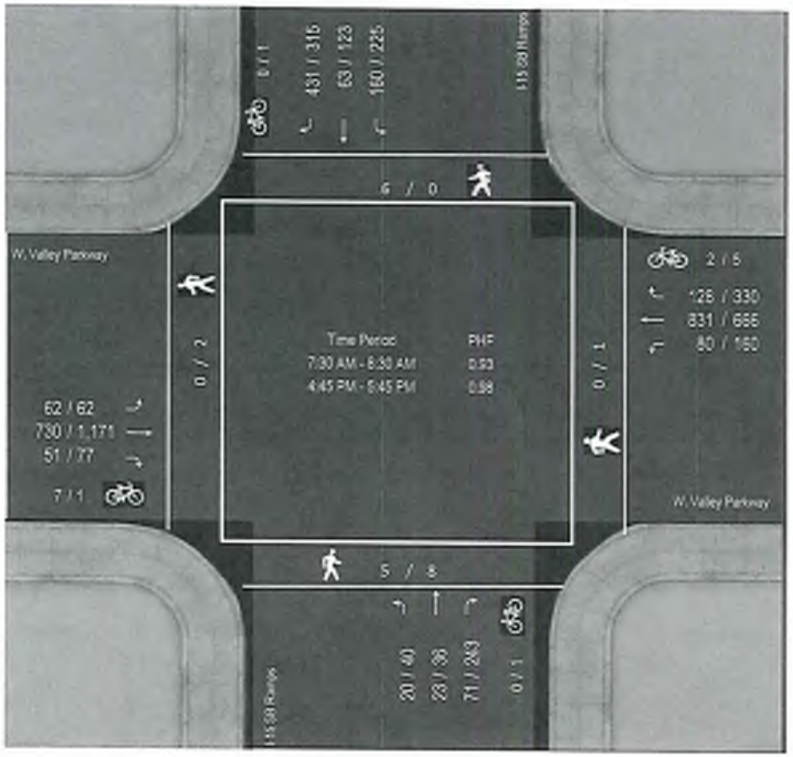
Location: W. Valley Parkway @ I-15 SB Ramps

Date of Count: Tuesday, August 19, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0244



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: W. Valley Parkway @ I-15 SB Ramps

AM Period (7:00 AM - 9:00 AM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	131	17	51	47	165	14	10	1	5	8	129	5	583
7:15 AM	130	11	41	51	216	12	15	5	4	12	158	6	661
7:30 AM	94	11	27	31	224	10	16	6	2	10	161	16	618
7:45 AM	113	17	49	22	210	30	22	4	6	6	167	21	667
8:00 AM	121	10	47	29	191	18	12	3	4	16	187	15	653
8:15 AM	103	25	37	46	196	22	21	10	8	19	215	10	712
8:30 AM	124	39	57	31	135	24	21	15	11	26	158	13	654
8:45 AM	108	27	72	32	153	26	36	14	13	14	168	9	672
Total	924	157	381	289	1,500	156	153	58	53	111	1,343	95	5,220

AM Intersection Peak Hour: 7:30 AM - 8:30 AM Intersection PHF: 0.93

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	431	63	160	128	831	80	71	23	20	51	730	62	2,650
PHF	0.89	0.63	0.82	0.70	0.89	0.67	0.81	0.58	0.63	0.67	0.85	0.74	0.93
Movement PHF		0.91			0.94			0.73			0.86		0.93

PM Period (4:00 PM - 6:00 PM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	82	24	59	80	122	47	61	20	8	18	346	16	883
4:15 PM	64	24	57	85	133	64	47	14	9	13	311	17	838
4:30 PM	62	41	54	81	127	44	38	9	7	20	308	15	806
4:45 PM	95	30	60	76	142	43	63	10	10	18	315	21	883
5:00 PM	79	38	56	93	167	44	58	8	6	15	292	15	871
5:15 PM	63	34	53	65	185	37	47	11	13	21	302	17	848
5:30 PM	78	21	56	96	172	36	75	7	11	23	262	9	846
5:45 PM	77	35	53	58	152	43	55	10	14	16	275	6	794
Total	600	247	448	634	1,200	358	444	89	78	144	2,411	116	6,769

PM Intersection Peak Hour: 4:45 PM - 5:45 PM Intersection PHF: 0.98

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	315	123	225	330	666	160	243	36	40	77	1171	62	3448
PHF	0.83	0.809	0.938	0.859	0.9	0.909	0.81	0.818	0.769	0.837	0.929	0.738	0.98
Movement PHF		0.90			0.95			0.86			0.93		0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

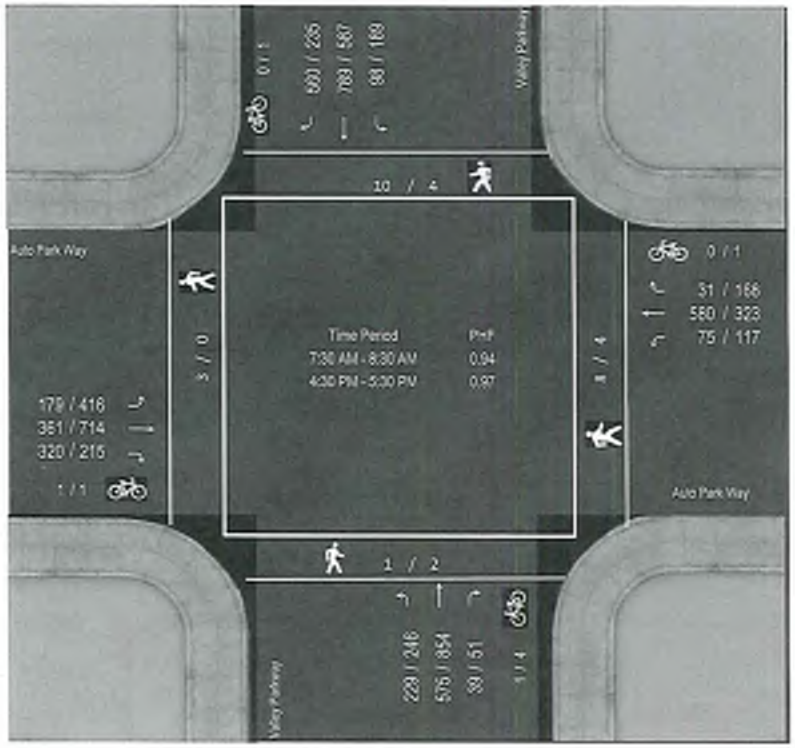
Location: Auto Park Way @ Valley Parkway

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Auto Park Way @ Valley Parkway

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	79	181	23	1	97	4	1	118	49	56	77	35	721
7:15 AM	95	216	30	14	117	17	7	103	49	89	86	42	865
7:30 AM	140	210	37	8	144	19	9	144	73	99	99	39	1,021
7:45 AM	153	217	20	6	171	24	11	162	55	63	79	48	1,009
8:00 AM	158	188	22	5	135	21	9	126	57	76	90	39	926
8:15 AM	109	174	19	12	130	11	10	143	44	82	93	53	880
8:30 AM	145	173	34	11	146	24	9	120	47	76	86	36	907
8:45 AM	139	158	27	13	107	13	7	129	36	49	79	57	814
Total	1,018	1,517	212	70	1,047	133	63	1,045	410	590	689	349	7,143

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	560	789	98	31	580	75	39	575	229	320	361	179	3,836
PHF	0.89	0.91	0.66	0.65	0.85	0.78	0.89	0.89	0.78	0.81	0.91	0.84	0.94
Movement PHF		0.93			0.85			0.92			0.91		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	45	154	39	51	69	22	11	229	63	44	199	95	1,021
4:15 PM	61	128	50	55	59	30	16	252	70	42	159	90	1,022
4:30 PM	64	156	44	46	67	27	13	219	79	50	167	91	1,023
4:45 PM	51	143	42	34	90	27	10	234	50	57	176	99	1,013
5:00 PM	54	114	58	44	86	31	12	182	67	52	203	114	1,017
5:15 PM	66	174	45	44	80	32	16	219	50	56	168	112	1,062
5:30 PM	49	135	56	38	71	25	20	179	48	49	137	84	891
5:45 PM	26	168	54	38	62	18	18	205	55	49	128	57	898
Total	416	1182	388	350	584	212	116	1,719	482	399	1,337	762	7,947

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	235	587	189	168	323	117	51	854	246	215	714	416	4115
PHF	0.89	0.843	0.815	0.913	0.897	0.914	0.797	0.912	0.778	0.943	0.879	0.912	0.97
Movement PHF		0.89			0.94			0.93			0.91		0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

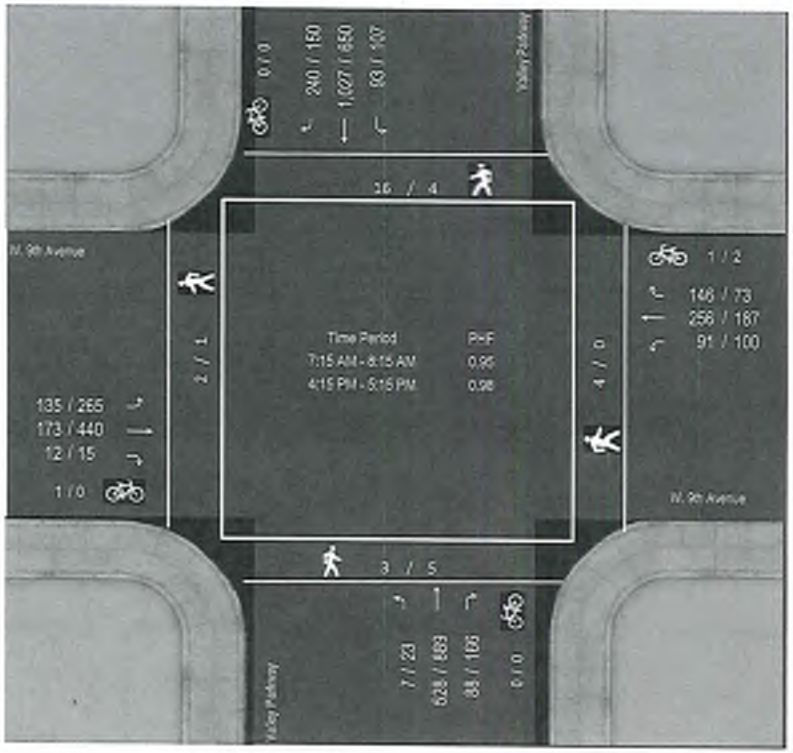
Location: W. 9th Avenue @ Valley Parkway

Date of Count: Wednesday, June 04, 2014

Analysts: LM/CD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: W. 9th Avenue @ Valley Parkway

AM Period [7:00 AM - 9:00 AM]

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	28	212	8	38	47	13	20	87	0	3	45	38	539
7:15 AM	56	293	22	40	59	23	16	113	0	2	38	29	691
7:30 AM	64	268	44	61	51	14	25	118	4	1	53	29	732
7:45 AM	72	227	14	30	76	31	27	166	1	6	45	36	731
8:00 AM	48	239	13	15	70	23	20	131	2	3	37	41	642
8:15 AM	46	231	11	14	51	21	22	148	0	2	38	37	621
8:30 AM	45	214	19	11	42	24	22	134	5	1	20	33	570
8:45 AM	42	174	13	12	35	17	14	122	5	1	32	38	505
Total	401	1,858	144	221	431	166	166	1,019	17	19	308	281	5,031

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.98

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	240	1,027	93	146	256	91	88	528	7	12	173	135	2,796
PHF	0.83	0.88	0.53	0.60	0.84	0.73	0.81	0.80	0.44	0.50	0.82	0.82	0.95
Movement PHF		0.90			0.90			0.80			0.92		0.95

PM Period [4:00 PM - 6:00 PM]

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	23	188	19	15	35	31	33	219	5	4	99	63	734
4:15 PM	38	160	24	14	39	28	36	244	4	4	104	74	769
4:30 PM	40	171	24	18	47	19	45	236	10	4	108	58	780
4:45 PM	37	158	26	18	56	26	49	204	4	3	103	67	751
5:00 PM	35	161	33	23	45	27	36	205	5	4	125	66	765
5:15 PM	37	171	39	17	31	30	41	198	7	1	98	64	734
5:30 PM	42	149	37	15	59	15	42	175	9	4	98	59	704
5:45 PM	36	174	31	12	53	23	41	172	8	2	73	64	689
Total	288	1332	233	132	365	199	323	1,653	52	26	808	515	5,926

PM Intersection Peak Hour : 4:15 PM - 5:15 PM Intersection PHF : 0.98

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	150	650	107	73	187	100	166	889	23	15	440	265	3065
PHF	0.94	0.95	0.811	0.793	0.835	0.893	0.847	0.911	0.575	0.938	0.88	0.895	0.98
Movement PHF		0.96			0.90			0.93			0.92		0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

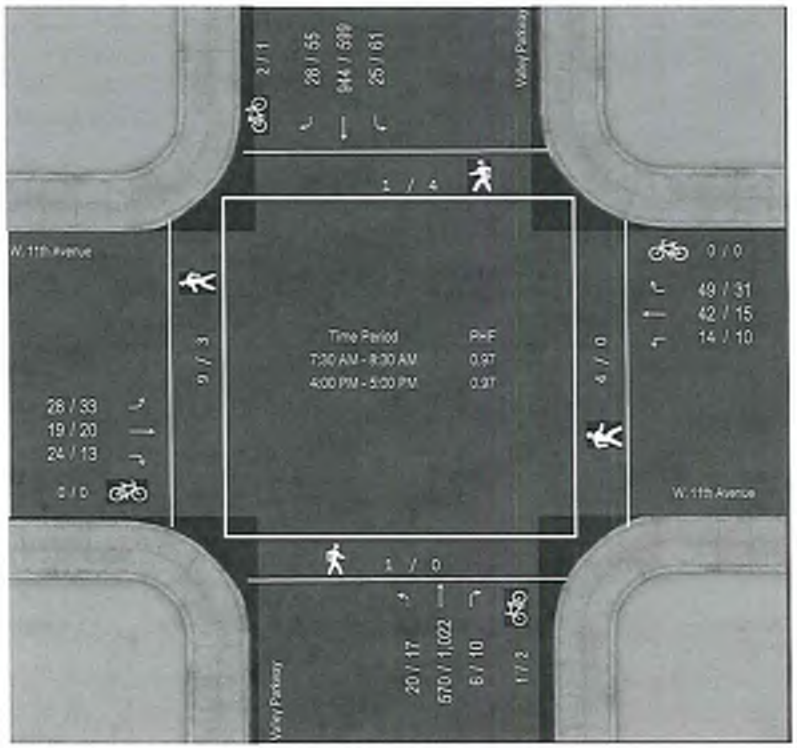
Location: W. 11th Avenue @ Valley Parkway

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: W. 11th Avenue @ Valley Parkway

AM Period (7:00 AM - 9:00 AM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	7	234	2	9	5	4	0	92	0	3	6	10	372
7:15 AM	10	271	4	10	6	0	2	104	4	8	5	4	428
7:30 AM	7	254	2	22	15	3	1	131	7	5	3	5	455
7:45 AM	7	223	10	9	11	3	2	153	1	8	5	8	440
8:00 AM	3	237	2	13	8	3	2	126	4	6	7	5	416
8:15 AM	11	230	11	5	8	5	1	160	8	5	4	10	458
8:30 AM	10	207	13	13	4	1	0	136	5	5	3	6	403
8:45 AM	12	155	10	14	3	2	3	132	6	2	7	11	357
Total	67	1,811	54	95	60	21	11	1,034	35	42	40	59	3,329

AM Intersection Peak Hour : 7:30 AM - 8:30 AM Intersection PHF : 0.97

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	28	944	25	49	42	14	6	570	20	24	19	28	1,769
PHF	0.64	0.93	0.57	0.56	0.70	0.70	0.75	0.89	0.63	0.75	0.68	0.70	0.97
Movement PHF		0.95			0.66			0.88			0.85		0.97

PM Period (4:00 PM - 6:00 PM)	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	10	160	24	6	3	2	1	262	2	2	5	6	483
4:15 PM	13	147	15	10	4	3	1	275	3	4	4	6	485
4:30 PM	15	148	11	9	7	5	4	254	3	3	3	13	475
4:45 PM	17	144	11	6	1	0	4	231	9	4	8	8	443
5:00 PM	10	149	20	4	1	0	3	235	1	1	14	9	447
5:15 PM	11	142	27	11	2	1	3	208	6	4	11	12	438
5:30 PM	12	133	24	5	4	0	1	245	2	1	9	7	443
5:45 PM	13	142	28	9	3	3	1	191	4	4	8	8	414
Total	101	1165	160	60	25	14	18	1,901	30	23	62	69	3,628

PM Intersection Peak Hour : 4:00 PM - 5:00 PM Intersection PHF : 0.97

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	55	599	61	31	15	10	10	1022	17	13	20	33	1886
PHF	0.81	0.936	0.635	0.775	0.536	0.5	0.625	0.929	0.472	0.813	0.625	0.635	0.97
Movement PHF		0.92			0.67			0.94			0.83		0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

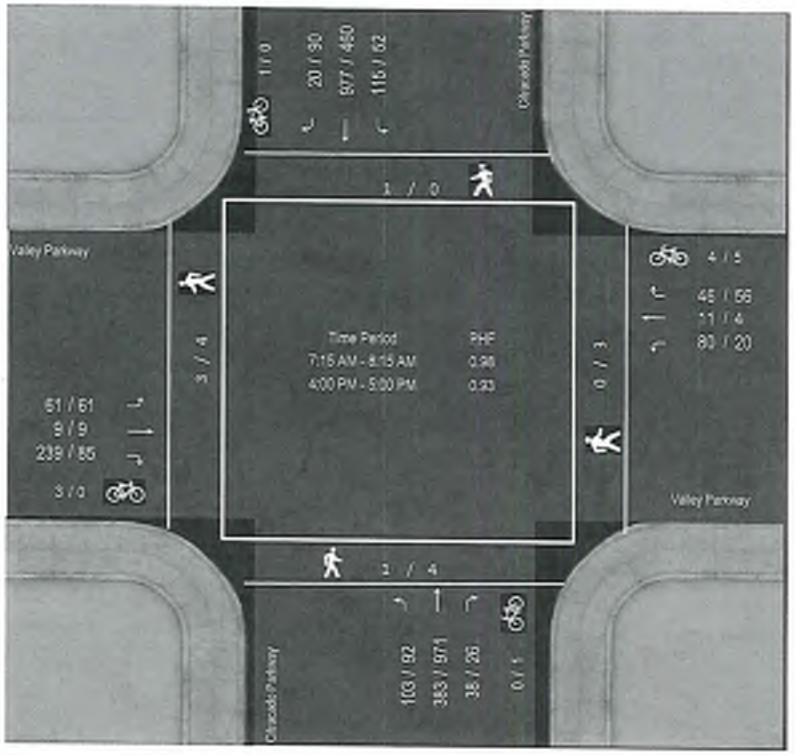
Location: Valley Parkway @ Citracado Parkway

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Valley Parkway @ Citracado Parkway

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	6	254	7	7	1	11	2	69	16	59	1	13	446
7:15 AM	3	303	9	13	2	14	8	80	16	66	1	15	530
7:30 AM	5	238	25	12	3	25	11	99	28	70	3	14	533
7:45 AM	8	223	34	10	2	23	8	117	22	57	2	18	524
8:00 AM	4	213	47	11	4	18	11	87	37	46	3	14	495
8:15 AM	5	208	48	9	6	16	21	109	20	24	8	13	487
8:30 AM	10	220	21	10	3	10	4	89	14	13	2	15	411
8:45 AM	9	151	7	8	3	5	3	109	11	12	1	16	335
Total	50	1,810	198	80	24	122	68	759	164	347	21	118	3,761

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.98

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	20	977	115	46	11	80	38	383	103	239	9	61	2,082
PHF	0.63	0.81	0.61	0.88	0.69	0.80	0.86	0.82	0.70	0.85	0.75	0.85	0.98
Movement PHF		0.88			0.86			0.89			0.89		0.98

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	23	118	9	13	0	5	4	261	20	13	3	13	482
4:15 PM	23	122	17	19	2	2	4	253	27	26	1	20	516
4:30 PM	16	117	15	13	1	6	7	232	25	24	2	15	473
4:45 PM	28	103	11	11	1	7	11	225	20	22	3	13	455
5:00 PM	16	116	11	11	0	8	3	217	27	22	2	13	446
5:15 PM	18	122	19	5	1	6	7	210	30	26	1	8	453
5:30 PM	29	99	10	6	1	1	9	238	19	23	3	19	457
5:45 PM	24	122	13	13	1	2	7	176	34	17	2	17	428
Total	177	919	105	91	7	37	52	1,812	202	173	17	118	3,710

PM Intersection Peak Hour : 4:00 PM - 5:00 PM Intersection PHF : 0.93

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	90	460	52	56	4	20	26	971	92	85	9	61	1926
PHF	0.80	0.943	0.765	0.737	0.5	0.714	0.591	0.93	0.852	0.817	0.75	0.763	0.93
Movement PHF		0.93			0.87			0.96			0.82		0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

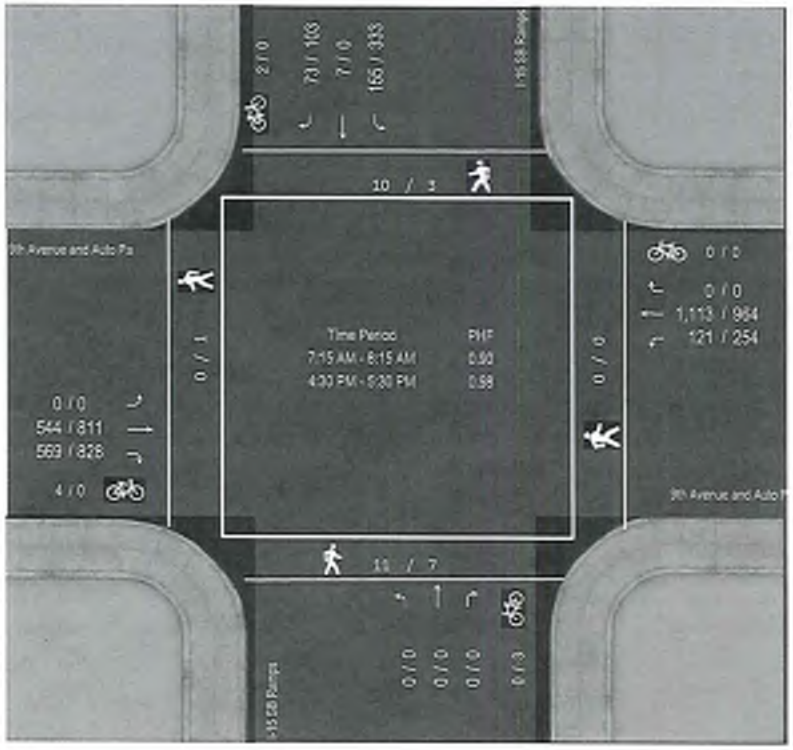
Location: 9th Avenue and Auto Parkway @ I-15 SB Ramps

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 9th Avenue and Auto Parkway @ I-15 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	27	1	41	0	227	40	0	0	0	127	96	0	559
7:15 AM	13	3	33	0	278	27	0	0	0	141	137	0	632
7:30 AM	19	2	38	0	323	27	0	0	0	136	174	0	719
7:45 AM	17	0	50	0	276	23	0	0	0	152	125	0	643
8:00 AM	24	2	34	0	236	44	0	0	0	140	108	0	588
8:15 AM	20	2	39	0	246	20	0	0	0	121	122	0	570
8:30 AM	26	1	32	0	227	39	0	0	0	122	94	0	541
8:45 AM	26	0	60	0	157	20	0	0	0	128	108	0	499
Total	172	11	327	0	1,970	240	0	0	0	1,067	964	0	4,751

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.90

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	73	7	155	0	1,113	121	0	0	0	569	544	0	2,582
PHF	0.76	0.58	0.78	#####	0.86	0.69	#####	#####	#####	0.94	0.78	#####	0.90
Movement PHF	0.88			0.88			#DIV/0!			0.90			0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	27	1	81	0	206	46	0	0	0	216	200	0	777
4:15 PM	35	0	80	0	230	47	0	0	0	190	213	0	795
4:30 PM	23	0	74	0	239	59	0	0	0	215	206	0	816
4:45 PM	31	0	94	0	236	48	0	0	0	195	204	0	808
5:00 PM	25	0	85	0	219	77	0	0	0	212	211	0	829
5:15 PM	24	0	80	0	270	70	0	0	0	206	190	0	840
5:30 PM	35	0	60	0	234	42	0	0	0	167	187	0	725
5:45 PM	36	0	78	0	227	44	0	0	0	170	170	0	725
Total	236	1	632	0	1,861	433	0	0	0	1,571	1,581	0	6,315

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.98

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	103	0	333	0	964	254	0	0	0	828	811	0	3293
PHF	0.83	#####	0.886	#####	0.893	0.825	#####	#####	#####	0.963	0.961	#####	0.98
Movement PHF	0.87			0.90			#DIV/0!			0.97			0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

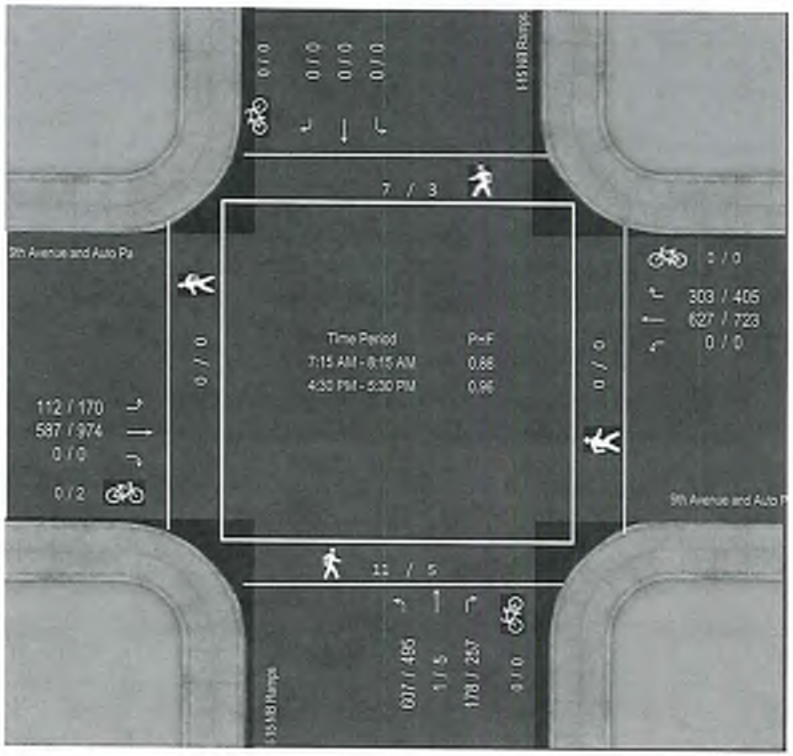
Location: 9th Avenue and Auto Parkway @ I-15 NB Ramps

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 9th Avenue and Auto Parkway @ I-15 NB Ramps

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	83	158	0	16	0	109	0	108	29	503
7:15 AM	0	0	0	86	169	0	32	0	136	0	136	34	593
7:30 AM	0	0	0	79	178	0	43	0	172	0	184	28	684
7:45 AM	0	0	0	74	117	0	60	1	182	0	149	26	609
8:00 AM	0	0	0	64	163	0	43	0	117	0	118	24	529
8:15 AM	0	0	0	69	123	0	49	0	143	0	138	23	545
8:30 AM	0	0	0	58	175	0	63	0	91	0	103	23	513
8:45 AM	0	0	0	59	65	0	47	2	112	0	144	24	453
Total	0	0	0	572	1,148	0	353	3	1,062	0	1,080	211	4,429

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.88

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	303	627	0	178	1	607	0	587	112	2,415
PHF	#####	#####	#####	0.88	0.88	#####	0.74	0.25	0.83	#####	0.80	0.82	0.88
Movement PHF	#DIV/0!			0.90			0.81			0.82			0.88

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	74	130	0	65	5	122	0	228	53	677
4:15 PM	0	0	0	81	135	0	70	0	142	0	243	50	721
4:30 PM	0	0	0	104	168	0	54	1	130	0	229	51	737
4:45 PM	0	0	0	89	164	0	54	2	120	0	263	35	727
5:00 PM	0	0	0	108	176	0	74	1	120	0	251	45	775
5:15 PM	0	0	0	104	215	0	75	1	125	0	231	39	790
5:30 PM	0	0	0	88	140	0	61	0	136	0	219	28	672
5:45 PM	0	0	0	75	149	0	38	0	122	0	214	34	632
Total	0	0	0	723	1,277	0	491	10	1,017	0	1,878	335	5,731

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.96

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	405	723	0	257	5	495	0	974	170	3029
PHF	#####	#####	#####	0.938	0.841	#####	0.857	0.625	0.952	#####	0.926	0.833	0.96
Movement PHF	#DIV/0!			0.88			0.94			0.96			0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

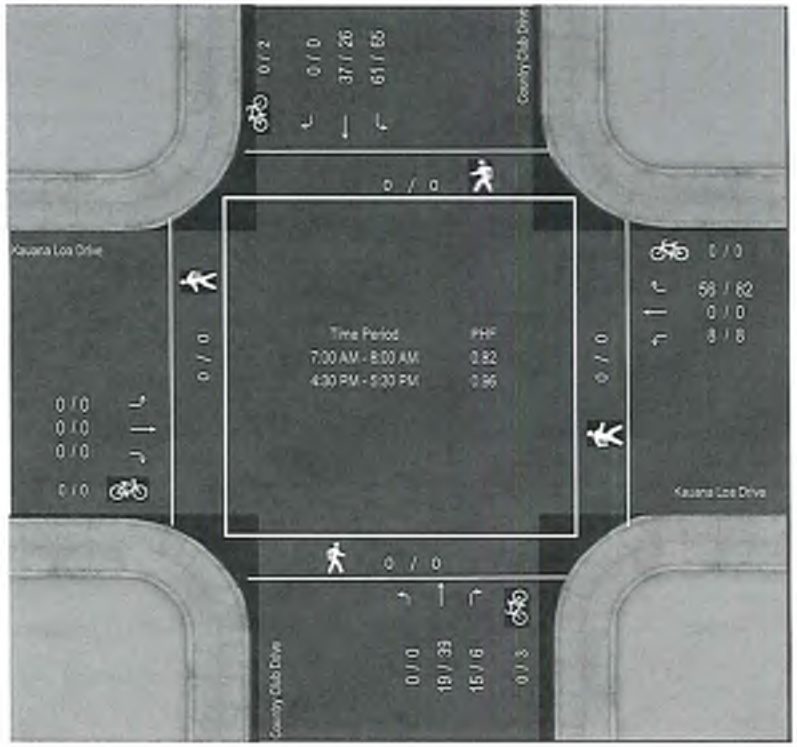
Location: Kauana Loa Drive @ Country Club Drive

Date of Count: Wednesday, June 04, 2014

Analysts: LMCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Kauana Loa Drive @ Country Club Drive

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	7	10	8	0	3	4	6	0	0	0	0	38
7:15 AM	0	6	18	10	0	4	7	2	0	0	0	0	47
7:30 AM	0	11	13	20	0	0	3	4	0	0	0	0	51
7:45 AM	0	13	20	18	0	1	1	7	0	0	0	0	60
8:00 AM	0	3	9	11	0	3	2	1	0	0	0	0	29
8:15 AM	0	6	18	14	1	0	2	3	0	0	0	0	44
8:30 AM	0	7	8	5	0	2	1	3	0	0	0	0	26
8:45 AM	0	9	13	16	0	0	3	4	0	0	0	0	45
Total	0	62	109	102	1	13	23	30	0	0	0	0	340

AM Intersection Peak Hour : 7:00 AM - 8:00 AM Intersection PHF : 0.82

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	37	61	56	0	8	15	19	0	0	0	0	196
PHF	#####	0.71	0.76	0.70	#####	0.50	0.54	0.68	#####	#####	#####	#####	0.82
Movement PHF	0.74			0.80			0.85			#DIV/0!			0.82

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	11	5	19	0	3	2	13	0	0	0	0	53
4:15 PM	0	6	14	19	0	3	5	4	0	0	0	0	51
4:30 PM	0	11	12	19	0	2	0	11	0	0	0	0	55
4:45 PM	0	6	11	23	0	2	3	11	0	0	0	0	56
5:00 PM	0	4	21	21	0	3	2	5	0	0	0	0	56
5:15 PM	0	5	21	19	0	1	1	12	0	0	0	0	59
5:30 PM	0	6	9	19	0	4	2	6	0	0	0	0	46
5:45 PM	0	7	8	15	0	6	1	9	0	0	0	0	46
Total	0	56	101	154	0	24	16	71	0	0	0	0	422

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.96

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	26	65	82	0	8	6	39	0	0	0	0	226
PHF	#####	0.591	0.774	0.891	#####	0.667	0.5	0.813	#####	#####	#####	#####	0.96
Movement PHF	0.88			0.90			0.80			#DIV/0!			0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

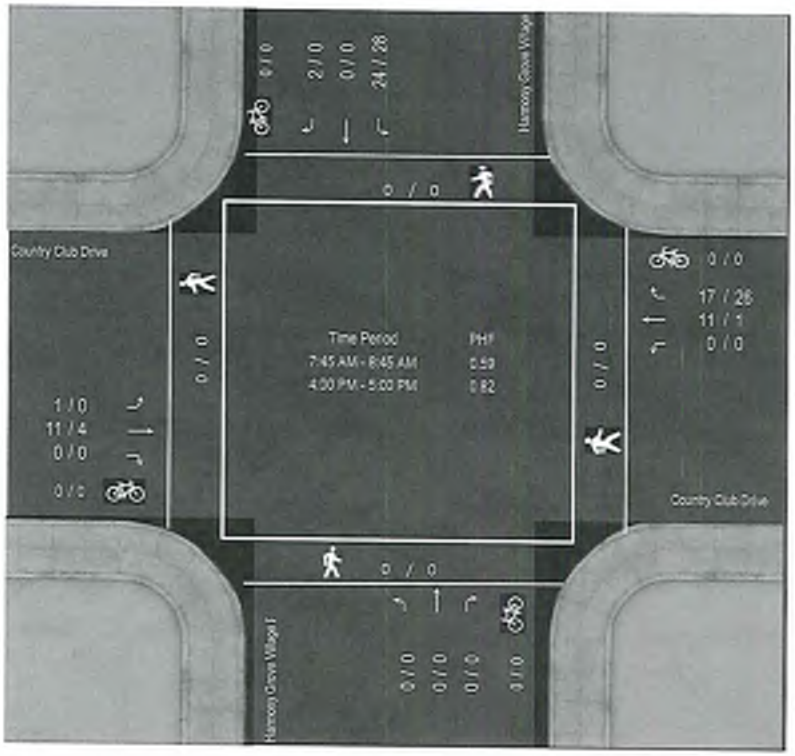
Location: Country Club Drive @ Harmony Grove Village Parkway

Date of Count: Wednesday, June 04, 2014

Analysts: LVCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Country Club Drive @ Harmony Grove Village Parkway

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	2	0	0	0	0	0	0	0	0	3
7:30 AM	2	0	7	4	0	0	0	0	0	0	5	0	18
7:45 AM	1	0	7	5	1	0	0	0	0	0	0	0	14
8:00 AM	0	0	5	0	2	0	0	0	0	0	1	1	9
8:15 AM	1	0	4	5	4	0	0	0	0	0	1	0	15
8:30 AM	0	0	8	7	4	0	0	0	0	0	9	0	28
8:45 AM	0	0	1	2	1	0	0	0	0	0	3	1	8
Total	4	0	33	26	12	0	0	0	0	0	19	2	96

AM Intersection Peak Hour : 7:45 AM - 8:45 AM — Intersection PHF : 0.59

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	0	24	17	11	0	0	0	0	0	11	1	66
PHF	0.50	#####	0.75	0.61	0.69	#####	#####	#####	#####	#####	0.31	0.25	0.59
Movement PHF	0.81			0.64			#DIV/0!			0.33			0.59

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	3	8	1	0	0	0	0	0	1	0	13
4:15 PM	0	0	10	6	0	0	0	0	0	0	1	0	17
4:30 PM	0	0	7	4	0	0	0	0	0	0	0	0	11
4:45 PM	0	0	8	8	0	0	0	0	0	0	2	0	18
5:00 PM	0	0	1	3	1	0	0	0	0	0	2	0	7
5:15 PM	0	0	5	9	1	0	0	0	0	0	2	1	18
5:30 PM	0	0	4	4	0	0	0	0	0	0	2	1	11
5:45 PM	0	0	5	5	0	0	0	0	0	0	1	0	11
Total	0	0	43	47	3	0	0	0	0	0	11	2	106

PM Intersection Peak Hour : 4:00 PM - 5:00 PM — Intersection PHF : 0.82

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	28	26	1	0	0	0	0	0	4	0	59
PHF	#####	#####	0.7	0.813	0.25	#####	#####	#####	#####	#####	0.5	#####	0.82
Movement PHF	0.70			0.75			#DIV/0!			0.50			0.82

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

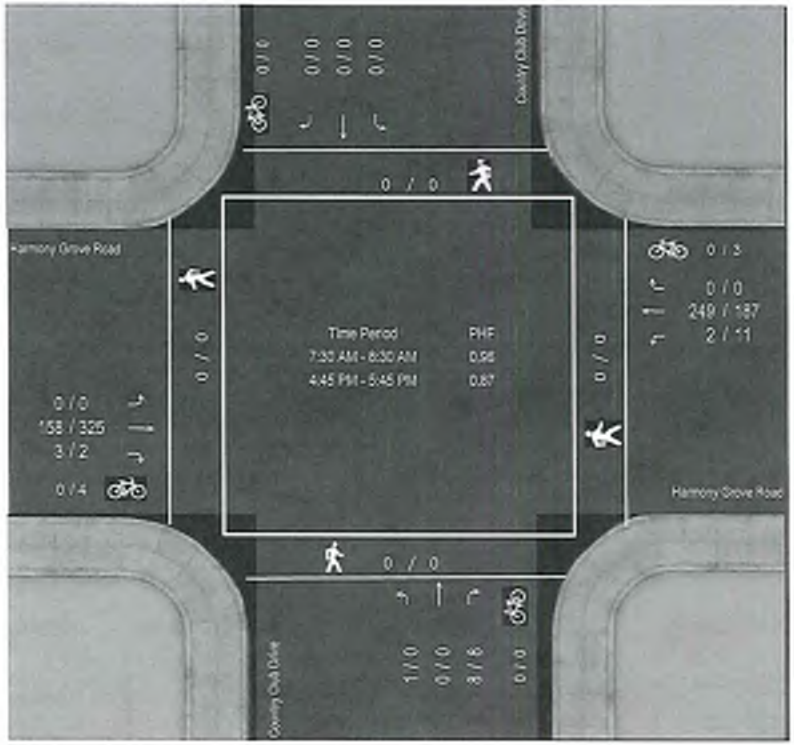
Location: Harmony Grove Road @ Country Club Drive

Date of Count: Wednesday, June 04, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Harmony Grove Road @ Country Club Drive

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	63	3	8	0	2	0	27	0	103
7:15 AM	0	0	0	0	60	0	2	0	0	0	34	0	96
7:30 AM	0	0	0	0	65	1	0	0	1	0	43	0	110
7:45 AM	0	0	0	0	58	0	5	0	0	2	44	0	109
8:00 AM	0	0	0	0	68	1	1	0	0	0	30	0	100
8:15 AM	0	0	0	0	58	0	2	0	0	1	41	0	102
8:30 AM	0	0	0	0	52	6	5	0	1	0	24	0	88
8:45 AM	0	0	0	0	54	1	0	0	0	1	25	0	81
Total	0	0	0	0	478	12	23	0	4	4	268	0	789

AM Intersection Peak Hour : 7:30 AM - 8:30 AM Intersection PHF : 0.96

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	249	2	8	0	1	3	158	0	421
PHF	#####	#####	#####	#####	0.92	0.50	0.40	#####	0.25	0.38	0.90	#####	0.96
Movement PHF	#DIV/0!			0.91			0.45			0.88			0.96

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	26	5	1	0	0	1	71	0	104
4:15 PM	0	0	0	0	30	4	2	0	1	1	84	0	122
4:30 PM	0	0	0	0	37	1	4	0	0	0	79	0	121
4:45 PM	0	0	0	0	49	4	3	0	0	1	97	0	154
5:00 PM	0	0	0	0	45	4	3	0	0	0	74	0	126
5:15 PM	0	0	0	0	45	1	0	0	0	0	80	0	126
5:30 PM	0	0	0	0	48	2	2	0	0	1	74	0	127
5:45 PM	0	0	0	0	39	5	5	0	0	1	55	0	105
Total	0	0	0	0	319	26	20	0	1	5	614	0	985

PM Intersection Peak Hour : 4:45 PM - 5:45 PM Intersection PHF : 0.87

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	187	11	8	0	0	2	325	0	533
PHF	#####	#####	#####	#####	0.954	0.688	0.667	#####	#####	0.5	0.838	#####	0.87
Movement PHF	#DIV/0!			0.93			0.67			0.83			0.87

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

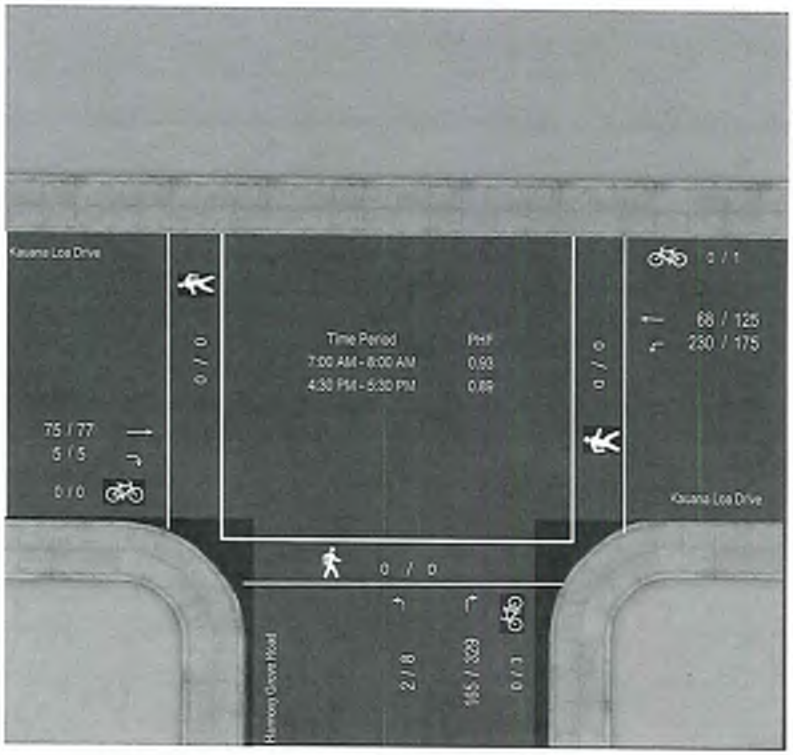
Location: Kauana Loa Drive @ Harmony Grove Road

Date of Count: Tuesday, June 03, 2014

Analysts: LWCD

Weather: Sunny

AVC Proj No: 14-01213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Kauana Loa Drive @ Harmony Grove Road

AM Period (7:00 AM - 9:00 AM)

	Westbound		Northbound		Eastbound		TOTAL
	Thru	Left	Right	Left	Right	Thru	
7:00 AM	19	58	42	0	2	20	141
7:15 AM	18	59	45	0	0	24	146
7:30 AM	12	63	37	1	2	16	131
7:45 AM	19	50	41	1	1	15	127
8:00 AM	8	51	26	0	2	14	101
8:15 AM	16	47	22	1	3	20	109
8:30 AM	12	48	25	1	2	18	106
8:45 AM	9	49	21	0	1	17	97
Total	113	425	259	4	13	144	958

AM Intersection Peak Hour : 7:00 AM - 8:00 AM Intersection PHF : 0.93

	Westbound		Northbound		Eastbound		TOTAL
	Thru	Left	Right	Left	Right	Thru	
Volume	68	230	165	2	5	75	545
PHF	0.89	0.91	0.92	0.50	0.63	0.78	0.93
Movement PHF	0.97		0.93		0.83		0.92

PM Period (4:00 PM - 6:00 PM)

	Westbound		Northbound		Eastbound		TOTAL
	Thru	Left	Right	Left	Right	Thru	
4:00 PM	27	28	57	1	1	14	128
4:15 PM	23	32	78	4	0	18	155
4:30 PM	25	35	82	2	1	14	159
4:45 PM	40	48	92	1	1	20	202
5:00 PM	31	49	81	3	1	18	183
5:15 PM	29	43	74	2	2	25	175
5:30 PM	24	46	69	2	1	14	156
5:45 PM	24	40	69	3	2	11	149
Total	223	321	602	18	9	134	1,307

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.89

	Westbound		Northbound		Eastbound		TOTAL
	Thru	Left	Right	Left	Right	Thru	
Volume	125	175	329	8	5	77	719
PHF	0.781	0.893	0.894	0.667	0.625	0.77	0.89
Movement PHF	0.85		0.91		0.76		0.89

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

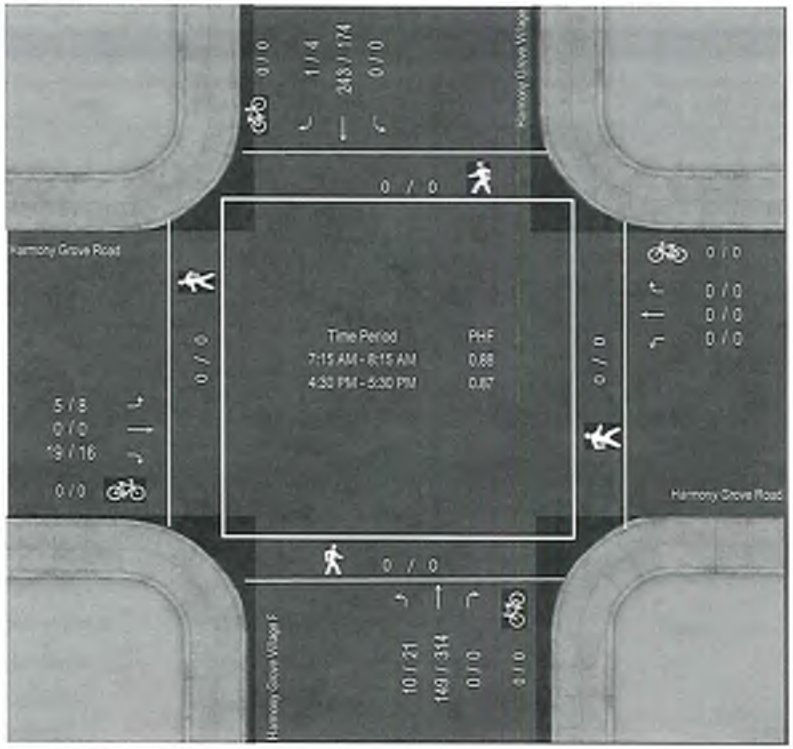
Location: Harmony Grove Road @ Harmony Grove Village Parkway

Date of Count: Wednesday, June 04, 2014

Analysts: LMCD

Weather: Sunny

AVC Proj No: 14-0213



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Harmony Grove Road @ Harmony Grove Village Parkway

AM Period (7:00 AM - 9:00 AM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	69	0	0	0	0	0	23	0	2	0	0	94
7:15 AM	0	57	0	0	0	0	0	35	1	4	0	0	97
7:30 AM	0	69	0	0	0	0	0	40	2	8	0	2	121
7:45 AM	0	55	0	0	0	0	0	39	5	5	0	1	105
8:00 AM	1	62	0	0	0	0	0	35	2	2	0	2	104
8:15 AM	2	50	0	0	0	0	0	36	4	3	0	1	96
8:30 AM	2	51	0	0	0	0	0	28	3	11	0	1	96
8:45 AM	0	51	0	0	0	0	0	22	2	11	0	2	88
Total	5	464	0	0	0	0	0	258	19	46	0	9	801

AM Intersection Peak Hour : 7:15 AM - 8:15 AM Intersection PHF : 0.88

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	243	0	0	0	0	0	149	10	19	0	5	427
PHF	0.25	0.88	#####	#####	#####	#####	#####	0.93	0.50	0.59	#####	0.63	0.88
Movement PHF	0.88			#DIV/0!			0.90			0.60			0.88

PM Period (4:00 PM - 6:00 PM)

	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	28	0	0	0	0	0	65	11	3	0	1	108
4:15 PM	1	24	0	0	0	0	0	88	5	6	0	2	126
4:30 PM	1	43	0	0	0	0	0	75	3	4	0	3	129
4:45 PM	1	44	0	0	0	0	0	94	7	6	0	3	155
5:00 PM	0	46	0	0	0	0	0	73	4	1	0	1	125
5:15 PM	2	41	0	0	0	0	0	72	7	5	0	1	128
5:30 PM	1	46	0	0	0	0	0	66	5	4	0	2	124
5:45 PM	1	37	0	0	0	0	0	61	4	4	0	3	110
Total	7	309	0	0	0	0	0	594	46	33	0	16	1,005

PM Intersection Peak Hour : 4:30 PM - 5:30 PM Intersection PHF : 0.87

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	4	174	0	0	0	0	0	314	21	16	0	8	537
PHF	0.50	0.946	#####	#####	#####	#####	#####	0.835	0.75	0.667	#####	0.667	0.87
Movement PHF	0.97			#DIV/0!			0.83			0.67			0.87

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5138

Location: Auto Park Way, btwn Mission Rd and Country Club Dr

Orientation: North-South

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

Weather: Sunny

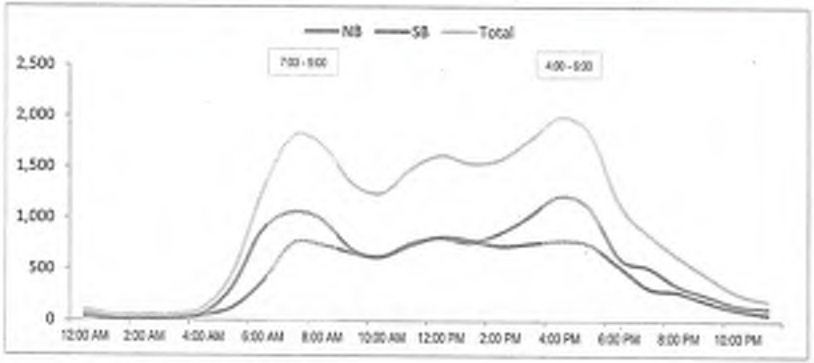
AVC Proj. No: 14-0213

24 Hour Segment Volume: 23,602

Time	Hourly Volume NB	SB	Total
12:00 AM - 1:00 AM	68	38	106
1:00 AM - 2:00 AM	34	19	53
2:00 AM - 3:00 AM	36	22	58
3:00 AM - 4:00 AM	39	23	62
4:00 AM - 5:00 AM	55	70	125
5:00 AM - 6:00 AM	133	337	470
6:00 AM - 7:00 AM	382	884	1,266
7:00 AM - 8:00 AM	748	1,057	1,805
8:00 AM - 9:00 AM	735	984	1,719
9:00 AM - 10:00 AM	660	687	1,347
10:00 AM - 11:00 AM	620	625	1,245
11:00 AM - 12:00 PM	750	737	1487
Total	4,260	5,483	9,743

Time	Hourly Volume NB	SB	Total
12:00 PM - 1:00 PM	806	811	1,617
1:00 PM - 2:00 PM	759	780	1,539
2:00 PM - 3:00 PM	853	725	1,578
3:00 PM - 4:00 PM	1,026	748	1,774
4:00 PM - 5:00 PM	1,216	777	1,993
5:00 PM - 6:00 PM	1,100	743	1,843
6:00 PM - 7:00 PM	617	533	1,150
7:00 PM - 8:00 PM	518	322	840
8:00 PM - 9:00 PM	340	285	625
9:00 PM - 10:00 PM	245	189	434
10:00 PM - 11:00 PM	152	116	268
11:00 PM - 12:00 AM	127	71	198
Total	7,759	6,100	13,859

24-Hour NB Volume 12,019 | **24-Hour SB Volume 11,583**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5138

Location: Citricado Pkwy, btwn Avenida Del Diablo and Valley Pkwy

Orientation: East-West

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

Weather: Sunny

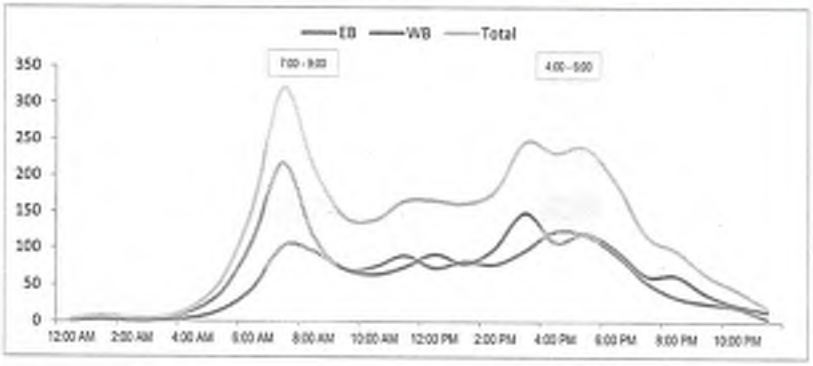
AVC Proj. No: 14-0213

24 Hour Segment Volume: 2,989

Time	Hourly Volume EB	WB	Total
12:00 AM - 1:00 AM	1	2	3
1:00 AM - 2:00 AM	3	5	8
2:00 AM - 3:00 AM	1	4	5
3:00 AM - 4:00 AM	3	3	6
4:00 AM - 5:00 AM	15	5	20
5:00 AM - 6:00 AM	42	17	59
6:00 AM - 7:00 AM	111	46	157
7:00 AM - 8:00 AM	217	103	320
8:00 AM - 9:00 AM	116	96	212
9:00 AM - 10:00 AM	72	72	144
10:00 AM - 11:00 AM	74	64	138
11:00 AM - 12:00 PM	90	74	164
Total	745	491	1,236

Time	Hourly Volume EB	WB	Total
12:00 PM - 1:00 PM	73	92	165
1:00 PM - 2:00 PM	82	79	161
2:00 PM - 3:00 PM	78	100	178
3:00 PM - 4:00 PM	97	149	246
4:00 PM - 5:00 PM	123	108	231
5:00 PM - 6:00 PM	118	120	238
6:00 PM - 7:00 PM	93	98	191
7:00 PM - 8:00 PM	55	63	118
8:00 PM - 9:00 PM	34	63	97
9:00 PM - 10:00 PM	26	38	64
10:00 PM - 11:00 PM	21	23	44
11:00 PM - 12:00 AM	5	15	20
Total	805	948	1,753

24-Hour EB Volume 1,550 | **24-Hour WB Volume 1,439**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Valley Pkwy, btwn W. 11th Ave and Avenida Del Diablo

Orientation: North-South

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

Weather: Sunny

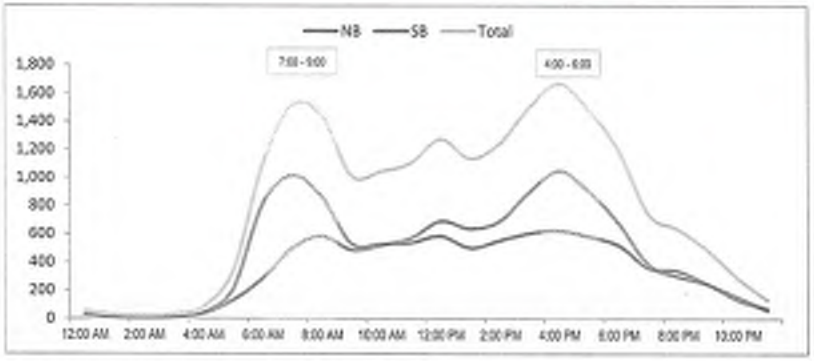
AVC Proj. No: 14-0213

24 Hour Segment Volume: 19,530

Time	Hourly Volume NB	SB	Total
12:00 AM - 1:00 AM	29	27	56
1:00 AM - 2:00 AM	13	15	28
2:00 AM - 3:00 AM	8	11	19
3:00 AM - 4:00 AM	15	17	32
4:00 AM - 5:00 AM	41	43	84
5:00 AM - 6:00 AM	130	207	337
6:00 AM - 7:00 AM	282	811	1,093
7:00 AM - 8:00 AM	497	1,016	1,513
8:00 AM - 9:00 AM	583	858	1,441
9:00 AM - 10:00 AM	485	528	1,013
10:00 AM - 11:00 AM	519	526	1,045
11:00 AM - 12:00 PM	567	536	1103
Total	3,169	4,595	7,764

Time	Hourly Volume NB	SB	Total
12:00 PM - 1:00 PM	690	583	1,273
1:00 PM - 2:00 PM	636	499	1,135
2:00 PM - 3:00 PM	691	552	1,243
3:00 PM - 4:00 PM	897	603	1,500
4:00 PM - 5:00 PM	1,049	622	1,671
5:00 PM - 6:00 PM	900	580	1,480
6:00 PM - 7:00 PM	675	517	1,192
7:00 PM - 8:00 PM	381	359	740
8:00 PM - 9:00 PM	298	333	631
9:00 PM - 10:00 PM	242	241	483
10:00 PM - 11:00 PM	135	150	285
11:00 PM - 12:00 AM	71	62	133
Total	6,665	5,101	11,766

24-Hour NB Volume 9,834 **24-Hour SB Volume 9,696**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: I. S. Auto Park Way to I-15 SB Ramps

Orientation: East-West

Date of Count: Tuesday, August 19, 2014

Analysts: DASH

Weather: Sunny

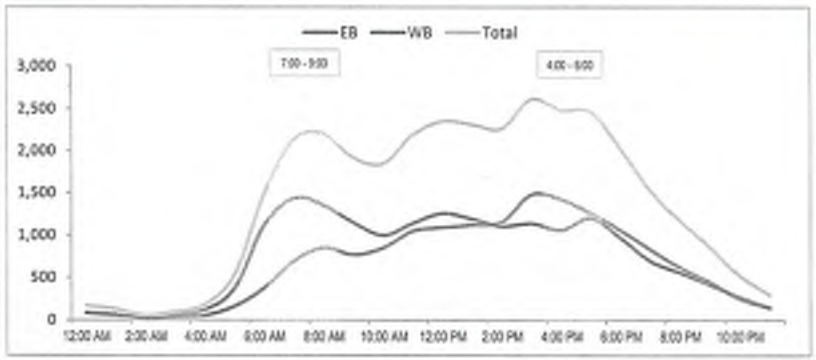
AVC Proj. No: 14-0244

24 Hour Segment Volume: 33,790

Time	Hourly Volume EB	WB	Total
12:00 AM - 1:00 AM	83	89	172
1:00 AM - 2:00 AM	61	67	128
2:00 AM - 3:00 AM	25	33	58
3:00 AM - 4:00 AM	38	64	102
4:00 AM - 5:00 AM	58	126	184
5:00 AM - 6:00 AM	166	376	542
6:00 AM - 7:00 AM	377	1,124	1,501
7:00 AM - 8:00 AM	699	1,435	2,134
8:00 AM - 9:00 AM	850	1,350	2,200
9:00 AM - 10:00 AM	769	1,146	1,915
10:00 AM - 11:00 AM	849	996	1,845
11:00 AM - 12:00 PM	1,046	1,140	2186
Total	5,021	7,946	12,967

Time	Hourly Volume EB	WB	Total
12:00 PM - 1:00 PM	1,089	1,257	2,346
1:00 PM - 2:00 PM	1,119	1,188	2,307
2:00 PM - 3:00 PM	1,156	1,104	2,260
3:00 PM - 4:00 PM	1,476	1,137	2,613
4:00 PM - 5:00 PM	1,418	1,058	2,476
5:00 PM - 6:00 PM	1,253	1,203	2,456
6:00 PM - 7:00 PM	1,054	962	2,016
7:00 PM - 8:00 PM	827	691	1,518
8:00 PM - 9:00 PM	611	554	1,165
9:00 PM - 10:00 PM	439	415	854
10:00 PM - 11:00 PM	251	266	517
11:00 PM - 12:00 AM	149	146	295
Total	10,842	9,981	20,823

24-Hour EB Volume 15,863 **24-Hour WB Volume 17,927**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: W. 9th Ave, btwn Valley Pkwy and Auto Park Way

Orientation: East-West

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

Weather: Sunny

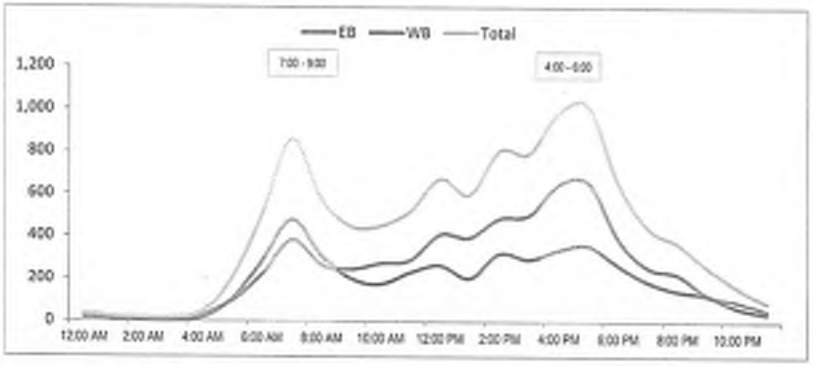
AVC Proj. No: 14-0213

24 Hour Segment Volume: 10,528

Time	Hourly Volume EB	Hourly Volume WB	Hourly Volume Total
12:00 AM - 1:00 AM	25	13	38
1:00 AM - 2:00 AM	10	10	20
2:00 AM - 3:00 AM	11	4	15
3:00 AM - 4:00 AM	12	3	15
4:00 AM - 5:00 AM	30	17	47
5:00 AM - 6:00 AM	99	105	204
6:00 AM - 7:00 AM	218	281	499
7:00 AM - 8:00 AM	383	477	860
8:00 AM - 9:00 AM	266	311	577
9:00 AM - 10:00 AM	245	201	446
10:00 AM - 11:00 AM	273	175	448
11:00 AM - 12:00 PM	288	230	518
Total	1,960	1,827	3,687

Time	Hourly Volume EB	Hourly Volume WB	Hourly Volume Total
12:00 PM - 1:00 PM	409	264	673
1:00 PM - 2:00 PM	395	203	598
2:00 PM - 3:00 PM	484	320	804
3:00 PM - 4:00 PM	500	293	793
4:00 PM - 5:00 PM	648	338	986
5:00 PM - 6:00 PM	655	358	1,013
6:00 PM - 7:00 PM	390	265	655
7:00 PM - 8:00 PM	254	187	441
8:00 PM - 9:00 PM	222	147	369
9:00 PM - 10:00 PM	128	127	255
10:00 PM - 11:00 PM	96	67	163
11:00 PM - 12:00 AM	53	38	91
Total	4,234	2,607	6,841

24-Hour EB Volume 6,094 | **24-Hour WB Volume 4,434**



Vehicular Turn Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Country Club Drive between Country Club Way and Auto Park Way

Orientation: east-west

Date of Count: Tuesday, August 28, 2012

Analysts: DASH

Weather: Sunny

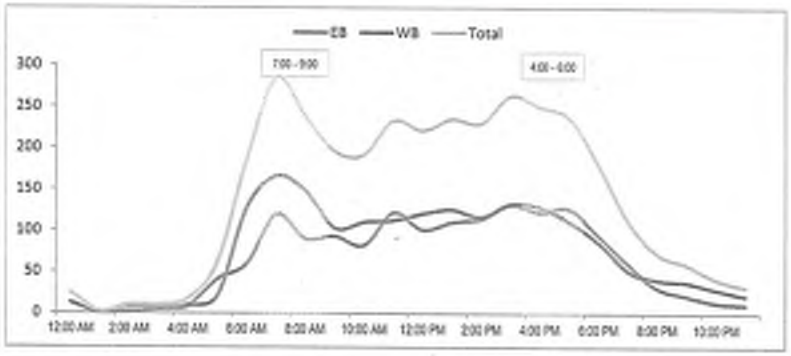
AVC Proj. No: 12-0003

24 Hour Segment Volume: 3,387

Time	Hourly Volume EB	Hourly Volume WB	Hourly Volume Total
12:00 AM - 1:00 AM	12	12	24
1:00 AM - 2:00 AM	1	1	2
2:00 AM - 3:00 AM	2	8	10
3:00 AM - 4:00 AM	4	6	10
4:00 AM - 5:00 AM	8	9	17
5:00 AM - 6:00 AM	41	20	61
6:00 AM - 7:00 AM	59	127	186
7:00 AM - 8:00 AM	119	166	285
8:00 AM - 9:00 AM	90	148	238
9:00 AM - 10:00 AM	93	103	196
10:00 AM - 11:00 AM	82	110	192
11:00 AM - 12:00 PM	121	112	233
Total	632	822	1,454

Time	Hourly Volume EB	Hourly Volume WB	Hourly Volume Total
12:00 PM - 1:00 PM	101	120	221
1:00 PM - 2:00 PM	110	125	235
2:00 PM - 3:00 PM	114	116	230
3:00 PM - 4:00 PM	131	132	263
4:00 PM - 5:00 PM	122	128	250
5:00 PM - 6:00 PM	126	111	237
6:00 PM - 7:00 PM	94	86	180
7:00 PM - 8:00 PM	60	52	112
8:00 PM - 9:00 PM	31	41	72
9:00 PM - 10:00 PM	21	38	59
10:00 PM - 11:00 PM	13	29	42
11:00 PM - 12:00 AM	11	21	32
Total	934	999	1,933

24-Hour EB Volume 1,556 | **24-Hour WB Volume 1,821**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Country Club Dr, btwn Auto Park Way and Kauana Loa Dr

Orientation: North-South

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

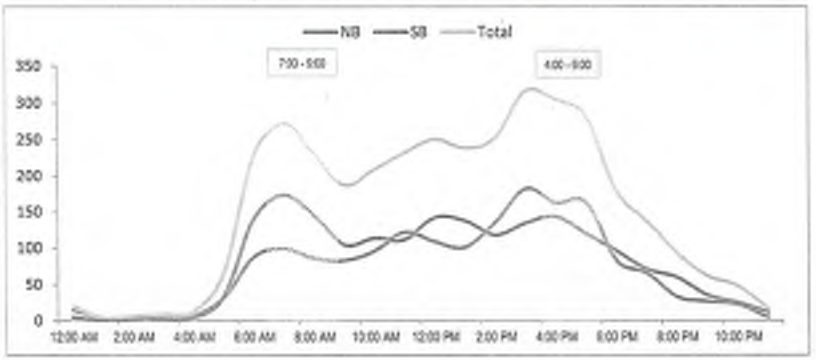
Weather: Sunny

AVC Proj. No: 14-0213

24 Hour Segment Volume: 3,656

Time	Hourly Volume NB	SB	Total	Time	Hourly Volume NB	SB	Total
12:00 AM - 1:00 AM	15	5	20	12:00 PM - 1:00 PM	108	142	250
1:00 AM - 2:00 AM	3	1	4	1:00 PM - 2:00 PM	101	137	238
2:00 AM - 3:00 AM	2	5	7	2:00 PM - 3:00 PM	135	117	252
3:00 AM - 4:00 AM	7	2	9	3:00 PM - 4:00 PM	182	134	316
4:00 AM - 5:00 AM	8	5	13	4:00 PM - 5:00 PM	162	143	305
5:00 AM - 6:00 AM	32	34	66	5:00 PM - 6:00 PM	163	119	282
6:00 AM - 7:00 AM	88	140	228	6:00 PM - 7:00 PM	83	96	179
7:00 AM - 8:00 AM	99	173	272	7:00 PM - 8:00 PM	66	71	137
8:00 AM - 9:00 AM	86	144	230	8:00 PM - 9:00 PM	33	60	93
9:00 AM - 10:00 AM	83	104	187	9:00 PM - 10:00 PM	27	35	62
10:00 AM - 11:00 AM	96	113	209	10:00 PM - 11:00 PM	23	25	48
11:00 AM - 12:00 PM	121	111	232	11:00 PM - 12:00 AM	5	12	17
Total	640	837	1,477	Total	1,088	1,091	2,179

24-Hour NB Volume 1,728 | 24-Hour SB Volume 1,928



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Country Club Dr, btwn Lauana Loa Dr and Harmony Grove Village Pkwy

Orientation: North-South

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

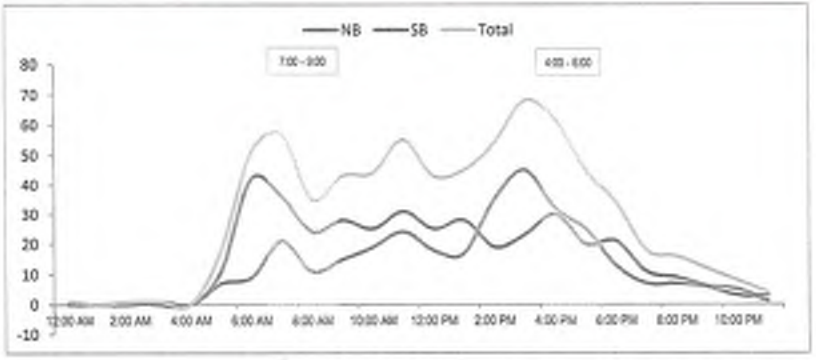
Weather: Sunny

AVC Proj. No: 14-0213

24 Hour Segment Volume: 715

Time	Hourly Volume NB	SB	Total	Time	Hourly Volume NB	SB	Total
12:00 AM - 1:00 AM	0	1	1	12:00 PM - 1:00 PM	18	25	43
1:00 AM - 2:00 AM	0	0	0	1:00 PM - 2:00 PM	17	28	45
2:00 AM - 3:00 AM	0	1	1	2:00 PM - 3:00 PM	35	19	54
3:00 AM - 4:00 AM	1	0	1	3:00 PM - 4:00 PM	45	23	68
4:00 AM - 5:00 AM	0	0	0	4:00 PM - 5:00 PM	32	30	62
5:00 AM - 6:00 AM	7	11	18	5:00 PM - 6:00 PM	25	20	45
6:00 AM - 7:00 AM	9	42	51	6:00 PM - 7:00 PM	13	21	34
7:00 AM - 8:00 AM	21	36	57	7:00 PM - 8:00 PM	7	11	18
8:00 AM - 9:00 AM	11	24	35	8:00 PM - 9:00 PM	7	9	16
9:00 AM - 10:00 AM	15	28	43	9:00 PM - 10:00 PM	6	6	12
10:00 AM - 11:00 AM	19	25	44	10:00 PM - 11:00 PM	5	3	8
11:00 AM - 12:00 PM	24	31	55	11:00 PM - 12:00 AM	1	3	4
Total	107	199	306	Total	211	198	409

24-Hour NB Volume 318 | 24-Hour SB Volume 397



Vehicular Turn Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Country Club Drive between Kauana Loa Drive and Harmony Grove Road

Orientation: north-south

Date of Count: Tuesday, August 28, 2012

Analysts: DASH

Weather: Sunny

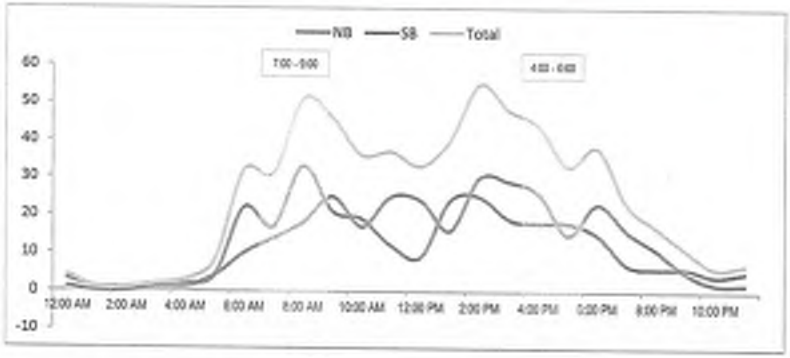
AVC Proj. No: 12-0003

24 Hour Segment Volume: 607

Time	Hourly Volume NB	SB	Total
12:00 AM - 1:00 AM	1	3	4
1:00 AM - 2:00 AM	0	1	1
2:00 AM - 3:00 AM	0	1	1
3:00 AM - 4:00 AM	1	1	2
4:00 AM - 5:00 AM	1	2	3
5:00 AM - 6:00 AM	4	4	8
6:00 AM - 7:00 AM	10	22	32
7:00 AM - 8:00 AM	14	17	31
8:00 AM - 9:00 AM	18	33	51
9:00 AM - 10:00 AM	25	21	46
10:00 AM - 11:00 AM	17	19	36
11:00 AM - 12:00 PM	25	12	37
Total	116	136	252

Time	Hourly Volume NB	SB	Total
12:00 PM - 1:00 PM	24	9	33
1:00 PM - 2:00 PM	16	24	40
2:00 PM - 3:00 PM	30	25	55
3:00 PM - 4:00 PM	29	19	48
4:00 PM - 5:00 PM	26	18	44
5:00 PM - 6:00 PM	15	18	33
6:00 PM - 7:00 PM	23	15	38
7:00 PM - 8:00 PM	16	7	23
8:00 PM - 9:00 PM	11	6	17
9:00 PM - 10:00 PM	5	6	11
10:00 PM - 11:00 PM	2	4	6
11:00 PM - 12:00 AM	2	5	7
Total	199	156	355

24-Hour NB Volume 315 **24-Hour SB Volume 292**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Harmony Grove Rd, West of Country Club Dr

Orientation: East-West

Date of Count: Tuesday, February 04, 2014

Analysts: DASH

Weather: Sunny

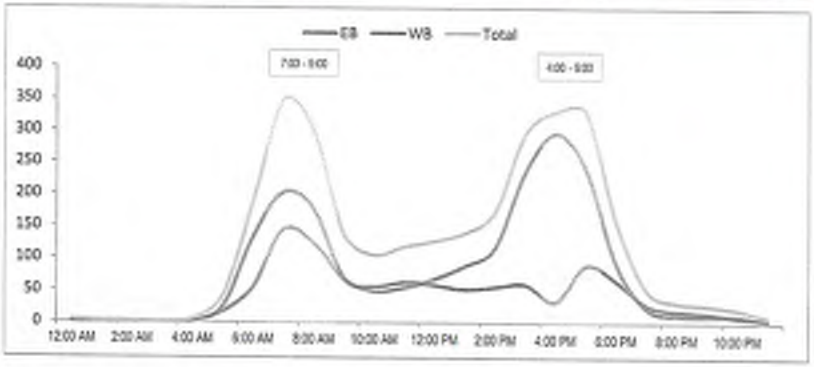
AVC Proj. No: 14-0158

24 Hour Segment Volume: 2,948

Time	Hourly Volume EB	WB	Total
12:00 AM - 1:00 AM	1	4	5
1:00 AM - 2:00 AM	1	1	2
2:00 AM - 3:00 AM	1	1	2
3:00 AM - 4:00 AM	0	0	0
4:00 AM - 5:00 AM	3	3	6
5:00 AM - 6:00 AM	17	24	41
6:00 AM - 7:00 AM	55	133	188
7:00 AM - 8:00 AM	145	203	348
8:00 AM - 9:00 AM	123	176	299
9:00 AM - 10:00 AM	68	69	137
10:00 AM - 11:00 AM	49	56	105
11:00 AM - 12:00 PM	55	63	118
Total	518	733	1,251

Time	Hourly Volume EB	WB	Total
12:00 PM - 1:00 PM	68	59	127
1:00 PM - 2:00 PM	88	52	140
2:00 PM - 3:00 PM	117	56	173
3:00 PM - 4:00 PM	236	60	296
4:00 PM - 5:00 PM	297	33	330
5:00 PM - 6:00 PM	240	89	329
6:00 PM - 7:00 PM	92	66	158
7:00 PM - 8:00 PM	24	28	52
8:00 PM - 9:00 PM	13	19	32
9:00 PM - 10:00 PM	12	16	28
10:00 PM - 11:00 PM	12	10	22
11:00 PM - 12:00 AM	4	6	10
Total	1,203	494	1,697

24-Hour EB Volume 1,721 **24-Hour WB Volume 1,227**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Harmony Grove Rd, btwn Kauana Loa Dr to Harmony Grove Village Pkwy

Orientation: North-South

Date of Count: Tuesday, June 03, 2014

Analysts: DASH

Weather: Sunny

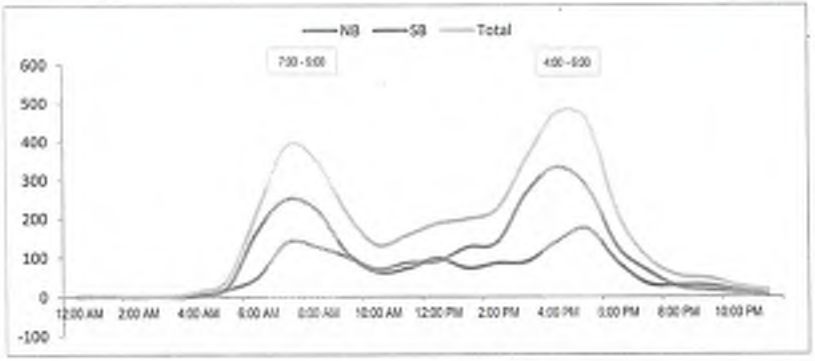
AVC Proj. No: 14-0213

24 Hour Segment Volume: 3,871

Time	Hourly Volume NB	SB	Total
12:00 AM - 1:00 AM	0	3	3
1:00 AM - 2:00 AM	1	1	2
2:00 AM - 3:00 AM	0	1	1
3:00 AM - 4:00 AM	1	0	1
4:00 AM - 5:00 AM	8	4	12
5:00 AM - 6:00 AM	19	26	45
6:00 AM - 7:00 AM	50	170	220
7:00 AM - 8:00 AM	140	250	390
8:00 AM - 9:00 AM	127	219	346
9:00 AM - 10:00 AM	101	110	211
10:00 AM - 11:00 AM	69	63	132
11:00 AM - 12:00 PM	86	72	158
Total	602	919	1,521

Time	Hourly Volume NB	SB	Total
12:00 PM - 1:00 PM	90	97	187
1:00 PM - 2:00 PM	126	72	198
2:00 PM - 3:00 PM	140	85	225
3:00 PM - 4:00 PM	269	89	358
4:00 PM - 5:00 PM	331	142	473
5:00 PM - 6:00 PM	279	174	453
6:00 PM - 7:00 PM	126	87	213
7:00 PM - 8:00 PM	65	33	98
8:00 PM - 9:00 PM	25	29	54
9:00 PM - 10:00 PM	18	29	47
10:00 PM - 11:00 PM	10	17	27
11:00 PM - 12:00 AM	3	14	17
Total	1,482	868	2,350

24-Hour NB Volume 2,084 24-Hour SB Volume 1,787



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Harmony Grove Rd, East of Kauna Loa Dr

Orientation: East-West

Date of Count: Tuesday, February 04, 2014

Analysts: DASH

Weather: Sunny

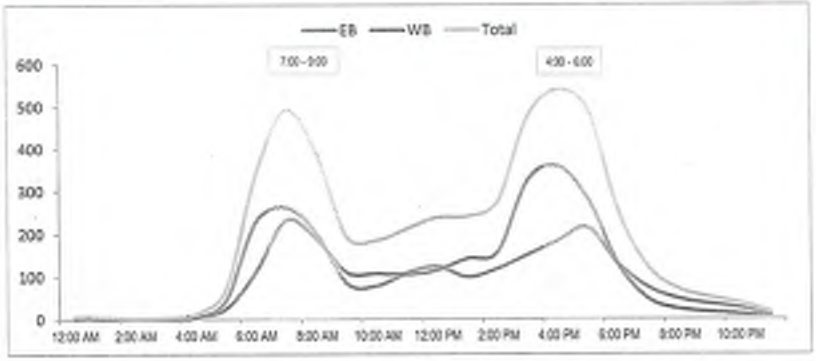
AVC Proj. No: 14-0158

24 Hour Segment Volume: 4,705

Time	Hourly Volume EB	WB	Total
12:00 AM - 1:00 AM	5	2	7
1:00 AM - 2:00 AM	1	4	5
2:00 AM - 3:00 AM	1	1	2
3:00 AM - 4:00 AM	1	3	4
4:00 AM - 5:00 AM	5	7	12
5:00 AM - 6:00 AM	44	25	69
6:00 AM - 7:00 AM	226	110	336
7:00 AM - 8:00 AM	261	230	491
8:00 AM - 9:00 AM	202	190	392
9:00 AM - 10:00 AM	84	109	193
10:00 AM - 11:00 AM	78	106	184
11:00 AM - 12:00 PM	107	104	211
Total	1,015	891	1,906

Time	Hourly Volume EB	WB	Total
12:00 PM - 1:00 PM	122	114	236
1:00 PM - 2:00 PM	98	141	239
2:00 PM - 3:00 PM	117	156	273
3:00 PM - 4:00 PM	150	323	473
4:00 PM - 5:00 PM	183	357	540
5:00 PM - 6:00 PM	213	280	493
6:00 PM - 7:00 PM	126	125	251
7:00 PM - 8:00 PM	73	46	119
8:00 PM - 9:00 PM	47	23	70
9:00 PM - 10:00 PM	35	16	51
10:00 PM - 11:00 PM	26	11	37
11:00 PM - 12:00 AM	9	8	17
Total	1,199	1,600	2,799

24-Hour EB Volume 2,214 24-Hour WB Volume 2,491



PeMS CAPM M15.596 Abs 15.6

Lane Flow 1	Lane Flow 2	Lane Flow 3	Lane Flow 4	Lane Flow 5	Total
1483	1107	1554			4144
1475	1538	2084			5097

PeMS CAPM M14.86 Abs 14.9

Lane Flow 1	Lane Flow 2	Lane Flow 3	Lane Flow 4	Total
1932	1695	1367		4994
1890	1667	1426		4983

WESTBOUND

Segment #1: PeMS CAPM M15.369 Abs 15.4
Mainline East of Nordahl

Sample Time	Lane Flow 1	Lane Flow 2	Lane Flow 3	Lane Flow 4	Lane Flow 5	Total
10/11/2011 7:00	2225	1956	1482			5663
10/11/2011 16:00	1757	1842	1471			5070

Segment #2: PeMS CAPM M14.14 Abs 14.1
Mainline West of Nordahl

Sample Time	Lane Flow 1	Lane Flow 2	Lane Flow 3	Lane Flow 4	Lane Flow 5	Total
10/11/2011 8:00	2394	2112	1356			5862
10/11/2011 16:00	2140	2036	1449			5625

APPENDIX C

HIGHWAY CAPACITY MANUAL INTERSECTION METHODOLOGY

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2000 HIGHWAY CAPACITY MANUAL LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

In the 2000 Highway Capacity Manual (HCM), Level of Service for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. Level of Service is not defined for the intersection as a whole. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The criteria are given in the following the table, and are based on the average control delay for any particular minor movement.

LEVEL OF SERVICE	AVERAGE CONTROL DELAY SEC/VEH			EXPECTED DELAY TO MINOR STREET TRAFFIC
A	0.0	≤	10.0	Little or no delay
B	10.1	to	15.0	Short traffic delays
C	15.1	to	25.0	Average traffic delays
D	25.1	to	35.0	Long traffic delays
E	35.1	to	50.0	Very long traffic delays
F		>	50.0	Severe congestion

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This Level of Service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form on side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

In most cases at Two-Way Stop Controlled (TWSC) intersections, the critical movement is the minor-street left-turn movement. As such, the minor-street left-turn movement can generally be considered the primary factor affecting overall intersection performance. The lower threshold for LOS F is set at 50 seconds of delay per vehicle. There are many instances, particularly in urban areas, in which the delay equations will predict delays of 50 seconds (LOS F) or more for minor-street movements under very low volume conditions on the minor street (less than 25 vehicle/hour). Since the first term of the equation is a function only of the capacity, the LOS F threshold of 50 sec/vehicle is reached with a movement capacity of approximately 85 vehicle/hour or less.

This procedure assumes random arrivals on the major street. For a typical four-lane arterial with average daily traffic volumes in the range of 15,000 to 20,000 vehicles per day (peak hour, 1,500 to 2,000 vehicle/hour), the delay equation used in the TWSC capacity analysis procedure will predict 50 seconds of delay or more (LOS F) for many urban TWSC intersections that allow minor-street left-turn movements. **The LOS F threshold will be reached regardless of the volume of minor-street left-turn traffic.** Not-withstanding this fact, most low-volume minor-street approaches would not meet any of the volume or delay warrants for signalization of the *Manual on Uniform Traffic Control Devices* (MUTCD) since the warrants define an asymptote at 100 vehicle/hour on the minor approach. As a result, many public agencies that use the HCM Level of Service thresholds to determine the design adequacy of TWSC intersections may be forced to eliminate the minor-street left-turn movement, even when the movement may not present any operational problem, such as the formation of long queues on the minor street or driveway approach.

2000 HIGHWAY CAPACITY MANUAL LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

In the 2000 Highway Capacity Manual (HCM), Level of Service for signalized intersections is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Specifically, Level of Service criteria are stated in terms of the average control delay per vehicle for a 15-minute analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Delay is a complex measure, and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group or approach in question.

LEVEL OF SERVICE	CONTROLLED DELAY PER VEHICLE (SEC)		
A		≤	10.0
B	10.1	to	20.0
C	20.1	to	35.0
D	35.1	to	55.0
E	55.1	to	80.0
F		>	80.0

Level of Service A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level of Service B describes operations with delay in the range of 10.1 to 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

Level of Service C describes operations with delay in the range of 20.1 to 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in the level. The number of vehicles stopping is significant at this level, although many still pass through the intersections without stopping.

Level of Service D describes operations with delay in the range of 35.1 to 55.0 seconds per vehicle. At Level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

Level of Service E describes operations with delay in the range of 55.1 to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level of Service F describes operations with delay in excess of 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e. when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

APPENDIX D

COUNTY OF SAN DIEGO AND CITY OF ESCONDIDO ROADWAY CLASSIFICATION TABLES

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TABLE 1
AVERAGE DAILY VEHICLE TRIPS*

MOBILITY ELEMENT ROADS			LEVELS OF SERVICE				
Road Classification		# of Travel Lanes	A	B	C	D	E
Expressway (6.1)		6	<36,000	<54,000	<70,000	<86,000	<108,000
Prime Arterial (6.2)		6	<22,200	<37,000	<44,600	<50,000	<57,000
Major Road	w/ Raised Median (4.1A)	4	<14,800	<24,700	<29,600	<33,400	<37,000
	w/ Intermittent Turn Lanes (4.1B)	4	<13,700	<22,800	<27,400	<30,800	<34,200
Boulevard	w/ Raised Median (4.2A)	4	<18,000	<21,000	<24,000	<27,000	<30,000
	w/ Intermittent Turn Lanes (4.2B)	4	<16,800	<19,600	<22,500	<25,000	<28,000
Community Collector	w/ Raised Median (2.1A)	2	<10,000	<11,700	<13,400	<15,000	<19,000
	w/ Continuous Left Turn Lane (2.1B)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Intermittent Turn Lane (2.1C)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Passing Lane (2.1D)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	No Median (2.1E)	2	<1,900	<4,100	<7,100	<10,900	<16,200
Light Collector	w/ Raised Median (2.2A)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Continuous Left Turn Lane (2.2B)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Intermittent Turn Lane (2.2C)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Passing Lane (2.2D)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	No Median (2.2E)	2	<1,900	<4,100	<7,100	<10,900	<16,200
	w/ Reduced Shoulder (2.2F)	2	<5,800	<6,800	<7,800	<8,700	<9,700
Minor Collector	w/ Raised Median (2.3A)	2	<3,000	<6,000	<7,000	<8,000	<9,000
	w/ Intermittent Turn Lane (2.3B)	2	<3,000	<6,000	<7,000	<8,000	<9,000
	No Median (2.3C)	2	<1,900	<4,100	<6,000	<7,000	<8,000
NON-MOBILITY ELEMENT ROADS**			LEVELS OF SERVICE				
Residential Collector		2	-	-	<4,500	-	-
Rural Residential Collector***		2	-	-	<4,500	-	-
Residential Road		2	-	-	<1,500	-	-
Rural Residential Road***		2	-	-	<1,500	-	-
Residential Cul-de-Sac or Loop Road		2	-	-	<200	-	-

* The values shown are subject to adjustment based on the geometry of the roadway, side frictions, and other relevant factors as determined by the Director, Department of Public Works.

** Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

*** Rural Residential Collectors and Rural Residential Roads are intended to serve areas with lot sizes of 2 acres or more which do not have a demand for on-street parking. On-street parking is not assured for these cross sections. Additional right-of-way is needed if on-street parking is in paved area.

**** See Tables 2A and 2B for roadway surfacing and right-of-way widths.

Table

CITY OF ESCONDIDO PROPOSED LEVEL OF SERVICE STANDARDS

STREET SEGMENT AVERAGE DAILY VEHICLE TRIP THRESHOLDS

Street Classification	Lanes	Cross Sections	Level of Service				
			A	B	C	D	E
Prime Arterial	(8lanes)	116/136 (NP)	23,800	37,800	51,800	62,300	70,000
	(6lanes)	106/126 (NP)	20,400	32,400	44,400	53,400	60,000
Major Road	(6lanes)	90/110 (NP)	17,000	27,000	37,000	44,500	50,000
	(4lanes)	82/102 (NP)	12,600	20,000	27,400	32,900	37,000
Collector	(4lanes)	64/84 (NP)	11,600	18,500	25,300	30,400	34,200
	(4lanes)	(WP)	6,800	10,800	14,800	17,800	20,000
Local Collector	(2lanes)	42/66 (NP)	5,100	8,100	11,100	13,400	15,000
		(WP)	3,400	5,400	7,400	8,900	10,000
Rural collector	(2lanes)						

(NP) No Parking
(WP) With Parking

The following V/C Ratios were utilized for determining Existing and Future Level of Service.

Level of Service		Volume/Capacity (V/C) Ratio		
A-	Less than or Equal to	0.00	to	0. 34
B-	Less than or Equal to	0.35	to	0. 54
C-	Less than or Equal to	0.55	to	0. 74
D-	Less than or Equal to	0.75	to	0. 89
E-	Less than or Equal to	0.90	to	1. 00

V/C 0.74

APPENDIX E

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS
EXISTING

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	437	7	145	379	482	0	0	560	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.6	5.6	5.6	5.2	5.6			5.6	5.6
Lane Util. Factor				0.95	0.91	0.95	0.97	0.95			0.91	1.00
Frt				1.00	0.99	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1681	1606	1504	3433	3539			5085	1583
Flt Permitted				0.95	0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1681	1606	1504	3433	3539			5085	1583
Peak-hour factor, 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
Adj. Flow (vph)	0	0	0	475	8	158	412	524	0	0	609	323
RTOR Reduction (vph)	0	0	0	0	3	110	0	0	0	0	0	189
Lane Group Flow (vph)	0	0	0	252	244	32	412	524	0	0	609	134
Turn Type				Split		Perm	Prot					Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Actuated Green, G (s)				22.3	22.3	22.3	19.8	66.5			41.5	41.5
Effective Green, g (s)				22.3	22.3	22.3	19.8	66.5			41.5	41.5
Actuated g/C Ratio				0.22	0.22	0.22	0.20	0.66			0.42	0.42
Clearance Time (s)				5.6	5.6	5.6	5.2	5.6			5.6	5.6
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				375	358	335	680	2353			2110	657
v/s Ratio Prot				0.15	c0.15		c0.12	0.15			c0.12	
v/s Ratio Perm						0.02						0.08
v/c Ratio				0.67	0.68	0.09	0.61	0.22			0.29	0.20
Uniform Delay, d1				35.5	35.6	30.8	36.5	6.6			19.4	18.7
Progression Factor				1.00	1.00	1.00	0.71	0.55			1.00	1.00
Incremental Delay, d2				4.7	5.3	0.1	1.4	0.2			0.3	0.7
Delay (s)				40.2	40.9	31.0	27.5	3.8			19.8	19.4
Level of Service				D	D	C	C	A			B	B
Approach Delay (s)		0.0			38.4			14.3			19.7	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM Average Control Delay	22.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	248	137	671	0	0	0	0	613	402	189	808	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	5.6					5.6	5.6	5.2	5.5	
Lane Util. Factor	0.95	0.91	0.95					0.95	0.88	0.97	0.95	
Frt	1.00	0.91	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1532	1504					3539	2787	3433	3539	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1532	1504					3539	2787	3433	3539	
Peak-hour factor, 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
Adj. Flow (vph)	270	149	729	0	0	0	0	666	437	205	878	0
RTOR Reduction (vph)	0	58	58	0	0	0	0	0	268	0	0	0
Lane Group Flow (vph)	243	410	379	0	0	0	0	666	169	205	878	0
Turn Type	Split		Perm						Perm	Prot		
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	34.6	34.6	34.6					38.6	38.6	10.4	54.3	
Effective Green, g (s)	34.6	34.6	34.6					38.6	38.6	10.4	54.3	
Actuated g/C Ratio	0.35	0.35	0.35					0.39	0.39	0.10	0.54	
Clearance Time (s)	5.6	5.6	5.6					5.6	5.6	5.2	5.5	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	582	530	520					1366	1076	357	1922	
v/s Ratio Prot	0.14	c0.27						0.19		0.06	c0.25	
v/s Ratio Perm			0.25						0.06			
v/c Ratio	0.42	0.77	0.73					0.49	0.16	0.57	0.46	
Uniform Delay, d1	25.0	29.2	28.6					23.2	20.1	42.7	13.9	
Progression Factor	1.00	1.00	1.00					0.59	1.00	1.11	0.38	
Incremental Delay, d2	0.5	6.9	5.1					1.2	0.3	2.1	0.8	
Delay (s)	25.5	36.1	33.7					15.0	20.4	49.5	6.0	
Level of Service	C	D	C					B	C	D	A	
Approach Delay (s)		32.9			0.0			17.1			14.2	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	260	294	165	63	339	205	200	543	30	364	748	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	3433	4897	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	3433	4897	
Peak-hour factor, 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
Adj. Flow (vph)	283	320	179	68	368	223	217	590	33	396	813	266
RTOR Reduction (vph)	0	0	131	0	0	182	0	0	19	0	53	0
Lane Group Flow (vph)	283	320	48	68	368	41	217	590	14	396	1026	0
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	13.5	26.7	26.7	4.0	18.2	18.2	11.0	33.8	33.8	15.5	38.3	
Effective Green, g (s)	13.5	26.7	26.7	4.0	18.2	18.2	11.0	33.8	33.8	15.5	38.3	
Actuated g/C Ratio	0.14	0.27	0.27	0.04	0.18	0.18	0.11	0.34	0.34	0.16	0.38	
Clearance Time (s)	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	463	945	423	137	644	288	378	1719	535	532	1876	
v/s Ratio Prot	c0.08	0.09		0.02	c0.10		c0.06	0.12		c0.12	c0.21	
v/s Ratio Perm			0.03			0.03			0.01			
v/c Ratio	0.61	0.34	0.11	0.50	0.57	0.14	0.57	0.34	0.03	0.74	0.55	
Uniform Delay, d1	40.8	29.5	27.7	47.0	37.3	34.3	42.3	24.8	22.1	40.4	24.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.21	0.81	
Incremental Delay, d2	2.4	0.2	0.1	2.8	1.2	0.2	2.1	0.5	0.1	4.8	1.0	
Delay (s)	43.2	29.7	27.8	49.8	38.6	34.6	44.4	25.3	22.2	53.6	20.6	
Level of Service	D	C	C	D	D	C	D	C	C	D	C	
Approach Delay (s)		34.2			38.4			30.1			29.4	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM Average Control Delay	32.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	189	0	19	0	0	0	83	528	1	64	900	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00		1.00				1.00	0.95		1.00	0.95	
Frt	1.00		0.85				1.00	1.00		1.00	0.98	
Flt Protected	0.95		1.00				0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1583				1770	3538		1770	3463	
Flt Permitted	0.76		1.00				0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1410		1583				1770	3538		1770	3463	
Peak-hour factor, 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
Adj. Flow (vph)	205	0	21	0	0	0	90	574	1	70	978	164
RTOR Reduction (vph)	0	0	17	0	0	0	0	0	0	0	13	0
Lane Group Flow (vph)	205	0	4	0	0	0	90	575	0	70	1129	0
Turn Type	Perm		Perm	Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)	16.9		16.9				7.4	48.3		6.7	47.6	
Effective Green, g (s)	16.9		16.9				7.4	48.3		6.7	47.6	
Actuated g/C Ratio	0.20		0.20				0.09	0.58		0.08	0.57	
Clearance Time (s)	4.0		4.0				4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0		3.0				3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	284		319				156	2037		141	1965	
v/s Ratio Prot							c0.05	0.16		0.04	c0.33	
v/s Ratio Perm	c0.15		0.00									
v/c Ratio	0.72		0.01				0.58	0.28		0.50	0.57	
Uniform Delay, d1	31.3		26.8				36.7	9.0		37.0	11.7	
Progression Factor	1.00		1.00				1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.7		0.0				5.1	0.3		2.7	1.2	
Delay (s)	40.0		26.8				41.8	9.4		39.7	12.9	
Level of Service	D		C				D	A		D	B	
Approach Delay (s)		38.8			0.0			13.8			14.4	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	83.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	129	99	145	340	106	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	1863	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	1863	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	140	108	158	370	115	158
RTOR Reduction (vph)	0	87	0	0	0	73
Lane Group Flow (vph)	140	21	158	370	115	85
Turn Type		Perm	Prot			pm+ov
Protected Phases	4		3	8	2	3
Permitted Phases		4				2
Actuated Green, G (s)	10.0	10.0	8.2	22.7	19.0	27.2
Effective Green, g (s)	10.0	10.0	8.2	22.7	19.0	27.2
Actuated g/C Ratio	0.20	0.20	0.16	0.45	0.37	0.54
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	367	312	286	834	663	990
v/s Ratio Prot	0.08		c0.09	c0.20	c0.06	0.01
v/s Ratio Perm		0.01				0.04
v/c Ratio	0.38	0.07	0.55	0.44	0.17	0.09
Uniform Delay, d1	17.7	16.6	19.6	9.6	10.6	5.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	2.3	0.4	0.6	0.0
Delay (s)	18.3	16.7	21.9	10.0	11.2	5.7
Level of Service	B	B	C	B	B	A
Approach Delay (s)	17.6			13.6	8.0	
Approach LOS	B			B	A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	50.7	Sum of lost time (s)	9.0
Intersection Capacity Utilization	31.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	10	0	0	226	8	147	82	0	260	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	11	0	0	246	9	160	89	0	283	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	626	549	141	329	460	80	283			249		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	626	549	141	329	460	80	283			249		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	75	99			100		
cM capacity (veh/h)	273	439	881	590	493	964	1277			1314		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2
Volume Total	11	246	9	80	80	89	188	94
Volume Left	0	0	9	0	0	0	0	0
Volume Right	11	246	0	0	0	89	0	0
cSH	881	964	1277	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.25	0.01	0.05	0.05	0.05	0.11	0.06
Queue Length 95th (ft)	1	25	1	0	0	0	0	0
Control Delay (s)	9.1	10.0	7.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B	A					
Approach Delay (s)	9.1	10.0	0.3				0.0	
Approach LOS	A	B						

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	24.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	331	740	0	0	770	177	303	3	341	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5			5.5	5.5		4.6	4.6			
Lane Util. Factor	0.97	0.91			0.91	1.00		1.00	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	3433	5085			5085	1556		1775	1583			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	3433	5085			5085	1556		1775	1583			
Peak-hour factor, 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
Adj. Flow (vph)	360	804	0	0	837	192	329	3	371	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	130	0	0	86	0	0	0
Lane Group Flow (vph)	360	804	0	0	837	62	0	332	285	0	0	0
Confl. Peds. (#/hr)			2			3	6					
Turn Type	Prot					Perm	Split		Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.2	54.5			34.1	34.1		40.4	40.4			
Effective Green, g (s)	16.2	54.5			34.1	34.1		40.4	40.4			
Actuated g/C Ratio	0.15	0.52			0.32	0.32		0.38	0.38			
Clearance Time (s)	4.2	5.5			5.5	5.5		4.6	4.6			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	530	2639			1651	505		683	609			
v/s Ratio Prot	c0.10	0.16			c0.16			c0.19				
v/s Ratio Perm						0.04			0.18			
v/c Ratio	0.68	0.30			0.51	0.12		0.49	0.47			
Uniform Delay, d1	41.9	14.4			28.7	24.9		24.4	24.2			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	3.5	0.3			1.1	0.5		2.5	2.6			
Delay (s)	45.4	14.7			29.8	25.4		26.9	26.8			
Level of Service	D	B			C	C		C	C			
Approach Delay (s)		24.2			29.0			26.9			0.0	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM Average Control Delay	26.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.3
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	768	75	103	812	158	36	42	90	213	101	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5	5.5	4.2	5.5	5.5	4.6	4.6	4.6		4.6	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.81	0.81	1.00	1.00	1.00		0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	3433	5085	1560	3433	6016	1258	1770	1863	1583		3180	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.99	
Satd. Flow (perm)	3433	5085	1560	3433	6016	1258	1770	1863	1583		3180	
Peak-hour factor, 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
Adj. Flow (vph)	75	835	82	112	883	172	39	46	98	232	110	502
RTOR Reduction (vph)	0	0	50	0	2	90	0	0	87	0	277	0
Lane Group Flow (vph)	75	835	32	112	898	65	39	46	11	0	567	0
Confl. Peds. (#/hr)			2			5						
Turn Type	Prot		Perm	Prot		Perm	Split		Perm	Split		
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases			2			6			3			
Actuated Green, G (s)	6.6	42.4	42.4	10.3	46.1	46.1	12.0	12.0	12.0		26.4	
Effective Green, g (s)	6.6	42.4	42.4	10.3	46.1	46.1	12.0	12.0	12.0		26.4	
Actuated g/C Ratio	0.06	0.39	0.39	0.09	0.42	0.42	0.11	0.11	0.11		0.24	
Clearance Time (s)	4.2	5.5	5.5	4.2	5.5	5.5	4.6	4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	206	1960	601	321	2521	527	193	203	173		763	
v/s Ratio Prot	0.02	c0.16		c0.03	c0.15		0.02	c0.02			c0.18	
v/s Ratio Perm			0.02			0.05			0.01			
v/c Ratio	0.36	0.43	0.05	0.35	0.36	0.12	0.20	0.23	0.06		0.74	
Uniform Delay, d1	49.7	24.9	21.2	46.7	21.8	19.6	44.6	44.8	44.0		38.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7	0.2	0.7	0.1	0.1	0.5	0.6	0.2		3.9	
Delay (s)	50.8	25.5	21.4	47.4	21.9	19.7	45.2	45.3	44.1		42.6	
Level of Service	D	C	C	D	C	B	D	D	D		D	
Approach Delay (s)		27.1			24.1			44.6			42.6	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	24.4
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	179	365	320	75	583	31	229	650	39	98	832	560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	0.93		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3291		3433	3512		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3291		3433	3512		3433	5085	1583	3433	5085	1583
Peak-hour factor, 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
Adj. Flow (vph)	195	397	348	82	634	34	249	707	42	107	904	609
RTOR Reduction (vph)	0	150	0	0	4	0	0	0	28	0	0	15
Lane Group Flow (vph)	195	595	0	82	664	0	249	707	14	107	904	594
Turn Type	Prot			Prot			Prot		Perm	Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	15.1	33.1		3.9	21.9		9.8	31.3	31.3	5.4	24.9	40.0
Effective Green, g (s)	15.1	33.1		3.9	21.9		9.8	31.3	31.3	5.4	24.9	40.0
Actuated g/C Ratio	0.16	0.36		0.04	0.24		0.11	0.34	0.34	0.06	0.27	0.44
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	565	1188		146	839		367	1736	540	202	1381	777
v/s Ratio Prot	0.06	0.18		0.02	c0.19		c0.07	0.14		0.03	0.18	c0.13
v/s Ratio Perm									0.01			0.25
v/c Ratio	0.35	0.50		0.56	0.79		0.68	0.41	0.03	0.53	0.65	0.76
Uniform Delay, d1	33.9	22.9		43.1	32.8		39.4	23.1	20.1	41.9	29.6	21.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3		4.9	5.1		4.9	0.7	0.1	2.5	2.4	4.5
Delay (s)	34.3	23.2		47.9	37.9		44.4	23.8	20.2	44.4	32.0	26.4
Level of Service	C	C		D	D		D	C	C	D	C	C
Approach Delay (s)		25.5			39.0			28.8			30.7	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	91.7	Sum of lost time (s)	15.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	195	12	117	270	146	7	577	128	93	1058	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.95		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3509		1770	3352		1770	4947		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3509		1770	3352		1770	4947		1770	4936	
Peak-hour factor, 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
Adj. Flow (vph)	175	212	13	127	293	159	8	627	139	101	1150	279
RTOR Reduction (vph)	0	5	0	0	84	0	0	31	0	0	33	0
Lane Group Flow (vph)	175	220	0	127	368	0	8	735	0	101	1396	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	12.0	17.4		10.7	16.1		0.7	34.5		7.8	41.6	
Effective Green, g (s)	12.0	17.4		10.7	16.1		0.7	34.5		7.8	41.6	
Actuated g/C Ratio	0.13	0.19		0.12	0.18		0.01	0.38		0.09	0.46	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	235	675		210	597		14	1888		153	2271	
v/s Ratio Prot	c0.10	0.06		0.07	c0.11		0.00	0.15		c0.06	c0.28	
v/s Ratio Perm												
v/c Ratio	0.74	0.33		0.60	0.62		0.57	0.39		0.66	0.61	
Uniform Delay, d1	37.7	31.4		37.8	34.3		44.7	20.3		40.0	18.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	12.1	0.3		4.9	1.9		46.0	0.6		10.2	1.3	
Delay (s)	49.8	31.7		42.7	36.2		90.7	20.9		50.2	19.6	
Level of Service	D	C		D	D		F	C		D	B	
Approach Delay (s)		39.6			37.6			21.6			21.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	26.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	15.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	19	24	14	42	49	20	637	6	25	987	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.92		1.00	0.92		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1708		1770	1713		1770	3534		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1708		1770	1713		1770	3534		1770	3539	1583
Peak-hour factor, 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
Adj. Flow (vph)	54	21	26	15	46	53	22	692	7	27	1073	46
RTOR Reduction (vph)	0	24	0	0	48	0	0	1	0	0	0	22
Lane Group Flow (vph)	54	23	0	15	51	0	22	698	0	27	1073	24
Turn Type	Split			Split			Prot			Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	5.9	5.9		6.0	6.0		0.7	31.6		1.9	32.8	32.8
Effective Green, g (s)	5.9	5.9		6.0	6.0		0.7	31.6		1.9	32.8	32.8
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.01	0.50		0.03	0.52	0.52
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	165	159		168	162		20	1761		53	1831	819
v/s Ratio Prot	c0.03	0.01		0.01	c0.03		0.01	0.20		c0.02	c0.30	
v/s Ratio Perm												0.02
v/c Ratio	0.33	0.15		0.09	0.31		1.10	0.40		0.51	0.59	0.03
Uniform Delay, d1	26.9	26.4		26.2	26.8		31.3	9.9		30.3	10.6	7.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	0.4		0.2	1.1		234.8	0.7		7.5	1.4	0.1
Delay (s)	28.1	26.9		26.4	27.9		266.1	10.6		37.8	12.0	7.6
Level of Service	C	C		C	C		F	B		D	B	A
Approach Delay (s)		27.5			27.7			18.4			12.4	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	9	345	80	11	46	290	283	38	123	926	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3477		1770	3526	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	3477		1770	3526	
Peak-hour factor, 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
Adj. Flow (vph)	80	10	375	87	12	50	315	308	41	134	1007	26
RTOR Reduction (vph)	0	0	333	0	0	46	0	9	0	0	2	0
Lane Group Flow (vph)	80	10	42	87	12	4	315	340	0	134	1031	0
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	7.7	9.5	9.5	5.7	7.5	7.5	19.3	42.2		9.3	32.2	
Effective Green, g (s)	7.7	9.5	9.5	5.7	7.5	7.5	19.3	42.2		9.3	32.2	
Actuated g/C Ratio	0.09	0.11	0.11	0.07	0.09	0.09	0.23	0.50		0.11	0.38	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	161	209	178	119	165	140	403	1732		194	1340	
v/s Ratio Prot	0.05	0.01		c0.05	0.01		c0.18	0.10		0.08	c0.29	
v/s Ratio Perm			c0.03			0.00						
v/c Ratio	0.50	0.05	0.24	0.73	0.07	0.03	0.78	0.20		0.69	0.77	
Uniform Delay, d1	36.7	33.6	34.3	38.7	35.4	35.3	30.7	11.8		36.3	23.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	0.1	0.7	20.5	0.2	0.1	9.5	0.1		10.1	2.7	
Delay (s)	39.1	33.7	35.0	59.2	35.6	35.4	40.2	11.9		46.4	25.7	
Level of Service	D	C	C	E	D	D	D	B		D	C	
Approach Delay (s)		35.7			49.3			25.3			28.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	30.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	84.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	552	627	121	1156	0	0	0	0	155	7	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.2	5.0					4.6	4.6	4.6
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3374	1467	1687	3374					1603	1615	1509
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3374	1467	1687	3374					1603	1615	1509
Peak-hour factor, PHF	0.92	0.78	0.94	0.69	0.86	0.92	0.92	0.92	0.92	0.78	0.58	0.76
Adj. Flow (vph)	0	708	667	175	1344	0	0	0	0	199	12	96
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	37
Lane Group Flow (vph)	0	708	667	175	1344	0	0	0	0	105	106	59
Confl. Peds. (#/hr)			11									
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	2%	7%	7%	7%	7%	2%	2%	2%	2%	7%	7%	7%
Turn Type			Perm	Prot						Split		custom
Protected Phases		2		1	6					4	4	4 5
Permitted Phases			2									4
Actuated Green, G (s)		46.5	46.5	13.3	55.8					11.4	11.4	20.2
Effective Green, g (s)		46.5	46.5	13.3	55.8					11.4	11.4	20.2
Actuated g/C Ratio		0.55	0.55	0.16	0.66					0.13	0.13	0.24
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6	4.6	
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1846	803	264	2215					215	217	359
v/s Ratio Prot		0.21		c0.10	0.40					0.07	c0.07	0.04
v/s Ratio Perm			c0.45									
v/c Ratio		0.38	0.83	0.66	0.61					0.49	0.49	0.16
Uniform Delay, d1		11.0	16.0	33.7	8.3					34.1	34.1	25.7
Progression Factor		1.00	1.00	1.11	1.12					1.00	1.00	1.00
Incremental Delay, d2		0.6	9.7	5.4	1.0					1.7	1.7	0.2
Delay (s)		11.6	25.7	42.9	10.3					35.8	35.8	25.9
Level of Service		B	C	D	B					D	D	C
Approach Delay (s)		18.5			14.1			0.0			32.7	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	13.8
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	595	0	0	633	303	644	1	178	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.0			5.0	5.0	4.6	4.6	4.6			
Lane Util. Factor	0.97	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3273	3374			3374	1476	1603	1607	1509			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3273	3374			3374	1476	1603	1607	1509			
Peak-hour factor, PHF	0.82	0.80	0.92	0.92	0.88	0.88	0.83	0.25	0.74	0.92	0.92	0.92
Adj. Flow (vph)	137	744	0	0	719	344	776	4	241	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	200	0	0	118	0	0	0
Lane Group Flow (vph)	137	744	0	0	719	144	388	392	123	0	0	0
Confl. Peds. (#/hr)						7						
Heavy Vehicles (%)	7%	7%	2%	2%	7%	7%	7%	7%	7%	2%	2%	2%
Turn Type	Prot					Perm	Split		Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	8.9	48.8			35.7	35.7	26.6	26.6	26.6			
Effective Green, g (s)	8.9	48.8			35.7	35.7	26.6	26.6	26.6			
Actuated g/C Ratio	0.10	0.57			0.42	0.42	0.31	0.31	0.31			
Clearance Time (s)	4.2	5.0			5.0	5.0	4.6	4.6	4.6			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	343	1937			1417	620	502	503	472			
v/s Ratio Prot	0.04	c0.22			c0.21		0.24	c0.24				
v/s Ratio Perm						0.10			0.08			
v/c Ratio	0.40	0.38			0.51	0.23	0.77	0.78	0.26			
Uniform Delay, d1	35.6	9.9			18.2	15.8	26.5	26.5	21.8			
Progression Factor	1.63	0.80			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.5			0.3	0.2	7.3	7.5	0.3			
Delay (s)	58.6	8.5			18.5	16.0	33.7	34.0	22.1			
Level of Service	E	A			B	B	C	C	C			
Approach Delay (s)		16.3			17.7			31.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	8	70	118	15	69	99
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	76	128	16	75	108

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	85	145	183
Volume Left (vph)	9	0	75
Volume Right (vph)	76	16	0
Hadj (s)	-0.48	-0.03	0.12
Departure Headway (s)	4.1	4.2	4.4
Degree Utilization, x	0.10	0.17	0.22
Capacity (veh/h)	799	819	797
Control Delay (s)	7.6	8.1	8.6
Approach Delay (s)	7.6	8.1	8.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.2		
HCM Level of Service	A		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	113	214	144	16	6	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	123	233	157	17	7	165

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total (vph)	123	233	157	17	7	165
Volume Left (vph)	123	0	0	0	7	0
Volume Right (vph)	0	0	0	17	0	165
Hadj (s)	0.53	0.03	0.03	-0.67	0.53	-0.67
Departure Headway (s)	5.7	5.2	5.4	4.7	6.3	5.1
Degree Utilization, x	0.19	0.33	0.23	0.02	0.01	0.23
Capacity (veh/h)	607	673	640	729	534	656
Control Delay (s)	8.8	9.6	8.8	6.6	8.2	8.4
Approach Delay (s)	9.3		8.6		8.4	
Approach LOS	A		A		A	

Intersection Summary			
Delay	8.9		
HCM Level of Service	A		
Intersection Capacity Utilization	27.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	202	3	9	383	2	5	11	21	2	7	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.92		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	1859		1770	1863	1583		1707		1770	1599	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	1859		1770	1863	1583		1707		1770	1599	
Peak-hour factor, 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
Adj. Flow (vph)	52	220	3	10	416	2	5	12	23	2	8	138
RTOR Reduction (vph)	0	1	0	0	0	1	0	18	0	0	108	0
Lane Group Flow (vph)	52	222	0	10	416	1	0	22	0	2	38	0
Turn Type	Prot			Prot		pm+ov	Split			Split		
Protected Phases	5	2		1	6	4	8	8		4	4	
Permitted Phases						6						
Actuated Green, G (s)	3.1	28.7		0.8	26.4	44.4		18.0		18.0	18.0	
Effective Green, g (s)	3.1	28.7		0.8	26.4	44.4		18.0		18.0	18.0	
Actuated g/C Ratio	0.04	0.35		0.01	0.32	0.54		0.22		0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	67	655		17	603	940		377		391	353	
v/s Ratio Prot	c0.03	0.12		0.01	c0.22	0.00		c0.01		0.00	c0.02	
v/s Ratio Perm						0.00						
v/c Ratio	0.78	0.34		0.59	0.69	0.00		0.06		0.01	0.11	
Uniform Delay, d1	38.9	19.4		40.2	24.0	8.4		25.1		24.8	25.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	42.0	1.4		42.8	6.4	0.0		0.3		0.0	0.6	
Delay (s)	80.8	20.8		83.0	30.3	8.5		25.4		24.8	26.0	
Level of Service	F	C		F	C	A		C		C	C	
Approach Delay (s)		32.2			31.5			25.4			26.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	30.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	81.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	68	12	406	38	15	231
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	13	441	41	16	251
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			87		1004	80
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			87		1004	80
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			71		91	74
cM capacity (veh/h)			1509		190	980

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	87	483	267
Volume Left	0	441	16
Volume Right	13	0	251
cSH	1700	1509	781
Volume to Capacity	0.05	0.29	0.34
Queue Length 95th (ft)	0	31	38
Control Delay (s)	0.0	7.9	12.0
Lane LOS		A	B
Approach Delay (s)	0.0	7.9	12.0
Approach LOS			B

Intersection Summary			
Average Delay	8.4		
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	111	1	276	70	40	2	155	133	10	334	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1860		1770	1762		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1860		1770	1762		1770	1863	1583	1770	1863	1583
Peak-hour factor, 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
Adj. Flow (vph)	101	121	1	300	76	43	2	168	145	11	363	79
RTOR Reduction (vph)	0	0	0	0	25	0	0	0	87	0	0	47
Lane Group Flow (vph)	101	122	0	300	94	0	2	168	58	11	363	32
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	7.4	8.3		16.4	17.3		0.6	28.8	28.8	0.6	28.8	28.8
Effective Green, g (s)	7.4	8.3		16.4	17.3		0.6	28.8	28.8	0.6	28.8	28.8
Actuated g/C Ratio	0.10	0.12		0.23	0.24		0.01	0.40	0.40	0.01	0.40	0.40
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	182	214		403	423		15	744	632	15	744	632
v/s Ratio Prot	0.06	c0.07		c0.17	0.05		0.00	0.09		c0.01	c0.19	
v/s Ratio Perm									0.04			0.02
v/c Ratio	0.55	0.57		0.74	0.22		0.13	0.23	0.09	0.73	0.49	0.05
Uniform Delay, d1	30.8	30.2		25.9	22.0		35.5	14.3	13.5	35.7	16.1	13.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	3.6		7.3	0.3		4.0	0.7	0.3	103.2	2.3	0.1
Delay (s)	34.4	33.8		33.2	22.3		39.5	15.0	13.8	138.9	18.4	13.4
Level of Service	C	C		C	C		D	B	B	F	B	B
Approach Delay (s)		34.1			30.1			14.6			20.5	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	18.0
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	469	5	248	502	884	0	0	727	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.6	5.6	5.6	5.2	5.6			5.6	5.6
Lane Util. Factor				0.95	0.91	0.95	0.97	0.95			0.91	1.00
Frt				1.00	0.99	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1681	1599	1504	3433	3539			5085	1583
Flt Permitted				0.95	0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1681	1599	1504	3433	3539			5085	1583
Peak-hour factor, 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
Adj. Flow (vph)	0	0	0	510	5	270	546	961	0	0	790	378
RTOR Reduction (vph)	0	0	0	0	5	77	0	0	0	0	0	230
Lane Group Flow (vph)	0	0	0	270	267	166	546	961	0	0	790	148
Turn Type				Split		Perm	Prot					Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Actuated Green, G (s)				24.2	24.2	24.2	20.3	64.6			39.1	39.1
Effective Green, g (s)				24.2	24.2	24.2	20.3	64.6			39.1	39.1
Actuated g/C Ratio				0.24	0.24	0.24	0.20	0.65			0.39	0.39
Clearance Time (s)				5.6	5.6	5.6	5.2	5.6			5.6	5.6
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				407	387	364	697	2286			1988	619
v/s Ratio Prot				0.16	c0.17		c0.16	c0.27			0.16	
v/s Ratio Perm						0.11						0.09
v/c Ratio				0.66	0.69	0.46	0.78	0.42			0.40	0.24
Uniform Delay, d1				34.2	34.5	32.3	37.8	8.6			22.0	20.5
Progression Factor				1.00	1.00	1.00	1.38	0.13			1.00	1.00
Incremental Delay, d2				4.0	5.3	0.9	3.8	0.4			0.6	0.9
Delay (s)				38.3	39.8	33.2	55.9	1.5			22.6	21.4
Level of Service				D	D	C	E	A			C	C
Approach Delay (s)		0.0			37.2			21.2			22.2	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	25.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	10.8
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	343	56	471	0	0	0	0	1043	518	366	830	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	5.6					5.6	5.6	5.2	5.6	
Lane Util. Factor	0.95	0.91	0.95					0.95	0.88	0.97	0.95	
Frt	1.00	0.90	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1515	1504					3539	2787	3433	3539	
Flt Permitted	0.95	0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1515	1504					3539	2787	3433	3539	
Peak-hour factor, 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
Adj. Flow (vph)	373	61	512	0	0	0	0	1134	563	398	902	0
RTOR Reduction (vph)	0	77	94	0	0	0	0	0	339	0	0	0
Lane Group Flow (vph)	328	239	208	0	0	0	0	1134	224	398	902	0
Turn Type	Split		Perm						Perm	Prot		
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	27.0	27.0	27.0					39.8	39.8	16.8	61.8	
Effective Green, g (s)	27.0	27.0	27.0					39.8	39.8	16.8	61.8	
Actuated g/C Ratio	0.27	0.27	0.27					0.40	0.40	0.17	0.62	
Clearance Time (s)	5.6	5.6	5.6					5.6	5.6	5.2	5.6	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	454	409	406					1409	1109	577	2187	
v/s Ratio Prot	c0.20	0.16						c0.32		c0.12	0.25	
v/s Ratio Perm			0.14						0.08			
v/c Ratio	0.72	0.58	0.51					0.80	0.20	0.69	0.41	
Uniform Delay, d1	33.1	31.6	30.9					26.7	19.7	39.1	9.8	
Progression Factor	1.00	1.00	1.00					0.46	0.09	1.03	1.15	
Incremental Delay, d2	5.6	2.1	1.1					3.9	0.3	3.2	0.5	
Delay (s)	38.7	33.7	32.0					16.1	2.0	43.6	11.8	
Level of Service	D	C	C					B	A	D	B	
Approach Delay (s)		34.9			0.0			11.5			21.5	
Approach LOS		C			A			B			C	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	485	174	37	362	438	327	907	44	172	487	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	3433	4762	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	3433	4762	
Peak-hour factor, 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
Adj. Flow (vph)	338	527	189	40	393	476	355	986	48	187	529	389
RTOR Reduction (vph)	0	0	134	0	0	215	0	0	18	0	134	0
Lane Group Flow (vph)	338	527	55	40	393	261	355	986	30	187	784	0
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	15.3	29.3	29.3	8.2	22.2	22.2	12.4	32.5	32.5	10.0	30.1	
Effective Green, g (s)	15.3	29.3	29.3	8.2	22.2	22.2	12.4	32.5	32.5	10.0	30.1	
Actuated g/C Ratio	0.15	0.29	0.29	0.08	0.22	0.22	0.12	0.32	0.32	0.10	0.30	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	525	1037	464	282	786	351	426	1653	514	343	1433	
v/s Ratio Prot	c0.10	0.15		0.01	0.11		c0.10	c0.19		0.05	c0.16	
v/s Ratio Perm			0.03			c0.17			0.02			
v/c Ratio	0.64	0.51	0.12	0.14	0.50	0.74	0.83	0.60	0.06	0.55	0.55	
Uniform Delay, d1	39.8	29.4	25.9	42.6	34.0	36.3	42.8	28.3	23.2	42.8	29.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.74	
Incremental Delay, d2	2.7	0.4	0.1	0.2	0.5	8.3	13.1	1.6	0.2	1.6	1.4	
Delay (s)	42.5	29.8	26.0	42.9	34.5	44.6	55.9	29.9	23.4	38.6	23.1	
Level of Service	D	C	C	D	C	D	E	C	C	D	C	
Approach Delay (s)		33.2			40.2			36.3			25.8	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM Average Control Delay	33.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	0	38	0	0	1	68	915	1	80	648	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00		0.85		0.85		1.00	1.00		1.00	0.96	
Flt Protected	0.95		1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1583		1583		1770	3539		1770	3409	
Flt Permitted	0.76		1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1410		1583		1583		1770	3539		1770	3409	
Peak-hour factor, 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
Adj. Flow (vph)	240	0	41	0	0	1	74	995	1	87	704	229
RTOR Reduction (vph)	0	0	32	0	1	0	0	0	0	0	30	0
Lane Group Flow (vph)	240	0	9	0	0	0	74	996	0	87	903	0
Turn Type	Perm		Perm	Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)	18.6		18.6		18.6		6.6	44.0		7.2	44.6	
Effective Green, g (s)	18.6		18.6		18.6		6.6	44.0		7.2	44.6	
Actuated g/C Ratio	0.23		0.23		0.23		0.08	0.54		0.09	0.55	
Clearance Time (s)	4.0		4.0		4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	321		360		360		143	1904		156	1859	
v/s Ratio Prot					0.00		0.04	c0.28		c0.05	0.26	
v/s Ratio Perm	c0.17		0.01									
v/c Ratio	0.75		0.03		0.00		0.52	0.52		0.56	0.49	
Uniform Delay, d1	29.4		24.6		24.4		36.1	12.2		35.8	11.5	
Progression Factor	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.2		0.0		0.0		3.1	1.0		4.3	0.9	
Delay (s)	38.6		24.6		24.4		39.2	13.2		40.0	12.4	
Level of Service	D		C		C		D	B		D	B	
Approach Delay (s)		36.5			24.4			15.0			14.8	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	81.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱	↰	↑	↰	↱
Volume (vph)	287	149	205	160	115	449
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	1863	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	1863	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	312	162	223	174	125	488
RTOR Reduction (vph)	0	120	0	0	0	136
Lane Group Flow (vph)	312	42	223	174	125	352
Turn Type		Perm	Prot			pm+ov
Protected Phases	4		3	8	2	3
Permitted Phases		4				2
Actuated Green, G (s)	14.7	14.7	12.4	31.6	16.5	28.9
Effective Green, g (s)	14.7	14.7	12.4	31.6	16.5	28.9
Actuated g/C Ratio	0.26	0.26	0.22	0.55	0.29	0.51
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	480	408	384	1031	511	926
v/s Ratio Prot	c0.17		c0.13	0.09	0.07	c0.08
v/s Ratio Perm		0.03				0.14
v/c Ratio	0.65	0.10	0.58	0.17	0.24	0.38
Uniform Delay, d1	18.9	16.2	20.0	6.3	15.5	8.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.1	2.2	0.1	1.1	0.3
Delay (s)	22.0	16.3	22.3	6.4	16.7	8.9
Level of Service	C	B	C	A	B	A
Approach Delay (s)	20.1			15.3	10.5	
Approach LOS	C			B	B	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	57.1	Sum of lost time (s)	13.5
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	1	0	0	154	19	153	61	0	358	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1	0	0	167	21	166	66	0	389	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	681	663	195	403	597	83	389			233		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	681	663	195	403	597	83	389			233		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	83	98			100		
cM capacity (veh/h)	274	373	814	524	408	960	1166			1332		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2
Volume Total	1	167	21	83	83	66	259	130
Volume Left	0	0	21	0	0	0	0	0
Volume Right	1	167	0	0	0	66	0	0
cSH	814	960	1166	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.17	0.02	0.05	0.05	0.04	0.15	0.08
Queue Length 95th (ft)	0	16	1	0	0	0	0	0
Control Delay (s)	9.4	9.5	8.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A	A					
Approach Delay (s)	9.4	9.5	0.7				0.0	
Approach LOS	A	A						

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	779	890	0	0	1016	275	210	1	298	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5			5.5	5.5		4.6	4.6			
Lane Util. Factor	0.97	0.91			0.91	1.00		1.00	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	3433	5085			5085	1550		1774	1583			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	3433	5085			5085	1550		1774	1583			
Peak-hour factor, 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
Adj. Flow (vph)	847	967	0	0	1104	299	228	1	324	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	228	0	0	73	0	0	0
Lane Group Flow (vph)	847	967	0	0	1104	71	0	229	251	0	0	0
Confl. Peds. (#/hr)						5	10					
Turn Type	Prot					Perm	Split		Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	29.8	58.9			24.9	24.9		36.0	36.0			
Effective Green, g (s)	29.8	58.9			24.9	24.9		36.0	36.0			
Actuated g/C Ratio	0.28	0.56			0.24	0.24		0.34	0.34			
Clearance Time (s)	4.2	5.5			5.5	5.5		4.6	4.6			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	974	2852			1206	368		608	543			
v/s Ratio Prot	c0.25	0.19			c0.22			0.13				
v/s Ratio Perm						0.05			c0.16			
v/c Ratio	0.87	0.34			0.92	0.19		0.38	0.46			
Uniform Delay, d1	35.8	12.5			39.0	32.0		26.0	26.9			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	8.4	0.3			12.2	1.2		1.8	2.8			
Delay (s)	44.1	12.8			51.3	33.2		27.8	29.8			
Level of Service	D	B			D	C		C	C			
Approach Delay (s)		27.4			47.4			29.0			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.3
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	1201	77	160	736	330	40	36	243	225	123	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5	5.5	4.2	5.5	5.5	4.6	4.6	4.6		4.6	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.81	0.81	1.00	1.00	1.00		0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.98	0.85	1.00	1.00	0.85		0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	3433	5085	1549	3433	5892	1282	1770	1863	1560		3193	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	3433	5085	1549	3433	5892	1282	1770	1863	1560		3193	
Peak-hour factor, 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
Adj. Flow (vph)	85	1305	84	174	800	359	43	39	264	245	134	355
RTOR Reduction (vph)	0	0	53	0	25	122	0	0	233	0	177	0
Lane Group Flow (vph)	85	1305	31	174	926	86	43	39	31	0	557	0
Confl. Peds. (#/hr)			8						1			2
Turn Type	Prot		Perm	Prot		Perm	Split		Perm	Split		
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases			2			6			3			
Actuated Green, G (s)	6.5	41.0	41.0	11.0	45.5	45.5	12.8	12.8	12.8		26.3	
Effective Green, g (s)	6.5	41.0	41.0	11.0	45.5	45.5	12.8	12.8	12.8		26.3	
Actuated g/C Ratio	0.06	0.37	0.37	0.10	0.41	0.41	0.12	0.12	0.12		0.24	
Clearance Time (s)	4.2	5.5	5.5	4.2	5.5	5.5	4.6	4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	203	1895	577	343	2437	530	206	217	182		763	
v/s Ratio Prot	0.02	c0.26		c0.05	0.16		c0.02	0.02			c0.17	
v/s Ratio Perm			0.02			0.07			0.02			
v/c Ratio	0.42	0.69	0.05	0.51	0.38	0.16	0.21	0.18	0.17		0.73	
Uniform Delay, d1	49.9	29.1	22.1	46.9	22.4	20.3	44.0	43.9	43.8		38.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.4	2.1	0.2	1.2	0.1	0.1	0.5	0.4	0.4		3.5	
Delay (s)	51.3	31.2	22.3	48.1	22.5	20.4	44.5	44.3	44.2		42.1	
Level of Service	D	C	C	D	C	C	D	D	D		D	
Approach Delay (s)		31.8			25.5			44.3			42.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	32.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	416	717	215	117	329	168	246	910	51	189	675	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	0.97		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3417		3433	3360		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3417		3433	3360		3433	5085	1583	3433	5085	1583
Peak-hour factor, 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
Adj. Flow (vph)	452	779	234	127	358	183	267	989	55	205	734	255
RTOR Reduction (vph)	0	36	0	0	81	0	0	0	39	0	0	64
Lane Group Flow (vph)	452	977	0	127	460	0	267	989	16	205	734	191
Turn Type	Prot			Prot			Prot		Perm	Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	13.4	26.7		4.0	17.3		8.0	23.0	23.0	5.0	20.0	33.4
Effective Green, g (s)	13.4	26.7		4.0	17.3		8.0	23.0	23.0	5.0	20.0	33.4
Actuated g/C Ratio	0.17	0.34		0.05	0.22		0.10	0.29	0.29	0.06	0.25	0.42
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	585	1159		174	739		349	1486	463	218	1292	772
v/s Ratio Prot	c0.13	c0.29		0.04	0.14		c0.08	c0.19		0.06	0.14	0.04
v/s Ratio Perm									0.01			0.08
v/c Ratio	0.77	0.84		0.73	0.62		0.77	0.67	0.03	0.94	0.57	0.25
Uniform Delay, d1	31.2	24.1		36.8	27.7		34.4	24.5	19.9	36.7	25.6	14.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.3	5.7		14.2	1.6		9.6	2.4	0.1	44.4	1.8	0.2
Delay (s)	37.5	29.8		51.0	29.4		44.0	26.8	20.1	81.1	27.4	14.7
Level of Service	D	C		D	C		D	C	C	F	C	B
Approach Delay (s)		32.2			33.5			30.1			33.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	32.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	456	15	152	216	73	23	925	196	107	713	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00		1.00	0.96		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3523		1770	3406		1770	4952		1770	4928	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3523		1770	3406		1770	4952		1770	4928	
Peak-hour factor, 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
Adj. Flow (vph)	310	496	16	165	235	79	25	1005	213	116	775	201
RTOR Reduction (vph)	0	2	0	0	39	0	0	30	0	0	39	0
Lane Group Flow (vph)	310	510	0	165	275	0	25	1188	0	116	937	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	16.1	19.8		12.7	16.4		1.8	32.4		6.0	36.6	
Effective Green, g (s)	16.1	19.8		12.7	16.4		1.8	32.4		6.0	36.6	
Actuated g/C Ratio	0.18	0.22		0.14	0.18		0.02	0.36		0.07	0.40	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	313	767		247	615		35	1765		117	1984	
v/s Ratio Prot	c0.18	c0.14		0.09	0.08		0.01	c0.24		c0.07	c0.19	
v/s Ratio Perm												
v/c Ratio	0.99	0.66		0.67	0.45		0.71	0.67		0.99	0.47	
Uniform Delay, d1	37.3	32.5		37.1	33.2		44.3	24.8		42.4	20.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	48.1	2.2		6.7	0.5		51.0	2.1		80.3	0.8	
Delay (s)	85.4	34.7		43.8	33.7		95.3	26.8		122.7	20.8	
Level of Service	F	C		D	C		F	C		F	C	
Approach Delay (s)		53.8			37.2			28.2			31.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	36.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.9	Sum of lost time (s)	25.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	20	13	10	15	31	17	1072	10	61	685	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.94		1.00	0.90		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1754		1770	1673		1770	3534		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1754		1770	1673		1770	3534		1770	3539	1583
Peak-hour factor, 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
Adj. Flow (vph)	53	22	14	11	16	34	18	1165	11	66	745	91
RTOR Reduction (vph)	0	13	0	0	32	0	0	0	0	0	0	38
Lane Group Flow (vph)	53	23	0	11	18	0	18	1176	0	66	745	53
Turn Type	Split			Split			Prot			Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	4.5	4.5		3.8	3.8		0.7	35.1		3.3	37.7	37.7
Effective Green, g (s)	4.5	4.5		3.8	3.8		0.7	35.1		3.3	37.7	37.7
Actuated g/C Ratio	0.07	0.07		0.06	0.06		0.01	0.54		0.05	0.58	0.58
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	123	122		104	98		19	1917		90	2062	922
v/s Ratio Prot	c0.03	0.01		0.01	c0.01		0.01	c0.33		c0.04	c0.21	
v/s Ratio Perm												0.03
v/c Ratio	0.43	0.19		0.11	0.18		0.95	0.61		0.73	0.36	0.06
Uniform Delay, d1	28.9	28.4		28.8	29.0		32.0	10.1		30.3	7.1	5.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.4	0.8		0.4	0.9		179.6	1.5		26.3	0.5	0.1
Delay (s)	31.3	29.1		29.3	29.9		211.6	11.6		56.5	7.6	5.9
Level of Service	C	C		C	C		F	B		E	A	A
Approach Delay (s)		30.4			29.8			14.6			11.0	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	22.5
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	9	264	20	4	56	300	893	26	64	449	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3524		1770	3378	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	3524		1770	3378	
Peak-hour factor, 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
Adj. Flow (vph)	82	10	287	22	4	61	326	971	28	70	488	213
RTOR Reduction (vph)	0	0	243	0	0	55	0	2	0	0	42	0
Lane Group Flow (vph)	82	10	44	22	4	6	326	997	0	70	659	0
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	6.8	13.4	13.4	2.0	8.6	8.6	20.0	48.1		6.6	34.7	
Effective Green, g (s)	6.8	13.4	13.4	2.0	8.6	8.6	20.0	48.1		6.6	34.7	
Actuated g/C Ratio	0.08	0.15	0.15	0.02	0.10	0.10	0.23	0.55		0.07	0.39	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	137	283	241	40	182	155	402	1924		133	1330	
v/s Ratio Prot	c0.05	0.01		0.01	0.00		c0.18	c0.28		0.04	0.20	
v/s Ratio Perm			c0.03			0.00						
v/c Ratio	0.60	0.04	0.18	0.55	0.02	0.04	0.81	0.52		0.53	0.50	
Uniform Delay, d1	39.3	31.8	32.6	42.6	35.9	36.0	32.3	12.7		39.2	20.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.9	0.1	0.4	15.3	0.0	0.1	11.7	1.0		3.7	1.3	
Delay (s)	46.2	31.9	32.9	57.9	36.0	36.1	44.0	13.7		43.0	21.4	
Level of Service	D	C	C	E	D	D	D	B		D	C	
Approach Delay (s)		35.8			41.6			21.1			23.4	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	24.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	88.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	817	871	254	1051	0	0	0	0	333	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.2	5.0					4.6	4.6	4.6
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		3374	1456	1687	3374					1603	1603	1509
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		3374	1456	1687	3374					1603	1603	1509
Peak-hour factor, PHF	0.92	0.96	0.96	0.83	0.89	0.92	0.92	0.92	0.92	0.89	0.92	0.83
Adj. Flow (vph)	0	851	907	306	1181	0	0	0	0	374	0	124
RTOR Reduction (vph)	0	0	377	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	851	530	306	1181	0	0	0	0	187	187	71
Confl. Peds. (#/hr)			7									
Heavy Vehicles (%)	2%	7%	7%	7%	7%	2%	2%	2%	2%	7%	7%	7%
Turn Type			Perm	Prot						Split		custom
Protected Phases		2		1	6					4	4	4 5
Permitted Phases			2									4
Actuated Green, G (s)		38.4	38.4	18.0	52.8					14.8	14.8	23.2
Effective Green, g (s)		38.4	38.4	18.0	52.8					14.8	14.8	23.2
Actuated g/C Ratio		0.45	0.45	0.21	0.62					0.17	0.17	0.27
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6	4.6	
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1524	658	357	2096					279	279	412
v/s Ratio Prot		0.25		c0.18	0.35					c0.12	0.12	0.05
v/s Ratio Perm			c0.36									
v/c Ratio		0.56	0.81	0.86	0.56					0.67	0.67	0.17
Uniform Delay, d1		17.1	20.1	32.3	9.4					32.8	32.8	23.6
Progression Factor		1.00	1.00	1.19	1.06					1.00	1.00	1.00
Incremental Delay, d2		1.5	10.2	15.4	0.9					6.2	6.2	0.2
Delay (s)		18.6	30.3	53.9	10.9					39.0	39.0	23.8
Level of Service		B	C	D	B					D	D	C
Approach Delay (s)		24.6			19.7			0.0			35.2	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	13.8
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	980	0	0	735	405	570	5	257	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.0			5.0	5.0	4.6	4.6	4.6			
Lane Util. Factor	0.97	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3273	3374			3374	1485	1603	1609	1509			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3273	3374			3374	1485	1603	1609	1509			
Peak-hour factor, PHF	0.83	0.92	0.92	0.92	0.84	0.94	0.95	0.63	0.86	0.92	0.92	0.92
Adj. Flow (vph)	205	1065	0	0	875	431	600	8	299	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	235	0	0	73	0	0	0
Lane Group Flow (vph)	205	1065	0	0	875	196	306	302	226	0	0	0
Confl. Peds. (#/hr)						3						
Heavy Vehicles (%)	7%	7%	2%	2%	7%	7%	7%	7%	7%	2%	2%	2%
Turn Type	Prot					Perm	Split		Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	10.6	53.4			38.6	38.6	22.0	22.0	22.0			
Effective Green, g (s)	10.6	53.4			38.6	38.6	22.0	22.0	22.0			
Actuated g/C Ratio	0.12	0.63			0.45	0.45	0.26	0.26	0.26			
Clearance Time (s)	4.2	5.0			5.0	5.0	4.6	4.6	4.6			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	408	2120			1532	674	415	416	391			
v/s Ratio Prot	0.06	c0.32			c0.26		c0.19	0.19				
v/s Ratio Perm						0.13			0.15			
v/c Ratio	0.50	0.50			0.57	0.29	0.74	0.73	0.58			
Uniform Delay, d1	34.7	8.6			17.1	14.6	28.9	28.7	27.4			
Progression Factor	1.55	0.98			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.9	0.7			0.5	0.2	6.7	6.2	2.1			
Delay (s)	54.9	9.1			17.6	14.8	35.6	34.9	29.5			
Level of Service	D	A			B	B	D	C	C			
Approach Delay (s)		16.5			16.7			33.4			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	8	92	112	6	83	154
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	100	122	7	90	167

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	109	128	258
Volume Left (vph)	9	0	90
Volume Right (vph)	100	7	0
Hadj (s)	-0.50	0.00	0.10
Departure Headway (s)	4.3	4.4	4.4
Degree Utilization, x	0.13	0.16	0.31
Capacity (veh/h)	771	779	790
Control Delay (s)	7.9	8.3	9.4
Approach Delay (s)	7.9	8.3	9.4
Approach LOS	A	A	A

Intersection Summary			
Delay	8.8		
HCM Level of Service	A		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	171	169	280	9	21	144
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	186	184	304	10	23	157

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total (vph)	186	184	304	10	23	157
Volume Left (vph)	186	0	0	0	23	0
Volume Right (vph)	0	0	0	10	0	157
Hadj (s)	0.53	0.03	0.03	-0.67	0.53	-0.67
Departure Headway (s)	5.9	5.4	5.5	4.8	6.7	5.5
Degree Utilization, x	0.30	0.27	0.46	0.01	0.04	0.24
Capacity (veh/h)	585	643	635	715	497	601
Control Delay (s)	10.2	9.2	11.9	6.6	8.8	9.0
Approach Delay (s)	9.7		11.7		9.0	
Approach LOS	A		B		A	

Intersection Summary			
Delay	10.3		
HCM Level of Service	B		
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	498	6	17	221	5	4	8	13	3	17	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.93		1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	1859		1770	1863	1583		1720		1770	1635	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	1859		1770	1863	1583		1720		1770	1635	
Peak-hour factor, 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
Adj. Flow (vph)	143	541	7	18	240	5	4	9	14	3	18	79
RTOR Reduction (vph)	0	1	0	0	0	3	0	11	0	0	62	0
Lane Group Flow (vph)	143	547	0	18	240	2	0	16	0	3	35	0
Turn Type	Prot			Prot		pm+ov	Split			Split		
Protected Phases	5	2		1	6	4	8	8		4	4	
Permitted Phases						6						
Actuated Green, G (s)	8.7	28.5		1.6	21.4	39.4		18.0		18.0	18.0	
Effective Green, g (s)	8.7	28.5		1.6	21.4	39.4		18.0		18.0	18.0	
Actuated g/C Ratio	0.11	0.35		0.02	0.26	0.48		0.22		0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	188	645		34	486	837		377		388	358	
v/s Ratio Prot	c0.08	c0.29		0.01	0.13	0.00		c0.01		0.00	c0.02	
v/s Ratio Perm						0.00						
v/c Ratio	0.76	0.85		0.53	0.49	0.00		0.04		0.01	0.10	
Uniform Delay, d1	35.7	24.8		39.9	25.8	11.1		25.3		25.1	25.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	16.5	13.1		14.1	3.6	0.0		0.2		0.0	0.5	
Delay (s)	52.2	37.9		54.0	29.3	11.1		25.5		25.1	26.1	
Level of Service	D	D		D	C	B		C		C	C	
Approach Delay (s)		40.9			30.7			25.5			26.1	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	82.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	56	25	255	74	18	514
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	61	27	277	80	20	559
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			88		709	74
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			88		709	74
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			82		94	43
cM capacity (veh/h)			1508		327	987

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	88	358	578
Volume Left	0	277	20
Volume Right	27	0	559
cSH	1700	1508	924
Volume to Capacity	0.05	0.18	0.63
Queue Length 95th (ft)	0	17	114
Control Delay (s)	0.0	6.5	15.2
Lane LOS		A	C
Approach Delay (s)	0.0	6.5	15.2
Approach LOS			C

Intersection Summary			
Average Delay	10.8		
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	83	4	151	145	20	1	463	343	20	148	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1851		1770	1829		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1851		1770	1829		1770	1863	1583	1770	1863	1583
Peak-hour factor, 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
Adj. Flow (vph)	91	90	4	164	158	22	1	503	373	22	161	134
RTOR Reduction (vph)	0	2	0	0	6	0	0	0	174	0	0	65
Lane Group Flow (vph)	91	92	0	164	174	0	1	503	199	22	161	69
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	7.1	8.0		11.5	12.4		0.7	40.2	40.2	1.5	41.0	41.0
Effective Green, g (s)	7.1	8.0		11.5	12.4		0.7	40.2	40.2	1.5	41.0	41.0
Actuated g/C Ratio	0.09	0.10		0.15	0.16		0.01	0.51	0.51	0.02	0.52	0.52
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	159	187		257	286		16	946	803	34	964	819
v/s Ratio Prot	0.05	0.05		c0.09	c0.10		0.00	c0.27		c0.01	0.09	
v/s Ratio Perm									0.13			0.04
v/c Ratio	0.57	0.49		0.64	0.61		0.06	0.53	0.25	0.65	0.17	0.08
Uniform Delay, d1	34.6	33.7		31.9	31.1		38.9	13.2	11.0	38.6	10.1	9.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	2.0		5.1	3.6		1.6	2.1	0.7	35.3	0.4	0.2
Delay (s)	39.5	35.7		37.0	34.8		40.6	15.3	11.7	73.9	10.5	9.8
Level of Service	D	D		D	C		D	B	B	E	B	A
Approach Delay (s)		37.6			35.8			13.8			14.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group