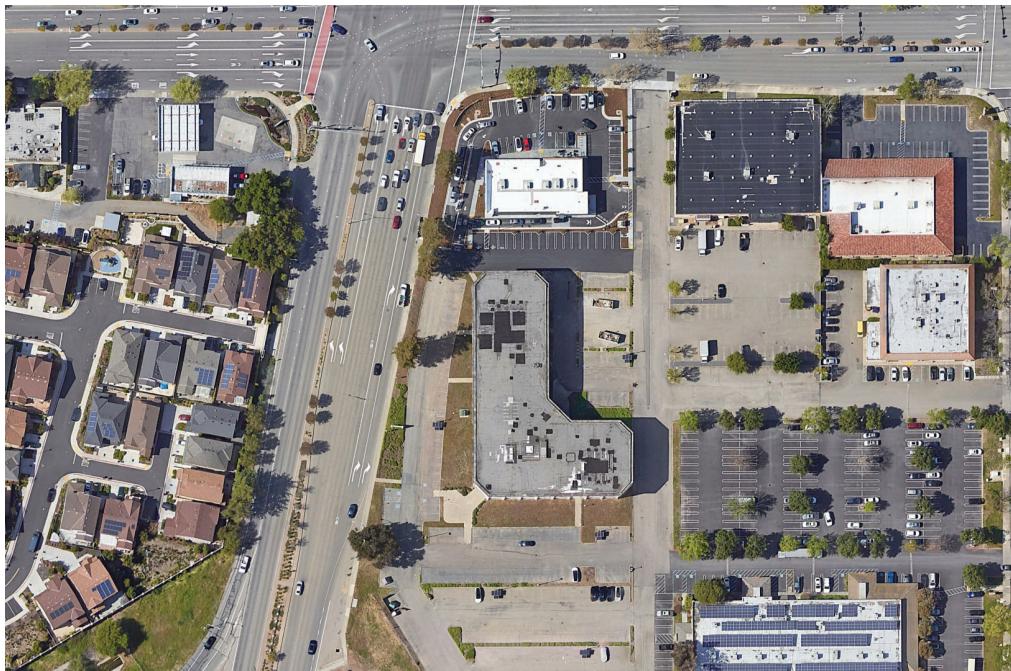




Transportation Impact Study for the BASIS School Project



Prepared for the City of Dublin

Submitted by
W-Trans

March 21, 2023



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Executive Summary

The BASIS School Project would be located at 7950 Dublin Boulevard in the City of Dublin. The school proposes to occupy an existing 81,575 square-foot office building and construct a new 9,134 square-foot gym and sports field. The project is expected to generate an average of 2,551 net-new daily trips, including 528 a.m., 240 school p.m., and 181 p.m. peak hour trips.

Pedestrian, bicycle, and transit facilities within the study area are generally adequate and would be improved once the planned future facilities identified in the City's draft *Bike and Pedestrian Plan* are completed. However, further study (conducted once the school opens) is recommended to determine whether a midblock pedestrian crosswalk with or without active enhancements, such as Rectangular Rapid Flashing Beacons (RRFB), is appropriate to facilitate pedestrian movement between the project site and nearby retail centers as well as to the BART station. This pedestrian amenity is consistent with the policies described in the *Downtown Dublin Specific Plan*.

Vehicles would primarily access the project site via driveways on Dublin Boulevard and Regional Street. Sight distances at these driveways for both entering and exiting drivers is adequate for the approach speeds.

The vehicle queue length would exceed available storage in the Regional Street/Dublin Boulevard northbound left-turn lane during the a.m. peak hour upon the addition of project-related traffic. To increase the storage capacity and vehicle throughput of this facility, it is recommended that the left-turn lane be extended and a center left-turn lane be added by modifying the striping and eliminating on-street parking. Optimization of traffic signal timing would also increase vehicle throughput at this intersection. Further study is also recommended to determine whether traffic operations elsewhere along the corridor would degrade since all the signalized intersections along the Dublin Boulevard corridor are under coordination and influence one another.

The proposed Traffic and Parking Management Plan prepared by the BASIS school is reasonably expected to result in acceptable operations.

The intersections at San Ramon Road/Dublin Boulevard, and Regional Street/Dublin Boulevard were evaluated for this study. The addition of project-related volumes at Regional Street/Dublin Boulevard is expected to degrade LOS from D to F during the a.m. peak hour. However, this is not considered an adverse condition based on the traffic operation standards described in the City's *Downtown Dublin Specific Plan*.

Introduction

This report presents an analysis of the potential traffic impacts and adverse operational effects that would be associated with development of the proposed BASIS Independent School to be located at 7950 Dublin Boulevard in the City of Dublin. The traffic study was completed in accordance with the criteria established by the City of Dublin and is consistent with standard traffic engineering techniques.

Prelude

The purpose of a traffic impact study is to provide City staff and policy makers with data that they can use to make an informed decision regarding the potential transportation impacts of a proposed project, and any associated recommended improvements to comply with the City's General Plan, or other policies. Vehicular traffic service levels at key intersections were evaluated for consistency with General Plan policies by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on anticipated travel patterns specific to the proposed project, then analyzing the effect the new traffic would be expected to have on the study intersections and need for improvements to maintain acceptable operation.

Project Profile

The BASIS School proposes to move into an existing 81,575 square foot office building at 7950 Dublin Boulevard, as well as construct a new 9,134 square foot gym building and sports field. The proposed school is assumed to be comprised of 420 middle school students and 380 high school students (800 students total). The school is proposed to open in September 2024. The location of the project site is shown in Figure 1.





Transportation Impact Study for the BASIS School Project
Figure 1 – Study Area and Existing Lane Configurations

Transportation Setting

Study Area and Periods

The study area varies depending on the topic. For pedestrian trips it consists of all streets within a half-mile of the project site that would lie along primary routes of pedestrian travel, or those leading to nearby residential or commercial areas. For bicycle trips it consists of all streets within one mile of the project site that would lie along primary routes of bicycle travel. For the safety and operational analyses, it consists of the project frontage and the following intersections selected with input from City staff:

1. San Ramon Road/Dublin Boulevard
2. Regional Street/Dublin Boulevard

It is noted that the two project driveways were not considered as study intersections. The *California Vehicle Code* defines an intersection as "the area embraced within the prolongation of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at approximately right angles or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict." This definition specifies that intersections are created where two "highways," or public streets, intersect. As driveways are not public streets, where they connect with a public road is not an intersection, so it would be unreasonable to evaluate it as such. The driveway connection should, however, be evaluated for operational issues such as adequacy of sight distance, need for turn lanes, and delay may be relevant in some cases, though it would not be associated with a Level of Service.

Operating conditions during the traditional a.m. and p.m. commute peak periods were evaluated to capture the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, and the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute. Additionally, the afternoon peak period of 2:00 to 4:00 p.m. was evaluated to capture the effects of traffic at the end of the school day. Counts were obtained for the study intersections on November 10, 2022, while local schools were in session.

Study Intersections

San Ramon Road/Dublin Boulevard is a four-legged signalized intersection with protected left-turn phasing on all approaches. Crosswalks with pedestrian phasing are available on all but the southern leg of the intersection.

Regional Street/Dublin Boulevard is a four-way signalized intersection with protected left-turn phasing on all approaches. Marked crosswalks with pedestrian phasing exist on all legs of the intersection.

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

Project Data

Trip Generation

The project consists of a school which would repurpose an existing 81,575 square foot office building as well as construction of a new gymnasium and sports fields. The proposed project site plan is shown in Figure 2.

The anticipated trip generation during the a.m. and school p.m. peak hours for the proposed project was estimated based on March 2017 observations conducted at the BASIS Independent Silicon Valley Campus located at 1290 Parkmoor Avenue in San Jose. To estimate the daily and p.m. peak hour trip generation, published standard rates for "Private School (K-8)" (ITE LU #530) and "Private High School" (ITE LU #534) from the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition, 2021, were used. These land uses were selected as they represented the most appropriate land uses available in the *Trip Generation Manual*. It is noted that the new gym building and sports field would not be open to the public and as such would not independently generate any new vehicle trips. Trip credits related to the existing building on site were not applied since the building was unoccupied and therefore not generating any trips on the date (November 10, 2022) that traffic counts were conducted. Trip reductions attributable to private bus use, carpooling and alternate transportation modes (walking, biking, or using transit) are assumed to be included for the a.m. and school p.m. peak hours only since the trip generation estimate is based on observations conducted at another similar BASIS campus. To provide a conservative analysis, reductions were not applied to the daily and p.m. peak hour trip generation estimates.

Total Project Trip Generation

The proposed project is expected to generate an average of 2,551 trips per day, including 528 trips during the a.m. peak hour, 240 during the school p.m. peak hour, and 181 during the p.m. peak hour. These new trips represent the increase in traffic associated with the project compared to existing conditions. For informational purposes, the most comparable ITE rates and resulting trips are also provided. These results are summarized in Table 1.

Table 1 – Trip Generation Summary

Land Use	Std	Daily		AM Peak Hour				School PM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out	Rate	Trips	In	Out
School	800			0.66*	528	267	261	0.30*	240	122	118				
Private (K-8)	420	4.11	1,726									0.26	109	50	59
Private HS	380	2.17	825									0.19	72	28	44
Total			2,551		528	267	261		240	122	118		181	78	103

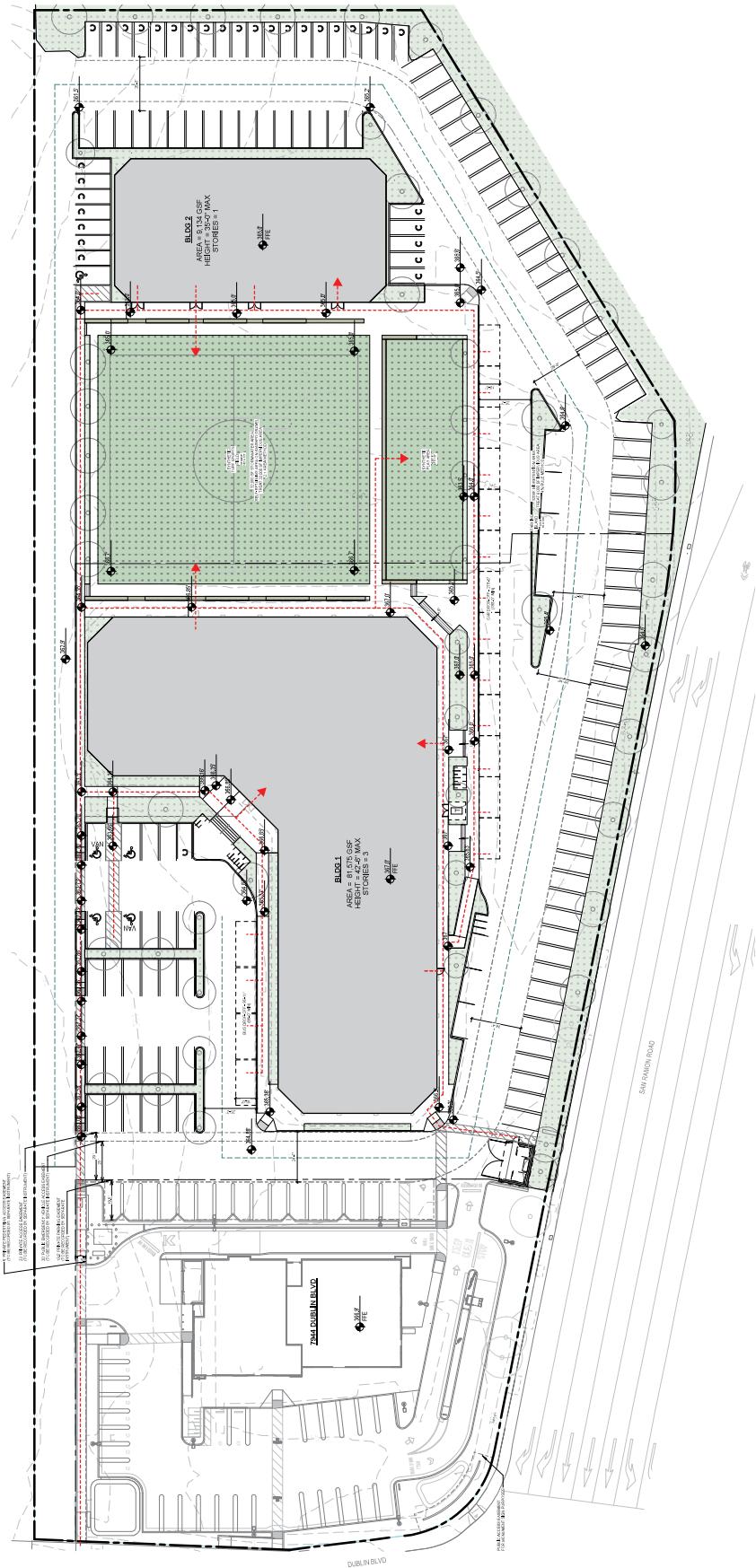
Informational Use Only, Based on ITE Rates

Private (K-8)	420	4.11	1,726	1.01	424	237	187	0.60	252	118	134	0.26	109	50	59
Private HS	380	2.17	825	0.66	251	148	103	0.40	152	59	93	0.19	72	28	44
<i>Subtotal (ITE)</i>			<i>2,551</i>		<i>675</i>	<i>385</i>	<i>290</i>		<i>404</i>	<i>177</i>	<i>227</i>		<i>181</i>	<i>78</i>	<i>103</i>

Note: * Estimated using observations at BASIS Independent Silicon Valley Campus; std = students

Trip Distribution

The pattern used to allocate new project trips to the street network was based on volume plots from the City of Dublin Travel Demand Model (most recently updated in 2021) with manual adjustments applied for rounding. The applied distribution assumptions and resulting trips are shown in Table 2.



Transportation Impact Study for the BASIS School Project
Figure 2 – Site Plan

Table 2 – Trip Distribution Assumptions

Route	Percent	Daily Trips	AM Trips	School PM Trips	PM Trips
To/From North on San Ramon Blvd	30%	765	158	72	54
To/From South on San Ramon Blvd	40%	1,020	212	96	73
To/From West on Dublin Blvd	14%	357	74	34	25
To/From East on Dublin Blvd	12%	306	63	29	22
To/From North on Regional St	3%	77	16	7	5
To/From East on St. Patrick Wy	1%	26	5	2	2
TOTAL	100%	2,551	528	240	181

Circulation System

This section addresses the first transportation bullet point on the CEQA checklist, which relates to the potential for a project to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Pedestrian Facilities

Existing and Planned Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In the vicinity of the project site, sidewalks, crosswalks, pedestrian signals, and curb ramps provide connected access for pedestrians. However, there is a gap in the sidewalk network on the west side of San Ramon Road to the south of Dublin Boulevard.

- **Dublin Boulevard** – Continuous sidewalks are provided on both sides of Dublin Boulevard to the east of Hansen Drive. A network of curb ramps, crosswalks with pedestrian phasing at signalized intersections, and overhead lighting exists. Dublin Boulevard provides access to commercial and residential areas within the City of Dublin.
- **San Ramon Road** – Continuous sidewalks are provided on both sides of San Ramon Road north of Dublin Boulevard and only on the west side of the road south of Dublin Boulevard. Overhead streetlights are provided on San Ramon Road.
- **Regional Street** – Sidewalks are provided on both sides of Regional Street. Curb ramps and crosswalks with pedestrian phasing exist at both intersections along the street and overhead lighting is provided. Regional Street provides access to adjacent commercial land uses.
- **The Saint Patrick Way** extension to Regional Street is currently under construction and is included as part of the pedestrian priority network according to the Downtown *Dublin Specific Plan*.

Midblock Pedestrian Crossing on Regional Street

A midblock crosswalk would provide a direct path between land uses on either side of Regional Street and encourage active transportation, especially among students.

As a preliminary step to evaluate the potential use of enhancements at crossings for pedestrians, warrant analyses were conducted for Regional Street relative to the need for a High-intensity Activated crossWALK (HAWK), Rectangular Rapid Flash Beacons (RRFB), or other intersection crossing enhancements.

The analysis was based on the HAWK warrants from the *California Manual on Uniform Traffic Control Devices* (CA MUTCD) as well as *Improving Pedestrian Safety at Unsignalized Crossings*, from the National Cooperative Highway Research Program (NCHRP) Report 562. These methodologies use the number of pedestrian crossings, the volume of vehicle traffic, vehicle travel speeds and pedestrian crossing distance to determine whether enhanced pedestrian crossing facilities are appropriate. Under existing conditions, warrants are not met since there are few pedestrian crossings. However, it is reasonable to assume that pedestrian use may currently be relatively low given the lack of existing midblock pedestrian crossing infrastructure between the project driveway and Dublin Retail Center to the east.

Therefore, a sensitivity analysis was conducted to determine the number of pedestrians that would need to be present during the peak hour for each location to meet warrants for enhancements. Analysis was performed based

on school p.m. peak hour Near-Term 2024 plus project volumes described in more detail in the following section. It was assumed that vehicles along Regional Street travel at the posted speed limit of 30 miles per hour.

From this sensitivity analysis it was concluded that 20 pedestrians would need to cross Regional Street during the school p.m. peak hour to meet the crosswalk warrant, and 27 pedestrians would be needed to meet the active/enhanced crossing treatment warrant. Given the retail land uses and BART station nearby as well as the future extension of Saint Patrick Way, it is reasonable to assume that the number of pedestrian crossings at this location would increase upon opening of the BASIS School. Therefore, once school operations have begun, further study may be necessary to confirm the number of pedestrian crossings at this location.

Additionally, the *Downtown Dublin Specific Plan (DDSP)* establishes a goal that pedestrian connections between shopping centers should be encouraged. This is interpreted by City staff to mean that a connected pedestrian network is encouraged between pedestrian-generating land uses such as shopping centers instead of strictly meaning that pedestrian connections should only be between shopping centers.

Therefore, to fulfill the goal of establishing pedestrian connections between land uses, a striped crosswalk is recommended near the project driveway along Regional Street. Any future crosswalk should be located south of the project driveway to minimize the potential for conflicts with vehicles turning left toward Dublin Boulevard and include advance pedestrian pavement markings (high-visibility continental or ladder crosswalks and appropriate "sharks teeth" yield lines) and warning signs consistent with the most recent standards from the CA MUTCD. Application of advance "sharks teeth" yield markings are intended to indicate the preferred vehicle waiting positions thereby preserving driver sight lines in the event that vehicle queues extend beyond the crosswalk from the Regional Street/Dublin Boulevard intersection.

Additionally, a pedestrian pathway between the school buildings and Regional Street is also recommended to provide a clearly marked route between the school and sidewalks on Regional Street since this route is along the shortest path between the school and land uses to the east including the BART station, and various residential units, and retail centers. Any future pedestrian pathway should be constructed to satisfy the minimum federal accessibility requirements as described in The Americans with Disabilities Act (ADA).

Project Effects on Pedestrian Facilities

Given the proximity of commercial and residential uses surrounding the proposed school, as well as the proximity to a BART station, it is reasonable to assume that some students and staff will want to walk, bicycle, and/or use transit to reach the school.

Project Site – The project would include paved walking connections between each building, sports fields and to nearby retail shops along Dublin Boulevard. It is noted that dedicated pedestrian pathways between the project site and Regional Street are not included in the proposed project. Although it is desirable to avoid pedestrian conflicts with vehicles as much as possible, the placement of pedestrian walkways spanning drive-aisles are acceptable based on the availability of unobstructed sight lines between drivers and pedestrians using the walkway, combined with the expected slow operating speeds of vehicles using the parking lots.

Finding – It is reasonable to assume that the pedestrian activity within the study area would increase upon the opening of the BASIS School. According to the NCHRP 562 methodology, a midblock pedestrian crossing with signing and markings only or an active/enhanced crossing treatment would be warranted if 20 or 27 pedestrians, respectively, are to cross Regional Street within the school p.m. peak hour.

Recommendation – Further study to determine whether the installation of a midblock crosswalk, potentially with enhanced crossing treatment, is recommended on Regional Street. A crosswalk at this location would comply with policies described in the *Downtown Dublin Specific Plan*. The crosswalk should be located along Regional Street south of the project driveway and include advance pedestrian warning signs and pavement markings consistent

with current CA MUTCD standards. A clearly marked pedestrian pathway between the school and sidewalks on Regional Street is also suggested.

Bicycle Facilities

Existing and Planned Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2020, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area, Class II bike lanes exist on Dublin Boulevard, San Ramon Road, and Regional Street. A Class I Multi-use Path or Class IV Bikeway is proposed along Dublin Boulevard for 4.4 miles between Kelly Canyon Drive and Scarlett Drive. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. Table 3 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in the *Dublin Bicycle and Pedestrian Plan (adopted in January 2023)*.

Table 3 – Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Regional St	II	0.4	Amador Valley Blvd	End of Regional St
San Ramon Rd	II	1.5	Alcosta Blvd	Dublin Blvd
Golden Gate Dr	II	0.2	Dublin Blvd	St Patrick Way
St Patrick Way	II	0.1	Golden Gate Dr	Amador Plaza Rd
Dublin Blvd	II	0.6	Silvergate Dr (750' west)	San Ramon Rd
Dublin Blvd	III	1.0	San Ramon Rd	Alamo Canal Trail
Planned				
Downtown Dublin	I	0.7	San Ramon Rd	Amador Plaza Rd
Dublin Blvd	I/IV	4.4	Kelly Canyon Dr	Scarlett Dr
St Patrick Way	II	0.2	Regional St	Golden Gate Dr

Source: *Dublin Bicycle and Pedestrian Plan, 2023*

Project Effects on Bicycle Facilities

Existing and future bicycle facilities, including bike lanes on San Ramon Road, Saint Patrick Way and Regional Street, together with shared use of minor streets provide adequate access for bicyclists within the vicinity of the project site.

Finding – Bicycle access to the site is adequately served by a network of bicycle facilities.

Transit Facilities

Existing Transit Facilities

The Livermore Amador Valley Transit Authority (LAVTA) Tri-Valley Wheels bus service provides fixed route bus service in Dublin, Pleasanton, and Livermore. The closest stops to the proposed project site serve Wheels Bus Route 30R and are located approximately 0.2 miles east of the project site, with the eastbound stop located at Dublin Boulevard/Regional Street and the westbound at Dublin Boulevard/Golden Gate Drive. Route 30R provides daily service to destinations between West Dublin/Pleasanton Bay Area Rapid Transit (BART) and Livermore.

The West Dublin/Pleasanton BART station is located approximately 0.5 miles from the project site. The station is along the “blue line” that operates direct train service between the Daly City and Dublin/ Pleasanton stations. Connecting service to other BART lines is available via a transfer at the Bay Fair or other stations. Existing transit routes and their operating schedules are summarized in Table 4.

Table 4 – Transit Routes						
Transit Agency	Distance to Stop (mi) ¹	Service			Connection	
		Days of Operation	Time	Frequency		
Livermore Amador Valley Transit Authority Tri-Valley Wheels						
Route #30R	0.4	Mon – Fri Sat Sun	5:52 a.m. – 9:52 p.m. 6:27 a.m. – 9:58 p.m. 6:19 a.m. – 9:50 p.m.	30 minutes 1 hour 1 hour	West Dublin BART to Livermore	
Bay Area Rapid Transit						
West Dublin/ Pleasanton	0.5	Mon – Fri Sat Sun	5:09 a.m. – 1:32 a.m. 5:47 a.m. – 1:32 a.m. 7:12 a.m. – 1:32 a.m.	15 minutes 30 minutes 30 minutes	Daly City to Dublin/Pleasanton	

Note: ¹ Defined as the shortest walking distance between the project site and the nearest bus stop

Source: wheelsbus.com; bart.gov

Two bicycles can be carried on all LAVTA Tri-Valley Wheels fixed-route buses. Bike rack space is on a first come, first served basis. On BART trains, bicycles are allowed except in the first car or any crowded car. During commuting hours, bikes are not allowed in the first three cars of any train. Cyclists must yield to other passengers and yield priority seating to seniors and people with disabilities.

Paratransit Services

Wheels Dial-A-Ride provides paratransit services to eligible people with disabilities who live in Livermore, Pleasanton, or Dublin. Additionally, BART provides paratransit services through lift vans to people with disabilities who cannot ride BART trains. Paratransit services are provided by both through reservations only.

On-Demand Transportation Services

On-demand private vehicle services, such as Uber and Lyft, are available in the project area 24 hours a day. These private vehicle services can be used for trips both within the local area and to further destinations, including transit stops/stations and local airports.

Project Effects on Transit Facilities

Development sites which are located within one-half mile (2,640 feet) of a transit stop are generally considered to be adequately served by transit. Existing transit routes were reviewed and determined to be adequate to accommodate project-generated transit trips. Existing stops are within an acceptable walking distance of the site and would be accessible via the existing sidewalk network in the study area.

Additionally, per the school's proposed Traffic and Parking Management Plan, up to 30 percent of the students and a portion of the staff are expected to use the free private school bus, which would alleviate the use of the nearby public transit options.

Finding – The project site is adequately served by transit since existing transit stops are less than one-half mile away and students are expected to use the school's private bus service.

Safety Issues

The potential for the project to impact safety was evaluated in terms of the adequacy of sight distance and need for turn lanes at the project accesses as well as the adequacy of stacking space in dedicated turn lanes at the Regional Street/Dublin Boulevard intersection to accommodate additional queuing due to adding project-generated trips and need for additional right-of-way controls. This section addresses the third transportation bullet on the CEQA checklist which is whether or not the project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Site Access

The proposed project is primarily accessed via two existing driveways. One of these driveways is located on Dublin Boulevard, approximately 270 feet east of San Ramon Road, while the other is located on Regional Street, approximately 380 feet south of Dublin Boulevard. The Dublin Boulevard driveway has right-turn vehicle access only since the raised median along Dublin Boulevard blocks all left-turn movements. Some drivers may also use one of the two driveways just east of the Earl Anthony Dublin Bowl to access the project site from Regional Street although use of these driveways by school related traffic will be discouraged via the Traffic and Parking Management Plan. All four driveways are shared with several neighboring retail establishments such as Starbucks, The Sleep Number Mattress Store, Video Only and the Earl Anthony Dublin Bowl.

The potential for vehicle conflicts between school-related vehicles and vehicles related to these adjacent land uses may occur within the internal aisleways of the surrounding parking lots. However, given that vehicle speeds within the parking lot and connecting internal aisles are relatively slow the potential for conflicts or collisions between circulating vehicles is not expected to result in a safety issue as these areas have unobstructed sight lines and are consistent with typical driver behavior and expectation within a parking lot.

An evaluation of vehicle delays leaving the site was conducted at each driveway which identified that an average delay of no more than 25.9 seconds per vehicle would be expected once project-related vehicle trips are added to the roadway network during any of the peak hours analyzed. This measure of delay is an acceptable amount that is also consistent with the typical expectations of drivers exiting a parking lot.

Sight Distance

At driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting to enter the street and the driver of an approaching vehicle. The sight distances from the project driveways were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distances for driveway approaches are based on stopping sight distance and use the approach travel speed as the basis for determining the recommended sight distance. Based on a design speed of 35 mph for Dublin Boulevard, the minimum stopping sight distance needed is 250 feet and based on a design speed of 30 mph for Regional Street, the minimum stopping sight distance needed is 200 feet. A review in the field shows that sight distance at the proposed project driveway location on Dublin Boulevard exceeds 250 feet to the west; sight lines to the east were not evaluated due to the access constraints associated with the existing center median island. Sight distance at the driveway on Regional Street exceeds 200 feet to the north and south. To maintain this sight distance any vegetation near the project's driveways should be trimmed to an appropriate height of less than three feet and trees trimmed so that nothing hangs below a height of seven feet from the surface of the roadway.

For a motorist traveling northbound on Regional Street intending to turn left into the project driveway, the stopping sight distance looking north along Regional Street is also greater than 200 feet, providing adequate

visibility to allow a following driver to observe and react to a vehicle that may slow before moving into the left-turn pocket before entering the driveway.

Finding – Adequate sight distance is available at the proposed project driveway locations to accommodate all turns entering and exiting the site.

Recommendation – To preserve a minimum sight distance of 250 feet at each driveway access point, it is recommended that vegetation along the project frontage be trimmed and maintained.

Queuing

Left-Turn Lane Queuing

The City of Dublin does not prescribe thresholds of significance regarding queue lengths. However, an increase in queue length due to project traffic was considered a potentially adverse condition if the increase would cause the queue to extend out of a dedicated turn lane into a through traffic lane, or the back of queue into a visually restricted area, such as a blind corner, or an adjacent intersection. If queues would already be expected to extend past a dedicated turn lane or into a visually restricted area without project traffic, the lengthening of the queue due to project traffic so that it would exceed a second threshold was considered to constitute a potentially adverse effect.

Regional Street/Dublin Boulevard

Under each scenario, the projected maximum queues in left-turn pockets at the Regional Street/Dublin Boulevard intersection were determined based on the queuing reports as provided by Synchro. Summarized in Table 5 are the predicted left-turn queue lengths for the approaches. Copies of the queuing reports are contained in Appendix A.

Table 5 – Left-Turn Queues at Regional Street/Dublin Boulevard

Study Intersection Approach	Available Storage	95 th Percentile Queues								
		AM Peak Hour			School PM Peak Hour			PM Peak Hour		
		E	NT	NT+P	E	NT	NT+P	E	NT	NT+P
Regional St										
Northbound Left	120	90	113	346	189	262	418	175	263	452
Southbound Left	125	77	77	77	185	185	185	223	230	230
Dublin Blvd										
Eastbound Left	275	219	220	236	253	265	274	238	252	246
Westbound Left	220	64	64	109	99	99	117	125	125	138

Notes: All distances are measured in feet; E = existing conditions; NT = near-term conditions; NT+P = near-term plus project conditions; **Bold text** = queue length exceeds available storage

Left-turn lane storage is expected to exceed the existing storage capacity on both the northbound and southbound approaches of Regional Street during the school p.m. and p.m. peak hour with or without the addition of project-related trips. Any vehicle spillover during these peak hours would restrict access to the adjacent through lanes as well as at nearby driveways serving neighboring retail centers.

The addition of project-related traffic would increase the queue length by 233 feet during the a.m. peak hour which exceeds the storage length of the northbound left-turn lane. Based on the previously described definition,

this is considered a significant impact for the a.m. peak hour only. To increase the storage capacity of the northbound left-turn vehicle movements, on-street parking could be eliminated and the pavement striping along Regional Street modified to provide a 130-foot-long northbound left-turn lane which transitions from a center two-way left-turn lane (TWLTL) together with the existing travel lane and Class II bike lane in each direction.

The traffic signals along Dublin Boulevard between San Ramon Road and Dougherty Road are controlled by an adaptive signal timing system capable of adjusting signal timing parameters based on real-time traffic flows along the corridor. All signalized intersections along this corridor are currently operating under coordination and, as such, are influenced by each other. Further in-depth study may be necessary to identify any potential changes in service levels or queue lengths attributable to signal timing adjustments combined with the addition of project-related trips along Dublin Boulevard.

Finding – Vehicle storage for the southbound and northbound left-turn lanes at the intersection of Regional Street/Dublin Boulevard are expected to exceed the storage capacity with or without the addition of project-related trips during the school p.m. and p.m. peak hours. Upon the addition of project-generated traffic, the northbound left-turn lane would also exceed the available storage during the a.m. peak hour. Queue spillback in these lanes would extend beyond the storage space and potentially restrict access to the adjacent through lanes and driveways to neighboring land uses. This would be an adverse condition for the a.m. peak hour only.

Recommendation – On-street parking should be prohibited and the pavement striping along Regional Street modified to provide one travel lane and Class II bike lane in each direction as well as a two-way left-turn lane and 130-foot-long northbound left-turn lane.

In addition to the recommended modifications to pavement striping along Regional Street, adjustments to the signal timing at the intersection of Regional Street/Dublin Boulevard would also reduce the vehicle queue length at the northbound left-turn lane. However, since all signalized intersections along this segment of Dublin Boulevard are operated under coordination it is also recommended that further study be conducted to identify whether any other changes in traffic operations would occur at other signalized intersections along the corridor due to changing timing at this location. Modifications to the pavement striping and signal timing would adequately increase both vehicle storage capacity and throughput for the northbound left-turn movement.

Drop-Off Lane Queuing

The proposed parking area includes a 280-foot-long drop-off area with storage capacity for 13 vehicles. The drop-off lane queuing was analyzed for the morning drop-off period only because it represents the period with the largest peak hour demand. As school traffic generally experiences short periods within the peak hour with concentrated arrivals and departures before and after the school bells, a peak hour factor adjustment was used to estimate the actual (design) flow rate of vehicles at the drop-off lanes. The use of a peak hour factor adjusts the number of estimated vehicle arrivals to appropriately account for concentrated peaking that is typical for schools. A peak hour factor of 1.0 means traffic levels are evenly spread out over the whole hour, and a lower number of 0.80 or less means traffic spikes for a short period during the hour, such as a school drop-off period.

Based on the school's trip generation forecast there would be 261 vehicles per hour departing during the morning peak hour; these were assumed to be vehicles dropping students off. Vehicle surveys conducted in March 2017 show that the peak hour factor for the BASIS Independent Silicon Valley Campus during the morning drop-off is 0.633, meaning there is a concentrated peak of traffic just before the school bell. This is equivalent to a design flow rate of 412 vehicles per hour.

A sensitivity test was conducted to determine the slowest service rate that could accommodate the expected demand considering the vehicle stacking area. Through this sensitivity test, it was determined that a service rate of approximately one vehicle discharged every 8.5 seconds would result in a 95th percentile of 13 vehicles in the queue and would have a low probability (5 percent) of exceeding thirteen vehicles in the queue at any point during the drop-off period. Probabilities of 5 percent or less are generally considered to be acceptable. Through

this process, it was determined that the successful operation of the drop-off lanes would rely on the quick discharge of vehicles at a rate no slower than 8.5 seconds per vehicle during peak periods, or about 7.1 vehicles per minute. Discharge rates which are slower than this would increase the probability that the queue would exceed the available storage of the drop-off lanes during the peak periods.

It is also worth noting that it was assumed that the egress from the drop-off lane to either Dublin Boulevard or Regional Street would be uninterrupted and clear of congestion. If a queue exists on the egress route for any reason, the discharge at the drop-off lane would be compromised and the queue length would be extended.

On the rare occasion when the queue exceeds 13 vehicles, any additional vehicles would likely stack up in the parking lot aisles which are able to accommodate at least 24 additional vehicles before extending beyond the project site boundaries. Vehicles attempting to use the aisle would still be able to pass by using the opposing lane, just as they would pass a vehicle waiting for a parking spot to become available in a crowded lot. Given that parking lots are a low-speed environment, the short-term blockage of the drive-aisle is not expected to cause difficulties as it is consistent with typical driver behavior and expectation within a parking lot.

Finding – Based on the estimated arrival rate and service rates, the available storage capacity of the drop-off lanes is expected to be adequate if the drop-off lane can discharge at least one car every 8.5 seconds and vehicles can exit onto either Dublin Boulevard or Regional Street. It is noted that if the queue exceeds 13 vehicles, any additional vehicles will stack up in the project parking lot drive-aisle which is able to accommodate at least 24 additional vehicles.

Traffic and Parking Management Plan

BASIS Independent Schools developed a Traffic and Parking Management Plan (TPMP) based on their experience operating other school campuses in the Bay Area. This plan was reviewed to evaluate its reasonableness for application at this project site.

According to the TPMP, vehicle trip generation will be reduced and parking facilities managed by offering a series of incentives to students and staff along with a system of remediation which is contractually enforceable as stated in the Parent and Student Guidebook. These incentives include access to a free private bus service, staggered bell schedule, extracurricular after-school activities and encouraging use of nearby public transit options. The plan also includes measures to manage both the traffic flow of private vehicles and the use of parking facilities via strictly enforced rules defining parking lot safety policies and the distribution of parking passes to a limited number of students and staff. Parents are contractually obligated to abide by these rules as stated in the Parent and Student Guidebook assigned to each family.

Finding – The proposed Traffic and Parking Management Plan would be reasonably expected to result in acceptable operations.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using the signalized methodology published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 6th edition. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle. The signalized methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For the purposes of this study, delays were calculated using signal timing obtained from the City of Dublin.

The project driveways are not defined as intersections, though delays were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology estimates the level of average delay in seconds per vehicle for each minor turning movement.

The ranges of delay associated with the various levels of service are indicated in Table 6.

Table 6 – Signalized Intersection Level of Service Criteria

LOS A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
LOS B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
LOS C	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
LOS D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
LOS E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
LOS F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual*, 6th Edition, Transportation Research Board, 2018

Traffic Operation Standards

The City of Dublin established that the performance standard for signalized intersections is to maintain no worse than LOS D as acceptable according to their *Transportation Impact Analysis Guidelines*, 2021. This translates to an allowable average delay of 55 seconds. However, intersections within the *Downtown Dublin Specific Plan* area may operate at LOS E or worse if the safety for pedestrians and bicyclists is maintained and effects to transit travel speeds is minimized. This area includes the study intersections of Dublin Boulevard/San Ramon Road and Dublin Boulevard/Regional Street.

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the a.m., school p.m., and p.m. peak periods. Copies of the traffic count data sheets are provided in

Appendix B. This condition does not include project-generated traffic volumes. Volume data was collected on November 10, 2022, while local schools were in session.

Under Existing Conditions both intersections operate acceptably at LOS C or D during all peak hours. A summary of the intersection Level of Service calculations and delays is contained in Table 7. The existing traffic volumes are shown in Figure 3, and copies of the calculations are provided in Appendix C.

Table 7 – Existing Peak Hour Intersection Levels of Service

Study Intersection	AM Peak		School PM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS
1. San Ramon Rd/Dublin Blvd	44.5	D	39.7	D	43.7	C
2. Regional St/Dublin Blvd	35.6	D	24.4	C	23.6	C

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

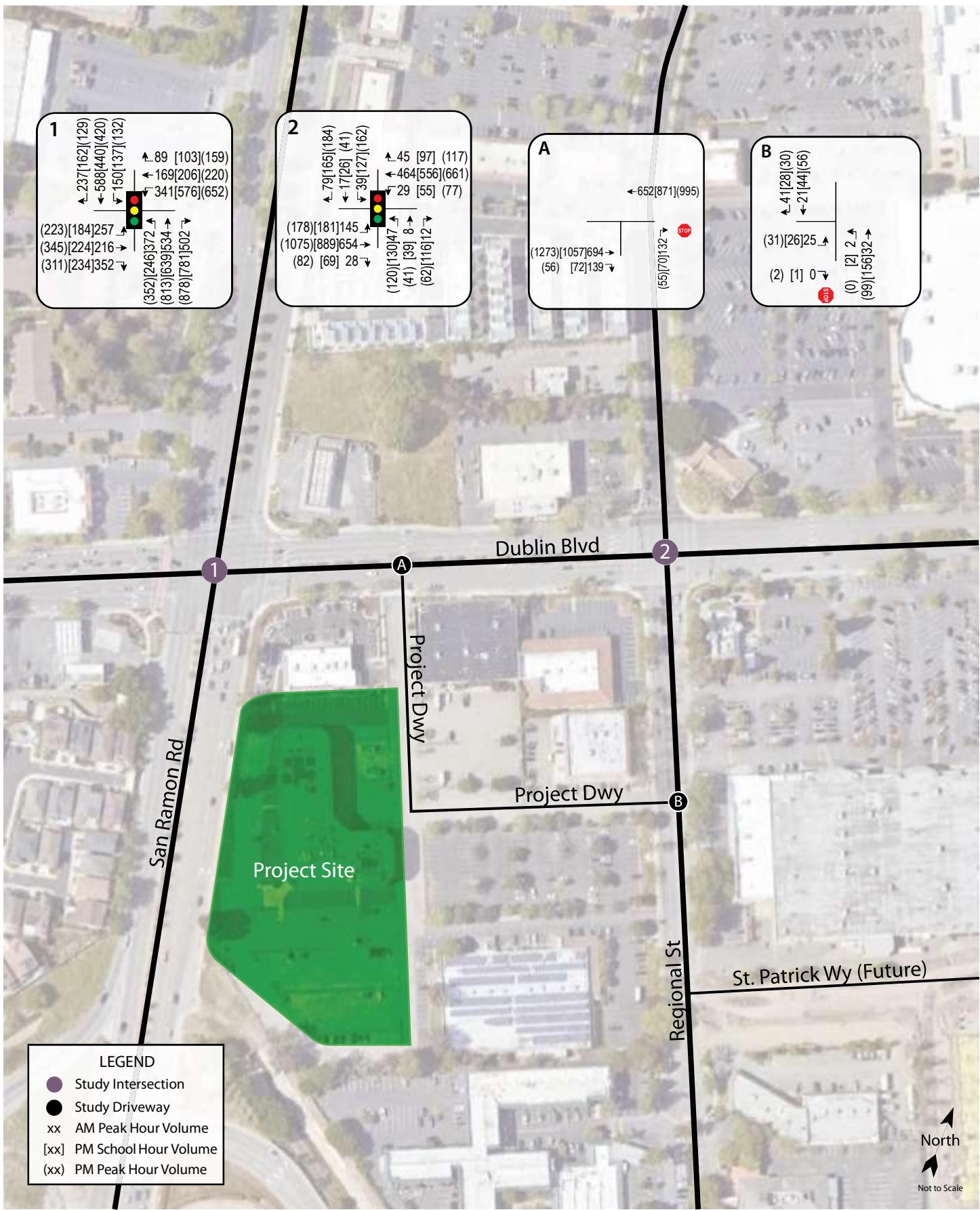
Near-Term Conditions

The Near-Term Conditions scenario includes existing traffic volumes plus the forecasted traffic demand due to local and regional growth in the near-term, defined to occur by the year 2024. These turning movement forecasts were developed using roadway segment volumes from the 2020 and 2040 City of Dublin travel demand models to determine approach and departure link growth, then applying the Furness methodology to determine individual turning movements at each intersection. It is noted that traffic associated with the future H-Mart project (located at 7884 Dublin Boulevard) was also added to the expected near-term volumes. Under these projected volumes both intersections would continue to operate acceptably at LOS C or D during all three peak hours. These results are summarized in Table 8 and Near-Term volumes are shown in Figure 4.

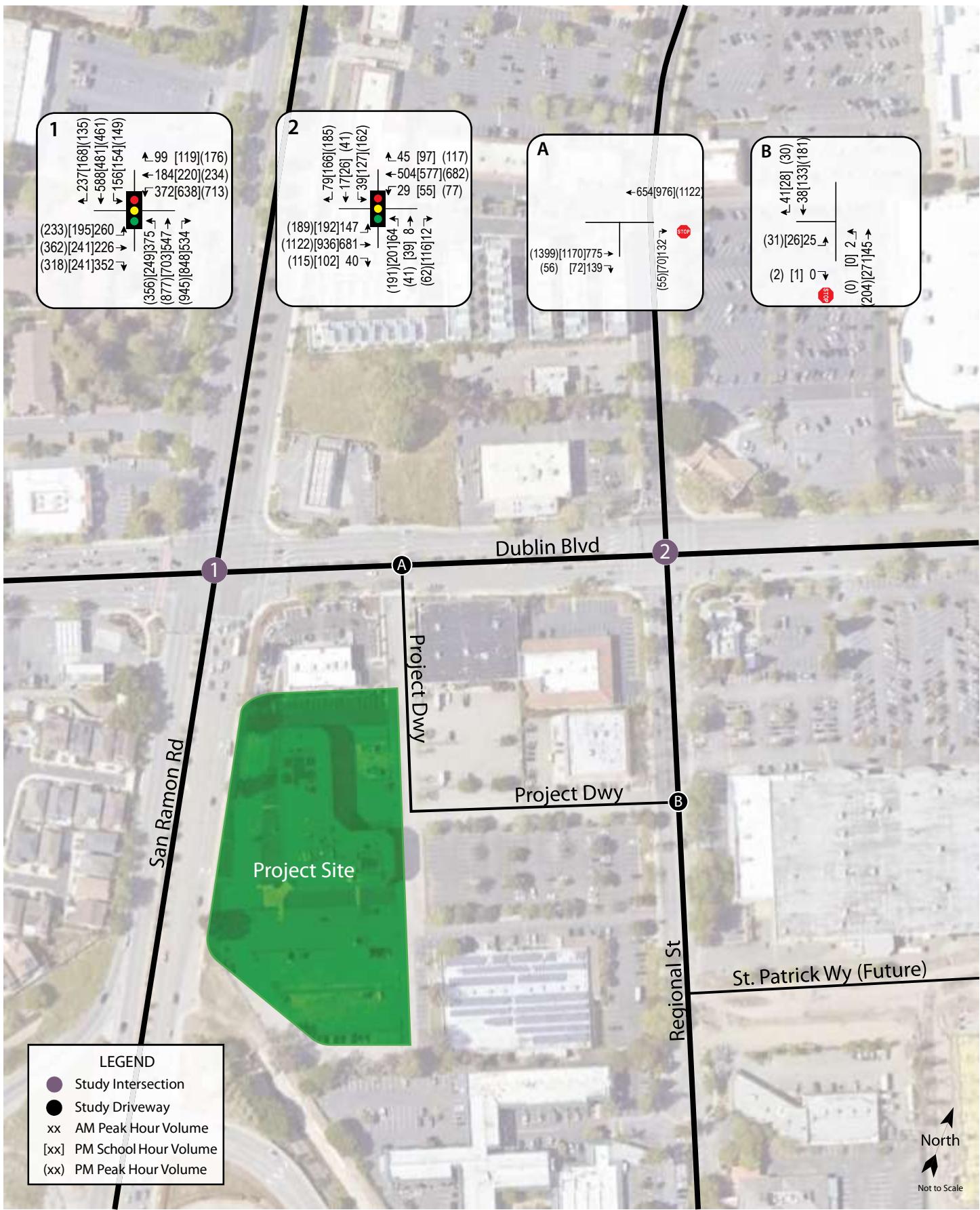
Table 8 – Near-Term Peak Hour Intersection Levels of Service

Study Intersection	AM Peak		School PM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS
1. San Ramon Rd/Dublin Blvd	45.0	D	40.1	D	45.3	D
2. Regional St/Dublin Blvd	36.3	D	27.0	C	25.9	C

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service



Transportation Impact Study for the BASIS School Project
Figure 3 – Existing Traffic Volumes



Transportation Impact Study for the BASIS School Project
Figure 4 – Near-Term Traffic Volumes

Project Conditions

Near-Term plus Project Conditions

With project-related traffic added to volumes for Near-Term Conditions, both intersections would be expected to continue operating at LOS C or D during all peak hours studied, except that Regional Street/Dublin Boulevard would operate at LOS F during the a.m. peak hour. These results are summarized in Table 9. Project traffic volumes are shown in Figure 5. Near-term plus Project volumes are shown in Figure 6.

Table 9 – Near-Term and Near-Term plus Project Peak Hour Intersection Levels of Service

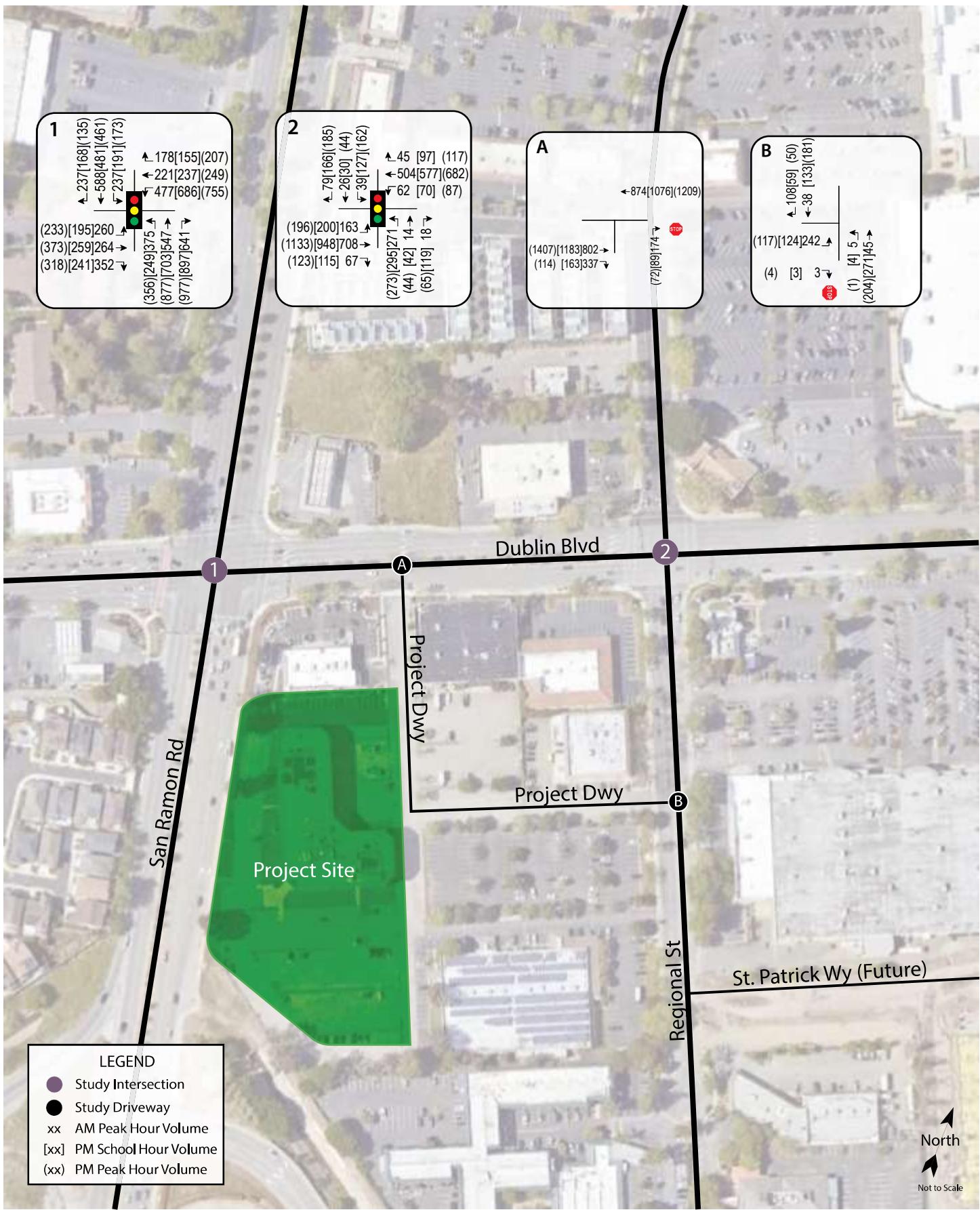
Study Intersection	Near-Term Conditions						Near-Term plus Project					
	AM Peak		Sch	PM Peak	PM Peak		AM Peak		Sch	PM Peak	PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. San Ramon Rd/Dublin Blvd	45.0	D	40.1	D	45.3	D	48.2	D	41.3	D	48.2	D
2. Regional St/Dublin Blvd	36.3	D	27.0	C	25.9	C	82.1	F	35.9	D	31.0	C

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation; Sch = School

Finding – The addition of project-generated traffic results in no change in LOS for San Ramon Road/Dublin Boulevard during any of the peak hours studied but would degrade operation from LOS D to F during the a.m. peak hour and from LOS C to D during the school p.m. peak hour at Regional Street/Dublin Boulevard. However, neither of these situations are considered an adverse condition based on the traffic operation standards described in the City's *Downtown Dublin Specific Plan*, which state that intersections within the specific plan area may operate at LOS E or worse.



Transportation Impact Study for the BASIS School Project
Figure 5 – Project Traffic Volumes



Transportation Impact Study for the BASIS School Project
Figure 6 – Near-Term plus Project Traffic Volumes

Conclusions and Recommendations

Conclusions

- The proposed project is expected to generate an average of 2,551 daily trips, with 528 trips during the a.m. peak hour, 240 during the school p.m. peak hour, and 181 during the p.m. peak hour.
- Pedestrian, bicycle, and transit facilities are generally adequate to serve the project, though pedestrian connectivity could be improved to comply with City policy.
- Sight lines at the project driveways are adequate for the approach speeds.
- For the Near-Term Condition, left-turn lane storage for the northbound and southbound Regional Street approaches to Dublin Boulevard are exceeded with or without the project during the school p.m. and p.m. peak hour scenarios considered. Upon the addition of project-generated traffic, the northbound left-turn lane storage would be exceeded during the a.m. peak hour; this is potentially an adverse condition.
- Based on the estimated arrival rate and service rate for the morning drop-off period, the available storage capacity of the drop-off lanes is expected to be adequate if the drop-off lane can discharge at least one vehicle every 8.5 seconds.
- The Traffic and Parking Management Plan prepared by the BASIS school is reasonably expected to achieve acceptable operations.
- Both signalized intersections currently operate acceptably and are expected to continue doing so under Near-Term 2024 volumes.
- Upon adding project-generated traffic to the near-term volumes, the operation at the Regional Street/Dublin Boulevard intersection would degrade from LOS D to F during the a.m. peak hour.

Recommendations

- Further study is recommended to determine whether the installation of a midblock crosswalk, potentially with enhanced crossing treatments, is appropriate on Regional Street. A midblock crosswalk at Regional Street would comply with policies described in the *Downtown Dublin Specific Plan*. The crosswalk should be located along Regional Street south of the project driveway and include advanced pedestrian warning signs and pavement markings consistent with current CA MUTCD standards. A pedestrian pathway, constructed to satisfy the minimum federal accessibility requirements as described in The Americans with Disabilities Act (ADA), between the school building and sidewalks on Regional Street is also recommended.
- To maintain adequate sight lines, all vegetation near the driveways on Dublin Boulevard and Regional Street should be trimmed to ensure that all landscaping lies below three feet in height or above seven feet.
- Elimination of on-street parking and modification of the pavement striping along Regional Street is recommended to provide one travel lane and one Class II bike lane in each direction as well as a two-way left-turn lane and 130-foot-long northbound left-turn lane and increase vehicle storage capacity for this movement.
- Optimization of traffic signal timing at Regional Street/Dublin Boulevard would increase vehicle throughput and reduce vehicle queue lengths at the Regional Street approach. Further study is recommended to determine whether traffic operations elsewhere along the corridor would degrade since all of the signalized intersections along the Dublin Boulevard corridor are under coordination and influence each other.

Study Participants and References

Study Participants

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DUB900-3





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Appendix A

Queuing Worksheets



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Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	158	741	32	553	51	9	13	42	18	86
v/c Ratio	0.60	0.20	0.36	0.14	0.48	0.09	0.07	0.33	0.17	0.51
Control Delay	65.1	6.9	74.5	11.9	77.8	62.2	0.8	68.7	65.4	22.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.1	6.9	74.5	11.9	77.8	62.2	0.8	68.7	65.4	22.7
Queue Length 50th (ft)	143	49	29	56	46	8	0	38	16	0
Queue Length 95th (ft)	219	134	64	86	90	27	0	77	42	54
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	264	3775	148	3858	195	483	526	195	533	505
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.20	0.22	0.14	0.26	0.02	0.02	0.22	0.03	0.17

Intersection Summary

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	191	1009	58	687	137	41	122	134	27	174
v/c Ratio	0.77	0.31	0.51	0.20	0.71	0.33	0.55	0.71	0.22	0.65
Control Delay	71.6	16.6	77.9	16.5	79.8	67.6	19.3	79.8	64.5	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.6	16.6	77.9	16.5	79.8	67.6	19.3	79.8	64.5	20.2
Queue Length 50th (ft)	175	152	52	82	123	36	0	120	24	0
Queue Length 95th (ft)	253	264	99	133	189	74	62	185	54	73
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	282	3263	199	3495	287	531	545	253	506	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.31	0.29	0.20	0.48	0.08	0.22	0.53	0.05	0.32

Intersection Summary

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	185	1205	80	811	125	43	65	169	43	192
v/c Ratio	0.77	0.39	0.59	0.24	0.69	0.35	0.30	0.70	0.28	0.62
Control Delay	67.7	19.4	79.3	17.6	79.8	69.7	3.5	73.2	63.0	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.7	19.4	79.3	17.6	79.8	69.7	3.5	73.2	63.0	17.0
Queue Length 50th (ft)	163	249	72	105	112	38	0	151	37	0
Queue Length 95th (ft)	238	298	125	158	175	78	0	223	76	75
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	277	3067	197	3431	287	546	551	259	496	559
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.39	0.41	0.24	0.44	0.08	0.12	0.65	0.09	0.34

Intersection Summary

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	160	783	32	597	70	9	13	42	18	86
v/c Ratio	0.60	0.21	0.36	0.16	0.56	0.08	0.07	0.32	0.17	0.51
Control Delay	64.7	7.9	74.5	12.8	79.1	60.1	0.7	68.2	65.4	22.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.7	7.9	74.5	12.8	79.1	60.1	0.7	68.2	65.4	22.7
Queue Length 50th (ft)	145	59	29	64	63	8	0	38	16	0
Queue Length 95th (ft)	220	148	64	97	113	26	0	77	42	54
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	268	3716	148	3787	195	483	526	199	533	505
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.21	0.22	0.16	0.36	0.02	0.02	0.21	0.03	0.17

Intersection Summary

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	202	1092	58	709	212	41	122	134	27	175
v/c Ratio	0.77	0.36	0.51	0.22	0.78	0.20	0.43	0.71	0.23	0.66
Control Delay	71.1	20.0	77.9	20.5	75.7	57.0	13.4	79.6	65.2	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.1	20.0	77.9	20.5	75.7	57.0	13.4	79.6	65.2	20.8
Queue Length 50th (ft)	184	190	52	95	188	35	0	120	24	0
Queue Length 95th (ft)	265	290	99	155	262	69	57	185	54	73
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	287	3035	199	3186	308	531	545	254	506	552
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.36	0.29	0.22	0.69	0.08	0.22	0.53	0.05	0.32

Intersection Summary

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	197	1289	80	832	199	43	65	169	43	193
v/c Ratio	0.77	0.44	0.59	0.26	0.82	0.27	0.27	0.69	0.34	0.67
Control Delay	65.6	20.8	79.3	19.8	84.2	62.6	2.6	73.4	67.8	19.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	20.8	79.3	19.8	84.2	62.6	2.6	73.4	67.8	19.7
Queue Length 50th (ft)	167	297	72	115	178	37	0	151	38	0
Queue Length 95th (ft)	252	314	125	170	263	74	0	#230	76	76
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	283	2958	197	3261	288	546	551	261	496	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.44	0.41	0.26	0.69	0.08	0.12	0.65	0.09	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	177	843	67	597	295	15	20	42	28	86
v/c Ratio	0.57	0.36	0.54	0.27	0.59	0.03	0.04	0.43	0.25	0.49
Control Delay	69.1	22.9	78.6	31.4	50.3	39.0	0.1	76.8	67.3	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	22.9	78.6	31.4	50.3	39.0	0.1	76.8	67.3	21.9
Queue Length 50th (ft)	160	124	60	102	241	10	0	38	25	0
Queue Length 95th (ft)	236	220	109	134	346	29	0	77	57	54
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	308	2372	153	2469	502	565	601	186	533	505
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.36	0.44	0.24	0.59	0.03	0.03	0.23	0.05	0.17

Intersection Summary

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	211	1119	74	709	311	44	125	134	32	175
v/c Ratio	0.78	0.44	0.57	0.27	0.72	0.12	0.30	0.71	0.26	0.66
Control Delay	72.2	27.8	78.9	27.5	59.4	48.5	10.0	79.6	66.2	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.2	27.8	78.9	27.5	59.4	48.5	10.0	79.6	66.2	20.5
Queue Length 50th (ft)	193	238	66	118	259	33	0	120	28	0
Queue Length 95th (ft)	274	311	117	158	#418	72	57	185	61	73
Internal Link Dist (ft)	354		631		271			478		
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	294	2537	199	2581	433	531	547	254	506	552
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.44	0.37	0.27	0.72	0.08	0.23	0.53	0.06	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: Regional St & Dublin Blvd

12/20/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	204	1308	91	832	284	46	68	169	46	193
v/c Ratio	0.77	0.50	0.62	0.29	0.81	0.19	0.22	0.61	0.35	0.67
Control Delay	66.1	27.4	79.6	24.5	72.0	55.3	1.8	67.0	68.2	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	27.4	79.6	24.5	72.0	55.3	1.8	67.0	68.2	19.5
Queue Length 50th (ft)	187	322	82	138	240	36	0	151	41	0
Queue Length 95th (ft)	246	338	138	172	#452	79	2	#230	81	76
Internal Link Dist (ft)		354		631		271			478	
Turn Bay Length (ft)	275		220		120		110	125		110
Base Capacity (vph)	287	2615	199	2849	350	546	551	293	496	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.50	0.46	0.29	0.81	0.08	0.12	0.58	0.09	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



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Appendix B

Intersection Peak Hour Volumes



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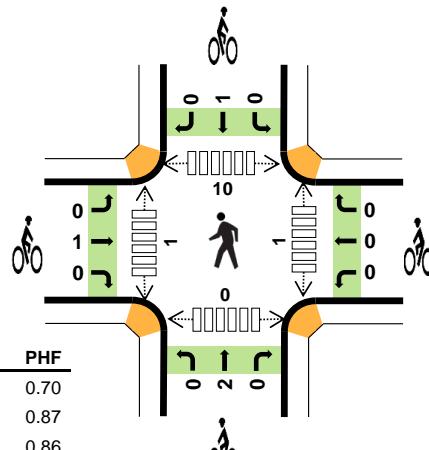
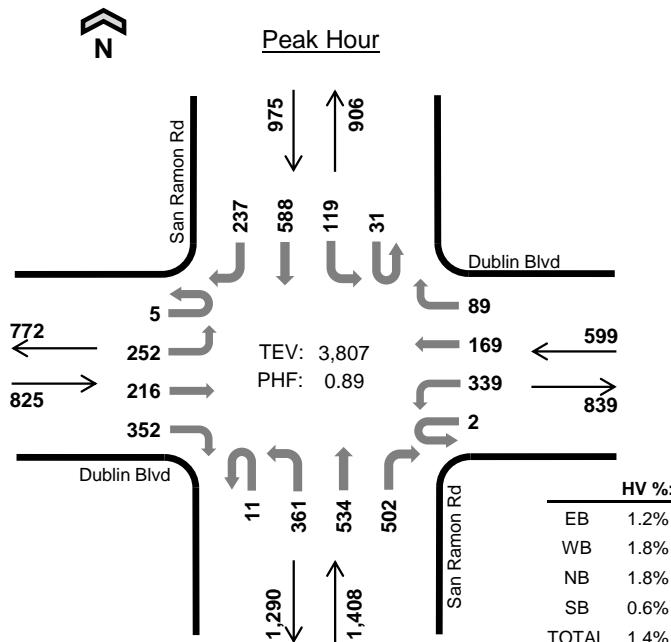
San Ramon Rd Dublin Blvd



Date: 11/10/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:45 AM to 8:45 AM

**Two-Hour Count Summaries**

Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour							
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH		RT		UT		LT		TH		RT		
7:00 AM	0	11	20	44	1	66	13	8	0	32	54	92	2	6	67	14	430	0							
7:15 AM	0	12	22	52	0	91	22	15	1	36	56	80	4	15	102	14	522	0							
7:30 AM	0	25	24	49	0	80	21	13	3	38	102	102	2	9	125	20	613	0							
7:45 AM	2	81	33	69	1	69	26	21	1	121	158	129	12	25	132	38	918	2,483							
8:00 AM	1	112	74	108	1	79	40	25	2	114	155	116	8	28	144	58	1,065	3,118							
8:15 AM	1	37	59	94	0	90	49	26	5	67	124	143	6	33	154	76	964	3,560							
8:30 AM	1	22	50	81	0	101	54	17	3	59	97	114	5	33	158	65	860	3,807							
8:45 AM	1	36	36	61	2	109	53	25	2	55	119	118	3	22	112	25	779	3,668							
Count Total	6	336	318	558	5	685	278	150	17	522	865	894	42	171	994	310	6,151	0							
Peak Hour	All	5	252	216	352	2	339	169	89	11	361	534	502	31	119	588	237	3,807	0						
Peak Hour	HV	0	2	2	6	0	7	0	4	0	3	14	8	0	0	4	2	52	0						
Peak Hour	HV%	0%	1%	1%	2%	0%	2%	0%	4%	0%	1%	3%	2%	0%	0%	1%	1%	1%	0						

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	5	9	2	19	0	0	0	0	0	0	1	1	0	2
7:15 AM	1	5	11	2	19	0	0	0	0	0	0	2	1	0	3
7:30 AM	2	2	7	2	13	0	0	0	0	0	0	0	0	0	0
7:45 AM	4	3	10	1	18	0	0	0	0	0	0	0	0	0	0
8:00 AM	3	2	8	2	15	1	0	0	1	2	0	0	5	0	5
8:15 AM	1	5	3	1	10	0	0	2	0	2	0	0	3	0	3
8:30 AM	2	1	4	2	9	0	0	0	0	0	1	1	2	0	4
8:45 AM	2	9	6	6	23	0	0	0	0	0	1	0	5	0	6
Count Total	18	32	58	18	126	1	0	2	1	4	2	4	17	0	23
Peak Hour	10	11	25	6	52	1	0	2	1	4	1	1	10	0	12

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	1	2	0	0	2	1	2	0	2	3	4	0	0	0	2	19	0		
7:15 AM	0	0	0	1	0	5	0	0	0	5	4	2	0	0	2	0	19	0		
7:30 AM	0	2	0	0	0	2	0	0	0	0	4	3	0	0	2	0	13	0		
7:45 AM	0	0	1	3	0	2	0	1	0	1	6	3	0	0	1	0	18	69		
8:00 AM	0	2	0	1	0	1	0	1	0	1	5	2	0	0	1	1	15	65		
8:15 AM	0	0	0	1	0	4	0	1	0	0	2	1	0	0	1	0	10	56		
8:30 AM	0	0	1	1	0	0	0	1	0	1	1	2	0	0	1	1	9	52		
8:45 AM	0	0	1	1	1	5	0	3	0	3	2	1	0	0	5	1	23	57		
Count Total	0	5	5	8	1	21	1	9	0	13	27	18	0	0	13	5	126	0		
Peak Hour	0	2	2	6	0	7	0	4	0	3	14	8	0	0	4	2	52	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:00 AM	0	1	0		0	0	0		0	0	0		0	1	0		2	2		
8:15 AM	0	0	0		0	0	0		0	2	0		0	0	0		2	4		
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	4		
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	4		
Count Total	0	1	0		0	0	0		0	2	0		0	1	0		4	0		
Peak Hour	0	1	0		0	0	0		0	2	0		0	1	0		4	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

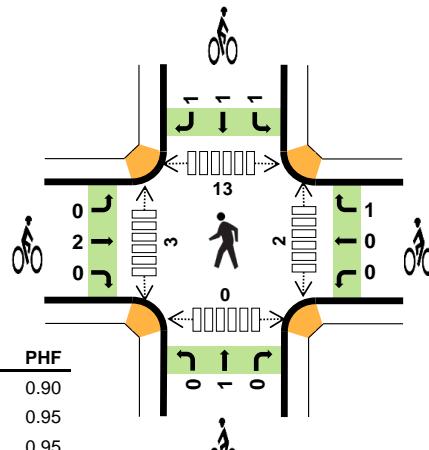
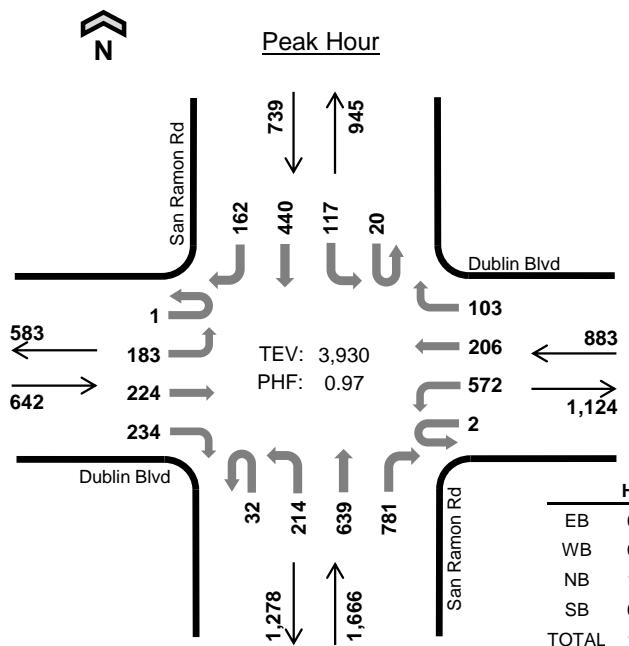
San Ramon Rd Dublin Blvd



Date: 11/10/2022

Count Period: 2:00 PM to 4:00 PM

Peak Hour: 3:00 PM to 4:00 PM

**Two-Hour Count Summaries**

Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	38	40	46	0	171	43	30	9	63	123	169	2	31	107	30	902	0		
2:15 PM	0	45	54	74	0	110	35	23	4	68	130	167	5	24	114	23	876	0		
2:30 PM	1	53	60	84	0	150	40	25	2	42	158	176	4	25	89	21	930	0		
2:45 PM	2	59	70	51	0	148	27	16	4	40	152	173	8	27	97	23	897	3,605		
3:00 PM	1	47	57	51	1	133	48	27	7	67	161	185	2	37	129	55	1,008	3,711		
3:15 PM	0	34	51	60	0	148	60	24	7	46	142	179	8	29	97	49	934	3,769		
3:30 PM	0	52	50	60	0	142	50	26	10	53	174	195	4	24	102	31	973	3,812		
3:45 PM	0	50	66	63	1	149	48	26	8	48	162	222	6	27	112	27	1,015	3,930		
Count Total	4	378	448	489	2	1,151	351	197	51	427	1,202	1,466	39	224	847	259	7,535	0		
Peak Hour	All	1	183	224	234	2	572	206	103	32	214	639	781	20	117	440	162	3,930	0	
	HV	0	1	2	3	0	2	3	0	0	5	9	12	0	1	5	0	43	0	
	HV%	0%	1%	1%	1%	0%	0%	1%	0%	0%	2%	1%	2%	0%	1%	1%	0%	1%	0	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	4	8	6	3	21	0	0	1	2	3	1	0	5	0	6
2:15 PM	1	5	8	5	19	0	1	0	0	1	2	3	10	0	15
2:30 PM	2	5	6	2	15	0	0	0	1	1	0	0	2	0	2
2:45 PM	6	3	4	2	15	0	1	0	2	3	0	0	9	0	9
3:00 PM	2	3	6	0	11	0	0	0	1	1	1	1	3	0	5
3:15 PM	2	0	8	2	12	0	0	0	1	1	0	1	3	0	4
3:30 PM	1	0	6	3	10	1	0	1	0	2	1	0	3	0	4
3:45 PM	1	2	6	1	10	1	1	0	1	3	0	1	4	0	5
Count Total	19	26	50	18	113	2	3	2	8	15	5	6	39	0	50
Peak Hour	6	5	26	6	43	2	1	1	3	7	2	3	13	0	18

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	1	1	2	0	5	2	1	0	0	4	2	0	0	2	1	21	0		
2:15 PM	0	0	1	0	0	3	0	2	0	1	5	2	0	0	3	2	19	0		
2:30 PM	0	0	0	2	0	5	0	0	0	2	1	3	0	0	2	0	15	0		
2:45 PM	0	3	2	1	0	2	1	0	0	1	2	1	0	1	1	0	15	70		
3:00 PM	0	0	1	1	0	1	2	0	0	1	2	3	0	0	0	0	11	60		
3:15 PM	0	0	0	2	0	0	0	0	0	2	4	2	0	1	1	0	12	53		
3:30 PM	0	1	0	0	0	0	0	0	0	1	2	3	0	0	3	0	10	48		
3:45 PM	0	0	1	0	0	1	1	0	0	1	1	4	0	0	1	0	10	43		
Count Total	0	5	6	8	0	17	6	3	0	9	21	20	0	2	13	3	113	0		
Peak Hour	0	1	2	3	0	2	3	0	0	5	9	12	0	1	5	0	43	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
2:00 PM	0	0	0		0	0	0		0	1	0		0	2	0		3	0		
2:15 PM	0	0	0		0	1	0		0	0	0		0	0	0		1	0		
2:30 PM	0	0	0		0	0	0		0	0	0		0	0	1		1	0		
2:45 PM	0	0	0		0	0	1		0	0	0		0	1	1		3	8		
3:00 PM	0	0	0		0	0	0		0	0	0		1	0	0		1	6		
3:15 PM	0	0	0		0	0	0		0	0	0		0	1	0		1	6		
3:30 PM	0	1	0		0	0	0		0	1	0		0	0	0		2	7		
3:45 PM	0	1	0		0	0	1		0	0	0		0	0	1		3	7		
Count Total	0	2	0		0	1	2		0	2	0		1	4	3		15	0		
Peak Hour	0	2	0		0	0	1		0	1	0		1	1	1		7	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

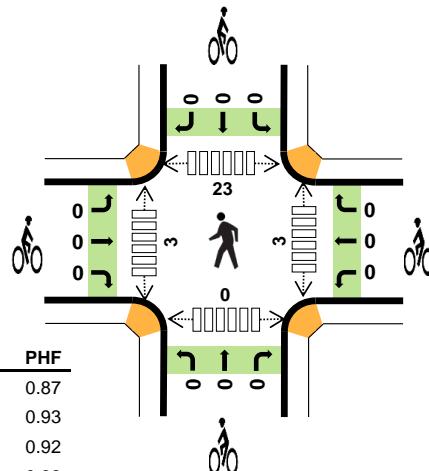
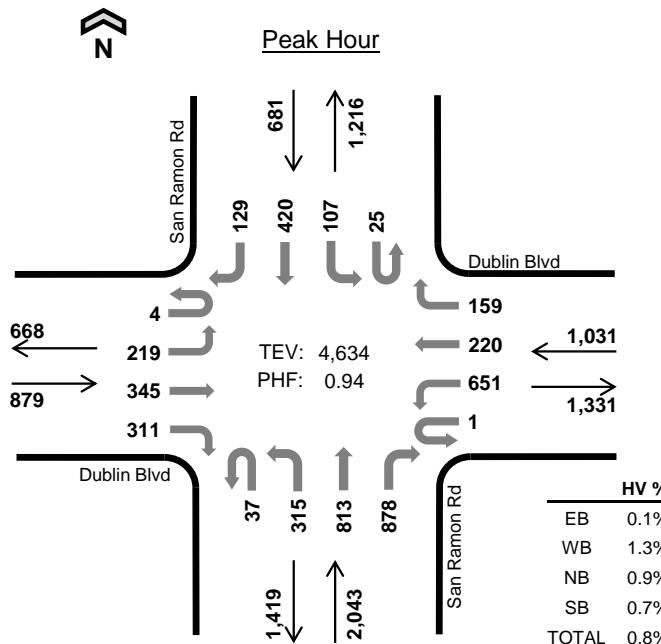
San Ramon Rd Dublin Blvd



Date: 11/10/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:45 PM to 5:45 PM



Two-Hour Count Summaries

Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour							
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH		RT		UT		LT		TH		RT		
4:00 PM	4	42	62	61	0	151	33	20	7	75	176	187	9	27	121	45	1,020	0							
4:15 PM	1	53	77	56	0	128	47	28	5	71	185	202	6	37	105	42	1,043	0							
4:30 PM	1	54	70	71	1	141	52	28	5	56	164	191	14	26	109	33	1,016	0							
4:45 PM	0	44	84	71	1	146	60	34	7	68	200	234	3	34	109	28	1,123	4,202							
5:00 PM	2	63	95	92	0	159	55	37	9	61	203	215	10	24	105	35	1,165	4,347							
5:15 PM	1	55	88	84	0	181	52	44	15	93	209	237	5	26	107	36	1,233	4,537							
5:30 PM	1	57	78	64	0	165	53	44	6	93	201	192	7	23	99	30	1,113	4,634							
5:45 PM	1	52	87	49	0	163	54	19	5	55	214	192	5	37	107	33	1,073	4,584							
Count Total	11	420	641	548	2	1,234	406	254	59	572	1,552	1,650	59	234	862	282	8,786	0							
Peak Hour	All	4	219	345	311	1	651	220	159	37	315	813	878	25	107	420	129	4,634	0						
Peak Hour	HV	0	0	0	1	0	10	2	1	0	2	3	14	0	1	4	0	38	0						
Peak Hour	HV%	0%	0%	0%	0%	0%	2%	1%	1%	0%	1%	0%	2%	0%	1%	1%	0%	1%	0						

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	2	5	1	8	0	0	1	0	1	2	2	7	0	11
4:15 PM	1	1	7	1	10	0	0	0	0	0	2	1	6	0	9
4:30 PM	3	4	3	1	11	0	0	1	0	1	0	0	1	0	1
4:45 PM	0	5	5	2	12	0	0	0	0	0	1	0	10	0	11
5:00 PM	1	3	7	1	12	0	0	0	0	0	0	1	3	0	4
5:15 PM	0	3	4	1	8	0	0	0	0	0	2	2	9	0	13
5:30 PM	0	2	3	1	6	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	3	2	0	5	0	0	0	0	0	0	0	1	0	1
Count Total	5	23	36	8	72	0	0	2	0	2	7	6	38	0	51
Peak Hour	1	13	19	5	38	0	0	0	0	0	3	3	23	0	29

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	0	0	0	0	1	1	0	0	2	1	2	0	0	1	0	8	0		
4:15 PM	0	1	0	0	0	0	1	0	0	1	1	5	0	0	1	0	10	0		
4:30 PM	0	0	2	1	0	2	1	1	0	0	1	2	1	0	0	0	11	0		
4:45 PM	0	0	0	0	0	3	2	0	0	1	0	4	0	1	1	0	12	41		
5:00 PM	0	0	0	1	0	3	0	0	0	0	1	6	0	0	1	0	12	45		
5:15 PM	0	0	0	0	0	3	0	0	0	0	1	3	0	0	1	0	8	43		
5:30 PM	0	0	0	0	0	1	0	1	0	1	1	1	0	0	1	0	6	38		
5:45 PM	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	5	31		
Count Total	0	1	2	2	0	16	5	2	0	5	6	25	1	1	6	0	72	0		
Peak Hour	0	0	0	1	0	10	2	1	0	2	3	14	0	1	4	0	38	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				San Ramon Rd				San Ramon Rd				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	1	0		0	0	0		1	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	1	0		0	0	0		1	0		
4:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	2		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	1		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	1		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	2	0		0	0	0		2	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

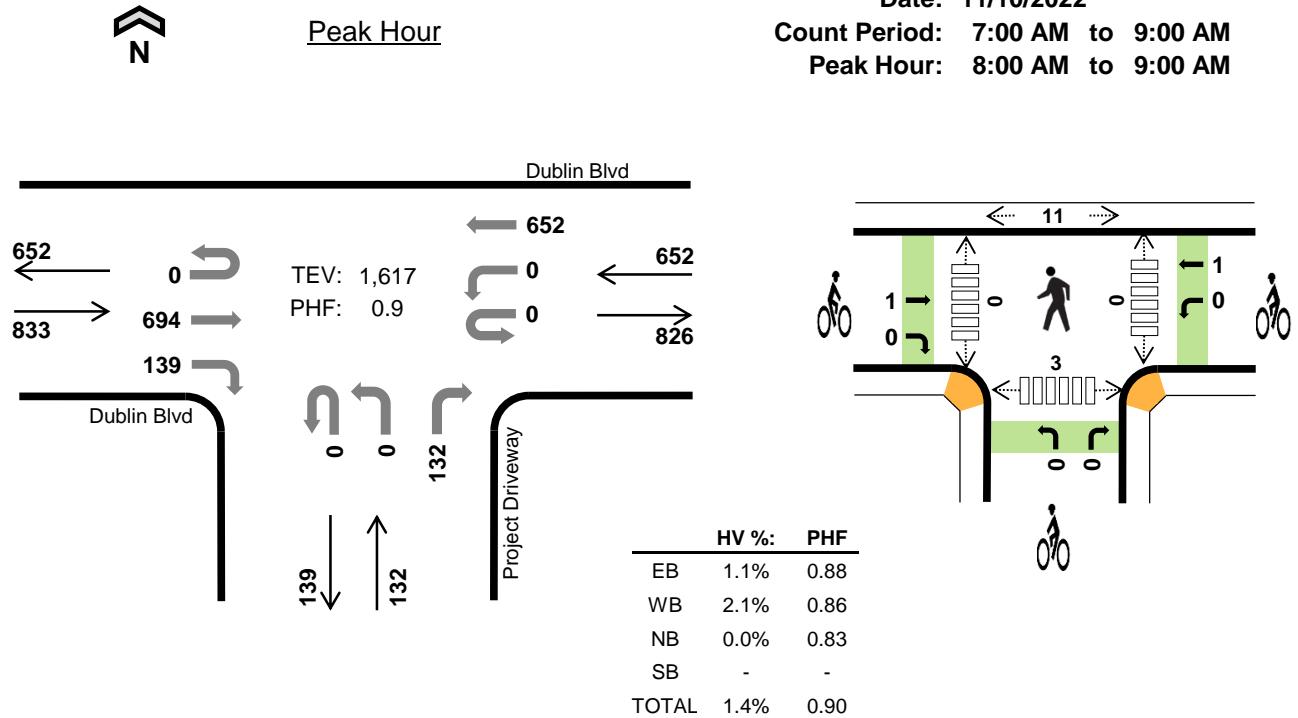
Project Driveway Dublin Blvd



Date: 11/10/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 8:00 AM to 9:00 AM

**Two-Hour Count Summaries**

Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour
	Eastbound		Westbound		Northbound		Southbound		UT	LT	TH	RT	UT	LT	TH	RT		
UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	90	26	0	0	88	0	0	0	0	12	0	0	0	0	216	0
7:15 AM	0	0	87	27	0	0	113	0	0	0	0	25	0	0	0	0	252	0
7:30 AM	0	0	102	34	0	0	124	0	0	0	0	27	0	0	0	0	287	0
7:45 AM	0	0	156	32	0	0	122	0	0	0	0	30	0	0	0	0	340	1,095
8:00 AM	0	0	192	29	0	0	141	0	0	0	0	26	0	0	0	0	388	1,267
8:15 AM	0	0	193	45	0	0	172	0	0	0	0	40	0	0	0	0	450	1,465
8:30 AM	0	0	157	37	0	0	150	0	0	0	0	30	0	0	0	0	374	1,552
8:45 AM	0	0	152	28	0	0	189	0	0	0	0	36	0	0	0	0	405	1,617
Count Total	0	0	1,129	258	0	0	1,099	0	0	0	0	226	0	0	0	0	2,712	0
Peak Hour	All HV	0	0	694	139	0	0	652	0	0	0	132	0	0	0	0	1,617	0
	HV% HV%	0	0	8	1	0	0	14	0	0	0	0	0	0	0	0	23	0
		-	-	1%	1%	-	-	2%	-	-	-	0%	-	-	-	-	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals				Bicycles				Pedestrians (Crossing Leg)							
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total	
7:00 AM	6	5	0	0	11	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	2	3	0	0	5	0	0	0	0	0	0	0	2	0	0	2
7:30 AM	3	4	1	0	8	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	4	5	0	0	9	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	2	5	0	0	7	1	1	0	0	2	0	0	4	0	4	
8:15 AM	1	2	0	0	3	0	0	0	0	0	0	0	2	1	3	
8:30 AM	3	2	0	0	5	0	0	0	0	0	0	0	1	1	2	
8:45 AM	3	5	0	0	8	0	0	0	0	0	0	0	4	1	5	
Count Total	24	31	1	0	56	1	1	0	0	2	0	0	15	3	18	
Peak Hr	9	14	0	0	23	1	1	0	0	2	0	0	11	3	14	

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	5	1	0	0	5	0	0	0	0	0	0	0	0	0	11	0		
7:15 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0		
7:30 AM	0	0	2	1	0	0	4	0	0	0	0	1	0	0	0	0	8	0		
7:45 AM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9	33		
8:00 AM	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7	29		
8:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	27		
8:30 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	24		
8:45 AM	0	0	2	1	0	0	5	0	0	0	0	0	0	0	0	0	8	23		
Count Total	0	0	21	3	0	0	31	0	0	0	0	1	0	0	0	0	56	0		
Peak Hour	0	0	8	1	0	0	0	14	0	0	0	0	0	0	0	0	23	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:00 AM	0	1	0	 	0	1	0	 	0	0	0	 	0	0	0	 	2	2		
8:15 AM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	 	0	2		
8:30 AM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	 	0	2		
8:45 AM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	 	0	2		
Count Total	0	1	0		0	1	0		0	0	0		0	0	0		2	0		
Peak Hour	0	1	0		0	1	0		0	0	0		0	0	0		2	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

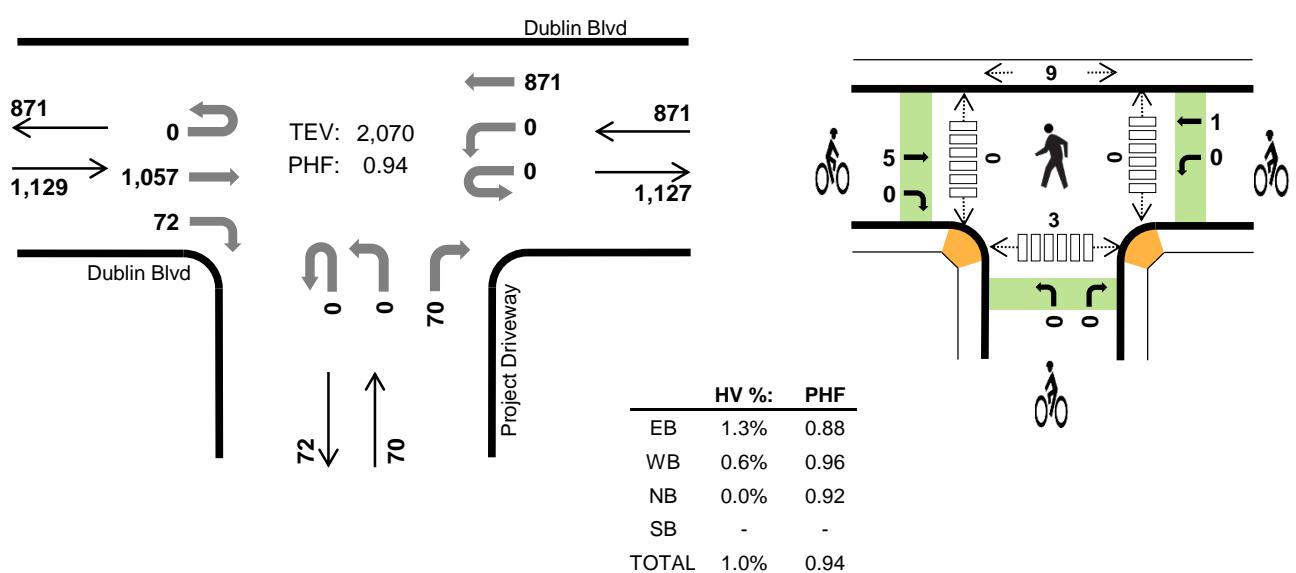
Project Driveway

Dublin Blvd



Date: 11/10/2022

Count Period: 2:00 PM to 4:00 PM
Peak Hour: 3:00 PM to 4:00 PM



Two-Hour Count Summaries

Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	0	225	14	0	0	222	0	0	0	0	13	0	0	0	0	474	0		
2:15 PM	0	0	230	13	0	0	181	0	0	0	0	12	0	0	0	0	436	0		
2:30 PM	0	0	246	19	0	0	221	0	0	0	0	16	0	0	0	0	502	0		
2:45 PM	0	0	247	22	0	0	191	0	0	0	0	14	0	0	0	0	474	1,886		
3:00 PM	0	0	265	22	0	0	213	0	0	0	0	19	0	0	0	0	519	1,931		
3:15 PM	0	0	245	14	0	0	217	0	0	0	0	19	0	0	0	0	495	1,990		
3:30 PM	0	0	247	17	0	0	228	0	0	0	0	16	0	0	0	0	508	1,996		
3:45 PM	0	0	300	19	0	0	213	0	0	0	0	16	0	0	0	0	548	2,070		
Count Total		0	0	2,005	140	0	0	1,686	0	0	0	0	125	0	0	0	0	3,956	0	
Peak Hour	All	0	0	1,057	72	0	0	871	0	0	0	0	70	0	0	0	0	2,070	0	
	HV	0	0	13	2	0	0	5	0	0	0	0	0	0	0	0	20	0		
	HV%	-	-	1%	3%	-	-	1%	-	-	-	-	0%	-	-	-	-	1%	0	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	3	8	1	0	12	0	0	0	0	0	0	0	2	1	3
2:15 PM	3	3	0	0	6	0	0	0	0	0	0	0	7	1	8
2:30 PM	4	7	0	0	11	0	0	0	0	0	0	0	1	2	3
2:45 PM	4	5	0	0	9	0	0	0	0	0	0	0	8	2	10
3:00 PM	4	3	0	0	7	1	0	0	0	1	0	0	0	1	1
3:15 PM	3	0	0	0	3	0	0	0	0	0	0	0	5	0	5
3:30 PM	3	0	0	0	3	1	0	0	0	1	0	0	0	0	0
3:45 PM	5	2	0	0	7	3	1	0	0	4	0	0	4	2	6
Count Total	29	28	1	0	58	5	1	0	0	6	0	0	27	9	36
Peak Hr	15	5	0	0	20	5	1	0	0	6	0	0	9	3	12

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	0	3	0	0	0	8	0	0	0	0	1	0	0	0	0	12	0		
2:15 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0		
2:30 PM	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	11	0		
2:45 PM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9	38		
3:00 PM	0	0	3	1	0	0	3	0	0	0	0	0	0	0	0	0	7	33		
3:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	30		
3:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22		
3:45 PM	0	0	4	1	0	0	2	0	0	0	0	0	0	0	0	0	7	20		
Count Total	0	0	27	2	0	0	28	0	0	0	0	1	0	0	0	0	58	0		
Peak Hour	0	0	13	2	0	0	5	0	0	0	0	0	0	0	0	0	20	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
2:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
2:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
2:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
2:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
3:00 PM	0	1	0		0	0	0		0	0	0		0	0	0		1	1		
3:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	1		
3:30 PM	0	1	0		0	0	0		0	0	0		0	0	0		1	2		
3:45 PM	0	3	0		0	1	0		0	0	0		0	0	0		4	6		
Count Total	0	5	0		0	1	0		0	0	0		0	0	0		6	0		
Peak Hour	0	5	0		0	1	0		0	0	0		0	0	0		6	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

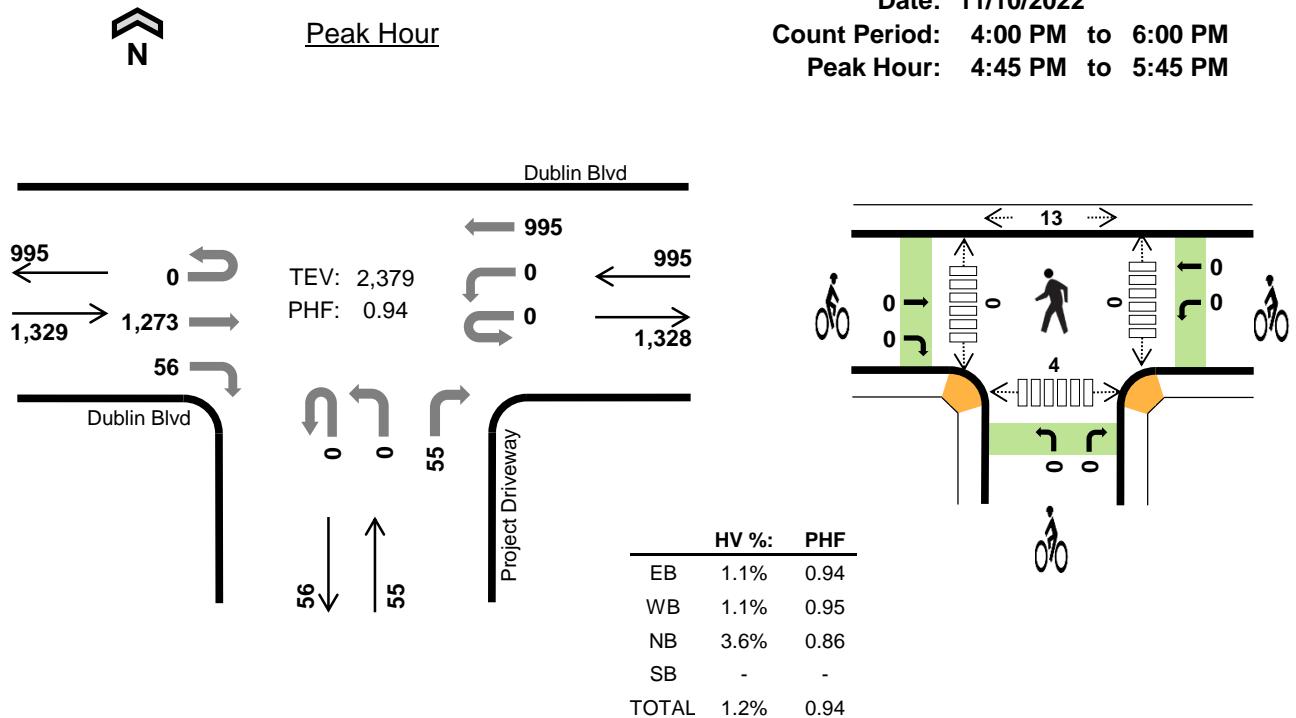
Project Driveway Dublin Blvd



Date: 11/10/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:45 PM to 5:45 PM

**Two-Hour Count Summaries**

Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour
	Eastbound		Westbound		Northbound		Southbound		UT	LT	TH	RT	UT	LT	TH	RT		
UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	257	14	0	0	199	0	0	0	0	22	0	0	0	0	492	0
4:15 PM	0	0	294	17	0	0	204	0	0	0	0	16	0	0	0	0	531	0
4:30 PM	0	0	279	13	0	0	210	0	0	0	0	12	0	0	0	0	514	0
4:45 PM	0	0	327	17	0	0	240	0	0	0	0	10	0	0	0	0	594	2,131
5:00 PM	0	0	327	9	0	0	261	0	0	0	0	16	0	0	0	0	613	2,252
5:15 PM	0	0	333	21	0	0	263	0	0	0	0	13	0	0	0	0	630	2,351
5:30 PM	0	0	286	9	0	0	231	0	0	0	0	16	0	0	0	0	542	2,379
5:45 PM	0	0	306	11	0	0	227	0	0	0	0	11	0	0	0	0	555	2,340
Count Total	0	0	2,409	111	0	0	1,835	0	0	0	0	116	0	0	0	0	4,471	0
Peak Hour	All HV	0	0	1,273	56	0	0	995	0	0	0	55	0	0	0	0	2,379	0
	HV	0	0	14	1	0	0	11	0	0	0	2	0	0	0	0	28	0
	HV%	-	-	1%	2%	-	-	1%	-	-	-	4%	-	-	-	-	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals				Bicycles				Pedestrians (Crossing Leg)							
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total	
4:00 PM	1	4	0	0	5	0	0	0	0	0	0	0	6	0	6	
4:15 PM	5	1	0	0	6	0	0	0	0	0	0	0	1	1	2	
4:30 PM	4	5	0	0	9	0	0	0	0	0	0	0	3	0	3	
4:45 PM	5	3	0	0	8	0	0	0	0	0	0	0	8	1	9	
5:00 PM	6	5	1	0	12	0	0	0	0	0	0	0	2	1	3	
5:15 PM	3	2	1	0	6	0	0	0	0	0	0	0	2	0	2	
5:30 PM	1	1	0	0	2	0	0	0	0	0	0	0	1	2	3	
5:45 PM	2	2	0	0	4	0	0	0	0	0	0	0	2	0	2	
Count Total	27	23	2	0	52	0	0	0	0	0	0	0	25	5	30	
Peak Hr	15	11	2	0	28	0	0	0	0	0	0	0	13	4	17	

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0		
4:15 PM	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6	0		
4:30 PM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9	0		
4:45 PM	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8	28		
5:00 PM	0	0	6	0	0	0	5	0	0	0	1	0	0	0	0	0	12	35		
5:15 PM	0	0	2	1	0	0	2	0	0	0	1	0	0	0	0	0	6	35		
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	28		
5:45 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	24		
Count Total	0	0	26	1	0	0	23	0	0	0	0	2	0	0	0	0	52	0		
Peak Hour	0	0	14	1	0	0	11	0	0	0	0	2	0	0	0	0	28	0		

Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				Project Driveway				N/A				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		

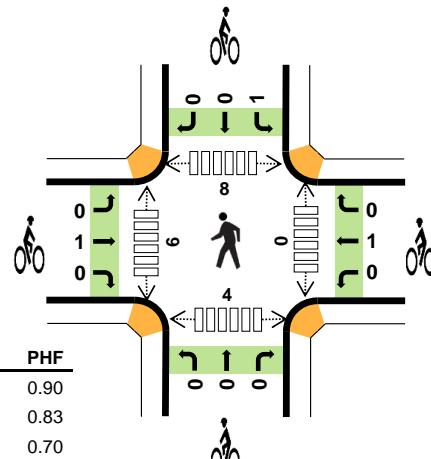
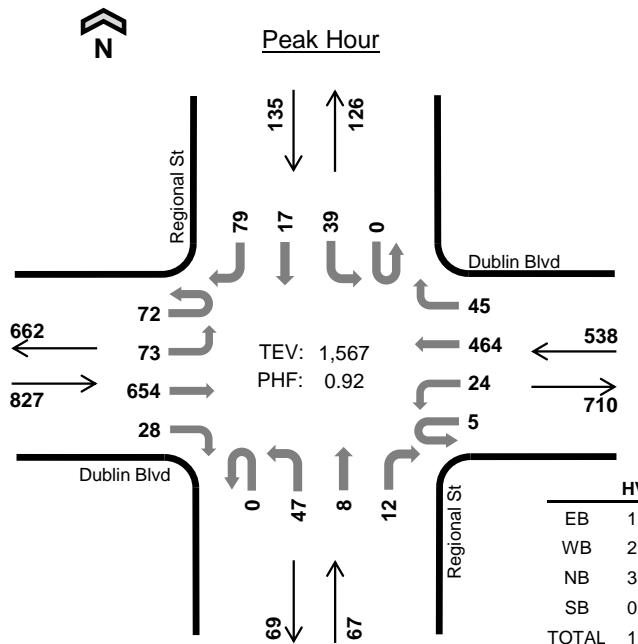
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Regional St
Dublin Blvd**

Date: 11/10/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 8:00 AM to 9:00 AM

**Two-Hour Count Summaries**

Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		EB		WB		NB		SB				
7:00 AM	8	9	75	11	0	4	60	3	0	11	1	4	0	6	3	11	206	0	
7:15 AM	16	5	85	8	0	0	67	2	0	9	1	3	0	8	3	17	224	0	
7:30 AM	18	10	93	8	0	8	85	5	0	10	2	4	0	4	4	11	262	0	
7:45 AM	14	15	138	10	1	8	94	5	0	10	3	6	0	6	4	10	324	1,016	
8:00 AM	17	15	185	5	1	5	95	6	0	17	3	4	0	3	3	13	372	1,182	
8:15 AM	18	20	184	8	1	5	125	10	0	11	1	2	0	15	6	18	424	1,382	
8:30 AM	16	15	146	2	1	11	100	15	0	12	2	3	0	8	3	25	359	1,479	
8:45 AM	21	23	139	13	2	3	144	14	0	7	2	3	0	13	5	23	412	1,567	
Count Total	128	112	1,045	65	6	44	770	60	0	87	15	29	0	63	31	128	2,583	0	
Peak Hour	All	72	73	654	28	5	24	464	45	0	47	8	12	0	39	17	79	1,567	0
	HV	0	0	7	1	0	0	14	1	0	1	1	0	0	0	0	25	0	
	HV%	0%	0%	1%	4%	0%	0%	3%	2%	-	2%	13%	0%	-	0%	0%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	4	1	0	10	0	0	0	0	0	0	0	3	0	3
7:15 AM	2	2	2	1	7	0	0	0	0	0	0	0	2	0	2
7:30 AM	3	4	1	0	8	0	0	0	0	0	0	0	1	0	1
7:45 AM	4	3	2	0	9	0	0	0	0	0	0	0	0	0	0
8:00 AM	2	5	0	0	7	1	1	0	0	2	0	0	3	0	3
8:15 AM	1	3	0	0	4	0	0	0	1	1	0	2	2	1	5
8:30 AM	3	2	0	0	5	0	0	0	0	0	0	3	1	3	7
8:45 AM	2	5	2	0	9	0	0	0	0	0	0	1	2	0	3
Count Total	22	28	8	1	59	1	1	0	1	3	0	6	14	4	24
Peak Hour	8	15	2	0	25	1	1	0	1	3	0	6	8	4	18

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	3	2	0	0	4	0	0	1	0	0	0	0	0	0	10	0		
7:15 AM	0	0	2	0	0	0	2	0	0	1	1	0	0	0	1	0	7	0		
7:30 AM	0	0	3	0	0	0	4	0	0	0	1	0	0	0	0	0	8	0		
7:45 AM	0	0	3	1	0	0	3	0	0	1	0	1	0	0	0	0	9	34		
8:00 AM	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7	31		
8:15 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	28		
8:30 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	25		
8:45 AM	0	0	1	1	0	0	4	1	0	1	1	0	0	0	0	0	9	25		
Count Total	0	0	18	4	0	0	27	1	0	4	3	1	0	0	1	0	59	0		
Peak Hour	0	0	7	1	0	0	14	1	0	1	1	0	0	0	0	0	25	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:00 AM	0	1	0		0	1	0		0	0	0		0	0	0		2	2		
8:15 AM	0	0	0		0	0	0		0	0	0		1	0	0		1	3		
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	3		
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	3		
Count Total	0	1	0		0	1	0		0	0	0		1	0	0		3	0		
Peak Hour	0	1	0		0	1	0		0	0	0		1	0	0		3	0		

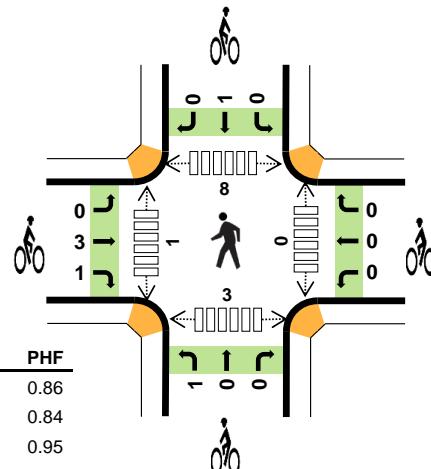
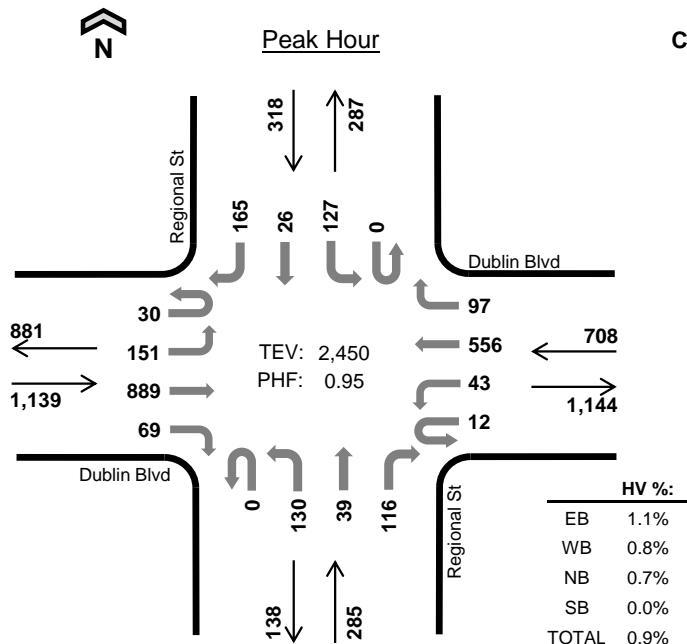
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Regional St
Dublin Blvd**

Date: 11/10/2022

Count Period: 2:00 PM to 4:00 PM

Peak Hour: 3:00 PM to 4:00 PM

**Two-Hour Count Summaries**

Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		EB		WB		NB		SB				
UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	5	34	167	23	1	8	133	30	0	34	7	22	0	23	7	49	543	0	
2:15 PM	5	37	185	14	5	18	115	13	0	24	8	17	0	33	5	41	520	0	
2:30 PM	5	42	192	19	1	11	128	26	0	36	6	15	0	36	7	56	580	0	
2:45 PM	3	43	177	21	6	7	109	19	0	33	11	17	0	30	8	44	528	2,171	
3:00 PM	6	41	236	17	2	8	137	17	0	45	11	19	0	29	6	35	609	2,237	
3:15 PM	10	38	203	9	5	12	131	23	0	28	7	38	0	35	8	43	590	2,307	
3:30 PM	8	32	190	18	2	18	163	28	0	21	11	33	0	33	6	41	604	2,331	
3:45 PM	6	40	260	25	3	5	125	29	0	36	10	26	0	30	6	46	647	2,450	
Count Total	48	307	1,610	146	25	87	1,041	185	0	257	71	187	0	249	53	355	4,621	0	
Peak Hour	All	30	151	889	69	12	43	556	97	0	130	39	116	0	127	26	165	2,450	0
	HV	0	0	13	0	0	0	4	2	0	1	1	0	0	0	0	0	21	0
	HV%	0%	0%	1%	0%	0%	0%	1%	2%	-	1%	3%	0%	-	0%	0%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	4	6	1	1	12	0	0	0	0	0	0	2	3	2	7
2:15 PM	3	2	2	1	8	0	0	0	0	0	0	4	3	1	8
2:30 PM	4	5	2	2	13	0	0	0	0	0	0	0	2	0	2
2:45 PM	4	3	1	3	11	0	0	0	0	0	0	2	2	0	4
3:00 PM	3	2	1	0	6	1	0	0	1	2	0	0	1	1	2
3:15 PM	3	0	0	0	3	0	0	0	0	0	0	1	4	2	7
3:30 PM	3	0	1	0	4	1	0	0	0	1	0	0	2	0	2
3:45 PM	4	4	0	0	8	2	0	1	0	3	0	0	1	0	1
Count Total	28	22	8	7	65	4	0	1	1	6	0	9	18	6	33
Peak Hour	13	6	2	0	21	4	0	1	1	6	0	1	8	3	12

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	2	2	0	0	0	6	0	0	0	0	1	0	1	0	0	12	0		
2:15 PM	0	0	2	1	0	0	2	0	0	0	0	2	0	0	0	1	8	0		
2:30 PM	0	0	4	0	0	0	5	0	0	0	0	2	0	0	1	1	13	0		
2:45 PM	0	1	3	0	0	0	2	1	0	0	0	1	0	0	0	3	11	44		
3:00 PM	0	0	3	0	0	0	2	0	0	1	0	0	0	0	0	0	6	38		
3:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	33		
3:30 PM	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	4	24		
3:45 PM	0	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	8	21		
Count Total	0	3	24	1	0	0	19	3	0	1	1	6	0	1	1	5	65	0		
Peak Hour	0	0	13	0	0	0	4	2	0	1	1	0	0	0	0	0	21	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
2:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
2:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
2:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
2:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
3:00 PM	0	1	0		0	0	0		0	0	0		0	1	0		2	2		
3:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	2		
3:30 PM	0	1	0		0	0	0		0	0	0		0	0	0		1	3		
3:45 PM	0	1	1		0	0	0		1	0	0		0	0	0		3	6		
Count Total	0	3	1		0	0	0		1	0	0		0	1	0		6	0		
Peak Hour	0	3	1		0	0	0		1	0	0		0	1	0		6	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

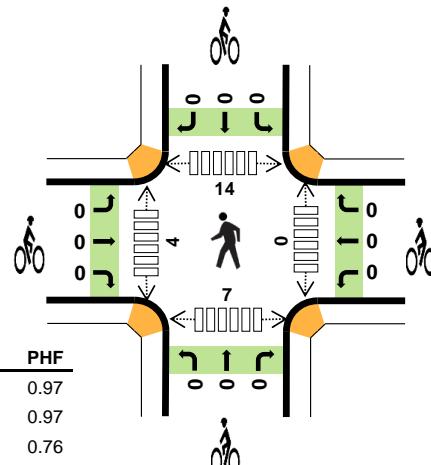
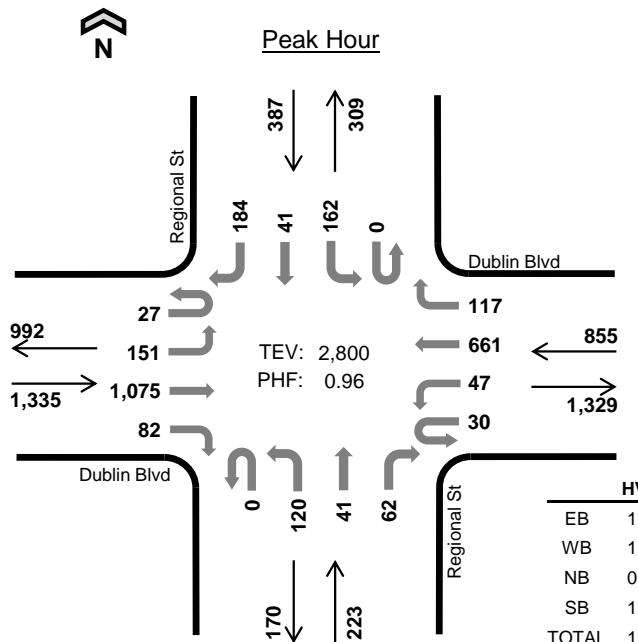
Regional St Dublin Blvd



Date: 11/10/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:45 PM to 5:45 PM



Two-Hour Count Summaries

Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		EB		WB		NB		SB				
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	11	41	221	11	2	8	142	15	0	33	5	24	0	38	14	36	601	0	
4:15 PM	5	31	248	26	5	13	136	21	0	25	12	13	0	32	7	30	604	0	
4:30 PM	2	37	241	8	6	12	139	14	0	26	8	24	0	35	10	50	612	0	
4:45 PM	5	39	285	16	8	15	166	22	0	29	5	16	0	25	13	39	683	2,500	
5:00 PM	9	37	275	17	3	7	178	33	0	39	16	18	0	42	7	46	727	2,626	
5:15 PM	6	43	260	25	8	17	157	36	0	28	13	15	0	47	11	55	721	2,743	
5:30 PM	7	32	255	24	11	8	160	26	0	24	7	13	0	48	10	44	669	2,800	
5:45 PM	9	34	262	13	2	9	154	24	0	18	9	14	0	50	12	39	649	2,766	
Count Total	54	294	2,047	140	45	89	1,232	191	0	222	75	137	0	317	84	339	5,266	0	
Peak Hour	All	27	151	1,075	82	30	47	661	117	0	120	41	62	0	162	41	184	2,800	0
	HV	1	0	14	1	0	1	8	1	0	1	0	0	0	1	1	2	31	0
	HV%	4%	0%	1%	1%	0%	2%	1%	1%	-	1%	0%	0%	-	1%	2%	1%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	2	1	1	5	0	0	0	0	0	0	0	3	1	4
4:15 PM	5	0	0	1	6	0	0	0	0	0	0	1	2	0	3
4:30 PM	4	5	1	1	11	0	0	0	0	0	0	1	1	0	2
4:45 PM	5	2	0	2	9	0	0	0	0	0	0	0	9	3	12
5:00 PM	7	4	1	1	13	0	0	0	0	0	0	1	2	0	3
5:15 PM	3	2	0	0	5	0	0	0	0	0	0	0	1	0	1
5:30 PM	1	2	0	1	4	0	0	0	0	0	0	3	2	4	9
5:45 PM	2	2	0	0	4	0	0	0	0	0	0	2	1	2	5
Count Total	28	19	3	7	57	0	0	0	0	0	0	8	21	10	39
Peak Hour	16	10	1	4	31	0	0	0	0	0	0	4	14	7	25

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT																
4:00 PM	0	0	1	0	0	0	2	0	0	1	0	0	0	0	1	0	5	0		
4:15 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0		
4:30 PM	0	1	3	0	0	0	5	0	0	0	0	1	0	0	1	0	11	0		
4:45 PM	0	0	5	0	0	0	2	0	0	0	0	0	0	0	1	1	9	31		
5:00 PM	1	0	5	1	0	0	3	1	0	1	0	0	0	1	0	0	13	39		
5:15 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	38		
5:30 PM	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	4	31		
5:45 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	26		
Count Total	1	1	25	1	0	1	17	1	0	2	0	1	0	1	3	3	57	0		
Peak Hour	1	0	14	1	0	1	8	1	0	1	0	0	0	1	1	2	31	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Dublin Blvd				Dublin Blvd				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

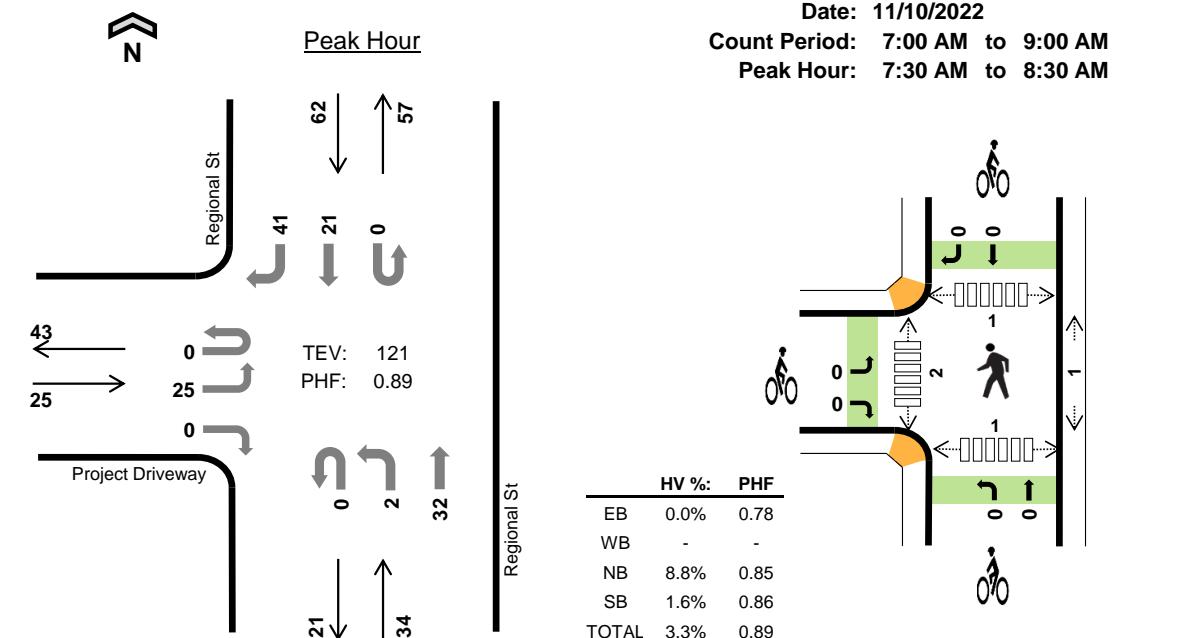
Regional St Project Driveway



Date: 11/10/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:30 AM to 8:30 AM



Two-Hour Count Summaries

Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	4	0	0	0	0	0	0	0	1	9	0	0	0	12	6	32	0		
7:15 AM	0	4	0	0	0	0	0	0	0	0	7	0	0	0	6	5	22	0		
7:30 AM	0	2	0	0	0	0	0	0	0	1	9	0	0	0	7	11	30	0		
7:45 AM	0	7	0	0	0	0	0	0	0	0	10	0	0	0	7	10	34	118		
8:00 AM	0	8	0	0	0	0	0	0	0	1	8	0	0	0	5	7	29	115		
8:15 AM	0	8	0	0	0	0	0	0	0	0	5	0	0	0	2	13	28	121		
8:30 AM	0	5	0	0	0	0	0	0	0	0	5	0	0	0	7	8	25	116		
8:45 AM	0	6	0	0	0	0	0	0	0	1	4	0	0	0	6	14	31	113		
Count Total	0	44	0	0	0	0	0	0	0	4	57	0	0	0	52	74	231	0		
Peak Hour	All	0	25	0	0	0	0	0	0	2	32	0	0	0	21	41	121	0		
HV	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	0		
HV%	-	0%	-	-	-	-	-	-	-	0%	9%	-	-	-	5%	0%	3%	0		

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	3	1	4	0	0	0	0	0	2	0	0	0	2
7:30 AM	0	0	2	0	2	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	8	5	13	0	0	0	0	0	3	2	1	1	7
Peak Hr	0	0	3	1	4	0	0	0	0	0	1	2	1	1	5

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0		
7:15 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	0		
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0		
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9		
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8		
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	4		
Count Total	0	0	0	0	0	0	0	0	0	0	8	0	0	0	5	0	13	0		
Peak Hour	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	0		

Two-Hour Count Summaries - Bikes

Interval Start	Project Driveway			N/A			Regional St			Regional St			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

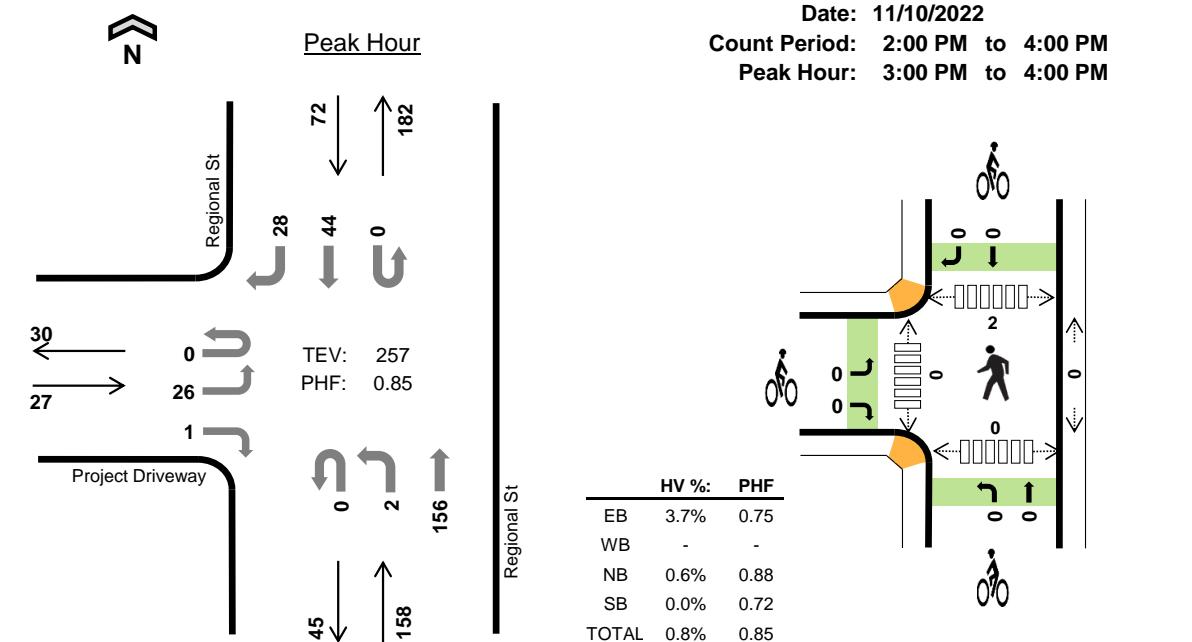
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Regional St Project Driveway

Date: 11/10/2022

Count Period: 2:00 PM to 4:00 PM

Peak Hour: 3:00 PM to 4:00 PM



Two-Hour Count Summaries

Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	11	0	1	0	0	0	0	0	0	15	0	0	0	10	10	47	0		
2:15 PM	0	7	0	0	0	0	0	0	0	0	10	0	0	0	12	12	41	0		
2:30 PM	0	8	0	1	0	0	0	0	0	0	12	0	0	0	10	9	40	0		
2:45 PM	0	14	0	2	0	0	0	0	0	0	21	0	1	0	7	7	52	180		
3:00 PM	0	8	0	1	0	0	0	0	0	0	33	0	0	0	5	6	53	186		
3:15 PM	0	7	0	0	0	0	0	0	0	0	36	0	0	0	9	7	59	204		
3:30 PM	0	5	0	0	0	0	0	0	0	1	43	0	0	0	12	8	69	233		
3:45 PM	0	6	0	0	0	0	0	0	0	1	44	0	0	0	18	7	76	257		
Count Total	0	66	0	5	0	0	0	0	0	2	214	0	1	0	83	66	437	0		
Peak Hr	All	0	26	0	1	0	0	0	0	2	156	0	0	0	44	28	257	0		
	HV	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0		
	HV%	-	0%	-	100%	-	-	-	-	0%	1%	-	-	-	0%	0%	1%	0		

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
3:00 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Count Total	1	0	5	4	10	0	0	0	0	0	0	0	2	0	2
Peak Hr	1	0	1	0	2	0	0	0	0	0	0	0	2	0	2

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0		
2:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0		
2:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0		
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8		
3:00 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	8			
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6			
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
Count Total	0	0	0	1	0	0	0	0	0	0	5	0	0	0	4	0	10	0		
Peak Hour	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	0			

Two-Hour Count Summaries - Bikes																			
Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT				
2:00 PM	0	0	0		0	0	0		0	0	0		0	0	0	0	0		
2:15 PM	0	0	0		0	0	0		0	0	0		0	0	0	0	0		
2:30 PM	0	0	0		0	0	0		0	0	0		0	0	0	0	0		
2:45 PM	0	0	0		0	0	0		0	0	0		0	0	0	0	0		
3:00 PM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	0	0		
3:15 PM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	0	0		
3:30 PM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	0	0		
3:45 PM	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0	0	0		
Peak Hour	0	0	0	 	0	0	0	 	0	0	0	 	0	0	0	0	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

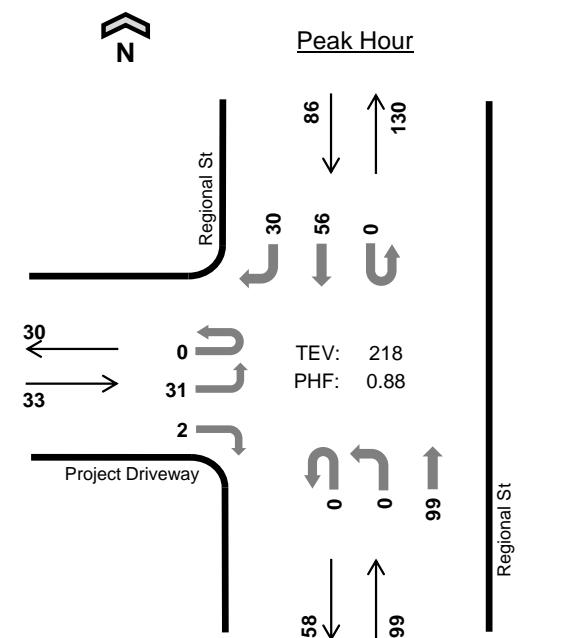
Regional St Project Driveway



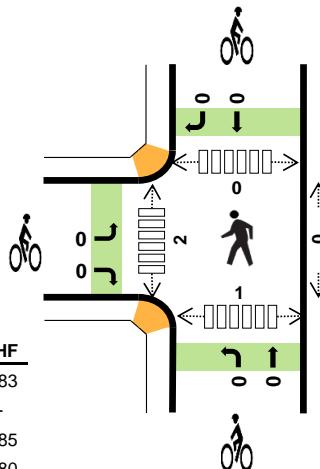
Date: 11/10/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	3.0%	0.83
WB	-	-
NB	2.0%	0.85
SB	2.3%	0.80
TOTAL	2.3%	0.88



Two-Hour Count Summaries

Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	8	0	0	0	0	0	0	0	0	28	0	0	0	10	9	55	0		
4:15 PM	0	6	0	0	0	0	0	0	0	0	29	0	0	0	14	13	62	0		
4:30 PM	0	9	0	0	0	0	0	0	0	0	17	0	0	0	14	5	45	0		
4:45 PM	0	8	0	2	0	0	0	0	0	0	25	0	0	0	18	3	56	218		
5:00 PM	0	16	0	0	0	0	0	0	0	0	24	0	0	0	12	2	54	217		
5:15 PM	0	4	0	0	0	0	0	0	0	0	22	0	0	0	24	7	57	212		
5:30 PM	0	11	0	0	0	0	0	0	0	0	8	0	0	0	18	8	45	212		
5:45 PM	0	3	0	0	0	0	0	0	0	1	15	0	0	0	15	2	36	192		
Count Total	0	65	0	2	0	0	0	0	0	1	168	0	0	0	125	49	410	0		
Peak Hour	All	0	31	0	2	0	0	0	0	0	99	0	0	0	56	30	218	0		
	HV	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	5	0		
	HV%	-	3%	-	0%	-	-	-	-	-	2%	-	-	-	4%	0%	2%	0		

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2
4:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	1	0	2	3	6	0	0	0	0	0	0	3	1	1	5
Peak Hr	1	0	2	2	5	0	0	0	0	0	0	2	0	1	3

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Count Total	0	1	0	0	0	0	0	0	0	0	2	0	0	0	3	0	6	0		
Peak Hour	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	5	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Project Driveway				N/A				Regional St				Regional St				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

Appendix C

Intersection Level of Service Calculations



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HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑↑↑	↑↑	↑↑↑↑	↑↑↑↑	↑↑
Traffic Volume (veh/h)	257	216	352	341	169	89	372	534	502	150	588	237
Future Volume (veh/h)	257	216	352	341	169	89	372	534	502	150	588	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00		0.98	1.00		0.99	1.00		0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1885	1885	1870	1870	1900	1841	1885	1856	1870	1900	1885	1885
Adj Flow Rate, veh/h	289	243	153	383	190	43	418	600	302	169	661	146
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	2	2	0	4	1	3	2	0	1	1
Cap, veh/h	338	545	419	497	292	235	476	2736	1763	222	2401	736
Arrive On Green	0.10	0.15	0.15	0.03	0.05	0.05	0.14	0.54	0.54	0.06	0.47	0.47
Sat Flow, veh/h	3483	3582	2752	5023	1900	1530	3483	5066	2752	3510	5147	1577
Grp Volume(v), veh/h	289	243	153	383	190	43	418	600	302	169	661	146
Grp Sat Flow(s), veh/h/in	1742	1791	1376	1674	1900	1530	1742	1689	1376	1755	1716	1577
Q Serve(g_s), s	11.4	8.6	7.0	10.6	13.7	3.8	16.5	8.7	6.2	6.6	11.0	7.6
Cyclo Q Clear(g_c), s	11.4	8.6	7.0	10.6	13.7	3.8	16.5	8.7	6.2	6.6	11.0	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	545	419	497	292	235	476	2736	1763	222	2401	736
V/C Ratio(X)	0.85	0.45	0.37	0.77	0.65	0.18	0.88	0.22	0.17	0.76	0.28	0.20
Avail Cap(c_a), veh/h	373	1023	786	718	611	492	572	2736	1763	351	2401	736
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	54.0	53.3	66.1	62.7	58.0	59.3	16.8	10.2	64.5	22.9	21.9
Incr Delay (d2), s/veh	16.1	0.8	0.8	4.2	3.4	0.5	12.8	0.2	0.2	5.4	0.3	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	5.8	4.0	2.5	5.0	7.3	1.5	8.0	3.3	1.9	3.1	4.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.4	54.8	54.1	70.3	66.2	58.5	72.0	17.0	10.5	69.9	23.1	22.6
LnGrp LOS	E	D	D	E	E	E	E	B	B	E	C	C
Approach Vol, veh/h	685				616			1320			976	
Approach Delay, s/veh	64.6				68.2			32.9			31.1	
Approach LOS	E				E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.8	81.0	18.8	26.3	24.1	70.7	18.6	26.5				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	14.0	45.6	20.0	40.0	23.0	36.6	15.0	45.0				
Max Q Clear Time (q_c+11), s	8.6	10.7	12.6	10.6	18.5	13.0	13.4	15.7				
Green Ext Time (p_c), s	0.2	8.5	1.3	3.2	0.7	7.0	0.2	1.7				
Intersection Summary												
HCM 6th Ctrl Delay				44.5								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBC	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Vol, veh/h	694	139	0	652	0	132
Future Vol, veh/h	694	139	0	652	0	132
Conflicting Peds, #/hr	0	3	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	0	2	0	0
Mvmt Flow	771	154	0	724	0	147
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	469
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	467
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	464
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	16.3			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT		
Capacity (veh/h)	464	-	-	-		
HCM Lane V/C Ratio	0.316	-	-	-		
HCM Control Delay (s)	16.3	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	1.3	-	-	-		

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑↑↑↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	145	654	28	29	464	45	47	8	12	39	17	79
Future Volume (veh/h)	145	654	28	29	464	45	47	8	12	39	17	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.97	1.00	0.97	1.00			0.98	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1900	1885	1841	1900	1856	1870	1870	1707	1900	1900	1900	1900
Adj Flow Rate, veh/h	158	711	21	32	504	46	51	9	2	42	18	19
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
Percent Heavy Veh, %	0	1	4	0	3	2	2	13	0	0	0	0
Cap, veh/h	149	3724	110	41	3994	355	66	150	139	55	154	126
Arrive On Green	0.03	0.24	0.24	0.02	0.67	0.67	0.04	0.09	0.09	0.03	0.08	0.08
Sat Flow, veh/h	1810	5133	151	1810	5996	534	1781	1707	1577	1810	1900	1552
Grp Volume(v), veh/h	158	475	257	32	400	150	51	9	2	42	18	19
Grp Sat Flow(s), veh/h/in	1810	1716	1853	1810	1596	1742	1781	1707	1577	1810	1900	1552
Q Serve(g_s), s	11.5	15.4	15.5	2.5	4.3	4.4	4.0	0.7	0.2	3.2	1.2	1.6
Cyclo Q Clear(g_c), s	11.5	15.4	15.5	2.5	4.3	4.4	4.0	0.7	0.2	3.2	1.2	1.6
Prop In Lane	1.00		0.08	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	2489	1345	41	3189	1161	66	150	139	55	154	126
V/C Ratio(X)	1.06	0.19	0.19	0.78	0.13	0.13	0.77	0.06	0.01	0.77	0.12	0.15
Avail Cap(c_a), veh/h	149	2489	1345	149	3189	1161	197	491	454	187	533	436
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.1	20.5	20.5	68.1	8.5	8.5	66.8	58.5	58.3	67.4	59.7	59.8
Incr Delay (d2), s/veh	91.6	0.2	0.3	11.1	0.1	0.2	7.1	0.2	0.0	8.2	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	9.4	7.2	7.8	1.3	1.5	1.7	1.9	0.3	0.1	1.6	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	159.7	20.7	20.8	79.1	8.6	8.8	73.9	58.7	58.3	75.6	60.1	60.5
LnGrp LOS	F	C	C	E	A	A	E	E	E	E	E	E
Approach Vol, veh/h	890			582			62			79		
Approach Delay, s/veh	45.4			12.5			71.2			68.4		
Approach LOS	D			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	17.0	7.7	106.6	9.7	16.1	16.0	98.3				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	14.5	* 40	11.5	55.0	15.5	* 39	11.5	55.0				
Max Q Clear Time (g_c+11), s	5.2	2.7	4.5	17.5	6.0	3.6	13.5	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	7.6	0.0	0.1	0.0	5.8				
Intersection Summary												
HCM 6th Ctrl Delay				35.6								
HCM 6th LOS				D								

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Movement	EBL	EBC	NBL	NBT	SBT	SBR
Intersection						
Int Delay, s/veh	2					
Lane Configurations	↑		↑	↑	↑	
Traffic Vol, veh/h	25	0	2	32	21	41
Future Vol, veh/h	25	0	2	32	21	41
Conflicting Peds, #/hr	3	3	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	9	5	0
Mvmt Flow	28	0	2	36	24	46
Major/Minor						
Major2						
Conflicting Flow All	93	53	73	0	-	0
Stage 1	50	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	912	1020	1540	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	906	1014	1536	-	-	-
Mov Cap-2 Maneuver	906	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Approach						
EB						
NB						
SB						
HCM Control Delay, s	9.1	0.4	0			
HCM LOS	A					
Minor Lane/Major Mvmt						
NBL						
NBT						
EBLn1						
SBT						
SBR						
Capacity (veh/h)	1536	-	906	-	-	-
HCM Lane V/C Ratio	0.001	-	0.031	-	-	-
HCM Control Delay (s)	7.3	0	9.1	-	-	-
HCM Lane LOS	A	A	A	-	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑↑↑	↑↑	↑↑↑↑	↑↑↑↑	↑↑
Traffic Volume (veh/h)	184	224	234	574	206	103	246	639	781	137	440	162
Future Volume (veh/h)	184	224	234	574	206	103	246	639	781	137	440	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00		0.96	1.00		0.99	1.00		0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1885	1885	1885	1900	1885	1900	1870	1885	1870	1885	1885	1900
Adj Flow Rate, veh/h	190	231	72	592	212	75	254	659	375	141	454	67
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	0	1	0	2	1	2	1	1	0
Cap, veh/h	243	357	275	692	312	257	313	2901	1930	193	2720	838
Arrive On Green	0.07	0.10	0.10	0.23	0.28	0.28	0.09	0.56	0.56	0.06	0.53	0.53
Sat Flow, veh/h	3483	3582	2766	5103	1885	1552	3456	5147	2752	3483	5147	1586
Grp Volume(v), veh/h	190	231	72	592	212	75	254	659	375	141	454	67
Grp Sat Flow(s), veh/h/in	1742	1791	1383	1701	1885	1552	1728	1716	1376	1742	1716	1586
Q Serve(g_s), s	7.5	8.7	3.4	15.6	14.0	5.3	10.1	9.0	6.6	5.6	6.4	2.9
Cyc/Q Clear(g_c), s	7.5	8.7	3.4	15.6	14.0	5.3	10.1	9.0	6.6	5.6	6.4	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	243	357	275	692	312	257	313	2901	1930	193	2720	838
V/C Ratio(X)	0.78	0.65	0.26	0.86	0.68	0.29	0.81	0.23	0.19	0.73	0.17	0.08
Avail Cap(c_a), veh/h	373	998	770	802	619	510	543	2901	1930	373	2720	838
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	60.7	58.3	52.8	47.4	44.2	62.5	15.3	7.3	65.1	17.1	16.2
Incr Delay (d2), s/veh	5.8	2.8	0.7	8.7	3.7	0.9	5.1	0.2	0.2	5.2	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	3.5	4.1	1.2	6.7	6.3	2.1	4.6	3.5	1.9	2.6	2.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.8	63.5	59.0	61.5	51.1	45.1	67.5	15.5	7.6	70.3	17.2	16.4
LnGrp LOS	E	E	E	E	D	D	E	B	A	E	B	B
Approach Vol, veh/h	493			879			1288			662		
Approach Delay, s/veh	65.3			57.6			23.4			28.4		
Approach LOS	E			E			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	84.3	24.0	18.9	17.7	79.4	14.8	28.2				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	15.0	43.6	22.0	39.0	22.0	36.6	15.0	46.0				
Max Q Clear Time (g_c+1), s	7.6	11.0	17.6	10.7	12.1	8.4	9.5	16.0				
Green Ext Time (p_c), s	0.2	9.8	1.4	2.5	0.6	4.6	0.3	2.2				
Intersection Summary												
HCM 6th Ctrl Delay				39.7								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT	SBL	SBT
Intersection								
Int Delay, s/veh	0.6							
Lane Configurations								
Traffic Vol, veh/h	1057	72	0	871	0	70		
Future Vol, veh/h	1057	72	0	871	0	70		
Conflicting Peds, #/hr	0	3	0	0	0	3		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	-	0		
Veh in Median Storage, #	0	-	-	0	0	0		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	94	94	94	94	94	94		
Heavy Vehicles, %	1	3	0	1	0	0		
Mvmt Flow	1124	77	0	927	0	74		
Major/Minor	Major1	Major2	Minor1					
Conflicting Flow All	0	0	-	-	-	607		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
Critical Hdwy	-	-	-	-	-	7.1		
Critical Hdwy Stg 1	-	-	-	-	-	-		
Critical Hdwy Stg 2	-	-	-	-	-	-		
Follow-up Hdwy	-	-	-	-	-	3.9		
Pot Cap-1 Maneuver	-	-	0	-	0	380		
Stage 1	-	-	0	-	0	-		
Stage 2	-	-	0	-	0	-		
Platoon blocked, %	-	-	-	-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	378		
Mov Cap-2 Maneuver	-	-	-	-	-	-		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
Approach	EB	WB	NB					
HCM Control Delay, s	0	0	16.8					
HCM LOS			C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT				
Capacity (veh/h)	378	-	-	-				
HCM Lane V/C Ratio	0.197	-	-	-				
HCM Control Delay (s)	16.8	-	-	-				
HCM Lane LOS	C	-	-	-				
HCM 95th %tile Q(veh)	0.7	-	-	-				

BASIS School TIS

2 - Existing Mid-Day PM

Synchro 11 Report

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HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑	↑↑↑		↑↑↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (veh/h)	181	889	69	55	556	97	130	39	116	127	26	165
Future Volume (veh/h)	181	889	69	55	556	97	130	39	116	127	26	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00		0.99	1.00			0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1900	1885	1900	1900	1885	1870	1885	1856	1900	1900	1900	1900
Adj Flow Rate, veh/h	191	936	62	58	585	94	137	41	43	134	27	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0	0	1	2	1	3	0	0	0	0
Cap, veh/h	212	3373	223	75	3470	540	161	97	83	158	95	79
Arrive On Green	0.23	1.00	1.00	0.04	0.61	0.61	0.09	0.05	0.05	0.09	0.05	0.05
Sat Flow, veh/h	1810	4923	325	1810	5696	886	1795	1856	1584	1810	1900	1574
Grp Volume(v), veh/h	191	652	346	58	497	182	137	41	43	134	27	48
Grp Sat Flow(s), veh/h/in	1810	1716	1817	1810	1621	1719	1795	1856	1584	1810	1900	1574
Q Serve(g_s), s	14.3	0.0	0.0	4.4	6.2	6.5	10.5	3.0	3.7	10.2	1.9	4.2
Cyc/Q Clear(g_c), s	14.3	0.0	0.0	4.4	6.2	6.5	10.5	3.0	3.7	10.2	1.9	4.2
Prop In Lane	1.00		0.18	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	2351	1245	75	2963	1047	161	97	83	158	95	79
V/C Ratio(X)	0.90	0.28	0.28	0.77	0.17	0.17	0.85	0.42	0.52	0.85	0.28	0.61
Avail Cap(c_a), veh/h	265	2351	1245	200	2963	1047	289	534	456	252	506	419
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	0.0	0.0	66.5	11.9	12.0	62.8	64.3	64.6	63.0	64.1	65.2
Incr Delay (d2), s/veh	24.1	0.3	0.6	6.2	0.1	0.4	4.7	3.5	5.9	7.8	1.9	8.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	7.1	0.1	0.2	2.2	2.3	2.6	5.0	1.5	1.6	5.1	1.0	1.9
Unsig. Movement Delay, s/veh												
LnGp Delay(d), s/veh	76.9	0.3	0.6	72.7	12.0	12.3	67.5	67.7	70.5	70.8	66.0	74.0
LnGp LOS	E	A	A	E	B	B	E	E	E	E	E	E
Approach Vol, veh/h	1189			737			221			209		
Approach Delay, s/veh	12.7			16.9			68.1			70.9		
Approach LOS	B			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	12.0	10.3	100.9	17.1	11.7	20.9	90.3				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	19.5	* 40	15.5	46.0	22.5	* 37	20.5	41.0				
Max Q Clear Time (q_c+1), s	12.2	5.7	6.4	2.0	12.5	6.2	16.3	8.5				
Green Ext Time (p_c), s	0.1	0.4	0.0	11.8	0.1	0.3	0.1	6.9				
Intersection Summary												
HCM 6th Ctrl Delay				24.4								
HCM 6th LOS				C								
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
Movement	EBL	EBC	NBL	NBT	SBT	SBR
Lane Configurations	↑↑↑		↑↑↑	↑↑↑	↑↑↑	↑↑↑
Traffic Vol, veh/h	26	1	2	156	44	28
Future Vol, veh/h	26	1	2	156	44	28
Conflicting Peds, #/hr	2	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	100	0	1	0	0
Mvmt Flow	31	1	2	184	52	33
Major/Minor						
Minor2		Major1		Major2		
Conflicting Flow All	261	71	87	0	-	0
Stage 1	71	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Critical Hdwy	6.4	7.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	2.2	-	-	-
Pot Cap-1 Maneuver	732	775	1522	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	728	774	1519	-	-	-
Mov Cap-2 Maneuver	728	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Approach						
EB		NB		SB		
HCM Control Delay, s	10.2		0.1		0	
HCM LOS	B					
Minor Lane/Major Mvmt						
NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1519	-	730	-	-	-
HCM Lane V/C Ratio	0.002	-	0.044	-	-	-
HCM Control Delay (s)	7.4	0	10.2	-	-	-
HCM Lane LOS	A	A	B	-	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

BASIS School TIS

2 - Existing Mid-Day PM

Synchro 11 Report

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HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	223	345	311	652	220	159	352	813	878	132	420	129
Future Volume (veh/h)	223	345	311	652	220	159	352	813	878	132	420	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		0.97	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1900	1900	1900	1870	1885	1885	1900	1870	1885	1885	1900	
Adj Flow Rate, veh/h	237	367	120	694	234	101	374	865	389	140	447	64
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	2	1	1	1	0	2	1	1	0
Cap, veh/h	290	506	397	764	395	324	432	2630	1836	192	2254	704
Arrive On Green	0.08	0.14	0.14	0.25	0.35	0.35	0.12	0.51	0.51	0.06	0.44	0.44
Sat Flow, veh/h	3510	3610	2834	5023	1885	1545	3483	5187	2785	3483	5147	1607
Grp Volume(v), veh/h	237	367	120	694	234	101	374	865	389	140	447	64
Grp Sat Flow(s), veh/h/in	1755	1805	1417	1674	1885	1545	1742	1729	1392	1742	1716	1607
Q Serve(g_s), s	9.3	13.6	5.3	18.8	14.2	6.7	14.7	13.8	7.7	5.5	7.5	3.3
Cyclo Q Clear(g_c), s	9.3	13.6	5.3	18.8	14.2	6.7	14.7	13.8	7.7	5.5	7.5	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	506	397	764	395	324	432	2630	1836	192	2254	704
V/C Ratio(X)	0.82	0.73	0.30	0.91	0.59	0.31	0.86	0.33	0.21	0.73	0.20	0.09
Avail Cap(c_a), veh/h	376	1006	789	789	619	508	547	2630	1836	373	2254	704
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	57.6	54.1	51.3	40.6	38.1	60.2	20.4	9.5	65.1	24.2	23.0
Incr Delay (d2), s/veh	10.4	2.8	0.6	14.4	2.0	0.8	11.3	0.3	0.3	5.2	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	4.6	6.4	1.9	8.2	6.1	0.1	7.1	5.6	2.4	2.6	3.1	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.5	60.5	54.7	65.7	42.6	38.9	71.5	20.8	9.7	70.3	24.4	23.3
LnGrp LOS	E	E	D	E	D	D	E	C	A	E	C	C
Approach Vol, veh/h	724				1029			1628			651	
Approach Delay, s/veh	63.8				57.8			29.8			34.2	
Approach LOS	E				E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.7	76.4	26.3	24.6	22.4	66.7	16.6	34.3				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	15.0	43.6	22.0	39.0	22.0	36.6	15.0	46.0				
Max Q Clear Time (g_c+1), s	7.5	15.8	20.8	15.6	16.7	9.5	11.3	16.2				
Green Ext Time (p_c), s	0.2	11.8	0.5	4.0	0.6	4.5	0.3	2.5				
Intersection Summary												
HCM 6th Ctrl Delay				43.7								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Vol, veh/h	1273	56	0	995	0	55
Future Vol, veh/h	1273	56	0	995	0	55
Conflicting Peds, #/hr	0	4	0	0	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	2	0	1	0	4
Mvmt Flow	1354	60	0	1059	0	59
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	715
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.94
Pot Cap-1 Maneuver	-	-	0	-	0	317
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	315
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	19			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT		
Capacity (veh/h)	315	-	-	-		
HCM Lane V/C Ratio	0.186	-	-	-		
HCM Control Delay (s)	19	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0.7	-	-	-		

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑		↑	↑↑↑	↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	178	1075	82	77	661	117	120	41	62	162	41	184
Future Volume (veh/h)	178	1075	82	77	661	117	120	41	62	162	41	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00		0.99	1.00			1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1885	1885	1885	1885	1885	1885	1900	1900	1885	1870	1885	
Adj Flow Rate, veh/h	185	1120	70	80	689	108	125	43	23	169	43	48
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	0	0	1	2	1
Cap, veh/h	206	3197	200	101	3351	511	149	108	92	193	152	128
Arrive On Green	0.23	1.00	1.00	0.06	0.59	0.59	0.08	0.06	0.06	0.11	0.08	0.08
Sat Flow, veh/h	1795	4949	309	1795	5709	871	1795	1900	1610	1795	1870	1574
Grp Volume(v), veh/h	185	776	414	80	584	213	125	43	23	169	43	48
Grp Sat Flow(s), veh/h/in	1795	1716	1828	1795	1621	1716	1795	1900	1610	1795	1870	1574
Q Serve(g_s), s	14.0	0.0	0.0	6.2	7.9	8.2	9.6	3.1	1.9	13.0	3.0	4.0
Cyclo Q Clear(g_c), s	14.0	0.0	0.0	6.2	7.9	8.2	9.6	3.1	1.9	13.0	3.0	4.0
Prop In Lane	1.00		0.17	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	2216	1180	101	2855	1007	149	108	92	193	152	128
V/C Ratio(X)	0.90	0.35	0.35	0.80	0.20	0.21	0.84	0.40	0.25	0.88	0.28	0.37
Avail Cap(c_a), veh/h	263	2216	1180	199	2855	1007	289	547	463	250	498	419
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	0.0	0.0	65.3	13.6	13.6	63.3	63.7	63.1	61.5	60.4	60.9
Incr Delay (d2), s/veh	23.1	0.4	0.8	5.3	0.2	0.5	4.7	2.8	1.7	19.6	1.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	6.9	0.1	0.3	3.0	2.9	3.3	4.6	1.6	0.8	7.0	1.5	1.7
Unsig. Movement Delay, s/veh												
LnGp Delay(d), s/veh	76.2	0.4	0.8	70.6	13.7	14.1	68.0	66.5	64.8	81.1	61.6	63.1
LnGp LOS	E	A	A	E	B	B	E	E	E	F	E	E
Approach Vol, veh/h	1375			877			191			260		
Approach Delay, s/veh	10.7			19.0			67.3			74.6		
Approach LOS	B			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.6	12.7	12.3	95.4	16.1	16.1	20.6	87.2				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	19.5	* 40	15.5	46.0	22.5	* 37	20.5	41.0				
Max Q Clear Time (g_c+11), s	15.0	5.1	8.2	2.0	11.6	6.0	16.0	10.2				
Green Ext Time (p_c), s	0.1	0.3	0.0	15.1	0.1	0.4	0.1	8.2				
Intersection Summary												
HCM 6th Ctrl Delay				23.6								
HCM 6th LOS				C								

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
	EBL	EBC	NBL	NBT	SBT	
Lane Configurations	↑		↑	↑	↑	
Traffic Vol, veh/h	31	2	0	99	56	30
Future Vol, veh/h	31	2	0	99	56	30
Conflicting Peds, #/hr	2	3	3	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	0	0	2	4	0
Mvmt Flow	35	2	0	113	64	34
Major/Minor						
	Minor2	Major1	Major2			
Conflicting Flow All	199	87	101	0	-	0
Stage 1	84	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.43	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	787	977	1504	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	782	971	1500	-	-	-
Mov Cap-2 Maneuver	782	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Approach						
	EB	NB	SB			
HCM Control Delay, s	9.8	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt						
	NBL	NBT	EBLN1	SBT	SBR	
Capacity (veh/h)	1500	-	791	-	-	-
HCM Lane V/C Ratio	-	-	0.047	-	-	-
HCM Control Delay (s)	0	-	9.8	-	-	-
HCM Lane LOS	A	-	A	-	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

BASIS School TIS

3 - Existing PM

Synchro 11 Report

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BASIS School TIS

3 - Existing PM

Synchro 11 Report

Page 3

HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	260	226	352	372	184	99	375	547	534	156	588	237
Future Volume (veh/h)	260	226	352	372	184	99	375	547	534	156	588	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00		0.98	1.00		0.99	1.00		0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1885	1885	1870	1870	1900	1841	1885	1856	1870	1900	1885	1885
Adj Flow Rate, veh/h	292	254	153	418	207	54	421	615	338	175	661	146
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	2	2	0	4	1	3	2	0	1	1
Cap, veh/h	341	553	425	532	308	248	479	2681	1752	228	2350	720
Arrive On Green	0.10	0.15	0.15	0.03	0.05	0.05	0.14	0.53	0.53	0.06	0.46	0.46
Sat Flow, veh/h	3483	3582	2752	5023	1900	1531	3483	5066	2752	3510	5147	1577
Grp Volume(v), veh/h	292	254	153	418	207	54	421	615	338	175	661	146
Grp Sat Flow(s), veh/h/in	1742	1791	1376	1674	1900	1531	1742	1689	1376	1755	1716	1577
Q Serve(g_s), s	11.6	9.0	7.0	11.6	15.0	4.7	16.6	9.1	7.2	6.9	11.2	7.8
Cyclo Q Clear(g_c), s	11.6	9.0	7.0	11.6	15.0	4.7	16.6	9.1	7.2	6.9	11.2	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	553	425	532	308	248	479	2681	1752	228	2350	720
V/C Ratio(X)	0.86	0.46	0.36	0.79	0.67	0.22	0.88	0.23	0.19	0.77	0.28	0.20
Avail Cap(c_a), veh/h	373	1023	786	718	611	492	572	2681	1752	351	2350	720
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	53.9	53.0	66.0	62.6	57.7	59.2	17.7	10.6	64.4	23.7	22.8
Incr Delay (d2), s/veh	16.5	0.8	0.7	5.0	3.6	0.6	12.9	0.2	0.2	5.4	0.3	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	5.9	4.1	2.5	5.5	8.0	1.9	8.1	3.5	2.2	3.2	4.6	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.6	54.7	53.7	71.0	66.2	58.4	72.2	17.9	10.9	69.8	24.0	23.4
LnGrp LOS	E	D	D	E	E	E	E	B	B	E	C	C
Approach Vol, veh/h	699			679			1374			982		
Approach Delay, s/veh	64.5			68.5			32.8			32.1		
Approach LOS	E			E			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	79.5	19.8	26.6	24.2	69.3	18.7	27.7				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	14.0	45.6	20.0	40.0	23.0	36.6	15.0	45.0				
Max Q Clear Time (g_c+1), s	8.9	11.1	13.6	11.0	18.6	13.2	13.6	17.0				
Green Ext Time (p_c), s	0.2	9.0	1.3	3.3	0.6	6.9	0.2	2.0				
Intersection Summary												
HCM 6th Ctrl Delay				45.0								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT	NBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Vol, veh/h	775	139	0	654	0	132	
Future Vol, veh/h	775	139	0	654	0	132	
Conflicting Peds, #/hr	0	3	0	0	0	3	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	0	-
Grade, %	0	-	-	0	0	0	-
Peak Hour Factor	90	90	90	90	90	90	90
Heavy Vehicles, %	1	1	0	2	0	0	0
Mvmt Flow	861	154	0	727	0	147	
Major/Minor	Major1	Major2	Minor1				
Conflicting Flow All	0	0	-	-	-	514	
Stage 1	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	
Critical Hdwy	-	-	-	-	-	7.1	
Critical Hdwy Stg 1	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	-	-	-	-	3.9	
Pot Cap-1 Maneuver	-	-	0	-	0	437	
Stage 1	-	-	0	-	0	-	
Stage 2	-	-	0	-	0	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	-	435	
Mov Cap-2 Maneuver	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	
Approach	EB	WB	NB				
HCM Control Delay, s	0	0	17.4				
HCM LOS			C				
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT			
Capacity (veh/h)	435	-	-	-			
HCM Lane V/C Ratio	0.337	-	-	-			
HCM Control Delay (s)	17.4	-	-	-			
HCM Lane LOS	C	-	-	-			
HCM 95th %tile Q(veh)	1.5	-	-	-			

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑		↑↑↑	↑↑↑	↑↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	147	681	40	29	504	45	64	8	12	39	17	79
Future Volume (veh/h)	147	681	40	29	504	45	64	8	12	39	17	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.97	1.00	0	0.97	1.00			0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1841	1900	1856	1870	1870	1707	1900	1900	1900	1900
Adj Flow Rate, veh/h	160	740	34	32	548	46	70	9	2	42	18	19
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
Percent Heavy Veh, %	0	1	4	0	3	2	2	13	0	0	0	0
Cap, veh/h	149	3589	164	41	3946	324	89	172	160	55	154	126
Arrive On Green	0.03	0.24	0.24	0.02	0.65	0.65	0.05	0.10	0.10	0.03	0.08	0.08
Sat Flow, veh/h	1810	5037	231	1810	6041	496	1781	1707	1581	1810	1900	1552
Grp Volume(v), veh/h	160	503	271	32	432	162	70	9	2	42	18	19
Grp Sat Flow(s), veh/h/ln	1810	1716	1836	1810	1596	1750	1781	1707	1581	1810	1900	1552
Q Serve(g_s), s	11.5	16.5	16.6	2.5	4.8	5.0	5.4	0.7	0.2	3.2	1.2	1.6
Cyclo Q Clear(g_c), s	11.5	16.5	16.6	2.5	4.8	5.0	5.4	0.7	0.2	3.2	1.2	1.6
Prop In Lane	1.00		0.13	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	2445	1309	41	3127	1143	89	172	160	55	154	126
V/C Ratio(X)	1.08	0.21	0.21	0.78	0.14	0.14	0.79	0.05	0.01	0.77	0.12	0.15
Avail Cap(c_a), veh/h	149	2445	1309	149	3127	1143	197	491	455	187	533	436
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.1	21.7	21.7	68.1	9.3	9.3	65.8	56.9	56.7	67.4	59.7	59.8
Incr Delay (d2), s/veh	95.7	0.2	0.4	11.1	0.1	0.3	5.7	0.2	0.0	8.2	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	9.6	7.7	8.3	1.3	1.7	1.9	2.6	0.3	0.1	1.6	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGp Delay(d), s/veh	163.8	21.9	22.1	79.1	9.3	9.5	71.5	57.0	56.7	75.6	60.1	60.5
LnGp LOS	F	C	C	E	A	A	E	E	E	E	E	E
Approach Vol, veh/h	934			626			81			79		
Approach Delay, s/veh	46.3			13.0			69.5			68.4		
Approach LOS	D			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	18.8	7.7	104.8	11.5	16.1	16.0	96.4				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	14.5	* 40	11.5	55.0	15.5	* 39	11.5	55.0				
Max Q Clear Time (g_c+11), s	5.2	2.7	4.5	18.6	7.4	3.6	13.5	7.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	8.1	0.0	0.1	0.0	6.3				
Intersection Summary												
HCM 6th Ctrl Delay				36.3								
HCM 6th LOS				D								

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
	EBL	EBC	NBL	NBT	SBT	SBR
Lane Configurations	↑		↑	↑	↑	↑
Traffic Vol, veh/h	25	0	0	45	38	41
Future Vol, veh/h	25	0	0	45	38	41
Conflicting Peds, #/hr	3	3	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	9	5	0
Mvmt Flow	28	0	0	51	43	46
Major/Minor						
	Minor2	Major1	Major2			
Conflicting Flow All	123	72	92	0	-	0
Stage 1	69	-	-	-	-	-
Stage 2	54	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	877	996	1515	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	974	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	872	990	1511	-	-	-
Mov Cap-2 Maneuver	872	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	971	-	-	-	-	-
Approach						
	EB	NB	SB			
HCM Control Delay, s	9.3	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt						
	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1511	-	872	-	-	-
HCM Lane V/C Ratio	-	-	0.032	-	-	-
HCM Control Delay (s)	0	-	9.3	-	-	-
HCM Lane LOS	A	-	A	-	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

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4 - Near-Term AM

Synchro 11 Report

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HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	195	241	241	638	220	119	249	703	848	154	481	168
Future Volume (veh/h)	195	241	241	638	220	119	249	703	848	154	481	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00		0.96	1.00		0.99	1.00		0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1885	1885	1885	1900	1885	1900	1870	1885	1870	1885	1885	1900
Adj Flow Rate, veh/h	201	248	79	658	227	92	257	725	444	159	496	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	0	1	0	2	1	2	1	1	0
Cap, veh/h	254	360	278	744	327	269	316	2817	1913	212	2659	819
Arrive On Green	0.07	0.10	0.10	0.24	0.29	0.29	0.09	0.55	0.55	0.06	0.52	0.52
Sat Flow, veh/h	3483	3582	2766	5103	1885	1553	3456	5147	2752	3483	5147	1586
Grp Volume(v), veh/h	201	248	79	658	227	92	257	725	444	159	496	73
Grp Sat Flow(s), veh/h/in	1742	1791	1383	1701	1885	1553	1728	1716	1376	1742	1716	1586
Q Serve(g_s), s	7.9	9.4	3.7	17.4	15.0	6.5	10.2	10.4	8.3	6.3	7.2	3.3
Cyclo Q Clear(g_c), s	7.9	9.4	3.7	17.4	15.0	6.5	10.2	10.4	8.3	6.3	7.2	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	360	278	744	327	269	316	2817	1913	212	2659	819
V/C Ratio(X)	0.79	0.69	0.28	0.88	0.70	0.34	0.81	0.26	0.23	0.75	0.19	0.09
Avail Cap(c_a), veh/h	373	998	770	802	619	510	543	2817	1913	373	2659	819
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	60.9	58.3	51.8	46.5	43.5	62.4	16.7	7.9	64.7	18.1	17.1
Incr Delay (d2), s/veh	6.9	3.3	0.8	11.4	3.8	1.1	5.1	0.2	0.3	5.3	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	3.8	4.4	1.3	7.6	6.7	0.1	4.7	4.1	2.4	2.9	2.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.7	64.2	59.1	63.3	50.2	44.5	67.5	16.9	8.1	70.0	18.3	17.4
LnGrp LOS	E	E	E	E	D	D	E	B	A	E	B	B
Approach Vol, veh/h	528			977			1426			728		
Approach Delay, s/veh	65.9			58.5			23.3			29.5		
Approach LOS	E			E			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.5	82.0	25.4	19.1	17.8	77.7	15.2	29.3				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	15.0	43.6	22.0	39.0	22.0	36.6	15.0	46.0				
Max Q Clear Time (g_c+11), s	8.3	12.4	19.4	11.4	12.2	9.2	9.9	17.0				
Green Ext Time (p_c), s	0.2	11.1	1.0	2.7	0.6	5.1	0.3	2.4				
Intersection Summary												
HCM 6th Ctrl Delay				40.1								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑
Traffic Vol, veh/h	1170	72	0	976	0	70
Future Vol, veh/h	1170	72	0	976	0	70
Conflicting Peds, #/hr	0	3	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	3	0	1	0	0
Mvmtn Flow	1245	77	0	1038	0	74
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	667
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	348
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	346
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	18.2			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT		
Capacity (veh/h)	346	-	-	-		
HCM Lane V/C Ratio	0.215	-	-	-		
HCM Control Delay (s)	18.2	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0.8	-	-	-		

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑↑↑↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	192	936	102	55	577	97	201	39	116	127	26	166
Future Volume (veh/h)	192	936	102	55	577	97	201	39	116	127	26	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00		0.99	1.00		0.99	1.00		0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1900	1885	1900	1900	1885	1870	1885	1856	1900	1900	1900	1900
Adj Flow Rate, veh/h	202	985	96	58	607	94	212	41	43	134	27	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0	0	1	2	1	3	0	0	0	0
Cap, veh/h	223	3058	297	75	3213	483	236	176	150	158	96	80
Arrive On Green	0.25	1.00	1.00	0.04	0.56	0.56	0.13	0.09	0.09	0.09	0.05	0.05
Sat Flow, veh/h	1810	4757	462	1810	5272	860	1795	1856	1587	1810	1900	1575
Grp Volume(v), veh/h	202	710	371	58	513	188	212	41	43	134	27	49
Grp Sat Flow(s), veh/h/in	1810	1716	1788	1810	1621	1723	1795	1856	1587	1810	1900	1575
Q Serve(g_s), s	15.2	0.0	0.0	4.4	7.2	7.5	16.3	2.9	3.5	10.2	1.9	4.3
Cyclo Q Clear(g_c), s	15.2	0.0	0.0	4.4	7.2	7.5	16.3	2.9	3.5	10.2	1.9	4.3
Prop In Lane	1.00		0.26	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	2206	1150	75	2729	967	236	176	150	158	96	80
V/C Ratio(X)	0.91	0.32	0.32	0.77	0.19	0.19	0.90	0.23	0.29	0.85	0.28	0.61
Avail Cap(c_a), veh/h	265	2206	1150	200	2729	967	289	534	457	252	506	419
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	0.0	0.0	66.5	15.1	15.1	59.9	58.7	59.0	63.0	64.0	65.1
Incr Delay (d2), s/veh	26.8	0.4	0.7	6.2	0.2	0.4	23.0	0.8	1.2	7.8	1.9	8.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	7.7	0.1	0.2	2.2	2.7	3.1	8.9	1.4	1.5	5.1	1.0	1.9
Unsig. Movement Delay, s/veh												
LnGp Delay(d), s/veh	78.8	0.4	0.7	72.7	15.2	15.6	82.9	59.5	60.2	70.8	65.9	74.0
LnGp LOS	E	A	A	E	B	B	F	E	E	E	E	E
Approach Vol, veh/h	1283			759			296			210		
Approach Delay, s/veh	12.8			19.7			76.4			70.9		
Approach LOS	B			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	18.0	10.3	95.0	22.9	11.8	21.7	83.6				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	19.5	* 40	15.5	46.0	22.5	* 37	20.5	41.0				
Max Q Clear Time (q_c+11), s	12.2	5.5	6.4	2.0	18.3	6.3	17.2	9.5				
Green Ext Time (p_c), s	0.1	0.4	0.0	13.2	0.1	0.3	0.1	7.1				
Intersection Summary												
HCM 6th Ctrl Delay				27.0								
HCM 6th LOS				C								

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
Movement	EBL	EBC	NBL	NBT	SBT	
Lane Configurations	↑	↑	↑	↑	↑	
Traffic Vol, veh/h	26	1	0	271	133	28
Future Vol, veh/h	26	1	0	271	133	28
Conflicting Peds, #/hr	2	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	100	0	1	0	0
Mvmt Flow	31	1	0	319	156	33
Major/Minor						
Minor2		Major1		Major2		
Conflicting Flow All	496	175	191	0	-	0
Stage 1	175	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Critical Hdwy	6.4	7.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	2.2	-	-	-
Pot Cap-1 Maneuver	537	668	1395	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	535	667	1392	-	-	-
Mov Cap-2 Maneuver	535	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Approach						
EB		NB		SB		
HCM Control Delay, s	12.1		0		0	
HCM LOS	B					
Minor Lane/Major Mvmt						
NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1392	-	539	-	-	
HCM Lane V/C Ratio	-	-	0.059	-	-	
HCM Control Delay (s)	0	-	12.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

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5 - Near-Term Mid-Day PM

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5 - Near-Term Mid-Day PM

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HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	233	362	318	713	234	176	356	877	945	149	461	135
Future Volume (veh/h)	233	362	318	713	234	176	356	877	945	149	461	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		0.97	1.00			1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1900	1900	1900	1870	1885	1885	1900	1870	1885	1885	1900	1900
Adj Flow Rate, veh/h	248	385	127	759	249	119	379	933	460	159	490	71
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	2	1	1	1	0	2	1	1	0
Cap, veh/h	301	527	414	789	410	337	437	2543	1804	212	2190	684
Arrive On Green	0.09	0.15	0.15	0.26	0.36	0.36	0.13	0.49	0.49	0.06	0.43	0.43
Sat Flow, veh/h	3510	3610	2834	5023	1885	1547	3483	5187	2785	3483	5147	1607
Grp Volume(v), veh/h	248	385	127	759	249	119	379	933	460	159	490	71
Grp Sat Flow(s), veh/h/in	1755	1805	1417	1674	1885	1547	1742	1729	1392	1742	1716	1607
Q Serve(g_s), s	9.7	14.3	5.6	20.9	15.1	7.9	14.9	15.6	9.8	6.3	8.5	3.7
Cyclo Q Clear(g_c), s	9.7	14.3	5.6	20.9	15.1	7.9	14.9	15.6	9.8	6.3	8.5	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	527	414	789	410	337	437	2543	1804	212	2190	684
V/C Ratio(X)	0.83	0.73	0.31	0.96	0.61	0.35	0.87	0.37	0.26	0.75	0.22	0.10
Avail Cap(c_a), veh/h	376	1006	789	789	619	508	547	2543	1804	373	2190	684
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	57.1	53.4	51.2	39.7	37.4	60.1	22.2	10.4	64.7	25.5	24.2
Incr Delay (d2), s/veh	11.5	2.8	0.6	23.1	2.1	0.9	11.6	0.4	0.3	5.3	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	4.8	6.7	2.0	9.6	6.5	2.9	7.2	6.4	3.0	2.9	3.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.5	59.9	54.0	74.3	41.7	38.3	71.7	22.6	10.8	70.0	25.8	24.5
LnGrp LOS	E	E	D	E	D	D	E	C	B	E	C	C
Approach Vol, veh/h	760			1127			1772			720		
Approach Delay, s/veh	63.7			63.3			30.0			35.4		
Approach LOS	E			E			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.5	74.0	27.0	25.4	22.6	65.0	17.0	35.5				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	15.0	43.6	22.0	39.0	22.0	36.6	15.0	46.0				
Max Q Clear Time (g_c+1), s	8.3	17.6	22.9	16.3	16.9	10.5	11.7	17.1				
Green Ext Time (p_c), s	0.2	12.8	0.0	4.2	0.6	4.9	0.3	2.8				
Intersection Summary												
HCM 6th Ctrl Delay				45.3								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT	NBR
Intersection							
Int Delay, s/veh	0.4						
Lane Configurations	↑↑	↑↑	↑↑	↑↑			
Traffic Vol, veh/h	1399	56	0	1122	0	55	
Future Vol, veh/h	1399	56	0	1122	0	55	
Conflicting Peds, #/hr	0	4	0	0	0	4	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	0	-
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	94	94	94	94	94	94	
Heavy Vehicles, %	1	2	0	1	0	4	
Mvmt Flow	1488	60	0	1194	0	59	
Major/Minor							
Major1					Minor1		
Conflicting Flow All	0	0	-	-	-	782	
Stage 1	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	
Critical Hdwy	-	-	-	-	-	7.18	
Critical Hdwy Stg 1	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	-	-	-	-	3.94	
Pot Cap-1 Maneuver	-	-	0	-	0	286	
Stage 1	-	-	0	-	0	-	
Stage 2	-	-	0	-	0	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	-	284	
Mov Cap-2 Maneuver	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	
Approach							
EB			WB		NB		
HCM Control Delay, s	0		0		20.9		
HCM LOS					C		
Minor Lane/Major Mvmt							
NBLn1			EBT		EBC		WBT
Capacity (veh/h)	284		-	-	-	-	-
HCM Lane V/C Ratio	0.206		-	-	-	-	-
HCM Control Delay (s)	20.9		-	-	-	-	-
HCM Lane LOS	C		-	-	-	-	-
HCM 95th %tile Q(veh)	0.8		-	-	-	-	-

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑↑↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	189	1122	115	77	682	117	191	41	62	162	41	185
Future Volume (veh/h)	189	1122	115	77	682	117	191	41	62	162	41	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00		0.99	1.00			1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1885	1885	1885	1885	1885	1885	1900	1900	1885	1870	1885	
Adj Flow Rate, veh/h	197	1169	105	80	710	108	199	43	23	169	43	49
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	0	0	1	2	1
Cap, veh/h	218	3001	269	101	3206	475	223	149	126	193	115	96
Arrive On Green	0.24	1.00	1.00	0.06	0.56	0.56	0.12	0.08	0.08	0.11	0.06	0.06
Sat Flow, veh/h	1795	4804	431	1795	5733	850	1795	1900	1610	1795	1870	1566
Grp Volume(v), veh/h	197	835	439	80	600	218	199	43	23	169	43	49
Grp Sat Flow(s), veh/h/in	1795	1716	1805	1795	1621	1719	1795	1900	1610	1795	1870	1566
Q Serve(g_s), s	14.9	0.0	0.0	6.2	8.7	9.0	15.3	3.0	1.9	13.0	3.1	4.2
Cyclo Q Clear(g_c), s	14.9	0.0	0.0	6.2	8.7	9.0	15.3	3.0	1.9	13.0	3.1	4.2
Prop In Lane	1.00	0.24	1.00		0.49	1.00			1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	2143	1127	101	2720	962	223	149	126	193	115	96
V/C Ratio(X)	0.90	0.39	0.39	0.80	0.22	0.23	0.89	0.29	0.18	0.88	0.37	0.51
Avail Cap(c_a), veh/h	263	2143	1127	199	2720	962	289	547	463	250	498	417
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	0.0	0.0	65.3	15.5	15.6	60.4	60.8	60.3	61.5	63.1	63.6
Incr Delay (d2), s/veh	26.2	0.5	1.0	5.3	0.2	0.5	20.1	1.3	0.8	19.6	2.4	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	7.4	0.2	0.3	3.0	3.3	3.7	8.2	1.5	0.8	7.0	1.6	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.4	0.5	1.0	70.6	15.7	16.1	80.5	62.1	61.2	81.1	65.5	68.6
LnGrp LOS	E	A	A	E	B	B	F	E	E	F	E	E
Approach Vol, veh/h	1471			898			265			261		
Approach Delay, s/veh	11.1			20.7			75.8			76.2		
Approach LOS	B			C			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.6	15.7	12.3	92.4	21.9	13.3	21.5	83.3				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	19.5	* 40	15.5	46.0	22.5	* 37	20.5	41.0				
Max Q Clear Time (g_c+11), s	15.0	5.0	8.2	2.0	17.3	6.2	16.9	11.0				
Green Ext Time (p_c), s	0.1	0.3	0.0	16.7	0.1	0.4	0.1	8.4				
Intersection Summary												
HCM 6th Ctrl Delay				25.9								
HCM 6th LOS				C								

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
Movement	EBL	EBC	NBL	NBT	SBT	SBR
Lane Configurations	↑		↑	↑	↑	↑
Traffic Vol, veh/h	31	2	0	204	181	30
Future Vol, veh/h	31	2	0	204	181	30
Conflicting Peds, #/hr	2	3	3	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	0	0	2	4	0
Mvmt Flow	35	2	0	232	206	34
Major/Minor						
Major2		Major1		Major2		
Conflicting Flow All	460	229	243	0	-	0
Stage 1	226	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.43	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	558	815	1335	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	555	810	1331	-	-	-
Mov Cap-2 Maneuver	555	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	800	-	-	-	-	-
Approach						
EB		NB		SB		
HCM Control Delay, s	11.8		0		0	
HCM LOS	B					
Minor Lane/Major Mvmt						
Capacity (veh/h)	1331	-	566	-	-	-
HCM Lane V/C Ratio	-	-	0.066	-	-	-
HCM Control Delay (s)	0	-	11.8	-	-	-
HCM Lane LOS	A	-	B	-	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	260	264	352	477	221	178	375	547	641	237	588	237
Future Volume (veh/h)	260	264	352	477	221	178	375	547	641	237	588	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00		0.98	1.00		0.99	1.00		0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1885	1885	1870	1870	1900	1841	1885	1856	1870	1900	1885	1885
Adj Flow Rate, veh/h	292	297	153	536	248	143	421	615	458	266	661	146
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	2	2	0	4	1	3	2	0	1	1
Cap, veh/h	341	557	428	638	351	283	479	2441	1680	316	2235	685
Arrive On Green	0.10	0.16	0.16	0.04	0.06	0.06	0.14	0.48	0.48	0.09	0.43	0.43
Sat Flow, veh/h	3483	3582	2752	5023	1900	1535	3483	5066	2752	3510	5147	1577
Grp Volume(v), veh/h	292	297	153	536	248	143	421	615	458	266	661	146
Grp Sat Flow(s), veh/h/in	1742	1791	1376	1674	1900	1535	1742	1689	1376	1755	1716	1577
Q Serve(g_s), s	11.6	10.7	7.0	14.8	17.9	12.6	16.6	10.0	10.9	10.4	11.7	8.1
Cyclo Q Clear(g_c), s	11.6	10.7	7.0	14.8	17.9	12.6	16.6	10.0	10.9	10.4	11.7	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	557	428	638	351	283	479	2441	1680	316	2235	685
V/C Ratio(X)	0.86	0.53	0.36	0.84	0.71	0.50	0.88	0.25	0.27	0.84	0.30	0.21
Avail Cap(c_a), veh/h	373	1023	786	718	611	493	572	2441	1680	351	2235	685
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	54.4	52.9	65.6	62.0	59.5	59.2	21.4	12.8	62.7	25.7	24.7
Incr Delay (d2), s/veh	16.5	1.1	0.7	8.6	3.7	2.0	12.9	0.2	0.4	15.5	0.3	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	5.9	4.9	2.5	7.2	9.6	5.4	8.1	4.0	3.4	5.3	4.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.6	55.6	53.6	74.2	65.7	61.5	72.2	21.6	13.2	78.3	26.0	25.4
LnGrp LOS	E	E	D	E	E	E	E	C	B	E	C	C
Approach Vol, veh/h	742			927			1494			1073		
Approach Delay, s/veh	64.2			70.0			33.3			38.9		
Approach LOS	E			E			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	72.9	22.8	26.8	24.2	66.2	18.7	30.8				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	14.0	45.6	20.0	40.0	23.0	36.6	15.0	45.0				
Max Q Clear Time (q_c+11), s	12.4	12.9	16.8	12.7	18.6	13.7	13.6	19.9				
Green Ext Time (p_c), s	0.1	10.0	1.0	3.7	0.6	6.9	0.2	2.8				
Intersection Summary												
HCM 6th Ctrl Delay				48.2								
HCM 6th LOS				D								

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Vol, veh/h	802	337	0	874	0	174
Future Vol, veh/h	802	337	0	874	0	174
Conflicting Peds, #/hr	0	3	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	0	2	0	0
Mvmt Flow	891	374	0	971	0	193
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	639
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	363
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	361
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	25.9			
HCM LOS			D			
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT		
Capacity (veh/h)	361	-	-	-		
HCM Lane V/C Ratio	0.536	-	-	-		
HCM Control Delay (s)	25.9	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	3	-	-	-		

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑↑	↑	↑↑↑	↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	163	708	67	62	504	45	271	14	18	39	26	79
Future Volume (veh/h)	163	708	67	62	504	45	271	14	18	39	26	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.97	1.00	0	0.97	1.00			0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1900	1885	1841	1900	1856	1870	1870	1707	1900	1900	1900	1900
Adj Flow Rate, veh/h	177	770	64	67	548	46	295	15	9	42	28	19
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
Percent Heavy Veh, %	0	1	4	0	3	2	2	13	0	0	0	0
Cap, veh/h	149	3028	250	86	3575	294	197	277	258	55	155	127
Arrive On Green	0.03	0.21	0.21	0.05	0.59	0.59	0.11	0.16	0.16	0.03	0.08	0.08
Sat Flow, veh/h	1810	4832	399	1810	6041	496	1781	1707	1592	1810	1900	1552
Grp Volume(v), veh/h	177	545	289	67	432	162	295	15	9	42	28	19
Grp Sat Flow(s), veh/h/in	1810	1716	1800	1810	1596	1750	1781	1707	1592	1810	1900	1552
Q Serve(g_s), s	11.5	18.6	18.8	5.1	5.7	5.8	15.5	1.0	0.7	3.2	1.9	1.6
Cyclo Q Clear(g_c), s	11.5	18.6	18.8	5.1	5.7	5.8	15.5	1.0	0.7	3.2	1.9	1.6
Prop In Lane	1.00		0.22	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	2150	1128	86	2833	1036	197	277	258	55	155	127
V/C Ratio(X)	1.19	0.25	0.26	0.78	0.15	0.16	1.50	0.05	0.03	0.77	0.18	0.15
Avail Cap(c_a), veh/h	149	2150	1128	149	2833	1036	197	491	458	187	533	436
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.1	28.1	28.2	66.0	12.8	12.9	62.3	49.6	49.4	67.4	59.9	59.8
Incr Delay (d2), s/veh	134.2	0.3	0.5	5.7	0.1	0.3	247.9	0.1	0.1	8.2	0.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	11.2	8.7	9.3	2.5	2.0	2.4	20.6	0.5	0.3	1.6	1.0	0.6
Unsig. Movement Delay, s/veh												
LnGp Delay(d), s/veh	202.3	28.4	28.7	71.7	12.9	13.2	310.2	49.6	49.5	75.6	60.6	60.4
LnGp LOS	F	C	C	E	B	B	F	D	D	E	E	E
Approach Vol, veh/h	1011				661			319			89	
Approach Delay, s/veh	58.9				19.0			290.6			67.6	
Approach LOS	E				B			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	27.4	11.1	92.7	20.0	16.1	16.0	87.9				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	14.5	* 40	11.5	55.0	15.5	* 39	11.5	55.0				
Max Q Clear Time (g_c+1), s	5.2	3.0	7.1	20.8	17.5	3.9	13.5	7.8				
Green Ext Time (p_c), s	0.0	0.1	0.0	8.8	0.0	0.2	0.0	6.3				
Intersection Summary												
HCM 6th Ctrl Delay					82.1							
HCM 6th LOS					F							
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
Int Delay, s/veh	6.5					
Movement	EBL	EBC	NBL	NBT	SBT	SBR
Lane Configurations	↑		3	3	45	38
Traffic Vol, veh/h	242	3	3	45	38	108
Future Vol, veh/h	242	3	3	45	38	108
Conflicting Peds, #/hr	3	3	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	9	5	0
Mvmt Flow	272	3	3	51	43	121
Major/Minor						
Minor2						
Conflicting Flow All	167	110	167	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	828	949	1423	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	821	944	1419	-	-	-
Mov Cap-2 Maneuver	821	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Approach						
EB		NB		SB		
HCM Control Delay, s	11.6		0.5		0	
HCM LOS	B					
Minor Lane/Major Mvmt						
NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1419	-	822	-	-	-
HCM Lane V/C Ratio	0.002	-	0.335	-	-	-
HCM Control Delay (s)	7.5	0	11.6	-	-	-
HCM Lane LOS	A	A	B	-	-	-
HCM 95th %tile Q(veh)	0	-	1.5	-	-	-

BASIS School TIS

7 - Near-Term + Project AM

Synchro 11 Report

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HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	195	259	241	686	237	155	249	703	897	191	481	168
Future Volume (veh/h)	195	259	241	686	237	155	249	703	897	191	481	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00		0.97	1.00		0.99	1.00		0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1885	1885	1885	1900	1885	1900	1870	1885	1870	1885	1885	1900
Adj Flow Rate, veh/h	201	267	79	707	244	129	257	725	495	197	496	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	0	1	0	2	1	2	1	1	0
Cap, veh/h	254	382	295	778	351	290	316	2693	1865	250	2592	799
Arrive On Green	0.07	0.11	0.11	0.25	0.31	0.31	0.09	0.52	0.52	0.07	0.50	0.50
Sat Flow, veh/h	3483	3582	2766	5103	1885	1556	3456	5147	2752	3483	5147	1586
Grp Volume(v), veh/h	201	267	79	707	244	129	257	725	495	197	496	73
Grp Sat Flow(s), veh/h/in	1742	1791	1383	1701	1885	1556	1728	1716	1376	1742	1716	1586
Q Serve(g_s), s	7.9	10.1	3.7	18.8	15.9	9.3	10.2	10.9	10.0	7.8	7.4	3.4
Cyclo Q Clear(g_c), s	7.9	10.1	3.7	18.8	15.9	9.3	10.2	10.9	10.0	7.8	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	382	295	778	351	290	316	2693	1865	250	2592	799
V/C Ratio(X)	0.79	0.70	0.27	0.91	0.70	0.45	0.81	0.27	0.27	0.79	0.19	0.09
Avail Cap(c_a), veh/h	373	998	771	802	619	511	543	2693	1865	373	2592	799
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	60.4	57.5	51.2	44.7	42.5	62.4	18.5	9.0	63.9	19.1	18.1
Incr Delay (d2), s/veh	6.9	3.3	0.7	14.3	3.5	1.5	5.1	0.2	0.3	6.5	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	3.8	4.7	1.3	8.3	7.1	3.5	4.7	4.3	2.9	3.6	3.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.7	63.6	58.2	65.6	48.3	44.0	67.5	18.8	9.3	70.4	19.2	18.3
LnGrp LOS	E	E	E	E	D	D	E	B	A	E	B	B
Approach Vol, veh/h	547				1080			1477			766	
Approach Delay, s/veh	65.5				59.1			24.1			32.3	
Approach LOS	E				E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	78.7	26.3	19.9	17.8	75.9	15.2	31.1				
Change Period (Y+Rc), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	15.0	43.6	22.0	39.0	22.0	36.6	15.0	46.0				
Max Q Clear Time (q_c+11), s	9.8	12.9	20.8	12.1	12.2	9.4	9.9	17.9				
Green Ext Time (p_c), s	0.3	11.6	0.5	2.9	0.6	5.1	0.3	2.8				
Intersection Summary												
HCM 6th Ctrl Delay					41.3							
HCM 6th LOS					D							

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBT	NBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Vol, veh/h	1183	163	0	1076	0	89	
Future Vol, veh/h	1183	163	0	1076	0	89	
Conflicting Peds, #/hr	0	3	0	0	0	3	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	0	-
Grade, %	0	-	-	0	0	0	-
Peak Hour Factor	94	94	94	94	94	94	
Heavy Vehicles, %	1	3	0	1	0	0	
Mvmt Flow	1259	173	0	1145	0	95	
Major/Minor	Major1	Major2	Minor1				
Conflicting Flow All	0	0	-	-	-	722	
Stage 1	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	
Critical Hdwy	-	-	-	-	-	7.1	
Critical Hdwy Stg 1	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	-	-	-	-	3.9	
Pot Cap-1 Maneuver	-	-	0	-	0	320	
Stage 1	-	-	0	-	0	-	
Stage 2	-	-	0	-	0	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	-	318	
Mov Cap-2 Maneuver	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	
Approach	EB	WB	NB				
HCM Control Delay, s	0	0	21.1				
HCM LOS			C				
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT			
Capacity (veh/h)	318	-	-	-			
HCM Lane V/C Ratio	0.298	-	-	-			
HCM Control Delay (s)	21.1	-	-	-			
HCM Lane LOS	C	-	-	-			
HCM 95th %tile Q(veh)	1.2	-	-	-			

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑		↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	200	948	115	70	577	97	295	42	119	127	30	166
Future Volume (veh/h)	200	948	115	70	577	97	295	42	119	127	30	166
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A _{pbt})	1.00	0.98	1.00		0.99	1.00		0.99	1.00		0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1900	1885	1900	1900	1885	1870	1885	1856	1900	1900	1900	1900
Adj Flow Rate, veh/h	211	998	110	74	607	94	311	44	46	134	32	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0	0	1	2	1	3	0	0	0	0
Cap, veh/h	232	2829	311	94	3017	453	289	230	197	158	97	80
Arrive On Green	0.26	1.00	1.00	0.05	0.53	0.53	0.16	0.12	0.12	0.09	0.05	0.05
Sat Flow, veh/h	1810	4692	516	1810	5726	860	1795	1856	1588	1810	1900	1575
Grp Volume(v), veh/h	211	729	379	74	513	188	311	44	46	134	32	49
Grp Sat Flow(s), veh/h/in	1810	1716	1777	1810	1621	1723	1795	1856	1588	1810	1900	1575
Q Serve(g_s), s	15.8	0.0	0.0	5.7	7.8	8.1	22.5	3.0	3.7	10.2	2.3	4.3
Cyclo Q Clear(g_c), s	15.8	0.0	0.0	5.7	7.8	8.1	22.5	3.0	3.7	10.2	2.3	4.3
Prop In Lane	1.00		0.29	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	2069	1071	94	2562	907	289	230	197	158	97	80
V/C Ratio(X)	0.91	0.35	0.35	0.79	0.20	0.21	1.08	0.19	0.23	0.85	0.33	0.61
Avail Cap(c_a), veh/h	265	2069	1071	200	2562	907	289	534	457	252	506	420
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	0.0	0.0	65.6	17.5	17.6	58.8	55.0	55.3	63.0	64.1	65.1
Incr Delay (d2), s/veh	28.9	0.5	0.9	5.4	0.2	0.5	75.2	0.5	0.7	7.8	2.4	8.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	8.1	0.1	0.3	2.7	3.0	3.4	16.3	1.4	1.5	5.1	1.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	80.2	0.5	0.9	71.0	17.7	18.1	134.0	55.5	56.0	70.8	66.5	73.8
LnGrp LOS	F	A	A	E	B	B	F	E	E	E	E	E
Approach Vol, veh/h	1319				775			401			215	
Approach Delay, s/veh	13.4				22.9			116.4			70.8	
Approach LOS	B				C			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	16.7	22.1	11.8	89.4	27.0	11.8	22.4	78.8				
Change Period (Y+R _c), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	19.5	* 40	15.5	46.0	22.5	* 37	20.5	41.0				
Max Q Clear Time (q_c+11), s	12.2	5.7	7.7	2.0	24.5	6.3	17.8	10.1				
Green Ext Time (p_c), s	0.1	0.4	0.0	13.7	0.0	0.4	0.1	7.1				
Intersection Summary												
HCM 6th Ctrl Delay					35.9							
HCM 6th LOS					D							
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
Movement	EBL	EBC	NBL	NBT	SBT	SBR
Lane Configurations	↑		↑	↑	↑	
Traffic Vol, veh/h	124	3	2	271	133	59
Future Vol, veh/h	124	3	2	271	133	59
Conflicting Peds, #/hr	2	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	100	0	1	0	0
Mvmt Flow	146	4	2	319	156	69
Major/Minor						
Conflict Flow All		518	193	227	0	0
Stage 1		193	-	-	-	-
Stage 2		325	-	-	-	-
Critical Hdwy	6.4	7.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	2.2	-	-	-
Pot Cap-1 Maneuver	521	651	1353	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	737	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	518	650	1350	-	-	-
Mov Cap-2 Maneuver	518	-	-	-	-	-
Stage 1	842	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Approach						
EB		NB		SB		
HCM Control Delay, s	14.7		0.1		0	
HCM LOS	B					
Minor Lane/Major Mvmt						
NBL		NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1350	-	520	-	-	-
HCM Lane V/C Ratio	0.002	-	0.287	-	-	-
HCM Control Delay (s)	7.7	0	14.7	-	-	-
HCM Lane LOS	A	A	B	-	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-	-

HCM 6th Signalized Intersection Summary

1: San Ramon Rd & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	233	373	318	755	249	207	356	877	977	173	461	135
Future Volume (veh/h)	233	373	318	755	249	207	356	877	977	173	461	135
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A _{pbT})	1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/in	1900	1900	1900	1870	1885	1885	1900	1870	1885	1885	1900	1900
Adj Flow Rate, veh/h	248	397	127	803	265	152	379	933	494	184	490	71
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	2	1	1	1	0	2	1	1	0
Cap, veh/h	301	541	424	789	417	343	437	2486	1773	237	2171	678
Arrive On Green	0.09	0.15	0.15	0.26	0.37	0.37	0.13	0.48	0.48	0.07	0.42	0.42
Sat Flow, veh/h	3510	3610	2834	5023	1885	1548	3483	5187	2784	3483	5147	1607
Grp Volume(v), veh/h	248	397	127	803	265	152	379	933	494	184	490	71
Grp Sat Flow(s), veh/h/in	1755	1805	1417	1674	1885	1548	1742	1729	1392	1742	1716	1607
Q Serve(g_s), s	9.7	14.7	5.6	22.0	16.2	10.4	14.9	16.0	11.0	7.3	8.5	3.7
Cyclo Q Clear(g_c), s	9.7	14.7	5.6	22.0	16.2	10.4	14.9	16.0	11.0	7.3	8.5	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	541	424	789	417	343	437	2486	1773	237	2171	678
V/C Ratio(X)	0.83	0.73	0.30	1.02	0.64	0.44	0.87	0.38	0.28	0.78	0.23	0.10
Avail Cap(c_a), veh/h	376	1006	789	789	619	509	547	2486	1773	373	2171	678
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	56.9	53.0	51.6	39.5	37.6	60.1	23.1	11.2	64.2	25.9	24.5
Incr Delay (d2), s/veh	11.5	2.8	0.6	36.4	2.3	1.3	11.6	0.4	0.4	5.4	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	4.8	6.9	2.0	11.0	7.0	3.8	7.2	6.5	3.4	3.4	3.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.5	59.6	53.5	88.1	41.8	38.9	71.7	23.6	11.6	69.6	26.1	24.8
LnGrp LOS	E	E	D	F	D	D	E	C	B	E	C	C
Approach Vol, veh/h	772		1220		1806			745				
Approach Delay, s/veh	63.4		71.9		30.4			36.7				
Approach LOS	E			E			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	14.5	72.5	27.0	26.0	22.6	64.5	17.0	36.0				
Change Period (Y+R _c), s	5.0	5.4	5.0	5.0	5.0	5.4	5.0	5.0				
Max Green Setting (Gmax), s	15.0	43.6	22.0	39.0	22.0	36.6	15.0	46.0				
Max Q Clear Time (g_c+11), s	9.3	18.0	24.0	16.7	16.9	10.5	11.7	18.2				
Green Ext Time (p_c), s	0.3	13.0	0.0	4.3	0.6	4.9	0.3	3.1				
Intersection Summary												
HCM 6th Ctrl Delay		48.2										
HCM 6th LOS		D										

HCM 6th TWSC

2: Driveway & Dublin Blvd

12/13/2022

Movement	EBT	EBC	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Vol, veh/h	1407	114	0	1209	0	72
Future Vol, veh/h	1407	114	0	1209	0	72
Conflicting Peds, #/hr	0	4	0	0	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	2	0	1	0	4
Mvmt Flow	1497	121	0	1286	0	77
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	817
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.94
Pot Cap-1 Maneuver	-	-	0	-	0	271
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	269
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	23.6			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	EBT	EBC	WBT		
Capacity (veh/h)	269	-	-	-		
HCM Lane V/C Ratio	0.285	-	-	-		
HCM Control Delay (s)	23.6	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	1.1	-	-	-		

HCM 6th Signalized Intersection Summary

3: Regional St & Dublin Blvd

12/13/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑		↑	↑↑↑	↑↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	196	1133	123	87	682	117	273	44	65	162	44	185
Future Volume (veh/h)	196	1133	123	87	682	117	273	44	65	162	44	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00		0.99	1.00			1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No		No	
Adj Sat Flow, veh/h/in	1885	1885	1885	1885	1885	1885	1900	1900	1885	1870	1885	
Adj Flow Rate, veh/h	204	1180	113	91	710	108	284	46	26	169	46	49
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	0	0	1	2	1
Cap, veh/h	225	2775	266	113	2975	441	289	218	185	193	115	97
Arrive On Green	0.25	1.00	1.00	0.06	0.52	0.52	0.16	0.11	0.11	0.11	0.06	0.06
Sat Flow, veh/h	1795	4774	457	1795	5732	850	1795	1900	1610	1795	1870	1567
Grp Volume(v), veh/h	204	848	445	91	600	218	284	46	26	169	46	49
Grp Sat Flow(s), veh/h/in	1795	1716	1800	1795	1621	1718	1795	1900	1610	1795	1870	1567
Q Serve(g_s), s	15.4	0.0	0.0	7.0	9.5	9.8	22.1	3.1	2.0	13.0	3.3	4.2
Cyclo Q Clear(g_c), s	15.4	0.0	0.0	7.0	9.5	9.8	22.1	3.1	2.0	13.0	3.3	4.2
Prop In Lane	1.00		0.25	1.00		0.49	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1994	1046	113	2524	892	289	218	185	193	115	97
V/C Ratio(X)	0.91	0.43	0.43	0.81	0.24	0.24	0.98	0.21	0.14	0.88	0.40	0.51
Avail Cap(c_a), veh/h	263	1994	1046	199	2524	892	289	547	463	250	498	417
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	0.0	64.8	18.5	18.6	58.6	56.2	55.7	61.5	63.2	63.6
Incr Delay (d2), s/veh	27.8	0.7	1.3	5.1	0.2	0.7	48.4	0.6	0.4	19.6	2.7	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	7.8	0.2	0.4	3.4	3.6	4.1	13.9	1.5	0.8	7.0	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGp Delay(d), s/veh	79.6	0.7	1.3	69.8	18.7	19.2	106.9	56.8	56.2	81.1	65.9	68.5
LnGp LOS	E	A	A	E	B	B	F	E	E	F	E	E
Approach Vol, veh/h	1497			909			356			264		
Approach Delay, s/veh	11.6			23.9			96.8			76.1		
Approach LOS	B			C			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.6	20.8	13.3	86.4	27.0	13.3	22.0	77.7				
Change Period (Y+Rc), s	4.5	* 4.7	4.5	5.0	4.5	* 4.7	4.5	5.0				
Max Green Setting (Gmax), s	19.5	* 40	15.5	46.0	22.5	* 37	20.5	41.0				
Max Q Clear Time (q_c+11), s	15.0	5.1	9.0	2.0	24.1	6.2	17.4	11.8				
Green Ext Time (p_c), s	0.1	0.4	0.0	17.1	0.0	0.5	0.1	8.3				
Intersection Summary												
HCM 6th Ctrl Delay				31.0								
HCM 6th LOS				C								
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

4: Regional St & Driveway

12/13/2022

Intersection						
Int Delay, s/veh						
Lane Configurations	↑		↑	↑	↑	
Traffic Vol, veh/h	117	4	1	204	181	50
Future Vol, veh/h	117	4	1	204	181	50
Conflicting Peds, #/hr	2	3	3	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	0	0	2	4	0
Mvmt Flow	133	5	1	232	206	57
Major/Minor						
Minor2						
Conflicting Flow All	474	241	266	0	-	0
Stage 1	238	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.43	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	547	803	1310	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	543	798	1306	-	-	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Approach						
EB						
HCM Control Delay, s	13.7		0		0	
HCM LOS	B					
Minor Lane/Major Mvmt						
NBL NBT EBLn1 SBT SBR						
Capacity (veh/h)	1306	-	549	-	-	-
HCM Lane V/C Ratio	0.001	-	0.25	-	-	-
HCM Control Delay (s)	7.8	0	13.7	-	-	-
HCM Lane LOS	A	A	B	-	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-	-