PSE Operations Training Center
Puyallup, WA

Traffic Impact Analysis

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FINDINGS & CONCLUSIONS

This Traffic Impact Analysis (TIA) has been prepared for the proposed *PSE Operations Training Center (OTC)* project located at 325 Todd Road NW in the City of Puyallup, WA.

Project Proposal. The proposed *PSE OTC* project would include the development of an operations training center with a total building area of up to 38,800 square feet (SF) on a site that is currently undeveloped land. It should be noted that this building area excludes a limited square footage of covered outdoor/ unenclosed training areas (approximately 8,673 SF) which does not fall within the definition of gross floor area (GFA) as defined by the Institute of Transportation Engineers (ITE). Vehicular access to/from the site is proposed via two (2) full access driveways on Todd Road NW. The project is expected to be completed and occupied in 2025.

Project Trip Generation. The proposed *PSE OTC* project is estimated to generate 624 new trips per weekday, with 59 new trips occurring during the AM peak hour (48 in, 11 out) and 58 new trips occurring during the PM peak hour (9 in, 49 out).

Intersection LOS Results. Intersection levels of service (LOS) were evaluated at five (5) off-site study intersections in the project vicinity for weekday AM and PM peak hour conditions with the proposed project. The LOS analysis results indicate that the following 3 intersections are not anticipated to meet the City's established LOS standards in 2025:

- 7th Street NW/Valley Ave NW (#1) – During the AM peak hour, the side-street left-turn from 7th Street NW is anticipated to operate at LOS E with the proposed project in 2025. During the PM peak hour, the same left-turn movement is anticipated to operate at LOS E/F in 2025. The *PSE OTC* project is estimated to add 25 new AM peak hour trips (1.8% of total entering traffic) and 40 new PM peak hour trips (2.1% of total entering traffic) to the intersection. The City of Puyallup does not currently have a planned improvement at this intersection in their 6-year TIP. However, based on future anticipated peak hour operation, it is recommended that the City consider adding a planned improvement to their 6-year TIP that would add a new traffic signal at this intersection. The *PSE OTC* project would provide a proportionate share contribution of 2.0% of the cost of the new signal.
- N Meridian Ave/Valley Ave NW (#2) – This signalized intersection currently operates at LOS F and is anticipated to continue to operate at LOS F without or with the proposed *PSE OTC* project during the PM peak hour in 2025. The *PSE OTC* project is estimated to add 35 new AM peak hour trips (1.1% of total entering traffic) and 34 new PM peak hour trips (0.9% of total entering traffic) to this intersection. While there are currently no planned improvements at this intersection by the City of Puyallup or WSDOT, the completion of the future SR-167 Extension project is expected to result in improved future operations at this intersection; this is due to the anticipated re-distribution of traffic from Valley Ave NW and N Meridian Ave onto the SR 167 extension which will have a new interchange configuration at N Meridian Ave, as well as new access and interchange further west at Freeman Road E. As a result, no mitigation is identified for the proposed *PSE OTC* project.

- N Meridian Ave/Spencer Street N (#3) – During the AM peak hour, the eastbound and westbound side-street left-turn movements are anticipated to operate at LOS F without or with the proposed project in 2025. During the PM peak hour, the westbound left-turn movement is anticipated to operate at LOS F in 2025. The *PSE OTC* project is estimated to add 31 new AM peak hour trips (2.2% of total entering traffic) and 14 new PM peak hour trips (1.1% of total entering traffic) to this intersection. It should be noted that this failing LOS condition currently exists (during the AM peak hour) or is anticipated to occur without the proposed project in 2025 (during the PM peak hour). In addition, given the delay that westbound left-turning vehicles would have at this intersection, it is anticipated that at least 90% of *PSE OTC* project trips destined to the south on N Meridian Ave or to the east on Valley Ave NE would utilize alternate routes (such as the 7th Street NW/Valley Ave NW intersection). Given that an alternate route is available for project trips to avoid this intersection, no mitigation is identified for the proposed *PSE OTC* project. However, the City may consider restricting side-street left-turns at this intersection in the future.

Site Access Analysis.

LOS and Queuing. Based on the results of the analysis, the individual movements entering and exiting the site at the two proposed stop-controlled site access driveways on Todd Road NW are expected to operate at LOS A with minimal queuing during the weekday AM and PM peak hour periods with the proposed project.

Sight Distance. Intersection sight distance and stopping sight distance were assessed at the proposed site access locations on Todd Road NW and were determined to meet WSDOT and City of Puyallup minimum standards.

Vehicle Turning Studies. Vehicle turning studies for the largest anticipated design vehicle (WB-67 truck with 53-foot low boy trailer) were conducted to ensure efficient site circulation. As shown on the vehicle turning diagrams, the internal site design is able to accommodate the design vehicle circulation through the site. It should be noted that the WB-67 truck with low boy trailer is only expected to be on site 1 to 2 times per year.

Mitigation

Off-Site SEPA Improvements – Based on the results of this analysis, the following measures are proposed to address and/or mitigate traffic impacts from the proposed *PSE OTC* project on roadways and intersections in the project vicinity:

- 7th Street NW/Valley Ave NW (#1) – The City of Puyallup does not currently have a planned improvement at this intersection in their 6-year TIP. However, based on future anticipated peak hour operation, it is recommended that the City consider adding a planned improvement to their 6-year TIP that would add a new traffic signal at this intersection. The *PSE OTC* project would provide a proportionate share contribution of 2.0% of the cost of the new signal.
- N Meridian Ave/Valley Ave NW (#2) – The completion of the future SR-167 Extension project is expected to result in improved future operations at this intersection due to the

anticipated re-distribution of traffic from Valley Ave NW and N Meridian Ave onto the SR 167 extension. As a result, no mitigation is proposed at this intersection.

- N Meridian Ave/Spencer St N (#3) – No mitigation is proposed at this intersection given that an alternate route is available to access Valley Ave and N Meridian Ave.

Transportation Impact Fees – To mitigate long-term transportation impacts to the City road system, the City administers a Transportation Impact Fee (TIF) to new developments to improve the transportation system to accommodate the higher travel demand added by new development. The impact fee is calculated based on the project's proposed land use less an impact fee credit for the existing land use (if applicable). The City's current adopted transportation impact fee is $4,500 per PM peak hour trip. The preliminary estimated transportation impact fee for the proposed *PSE OTC* project is $261,000 ($4,500 x 58 new PM peak hour trips).

INTRODUCTION

This Traffic Impact Analysis (TIA) has been prepared for the *PSE Operations Training Center (OTC)* project located at 325 Todd Road NW in the City of Puyallup, WA (see Figure 1).

Project Description

The proposed *PSE OTC* project would include the development of an operations training center with a total building area of up to 38,800 square feet (SF). It should be noted that this building area excludes a limited square footage of covered outdoor/unenclosed training areas (approximately 8,673 SF) which does not fall within the definition of gross floor area (GFA) as defined by the Institute of Transportation Engineers (ITE).

The existing site is currently undeveloped land. Vehicular access to/from the site is proposed via two (2) full access driveways on Todd Road NW. The project is expected to be completed and occupied in 2025. A preliminary site plan is included in Appendix A.

Project Approach

Based on traffic scoping correspondence with City of Puyallup staff, the following tasks were undertaken to evaluate and disclose the traffic impacts associated with the *PSE OTC* project:

- Assessed existing conditions through field reconnaissance and reviewed existing planning documents.
- Described and assessed existing transportation conditions in the area.
- Documented existing public transit service and non-motorized facilities.
- Estimated trip generation for weekday daily, AM, and PM peak hour conditions.
- Documented trip distribution and assignment of project-generated traffic.
- Documented traffic forecasts and assumptions for year 2025 weekday AM and PM peak hour conditions without and with the proposed development.
- Conducted weekday AM and PM peak hour level of service (LOS) analyses at five (5) off-site study intersections for 2023 existing and 2025 future conditions without and with the proposed development.
- Assessed operations at the proposed site access driveways, including AM and PM peak hour LOS and queuing, and sight distance.
- Identified improvements to mitigate impacts of the project onto the adjacent street system.

Primary Data and Information Sources

- 2023 weekday AM and PM peak hour traffic counts, All Traffic Data.
- Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.
- *Highway Capacity Manual (HCM) 7th Edition,* TRB.
- City of Puyallup *2023-2028 Six Year Transportation Improvement Program.*
- *Pierce County 2023-2028 Transportation Improvement Program.*
- WSDOT *2023-2026 Statewide Transportation Improvement Program (STIP).*
- Pierce Transit website, June 2023.
- City of Puyallup *Comprehensive Plan*, 2015.

Figure 1: Project Site Vicinity

EXISTING CONDITIONS

This section describes existing transportation system conditions in the study area. Existing conditions include an inventory of existing roadways, existing traffic volumes, intersection levels of service (LOS), public transportation services, and non-motorized transportation facilities.

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, paved shoulders, and pedestrian facilities. The relationship of these roadways to the project site is shown in Figure 1.

Table 1
Existing Study Area Roadway Network

Roadway	Orientation	Arterial Classification	No. of Lanes	Speed Limit (mph)	Street Parking	Sidewalks	Bicycle Facilities
Valley Ave	East-West	Major Arterial	5	35	None	Both Sides	None
N Meridian Ave (SR 161)	North-South	Major Arterial	2-5	35	None	Both Sides	None
Todd Road NW/ 23rd Ave NW	East-West	Local Road	2	25	None	South Side	None
7th Street NW	North-South	Local Road	3	25	None	Both Sides	None
Spencer Street N	North-South	Local Road	2	25	None	East Side	None

Study Intersections

The City of Puyallup requires a detailed traffic analysis at intersections impacted by 25 or more peak hour project trips. Based on this requirement and traffic scoping correspondence with City of Puyallup staff, the following five (5) off-site study intersections were included in this TIA:

1. 7th Street NW/Valley Ave NW
2. N Meridian Ave/Valley Ave NW
3. N Meridian Ave/Spencer Street N
4. Spencer Street N/Todd Road NE
5. 4th Street NW/Todd Road NW

Public Transportation Services

Pierce Transit provides public transportation services in the immediate vicinity of the proposed project. The nearest bus stops are located approximately a half-mile away on N Meridian Ave, south of Spencer St N, which provide access to Pierce Transit Route 402.

Route 402 offers weekday and weekend transit service from Meridian E/171st St Ct E to the Federal Way Transit Center. The current schedule for Route 402 includes approximately 60-minute headways from 6:15 AM to 9:00 PM on weekdays and 7:00 AM to 7:45 PM on weekends.

Non-motorized Transportation Facilities

Non-motorized transportation facilities in the project site vicinity include sidewalks on the south side of 23rd Ave NW (Todd Road NW), on both sides of 7th Street NW, on the east side of Spencer Street N, on both sides of N Meridian Ave, and on both sides of Valley Ave NW. Pedestrian crosswalks and pushbuttons are provided at the signalized intersection of N Meridian Ave/Valley Ave NW. Based on traffic counts conducted at the study intersections, there is minimal pedestrian activity in the site vicinity.

Existing Traffic Volumes

Existing weekday AM and PM peak hour traffic volumes at the five (5) study intersections were based on traffic counts conducted in April 2023. The AM peak hour represents the highest one-hour time period between 7:00 and 9:00 AM. The PM peak hour represents the highest one-hour time period between 4:00 and 6:00 PM. The existing traffic count worksheets are included in Appendix B.

Based on traffic scoping discussions with City of Puyallup staff, in order to reflect 'true demand' at the study intersections, traffic data was also collected to adjust the peak hour turning movement counts for 'unserved demand'.

True and Unserved Demand

'True demand' is defined as the total number of vehicles that arrive at an intersection during a given period of time. When traffic volumes during this time period exceed the capacity of individual traffic movements, the true demand volumes are equal to the number of vehicles that successfully enter the intersection during that time period PLUS the number of vehicles that arrived at the intersection during that time period but did not yet enter the intersection. This second component of true demand is what is called 'unserved demand'.

Standard turning movement counts (TMCs) at an intersection count the number of vehicles that successfully enter the intersection during a given time period. To capture unserved demand, a separate count is collected at each study intersection of the number of vehicles remaining in queue at the beginning and end of each new time period for each traffic movement.

To account for unserved demand at the signalized study intersection of N Meridian Ave/Valley Ave NW (#2), the following methodology was applied which is consistent with other recently approved traffic studies in the City of Puyallup:

1. Include the vehicle queues observed (by movement) at the start of the peak hour as the "initial queue" in LOS calculations consistent with methodology outlined in the 7th Edition of the *Highway Capacity Manual (HCM)* using *Synchro 12* traffic analysis software.

2. Analyze true demand volumes in LOS calculations by adding the vehicles in queue at the end of the peak hour (i.e., residual queue) to the total turning movement counts.

To account for possible unserved demand at the stop-controlled study intersections, true demand volumes were analyzed in LOS calculations by adding the vehicles in queue at the end of the peak hour (i.e., residual queue) to the total turning movement counts. Since "initial queue" is not an available parameter in *Synchro 12* for stop-controlled intersections, no adjustments for "initial queue" were made at the stop-controlled study intersections. However, given that the issue of unserved demand is typically an issue experienced at signalized intersections operating at or near capacity, these adjustments to the traffic volumes at the stop-controlled study intersections (#1, #3 to #5) would provide a conservative analysis.

The resulting 2023 existing AM and PM peak hour true demand volumes and the initial and residual vehicle queues associated with each turning movement are included in Appendix C. A summary of the true demand methodology and detailed true demand volume calculations are also included in Appendix C.

The 2023 existing weekday AM and PM peak hour traffic volumes at the study intersections are illustrated in Figures 2 and 3 and reflect true demand volumes.

Figure 2: 2023 Existing Weekday AM Peak Hour Traffic Volumes

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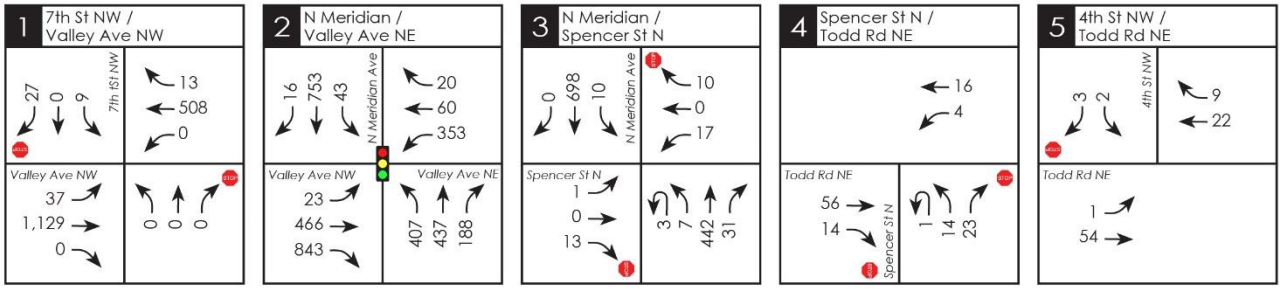

Figure 3: 2023 Existing Weekday PM Peak Hour Traffic Volumes

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Existing Intersection Levels of Service

Existing weekday AM and PM peak hour level of service (LOS) analyses were conducted at the five (5) off-site study intersections. Level of service calculations for intersections were based on the use of *Synchro 12* traffic analysis software. The LOS methodology is included in Appendix D.

Existing signal timing used in the analysis was provided by the Washington State Department of Transportation (WSDOT). It should be noted that the LOS calculations at all five (5) study intersections were conducted based on true demand traffic volumes. Additionally, initial queues were accounted for at the signalized intersection of N Meridian Ave/Valley Ave NW (#2) consistent with *Highway Capacity Manual (HCM) 7th Edition* methodology.

Based on City of Puyallup and WSDOT LOS standards, the LOS standard is LOS D at all study intersections with exception to intersections along N Meridian Ave (intersections #2 and #3) where the LOS standard is LOS E per the Transportation Element of the *City of Puyallup Comprehensive Plan Policy T-3.2*.

The 2023 existing AM and PM peak hour LOS analysis results for the study intersections are summarized in Table 2 with detailed LOS worksheets included in Appendix D.

Table 2
2023 Existing Peak Hour Level of Service Summary

Study Intersection	*LOS Standard*	AM Peak Hour LOS	AM Peak Hour Delay (sec)	PM Peak Hour LOS	PM Peak Hour Delay (sec)
Signalized:					
2. N Meridian Ave/Valley Ave NW	*E*	D	36.1	F	98.2
Stop-Controlled:					
1. 7th Street NW/Valley Ave NW	*D*				
Eastbound Left-Turn		A	10.0	A	8.8
Westbound Left-Turn		A	8.8	A	0.0
Southbound Left Turn		D	30.0	E	36.2
Southbound Shared Thru-Right		B	11.9	B	10.4
3. N Meridian Ave/Spencer Street N	*E*				
Northbound Left-Turn		A	8.6	A	9.2
Eastbound Left-Turn		F	71.2	E	37.3
Eastbound Shared Thru-Right		B	11.2	B	14.0
Westbound Left-Turn		F	106.7	E	43.8
Westbound Shared Thru-Right		B	12.4	B	10.0
Southbound Left-Turn		B	10.0	A	8.4
4. Spencer Street N/Todd Road NE [1]	*E*				
Northbound Approach		A	7.2	A	7.4
Eastbound Approach		A	7.1	A	7.4
Westbound Approach		A	7.3	A	7.3
5. 4th Street NW/Todd Road NW	*D*				
Eastbound Left-Turn		A	7.3	A	7.3
Southbound Approach		A	8.8	A	8.9

1. Evaluated as an all-way stop given that the existing configuration with NB and EB stop signs is not supported by HCM 7th Ed.

As shown in Table 2, side-street turns at the intersection of N Meridian Ave/Spencer Street N (#3) currently operate at LOS F during the weekday AM peak hour.

During the weekday PM peak hour, 2 intersections currently do not meet established LOS standards. The signalized intersection of N Meridian Ave/Valley Ave NW (#2) currently operates at LOS F during the weekday PM peak hour, and side-street turns at the intersection of 7th Street NW/Valley Ave NE (#1) currently operate at LOS F during the weekday PM peak hour.

FUTURE CONDITIONS

Planned Transportation Improvements

Based on a review of the City of Puyallup *2023-2028 Six Year Transportation Improvement Program (TIP)*, the Pierce County *2023-2028 TIP*, and the Washington State Department of Transportation (WSDOT) *2023-2026 Statewide Transportation Improvement Program,* the following transportation improvements are planned in the project vicinity:

City of Puyallup 2023-2028 TIP

- TIP #41: Valley Ave NE Road Improvement (4th Street NE to City Limits (East 300 feet to City Limits))
  Description:
  Widen roadway to five lanes with curb, gutter, sidewalk, sewer, and street lighting. This project does not have a planned construction year.

Pierce County 2023-2028 TIP

No capacity related projects were identified within the project vicinity in the Pierce County *2023-2028 Transportation Improvement Program* (TIP).

WSDOT 2023-2026 STIP

- STIP ID# WDO-410: SR 167 Completion Project (Stage 2 - SR 167/I-5 to SR 161)
  Description:
  Construction of new four lane extension of SR 167 between I-5 in Tacoma to SR 161 in Puyallup including new interchanges at SR 161 and Valley Ave, wetland mitigation in the Wapato Creek Watershed, and construction of a missing link in the regional trail system from Puyallup to Fife. This is a multi-year project and is currently anticipated to take place between 2026 and 2028.

It should be noted that the SR 167 extension is anticipated to result in changes to travel patterns in the study area, particularly on Valley Ave and N Meridian Ave (SR 161).

Project Trip Generation

The proposed *PSE OTC* project would include the development of an operations training center with a total building area of up to 38,800 square feet (SF).

Trip generation estimates for the proposed *PSE OTC* project were based on methodology documented in the ITE *Trip Generation Manual*, 11th Edition for land use code (LUC) 760 (Research & Development Center). Based on ITE's definition of gross floor area (GFA) which excludes unclosed roofed-over spaces, except those contained within the principal outside faces of exterior walls, it should be noted that the building area used in the trip generation estimates excludes a limited square footage of covered outdoor/unenclosed training areas (approximately 8,673 SF) which does not fall within ITE's definition of GFA.

The resulting new weekday daily, AM peak hour, and PM peak hour trip generation estimates for the proposed *PSE OTC* project are summarized in Table 3. The detailed trip generation calculations are included in Appendix E.

Table 3
Project Trip Generation Summary

	New Trips Generated		
Weekday Time Period	In	Out	Total
Daily	312	312	624
AM Peak Hour	48	11	59
PM Peak Hour	9	49	58

Project Trip Distribution and Assignment

The trip distribution of the project-generated trips to/from the site was estimated based on existing and anticipated traffic patterns in the project vicinity, the location of the proposed site driveways, and the location of population and employment centers in the project vicinity. The following Table 4 summarizes the resulting general trip distribution patterns.

Table 4
Peak Hour Project Trip Distribution

Route (Direction)	Trip Distribution
N Meridian Ave (south)	45%
Valley Ave NW (west)	20%
N Meridian Ave (north)	15%
Valley Ave NE (east)	15%
Todd Road NE (east)	5%
TOTAL	**100%**

Furthermore, it should be noted that the 45% entering trips from N Meridian Ave and the 15% entering trips from Valley Ave NE are anticipated to predominantly use the N Meridian Ave/Spencer Street N (#3) intersection which is a more direct route to the site via Todd Road. However, the exiting trips are anticipated to shift more toward the west via 7th Street NW and Valley Ave, rather than via Spencer Street, given that the stop-sign controlled left-turn from Spencer Street onto N Meridian Ave currently experiences higher delays in the peak hours. Given the higher delays that westbound left-turning vehicles have at the intersection of N Meridian Ave/Spencer Street (#3), it is anticipated that at least 90% of *PSE OTC* project trips destined to the south on N Meridian Ave or to the east on Valley Ave NE would use 7th Street NW and Valley Ave as an alternate route. These distribution patterns were confirmed by City of Puyallup staff during the traffic scoping process.

Based on the trip distribution patterns discussed above, the weekday AM and PM peak hour project trips were assigned through the five (5) study intersections and proposed site access locations. Figures 4 and 5 illustrate the resulting distribution and assignment of weekday AM and PM peak hour project trips through the study intersections and site access locations.

Future Traffic Volumes

Future year 2025 No Action (without project) weekday AM and PM peak hour traffic volumes were estimated by applying a 3.0 percent annual growth rate to the existing year 2023 volumes to account for new development in the study area and background growth in existing traffic. The future 2025 No Action AM and PM peak hour traffic volumes at the five (5) study intersections are shown in Figures 6 and 7.

Future year 2025 weekday AM and PM peak hour traffic volumes with the proposed *PSE OTC* project were estimated by adding the peak hour trip assignment from the proposed development (shown in Figures 4 and 5) to the 2025 No Action weekday AM and PM peak hour traffic volumes (shown in Figures 6 and 7). The resulting 2025 With Project weekday AM and PM peak hour traffic volumes at the study intersections and site access locations are shown in Figures 8 and 9.

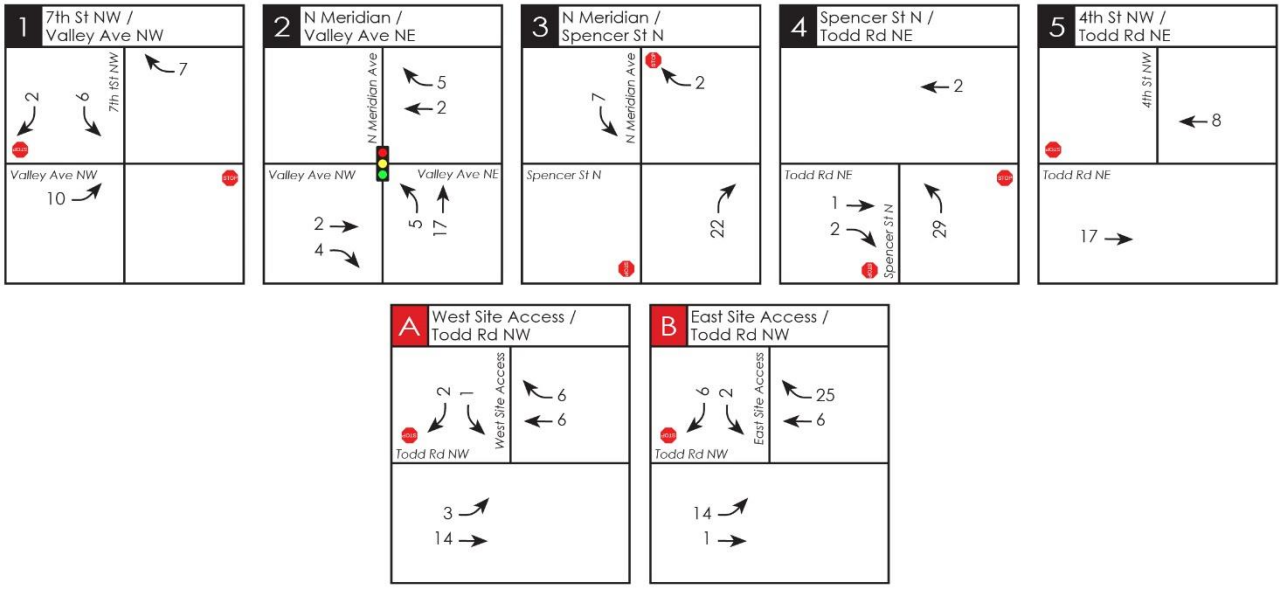

Figure 4: Weekday AM Peak Hour Project Trip Distribution and Assignment

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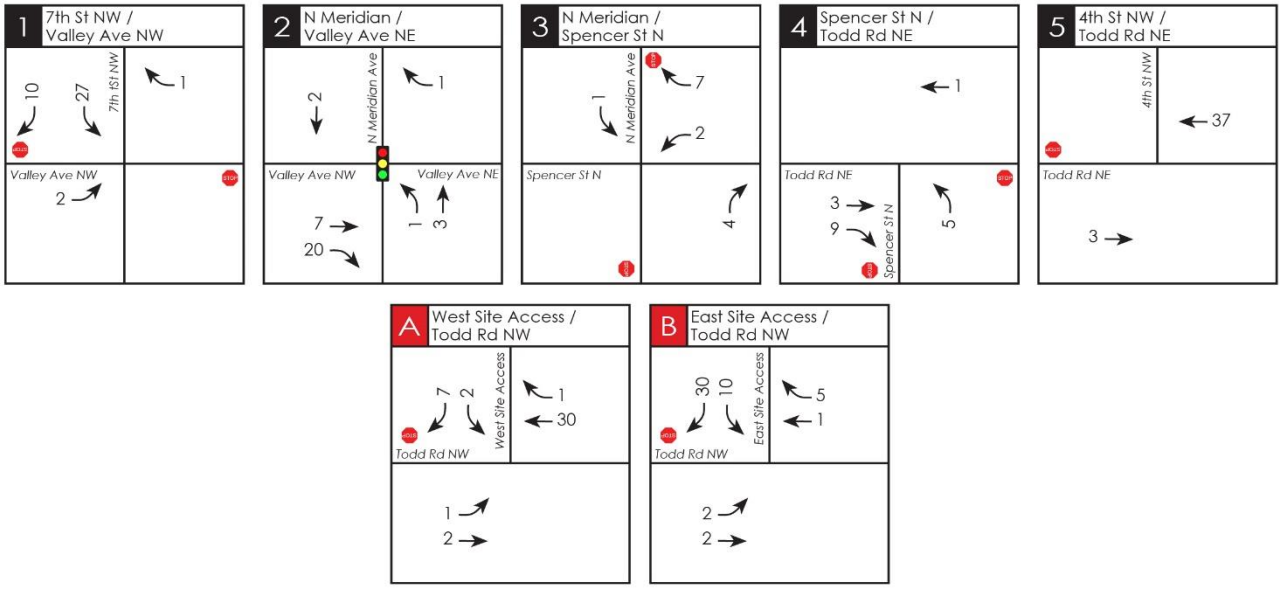

Figure 5: Weekday PM Peak Hour Project Trip Distribution and Assignment

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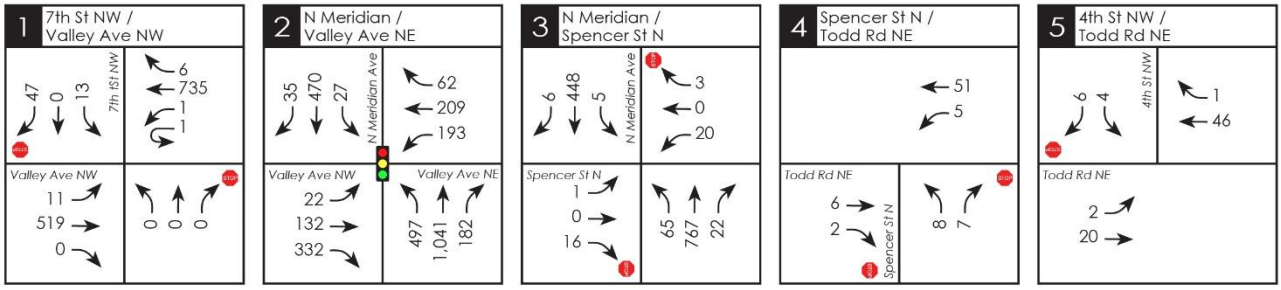

Figure 6: 2025 No Action Weekday AM Peak Hour Traffic Volumes

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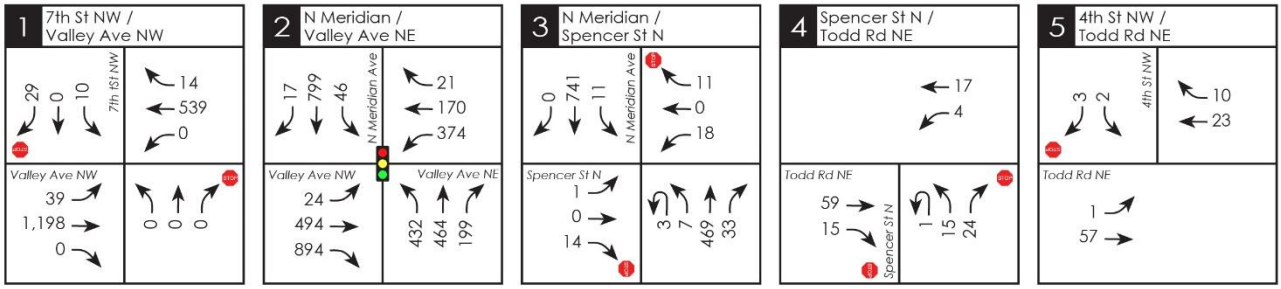

Figure 7: 2025 No Action Weekday PM Peak Hour Traffic Volumes

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Figure 8: 2025 With Project Weekday AM Peak Hour Traffic Volumes

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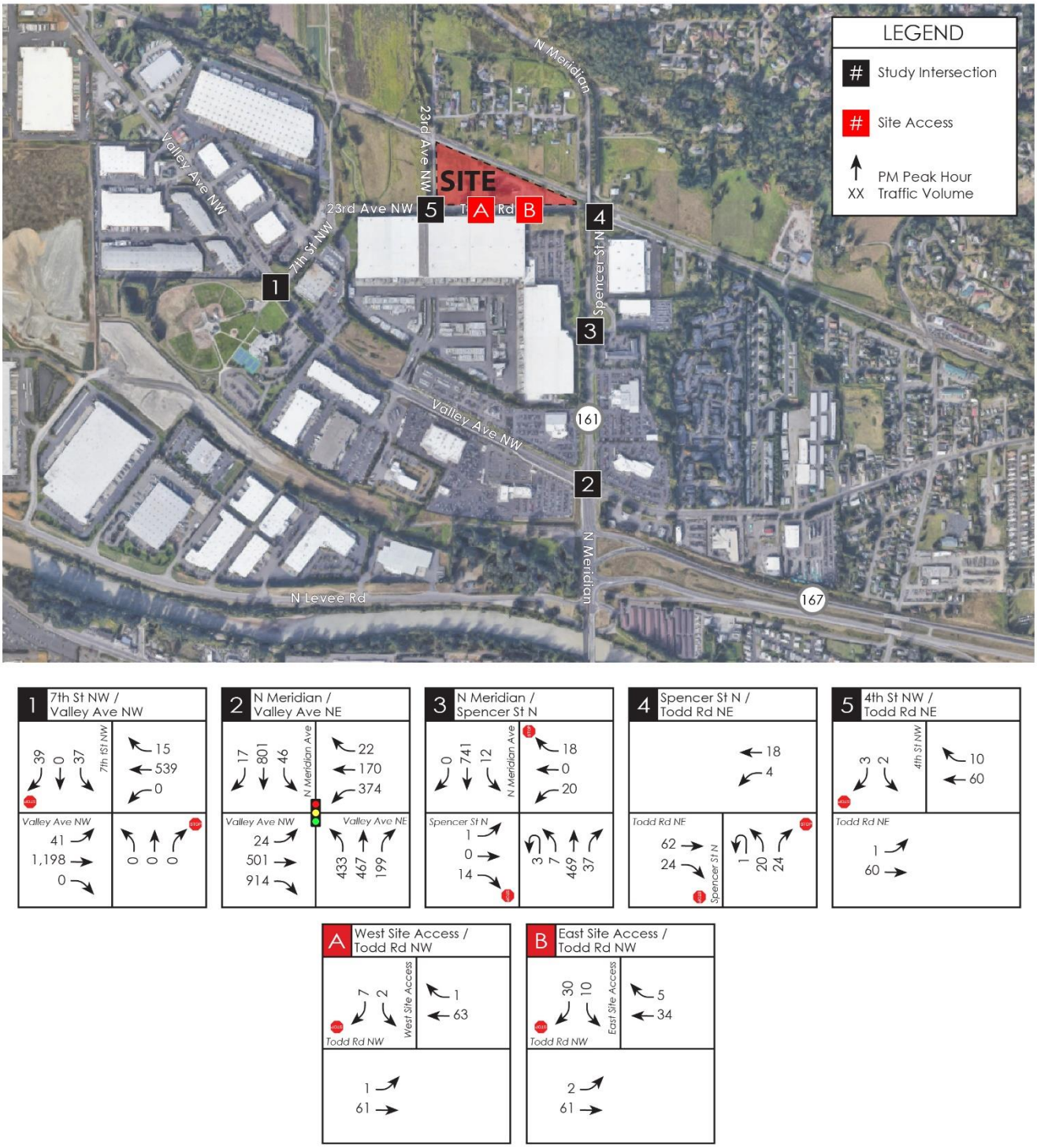

Figure 9: 2025 With Project Weekday PM Peak Hour Traffic Volumes

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Future Intersection Levels of Service

Future intersection LOS analyses were evaluated at the off-site study intersections for future year 2025 (horizon year) conditions without and with the proposed *PSE OTC* project. Since there are no planned improvements at the off-site study intersections that are anticipated to be completed prior to the evaluated horizon year (2025), the roadway network assumed in the future LOS analyses at the off-site study intersections was based on existing intersection geometry and signal timing.

The 2025 weekday AM and PM peak hour LOS results at the study intersections without and with the proposed *PSE OTC* project are summarized in Tables 5 and 6. The detailed LOS worksheets are included in Appendix D.

Based on the City of Puyallup and WSDOT LOS standards, the LOS standard is LOS D at all study intersections with exception to intersections along N Meridian Ave (intersections #2 and #3) where the LOS standard is LOS E per the Transportation Element of the *City of Puyallup Comprehensive Plan Policy T-3.2.*

Table 5
2025 AM Peak Hour Level of Service Summary

Study Intersection	*LOS Standard*	2025 No Action LOS	2025 No Action Delay (sec)	2025 With Project LOS	2025 With Project Delay (sec)
Signalized:					
2. N Meridian Ave/Valley Ave NW	*E*	D	36.8	D	36.9
Stop-Controlled:					
1. 7th Street NW/Valley Ave NW	*D*				
Eastbound Left-Turn		B	10.2	B	10.3
Westbound Left-Turn		A	9.0	A	9.0
Southbound Left Turn		D	33.6	E	37.3
Southbound Shared Thru-Right		B	12.3	B	12.3
3. N Meridian Ave/Spencer Street N	*E*				
Northbound Left-Turn		A	8.7	A	8.7
Eastbound Left-Turn		F	108.0	F	116.8
Eastbound Shared Thru-Right		B	11.5	B	11.5
Westbound Left-Turn		F	209.4	F	235.3
Westbound Shared Thru-Right		B	13.3	B	13.3
Southbound Left-Turn		B	10.6	B	10.8
4. Spencer Street N/Todd Road NE [1]	*D*				
Northbound Approach		A	7.2	A	7.7
Eastbound Approach		A	7.1	A	7.2
Westbound Approach		A	7.3	A	7.4
5. 4th Street NW/Todd Road NW	*D*				
Eastbound Left-Turn		A	7.4	A	7.4
Southbound Approach		A	8.8	A	8.9

1. Evaluated as an all-way stop given that the existing configuration with NB and EB stop signs is not supported by HCM 7th Ed.

Table 6
2025 PM Peak Hour Level of Service Summary

Study Intersection	*LOS Standard*	2025 No Action LOS	2025 No Action Delay (sec)	2025 With Project LOS	2025 With Project Delay (sec)
Signalized:					
2. N Meridian Ave/Valley Ave NW	*E*	F	108.7	F	111.7
Stop-Controlled:					
1. 7th Street NW/Valley Ave NW	*D*				
Eastbound Left-Turn		A	8.9	A	8.9
Westbound Left-Turn		A	0.0	A	0.0
Southbound Left Turn		E	41.3	F	55.5
Southbound Shared Thru-Right		B	10.5	B	10.6
3. N Meridian Ave/Spencer Street N	*E*				
Northbound Left-Turn		A	9.4	A	9.4
Eastbound Left-Turn		E	44.8	E	45.6
Eastbound Shared Thru-Right		B	14.6	B	14.6
Westbound Left-Turn		F	55.9	F	57.8
Westbound Shared Thru-Right		B	10.2	B	10.3
Southbound Left-Turn		A	8.5	A	8.5
4. Spencer Street N/Todd Road NE [1]	*D*				
Northbound Approach		A	7.4	A	7.5
Eastbound Approach		A	7.4	A	7.5
Westbound Approach		A	7.4	A	7.4
5. 4th Street NW/Todd Road NW	*D*				
Eastbound Left-Turn		A	7.3	A	7.4
Southbound Approach		A	8.9	A	9.2

1. Evaluated as an all-way stop given that the existing configuration with NB and EB stop signs is not supported by HCM 7th Ed.

As shown in **Tables 5 and 6**, 3 of the 5 off-site study intersections are anticipated to exceed established LOS standards without or with the proposed project in 2025. The following explains the resulting operation of those intersections during the weekday AM and/or PM peak hours in 2025:

- 7th Street NW/Valley Ave NW (#1) – During the AM peak hour, the side-street left-turn from 7th Street NW is anticipated to operate at LOS E with the proposed project in 2025. During the PM peak hour, the same left-turn movement is anticipated to operate at LOS E/F in 2025. The *PSE OTC* project is estimated to add 25 new AM peak hour trips (1.8% of total entering traffic) and 40 new PM peak hour trips (2.1% of total entering traffic) to the intersection. The City of Puyallup does not currently have a planned improvement at this intersection in their 6-year TIP. However, based on future anticipated peak hour operation, it is recommended that the City consider adding a planned improvement to their 6-year TIP that would add a new traffic signal at this intersection. The *PSE OTC* project would provide a proportionate share contribution of 2.0% of the cost of the new signal.

- N Meridian Ave/Valley Ave NW (#2) – This signalized intersection currently operates at LOS F and is anticipated to continue to operate at LOS F without or with the proposed *PSE OTC* project during the PM peak hour in 2025. The *PSE OTC* project is estimated to add 35 new AM peak hour trips (1.1% of total entering traffic) and 34 new PM peak hour trips (0.9% of total entering traffic) to this intersection. While there are currently no planned improvements at this intersection by the City of Puyallup or WSDOT, the completion of the future SR-167 Extension project is expected to result in improved future operations at this intersection; this is due to the anticipated re-distribution of traffic from Valley Ave NW and N Meridian Ave onto the SR 167 extension which will have a new interchange configuration at N Meridian Ave, as well as new access and interchange further west at Freeman Road E. As a result, no mitigation is identified for the proposed *PSE OTC* project.
- N Meridian Ave/Spencer Street N (#3) – During the AM peak hour, the eastbound and westbound side-street left-turn movements are anticipated to operate at LOS F without or with the proposed project in 2025. During the PM peak hour, the westbound left-turn movement is anticipated to operate at LOS F in 2025. The *PSE OTC* project is estimated to add 31 new AM peak hour trips (2.2% of total entering traffic) and 14 new PM peak hour trips (1.1% of total entering traffic) to this intersection. It should be noted that this failing LOS condition currently exists (during the AM peak hour) or is anticipated to occur without the proposed project in 2025 (during the PM peak hour). In addition, given the delay that westbound left-turning vehicles would have at this intersection, it is anticipated that at least 90% of *PSE OTC* project trips destined to the south on N Meridan Ave or to the east on Valley Ave NE would utilize alternate routes (such as the 7th Street NW/Valley Ave NW intersection). Given that an alternate route is available for project trips to avoid this intersection, no mitigation is identified for the proposed *PSE OTC* project. However, the City may consider restricting side-street left-turns at this intersection in the future.

Site Access Evaluation

Vehicular access to/from the proposed *PSE OTC* project is proposed via two (2) full access driveways on Todd Road NW. This section documents the evaluation of the proposed site access locations including level of service (LOS), queuing, sight distance, and vehicle turning studies.

LOS and Queuing

To assess operations at the proposed site access locations, LOS and queuing were conducted during the weekday AM and PM peak hours for future year 2025 conditions. 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 2025 AM and PM peak hour traffic volumes at the proposed site access locations were shown previously in Figures 8 and 9.

Table 7 summarizes the results of the 2025 LOS and queue analyses at the site access driveways. The LOS and queue worksheets are included in Appendix D.

Table 7
Future 2025 Weekday Peak Hour Site Access LOS and Queue Summary

	AM Peak Hour			PM Peak Hour		
Site Access / Movement	LOS	Delay (sec)	95th % Queue (ft)[1]	LOS	Delay (sec)	95th % Queue (ft)[1]
A. West Site Access/Todd Road NW						
Eastbound Left-Turn	A	7.4	0'	A	7.4	0'
Southbound Approach	A	8.8	0'	A	8.8	0'
B. East Site Access/Todd Road NW						
Eastbound Left-Turn	A	7.4	0'	A	7.3	0'
Southbound Approach	A	8.8	0'	A	8.8	< 25'

1. < 25' indicates queue is statistically less than 1 vehicle.

As shown in Table 7, all turn movements at the two site access driveways are expected to operate at LOS A with minimal queueing during the weekday AM and PM peak hour periods.

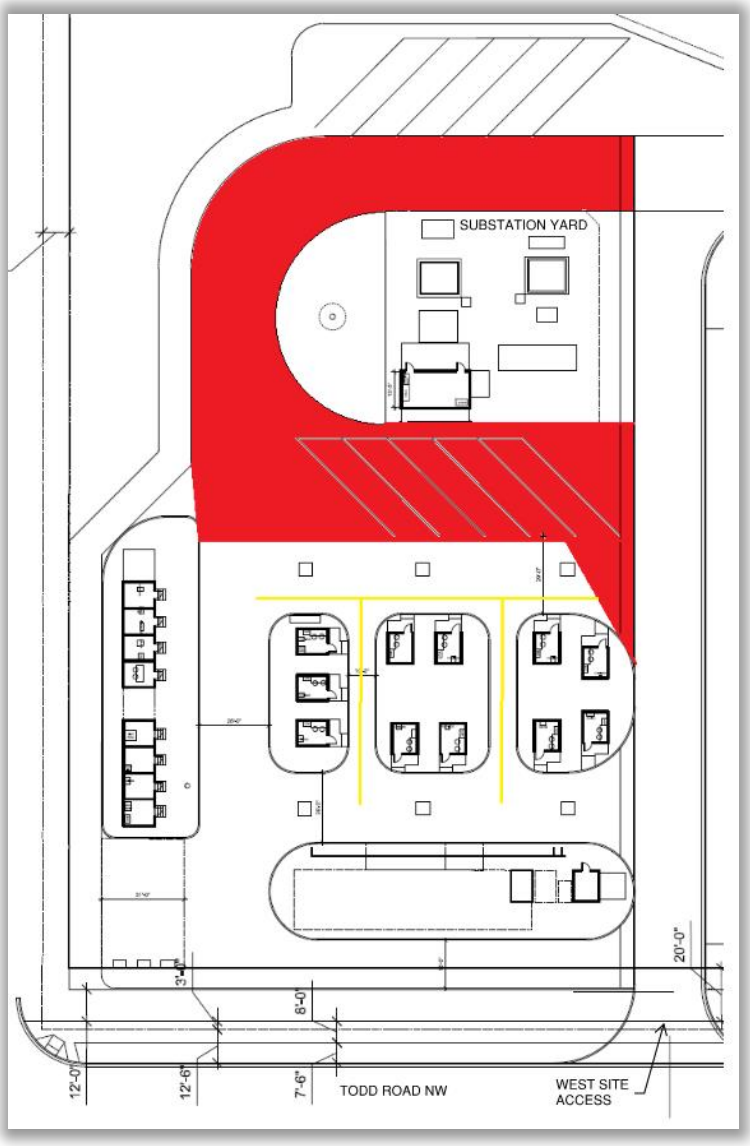
Sight Distance

Intersection sight distance (ISD) and stopping sight distance (SSD) assessments were conducted at the proposed site access locations on Todd Road based on a review of AASHTO's *A Policy on Geometric Design of Highways and Streets, 7th Edition (2018)* and the City of Puyallup's *City Standards – Section 100 Roadway Design*. The sight distance assessments were conducted based on a 35-mph design speed (posted speed + 10 mph) for a combination truck, a single-unit truck, and a passenger vehicle.

Sight distance exhibits were provided by Freeland & Associates and are included in Appendix F. As shown in the exhibits included in Appendix F, the available ISDs and SSDs at the proposed site access locations are anticipated to meet WSDOT and City of Puyallup minimum standards.

Vehicle Turning Studies

Vehicle turning studies for the largest anticipated design vehicle were conducted to ensure efficient site circulation. The largest anticipated design vehicle is a WB-67 truck with 53-foot low boy trailer which will be used to deliver and install transformers at the substation yard, which occupies the northwest end of the site. The WB-67 truck with low boy trailer will traverse and set up in the area around the substation yard only (i.e., red shaded area below). Angled stalls directly south of the substation yard will be vacated on those days when the WB-67 truck is on site making a transformer delivery. It should be noted that the WB-67 truck and low boy trailer is only expected to be on site 1 to 2 times per year. The WB-67 truck and low boy trailer will not deviate from the designated travel path as there is an extra-deep subgrade requirement for this heavy vehicle. The vehicle turning studies are shown in Appendix G. As shown on the diagrams, the internal site design is able to accommodate the design vehicle circulation through the site.



MITIGATION

The following measures are identified to mitigate transportation impacts of the proposed PSE Operations Training Center development.

Off-Site SEPA Improvements

Based on the results of this analysis, the following are proposed to mitigate traffic impacts from the proposed *PSE OTC* project on roadways and intersections in the project vicinity:

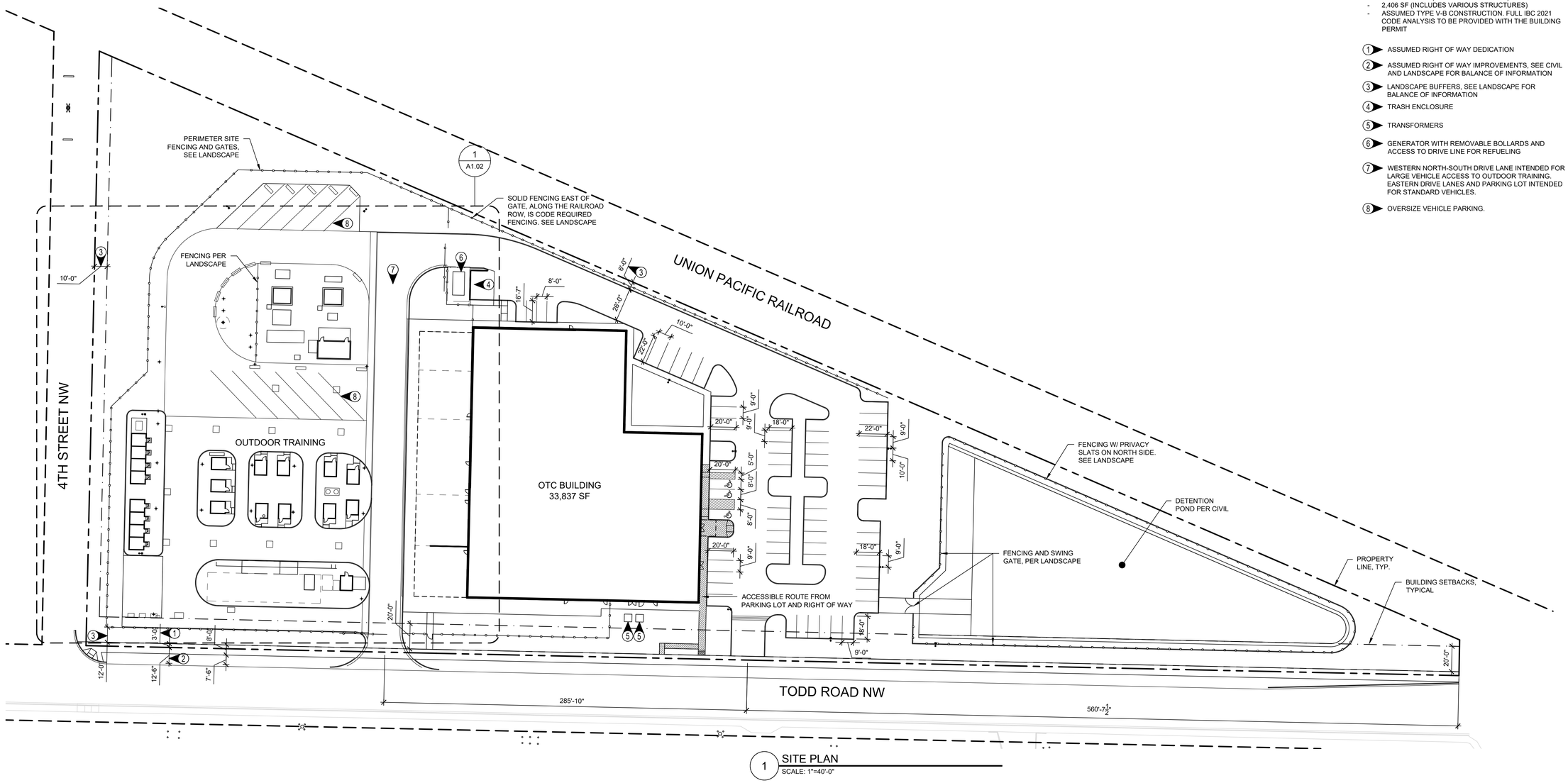
- 7th Street NW/Valley Ave NW (#1) – The City of Puyallup does not currently have a planned improvement at this intersection in their 6-year TIP. However, based on future anticipated peak hour operation, it is recommended that the City consider adding a planned improvement to their 6-year TIP that would add a new traffic signal at this intersection. The *PSE OTC* project would provide a proportionate share contribution of 2.0% of the cost of the new signal.
- N Meridian Ave/Valley Ave NW (#2) – The completion of the future SR-167 Extension project is expected to result in improved future operations at this intersection due to the anticipated re-distribution of traffic from Valley Ave NW and N Meridian Ave onto the SR 167 extension. As a result, no mitigation is proposed at this intersection.
- N Meridian Ave/Spencer St N (#3) – No mitigation is proposed at this intersection given that an alternate route is available to access Valley Ave and N Meridian Ave.

Transportation Impact Fees

To mitigate long-term transportation impacts, the City administers a Transportation Impact Fee (TIF) to new developments to improve the transportation system to accommodate the higher travel demand added by new development. The impact fee is calculated based on the project's proposed land use less an impact fee credit for the existing land use (if applicable). The City's current adopted transportation impact fee is $4,500 per PM peak hour trip. The preliminary estimated transportation impact fee for the proposed *PSE OTC* project is $261,000 ($4,500 x 58 new PM peak hour trips).

Appendix A

Preliminary Site Plan



1 SITE PLAN
SCALE: 1"=40'-0"

GENERAL NOTES:

1. THIS SITE PLAN WAS GENERATED BASED ON THE INFORMATION GATHERED DURING THE PROGRAMMING PHASE, END USER MEETINGS, ROOM DATA SHEETS, THE FF&E SPREADSHEET, AND PSE COMMENTS. THE SITE PLAN SHOWS THE MAIN PROGRAM AREAS AND BUILDINGS, AND THE KNOWN SITE CONSTRAINTS. SEE THE ROOM DATA SHEETS AND THE FF&E SPREADSHEET FOR MORE DETAILED REQUIREMENTS AND INFORMATION. THE SITE PLAN WILL BE FURTHER DEVELOPED IN UPCOMING DESIGN PHASES (DESIGN DEVELOPMENT, AND CONSTRUCTION DOCUMENTS).

2. PARKING
- STANDARDS STALLS = 58
- LARGER 'PICKUP' TRUCK STALLS (10'X22') = 10
- OVERSIZE VEHICLE STALLS (12'X40') = 10
- **TOTAL: 78 STALLS PROVIDED**

THE CLOSEST ASSOCIATED USE TYPE DEFINED IN THE PUYALLUP MUNICIPAL CODE (PMC) ARE, 'COLLEGES, UNIVERSITIES, VOCATIONAL SCHOOLS', WHICH INCLUDES CLASSROOMS,OFFICE SPACES, AND AUDITORIUMS. THE OTHER USE TYPE IS WAREHOUSE.
- COLLEGES, UNIVERSITIES, VOCATIONAL SCHOOLS
  CLASSROOMS (1/50 SF): 2,430 SF / 50 = 49
  OFFICE SPACE (1/300 SF): 2,190 SF / 300 SF = 8
- WAREHOUSE (1/2,000 SF): 3,088 SF / 2,000 SF = 2
- **TOTAL: 59 STALLS REQUIRED**

THE SITE PLAN PROVIDES 223 LINEAL FEET OF PARALLEL PARKING OR LOADING ZONES FOR LARGE PSE AND EMERGENCY RESPONSE VEHICLES. THESE ARE LOCATED ALONG THE WEST SIDE OF THE OTC BUILDING, WHERE THE MAIN LABS ARE, AND ACROSS FROM THE OUTDOOR TRAINING AREA.

3. CITY OF PUYALLUP PRE-APPLICATION REQUIREMENTS
- SEE CIVIL FOR DRIVE ISLES, PAVING/CURBS, AND PARKING LOTS.
- SEE LANDSCAPE FOR BUFFERS AND FENCING.

4. BUILDING DATA: OUTDOOR TRAINING AREA
- B OCCUPANCY (VOCATIONAL SCHOOL)
- 2,406 SF (INCLUDES VARIOUS STRUCTURES)
- ASSUMED TYPE V-B CONSTRUCTION. FULL IBC 2021 CODE ANALYSIS TO BE PROVIDED WITH THE BUILDING PERMIT

1. ASSUMED RIGHT OF WAY DEDICATION
2. ASSUMED RIGHT OF WAY IMPROVEMENTS, SEE CIVIL AND LANDSCAPE FOR BALANCE OF INFORMATION
3. LANDSCAPE BUFFERS, SEE LANDSCAPE FOR BALANCE OF INFORMATION
4. TRASH ENCLOSURE
5. TRANSFORMERS
6. GENERATOR WITH REMOVABLE BOLLARDS AND ACCESS TO DRIVE LINE FOR REFUELING
7. WESTERN NORTH-SOUTH DRIVE LANE INTENDED FOR LARGE VEHICLE ACCESS TO OUTDOOR TRAINING. EASTERN DRIVE LANES AND PARKING LOT INTENDED FOR STANDARD VEHICLES.
8. OVERSIZE VEHICLE PARKING.

ZERVAS
ARCHITECTURE | INTERIOR DESIGN
zervasgroup.com
209 Prospect Street
Bellingham, WA 98225
360.734.4744

SCHEMATIC DESIGN

REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH
SCALE: 1"=40'-0" 0 40'

PSE - OPERATIONAL TRAINING CENTER

OVERALL SITE PLAN

PROJECT No:	202202.06
DRAWN BY:	MR
CHECKED BY:	AK
DATE ISSUED:	07/21/23

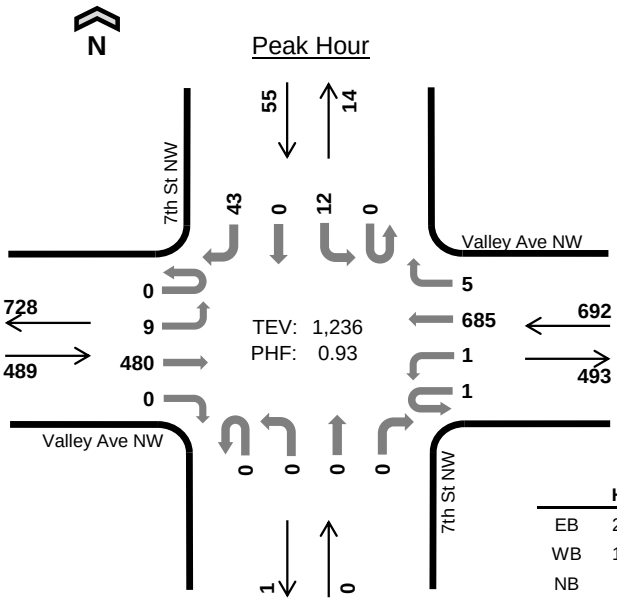
A1.01

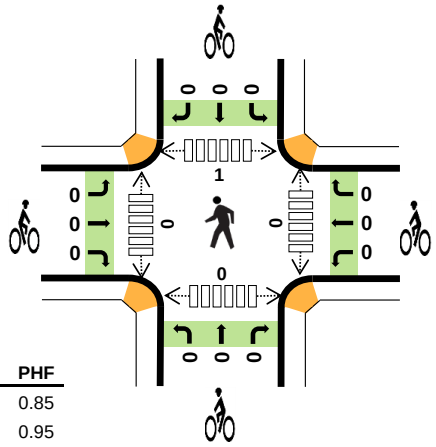
Appendix B

Existing Peak Hour Turning Movement Count Sheets

7th St NW
Valley Ave NW

Date: 04/26/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	21.9%	0.85
WB	17.1%	0.95
NB	-	-
SB	21.8%	0.72
TOTAL	19.2%	0.93

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**4**	**109**	**0**	**0**	**0**	**176**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**12**	**306**	0
7:15 AM		**0**	**1**	**114**	**0**	**0**	**0**	**153**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**16**	**289**	0
7:30 AM		**0**	**2**	**115**	**0**	**1**	**0**	**182**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**309**	0
7:45 AM		**0**	**2**	**142**	**0**	**0**	**1**	**174**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**332**	**1,236**
8:00 AM		0	4	131	0	0	0	123	2	0	0	0	2	0	2	0	4	268	1,198
8:15 AM		0	1	94	0	0	0	134	4	0	0	0	0	0	0	0	5	238	1,147
8:30 AM		0	2	122	0	0	1	149	4	0	0	0	1	0	3	0	6	288	1,126
8:45 AM		0	1	102	0	0	0	109	2	0	0	0	0	0	3	0	9	226	1,020
Count Total		0	17	929	0	1	2	1,200	17	0	0	0	3	0	20	0	67	2,256	0
Peak Hour	**All**	**0**	**9**	**480**	**0**	**1**	**1**	**685**	**5**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**43**	**1,236**	**0**
	HV	**0**	**1**	**106**	**0**	**0**	**0**	**116**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**237**	**0**
	HV%	**-**	**11%**	**22%**	**-**	**0%**	**0%**	**17%**	**40%**	**-**	**-**	**-**	**-**	**-**	**50%**	**-**	**14%**	**19%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**17**	**34**	**0**	**4**	***55***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**36**	**34**	**0**	**5**	***75***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**22**	**23**	**0**	**3**	***48***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**32**	**27**	**0**	**0**	***59***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
8:00 AM	25	18	0	1	*44*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	26	25	0	0	*51*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	29	35	0	5	*69*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	32	7	0	2	*41*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	219	203	0	20	*442*	0	0	0	0	*0*	0	0	1	0	*1*
Peak Hour	**107**	**118**	**0**	**12**	***237***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**17**	**0**	**0**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**55**	0
7:15 AM	**0**	**1**	**35**	**0**	**0**	**0**	**32**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**75**	0
7:30 AM	**0**	**0**	**22**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**48**	0
7:45 AM	**0**	**0**	**32**	**0**	**0**	**0**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**	**237**
8:00 AM	0	0	25	0	0	0	18	0	0	0	0	0	0	1	0	0	44	226
8:15 AM	0	1	25	0	0	0	25	0	0	0	0	0	0	0	0	0	51	202
8:30 AM	0	1	28	0	0	0	34	1	0	0	0	0	0	3	0	2	69	223
8:45 AM	0	0	32	0	0	0	6	1	0	0	0	0	0	1	0	1	41	205
Count Total	0	3	216	0	0	0	199	4	0	0	0	0	0	11	0	9	442	0
Peak Hour	**0**	**1**	**106**	**0**	**0**	**0**	**116**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**237**	**0**

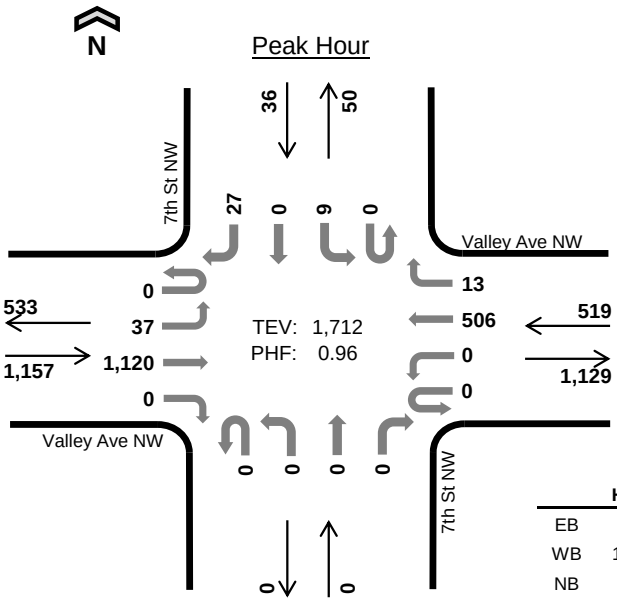
Two-Hour Count Summaries - Bikes

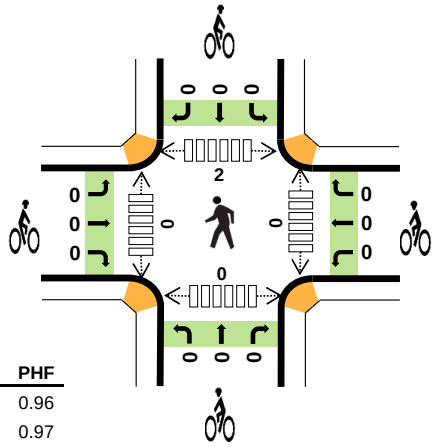
Interval Start	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

7th St NW
Valley Ave NW

Date: 04/26/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	5.7%	0.96
WB	12.5%	0.97
NB	-	-
SB	11.1%	0.82
TOTAL	7.9%	0.96

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	11	242	0	0	0	121	3	0	0	0	0	0	2	0	10	389	0
4:15 PM		**0**	**4**	**275**	**0**	**0**	**0**	**128**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**415**	0
4:30 PM		**0**	**9**	**292**	**0**	**0**	**0**	**125**	**7**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**8**	**444**	0
4:45 PM		**0**	**10**	**292**	**0**	**0**	**0**	**119**	**5**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**6**	**434**	1,682
5:00 PM		**0**	**14**	**261**	**0**	**0**	**0**	**134**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**8**	**419**	**1,712**
5:15 PM		0	6	241	0	0	0	129	1	0	0	0	0	0	3	0	10	390	1,687
5:30 PM		0	2	208	0	0	0	111	3	0	0	0	1	0	3	0	9	337	1,580
5:45 PM		0	7	176	0	0	0	105	0	0	0	0	0	0	4	0	6	298	1,444
Count Total		0	63	1,987	0	0	0	972	20	0	0	0	1	0	21	0	62	3,126	0
Peak Hour	**All**	**0**	**37**	**1,120**	**0**	**0**	**0**	**506**	**13**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**27**	**1,712**	**0**
	HV	**0**	**4**	**62**	**0**	**0**	**0**	**62**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**135**	**0**
	HV%	**-**	**11%**	**6%**	**-**	**-**	**-**	**12%**	**23%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**15%**	**8%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	17	21	0	4	*42*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**21**	**20**	**0**	**3**	***44***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**24**	**14**	**0**	**0**	***38***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**9**	**15**	**0**	**0**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
5:00 PM	**12**	**16**	**0**	**1**	***29***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	21	17	0	1	*39*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	11	19	0	1	*31*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	10	15	0	0	*25*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	125	137	0	10	*272*	0	0	0	0	*0*	0	0	2	0	*2*
Peak Hour	**66**	**65**	**0**	**4**	***135***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	17	0	0	0	19	2	0	0	0	0	0	1	0	3	42	0
4:15 PM	**0**	**1**	**20**	**0**	**0**	**0**	**19**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**44**	0
4:30 PM	**0**	**2**	**22**	**0**	**0**	**0**	**13**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**38**	0
4:45 PM	**0**	**0**	**9**	**0**	**0**	**0**	**14**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	148
5:00 PM	**0**	**1**	**11**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**29**	**135**
5:15 PM	0	0	21	0	0	0	17	0	0	0	0	0	0	0	0	1	39	130
5:30 PM	0	0	11	0	0	0	19	0	0	0	0	0	0	1	0	0	31	123
5:45 PM	0	1	9	0	0	0	15	0	0	0	0	0	0	0	0	0	25	124
Count Total	0	5	120	0	0	0	132	5	0	0	0	0	0	2	0	8	272	0
Peak Hour	**0**	**4**	**62**	**0**	**0**	**0**	**62**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**135**	**0**

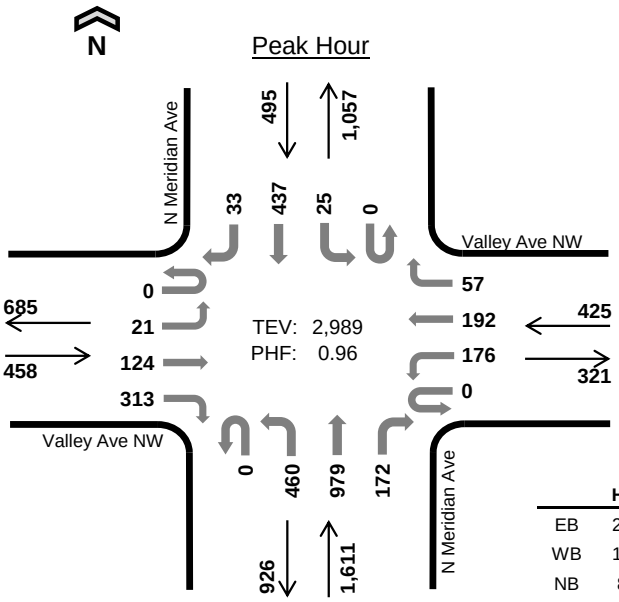
Two-Hour Count Summaries - Bikes

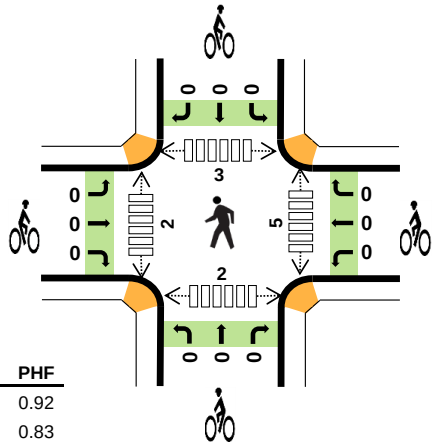
Interval Start	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Meridian Ave
Valley Ave NW

Date: 05/02/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	25.3%	0.92
WB	16.9%	0.83
NB	8.8%	0.95
SB	6.9%	0.93
TOTAL	12.2%	0.96

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	5	39	51	0	32	64	14	0	115	217	39	0	16	67	9	668	0
7:15 AM		**0**	**3**	**28**	**73**	**0**	**37**	**44**	**11**	**0**	**119**	**253**	**50**	**0**	**9**	**110**	**13**	**750**	0
7:30 AM		**0**	**7**	**30**	**83**	**0**	**52**	**58**	**18**	**0**	**105**	**263**	**28**	**0**	**4**	**121**	**8**	**777**	0
7:45 AM		**0**	**5**	**33**	**71**	**0**	**41**	**45**	**12**	**0**	**105**	**256**	**45**	**0**	**7**	**117**	**9**	**746**	2,941
8:00 AM		**0**	**6**	**33**	**86**	**0**	**46**	**45**	**16**	**0**	**131**	**207**	**49**	**0**	**5**	**89**	**3**	**716**	**2,989**
8:15 AM		0	6	25	87	0	34	31	17	0	106	178	41	0	7	106	6	644	2,883
8:30 AM		0	10	23	77	0	51	34	7	0	74	139	41	0	10	90	6	562	2,668
8:45 AM		0	2	25	78	0	42	29	17	0	106	164	51	0	8	96	9	627	2,549
Count Total		0	44	236	606	0	335	350	112	0	861	1,677	344	0	66	796	63	5,490	0
Peak Hour	**All**	**0**	**21**	**124**	**313**	**0**	**176**	**192**	**57**	**0**	**460**	**979**	**172**	**0**	**25**	**437**	**33**	**2,989**	**0**
	HV	**0**	**2**	**31**	**83**	**0**	**33**	**27**	**12**	**0**	**79**	**41**	**22**	**0**	**4**	**23**	**7**	**364**	**0**
	HV%	**-**	**10%**	**25%**	**27%**	**-**	**19%**	**14%**	**21%**	**-**	**17%**	**4%**	**13%**	**-**	**16%**	**5%**	**21%**	**12%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	30	17	33	3	*83*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**35**	**11**	**27**	**9**	***82***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	*2*
7:30 AM	**19**	**24**	**33**	**12**	***88***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**1**	**1**	*6*
7:45 AM	**34**	**15**	**41**	**8**	***98***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**1**	*3*
8:00 AM	**28**	**22**	**41**	**5**	***96***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
8:15 AM	30	23	32	15	*100*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	33	19	24	6	*82*	0	0	0	0	*0*	0	2	0	0	*2*
8:45 AM	31	19	37	6	*93*	0	0	0	0	*0*	2	0	1	0	*3*
Count Total	240	150	268	64	*722*	0	0	0	0	*0*	7	4	4	2	*17*
Peak Hour	**116**	**72**	**142**	**34**	***364***	**0**	**0**	**0**	**0**	***0***	**5**	**2**	**3**	**2**	***12***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW				Valley Ave NW				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	13	15	0	3	13	1	0	21	10	2	0	0	3	0	83	0
7:15 AM	**0**	**1**	**9**	**25**	**0**	**5**	**6**	**0**	**0**	**16**	**7**	**4**	**0**	**2**	**2**	**5**	**82**	0
7:30 AM	**0**	**0**	**5**	**14**	**0**	**11**	**6**	**7**	**0**	**18**	**15**	**0**	**0**	**0**	**11**	**1**	**88**	0
7:45 AM	**0**	**1**	**8**	**25**	**0**	**10**	**4**	**1**	**0**	**22**	**12**	**7**	**0**	**1**	**6**	**1**	**98**	351
8:00 AM	**0**	**0**	**9**	**19**	**0**	**7**	**11**	**4**	**0**	**23**	**7**	**11**	**0**	**1**	**4**	**0**	**96**	**364**
8:15 AM	0	0	6	24	0	9	10	4	0	16	13	3	0	0	13	2	100	382
8:30 AM	0	2	4	27	0	12	4	3	0	17	5	2	0	0	4	2	82	376
8:45 AM	0	0	2	29	0	7	9	3	0	22	12	3	0	0	6	0	93	371
Count Total	0	6	56	178	0	64	63	23	0	155	81	32	0	4	49	11	722	0
Peak Hour	**0**	**2**	**31**	**83**	**0**	**33**	**27**	**12**	**0**	**79**	**41**	**22**	**0**	**4**	**23**	**7**	**364**	**0**

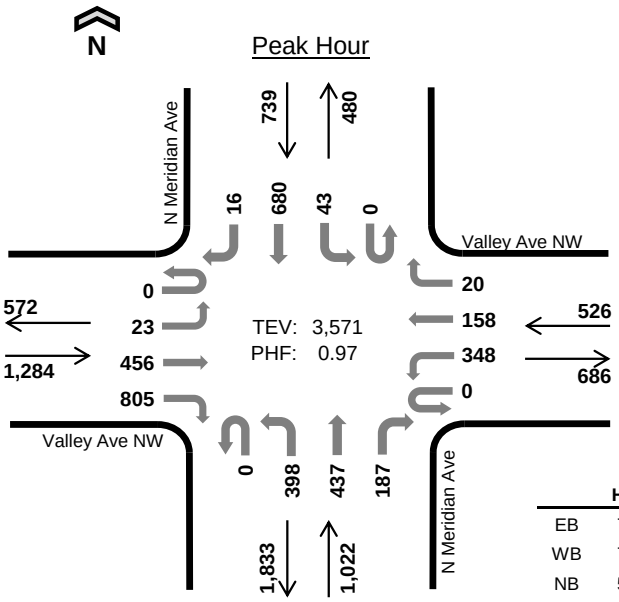
Two-Hour Count Summaries - Bikes

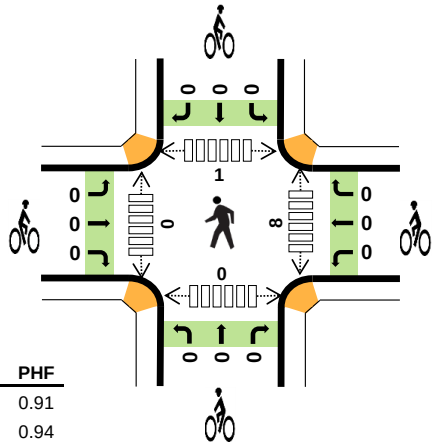
Interval Start	Valley Ave NW			Valley Ave NW			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Meridian Ave
Valley Ave NW

Date: 05/02/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	7.2%	0.91
WB	7.6%	0.94
NB	5.9%	0.98
SB	3.5%	0.96
TOTAL	6.1%	0.97

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	10	86	165	0	90	32	10	0	64	114	43	0	11	190	1	816	0
4:15 PM		0	4	129	155	0	81	42	8	0	78	113	46	0	5	165	4	830	0
4:30 PM		**0**	**8**	**112**	**173**	**0**	**87**	**46**	**7**	**0**	**98**	**111**	**51**	**0**	**8**	**171**	**3**	**875**	0
4:45 PM		**0**	**4**	**140**	**208**	**0**	**94**	**43**	**1**	**0**	**99**	**112**	**34**	**0**	**11**	**166**	**4**	**916**	3,437
5:00 PM		**0**	**3**	**94**	**222**	**0**	**85**	**34**	**7**	**0**	**88**	**119**	**48**	**0**	**13**	**164**	**6**	**883**	3,504
5:15 PM		**0**	**8**	**110**	**202**	**0**	**82**	**35**	**5**	**0**	**113**	**95**	**54**	**0**	**11**	**179**	**3**	**897**	**3,571**
5:30 PM		0	8	68	178	0	50	35	8	0	110	106	43	0	7	181	11	805	3,501
5:45 PM		0	3	59	183	0	55	38	8	0	118	110	57	0	4	164	12	811	3,396
Count Total		0	48	798	1,486	0	624	305	54	0	768	880	376	0	70	1,380	44	6,833	0
Peak Hour	**All**	**0**	**23**	**456**	**805**	**0**	**348**	**158**	**20**	**0**	**398**	**437**	**187**	**0**	**43**	**680**	**16**	**3,571**	**0**
	HV	**0**	**1**	**45**	**47**	**0**	**9**	**29**	**2**	**0**	**41**	**12**	**7**	**0**	**2**	**22**	**2**	**219**	**0**
	HV%	**-**	**4%**	**10%**	**6%**	**-**	**3%**	**18%**	**10%**	**-**	**10%**	**3%**	**4%**	**-**	**5%**	**3%**	**13%**	**6%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	19	12	9	3	*43*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	25	14	15	11	*65*	0	0	0	0	*0*	6	0	0	0	*6*
4:30 PM	**26**	**14**	**13**	**3**	***56***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**0**	**0**	*6*
4:45 PM	**20**	**12**	**15**	**12**	***59***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:00 PM	**27**	**8**	**14**	**5**	***54***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
5:15 PM	**20**	**6**	**18**	**6**	***50***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	30	8	12	0	*50*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	17	9	21	1	*48*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	184	83	117	41	*425*	0	0	0	0	*0*	16	0	1	1	*18*
Peak Hour	**93**	**40**	**60**	**26**	***219***	**0**	**0**	**0**	**0**	***0***	**8**	**0**	**1**	**0**	***9***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW				Valley Ave NW				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	9	9	0	3	9	0	0	5	2	2	0	0	3	0	43	0
4:15 PM	0	0	13	12	0	2	12	0	0	11	1	3	0	0	9	2	65	0
4:30 PM	**0**	**0**	**13**	**13**	**0**	**3**	**11**	**0**	**0**	**11**	**1**	**1**	**0**	**1**	**2**	**0**	**56**	0
4:45 PM	**0**	**0**	**10**	**10**	**0**	**3**	**9**	**0**	**0**	**9**	**4**	**2**	**0**	**1**	**10**	**1**	**59**	223
5:00 PM	**0**	**0**	**14**	**13**	**0**	**1**	**5**	**2**	**0**	**9**	**3**	**2**	**0**	**0**	**5**	**0**	**54**	234
5:15 PM	**0**	**1**	**8**	**11**	**0**	**2**	**4**	**0**	**0**	**12**	**4**	**2**	**0**	**0**	**5**	**1**	**50**	**219**
5:30 PM	0	0	17	13	0	3	5	0	0	10	1	1	0	0	0	0	50	213
5:45 PM	0	0	6	11	0	1	8	0	0	15	2	4	0	0	1	0	48	202
Count Total	0	2	90	92	0	18	63	2	0	82	18	17	0	2	35	4	425	0
Peak Hour	**0**	**1**	**45**	**47**	**0**	**9**	**29**	**2**	**0**	**41**	**12**	**7**	**0**	**2**	**22**	**2**	**219**	**0**

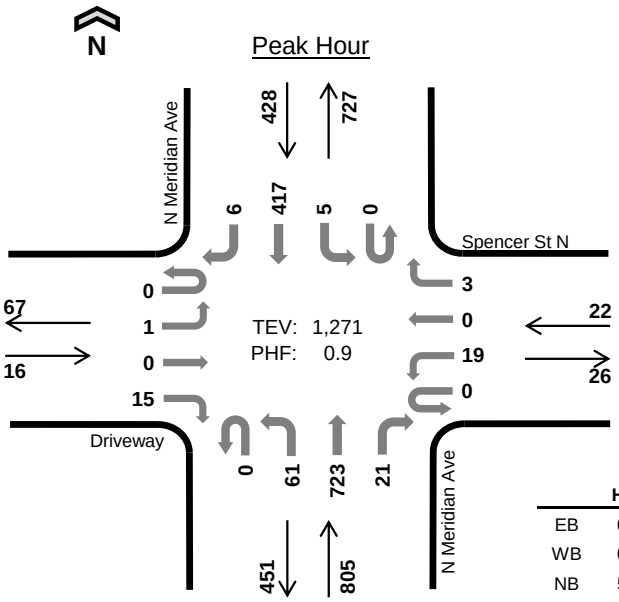
Two-Hour Count Summaries - Bikes

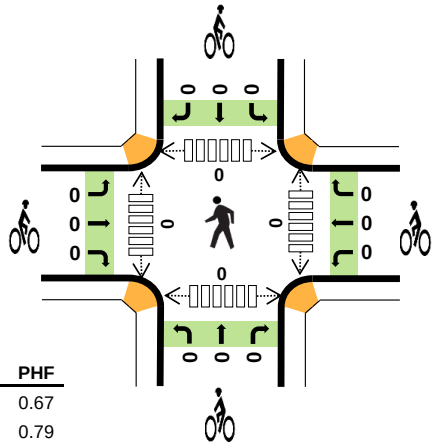
Interval Start	Valley Ave NW			Valley Ave NW			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Meridian Ave
Spencer St N

Date: 04/26/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	0.0%	0.67
WB	0.0%	0.79
NB	5.8%	0.89
SB	4.9%	0.91
TOTAL	5.4%	0.90

Two-Hour Count Summaries

Interval Start	Driveway (Eastbound)				Spencer St N (Westbound)				N Meridian Ave (Northbound)				N Meridian Ave (Southbound)				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**1**	**0**	**1**	**0**	**6**	**0**	**1**	**0**	**10**	**197**	**1**	**0**	**0**	**81**	**2**	**300**	0
7:15 AM	**0**	**0**	**0**	**6**	**0**	**6**	**0**	**0**	**0**	**11**	**163**	**3**	**0**	**2**	**115**	**1**	**307**	0
7:30 AM	**0**	**0**	**0**	**5**	**0**	**4**	**0**	**1**	**0**	**18**	**201**	**8**	**0**	**2**	**115**	**0**	**354**	0
7:45 AM	**0**	**0**	**0**	**3**	**0**	**3**	**0**	**1**	**0**	**22**	**162**	**9**	**0**	**1**	**106**	**3**	**310**	**1,271**
8:00 AM	0	0	0	4	0	12	0	1	0	6	163	8	0	1	98	2	295	1,266
8:15 AM	0	0	0	7	0	4	0	2	0	5	162	5	0	1	114	0	300	1,259
8:30 AM	0	0	0	5	0	11	0	1	0	8	122	8	0	1	85	0	241	1,146
8:45 AM	0	0	0	5	0	8	0	1	0	7	126	18	0	0	87	0	252	1,088
Count Total	0	1	0	36	0	54	0	8	0	87	1,296	60	0	8	801	8	2,359	0
Peak Hour All	**0**	**1**	**0**	**15**	**0**	**19**	**0**	**3**	**0**	**61**	**723**	**21**	**0**	**5**	**417**	**6**	**1,271**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**3**	**0**	**1**	**20**	**0**	**68**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**6%**	**14%**	**-**	**20%**	**5%**	**0%**	**5%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**0**	**0**	**12**	**1**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**0**	**0**	**10**	**4**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**0**	**15**	**9**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**10**	**7**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	0	4	10	3	*17*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	12	6	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	9	6	*15*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	9	1	*11*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	0	5	87	37	*129*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hour	**0**	**0**	**47**	**21**	***68***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Spencer St N				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**1**	**0**	**13**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**2**	**0**	**0**	**4**	**0**	**14**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**1**	**0**	**1**	**8**	**0**	**24**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**7**	**0**	**17**	**68**
8:00 AM	0	0	0	0	0	3	0	1	0	0	9	1	0	0	3	0	17	72
8:15 AM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	6	0	18	76
8:30 AM	0	0	0	0	0	0	0	0	0	0	7	2	0	1	5	0	15	67
8:45 AM	0	0	0	0	0	1	0	0	0	0	8	1	0	0	1	0	11	61
Count Total	0	0	0	0	0	4	0	1	0	0	80	7	0	2	35	0	129	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**3**	**0**	**1**	**20**	**0**	**68**	**0**

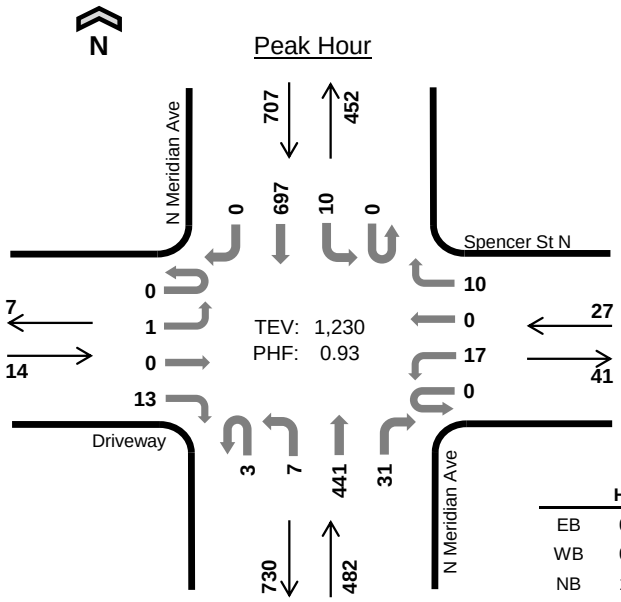
Two-Hour Count Summaries - Bikes

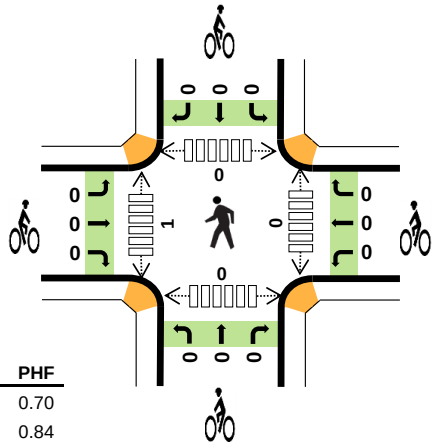
Interval Start	Driveway			Spencer St N			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Meridian Ave
Spencer St N

Date: 04/26/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.0%	0.70
WB	0.0%	0.84
NB	1.2%	0.93
SB	2.7%	0.92
TOTAL	2.0%	0.93

Two-Hour Count Summaries

Interval Start	Driveway Eastbound				Spencer St N Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	9	0	6	0	6	0	2	99	15	0	5	171	0	313	0
4:15 PM	0	0	0	2	0	1	0	2	0	1	116	7	0	4	127	0	260	0
4:30 PM	0	0	0	6	0	2	0	3	0	2	108	11	0	1	152	0	285	0
4:45 PM	**0**	**0**	**0**	**5**	**0**	**6**	**0**	**2**	**0**	**3**	**115**	**12**	**0**	**2**	**175**	**0**	**320**	1,178
5:00 PM	**0**	**0**	**0**	**3**	**0**	**3**	**0**	**4**	**1**	**0**	**109**	**2**	**0**	**2**	**154**	**0**	**278**	1,143
5:15 PM	**0**	**1**	**0**	**3**	**0**	**2**	**0**	**2**	**2**	**4**	**96**	**9**	**0**	**4**	**178**	**0**	**301**	1,184
5:30 PM	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**	**0**	**0**	**121**	**8**	**0**	**2**	**190**	**0**	**331**	**1,230**
5:45 PM	0	0	0	0	0	8	0	0	0	3	125	6	0	1	145	0	288	1,198
Count Total	0	1	0	30	0	34	0	21	3	15	889	70	0	21	1,292	0	2,376	0
Peak Hour All	**0**	**1**	**0**	**13**	**0**	**17**	**0**	**10**	**3**	**7**	**441**	**31**	**0**	**10**	**697**	**0**	**1,230**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**17**	**0**	**25**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**6%**	**-**	**20%**	**2%**	**-**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	4	7	*11*	0	0	0	0	*0*	1	1	0	0	*2*
4:15 PM	0	0	2	7	*9*	0	0	0	0	*0*	0	1	0	1	*2*
4:30 PM	0	0	3	4	*7*	0	0	0	0	*0*	0	1	0	0	*1*
4:45 PM	**0**	**0**	**2**	**3**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**0**	**0**	**1**	**5**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**2**	**7**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	2	1	*3*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	0	17	38	*55*	0	0	1	0	*1*	1	4	0	1	*6*
Peak Hour	**0**	**0**	**6**	**19**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Spencer St N				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	7	0	11	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	5	0	9	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	1	3	0	7	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**5**	32
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**6**	27
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**5**	**0**	**9**	27
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**5**	**25**
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	23
Count Total	0	0	0	0	0	0	0	0	0	0	14	3	0	5	33	0	55	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**17**	**0**	**25**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Driveway			Spencer St N			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

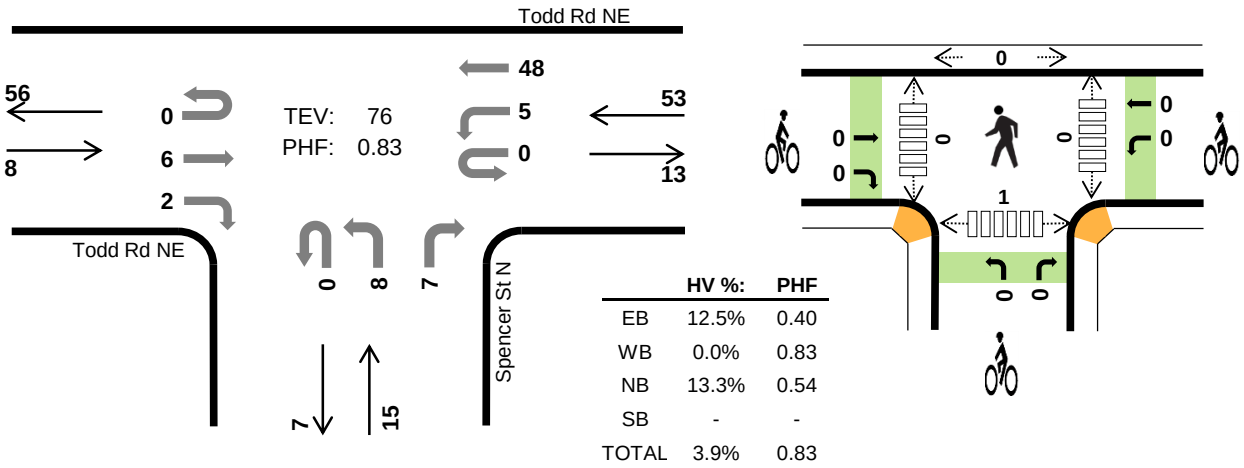
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Spencer St N
Todd Rd NE

N

Peak Hour

Date: 04/26/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	12.5%	0.40
WB	0.0%	0.83
NB	13.3%	0.54
SB	-	-
TOTAL	3.9%	0.83

Two-Hour Count Summaries

Interval Start		Todd Rd NE Eastbound				Todd Rd NE Westbound				Spencer St N Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**0**	**2**	**0**	**0**	**1**	**15**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**20**	0
7:15 AM		**0**	**0**	**0**	**0**	**0**	**2**	**12**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**17**	0
7:30 AM		**0**	**0**	**3**	**2**	**0**	**1**	**7**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**16**	0
7:45 AM		**0**	**0**	**1**	**0**	**0**	**1**	**14**	**0**	**0**	**4**	**0**	**3**	**0**	**0**	**0**	**0**	**23**	**76**
8:00 AM		0	0	1	2	0	4	3	0	0	4	0	3	0	0	0	0	17	73
8:15 AM		0	0	1	3	0	1	5	0	0	0	0	2	0	0	0	0	12	68
8:30 AM		0	0	2	4	0	2	2	0	0	2	0	1	0	0	0	0	13	65
8:45 AM		0	0	1	3	0	0	7	0	0	5	0	7	0	0	0	0	23	65
Count Total		0	0	11	14	0	12	65	0	0	19	0	20	0	0	0	0	141	0
Peak Hour	**All**	**0**	**0**	**6**	**2**	**0**	**5**	**48**	**0**	**0**	**8**	**0**	**7**	**0**	**0**	**0**	**0**	**76**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**
	HV%	**-**	**-**	**17%**	**0%**	**-**	**0%**	**0%**	**-**	**-**	**13%**	**-**	**14%**	**-**	**-**	**-**	**-**	**4%**	**0**

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

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

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Todd Rd NE				Todd Rd NE				Spencer St N				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	5
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	5
Count Total	0	0	2	0	0	2	0	0	0	2	0	2	0	0	0	0	8	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Todd Rd NE			Todd Rd NE			Spencer St N			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

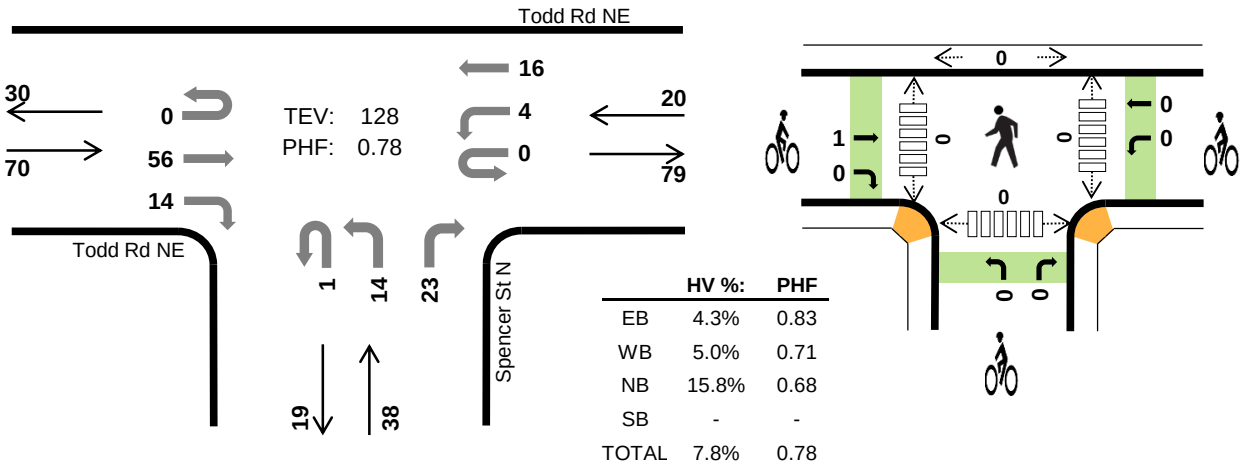
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Spencer St N
Todd Rd NE

N

Peak Hour

Date: 04/26/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



Two-Hour Count Summaries

Interval Start		Todd Rd NE Eastbound				Todd Rd NE Westbound				Spencer St N Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**0**	**14**	**7**	**0**	**2**	**4**	**0**	**0**	**7**	**0**	**7**	**0**	**0**	**0**	**0**	**41**	0
4:15 PM		**0**	**0**	**9**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**7**	**0**	**0**	**0**	**0**	**21**	0
4:30 PM		**0**	**0**	**18**	**2**	**0**	**1**	**6**	**0**	**1**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**35**	0
4:45 PM		**0**	**0**	**15**	**4**	**0**	**1**	**4**	**0**	**0**	**3**	**0**	**4**	**0**	**0**	**0**	**0**	**31**	**128**
5:00 PM		0	0	14	3	0	1	1	0	0	2	0	2	0	0	0	0	23	110
5:15 PM		0	0	12	1	0	1	4	0	0	3	0	6	0	0	0	0	27	116
5:30 PM		0	0	4	2	0	3	2	0	0	3	0	4	0	0	0	0	18	99
5:45 PM		0	0	6	3	0	2	3	0	0	3	0	2	0	0	0	0	19	87
Count Total		0	0	92	23	0	11	26	0	1	25	0	37	0	0	0	0	215	0
Peak Hour	**All**	**0**	**0**	**56**	**14**	**0**	**4**	**16**	**0**	**1**	**14**	**0**	**23**	**0**	**0**	**0**	**0**	**128**	**0**
	HV	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**10**	**0**
	HV%	**-**	**-**	**5%**	**0%**	**-**	**0%**	**6%**	**-**	**0%**	**7%**	**-**	**22%**	**-**	**-**	**-**	**-**	**8%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**0**	**1**	**2**	**0**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**0**	**0**	**3**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**0**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	4	1	10	0	*15*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hr	**3**	**1**	**6**	**0**	***10***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

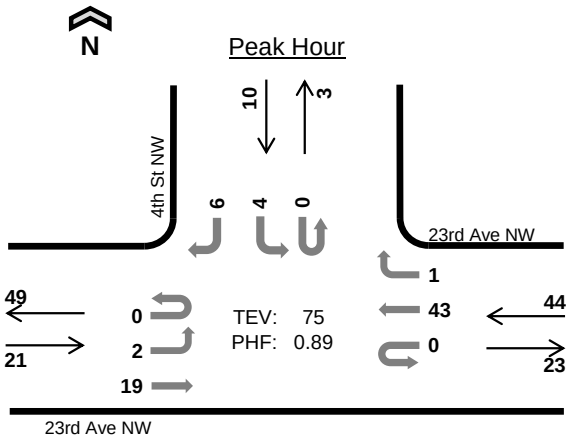
Interval Start	Todd Rd NE				Todd Rd NE				Spencer St N				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**10**
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	0	4	0	0	0	1	0	0	2	0	8	0	0	0	0	15	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**10**	**0**

Two-Hour Count Summaries - Bikes

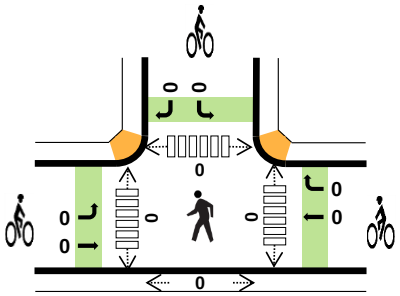
Interval Start	Todd Rd NE			Todd Rd NE			Spencer St N			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

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

4th St NW
23rd Ave NW



Date: 05/02/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.8%	0.58
WB	6.8%	0.92
NB	-	-
SB	10.0%	0.50
TOTAL	6.7%	0.89

Two-Hour Count Summaries

Interval Start		23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	4	0	0	0	12	1	0	0	0	0	0	0	0	1	18	0
7:15 AM		0	0	1	0	0	0	11	1	0	0	0	0	0	1	0	0	14	0
7:30 AM		**0**	**1**	**4**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**18**	0
7:45 AM		**0**	**0**	**9**	**0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	71
8:00 AM		**0**	**1**	**3**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**18**	71
8:15 AM		**0**	**0**	**3**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**18**	**75**
8:30 AM		0	0	3	0	0	0	5	3	0	0	0	0	0	1	0	0	12	69
8:45 AM		0	1	4	0	0	0	7	3	0	0	0	0	0	1	0	1	17	65
Count Total		0	3	31	0	0	0	78	9	0	0	0	0	0	7	0	8	136	0
Peak Hour	**All**	**0**	**2**	**19**	**0**	**0**	**0**	**43**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**6**	**75**	**0**
	HV	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**
	HV%	**-**	**50%**	**0%**	**-**	**-**	**-**	**5%**	**100%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**17%**	**7%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	3	6	0	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**1**	**3**	**0**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

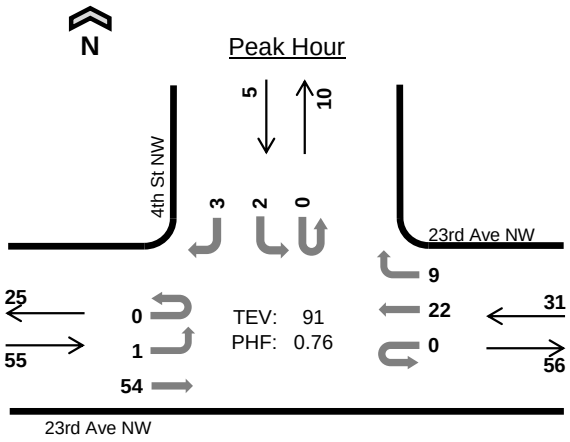
Interval Start	23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
8:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	5
8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	5
Count Total	0	1	2	0	0	0	4	2	0	0	0	0	0	0	0	1	10	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**

Two-Hour Count Summaries - Bikes

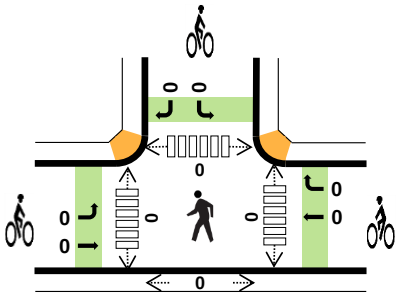
Interval Start	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

4th St NW
23rd Ave NW



Date: 05/02/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	1.8%	0.65
WB	19.4%	0.78
NB	-	-
SB	20.0%	0.42
TOTAL	8.8%	0.76

Two-Hour Count Summaries

Interval Start		23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**0**	**14**	**0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**25**	0
4:15 PM		**0**	**0**	**11**	**0**	**0**	**0**	**6**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**22**	0
4:30 PM		**0**	**1**	**20**	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	0
4:45 PM		**0**	**0**	**9**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**14**	**91**
5:00 PM		0	1	8	0	0	0	7	1	0	0	0	0	0	1	0	0	18	84
5:15 PM		0	1	8	0	0	0	3	1	0	0	0	0	0	0	0	0	13	75
5:30 PM		0	1	3	0	0	0	9	1	0	0	0	0	0	1	0	1	16	61
5:45 PM		0	0	3	0	0	0	3	2	0	0	0	0	0	0	0	0	8	55
Count Total		0	4	76	0	0	0	44	14	0	0	0	0	0	4	0	4	146	0
Peak Hour	**All**	**0**	**1**	**54**	**0**	**0**	**0**	**22**	**9**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**91**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**
	HV%	**-**	**0%**	**2%**	**-**	**-**	**-**	**23%**	**11%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**33%**	**9%**	**0**

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

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	7	0	1	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**1**	**6**	**0**	**1**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**8**
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	6	1	0	0	0	0	0	0	0	1	9	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Appendix C

True Demand Volumes/Calculations

Table C1
Year 2023 Existing AM Peak Hour True Demand Volume Summary

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	1. 7th Street NW/Valley Ave NW											
Initial Queue (veh)	0	0	0	0	2	0	0	0	0	0	0	0
TMC (veh)	9	480	0	2	685	5	0	0	0	12	0	43
Residual Queue (veh)	1	9	0	0	8	1	0	0	0	0	0	1
True Demand Volume (veh)	**10**	**489**	**0**	**2**	**693**	**6**	**0**	**0**	**0**	**12**	**0**	**44**
	2. N Meridian Ave/Valley Ave NW											
Initial Queue (veh)	0	1	1	0	1	1	13	4	0	0	2	0
TMC (veh)	21	124	313	176	192	57	460	979	172	25	437	33
Residual Queue (veh)	0	0	0	6	5	1	8	2	0	0	6	0
True Demand Volume (veh)	**21**	**124**	**313**	**182**	**197**	**58**	**468**	**981**	**172**	**25**	**443**	**33**
	3. N Meridian Ave/Spencer Street N											
Initial Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
TMC (veh)	1	0	15	19	0	3	61	723	21	5	417	6
Residual Queue (veh)	0	0	0	0	0	0	0	0	0	0	5	0
True Demand Volume (veh)	**1**	**0**	**15**	**19**	**0**	**3**	**61**	**723**	**21**	**5**	**422**	**6**
	4. Spencer Street N/Todd Road NE											
Initial Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
TMC (veh)	0	6	2	5	48	0	8	0	7	0	0	0
Residual Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volume (veh)	**0**	**6**	**2**	**5**	**48**	**0**	**8**	**0**	**7**	**0**	**0**	**0**
	5. 4th Street NW/23rd Ave NW											
Initial Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
TMC (veh)	2	19	0	0	43	1	0	0	0	4	0	6
Residual Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volume (veh)	**2**	**19**	**0**	**0**	**43**	**1**	**0**	**0**	**0**	**4**	**0**	**6**

TMC = Turning Movement Count

It should be noted that the volumes above are summarized by movement and are not associated with an individual lane.

Table C2
Year 2023 Existing PM Peak Hour True Demand Volume Summary

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	1. 7th Street NW/Valley Ave NW											
Initial Queue (veh)	1	10	0	0	2	0	0	0	0	0	0	0
TMC (veh)	37	1120	0	0	506	13	0	0	0	9	0	27
Residual Queue (veh)	0	9	0	0	2	0	0	0	0	0	0	0
True Demand Volume (veh)	**37**	**1129**	**0**	**0**	**508**	**13**	**0**	**0**	**0**	**9**	**0**	**27**
	2. N Meridian Ave/Valley Ave NW											
Initial Queue (veh)	0	26	32	4	0	0	11	3	0	2	75	0
TMC (veh)	23	456	805	348	158	20	398	437	187	43	680	16
Residual Queue (veh)	0	10	38	5	2	0	9	0	1	0	73	0
True Demand Volume (veh)	**23**	**466**	**843**	**353**	**160**	**20**	**407**	**437**	**188**	**43**	**753**	**16**
	3. N Meridian Ave/Spencer Street N											
Initial Queue (veh)	0	0	0	0	0	0	0	1	0	0	1	0
TMC (veh)	1	0	13	17	0	10	10	441	31	10	697	0
Residual Queue (veh)	0	0	0	0	0	0	0	1	0	0	1	0
True Demand Volume (veh)	**1**	**0**	**13**	**17**	**0**	**10**	**10**	**442**	**31**	**10**	**698**	**0**
	4. Spencer Street N/Todd Road NE											
Initial Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
TMC (veh)	0	56	14	4	16	0	15	0	23	0	0	0
Residual Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volume (veh)	**0**	**56**	**14**	**4**	**16**	**0**	**15**	**0**	**23**	**0**	**0**	**0**
	5. 4th Street NW/23rd Ave NW											
Initial Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
TMC (veh)	1	54	0	0	22	9	0	0	0	2	0	3
Residual Queue (veh)	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volume (veh)	**1**	**54**	**0**	**0**	**22**	**9**	**0**	**0**	**0**	**2**	**0**	**3**

TMC = Turning Movement Count

It should be noted that the volumes above are summarized by movement and are not associated with an individual lane.

True Demand – Methodology

True Demand:

"True Demand" is defined as the total number vehicles that arrive at an intersection's approach during a 15-minute interval. When 15-minute traffic volumes exceed the capacity of individual traffic movements, the true demand volumes are the number of the vehicles counted for each turning movement period PLUS the number of vehicles that arrived at the intersection during a 15-minute count period but did not yet enter the intersection.

To collect demand volume counts, a separate count will be made of number of vehicles remaining in queue at the beginning of each new 15-minute period for each traffic movement. When added to the standard 15-minute period turning movement counts, the total demand volumes can be estimated for each traffic movement for each 15-minute period.

Methodology:

1. The count of vehicles that makes the turning movement or the number of vehicles that enters the intersection at a particular 15 minutes interval from all arms of an intersection are counted as normal.

2. At the end of the 15 minutes period, the number of vehicles that have already arrived at the intersection and either queuing at the red lights or moving to cross the stop line are identified.

3. The identified vehicles are then counted as per their turning movement and added to the original 15 minutes period in which they arrived (but not serviced).

4. The total turning volume + vehicles that have arrived but not crossed = True demand for that particular 15 minutes.

PSE Operations Training Center (Puyallup)
True Demand Calculations
7th St NW / Valley Ave NW
AM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	4	109	0	0	178	0	0	0	0	5	0	12
7:15 AM	1	119	0	0	166	2	0	0	0	3	0	16
7:30 AM	2	125	0	1	186	0	0	0	0	4	0	5
7:45 AM	3	151	0	1	182	4	0	0	0	0	0	11
8:00 AM	4	131	0	0	123	2	0	0	2	2	0	5
8:15 AM	1	97	0	0	140	4	0	0	0	0	0	6
8:30 AM	2	127	0	1	153	4	0	0	2	3	0	7
8:45 AM	1	102	0	0	121	2	0	0	0	3	0	9
7:00 - 8:00 AM	10	504	0	2	712	6	0	0	0	12	0	44

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	4	109	0	0	176	0	0	0	0	5	0	12
7:15 AM	1	114	0	0	153	2	0	0	0	3	0	16
7:30 AM	2	115	0	1	182	0	0	0	0	4	0	5
7:45 AM	2	142	0	1	174	3	0	0	0	0	0	10
8:00 AM	4	131	0	0	123	2	0	0	2	2	0	4
8:15 AM	1	94	0	0	134	4	0	0	0	0	0	5
8:30 AM	2	122	0	1	149	4	0	0	1	3	0	6
8:45 AM	1	102	0	0	109	2	0	0	0	3	0	9
7:00 - 8:00 AM	9	480	0	2	685	5	0	0	0	12	0	43

Peak Hour Factor = 0.93

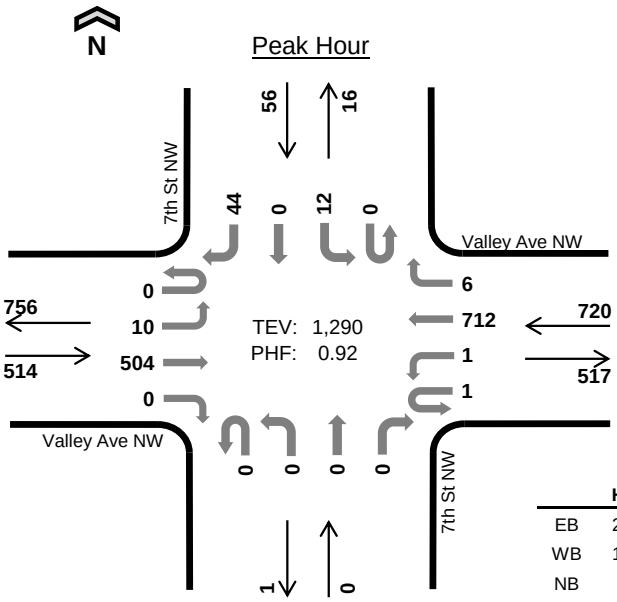
	DELTA = VEHICLES IN QUEUE											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:15 AM	0	5	0	0	13	0	0	0	0	0	0	0
7:30 AM	0	10	0	0	4	0	0	0	0	0	0	0
7:45 AM	1	9	0	0	8	1	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	3	0	0	6	0	0	0	0	0	0	1
8:30 AM	0	5	0	0	4	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	12	0	0	0	0	0	0	0
7:00 - 8:00 AM	1	24	0	0	27	1	0	0	0	0	0	1

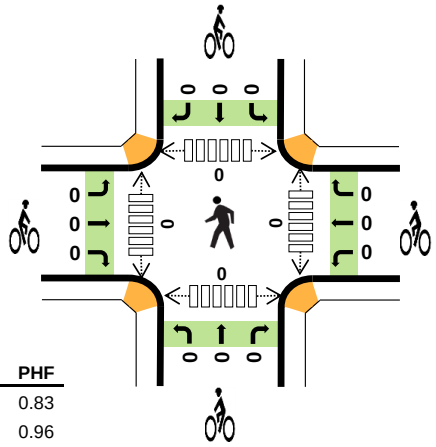
7:00-8:00 AM True Demand Volumes

Initial Queue @ 7:00	0	0	0	0	2	0	0	0	0	0	0	0
Stop Line Count (TMC)	9	480	0	2	685	5	0	0	0	12	0	43
Queued vehicles @ 8:00	1	9	0	0	8	1	0	0	0	0	0	1
True Demand Volumes	10	489	0	2	693	6	0	0	0	12	0	44

7th St NW
Valley Ave NW

Date: 04/26/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	21.4%	0.83
WB	16.8%	0.96
NB	-	-
SB	21.4%	0.74
TOTAL	18.8%	0.92

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**4**	**109**	**0**	**0**	**0**	**178**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**12**	**308**	0
7:15 AM		**0**	**1**	**119**	**0**	**0**	**0**	**166**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**16**	**307**	0
7:30 AM		**0**	**2**	**125**	**0**	**1**	**0**	**186**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**323**	0
7:45 AM		**0**	**3**	**151**	**0**	**0**	**1**	**182**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**352**	**1,290**
8:00 AM		0	4	131	0	0	0	123	2	0	0	0	2	0	2	0	5	269	1,251
8:15 AM		0	1	97	0	0	0	140	4	0	0	0	0	0	0	0	6	248	1,192
8:30 AM		0	2	127	0	0	1	153	4	0	0	0	2	0	3	0	7	299	1,168
8:45 AM		0	1	102	0	0	0	121	2	0	0	0	0	0	3	0	9	238	1,054
Count Total		0	18	961	0	1	2	1,249	18	0	0	0	4	0	20	0	71	2,344	0
Peak Hour	**All**	**0**	**10**	**504**	**0**	**1**	**1**	**712**	**6**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**44**	**1,290**	**0**
	HV	**0**	**1**	**109**	**0**	**0**	**0**	**119**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**243**	**0**
	HV%	**-**	**10%**	**22%**	**-**	**0%**	**0%**	**17%**	**33%**	**-**	**-**	**-**	**-**	**-**	**50%**	**-**	**14%**	**19%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**17**	**34**	**0**	**4**	***55***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**38**	**36**	**0**	**5**	***79***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**22**	**23**	**0**	**3**	***48***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**33**	**28**	**0**	**0**	***61***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	25	18	0	1	*44*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	26	27	0	0	*53*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	30	35	0	6	*71*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	32	9	0	2	*43*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	223	210	0	21	*454*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**110**	**121**	**0**	**12**	***243***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**17**	**0**	**0**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**55**	0
7:15 AM	**0**	**1**	**37**	**0**	**0**	**0**	**34**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**79**	0
7:30 AM	**0**	**0**	**22**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**48**	0
7:45 AM	**0**	**0**	**33**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**243**
8:00 AM	0	0	25	0	0	0	18	0	0	0	0	0	0	1	0	0	44	232
8:15 AM	0	1	25	0	0	0	27	0	0	0	0	0	0	0	0	0	53	206
8:30 AM	0	1	29	0	0	0	34	1	0	0	0	0	0	3	0	3	71	229
8:45 AM	0	0	32	0	0	0	8	1	0	0	0	0	0	1	0	1	43	211
Count Total	0	3	220	0	0	0	206	4	0	0	0	0	0	11	0	10	454	0
Peak Hour	**0**	**1**	**109**	**0**	**0**	**0**	**119**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**243**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
7th St NW / Valley Ave NW
PM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	12	252	0	0	123	3	0	0	0	2	0	10
4:15 PM	4	280	0	0	135	1	0	0	0	2	0	5
4:30 PM	9	294	0	0	126	7	0	0	0	3	0	8
4:45 PM	10	304	0	0	121	5	0	0	0	2	0	7
5:00 PM	14	270	0	0	136	0	0	0	0	2	0	8
5:15 PM	6	244	0	0	131	1	0	0	0	3	0	10
5:30 PM	2	209	0	0	120	3	0	0	1	5	0	9
5:45 PM	7	176	0	0	105	0	0	0	0	4	0	6
4:15 - 5:15 PM	37	1148	0	0	518	13	0	0	0	9	0	28

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	11	242	0	0	121	3	0	0	0	2	0	10
4:15 PM	4	275	0	0	128	1	0	0	0	2	0	5
4:30 PM	9	292	0	0	125	7	0	0	0	3	0	8
4:45 PM	10	292	0	0	119	5	0	0	0	2	0	6
5:00 PM	14	261	0	0	134	0	0	0	0	2	0	8
5:15 PM	6	241	0	0	129	1	0	0	0	3	0	10
5:30 PM	2	208	0	0	111	3	0	0	1	3	0	9
5:45 PM	7	176	0	0	105	0	0	0	0	4	0	6
4:15 - 5:15 PM	37	1120	0	0	506	13	0	0	0	9	0	27

Peak Hour Factor = 0.96

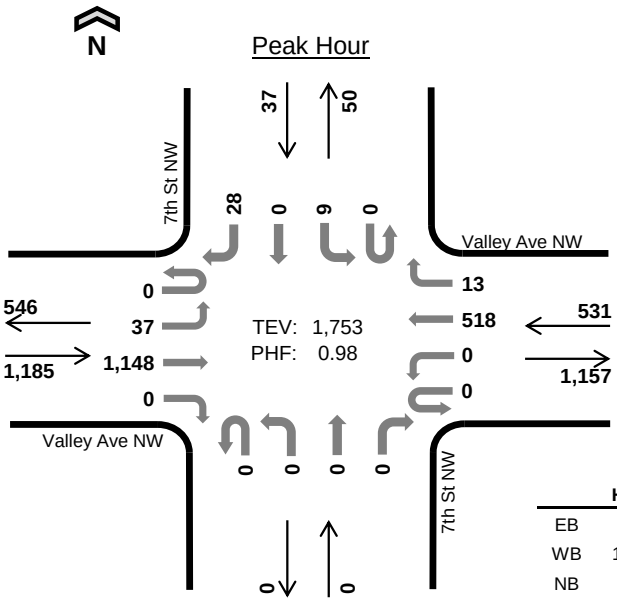
	DELTA = VEHICLES IN QUEUE											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	1	10	0	0	2	0	0	0	0	0	0	0
4:15 PM	0	5	0	0	7	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	12	0	0	2	0	0	0	0	0	0	1
5:00 PM	0	9	0	0	2	0	0	0	0	0	0	0
5:15 PM	0	3	0	0	2	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	9	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 - 5:15 PM	0	28	0	0	12	0	0	0	0	0	0	1

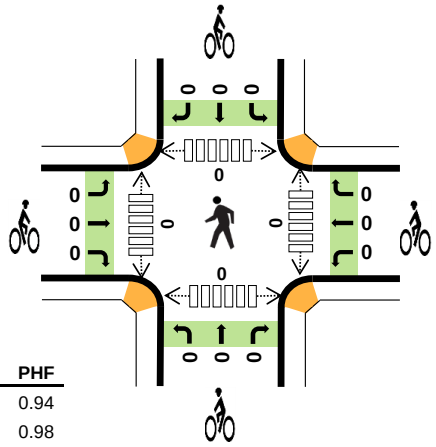
4:15-5:15 PM True Demand Volumes

Initial Queue @ 4:15	1	10	0	0	2	0	0	0	0	0	0	0
Stop Line Count (TMC)	37	1120	0	0	506	13	0	0	0	9	0	27
Queued vehicles @ 5:15	0	9	0	0	2	0	0	0	0	0	0	0
True Demand Volumes	37	1129	0	0	508	13	0	0	0	9	0	27

7th St NW
Valley Ave NW

Date: 04/26/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	5.7%	0.94
WB	12.6%	0.98
NB	-	-
SB	13.5%	0.84
TOTAL	8.0%	0.98

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	12	252	0	0	0	123	3	0	0	0	0	0	2	0	10	402	0
4:15 PM		**0**	**4**	**280**	**0**	**0**	**0**	**135**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**427**	0
4:30 PM		**0**	**9**	**294**	**0**	**0**	**0**	**126**	**7**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**8**	**447**	0
4:45 PM		**0**	**10**	**304**	**0**	**0**	**0**	**121**	**5**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**7**	**449**	1,725
5:00 PM		**0**	**14**	**270**	**0**	**0**	**0**	**136**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**8**	**430**	**1,753**
5:15 PM		0	6	244	0	0	0	131	1	0	0	0	0	0	3	0	10	395	1,721
5:30 PM		0	2	209	0	0	0	120	3	0	0	0	1	0	5	0	9	349	1,623
5:45 PM		0	7	176	0	0	0	105	0	0	0	0	0	0	4	0	6	298	1,472
Count Total		0	64	2,029	0	0	0	997	20	0	0	0	1	0	23	0	63	3,197	0
Peak Hour	**All**	**0**	**37**	**1,148**	**0**	**0**	**0**	**518**	**13**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**28**	**1,753**	**0**
	HV	**0**	**4**	**64**	**0**	**0**	**0**	**64**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**140**	**0**
	HV%	**-**	**11%**	**6%**	**-**	**-**	**-**	**12%**	**23%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**18%**	**8%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	19	21	0	4	*44*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**22**	**21**	**0**	**3**	***46***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**24**	**14**	**0**	**0**	***38***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**9**	**16**	**0**	**1**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**13**	**16**	**0**	**1**	***30***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	21	19	0	1	*41*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	11	20	0	1	*32*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	10	15	0	0	*25*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	129	142	0	11	*282*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**68**	**67**	**0**	**5**	***140***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW Eastbound				Valley Ave NW Westbound				7th St NW Northbound				7th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	19	0	0	0	19	2	0	0	0	0	0	1	0	3	44	0
4:15 PM	**0**	**1**	**21**	**0**	**0**	**0**	**20**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**46**	0
4:30 PM	**0**	**2**	**22**	**0**	**0**	**0**	**13**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**38**	0
4:45 PM	**0**	**0**	**9**	**0**	**0**	**0**	**15**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**26**	154
5:00 PM	**0**	**1**	**12**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**30**	**140**
5:15 PM	0	0	21	0	0	0	19	0	0	0	0	0	0	0	0	1	41	135
5:30 PM	0	0	11	0	0	0	20	0	0	0	0	0	0	1	0	0	32	129
5:45 PM	0	1	9	0	0	0	15	0	0	0	0	0	0	0	0	0	25	128
Count Total	0	5	124	0	0	0	137	5	0	0	0	0	0	2	0	9	282	0
Peak Hour	**0**	**4**	**64**	**0**	**0**	**0**	**64**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**140**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Valley Ave NW Eastbound			Valley Ave NW Westbound			7th St NW Northbound			7th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
N Meridian Ave / Valley Ave NW
AM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	5	40	52	32	65	15	128	221	39	16	69	9
7:15 AM	3	30	78	43	48	16	126	256	50	9	118	13
7:30 AM	7	30	85	59	62	19	117	264	28	4	126	8
7:45 AM	5	34	81	44	46	14	116	257	45	7	122	9
8:00 AM	6	33	86	52	50	17	139	209	49	5	95	3
8:15 AM	6	29	100	40	35	17	110	180	41	7	118	6
8:30 AM	10	23	78	52	34	7	80	151	41	10	95	6
8:45 AM	2	27	79	43	30	17	110	166	51	8	96	9
7:15 - 8:15 AM	21	127	330	198	206	66	498	986	172	25	461	33

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	5	39	51	32	64	14	115	217	39	16	67	9
7:15 AM	3	28	73	37	44	11	119	253	50	9	110	13
7:30 AM	7	30	83	52	58	18	105	263	28	4	121	8
7:45 AM	5	33	71	41	45	12	105	256	45	7	117	9
8:00 AM	6	33	86	46	45	16	131	207	49	5	89	3
8:15 AM	6	25	87	34	31	17	106	178	41	7	106	6
8:30 AM	10	23	77	51	34	7	74	139	41	10	90	6
8:45 AM	2	25	78	42	29	17	106	164	51	8	96	9
7:15 - 8:15 AM	21	124	313	176	192	57	460	979	172	25	437	33

Peak Hour Factor = 0.96

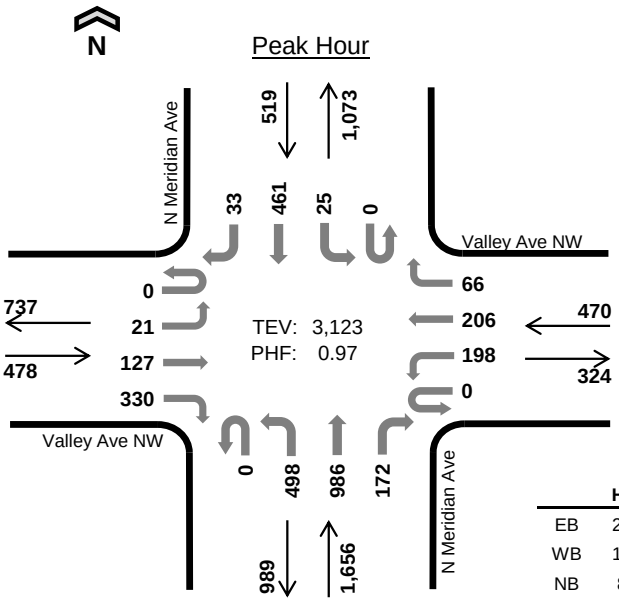
	DELTA = VEHICLES IN QUEUE											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	1	1	0	1	1	13	4	0	0	2	0
7:15 AM	0	2	5	6	4	5	7	3	0	0	8	0
7:30 AM	0	0	2	7	4	1	12	1	0	0	5	0
7:45 AM	0	1	10	3	1	2	11	1	0	0	5	0
8:00 AM	0	0	0	6	5	1	8	2	0	0	6	0
8:15 AM	0	4	13	6	4	0	4	2	0	0	12	0
8:30 AM	0	0	1	1	0	0	6	12	0	0	5	0
8:45 AM	0	2	1	1	1	0	4	2	0	0	0	0
7:15 - 8:15 AM	0	3	17	22	14	9	38	7	0	0	24	0

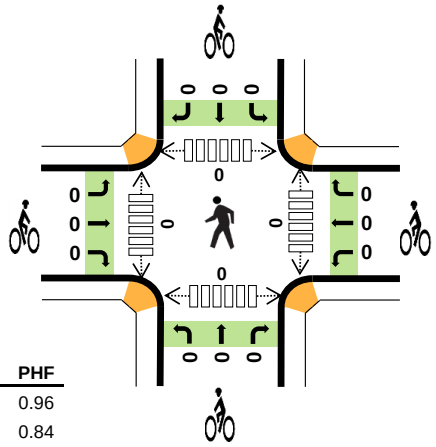
7:15-8:15 AM True Demand Volumes

Initial Queue @ 7:15	0	1	1	0	1	1	13	4	0	0	2	0
Stop Line Count (TMC)	21	124	313	176	192	57	460	979	172	25	437	33
Queued vehicles @ 8:15	0	0	0	6	5	1	8	2	0	0	6	0
True Demand Volumes	21	124	313	182	197	58	468	981	172	25	443	33

N Meridian Ave
Valley Ave NW

Date: 05/02/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	25.1%	0.96
WB	17.0%	0.84
NB	8.8%	0.96
SB	6.6%	0.93
TOTAL	12.2%	0.97

Two-Hour Count Summaries

Interval Start	Valley Ave NW Eastbound				Valley Ave NW Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	5	40	52	0	32	65	15	0	128	221	39	0	16	69	9	691	0
7:15 AM	**0**	**3**	**30**	**78**	**0**	**43**	**48**	**16**	**0**	**126**	**256**	**50**	**0**	**9**	**118**	**13**	**790**	0
7:30 AM	**0**	**7**	**30**	**85**	**0**	**59**	**62**	**19**	**0**	**117**	**264**	**28**	**0**	**4**	**126**	**8**	**809**	0
7:45 AM	**0**	**5**	**34**	**81**	**0**	**44**	**46**	**14**	**0**	**116**	**257**	**45**	**0**	**7**	**122**	**9**	**780**	3,070
8:00 AM	**0**	**6**	**33**	**86**	**0**	**52**	**50**	**17**	**0**	**139**	**209**	**49**	**0**	**5**	**95**	**3**	**744**	**3,123**
8:15 AM	0	6	29	100	0	40	35	17	0	110	180	41	0	7	118	6	689	3,022
8:30 AM	0	10	23	78	0	52	34	7	0	80	151	41	0	10	95	6	587	2,800
8:45 AM	0	2	27	79	0	43	30	17	0	110	166	51	0	8	96	9	638	2,658
Count Total	0	44	246	639	0	365	370	122	0	926	1,704	344	0	66	839	63	5,728	0
Peak Hour All	**0**	**21**	**127**	**330**	**0**	**198**	**206**	**66**	**0**	**498**	**986**	**172**	**0**	**25**	**461**	**33**	**3,123**	**0**
Peak Hour HV	**0**	**2**	**31**	**87**	**0**	**40**	**27**	**13**	**0**	**83**	**41**	**22**	**0**	**4**	**23**	**7**	**380**	**0**
Peak Hour HV%	**-**	**10%**	**24%**	**26%**	**-**	**20%**	**13%**	**20%**	**-**	**17%**	**4%**	**13%**	**-**	**16%**	**5%**	**21%**	**12%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	31	17	34	3	*85*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**38**	**13**	**28**	**9**	***88***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**20**	**27**	**35**	**12**	***94***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**34**	**17**	**41**	**8**	***100***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**28**	**23**	**42**	**5**	***98***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	35	25	33	17	*110*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	34	19	26	6	*85*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	32	20	37	6	*95*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	252	161	276	66	*755*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**120**	**80**	**146**	**34**	***380***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW				Valley Ave NW				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	14	15	0	3	13	1	0	22	10	2	0	0	3	0	85	0
7:15 AM	**0**	**1**	**9**	**28**	**0**	**7**	**6**	**0**	**0**	**17**	**7**	**4**	**0**	**2**	**2**	**5**	**88**	0
7:30 AM	**0**	**0**	**5**	**15**	**0**	**14**	**6**	**7**	**0**	**20**	**15**	**0**	**0**	**0**	**11**	**1**	**94**	0
7:45 AM	**0**	**1**	**8**	**25**	**0**	**11**	**4**	**2**	**0**	**22**	**12**	**7**	**0**	**1**	**6**	**1**	**100**	367
8:00 AM	**0**	**0**	**9**	**19**	**0**	**8**	**11**	**4**	**0**	**24**	**7**	**11**	**0**	**1**	**4**	**0**	**98**	**380**
8:15 AM	0	0	8	27	0	9	12	4	0	17	13	3	0	0	15	2	110	402
8:30 AM	0	2	4	28	0	12	4	3	0	18	6	2	0	0	4	2	85	393
8:45 AM	0	0	3	29	0	7	10	3	0	22	12	3	0	0	6	0	95	388
Count Total	0	6	60	186	0	71	66	24	0	162	82	32	0	4	51	11	755	0
Peak Hour	**0**	**2**	**31**	**87**	**0**	**40**	**27**	**13**	**0**	**83**	**41**	**22**	**0**	**4**	**23**	**7**	**380**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Valley Ave NW			Valley Ave NW			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
N Meridian Ave / Valley Ave NW
PM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	10	102	214	92	32	10	71	125	43	12	259	1
4:15 PM	4	155	187	85	42	8	89	116	46	7	240	4
4:30 PM	8	135	241	88	46	7	109	115	51	10	224	3
4:45 PM	4	153	256	94	43	1	105	114	34	14	197	4
5:00 PM	3	115	249	85	34	7	96	122	48	15	207	6
5:15 PM	8	120	240	87	37	5	122	95	55	11	252	3
5:30 PM	8	71	197	55	35	8	121	108	43	9	242	11
5:45 PM	3	66	188	59	39	8	121	110	57	4	184	12
4:30 - 5:30 PM	23	523	986	354	160	20	432	446	188	50	880	16

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	10	86	165	90	32	10	64	114	43	11	190	1
4:15 PM	4	129	155	81	42	8	78	113	46	5	165	4
4:30 PM	8	112	173	87	46	7	98	111	51	8	171	3
4:45 PM	4	140	208	94	43	1	99	112	34	11	166	4
5:00 PM	3	94	222	85	34	7	88	119	48	13	164	6
5:15 PM	8	110	202	82	35	5	113	95	54	11	179	3
5:30 PM	8	68	178	50	35	8	110	106	43	7	181	11
5:45 PM	3	59	183	55	38	8	118	110	57	4	164	12
4:30 - 5:30 PM	23	456	805	348	158	20	398	437	187	43	680	16

Peak Hour Factor = 0.97

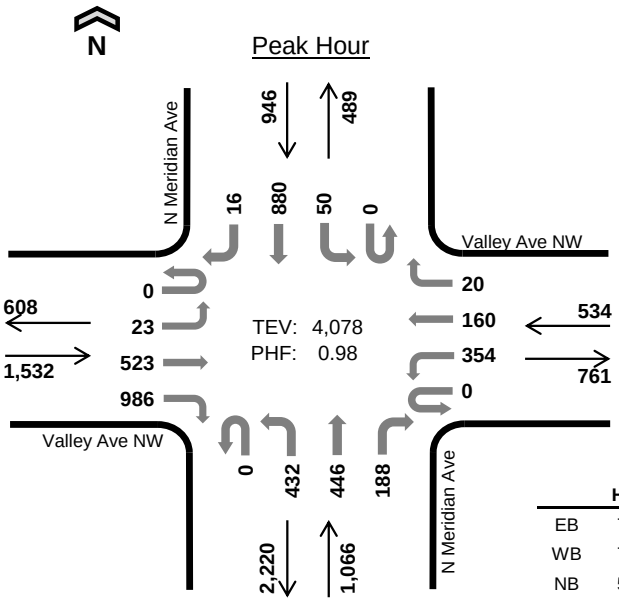
	DELTA = VEHICLES IN QUEUE											
	Valley Ave NW Eastbound			Valley Ave NW Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	16	49	2	0	0	7	11	0	1	69	0
4:15 PM	0	26	32	4	0	0	11	3	0	2	75	0
4:30 PM	0	23	68	1	0	0	11	4	0	2	53	0
4:45 PM	0	13	48	0	0	0	6	2	0	3	31	0
5:00 PM	0	21	27	0	0	0	8	3	0	2	43	0
5:15 PM	0	10	38	5	2	0	9	0	1	0	73	0
5:30 PM	0	3	19	5	0	0	11	2	0	2	61	0
5:45 PM	0	7	5	4	1	0	3	0	0	0	20	0
4:30 - 5:30 PM	0	67	181	6	2	0	34	9	1	7	200	0

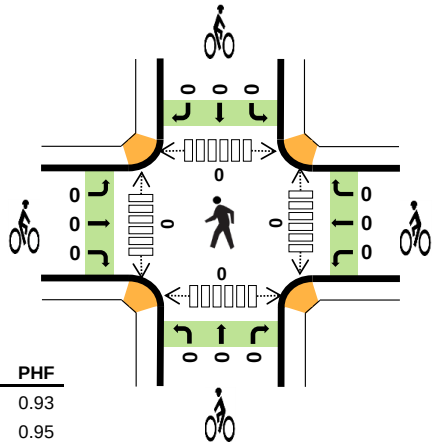
4:30-5:30 PM True Demand Volumes

Initial Queue @ 4:30	0	26	32	4	0	0	11	3	0	2	75	0
Stop Line Count (TMC)	23	456	805	348	158	20	398	437	187	43	680	16
Queued vehicles @ 5:30	0	10	38	5	2	0	9	0	1	0	73	0
True Demand Volumes	23	466	843	353	160	20	407	437	188	43	753	16

N Meridian Ave
Valley Ave NW

Date: 05/02/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	7.2%	0.93
WB	7.5%	0.95
NB	5.8%	0.97
SB	3.2%	0.89
TOTAL	6.0%	0.98

Two-Hour Count Summaries

Interval Start		Valley Ave NW Eastbound				Valley Ave NW Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	10	102	214	0	92	32	10	0	71	125	43	0	12	259	1	971	0
4:15 PM		0	4	155	187	0	85	42	8	0	89	116	46	0	7	240	4	983	0
4:30 PM		**0**	**8**	**135**	**241**	**0**	**88**	**46**	**7**	**0**	**109**	**115**	**51**	**0**	**10**	**224**	**3**	**1,037**	0
4:45 PM		**0**	**4**	**153**	**256**	**0**	**94**	**43**	**1**	**0**	**105**	**114**	**34**	**0**	**14**	**197**	**4**	**1,019**	4,010
5:00 PM		**0**	**3**	**115**	**249**	**0**	**85**	**34**	**7**	**0**	**96**	**122**	**48**	**0**	**15**	**207**	**6**	**987**	4,026
5:15 PM		**0**	**8**	**120**	**240**	**0**	**87**	**37**	**5**	**0**	**122**	**95**	**55**	**0**	**11**	**252**	**3**	**1,035**	**4,078**
5:30 PM		0	8	71	197	0	55	35	8	0	121	108	43	0	9	242	11	908	3,949
5:45 PM		0	3	66	188	0	59	39	8	0	121	110	57	0	4	184	12	851	3,781
Count Total		0	48	917	1,772	0	645	308	54	0	834	905	377	0	82	1,805	44	7,791	0
Peak Hour	**All**	**0**	**23**	**523**	**986**	**0**	**354**	**160**	**20**	**0**	**432**	**446**	**188**	**0**	**50**	**880**	**16**	**4,078**	**0**
	HV	**0**	**1**	**52**	**58**	**0**	**9**	**29**	**2**	**0**	**43**	**12**	**7**	**0**	**3**	**25**	**2**	**243**	**0**
	HV%	**-**	**4%**	**10%**	**6%**	**-**	**3%**	**18%**	**10%**	**-**	**10%**	**3%**	**4%**	**-**	**6%**	**3%**	**13%**	**6%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	24	12	10	4	*50*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	28	14	15	11	*68*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**31**	**14**	**15**	**5**	***65***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**23**	**12**	**15**	**13**	***63***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**33**	**8**	**14**	**6**	***61***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**24**	**6**	**18**	**6**	***54***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	31	8	16	0	*55*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	18	9	21	1	*49*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	212	83	124	46	*465*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**111**	**40**	**62**	**30**	***243***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Valley Ave NW				Valley Ave NW				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	10	13	0	3	9	0	0	6	2	2	0	0	4	0	50	0
4:15 PM	0	0	14	14	0	2	12	0	0	11	1	3	0	0	9	2	68	0
4:30 PM	**0**	**0**	**15**	**16**	**0**	**3**	**11**	**0**	**0**	**13**	**1**	**1**	**0**	**2**	**3**	**0**	**65**	0
4:45 PM	**0**	**0**	**13**	**10**	**0**	**3**	**9**	**0**	**0**	**9**	**4**	**2**	**0**	**1**	**11**	**1**	**63**	246
5:00 PM	**0**	**0**	**15**	**18**	**0**	**1**	**5**	**2**	**0**	**9**	**3**	**2**	**0**	**0**	**6**	**0**	**61**	257
5:15 PM	**0**	**1**	**9**	**14**	**0**	**2**	**4**	**0**	**0**	**12**	**4**	**2**	**0**	**0**	**5**	**1**	**54**	**243**
5:30 PM	0	0	17	14	0	3	5	0	0	14	1	1	0	0	0	0	55	233
5:45 PM	0	0	7	11	0	1	8	0	0	15	2	4	0	0	1	0	49	219
Count Total	0	2	100	110	0	18	63	2	0	89	18	17	0	3	39	4	465	0
Peak Hour	**0**	**1**	**52**	**58**	**0**	**9**	**29**	**2**	**0**	**43**	**12**	**7**	**0**	**3**	**25**	**2**	**243**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Valley Ave NW			Valley Ave NW			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
N Meridian Ave / Spencer St N
AM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Driveway Eastbound			Spencer St N Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	1	0	1	6	0	1	10	197	1	0	81	2
7:15 AM	0	0	6	6	0	0	11	166	3	2	117	1
7:30 AM	0	0	5	4	0	2	19	201	8	2	120	0
7:45 AM	0	0	3	3	0	1	22	162	9	1	111	3
8:00 AM	0	0	4	13	0	1	6	163	8	1	98	2
8:15 AM	0	0	7	4	0	2	5	164	5	1	114	0
8:30 AM	0	0	5	11	0	1	8	122	9	1	85	0
8:45 AM	0	0	5	9	0	1	7	128	18	0	88	0
7:00 - 8:00 AM	1	0	15	19	0	4	62	726	21	5	429	6

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Driveway Eastbound			Spencer St N Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	1	0	1	6	0	1	10	197	1	0	81	2
7:15 AM	0	0	6	6	0	0	11	163	3	2	115	1
7:30 AM	0	0	5	4	0	1	18	201	8	2	115	0
7:45 AM	0	0	3	3	0	1	22	162	9	1	106	3
8:00 AM	0	0	4	12	0	1	6	163	8	1	98	2
8:15 AM	0	0	7	4	0	2	5	162	5	1	114	0
8:30 AM	0	0	5	11	0	1	8	122	8	1	85	0
8:45 AM	0	0	5	8	0	1	7	126	18	0	87	0
7:00 - 8:00 AM	1	0	15	19	0	3	61	723	21	5	417	6

Peak Hour Factor = 0.90

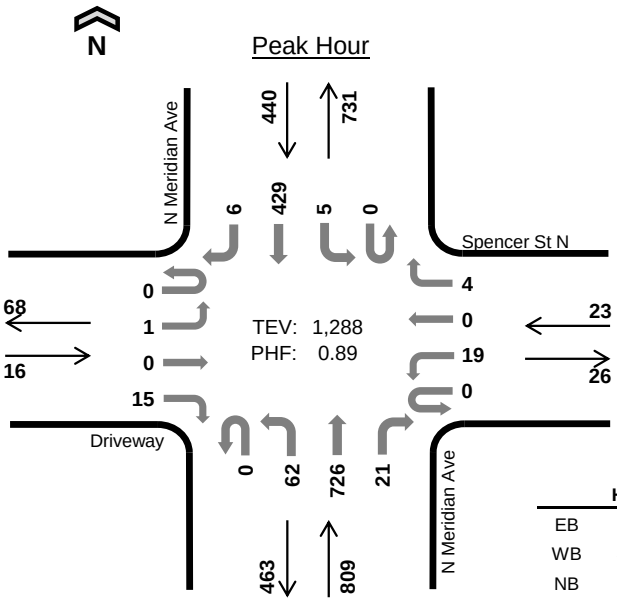
	DELTA = VEHICLES IN QUEUE											
	Driveway Eastbound			Spencer St N Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	3	0	0	2	0
7:30 AM	0	0	0	0	0	1	1	0	0	0	5	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	5	0
8:00 AM	0	0	0	1	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0
8:45 AM	0	0	0	1	0	0	0	2	0	0	1	0
7:00 - 8:00 AM	0	0	0	0	0	1	1	3	0	0	12	0

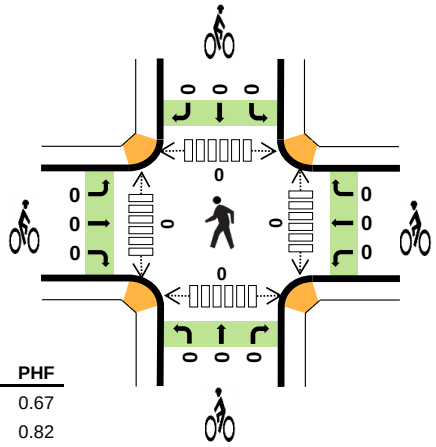
7:00-8:00 AM True Demand Volumes

Initial Queue @ 7:00	0	0	0	0	0	0	0	0	0	0	0	0
Stop Line Count (TMC)	1	0	15	19	0	3	61	723	21	5	417	6
Queued vehicles @ 8:00	0	0	0	0	0	0	0	0	0	0	5	0
True Demand Volumes	1	0	15	19	0	3	61	723	21	5	422	6

N Meridian Ave
Spencer St N

Date: 04/26/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	0.0%	0.67
WB	4.3%	0.82
NB	5.9%	0.89
SB	5.0%	0.90
TOTAL	5.5%	0.89

Two-Hour Count Summaries

Interval Start	Driveway Eastbound				Spencer St N Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**1**	**0**	**1**	**0**	**6**	**0**	**1**	**0**	**10**	**197**	**1**	**0**	**0**	**81**	**2**	**300**	0
7:15 AM	**0**	**0**	**0**	**6**	**0**	**6**	**0**	**0**	**0**	**11**	**166**	**3**	**0**	**2**	**117**	**1**	**312**	0
7:30 AM	**0**	**0**	**0**	**5**	**0**	**4**	**0**	**2**	**0**	**19**	**201**	**8**	**0**	**2**	**120**	**0**	**361**	0
7:45 AM	**0**	**0**	**0**	**3**	**0**	**3**	**0**	**1**	**0**	**22**	**162**	**9**	**0**	**1**	**111**	**3**	**315**	**1,288**
8:00 AM	0	0	0	4	0	13	0	1	0	6	163	8	0	1	98	2	296	1,284
8:15 AM	0	0	0	7	0	4	0	2	0	5	164	5	0	1	114	0	302	1,274
8:30 AM	0	0	0	5	0	11	0	1	0	8	122	9	0	1	85	0	242	1,155
8:45 AM	0	0	0	5	0	9	0	1	0	7	128	18	0	0	88	0	256	1,096
Count Total	0	1	0	36	0	56	0	9	0	88	1,303	61	0	8	814	8	2,384	0
Peak Hour All	**0**	**1**	**0**	**15**	**0**	**19**	**0**	**4**	**0**	**62**	**726**	**21**	**0**	**5**	**429**	**6**	**1,288**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**45**	**3**	**0**	**1**	**21**	**0**	**71**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**25%**	**-**	**0%**	**6%**	**14%**	**-**	**20%**	**5%**	**0%**	**6%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**0**	**0**	**12**	**1**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**0**	**0**	**11**	**5**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**1**	**15**	**9**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**10**	**7**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	0	5	10	3	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	12	6	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	10	6	*16*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	9	1	*11*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	7	89	38	*134*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**1**	**48**	**22**	***71***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Spencer St N				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**1**	**0**	**13**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**2**	**0**	**0**	**5**	**0**	**16**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**14**	**1**	**0**	**1**	**8**	**0**	**25**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**7**	**0**	**17**	**71**
8:00 AM	0	0	0	0	0	4	0	1	0	0	9	1	0	0	3	0	18	76
8:15 AM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	6	0	18	78
8:30 AM	0	0	0	0	0	0	0	0	0	0	7	3	0	1	5	0	16	69
8:45 AM	0	0	0	0	0	1	0	0	0	0	8	1	0	0	1	0	11	63
Count Total	0	0	0	0	0	5	0	2	0	0	81	8	0	2	36	0	134	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**45**	**3**	**0**	**1**	**21**	**0**	**71**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Driveway			Spencer St N			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
N Meridian Ave / Spencer St N
PM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Driveway Eastbound			Spencer St N Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	0	9	6	0	6	2	99	16	5	180	0
4:15 PM	0	0	2	1	0	2	1	116	7	4	127	0
4:30 PM	0	0	6	2	0	3	2	109	11	1	153	0
4:45 PM	0	0	5	6	0	2	3	115	12	2	175	0
5:00 PM	0	0	3	3	0	4	1	109	2	2	157	0
5:15 PM	1	0	3	3	0	2	6	96	9	4	182	0
5:30 PM	0	0	2	6	0	2	0	122	8	2	191	0
5:45 PM	0	0	0	8	0	0	3	126	6	1	145	0
4:45 - 5:45 PM	1	0	13	18	0	10	10	442	31	10	705	0

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Driveway Eastbound			Spencer St N Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	0	9	6	0	6	2	99	15	5	171	0
4:15 PM	0	0	2	1	0	2	1	116	7	4	127	0
4:30 PM	0	0	6	2	0	3	2	108	11	1	152	0
4:45 PM	0	0	5	6	0	2	3	115	12	2	175	0
5:00 PM	0	0	3	3	0	4	1	109	2	2	154	0
5:15 PM	1	0	3	2	0	2	6	96	9	4	178	0
5:30 PM	0	0	2	6	0	2	0	121	8	2	190	0
5:45 PM	0	0	0	8	0	0	3	125	6	1	145	0
4:45 - 5:45 PM	1	0	13	17	0	10	10	441	31	10	697	0

Peak Hour Factor = 0.93

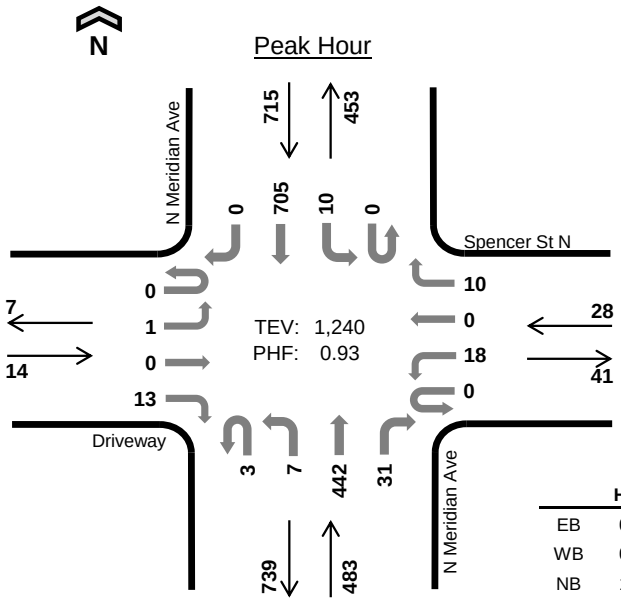
	DELTA = VEHICLES IN QUEUE											
	Driveway Eastbound			Spencer St N Westbound			N Meridian Ave Northbound			N Meridian Ave Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	0	0	0	0	0	0	0	1	0	9	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	3	0
5:15 PM	0	0	0	1	0	0	0	0	0	0	4	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:45 - 5:45 PM	0	0	0	1	0	0	0	1	0	0	8	0

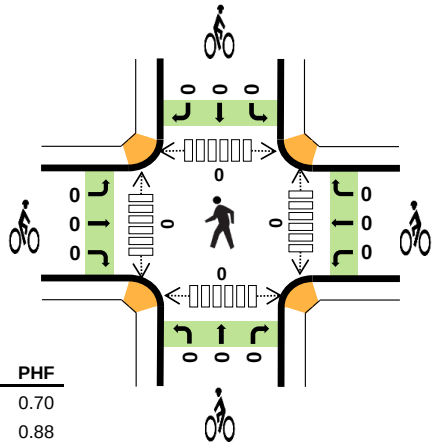
4:45-5:45 PM True Demand Volumes

Initial Queue @ 4:45	0	0	0	0	0	0	0	1	0	0	1	0
Stop Line Count (TMC)	1	0	13	17	0	10	10	441	31	10	697	0
Queued vehicles @ 5:45	0	0	0	0	0	0	0	1	0	0	1	0
True Demand Volumes	1	0	13	17	0	10	10	442	31	10	698	0

N Meridian Ave
Spencer St N

Date: 04/26/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.0%	0.70
WB	0.0%	0.88
NB	1.2%	0.93
SB	2.7%	0.93
TOTAL	2.0%	0.93

Two-Hour Count Summaries

Interval Start		Driveway Eastbound				Spencer St N Westbound				N Meridian Ave Northbound				N Meridian Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	9	0	6	0	6	0	2	99	16	0	5	180	0	323	0
4:15 PM		0	0	0	2	0	1	0	2	0	1	116	7	0	4	127	0	260	0
4:30 PM		0	0	0	6	0	2	0	3	0	2	109	11	0	1	153	0	287	0
4:45 PM		**0**	**0**	**0**	**5**	**0**	**6**	**0**	**2**	**0**	**3**	**115**	**12**	**0**	**2**	**175**	**0**	**320**	1,190
5:00 PM		**0**	**0**	**0**	**3**	**0**	**3**	**0**	**4**	**1**	**0**	**109**	**2**	**0**	**2**	**157**	**0**	**281**	1,148
5:15 PM		**0**	**1**	**0**	**3**	**0**	**3**	**0**	**2**	**2**	**4**	**96**	**9**	**0**	**4**	**182**	**0**	**306**	1,194
5:30 PM		**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**	**0**	**0**	**122**	**8**	**0**	**2**	**191**	**0**	**333**	**1,240**
5:45 PM		0	0	0	0	0	8	0	0	0	3	126	6	0	1	145	0	289	1,209
Count Total		0	1	0	30	0	35	0	21	3	15	892	71	0	21	1,310	0	2,399	0
Peak Hour	**All**	**0**	**1**	**0**	**13**	**0**	**18**	**0**	**10**	**3**	**7**	**442**	**31**	**0**	**10**	**705**	**0**	**1,240**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**17**	**0**	**25**	**0**
	HV%	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**6%**	**-**	**20%**	**2%**	**-**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	4	8	*12*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	2	7	*9*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	3	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**2**	**3**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**1**	**5**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**2**	**7**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	2	1	*3*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	0	17	39	*56*	0	0	1	0	*1*	0	0	0	0	*0*
Peak Hour	**0**	**0**	**6**	**19**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Spencer St N				N Meridian Ave				N Meridian Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	8	0	12	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	5	0	9	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	1	3	0	7	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**5**	33
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**6**	27
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**5**	**0**	**9**	27
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**5**	**25**
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	23
Count Total	0	0	0	0	0	0	0	0	0	0	14	3	0	5	34	0	56	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**17**	**0**	**25**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Driveway			Spencer St N			N Meridian Ave			N Meridian Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
Spencer St N / Todd Rd NE
AM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Todd Rd NE Eastbound			Todd Rd NE Westbound			Spencer St N Northbound			0 Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	2	0	1	15	0	1	0	1	0	0	0
7:15 AM	0	0	0	2	12	0	2	0	1	0	0	0
7:30 AM	0	3	2	1	7	0	1	0	2	0	0	0
7:45 AM	0	1	0	1	14	0	4	0	3	0	0	0
8:00 AM	0	1	2	4	3	0	4	0	4	0	0	0
8:15 AM	0	1	3	1	5	0	0	0	2	0	0	0
8:30 AM	0	2	4	2	2	0	2	0	1	0	0	0
8:45 AM	0	1	3	0	7	0	5	0	7	0	0	0
7:00 - 8:00 AM	0	6	2	5	48	0	8	0	7	0	0	0

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Todd Rd NE Eastbound			Todd Rd NE Westbound			Spencer St N Northbound			0 Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	2	0	1	15	0	1	0	1	0	0	0
7:15 AM	0	0	0	2	12	0	2	0	1	0	0	0
7:30 AM	0	3	2	1	7	0	1	0	2	0	0	0
7:45 AM	0	1	0	1	14	0	4	0	3	0	0	0
8:00 AM	0	1	2	4	3	0	4	0	3	0	0	0
8:15 AM	0	1	3	1	5	0	0	0	2	0	0	0
8:30 AM	0	2	4	2	2	0	2	0	1	0	0	0
8:45 AM	0	1	3	0	7	0	5	0	7	0	0	0
7:00 - 8:00 AM	0	6	2	5	48	0	8	0	7	0	0	0

Peak Hour Factor = 0.83

	DELTA = VEHICLES IN QUEUE											
	Todd Rd NE Eastbound			Todd Rd NE Westbound			Spencer St N Northbound			0 Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0

7:00-8:00 AM True Demand Volumes

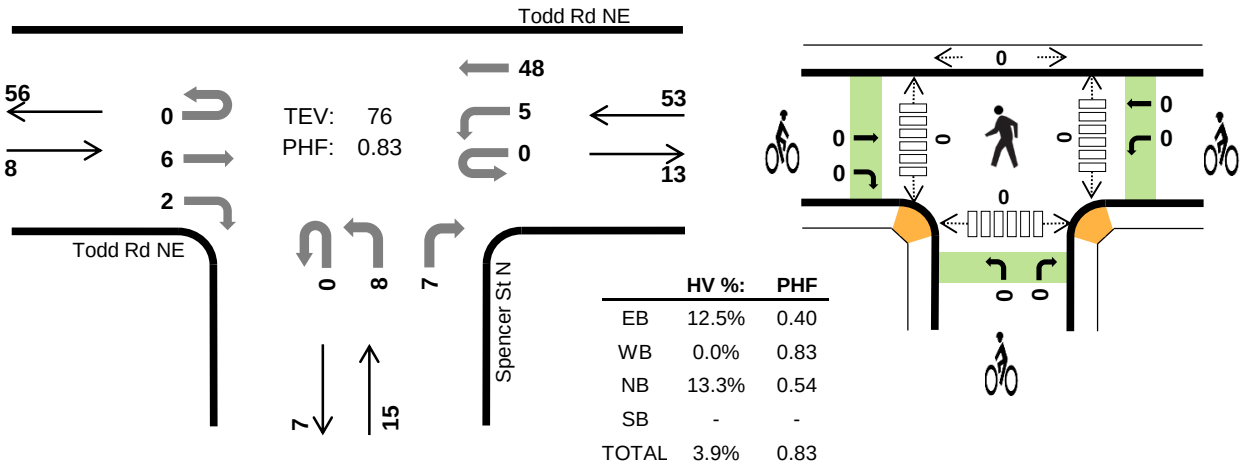
Initial Queue @ 7:00	0	0	0	0	0	0	0	0	0	0	0	0
Stop Line Count (TMC)	0	6	2	5	48	0	8	0	7	0	0	0
Queued vehicles @ 8:00	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volumes	0	6	2	5	48	0	8	0	7	0	0	0

Spencer St N
Todd Rd NE

N

Peak Hour

Date: 04/26/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	12.5%	0.40
WB	0.0%	0.83
NB	13.3%	0.54
SB	-	-
TOTAL	3.9%	0.83

Two-Hour Count Summaries

Interval Start		Todd Rd NE Eastbound				Todd Rd NE Westbound				Spencer St N Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**0**	**2**	**0**	**0**	**1**	**15**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**20**	0
7:15 AM		**0**	**0**	**0**	**0**	**0**	**2**	**12**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**17**	0
7:30 AM		**0**	**0**	**3**	**2**	**0**	**1**	**7**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**16**	0
7:45 AM		**0**	**0**	**1**	**0**	**0**	**1**	**14**	**0**	**0**	**4**	**0**	**3**	**0**	**0**	**0**	**0**	**23**	**76**
8:00 AM		0	0	1	2	0	4	3	0	0	4	0	4	0	0	0	0	18	74
8:15 AM		0	0	1	3	0	1	5	0	0	0	0	2	0	0	0	0	12	69
8:30 AM		0	0	2	4	0	2	2	0	0	2	0	1	0	0	0	0	13	66
8:45 AM		0	0	1	3	0	0	7	0	0	5	0	7	0	0	0	0	23	66
Count Total		0	0	11	14	0	12	65	0	0	19	0	21	0	0	0	0	142	0
Peak Hour	**All**	**0**	**0**	**6**	**2**	**0**	**5**	**48**	**0**	**0**	**8**	**0**	**7**	**0**	**0**	**0**	**0**	**76**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**
	HV%	**-**	**-**	**17%**	**0%**	**-**	**0%**	**0%**	**-**	**-**	**13%**	**-**	**14%**	**-**	**-**	**-**	**-**	**4%**	**0**

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

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

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Todd Rd NE				Todd Rd NE				Spencer St N				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	5
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	5
Count Total	0	0	2	0	0	2	0	0	0	2	0	2	0	0	0	0	8	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Todd Rd NE			Todd Rd NE			Spencer St N			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
Spencer St N / Todd Rd NE
PM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	Todd Rd NE Eastbound			Todd Rd NE Westbound			Spencer St N Northbound			0 Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	14	7	2	4	0	7	0	7	0	0	0
4:15 PM	0	9	1	0	2	0	2	0	7	0	0	0
4:30 PM	0	18	2	1	6	0	3	0	5	0	0	0
4:45 PM	0	15	4	1	4	0	3	0	4	0	0	0
5:00 PM	0	14	3	1	1	0	3	0	2	0	0	0
5:15 PM	0	12	1	1	4	0	3	0	6	0	0	0
5:30 PM	0	4	2	3	2	0	3	0	4	0	0	0
5:45 PM	0	6	3	2	3	0	3	0	2	0	0	0
4:00 - 5:00 PM	0	56	14	4	16	0	15	0	23	0	0	0

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	Todd Rd NE Eastbound			Todd Rd NE Westbound			Spencer St N Northbound			0 Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	14	7	2	4	0	7	0	7	0	0	0
4:15 PM	0	9	1	0	2	0	2	0	7	0	0	0
4:30 PM	0	18	2	1	6	0	3	0	5	0	0	0
4:45 PM	0	15	4	1	4	0	3	0	4	0	0	0
5:00 PM	0	14	3	1	1	0	2	0	2	0	0	0
5:15 PM	0	12	1	1	4	0	3	0	6	0	0	0
5:30 PM	0	4	2	3	2	0	3	0	4	0	0	0
5:45 PM	0	6	3	2	3	0	3	0	2	0	0	0
4:00 - 5:00 PM	0	56	14	4	16	0	15	0	23	0	0	0

Peak Hour Factor = 0.78

	DELTA = VEHICLES IN QUEUE											
	Todd Rd NE Eastbound			Todd Rd NE Westbound			Spencer St N Northbound			0 Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

4:00-5:00 PM True Demand Volumes

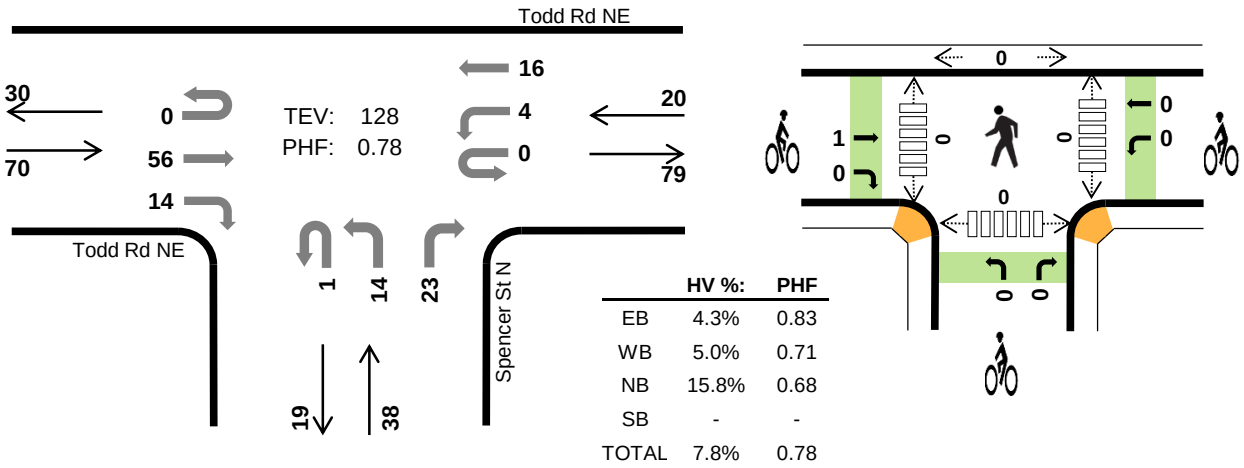
Initial Queue @ 4:00	0	0	0	0	0	0	0	0	0	0	0	0
Stop Line Count (TMC)	0	56	14	4	16	0	15	0	23	0	0	0
Queued vehicles @ 5:00	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volumes	0	56	14	4	16	0	15	0	23	0	0	0

Spencer St N
Todd Rd NE

N

Peak Hour

Date: 04/26/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



Two-Hour Count Summaries

Interval Start		Todd Rd NE Eastbound				Todd Rd NE Westbound				Spencer St N Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**0**	**14**	**7**	**0**	**2**	**4**	**0**	**0**	**7**	**0**	**7**	**0**	**0**	**0**	**0**	**41**	0
4:15 PM		**0**	**0**	**9**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**7**	**0**	**0**	**0**	**0**	**21**	0
4:30 PM		**0**	**0**	**18**	**2**	**0**	**1**	**6**	**0**	**1**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**35**	0
4:45 PM		**0**	**0**	**15**	**4**	**0**	**1**	**4**	**0**	**0**	**3**	**0**	**4**	**0**	**0**	**0**	**0**	**31**	**128**
5:00 PM		0	0	14	3	0	1	1	0	0	3	0	2	0	0	0	0	24	111
5:15 PM		0	0	12	1	0	1	4	0	0	3	0	6	0	0	0	0	27	117
5:30 PM		0	0	4	2	0	3	2	0	0	3	0	4	0	0	0	0	18	100
5:45 PM		0	0	6	3	0	2	3	0	0	3	0	2	0	0	0	0	19	88
Count Total		0	0	92	23	0	11	26	0	1	26	0	37	0	0	0	0	216	0
Peak Hour	**All**	**0**	**0**	**56**	**14**	**0**	**4**	**16**	**0**	**1**	**14**	**0**	**23**	**0**	**0**	**0**	**0**	**128**	**0**
	HV	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**10**	**0**
	HV%	**-**	**-**	**5%**	**0%**	**-**	**0%**	**6%**	**-**	**0%**	**7%**	**-**	**22%**	**-**	**-**	**-**	**-**	**8%**	**0**

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

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	**0**	**1**	**2**	**0**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**0**	**0**	**3**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**0**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	4	1	10	0	*15*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hr	**3**	**1**	**6**	**0**	***10***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Todd Rd NE				Todd Rd NE				Spencer St N				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**10**
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	0	4	0	0	0	1	0	0	2	0	8	0	0	0	0	15	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**10**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Todd Rd NE			Todd Rd NE			Spencer St N			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
4th St NW / 23rd Ave NW
AM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	4	0	0	12	1	0	0	0	0	0	1
7:15 AM	0	1	0	0	11	1	0	0	0	1	0	0
7:30 AM	1	4	0	0	11	0	0	0	0	0	0	2
7:45 AM	0	9	0	0	10	1	0	0	0	0	0	1
8:00 AM	1	3	0	0	12	0	0	0	0	2	0	0
8:15 AM	0	3	0	0	10	0	0	0	0	2	0	3
8:30 AM	0	3	0	0	5	3	0	0	0	1	0	0
8:45 AM	1	4	0	0	7	3	0	0	0	1	0	1
7:30 - 8:30 AM	2	19	0	0	43	1	0	0	0	4	0	6

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	4	0	0	12	1	0	0	0	0	0	1
7:15 AM	0	1	0	0	11	1	0	0	0	1	0	0
7:30 AM	1	4	0	0	11	0	0	0	0	0	0	2
7:45 AM	0	9	0	0	10	1	0	0	0	0	0	1
8:00 AM	1	3	0	0	12	0	0	0	0	2	0	0
8:15 AM	0	3	0	0	10	0	0	0	0	2	0	3
8:30 AM	0	3	0	0	5	3	0	0	0	1	0	0
8:45 AM	1	4	0	0	7	3	0	0	0	1	0	1
7:30 - 8:30 AM	2	19	0	0	43	1	0	0	0	4	0	6

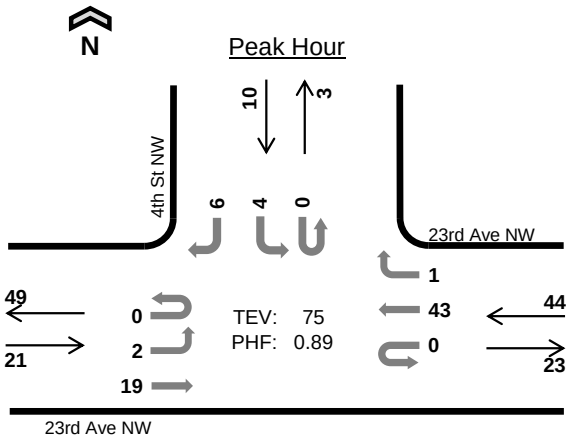
Peak Hour Factor = 0.89

	DELTA = VEHICLES IN QUEUE											
	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0

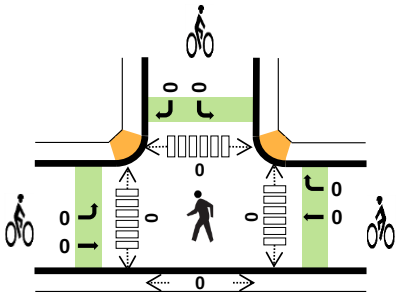
7:30-8:30 AM True Demand Volumes

Initial Queue @ 7:30	0	0	0	0	0	0	0	0	0	0	0	0
Stop Line Count (TMC)	2	19	0	0	43	1	0	0	0	4	0	6
Queued vehicles @ 8:30	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volumes	2	19	0	0	43	1	0	0	0	4	0	6

4th St NW
23rd Ave NW



Date: 05/02/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.8%	0.58
WB	6.8%	0.92
NB	-	-
SB	10.0%	0.50
TOTAL	6.7%	0.89

Two-Hour Count Summaries

Interval Start		23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	4	0	0	0	12	1	0	0	0	0	0	0	0	1	18	0
7:15 AM		0	0	1	0	0	0	11	1	0	0	0	0	0	1	0	0	14	0
7:30 AM		**0**	**1**	**4**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**18**	0
7:45 AM		**0**	**0**	**9**	**0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	71
8:00 AM		**0**	**1**	**3**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**18**	71
8:15 AM		**0**	**0**	**3**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**18**	**75**
8:30 AM		0	0	3	0	0	0	5	3	0	0	0	0	0	1	0	0	12	69
8:45 AM		0	1	4	0	0	0	7	3	0	0	0	0	0	1	0	1	17	65
Count Total		0	3	31	0	0	0	78	9	0	0	0	0	0	7	0	8	136	0
Peak Hour	**All**	**0**	**2**	**19**	**0**	**0**	**0**	**43**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**6**	**75**	**0**
	HV	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**
	HV%	**-**	**50%**	**0%**	**-**	**-**	**-**	**5%**	**100%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**17%**	**7%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	3	6	0	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**1**	**3**	**0**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
8:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	5
8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	5
Count Total	0	1	2	0	0	0	4	2	0	0	0	0	0	0	0	1	10	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

PSE Operations Training Center (Puyallup)
True Demand Calculations
4th St NW / 23rd Ave NW
PM PEAK HOUR

	True Demand Raw Counts - TOTAL [1]											
	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	14	0	0	5	3	0	0	0	1	0	2
4:15 PM	0	11	0	0	6	4	0	0	0	0	0	1
4:30 PM	1	20	0	0	7	2	0	0	0	0	0	0
4:45 PM	0	9	0	0	4	0	0	0	0	1	0	0
5:00 PM	1	8	0	0	7	1	0	0	0	1	0	0
5:15 PM	1	8	0	0	3	1	0	0	0	0	0	0
5:30 PM	1	3	0	0	9	1	0	0	0	1	0	1
5:45 PM	0	3	0	0	3	2	0	0	0	0	0	0
4:00 - 5:00 PM	1	54	0	0	22	9	0	0	0	2	0	3

[1] Volumes at each 15-min interval represent TMCs for the interval + the # of vehicles that were in queue at the end of each interval.

	Turning Movement Counts - TOTAL											
	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	14	0	0	5	3	0	0	0	1	0	2
4:15 PM	0	11	0	0	6	4	0	0	0	0	0	1
4:30 PM	1	20	0	0	7	2	0	0	0	0	0	0
4:45 PM	0	9	0	0	4	0	0	0	0	1	0	0
5:00 PM	1	8	0	0	7	1	0	0	0	1	0	0
5:15 PM	1	8	0	0	3	1	0	0	0	0	0	0
5:30 PM	1	3	0	0	9	1	0	0	0	1	0	1
5:45 PM	0	3	0	0	3	2	0	0	0	0	0	0
4:00 - 5:00 PM	1	54	0	0	22	9	0	0	0	2	0	3

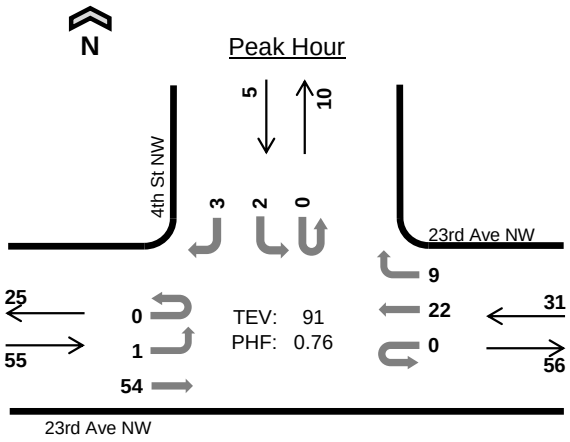
Peak Hour Factor = 0.76

	DELTA = VEHICLES IN QUEUE											
	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound		
Interval Start	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

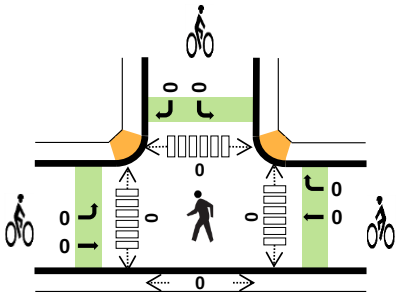
4:00-5:00 PM True Demand Volumes

Initial Queue @ 4:00	0	0	0	0	0	0	0	0	0	0	0	0
Stop Line Count (TMC)	1	54	0	0	22	9	0	0	0	2	0	3
Queued vehicles @ 5:00	0	0	0	0	0	0	0	0	0	0	0	0
True Demand Volumes	1	54	0	0	22	9	0	0	0	2	0	3

4th St NW
23rd Ave NW



Date: 05/02/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	1.8%	0.65
WB	19.4%	0.78
NB	-	-
SB	20.0%	0.42
TOTAL	8.8%	0.76

Two-Hour Count Summaries

Interval Start		23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**0**	**14**	**0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**25**	0
4:15 PM		**0**	**0**	**11**	**0**	**0**	**0**	**6**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**22**	0
4:30 PM		**0**	**1**	**20**	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	0
4:45 PM		**0**	**0**	**9**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**14**	**91**
5:00 PM		0	1	8	0	0	0	7	1	0	0	0	0	0	1	0	0	18	84
5:15 PM		0	1	8	0	0	0	3	1	0	0	0	0	0	0	0	0	13	75
5:30 PM		0	1	3	0	0	0	9	1	0	0	0	0	0	1	0	1	16	61
5:45 PM		0	0	3	0	0	0	3	2	0	0	0	0	0	0	0	0	8	55
Count Total		0	4	76	0	0	0	44	14	0	0	0	0	0	4	0	4	146	0
Peak Hour	**All**	**0**	**1**	**54**	**0**	**0**	**0**	**22**	**9**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**91**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**
	HV%	**-**	**0%**	**2%**	**-**	**-**	**-**	**23%**	**11%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**33%**	**9%**	**0**

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

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	7	0	1	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**1**	**6**	**0**	**1**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	23rd Ave NW Eastbound				23rd Ave NW Westbound				0 Northbound				4th St NW Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**8**
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	6	1	0	0	0	0	0	0	0	1	9	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	23rd Ave NW Eastbound			23rd Ave NW Westbound			0 Northbound			4th St NW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Appendix D

Level of Service (LOS) 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.

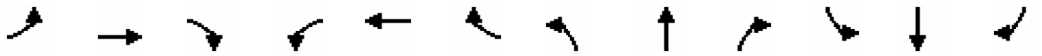
Unsignalized Intersection LOS (two-way stop control, all-way stop control, and roundabouts) is based on the average control delay. For two-way stop-controlled intersections, the LOS criteria apply to each controlled minor-street approach, controlled minor-street lane group, and controlled major-street 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.

2023 Existing



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	489	0	2	693	6	0	0	0	12	0	44
Future Volume (vph)	10	489	0	2	693	6	0	0	0	12	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			4%			0%	
Storage Length (ft)	175		0	50		0	0		0	200		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		481			493			295			496	
Travel Time (s)		9.4			9.6			8.0			13.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	22%	22%	22%	17%	17%	17%	0%	0%	0%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	489	0	2	693	6	0	0	0	12	0	44
Future Vol, veh/h	10	489	0	2	693	6	0	0	0	12	0	44
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	-	50	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	22	22	22	17	17	17	0	0	0	22	22	22
Mvmt Flow	11	526	0	2	745	6	0	0	0	13	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	753	0	0	526	0	0	924	1304	263	1038	1301	377
Stage 1	-	-	-	-	-	-	547	547	-	754	754	-
Stage 2	-	-	-	-	-	-	377	757	-	284	547	-
Critical Hdwy	4.54	-	-	4.44	-	-	8.3	7.3	7.3	7.94	6.94	7.34
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	6.3	-	6.94	5.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.3	6.3	-	6.94	5.94	-
Follow-up Hdwy	2.42	-	-	2.37	-	-	3.5	4	3.3	3.72	4.22	3.52
Pot Cap-1 Maneuver	734	-	-	940	-	-	185	121	720	160	135	567
Stage 1	-	-	-	-	-	-	437	461	-	326	370	-
Stage 2	-	-	-	-	-	-	572	354	-	646	468	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	733	-	-	940	-	-	167	119	720	157	133	567
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	119	-	157	133	-
Stage 1	-	-	-	-	-	-	431	454	-	321	369	-
Stage 2	-	-	-	-	-	-	523	353	-	636	462	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.2	0.03	0	15.8
HCM LOS			A	C

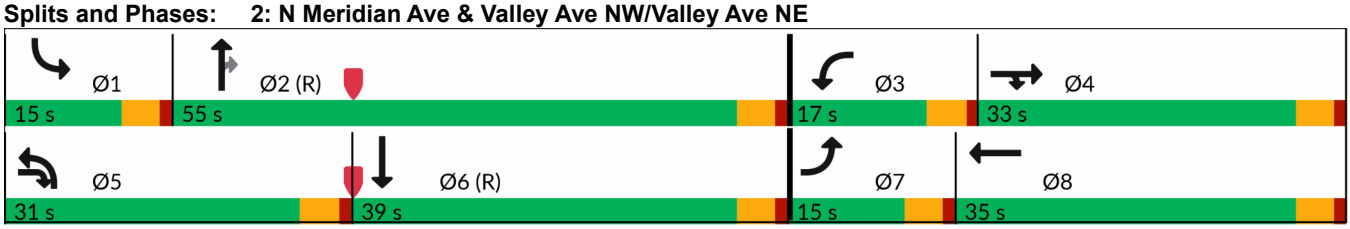
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	733	-	-	940	-	-	157	567
HCM Lane V/C Ratio	-	0.015	-	-	0.002	-	-	0.082	0.084
HCM Control Delay (s/veh)	0	10	-	-	8.8	-	-	30	11.9
HCM Lane LOS	A	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3	0.3

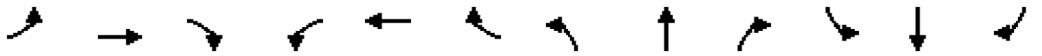
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	124	313	182	197	58	468	981	172	25	443	33
Future Volume (vph)	21	124	313	182	197	58	468	981	172	25	443	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		475	300		0	200		225	175		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			No			Yes			No			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		890			859			772			1221	
Travel Time (s)		17.3			16.7			15.0			23.8	
Confl. Peds. (#/hr)	3			2		3	2		5	5		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	25%	25%	25%	17%	17%	17%	9%	9%	9%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases									2			
Detector Phase	7	4	4 5	3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	8.0		4.0	8.0		4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	8.5	31.5		8.5	32.5		8.5	31.5	31.5	8.5	37.5	
Total Split (s)	15.0	33.0		17.0	35.0		31.0	55.0	55.0	15.0	39.0	
Total Split (%)	12.5%	27.5%		14.2%	29.2%		25.8%	45.8%	45.8%	12.5%	32.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 110 (92%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: N Meridian Ave & Valley Ave NW/Valley Ave NE





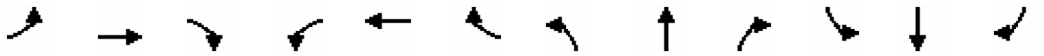
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	124	313	182	197	58	468	981	172	25	443	33
Future Volume (veh/h)	21	124	313	182	197	58	468	981	172	25	443	33
Initial Q (Qb), veh	0	1	1	0	2	0	13	4	0	0	2	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1530	1530	1530	1648	1648	1648	1767	1767	1767	1796	1796	1796
Adj Flow Rate, veh/h	22	129	326	190	205	60	488	1022	0	26	461	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	25	25	25	17	17	17	9	9	9	7	7	7
Cap, veh/h	25	451	746	241	525	147	600	1997		33	1506	
Arrive On Green	0.02	0.15	0.15	0.08	0.22	0.22	0.17	0.60	0.00	0.02	0.44	0.00
Sat Flow, veh/h	1457	2906	2259	3045	2401	684	3264	3357	1497	1711	3503	0
Grp Volume(v), veh/h	22	129	326	190	132	133	488	1022	0	26	461	0
Grp Sat Flow(s),veh/h/ln	1457	1453	1130	1522	1566	1519	1632	1678	1497	1711	1706	0
Q Serve(g_s), s	1.8	4.7	13.6	7.4	8.6	9.0	17.4	21.2	0.0	1.8	10.4	0.0
Cycle Q Clear(g_c), s	1.8	4.7	13.6	7.4	8.6	9.0	17.4	21.2	0.0	1.8	10.4	0.0
Prop In Lane	1.00		1.00	1.00		0.45	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	25	451	746	241	341	331	600	1997		33	1506	
V/C Ratio(X)	0.87	0.29	0.44	0.79	0.39	0.40	0.81	0.51		0.79	0.31	
Avail Cap(c_a), veh/h	127	690	932	317	398	386	721	2003		150	1511	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.8	44.9	31.7	54.3	40.2	40.4	47.9	14.4	0.0	58.6	21.8	0.0
Incr Delay (d2), s/veh	54.1	0.5	0.6	9.3	1.0	1.1	6.3	0.9	0.0	37.6	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.1	0.1	18.1	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.8	3.8	3.1	3.5	3.6	9.8	8.2	0.0	1.1	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	112.9	45.4	32.3	63.6	41.3	41.6	72.3	15.4	0.0	96.2	22.3	0.0
LnGrp LOS	F	D	C	E	D	D	E	B		F	C	
Approach Vol, veh/h		477			455			1510			487	
Approach Delay, s/veh		39.6			50.7			33.8			26.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	76.1	14.0	23.1	25.3	57.6	6.6	30.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	50.5	12.5	28.5	26.5	34.5	10.5	30.5
Max Q Clear Time (g_c+I1), s	3.8	23.2	9.4	15.6	19.4	12.4	3.8	11.0
Green Ext Time (p_c), s	0.0	11.3	0.2	2.5	1.3	4.1	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	36.1
HCM 7th LOS	D

Notes

User approved changes to right turn type.
Unsignalized Delay for [NBR, SBR] 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)	1	0	15	19	0	3	61	723	21	5	422	6
Future Volume (vph)	1	0	15	19	0	3	61	723	21	5	422	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Storage Length (ft)	50		0	100		0	175		0	50		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		328			376			1221			397	
Travel Time (s)		8.9			10.3			23.8			7.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	6%	6%	6%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	15	19	0	3	61	723	21	5	422	6
Future Vol, veh/h	1	0	15	19	0	3	61	723	21	5	422	6
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	-	-	100	-	-	175	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-3	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	6	6	6	5	5	5
Mvmt Flow	1	0	17	21	0	3	68	803	23	6	469	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1422	1446	472	1419	1426	803	476	0	0	827	0	0
Stage 1	483	483	-	939	939	-	-	-	-	-	-	-
Stage 2	939	962	-	480	487	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.16	-	-	4.15	-	-
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	2.254	-	-	2.245	-	-
Pot Cap-1 Maneuver	60	66	596	61	70	*490	1066	-	-	720	-	-
Stage 1	568	556	-	340	316	-	-	-	-	-	-	-
Stage 2	340	300	-	571	554	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	55	61	596	55	65	*490	1066	-	-	720	-	-
Mov Cap-2 Maneuver	55	61	-	55	65	-	-	-	-	-	-	-
Stage 1	532	552	-	319	296	-	-	-	-	-	-	-
Stage 2	316	281	-	550	550	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.97	93.88	0.65	0.12
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1066	-	-	55	596	55	490	720	-	-
HCM Lane V/C Ratio	0.064	-	-	0.02	0.028	0.384	0.007	0.008	-	-
HCM Control Delay (s/veh)	8.6	-	-	71.2	11.2	106.7	12.4	10	-	-
HCM Lane LOS	A	-	-	F	B	F	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.1	1.4	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	6	2	5	48	8	7
Future Volume (vph)	6	2	5	48	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	607			518	603	
Travel Time (s)	16.6			14.1	16.4	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	13%	13%	0%	0%	13%	13%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

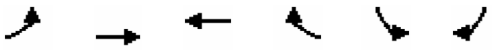
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	2	5	48	8	7
Future Vol, veh/h	6	2	5	48	8	7
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	13	13	0	0	13	13
Mvmt Flow	7	2	6	58	10	8
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	7.1	7.3	7.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	53%	0%	9%
Vol Thru, %	0%	75%	91%
Vol Right, %	47%	25%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	15	8	53
LT Vol	8	0	5
Through Vol	0	6	48
RT Vol	7	2	0
Lane Flow Rate	18	10	64
Geometry Grp	1	1	1
Degree of Util (X)	0.02	0.011	0.07
Departure Headway (Hd)	4.076	4.05	3.958
Convergence, Y/N	Yes	Yes	Yes
Cap	877	885	908
Service Time	2.105	2.069	1.968
HCM Lane V/C Ratio	0.021	0.011	0.07
HCM Control Delay, s/veh	7.2	7.1	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	19	43	1	4	6
Future Volume (vph)	2	19	43	1	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		491	706		515	
Travel Time (s)		13.4	19.3		14.0	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	7%	7%	10%	10%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

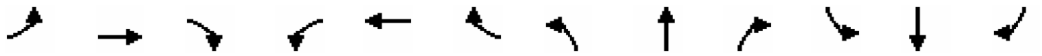
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	19	43	1	4	6
Future Vol, veh/h	2	19	43	1	4	6
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	89	89	89	89	89	89
Heavy Vehicles, %	5	5	7	7	10	10
Mvmt Flow	2	21	48	1	4	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	75	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	4.15	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.245	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1538	-	-	-	909	997
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	976	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1538	-	-	-	908	997
Mov Cap-2 Maneuver	-	-	-	-	908	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	976	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.7	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1538	-	-	-	960
HCM Lane V/C Ratio	0.001	-	-	-	0.012
HCM Control Delay (s/veh)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1129	0	0	508	13	0	0	0	9	0	27
Future Volume (vph)	37	1129	0	0	508	13	0	0	0	9	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			4%			0%	
Storage Length (ft)	175		0	50		0	0		0	200		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		481			493			295			496	
Travel Time (s)		9.4			9.6			8.0			13.5	
Confl. Peds. (#/hr)	2					2						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	6%	13%	13%	13%	0%	0%	0%	11%	11%	11%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	1129	0	0	508	13	0	0	0	9	0	27
Future Vol, veh/h	37	1129	0	0	508	13	0	0	0	9	0	27
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	-	50	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	13	13	13	0	0	0	11	11	11
Mvmt Flow	39	1176	0	0	529	14	0	0	0	9	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	545	0	0	1176	0	0	1518	1798	588	1203	1791	273
Stage 1	-	-	-	-	-	-	1253	1253	-	538	538	-
Stage 2	-	-	-	-	-	-	265	545	-	665	1253	-
Critical Hdwy	4.22	-	-	4.36	-	-	8.3	7.3	7.3	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	6.3	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.3	6.3	-	6.72	5.72	-
Follow-up Hdwy	2.26	-	-	2.33	-	-	3.5	4	3.3	3.61	4.11	3.41
Pot Cap-1 Maneuver	993	-	-	531	-	-	59	54	428	130	73	698
Stage 1	-	-	-	-	-	-	140	186	-	473	499	-
Stage 2	-	-	-	-	-	-	682	462	-	395	225	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	531	-	-	55	52	428	125	70	697
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	52	-	125	70	-
Stage 1	-	-	-	-	-	-	135	179	-	453	498	-
Stage 2	-	-	-	-	-	-	655	462	-	379	216	-

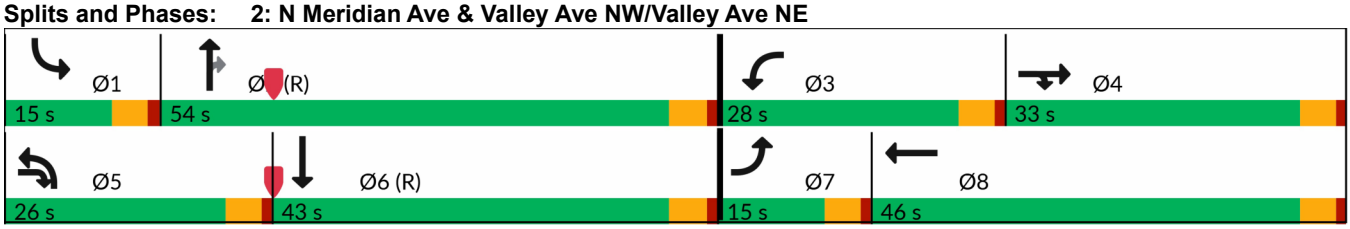
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.28	0	0	16.83
HCM LOS			A	C

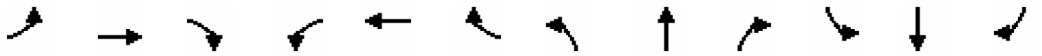
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	991	-	-	531	-	-	125	697
HCM Lane V/C Ratio	-	0.039	-	-	-	-	-	0.075	0.04
HCM Control Delay (s/veh)	0	8.8	-	-	0	-	-	36.2	10.4
HCM Lane LOS	A	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.2	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	466	843	353	160	20	407	437	188	43	753	16
Future Volume (vph)	23	466	843	353	160	20	407	437	188	43	753	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		475	300		0	200		225	175		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			No			Yes			No			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		890			859			772			1221	
Travel Time (s)		17.3			16.7			15.0			23.8	
Confl. Peds. (#/hr)	1					1			8	8		
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 (%)	7%	7%	7%	8%	8%	8%	6%	6%	6%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases									2			
Detector Phase	7	4	4 5	3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	8.0		4.0	8.0		4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	8.5	31.5		8.5	32.5		8.5	31.5	31.5	8.5	37.5	
Total Split (s)	15.0	33.0		28.0	46.0		26.0	54.0	54.0	15.0	43.0	
Total Split (%)	11.5%	25.4%		21.5%	35.4%		20.0%	41.5%	41.5%	11.5%	33.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 85 (65%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Meridian Ave & Valley Ave NW/Valley Ave NE





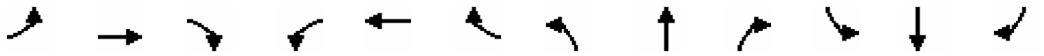
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	466	843	353	160	20	407	437	188	43	753	16
Future Volume (veh/h)	23	466	843	353	160	20	407	437	188	43	753	16
Initial Q (Qb), veh	0	26	32	4	0	0	11	3	0	2	75	0
Lane Width Adj.	1.00	1.00	1.00	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	1796	1796	1796	1781	1781	1781	1811	1811	1811	1841	1841	1841
Adj Flow Rate, veh/h	24	480	869	364	165	21	420	451	0	44	776	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
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	4	4	4
Cap, veh/h	31	748	1017	439	1061	133	504	1648		64	1036	
Arrive On Green	0.02	0.22	0.22	0.13	0.33	0.33	0.14	0.48	0.00	0.03	0.37	0.00
Sat Flow, veh/h	1711	3413	2673	3291	3025	380	3346	3441	1535	1753	3589	0
Grp Volume(v), veh/h	24	480	869	364	91	95	420	451	0	44	776	0
Grp Sat Flow(s),veh/h/ln	1711	1706	1337	1646	1692	1713	1673	1721	1535	1753	1749	0
Q Serve(g_s), s	1.8	16.6	28.5	14.1	5.0	5.1	16.0	10.2	0.0	3.2	23.4	0.0
Cycle Q Clear(g_c), s	1.8	16.6	28.5	14.1	5.0	5.1	16.0	10.2	0.0	3.2	23.4	0.0
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	31	748	1017	439	593	601	504	1648		64	1036	
V/C Ratio(X)	0.79	0.64	0.85	0.83	0.15	0.16	0.83	0.27		0.69	0.75	
Avail Cap(c_a), veh/h	138	748	970	595	560	567	553	1653		142	1291	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.6	47.9	39.8	55.2	29.0	29.1	54.4	20.5	0.0	62.2	45.8	0.0
Incr Delay (d2), s/veh	34.6	2.1	7.9	7.2	0.2	0.2	10.1	0.4	0.0	15.0	5.0	0.0
Initial Q Delay(d3), s/veh	0.0	24.3	48.9	3.5	0.0	0.0	20.5	0.0	0.0	23.2	147.8	0.0
%ile BackOfQ(50%),veh/ln	1.1	11.7	23.4	6.7	2.0	2.1	9.6	4.4	0.0	2.4	38.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.1	74.3	96.6	65.9	29.2	29.2	85.1	20.9	0.0	100.5	198.5	0.0
LnGrp LOS	F	E	F	E	C	C	F	C		F	F	
Approach Vol, veh/h		1373			550			871			820	
Approach Delay, s/veh		88.8			53.5			51.8			193.3	
Approach LOS		F			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	66.9	21.4	33.0	23.1	52.5	6.8	47.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	49.5	23.5	28.5	21.5	38.5	10.5	41.5
Max Q Clear Time (g_c+I1), s	5.2	12.2	16.1	30.5	18.0	25.4	3.8	7.1
Green Ext Time (p_c), s	0.0	4.6	0.8	0.0	0.7	5.6	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	98.2
HCM 7th LOS	F

Notes

Unsignalized Delay for [NBR, SBR] 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)	1	0	13	17	0	10	10	442	31	10	698	0
Future Volume (vph)	1	0	13	17	0	10	10	442	31	10	698	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Storage Length (ft)	50		0	100		0	175		0	50		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		328			376			1221			397	
Travel Time (s)		8.9			10.3			23.8			7.7	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	13	17	0	10	10	442	31	10	698	0
Future Vol, veh/h	1	0	13	17	0	10	10	442	31	10	698	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	100	-	-	175	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-3	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	1	0	14	18	0	11	11	475	33	11	751	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1270	1303	752	1269	1270	475	752	0	0	509	0	0
Stage 1	773	773	-	497	497	-	-	-	-	-	-	-
Stage 2	497	530	-	772	773	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
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	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	*117	124	414	*117	*132	*727	863	-	-	1066	-	-
Stage 1	*395	412	-	*686	*600	-	-	-	-	-	-	-
Stage 2	*686	574	-	*395	*412	-	-	-	-	-	-	-
Platoon blocked, %	0	0		0	0	0		-	-	0	-	-
Mov Cap-1 Maneuver	*113	121	413	*111	*129	*727	862	-	-	1066	-	-
Mov Cap-2 Maneuver	*113	121	-	*111	*129	-	-	-	-	-	-	-
Stage 1	*390	407	-	*677	*593	-	-	-	-	-	-	-
Stage 2	*667	567	-	*378	*407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.68	31.29	0.19	0.12
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	862	-	-	113	413	111	727	1066	-	-
HCM Lane V/C Ratio	0.012	-	-	0.01	0.034	0.165	0.015	0.01	-	-
HCM Control Delay (s/veh)	9.2	-	-	37.3	14	43.8	10	8.4	-	-
HCM Lane LOS	A	-	-	E	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.6	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	56	14	4	16	15	23
Future Volume (vph)	56	14	4	16	15	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	607			518	603	
Travel Time (s)	16.6			14.1	16.4	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	4%	4%	5%	5%	16%	16%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

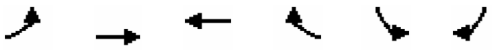
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	56	14	4	16	15	23
Future Vol, veh/h	56	14	4	16	15	23
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	4	4	5	5	16	16
Mvmt Flow	72	18	5	21	19	29
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	7.4	7.3	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	39%	0%	20%
Vol Thru, %	0%	80%	80%
Vol Right, %	61%	20%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	38	70	20
LT Vol	15	0	4
Through Vol	0	56	16
RT Vol	23	14	0
Lane Flow Rate	49	90	26
Geometry Grp	1	1	1
Degree of Util (X)	0.055	0.099	0.03
Departure Headway (Hd)	4.088	3.952	4.178
Convergence, Y/N	Yes	Yes	Yes
Cap	871	906	854
Service Time	2.138	1.982	2.218
HCM Lane V/C Ratio	0.056	0.099	0.03
HCM Control Delay, s/veh	7.4	7.4	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	54	22	9	2	3
Future Volume (vph)	1	54	22	9	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		491	706		515	
Travel Time (s)		13.4	19.3		14.0	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	2%	2%	19%	19%	20%	20%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

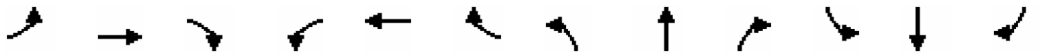
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	54	22	9	2	3
Future Vol, veh/h	1	54	22	9	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	19	19	20	20
Mvmt Flow	1	71	29	12	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	41	0	-	0	109	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.12	-	-	-	6.6	6.4
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	2.218	-	-	-	3.68	3.48
Pot Cap-1 Maneuver	1569	-	-	-	847	989
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	906	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1569	-	-	-	846	989
Mov Cap-2 Maneuver	-	-	-	-	846	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	906	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.13	0	8.91
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1569	-	-	-	926
HCM Lane V/C Ratio	0.001	-	-	-	0.007
HCM Control Delay (s/veh)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

2025 No Action



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	519	0	2	735	6	0	0	0	13	0	47
Future Volume (vph)	11	519	0	2	735	6	0	0	0	13	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			4%			0%	
Storage Length (ft)	175		0	50		0	0		0	200		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		481			493			295			496	
Travel Time (s)		9.4			9.6			8.0			13.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	22%	22%	22%	17%	17%	17%	0%	0%	0%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	519	0	2	735	6	0	0	0	13	0	47
Future Vol, veh/h	11	519	0	2	735	6	0	0	0	13	0	47
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	-	50	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	22	22	22	17	17	17	0	0	0	22	22	22
Mvmt Flow	12	558	0	2	790	6	0	0	0	14	0	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	798	0	0	558	0	0	981	1384	279	1102	1381	399
Stage 1	-	-	-	-	-	-	582	582	-	799	799	-
Stage 2	-	-	-	-	-	-	399	802	-	303	582	-
Critical Hdwy	4.54	-	-	4.44	-	-	8.3	7.3	7.3	7.94	6.94	7.34
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	6.3	-	6.94	5.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.3	6.3	-	6.94	5.94	-
Follow-up Hdwy	2.42	-	-	2.37	-	-	3.5	4	3.3	3.72	4.22	3.52
Pot Cap-1 Maneuver	703	-	-	912	-	-	166	107	702	143	120	547
Stage 1	-	-	-	-	-	-	414	442	-	305	352	-
Stage 2	-	-	-	-	-	-	552	334	-	629	451	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	702	-	-	912	-	-	148	104	702	140	118	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	104	-	140	118	-
Stage 1	-	-	-	-	-	-	407	434	-	299	351	-
Stage 2	-	-	-	-	-	-	500	333	-	618	443	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.21	0.02	0	16.87
HCM LOS			A	C

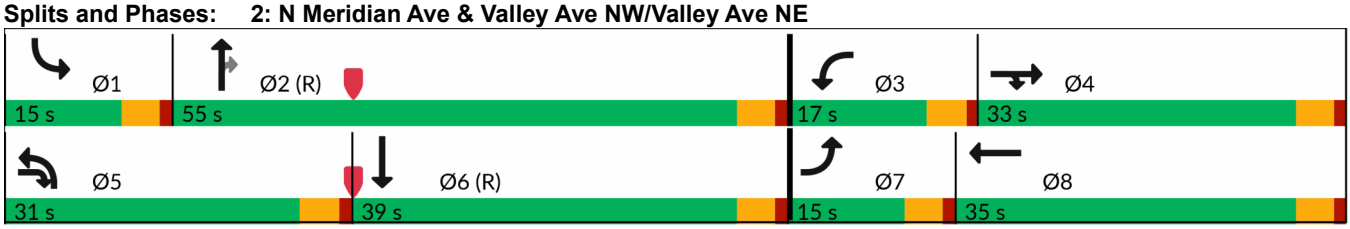
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	702	-	-	912	-	-	140	547
HCM Lane V/C Ratio	-	0.017	-	-	0.002	-	-	0.1	0.092
HCM Control Delay (s/veh)	0	10.2	-	-	9	-	-	33.6	12.3
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.3	0.3

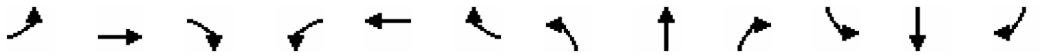
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	132	332	193	209	62	497	1041	182	27	470	35
Future Volume (vph)	22	132	332	193	209	62	497	1041	182	27	470	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		475	300		0	200		225	175		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			No			Yes			No			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		890			859			772			1221	
Travel Time (s)		17.3			16.7			15.0			23.8	
Confl. Peds. (#/hr)	3			2		3	2		5	5		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	25%	25%	25%	17%	17%	17%	9%	9%	9%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases									2			
Detector Phase	7	4	4 5	3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	8.0		4.0	8.0		4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	8.5	31.5		8.5	32.5		8.5	31.5	31.5	8.5	37.5	
Total Split (s)	15.0	33.0		17.0	35.0		31.0	55.0	55.0	15.0	39.0	
Total Split (%)	12.5%	27.5%		14.2%	29.2%		25.8%	45.8%	45.8%	12.5%	32.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 110 (92%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: N Meridian Ave & Valley Ave NW/Valley Ave NE





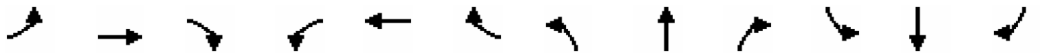
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	132	332	193	209	62	497	1041	182	27	470	35
Future Volume (veh/h)	22	132	332	193	209	62	497	1041	182	27	470	35
Initial Q (Qb), veh	0	1	1	0	2	0	13	4	0	0	2	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1530	1530	1530	1648	1648	1648	1767	1767	1767	1796	1796	1796
Adj Flow Rate, veh/h	23	138	346	201	218	65	518	1084	0	28	490	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	25	25	25	17	17	17	9	9	9	7	7	7
Cap, veh/h	26	469	779	252	544	155	626	1961		35	1444	
Arrive On Green	0.02	0.16	0.16	0.08	0.23	0.23	0.18	0.59	0.00	0.02	0.42	0.00
Sat Flow, veh/h	1457	2906	2260	3045	2389	694	3264	3357	1497	1711	3503	0
Grp Volume(v), veh/h	23	138	346	201	141	142	518	1084	0	28	490	0
Grp Sat Flow(s),veh/h/ln	1457	1453	1130	1522	1566	1518	1632	1678	1497	1711	1706	0
Q Serve(g_s), s	1.9	5.0	14.3	7.8	9.2	9.6	18.5	23.7	0.0	2.0	11.6	0.0
Cycle Q Clear(g_c), s	1.9	5.0	14.3	7.8	9.2	9.6	18.5	23.7	0.0	2.0	11.6	0.0
Prop In Lane	1.00		1.00	1.00		0.46	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	26	469	779	252	355	344	626	1961		35	1444	
V/C Ratio(X)	0.88	0.29	0.44	0.80	0.40	0.41	0.83	0.55		0.81	0.34	
Avail Cap(c_a), veh/h	127	690	951	317	398	386	721	1968		150	1450	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.8	44.4	30.6	54.0	39.6	39.7	47.5	15.5	0.0	58.6	23.4	0.0
Incr Delay (d2), s/veh	55.5	0.5	0.6	10.7	1.0	1.1	7.4	1.1	0.0	39.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.1	0.1	18.0	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.9	4.0	3.3	3.7	3.8	10.4	9.2	0.0	1.2	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.3	44.9	31.2	64.8	40.7	40.9	72.9	16.7	0.0	98.0	24.1	0.0
LnGrp LOS	F	D	C	E	D	D	E	B		F	C	
Approach Vol, veh/h		507			484			1602			518	
Approach Delay, s/veh		38.7			50.8			34.9			28.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	74.9	14.4	23.8	26.3	55.5	6.6	31.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	50.5	12.5	28.5	26.5	34.5	10.5	30.5
Max Q Clear Time (g_c+I1), s	4.0	25.7	9.8	16.3	20.5	13.6	3.9	11.6
Green Ext Time (p_c), s	0.0	11.5	0.2	2.6	1.3	4.3	0.0	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	36.8
HCM 7th LOS	D

Notes

User approved changes to right turn type.
Unsignalized Delay for [NBR, SBR] 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)	1	0	16	20	0	3	65	767	22	5	448	6
Future Volume (vph)	1	0	16	20	0	3	65	767	22	5	448	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Storage Length (ft)	50		0	100		0	175		0	50		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		328			376			1221			397	
Travel Time (s)		8.9			10.3			23.8			7.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	6%	6%	6%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	16	20	0	3	65	767	22	5	448	6
Future Vol, veh/h	1	0	16	20	0	3	65	767	22	5	448	6
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	-	-	100	-	-	175	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-3	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	6	6	6	5	5	5
Mvmt Flow	1	0	18	22	0	3	72	852	24	6	498	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1509	1533	501	1506	1512	852	504	0	0	877	0	0
Stage 1	512	512	-	997	997	-	-	-	-	-	-	-
Stage 2	997	1021	-	509	516	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.16	-	-	4.15	-	-
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	2.254	-	-	2.245	-	-
Pot Cap-1 Maneuver	39	44	574	40	48	*439	1040	-	-	*645	-	-
Stage 1	548	540	-	306	283	-	-	-	-	-	-	-
Stage 2	306	267	-	551	538	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	36	41	574	36	44	*439	1040	-	-	*645	-	-
Mov Cap-2 Maneuver	36	41	-	36	44	-	-	-	-	-	-	-
Stage 1	510	535	-	284	264	-	-	-	-	-	-	-
Stage 2	282	248	-	529	533	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/veh	17.15	183.81	0.66	0.12
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1040	-	-	36	574	36	439	* 645	-	-
HCM Lane V/C Ratio	0.069	-	-	0.031	0.031	0.623	0.008	0.009	-	-
HCM Control Delay (s/veh)	8.7	-	-	108	11.5	209.4	13.3	10.6	-	-
HCM Lane LOS	A	-	-	F	B	F	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.1	2.2	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	6	2	5	51	8	7
Future Volume (vph)	6	2	5	51	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	607			518	603	
Travel Time (s)	16.6			14.1	16.4	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	13%	13%	0%	0%	13%	13%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

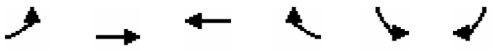
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	2	5	51	8	7
Future Vol, veh/h	6	2	5	51	8	7
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	13	13	0	0	13	13
Mvmt Flow	7	2	6	61	10	8
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	7.1	7.3	7.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	53%	0%	9%
Vol Thru, %	0%	75%	91%
Vol Right, %	47%	25%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	15	8	56
LT Vol	8	0	5
Through Vol	0	6	51
RT Vol	7	2	0
Lane Flow Rate	18	10	67
Geometry Grp	1	1	1
Degree of Util (X)	0.02	0.011	0.074
Departure Headway (Hd)	4.082	4.053	3.957
Convergence, Y/N	Yes	Yes	Yes
Cap	876	884	909
Service Time	2.113	2.073	1.967
HCM Lane V/C Ratio	0.021	0.011	0.074
HCM Control Delay, s/veh	7.2	7.1	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	20	46	1	4	6
Future Volume (vph)	2	20	46	1	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		491	706		515	
Travel Time (s)		13.4	19.3		14.0	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	7%	7%	10%	10%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

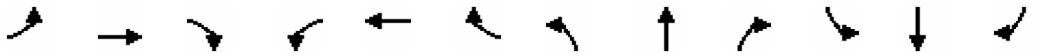
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	20	46	1	4	6
Future Vol, veh/h	2	20	46	1	4	6
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	89	89	89	89	89	89
Heavy Vehicles, %	5	5	7	7	10	10
Mvmt Flow	2	22	52	1	4	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	53	0	-	0	79	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.15	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.245	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1534	-	-	-	904	993
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1534	-	-	-	903	993
Mov Cap-2 Maneuver	-	-	-	-	903	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	975	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.67	0	8.82
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1534	-	-	-	955
HCM Lane V/C Ratio	0.001	-	-	-	0.012
HCM Control Delay (s/veh)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	1198	0	0	539	14	0	0	0	10	0	29
Future Volume (vph)	39	1198	0	0	539	14	0	0	0	10	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			4%			0%	
Storage Length (ft)	175		0	50		0	0		0	200		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		481			493			295			496	
Travel Time (s)		9.4			9.6			8.0			13.5	
Confl. Peds. (#/hr)	2					2						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	6%	13%	13%	13%	0%	0%	0%	11%	11%	11%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	1198	0	0	539	14	0	0	0	10	0	29
Future Vol, veh/h	39	1198	0	0	539	14	0	0	0	10	0	29
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	-	50	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	13	13	13	0	0	0	11	11	11
Mvmt Flow	41	1248	0	0	561	15	0	0	0	10	0	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	578	0	0	1248	0	0	1610	1907	624	1276	1900	290
Stage 1	-	-	-	-	-	-	1329	1329	-	571	571	-
Stage 2	-	-	-	-	-	-	281	578	-	705	1329	-
Critical Hdwy	4.22	-	-	4.36	-	-	8.3	7.3	7.3	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	6.3	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.3	6.3	-	6.72	5.72	-
Follow-up Hdwy	2.26	-	-	2.33	-	-	3.5	4	3.3	3.61	4.11	3.41
Pot Cap-1 Maneuver	965	-	-	497	-	-	50	45	404	115	62	680
Stage 1	-	-	-	-	-	-	124	168	-	451	481	-
Stage 2	-	-	-	-	-	-	665	444	-	373	206	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	963	-	-	497	-	-	46	43	404	110	59	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	46	43	-	110	59	-
Stage 1	-	-	-	-	-	-	119	161	-	431	480	-
Stage 2	-	-	-	-	-	-	636	443	-	357	197	-

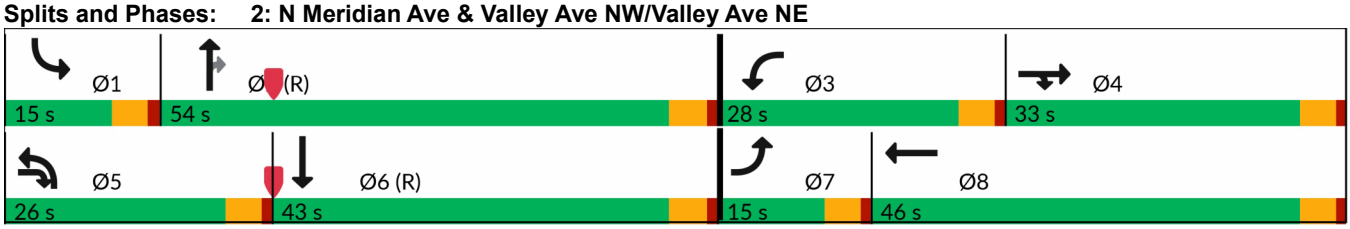
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.28	0	0	18.43
HCM LOS			A	C

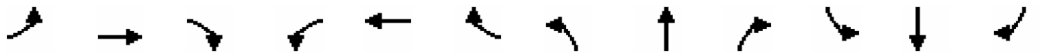
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	963	-	-	497	-	-	110	679
HCM Lane V/C Ratio	-	0.042	-	-	-	-	-	0.095	0.044
HCM Control Delay (s/veh)	0	8.9	-	-	0	-	-	41.3	10.5
HCM Lane LOS	A	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.3	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	494	894	374	170	21	432	464	199	46	799	17
Future Volume (vph)	24	494	894	374	170	21	432	464	199	46	799	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		475	300		0	200		225	175		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			No			Yes			No			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		890			859			772			1221	
Travel Time (s)		17.3			16.7			15.0			23.8	
Confl. Peds. (#/hr)	1					1			8	8		
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 (%)	7%	7%	7%	8%	8%	8%	6%	6%	6%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases									2			
Detector Phase	7	4	4 5	3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	8.0		4.0	8.0		4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	8.5	31.5		8.5	32.5		8.5	31.5	31.5	8.5	37.5	
Total Split (s)	15.0	33.0		28.0	46.0		26.0	54.0	54.0	15.0	43.0	
Total Split (%)	11.5%	25.4%		21.5%	35.4%		20.0%	41.5%	41.5%	11.5%	33.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 85 (65%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Meridian Ave & Valley Ave NW/Valley Ave NE





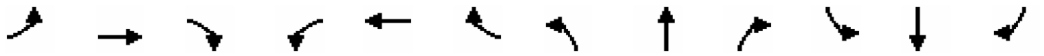
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	494	894	374	170	21	432	464	199	46	799	17
Future Volume (veh/h)	24	494	894	374	170	21	432	464	199	46	799	17
Initial Q (Qb), veh	0	26	32	4	0	0	11	3	0	2	75	0
Lane Width Adj.	1.00	1.00	1.00	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	1796	1796	1796	1781	1781	1781	1811	1811	1811	1841	1841	1841
Adj Flow Rate, veh/h	25	509	922	386	175	22	445	478	0	47	824	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
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	4	4	4
Cap, veh/h	31	748	1029	460	1080	134	523	1618		67	1036	
Arrive On Green	0.02	0.22	0.22	0.14	0.34	0.34	0.15	0.47	0.00	0.03	0.36	0.00
Sat Flow, veh/h	1711	3413	2673	3291	3030	376	3346	3441	1535	1753	3589	0
Grp Volume(v), veh/h	25	509	922	386	97	100	445	478	0	47	824	0
Grp Sat Flow(s),veh/h/ln	1711	1706	1337	1646	1692	1713	1673	1721	1535	1753	1749	0
Q Serve(g_s), s	1.9	17.8	28.5	14.9	5.2	5.4	16.9	11.1	0.0	3.5	25.8	0.0
Cycle Q Clear(g_c), s	1.9	17.8	28.5	14.9	5.2	5.4	16.9	11.1	0.0	3.5	25.8	0.0
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	31	748	1029	460	603	611	523	1618		67	1036	
V/C Ratio(X)	0.80	0.68	0.90	0.84	0.16	0.16	0.85	0.30		0.70	0.80	
Avail Cap(c_a), veh/h	138	748	988	595	571	578	553	1623		142	1246	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.6	48.4	40.0	54.8	28.6	28.6	54.2	21.4	0.0	62.0	45.8	0.0
Incr Delay (d2), s/veh	35.5	2.8	11.1	8.3	0.2	0.2	11.9	0.5	0.0	14.6	6.3	0.0
Initial Q Delay(d3), s/veh	0.0	27.2	65.1	3.4	0.0	0.0	21.4	0.0	0.0	21.0	168.7	0.0
%ile BackOfQ(50%),veh/ln	1.1	12.6	26.9	7.2	2.1	2.2	10.3	4.8	0.0	2.5	41.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	99.0	78.4	116.2	66.5	28.8	28.8	87.5	21.9	0.0	97.6	220.8	0.0
LnGrp LOS	F	E	F	E	C	C	F	C		F	F	
Approach Vol, veh/h		1456			583			923			871	
Approach Delay, s/veh		102.7			53.8			53.5			214.1	
Approach LOS		F			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	65.8	22.2	33.0	24.0	50.8	6.9	48.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	49.5	23.5	28.5	21.5	38.5	10.5	41.5
Max Q Clear Time (g_c+I1), s	5.5	13.1	16.9	30.5	18.9	27.8	3.9	7.4
Green Ext Time (p_c), s	0.0	4.9	0.8	0.0	0.5	5.2	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	108.7
HCM 7th LOS	F

Notes

Unsignalized Delay for [NBR, SBR] 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)	1	0	14	18	0	11	10	469	33	11	741	0
Future Volume (vph)	1	0	14	18	0	11	10	469	33	11	741	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Storage Length (ft)	50		0	100		0	175		0	50		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		328			376			1221			397	
Travel Time (s)		8.9			10.3			23.8			7.7	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	14	18	0	11	10	469	33	11	741	0
Future Vol, veh/h	1	0	14	18	0	11	10	469	33	11	741	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	100	-	-	175	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-3	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	1	0	15	19	0	12	11	504	35	12	797	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1347	1383	798	1346	1347	504	798	0	0	540	0	0
Stage 1	821	821	-	526	526	-	-	-	-	-	-	-
Stage 2	526	561	-	820	821	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
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	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	*95	102	389	*96	*110	*703	829	-	-	1033	-	-
Stage 1	*371	391	-	*663	*580	-	-	-	-	-	-	-
Stage 2	*663	556	-	*372	*391	-	-	-	-	-	-	-
Platoon blocked, %	0	0		0	0	0		-	-	0	-	-
Mov Cap-1 Maneuver	*91	100	389	*90	*108	*703	828	-	-	1033	-	-
Mov Cap-2 Maneuver	*91	100	-	*90	*108	-	-	-	-	-	-	-
Stage 1	*366	386	-	*655	*573	-	-	-	-	-	-	-
Stage 2	*644	549	-	*353	*386	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.64	38.54	0.18	0.12
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	828	-	-	91	389	90	703	1033	-	-
HCM Lane V/C Ratio	0.013	-	-	0.012	0.039	0.216	0.017	0.011	-	-
HCM Control Delay (s/veh)	9.4	-	-	44.8	14.6	55.9	10.2	8.5	-	-
HCM Lane LOS	A	-	-	E	B	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.8	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	59	15	4	17	16	24
Future Volume (vph)	59	15	4	17	16	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	607			518	603	
Travel Time (s)	16.6			14.1	16.4	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	4%	4%	5%	5%	16%	16%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

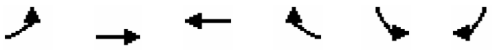
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	59	15	4	17	16	24
Future Vol, veh/h	59	15	4	17	16	24
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	4	4	5	5	16	16
Mvmt Flow	76	19	5	22	21	31
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	7.4	7.4	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	40%	0%	19%
Vol Thru, %	0%	80%	81%
Vol Right, %	60%	20%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	40	74	21
LT Vol	16	0	4
Through Vol	0	59	17
RT Vol	24	15	0
Lane Flow Rate	51	95	27
Geometry Grp	1	1	1
Degree of Util (X)	0.058	0.104	0.031
Departure Headway (Hd)	4.102	3.957	4.186
Convergence, Y/N	Yes	Yes	Yes
Cap	868	904	852
Service Time	2.153	1.987	2.227
HCM Lane V/C Ratio	0.059	0.105	0.032
HCM Control Delay, s/veh	7.4	7.4	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	57	23	10	2	3
Future Volume (vph)	1	57	23	10	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		491	706		515	
Travel Time (s)		13.4	19.3		14.0	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	2%	2%	19%	19%	20%	20%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

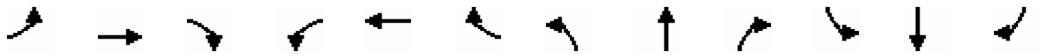
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	57	23	10	2	3
Future Vol, veh/h	1	57	23	10	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	19	19	20	20
Mvmt Flow	1	75	30	13	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	43	0	-	0	114	37
Stage 1	-	-	-	-	37	-
Stage 2	-	-	-	-	78	-
Critical Hdwy	4.12	-	-	-	6.6	6.4
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	2.218	-	-	-	3.68	3.48
Pot Cap-1 Maneuver	1565	-	-	-	840	986
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1565	-	-	-	840	986
Mov Cap-2 Maneuver	-	-	-	-	840	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	902	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.13	0	8.93
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1565	-	-	-	922
HCM Lane V/C Ratio	0.001	-	-	-	0.007
HCM Control Delay (s/veh)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

2025 With Project



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	519	0	2	735	13	0	0	0	19	0	49
Future Volume (vph)	21	519	0	2	735	13	0	0	0	19	0	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			4%			0%	
Storage Length (ft)	175		0	50		0	0		0	200		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		481			493			295			496	
Travel Time (s)		9.4			9.6			8.0			13.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	22%	22%	22%	17%	17%	17%	0%	0%	0%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	519	0	2	735	13	0	0	0	19	0	49
Future Vol, veh/h	21	519	0	2	735	13	0	0	0	19	0	49
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	-	50	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	22	22	22	17	17	17	0	0	0	22	22	22
Mvmt Flow	23	558	0	2	790	14	0	0	0	20	0	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	805	0	0	558	0	0	1003	1413	279	1127	1406	403
Stage 1	-	-	-	-	-	-	603	603	-	803	803	-
Stage 2	-	-	-	-	-	-	399	810	-	324	603	-
Critical Hdwy	4.54	-	-	4.44	-	-	8.3	7.3	7.3	7.94	6.94	7.34
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	6.3	-	6.94	5.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.3	6.3	-	6.94	5.94	-
Follow-up Hdwy	2.42	-	-	2.37	-	-	3.5	4	3.3	3.72	4.22	3.52
Pot Cap-1 Maneuver	698	-	-	912	-	-	160	102	702	136	116	544
Stage 1	-	-	-	-	-	-	400	430	-	303	350	-
Stage 2	-	-	-	-	-	-	552	331	-	610	440	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	697	-	-	912	-	-	139	98	702	132	112	543
Mov Cap-2 Maneuver	-	-	-	-	-	-	139	98	-	132	112	-
Stage 1	-	-	-	-	-	-	387	416	-	293	349	-
Stage 2	-	-	-	-	-	-	497	330	-	590	426	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.02	0	19.31
HCM LOS			A	C

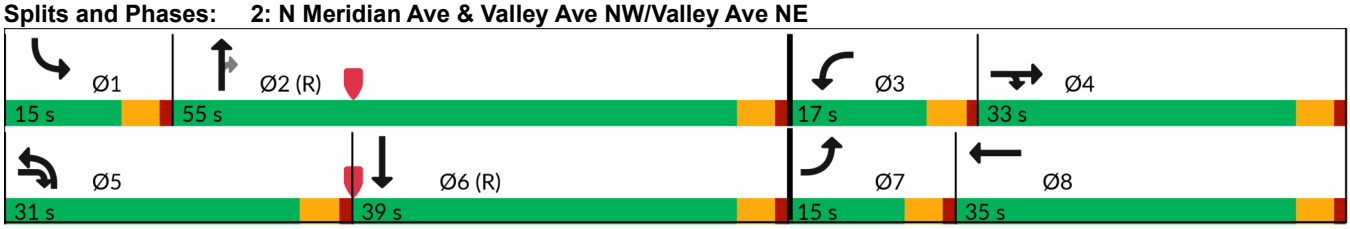
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	697	-	-	912	-	-	132	543
HCM Lane V/C Ratio	-	0.032	-	-	0.002	-	-	0.155	0.097
HCM Control Delay (s/veh)	0	10.3	-	-	9	-	-	37.3	12.3
HCM Lane LOS	A	B	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.5	0.3

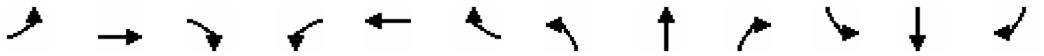
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	134	336	193	211	67	502	1058	182	27	470	35
Future Volume (vph)	22	134	336	193	211	67	502	1058	182	27	470	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		475	300		0	200		225	175		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			No			Yes			No			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		890			859			772			1221	
Travel Time (s)		17.3			16.7			15.0			23.8	
Confl. Peds. (#/hr)	3			2		3	2		5	5		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	25%	25%	25%	17%	17%	17%	9%	9%	9%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases									2			
Detector Phase	7	4	4 5	3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	8.0		4.0	8.0		4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	8.5	31.5		8.5	32.5		8.5	31.5	31.5	8.5	37.5	
Total Split (s)	15.0	33.0		17.0	35.0		31.0	55.0	55.0	15.0	39.0	
Total Split (%)	12.5%	27.5%		14.2%	29.2%		25.8%	45.8%	45.8%	12.5%	32.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 110 (92%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: N Meridian Ave & Valley Ave NW/Valley Ave NE





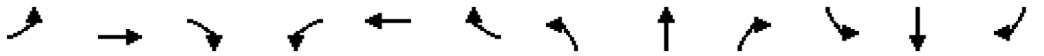
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	134	336	193	211	67	502	1058	182	27	470	35
Future Volume (veh/h)	22	134	336	193	211	67	502	1058	182	27	470	35
Initial Q (Qb), veh	0	1	1	0	2	0	13	4	0	0	2	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1530	1530	1530	1648	1648	1648	1767	1767	1767	1796	1796	1796
Adj Flow Rate, veh/h	23	140	350	201	220	70	523	1102	0	28	490	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	25	25	25	17	17	17	9	9	9	7	7	7
Cap, veh/h	26	472	785	252	538	163	630	1957		35	1435	
Arrive On Green	0.02	0.16	0.16	0.08	0.23	0.23	0.18	0.59	0.00	0.02	0.42	0.00
Sat Flow, veh/h	1457	2906	2260	3045	2350	727	3264	3357	1497	1711	3503	0
Grp Volume(v), veh/h	23	140	350	201	145	145	523	1102	0	28	490	0
Grp Sat Flow(s),veh/h/ln	1457	1453	1130	1522	1566	1511	1632	1678	1497	1711	1706	0
Q Serve(g_s), s	1.9	5.1	14.4	7.8	9.4	9.9	18.7	24.3	0.0	2.0	11.6	0.0
Cycle Q Clear(g_c), s	1.9	5.1	14.4	7.8	9.4	9.9	18.7	24.3	0.0	2.0	11.6	0.0
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	26	472	785	252	357	345	630	1957		35	1435	
V/C Ratio(X)	0.88	0.30	0.45	0.80	0.41	0.42	0.83	0.56		0.81	0.34	
Avail Cap(c_a), veh/h	127	690	955	317	398	384	721	1964		150	1441	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.8	44.3	30.5	54.0	39.5	39.7	47.4	15.8	0.0	58.6	23.7	0.0
Incr Delay (d2), s/veh	55.5	0.5	0.6	10.7	1.1	1.2	7.5	1.2	0.0	39.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.1	0.1	18.0	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.9	4.0	3.3	3.8	3.9	10.6	9.5	0.0	1.2	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.3	44.8	31.0	64.8	40.7	41.0	73.0	17.0	0.0	98.0	24.3	0.0
LnGrp LOS	F	D	C	E	D	D	E	B		F	C	
Approach Vol, veh/h		513			491			1625			518	
Approach Delay, s/veh		38.5			50.6			35.0			28.3	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	74.7	14.4	23.9	26.5	55.2	6.6	31.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	50.5	12.5	28.5	26.5	34.5	10.5	30.5
Max Q Clear Time (g_c+I1), s	4.0	26.3	9.8	16.4	20.7	13.6	3.9	11.9
Green Ext Time (p_c), s	0.0	11.6	0.2	2.6	1.3	4.3	0.0	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	36.9
HCM 7th LOS	D

Notes

User approved changes to right turn type.
Unsignalized Delay for [NBR, SBR] 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)	1	0	16	20	0	5	65	767	44	12	448	6
Future Volume (vph)	1	0	16	20	0	5	65	767	44	12	448	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Storage Length (ft)	50		0	100		0	175		0	50		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		328			376			1221			397	
Travel Time (s)		8.9			10.3			23.8			7.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	6%	6%	6%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	16	20	0	5	65	767	44	12	448	6
Future Vol, veh/h	1	0	16	20	0	5	65	767	44	12	448	6
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	-	-	100	-	-	175	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-3	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	6	6	6	5	5	5
Mvmt Flow	1	0	18	22	0	6	72	852	49	13	498	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1524	1573	501	1521	1528	852	504	0	0	901	0	0
Stage 1	528	528	-	997	997	-	-	-	-	-	-	-
Stage 2	997	1046	-	524	531	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.16	-	-	4.15	-	-
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	2.254	-	-	2.245	-	-
Pot Cap-1 Maneuver	37	38	574	38	45	*439	1040	-	-	639	-	-
Stage 1	538	531	-	306	283	-	-	-	-	-	-	-
Stage 2	306	251	-	540	529	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	33	35	574	33	41	*439	1040	-	-	639	-	-
Mov Cap-2 Maneuver	33	35	-	33	41	-	-	-	-	-	-	-
Stage 1	500	520	-	284	264	-	-	-	-	-	-	-
Stage 2	281	233	-	512	518	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/veh	17.67	190.94	0.65	0.28
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1040	-	-	33	574	33	439	639	-	-
HCM Lane V/C Ratio	0.069	-	-	0.033	0.031	0.671	0.013	0.021	-	-
HCM Control Delay (s/veh)	8.7	-	-	116.8	11.5	235.3	13.3	10.8	-	-
HCM Lane LOS	A	-	-	F	B	F	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.1	2.3	0	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	7	4	5	53	37	7
Future Volume (vph)	7	4	5	53	37	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	391			518	603	
Travel Time (s)	16.6			14.1	16.4	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	13%	13%	0%	0%	13%	13%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

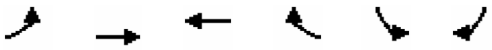
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	7	4	5	53	37	7
Future Vol, veh/h	7	4	5	53	37	7
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	13	13	0	0	13	13
Mvmt Flow	8	5	6	64	45	8
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	7.2	7.4	7.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	84%	0%	9%
Vol Thru, %	0%	64%	91%
Vol Right, %	16%	36%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	44	11	58
LT Vol	37	0	5
Through Vol	0	7	53
RT Vol	7	4	0
Lane Flow Rate	53	13	70
Geometry Grp	1	1	1
Degree of Util (X)	0.064	0.015	0.078
Departure Headway (Hd)	4.338	4.048	4.02
Convergence, Y/N	Yes	Yes	Yes
Cap	824	879	889
Service Time	2.375	2.096	2.056
HCM Lane V/C Ratio	0.064	0.015	0.079
HCM Control Delay, s/veh	7.7	7.2	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0	0.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	37	54	1	4	6
Future Volume (vph)	2	37	54	1	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		491	548		515	
Travel Time (s)		13.4	19.3		14.0	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	7%	7%	10%	10%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

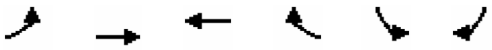
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	37	54	1	4	6
Future Vol, veh/h	2	37	54	1	4	6
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	89	89	89	89	89	89
Heavy Vehicles, %	5	5	7	7	10	10
Mvmt Flow	2	42	61	1	4	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	62	0	-	0	107	61
Stage 1	-	-	-	-	61	-
Stage 2	-	-	-	-	46	-
Critical Hdwy	4.15	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.245	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1522	-	-	-	871	982
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	956	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1522	-	-	-	870	982
Mov Cap-2 Maneuver	-	-	-	-	870	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	956	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1522	-	-	-	934
HCM Lane V/C Ratio	0.001	-	-	-	0.012
HCM Control Delay (s/veh)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	38	53	6	1	2
Future Volume (vph)	3	38	53	6	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		548	370		273	
Travel Time (s)		14.9	10.1		6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	7%	7%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

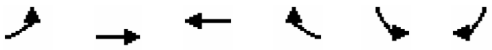
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	38	53	6	1	2
Future Vol, veh/h	3	38	53	6	1	2
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, %	3	3	7	7	3	3
Mvmt Flow	3	41	58	7	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	64	0	-	0	109	61
Stage 1	-	-	-	-	61	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1532	-	-	-	886	1002
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1532	-	-	-	884	1002
Mov Cap-2 Maneuver	-	-	-	-	884	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	972	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.54	0	8.77
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	959
HCM Lane V/C Ratio	0.002	-	-	-	0.003
HCM Control Delay (s/veh)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	25	53	25	2	6
Future Volume (vph)	14	25	53	25	2	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		370	391		255	
Travel Time (s)		10.1	10.7		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	7%	7%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

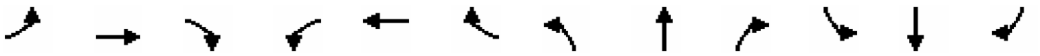
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	25	53	25	2	6
Future Vol, veh/h	14	25	53	25	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	7	7	3	3
Mvmt Flow	15	27	58	27	2	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	85	0	-	0	129	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	58	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1505	-	-	-	863	988
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	962	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1505	-	-	-	854	988
Mov Cap-2 Maneuver	-	-	-	-	854	-
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	962	-

Approach	EB	WB	SB
HCM Control Delay, s/v	2.66	0	8.82
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1505	-	-	-	951
HCM Lane V/C Ratio	0.01	-	-	-	0.009
HCM Control Delay (s/veh)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1198	0	0	539	15	0	0	0	37	0	39
Future Volume (vph)	41	1198	0	0	539	15	0	0	0	37	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			4%			0%	
Storage Length (ft)	175		0	50		0	0		0	200		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		481			493			295			496	
Travel Time (s)		9.4			9.6			8.0			13.5	
Confl. Peds. (#/hr)	2					2						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	6%	13%	13%	13%	0%	0%	0%	11%	11%	11%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	1198	0	0	539	15	0	0	0	37	0	39
Future Vol, veh/h	41	1198	0	0	539	15	0	0	0	37	0	39
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	-	50	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	13	13	13	0	0	0	11	11	11
Mvmt Flow	43	1248	0	0	561	16	0	0	0	39	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	579	0	0	1248	0	0	1614	1912	624	1281	1905	291
Stage 1	-	-	-	-	-	-	1333	1333	-	571	571	-
Stage 2	-	-	-	-	-	-	281	579	-	709	1333	-
Critical Hdwy	4.22	-	-	4.36	-	-	8.3	7.3	7.3	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	6.3	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.3	6.3	-	6.72	5.72	-
Follow-up Hdwy	2.26	-	-	2.33	-	-	3.5	4	3.3	3.61	4.11	3.41
Pot Cap-1 Maneuver	964	-	-	497	-	-	49	45	404	114	61	680
Stage 1	-	-	-	-	-	-	123	167	-	451	481	-
Stage 2	-	-	-	-	-	-	665	443	-	371	205	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	962	-	-	497	-	-	44	43	404	108	59	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	44	43	-	108	59	-
Stage 1	-	-	-	-	-	-	117	160	-	430	480	-
Stage 2	-	-	-	-	-	-	625	442	-	354	196	-

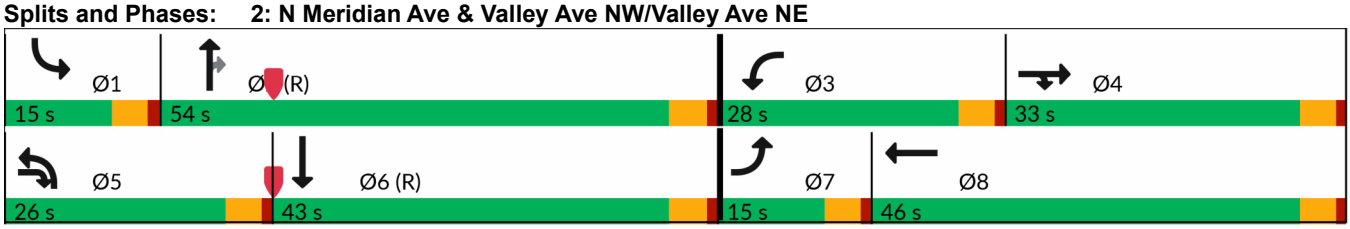
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0	0	32.49
HCM LOS			A	D

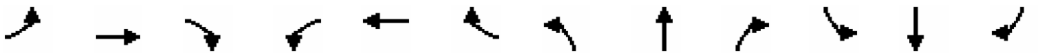
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	962	-	-	497	-	-	108	679
HCM Lane V/C Ratio	-	0.044	-	-	-	-	-	0.356	0.06
HCM Control Delay (s/veh)	0	8.9	-	-	0	-	-	55.5	10.6
HCM Lane LOS	A	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	1.4	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	501	914	374	170	22	433	467	199	46	801	17
Future Volume (vph)	24	501	914	374	170	22	433	467	199	46	801	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		475	300		0	200		225	175		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			No			Yes			No			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		890			859			772			1221	
Travel Time (s)		17.3			16.7			15.0			23.8	
Confl. Peds. (#/hr)	1					1			8	8		
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 (%)	7%	7%	7%	8%	8%	8%	6%	6%	6%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases									2			
Detector Phase	7	4	4 5	3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	8.0		4.0	8.0		4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	8.5	31.5		8.5	32.5		8.5	31.5	31.5	8.5	37.5	
Total Split (s)	15.0	33.0		28.0	46.0		26.0	54.0	54.0	15.0	43.0	
Total Split (%)	11.5%	25.4%		21.5%	35.4%		20.0%	41.5%	41.5%	11.5%	33.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 85 (65%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Meridian Ave & Valley Ave NW/Valley Ave NE





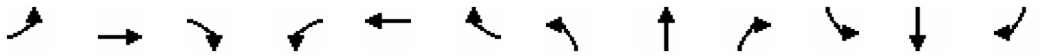
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	501	914	374	170	22	433	467	199	46	801	17
Future Volume (veh/h)	24	501	914	374	170	22	433	467	199	46	801	17
Initial Q (Qb), veh	0	26	32	4	0	0	11	3	0	2	75	0
Lane Width Adj.	1.00	1.00	1.00	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	1796	1796	1796	1781	1781	1781	1811	1811	1811	1841	1841	1841
Adj Flow Rate, veh/h	25	516	942	386	175	23	446	481	0	47	826	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
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	4	4	4
Cap, veh/h	31	748	1029	460	1074	139	523	1618		67	1036	
Arrive On Green	0.02	0.22	0.22	0.14	0.34	0.34	0.15	0.47	0.00	0.03	0.36	0.00
Sat Flow, veh/h	1711	3413	2673	3291	3013	390	3346	3441	1535	1753	3589	0
Grp Volume(v), veh/h	25	516	942	386	97	101	446	481	0	47	826	0
Grp Sat Flow(s),veh/h/ln	1711	1706	1337	1646	1692	1711	1673	1721	1535	1753	1749	0
Q Serve(g_s), s	1.9	18.1	28.5	14.9	5.3	5.4	17.0	11.2	0.0	3.5	25.9	0.0
Cycle Q Clear(g_c), s	1.9	18.1	28.5	14.9	5.3	5.4	17.0	11.2	0.0	3.5	25.9	0.0
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	31	748	1029	460	603	610	523	1618		67	1036	
V/C Ratio(X)	0.80	0.69	0.92	0.84	0.16	0.17	0.85	0.30		0.70	0.80	
Avail Cap(c_a), veh/h	138	748	988	595	571	577	553	1623		142	1245	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.6	48.5	40.0	54.8	28.6	28.6	54.2	21.4	0.0	62.0	45.8	0.0
Incr Delay (d2), s/veh	35.5	3.0	13.1	8.3	0.2	0.2	12.0	0.5	0.0	14.6	6.4	0.0
Initial Q Delay(d3), s/veh	0.0	28.0	73.9	3.4	0.0	0.0	21.5	0.0	0.0	21.0	169.5	0.0
%ile BackOfQ(50%),veh/ln	1.1	12.8	28.4	7.2	2.1	2.2	10.3	4.8	0.0	2.5	41.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	99.0	79.5	127.0	66.5	28.8	28.8	87.7	21.9	0.0	97.6	221.7	0.0
LnGrp LOS	F	E	F	E	C	C	F	C		F	F	
Approach Vol, veh/h		1483			584			927			873	
Approach Delay, s/veh		110.0			53.7			53.5			215.0	
Approach LOS		F			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	65.8	22.2	33.0	24.0	50.8	6.9	48.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	49.5	23.5	28.5	21.5	38.5	10.5	41.5
Max Q Clear Time (g_c+I1), s	5.5	13.2	16.9	30.5	19.0	27.9	3.9	7.4
Green Ext Time (p_c), s	0.0	4.9	0.8	0.0	0.5	5.1	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	111.7
HCM 7th LOS	F

Notes

Unsignalized Delay for [NBR, SBR] 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)	1	0	14	20	0	18	10	469	37	12	741	0
Future Volume (vph)	1	0	14	20	0	18	10	469	37	12	741	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Storage Length (ft)	50		0	100		0	175		0	50		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		328			376			1221			397	
Travel Time (s)		8.9			10.3			23.8			7.7	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	14	20	0	18	10	469	37	12	741	0
Future Vol, veh/h	1	0	14	20	0	18	10	469	37	12	741	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	100	-	-	175	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-3	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	1	0	15	22	0	19	11	504	40	13	797	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1349	1389	798	1348	1349	504	798	0	0	544	0	0
Stage 1	824	824	-	526	526	-	-	-	-	-	-	-
Stage 2	526	566	-	823	824	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
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	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	*95	101	389	*95	*110	*703	829	-	-	1027	-	-
Stage 1	*370	390	-	*663	*580	-	-	-	-	-	-	-
Stage 2	*663	552	-	*371	*390	-	-	-	-	-	-	-
Platoon blocked, %	0	0		0	0	0		-	-	0	-	-
Mov Cap-1 Maneuver	*90	98	389	*89	*107	*703	828	-	-	1027	-	-
Mov Cap-2 Maneuver	*90	98	-	*89	*107	-	-	-	-	-	-	-
Stage 1	*365	385	-	*655	*573	-	-	-	-	-	-	-
Stage 2	*637	545	-	*352	*385	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.69	35.28	0.18	0.14
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	828	-	-	90	389	89	703	1027	-	-
HCM Lane V/C Ratio	0.013	-	-	0.012	0.039	0.241	0.028	0.013	-	-
HCM Control Delay (s/veh)	9.4	-	-	45.6	14.6	57.8	10.3	8.5	-	-
HCM Lane LOS	A	-	-	E	B	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.9	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	62	24	4	18	21	24
Future Volume (vph)	62	24	4	18	21	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	411			518	603	
Travel Time (s)	16.6			14.1	16.4	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	4%	4%	5%	5%	16%	16%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

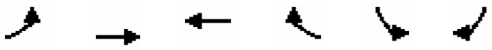
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	62	24	4	18	21	24
Future Vol, veh/h	62	24	4	18	21	24
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	4	4	5	5	16	16
Mvmt Flow	79	31	5	23	27	31
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	7.5	7.4	7.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	47%	0%	18%
Vol Thru, %	0%	72%	82%
Vol Right, %	53%	28%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	45	86	22
LT Vol	21	0	4
Through Vol	0	62	18
RT Vol	24	24	0
Lane Flow Rate	58	110	28
Geometry Grp	1	1	1
Degree of Util (X)	0.067	0.12	0.033
Departure Headway (Hd)	4.184	3.922	4.206
Convergence, Y/N	Yes	Yes	Yes
Cap	850	911	846
Service Time	2.242	1.961	2.257
HCM Lane V/C Ratio	0.068	0.121	0.033
HCM Control Delay, s/veh	7.5	7.5	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.4	0.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	60	60	10	2	3
Future Volume (vph)	1	60	60	10	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		491	548		515	
Travel Time (s)		13.4	19.3		14.0	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	2%	2%	19%	19%	20%	20%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

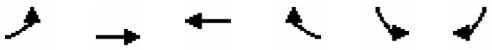
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	60	60	10	2	3
Future Vol, veh/h	1	60	60	10	2	3
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	76	76	76	76	76	76
Heavy Vehicles, %	2	2	19	19	20	20
Mvmt Flow	1	79	79	13	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	92	0	-	0	167	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	82	-
Critical Hdwy	4.12	-	-	-	6.6	6.4
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	2.218	-	-	-	3.68	3.48
Pot Cap-1 Maneuver	1503	-	-	-	783	926
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	898	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1503	-	-	-	783	926
Mov Cap-2 Maneuver	-	-	-	-	783	-
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	898	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.12	0	9.21
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1503	-	-	-	863
HCM Lane V/C Ratio	0.001	-	-	-	0.008
HCM Control Delay (s/veh)	7.4	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	61	63	1	2	7
Future Volume (vph)	1	61	63	1	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		548	350		273	
Travel Time (s)		14.9	9.5		6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	19%	19%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

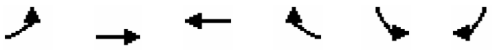
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	61	63	1	2	7
Future Vol, veh/h	1	61	63	1	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	19	19	3	3
Mvmt Flow	1	66	68	1	2	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	70	0	-	0	138	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	68	-
Critical Hdwy	4.12	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.218	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1531	-	-	-	853	991
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1531	-	-	-	853	991
Mov Cap-2 Maneuver	-	-	-	-	853	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	952	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.12	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1531	-	-	-	957
HCM Lane V/C Ratio	0.001	-	-	-	0.01
HCM Control Delay (s/veh)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	61	34	5	10	30
Future Volume (vph)	2	61	34	5	10	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		350	411		307	
Travel Time (s)		9.5	11.2		7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	19%	19%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	61	34	5	10	30
Future Vol, veh/h	2	61	34	5	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	19	19	3	3
Mvmt Flow	2	66	37	5	11	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	42	0	-	0	110	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	71	-
Critical Hdwy	4.12	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.218	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1567	-	-	-	884	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	950	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1567	-	-	-	883	1029
Mov Cap-2 Maneuver	-	-	-	-	883	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.23	0	8.81
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1567	-	-	-	988
HCM Lane V/C Ratio	0.001	-	-	-	0.044
HCM Control Delay (s/veh)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Appendix E

Trip Generation Calculations

PSE Puyallup Operations Training Center
Trip Generation Summary

DAILY

Land Use	Size	Units[1]	ITE LUC[2]	Trip Rate[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trips Generated In	Trips Generated Out	Trips Generated Total
Proposed Use:									
Research & Development Center	38,800	GFA	760	T = 9.70(X) + 247.71	50%	50%	312	312	624
				NET NEW DAILY TRIP GENERATION =			**312**	**312**	**624**

AM PEAK HOUR

Land Use	Size	Units[1]	ITE LUC[2]	Trip Rate[2]	Directional Split[2] In	Directional Split[2] Out	Trips Generated In	Trips Generated Out	Trips Generated Total
Proposed Use:									
Research & Development Center	38,800	GFA	760	T = 0.89(X) + 24.54	82%	18%	48	11	59
				NET NEW AM PEAK HOUR TRIP GENERATION =			**48**	**11**	**59**

PM PEAK HOUR

Land Use	Size	Units[1]	ITE LUC[2]	Trip Rate[2]	Directional Split[2] In	Directional Split[2] Out	Trips Generated In	Trips Generated Out	Trips Generated Total
Proposed Use:									
Research & Development Center	38,800	GFA	760	T = 0.84(X) + 25.08	16%	84%	9	49	58
				NET NEW PM PEAK HOUR TRIP GENERATION =			**9**	**49**	**58**

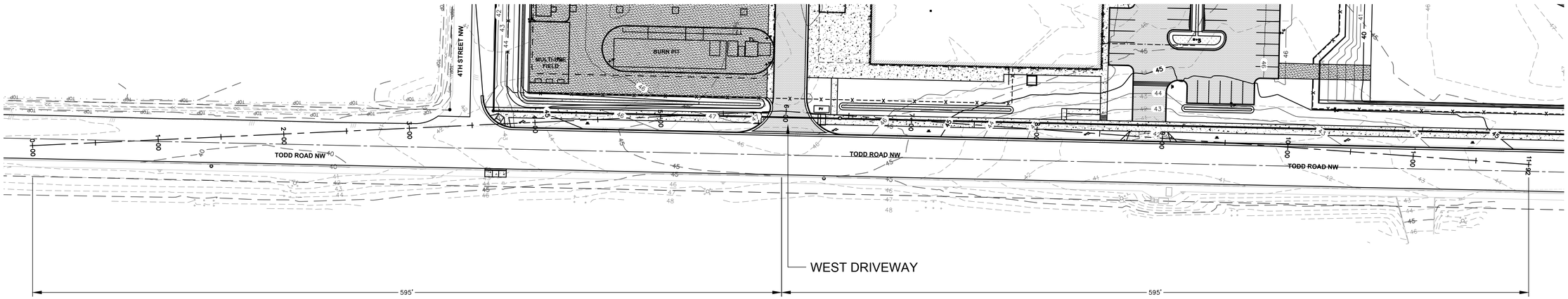
Notes:

[1.] GFA = Gross Floor Area,

[2.] Land Use Code, trip rates and directional distributions based on ITE *Trip Generation Manual,* 11th Edition (2021).

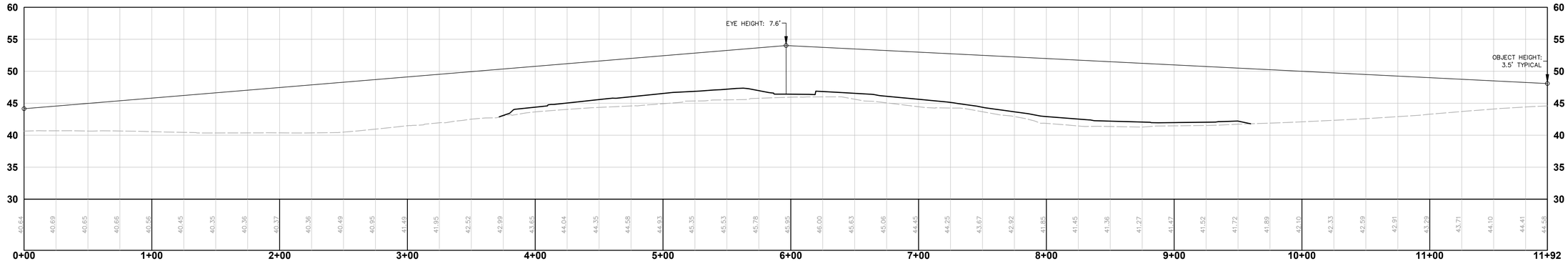
Appendix F

Sight Distance Exhibits provided by Freeland & Associates



PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'

V: 1" = 8'

INTERSECTION SIGHT DISTANCE
VEHICLE TYPE = COMBINATION TRUCK
DRIVER'S EYE HEIGHT = 7.6'
APPROACHING VEHICLE HEIGHT = 3.5'
DISTANCE FROM TRAVELED WAY = 18'
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
ISD EQUATION = 1.47 x DESIGN SPEED x TIME GAP
TIME GAP = 11.5 SECONDS
ISD LEFT TURN FROM STOP = 595'

REFERENCE 2018 AASHTO (7TH EDITION) EQ 9-1 AND TABLE 9-6

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JAMES PATRICK MCEACHRON
STATE OF WASHINGTON
49494
REGISTERED PROFESSIONAL ENGINEER
6/26/2023

SCHEMATIC DESIGN

REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

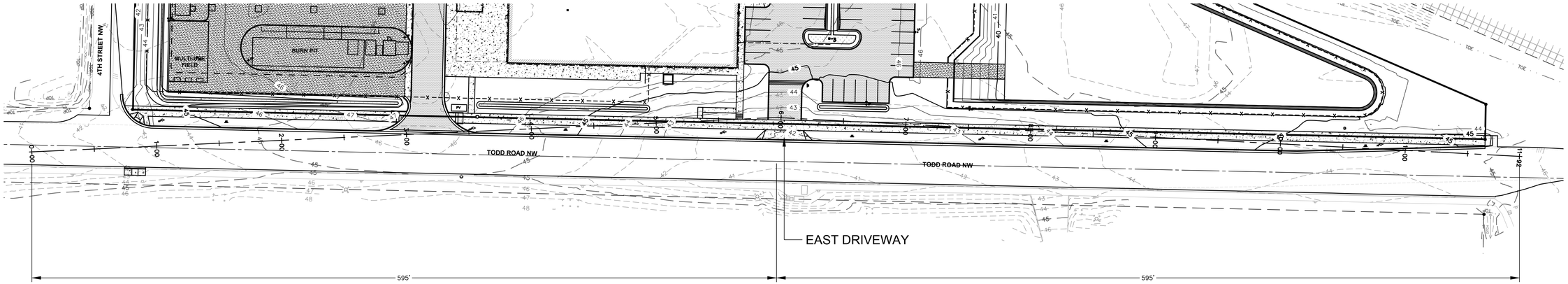
SCALE: 1"=40' (0 – 40)

PSE - OPERATIONAL TRAINING CENTER

INTERSECTION SIGHT DISTANCE WEST DRIVEWAY

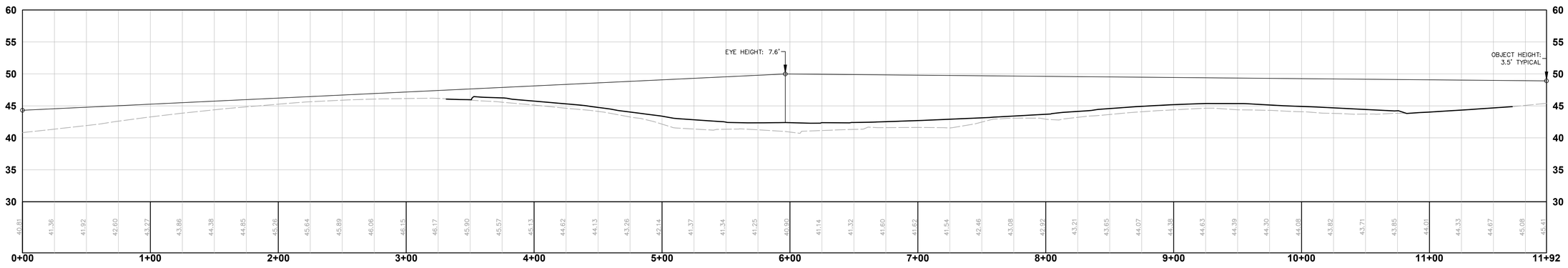
PROJECT No:	22219
DRAWN BY:	MPM
CHECKED BY:	THF
DATE ISSUED:	06-26-2023

EXH (1)



PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'
V: 1" = 8'

INTERSECTION SIGHT DISTANCE
VEHICLE TYPE = COMBINATION TRUCK
DRIVER'S EYE HEIGHT = 7.6'
APPROACHING VEHICLE HEIGHT = 3.5'
DISTANCE FROM TRAVELED WAY = 18'
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
ISD EQUATION = 1.47 x DESIGN SPEED x TIME GAP
TIME GAP = 11.5 SECONDS
ISD LEFT TURN FROM STOP = 595'

REFERENCE 2018 AASHTO (7TH EDITION) EQ 9-1 AND TABLE 9-6

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REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

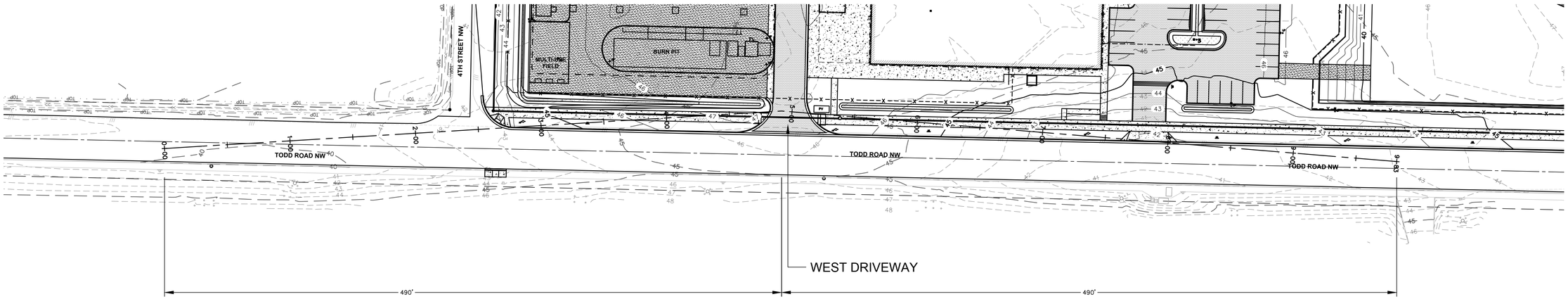
SCALE: 1"=40' 0 40

PSE - OPERATIONAL TRAINING CENTER

INTERSECTION SIGHT DISTANCE EAST DRIVEWAY

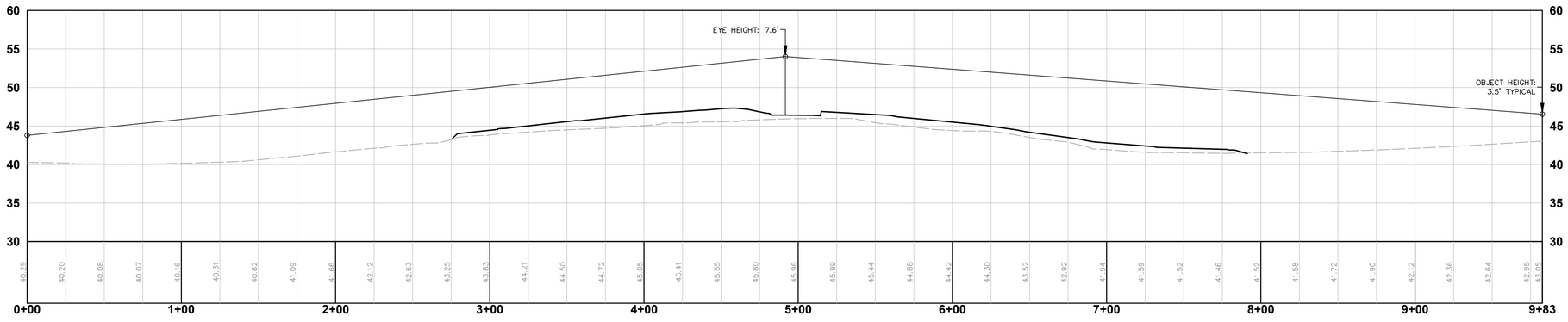
PROJECT No:	22219
DRAWN BY:	MPM
CHECKED BY:	THF
DATE ISSUED:	06-28-2023

EXH (2)



PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'

V: 1" = 8'

INTERSECTION SIGHT DISTANCE
VEHICLE TYPE = SU TRUCK
DRIVER'S EYE HEIGHT = 7.6'
APPROACHING VEHICLE HEIGHT = 3.5'
DISTANCE FROM TRAVELED WAY = 18'
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
ISD EQUATION = 1.47 x DESIGN SPEED x TIME GAP
TIME GAP = 9.5 SECONDS
ISD LEFT TURN FROM STOP = 490'

REFERENCE 2018 AASHTO (7TH EDITION) EQ 9-1 AND TABLE 9-6

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REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

SCALE: 1"=40' (0 – 40)

PSE - OPERATIONAL TRAINING CENTER

INTERSECTION SIGHT DISTANCE WEST DRIVEWAY

PROJECT No:	22219
DRAWN BY:	MPM
CHECKED BY:	THF
DATE ISSUED:	06-26-2023

EXH (3)

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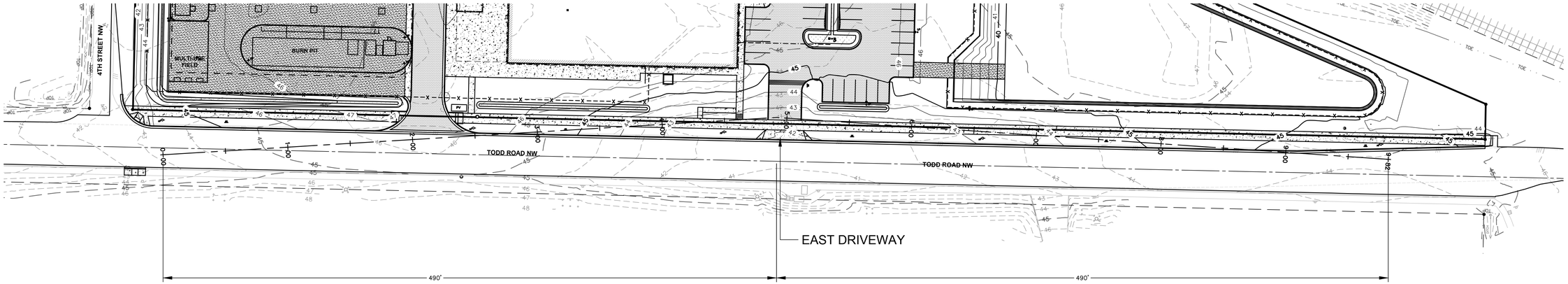
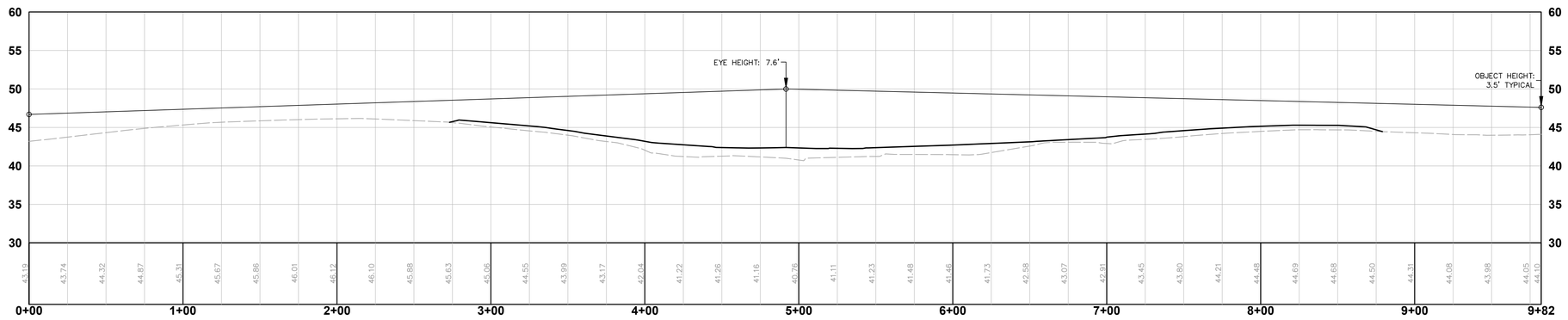


PLAN VIEW
SCALE: 1" = 40'



PROFILE VIEW
H: 1" = 40'
V: 1" = 8'

INTERSECTION SIGHT DISTANCE
VEHICLE TYPE = SU TRUCK
DRIVER'S EYE HEIGHT = 7.6'
APPROACHING VEHICLE HEIGHT = 3.5'
DISTANCE FROM TRAVELED WAY = 18'
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
ISD EQUATION = 1.47 x DESIGN SPEED x TIME GAP
TIME GAP = 9.5 SECONDS
ISD LEFT TURN FROM STOP = 490'

REFERENCE 2018 AASHTO (7TH EDITION) EQ 9-1 AND TABLE 9-6

SCHEMATIC DESIGN

REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

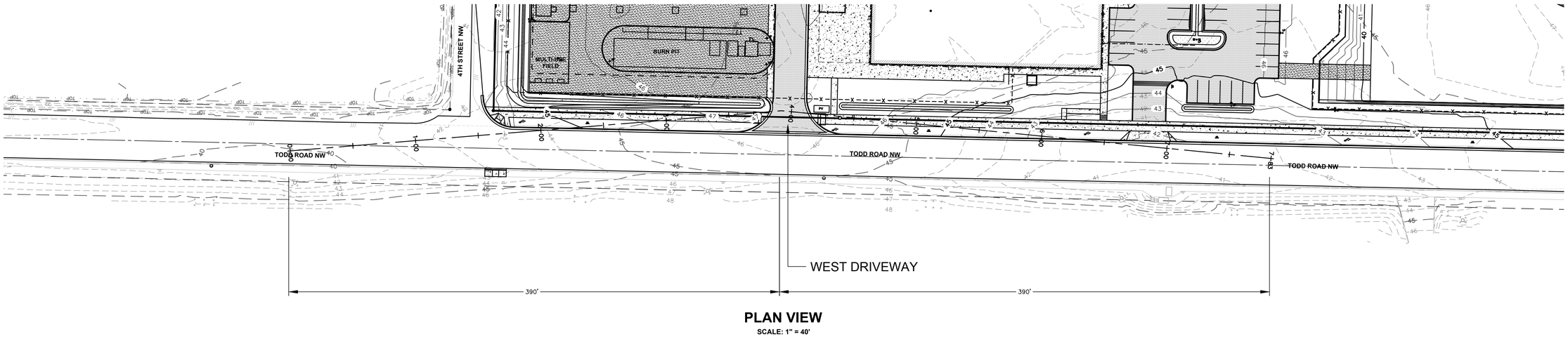
SCALE: 1"=40' 0 40

PSE - OPERATIONAL TRAINING CENTER

INTERSECTION SIGHT DISTANCE EAST DRIVEWAY

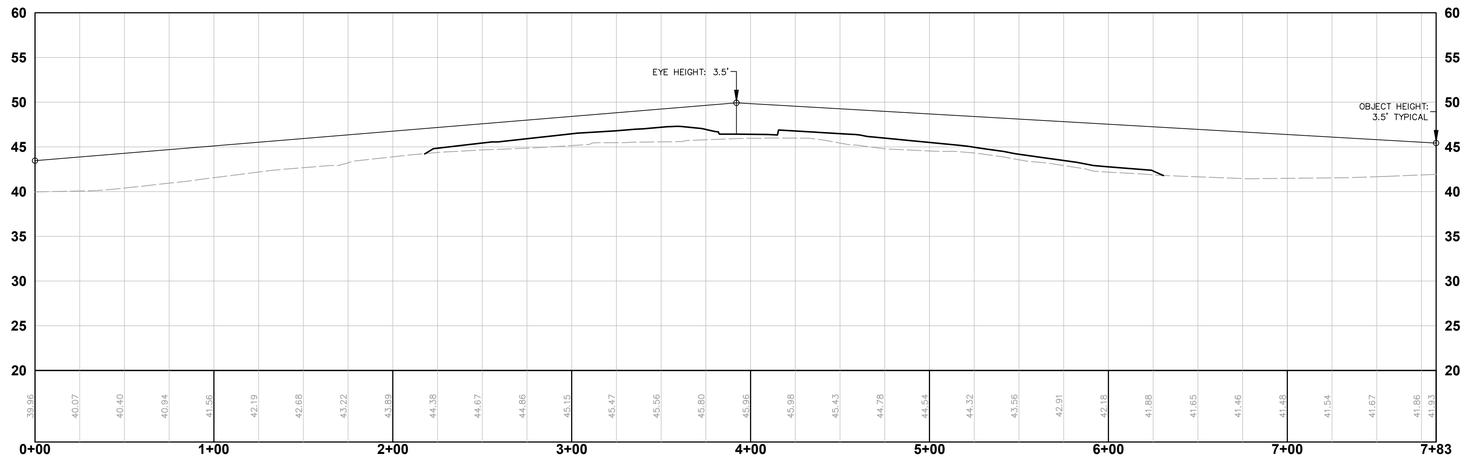
PROJECT No:	22219
DRAWN BY:	MPM
CHECKED BY:	THF
DATE ISSUED:	06-28-2023

EXH (4)



PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'

V: 1" = 8'

INTERSECTION SIGHT DISTANCE
VEHICLE TYPE = PASSENGER CAR
DRIVER'S EYE HEIGHT = 3.5'
APPROACHING VEHICLE HEIGHT = 3.5'
DISTANCE FROM TRAVELED WAY = 18'
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
ISD EQUATION = 1.47 x DESIGN SPEED x TIME GAP
TIME GAP = 7.5 SECONDS
ISD LEFT TURN FROM STOP = 390'

REFERENCE 2018 AASHTO (7TH EDITION) EQ 9-1 AND TABLE 9-6

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SCHEMATIC DESIGN

REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

SCALE: 1"=40' 0 40

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INTERSECTION SIGHT DISTANCE WEST DRIVEWAY

PROJECT No:	22219
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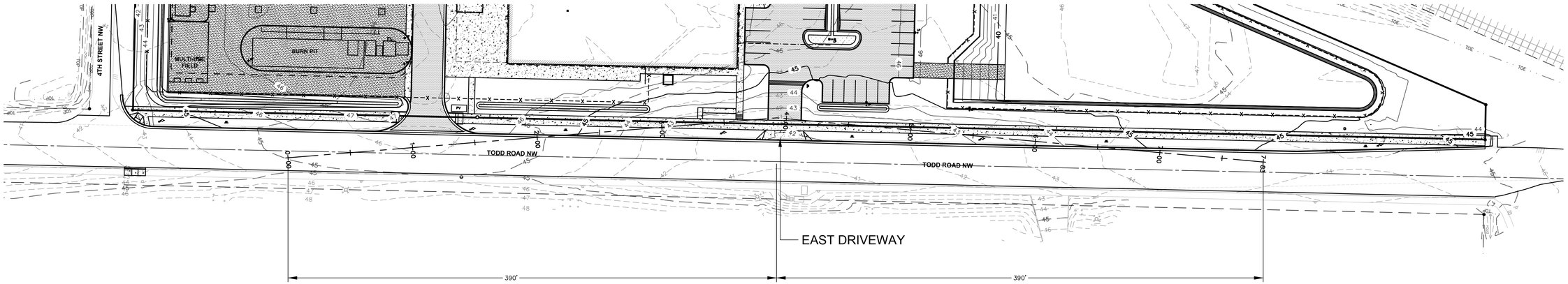
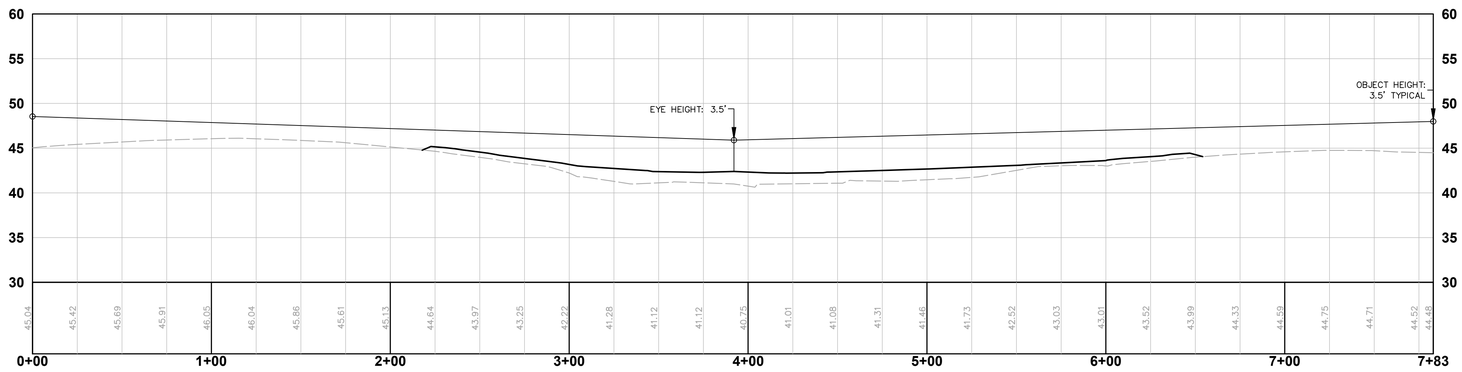
DATE ISSUED:	06-26-2023

EXH (5)



PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'
V: 1" = 8'

INTERSECTION SIGHT DISTANCE
VEHICLE TYPE = PASSENGER CAR
DRIVER'S EYE HEIGHT = 3.5'
APPROACHING VEHICLE HEIGHT = 3.5'
DISTANCE FROM TRAVELED WAY = 18'
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
ISD EQUATION = 1.47 x DESIGN SPEED x TIME GAP
TIME GAP = 7.5 SECONDS
ISD LEFT TURN FROM STOP = 390'

REFERENCE 2018 AASHTO (7TH EDITION) EQ 9-1 AND TABLE 9-6

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PLAN NORTH | TRUE NORTH

SCALE: 1"=40' 0 40

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INTERSECTION SIGHT DISTANCE EAST DRIVEWAY

PROJECT No:	22219
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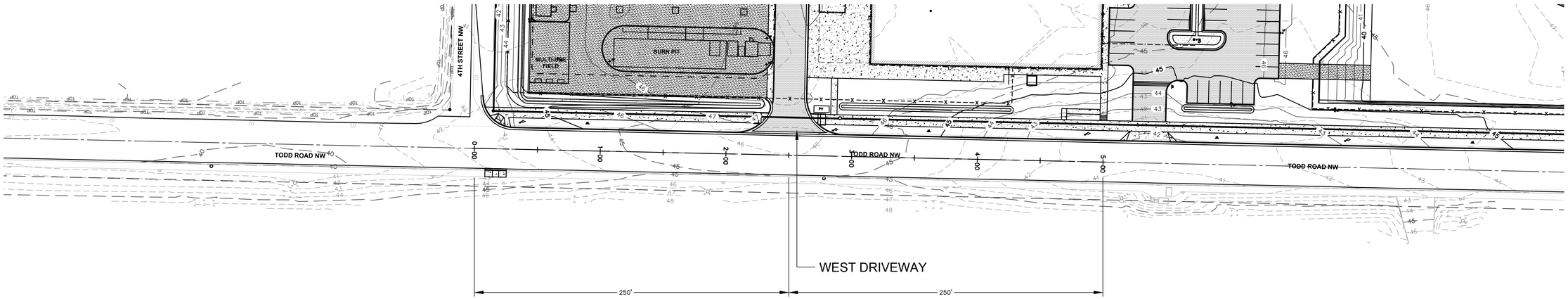
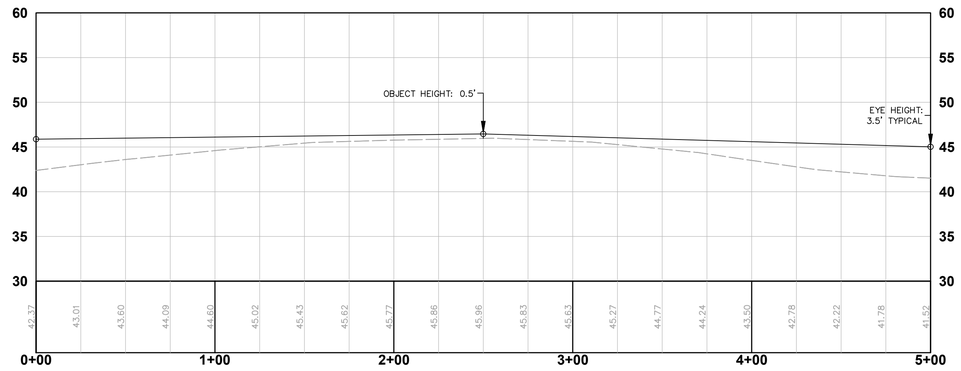
CHECKED BY:	THF
DATE ISSUED:	06-28-2023

EXH (6)



PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'
V: 1" = 8'

STOPPING SIGHT DISTANCE
VEHICLE TYPE = PASSENGER CAR
DRIVER'S EYE HEIGHT = 3.5'
OBJECT HEIGHT = 0.5' PER CITY OF PUYALLUP STANDARDS
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
SSD = 250'

REFERENCE 2018 AASHTO (7TH EDITION) TABLE 3-1

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SCHEMATIC DESIGN

REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

SCALE: 1"=40'

0 40

PSE - OPERATIONAL TRAINING CENTER

STOPPPING SIGHT DISTANCE WEST DRIVEWAY

PROJECT No:	22219
DRAWN BY:	MPM
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DATE ISSUED:	06-26-2023

EXH (7)

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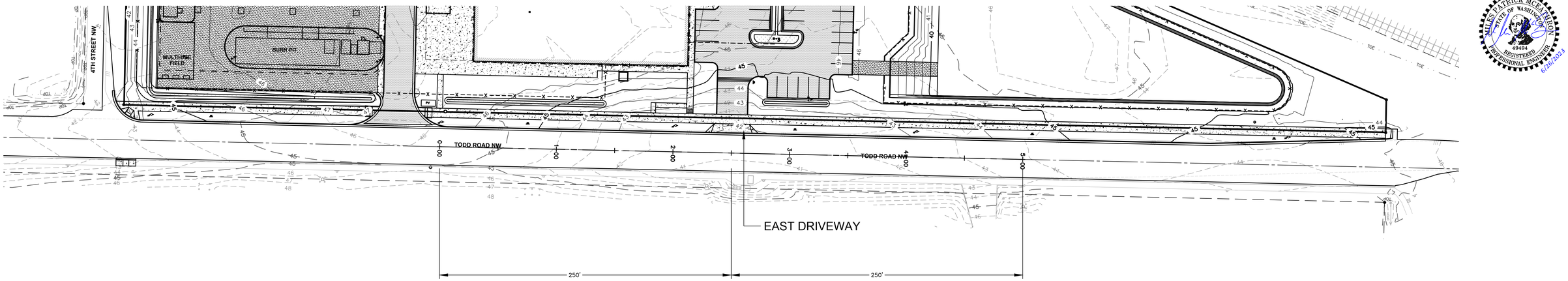
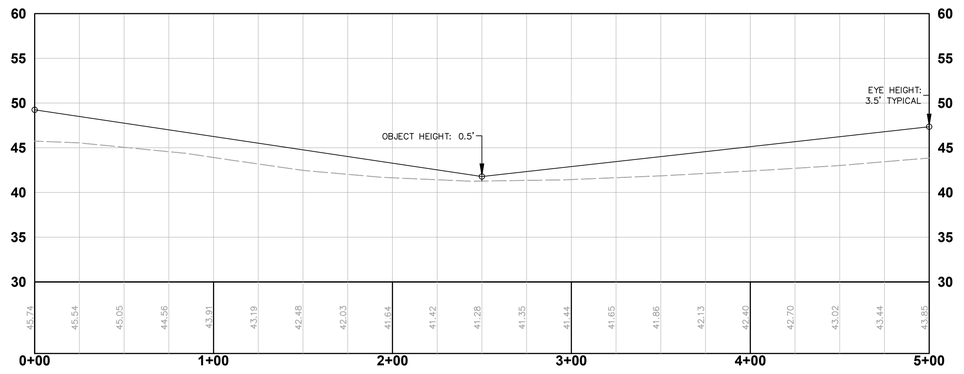


PLAN VIEW

SCALE: 1" = 40'



PROFILE VIEW

H: 1" = 40'
V: 1" = 8'

STOPPING SIGHT DISTANCE
VEHICLE TYPE = PASSENGER CAR
DRIVER'S EYE HEIGHT = 3.5'
OBJECT HEIGHT = 0.5' PER CITY OF PUYALLUP STANDARDS
POSTED SPEED = 25 MPH
DESIGN SPEED = 35 MPH
SSD = 250'

REFERENCE 2018 AASHTO (7TH EDITION) TABLE 3-1

JAMES PATRICK MCELHERON — STATE OF WASHINGTON — 49494 — REGISTERED PROFESSIONAL ENGINEER — 6/26/2023

SCHEMATIC DESIGN

REV	ISSUED FOR	DATE

PLAN NORTH | TRUE NORTH

SCALE: 1"=40' 0 40

PSE - OPERATIONAL TRAINING CENTER

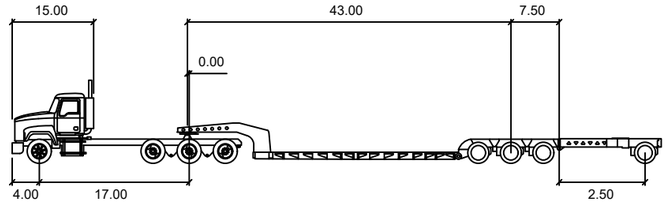
STOPPING SIGHT DISTANCE EAST DRIVEWAY

PROJECT No:	22219
DRAWN BY:	MPM
CHECKED BY:	THF
DATE ISSUED:	06-26-2023

EXH (8)

Appendix G

Vehicle Turning Diagrams



PSE Transformer Vehicle 8-Axle

feet

First Unit Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
First Unit Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

AUTOTURN GENERAL NOTES:

1. *AUTOTURN MOVEMENTS ARE GENERATED BY A COMPUTER MODEL. RESULTS SHOULD BE CONSIDERED APPROXIMATE AND USED CONSERVATIVELY.*
2. *ACTUAL DESIGN VEHICLE DIMENSIONS MAY VARY.*
3. *A 'SUCCESSFUL' SIMULATION DOES NOT CONCLUDE THAT ALL DRIVERS WOULD BE ABLE TO COMPLETE OR REPLICATE THE MODELED TURNING MOVEMENT WITH ACTUAL DRIVING SCENARIOS.*
4. *OTHER DRIVEABLE PATHS MAY EXIST.*

LEGEND
VEHICLE BODY ENVELOPE
FRONT TIRE PATH
REAR TIRE PATH

PRELIMINARY - FOR DISCUSSION ONLY

N

0 50

SCALE IN FEET

DATE: 07/12/2023

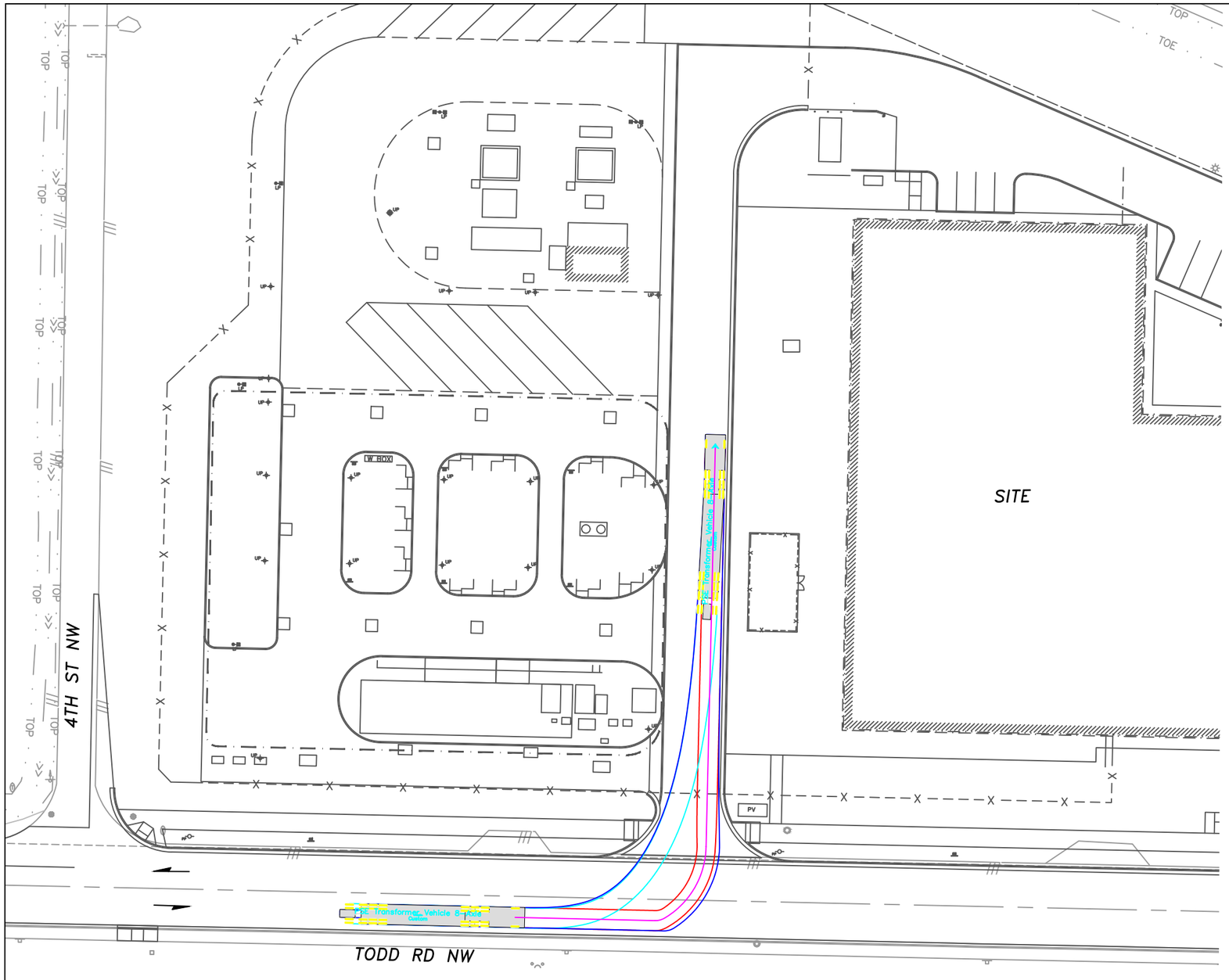
TENW
Transportation Engineering NorthWest
Transportation Planning | Design | Traffic Impact & Operations
11400 SE 8th Street, Suite 200, Bellevue, WA 98004 | Office (425) 889-6747
Project Contact: Glen Dubreuil
Phone: 206-295-6776

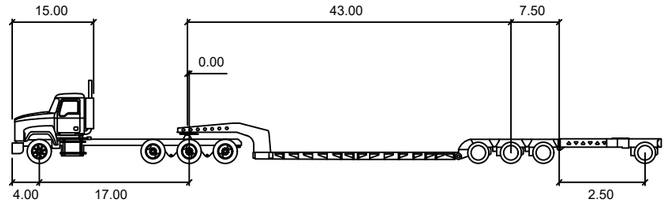
PSE OPERATIONS TRAINING CENTER PUYALLUP, WA

FIGURE: 1

AUTOTURN ANALYSIS - CUSTOM VEHICLE WEST DRIVEWAY- RIGHT TURN IN

OF 4





PSE Transformer Vehicle 8-Axle

feet

First Unit Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
First Unit Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

AUTOTURN GENERAL NOTES:

1. *AUTOTURN MOVEMENTS ARE GENERATED BY A COMPUTER MODEL. RESULTS SHOULD BE CONSIDERED APPROXIMATE AND USED CONSERVATIVELY.*
2. *ACTUAL DESIGN VEHICLE DIMENSIONS MAY VARY.*
3. *A 'SUCCESSFUL' SIMULATION DOES NOT CONCLUDE THAT ALL DRIVERS WOULD BE ABLE TO COMPLETE OR REPLICATE THE MODELED TURNING MOVEMENT WITH ACTUAL DRIVING SCENARIOS.*
4. *OTHER DRIVEABLE PATHS MAY EXIST.*

LEGEND
VEHICLE BODY ENVELOPE
FRONT TIRE PATH
REAR TIRE PATH

PRELIMINARY - FOR DISCUSSION ONLY

N

0 50

SCALE IN FEET

DATE: 07/12/2023

TENW
Transportation Engineering NorthWest
Transportation Planning | Design | Traffic Impact & Operations
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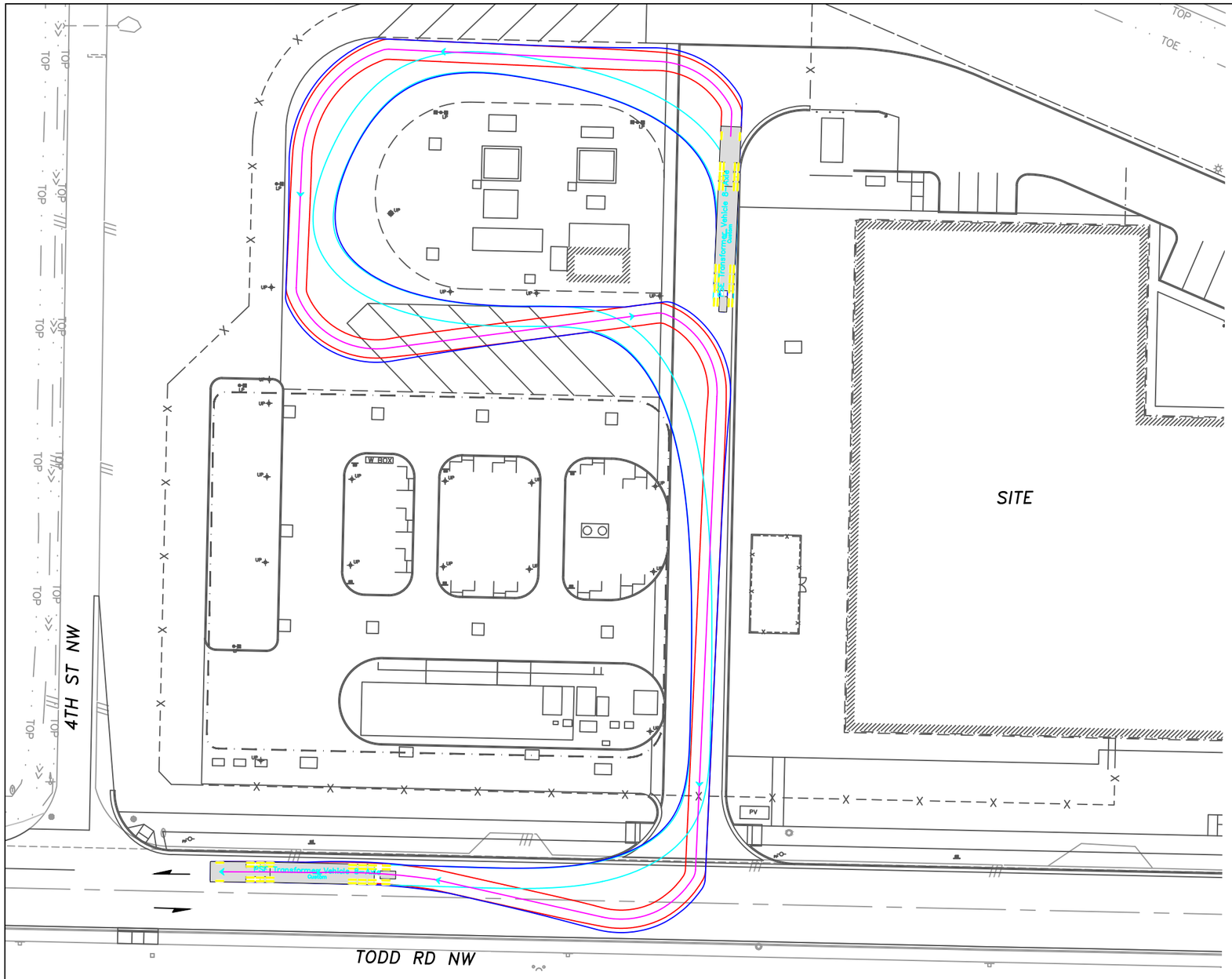
Project Contact: Glen Dubreuil
Phone: 206-295-6776

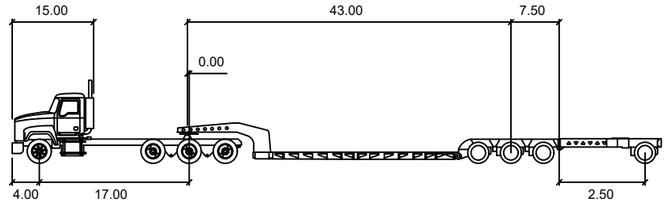
PSE OPERATIONS TRAINING CENTER PUYALLUP, WA

FIGURE: 2

AUTOTURN ANALYSIS - CUSTOM VEHICLE WEST DRIVEWAY- LEFT TURN IN

OF 4





PSE Transformer Vehicle 8-Axle

feet

First Unit Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
First Unit Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

AUTOTURN GENERAL NOTES:

1. *AUTOTURN MOVEMENTS ARE GENERATED BY A COMPUTER MODEL. RESULTS SHOULD BE CONSIDERED APPROXIMATE AND USED CONSERVATIVELY.*
2. *ACTUAL DESIGN VEHICLE DIMENSIONS MAY VARY.*
3. *A 'SUCCESSFUL' SIMULATION DOES NOT CONCLUDE THAT ALL DRIVERS WOULD BE ABLE TO COMPLETE OR REPLICATE THE MODELED TURNING MOVEMENT WITH ACTUAL DRIVING SCENARIOS.*
4. *OTHER DRIVEABLE PATHS MAY EXIST.*

LEGEND
VEHICLE BODY ENVELOPE
FRONT TIRE PATH
REAR TIRE PATH

PRELIMINARY - FOR DISCUSSION ONLY

DATE: 07/12/2023

N

0 50

SCALE IN FEET

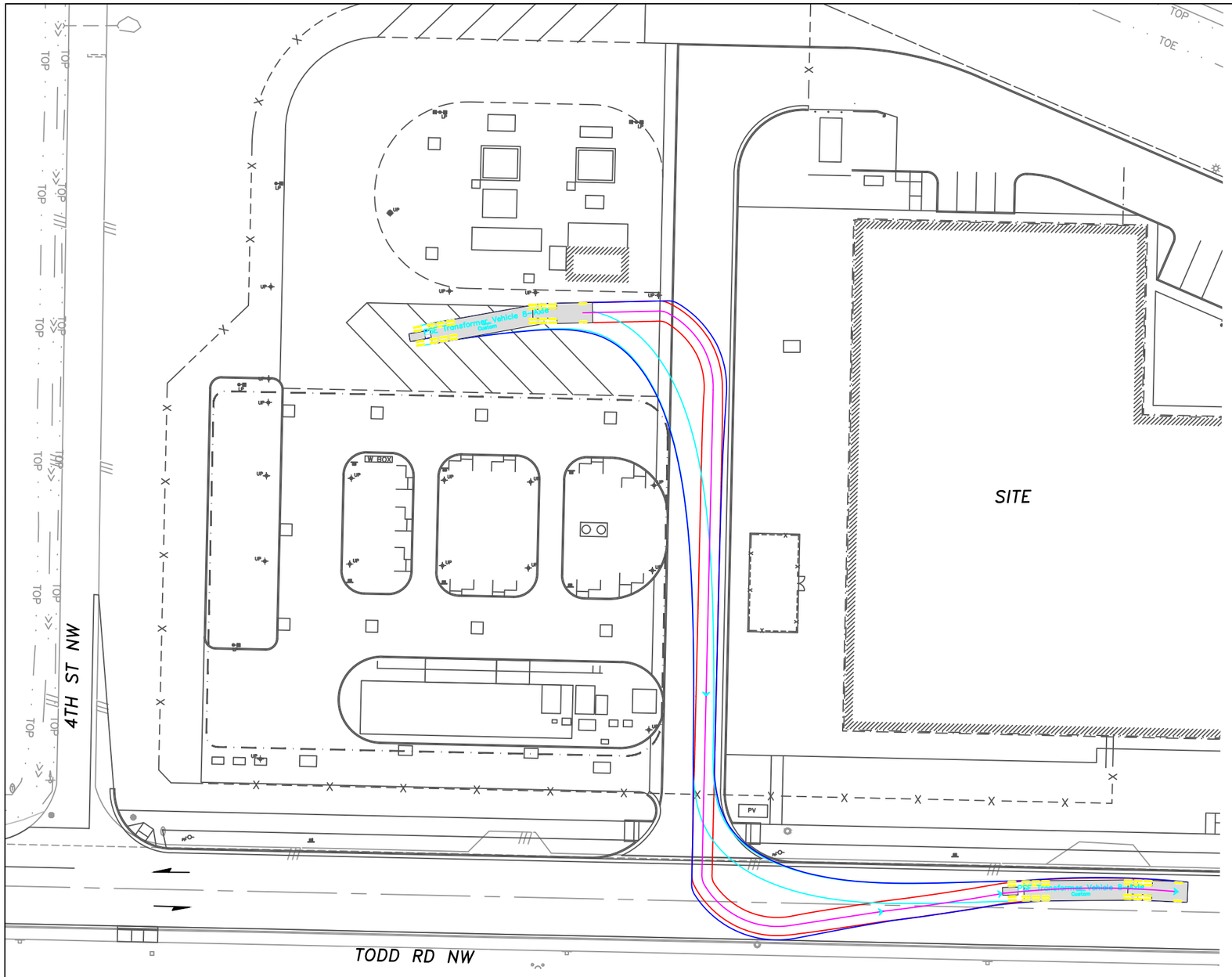
TENW
Transportation Engineering NorthWest
Transportation Planning | Design | Traffic Impact & Operations
11400 SE 8th Street, Suite 200, Bellevue, WA 98004 | Office (425) 889-6747
Project Contact: Glen Dubreuil
Phone: 206-295-6776

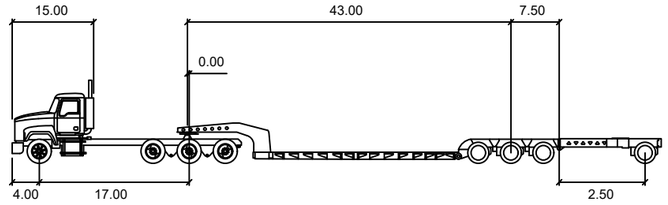
PSE OPERATIONS TRAINING CENTER PUYALLUP, WA

FIGURE: 3

AUTOTURN ANALYSIS - CUSTOM VEHICLE WEST DRIVEWAY- RIGHT TURN OUT OPTION 1

OF 4





PSE Transformer Vehicle 8-Axle

feet

First Unit Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
First Unit Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

AUTOTURN GENERAL NOTES:

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4. *OTHER DRIVEABLE PATHS MAY EXIST.*

LEGEND
VEHICLE BODY ENVELOPE
FRONT TIRE PATH
REAR TIRE PATH

PRELIMINARY - FOR DISCUSSION ONLY

N

0 50

SCALE IN FEET

DATE: 07/12/2023

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PSE OPERATIONS TRAINING CENTER PUYALLUP, WA

FIGURE: 4

AUTOTURN ANALYSIS - CUSTOM VEHICLE WEST DRIVEWAY- LEFT TURN OUT OPTION 1

OF 4