Exhibit "14"

Chick-fil-A I-5 & Hwy 20

Burlington, WA

Updated Traffic Impact Analysis

January 24, 2025

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FINDINGS/CONCLUSIONS

This Traffic Impact Analysis (TIA) has been prepared for the proposed *Chick-fil-A I-5 & Hwy 20* project located on the east side of Nevitt Road south of SR 20 in Burlington, WA. This is an update to the prior TIA (dated September 9, 2024) to address City of Burlington and WSDOT comments.

Project Proposal. The project would include the development of a 4,986 square foot (SF) Chick-fil-A restaurant with indoor seating and a drive-through window. The existing site is occupied by a 10-room motel that will be removed with the project. Vehicular access to the site is proposed at two (2) locations; one (1) full access driveway on Nevitt Road and one (1) right-in, right out driveway on SR 20. Full project buildout is expected by 2026.

Trip Generation. The proposed project is estimated to generate 1,857 net new weekday daily trips with 49 net new trips occurring during the weekday AM peak hour (26 in, 23 out) and 122 net new trips during the weekday PM peak hour (64 in, 58 out). The proposed project is estimated to generate 169 net new trips during the Saturday midday peak hour (86 in, 83 out).

Intersection Level of Service (LOS). Weekday AM, weekday PM, and Saturday midday peak hour LOS analysis was conducted at three (3) off-site study intersections. Based on the results of the analysis, each of the study intersections are anticipated to meet City of Burlington and WSDOT LOS standards during the weekday AM, weekday PM, and Saturday midday peak hours with the proposed project.

Nevitt Road/SR 20 Queuing Analysis. Weekday AM, weekday PM, and Saturday midday peak hour queuing analysis for the northbound approach of the Nevitt Road/SR 20 signalized intersection was conducted for future year 2026 conditions with the proposed channelization modifications on Nevitt Road. Based on this analysis, the peak hour queueing from the traffic signal (northbound approach) is expected to be accommodated within the proposed turn pockets and is not anticipated to impact the operations of the proposed Chick-fil-A driveway.

Site Access Evaluation. Based on the results of the analysis, the individual movements entering and exiting the site at each of the proposed stop-controlled site access locations on Nevitt Road and SR 20 are expected to operate at LOS C or better during the weekday AM, weekday PM, and Saturday midday peak hours. Additionally, the estimated 95th-percentile queues at each of the site access locations are anticipated to be no more than 75 feet (3 vehicles).

Drive-Through Queuing. Based on queuing observations conducted at existing local Chick-fil-A Restaurants, the proposed drive-through storage is anticipated to accommodate the expected drive-through queues without impacting the adjacent public streets.

Mitigation.

Frontage Improvements. The proposed project will include standard City of Burlington required frontage improvements including widening the sidewalks along the Nevitt Road and SR 20 frontages to 10 feet to support the City's *Enhanced Pedestrian Amenity Street* designations.

Nevitt Road Channelization Modification. The project is proposing a modification to the channelization on Nevitt Road including converting the existing northbound channelization at the Nevitt Road/SR 20 signalized intersection from a single northbound left-turn lane and dual northbound right-turn lanes to dual northbound

left-turn lanes and a single northbound right-turn lane. This change effectively reduces the length of the northbound left-turn queue and allows room for a new southbound left-turn pocket on Nevitt Road serving the proposed Chick-fil-A site. The project would also complete necessary modifications to the traffic signal at Nevitt Road/SR 20 to accommodate the revised northbound lane configuration.

Transportation Impact Fees. Per Burlington Municipal Code 15.12, transportation mitigation required by the City of Burlington is payment of a transportation impact fee based on the project's proposed land use. As of the date of this study, the adopted impact fee schedule identifies a fee of $2,665 per new PM peak hour trip, for a total fee of $325,130 ($2,665 X 122 PM Trips). The impact fee rates are subject to change, and the final impact fee calculation will be based on the rates in effect at the time of issuance of a building permit.

INTRODUCTION

This Traffic Impact Analysis (TIA) has been prepared for the proposed *Chick-fil-A I-5 & Hwy 20* project located on the east side of Nevitt Road south of SR 20 in Burlington, WA as shown in Figure 1. This is an update to the prior TIA (dated September 9, 2024) to address City of Burlington and WSDOT comments.

Project Description

Buildout of the proposed project is anticipated to include the development of a 4,986 square foot (SF) Chick-fil-A restaurant with indoor seating and a drive-through window. The existing site is occupied by a 10-room motel that will be removed with the project.

Vehicular access to the site is proposed at two (2) locations; one (1) full access driveway on Nevitt Road and one (1) right-in, right out driveway on SR 20. Full project buildout is expected by 2026. A preliminary site plan is included in Appendix A.

Project Approach

To analyze the traffic impacts from the proposed *Chick-fil-A I-5 & Hwy 20* project, the following tasks were undertaken based on coordination with City of Burlington staff during the traffic scoping process.

- Assessed existing conditions through field reconnaissance and reviewed existing planning documents.
- Described and assessed existing transportation conditions in the area.
- Documented existing (2024) traffic volumes and intersection levels of service (LOS) at three (3) off-site study intersections during the weekday AM, weekday PM, and Saturday midday peak hours.
- Documented future planned transportation improvements in the project vicinity.
- Developed trip generation estimates for weekday daily, weekday AM peak hour, weekday PM peak hour, and Saturday midday peak hour conditions based on the proposed land uses.
- Documented trip distribution and assignment of weekday AM and PM peak hour and Saturday midday peak hour project-generated traffic.
- Documented traffic forecasts and assumptions for year 2026 conditions at the three (3) off-site study intersections without and with the proposed project.
- Analyzed weekday AM, weekday PM, and Saturday midday peak hour LOS for future year 2026 conditions without and with the proposed project at three (3) off-site study intersections.
- Evaluated weekday AM, weekday PM, and Saturday midday peak hour operations of the two (2) proposed site access locations.
- Documented proposed traffic mitigation.

Primary Data and Information Sources

- 2024 weekday AM, weekday PM, and Saturday midday peak hour traffic counts, All Traffic Data.
- Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.
- *Highway Capacity Manual (HCM 7th Edition),* 2022.
- City of Burlington Comprehensive Plan (Section 8 – Transportation), 2023.
- WSDOT 2024-2027 *Statewide Transportation Improvement Program* (STIP).
- Chick-fil-A Trip Generation Studies, 2022-2024.

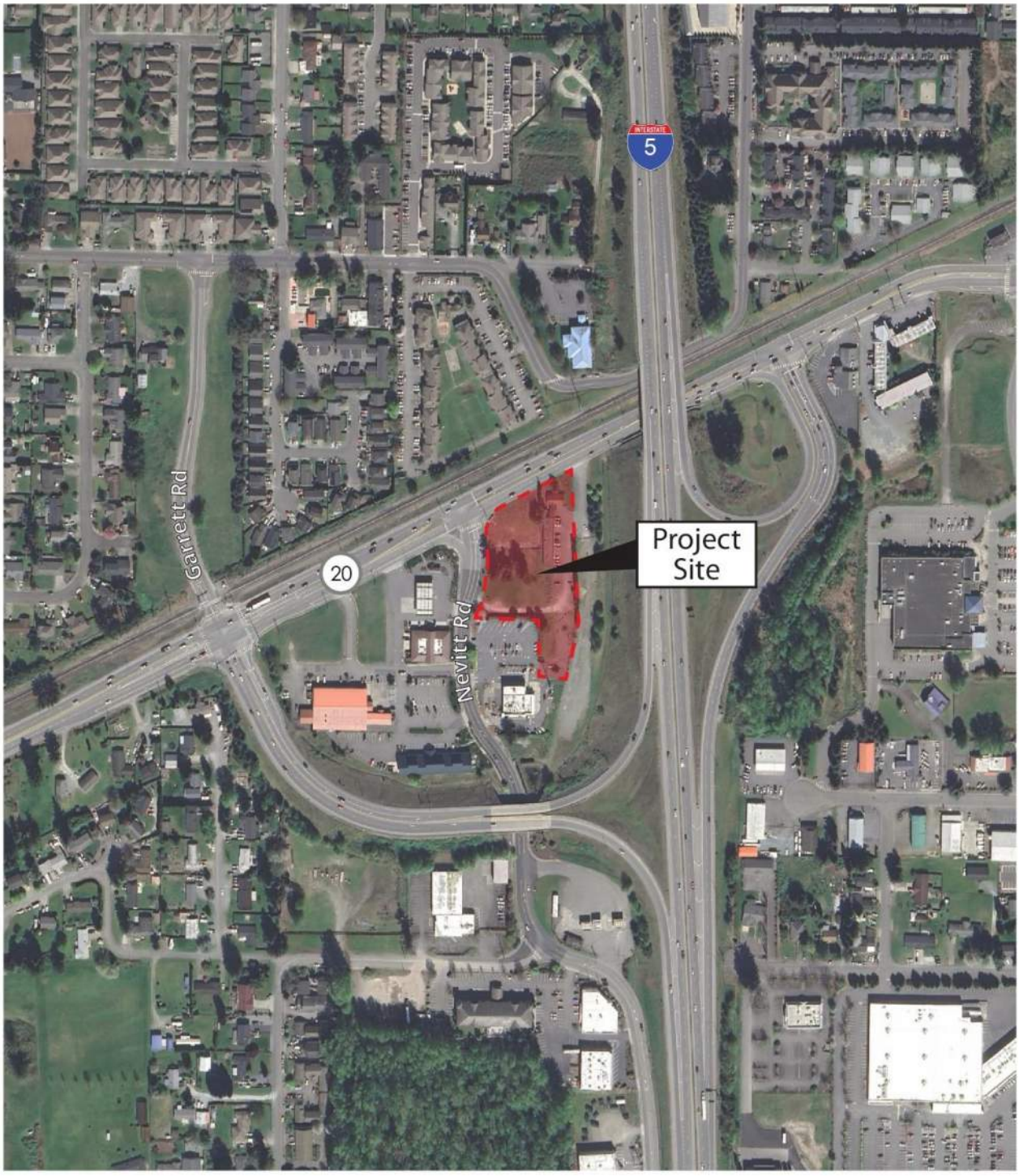

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Figure 1: Project Site Vicinity

EXISTING CONDITIONS

Study Area

The existing transportation study area and roadway network providing access to the *Chick-fil-A I-5 & Hwy 20* project is shown on Figure 1. The study intersections evaluated in this traffic analysis were identified and agreed upon by the City of Burlington and WSDOT staff during the traffic scoping process. The three (3) study intersections are as follows:

1. I-5 SB Ramps/SR 20
2. Nevitt Road/SR 20
3. I-5 NB Ramps/SR 20

Roadway Network

Table 1 describes the existing characteristics of the streets that would be used as primary routes to and from the site. Roadway characteristics are described in terms of orientation, arterial classification, posted speed limits, number of lanes, parking, and sidewalks. The relationship of these roadways to the project site is shown in Figure 1.

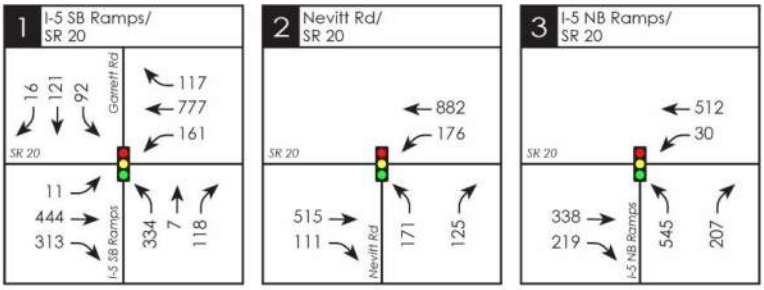
Table 1
Existing Roadway Network Summary – Project Site Vicinity

Roadway	Orientation	Classification	Speed Limit	Number of Lanes	Street Parking	Sidewalks
SR 20	East/West	Principal Arterial	35	4-6	None	South Side
Nevitt Road	North/South	Local	25	3	None	Both Sides

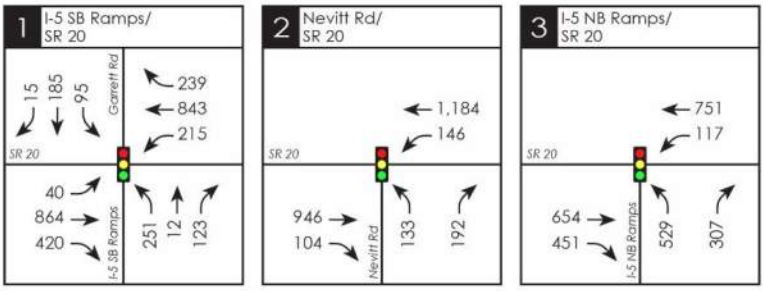
Traffic Volumes

Existing weekday AM, weekday PM, and Saturday midday peak hour traffic volumes at the study intersections were based on counts collected by All Traffic Data in May and July 2024. The weekday AM peak hour represents the highest hour of traffic between 7:00 and 9:00 a.m. The weekday PM peak hour represents the highest hour of traffic between 4:00 and 6:00 p.m. The Saturday midday peak hour represents the highest hour of traffic between 11:00 a.m. and 1:00 p.m. The 2024 existing peak hour traffic volumes at the study intersections are shown in Figure 2. The existing traffic count sheets are included in Appendix B.

Weekday AM Peak Hour



Weekday PM Peak Hour



Saturday Midday Peak Hour

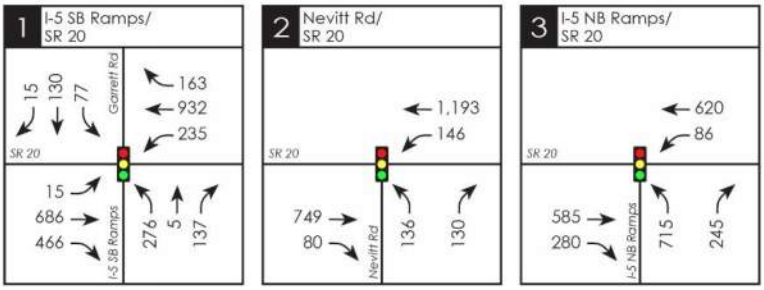


Figure 2: 2024 Existing Peak Hour Traffic Volumes

Intersection Levels of Service

Existing weekday AM, weekday PM, and Saturday midday peak hour level of service (LOS) analyses were conducted at the three (3) off site study intersections based upon existing channelization.

Intersection LOS was calculated using the methodology and procedures outlined in the *Highway Capacity Manual* (HCM 7th Edition) using the *Synchro 12* software program and consistent with the WSDOT Synchro Protocol (August 2018). The 2024 existing weekday AM, weekday PM, and Saturday midday peak hour LOS analysis results for the study intersections are summarized in Table 2. The LOS methodology and 2024 Existing LOS calculations are included in Appendix C.

Per the City of Burlington Comprehensive Plan, the LOS standard for City streets is LOS D. State Highways are managed by WSDOT and the current LOS standard is also LOS D.

Table 2
Existing 2024 Peak Hour LOS Summary

	Weekday AM Peak Hour		Weekday PM Peak Hour		Saturday Midday Peak Hour	
Study Intersection	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Signalized:						
1. I-5 SB Ramp / SR 20	C	24.2	C	28.6	C	25.9
2. Nevitt Road / SR 20	B	12.0	B	11.7	B	10.6
3. I-5 NB Ramp / SR 20	B	12.5	B	17.6	B	16.0

As shown in Table 2, each of the study intersections currently meet City of Burlington and WSDOT standards during the weekday AM, weekday PM, and Saturday midday peak hour.

FUTURE CONDITIONS

Planned Transportation Improvements

Based on a review of the current WSDOT 2024-2027 *Statewide Transportation Improvement Program* (STIP) and the *City of Burlington Comprehensive Plan* there are several planned transportation improvements within the study area.

WS-A-4: Reconstruct SR 20 to Urban Standards with Complete Streets Improvements from Burlington Blvd to City Limits. The cost estimate for this project is $6,930,000 and is impact fee eligible.

Nevitt Road Bike Lane: Per Map 8.5 (Proposed Non-Motorized Transportation Plan) of the City's *Comprehensive Plan*, there are future plans to install a new bike lane on Nevitt Road connecting to SR 20 and west to the existing bike lane on Garrett Road.

SR 20 Enhanced Pedestrian Amenities: Per Map 8.6 (Proposed Enhanced Pedestrian Amenities) of the City's *Comprehensive Plan,* SR 20 in the study area is designated as an enhanced pedestrian amenity street. Enhanced pedestrian amenity streets are intended to promote and accommodate increased pedestrian traffic in areas of intensive mixed-use development and may include raised crosswalks, wider sidewalks, awnings and overhands that provide weather protection for pedestrians, pedestrian signage, additional street trees, or extra pedestrian scale lighting. As part of the proposed *Chick-fil-A I-5 & Hwy 20* project, the SR 20 frontage improvements will include widening the sidewalk to 10 feet along with a 5-foot buffer strip in between the curb and the sidewalk and

Project Trip Generation

The weekday AM, weekday PM, and Saturday midday peak hour trip generation estimates for the proposed *Chick-fil-A I-5 & Hwy 20* project were based on trip generation studies conducted at the following four (4) existing Chick-fil-A locations:

- 12026 NE 124th Street, Kirkland, WA
- 12801 Aurora Ave N, Seattle, WA
- 8302 Quinault Drive NE, Lacey, WA
- 9304 N Newport Hwy, Spokane, WA

Data was collected on three (3) consecutive weekdays and one (1) Saturday and from this data, Chick-fil-A specific trip rates were derived based on an average of the four (4) study locations. These trip rates were then applied to the proposed *Chick-fil-A I-5 & Hwy 20* project to estimate weekday AM, weekday PM, and Saturday midday peak hour trip generation for the proposed project. Weekday daily trip generation for the proposed project was based on the weekday daily trip rate in the ITE *Trip Generation Manual*, 11th Edition for Land Use Code (LUC) 934 (Fast-Food Restaurant with Drive-Through Window) factored up based on the ratio of weekday daily to weekday PM peak hour in ITE applied to the Chick-fil-A specific weekday PM peak hour trip rate.

The trip generation estimates for the existing motel to be removed were based on methodology documented in the ITE *Trip Generation Manual* for LUC 320 (Motel).

Adjustments to the trip generation estimates were made to account for pass-by trips, which are trips that are made by vehicles that are already on the adjacent streets and make intermediate stops at the commercial uses on route to a primary destination (i.e. on the way from work to home). The pass-by reduction is based

on studies documented in the appendices of the ITE *Trip Generation Manual*, 11th Edition for LUC 934 (Fast-Food Restaurant with Drive-Through Window).

The resulting net new weekday daily, weekday AM, weekday PM, and Saturday midday peak hour trip generation estimates for the proposed project are summarized below in Table 3. Detailed trip generation calculations, including data from the local Chick-fil-A trip generation studies, are included in Appendix D.

Table 3
Trip Generation Summary

	Net New Trips Generated		
Time Period	In	Out	Total
Weekday Daily	929	928	1,857
Weekday AM Peak Hour	26	23	49
Weekday PM Peak Hour	64	58	122
Saturday Midday Peak Hour[1]	86	83	169

1. No credit for Saturday midday peak hour for the existing motel was assumed. These are gross trips for this time period.

Project Trip Distribution

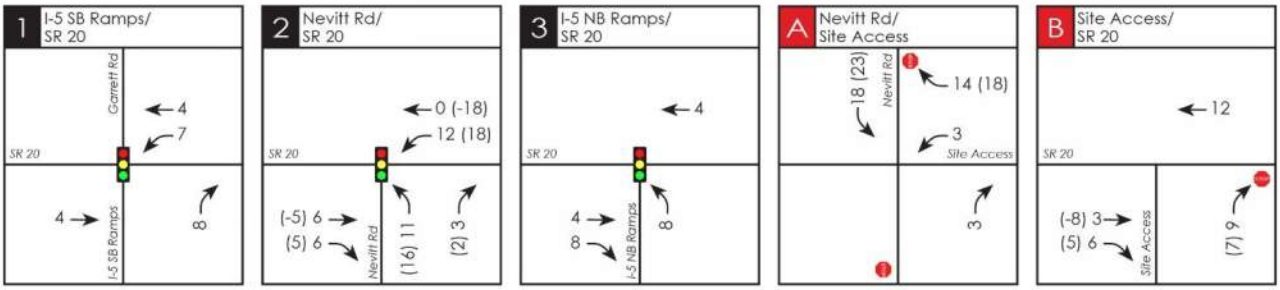
The distribution of vehicle trips generated by the proposed *Chick-fil-A I-5 & Hwy 20* project to the surrounding roadway network was based on existing and anticipated travel patterns in the area and turning movement count data collected at the study intersections. The distribution and assignment of the net new weekday AM, weekday PM, and Saturday midday peak hour project-generated trips are shown in Figure 3.

Traffic Volumes

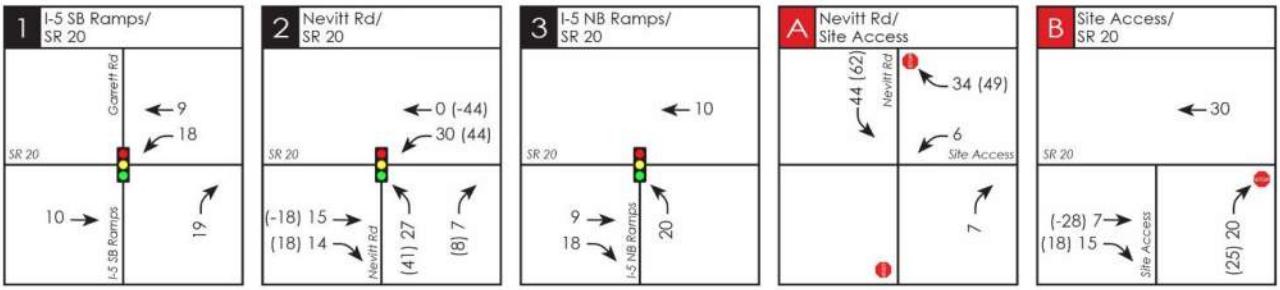
To estimate the future 2026 No Action (Without Project) weekday AM, weekday PM, and Saturday midday peak hour traffic volumes, a 3% annual background growth rate was applied to the existing volumes as confirmed by City and WSDOT staff during the traffic scoping process.

The resulting future 2026 No Action weekday AM, weekday PM, and Saturday midday peak hour traffic volumes at the study intersections are shown in Figure 4. The 2026 With Project traffic volumes were determined by adding the trip assignment from the proposed project (shown in Figure 3) to the future 2026 No Action traffic volumes (shown in Figure 4). The 2026 With Project weekday AM, weekday PM, and Saturday midday peak hour traffic volumes are shown in Figure 5.

Weekday AM Peak Hour



Weekday PM Peak Hour



Saturday Midday Peak Hour

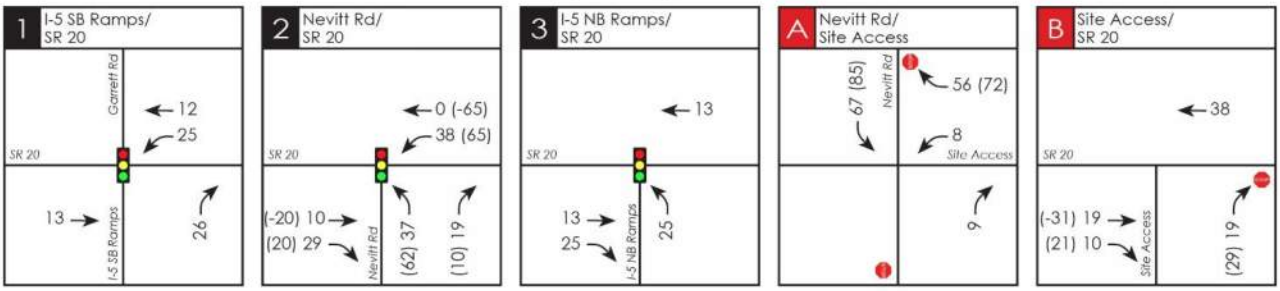
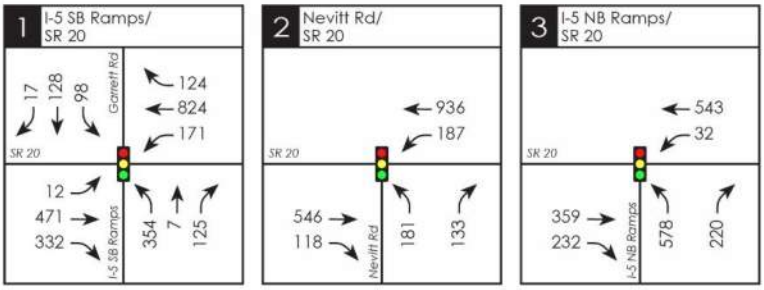
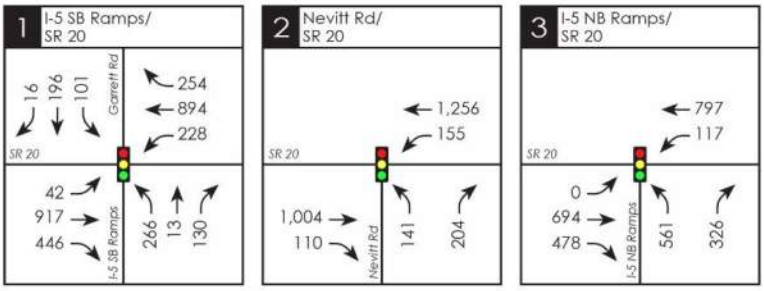


Figure 3: Peak Hour Project Trip Distribution and Assignment

Weekday AM Peak Hour



Weekday PM Peak Hour



Saturday Midday Peak Hour

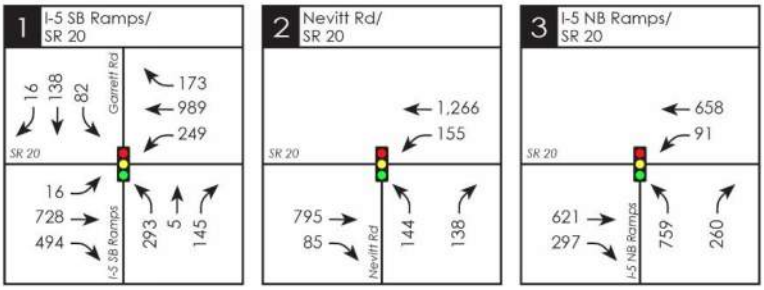
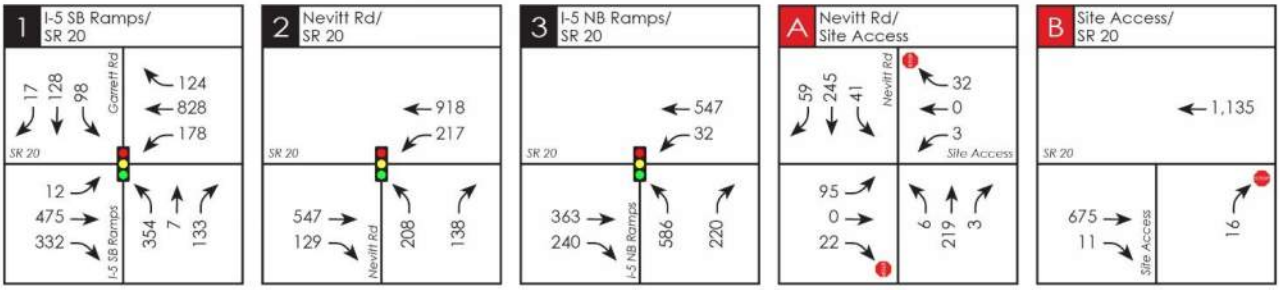
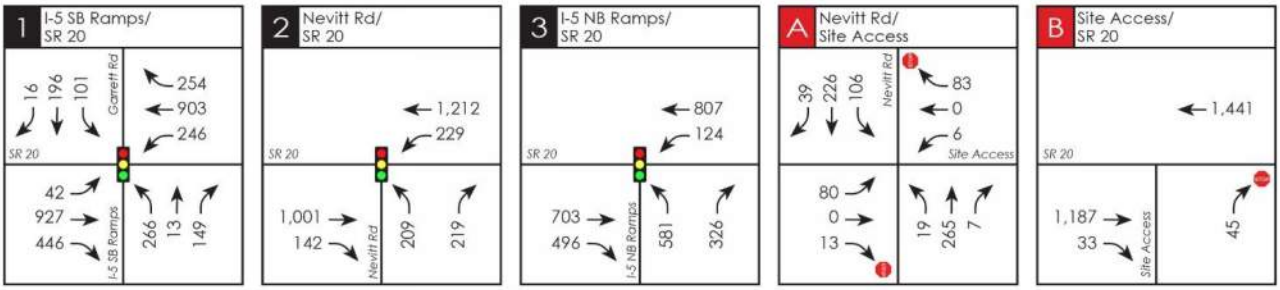


Figure 4: 2026 No Action Peak Hour Traffic Volumes

Weekday AM Peak Hour



Weekday PM Peak Hour



Saturday Midday Peak Hour

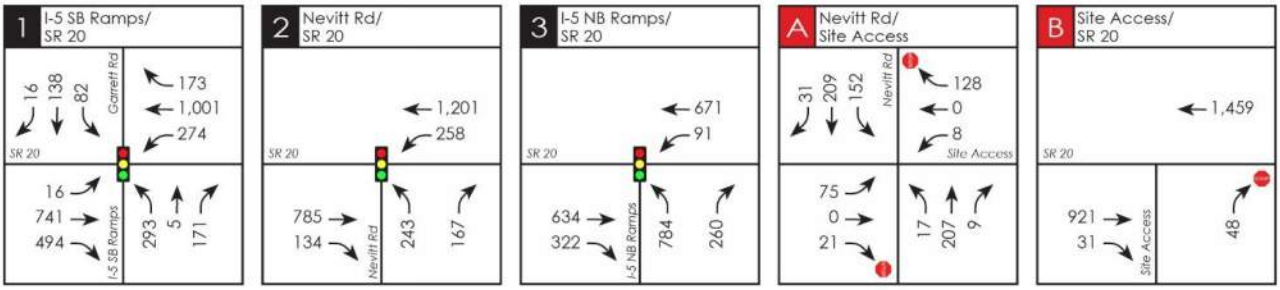


Figure 5: 2026 With Project Peak Hour Traffic Volumes

Intersection Levels of Service

Future year (2026) weekday AM, weekday PM, and Saturday midday peak hour LOS analysis was conducted at the three (3) study intersections for future No Action (without project) and With Project conditions.

In order to better facilitate access to the site for customers coming from the east on SR 20, the project is proposing a modification to the channelization on Nevitt Road that would convert the existing northbound channelization at the Nevitt Road/SR 20 signalized intersection from a single northbound left-turn lane and dual northbound right-turn lanes to dual northbound left-turn lanes and a single northbound right-turn lane. This change effectively reduces the length of the northbound left-turn queue on Nevitt Road and allows room for a new southbound left-turn pocket on Nevitt Road serving the proposed Chick-fil-A site. A preliminary concept of this proposed modification is included in Appendix E. The LOS analysis conducted for future With Project conditions at Nevitt Road/SR 20 reflects this proposed modification.

The LOS results at the study intersections without and with the proposed project are summarized in Table 4. The detailed LOS worksheets are included in Appendix C.

Table 4
Future 2026 Peak Hour LOS Summary at Study Intersections

	No Action		With Project	
Study Intersection	LOS	Delay (sec)	LOS	Delay (sec)
Weekday AM Peak Hour				
1. I-5 SB Ramps / SR 20	C	25.9	C	26.1
2. Nevitt Road / SR 20[1]	B	12.6	B	12.1
3. I-5 NB Ramps / SR 20	B	13.0	B	13.1
Weekday PM Peak Hour				
1. I-5 SB Ramps / SR 20	C	31.2	C	32.0
2. Nevitt Road / SR 20[1]	B	12.4	B	16.2
3. I-5 NB Ramps / SR 20	B	18.9	B	19.3
Saturday Midday Peak Hour				
1. I-5 SB Ramps / SR 20	C	27.9	C	28.7
2. Nevitt Road / SR 20[1]	B	11.1	B	13.6
3. I-5 NB Ramps / SR 20	B	17.0	B	17.5

Notes:
1. With Project results include proposed modification to Nevitt Road.

Per the City of Burlington Comprehensive Plan, the LOS standard for City streets is LOS D. State Highways are managed by WSDOT and the current LOS standard is also LOS D.

As shown in Table 4, each of the study intersections are anticipated to meet City of Burlington and WSDOT LOS standards during the weekday AM, weekday PM, and Saturday midday peak hours.

Nevitt Road Queuing Analysis

Future year (2026) weekday AM, weekday PM, and Saturday midday peak hour queuing analysis was conducted at the Nevitt Road/SR 20 signalized study intersection with the proposed modification to the channelization on Nevitt Road. An average of five (5) SimTraffic simulations were used. A summary of the average and 95th-percentile queues on Nevitt Road with the proposed channelization modifications is shown in Table 5. The detailed queuing results are included in Appendix F.

Table 5
Future 2026 With-Project Peak Hour Queues at Nevitt Road/SR 20

Study Intersection/Lane	Storage (ft)	Average Queue (ft)	95th % Queue (ft)
Weekday AM Peak Hour			
2. Nevitt Road / SR 20			
Northbound Left-Turn[1]	75'	50'	75'
Northbound Left-Turn	200'	100'	175'
Northbound Right-Turn	200'	50'	100'
Weekday PM Peak Hour			
2. Nevitt Road / SR 20			
Northbound Left-Turn[1]	75'	50'	75'
Northbound Left-Turn	200'	100'	200'
Northbound Right-Turn	200'	100'	175'
Saturday Midday Peak Hour			
2. Nevitt Road / SR 20			
Northbound Left-Turn[1]	75'	50'	75'
Northbound Left-Turn	200'	100'	200'
Northbound Right-Turn	200'	75'	125'

1. 95th-percentile queue estimated to exceed the available storage by ~25 feet (1 vehicle). This spillover has been added to the adjacent northbound left-turn lane queues, which is accommodated within the proposed left turn storage.

As shown in Table 5, the estimated peak hour queuing at the Nevitt Road/SR 20 signalized intersection (northbound approach) is expected to be accommodated within the proposed turn pocket lengths.

The proposed modifications to the channelization on Nevitt Road are supported by the analysis presented. It should be noted that while the channelization on Nevitt Road was modified, the existing signal timing (i.e. min/max splits) at the Nevitt Road/SR 20 signalized intersection was maintained.

Site Access Evaluation

Vehicular access to the site is proposed at two (2) locations; one (1) full access driveway on Nevitt Road and one (1) right-in, right out driveway on SR 20.

To assess operations at the proposed site access locations, LOS and queuing was conducted during the weekday AM, weekday PM, and Saturday midday peak hour for future year 2026 (year of opening) conditions. Site access LOS was calculated using the methodology and procedures outlined in the *Highway Capacity Manual* (HCM 7th Edition) using the *Synchro 12* software program. The queuing analysis was based on an average of five (5) SimTraffic simulations. The reported queues for the individual movements at each of the proposed site access locations are 95th-percentile queues, which are only exceeded five (5) percent of the time. The 2026 weekday AM, weekday PM, and Saturday midday peak hour traffic volumes at the proposed site access locations were shown previously in Figures 7-9.

The weekday AM, weekday PM, and Saturday midday peak hour site access analysis for future year 2026 (year of opening) is summarized below in Table 6. The LOS worksheets are included in Appendix C. The detailed SimTraffic queuing reports are included in Appendix F.

Table 6
Future 2026 Site Access LOS and Queue Summary

Site Access / Movement	Weekday AM Peak Hour LOS	Weekday AM Peak Hour Delay (sec)	Weekday AM Peak Hour 95th % Queue (ft)[1]	Weekday PM Peak Hour LOS	Weekday PM Peak Hour Delay (sec)	Weekday PM Peak Hour 95th % Queue (ft)[1]	Saturday Midday Peak Hour LOS	Saturday Midday Peak Hour Delay (sec)	Saturday Midday Peak Hour 95th % Queue (ft)[1]
A. Nevitt Rd/Site Access									
Westbound Approach	B	10.2	50'	B	11.1	50'	B	11.3	75'
Southbound Left-Turn	A	8.0	25'	A	8.2	50'	A	8.1	50'
B. SR 20/Site Access									
Northbound Right-Turn	B	10.9	25'	C	15.0	50'	B	12.9	25'

1. Queues are based on the average of five (5) SimTraffic simulations.

As shown in Table 6, the individual movements entering and exiting the site at the proposed stop-controlled site access locations are expected to operate at LOS C or better during the weekday AM, weekday PM, and Saturday midday peak hours in 2026 (year of opening). Additionally, the estimated 95th-percentile queues at each of the site access locations are anticipated to be no more than 75 feet (3 vehicles) which occurs during the Saturday midday peak hour.

Drive-Through Queuing

To confirm the adequacy of storage provided for the proposed drive-through lanes, existing queuing observations were conducted at the following two (2) local Chick-fil-A restaurants:

- Chick-fil-A Seattle located at 12801 Aurora Avenue N
- Chick-fil-A Kirkland located at 12026 NE 124th Street

The drive-through queuing observations were conducted during the midday peak periods (11:00 AM – 1:00 PM) on a Friday and Saturday and included recording the queuing observations in 5-minute intervals. The maximum observed queue was noted separately for the location of the drive-through window to the order point and the order point back. A summary of the queue observations at the local Chick-fil-A locations is summarized below in Table 9.

Table 7
Chick-fil-A Queuing Observations

Restaurant Location	Date of Observations	Maximum Queue Observed (vehicles) Drive-Through Window to Order Point	Order Point Back	Total Queue
Chick-fil-A Kirkland	Friday 10/4/24	8	8	16
	Saturday 10/5/24	9	16	25
Chick-fil-A Seattle	Friday 10/4/24	7	9	16
	Saturday 10/5/24	7	12	19

As shown in Table 9, the maximum observed drive-through queue at the Seattle location on Aurora was 19 vehicles and occurred on Saturday at 12:45 PM. This included seven (7) vehicles between the drive-through window and order point and 12 vehicles from the order point back extending into the on-site parking areas and onto the adjacent street (N 128th St). The Seattle location has on-site storage for approximately 9 vehicles before backing occurs on the adjacent public street.

The maximum observed drive-through queue at the Kirkland location was 25 vehicles and occurred on Saturday at 12:35 PM. This included nine (9) vehicles between the drive-through window and order point and 16 vehicles from the order point back extending into the on-site parking areas. Queues at the Kirkland location were not observed to extend back to the adjacent public streets.

Based on the current site plan for the proposed *Chick-fil-A I-5 & Hwy 20* project, the drive-through lanes will include space for approximately 37 vehicles without encroaching into the drive-aisles (17 vehicles between the drive-through window and order point and 20 vehicles from the order point to the entrance of the drive-through). Based on these observations at similar Chick-fil-A locations, the storage provided on-site will be sufficient to accommodate the expected drive-through queues. The detailed drive-through queuing observations are included in Appendix G.

Transit and Non-Motorized Facilities

Existing transit service in the project vicinity is provided by Skagit Transit. The closest bus stop is located on the west side of Nevitt Road just south of the proposed project. This stop currently provides service for Skagit Transit Route 101 connecting key locations in Burlington including Chuckanut Park & Ride, Dick's Sporting Goods, and the Library. This route is designed to facilitate easy access to commercial and educational hubs, enhancing connectivity within the community.

Existing non-motorized facilities in the project vicinity include sidewalks on both sides of Nevitt Road and on the south side of SR 20. An existing marked pedestrian crossing with pedestrian pushbuttons exists on the south leg of the Nevitt Road/SR 20 signalized intersection. As part of the proposed project, the sidewalks along the project's Nevitt Road and SR 20 frontages will be widened to 10 feet to support the City's *Enhance Pedestrian Amenity Street* designations. This improvement, along with the existing facilities in the area, will provide sufficient access for transit and non-motorized users.

It should also be noted there are future plans to install a new bike lane on Nevitt Road connecting to SR 20 and west to the existing bike lane on Garrett Road.

MITIGATION

Frontage Improvements

The proposed project will include standard City of Burlington required frontage improvements including widening the sidewalks along the Nevitt Road and SR 20 frontages to 10 feet to support the City's *Enhance Pedestrian Amenity Street* designations.

Nevitt Road Channelization Modification

The project is proposing a modification to the channelization on Nevitt Road including converting the existing northbound channelization at the Nevitt Road/SR 20 signalized intersection from a single northbound left-turn lane and dual northbound right-turn lanes to dual northbound left-turn lanes and a single northbound right-turn lane. This change effectively reduces the length of the northbound left-turn queue and allows room for a new southbound left-turn pocket on Nevitt Road serving the proposed Chick-fil-A site. The project would also complete necessary modifications to the traffic signal at Nevitt Road/SR 20 to accommodate the revised northbound lane configuration.

Transportation Impact Fees

Per Burlington Municipal Code 15.12, transportation mitigation required by the City of Burlington is payment of a transportation impact fee based on the project's proposed land use. As of the date of this study, the adopted impact fee schedule identifies a fee of $2,665 per new PM peak hour trip, for a total fee of $325,130 ($2,665 X 122 PM Trips). The impact fee rates are subject to change, and the final impact fee calculation will be based on the rates in effect at the time of issuance of a building permit.

Appendix A

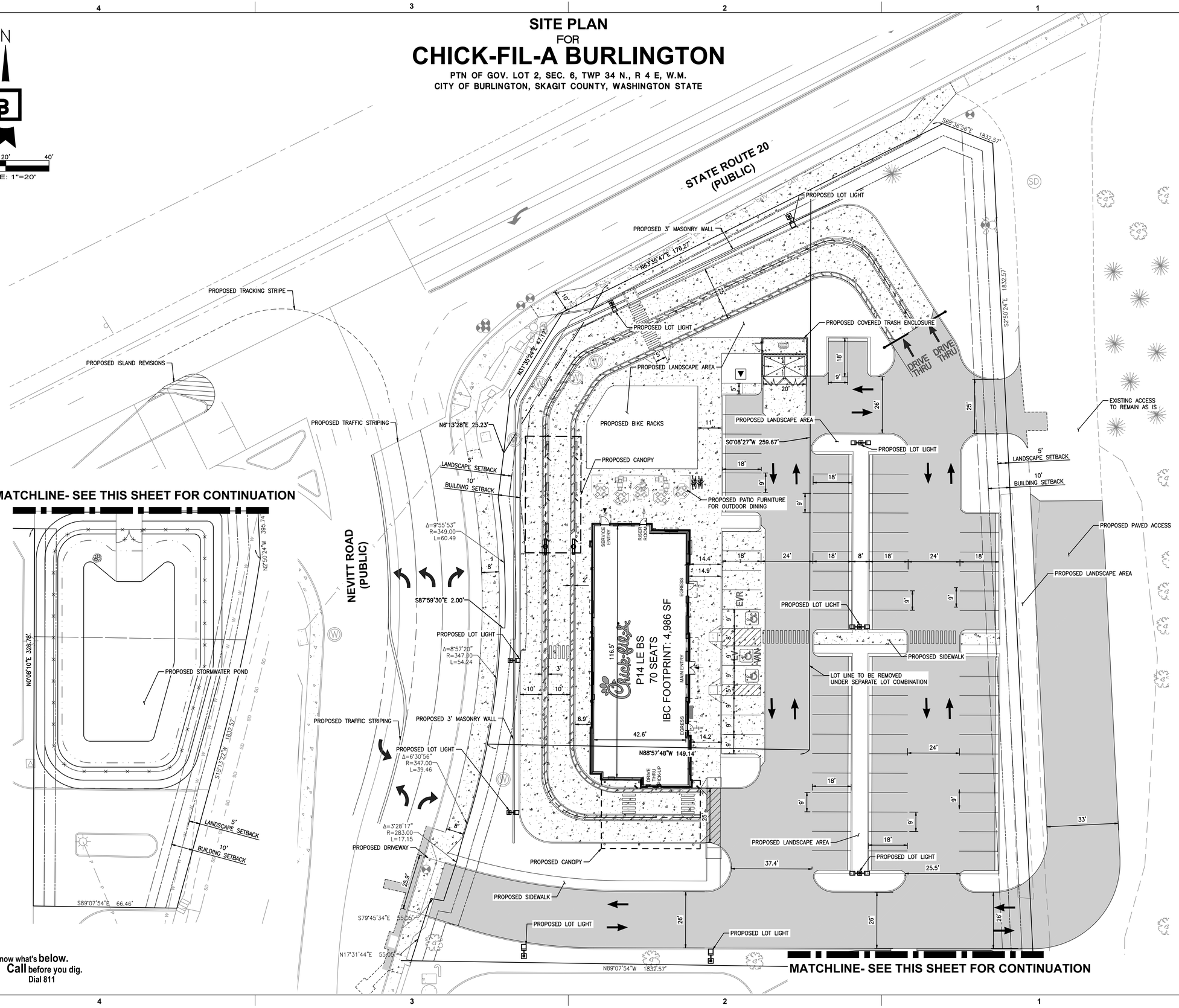
Preliminary Site Plan

SITE PLAN
FOR
CHICK-FIL-A BURLINGTON

PTN OF GOV. LOT 2, SEC. 6, TWP 34 N., R 4 E, W.M.
CITY OF BURLINGTON, SKAGIT COUNTY, WASHINGTON STATE

N

0 10' 20' 40'
SCALE: 1"=20'



MATCHLINE- SEE THIS SHEET FOR CONTINUATION

MATCHLINE- SEE THIS SHEET FOR CONTINUATION

Know what's **below.**
Call before you dig.
Dial 811

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998

Barghausen
Consulting Engineers, Inc.

18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

PRELIMINARY

CHICK-FIL-A
I-5 & HWY 200
680 HWY 20
BURLINGTON, WA 98233

FSR#05689

BUILDING TYPE / SIZE:
RELEASE:

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT #	23306
PRINTED FOR	PRELIMINARY
DATE	1/31/2025
DRAWN BY	WHO

SHEET
SITE PLAN

SHEET NUMBER
C3

Appendix B

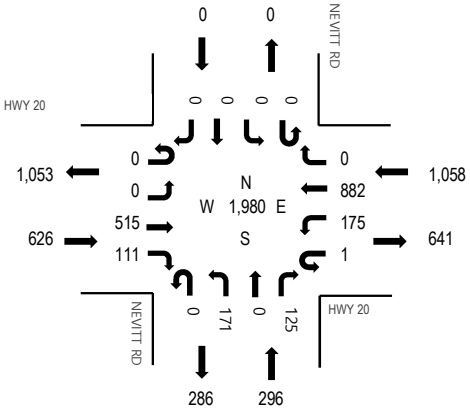
Existing Traffic Count Sheets

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

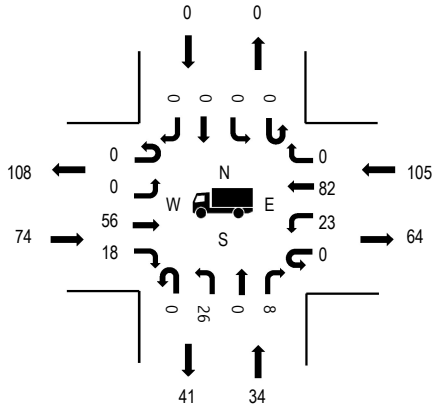
Location: 1 NEVITT RD & HWY 20 AM
Date: Thursday, May 23, 2024
Peak Hour: 07:30 AM - 08:30 AM

Peak Hour

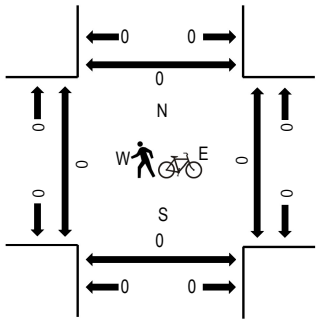
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	11.8%	0.84
WB	9.9%	0.94
NB	11.5%	0.83
SB	0.0%	0.00
All	10.8%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				NEVITT RD Northbound				NEVITT RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	107	8	0	37	195	0	0	35	0	21	0	0	0	0	403	1,871
7:15 AM	0	0	102	14	0	34	216	0	0	34	0	36	0	0	0	0	436	1,952
7:30 AM	0	0	118	23	0	46	221	0	0	47	0	42	0	0	0	0	497	1,980
7:45 AM	0	0	155	31	0	48	233	0	0	45	0	23	0	0	0	0	535	1,939
8:00 AM	0	0	112	30	1	44	225	0	0	37	0	35	0	0	0	0	484	1,833
8:15 AM	0	0	130	27	0	37	203	0	0	42	0	25	0	0	0	0	464	
8:30 AM	0	0	118	20	0	30	223	0	0	37	0	28	0	0	0	0	456	
8:45 AM	0	0	131	22	0	22	200	0	0	36	0	18	0	0	0	0	429	
Count Total	0	0	973	175	1	298	1,716	0	0	313	0	228	0	0	0	0	3,704	
Peak Hour	0	0	515	111	1	175	882	0	0	171	0	125	0	0	0	0	1,980	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

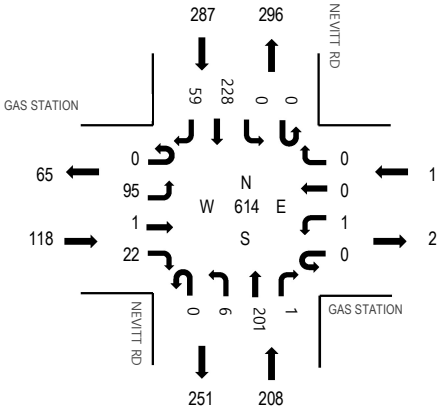
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	8	6	19	0	33	7:00 AM	0	0	0	0	0
7:15 AM	10	13	23	0	46	7:15 AM	0	0	0	0	0
7:30 AM	19	10	22	0	51	7:30 AM	0	0	0	0	0
7:45 AM	18	9	32	0	59	7:45 AM	0	0	0	0	0
8:00 AM	21	7	24	0	52	8:00 AM	0	0	0	0	0
8:15 AM	16	8	27	0	51	8:15 AM	0	0	0	0	0
8:30 AM	16	10	30	0	56	8:30 AM	0	0	0	0	0
8:45 AM	20	6	23	0	49	8:45 AM	0	0	0	0	0
Count Total	128	69	200	0	397	Count Total	0	0	0	0	0
Peak Hour	74	34	105	0	213	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

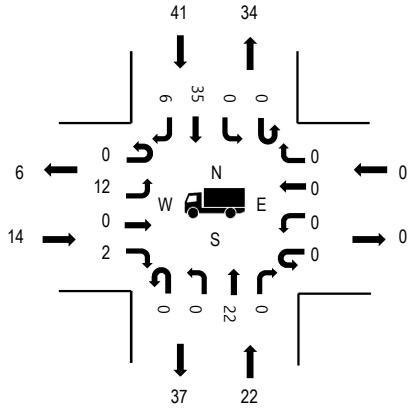
Location: 2 NEVITT RD & GAS STATION AM
Date: Thursday, May 23, 2024
Peak Hour: 07:30 AM - 08:30 AM

Peak Hour

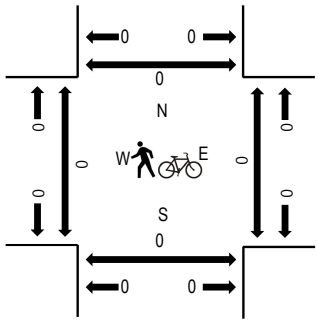
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	11.9%	0.78
WB	0.0%	0.25
NB	10.6%	0.79
SB	14.3%	0.91
All	12.5%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	GAS STATION Eastbound				GAS STATION Westbound				NEVITT RD Northbound				NEVITT RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	20	0	6	0	0	0	0	0	3	36	0	0	0	27	17	109	571
7:15 AM	0	27	0	8	0	0	0	0	0	9	41	0	0	0	37	11	133	613
7:30 AM	0	28	0	10	0	0	0	0	0	3	62	1	0	0	52	18	174	614
7:45 AM	0	25	0	3	0	0	0	0	0	2	46	0	0	0	65	14	155	561
8:00 AM	0	21	1	5	0	0	0	0	0	1	48	0	0	0	63	12	151	508
8:15 AM	0	21	0	4	0	1	0	0	0	0	45	0	0	0	48	15	134	
8:30 AM	0	19	0	7	0	0	0	0	0	2	46	0	0	0	37	10	121	
8:45 AM	0	14	0	0	0	0	0	0	0	0	42	0	0	0	38	8	102	
Count Total	0	175	1	43	0	1	0	0	0	20	366	1	0	0	367	105	1,079	
Peak Hour	0	95	1	22	0	1	0	0	0	6	201	1	0	0	228	59	614	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

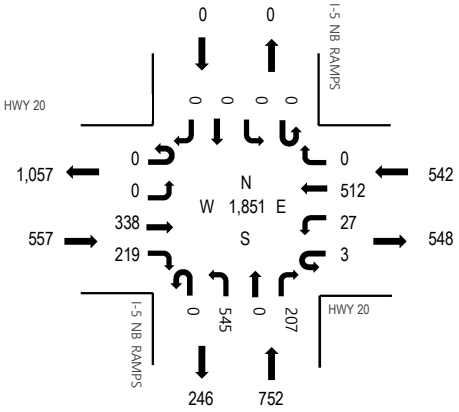
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	4	4	0	4	12	7:00 AM	0	0	0	0	0
7:15 AM	7	7	0	6	20	7:15 AM	0	0	0	0	0
7:30 AM	3	7	0	10	20	7:30 AM	0	0	0	0	0
7:45 AM	6	7	0	11	24	7:45 AM	0	0	0	0	0
8:00 AM	3	2	0	7	12	8:00 AM	0	0	0	0	0
8:15 AM	2	6	0	13	21	8:15 AM	0	0	0	0	0
8:30 AM	3	8	0	6	17	8:30 AM	0	0	1	0	1
8:45 AM	1	5	0	2	8	8:45 AM	0	0	0	0	0
Count Total	29	46	0	59	134	Count Total	0	0	1	0	1
Peak Hour	14	22	0	41	77	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

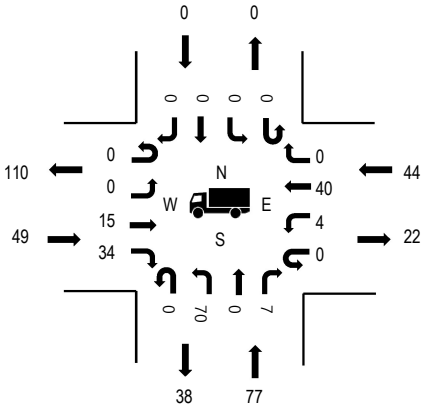
Location: 3 I-5 NB RAMPS & HWY 20 AM
Date: Thursday, July 11, 2024
Peak Hour: 07:00 AM - 08:00 AM

Peak Hour

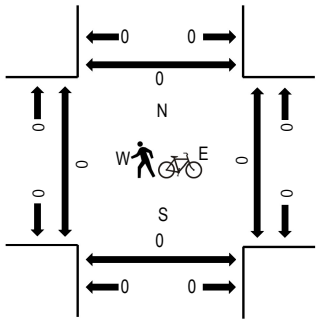
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	8.8%	0.92
WB	8.1%	0.89
NB	10.2%	0.87
SB	0.0%	0.00
All	9.2%	0.89

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	0	70	69	1	10	141	0	0	131	0	41	0	0	0	0	463	1,851
7:15 AM	0	0	103	48	1	8	144	0	0	162	0	54	0	0	0	0	520	1,826
7:30 AM	0	0	97	55	0	4	119	0	0	144	0	61	0	0	0	0	480	1,777
7:45 AM	0	0	68	47	1	5	108	0	0	108	0	51	0	0	0	0	388	1,762
8:00 AM	0	0	79	56	0	4	128	0	0	122	0	49	0	0	0	0	438	1,830
8:15 AM	0	0	102	58	0	6	112	0	0	131	0	62	0	0	0	0	471	
8:30 AM	0	0	108	51	4	8	112	0	0	125	0	57	0	0	0	0	465	
8:45 AM	0	0	103	51	1	7	121	0	0	127	0	46	0	0	0	0	456	
Count Total	0	0	730	435	8	52	985	0	0	1,050	0	421	0	0	0	0	3,681	
Peak Hour	0	0	338	219	3	27	512	0	0	545	0	207	0	0	0	0	1,851	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

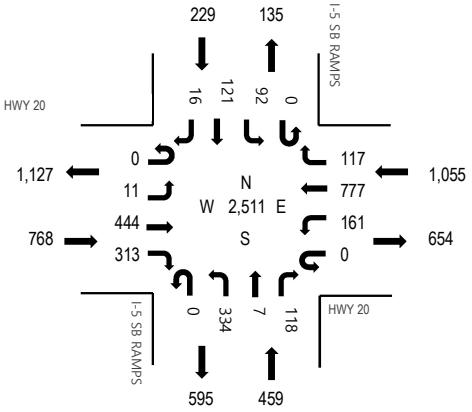
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	11	16	15	0	42	7:00 AM	0	0	0	0	0
7:15 AM	15	24	8	0	47	7:15 AM	0	0	0	0	0
7:30 AM	15	24	10	0	49	7:30 AM	0	0	0	0	0
7:45 AM	8	13	11	0	32	7:45 AM	0	0	0	0	0
8:00 AM	20	13	6	0	39	8:00 AM	0	2	0	0	2
8:15 AM	14	18	10	0	42	8:15 AM	0	0	0	0	0
8:30 AM	8	19	14	0	41	8:30 AM	0	0	0	0	0
8:45 AM	13	18	21	0	52	8:45 AM	0	2	0	0	2
Count Total	104	145	95	0	344	Count Total	0	4	0	0	4
Peak Hour	49	77	44	0	170	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 I-5 SB RAMPS & HWY 20 AM
Date: Thursday, July 11, 2024
Peak Hour: 07:15 AM - 08:15 AM

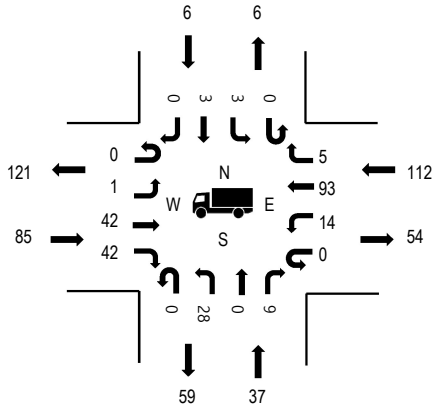
Peak Hour

Motorized Vehicles

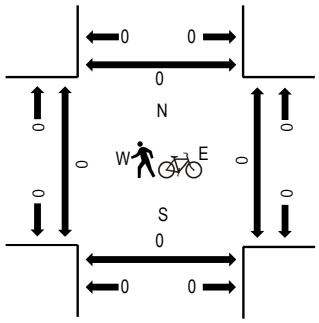


	HV%	PHF
EB	11.1%	0.93
WB	10.6%	0.97
NB	8.1%	0.97
SB	2.6%	0.87
All	9.6%	0.97

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				I-5 SB RAMPS Northbound				I-5 SB RAMPS Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	2	77	67	0	26	168	24	0	71	2	26	0	12	32	9	516	2,416
7:15 AM	0	3	110	79	0	40	206	26	0	86	0	28	0	27	35	4	644	2,511
7:30 AM	0	2	116	74	0	34	201	28	0	85	2	22	0	29	30	5	628	2,415
7:45 AM	0	0	99	78	0	29	198	46	0	87	1	30	0	22	37	1	628	2,380
8:00 AM	0	6	119	82	0	58	172	17	0	76	4	38	0	14	19	6	611	2,383
8:15 AM	0	5	107	80	0	46	159	18	0	65	1	25	0	17	23	2	548	
8:30 AM	0	3	84	74	1	35	186	34	0	79	4	33	0	23	30	7	593	
8:45 AM	0	2	139	98	0	33	157	44	0	61	5	40	0	15	35	2	631	
Count Total	0	23	851	632	1	301	1,447	237	0	610	19	242	0	159	241	36	4,799	
Peak Hour	0	11	444	313	0	161	777	117	0	334	7	118	0	92	121	16	2,511	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

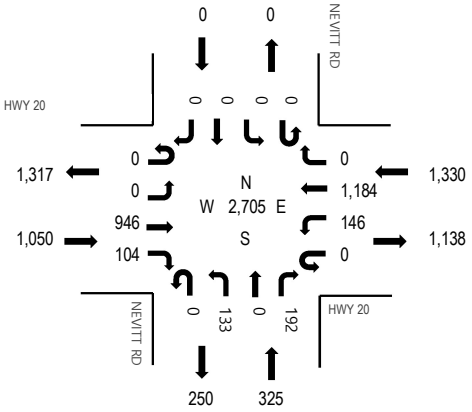
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	22	9	22	1	54	7:00 AM	0	0	0	0	0
7:15 AM	23	3	26	2	54	7:15 AM	0	0	0	0	0
7:30 AM	14	13	27	3	57	7:30 AM	0	0	0	0	0
7:45 AM	25	12	33	1	71	7:45 AM	0	0	0	0	0
8:00 AM	23	9	26	0	58	8:00 AM	0	0	0	0	0
8:15 AM	29	9	14	1	53	8:15 AM	0	0	1	0	1
8:30 AM	19	18	23	3	63	8:30 AM	0	0	0	0	0
8:45 AM	23	7	28	5	63	8:45 AM	0	0	0	0	0
Count Total	178	80	199	16	473	Count Total	0	0	1	0	1
Peak Hour	85	37	112	6	240	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

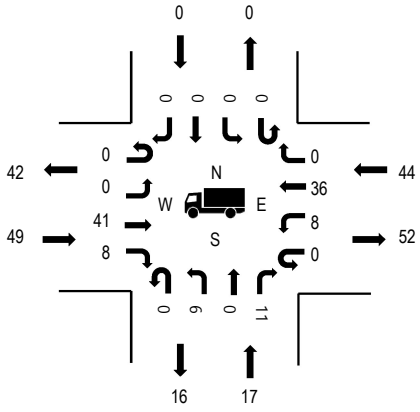
Location: 1 NEVITT RD & HWY 20 PM
Date: Thursday, May 23, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

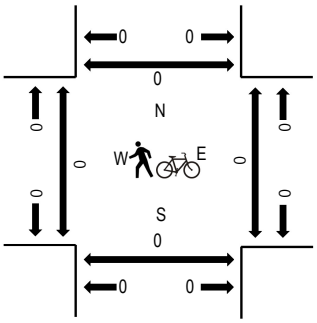
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	4.7%	0.96
WB	3.3%	0.95
NB	5.2%	0.94
SB	0.0%	0.00
All	4.1%	0.97

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				NEVITT RD Northbound				NEVITT RD Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	242	31	0	23	327	0	0	32	0	45	0	0	0	0	700	2,705
4:15 PM	0	0	242	28	0	35	301	0	0	35	0	49	0	0	0	0	690	2,634
4:30 PM	0	0	219	23	0	47	294	0	0	29	0	49	0	0	0	0	661	2,647
4:45 PM	0	0	243	22	0	41	262	0	0	37	0	49	0	0	0	0	654	2,637
5:00 PM	0	0	201	17	0	40	298	0	0	33	0	40	0	0	0	0	629	2,553
5:15 PM	0	0	276	24	0	25	290	0	0	48	0	40	0	0	0	0	703	
5:30 PM	0	0	244	21	0	32	288	0	0	31	0	35	0	0	0	0	651	
5:45 PM	0	0	237	22	0	25	226	0	0	27	0	33	0	0	0	0	570	
Count Total	0	0	1,904	188	0	268	2,286	0	0	272	0	340	0	0	0	0	5,258	
Peak Hour	0	0	946	104	0	146	1,184	0	0	133	0	192	0	0	0	0	2,705	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

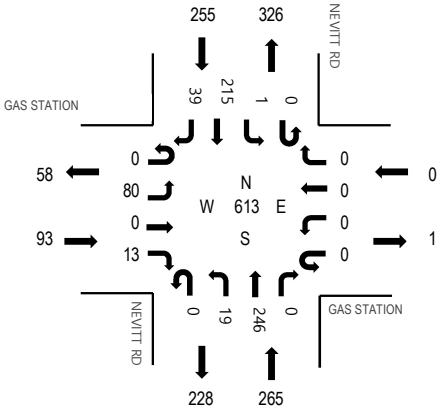
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	13	5	11	0	29	4:00 PM	0	0	0	0	0
4:15 PM	9	4	12	0	25	4:15 PM	0	0	0	0	0
4:30 PM	8	3	11	0	22	4:30 PM	0	0	0	0	0
4:45 PM	19	5	10	0	34	4:45 PM	0	0	0	0	0
5:00 PM	10	2	11	0	23	5:00 PM	0	0	0	0	0
5:15 PM	13	0	5	0	18	5:15 PM	0	0	0	0	0
5:30 PM	9	3	6	0	18	5:30 PM	0	1	0	0	1
5:45 PM	8	6	7	0	21	5:45 PM	0	0	0	0	0
Count Total	89	28	73	0	190	Count Total	0	1	0	0	1
Peak Hour	49	17	44	0	110	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

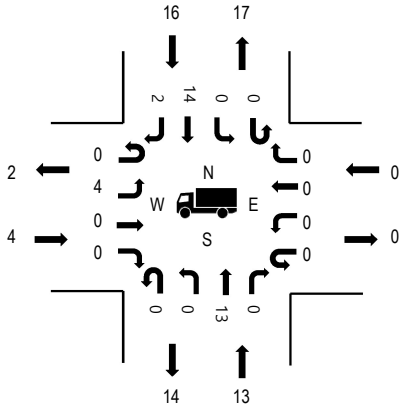
Location: 2 NEVITT RD & GAS STATION PM
Date: Thursday, May 23, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

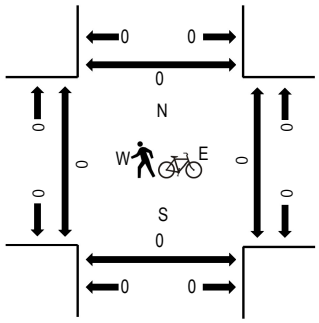
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	4.3%	0.89
WB	0.0%	0.00
NB	4.9%	0.95
SB	6.3%	0.87
All	5.4%	0.95

Traffic Counts - Motorized Vehicles

Interval Start Time	GAS STATION Eastbound				GAS STATION Westbound				NEVITT RD Northbound				NEVITT RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	19	0	4	0	0	0	0	0	6	64	0	0	0	50	8	151	613
4:15 PM	0	23	0	1	0	0	0	0	0	5	58	0	0	0	52	6	145	605
4:30 PM	0	17	0	3	0	0	0	0	0	6	62	0	0	1	61	11	161	602
4:45 PM	0	21	0	5	0	0	0	0	0	2	62	0	0	0	52	14	156	563
5:00 PM	0	13	0	6	0	0	0	0	0	6	61	0	1	0	47	9	143	516
5:15 PM	0	24	0	5	0	0	0	0	0	1	63	0	1	0	42	6	142	
5:30 PM	0	11	0	5	0	0	0	0	0	1	52	0	0	0	43	10	122	
5:45 PM	0	13	0	3	0	0	0	0	0	1	48	1	0	0	40	3	109	
Count Total	0	141	0	32	0	0	0	0	0	28	470	1	2	1	387	67	1,129	
Peak Hour	0	80	0	13	0	0	0	0	0	19	246	0	0	1	215	39	613	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

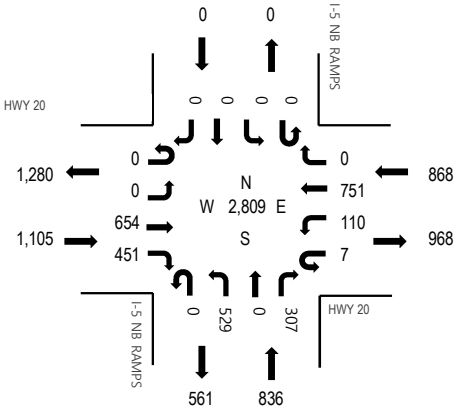
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	3	0	0	5	4:00 PM	0	0	0	0	0
4:15 PM	0	4	0	4	8	4:15 PM	0	0	0	0	0
4:30 PM	0	3	0	5	8	4:30 PM	0	0	0	0	0
4:45 PM	2	3	0	7	12	4:45 PM	0	0	0	0	0
5:00 PM	0	3	0	0	3	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1	5:15 PM	0	0	0	0	0
5:30 PM	2	3	0	2	7	5:30 PM	0	0	0	0	0
5:45 PM	0	5	0	2	7	5:45 PM	0	0	0	0	0
Count Total	6	24	0	21	51	Count Total	0	0	0	0	0
Peak Hour	4	13	0	16	33	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

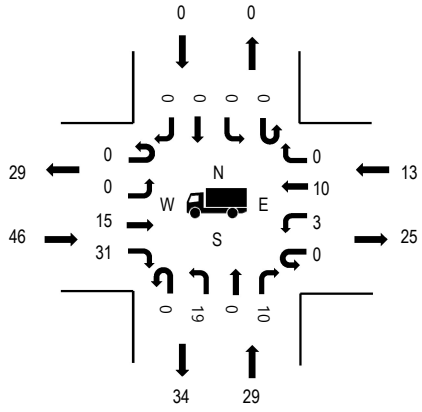
Location: 3 I-5 NB RAMPS & HWY 20 PM
Date: Thursday, July 11, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

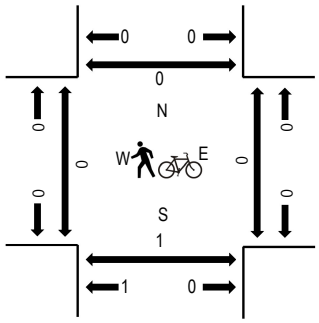
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	4.2%	0.90
WB	1.5%	0.94
NB	3.5%	0.93
SB	0.0%	0.00
All	3.1%	0.92

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	170	106	2	21	175	0	0	124	0	79	0	0	0	0	677	2,809
4:15 PM	0	0	144	117	1	32	180	0	0	123	0	71	0	0	0	0	668	2,755
4:30 PM	0	0	156	106	0	25	200	0	0	137	0	78	0	0	0	0	702	2,783
4:45 PM	0	0	184	122	4	32	196	0	0	145	0	79	0	0	0	0	762	2,705
5:00 PM	0	0	159	118	1	28	135	0	0	110	0	72	0	0	0	0	623	2,532
5:15 PM	0	0	164	101	5	26	154	0	0	155	0	91	0	0	0	0	696	
5:30 PM	0	0	169	123	1	20	146	0	0	101	0	64	0	0	0	0	624	
5:45 PM	0	0	145	100	2	22	146	0	0	124	0	50	0	0	0	0	589	
Count Total	0	0	1,291	893	16	206	1,332	0	0	1,019	0	584	0	0	0	0	5,341	
Peak Hour	0	0	654	451	7	110	751	0	0	529	0	307	0	0	0	0	2,809	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	14	9	3	0	26	4:00 PM	0	1	0	0	1
4:15 PM	14	12	4	0	30	4:15 PM	0	0	0	0	0
4:30 PM	9	4	3	0	16	4:30 PM	0	0	0	0	0
4:45 PM	9	4	3	0	16	4:45 PM	0	0	0	0	0
5:00 PM	13	7	4	0	24	5:00 PM	0	1	0	0	1
5:15 PM	9	3	5	0	17	5:15 PM	0	1	0	0	1
5:30 PM	12	6	5	0	23	5:30 PM	0	0	0	0	0
5:45 PM	12	6	2	0	20	5:45 PM	0	0	0	0	0
Count Total	92	51	29	0	172	Count Total	0	3	0	0	3
Peak Hour	46	29	13	0	88	Peak Hour	0	1	0	0	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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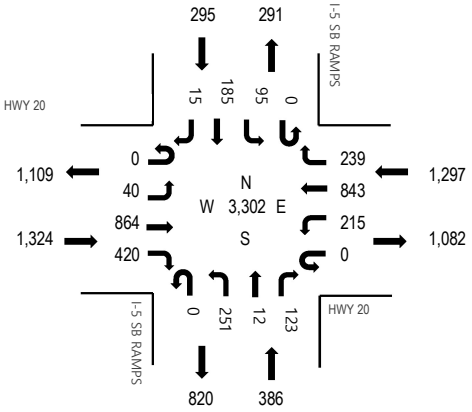
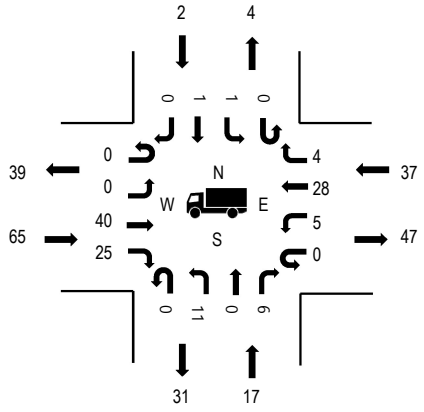
Location: 4 I-5 SB RAMPS & HWY 20 PM
Date: Thursday, July 11, 2024
Peak Hour: 04:15 PM - 05:15 PM

Peak Hour

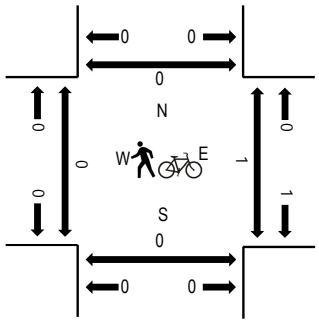
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	4.9%	0.98
WB	2.9%	0.93
NB	4.4%	0.83
SB	0.7%	0.84
All	3.7%	0.97

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				I-5 SB RAMPS Northbound				I-5 SB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	13	202	140	0	48	211	52	0	51	5	28	0	25	37	3	815	3,263
4:15 PM	0	11	215	100	0	50	216	47	0	78	4	34	0	24	45	2	826	3,302
4:30 PM	0	10	210	118	0	47	204	52	0	60	2	26	0	28	56	4	817	3,262
4:45 PM	0	10	214	111	0	54	212	65	0	46	3	29	0	17	40	4	805	3,234
5:00 PM	0	9	225	91	0	64	211	75	0	67	3	34	0	26	44	5	854	3,183
5:15 PM	1	10	261	75	0	51	192	47	0	70	6	19	0	23	29	2	786	
5:30 PM	0	8	218	103	0	61	171	59	0	70	4	26	0	29	37	3	789	
5:45 PM	0	17	258	96	0	60	160	31	0	44	2	36	0	20	24	6	754	
Count Total	1	88	1,803	834	0	435	1,577	428	0	486	29	232	0	192	312	29	6,446	
Peak Hour	0	40	864	420	0	215	843	239	0	251	12	123	0	95	185	15	3,302	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

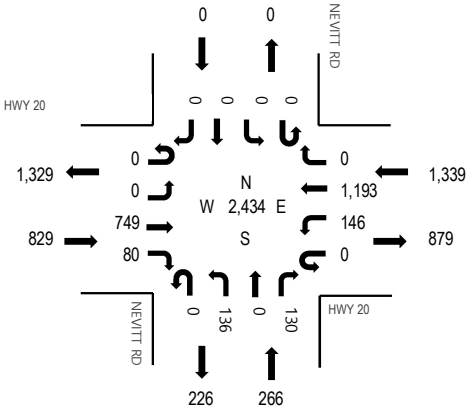
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	17	2	11	0	30	4:00 PM	0	0	0	0	0
4:15 PM	24	5	10	0	39	4:15 PM	0	0	0	0	0
4:30 PM	17	6	10	2	35	4:30 PM	0	0	0	0	0
4:45 PM	11	2	12	0	25	4:45 PM	0	0	0	0	0
5:00 PM	13	4	5	0	22	5:00 PM	0	0	1	0	1
5:15 PM	17	4	4	0	25	5:15 PM	0	0	0	0	0
5:30 PM	18	5	6	1	30	5:30 PM	0	0	0	0	0
5:45 PM	13	6	9	0	28	5:45 PM	0	0	1	0	1
Count Total	130	34	67	3	234	Count Total	0	0	2	0	2
Peak Hour	65	17	37	2	121	Peak Hour	0	0	1	0	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 NEVITT RD & HWY 20 Noon
Date: Saturday, July 13, 2024
Peak Hour: 11:00 AM - 12:00 PM

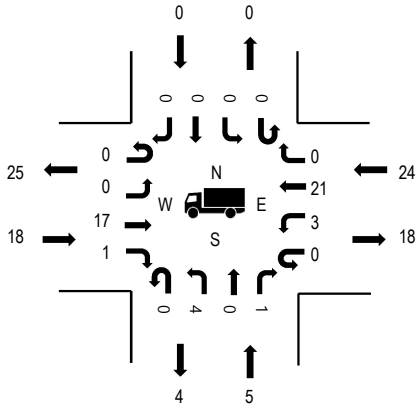
Peak Hour

Motorized Vehicles

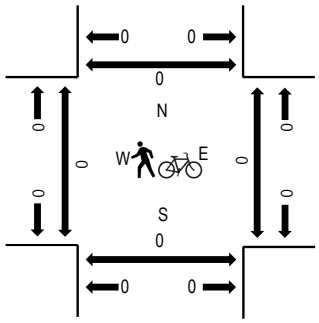


	HV%	PHF
EB	2.2%	0.87
WB	1.8%	0.89
NB	1.9%	0.89
SB	0.0%	0.00
All	1.9%	0.96

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				NEVITT RD Northbound				NEVITT RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
11:00 AM	0	0	153	19	0	35	341	0	0	23	0	25	0	0	0	0	596	2,434
11:15 AM	0	0	218	19	0	33	287	0	0	45	0	30	0	0	0	0	632	2,430
11:30 AM	0	0	164	21	0	39	286	0	0	33	0	38	0	0	0	0	581	2,377
11:45 AM	0	0	214	21	0	39	279	0	0	35	0	37	0	0	0	0	625	2,388
12:00 PM	0	0	172	14	0	38	305	0	0	32	0	31	0	0	0	0	592	2,402
12:15 PM	0	0	180	21	0	23	285	0	0	40	0	30	0	0	0	0	579	
12:30 PM	0	0	159	19	0	48	296	0	0	38	0	32	0	0	0	0	592	
12:45 PM	0	0	217	30	0	32	284	0	1	42	0	33	0	0	0	0	639	
Count Total	0	0	1,477	164	0	287	2,363	0	1	288	0	256	0	0	0	0	4,836	
Peak Hour	0	0	749	80	0	146	1,193	0	0	136	0	130	0	0	0	0	2,434	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	2	1	6	0	9	11:00 AM	0	0	0	0	0
11:15 AM	5	2	6	0	13	11:15 AM	0	0	0	0	0
11:30 AM	6	1	10	0	17	11:30 AM	0	0	0	0	0
11:45 AM	5	1	2	0	8	11:45 AM	0	0	0	0	0
12:00 PM	6	2	5	0	13	12:00 PM	0	0	0	0	0
12:15 PM	6	3	4	0	13	12:15 PM	0	0	0	0	0
12:30 PM	4	1	4	0	9	12:30 PM	1	0	0	0	1
12:45 PM	10	0	5	0	15	12:45 PM	0	0	0	0	0
Count Total	44	11	42	0	97	Count Total	1	0	0	0	1
Peak Hour	18	5	24	0	47	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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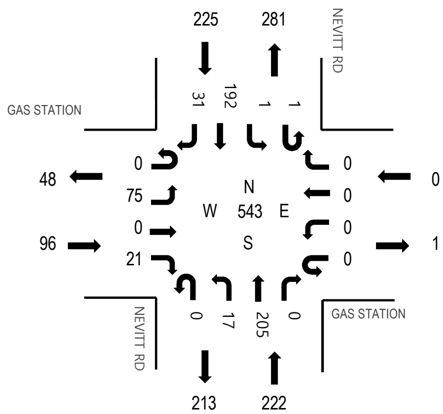
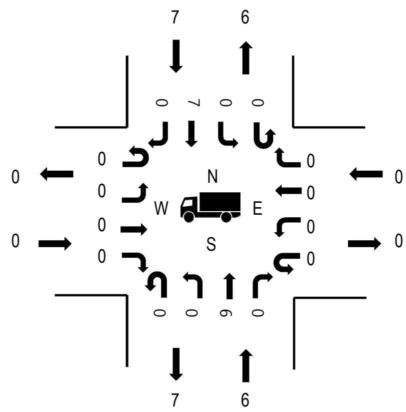
Location: 2 NEVITT RD & GAS STATION Noon
Date: Saturday, July 13, 2024
Peak Hour: 12:00 PM - 01:00 PM

Peak Hour

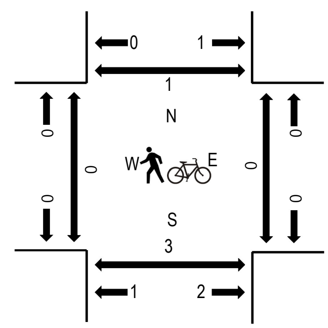
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	0.0%	0.83
WB	0.0%	0.00
NB	2.7%	0.87
SB	3.1%	0.84
All	2.4%	0.85

Traffic Counts - Motorized Vehicles

Interval Start Time	GAS STATION Eastbound				GAS STATION Westbound				NEVITT RD Northbound				NEVITT RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
11:00 AM	0	15	0	7	0	1	0	0	0	3	35	0	1	0	45	9	116	525
11:15 AM	0	18	0	4	0	0	0	0	0	4	55	1	0	0	45	7	134	538
11:30 AM	0	17	0	3	0	0	0	0	0	3	54	0	0	0	47	8	132	520
11:45 AM	0	15	0	7	0	0	0	0	0	2	55	0	0	0	54	10	143	526
12:00 PM	0	18	0	7	0	0	0	0	0	5	47	0	1	0	45	6	129	543
12:15 PM	0	17	0	1	0	0	0	0	0	2	52	0	0	1	35	8	116	
12:30 PM	0	20	0	4	0	0	0	0	0	4	48	0	0	0	51	11	138	
12:45 PM	0	20	0	9	0	0	0	0	0	6	58	0	0	0	61	6	160	
Count Total	0	140	0	42	0	1	0	0	0	29	404	1	2	1	383	65	1,068	
Peak Hour	0	75	0	21	0	0	0	0	0	17	205	0	1	1	192	31	543	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

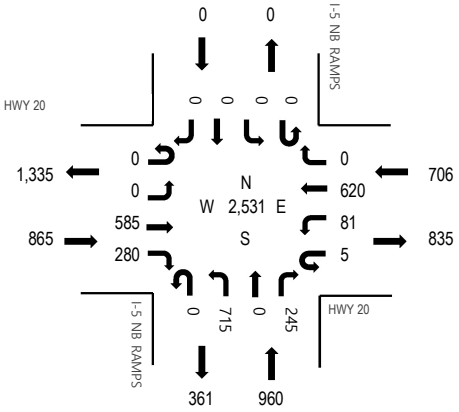
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	0	1	0	0	1	11:00 AM	0	1	0	0	1
11:15 AM	0	2	0	0	2	11:15 AM	0	1	0	0	1
11:30 AM	0	1	0	4	5	11:30 AM	0	0	0	0	0
11:45 AM	1	1	0	0	2	11:45 AM	0	0	0	0	0
12:00 PM	0	1	0	2	3	12:00 PM	0	0	0	0	0
12:15 PM	0	2	0	1	3	12:15 PM	0	1	0	0	1
12:30 PM	0	2	0	3	5	12:30 PM	0	2	0	1	3
12:45 PM	0	1	0	1	2	12:45 PM	0	0	0	0	0
Count Total	1	11	0	11	23	Count Total	0	5	0	1	6
Peak Hour	0	6	0	7	13	Peak Hour	0	3	0	1	4

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

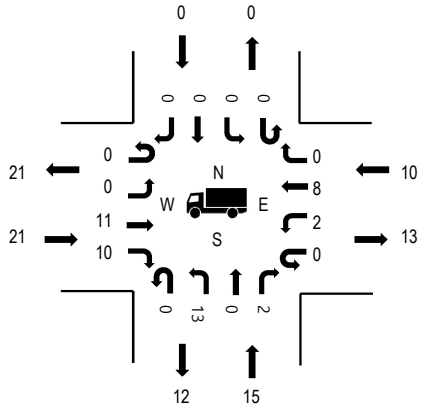
Location: 3 I-5 NB RAMPS & HWY 20 Noon
Date: Saturday, July 13, 2024
Peak Hour: 12:00 PM - 01:00 PM

Peak Hour

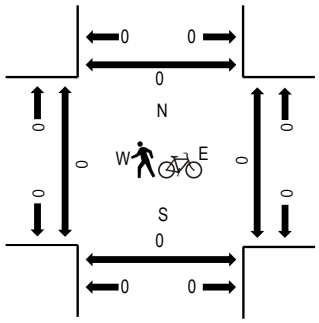
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	2.4%	0.92
WB	1.4%	0.92
NB	1.6%	0.92
SB	0.0%	0.00
All	1.8%	0.97

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
11:00 AM	0	0	185	70	1	21	136	0	0	175	0	58	0	0	0	0	646	2,529
11:15 AM	0	0	149	77	1	18	151	0	0	163	0	76	0	0	0	0	635	2,496
11:30 AM	0	0	152	40	0	17	161	0	0	176	0	77	0	0	0	0	623	2,512
11:45 AM	0	0	152	59	1	14	147	0	0	172	0	80	0	0	0	0	625	2,525
12:00 PM	0	0	132	81	1	12	145	0	0	184	0	58	0	0	0	0	613	2,531
12:15 PM	0	0	160	75	0	24	167	0	0	160	0	65	0	0	0	0	651	
12:30 PM	0	0	160	63	3	25	153	0	0	166	0	66	0	0	0	0	636	
12:45 PM	0	0	133	61	1	20	155	0	0	205	0	56	0	0	0	0	631	
Count Total	0	0	1,223	526	8	151	1,215	0	0	1,401	0	536	0	0	0	0	5,060	
Peak Hour	0	0	585	280	5	81	620	0	0	715	0	245	0	0	0	0	2,531	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

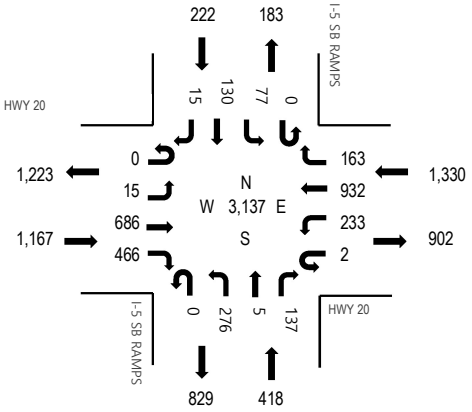
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	7	12	2	0	21	11:00 AM	0	0	0	0	0
11:15 AM	7	4	2	0	13	11:15 AM	0	0	0	0	0
11:30 AM	4	1	1	0	6	11:30 AM	0	0	0	0	0
11:45 AM	8	2	5	0	15	11:45 AM	0	0	0	0	0
12:00 PM	6	3	2	0	11	12:00 PM	0	0	0	0	0
12:15 PM	6	0	3	0	9	12:15 PM	0	0	0	0	0
12:30 PM	7	5	3	0	15	12:30 PM	0	0	0	0	0
12:45 PM	2	7	2	0	11	12:45 PM	0	0	0	0	0
Count Total	47	34	20	0	101	Count Total	0	0	0	0	0
Peak Hour	21	15	10	0	46	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

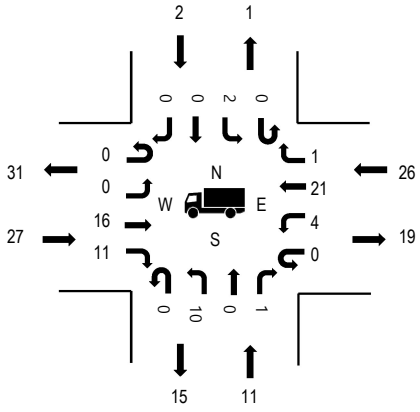
Location: 4 I-5 SB RAMPS & HWY 20 Noon
Date: Saturday, July 13, 2024
Peak Hour: 11:00 AM - 12:00 PM

Peak Hour

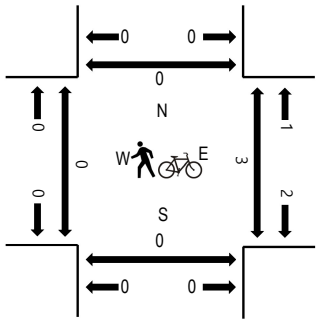
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	2.3%	0.92
WB	2.0%	0.93
NB	2.6%	0.92
SB	0.9%	0.80
All	2.1%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 20 Eastbound				HWY 20 Westbound				I-5 SB RAMPS Northbound				I-5 SB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
11:00 AM	0	1	145	141	1	69	252	36	0	79	0	29	0	17	29	1	800	3,137
11:15 AM	0	6	189	122	0	36	234	49	0	75	2	37	0	19	28	6	803	3,098
11:30 AM	0	3	181	102	1	67	231	31	0	59	1	27	0	23	40	6	772	3,076
11:45 AM	0	5	171	101	0	61	215	47	0	63	2	44	0	18	33	2	762	3,016
12:00 PM	0	0	152	140	1	48	236	49	0	53	1	23	0	23	29	6	761	3,080
12:15 PM	0	0	173	136	0	49	236	41	0	63	1	28	0	24	24	6	781	
12:30 PM	0	2	151	90	1	51	227	42	0	57	1	22	0	32	28	8	712	
12:45 PM	0	4	164	151	0	67	221	40	0	61	3	52	0	28	33	2	826	
Count Total	0	21	1,326	983	4	448	1,852	335	0	510	11	262	0	184	244	37	6,217	
Peak Hour	0	15	686	466	2	233	932	163	0	276	5	137	0	77	130	15	3,137	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	3	4	7	0	14	11:00 AM	0	0	1	0	1
11:15 AM	9	3	7	0	19	11:15 AM	0	0	1	0	1
11:30 AM	9	3	9	1	22	11:30 AM	0	0	1	0	1
11:45 AM	6	1	3	1	11	11:45 AM	0	0	0	0	0
12:00 PM	7	1	2	1	11	12:00 PM	0	0	0	0	0
12:15 PM	6	1	6	1	14	12:15 PM	0	0	0	0	0
12:30 PM	3	2	5	1	11	12:30 PM	0	0	1	0	1
12:45 PM	9	3	4	0	16	12:45 PM	0	0	0	0	0
Count Total	52	18	43	5	118	Count Total	0	0	4	0	4
Peak Hour	27	11	26	2	66	Peak Hour	0	0	3	0	3

Appendix C

Level of Service (LOS) Methodology and Calculations

Level of Service Methodology

Level of Service (LOS) generally refers to the degree of congestion at an intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS.

Signalized Intersection LOS represents the average control delay (sec/veh) and can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The table below outlines the HCM (7th Edition) LOS criteria for signalized intersections.

LOS Criteria for Signalized Intersections[1]

Control Delay (sec/veh)	Level of Service [2]	General Description [3]
≤ 10	A	Exceptionally Favorable Progression (or very short cycle lengths) – Most vehicles arrive during the green indication and travel through the intersection without stopping.
> 10 to ≤ 20	B	Highly Favorable Progression (or short cycle lengths) – While more vehicles than LOS A stop, most vehicles still pass through the intersection without stopping.
> 20 to ≤ 35	C	Favorable Progression (or moderate cycle lengths) – Individual cycle failures begin to appear, but many vehicles still pass through the intersection without stopping.
> 35 to ≤ 55	D	Ineffective Progression (or long cycle lengths) – Many vehicles stop and individual cycle failures are noticeable.
> 55 to ≤ 80	E	Unfavorable Progression (and long cycle lengths) – Individual cycle failures are frequent.
> 80	F	Very Poor Progression (and long cycle lengths) – Most cycles fail to clear the queue at this level.

1 Source: Highway Capacity Manual 7th Edition, Transportation Research Board, 2022.
2 If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group. For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.
3 Individual cycle failures: one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle.

Synchro 12 and/or HCM 2000 LOS methodology may be used when HCM 7th Edition methodology is not supported at an intersection (i.e., intersection geometry and/or custom phasing) or jurisdictional standards require use of an alternative methodology.

Unsignalized Intersection LOS (two-way stop control, all-way stop control, and roundabouts) is based on the average control delay. For two-way stop-controlled intersections, the LOS criteria apply to each controlled minor-street approach, controlled minor-street lane group, and controlled major-street movement (additional v/c ratio criteria apply to lane group LOS only). LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop-controlled intersections. For all-way stop-controlled intersections and roundabouts, LOS can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The table below outlines the HCM (7th Edition) LOS criteria for unsignalized intersections based on these methodologies.

LOS Criteria for Unsignalized Intersections[1]

Control Delay (sec/veh)	Level of Service [2]
≤ 10	A
> 10 to ≤ 15	B
> 15 to ≤ 25	C
> 25 to ≤ 35	D
> 35 to ≤ 50	E
> 50	F

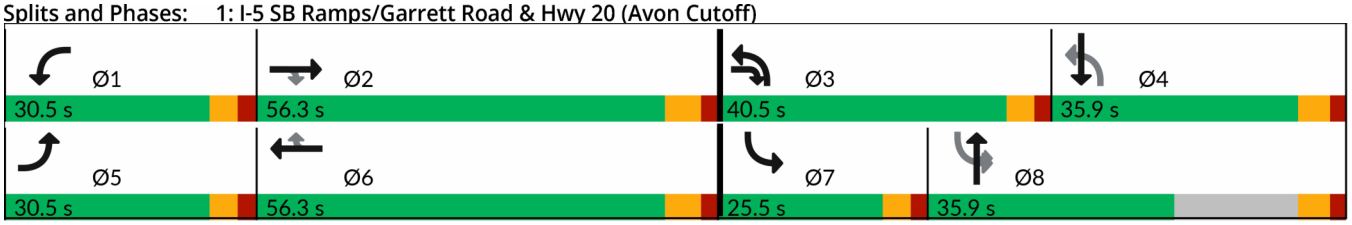
1 Source: Highway Capacity Manual 7th Edition, Transportation Research Board, 2022.
2 If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group. For approach-based and intersection-wide assessments at unsignalized intersections, LOS is defined solely by control delay.

2024 Existing

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	444	313	161	777	117	334	7	118	92	121	16
Future Volume (vph)	11	444	313	161	777	117	334	7	118	92	121	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		829			754			915			551	
Travel Time (s)		12.6			14.7			25.0			15.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	8%	8%	8%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes		
Recall Mode	None	Min	None	None	Min	Min	None	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 163.2	
Actuated Cycle Length: 95.6	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	444	313	161	777	117	334	7	118	92	121	16
Future Volume (veh/h)	11	444	313	161	777	117	334	7	118	92	121	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1600	1600	1600	1600	1600	1641	1641	1641	1709	1709	1709
Adj Flow Rate, veh/h	11	458	323	166	801	121	344	7	122	95	125	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	8	8	8	3	3	3
Cap, veh/h	12	896	699	242	1120	499	472	454	385	501	171	22
Arrive On Green	0.01	0.29	0.29	0.08	0.37	0.37	0.22	0.28	0.28	0.06	0.12	0.12
Sat Flow, veh/h	1524	3040	1356	2956	3040	1356	1563	1641	1391	1628	1485	190
Grp Volume(v), veh/h	11	458	323	166	801	121	344	7	122	95	0	141
Grp Sat Flow(s),veh/h/ln	1524	1520	1356	1478	1520	1356	1563	1641	1391	1628	0	1675
Q Serve(g_s), s	0.6	10.1	12.2	4.4	18.3	5.0	15.1	0.3	5.6	3.3	0.0	6.6
Cycle Q Clear(g_c), s	0.6	10.1	12.2	4.4	18.3	5.0	15.1	0.3	5.6	3.3	0.0	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	12	896	699	242	1120	499	472	454	385	501	0	193
V/C Ratio(X)	0.89	0.51	0.46	0.69	0.72	0.24	0.73	0.02	0.32	0.19	0.00	0.73
Avail Cap(c_a), veh/h	471	1881	1139	915	1881	839	803	609	516	807	0	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	23.7	12.4	36.1	21.9	17.7	23.2	21.2	23.2	18.9	0.0	34.5
Incr Delay (d2), s/veh	74.7	0.6	0.7	2.6	1.2	0.4	1.6	0.0	0.5	0.1	0.0	5.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.4	3.6	1.6	6.2	1.6	5.6	0.1	1.9	1.2	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.8	24.3	13.1	38.6	23.1	18.0	24.8	21.2	23.6	19.0	0.0	39.8
LnGrp LOS	F	C	B	D	C	B	C	C	C	B		D
Approach Vol, veh/h		792			1088			473			236	
Approach Delay, s/veh		21.0			24.9			24.5			31.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	30.1	23.4	15.2	6.2	36.1	10.3	28.3
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	6.4	14.2	17.1	8.6	2.6	20.3	5.3	7.6
Green Ext Time (p_c), s	0.4	6.6	0.7	0.7	0.0	9.5	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

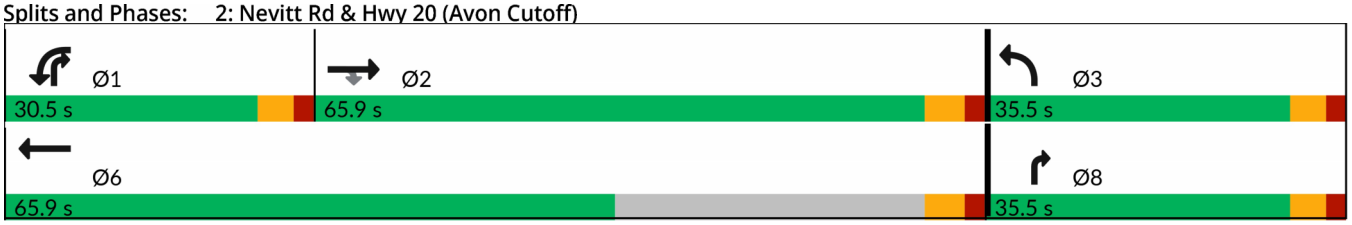
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	515	111	176	882	171	125	
Future Volume (vph)	515	111	176	882	171	125	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	515		205	205	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	754			985	421		
Travel Time (s)	14.7			19.2	11.5		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	12%	12%	10%	10%	12%	12%	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 131.9	
Actuated Cycle Length: 71	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	515	111	176	882	171	125
Future Volume (veh/h)	515	111	176	882	171	125
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1586	1586	1614	1614	1586	1586
Adj Flow Rate, veh/h	554	0	189	948	184	134
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	10	10	12	12
Cap, veh/h	967		236	1804	265	779
Arrive On Green	0.32	0.00	0.15	0.59	0.18	0.18
Sat Flow, veh/h	3093	1344	1537	3146	1511	2366
Grp Volume(v), veh/h	554	0	189	948	184	134
Grp Sat Flow(s),veh/h/ln	1507	1344	1537	1533	1511	1183
Q Serve(g_s), s	7.4	0.0	5.7	8.9	5.5	1.9
Cycle Q Clear(g_c), s	7.4	0.0	5.7	8.9	5.5	1.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	967		236	1804	265	779
V/C Ratio(X)	0.57		0.80	0.53	0.69	0.17
Avail Cap(c_a), veh/h	3743		795	3808	938	1833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.7	5.9	18.7	11.5
Incr Delay (d2), s/veh	0.8	0.0	4.6	0.3	3.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.1	1.7	2.0	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.4	0.0	24.4	6.3	22.0	11.6
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	554			1137	318	
Approach Delay, s/veh	14.4			9.3	17.6	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.9	21.4				34.3	14.0
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	7.7	9.4				10.9	7.5
Green Ext Time (p_c), s	0.3	6.1				12.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.0
HCM 7th LOS	B

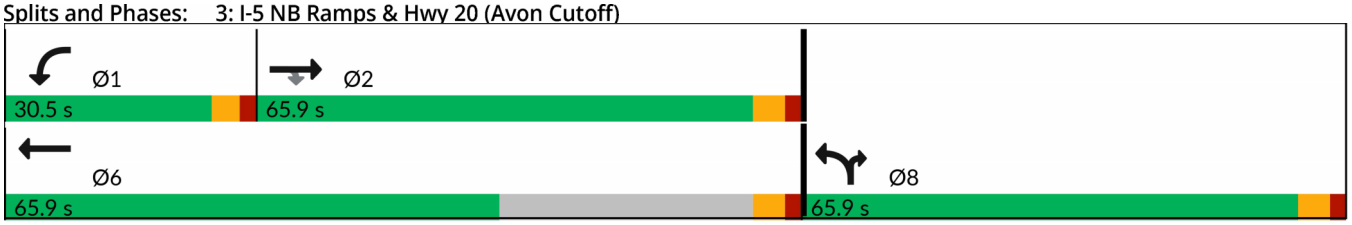
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	338	219	30	512	545	207
Future Volume (vph)	338	219	30	512	545	207
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	985			373	648	
Travel Time (s)	19.2			7.3	17.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	9%	9%	8%	8%	10%	2%
Shared Lane Traffic (%)						10%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 162.3	
Actuated Cycle Length: 59.8	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	338	219	30	512	545	207
Future Volume (veh/h)	338	219	30	512	545	207
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1627	1627	1641	1641	1614	1723
Adj Flow Rate, veh/h	380	0	34	575	612	233
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	9	9	8	8	10	2
Cap, veh/h	762		61	1297	934	444
Arrive On Green	0.25	0.00	0.04	0.42	0.30	0.30
Sat Flow, veh/h	3173	1379	1563	3200	3073	1460
Grp Volume(v), veh/h	380	0	34	575	612	233
Grp Sat Flow(s),veh/h/ln	1546	1379	1563	1559	1537	1460
Q Serve(g_s), s	4.4	0.0	0.9	5.6	7.3	5.6
Cycle Q Clear(g_c), s	4.4	0.0	0.9	5.6	7.3	5.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	762		61	1297	934	444
V/C Ratio(X)	0.50		0.56	0.44	0.66	0.53
Avail Cap(c_a), veh/h	4403		927	4440	4377	2079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.9	8.8	12.7	12.1
Incr Delay (d2), s/veh	0.7	0.0	5.8	0.3	0.8	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.4	1.4	2.2	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.4	0.0	25.7	9.1	13.5	13.1
LnGrp LOS	B		C	A	B	B
Approach Vol, veh/h	380			609	845	
Approach Delay, s/veh	14.4			10.1	13.4	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.1	16.3				23.4	18.7
Change Period (Y+Rc), s	5.5	5.9				5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0				60.0	60.0
Max Q Clear Time (g_c+I1), s	2.9	6.4				7.6	9.3
Green Ext Time (p_c), s	0.0	3.9				6.4	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	12.5
HCM 7th LOS	B

Notes

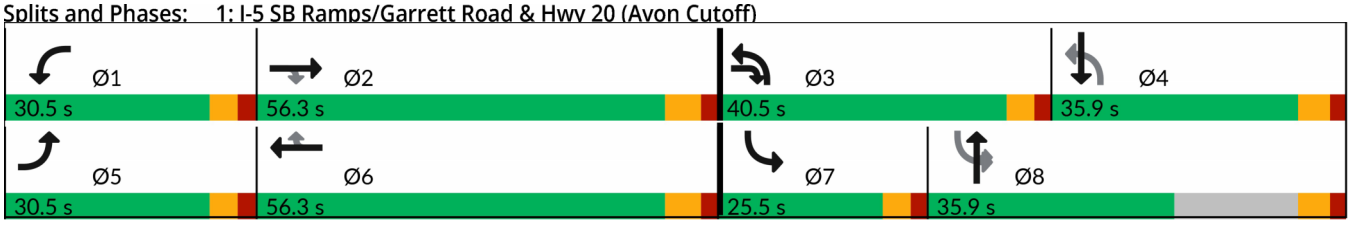
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	864	420	215	843	239	251	12	123	95	185	15
Future Volume (vph)	40	864	420	215	843	239	251	12	123	95	185	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		843			738			872			571	
Travel Time (s)		12.8			14.4			23.8			15.6	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	4%	4%	4%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 163.2
Actuated Cycle Length: 122
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	864	420	215	843	239	251	12	123	95	185	15
Future Volume (veh/h)	40	864	420	215	843	239	251	12	123	95	185	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1709	1709	1709	1695	1695	1695	1736	1736	1736
Adj Flow Rate, veh/h	41	891	433	222	869	246	259	12	127	98	191	15
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	1	1	1
Cap, veh/h	50	1190	755	293	1409	629	364	418	354	474	238	19
Arrive On Green	0.03	0.37	0.37	0.09	0.43	0.43	0.16	0.25	0.25	0.06	0.15	0.15
Sat Flow, veh/h	1602	3195	1425	3158	3247	1448	1615	1695	1435	1654	1589	125
Grp Volume(v), veh/h	41	891	433	222	869	246	259	12	127	98	0	206
Grp Sat Flow(s),veh/h/ln	1602	1598	1425	1579	1624	1448	1615	1695	1435	1654	0	1714
Q Serve(g_s), s	2.6	24.7	20.9	7.0	21.1	11.8	13.5	0.5	7.5	4.4	0.0	11.8
Cycle Q Clear(g_c), s	2.6	24.7	20.9	7.0	21.1	11.8	13.5	0.5	7.5	4.4	0.0	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	50	1190	755	293	1409	629	364	418	354	474	0	257
V/C Ratio(X)	0.82	0.75	0.57	0.76	0.62	0.39	0.71	0.03	0.36	0.21	0.00	0.80
Avail Cap(c_a), veh/h	393	1567	923	774	1593	710	664	499	422	699	0	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.1	27.8	16.2	45.1	22.3	19.7	30.0	29.1	31.7	26.0	0.0	41.9
Incr Delay (d2), s/veh	20.8	1.8	1.0	3.0	0.8	0.6	1.9	0.0	0.6	0.2	0.0	5.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	9.1	6.8	2.8	7.8	4.1	5.4	0.2	2.7	1.8	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.9	29.6	17.2	48.1	23.1	20.2	32.0	29.2	32.3	26.2	0.0	47.6
LnGrp LOS	E	C	B	D	C	C	C	C	C	C		D
Approach Vol, veh/h		1365			1337			398			304	
Approach Delay, s/veh		26.9			26.7			32.0			40.7	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	44.3	21.5	21.2	8.7	50.5	11.7	31.0
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	9.0	26.7	15.5	13.8	4.6	23.1	6.4	9.5
Green Ext Time (p_c), s	0.5	11.2	0.5	1.0	0.0	10.9	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

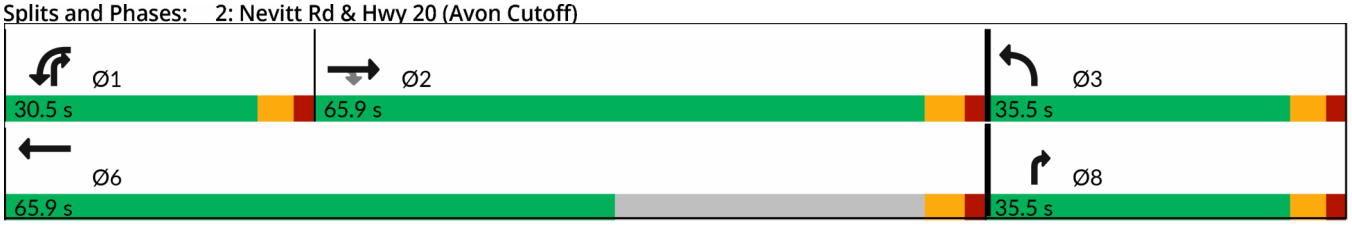
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	946	104	146	1184	133	192	
Future Volume (vph)	946	104	146	1184	133	192	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	515		205	205	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	738			984	396		
Travel Time (s)	14.4			19.2	10.8		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	
Heavy Vehicles (%)	5%	5%	3%	3%	5%	5%	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 131.9	
Actuated Cycle Length: 83	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	946	104	146	1184	133	192
Future Volume (veh/h)	946	104	146	1184	133	192
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1682	1682	1709	1709	1682	1682
Adj Flow Rate, veh/h	975	0	151	1221	137	198
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	3	3	5	5
Cap, veh/h	1505		191	2205	213	628
Arrive On Green	0.47	0.00	0.12	0.68	0.13	0.13
Sat Flow, veh/h	3279	1425	1628	3333	1602	2508
Grp Volume(v), veh/h	975	0	151	1221	137	198
Grp Sat Flow(s),veh/h/ln	1598	1425	1628	1624	1602	1254
Q Serve(g_s), s	14.1	0.0	5.5	11.7	4.9	3.9
Cycle Q Clear(g_c), s	14.1	0.0	5.5	11.7	4.9	3.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1505		191	2205	213	628
V/C Ratio(X)	0.65		0.79	0.55	0.64	0.32
Avail Cap(c_a), veh/h	3159		670	3210	792	1534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	26.1	5.0	24.9	18.5
Incr Delay (d2), s/veh	0.7	0.0	5.4	0.3	3.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	2.2	2.4	2.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.9	0.0	31.4	5.3	28.1	18.8
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	975			1372	335	
Approach Delay, s/veh	12.9			8.2	22.6	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.6	34.5				47.1	13.6
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	16.1				13.7	6.9
Green Ext Time (p_c), s	0.3	12.5				17.6	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	11.7
HCM 7th LOS	B

Notes

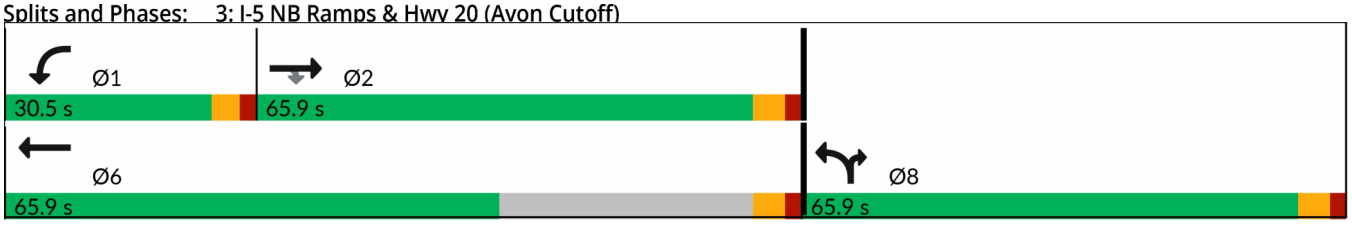
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	654	451	117	751	529	307
Future Volume (vph)	654	451	117	751	529	307
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	984			319	654	
Travel Time (s)	19.2			6.2	17.8	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	2%	2%	4%	4%
Shared Lane Traffic (%)						15%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary

Area Type: Other
Cycle Length: 162.3
Actuated Cycle Length: 96.7
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	654	451	117	751	529	307
Future Volume (veh/h)	654	451	117	751	529	307
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1695	1695	1723	1723	1695	1695
Adj Flow Rate, veh/h	711	0	127	816	604	303
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	2	2	4	4
Cap, veh/h	1118		162	1742	913	406
Arrive On Green	0.35	0.00	0.10	0.53	0.28	0.28
Sat Flow, veh/h	3306	1437	1641	3359	3229	1437
Grp Volume(v), veh/h	711	0	127	816	604	303
Grp Sat Flow(s),veh/h/ln	1611	1437	1641	1637	1615	1437
Q Serve(g_s), s	11.8	0.0	4.8	9.9	10.5	12.2
Cycle Q Clear(g_c), s	11.8	0.0	4.8	9.9	10.5	12.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1118		162	1742	913	406
V/C Ratio(X)	0.64		0.79	0.47	0.66	0.75
Avail Cap(c_a), veh/h	3033		644	3082	3041	1353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	28.1	9.3	20.2	20.8
Incr Delay (d2), s/veh	0.9	0.0	6.1	0.3	0.8	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	2.0	2.9	3.8	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.3	0.0	34.2	9.6	21.0	23.5
LnGrp LOS	B		C	A	C	C
Approach Vol, veh/h	711			943	907	
Approach Delay, s/veh	18.3			12.9	21.8	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.8	28.0			39.8	23.9
Change Period (Y+Rc), s	5.5	5.9			5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0			60.0	60.0
Max Q Clear Time (g_c+I1), s	6.8	13.8			11.9	14.2
Green Ext Time (p_c), s	0.2	8.2			9.9	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	17.6
HCM 7th LOS	B

Notes

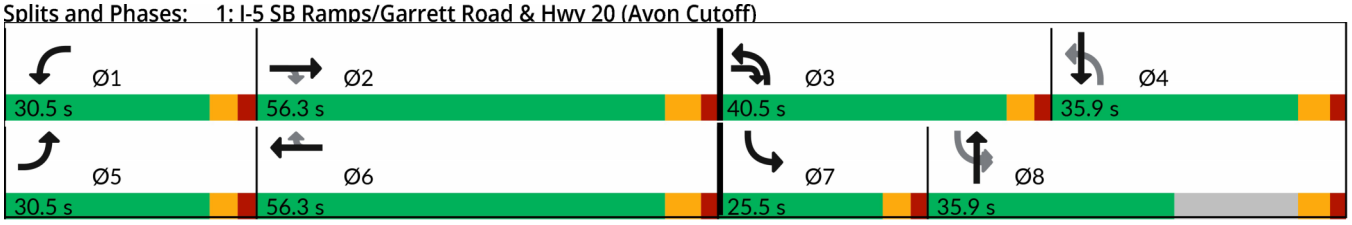
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	686	466	235	932	163	276	5	137	77	130	15
Future Volume (vph)	15	686	466	235	932	163	276	5	137	77	130	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		939			738			872			571	
Travel Time (s)		14.2			14.4			23.8			15.6	
Confl. Peds. (#/hr)									3			3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 163.2
Actuated Cycle Length: 106.3
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	686	466	235	932	163	276	5	137	77	130	15
Future Volume (veh/h)	15	686	466	235	932	163	276	5	137	77	130	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1709	1709	1709	1736	1736	1736
Adj Flow Rate, veh/h	15	700	476	240	951	166	282	5	140	79	133	15
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	1	1	1
Cap, veh/h	17	1161	771	318	1454	649	413	429	363	470	196	22
Arrive On Green	0.01	0.35	0.35	0.10	0.44	0.44	0.17	0.25	0.25	0.05	0.13	0.13
Sat Flow, veh/h	1641	3273	1460	3183	3273	1460	1628	1709	1443	1654	1531	173
Grp Volume(v), veh/h	15	700	476	240	951	166	282	5	140	79	0	148
Grp Sat Flow(s),veh/h/ln	1641	1637	1460	1591	1637	1460	1628	1709	1443	1654	0	1704
Q Serve(g_s), s	0.9	16.7	21.7	7.0	21.6	6.8	13.9	0.2	7.6	3.3	0.0	7.9
Cycle Q Clear(g_c), s	0.9	16.7	21.7	7.0	21.6	6.8	13.9	0.2	7.6	3.3	0.0	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	17	1161	771	318	1454	649	413	429	363	470	0	218
V/C Ratio(X)	0.89	0.60	0.62	0.76	0.65	0.26	0.68	0.01	0.39	0.17	0.00	0.68
Avail Cap(c_a), veh/h	432	1722	1021	837	1722	768	730	539	456	735	0	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.0	25.2	15.7	41.6	20.7	16.6	28.5	26.7	29.5	24.4	0.0	39.6
Incr Delay (d2), s/veh	60.6	0.7	1.2	2.7	0.9	0.3	1.5	0.0	0.7	0.1	0.0	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.1	7.2	2.8	7.9	2.3	5.5	0.1	2.7	1.3	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	107.6	25.9	16.8	44.4	21.6	16.9	30.0	26.7	30.2	24.5	0.0	43.3
LnGrp LOS	F	C	B	D	C	B	C	C	C	C		D
Approach Vol, veh/h		1191			1357			427			227	
Approach Delay, s/veh		23.3			25.0			30.0			36.7	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	40.0	22.0	18.0	6.5	48.5	10.3	29.8
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	9.0	23.7	15.9	9.9	2.9	23.6	5.3	9.6
Green Ext Time (p_c), s	0.5	10.0	0.6	0.8	0.0	11.2	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.9
HCM 7th LOS	C

Notes

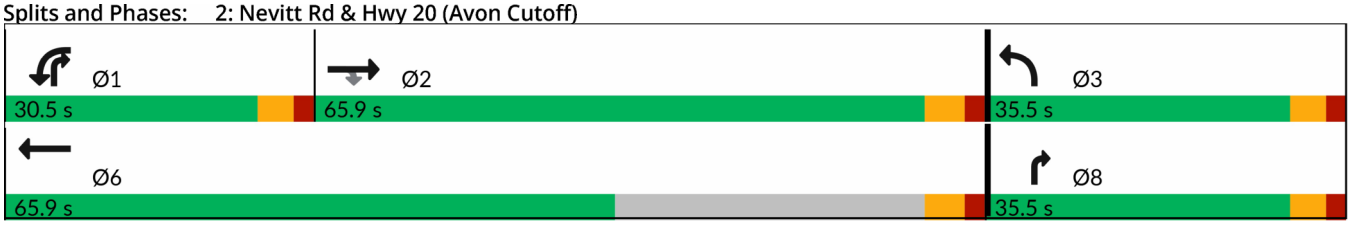
User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	749	80	146	1193	136	130	
Future Volume (vph)	749	80	146	1193	136	130	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	515		205	205	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	738			984	407		
Travel Time (s)	14.4			19.2	11.1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary

Area Type: Other
Cycle Length: 131.9
Actuated Cycle Length: 70.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	749	80	146	1193	136	130
Future Volume (veh/h)	749	80	146	1193	136	130
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	780	0	152	1243	142	135
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1339		195	2085	225	657
Arrive On Green	0.41	0.00	0.12	0.64	0.14	0.14
Sat Flow, veh/h	3359	1460	1641	3359	1641	2569
Grp Volume(v), veh/h	780	0	152	1243	142	135
Grp Sat Flow(s),veh/h/ln	1637	1460	1641	1637	1641	1285
Q Serve(g_s), s	9.3	0.0	4.5	11.2	4.1	2.1
Cycle Q Clear(g_c), s	9.3	0.0	4.5	11.2	4.1	2.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1339		195	2085	225	657
V/C Ratio(X)	0.58		0.78	0.60	0.63	0.21
Avail Cap(c_a), veh/h	3894		813	3894	976	1834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	21.6	5.4	20.6	14.7
Incr Delay (d2), s/veh	0.6	0.0	5.0	0.4	2.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	1.8	2.1	1.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.1	0.0	26.6	5.8	23.5	14.9
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	780			1395	277	
Approach Delay, s/veh	12.1			8.0	19.3	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.5	26.5				38.0	12.4
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	6.5	11.3				13.2	6.1
Green Ext Time (p_c), s	0.3	9.3				18.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	10.6
HCM 7th LOS	B

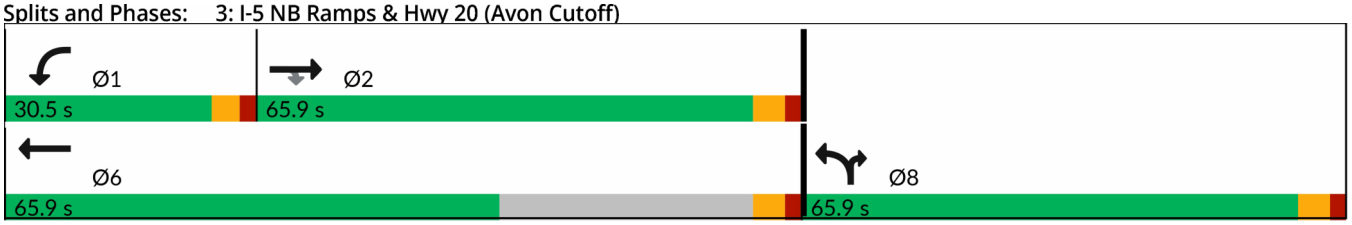
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	585	280	86	620	715	245
Future Volume (vph)	585	280	86	620	715	245
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	984			319	654	
Travel Time (s)	19.2			6.2	17.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Shared Lane Traffic (%)						10%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 162.3	
Actuated Cycle Length: 84.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	585	280	86	620	715	245
Future Volume (veh/h)	585	280	86	620	715	245
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1723	1723	1736	1736	1723	1723
Adj Flow Rate, veh/h	603	0	89	639	737	253
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	1	1	2	2
Cap, veh/h	1018		113	1576	1022	455
Arrive On Green	0.31	0.00	0.07	0.48	0.31	0.31
Sat Flow, veh/h	3359	1460	1654	3386	3281	1460
Grp Volume(v), veh/h	603	0	89	639	737	253
Grp Sat Flow(s),veh/h/ln	1637	1460	1654	1650	1641	1460
Q Serve(g_s), s	8.7	0.0	3.0	7.0	11.2	8.1
Cycle Q Clear(g_c), s	8.7	0.0	3.0	7.0	11.2	8.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1018		113	1576	1022	455
V/C Ratio(X)	0.59		0.79	0.41	0.72	0.56
Avail Cap(c_a), veh/h	3513		739	3540	3521	1567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	25.6	9.5	17.1	16.0
Incr Delay (d2), s/veh	0.8	0.0	8.7	0.2	1.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	1.3	2.0	4.0	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.1	0.0	34.4	9.7	18.1	17.1
LnGrp LOS	B		C	A	B	B
Approach Vol, veh/h	603			728	990	
Approach Delay, s/veh	17.1			12.7	17.8	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	23.3				32.6	23.3
Change Period (Y+Rc), s	5.5	5.9				5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0				60.0	60.0
Max Q Clear Time (g_c+I1), s	5.0	10.7				9.0	13.2
Green Ext Time (p_c), s	0.1	6.7				7.2	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	16.0
HCM 7th LOS	B

Notes

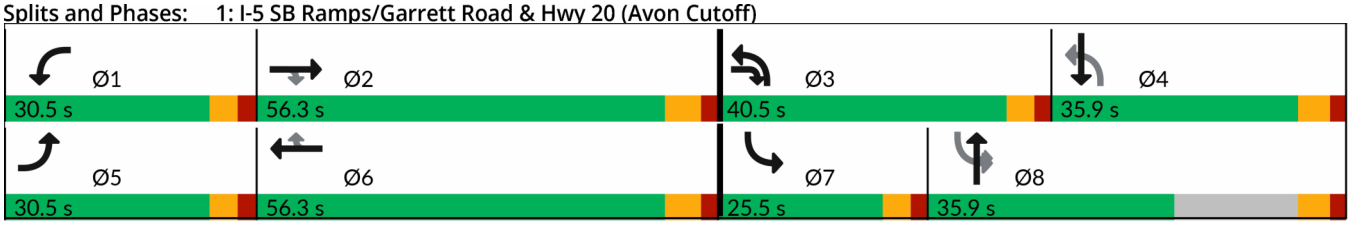
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

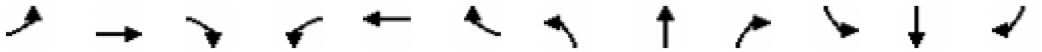
2026 No Action

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	471	332	171	824	124	354	7	125	98	128	17
Future Volume (vph)	12	471	332	171	824	124	354	7	125	98	128	17
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		844			754			914			551	
Travel Time (s)		12.8			14.7			24.9			15.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	8%	8%	8%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 163.2	
Actuated Cycle Length: 102.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	471	332	171	824	124	354	7	125	98	128	17
Future Volume (veh/h)	12	471	332	171	824	124	354	7	125	98	128	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1600	1600	1600	1600	1600	1641	1641	1641	1709	1709	1709
Adj Flow Rate, veh/h	12	486	342	176	849	128	365	7	129	101	132	18
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	8	8	8	3	3	3
Cap, veh/h	13	916	721	249	1146	511	480	471	399	536	175	24
Arrive On Green	0.01	0.30	0.30	0.08	0.38	0.38	0.23	0.29	0.29	0.06	0.12	0.12
Sat Flow, veh/h	1524	3040	1356	2956	3040	1356	1563	1641	1391	1628	1472	201
Grp Volume(v), veh/h	12	486	342	176	849	128	365	7	129	101	0	150
Grp Sat Flow(s),veh/h/ln	1524	1520	1356	1478	1520	1356	1563	1641	1391	1628	0	1673
Q Serve(g_s), s	0.7	11.6	13.8	5.1	21.1	5.7	17.3	0.3	6.4	3.8	0.0	7.6
Cycle Q Clear(g_c), s	0.7	11.6	13.8	5.1	21.1	5.7	17.3	0.3	6.4	3.8	0.0	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	13	916	721	249	1146	511	480	471	399	536	0	198
V/C Ratio(X)	0.91	0.53	0.47	0.71	0.74	0.25	0.76	0.01	0.32	0.19	0.00	0.76
Avail Cap(c_a), veh/h	436	1740	1088	846	1740	776	746	564	478	808	0	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.3	25.4	12.8	39.0	23.5	18.7	24.6	22.3	24.5	19.7	0.0	37.3
Incr Delay (d2), s/veh	75.9	0.7	0.7	2.8	1.4	0.4	1.9	0.0	0.5	0.1	0.0	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.0	4.1	1.9	7.3	1.8	6.5	0.1	2.1	1.4	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	119.2	26.0	13.5	41.7	24.9	19.1	26.5	22.3	24.9	19.9	0.0	43.0
LnGrp LOS	F	C	B	D	C	B	C	C	C	B		D
Approach Vol, veh/h		840			1153			501			251	
Approach Delay, s/veh		22.3			26.8			26.1			33.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	32.6	25.6	16.3	6.3	39.2	10.9	31.0
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	7.1	15.8	19.3	9.6	2.7	23.1	5.8	8.4
Green Ext Time (p_c), s	0.4	7.0	0.8	0.8	0.0	9.8	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.9
HCM 7th LOS	C

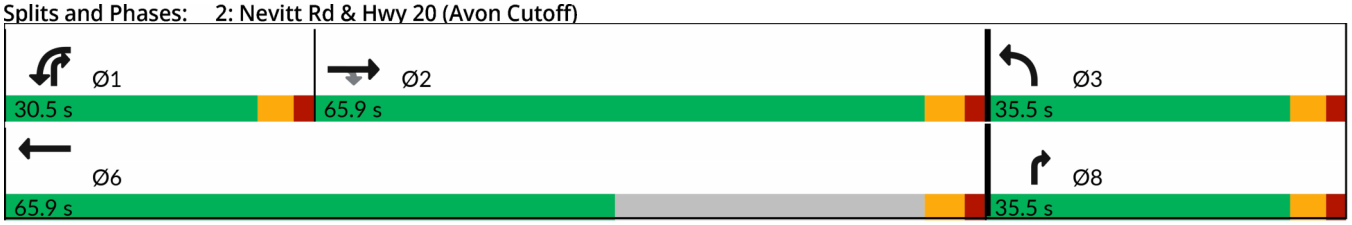
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	546	118	187	936	181	133	
Future Volume (vph)	546	118	187	936	181	133	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	515		205	205	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	754			985	366		
Travel Time (s)	14.7			19.2	10.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	12%	12%	10%	10%	12%	12%	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 131.9	
Actuated Cycle Length: 75.2	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	546	118	187	936	181	133
Future Volume (veh/h)	546	118	187	936	181	133
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1586	1586	1614	1614	1586	1586
Adj Flow Rate, veh/h	587	0	201	1006	195	143
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	10	10	12	12
Cap, veh/h	990		249	1832	274	812
Arrive On Green	0.33	0.00	0.16	0.60	0.18	0.18
Sat Flow, veh/h	3093	1344	1537	3146	1511	2366
Grp Volume(v), veh/h	587	0	201	1006	195	143
Grp Sat Flow(s),veh/h/ln	1507	1344	1537	1533	1511	1183
Q Serve(g_s), s	8.4	0.0	6.5	10.1	6.2	2.2
Cycle Q Clear(g_c), s	8.4	0.0	6.5	10.1	6.2	2.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	990		249	1832	274	812
V/C Ratio(X)	0.59		0.81	0.55	0.71	0.18
Avail Cap(c_a), veh/h	3512		746	3572	880	1762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	0.0	20.8	6.2	19.8	11.8
Incr Delay (d2), s/veh	0.8	0.0	4.6	0.4	3.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	2.4	2.1	2.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.2	0.0	25.4	6.6	23.3	11.9
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	587			1207	338	
Approach Delay, s/veh	15.2			9.7	18.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.9	22.8				36.7	14.8
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	8.5	10.4				12.1	8.2
Green Ext Time (p_c), s	0.4	6.6				13.4	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	12.6
HCM 7th LOS	B

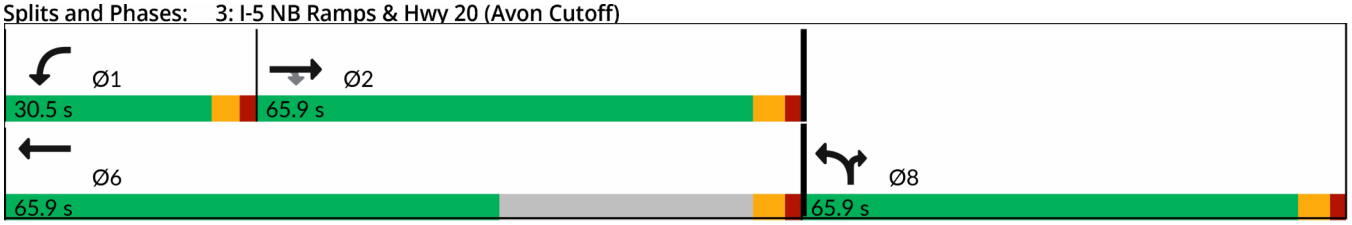
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	359	232	32	543	578	220
Future Volume (vph)	359	232	32	543	578	220
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	985			373	648	
Travel Time (s)	19.2			7.3	17.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	9%	9%	8%	8%	10%	2%
Shared Lane Traffic (%)						10%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 162.3	
Actuated Cycle Length: 63	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	359	232	32	543	578	220
Future Volume (veh/h)	359	232	32	543	578	220
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1627	1627	1641	1641	1614	1723
Adj Flow Rate, veh/h	403	0	36	610	649	247
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	9	9	8	8	10	2
Cap, veh/h	781		63	1302	968	460
Arrive On Green	0.25	0.00	0.04	0.42	0.31	0.31
Sat Flow, veh/h	3173	1379	1563	3200	3073	1460
Grp Volume(v), veh/h	403	0	36	610	649	247
Grp Sat Flow(s),veh/h/ln	1546	1379	1563	1559	1537	1460
Q Serve(g_s), s	4.9	0.0	1.0	6.3	8.1	6.2
Cycle Q Clear(g_c), s	4.9	0.0	1.0	6.3	8.1	6.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	781		63	1302	968	460
V/C Ratio(X)	0.52		0.57	0.47	0.67	0.54
Avail Cap(c_a), veh/h	4204		885	4239	4179	1985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	20.8	9.3	13.1	12.5
Incr Delay (d2), s/veh	0.8	0.0	5.9	0.4	0.8	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.4	1.6	2.5	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.9	0.0	26.7	9.7	13.9	13.4
LnGrp LOS	B		C	A	B	B
Approach Vol, veh/h	403			646	896	
Approach Delay, s/veh	14.9			10.6	13.8	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.3	17.1			24.3	19.8
Change Period (Y+Rc), s	5.5	5.9			5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0			60.0	60.0
Max Q Clear Time (g_c+I1), s	3.0	6.9			8.3	10.1
Green Ext Time (p_c), s	0.0	4.2			6.9	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	13.0
HCM 7th LOS	B

Notes

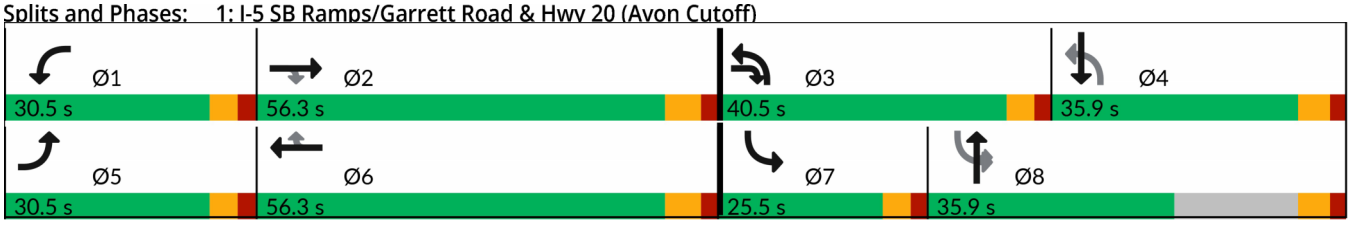
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	917	446	228	894	254	266	13	130	101	196	16
Future Volume (vph)	42	917	446	228	894	254	266	13	130	101	196	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		815			738			872			571	
Travel Time (s)		12.3			14.4			23.8			15.6	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	4%	4%	4%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 163.2
Actuated Cycle Length: 130
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	917	446	228	894	254	266	13	130	101	196	16
Future Volume (veh/h)	42	917	446	228	894	254	266	13	130	101	196	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1709	1709	1709	1695	1695	1695	1736	1736	1736
Adj Flow Rate, veh/h	43	945	460	235	922	262	274	13	134	104	202	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	1	1	1
Cap, veh/h	53	1204	769	301	1426	636	364	432	366	480	245	19
Arrive On Green	0.03	0.38	0.38	0.10	0.44	0.44	0.16	0.25	0.25	0.06	0.15	0.15
Sat Flow, veh/h	1602	3195	1425	3158	3247	1448	1615	1695	1435	1654	1588	126
Grp Volume(v), veh/h	43	945	460	235	922	262	274	13	134	104	0	218
Grp Sat Flow(s),veh/h/ln	1602	1598	1425	1579	1624	1448	1615	1695	1435	1654	0	1713
Q Serve(g_s), s	2.9	28.8	24.2	8.0	24.5	13.7	15.4	0.6	8.5	5.1	0.0	13.6
Cycle Q Clear(g_c), s	2.9	28.8	24.2	8.0	24.5	13.7	15.4	0.6	8.5	5.1	0.0	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	53	1204	769	301	1426	636	364	432	366	480	0	265
V/C Ratio(X)	0.81	0.78	0.60	0.78	0.65	0.41	0.75	0.03	0.37	0.22	0.00	0.82
Avail Cap(c_a), veh/h	363	1449	878	716	1473	657	614	461	391	676	0	466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	30.4	17.3	48.7	24.2	21.2	32.0	30.9	33.8	27.4	0.0	45.1
Incr Delay (d2), s/veh	19.0	2.7	1.2	3.3	1.1	0.6	2.4	0.0	0.6	0.2	0.0	6.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	10.9	8.0	3.3	9.3	4.7	6.3	0.3	3.0	2.0	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.0	33.1	18.4	52.0	25.3	21.8	34.4	30.9	34.4	27.6	0.0	51.5
LnGrp LOS	E	C	B	D	C	C	C	C	C	C		D
Approach Vol, veh/h		1448			1419			421			322	
Approach Delay, s/veh		29.6			29.1			34.3			43.8	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	47.9	23.4	22.9	9.2	54.7	12.4	34.0
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	10.0	30.8	17.4	15.6	4.9	26.5	7.1	10.5
Green Ext Time (p_c), s	0.5	10.7	0.6	1.0	0.0	10.9	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C

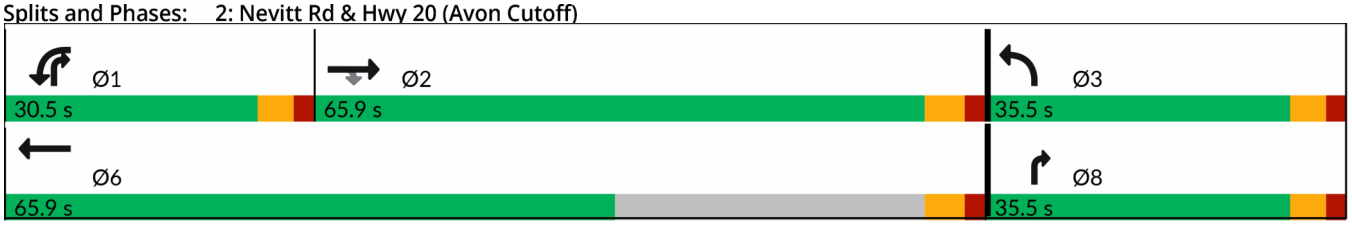
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	1004	110	155	1256	141	204	
Future Volume (vph)	1004	110	155	1256	141	204	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	515		205	205	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	738			984	340		
Travel Time (s)	14.4			19.2	9.3		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	
Heavy Vehicles (%)	5%	5%	3%	3%	5%	5%	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 131.9	
Actuated Cycle Length: 87.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1004	110	155	1256	141	204
Future Volume (veh/h)	1004	110	155	1256	141	204
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1682	1682	1709	1709	1682	1682
Adj Flow Rate, veh/h	1035	0	160	1295	145	210
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	3	3	5	5
Cap, veh/h	1544		200	2241	217	649
Arrive On Green	0.48	0.00	0.12	0.69	0.14	0.14
Sat Flow, veh/h	3279	1425	1628	3333	1602	2508
Grp Volume(v), veh/h	1035	0	160	1295	145	210
Grp Sat Flow(s),veh/h/ln	1598	1425	1628	1624	1602	1254
Q Serve(g_s), s	16.2	0.0	6.3	13.5	5.6	4.4
Cycle Q Clear(g_c), s	16.2	0.0	6.3	13.5	5.6	4.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1544		200	2241	217	649
V/C Ratio(X)	0.67		0.80	0.58	0.67	0.32
Avail Cap(c_a), veh/h	2928		622	2976	734	1458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	27.9	5.2	26.9	19.6
Incr Delay (d2), s/veh	0.7	0.0	5.4	0.3	3.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	2.6	2.8	2.3	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.7	0.0	33.3	5.6	30.4	19.9
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	1035			1455	355	
Approach Delay, s/veh	13.7			8.6	24.2	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.6	37.5				51.1	14.4
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	8.3	18.2				15.5	7.6
Green Ext Time (p_c), s	0.3	13.4				19.0	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	12.4
HCM 7th LOS	B

Notes

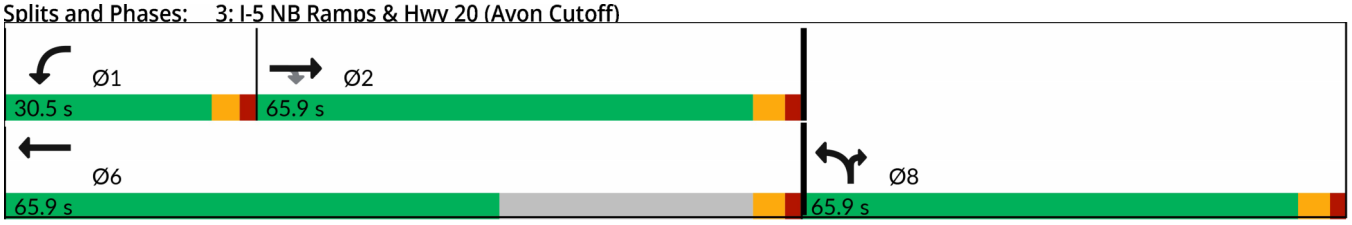
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	694	478	124	797	561	326
Future Volume (vph)	694	478	124	797	561	326
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	984			319	654	
Travel Time (s)	19.2			6.2	17.8	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	2%	2%	4%	4%
Shared Lane Traffic (%)						15%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary

Area Type: Other
Cycle Length: 162.3
Actuated Cycle Length: 104.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	694	478	124	797	561	326
Future Volume (veh/h)	694	478	124	797	561	326
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1695	1695	1723	1723	1695	1695
Adj Flow Rate, veh/h	754	0	135	866	640	321
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	2	2	4	4
Cap, veh/h	1143		171	1761	942	419
Arrive On Green	0.35	0.00	0.10	0.54	0.29	0.29
Sat Flow, veh/h	3306	1437	1641	3359	3229	1437
Grp Volume(v), veh/h	754	0	135	866	640	321
Grp Sat Flow(s),veh/h/ln	1611	1437	1641	1637	1615	1437
Q Serve(g_s), s	13.7	0.0	5.6	11.5	12.1	14.1
Cycle Q Clear(g_c), s	13.7	0.0	5.6	11.5	12.1	14.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1143		171	1761	942	419
V/C Ratio(X)	0.66		0.79	0.49	0.68	0.77
Avail Cap(c_a), veh/h	2788		592	2833	2795	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	30.3	10.1	21.7	22.4
Incr Delay (d2), s/veh	0.9	0.0	6.0	0.3	0.9	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	2.4	3.5	4.5	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.8	0.0	36.3	10.4	22.6	25.4
LnGrp LOS	B		D	B	C	C
Approach Vol, veh/h	754			1001	961	
Approach Delay, s/veh	19.8			13.9	23.5	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.7	30.5			43.2	26.1
Change Period (Y+Rc), s	5.5	5.9			5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0			60.0	60.0
Max Q Clear Time (g_c+I1), s	7.6	15.7			13.5	16.1
Green Ext Time (p_c), s	0.2	8.8			10.7	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Notes

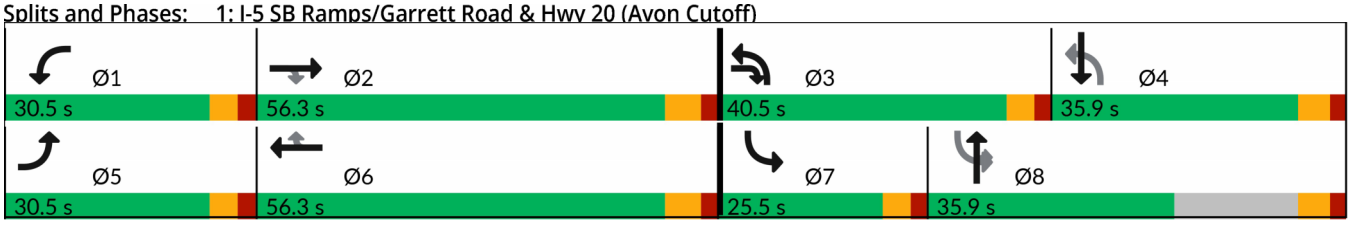
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	728	494	249	989	173	293	5	145	82	138	16
Future Volume (vph)	16	728	494	249	989	173	293	5	145	82	138	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		885			738			872			571	
Travel Time (s)		13.4			14.4			23.8			15.6	
Confl. Peds. (#/hr)									3			3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 163.2
Actuated Cycle Length: 113.3
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	728	494	249	989	173	293	5	145	82	138	16
Future Volume (veh/h)	16	728	494	249	989	173	293	5	145	82	138	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1709	1709	1709	1736	1736	1736
Adj Flow Rate, veh/h	16	743	504	254	1009	177	299	5	148	84	141	16
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	1	1	1
Cap, veh/h	18	1180	790	327	1481	660	415	442	373	475	199	23
Arrive On Green	0.01	0.36	0.36	0.10	0.45	0.45	0.18	0.26	0.26	0.05	0.13	0.13
Sat Flow, veh/h	1641	3273	1460	3183	3273	1460	1628	1709	1443	1654	1530	174
Grp Volume(v), veh/h	16	743	504	254	1009	177	299	5	148	84	0	157
Grp Sat Flow(s),veh/h/ln	1641	1637	1460	1591	1637	1460	1628	1709	1443	1654	0	1704
Q Serve(g_s), s	1.0	19.3	24.8	8.0	25.0	7.8	15.9	0.2	8.7	3.8	0.0	9.1
Cycle Q Clear(g_c), s	1.0	19.3	24.8	8.0	25.0	7.8	15.9	0.2	8.7	3.8	0.0	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	18	1180	790	327	1481	660	415	442	373	475	0	222
V/C Ratio(X)	0.91	0.63	0.64	0.78	0.68	0.27	0.72	0.01	0.40	0.18	0.00	0.71
Avail Cap(c_a), veh/h	400	1595	975	775	1595	711	676	500	422	710	0	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.7	27.1	16.5	44.9	22.2	17.5	30.4	28.3	31.4	25.7	0.0	42.8
Incr Delay (d2), s/veh	63.6	0.8	1.3	3.0	1.3	0.3	1.8	0.0	0.7	0.1	0.0	4.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	7.2	8.3	3.2	9.4	2.7	6.4	0.1	3.1	1.5	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.3	27.9	17.8	47.9	23.5	17.8	32.2	28.3	32.1	25.8	0.0	46.9
LnGrp LOS	F	C	B	D	C	B	C	C	C	C		D
Approach Vol, veh/h		1263			1440			452			241	
Approach Delay, s/veh		25.0			27.1			32.1			39.5	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	43.3	24.0	19.3	6.6	52.7	10.9	32.4
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	10.0	26.8	17.9	11.1	3.0	27.0	5.8	10.7
Green Ext Time (p_c), s	0.6	10.2	0.6	0.8	0.0	11.2	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C

Notes

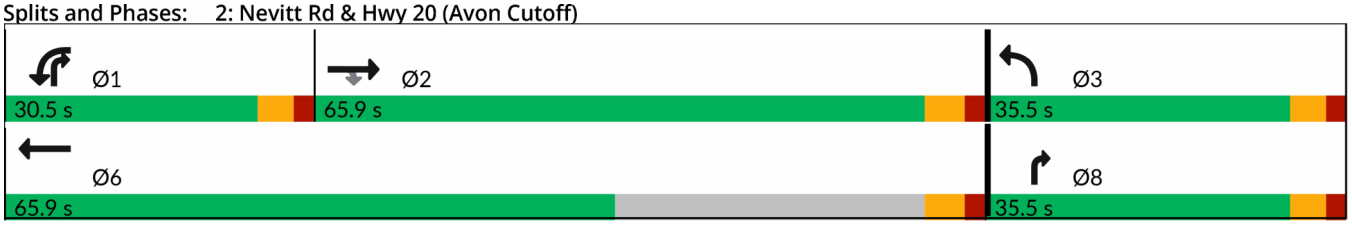
User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	795	85	155	1266	144	138	
Future Volume (vph)	795	85	155	1266	144	138	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	515		205	205	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	738			984	593		
Travel Time (s)	14.4			19.2	16.2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary

Area Type: Other
Cycle Length: 131.9
Actuated Cycle Length: 75
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	795	85	155	1266	144	138
Future Volume (veh/h)	795	85	155	1266	144	138
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	828	0	161	1319	150	144
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1376		205	2120	230	682
Arrive On Green	0.42	0.00	0.13	0.65	0.14	0.14
Sat Flow, veh/h	3359	1460	1641	3359	1641	2569
Grp Volume(v), veh/h	828	0	161	1319	150	144
Grp Sat Flow(s),veh/h/ln	1637	1460	1641	1637	1641	1285
Q Serve(g_s), s	10.6	0.0	5.1	12.8	4.7	2.3
Cycle Q Clear(g_c), s	10.6	0.0	5.1	12.8	4.7	2.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1376		205	2120	230	682
V/C Ratio(X)	0.60		0.78	0.62	0.65	0.21
Avail Cap(c_a), veh/h	3650		762	3650	915	1754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	22.8	5.6	21.9	15.4
Incr Delay (d2), s/veh	0.6	0.0	4.9	0.4	3.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	2.1	2.5	1.9	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.7	0.0	27.7	6.0	25.0	15.5
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	828			1480	294	
Approach Delay, s/veh	12.7			8.4	20.3	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.2	28.5				40.7	13.1
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	7.1	12.6				14.8	6.7
Green Ext Time (p_c), s	0.3	10.1				19.6	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.1
HCM 7th LOS	B

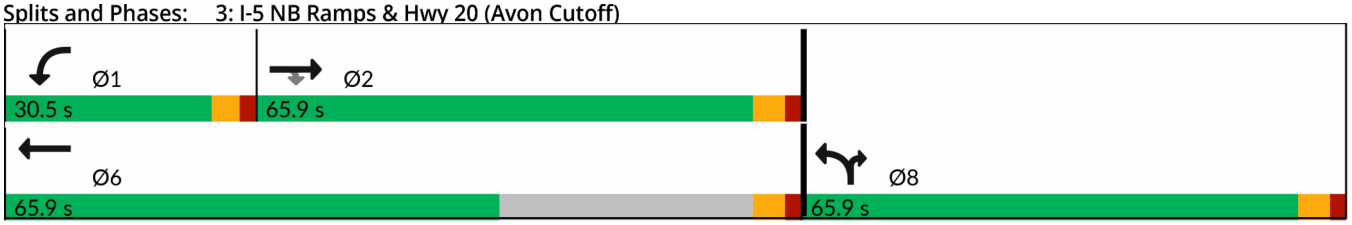
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	621	297	91	658	759	260
Future Volume (vph)	621	297	91	658	759	260
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	984			319	654	
Travel Time (s)	19.2			6.2	17.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Shared Lane Traffic (%)						10%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 162.3	
Actuated Cycle Length: 92.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	621	297	91	658	759	260
Future Volume (veh/h)	621	297	91	658	759	260
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1723	1723	1736	1736	1723	1723
Adj Flow Rate, veh/h	640	0	94	678	782	268
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	1	1	2	2
Cap, veh/h	1042		120	1591	1056	470
Arrive On Green	0.32	0.00	0.07	0.48	0.32	0.32
Sat Flow, veh/h	3359	1460	1654	3386	3281	1460
Grp Volume(v), veh/h	640	0	94	678	782	268
Grp Sat Flow(s),veh/h/ln	1637	1460	1654	1650	1641	1460
Q Serve(g_s), s	10.0	0.0	3.4	8.1	12.8	9.2
Cycle Q Clear(g_c), s	10.0	0.0	3.4	8.1	12.8	9.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1042		120	1591	1056	470
V/C Ratio(X)	0.61		0.78	0.43	0.74	0.57
Avail Cap(c_a), veh/h	3264		687	3289	3272	1456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	27.4	10.2	18.2	17.0
Incr Delay (d2), s/veh	0.8	0.0	8.1	0.3	1.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	1.5	2.4	4.6	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.2	0.0	35.5	10.4	19.2	18.0
LnGrp LOS	B		D	B	B	B
Approach Vol, veh/h	640			772	1050	
Approach Delay, s/veh	18.2			13.5	18.9	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.9	25.1			34.9	25.3
Change Period (Y+Rc), s	5.5	5.9			5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0			60.0	60.0
Max Q Clear Time (g_c+I1), s	5.4	12.0			10.1	14.8
Green Ext Time (p_c), s	0.1	7.2			7.8	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B

Notes

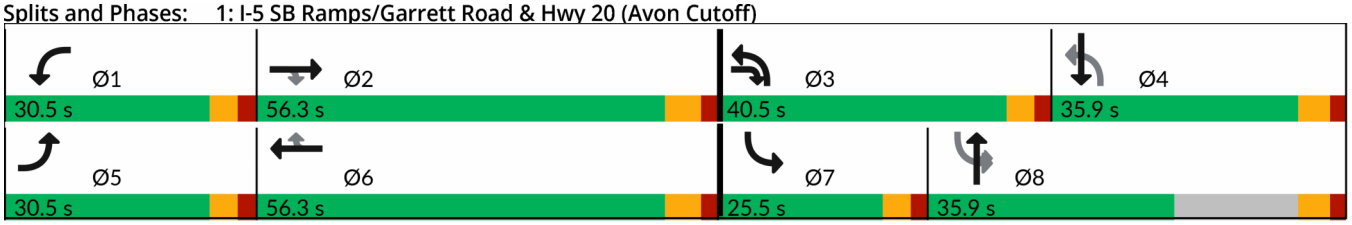
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

2026 With Project

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	475	332	178	828	124	354	7	133	98	128	17
Future Volume (vph)	12	475	332	178	828	124	354	7	133	98	128	17
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		901			754			925			551	
Travel Time (s)		13.7			14.7			25.2			15.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	8%	8%	8%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 163.2	
Actuated Cycle Length: 103	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	475	332	178	828	124	354	7	133	98	128	17
Future Volume (veh/h)	12	475	332	178	828	124	354	7	133	98	128	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1600	1600	1600	1600	1600	1641	1641	1641	1709	1709	1709
Adj Flow Rate, veh/h	12	490	342	184	854	128	365	7	137	101	132	18
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	11	11	11	11	11	11	8	8	8	3	3	3
Cap, veh/h	13	911	719	257	1150	513	479	471	399	533	174	24
Arrive On Green	0.01	0.30	0.30	0.09	0.38	0.38	0.23	0.29	0.29	0.06	0.12	0.12
Sat Flow, veh/h	1524	3040	1356	2956	3040	1356	1563	1641	1391	1628	1472	201
Grp Volume(v), veh/h	12	490	342	184	854	128	365	7	137	101	0	150
Grp Sat Flow(s),veh/h/ln	1524	1520	1356	1478	1520	1356	1563	1641	1391	1628	0	1673
Q Serve(g_s), s	0.7	11.8	13.9	5.3	21.3	5.7	17.4	0.3	6.8	3.8	0.0	7.6
Cycle Q Clear(g_c), s	0.7	11.8	13.9	5.3	21.3	5.7	17.4	0.3	6.8	3.8	0.0	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	13	911	719	257	1150	513	479	471	399	533	0	198
V/C Ratio(X)	0.91	0.54	0.48	0.72	0.74	0.25	0.76	0.01	0.34	0.19	0.00	0.76
Avail Cap(c_a), veh/h	434	1733	1085	843	1733	773	743	561	476	804	0	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.4	25.6	13.0	39.0	23.6	18.7	24.8	22.4	24.7	19.8	0.0	37.4
Incr Delay (d2), s/veh	76.1	0.7	0.7	2.8	1.4	0.4	1.9	0.0	0.5	0.1	0.0	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.0	4.2	2.0	7.4	1.8	6.5	0.1	2.3	1.4	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	119.5	26.3	13.7	41.7	25.0	19.1	26.6	22.4	25.2	20.0	0.0	43.2
LnGrp LOS	F	C	B	D	C	B	C	C	C	B		D
Approach Vol, veh/h		844			1166			509			251	
Approach Delay, s/veh		22.5			27.0			26.2			33.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	32.6	25.7	16.3	6.3	39.5	10.9	31.1
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	7.3	15.9	19.4	9.6	2.7	23.3	5.8	8.8
Green Ext Time (p_c), s	0.4	7.1	0.8	0.8	0.0	9.9	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	26.1
HCM 7th LOS	C

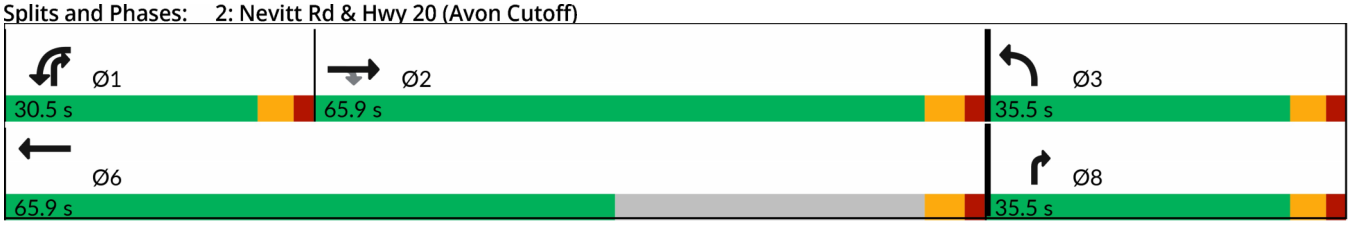
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	547	129	217	918	208	138	
Future Volume (vph)	547	129	217	918	208	138	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	325		75	205	
Storage Lanes		1	1		1	0	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	754			349	262		
Travel Time (s)	14.7			6.8	7.1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	12%	12%	10%	10%	12%	12%	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 131.9	
Actuated Cycle Length: 70.2	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	547	129	217	918	208	138
Future Volume (veh/h)	547	129	217	918	208	138
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1586	1586	1614	1614	1586	1586
Adj Flow Rate, veh/h	588	0	233	987	224	148
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	10	10	12	12
Cap, veh/h	999		286	1921	433	449
Arrive On Green	0.33	0.00	0.19	0.63	0.15	0.15
Sat Flow, veh/h	3093	1344	1537	3146	2931	1344
Grp Volume(v), veh/h	588	0	233	987	224	148
Grp Sat Flow(s),veh/h/ln	1507	1344	1537	1533	1465	1344
Q Serve(g_s), s	8.2	0.0	7.3	9.0	3.6	4.2
Cycle Q Clear(g_c), s	8.2	0.0	7.3	9.0	3.6	4.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	999		286	1921	433	449
V/C Ratio(X)	0.59		0.81	0.51	0.52	0.33
Avail Cap(c_a), veh/h	3581		761	3642	1741	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	19.7	5.2	19.9	12.6
Incr Delay (d2), s/veh	0.8	0.0	4.2	0.3	1.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	2.6	1.6	1.2	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.8	0.0	23.9	5.5	20.8	13.0
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	588			1220	372	
Approach Delay, s/veh	14.8			9.0	17.7	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.9	22.6				37.5	13.0
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	9.3	10.2				11.0	6.2
Green Ext Time (p_c), s	0.4	6.6				13.1	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	12.1
HCM 7th LOS	B

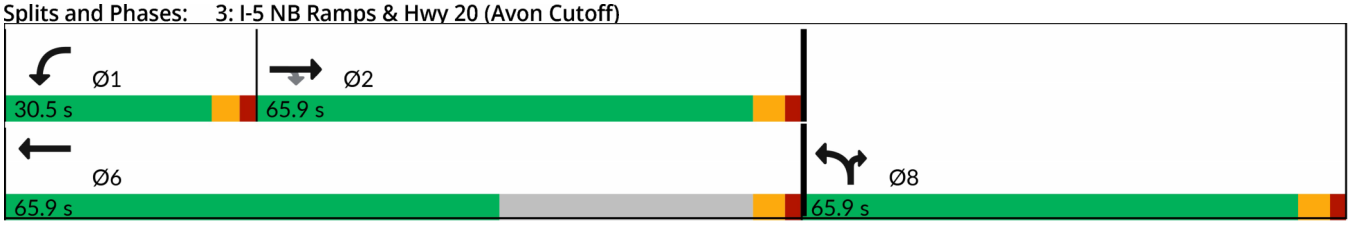
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	363	240	32	547	586	220
Future Volume (vph)	363	240	32	547	586	220
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	636			373	648	
Travel Time (s)	12.4			7.3	17.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	9%	9%	8%	8%	10%	2%
Shared Lane Traffic (%)						10%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 162.3	
Actuated Cycle Length: 63.9	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	363	240	32	547	586	220
Future Volume (veh/h)	363	240	32	547	586	220
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1627	1627	1641	1641	1614	1723
Adj Flow Rate, veh/h	408	0	36	615	658	247
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	9	9	8	8	10	2
Cap, veh/h	785		63	1303	975	463
Arrive On Green	0.25	0.00	0.04	0.42	0.32	0.32
Sat Flow, veh/h	3173	1379	1563	3200	3073	1460
Grp Volume(v), veh/h	408	0	36	615	658	247
Grp Sat Flow(s),veh/h/ln	1546	1379	1563	1559	1537	1460
Q Serve(g_s), s	5.1	0.0	1.0	6.4	8.3	6.2
Cycle Q Clear(g_c), s	5.1	0.0	1.0	6.4	8.3	6.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	785		63	1303	975	463
V/C Ratio(X)	0.52		0.57	0.47	0.67	0.53
Avail Cap(c_a), veh/h	4164		877	4199	4139	1966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	21.0	9.4	13.2	12.5
Incr Delay (d2), s/veh	0.8	0.0	5.9	0.4	0.8	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.4	1.6	2.5	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.0	0.0	26.9	9.8	14.0	13.5
LnGrp LOS	B		C	A	B	B
Approach Vol, veh/h	408			651	905	
Approach Delay, s/veh	15.0			10.7	13.9	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.3	17.2			24.5	20.0
Change Period (Y+Rc), s	5.5	5.9			5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0			60.0	60.0
Max Q Clear Time (g_c+I1), s	3.0	7.1			8.4	10.3
Green Ext Time (p_c), s	0.0	4.3			6.9	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	13.1
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	0	22	3	0	32	6	219	3	41	245	59
Future Volume (vph)	95	0	22	3	0	32	6	219	3	41	245	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	50		0	50		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		159			251			251			262	
Travel Time (s)		4.3			6.8			6.8			7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	12%	12%	12%	0%	0%	0%	11%	11%	11%	14%	14%	14%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	0	22	3	0	32	6	219	3	41	245	59
Future Vol, veh/h	95	0	22	3	0	32	6	219	3	41	245	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	0	0	0	11	11	11	14	14	14
Mvmt Flow	103	0	24	3	0	35	7	238	3	45	266	64

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	639	642	298	608	672	240	330	0	0	241	0	0
Stage 1	388	388	-	253	253	-	-	-	-	-	-	-
Stage 2	251	254	-	355	420	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.62	6.32	7.1	6.5	6.2	4.21	-	-	4.24	-	-
Critical Hdwy Stg 1	6.22	5.62	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.62	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	3.5	4	3.3	2.299	-	-	2.326	-	-
Pot Cap-1 Maneuver	375	380	718	411	380	804	1180	-	-	1258	-	-
Stage 1	616	592	-	756	702	-	-	-	-	-	-	-
Stage 2	731	679	-	666	593	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	344	364	718	381	364	804	1180	-	-	1258	-	-
Mov Cap-2 Maneuver	344	364	-	381	364	-	-	-	-	-	-	-
Stage 1	595	571	-	752	698	-	-	-	-	-	-	-
Stage 2	696	675	-	621	572	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	19.07	10.17	0.21	0.95
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1180	-	-	382	734	1258	-	-
HCM Lane V/C Ratio	0.006	-	-	0.333	0.052	0.035	-	-
HCM Ctrl Dly (s/v)	8.1	-	-	19.1	10.2	8	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0.2	0.1	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	675	11	0	1135	0	16
Future Volume (vph)	675	11	0	1135	0	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1900	1900
Link Speed (mph)	35			35	25	
Link Distance (ft)	349			636	197	
Travel Time (s)	6.8			12.4	5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	10%	10%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	675	11	0	1135	0	16
Future Vol, veh/h	675	11	0	1135	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	0	0
Mvmt Flow	734	12	0	1234	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	373
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	630
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	630
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	10.87
HCM LOS			B

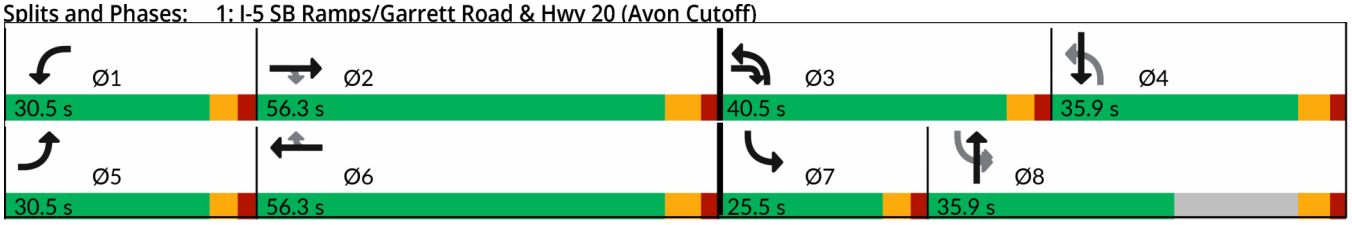
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	630	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-
HCM Ctrl Dly (s/v)	10.9	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	927	446	246	903	254	266	13	149	101	196	16
Future Volume (vph)	42	927	446	246	903	254	266	13	149	101	196	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		1006			738			872			571	
Travel Time (s)		15.2			14.4			23.8			15.6	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	4%	4%	4%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 163.2
Actuated Cycle Length: 132.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	927	446	246	903	254	266	13	149	101	196	16
Future Volume (veh/h)	42	927	446	246	903	254	266	13	149	101	196	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1709	1709	1709	1695	1695	1695	1736	1736	1736
Adj Flow Rate, veh/h	43	956	460	254	931	262	274	13	154	104	202	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	1	1	1
Cap, veh/h	53	1203	768	319	1443	644	361	431	364	472	244	19
Arrive On Green	0.03	0.38	0.38	0.10	0.44	0.44	0.16	0.25	0.25	0.06	0.15	0.15
Sat Flow, veh/h	1602	3195	1425	3158	3247	1448	1615	1695	1435	1654	1588	126
Grp Volume(v), veh/h	43	956	460	254	931	262	274	13	154	104	0	218
Grp Sat Flow(s),veh/h/ln	1602	1598	1425	1579	1624	1448	1615	1695	1435	1654	0	1713
Q Serve(g_s), s	3.0	30.0	24.7	8.8	25.1	13.8	15.7	0.6	10.1	5.2	0.0	13.9
Cycle Q Clear(g_c), s	3.0	30.0	24.7	8.8	25.1	13.8	15.7	0.6	10.1	5.2	0.0	13.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	53	1203	768	319	1443	644	361	431	364	472	0	264
V/C Ratio(X)	0.81	0.79	0.60	0.80	0.65	0.41	0.76	0.03	0.42	0.22	0.00	0.83
Avail Cap(c_a), veh/h	356	1420	865	701	1443	644	601	452	383	662	0	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.1	31.2	17.7	49.4	24.4	21.2	32.8	31.6	35.1	28.1	0.0	46.2
Incr Delay (d2), s/veh	18.9	3.1	1.2	3.4	1.1	0.6	2.5	0.0	0.8	0.2	0.0	6.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	11.4	8.2	3.6	9.5	4.8	6.4	0.3	3.6	2.1	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.0	34.3	18.9	52.8	25.5	21.8	35.2	31.6	35.9	28.2	0.0	52.6
LnGrp LOS	E	C	B	D	C	C	D	C	D	C		D
Approach Vol, veh/h		1459			1447			441			322	
Approach Delay, s/veh		30.6			29.6			35.4			44.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	48.7	23.8	23.2	9.2	56.3	12.5	34.5
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	10.8	32.0	17.7	15.9	5.0	27.1	7.2	12.1
Green Ext Time (p_c), s	0.5	10.4	0.6	1.0	0.0	10.9	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	32.0
HCM 7th LOS	C

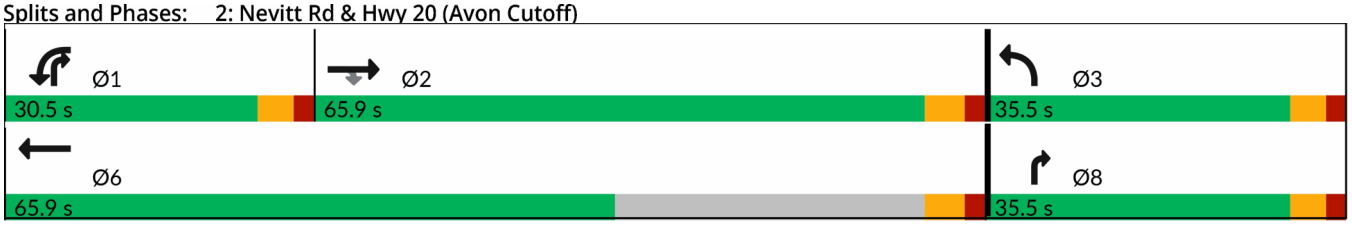
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	1001	142	229	1212	209	219	
Future Volume (vph)	1001	142	229	1212	209	219	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	325		75	205	
Storage Lanes		1	1		1	0	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	738			349	262		
Travel Time (s)	14.4			6.8	7.1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	
Heavy Vehicles (%)	5%	5%	3%	3%	5%	5%	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 131.9	
Actuated Cycle Length: 94.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1001	142	229	1212	209	219
Future Volume (veh/h)	1001	142	229	1212	209	219
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1682	1682	1709	1709	1682	1682
Adj Flow Rate, veh/h	1032	0	236	1249	215	226
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	3	3	5	5
Cap, veh/h	1436		276	2235	524	482
Arrive On Green	0.45	0.00	0.17	0.69	0.17	0.17
Sat Flow, veh/h	3279	1425	1628	3333	3107	1425
Grp Volume(v), veh/h	1032	0	236	1249	215	226
Grp Sat Flow(s),veh/h/ln	1598	1425	1628	1624	1554	1425
Q Serve(g_s), s	20.9	0.0	11.2	15.5	4.9	9.9
Cycle Q Clear(g_c), s	20.9	0.0	11.2	15.5	4.9	9.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1436		276	2235	524	482
V/C Ratio(X)	0.72		0.85	0.56	0.41	0.47
Avail Cap(c_a), veh/h	2408		511	2447	1171	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	32.1	6.3	29.6	20.7
Incr Delay (d2), s/veh	1.0	0.0	5.6	0.3	0.5	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	4.6	4.0	1.9	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.8	0.0	37.7	6.6	30.1	21.4
LnGrp LOS	B		D	A	C	C
Approach Vol, veh/h	1032			1485	441	
Approach Delay, s/veh	18.8			11.6	25.6	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	19.0	41.7			60.7	18.9
Change Period (Y+Rc), s	5.5	5.9			5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0			60.0	30.0
Max Q Clear Time (g_c+I1), s	13.2	22.9			17.5	11.9
Green Ext Time (p_c), s	0.4	12.9			17.6	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	16.2
HCM 7th LOS	B

Notes

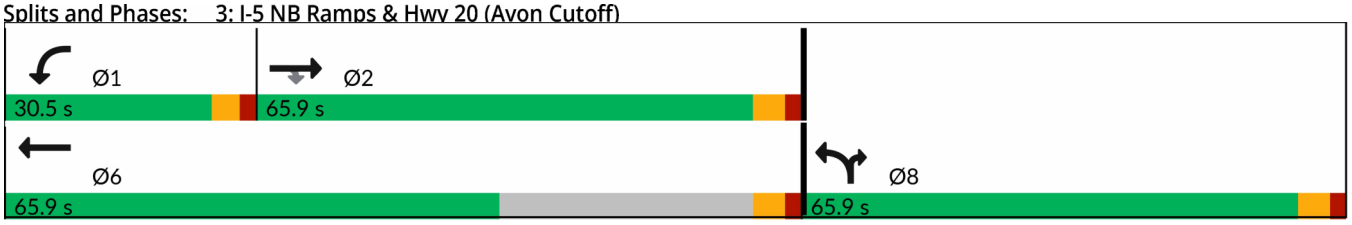
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	703	496	124	807	581	326
Future Volume (vph)	703	496	124	807	581	326
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	635			319	654	
Travel Time (s)	12.4			6.2	17.8	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	2%	2%	4%	4%
Shared Lane Traffic (%)						14%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary

Area Type: Other
Cycle Length: 162.3
Actuated Cycle Length: 107.2
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	703	496	124	807	581	326
Future Volume (veh/h)	703	496	124	807	581	326
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1695	1695	1723	1723	1695	1695
Adj Flow Rate, veh/h	764	0	135	877	656	329
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	2	2	4	4
Cap, veh/h	1147		170	1759	957	426
Arrive On Green	0.36	0.00	0.10	0.54	0.30	0.30
Sat Flow, veh/h	3306	1437	1641	3359	3229	1437
Grp Volume(v), veh/h	764	0	135	877	656	329
Grp Sat Flow(s),veh/h/ln	1611	1437	1641	1637	1615	1437
Q Serve(g_s), s	14.2	0.0	5.7	12.0	12.7	14.8
Cycle Q Clear(g_c), s	14.2	0.0	5.7	12.0	12.7	14.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1147		170	1759	957	426
V/C Ratio(X)	0.67		0.79	0.50	0.69	0.77
Avail Cap(c_a), veh/h	2723		578	2766	2729	1214
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	0.0	31.1	10.4	22.0	22.8
Incr Delay (d2), s/veh	1.0	0.0	6.1	0.3	0.9	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	2.4	3.7	4.7	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	20.3	0.0	37.1	10.7	22.9	25.8
LnGrp LOS	C		D	B	C	C
Approach Vol, veh/h	764			1012	985	
Approach Delay, s/veh	20.3			14.2	23.9	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.9	31.2				44.0	26.9
Change Period (Y+Rc), s	5.5	5.9				5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0				60.0	60.0
Max Q Clear Time (g_c+I1), s	7.7	16.2				14.0	16.8
Green Ext Time (p_c), s	0.2	8.9				10.8	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.3
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	0	13	6	0	83	19	265	7	106	226	39
Future Volume (vph)	80	0	13	6	0	83	19	265	7	106	226	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	50		0	50		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		159			251			251			262	
Travel Time (s)		4.3			6.8			6.8			7.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	0	13	6	0	83	19	265	7	106	226	39
Future Vol, veh/h	80	0	13	6	0	83	19	265	7	106	226	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	0	0	0	5	5	5	6	6	6
Mvmt Flow	84	0	14	6	0	87	20	279	7	112	238	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	801	808	258	784	825	283	279	0	0	286	0	0
Stage 1	482	482	-	323	323	-	-	-	-	-	-	-
Stage 2	319	326	-	461	502	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.1	6.5	6.2	4.15	-	-	4.16	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.5	4	3.3	2.245	-	-	2.254	-	-
Pot Cap-1 Maneuver	301	313	775	313	310	761	1267	-	-	1253	-	-
Stage 1	562	550	-	694	654	-	-	-	-	-	-	-
Stage 2	688	645	-	584	545	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	239	280	775	276	278	761	1267	-	-	1253	-	-
Mov Cap-2 Maneuver	239	280	-	276	278	-	-	-	-	-	-	-
Stage 1	512	501	-	683	644	-	-	-	-	-	-	-
Stage 2	600	634	-	523	497	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	26.45	11.13	0.52	2.33
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1267	-	-	264	680	1253	-	-
HCM Lane V/C Ratio	0.016	-	-	0.371	0.138	0.089	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	26.4	11.1	8.2	-	-
HCM Lane LOS	A	-	-	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.6	0.5	0.3	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1187	33	0	1441	0	45
Future Volume (vph)	1187	33	0	1441	0	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1900	1900
Link Speed (mph)	35			35	25	
Link Distance (ft)	349			635	192	
Travel Time (s)	6.8			12.4	5.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1187	33	0	1441	0	45
Future Vol, veh/h	1187	33	0	1441	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	3	3	0	0
Mvmt Flow	1290	36	0	1566	0	49

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	663
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	408
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	408
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	15.01
HCM LOS			C

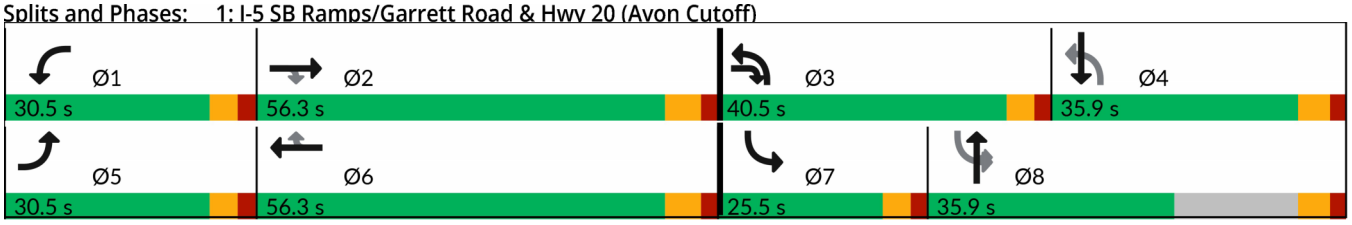
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	408	-	-	-
HCM Lane V/C Ratio	0.12	-	-	-
HCM Ctrl Dly (s/v)	15	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	741	494	274	1001	173	293	5	171	82	138	16
Future Volume (vph)	16	741	494	274	1001	173	293	5	171	82	138	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		500	385		365	725		240	365		0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			35			25			25	
Link Distance (ft)		893			738			872			571	
Travel Time (s)		13.5			14.4			23.8			15.6	
Confl. Peds. (#/hr)									3			3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2			6	4		8	8		
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	7.0	3.0	3.0	7.0	7.0	3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.5	50.3	8.5	8.5	45.3	45.3	8.5	47.9	47.9	8.5	48.9	
Total Split (s)	30.5	56.3	40.5	30.5	56.3	56.3	40.5	35.9	35.9	25.5	35.9	
Total Split (%)	18.7%	34.5%	24.8%	18.7%	34.5%	34.5%	24.8%	22.0%	22.0%	15.6%	22.0%	
Yellow Time (s)	3.5	4.3	3.5	3.5	4.3	4.3	3.5	3.9	3.9	3.5	3.9	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.3	5.5	5.5	6.3	6.3	5.5	5.9	5.9	5.5	5.9	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	Min	None	None	Min	Min	None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 163.2
Actuated Cycle Length: 116.8
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: I-5 SB Ramps/Garrett Road & Hwy 20 (Avon Cutoff)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	741	494	274	1001	173	293	5	171	82	138	16
Future Volume (veh/h)	16	741	494	274	1001	173	293	5	171	82	138	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1709	1709	1709	1736	1736	1736
Adj Flow Rate, veh/h	16	756	504	280	1021	177	299	5	174	84	141	16
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	1	1	1
Cap, veh/h	18	1174	787	352	1501	670	412	440	372	464	198	22
Arrive On Green	0.01	0.36	0.36	0.11	0.46	0.46	0.18	0.26	0.26	0.05	0.13	0.13
Sat Flow, veh/h	1641	3273	1460	3183	3273	1460	1628	1709	1443	1654	1530	174
Grp Volume(v), veh/h	16	756	504	280	1021	177	299	5	174	84	0	157
Grp Sat Flow(s),veh/h/ln	1641	1637	1460	1591	1637	1460	1628	1709	1443	1654	0	1704
Q Serve(g_s), s	1.0	20.2	25.5	9.0	25.8	7.8	16.3	0.2	10.7	3.9	0.0	9.3
Cycle Q Clear(g_c), s	1.0	20.2	25.5	9.0	25.8	7.8	16.3	0.2	10.7	3.9	0.0	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	18	1174	787	352	1501	670	412	440	372	464	0	221
V/C Ratio(X)	0.91	0.64	0.64	0.80	0.68	0.26	0.73	0.01	0.47	0.18	0.00	0.71
Avail Cap(c_a), veh/h	391	1559	958	758	1559	695	661	488	412	693	0	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.9	28.1	17.0	45.5	22.4	17.5	31.2	29.0	32.9	26.4	0.0	43.8
Incr Delay (d2), s/veh	62.9	0.8	1.4	3.1	1.3	0.3	1.8	0.0	0.9	0.1	0.0	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	7.6	8.6	3.7	9.7	2.7	6.6	0.1	3.8	1.6	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.8	28.9	18.4	48.6	23.7	17.8	33.0	29.0	33.8	26.5	0.0	48.0
LnGrp LOS	F	C	B	D	C	B	C	C	C	C		D
Approach Vol, veh/h		1276			1478			478			241	
Approach Delay, s/veh		25.9			27.7			33.3			40.5	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	44.0	24.4	19.5	6.6	54.4	11.0	32.9
Change Period (Y+Rc), s	5.5	6.3	5.5	5.9	5.5	6.3	5.5	5.9
Max Green Setting (Gmax), s	25.0	50.0	35.0	30.0	25.0	50.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	11.0	27.5	18.3	11.3	3.0	27.8	5.9	12.7
Green Ext Time (p_c), s	0.6	10.2	0.6	0.8	0.0	11.1	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	28.7
HCM 7th LOS	C

Notes

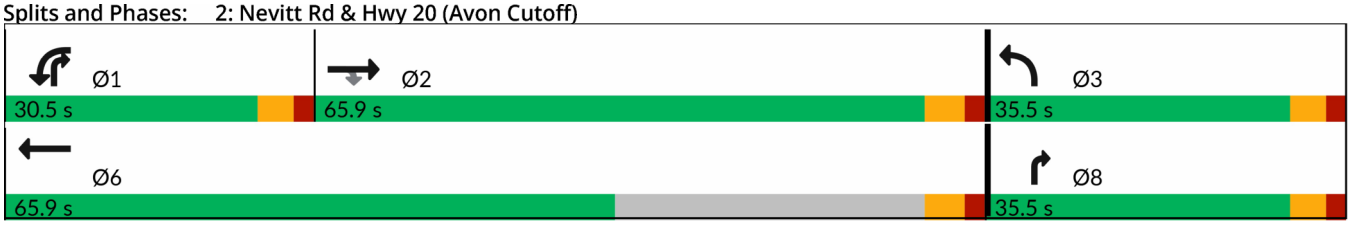
User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø8
Lane Configurations							
Traffic Volume (vph)	785	134	258	1201	243	167	
Future Volume (vph)	785	134	258	1201	243	167	
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	
Storage Length (ft)		485	325		75	205	
Storage Lanes		1	1		1	0	
Taper Length (ft)			25		25		
Right Turn on Red		Yes				Yes	
Link Speed (mph)	35			35	25		
Link Distance (ft)	738			402	262		
Travel Time (s)	14.4			7.8	7.1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	
Shared Lane Traffic (%)							
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	3	8 1	8
Permitted Phases		2					
Detector Phase	2	2	1	6	3	8 1	
Switch Phase							
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0		5.0
Minimum Split (s)	33.9	33.9	10.5	12.9	10.5		10.5
Total Split (s)	65.9	65.9	30.5	65.9	35.5		35.5
Total Split (%)	50.0%	50.0%	23.1%	50.0%	26.9%		27%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.5		3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	None	Min	None		None

Intersection Summary

Area Type: Other
Cycle Length: 131.9
Actuated Cycle Length: 82.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	785	134	258	1201	243	167
Future Volume (veh/h)	785	134	258	1201	243	167
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	818	0	269	1251	253	174
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1280		320	2205	461	497
Arrive On Green	0.39	0.00	0.20	0.67	0.14	0.14
Sat Flow, veh/h	3359	1460	1641	3359	3183	1460
Grp Volume(v), veh/h	818	0	269	1251	253	174
Grp Sat Flow(s),veh/h/ln	1637	1460	1641	1637	1591	1460
Q Serve(g_s), s	12.8	0.0	9.9	12.7	4.6	5.6
Cycle Q Clear(g_c), s	12.8	0.0	9.9	12.7	4.6	5.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1280		320	2205	461	497
V/C Ratio(X)	0.64		0.84	0.57	0.55	0.35
Avail Cap(c_a), veh/h	3125		653	3125	1519	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	24.3	5.4	25.0	15.5
Incr Delay (d2), s/veh	0.8	0.0	4.4	0.3	1.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	3.9	2.7	1.8	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.3	0.0	28.8	5.7	26.0	16.0
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	818			1520	427	
Approach Delay, s/veh	16.3			9.8	21.9	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	17.8	30.5				48.2	14.6
Change Period (Y+Rc), s	5.5	5.9				5.9	5.5
Max Green Setting (Gmax), s	25.0	60.0				60.0	30.0
Max Q Clear Time (g_c+I1), s	11.9	14.8				14.7	7.6
Green Ext Time (p_c), s	0.5	9.8				18.1	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

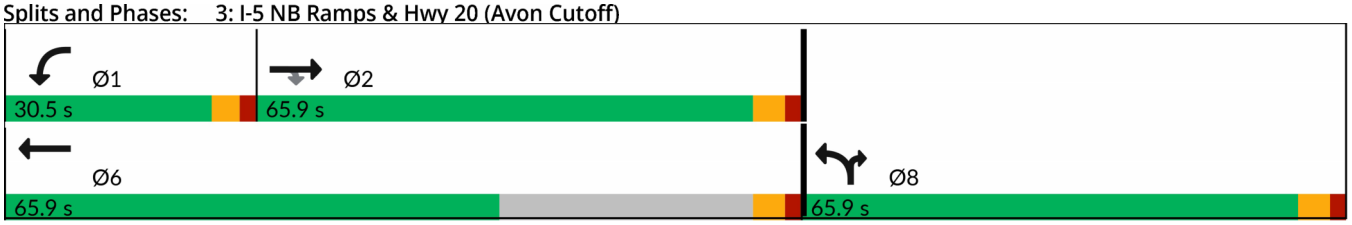
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	634	322	91	671	784	260
Future Volume (vph)	634	322	91	671	784	260
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)		200	300		0	485
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			35	25	
Link Distance (ft)	581			319	654	
Travel Time (s)	11.3			6.2	17.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Shared Lane Traffic (%)						10%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	7.0	5.0	5.0
Minimum Split (s)	43.9	43.9	10.5	12.9	10.9	10.9
Total Split (s)	65.9	65.9	30.5	65.9	65.9	65.9
Total Split (%)	40.6%	40.6%	18.8%	40.6%	40.6%	40.6%
Yellow Time (s)	3.9	3.9	3.5	3.9	3.9	3.9
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	5.5	5.9	5.9	5.9
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?						
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 162.3	
Actuated Cycle Length: 96.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: I-5 NB Ramps & Hwy 20 (Avon Cutoff)



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	634	322	91	671	784	260
Future Volume (veh/h)	634	322	91	671	784	260
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1723	1723	1736	1736	1723	1723
Adj Flow Rate, veh/h	654	0	94	692	808	268
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	1	1	2	2
Cap, veh/h	1049		120	1589	1077	479
Arrive On Green	0.32	0.00	0.07	0.48	0.33	0.33
Sat Flow, veh/h	3359	1460	1654	3386	3281	1460
Grp Volume(v), veh/h	654	0	94	692	808	268
Grp Sat Flow(s),veh/h/ln	1637	1460	1654	1650	1641	1460
Q Serve(g_s), s	10.5	0.0	3.5	8.5	13.6	9.4
Cycle Q Clear(g_c), s	10.5	0.0	3.5	8.5	13.6	9.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1049		120	1589	1077	479
V/C Ratio(X)	0.62		0.78	0.44	0.75	0.56
Avail Cap(c_a), veh/h	3164		666	3189	3172	1411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	28.3	10.5	18.6	17.2
Incr Delay (d2), s/veh	0.9	0.0	8.1	0.3	1.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.6	2.6	5.0	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.8	0.0	36.4	10.8	19.7	18.2
LnGrp LOS	B		D	B	B	B
Approach Vol, veh/h	654			786	1076	
Approach Delay, s/veh	18.8			13.9	19.3	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.0	25.8			35.8	26.3
Change Period (Y+Rc), s	5.5	5.9			5.9	5.9
Max Green Setting (Gmax), s	25.0	60.0			60.0	60.0
Max Q Clear Time (g_c+I1), s	5.5	12.5			10.5	15.6
Green Ext Time (p_c), s	0.1	7.4			8.0	4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	17.5
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	0	21	8	0	128	17	207	9	152	209	31
Future Volume (vph)	75	0	21	8	0	128	17	207	9	152	209	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	50		0	50		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		159			251			251			262	
Travel Time (s)		4.3			6.8			6.8			7.1	
Confl. Peds. (#/hr)	1		3	3		1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	0	21	8	0	128	17	207	9	152	209	31
Future Vol, veh/h	75	0	21	8	0	128	17	207	9	152	209	31
Conflicting Peds, #/hr	1	0	3	3	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	2	2	2
Mvmt Flow	82	0	23	9	0	139	18	225	10	165	227	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	837	846	247	827	858	231	261	0	0	235	0	0
Stage 1	574	574	-	267	267	-	-	-	-	-	-	-
Stage 2	263	272	-	561	591	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	288	301	797	293	297	813	1304	-	-	1333	-	-
Stage 1	507	506	-	743	692	-	-	-	-	-	-	-
Stage 2	747	688	-	516	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	206	260	794	245	256	813	1304	-	-	1333	-	-
Mov Cap-2 Maneuver	206	260	-	245	256	-	-	-	-	-	-	-
Stage 1	444	443	-	732	682	-	-	-	-	-	-	-
Stage 2	609	679	-	438	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	30	11.34	0.57	3.13
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1304	-	-	246	715	1333	-	-
HCM Lane V/C Ratio	0.014	-	-	0.424	0.207	0.124	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	30	11.3	8.1	-	-
HCM Lane LOS	A	-	-	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2	0.8	0.4	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	921	31	0	1459	0	48
Future Volume (vph)	921	31	0	1459	0	48
Ideal Flow (vphpl)	1750	1750	1750	1750	1900	1900
Link Speed (mph)	35			35	25	
Link Distance (ft)	402			581	206	
Travel Time (s)	7.8			11.3	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	921	31	0	1459	0	48
Future Vol, veh/h	921	31	0	1459	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	1001	34	0	1586	0	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	517
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	508
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	508
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	12.89
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	508	-	-	-
HCM Lane V/C Ratio	0.103	-	-	-
HCM Ctrl Dly (s/v)	12.9	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Appendix D

Trip Generation Calculations

Chick-fil-A I-5 & Hwy 20 (Burlington)
Trip Generation Summary

Land Use	Units [1]	ITE LUC [2]	Trip Rate [3]	Directional Distribution In	Directional Distribution Out	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY DAILY								
Proposed Use:								
Chick-fil-A Restaurant (Drive-Through and Seating)	4,986 GFA	934	795.69	50%	50%	1,983	1,984	3,967
Pass-by Trips [4,5]	53%					-1051	-1052	-2,103
						932	932	1,864
Existing Use:								
Motel	10 Rooms	320	T=3.62(X)-29.43	50%	50%	-3	-4	-7
					New Daily Trips =	**929**	**928**	**1,857**
WEEKDAY AM PEAK HOUR								
Proposed Use:								
Chick-fil-A Restaurant (Drive-Through and Seating)	4,986 GFA	934	21.26	52%	48%	55	51	106
Pass-by Trips [4]	50%					-28	-25	-53
						27	26	53
Existing Use:								
Motel	10 Rooms	320	0.35	37%	63%	-1	-3	-4
					New AM Peak Hour Trips =	**26**	**23**	**49**
WEEKDAY PM PEAK HOUR								
Proposed Use:								
Chick-fil-A Restaurant (Drive-Through and Seating)	4,986 GFA	934	56.22	52%	48%	146	134	280
Pass-by Trips [4]	55%					-80	-74	-154
						66	60	126
Existing Use:								
Motel	10 Rooms	320	0.36	54%	46%	-2	-2	-4
					New PM Peak Hour Trips =	**64**	**58**	**122**
SATURDAY MIDDAY PEAK HOUR								
Proposed Use:								
Chick-fil-A Restaurant (Drive-Through and Seating)	4,986 GFA	934	75.35	51%	49%	192	184	376
Pass-by Trips [4,6]	55%					-106	-101	-207
						86	83	169
					New Midday Peak Hour Trips =	**86**	**83**	**169**

Notes:

[1] GFA = Gross Floor Area

[2] Based on Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition, 2021.

[3] Based on trip rate derived from traffic counts collected at existing Chick-fil-A restaurants in WA.

[4] Pass-by trips determined based on appendices included in the ITE Trip Generation Manual, 11th Edition.

[5] Pass-by percentage for daily based on the average of the AM and PM peak hours.

[6] Pass-by percentage for Saturday Midday peak hour based on the PM peak hour.

Existing Trip Generation Study
12026 NE 124th St, Kirkland, WA (10/2/24-10/4/24)

Weekday AM Peak Hour (7:00 - 9:00 AM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Wednesday, October 2, 2024	58	60	118	4,526	26.07
Thursday, October 3, 2024	57	56	113	4,526	24.97
Friday, October 4, 2024	69	77	146	4,526	32.26
3-Day Average	**62**	**64**	**126**	**4,526**	**27.84**
	49%	51%			

Weekday PM Peak Hour (4:00 - 6:00 PM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Wednesday, October 2, 2024	141	135	276	4,526	60.98
Thursday, October 3, 2024	131	124	255	4,526	56.34
Friday, October 4, 2024	140	141	281	4,526	62.09
3-Day Average	**138**	**133**	**271**	**4,526**	**59.88**
	51%	49%			

Saturday Midday Peak Hour (11:00 AM - 1:00 PM)					
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Saturday, October 5, 2024	199	183	382	4,526	84.40
Saturday Midday Peak Hour Trip Rate	**199**	**183**	**382**	**4,526**	**84.40**
	52.1%	47.9%			

Wednesday, October 2, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	12	9	21		
7:15 AM	7	13	20		
7:30 AM	14	10	24		
7:45 AM	12	10	22	87	7:00 AM - 8:00 AM
8:00 AM	15	12	27	93	7:15 AM - 8:15 AM
8:15 AM	17	16	33	106	7:30 AM - 8:30 AM
8:30 AM	16	15	31	113	7:45 AM - 8:45 AM
8:45 AM	10	17	27	118	8:00 AM - 9:00 AM
Peak Hour	58	60	118	Peak Hour is 8:00 AM - 9:00 AM	
	118				

Thursday, October 3, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	17	11	28		
7:15 AM	9	11	20		
7:30 AM	16	12	28		
7:45 AM	10	13	23	99	7:00 AM - 8:00 AM
8:00 AM	12	9	21	92	7:15 AM - 8:15 AM
8:15 AM	15	14	29	101	7:30 AM - 8:30 AM
8:30 AM	18	16	34	107	7:45 AM - 8:45 AM
8:45 AM	12	17	29	113	8:00 AM - 9:00 AM
Peak Hour	57	56	113	Peak Hour is 8:00 AM - 9:00 AM	
	113				

Friday, October 4, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	9	4	13		
7:15 AM	14	8	22		
7:30 AM	19	16	35		
7:45 AM	21	20	41	111	7:00 AM - 8:00 AM
8:00 AM	12	19	31	129	7:15 AM - 8:15 AM
8:15 AM	22	11	33	140	7:30 AM - 8:30 AM
8:30 AM	14	27	41	146	7:45 AM - 8:45 AM
8:45 AM	22	15	37	142	8:00 AM - 9:00 AM
Peak Hour	69	77	146	Peak Hour is 7:45 AM - 8:45 AM	
	146				

Wednesday, October 2, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	27	30	57		
4:15 PM	20	28	48		
4:30 PM	30	25	55		
4:45 PM	27	32	59	219	4:00 PM - 5:00 PM
5:00 PM	37	28	65	227	4:15 PM - 5:15 PM
5:15 PM	28	38	66	245	4:30 PM - 5:30 PM
5:30 PM	37	30	67	257	4:45 PM - 5:45 PM
5:45 PM	39	39	78	276	5:00 PM - 6:00 PM
Peak Hour	141	135	276	Peak Hour is 5:00 PM - 6:00 PM	
	276				

Thursday, October 3, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	26	23	49		
4:15 PM	29	31	60		
4:30 PM	21	18	39		
4:45 PM	28	31	59	207	4:00 PM - 5:00 PM
5:00 PM	40	22	62	220	4:15 PM - 5:15 PM
5:15 PM	22	37	59	219	4:30 PM - 5:30 PM
5:30 PM	35	29	64	244	4:45 PM - 5:45 PM
5:45 PM	34	36	70	255	5:00 PM - 6:00 PM
Peak Hour	131	124	255	Peak Hour is 5:00 PM - 6:00 PM	
	255				

Friday, October 4, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	25	27	52		
4:15 PM	26	22	48		
4:30 PM	41	38	79		
4:45 PM	34	32	66	245	4:00 PM - 5:00 PM
5:00 PM	30	35	65	258	4:15 PM - 5:15 PM
5:15 PM	35	36	71	281	4:30 PM - 5:30 PM
5:30 PM	33	32	65	267	4:45 PM - 5:45 PM
5:45 PM	34	28	62	263	5:00 PM - 6:00 PM
Peak Hour	140	141	281	Peak Hour is 4:30 PM - 5:30 PM	
	281				

Saturday, October 5, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
11:00 AM	32	21	53		
11:15 AM	26	25	51		
11:30 AM	38	37	75		
11:45 AM	34	34	68	247	11:00 AM - 12:00 PM
12:00 PM	45	38	83	277	11:15 AM - 12:15 PM
12:15 PM	49	49	98	324	11:30 AM - 12:30 PM
12:30 PM	56	48	104	353	11:45 AM - 12:45 PM
12:45 PM	49	48	97	382	12:00 PM - 1:00 PM
Peak Hour	199	183	382	Peak Hour is 12:00 PM - 1:00 PM	
	382				

Existing Trip Generation Study
12801 Aurora Ave N, Seattle, WA (10/2/24-10/4/24)

Weekday AM Peak Hour (7:00 - 9:00 AM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Wednesday, October 2, 2024	52	43	95	4,546	20.90
Thursday, October 3, 2024	51	46	97	4,546	21.34
Friday, October 4, 2024	52	49	101	4,546	22.22
3-Day Average	**52**	**46**	**98**	**4,546**	**21.56**
	53%	47%			

Weekday PM Peak Hour (4:00 - 6:00 PM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Wednesday, October 2, 2024	118	92	210	4,546	46.19
Thursday, October 3, 2024	116	104	220	4,546	48.39
Friday, October 4, 2024	117	110	227	4,546	49.93
3-Day Average	**117**	**102**	**219**	**4,546**	**48.17**
	53%	47%			

Saturday Midday Peak Hour (11:00 AM - 1:00 PM)					
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Saturday, October 5, 2024	119	101	220	4,546	48.39
Saturday Midday Peak Hour Trip Rate	**119**	**101**	**220**	**4,546**	**48.39**
	54.1%	45.9%			

Wednesday, October 2, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	6	6	12		
7:15 AM	10	11	21		
7:30 AM	12	8	20		
7:45 AM	12	12	24	77	7:00 AM - 8:00 AM
8:00 AM	10	6	16	81	7:15 AM - 8:15 AM
8:15 AM	13	16	29	89	7:30 AM - 8:30 AM
8:30 AM	17	9	26	95	7:45 AM - 8:45 AM
8:45 AM	6	14	20	91	8:00 AM - 9:00 AM
Peak Hour	52	43	95	Peak Hour is 7:45 AM - 8:45 AM	
	95				

Thursday, October 3, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	5	6	11		
7:15 AM	6	5	11		
7:30 AM	10	8	18		
7:45 AM	21	13	34	74	7:00 AM - 8:00 AM
8:00 AM	9	14	23	86	7:15 AM - 8:15 AM
8:15 AM	7	7	14	89	7:30 AM - 8:30 AM
8:30 AM	14	12	26	97	7:45 AM - 8:45 AM
8:45 AM	14	13	27	90	8:00 AM - 9:00 AM
Peak Hour	51	46	97	Peak Hour is 7:45 AM - 8:45 AM	
	97				

Friday, October 4, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	6	5	11		
7:15 AM	9	7	16		
7:30 AM	11	8	19		
7:45 AM	11	11	22	68	7:00 AM - 8:00 AM
8:00 AM	15	10	25	82	7:15 AM - 8:15 AM
8:15 AM	16	18	34	100	7:30 AM - 8:30 AM
8:30 AM	7	7	14	95	7:45 AM - 8:45 AM
8:45 AM	14	14	28	101	8:00 AM - 9:00 AM
Peak Hour	52	49	101	Peak Hour is 8:00 AM - 9:00 AM	
	101				

Wednesday, October 2, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	28	20	48		
4:15 PM	21	31	52		
4:30 PM	22	29	51		
4:45 PM	28	27	55	206	4:00 PM - 5:00 PM
5:00 PM	32	17	49	207	4:15 PM - 5:15 PM
5:15 PM	20	22	42	197	4:30 PM - 5:30 PM
5:30 PM	22	27	49	195	4:45 PM - 5:45 PM
5:45 PM	44	26	70	210	5:00 PM - 6:00 PM
Peak Hour	118	92	210	Peak Hour is 5:00 PM - 6:00 PM	
	210				

Thursday, October 3, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	21	17	38		
4:15 PM	27	35	62		
4:30 PM	17	16	33		
4:45 PM	24	19	43	176	4:00 PM - 5:00 PM
5:00 PM	22	27	49	187	4:15 PM - 5:15 PM
5:15 PM	26	25	51	176	4:30 PM - 5:30 PM
5:30 PM	32	22	54	197	4:45 PM - 5:45 PM
5:45 PM	36	30	66	220	5:00 PM - 6:00 PM
Peak Hour	116	104	220	Peak Hour is 5:00 PM - 6:00 PM	
	220				

Friday, October 4, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	28	25	53		
4:15 PM	25	29	54		
4:30 PM	18	26	44		
4:45 PM	34	26	60	211	4:00 PM - 5:00 PM
5:00 PM	21	23	44	202	4:15 PM - 5:15 PM
5:15 PM	35	29	64	212	4:30 PM - 5:30 PM
5:30 PM	28	28	56	224	4:45 PM - 5:45 PM
5:45 PM	33	30	63	227	5:00 PM - 6:00 PM
Peak Hour	117	110	227	Peak Hour is 5:00 PM - 6:00 PM	
	227				

Saturday, October 5, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
11:00 AM	27	22	49		
11:15 AM	22	21	43		
11:30 AM	31	21	52		
11:45 AM	39	37	76	220	11:00 AM - 12:00 PM
12:00 PM	46	35	81	252	11:15 AM - 12:15 PM
12:15 PM	47	47	94	303	11:30 AM - 12:30 PM
12:30 PM	36	35	71	322	11:45 AM - 12:45 PM
12:45 PM	30	37	67	313	12:00 PM - 1:00 PM
Peak Hour	119	101	220	Peak Hour is 11:45 AM - 12:45 PM	
	220				

Existing Trip Generation Study
8302 Quinalt Dr NE, Lacey, WA (7/26/2022 - 7/28/2022)

Weekday AM Peak Hour (7:00 - 9:00 AM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Tuesday, July 26, 2022	46	50	96	4,848	19.80
Wednesday, July 27, 2022	40	40	80	4,848	16.50
Thursday, July 28, 2022	57	46	103	4,848	21.25
3-Day Average	**48**	**45**	**93**	**4,848**	**19.18**
	52%	48%			

Weekday PM Peak Hour (4:00 - 6:00 PM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Tuesday, July 26, 2022	134	133	267	4,848	55.07
Wednesday, July 27, 2022	126	140	266	4,848	54.87
Thursday, July 28, 2022	154	137	291	4,848	60.02
3-Day Average	**138**	**137**	**275**	**4,848**	**56.72**
	50%	50%			

Tuesday, July 26, 2022

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	3	7	10		
7:15 AM	7	3	10		
7:30 AM	9	13	22		
7:45 AM	14	7	21	63	7:00 AM - 8:00 AM
8:00 AM	13	13	26	79	7:15 AM - 8:15 AM
8:15 AM	7	15	22	91	7:30 AM - 8:30 AM
8:30 AM	17	9	26	95	7:45 AM - 8:45 AM
8:45 AM	9	13	22	96	8:00 AM - 9:00 AM
Peak Hour	46	50	96	Peak Hour is 8:00 AM - 9:00 AM	
	96				

Wednesday, July 27, 2022

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	7	8	15		
7:15 AM	5	7	12		
7:30 AM	11	9	20		
7:45 AM	7	8	15	62	7:00 AM - 8:00 AM
8:00 AM	10	11	21	68	7:15 AM - 8:15 AM
8:15 AM	13	9	22	78	7:30 AM - 8:30 AM
8:30 AM	6	9	15	73	7:45 AM - 8:45 AM
8:45 AM	11	11	22	80	8:00 AM - 9:00 AM
Peak Hour	40	40	80	Peak Hour is 8:00 AM - 9:00 AM	
	80				

Thursday, July 28, 2022

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	7	11	18		
7:15 AM	9	9	18		
7:30 AM	15	12	27		
7:45 AM	12	16	28	91	7:00 AM - 8:00 AM
8:00 AM	9	12	21	94	7:15 AM - 8:15 AM
8:15 AM	17	8	25	101	7:30 AM - 8:30 AM
8:30 AM	13	12	25	99	7:45 AM - 8:45 AM
8:45 AM	18	14	32	103	8:00 AM - 9:00 AM
Peak Hour	57	46	103	Peak Hour is 8:00 AM - 9:00 AM	
	103				

Tuesday, July 26, 2022

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	24	24	48		
4:15 PM	26	25	51		
4:30 PM	34	25	59		
4:45 PM	27	33	60	218	4:00 PM - 5:00 PM
5:00 PM	30	35	65	235	4:15 PM - 5:15 PM
5:15 PM	30	23	53	237	4:30 PM - 5:30 PM
5:30 PM	40	37	77	255	4:45 PM - 5:45 PM
5:45 PM	34	38	72	267	5:00 PM - 6:00 PM
Peak Hour	134	133	267	Peak Hour is 5:00 PM - 6:00 PM	
	267				

Wednesday, July 27, 2022

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	28	30	58		
4:15 PM	27	32	59		
4:30 PM	32	26	58		
4:45 PM	34	29	63	238	4:00 PM - 5:00 PM
5:00 PM	22	29	51	231	4:15 PM - 5:15 PM
5:15 PM	39	38	77	249	4:30 PM - 5:30 PM
5:30 PM	35	39	74	265	4:45 PM - 5:45 PM
5:45 PM	30	34	64	266	5:00 PM - 6:00 PM
Peak Hour	126	140	266	Peak Hour is 5:00 PM - 6:00 PM	
	266				

Thursday, July 28, 2022

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	20	28	48		
4:15 PM	28	16	44		
4:30 PM	31	32	63		
4:45 PM	31	27	58	213	4:00 PM - 5:00 PM
5:00 PM	30	24	54	219	4:15 PM - 5:15 PM
5:15 PM	39	45	84	259	4:30 PM - 5:30 PM
5:30 PM	36	31	67	263	4:45 PM - 5:45 PM
5:45 PM	49	37	86	291	5:00 PM - 6:00 PM
Peak Hour	154	137	291	Peak Hour is 5:00 PM - 6:00 PM	
	291				

Existing Trip Generation Study
9304 N Newport Hwy, Spokane, WA (3/26/24-3/28/24)

Weekday AM Peak Hour (7:00 - 9:00 AM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Tuesday, March 26, 2024	38	37	75	5,040	14.88
Wednesday, March 27, 2024	45	44	89	5,040	17.66
Thursday, March 28, 2024	47	37	84	5,040	16.67
3-Day Average	**44**	**39**	**83**	**5,040**	**16.47**
	53%	47%			

Weekday PM Peak Hour (4:00-6:00 PM)	3-Day Average				
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Tuesday, March 26, 2024	161	131	292	5,040	57.94
Wednesday, March 27, 2024	174	163	337	5,040	66.87
Thursday, March 28, 2024	147	132	279	5,040	55.36
3-Day Average	**161**	**142**	**303**	**5,040**	**60.12**
	53%	47%			

Saturday Midday Peak Hour (11:00 AM - 1:00 PM)					
Day	In	Out	Total	SF	Trip Rate per 1,000 SF
Saturday, March 23, 2024	220	248	468	5,040	92.86
Saturday Midday Peak Hour Trip Rate	**220**	**248**	**468**	**5,040**	**92.86**
	47%	53%			

Tuesday, March 26, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	3	5	8		
7:15 AM	6	8	14		
7:30 AM	8	4	12		
7:45 AM	12	8	20	54	7:00 AM - 8:00 AM
8:00 AM	8	12	20	66	7:15 AM - 8:15 AM
8:15 AM	7	5	12	64	7:30 AM - 8:30 AM
8:30 AM	13	8	21	73	7:45 AM - 8:45 AM
8:45 AM	10	12	22	75	8:00 AM - 9:00 AM
Peak Hour	38	37	75	Peak Hour is 8:00 AM - 9:00 AM	
	75				

Wednesday, March 27, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	8	8	16		
7:15 AM	5	8	13		
7:30 AM	7	5	12		
7:45 AM	9	7	16	57	7:00 AM - 8:00 AM
8:00 AM	12	14	26	67	7:15 AM - 8:15 AM
8:15 AM	10	12	22	76	7:30 AM - 8:30 AM
8:30 AM	11	7	18	82	7:45 AM - 8:45 AM
8:45 AM	12	11	23	89	8:00 AM - 9:00 AM
Peak Hour	45	44	89	Peak Hour is 8:00 AM - 9:00 AM	
	89				

Thursday, March 28, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
7:00 AM	9	7	16		
7:15 AM	4	5	9		
7:30 AM	7	7	14		
7:45 AM	5	5	10	49	7:00 AM - 8:00 AM
8:00 AM	7	6	13	46	7:15 AM - 8:15 AM
8:15 AM	11	6	17	54	7:30 AM - 8:30 AM
8:30 AM	8	12	20	60	7:45 AM - 8:45 AM
8:45 AM	21	13	34	84	8:00 AM - 9:00 AM
Peak Hour	47	37	84	Peak Hour is 8:00 AM - 9:00 AM	
	84				

Tuesday, March 26, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	14	36	50		
4:15 PM	24	18	42		
4:30 PM	31	32	63		
4:45 PM	39	30	69	224	4:00 PM - 5:00 PM
5:00 PM	42	24	66	240	4:15 PM - 5:15 PM
5:15 PM	35	37	72	270	4:30 PM - 5:30 PM
5:30 PM	39	36	75	282	4:45 PM - 5:45 PM
5:45 PM	45	34	79	292	5:00 PM - 6:00 PM
Peak Hour	161	131	292	Peak Hour is 5:00 PM - 6:00 PM	
	292				

Wednesday, March 27, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	20	21	41		
4:15 PM	25	30	55		
4:30 PM	24	20	44		
4:45 PM	45	28	73	213	4:00 PM - 5:00 PM
5:00 PM	46	38	84	256	4:15 PM - 5:15 PM
5:15 PM	39	44	83	284	4:30 PM - 5:30 PM
5:30 PM	48	40	88	328	4:45 PM - 5:45 PM
5:45 PM	41	41	82	337	5:00 PM - 6:00 PM
Peak Hour	174	163	337	Peak Hour is 5:00 PM - 6:00 PM	
	337				

Thursday, March 28, 2024

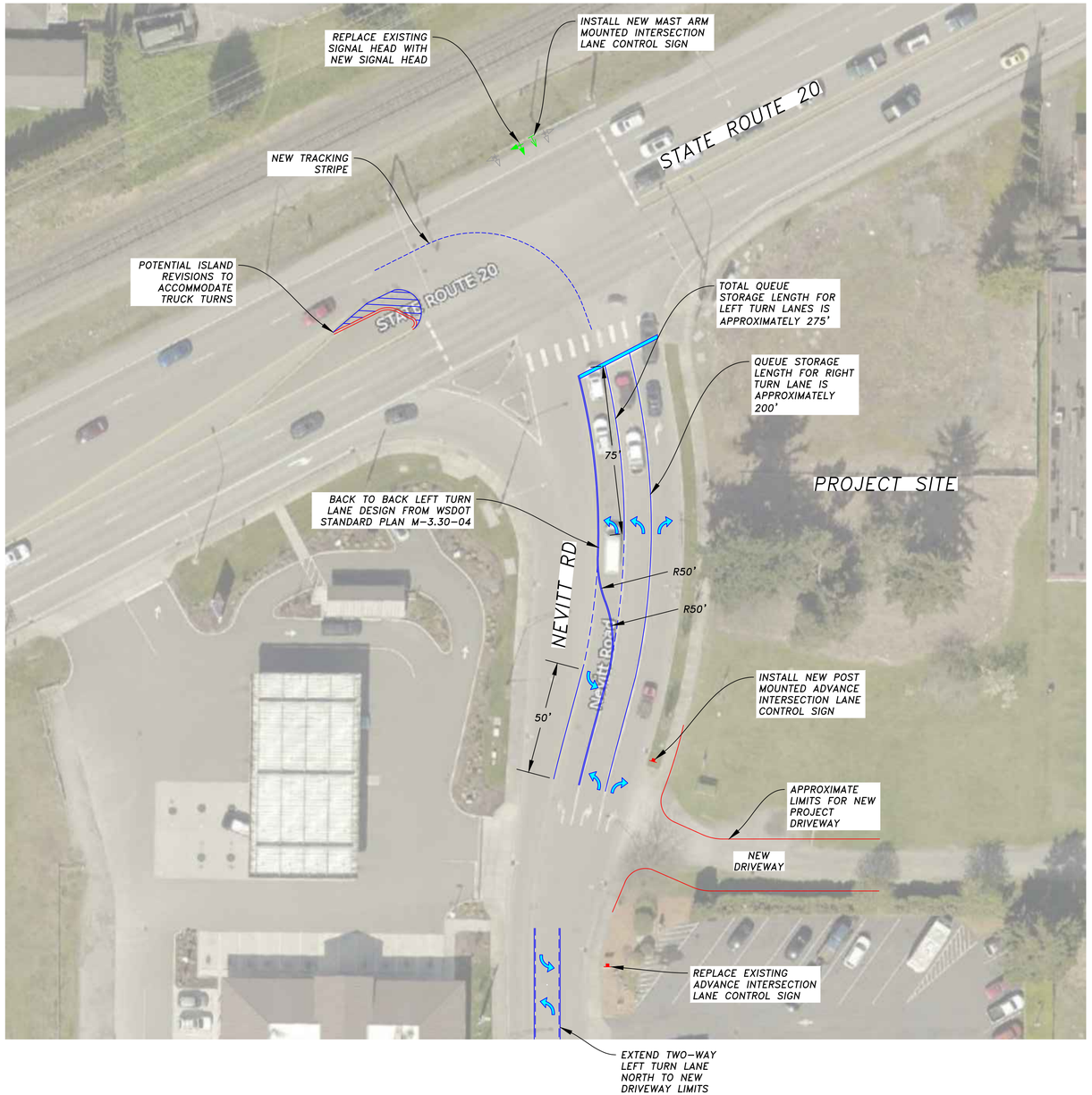
Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
4:00 PM	24	18	42		
4:15 PM	25	30	55		
4:30 PM	33	29	62		
4:45 PM	31	33	64	223	4:00 PM - 5:00 PM
5:00 PM	34	30	64	245	4:15 PM - 5:15 PM
5:15 PM	36	32	68	258	4:30 PM - 5:30 PM
5:30 PM	31	38	69	265	4:45 PM - 5:45 PM
5:45 PM	46	32	78	279	5:00 PM - 6:00 PM
Peak Hour	147	132	279	Peak Hour is 5:00 PM - 6:00 PM	
	279				

Saturday, March 23, 2024

Interval Begin	Total Trips			Hourly Totals	
	In	Out	Total		
11:00 AM	29	22	51		
11:15 AM	54	31	85		
11:30 AM	53	38	91		
11:45 AM	59	63	122	349	11:00 AM - 12:00 PM
12:00 PM	57	63	120	418	11:15 AM - 12:15 PM
12:15 PM	53	54	107	440	11:30 AM - 12:30 PM
12:30 PM	51	68	119	468	11:45 AM - 12:45 PM
12:45 PM	56	37	93	439	12:00 PM - 1:00 PM
Peak Hour	220	248	468	Peak Hour is 11:45 AM - 12:45 PM	
	468				

Appendix E

Proposed Nevitt Road Channelization Modification



PRELIMINARY - FOR DISCUSSION ONLY

LIST OF IMPROVEMENTS:

- TWO NEWLY STRIPED NORTHBOUND LEFT TURN LANES
- ONE NEW TRACKING STRIPE THROUGH INTERSECTION
- ONE NEWLY STRIPED NORTHBOUND RIGHT TURN LANE
- ONE NEWLY STRIPED SOUTHBOUND LEFT TURN LANE FOR NEW DRIVEWAY
- EXTEND STRIPING FOR TWO-WAY LEFT TURN LANE
- REPLACE ONE EXISTING POST MOUNTED SIGN
- INSTALL ONE NEW POST MOUNTED SIGN
- INSTALL ONE NEW SIGN ON EXISTING SIGNAL POLE MAST ARM
- REPLACE ONE EXISTING VEHICLE SIGNAL HEAD WITH NEW VEHICLE SIGNAL HEAD ON EXISTING SIGNAL POLE MAST ARM
- POTENTIAL ISLAND REVISIONS TO ACCOMMODATE TRUCK TURNS

LEGEND

EXISTING	NEW	DESCRIPTION
		VEHICLE SIGNAL HEAD
		MAST ARM MOUNTED SIGN
		POLE MOUNTED SIGN
		CURB
		CHANNELIZATION

N

0 15 30 60 90

SCALE IN FEET

△	REVISION	DATE	BY

DESIGNED BY: KEW

DRAWN BY: KEW

APPROVED BY: CTB

ISSUE DATE: 07-18-2024

JOB NO.: TENW 2024-146

DRAWING FILE NO.:

TENW
Transportation Engineering NorthWest
Transportation Planning | Design | Traffic Impact & Operations
11400 SE 8th St, Suite 200, Bellevue, WA 98004 | Office (425) 889-6747
Project Contact: Chris Bicket, P.E.
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CHICK-FIL-A, INC.
105 PROGRESS
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STEVE SCHWARTZ

CHICK-FIL-A
I-5 & HIGHWAY 20
BURLINGTON, WA

NEVITT RD CHANNELIZATION & SIGNAL CONCEPT

DRAWING NO.: PM-01

SHEET NO.: 1 OF 1 SHEETS

Appendix F

SimTraffic Queuing Results

With Proposed Channelization Modification

Intersection: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	T	T	L	L	R
Maximum Queue (ft)	251	302	25	214	217	194	100	169	135
Average Queue (ft)	96	125	1	112	101	90	41	93	51
95th Queue (ft)	191	236	18	180	180	167	97	162	103
Link Distance (ft)	662	662			267	267		164	164
Upstream Blk Time (%)				0	0	0		2	0
Queuing Penalty (veh)				0	0	0		3	0
Storage Bay Dist (ft)			485	325			75		
Storage Blk Time (%)				0	0		1	16	
Queuing Penalty (veh)				0	0		1	17	

Intersection: 4: Nevitt Rd & Site Access

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	132	52	13	36	48	31
Average Queue (ft)	49	22	1	3	7	1
95th Queue (ft)	95	46	5	32	29	23
Link Distance (ft)	116	198		190		164
Upstream Blk Time (%)	1					0
Queuing Penalty (veh)	0					0
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)				0	0	
Queuing Penalty (veh)				0	0	

Intersection: 5: Site Access & Hwy 20 (Avon Cutoff)

Movement	WB	NB
Directions Served	T	R
Maximum Queue (ft)	12	26
Average Queue (ft)	0	8
95th Queue (ft)	6	24
Link Distance (ft)	582	130
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 21

Intersection: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	T	T	L	L	R
Maximum Queue (ft)	430	496	102	258	294	264	100	183	181
Average Queue (ft)	176	216	4	147	148	132	50	106	102
95th Queue (ft)	382	425	74	237	262	236	110	182	173
Link Distance (ft)	643	643			269	269		164	164
Upstream Blk Time (%)				0	1	0		3	1
Queuing Penalty (veh)				0	7	2		7	3
Storage Bay Dist (ft)			485	325			75		
Storage Blk Time (%)		0		0	1		3	27	
Queuing Penalty (veh)		0		1	2		3	28	

Intersection: 4: Nevitt Rd & Site Access

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	111	74	27	80	60	35
Average Queue (ft)	44	34	3	6	19	1
95th Queue (ft)	85	57	15	37	50	19
Link Distance (ft)	116	198		190		164
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)			0	1	1	0
Queuing Penalty (veh)			0	0	2	0

Intersection: 5: Site Access & Hwy 20 (Avon Cutoff)

Movement	EB	WB	WB	NB
Directions Served	TR	T	T	R
Maximum Queue (ft)	23	135	107	55
Average Queue (ft)	1	8	4	20
95th Queue (ft)	17	57	35	43
Link Distance (ft)	269	579	579	129
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 56

Intersection: 2: Nevitt Rd & Hwy 20 (Avon Cutoff)

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	T	T	L	L	R
Maximum Queue (ft)	301	346	41	274	270	222	100	178	164
Average Queue (ft)	128	156	1	140	114	104	56	102	66
95th Queue (ft)	270	310	22	234	212	187	109	177	124
Link Distance (ft)	643	643			320	320		164	164
Upstream Blk Time (%)				0	0			3	0
Queuing Penalty (veh)				0	0			6	0
Storage Bay Dist (ft)			485	325			75		
Storage Blk Time (%)				0	0		2	22	
Queuing Penalty (veh)				0	0		3	26	

Intersection: 4: Nevitt Rd & Dvwy/Site Access

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	96	88	16	46	57	61
Average Queue (ft)	41	42	2	2	17	3
95th Queue (ft)	76	73	12	21	45	31
Link Distance (ft)	116	198		190		164
Upstream Blk Time (%)	0					0
Queuing Penalty (veh)	0					0
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)				0	1	0
Queuing Penalty (veh)				0	2	0

Intersection: 5: Site Access & Hwy 20 (Avon Cutoff)

Movement	EB	WB	WB	NB
Directions Served	T	T	T	R
Maximum Queue (ft)	11	22	6	53
Average Queue (ft)	0	1	0	17
95th Queue (ft)	8	12	5	37
Link Distance (ft)	320	526	526	139
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 38

Appendix G

Drive-Through Queue Observations

Chick-fil-A Seattle
Existing Drive-Through Queuing Observations

	Friday, October 4, 2024 Max Queue Observed			Saturday, October 5, 2024 Max Queue Observed		
Time Interval Start	Drive-Through Window to Order Point	Order Point Back	Total Queue	Drive-Through Window to Order Point	Order Point Back	Total Queue
11:00 AM	2	1	3	5	0	5
11:05 AM	3	1	4	4	2	6
11:10 AM	5	3	8	4	1	5
11:15 AM	2	1	3	5	2	7
11:20 AM	1	1	2	7	2	9
11:25 AM	2	2	4	7	2	9
11:30 AM	4	4	8	7	2	9
11:35 AM	5	1	6	7	4	11
11:40 AM	6	1	7	7	4	11
11:45 AM	6	2	8	7	8	15
11:50 AM	4	3	7	7	5	12
11:55 AM	7	3	10	7	5	12
12:00 PM	7	3	10	6	4	10
12:05 PM	7	5	12	7	6	13
12:10 PM	7	6	13	7	6	13
12:15 PM	7	4	11	7	6	13
12:20 PM	7	9	16	7	5	12
12:25 PM	7	5	12	7	8	15
12:30 PM	7	6	13	7	3	10
12:35 PM	7	6	13	7	9	16
12:40 PM	7	4	11	7	8	15
12:45 PM	5	2	7	7	12	19
12:50 PM	5	2	7	7	12	19
12:55 PM	6	2	8	7	9	16
		50th %	8		50th %	12
		85th %	13		85th %	16
		95th %	13		95th %	19
		Max	16		Max	19

Chick-fil-A Kirkland
Existing Drive-Through Queuing Observations

	Friday, October 4, 2024 Max Queue Observed			Saturday, October 5, 2024 Max Queue Observed		
Time Interval Start	Drive-Through Window to Order Point	Order Point Back	Total Queue	Drive-Through Window to Order Point	Order Point Back	Total Queue
11:00 AM	3	0	3	4	0	4
11:05 AM	4	0	4	5	1	6
11:10 AM	4	6	10	7	6	13
11:15 AM	6	1	7	7	5	12
11:20 AM	4	5	9	8	5	13
11:25 AM	5	4	9	5	5	10
11:30 AM	7	4	11	9	5	14
11:35 AM	6	8	14	7	5	12
11:40 AM	7	4	11	8	3	11
11:45 AM	8	4	12	7	3	10
11:50 AM	8	4	12	5	4	9
11:55 AM	8	3	11	5	9	14
12:00 PM	7	6	13	8	7	15
12:05 PM	7	6	13	8	9	17
12:10 PM	8	7	15	8	6	14
12:15 PM	8	7	15	8	8	16
12:20 PM	8	4	12	8	10	18
12:25 PM	8	8	16	8	9	17
12:30 PM	9	5	14	8	14	22
12:35 PM	8	5	13	9	16	25
12:40 PM	8	5	13	8	14	22
12:45 PM	8	4	12	8	8	16
12:50 PM	8	4	12	8	6	14
12:55 PM	7	4	11	8	10	18
		50th %	12		50th %	14
		85th %	14		85th %	18
		95th %	15		95th %	22
		Max	16		Max	25