

NANCY RIDGE INDUSTRIAL

TRAFFIC IMPACT ANALYSIS

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October 22, 2021

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1 EXECUTIVE SUMMARY

This Traffic Impact Analysis (TIA) was conducted on the request of the City of San Diego to evaluate the potential transportation-related impacts of the proposed Nancy Ridge industrial project (Project Tracking System Number 637151). The project proposes an industrial development located on Nancy Ridge Drive in the IL-2-1 Zone in the City of San Diego. The project site was previously approved for use as a laydown area under Site Development Permit 1472180 (PTS # 419154). A Mitigated Negative Declaration (MND) was submitted and approved for the same. The current permit requires a Condominium Map, Map Waiver, Tentative Map and Neighborhood Development Permit for an amendment to Site Development Permit No. 1472180 to subdivide two previously graded parcels with Environmentally Sensitive Land (ESL) into three parcels.

The planned development has since been modified and now proposes the construction of four industrial buildings totaling approximately 89,750 square feet within the same footprint as the previously approved project. Since the previously planned development utilized the 1998 City of San Diego Traffic Impact Study Manual (1998-TISM), tiering on the approved MND, the proposed project was evaluated using the same guidelines in this TIA. The site plan for the project is shown in Figure 1. Access to the project would be provided via the approved driveway from Nancy Ridge Drive.

Based on the San Diego Land Development Code, *Trip Generation Manual* (2003) vehicle trip generation rate for warehouse, the project would generate approximately 449 net daily trips including 68 net trips during the AM peak hour and 72 net trips during the PM peak hour.

Two study area intersections, namely Nancy Ridge Drive/Carroll Canyon Road, and Project Driveway/ Nancy Ridge Drive were evaluated during the peak hours at the request of the City. Peak hours are defined as the hours with the highest traffic volumes. Peak hour traffic operations were evaluated for the following scenarios:

- Existing Conditions
- Existing plus Project Conditions
- Near-Term Conditions
- Near-Term Conditions plus Project Conditions

Traffic counts for Nancy Ridge Drive and Carroll Canyon Road were provided by the City of San Diego.

As per the LOS analysis, the proposed Nancy Ridge industrial project would not cause a significant impact during all of the four above-mentioned scenarios at any of the study intersections.

2 INTRODUCTION

This Traffic Impact Analysis (TIA) was conducted on the request of the City of San Diego to evaluate the potential transportation-related impacts of the proposed Nancy Ridge industrial project (Project Tracking System Number 637151). The study intersections and study scenarios evaluated for this TIA are concurrent as per the request of the City and the 1998 City of San Diego Traffic Impact Study Manual (1998-TISM). The previously planned development of the laydown area utilized the 1998-TISM. A Mitigated Negative Declaration (MND) was submitted and approved for the previously proposed project. Tiering on the approved MND, the proposed project was evaluated for impacts using the same guidelines. The project proposes the development of four industrial buildings located on Nancy Ridge Drive located approximately 1,600 feet south of the intersection of Nancy Ridge Drive/Carroll Canyon Road in the IL-2-1 Zone in the Mira Mesa Community in the City of San Diego.

2.1 Project Description

The project site was previously approved for use as a laydown area under Site Development Permit 1472180 (PTS # 419154). The planned development has since been modified and now proposes the construction of four industrial buildings totaling approximately 89,750 square feet within the same footprint as the previously approved project. The current permit requires a Condominium Map, Map Waiver, Tentative Map and Neighborhood Development Permit for an amendment to Site Development Permit No. 1472180 to subdivide two previously graded parcels with Environmentally Sensitive Land (ESL) into three parcels. The project location is shown in Figure 1. The site plan for the project is shown in Figure 2. Access to the project would be provided via the approved driveway from Nancy Ridge Drive.

Figure 1: Project Location

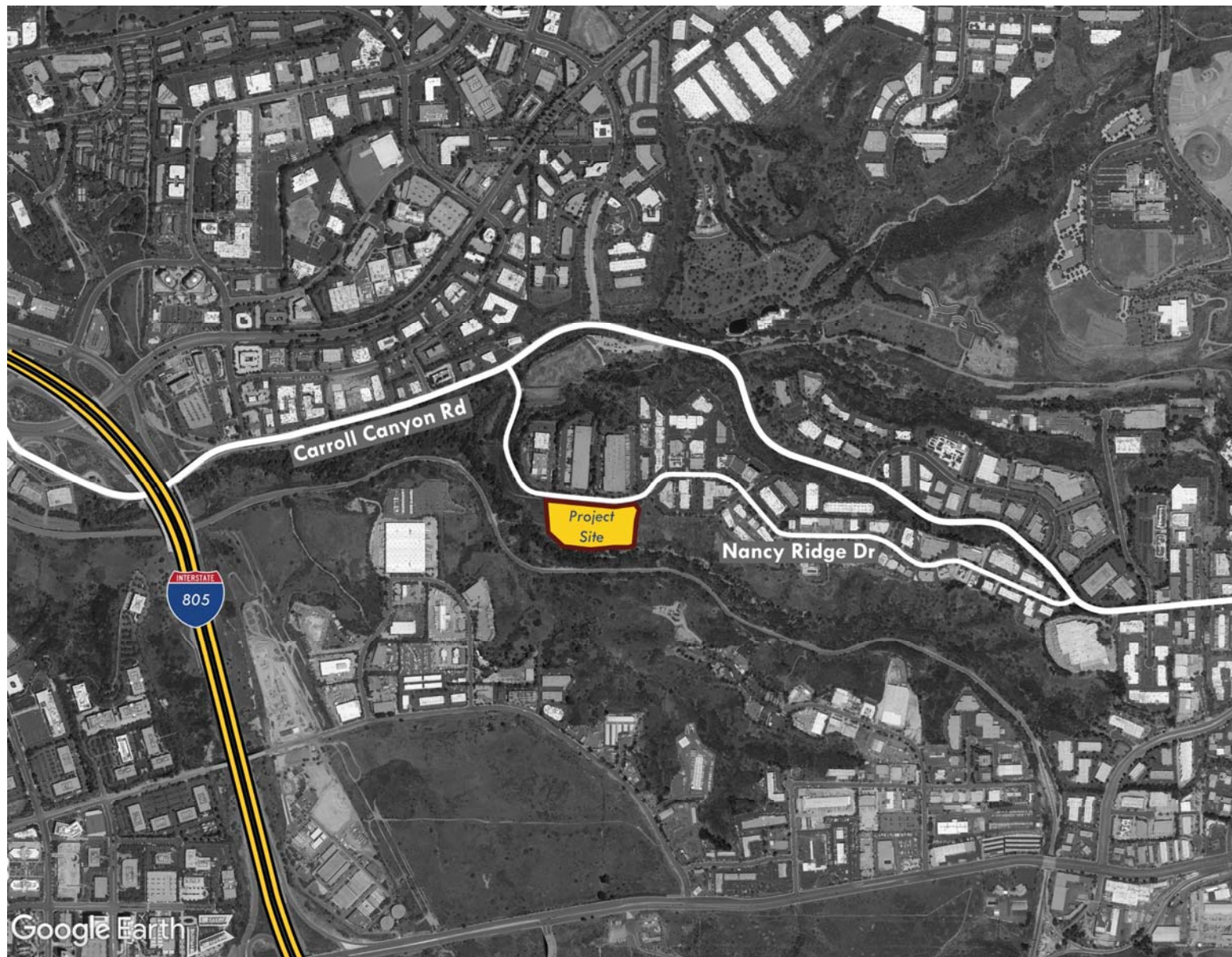
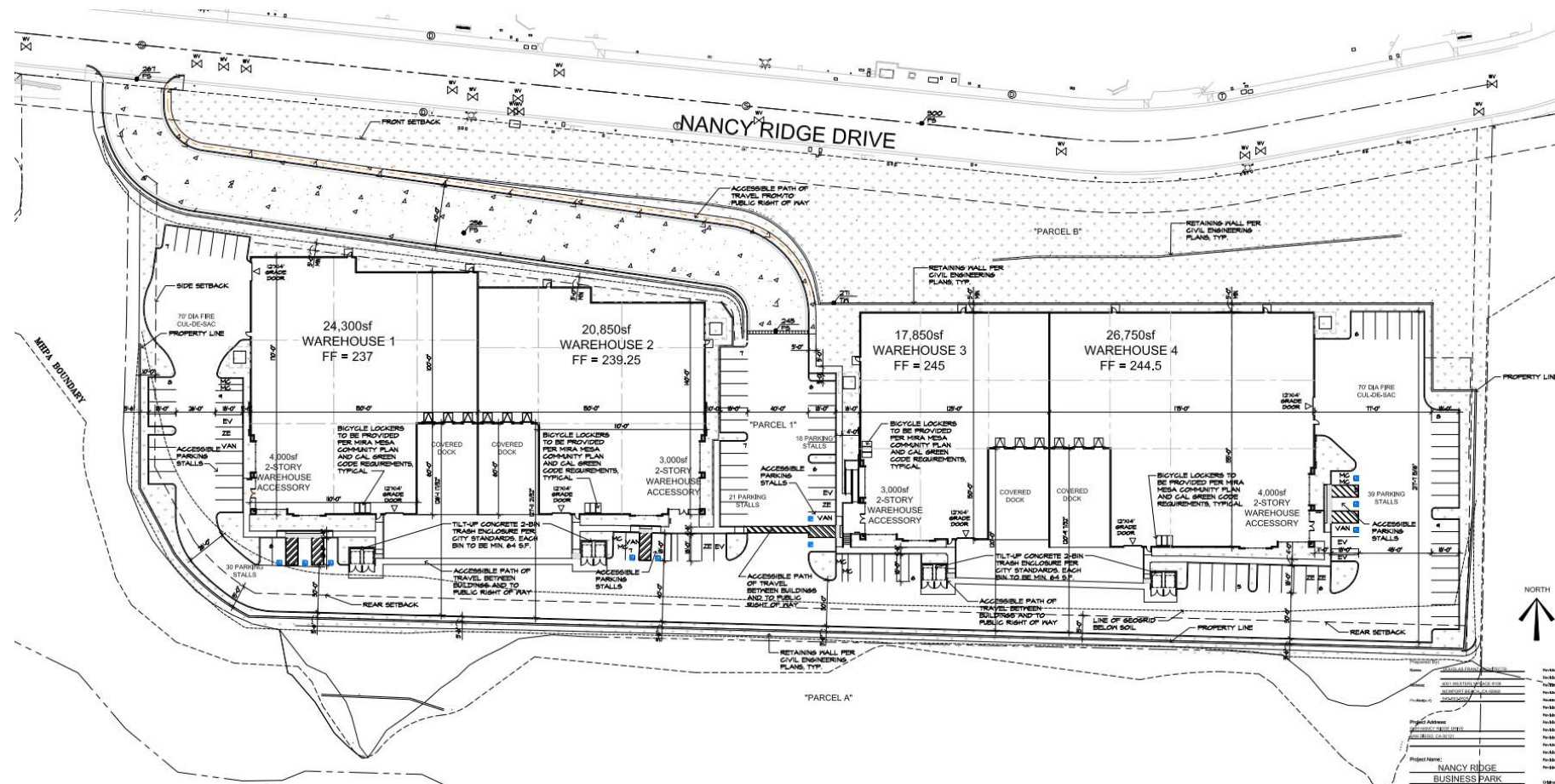


Figure 2: Project Site Plan



2.2 Study Area and Analysis Scenarios

The study area includes the following two intersections:

1. Nancy Ridge Drive/Carroll Canyon Road (Signalized)
2. Project Driveway/Nancy Ridge Drive (Two-way Stop Controlled)

The location of the study area intersections is shown on Figure 3 – Project Study Area. Traffic counts at the intersections were provided by the City of San Diego. As the counts were dated October 25, 2018, a factor of 1% growth rate per year was applied to escalate the 2018 counts to 2021 volumes. The traffic count data is provided in *Appendix A*.

Two study area intersections were evaluated during the peak hours, which are defined as the hours with the highest traffic volumes during the peak weekday and weekend periods. For weekdays, the highest traffic volumes are generally observed during the 7 AM to 9 AM and 4 PM to 6 PM peak commute periods. Peak hour traffic operations were evaluated for the following scenarios:

- Existing Conditions
- Existing plus Project Conditions
- Near-Term Conditions
- Near-Term Conditions plus Project Conditions

Near-term conditions were analyzed by adding cumulative projects to the baseline year conditions. Cumulative projects for the near-term scenario analysis were provided by the City.

Figure 3: Project Study Area



2.3 Methodology

Intersection operations are evaluated using Level of Service (LOS), which is a measure of the delay experienced by drivers on a roadway facility. LOS A indicates free-flow traffic conditions and is generally the best operating conditions. LOS F is an extremely congested condition and is the worst operating condition from the driver's perspective. In this report, LOS at signalized and unsignalized intersections is calculated using the Highway Capacity Manual (HCM), 6th Edition methodology.

LOS at signalized intersections is defined in terms of the weighted average control delay for the intersection as a whole. Control delay is a measure of the increase in travel time that is experienced due to traffic signal control and is expressed in terms of average control delay per vehicle (in seconds). Control delay is determined based on the intersection geometry and volume, signal cycle length, phasing and coordination along the arterial corridor. Table 1 shows the relationship between control delay and LOS at a signalized intersection.

Table 1. Relationship between Control Delay and LOS at a Signalized Intersection

LOS	Delay (Seconds per Vehicle)
A	≤ 10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	>80

Unsignalized intersections are categorized as either all-way stop control (AWSC) or two-way stop control (TWSC). LOS at AWSC intersections is determined by the weighted average control delay of the overall intersection. The HCM TWSC intersection methodology calculates LOS based on the delay experienced by drivers on the minor (stop-controlled) approaches to the intersection. For TWSC intersections, LOS is determined for each minor-street movement, as well as the major-street left-turns. The relationship between delay and LOS at Unsignalized intersections is shown in Table 2.

Table 2. Relationship between Delay and LOS an Unsignalized Intersection

LOS	Delay (seconds)
A	0-10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	>50

2.4 Significance Criteria

Since the previously planned development of the laydown area utilized the 1998-TISM, tiering on the approved MND, the proposed project was evaluated using the same guidelines, as well as input received on the scope of work from the City of San Diego. The TISM (1998) states that the acceptable level of service standard for roadways and intersections in San Diego is level of service D. However, for undeveloped locations, the goal is to achieve a level of service C. The allowable increase due to project impacts for intersections as per the TISM is shown in Table 3.

Table 3. Significant Transportation Impact Measure

LEVEL OF SERVICE WITH PROJECT	ALLOWABLE INCREASE/DECREASE DUE TO PROJECT IMPACTS*		
	INTERSECTIONS	ROADWAY SECTIONS	
	DELAY (SEC)	V/C	SPEED (MPH)
A	N/A	0.10	5
B	6	0.06	3
C	4	0.04	2
D**	2	0.02	1
E**	2	0.02	1
F**	2	0.02	1

NOTES:

* If a proposed project's impact exceed the values shown in the table, then the impacts are deemed "significant." The project applicant shall identify "feasible mitigations" to bring the facility back to the level previously held by the facility prior to the project's traffic impacts.

** The acceptable level of service standard for roadways and intersections in San Diego is level of service D. However, for undeveloped locations, the goal is to achieve a level of service C.

KEY: DELAY = Average stopped delay per vehicle measured in seconds
 V/C = Volume to Capacity Ratio [capacity at level of service E should be used (Use Table 1.)]
 SPEED = Arterial speed measured in miles per hour
 N/A = Not Applicable

3 BASELINE CONDITIONS

This section discusses the baseline (without project) conditions. Baseline conditions are those conditions that exist within the study area in the existing condition and that are forecast to occur in the future, without the proposed project.

3.1 Existing Transportation System

Roadways providing access to the project site include I-805, Carroll Canyon Road, and Nancy Ridge Drive. The characteristics of each roadway are discussed below:

- I-805 is an Interstate highway in California and provides regional connections to Orange and Los Angeles County through I-5 and to the south of San Diego County from the project location.
- Carroll Canyon Road is a four-lane major which provides connections to I-805 on the west and Miramar Road on the east.
- Nancy Ridge Road is a two-lane collector which connects to Carroll Canyon Road on both the west and east ends.

3.2 Existing Traffic Volumes and Levels of Service

As discussed in Section 2.2, traffic counts from 2018 were provided by the City. The 2018 counts were projected to 2021 volume utilizing a growth rate of 1% per year. The existing Levels of Service at the study area intersections were determined using the methodology described in section 2.3. The existing lane geometries for the study intersections are shown in Figure 4. The Existing AM and PM peak hour traffic volumes are shown in Figure 5. Table 4 shows the existing AM and PM peak hour levels of service at study intersections. As shown in Table 4, the study intersection of Nancy Ridge Drive/Carroll Canyon Road operates at a satisfactory LOS B during both peak hours. All LOS calculations are provided in Appendix B.

Table 4. Existing AM and PM Peak Hour Levels of Service

Intersection	Traffic Control	Existing Conditions			
		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS ²	Delay ¹	LOS ²
1. Nancy Ridge Dr/Carroll Canyon Rd	Signal	13.9	B	12.4	B
2. Project Dwy/Carroll Canyon Rd	TWSC	-	-	-	-

 =Unsatisfactory Intersection Operation

TWSC = Two-Way Stop Controlled

¹ Delay in Seconds

² Level of Service

Figure 4: Existing Lane Geometry and Traffic Control

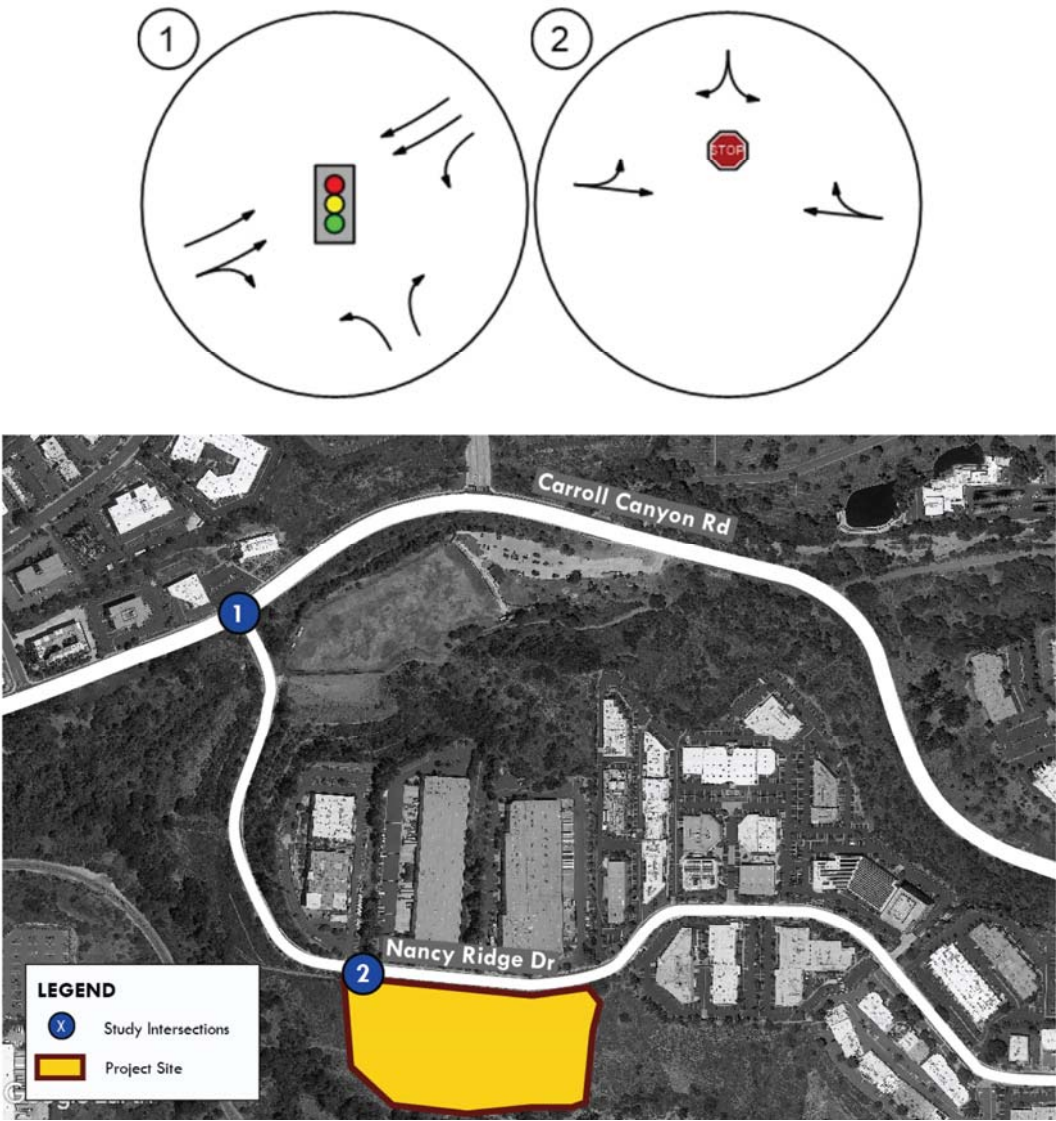
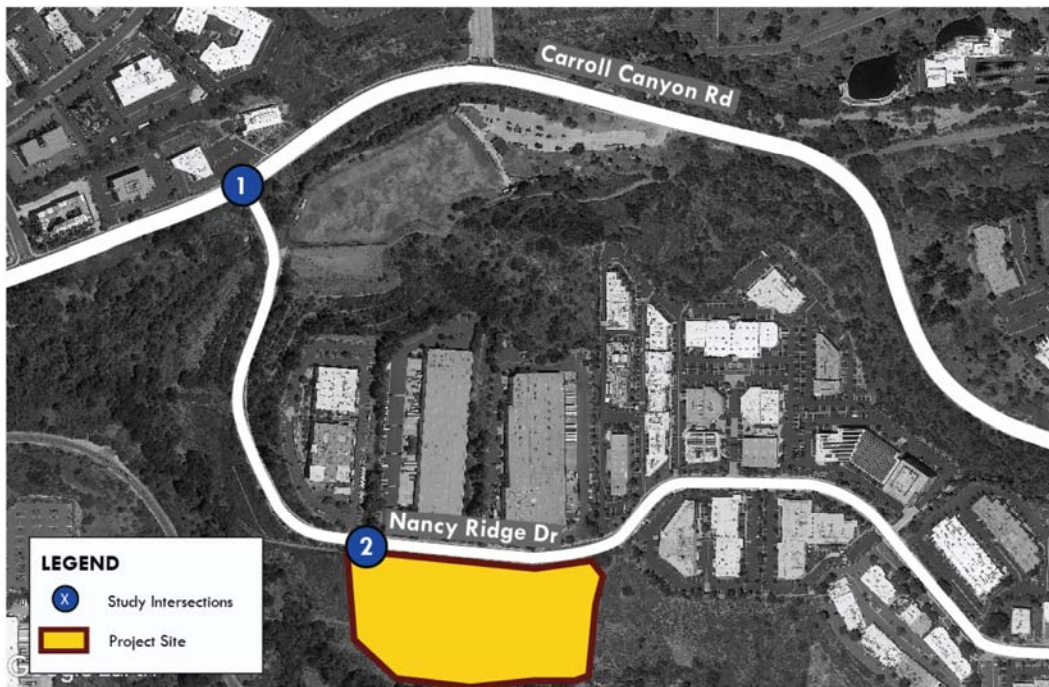
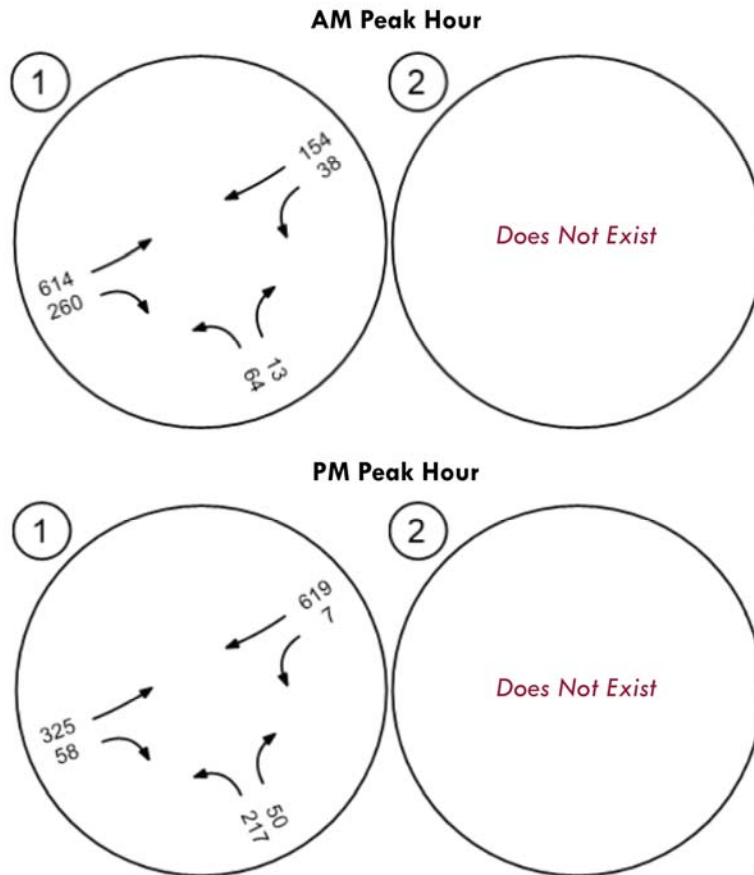


Figure 5: Existing Conditions Peak Hour Volumes



3.3 Near-Term (2023) Traffic Volumes and Level of Service

As per the direction of the City of San Diego, the traffic volumes for the study intersections for this scenario were determined by utilizing the greater of the addition of cumulative projects to the existing condition volumes or 1% growth rate per year for the near-term condition. EPD calculated the total intersection volume for near-term (2023) conditions by applying a growth rate of 1% per year, and the total volume obtained by adding cumulative projects to the existing conditions volumes. The addition of cumulative projects resulted in a higher intersection volume and was hence utilized for analyzing this scenario.

The City of San Diego provided information regarding cumulative projects in the vicinity of the project. One cumulative project was identified and the location of the cumulative project is shown in Figure 6. The City also provided EPD with the cumulative project trip generation and trip distribution. Table 5 shows the trip generation for the cumulative project.

The traffic volume generated by the cumulative project was distributed to the study area intersections and is illustrated in Figure 7. The Near-term Baseline traffic volumes are illustrated in Figure 8.

Table 6 shows the Near-term Baseline AM and PM peak hour levels of service at study intersections. As shown in Table 6, the study intersection of Nancy Ridge Drive/Carroll Canyon Road operates at a satisfactory LOS B during both peak hours. All LOS calculations are provided in Appendix B.

Table 5. Cumulative Project Trip Generation

Land Use	AM Peak Hour				PM Peak Hour		
	Daily	In	Out	Total	In	Out	Total
<u>Project Trip Generation</u>							
Flying Tee (Golf Driving Range) ¹	1368	66	16	82	55	77	132

¹ The daily, AM and PM peak hour trips were provided by the City of San Diego.

Table 6. Near-Term AM and PM Peak Hour Levels of Service

Intersection	Traffic Control	Near-Term Condition			
		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS ²	Delay ¹	LOS ²
1. Nancy Ridge Dr/Carroll Canyon Rd	Signal	14.2	B	12.5	B
2. Project Dwy/Carroll Canyon Rd	TWSC	-	-	-	-

■ =Unsatisfactory Intersection Operation

TWSC = Two-Way Stop Controlled

¹ Delay in Seconds

² Level of Service

Figure 6: Location of Cumulative Projects



Figure 7: Cumulative Project Peak Hour Trip Assignment

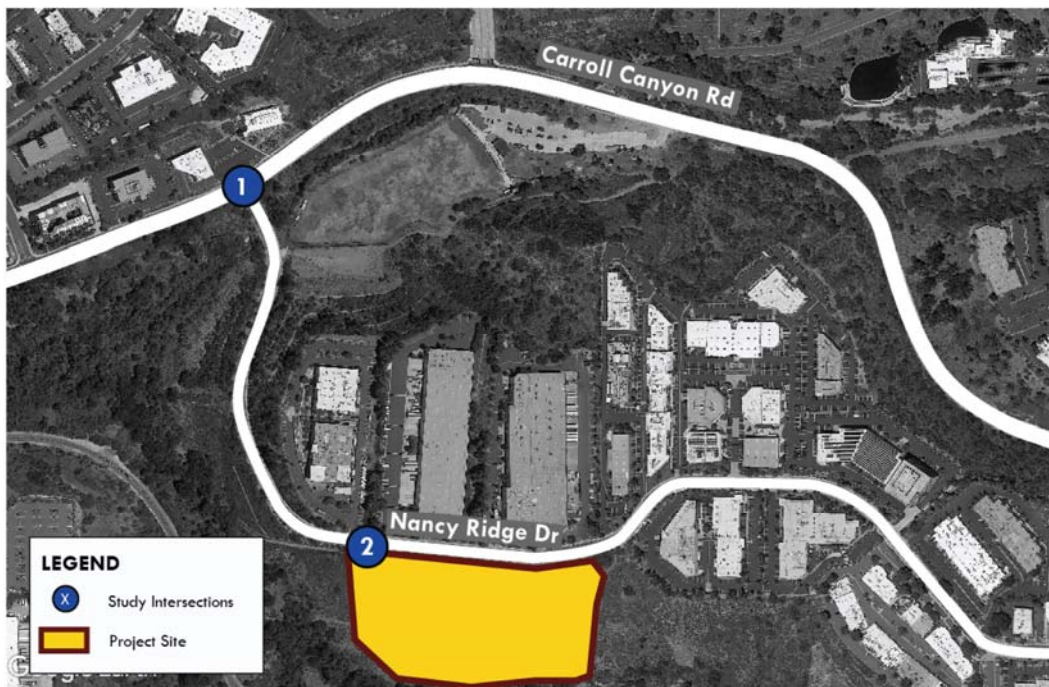
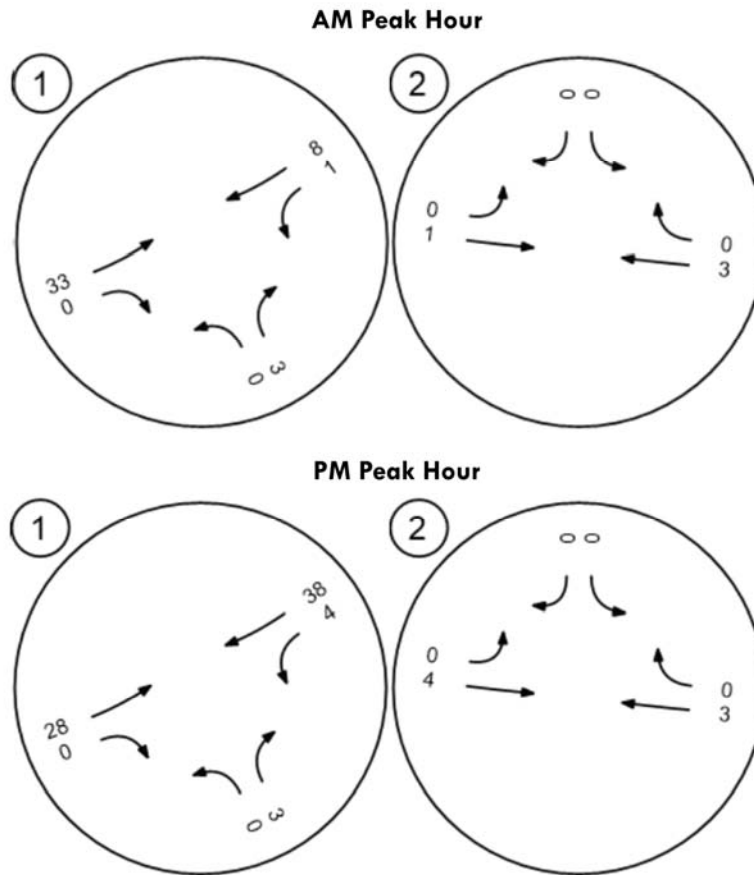
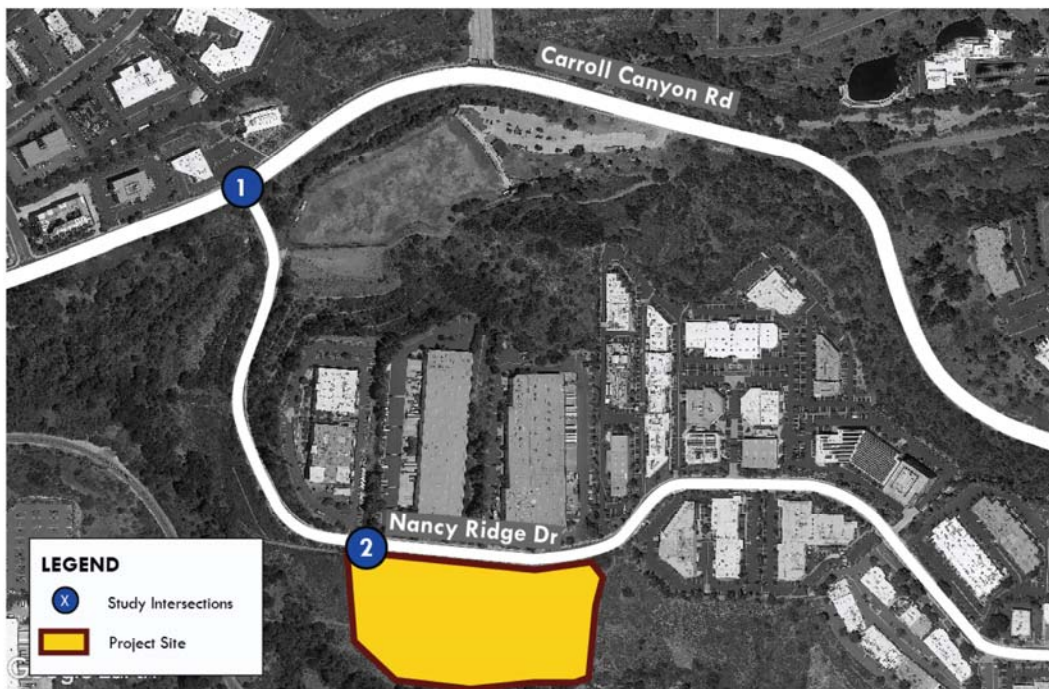
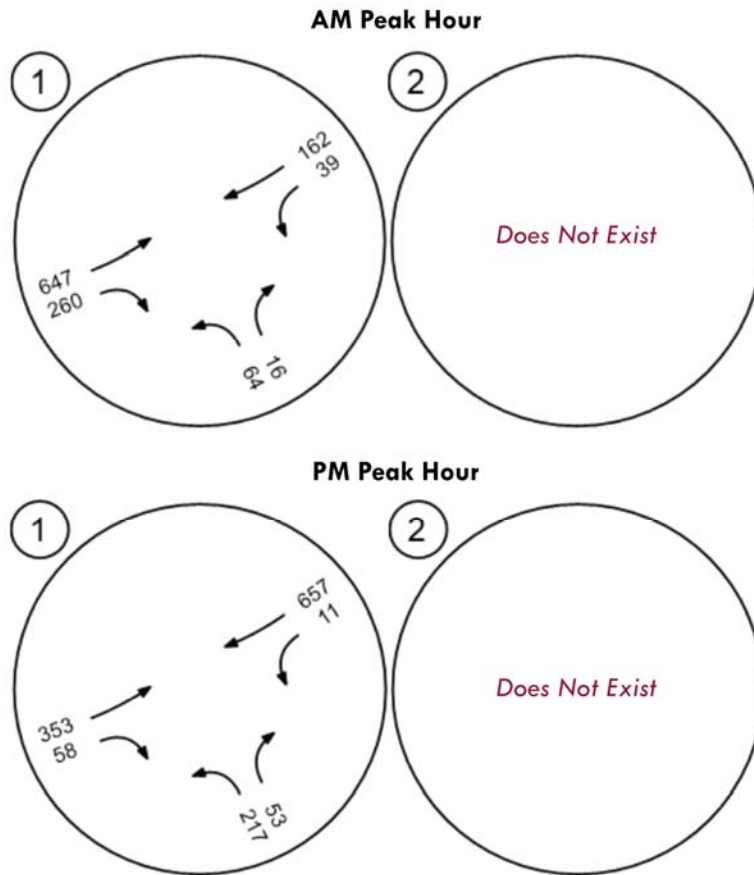


Figure 8: Near-Term Conditions Peak Hour Volumes



4 PROPOSED PROJECT

4.1 Project Trip Generation

The trip generation of the proposed project was developed using the San Diego Land Development Code, *Trip Generation Manual* (2003) vehicle trip generation rate for warehouse. The project trip generation is shown in Table 7. The project is estimated to generate approximately 449 net daily trips including 68 net trips during the AM peak hour and 72 net trips during the PM peak hour.

4.2 Project Trips

The project trips were distributed to the surrounding roadways based on the trip distribution advisory received from the City. Approximately 80 percent of the project trips would travel west and 20 percent would travel east from the project driveway. Project trips were assigned to the study area intersections by multiplying the net project trip generation by the trip distribution percent at each location. The project trip distribution is shown in Figure 9. Project trips during the AM and PM peak hours are shown in Figure 10.

Table 7. Project Trip Generation

			AM Peak Hour			PM Peak Hour		
Land Use	Units	Daily	In	Out	Total	In	Out	Total
<u>Trip Rates</u>								
Warehousing ¹	TSF	5.00	0.53	0.23	0.75	0.32	0.48	0.80
<u>Project Trip Generation</u>								
Warehouse ^{1,2}	89,750 TSF	449	47	21	68	29	43	72

TSF = Thousand Square Feet

¹ Trip rates from the City of San Diego Trip Generation Manual (2003). Land Use - Warehousing.

² Warehouse 1 comprises 24,300 SF, Warehouse 2 comprises 20,850 SF, Warehouse 3 comprises 17,850 SF, and Warehouse 4 comprises 26,750 SF.

Figure 9: Project Trip Distribution

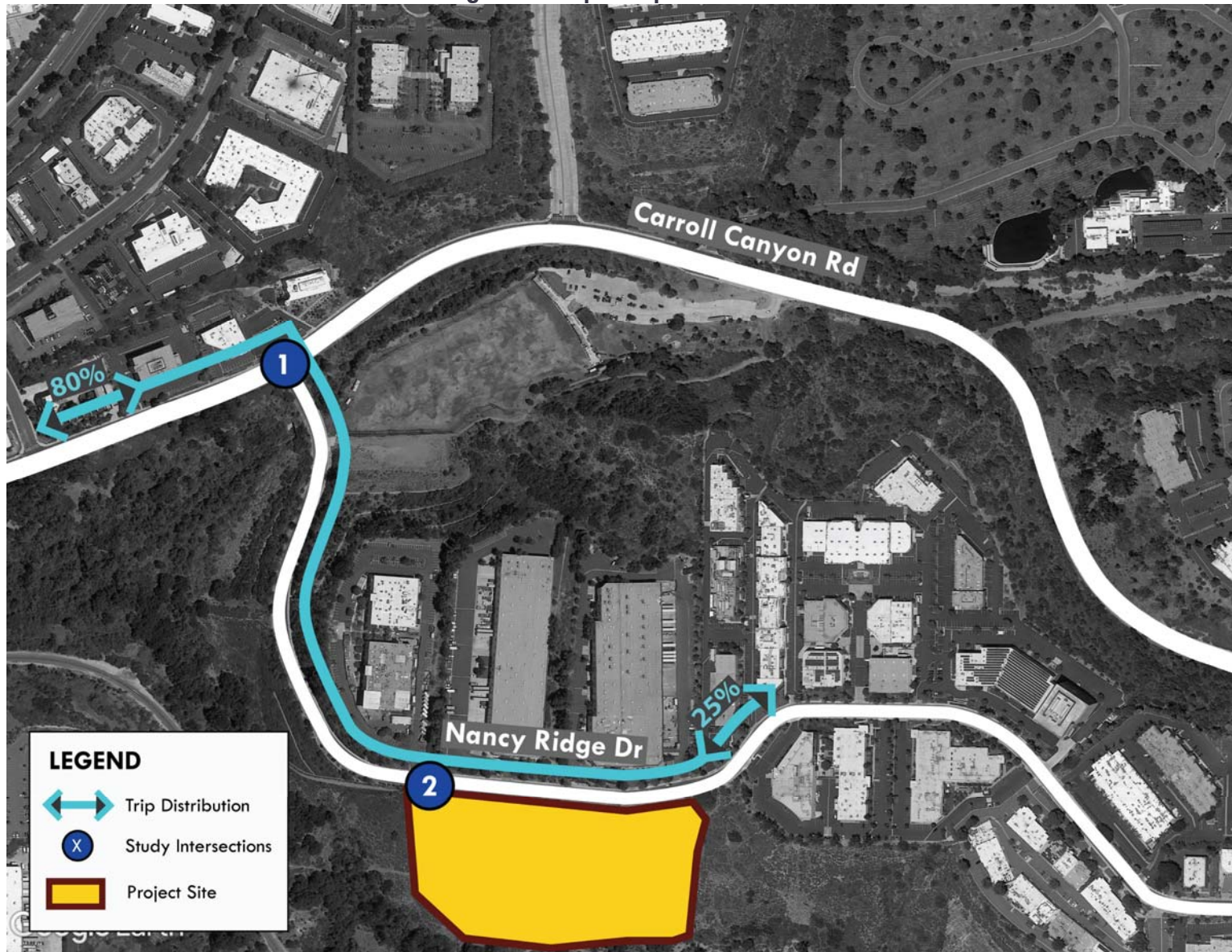
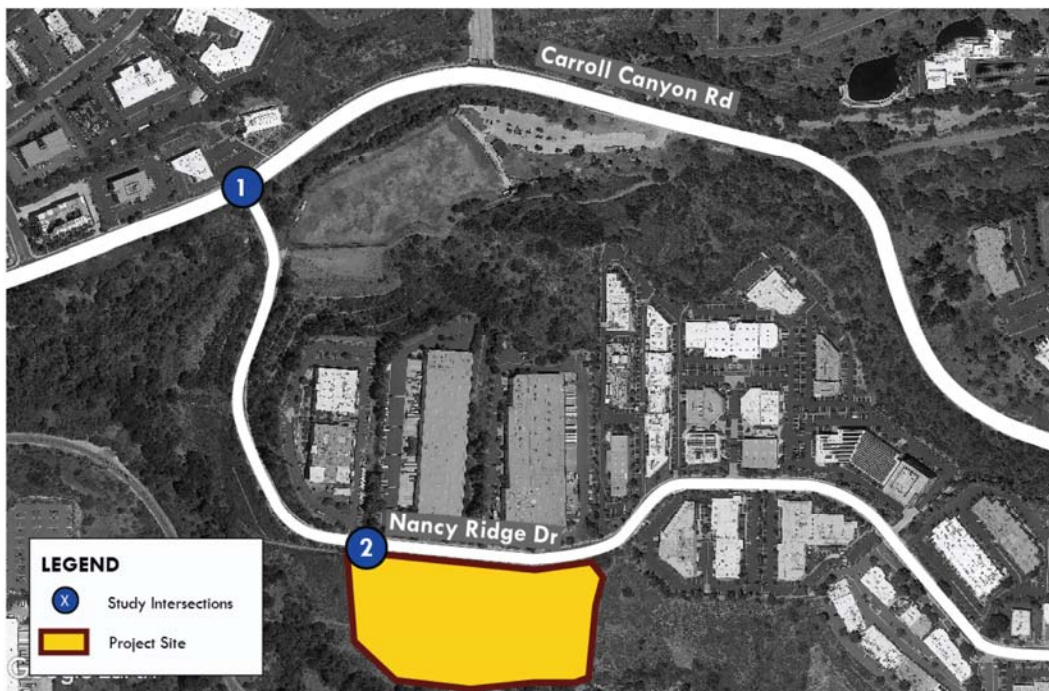
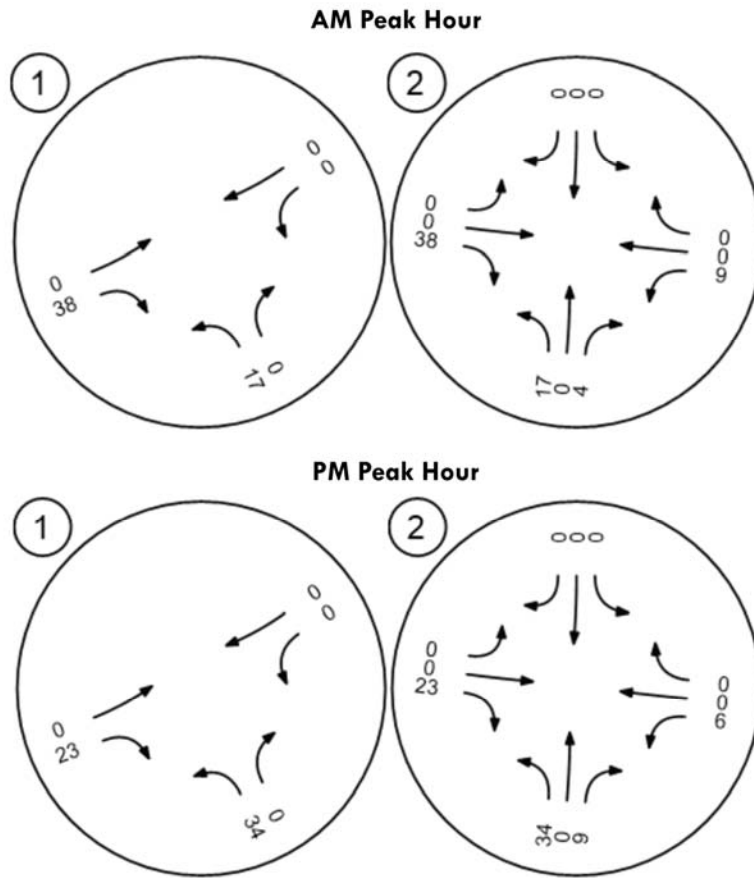


Figure 10: Project Peak Hour Trip Assignment



5 PROJECT IMPACTS

5.1 Existing Plus Project Traffic Volumes and Intersection Operations

Existing plus Project traffic volumes were determined by adding the project trips to Existing Baseline traffic volumes. The Existing plus Project AM and PM peak hour traffic volumes are shown in Figure 11. An intersection operations analysis was conducted for the study area to evaluate the Existing plus Project peak hour conditions. Intersection operations were calculated using the LOS methodology described previously in Section 2.3 - Methodology.

Table 8 shows the existing baseline and existing plus project AM and PM peak hour levels of service at study intersections. As shown in Table 8, both study intersections are forecast to operate at satisfactory LOS B during both peak hours. All LOS calculations are provided in *Appendix B*.

Table 8. Existing Baseline and Existing Year plus Project Peak Hour Levels of Service

Intersection	Traffic Control	Existing Conditions				Existing plus Project Conditions			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²
1. Nancy Ridge Dr/Carroll Canyon Rd	Signal	13.9	B	12.4	B	14.5	B	12.7	B
2. Project Dwy/Carroll Canyon Rd	TWSC	-	-	-	-	12.1	B	11.6	B

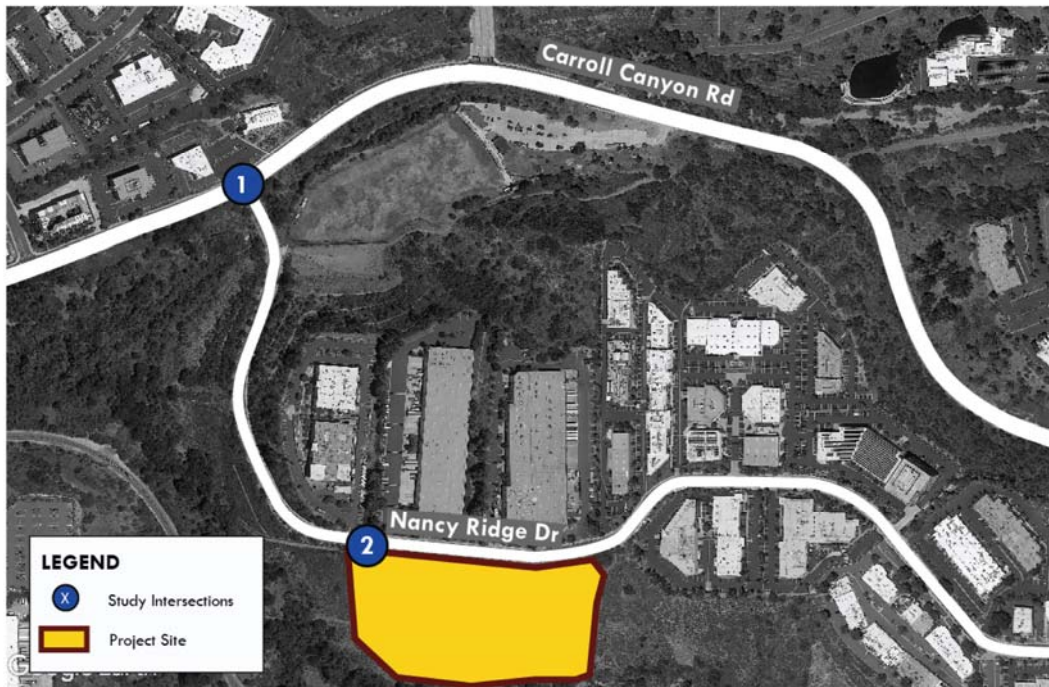
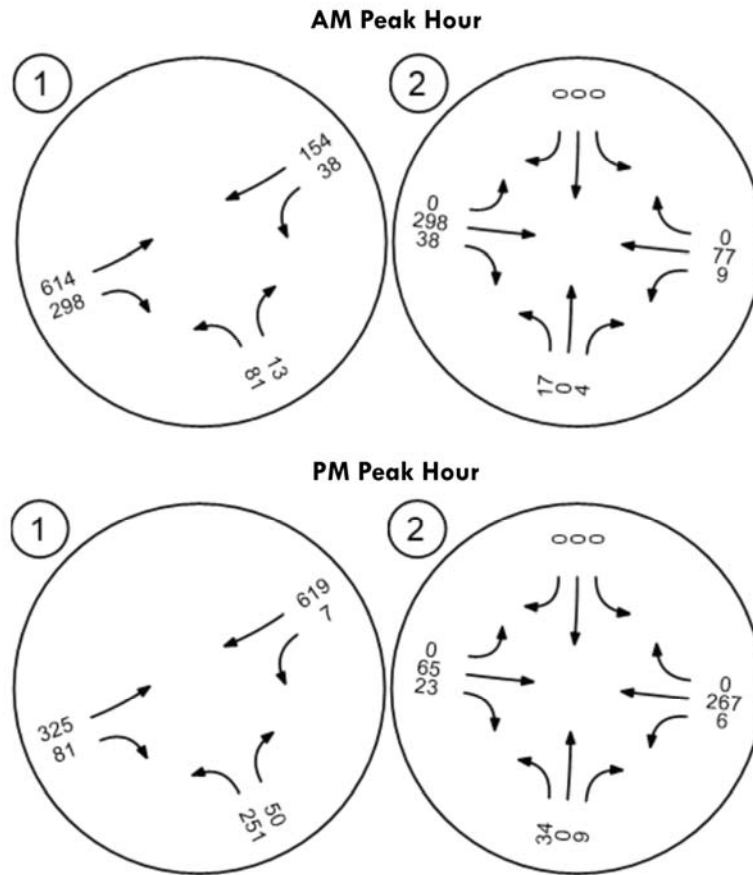
■ = Unsatisfactory Intersection Operation

TWSC = Two-Way Stop Controlled

¹ Delay in Seconds

² Level of Service

Figure 11: Existing Year Plus Project Peak Hour Traffic Volumes




5.2 Near-Term Plus Project Traffic Volumes and Intersection Operations

Near-term plus Project traffic volumes were determined by adding the project trips to the Near-term conditions. The Near-term plus Project AM and PM peak hour traffic volumes at the study intersections are shown in Figure 12. An intersection operations analysis was conducted for the study area to evaluate the Near-Term plus Project peak hour conditions. Intersection operations were calculated using the LOS methodology described previously in Section 2.3 - Methodology.

Table 9 shows the Near-term baseline and Near-term plus Project AM and PM peak hour levels of service at study intersections. As shown in Table 9, both study intersections would continue to operate at satisfactory LOS B during both peak hours with the addition of project traffic. All LOS calculations are provided in *Appendix B*.

Table 9. Near-Term Baseline and Near-Term plus Project Peak Hour Levels of Service

Intersection	Traffic Control	Near-Term Condition				Near-Term plus Project Condition			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²
1. Nancy Ridge Dr/Carroll Canyon Rd	Signal	14.2	B	12.5	B	14.8	B	12.8	B
2. Project Dwy/Carroll Canyon Rd	TWSC	-	-	-	-	12.1	B	11.7	B

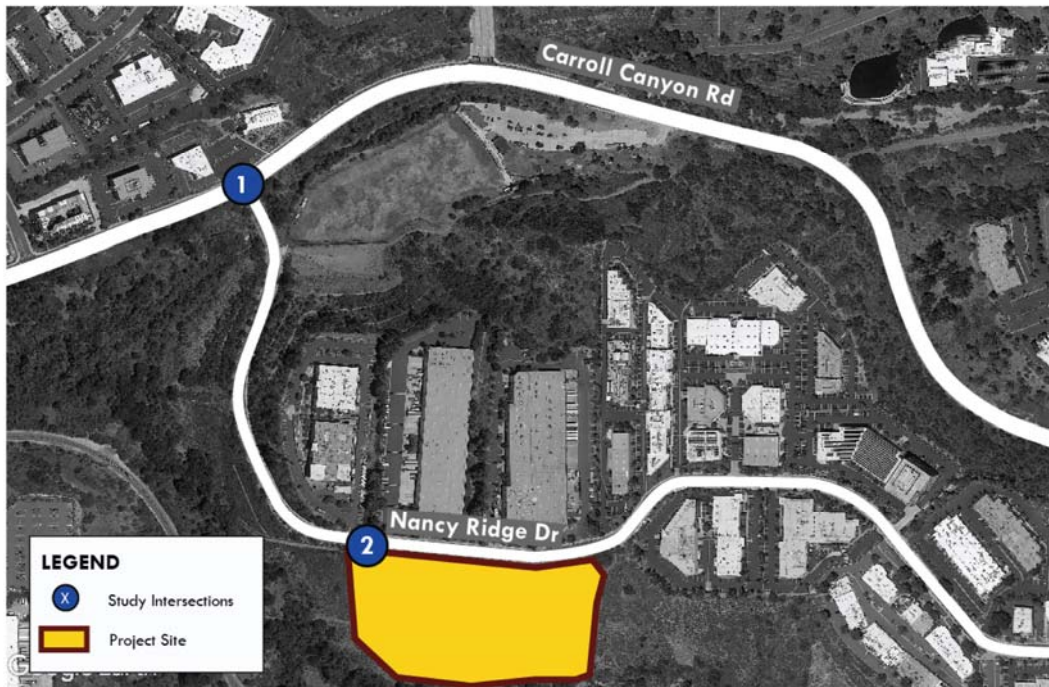
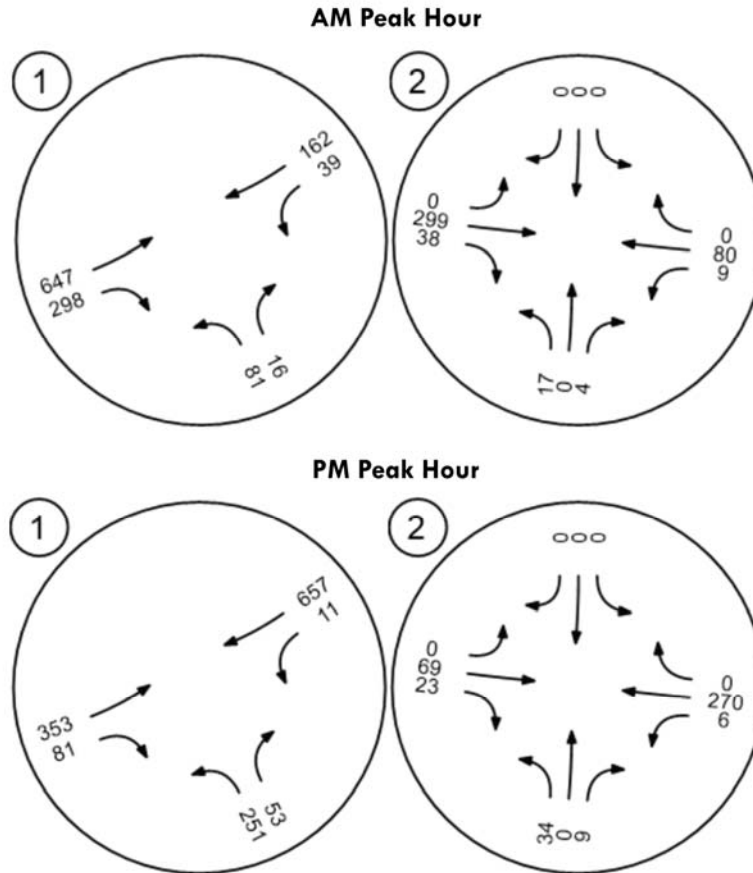
 =Unsatisfactory Intersection Operation

TWSC = Two-Way Stop Controlled

¹ Delay in Seconds

² Level of Service

Figure 12: Near-Term Plus Project Peak Hour Traffic Volumes



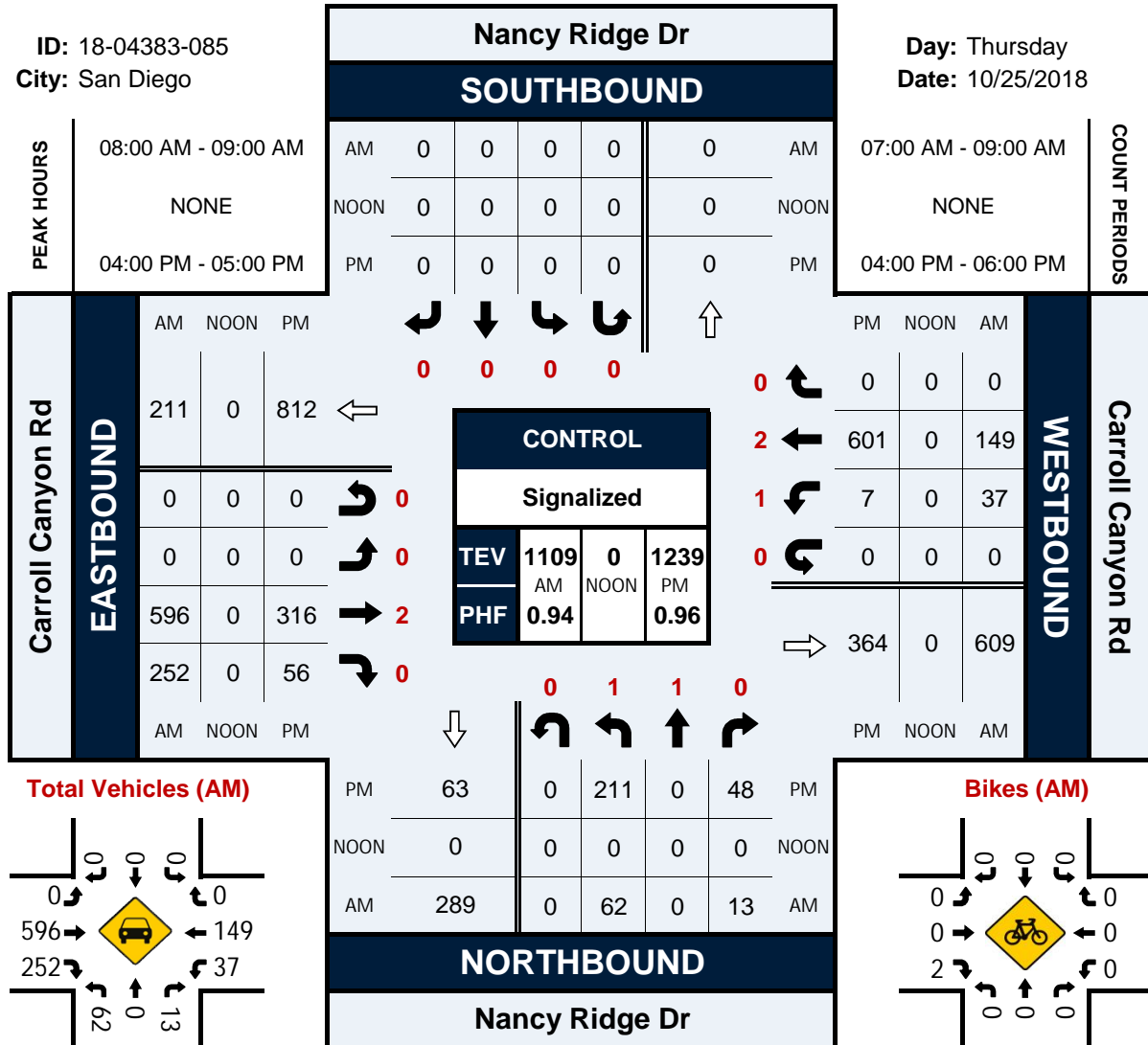
APPENDIX A – 2018 TRAFFIC COUNTS

Nancy Ridge Dr & Carroll Canyon Rd

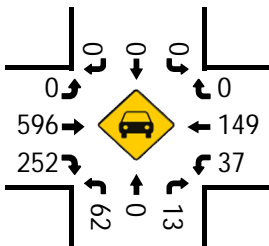
Peak Hour Turning Movement Count

ID: 18-04383-085
City: San Diego

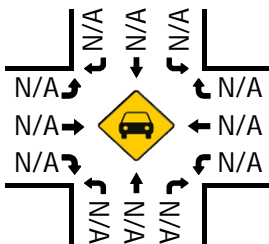
Day: Thursday
Date: 10/25/2018



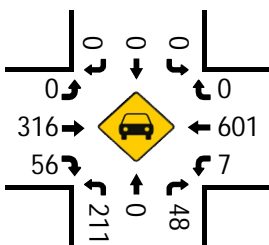
Total Vehicles (AM)



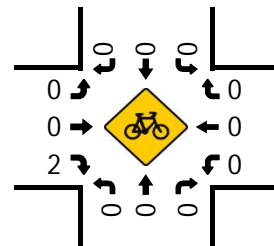
Total Vehicles (Noon)



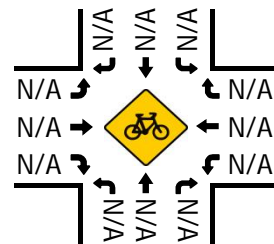
Total Vehicles (PM)



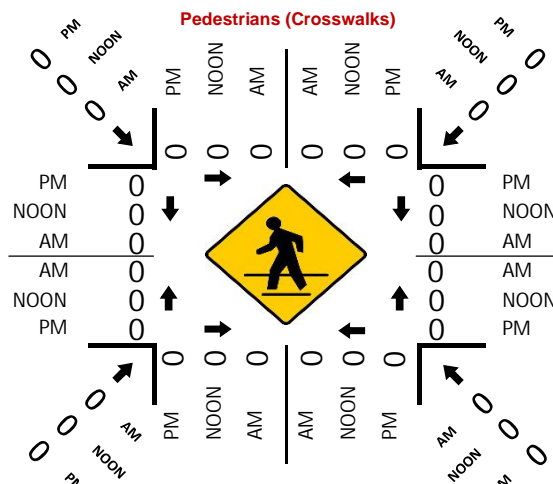
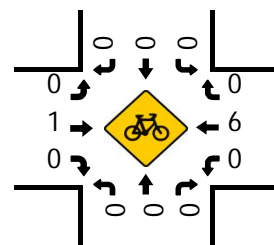
Bikes (AM)



Bikes (Noon)



Bikes (PM)



APPENDIX B – LEVEL OF SERVICE CALCULATIONS

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Report File: C:\...\Existing AM.pdf

Scenario 1 Existing AM
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	NB Left	0.325	13.9	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	EB Thru	0.003	0.0	A




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.325

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	64	13	614	260	38	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	13	614	260	38	154
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	3	163	69	10	41
Total Analysis Volume [veh/h]	68	14	653	277	40	164
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	31	0	9	40
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	16	16	27	27	36	36
g / C, Green / Cycle	0.27	0.27	0.45	0.45	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.04	0.01	0.25	0.27	0.05	0.05
s, saturation flow rate [veh/h]	1781	1589	1870	1692	831	3560
c, Capacity [veh/h]	475	424	841	761	553	2136
d1, Uniform Delay [s]	16.77	16.28	12.08	12.51	6.31	5.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.63	0.15	2.61	3.63	0.25	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.14	0.03	0.55	0.61	0.07	0.08
d, Delay for Lane Group [s/veh]	17.41	16.42	14.69	16.15	6.56	5.10
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.74	0.15	4.50	4.80	0.19	0.35
50th-Percentile Queue Length [ft/ln]	18.59	3.72	112.45	119.92	4.84	8.65
95th-Percentile Queue Length [veh/ln]	1.34	0.27	7.98	8.39	0.35	0.62
95th-Percentile Queue Length [ft/ln]	33.46	6.70	199.40	209.71	8.72	15.57

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.41	16.42	15.11	16.15	6.56	5.10
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	17.24		15.42		5.39	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	13.86					
Intersection LOS	B					
Intersection V/C	0.325					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.450
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	900	1200
d_b, Bicycle Delay [s]	16.13	9.08	4.80
I_b,int, Bicycle LOS Score for Intersection	1.560	2.327	1.728
Bicycle LOS	A	B	A

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 0.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.003

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	298	0	0	77	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	298	0	0	77	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	78	0	0	20	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	314	0	0	81	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.37	11.64	9.96	11.37	11.64	8.68	7.37	0.00	0.00	7.89	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.99			10.57			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.00											
Intersection LOS	A											

Vistro File: C:\...\Vistro.vistro

Scenario 1 Existing AM

Report File: C:\...\Existing AM.pdf

10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	64	13	614	260	38	154	1143

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	0	0	0	0	0	0	0	298	0	0	77	0	375

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Existing PM.pdf

Scenario 4 Existing PM
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	EB Right	0.296	12.4	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	WB Thru	0.003	0.0	A




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.296

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	217	50	325	58	7	619
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	50	325	58	7	619
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	13	81	15	2	155
Total Analysis Volume [veh/h]	217	50	325	58	7	619
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	25	0	9	34
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	22	22	21	21	30	30
g / C, Green / Cycle	0.37	0.37	0.35	0.35	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.12	0.03	0.10	0.11	0.01	0.17
s, saturation flow rate [veh/h]	1781	1589	1870	1775	1182	3560
c, Capacity [veh/h]	653	583	654	621	692	1780
d1, Uniform Delay [s]	13.70	12.42	14.12	14.21	7.72	9.08
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.37	0.29	1.13	1.29	0.03	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.09	0.29	0.31	0.01	0.35
d, Delay for Lane Group [s/veh]	15.07	12.71	15.25	15.49	7.74	9.62
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.14	0.44	1.90	1.93	0.04	2.17
50th-Percentile Queue Length [ft/ln]	53.58	11.07	47.55	48.21	1.09	54.36
95th-Percentile Queue Length [veh/ln]	3.86	0.80	3.42	3.47	0.08	3.91
95th-Percentile Queue Length [ft/ln]	96.45	19.93	85.59	86.77	1.95	97.85

Movement, Approach, & Intersection Results

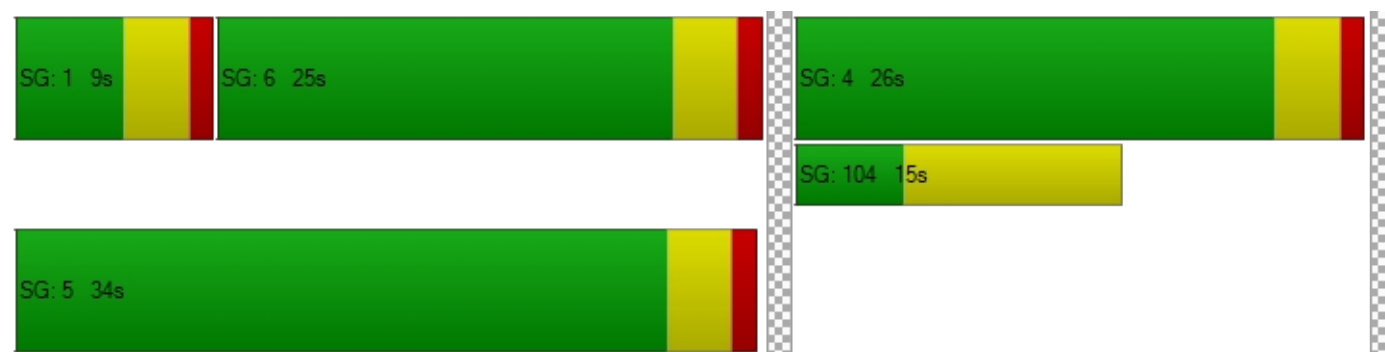
d_M, Delay for Movement [s/veh]	15.07	12.71	15.35	15.49	7.74	9.62
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	14.63		15.37		9.60	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.38					
Intersection LOS	B					
Intersection V/C	0.296					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.476
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	700	1000
d_b, Bicycle Delay [s]	12.03	12.68	7.50
I_b,int, Bicycle LOS Score for Intersection	1.560	1.876	2.076
Bicycle LOS	A	A	B

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 0.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.003

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	65	0	0	267	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	65	0	0	267	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	17	0	0	70	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	68	0	0	281	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.94	11.26	8.62	10.94	11.26	9.75	7.81	0.00	0.00	7.35	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.27			10.65			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.00											
Intersection LOS	A											

Vistro File: C:\...\Vistro.vistro

Scenario 4 Existing PM

Report File: C:\...\Existing PM.pdf

10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	217	50	325	58	7	619	1276

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	0	0	0	0	0	0	0	65	0	0	267	0	332

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Near-Term AM.pdf

Scenario 5 Near Term AM
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	NB Left	0.334	14.2	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	EB Thru	0.003	0.0	A




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.334

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	64	13	614	260	38	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	33	0	1	8
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	16	647	260	39	162
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	4	172	69	10	43
Total Analysis Volume [veh/h]	68	17	688	277	41	172
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	31	0	9	40
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	16	16	27	27	36	36
g / C, Green / Cycle	0.27	0.27	0.45	0.45	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.04	0.01	0.26	0.28	0.05	0.05
s, saturation flow rate [veh/h]	1781	1589	1870	1698	815	3560
c, Capacity [veh/h]	475	424	841	764	541	2136
d1, Uniform Delay [s]	16.77	16.31	12.23	12.68	6.45	5.04
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.63	0.18	2.83	3.94	0.27	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.14	0.04	0.57	0.63	0.08	0.08
d, Delay for Lane Group [s/veh]	17.41	16.49	15.06	16.62	6.72	5.12
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.74	0.18	4.75	5.07	0.20	0.36
50th-Percentile Queue Length [ft/ln]	18.59	4.53	118.69	126.79	4.99	9.09
95th-Percentile Queue Length [veh/ln]	1.34	0.33	8.32	8.76	0.36	0.65
95th-Percentile Queue Length [ft/ln]	33.46	8.16	208.03	219.12	8.99	16.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.41	16.49	15.53	16.62	6.72	5.12
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	17.22		15.84		5.43	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	14.18					
Intersection LOS	B					
Intersection V/C	0.334					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.460
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	900	1200
d_b, Bicycle Delay [s]	16.13	9.08	4.80
I_b,int, Bicycle LOS Score for Intersection	1.560	2.356	1.735
Bicycle LOS	A	B	A

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 0.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.003

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	298	0	0	77	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	1	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	299	0	0	80	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	79	0	0	21	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	315	0	0	84	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.41	11.68	9.96	11.41	11.68	8.69	7.38	0.00	0.00	7.89	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.02			10.59			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.00											
Intersection LOS	A											

Vistro File: C:\...\Vistro.vistro

Scenario 5 Near Term AM

Report File: C:\...\Near-Term AM.pdf

10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	64	16	647	260	39	162	1188

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	0	0	0	0	0	0	0	299	0	0	80	0	379

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Near-Term PM.pdf

Scenario 6 Near Term PM
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	EB Right	0.306	12.5	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	WB Thru	0.003	0.0	A




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.306

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	217	50	325	58	7	619
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	28	0	4	38
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	53	353	58	11	657
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	13	88	15	3	164
Total Analysis Volume [veh/h]	217	53	353	58	11	657
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	25	0	9	34
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	22	22	21	21	30	30
g / C, Green / Cycle	0.37	0.37	0.35	0.35	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.12	0.03	0.11	0.12	0.01	0.18
s, saturation flow rate [veh/h]	1781	1589	1870	1781	1163	3560
c, Capacity [veh/h]	653	583	654	623	678	1780
d1, Uniform Delay [s]	13.70	12.45	14.24	14.33	7.76	9.20
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.37	0.31	1.25	1.41	0.04	0.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.09	0.31	0.33	0.02	0.37
d, Delay for Lane Group [s/veh]	15.07	12.76	15.49	15.74	7.81	9.79
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.14	0.47	2.06	2.09	0.07	2.34
50th-Percentile Queue Length [ft/ln]	53.58	11.76	51.58	52.28	1.71	58.53
95th-Percentile Queue Length [veh/ln]	3.86	0.85	3.71	3.76	0.12	4.21
95th-Percentile Queue Length [ft/ln]	96.45	21.18	92.84	94.11	3.09	105.35

Movement, Approach, & Intersection Results

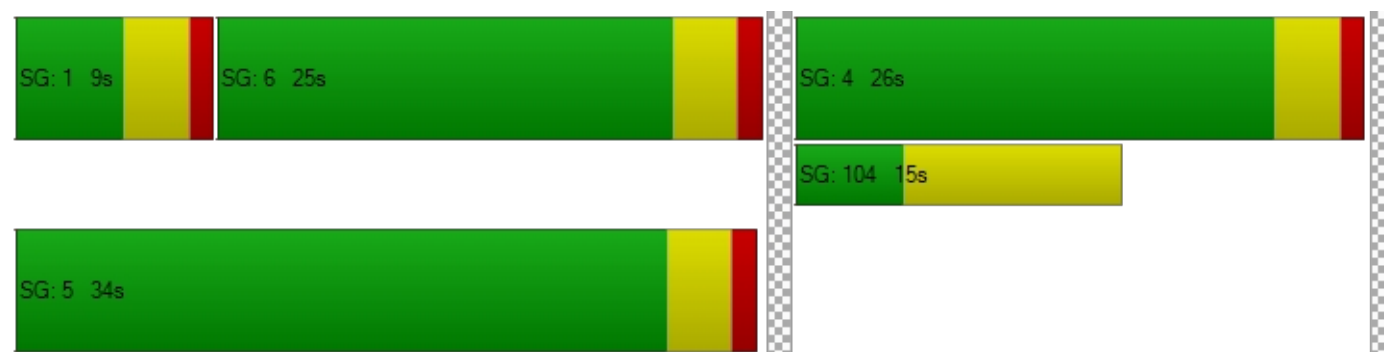
d_M, Delay for Movement [s/veh]	15.07	12.76	15.60	15.74	7.81	9.79
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	14.61		15.62		9.75	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.51					
Intersection LOS	B					
Intersection V/C	0.306					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.490
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	700	1000
d_b, Bicycle Delay [s]	12.03	12.68	7.50
I_b,int, Bicycle LOS Score for Intersection	1.560	1.899	2.111
Bicycle LOS	A	A	B

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 0.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.003

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	65	0	0	267	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	4	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	69	0	0	270	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	18	0	0	71	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	73	0	0	284	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.02	11.33	8.64	11.02	11.33	9.77	7.82	0.00	0.00	7.36	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.33			10.70			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.00											
Intersection LOS	A											

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Scenario 6 Near Term PM

Report File: C:\...\Near-Term PM.pdf

10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	217	53	353	58	11	657	1349

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	0	0	0	0	0	0	0	69	0	0	270	0	339

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Report File: C:\...\Existing AM+Project.pdf

Scenario 7 Existing AM + Project
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	NB Left	0.349	14.5	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	NB Left	0.034	12.1	B




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	14.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.349

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	64	13	614	260	38	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	0	38	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	81	13	614	298	38	154
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	3	163	79	10	41
Total Analysis Volume [veh/h]	86	14	653	317	40	164
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	31	0	9	40
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	16	16	27	27	36	36
g / C, Green / Cycle	0.27	0.27	0.45	0.45	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.05	0.01	0.26	0.29	0.05	0.05
s, saturation flow rate [veh/h]	1781	1589	1870	1677	813	3560
c, Capacity [veh/h]	475	424	841	754	537	2136
d1, Uniform Delay [s]	16.95	16.28	12.25	12.77	6.53	5.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.84	0.15	2.87	4.19	0.27	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.03	0.58	0.64	0.07	0.08
d, Delay for Lane Group [s/veh]	17.79	16.42	15.12	16.95	6.79	5.10
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.95	0.15	4.78	5.16	0.19	0.35
50th-Percentile Queue Length [ft/ln]	23.85	3.72	119.60	129.11	4.87	8.65
95th-Percentile Queue Length [veh/ln]	1.72	0.27	8.37	8.89	0.35	0.62
95th-Percentile Queue Length [ft/ln]	42.94	6.70	209.28	222.28	8.77	15.57

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.79	16.42	15.59	16.95	6.79	5.10
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	17.60		16.04		5.43	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	14.46					
Intersection LOS	B					
Intersection V/C	0.349					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.450
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	900	1200
d_b, Bicycle Delay [s]	16.13	9.08	4.80
I_b,int, Bicycle LOS Score for Intersection	1.560	2.360	1.728
Bicycle LOS	A	B	A

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 12.1
 Level Of Service: B
 Volume to Capacity (v/c): 0.034

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	298	0	0	77	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	4	0	0	0	0	0	38	9	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	4	0	0	0	0	298	38	9	77	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	4	0	1	0	0	0	0	78	10	2	20	0
Total Analysis Volume [veh/h]	18	0	4	0	0	0	0	314	40	9	81	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	12.06	12.30	10.35	11.85	12.22	8.68	7.37	0.00	0.00	8.01	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	3.09	3.09	3.09	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.56	0.56
d_A, Approach Delay [s/veh]	11.75			10.92			0.00			0.80		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.71											
Intersection LOS	B											

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Report File: C:\...\Existing AM+Project.pdf

Scenario 7 Existing AM + Project
10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	81	13	614	298	38	154	1198

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	17	0	4	0	0	0	0	298	38	9	77	0	443

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Existing PM+Project.pdf

Scenario 8 Existing PM + Project
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	EB Right	0.315	12.7	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	NB Left	0.062	11.6	B




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	12.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.315

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	217	50	325	58	7	619
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	0	23	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	50	325	81	7	619
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	13	81	20	2	155
Total Analysis Volume [veh/h]	251	50	325	81	7	619
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	25	0	9	34
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	22	22	21	21	30	30
g / C, Green / Cycle	0.37	0.37	0.35	0.35	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.14	0.03	0.11	0.12	0.01	0.17
s, saturation flow rate [veh/h]	1781	1589	1870	1747	1166	3560
c, Capacity [veh/h]	653	583	654	611	679	1780
d1, Uniform Delay [s]	14.01	12.42	14.22	14.34	7.75	9.08
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.71	0.29	1.23	1.46	0.03	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.09	0.31	0.33	0.01	0.35
d, Delay for Lane Group [s/veh]	15.72	12.71	15.45	15.80	7.78	9.62
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.55	0.44	2.03	2.07	0.04	2.17
50th-Percentile Queue Length [ft/ln]	63.79	11.07	50.85	51.83	1.09	54.36
95th-Percentile Queue Length [veh/ln]	4.59	0.80	3.66	3.73	0.08	3.91
95th-Percentile Queue Length [ft/ln]	114.83	19.93	91.53	93.29	1.96	97.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.72	12.71	15.58	15.80	7.78	9.62
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	15.22		15.62		9.60	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.70					
Intersection LOS	B					
Intersection V/C	0.315					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.476
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	700	1000
d_b, Bicycle Delay [s]	12.03	12.68	7.50
I_b,int, Bicycle LOS Score for Intersection	1.560	1.895	2.076
Bicycle LOS	A	A	B

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.6
 Level Of Service: B
 Volume to Capacity (v/c): 0.062

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	65	0	0	267	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	9	0	0	0	0	0	23	6	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	0	9	0	0	0	0	65	23	6	267	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	9	0	2	0	0	0	0	17	6	2	70	0
Total Analysis Volume [veh/h]	36	0	9	0	0	0	0	68	24	6	281	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.62	11.92	9.11	11.29	11.59	9.75	7.81	0.00	0.00	7.41	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.23	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	5.72	5.72	5.72	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.30
d_A, Approach Delay [s/veh]	11.12			10.88			0.00			0.15		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.28											
Intersection LOS	B											

Vistro File: C:\...\Vistro.vistro

Scenario 8 Existing PM + Project

Report File: C:\...\Existing PM+Project.pdf

10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	251	50	325	81	7	619	1333

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	34	0	9	0	0	0	0	65	23	6	267	0	404

Vistro File: C:\...\Vistro.vistro

Scenario 8 Existing PM + Project

Report File: C:\...\Existing PM+Project.pdf

10/21/2021

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	Final Base	217	50	325	58	7	619	1276
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	34	0	0	23	0	0	57
		Other	0	0	0	0	0	0	0
		Future Total	251	50	325	81	7	619	1333

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	Final Base	0	0	0	0	0	0	0	65	0	0	267	0	332
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	34	0	9	0	0	0	0	0	23	6	0	0	72
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	34	0	9	0	0	0	0	65	23	6	267	0	404

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Near-Term AM plus Project.pdf

Scenario 9 Near Term AM + Project
10/21/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	NB Left	0.359	14.8	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	NB Left	0.034	12.1	B




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	14.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.359

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	64	13	614	260	38	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	3	33	38	1	8
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	81	16	647	298	39	162
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	4	172	79	10	43
Total Analysis Volume [veh/h]	86	17	688	317	41	172
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	31	0	9	40
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	16	16	27	27	36	36
g / C, Green / Cycle	0.27	0.27	0.45	0.45	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.05	0.01	0.27	0.30	0.05	0.05
s, saturation flow rate [veh/h]	1781	1589	1870	1683	798	3560
c, Capacity [veh/h]	475	424	841	757	527	2136
d1, Uniform Delay [s]	16.95	16.31	12.41	12.94	6.69	5.04
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.84	0.18	3.12	4.55	0.29	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.04	0.60	0.66	0.08	0.08
d, Delay for Lane Group [s/veh]	17.79	16.49	15.53	17.49	6.98	5.12
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.95	0.18	5.05	5.46	0.20	0.36
50th-Percentile Queue Length [ft/ln]	23.85	4.53	126.14	136.47	5.02	9.09
95th-Percentile Queue Length [veh/ln]	1.72	0.33	8.73	9.29	0.36	0.65
95th-Percentile Queue Length [ft/ln]	42.94	8.16	218.24	232.26	9.04	16.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.79	16.49	16.06	17.49	6.98	5.12
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	17.57		16.51		5.48	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	14.81					
Intersection LOS	B					
Intersection V/C	0.359					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.460
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	900	1200
d_b, Bicycle Delay [s]	16.13	9.08	4.80
I_b,int, Bicycle LOS Score for Intersection	1.560	2.389	1.735
Bicycle LOS	A	B	A

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 12.1
 Level Of Service: B
 Volume to Capacity (v/c): 0.034

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	298	0	0	77	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	4	0	0	0	0	1	38	9	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	4	0	0	0	0	299	38	9	80	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	4	0	1	0	0	0	0	79	10	2	21	0
Total Analysis Volume [veh/h]	18	0	4	0	0	0	0	315	40	9	84	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	12.11	12.34	10.36	11.90	12.26	8.69	7.38	0.00	0.00	8.01	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	3.11	3.11	3.11	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.56	0.56
d_A, Approach Delay [s/veh]	11.79			10.95			0.00			0.78		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.71											
Intersection LOS	B											

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Report File: C:\...\Near-Term AM plus Project.pdf

Scenario 9 Near Term AM + Project
10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	81	16	647	298	39	162	1243

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	17	0	4	0	0	0	0	299	38	9	80	0	447

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Scenario 10 Near Term PM + Project

Report File: C:\...\Near-Term PM plus Project.pdf

10/21/2021

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Nancy Ridge Dr/ Carroll Canyon Rd	Signalized	HCM 6th Edition	EB Right	0.325	12.8	B
2	Project Dwy/ Nancy Ridge Dr	Two-way stop	HCM 6th Edition	NB Left	0.063	11.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Nancy Ridge Dr/ Carroll Canyon Rd

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.325

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	95.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	215.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	217	50	325	58	7	619
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	3	28	23	4	38
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	53	353	81	11	657
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	13	88	20	3	164
Total Analysis Volume [veh/h]	251	53	353	81	11	657
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	4	0	6	0	1	5
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	25	0	9	34
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	22	22	21	21	30	30
g / C, Green / Cycle	0.37	0.37	0.35	0.35	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.14	0.03	0.12	0.12	0.01	0.18
s, saturation flow rate [veh/h]	1781	1589	1870	1754	1147	3560
c, Capacity [veh/h]	653	583	654	614	665	1780
d1, Uniform Delay [s]	14.01	12.45	14.34	14.46	7.80	9.20
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.71	0.31	1.36	1.59	0.05	0.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.09	0.33	0.35	0.02	0.37
d, Delay for Lane Group [s/veh]	15.72	12.76	15.70	16.06	7.85	9.79
Lane Group LOS	B	B	B	B	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.55	0.47	2.20	2.24	0.07	2.34
50th-Percentile Queue Length [ft/ln]	63.79	11.76	54.96	56.01	1.72	58.53
95th-Percentile Queue Length [veh/ln]	4.59	0.85	3.96	4.03	0.12	4.21
95th-Percentile Queue Length [ft/ln]	114.83	21.18	98.92	100.81	3.09	105.35

Movement, Approach, & Intersection Results

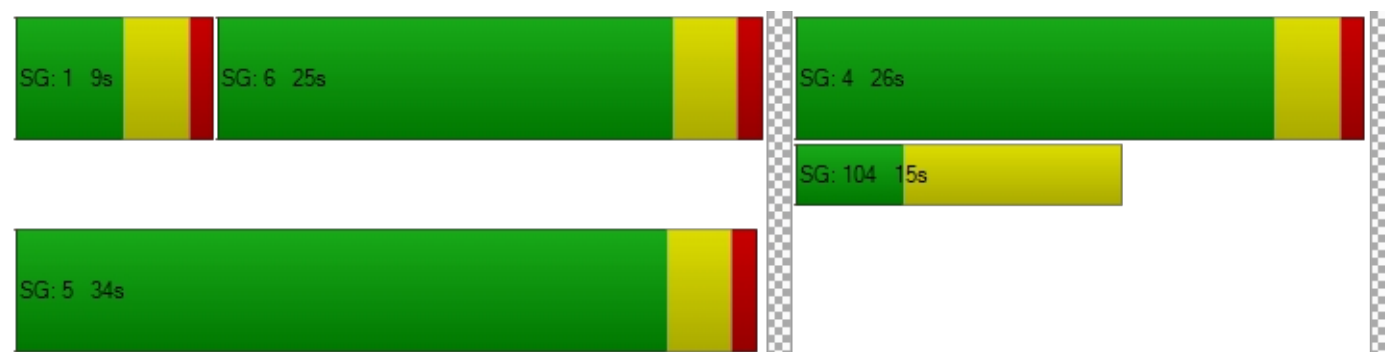
d_M, Delay for Movement [s/veh]	15.72	12.76	15.84	16.06	7.85	9.79
Movement LOS	B	B	B	B	A	A
d_A, Approach Delay [s/veh]	15.20		15.88		9.76	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.82					
Intersection LOS	B					
Intersection V/C	0.325					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.490
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	700	1000
d_b, Bicycle Delay [s]	12.03	12.68	7.50
I_b,int, Bicycle LOS Score for Intersection	1.560	1.918	2.111
Bicycle LOS	A	A	B

Sequence

Ring 1	1	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 2: Project Dwy/ Nancy Ridge Dr

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.7
 Level Of Service: B
 Volume to Capacity (v/c): 0.063

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	65	0	0	267	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	9	0	0	0	0	4	23	6	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	0	9	0	0	0	0	69	23	6	270	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	9	0	2	0	0	0	0	18	6	2	71	0
Total Analysis Volume [veh/h]	36	0	9	0	0	0	0	73	24	6	284	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.71	12.00	9.14	11.36	11.66	9.77	7.82	0.00	0.00	7.42	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.23	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	5.79	5.79	5.79	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.30
d_A, Approach Delay [s/veh]	11.19			10.93			0.00			0.15		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.27											
Intersection LOS	B											

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Scenario 10 Near Term PM + Project

Report File: C:\...\Near-Term PM plus Project.pdf

10/21/2021

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Nancy Ridge Dr/ Carroll Canyon Rd	251	53	353	81	11	657	1406

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Project Dwy/ Nancy Ridge Dr	34	0	9	0	0	0	0	69	23	6	270	0	411