FEHR PEERS

Memorandum

Date: June 7, 2023

To: Emily Benoit, City of Vancouver

From: Camilo Alvarez Tuta, EIT & Kara Hall, PE

Subject: SE 34th Street Safety & Mobility Project Technical Approach & Findings

PT21-0068

Introduction

The SE 34th Street Safety & Mobility Project (Project) was initiated to evaluate options to improve safety and comfort for all who travel on SE 34th Street. This memorandum documents the Project goals, the technical approach, and findings for future conditions on SE 34th Street.

The analysis presented in this memorandum was completed to quantify the changes in vehicle operations within the study area if one travel lane in each direction were to be repurposed to add facilities for people riding bicycles and using other small mobility devices. The analysis presented in this memorandum will inform conversations with City staff and community members to confirm that repurposing a travel lane is feasible on this corridor and to identify areas where additional design considerations may be needed based on vehicle operations or safety concerns.

Project Overview

The Project is an opportunity for the City to improve safety and mobility on SE 34th Street between SE 162nd Avenue and SE 192nd Avenue, as shown on **Figure 1**. As the City prepares for a microsurfacing project that will repave SE 34th Street, this project is evaluating changes to the corridor that could be incorporated in that project, including:

- Repurposing a travel lane to add bike lanes and/or shared facilities for people rolling, walking, and biking.
- Safety improvements at intersections and crossings to better accommodate people rolling, walking, and biking.
- Traffic calming design features to lower traffic speeds.

Project Goals

This study was initiated to identify solutions that, when implemented with the planned microsurfacing project, would improve safety and mobility along the SE 34th Street corridor. To align solutions with those outcomes, three study goals have been developed. Each goal is supported by several performance metrics, which will be used to measure the alignment of potential solutions with the project goals. The three goals and related performance metrics are shown in **Table 1** below.

Proposed Roadway Changes

Analysis completed for the "with Repurposed Lane" scenarios, described in the following sections, assumes the removal of one travel lane in the eastbound and westbound direction on SE 34th Street between SE 164th Avenue and SE 192nd Avenue. To accommodate the change in the number of travel lanes on SE 34th Street, a reduction in the number of turn lanes for the following movements would be required at the SE 164th Avenue and SE 192nd Avenue intersections:

- Eastbound left-turn at SE 164th Avenue, reduction from dual left-turn lanes to a single left-turn lane
- Westbound left-turn at SE 164th Avenue, reduction from dual left-turn lanes to a single left-turn lane
- Northbound left-turn at SE 192nd Avenue, reduction from dual left-turn lanes to a single left-turn lane

The existing lane configurations and lane configurations analyzed for the "with Repurposed Lane" scenarios are shown on **Figure 2** and **Figure 3**, respectively.

The analysis presented below is based on the current proposed design as of May 2023. Based on feedback from City staff throughout the Project development process, the following changes have been incorporated in the recommended design:

- Beginning/ending the on-street mobility lane west of SE 192nd Avenue to maintain vehicle capacity on the southbound and westbound approaches at the SE 192nd Avenue intersection. By adjusting the extents of the on-street mobility lane, the dual southbound left-turn lanes on SE 192nd Avenue can be maintained, along with three lanes on the westbound approach on SE 34th Street at SE 192nd Avenue.
- Revising lane geometry on the westbound approach at SE 192nd Avenue to provide one left-turn lane, one through-lane, and a right-turn lane.

These changes were made to maintain capacity for vehicles on key movements using the SE 192nd Avenue and SE 34th Street intersection while maintaining safety for people using the proposed mobility lane.

Figure 1. Project Study Area

Table 1. Project Goals & Performance Metrics

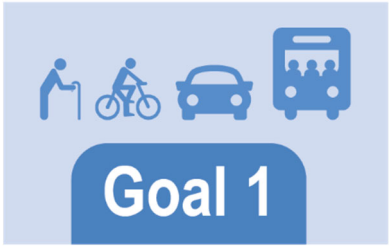
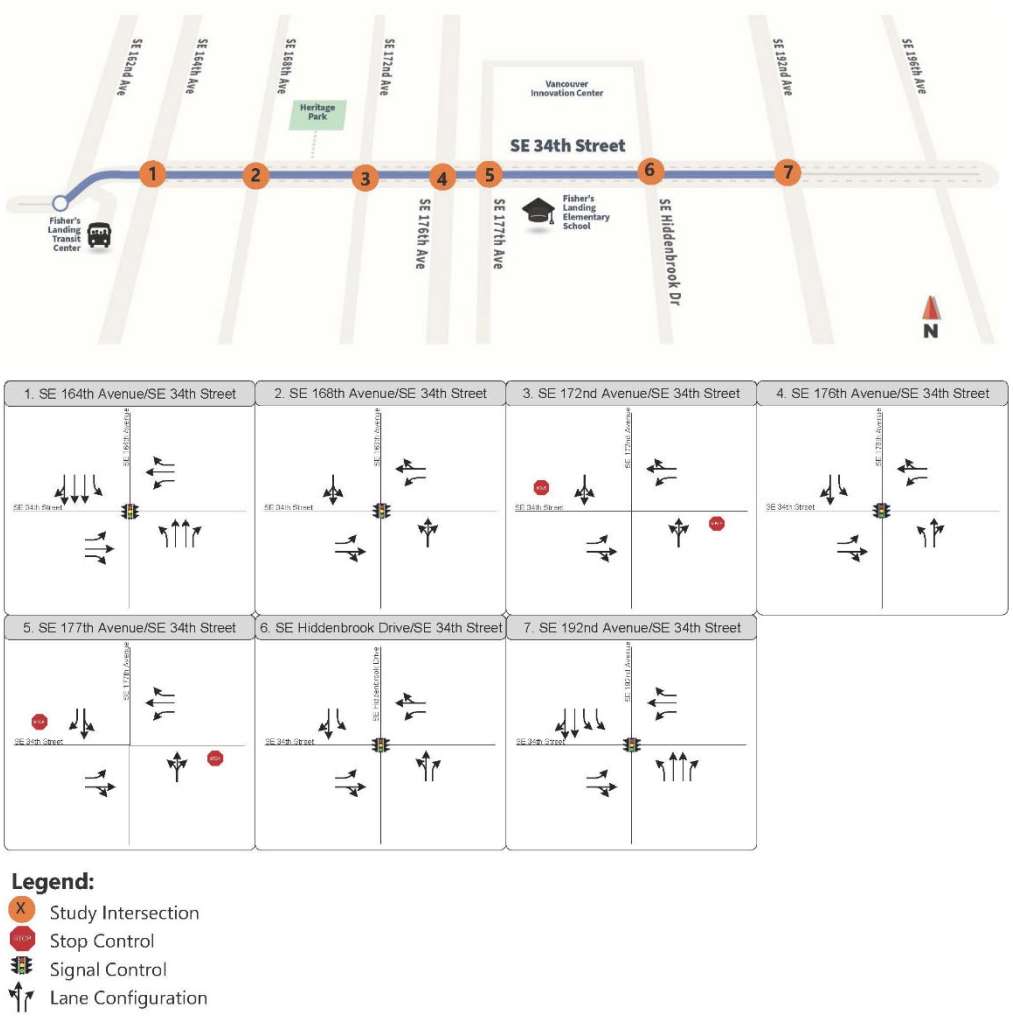
Study Goal	Performance Metrics
 ***Improve comfort and mobility for all users***	• Creates an east-west connection for people biking • Improves access to existing transit service • Adds aesthetic amenities • Does not substantially add to vehicular delays
 ***Prioritize safety for all users***	• Uses traffic calming to lower speeds • Improves locations with a high number of crashes or conflict points • Supports safe pedestrian crossings near key destinations
 ***Facilitate near-term implementation***	• Leverages low-cost solutions • Can be implemented with the planned overlay • Is eligible for outside funding

Figure 2. Existing Lane Configurations

Figure 3. With Repurposed Lane Configurations



Existing Plans & Data Sets

This evaluation began with an assessment of existing conditions, including a field visit to observe travel patterns along the corridor and a review of existing plans pertaining to the corridor. The review of existing plans included the following documents:

- Vancouver Innovation Center Comprehensive Plan
- City of Vancouver 2004 Transportation System Plan (TSP)

Vancouver Innovation Center Comprehensive Plan

The Vancouver Innovation Center (VIC) is a 179-acre campus located north of SE 34th Street between SE 176th Avenue and SE 192nd Avenue. The VIC Master Plan was recently updated to incorporate a mix of light industrial/employment, school, residential, and mixed-use land uses. This update also included traffic analysis and recommended changes to several intersections along SE 34th Street. The assumptions in the VIC Master Plan have been incorporated in this evaluation as described in the future conditions section below.

City of Vancouver 2004 Transportation System Plan (TSP)

While the City is currently in the process of updating its TSP, the adopted TSP, completed in 2004, identified several improvements along SE 34th Street that have not been completed:

- Proposed bike lanes along SE 34th Street from 164th Avenue to 192nd Avenue *(to be evaluated by this study)*
- Proposed Phase 1 Intelligent Transportation System (ITS) Route along SE 34th Street

Coordination with City staff resulted in the determination that there have not been any ITS improvements on the corridor since the TSP was developed and there are no planned ITS projects at this time.

Data Sets

The existing conditions evaluation for this project relied on data provided by the City and traffic count data collected in December 2022. Each data set used in this evaluation is described below.

Bicycle & Pedestrian Data

Evaluation of conditions for people walking was completed using GIS data provided by the City and field observations. Data provided by the City included sidewalk locations, sidewalk width, and the location of Americans with Disabilities Act (ADA) compliant curb ramps. Data provided by the City also ranks sidewalk pavement conditions on a scale of one (good) to six (poor). The data also included a similar scoring criterion for the ramp condition.

An inventory of bicycle facilities on the corridor and surrounding roadway network was completed using Clark County's GIS data.

Transit Data

The location of transit stops and routes near the corridor were included in the GIS data provided by the City. Stop amenities along the corridor were identified using Google Street View and field observations. Published schedule data on C-Tran's website was used to determine transit headways and operating hours along the corridor.

Crash Data

Crash data was provided by the City and uses data available from the Washington State Department of Transportation (WSDOT) from 2014 to 2020. Data analyzed for this assessment includes:

- the types of users involved in the crash (vehicles, bicyclists, or pedestrians)
- injuries and their severity
- the circumstances surrounding the crash

Freight

The WSDOT 2019 Freight and Goods Transportation System (FGTS) which classifies freight corridors by modes in Washington State based on annual freight tonnage moved, including truck, rail, and waterway freight corridors was used to determine the freight classification for this corridor.

Vehicle Data

Field observations and aerial photos were used to identify the corridor cross-section, the presence of medians, intersection lane configurations, and the posted speed limit along SE 34th Street. City GIS confirmed the right-of-way (ROW) width along the corridor for planning purposes.

Traffic volume data was collected at nine intersections during the AM and PM peak periods on December 6, 2022. A 24-hour roadway count was also collected just east of SE 164th Avenue. **Table 2** provides a summary of count data collected along the SE 34th Street corridor.

Table 2. Traffic Count Locations

Location	Data Collected
SE 164th Avenue & SE 34th Street	AM Peak Period (7:00-9:00AM) & PM Peak Period (4:00-6:00PM) Turning Movement Counts by Mode
SE 168th Avenue & SE 34th Street	
Pedestrian Signal & SE 34th Street	
SE 172nd Avenue & SE 34th Street	
SE 176th Avenue & SE 34th Street	
SE 177th Avenue & SE 34th Street	
Hiddenbrook Drive & SE 34th Street	
SE 192nd Avenue & SE 34th Street	
Segment between 164th Avenue & 168th Avenue	24-hour Tube Count

Analysis Methodology

An analysis of current traffic conditions was completed to understand how the corridor operates today and to confirm that the analysis tools are calibrated to local conditions and accurately reflect conditions in the field.

The following section describes the analysis methodology for traffic operations and findings for existing conditions.

Level of Service and Delay

Intersection operations analysis was completed using the methodology documented in the Highway Capacity Manual, 6th Edition (HCM). Under this approach, the intersection level of service (LOS), is determined by assigning a letter grade, from A (the best) to F (the worst), based on the level of delay experienced by drivers at the intersection. For signalized and all-way stop-controlled (AWSC) intersections, LOS is assigned using the average delay for all approaches. For two-way stop-controlled (TWSC) intersections, LOS is assigned based on the movement with the highest delay. The LOS and delay thresholds based on HCM methodology are presented in **Table 3**.

Table 3. Level of Service Definitions

Level of Service	Description	Signalized Intersection Delay (seconds/vehicle)	Unsignalized Intersection Delay (seconds/vehicle)
A	Free-flowing Conditions	≤ 10	0-10
B	Stable Flow (slight delays)	>10-20	>10-15
C	Stable Flow (acceptable delays)	>20-35	>15-25
D	Approaching Unstable Flow (tolerable delay)	>35-55	>25-35
E	Unstable Flow (intolerable delay)	>55-80	>35-50
F	Forced Flow (congested and queues fail to clear)	>80	>50

Source: Highway Capacity Manual, 6th Edition

In addition to LOS and delay, vehicle queueing and travel time on SE 34th Street between SE 164th Avenue and SE 192nd Avenue were also evaluated. All traffic operations analysis was completed using the microsimulation software Simtraffic, a microsimulation module included in Synchro 11. SimTraffic captures the observed characteristics of driver behavior and models the interaction between vehicles in a study network. For this study, microsimulation was used to accurately reflect operations along the corridor including driver behavior, the impact of the mid-block pedestrian crossing on traffic flow, and to capture the effects of any spillback between intersections that may occur as traffic volume increases in the future.

Results for LOS, queueing, and travel time along the corridor are based on the average results from ten statistically valid microsimulation runs for both the AM peak hour (7:45-8:45 AM) and the PM peak hour (4:00-5:00 PM).

Existing Conditions

For an overview of existing conditions for all users, see the existing conditions figures included as **Attachment A** to this memorandum.

Multimodal Users

Existing infrastructure for people walking and biking is shown on the attached Existing Infrastructure figure included as **Attachment A**. As shown on the figure, sidewalks are provided throughout the study area on both sides of SE 34th Street. Along the corridor, sidewalks are generally six feet wide, with several sections where width varies from four feet to greater than six feet, predominantly on the south side of SE 34th Street.

Today, there are no bicycle facilities on SE 34th Street except for the segment between SE 164th Avenue and SE 162nd Avenue where an on-street bike lane is provided for people biking in the westbound direction. There are also on-street bike lanes provided on several roadways that connect to SE 34th Street, including:

- SE 162nd Avenue north of SE 34th Street
- SE 168th Avenue north of SE 34th Street
- SE 176th Avenue north of SE 34th Street
- SE 192nd Avenue north and south of SE 34th Street

Transit

Transit service along SE 34th Street is provided by C-Tran and there are a total of four stops in each direction along the corridor. The location of transit stops along SE 34th Street are shown on the attached Existing Infrastructure figure.

Today, the corridor is served by Route 37 which operates with 15-minute headways during the weekday peak hours, 20-minute headways on Saturdays, and 30-minute headways on Sundays.

Transit ridership data from September 2022 is presented in **Table 4**. Based on the data presented below, an average of 1.6 people per day get on and off the bus at the stops in the study area and the average time it takes a bus to pick-up or drop-off riders is 19 seconds.

Table 4. September 2022 Transit Data

Stop Location	Number of People Getting On Per Day	Number of People Getting Off Per Day	Number of Ramp Deployments Per Day	Average Stop Time (Seconds)
Eastbound Stops				
SE 172nd Avenue	3	1	0.67	0:00:17
SE 176th Avenue	1	0	0	0:00:18
SE 189th Avenue	3	3	0.3	0:00:20
Hiddenbrook Drive	1	2	0	0:00:16
Westbound Stops				
Hiddenbrook Drive	1	2	0	0:00:17
SE 189th Avenue	4	3	0.2	0:00:23
SE 177th Avenue	0	0	0	0:00:25
SE 172nd Avenue	0	2	0	0:00:15

Source: C-Tran, September 2022

Safety

To understand the type of safety improvements that may need to be incorporated in this project, an analysis of crash data provided by the City for the period from 2014 to 2020 was analyzed. This data was analyzed to identify locations where a high number of crashes have occurred, understand the severity of crashes that have occurred, and to identify the contributing factors to crashes along the corridor.

The location of crashes that have occurred on SE 34th Street between SE 162nd Avenue and SE 196th Avenue are shown on the Safety figure, included as an attachment to this memorandum. The contributing factor for all crashes is also shown on the figure. The highest number of crashes occurred at the SE 164th Avenue and SE 192nd Avenue intersections, with a total of 26 crashes occurring at both intersections. During the period analyzed, there were two crashes involving a pedestrian and two crashes involving a bicyclist. Three of the four crashes involving a person walking or biking involved a vehicle that was turning.

Another important safety consideration for this corridor is the interaction between freight vehicles and other more vulnerable users, particularly people walking and biking. In the state of

Washington, truck corridors are classified into five tiers, T-1 which carries the most goods to T-5. The SE 34th Street corridor is designated by WSDOT as a T-3 freight route according to the published FGTS maps. While SE 34th Street is not a high-priority freight corridor, as the proposed design is developed, consideration should be given to the types of freight vehicles that use the corridor. Potential design features that can provide the greatest separation between those vehicles and people walking and biking should be explored.

Vehicles

Traffic operations analysis for the existing conditions was completed using the traffic counts collected in December 2022, lane configurations based on field observations, and signal timing information provided by the City. Traffic count data is provided in **Appendix A**.

Future Conditions

This section describes the scenarios representing future conditions that were evaluated, the methodology used to develop traffic volume forecasts, and the technical findings for each of the scenarios.

Future Forecasts

To understand how SE 34th Street would operate if one lane were to be repurposed, three future scenarios were evaluated: 2024, 2030 and 2040. Assumptions and methodology used to develop traffic volume forecasts for each scenario are described below.

2024

This near-term scenario was evaluated to understand how the corridor would operate if growth were to occur at two percent per year, a more aggressive growth rate than is forecast to occur based on the regional travel demand model, accounting for a return to normal traffic conditions post-COVID. To develop turning movement forecasts for 2024, an annual growth rate of two percent per year for two years was applied to traffic counts collected in December 2022.

By 2024, the existing VIC is expected to be fully occupied. To account for the increase in trips resulting from full occupancy of the existing site, the difference between the calculated trip generation for the existing VIC, included in the TIA for the VIC, was used to determine how many more trips to and from the site are likely to occur using driveway counts collected in December 2022. The difference between the existing site trip generation and driveway counts collected in 2022, was added to the traffic forecasts developed for 2024.

2030

This medium-term scenario was evaluated to understand the corridor's operations with an additional six years of growth and Phase 1 and Phase 2 of the VIC Mixed Use Master Plan in place. Phase 2 of the VIC Master Plan includes the following transportation changes:

- Construction of SE 29th Street between SE 176th Avenue and the west portion of the VIC loop
- Construction of a single lane roundabout at SE 29th Street and SE 176th Avenue
- Implementation of the VIC mitigation measures at the SE 29th Street and SE 164th Avenue intersection
- Closure of the west campus driveway at SE 177th Avenue

These changes to the transportation system are expected to change travel patterns, specifically between SE 176th Street and SE 164th Avenue as SE 29th Street will provide a direct connection to the VIC campus.

To develop traffic forecasts for this scenario, growth rates were derived from the regional travel demand model, provided by the Southwest Washington Regional Transportation Council (SW RTC), these rates were applied to the traffic forecast developed for 2024 to reflect six additional years of growth. Data provided by SW RTC indicates that volume will increase at an annual rate of 0.9 percent per year during the AM peak hour and 1.1 percent per year during the PM peak hour.

Once regional growth was accounted for, new trips associated with Phase 1 and Phase 2 of the VIC were added to the traffic forecasts for 2030. This included rerouting trips to use the new connection at SE 29th Street and shifting existing trips to the Hiddenbrook Driveway to account for the closure of the SE 177th Avenue access point.

2040

To understand how SE 34th Street would operate long-term, conditions in 2040 were evaluated. To develop traffic forecasts for this scenario, the growth rates derived from the regional travel demand model were applied to 2030 forecasts to reflect an additional 10 years of growth.

The VIC is also expected to be fully built out by 2036. To account for the increase in traffic that is expected to occur when the site is fully built out, trips traveling to and from the VIC were added to the 2040 forecasts developed for this study. Trips were added using the trip generation, distribution, and assignment documented in the *Traffic Impact Analysis for the Vancouver Innovation Center Master Plan (November 2020).* See the attached AM and PM Peak Hour Volume figures, and detailed turning movement forecasts in 2040. The 2040 traffic forecasts also assume that improvements associated with the VIC will connect SE 29th Street through the VIC campus to SE 192nd Avenue, providing a parallel route to SE 34th Street through the VIC campus.

2024 Operations Findings

Findings for the 2024 "No Build" scenario, which assumes that there are no changes to the existing roadway network, and the "with Repurposed Lane" scenario are presented in **Table 5** through **Table 7** below. As shown, during the AM peak hour, all intersections operate at LOS C or better. During the PM peak hour, the SE 164th Avenue intersection operates at LOS D and the SE 177th Avenue (a side-street stop-controlled intersection) operates at LOS E.

Table 5. 2024 No Build LOS Summary

Location	Intersection Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay (seconds)	LOS	Delay (seconds)
SE 164th Avenue & SE 34th Street	Signalized	C	26	D	44
SE 168th Avenue & SE 34th Street	Signalized	A	5	A	6
SE 172nd Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	B	15(NBT)	C	20(NBT)
SE 176th Avenue & SE 34th Street	Signalized	A	7	B	11
SE 177th Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	B	14(NBL)	C	20(SBT)
Hiddenbrook Drive & SE 34th Street	Signalized	B	12	B	13
SE 192nd Avenue & SE 34th Street	Signalized	C	21	C	30

Notes:
[1] For side street stop-controlled intersections, the movement with the highest delay is reported and shown in parenthesis.

Queuing was evaluated at the SE 164th Avenue and SE 192nd Avenue intersections, as those are the primary intersections where queueing was observed to occur today and where repurposing a travel lane is most likely to increase queueing.

The maximum queues are shown in
Table 6. Under the 2024 No Build conditions, the northbound left-turn and through, the southbound left-turn at SE 164th Avenue, and the westbound left-turn at SE 192nd Avenue were found to exceed available storage during PM peak hours. For detailed queueing results, see **Appendix C**.

Table 6. 2024 No Build Queueing Results

Intersection	Approach	Movement	Storage (ft)	Maximum Vehicle Queue (ft)	
				AM	PM
SE 164th Avenue & SE 34th Street	EB	L	175	100	125
		T	350	150	225
		R	350	125	150
	WB	L	425	275	275
		T	925	200	275
		R	200	175	200
	NB	L	400	225	**475**
		T	900	375	**925**
		TR	900	125	600
	SB	L	250	275	**300**
		T	1,025	275	375
		R	1,025	175	275
SE 192nd Avenue & SE 34th Street	EB	L	175	150	175
		T	450	150	175
		TR	450	175	225
	WB	L	175	**200**	**225**
		T	425	150	350
		R	425	150	250
	NB	L	375	125	150
		T	725	250	300

Intersection	Approach	Movement	Storage (ft)	Maximum Vehicle Queue (ft)	
				AM	PM
		TR	375	150	100
	SB	L	325	175	250
		T	525	200	300
		TR	525	175	300

Notes:
L= Left, T=Through, R=Right, TR=Through/Right
NB=Northbound, SB=Southbound, EB=Eastbound, WB =Westbound
Locations, where the queue exceeds available storage, are shown in **bold red** text.

Travel time for SE 34th Street between SE 192nd Avenue and SE 164th Avenue was also evaluated for vehicles traveling in the eastbound and westbound directions. As shown in **Table 7**, travel time is highest in the eastbound direction during both peak hours under the 2024 No Build conditions.

Table 7. 2024 No Build Travel Time

Direction	Peak Hour Travel Time (min:sec)	
	AM	PM
Eastbound between SE 164th Avenue and SE 192nd Avenue	4:32	4:38
Westbound between SE 192nd Avenue and SE 164th Avenue	4:06	4:21

2024 with Repurposed Lane Findings

To understand near-term changes to corridor operations resulting from repurposing a travel lane, 2024 conditions were evaluated with a repurposed lane. This evaluation used the 2024 traffic volume data and the "with Repurposed Lane" lane configurations shown on **Figure 3**.

Intersection delay and LOS for the 2024 with Repurposed Lane scenario are presented in **Table 8** along with a comparison to 2024 No Build results. Under 2024 conditions, repurposing a travel lane would result in a minimal increase in delay along the corridor, with the largest increase in intersection delay (22 seconds) occurring at the SE 164th Avenue intersection during the AM peak hour.

Vehicle queues at SE 164th Avenue and SE 192nd Avenue were also evaluated to determine if queues could be accommodated within existing storage with the removal of dual left-turn lanes at those intersections. As shown in **Table 9**, most movements would experience an increase in vehicle queues of approximately two to three vehicle lengths.

At SE 164th Avenue, the following movements would exceed available storage with a repurposed lane in place:

- Westbound left-turn during morning and evening peak hours
- Northbound left-turn during the PM peak hour; this movement would also exceed available storage under No Build conditions.
- Northbound through movement during the PM peak hour; this movement would exceed available storage under No Build conditions but is extended by 25 feet or approximately one vehicle length.
- Northbound right-turn during the PM peak hour.
- Southbound left-turn during both peak hours (no change from the No Build conditions)

At SE 192nd Avenue, the following movements would exceed available storage with a repurposed lane in place:

- Eastbound left-turn during both peak hours
- Westbound left-turn during both peak hours (no change from No Build conditions)

Lastly, to understand how repurposing a travel lane would change vehicle travel at the corridor level, travel time under 2024 No Build conditions was compared to travel time under the 2024 With Repurposed Lane scenario. It is important to note that it was assumed that under the "with Repurposed Lane" scenario, the posted speed would be lowered to improve the safety and comfort of people walking and biking. For the "with Repurposed Lane" scenarios, the speed limit for SE 34th Street was changed from 40 miles per hour (mph) to 30 mph in Synchro/SimTraffic. As

shown in **Table 10**, the proposed changes would increase corridor travel time by less than one minute for both eastbound and westbound vehicles during the peak hours.

Table 8. 2024 with Repurposed Lane LOS Summary

Location	Intersection Control	2024 No Build				2024 with Repurposed Lane				Delay Change from No Build (seconds)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	AM	PM
SE 164th Avenue & SE 34th Street	Signalized	C	26	D	44	D	48	D	49	+22	+5
SE 168th Avenue & SE 34th Street	Signalized	A	5	A	6	A	7	A	9	+2	+3
SE 172nd Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	B	15(NBT)	C	20(NBT)	C	24(NBT)	C	23(NBT)	+9	+3
SE 176th Avenue & SE 34th Street	Signalized	A	7	B	11	B	12	B	13	+5	+2
SE 177th Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	B	14(NBL)	C	20(SBT)	C	16(NBL)	D	26(SBT)	+2	+6
Hiddenbrook Drive & SE 34th Street	Signalized	B	12	B	13	C	21	B	14	+9	+1
SE 192nd Avenue & SE 34th Street	Signalized	C	21	C	30	D	39	C	34	+18	+4

Notes:
Bold text indicates LOS E or F.
[1] For side street stop-controlled intersections, the movement with the highest delay is reported and shown in parenthesis.

Table 9. 2024 with Repurposed Lane Queue Summary

Intersection	Approach	Movement	Storage (ft)	Maximum Queue (ft)					
				2024 No Build		2024 with Repurposed Lane		Change in Queue Length (ft)	
				Peak Hour		Peak Hour			
				AM	PM	AM	PM	AM	PM
SE 164th Avenue & SE 34th Street	EB	L	175	100	125	100	125	0	0
		T	350	150	225	150	175	0	-50
		R	350	125	150	100	150	-25	0
	WB	L	425	275	275	**450**	**450**	+175	+175
		T	925	200	275	325	425	+125	+150
		R	200	175	200	100	200	-75	0
	NB	L	400	225	**475**	300	**475**	+75	0
		T	900	375	**925**	450	**950**	+75	+25
		R	900	125	600	150	**925**	+25	+325
	SB	L	250	**275**	**300**	**275**	**300**	0	0
		T	1,025	275	375	300	400	+25	+25
		R	1,025	175	275	200	275	+25	+0

Intersection	Approach	Movement	Storage (ft)	Maximum Queue (ft)					
				2024 No Build		2024 with Repurposed Lane		Change in Queue Length (ft)	
				Peak Hour		Peak Hour			
				AM	PM	AM	PM	AM	PM
SE 192nd Avenue & SE 34th Street	EB	L	175	150	175	**225**	**225**	+75	+50
		T	450	150	175	325	425	+175	+250
		TR	450	175	225	-	-	-	-
	WB	L	175	**200**	**225**	**200**	**225**	+0	+0
		T	425	150	350	200	400	+50	+50
		R	425	150	250	75	100	-75	-150
	NB	L	375	125	150	150	175	+25	+25
		T	725	250	300	225	350	-25	+50
		TR	375	150	100	150	100	+0	+0
	SB	L	325	175	250	175	250	+0	+0
		T	525	200	300	225	325	+25	+25
		TR / R*	525	175	300	175	300	+0	+0

Notes:
L= Left, T=Through, R=Right, TR=Through/Right, R*=Right with "Repurposed Lane" Scenario
NB=Northbound, SB=Southbound, EB=Eastbound, WB =Westbound
Locations where queue exceeds available storage are shown in **bold red** text.

Table 10. 2024 with Repurposed Lane Travel Time Summary

Direction	Peak Hour Travel Time (min:sec)				Travel Time Change from No Build (min:sec)	
	2024 No Build		Existing with Repurposed Lane			
	AM	PM	AM	PM	AM	PM
Eastbound between SE 164th Avenue and SE 192nd Avenue	4:32	4:38	5:17	5:26	+0:45	+0:48
Westbound between SE 192nd Avenue and SE 164th Avenue	4:06	4:21	4:48	5:04	+0:42	+0:42

2030 Operations Findings

Traffic volumes for the 2030 scenarios were developed based on the methodology described above. It was also assumed that the following changes to SE 34th Street would be in place by 2030 under both the No Build and With Repurposed Lane scenarios:

- Closure of the west campus driveway at SE 177th Avenue and resulting in the shift of inbound and outbound trips from the VIC to Hiddenbrook Drive

Findings for the 2030 scenarios are presented in **Table 11** through **Table 13** below.

Under the No Build Alternative, all study intersections would operate at LOS D or better, with the highest delay experienced by drivers (48 seconds) occurring at SE 164th Avenue during the PM peak hour.

With the repurposed lane in place, the SE 164th Avenue intersection would operate at LOS E during the PM peak hour. At SE 192nd Avenue, LOS would degrade from LOS C to D and the largest increase in delay would occur during the PM peak hour (22 seconds).

By 2030, the removal of left-turn lanes and changes to intersection lane configurations would cause vehicle queues for the following movements to exceed capacity at SE 164th Avenue:

- The westbound left-turn during both peak hours
- All northbound movements during the PM peak hour (minimal change from the No Build alternative)
- Southbound left-turn during both peak hours (no change from No Build conditions)

At SE 192nd Avenue, the following movements would exceed storage under the "with Repurposed Lane" scenario:

- Eastbound left-turn at SE 192nd Avenue during both peak hours (this movement also exceeds capacity under the No Build alternative). During the PM peak hour, spillback from this queue also causes the eastbound through to exceed capacity.
- Southbound left-turn during the AM peak hour. During the PM peak hour, queues of all southbound movements exceed capacity under the No Build and Build alternative. With the repurposed lane in place the queue is increased by two to three vehicles for all movements.
- Northbound left-turn during the PM peak hours

At the corridor level, repurposing a travel lane would result in a travel time increase of less than one minute for both eastbound and westbound directions during the AM peak hour. During the PM peak hour, the travel time increase is approximately a minute and a half for the eastbound vehicles and 55 seconds for the vehicles traveling westbound between SE 192nd Avenue and SE 164th Avenue.

Table 11. 2030 LOS Summary

Location	Intersection Control	2030 No Build				2030 with Repurposed Lane				Delay Change from No Build (seconds)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	AM	PM
SE 164th Avenue & SE 34th Street	Signalized	C	29	D	48	C	33	**E**	60	+4	+12
SE 168th Avenue & SE 34th Street	Signalized	A	5	A	7	A	8	B	11	+3	+4
SE 172nd Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	C	15(NBL)	C	24(NBL)	C	21(NBL)	D	31(NBL)	+6	+7
SE 176th Avenue & SE 34th Street	Signalized	A	8	B	12	B	10	B	16	+2	+4
SE 177th Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	A	10(NBL)	C	16(NBL)	B	12(NBL)	C	17(NBL)	+3	+1
Hiddenbrook Drive & SE 34th Street	Signalized	B	20	C	21	C	22	C	33	+2	+12
SE 192nd Avenue & SE 34th Street	Signalized	C	23	D	39	C	25	D	53	+2	+14

Notes:
Bold text indicates LOS E or F operations.
[1] For side street stop-controlled intersections, the movement with the highest delay is reported and shown in parenthesis.

Table 12. 2030 Queue Summary

Intersection	Approach	Movement	Storage (ft)	Maximum Queue (ft)					
				2030 No Build		2030 with Repurposed Lane		Change in Queue Length from No Build (ft)	
				Peak Hour		Peak Hour			
				AM	PM	AM	PM	AM	PM
SE 164th Avenue & SE 34th Street	EB	L	175	100	150	100	125	+0	-25
		T	350	175	225	150	225	-25	+0
		R	350	125	150	125	175	+0	+25
	WB	L	425	275	300	**475**	**475**	+200	+175
		T	925	225	275	600	575	+375	+300
		R	200	175	200	100	175	-75	-25
	NB	L	400	275	**475**	375	**475**	+100	+0
		T	900	450	**925**	525	**950**	+75	+25
		R	900	175	**925**	225	**950**	+50	+25
	SB	L	250	**275**	**300**	**300**	**300**	+25	+0
		T	1,025	300	425	325	500	+25	+75
		R	1,025	175	300	225	375	+25	+75

Intersection	Approach	Movement	Storage (ft)	Maximum Queue (ft)					
				2030 No Build		2030 with Repurposed Lane		Change in Queue Length from No Build (ft)	
				Peak Hour		Peak Hour			
				AM	PM	AM	PM	AM	PM
SE 192nd Avenue & SE 34th Street	EB	L	175	**225**	**225**	**225**	**225**	+0	+0
		T	450	225	325	425	**475**	+200	+150
		TR	450	250	325	-	-	-	-
	WB	L	175	200	225	200	225	+0	+0
		T	425	125	425	200	400	+75	-25
		R[1]	425	150	300	75	100	-75	-200
	NB	L	375	175	250	225	**425**	+50	+175
		T	725	250	350	275	475	+25	+125
		R	375	150	100	150	100	+0	+0
	SB	L	325	175	**350**	**200**	**400**	+25	+50
		T	525	250	**500**	250	**550**	+0	+50
		TR	325	275	**475**	275	**550**	+0	+75

Notes:
L= Left, T=Through, R=Right, TR=Through/Right
NB=Northbound, SB=Southbound, EB=Eastbound, WB =Westbound
[1]Movement is a shared through/right under the No Build conditions.
Locations where queue exceeds available storage are shown in bold red text.

Table 13. 2030 Travel Time Summary

Direction	Peak Hour Travel Time (min:sec)				Travel Time Change from No Build (min:sec)	
	No Build		With Repurposed Lane			
	AM	PM	AM	PM	AM	PM
Eastbound between SE 164th Avenue and SE 192nd Avenue	4:30	4:47	5:18	6:18	+0:47	+01:31
Westbound between SE 192nd Avenue and SE 164th Avenue	4:18	4:33	5:05	5:28	+0:47	+0:55

2040 Operations Findings

By 2040, under the No Build scenario, congestion along SE 34th Street is expected to increase, particularly during the PM peak hour. Findings for 2040 conditions are presented in **Table 14** through **Table 16**. The findings shown below assume that the connection of SE 29th Street to SE 192nd Avenue is completed as part of the VIC redevelopment, which is expected to be completed by 2040.

Under No Build conditions, all study intersections would operate at LOS D better except for the SE 164th Avenue intersection which operates at LOS E during the PM peak hour.

During the AM peak hour, repurposing a lane would result in the following LOS changes:

- SE 164th Avenue from LOS C to LOS D
- SE 172nd Avenue from LOS C to LOS E
- SE 176th Avenue and SE 177th Avenue LOS A to LOS B

During the PM peak hour, repurposing a lane would result in the following LOS changes:

- SE 164th Avenue from LOS E to LOS F
- SE 172nd Avenue from LOS A to LOS B
- SE 177th Avenue from LOS D to LOS E
- SE 192nd Avenue from LOS C to LOS D
- SE 192nd Avenue from LOS D to LOS F

Queueing results for the 2040 scenarios indicate that vehicle queues will exceed available capacity for several movements at the SE 164th Avenue and SE 192nd Avenue intersections under the No

Build alternative and With Repurposed Lane Scenario. Repurposing a travel lane would extend queues, particularly during the PM peak hour. On SE 164th and SE 192nd Avenues, long-term improvements outside the scope of this project may be needed to accommodate queuing at those intersections.

At SE 164th Avenue, the repurposed lane scenario will increase queues for three movements that exceed available storage under the No Build Alternative: the westbound left-turn during both peak hours, the northbound left-turn during the AM peak hour, and northbound right-turn during the PM peak hour. With the repurposed lane in place, the eastbound left-turn queue would also exceed storage during the PM peak hour.

At SE 192nd Avenue, there is little change in queueing during the AM peak hour with the repurposed lane in place. During the PM peak hour, queueing would increase for most movements. This is a result of signal timing changes required to provide adequate green time to the east/west approaches.

Consistent with findings for intersection operations and queueing, travel time along the corridor with a repurposed lane is expected to increase by 2040. Repurposing a travel lane would result in travel time increases of less than one minute during the AM peak hour. A more substantial increase would be expected during the PM peak hour with travel time increasing by approximately three minutes and forty-five seconds for eastbound vehicles and one minute for westbound vehicles.

Table 14. 2040 LOS Summary

Location	Intersection Control	2040 No Build				2040 with Repurposed Lane				Delay Change from No Build (seconds)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	AM	PM
SE 164th Avenue & SE 34th Street	Signalized	C	32	**E**	63	D	43	**F**	88	+11	+25
SE 168th Avenue & SE 34th Street	Signalized	A	6	A	8	A	10	B	14	+4	+6
SE 172nd Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	C	20(NBT)	D	30(NBT)	**E**	36(NBT)	**E**	40(NBL)	+16	+10
SE 176th Avenue & SE 34th Street	Signalized	A	9	B	11	B	12	B	19	+3	+8
SE 177th Avenue & SE 34th Street	Side-Street Stop-Controlled[1]	A	9(NBL)	C	14(NBL)	B	11(NBL)	C	25(NBL)	+2	+11
Hiddenbrook Drive & SE 34th Street	Signalized	C	23	C	21	C	25	D	40	+2	+19
SE 192nd Avenue & SE 34th Street	Signalized	C	25	D	42	C	28	**F**	86	+3	+44

Notes:
Bold text indicates LOS E or F Operations.
[1] For side street stop-controlled intersections, the movement with the highest delay is reported and shown in parenthesis.

Table 15. 2040 Queue Summary

Intersection	Approach	Movement	Storage (ft)	Maximum Queue (ft)					
				2040 No Build		2040 with Repurposed Lane		Change in Queue Length from No Build (ft)	
				Peak Hour		Peak Hour			
				AM	PM	AM	PM	AM	PM
SE 164th Avenue & SE 34th Street	EB	L	175	125	125	125	**200**	+0	+75
		T	350	175	275	150	250	-25	-25
		R	350	150	225	150	225	+0	+0
	WB	L	425	300	300	**475**	**475**	+175	+175
		T	925	225	325	675	800	+450	+475
		R	200	150	200	125	200	-25	+0
	NB	L	400	350	**475**	**450**	**475**	+100	+0
		T	900	525	**925**	825	950	+300	+25
		R	900	300	**925**	375	**950**	+75	+25
	SB	L	250	**300**	**325**	**300**	**325**	+0	+0
		T	1,025	325	650	425	950	+100	+300
		R	1,025	225	500	250	775	+25	+275

Intersection	Approach	Movement	Storage (ft)	Maximum Queue (ft)					
				2040 No Build		2040 with Repurposed Lane		Change in Queue Length from No Build (ft)	
				Peak Hour		Peak Hour			
				AM	PM	AM	PM	AM	PM
SE 192nd Avenue & SE 34th Street	EB	L	175	175	**225**	**225**	**225**	+50	+0
		T	450	200	250	450	**550**	+250	+300
		R	450	250	275	-	-	-	-
	WB	L	175	**200**	**225**	**225**	**225**	+25	+0
		T	425	175	425	250	425	+75	+0
		R[1]	425	200	400	100	150	-100	-250
	NB	L	375	175	300	225	**475**	+50	+175
		T	725	300	500	325	**775**	+25	+275
		R	375	175	200	175	**450**	+0	+250
	SB	L	325	200	325	225	**400**	+25	+75
		T	525	275	425	300	**550**	+25	+125
		TR	525	300	425	275	**550**	-25	+125

Notes:
L= Left, T=Through, R=Right, TR=Through/Right, NB=Northbound, SB=Southbound, EB=Eastbound, WB =Westbound
[1]Movement is a TR under the No Build alternative.
Bold text indicates movement exceeds available storage.

Table 16. 2040 Travel Time Summary

Direction	Peak Hour Travel Time (min:sec)				Travel Time Change from No Build (min:sec)	
	No Build		With Repurposed Lane			
	AM	PM	AM	PM	AM	PM
Eastbound between SE 164th Avenue and SE 192nd Avenue	4:36	4:50	5:37	8:33	+1:00	+3:43
Westbound between SE 192nd Avenue and SE 164th Avenue	4:19	4:50	5:05	5:50	+0:46	+1:00

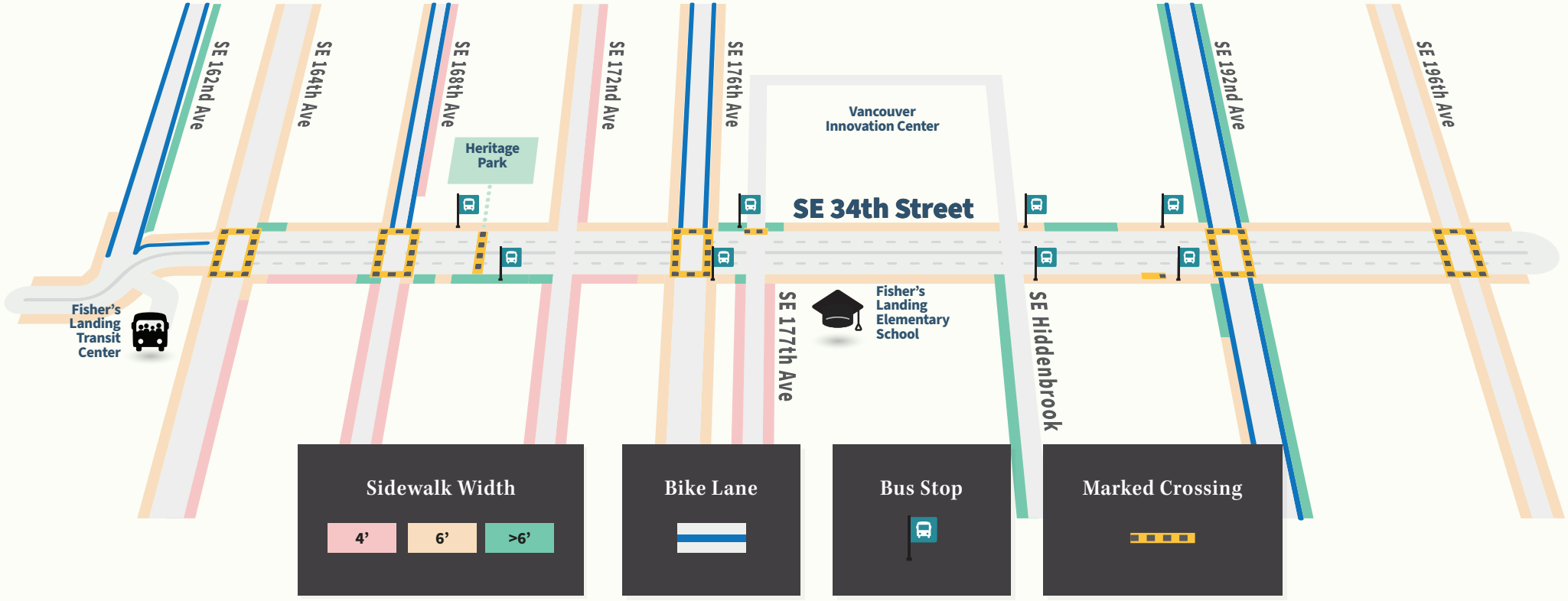
Summary

Key takeaways from the analysis presented in the sections above include:

- One travel lane in the eastbound and westbound directions can be repurposed to provide dedicated space for people walking and biking with moderate impact on vehicle operations under 2024 and 2030 conditions.
- By 2040, congestion on SE 34th Street is expected to increase, particularly during the PM peak hour when intersection operations will begin to degrade under the No Build scenarios.
- Repurposing a travel lane under 2040 conditions would increase intersection delay, queuing, and travel time on SE 34th Street during the PM peak hour at SE 164th Avenue, SE 192nd Avenue, and stop-controlled intersections along the corridor.

SE 34th Street

Attachment A. Existing Infrastructure



FEHR PEERS

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Appendix A: Traffic Volumes Memorandum

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www.fehrandpeers.com

Memorandum

Date: January 31, 2023

To: Emily Benoit, City of Vancouver

From: Camilo Alvarez Tuta, EIT & Kara Hall, PE

Subject: SE 34th Street Safety & Mobility Project Data Collection Update

PT21-0068

Introduction

This memorandum presents updated traffic volume data for the SE 34th Street Safety & Mobility Project and proposed next steps for the traffic analysis.

Traffic volume data, including turning movement counts at study intersections and 24-hour tube counts, were initially collected in January 2022 and used to evaluate a proposed lane reconfiguration on SE 34th Street. A review of this data, completed at the beginning of the traffic analysis phase, found that traffic volume on SE 34th Street had increased compared to data collected in 2020 and 2021 but was still approximately 15 percent lower than pre-COVID conditions (i.e., traffic counts collected between 2017 and 2019).

In November 2022, a volume comparison using counts collected on SE 34th Street in May 2022 as part of another traffic study, found that traffic volume on the corridor had increased substantially between January and May 2022 as traffic patterns continued to return to pre-COVID conditions.

Through coordination with City staff it was determined that new traffic volume data should be collected in December 2022 and compared to January 2022 data to determine if the baseline data being used for the SE 34th Street Safety & Mobility Project should be adjusted to reflect current conditions on the corridor.

Volume Comparison

To determine if baseline volume data should be adjusted to reflect December 2022 conditions, volume data collected in December 2022 was compared to data collected in January 2022. The comparison was completed using AM and PM peak hour volume data at the seven study intersections. As shown in **Table 1**, a comparison using the total volume entering the study

intersections found that volume increased by more than 10 percent at all study intersections between January and December during both peak hours. A review of 24-hour counts collected on SE 34th Street just east of SE 164th Avenue also found that daily volume on the corridor increased from 10,300 trips in January to 11,934 trips in December which equates to a 16 percent increase.

Table 1. Total Peak Hour Volume Comparison

Intersection	Percent Change (Dec. 2022 – Jan. 2022)	
	AM Peak Hour	PM Peak Hour
1. 164th Avenue/34th Street	+15%	+12%
2. 168th Avenue/34th Street	+19%	+18%
3. 172nd Avenue/34th Street	+15%	+16%
4. 176th Avenue/34th Street	+16%	+15%
5. 177th Avenue/34th Street	+21%	+19%
6. Hiddenbrook Drive/34th Street	+14%	+18%
7. 192nd Avenue/34th Street	+11%	+14%
Average	***+16%***	***+16%***

To understand how current traffic volume compares to pre-COVID conditions, volume collected in December 2022 was compared to volume collected in October 2018 at the SE 192nd Avenue intersection. The change in volume between 2018 and 2022 during the peak hours can be found in **Table 2** and **Table 3**.

During the AM peak hour, the total intersection volume was found to be within one percent of 2018 volume. While the volume for most movements was found to be higher in 2022 than 2018, volume on the westbound approach was lower for all movements.

Table 2. AM Peak Hour Comparison (Oct. 2018 to Dec. 2022)

Time Period	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Oct. 2018	47	534	223	95	367	72	78	120	25	210	113	74
Dec. 2022	70	520	290	88	380	84	66	123	28	143	95	45
Difference	+23	-14	+67	-7	+13	+12	-12	+3	+3	-67	-18	-29

Notes: The difference shown represents 2022 counts subtracted from 2018 counts.

During the PM peak hour, the total volume at the intersection was found to be nine percent, or 288 trips, lower in December 2022 than October 2018. While there are minor volume differences on the northbound, southbound, and eastbound approaches, the largest volume difference is the decrease in volume on the westbound approach. The decrease in volume for all movements on the westbound approach compared to 2018 is consistent with findings during the AM peak hour.

Table 3. PM Peak Hour Comparison (Oct. 2018 to Dec. 2022)

Time Period	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	L	T	R	L	L	T	R	L
Oct. 2018	74	785	144	172	752	101	122	143	49	362	204	106
Dec. 2022	69	733	134	167	673	75	100	171	57	295	153	99
Difference	-5	-52	-10	-5	-79	-26	-22	+28	+8	-67	-51	-7

Notes: The difference shown represents 2022 counts subtracted from 2018 counts.

The Vancouver Innovation Center (VIC) is the primary generator for employment trips on SE 34th Street between SE 164th Avenue and SE 192nd Avenue. As employment trips were drastically reduced because of the transition to remote work during the COVID-19 pandemic and the site is only partially occupied with occupancy rates expected to increase between January and March 2023, two comparisons were completed for volume entering and exiting the site.

The first, compared the number of trips entering and exiting the site during the peak hours in January 2022 to the number of peak hour trips in December 2022. As shown in **Table 4**, the comparison found that between January and December the number of trips entering the site during the AM peak hour increased by nearly 100 trips and a similar increase was observed in outbound trips during the PM peak hour. This finding indicates that the number of people working in-person at the site has increased substantially from January 2022.

Table 4. VIC Trip Generation Comparison

Month/Year	AM Peak Hour Trips		PM Peak Hour Trips	
	Inbound	Outbound	Inbound	Outbound
January 2022	121	22	24	92
December 2022	216	22	24	191
Difference (Dec. – Jan.)	+95	0	0	+99

The second comparison compared the number of trips in December 2022 to the number of trips the site is expected to generate when the current site is fully occupied. The trip generation for the

fully occupied scenario is based on trip generation rates documented in the *Traffic Impact Analysis for the Vancouver Innovation Center Master Plan* (November 2020). As shown in **Table 5**, the number of trips traveling to and from the site in December was found to be lower than the expected number of trips traveling to the site when existing buildings are fully occupied.

Table 5. VIC Fully Occupied Trip Generation Comparison

Scenario	AM Peak Hour Trips		PM Peak Hour Trips	
	Inbound	Outbound	Inbound	Outbound
December 2022	216	22	24	191
Full Occupancy (Existing Site)[1]	262	120	76	368
Difference (Full Occupancy – Dec. 2022)	-46	-98	-52	-177

Source Notes:
[1]Table 4: Site Trip Generation Estimate, *Traffic Impact Analysis for the Vancouver Innovation Center Master Plan* (Kittelson & Associates, November 2020)

For more detailed information on volume data collected in January and December 2022 see **Attachment A** and **B** respectively. For volume changes for specific turning movements between January and December 2022, see **Attachment C**.

Proposed Next Steps

This section documents the proposed next steps for updating the traffic analysis for the SE 34th Street Safety & Mobility Project.

Updates to the baseline volume data: Based on the findings that volume increased by an average of 16 percent at all study intersections during peak hours and during a 24-hour period, it is recommended that baseline volume data be updated to reflect December 2022 conditions.

Updates to future scenarios: As the existing volume data serves as the baseline for all future traffic volume forecasts, all future volume scenarios should be updated to reflect the new baseline data. To align with timing of the paving project, it is recommended that traffic volumes reflecting conditions in the following years be analyzed: 2024, 2030, and 2040.

To develop traffic volume forecasts for those years, the following approach will be applied:

Opening Day (2024):

- Because the opening day scenario is within five years, an aggressive growth rate of two percent per year will be applied to 2022 counts.
- Addition of trips shown in **Table 3** needed to reflect full occupancy of the existing VIC site based on trip distribution derived from the December 2022 counts.

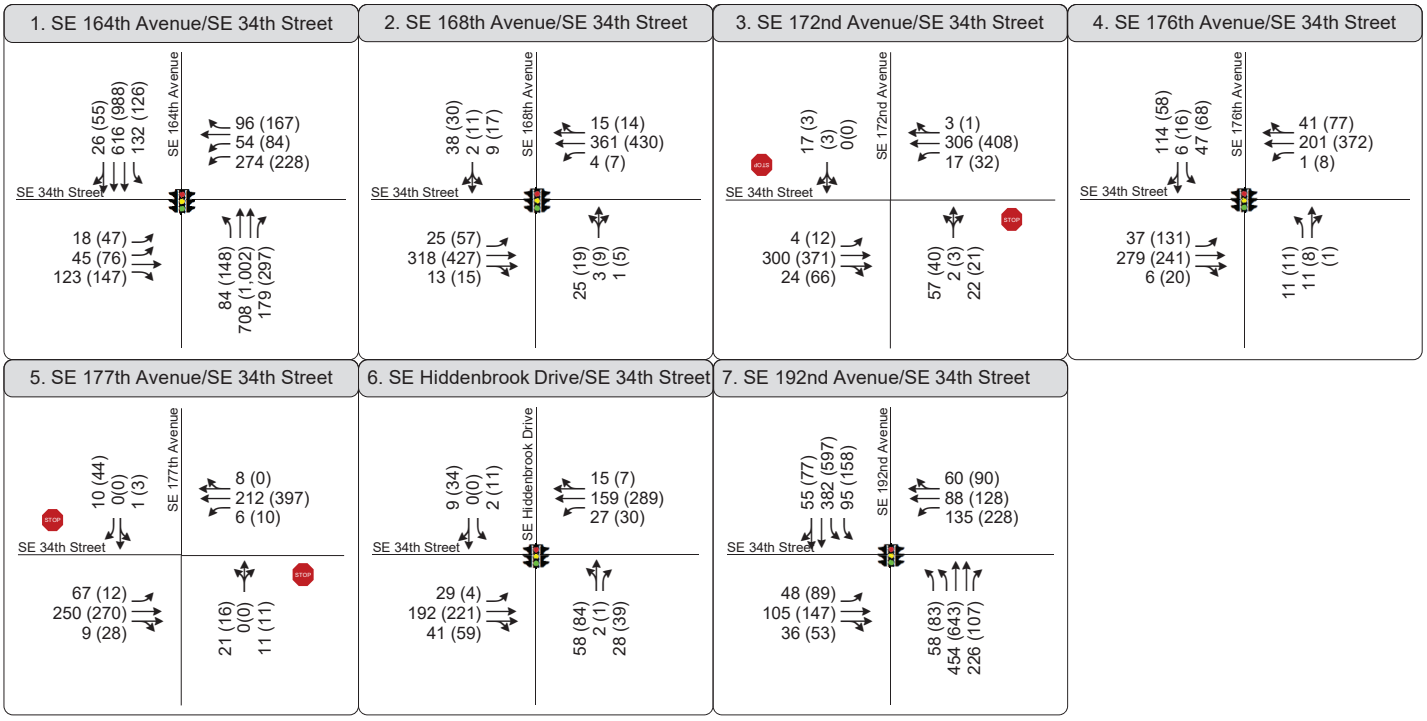
Medium-Term (2030):

- Six years of growth applied to Opening Day (2024) volumes using growth rates from the Southwest Regional Transportation Council (SWRTC) travel demand model (0.9 percent per year for the AM peak hour and 1.16 percent per year for the PM peak hour).
- Apply any additional growth needed to ensure that growth by 2030 includes new trips resulting from the planned Section 30 Development and the HQ Master Plan.

Long-Term (2040):

- 10 years of growth applied to the Medium-Term (2030) volumes using growth rates derived from the SWRTC model.
- Addition of trips resulting from full buildout of the VIC as documented in the traffic analysis for the VIC.

Attachment A. January 2022 Traffic Volumes

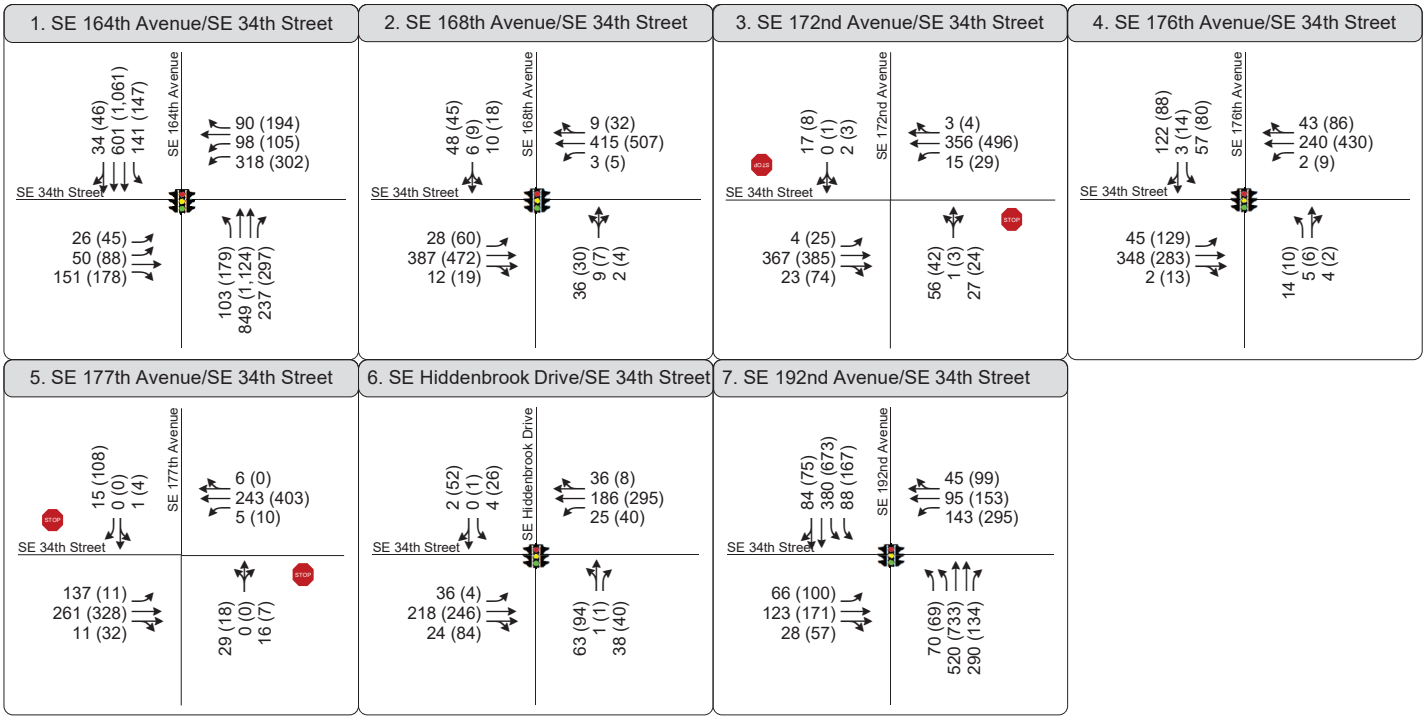


Legend:

- Study Intersection
- Stop Control
- Signal Control
- Lane Configuration

AM (PM) Peak Hour Traffic Volumes
and Lane Configurations
January 2022

Attachment B. December 2022 Traffic Volumes



Legend:

- Study Intersection
- Stop Control
- Signal Control
- Lane Configuration

AM (PM) Peak Hour Traffic Volumes
and Lane Configurations
December 2022

Attachment C. Peak Hour Volume Comparison by Movement

AM Peak Hour

Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1. 164th Avenue/34th Street	+19	+141	+58	+9	-15	+8	+8	+5	+28	+44	+43	-6	+342
2. 168th Avenue/34th Street	+11	+6	+1	+1	+4	+10	+3	+69	-1	-1	+57	-6	+154
3. 172nd Avenue/34th Street	-1	-1	+5	+2	+0	+0	+0	+63	-1	-2	+51	+0	+116
4. 176th Avenue/34th Street	+3	-6	+4	+10	-3	+8	+8	+67	-4	+1	+35	+2	+125
5. 177th Avenue/34th Street	+8	+0	+5	+0	+0	+5	+70	+10	+2	-1	+30	-2	+127
6. Hiddenbrook Drive/34th Street	+5	-1	+10	+2	+0	-7	+7	+29	-17	-2	+30	+21	+77
7. 192nd Avenue/34th Street	+12	+66	+64	-7	-2	+29	+18	+18	-8	+8	+7	-15	+190

PM Peak Hour

Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1. 164th Avenue/34th Street	+31	+122	0	+21	+73	-9	-2	+19	+31	+74	+21	+27	+408
2. 168th Avenue/34th Street	+11	-2	-1	+1	-2	+15	+3	+45	+4	-2	+91	+18	+181
3. 172nd Avenue/34th Street	+2	+0	+3	+3	-2	+5	+13	+16	+8	-3	+100	+3	+148
4. 176th Avenue/34th Street	-1	-2	+1	+12	-2	+30	-2	+43	-7	+1	+70	+9	+152
5. 177th Avenue/34th Street	+2	+0	-4	+1	+0	+64	-1	+61	+4	+0	+19	+0	+146
6. Hiddenbrook Drive/34th Street	+10	+0	+1	+15	+1	+18	+0	+23	+25	+10	+30	+1	+134
7. 192nd Avenue/34th Street	-14	+90	+27	+9	+76	-2	+11	+24	+4	+67	+25	+9	+326

Appendix B: Traffic Count Data

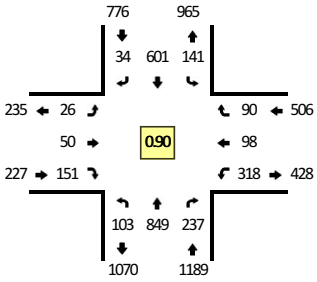
Type of peak hour being reported: Intersection Peak

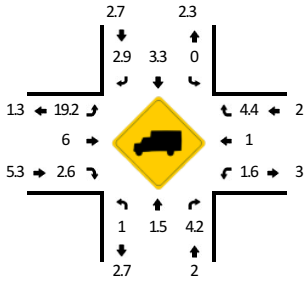
Method for determining peak hour: Total Entering Volume

LOCATION: SE 164th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

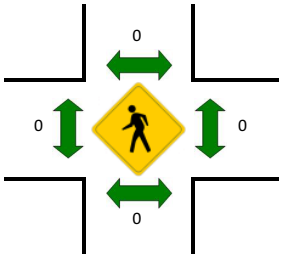
QC JOB #: 16019601
DATE: Tue, Dec 6 2022

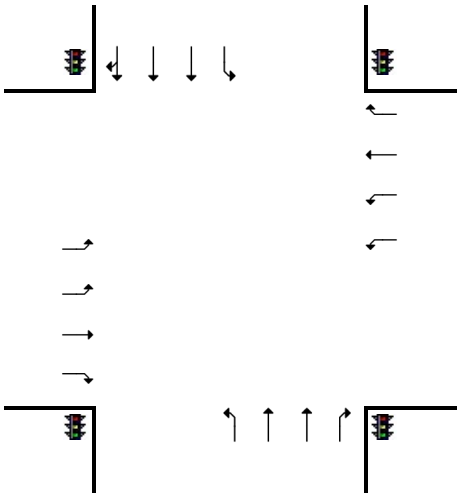
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

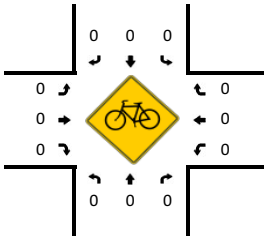


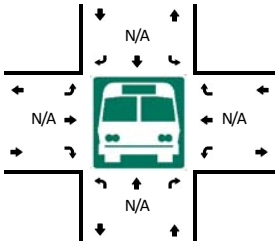


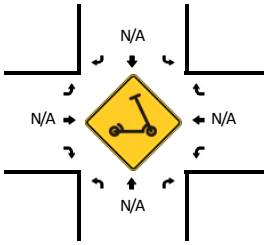
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	SE 164th Ave (Northbound)				SE 164th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	49	8	0	6	31	1	0	3	2	8	0	20	4	1	0	139	
7:05 AM	7	44	10	0	9	46	3	0	1	3	13	0	16	3	4	0	159	
7:10 AM	5	31	7	0	3	48	3	0	0	3	15	0	23	7	2	0	147	
7:15 AM	4	50	18	0	9	46	2	0	4	2	11	0	27	4	6	0	183	
7:20 AM	9	54	11	0	5	41	1	0	0	4	11	0	22	11	5	0	174	
7:25 AM	2	65	12	0	10	58	2	0	3	5	8	0	26	5	8	0	204	
7:30 AM	10	43	10	0	8	47	1	0	1	4	14	0	33	20	7	0	198	
7:35 AM	5	68	21	0	13	59	4	0	2	2	8	0	22	5	10	0	219	
7:40 AM	9	54	19	0	9	58	3	0	3	5	12	0	32	8	5	0	217	
7:45 AM	12	86	27	0	19	57	6	0	1	4	6	0	24	1	9	0	252	
7:50 AM	8	81	23	0	10	46	3	0	2	8	13	0	31	11	3	0	239	
7:55 AM	7	95	24	0	19	55	4	0	0	6	15	0	24	8	4	0	261	2392
8:00 AM	8	56	22	0	13	32	0	0	4	2	9	0	27	10	13	0	196	2449
8:05 AM	8	73	16	0	14	68	3	0	0	4	5	0	32	11	7	0	241	2531
8:10 AM	11	58	25	0	4	34	1	0	3	6	15	0	25	6	9	0	197	2581
8:15 AM	10	93	17	0	14	50	5	0	2	1	19	0	16	7	12	0	246	2644
8:20 AM	9	62	15	0	8	39	3	0	5	4	24	0	30	6	7	0	212	2682
8:25 AM	6	80	18	0	10	56	1	0	3	4	11	0	22	5	4	0	220	2698
8:30 AM	10	50	9	0	11	46	4	0	4	4	12	0	23	1	9	0	183	2683
8:35 AM	5	63	12	0	14	60	1	0	1	4	10	0	20	4	6	0	200	2664
8:40 AM	8	70	16	0	7	47	2	0	2	7	9	0	29	4	12	0	213	2660
8:45 AM	4	68	18	0	15	67	4	0	2	0	8	0	33	4	6	0	229	2637
8:50 AM	9	69	22	0	11	38	0	0	2	8	16	0	17	14	9	0	215	2613
8:55 AM	8	83	21	0	9	57	2	0	2	4	8	0	26	5	4	0	229	2581

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	108	1048	296	0	192	632	52	0	12	72	136	0	316	80	64	0	3008
Heavy Trucks	0	8	0		0	24	4		4	8	0		12	0	0		60
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

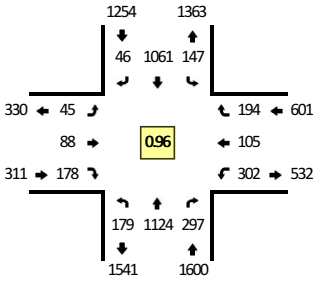
Type of peak hour being reported: Intersection Peak

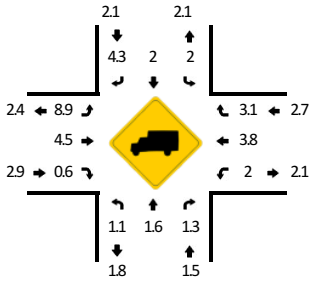
Method for determining peak hour: Total Entering Volume

LOCATION: SE 164th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

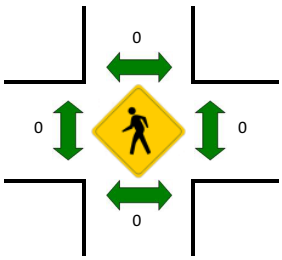
QC JOB #: 16019602
DATE: Tue, Dec 6 2022

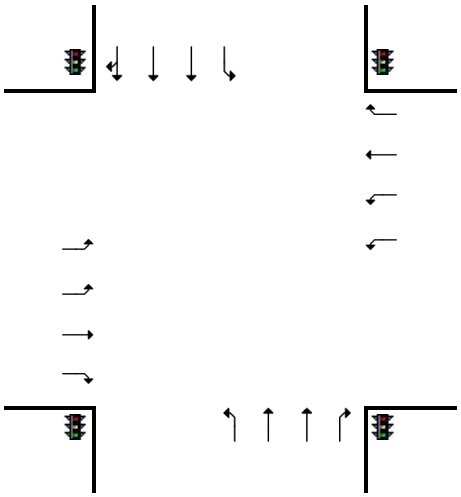
Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

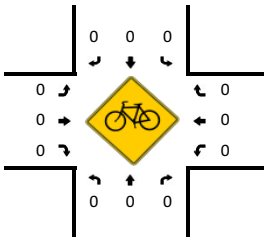


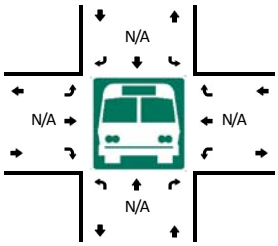


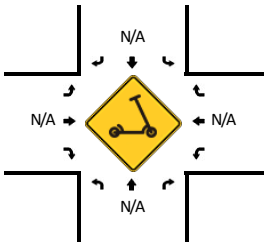
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	SE 164th Ave (Northbound)				SE 164th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	11	81	26	0	10	70	7	0	5	3	9	0	31	10	11	0	274	
4:05 PM	18	116	26	0	6	79	3	0	3	6	24	0	24	8	15	0	328	
4:10 PM	14	84	23	0	16	94	3	0	1	8	10	0	40	10	18	0	321	
4:15 PM	19	104	31	0	8	89	4	0	1	3	14	0	13	5	15	0	306	
4:20 PM	10	73	31	0	16	106	2	0	3	7	11	0	24	7	13	0	303	
4:25 PM	17	125	23	0	14	75	6	0	1	1	17	0	19	9	12	0	319	
4:30 PM	12	81	26	0	13	80	3	0	3	7	9	0	28	3	13	0	278	
4:35 PM	18	105	22	0	5	84	5	0	6	10	20	0	24	11	13	0	323	
4:40 PM	11	77	26	0	13	96	4	0	10	10	14	0	36	14	28	0	339	
4:45 PM	22	114	21	0	14	77	5	0	2	9	17	0	21	8	12	0	322	
4:50 PM	11	81	20	0	17	80	3	0	8	13	11	0	20	10	21	0	295	
4:55 PM	17	98	26	0	11	94	6	0	2	4	12	0	22	12	16	0	320	3728
5:00 PM	10	66	22	0	14	107	2	0	5	10	19	0	31	8	18	0	312	3766
5:05 PM	16	106	23	0	12	89	4	0	5	9	17	0	23	4	16	0	324	3762
5:10 PM	8	72	24	0	14	107	5	0	4	6	14	0	27	14	21	0	316	3757
5:15 PM	11	114	29	0	10	74	1	0	4	8	14	0	14	6	9	0	294	3745
5:20 PM	11	59	26	0	18	83	0	0	2	5	10	0	22	6	18	0	260	3702
5:25 PM	19	101	32	0	10	88	3	0	6	7	17	0	12	13	15	0	323	3706
5:30 PM	12	63	24	0	21	77	3	0	1	10	16	0	19	8	15	0	269	3697
5:35 PM	15	113	35	0	10	73	2	0	5	3	14	0	26	3	11	0	310	3684
5:40 PM	6	84	23	0	10	104	1	0	8	6	15	0	27	7	9	0	300	3645
5:45 PM	14	89	35	0	5	74	6	0	3	4	10	0	16	1	9	0	266	3589
5:50 PM	11	75	25	0	7	83	3	0	0	3	13	0	22	4	9	0	255	3549
5:55 PM	17	70	21	0	7	57	2	0	3	4	9	0	12	1	10	0	213	3442

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	204	1184	276	0	128	1028	56	0	72	116	204	0	324	132	212	0	3936
Heavy Trucks	0	28	8		0	12	4		4	8	4		0	12	0		80
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

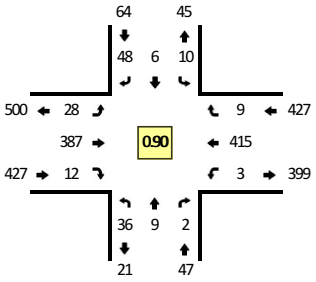
Type of peak hour being reported: Intersection Peak

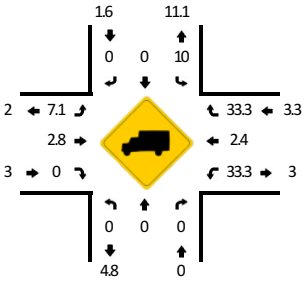
Method for determining peak hour: Total Entering Volume

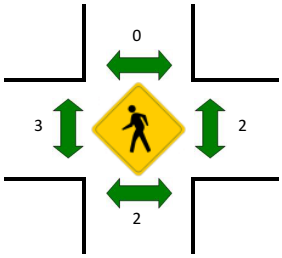
LOCATION: SE 168th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

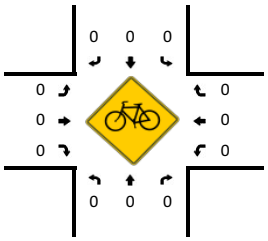
QC JOB #: 16019603
DATE: Tue, Dec 6 2022

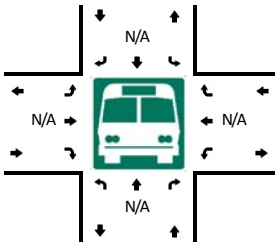
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:55 AM -- 8:10 AM

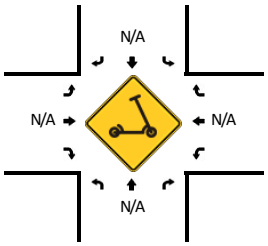












5-Min Count Period Beginning At	SE 168th Ave (Northbound)				SE 168th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	1	0	0	0	0	3	0	2	14	0	0	0	21	0	0	42	
7:05 AM	0	0	1	0	0	0	4	0	0	22	0	0	0	30	0	0	57	
7:10 AM	1	0	0	0	0	0	3	0	0	11	0	0	0	20	0	0	35	
7:15 AM	0	1	1	0	0	0	4	0	2	27	0	0	0	33	2	0	70	
7:20 AM	3	2	1	0	0	1	11	0	2	16	0	0	0	27	2	0	65	
7:25 AM	2	0	1	0	1	0	4	0	2	28	1	0	0	31	1	0	71	
7:30 AM	4	0	0	0	0	0	4	0	0	19	0	0	0	40	3	0	70	
7:35 AM	3	0	0	0	1	0	7	0	3	34	1	0	0	42	0	0	91	
7:40 AM	4	1	0	0	2	1	3	0	0	30	0	0	0	31	0	0	72	
7:45 AM	1	1	0	0	0	0	3	0	2	48	1	0	0	38	1	0	95	
7:50 AM	3	0	0	0	0	0	3	0	2	37	0	1	0	26	1	0	73	
7:55 AM	2	0	0	0	2	2	6	0	2	48	1	0	0	34	0	0	97	838
8:00 AM	5	2	1	0	1	0	3	0	3	31	2	0	1	38	1	0	88	884
8:05 AM	6	2	0	0	1	1	2	0	5	30	1	0	0	36	0	0	84	911
8:10 AM	2	1	1	0	1	0	3	0	0	30	1	0	0	37	1	0	77	953
8:15 AM	0	1	0	0	2	2	2	0	2	31	2	0	0	36	2	0	80	963
8:20 AM	2	0	0	0	0	0	4	0	5	17	2	0	0	28	0	0	58	956
8:25 AM	4	1	0	0	0	0	8	0	3	32	1	0	2	29	0	0	80	965
8:30 AM	4	3	1	0	3	1	4	0	0	22	1	0	0	17	2	0	58	953
8:35 AM	1	0	0	0	0	0	1	0	1	30	0	0	0	30	0	0	63	925
8:40 AM	1	0	1	0	0	0	7	0	3	19	3	0	0	48	1	0	83	936
8:45 AM	5	0	0	0	1	1	2	0	4	34	1	0	1	19	1	0	69	910
8:50 AM	5	1	0	0	2	0	4	0	3	32	1	0	1	40	2	0	91	928
8:55 AM	6	0	0	0	2	0	1	0	5	32	1	0	0	17	1	0	65	896

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	16	4	0	16	12	44	0	40	436	16	0	4	432	4	0	1076
Heavy Trucks	0	0	0		0	0	0		8	8	0		4	4	0		24
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

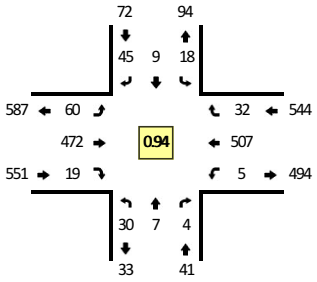
Type of peak hour being reported: Intersection Peak

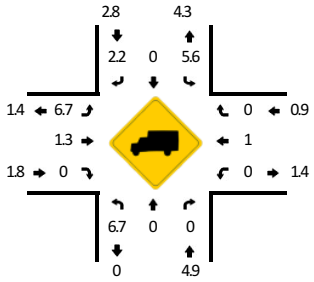
Method for determining peak hour: Total Entering Volume

LOCATION: SE 168th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

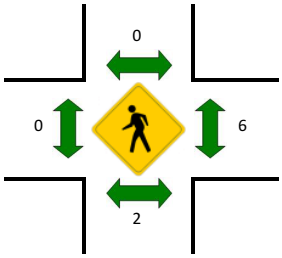
QC JOB #: 16019604
DATE: Tue, Dec 6 2022

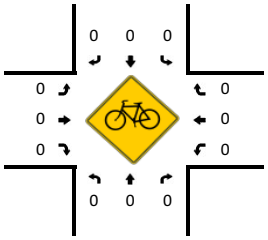
Peak-Hour: 4:35 PM -- 5:35 PM
Peak 15-Min: 4:55 PM -- 5:10 PM

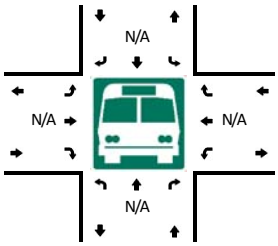


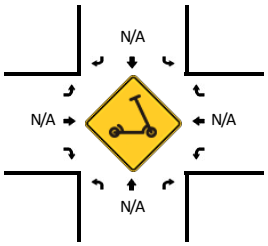


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	SE 168th Ave (Northbound)				SE 168th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	0	0	2	1	5	0	5	34	0	0	1	50	1	0	100	
4:05 PM	0	1	0	0	1	0	3	0	3	29	5	1	2	47	3	0	95	
4:10 PM	2	0	1	0	3	2	1	0	8	34	4	0	1	55	1	0	112	
4:15 PM	1	2	0	0	0	1	2	0	2	40	3	0	0	38	2	0	91	
4:20 PM	0	3	1	0	2	1	5	0	5	43	2	0	0	32	0	0	94	
4:25 PM	4	0	1	0	2	0	6	0	4	37	1	1	0	38	1	0	95	
4:30 PM	3	0	1	0	1	0	1	0	8	34	4	0	0	23	3	0	78	
4:35 PM	2	0	1	0	1	0	5	0	2	35	0	0	0	66	0	0	112	
4:40 PM	1	0	0	0	2	1	5	0	5	37	0	0	0	58	0	0	109	
4:45 PM	1	0	1	0	0	1	2	0	1	46	2	0	1	35	1	0	91	
4:50 PM	1	3	1	0	2	2	4	0	6	41	2	0	1	39	2	0	104	
4:55 PM	5	0	0	0	3	1	4	0	5	41	1	0	0	52	0	0	112	1193
5:00 PM	6	0	0	0	0	1	5	0	2	38	2	0	0	39	9	0	102	1195
5:05 PM	4	1	0	0	1	0	2	0	3	40	2	1	2	46	4	0	106	1206
5:10 PM	0	1	0	0	0	1	4	0	5	38	1	1	0	44	3	0	98	1192
5:15 PM	3	0	0	0	3	0	6	0	6	38	0	0	0	29	1	0	86	1187
5:20 PM	4	1	0	0	1	1	3	0	9	40	2	0	0	29	5	0	95	1188
5:25 PM	1	1	1	0	2	0	2	0	6	39	4	2	0	39	5	0	102	1195
5:30 PM	2	0	0	0	3	1	3	0	5	39	3	1	1	31	2	0	91	1208
5:35 PM	0	0	0	0	2	0	7	0	4	47	6	0	0	40	1	0	107	1203
5:40 PM	0	0	1	0	3	2	4	0	2	33	1	0	0	32	2	0	80	1174
5:45 PM	0	0	0	0	0	0	1	0	3	39	4	1	0	33	2	0	83	1166
5:50 PM	2	1	1	0	2	1	4	0	5	27	4	0	0	24	0	0	71	1133
5:55 PM	1	1	0	0	1	1	1	0	5	25	1	1	1	20	1	0	59	1080

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	4	0	0	16	8	44	0	40	476	20	4	8	548	52	0	1280
Heavy Trucks	4	0	0		4	0	0		4	4	0		0	4	0		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

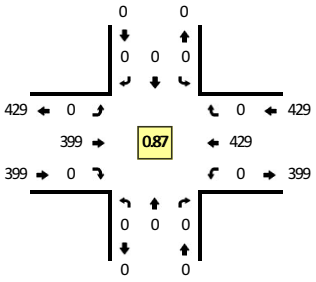
Type of peak hour being reported: Intersection Peak

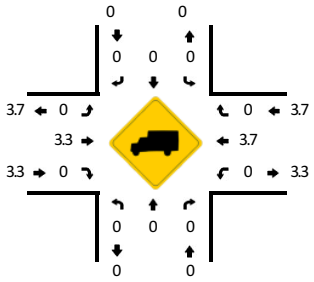
Method for determining peak hour: Total Entering Volume

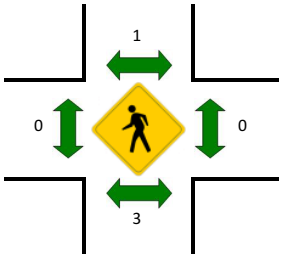
LOCATION: Pedestrian Signal -- SE 34th St
CITY/STATE: Vancouver, WA

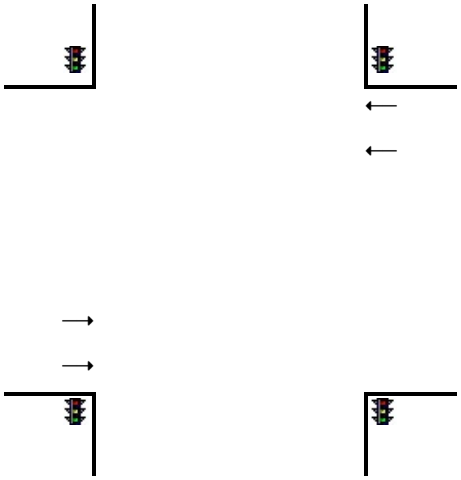
QC JOB #: 16019605
DATE: Tue, Dec 6 2022

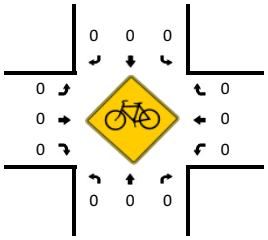
Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

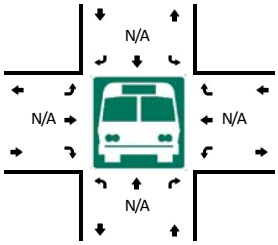


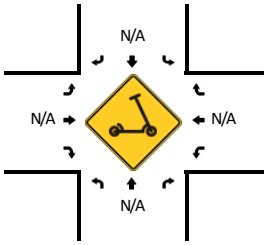












5-Min Count Period Beginning At	Pedestrian Signal (Northbound)				Pedestrian Signal (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	13	0	0	0	20	0	0	33	
7:05 AM	0	0	0	0	0	0	0	0	0	24	0	0	0	31	0	0	55	
7:10 AM	0	0	0	0	0	0	0	0	0	12	0	0	0	26	0	0	38	
7:15 AM	0	0	0	0	0	0	0	0	0	27	0	0	0	32	0	0	59	
7:20 AM	0	0	0	0	0	0	0	0	0	17	0	0	0	30	0	0	47	
7:25 AM	0	0	0	0	0	0	0	0	0	31	0	0	0	31	0	0	62	
7:30 AM	0	0	0	0	0	0	0	0	0	19	0	0	0	44	0	0	63	
7:35 AM	0	0	0	0	0	0	0	0	0	32	0	0	0	40	0	0	72	
7:40 AM	0	0	0	0	0	0	0	0	0	35	0	0	0	32	0	0	67	
7:45 AM	0	0	0	0	0	0	0	0	0	48	0	0	0	40	0	0	88	
7:50 AM	0	0	0	0	0	0	0	0	0	37	0	0	0	26	0	0	63	
7:55 AM	0	0	0	0	0	0	0	0	0	51	0	0	0	36	0	0	87	734
8:00 AM	0	0	0	0	0	0	0	0	0	31	0	0	0	39	0	0	70	771
8:05 AM	0	0	0	0	0	0	0	0	0	33	0	0	0	37	0	0	70	786
8:10 AM	0	0	0	0	0	0	0	0	0	29	0	0	0	39	0	0	68	816
8:15 AM	0	0	0	0	0	0	0	0	0	36	0	0	0	35	0	0	71	828
8:20 AM	0	0	0	0	0	0	0	0	0	16	0	0	0	29	0	0	45	826
8:25 AM	0	0	0	0	0	0	0	0	0	33	0	0	0	31	0	0	64	828
8:30 AM	0	0	0	0	0	0	0	0	0	24	0	0	0	19	0	0	43	808
8:35 AM	0	0	0	0	0	0	0	0	0	32	0	0	0	32	0	0	64	800
8:40 AM	0	0	0	0	0	0	0	0	0	19	0	0	0	50	0	0	69	802
8:45 AM	0	0	0	0	0	0	0	0	0	35	0	0	0	22	0	0	57	771
8:50 AM	0	0	0	0	0	0	0	0	0	35	0	0	0	42	0	0	77	785
8:55 AM	0	0	0	0	0	0	0	0	0	31	0	0	0	17	0	0	48	746

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	0	0	0	544	0	0	0	408	0	0	952
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	8	0		16
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

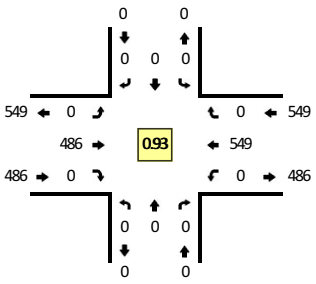
Report generated on 12/16/2022 6:45 AM

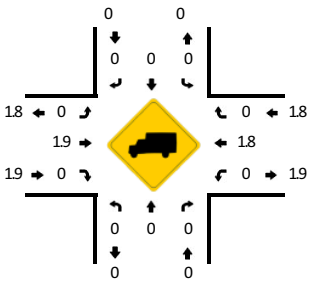
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

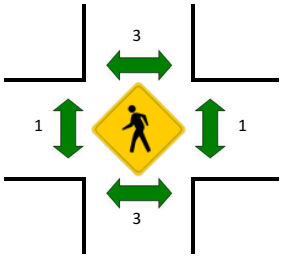
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

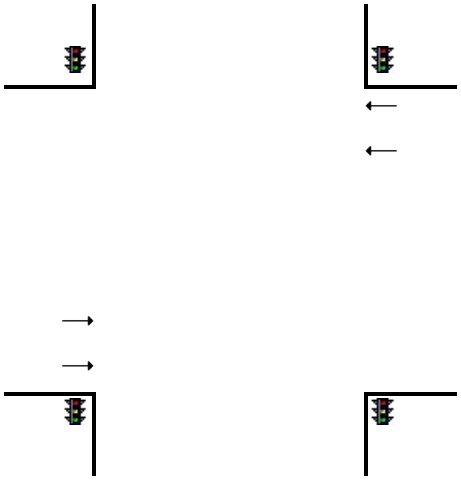
LOCATION: Pedestrian Signal -- SE 34th St | **QC JOB #:** 16019606
CITY/STATE: Vancouver, WA | **DATE:** Tue, Dec 6 2022

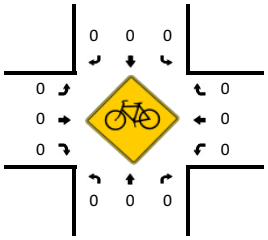
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

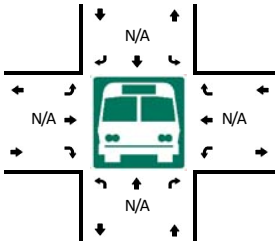


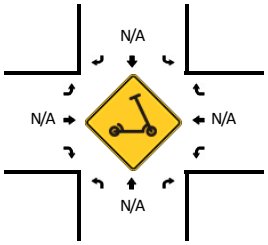












5-Min Count Period Beginning At	Pedestrian Signal (Northbound)				Pedestrian Signal (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	36	0	0	0	53	0	0	89	
4:05 PM	0	0	0	0	0	0	0	0	0	31	0	0	0	47	0	0	78	
4:10 PM	0	0	0	0	0	0	0	0	0	38	0	0	0	59	0	0	97	
4:15 PM	0	0	0	0	0	0	0	0	0	38	0	0	0	36	0	0	74	
4:20 PM	0	0	0	0	0	0	0	0	0	46	0	0	0	34	0	0	80	
4:25 PM	0	0	0	0	0	0	0	0	0	35	0	0	0	38	0	0	73	
4:30 PM	0	0	0	0	0	0	0	0	0	43	0	0	0	28	0	0	71	
4:35 PM	0	0	0	0	0	0	0	0	0	35	0	0	0	64	0	0	99	
4:40 PM	0	0	0	0	0	0	0	0	0	39	0	0	0	58	0	0	97	
4:45 PM	0	0	0	0	0	0	0	0	0	47	0	0	0	36	0	0	83	
4:50 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	48	0	0	90	
4:55 PM	0	0	0	0	0	0	0	0	0	41	0	0	0	48	0	0	89	1020
5:00 PM	0	0	0	0	0	0	0	0	0	41	0	0	0	52	0	0	93	1024
5:05 PM	0	0	0	0	0	0	0	0	0	41	0	0	0	48	0	0	89	1035
5:10 PM	0	0	0	0	0	0	0	0	0	36	0	0	0	46	0	0	82	1020
5:15 PM	0	0	0	0	0	0	0	0	0	41	0	0	0	29	0	0	70	1016
5:20 PM	0	0	0	0	0	0	0	0	0	41	0	0	0	37	0	0	78	1014
5:25 PM	0	0	0	0	0	0	0	0	0	43	0	0	0	43	0	0	86	1027
5:30 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	34	0	0	76	1032
5:35 PM	0	0	0	0	0	0	0	0	0	46	0	0	0	40	0	0	86	1019
5:40 PM	0	0	0	0	0	0	0	0	0	39	0	0	0	34	0	0	73	995
5:45 PM	0	0	0	0	0	0	0	0	0	39	0	0	0	34	0	0	73	985
5:50 PM	0	0	0	0	0	0	0	0	0	30	0	0	0	23	0	0	53	948
5:55 PM	0	0	0	0	0	0	0	0	0	25	0	0	0	23	0	0	48	907

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	0	0	0	484	0	0	0	632	0	0	1116
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	4	0		16
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

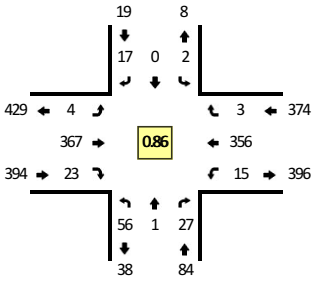
Type of peak hour being reported: Intersection Peak

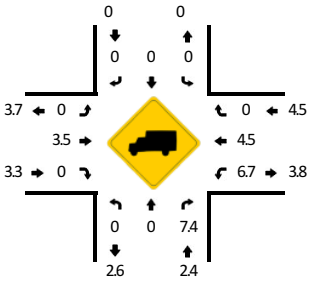
Method for determining peak hour: Total Entering Volume

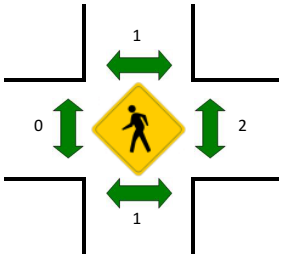
LOCATION: SE 172nd Ave -- SE 34th St
CITY/STATE: Vancouver, WA

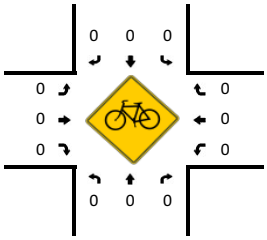
QC JOB #: 16019607
DATE: Tue, Dec 6 2022

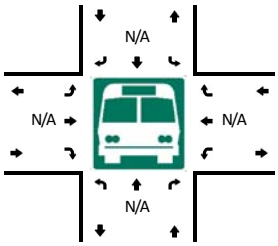
Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

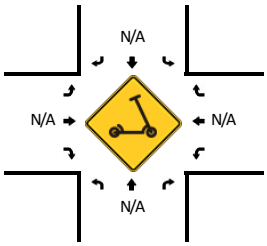












5-Min Count Period Beginning At	SE 172nd Ave (Northbound)				SE 172nd Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	3	0	0	0	0	1	1	12	0	0	0	16	0	0	34	
7:05 AM	6	0	5	0	0	1	1	0	0	22	1	0	0	25	0	0	61	
7:10 AM	3	0	2	0	0	0	0	0	0	12	0	0	0	23	0	0	40	
7:15 AM	2	0	1	0	0	0	1	0	0	23	3	0	0	28	0	0	58	
7:20 AM	6	0	3	0	0	0	1	0	0	17	1	0	1	22	1	0	52	
7:25 AM	4	0	3	0	0	0	3	0	0	27	2	0	2	27	0	0	68	
7:30 AM	4	0	6	0	0	0	3	0	1	19	0	0	1	35	0	0	69	
7:35 AM	7	0	0	0	0	0	2	0	0	28	1	0	0	32	0	0	70	
7:40 AM	3	0	3	0	0	0	2	0	0	35	3	0	1	26	0	0	73	
7:45 AM	5	0	3	0	0	0	0	0	0	42	1	0	2	35	0	0	88	
7:50 AM	4	1	2	0	0	0	0	0	0	39	2	0	1	23	0	0	72	
7:55 AM	6	0	3	0	0	0	1	0	0	46	5	0	3	29	1	0	94	779
8:00 AM	8	0	0	0	1	0	1	0	0	30	1	0	1	29	0	0	71	816
8:05 AM	5	0	1	0	0	0	0	0	0	26	3	0	0	31	0	0	66	821
8:10 AM	2	0	2	0	1	0	1	0	2	27	3	0	1	36	1	0	76	857
8:15 AM	2	0	1	0	0	0	3	0	1	31	1	0	2	31	0	0	72	871
8:20 AM	5	1	1	0	0	0	2	0	1	17	2	0	2	21	0	0	52	871
8:25 AM	3	0	0	0	1	0	2	0	1	28	2	0	2	25	0	0	64	867
8:30 AM	4	0	5	0	0	0	0	0	1	23	1	0	0	16	1	0	51	849
8:35 AM	3	0	0	0	0	0	3	0	0	24	3	0	1	26	0	0	60	839
8:40 AM	8	0	0	0	0	0	2	0	0	23	1	0	0	39	1	0	74	840
8:45 AM	3	0	3	0	0	0	1	0	0	29	2	0	2	19	1	0	60	812
8:50 AM	6	0	2	0	0	0	1	0	1	34	4	0	0	35	0	0	83	823
8:55 AM	2	0	2	0	1	0	1	0	0	26	4	0	2	14	0	0	52	781

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	4	32	0	0	0	4	0	0	508	32	0	24	348	4	0	1016
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	8	0		16
Buses																	
Pedestrians		0				4				0				4			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

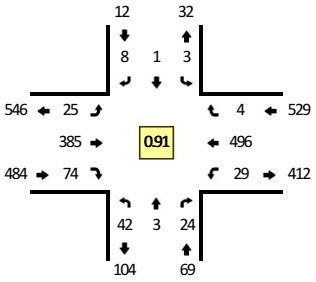
Report generated on 12/16/2022 6:45 AM

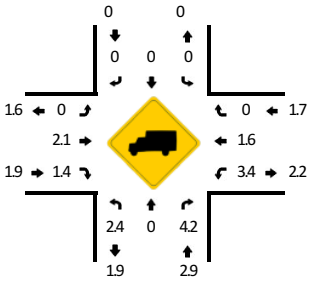
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

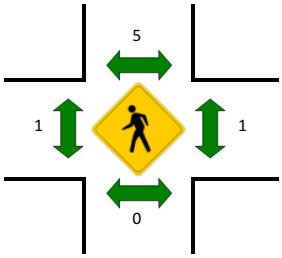
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

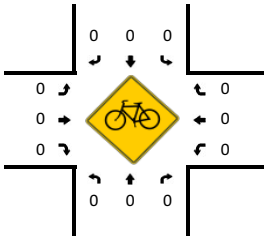
LOCATION: SE 172nd Ave -- SE 34th St | **QC JOB #:** 16019608
CITY/STATE: Vancouver, WA | **DATE:** Tue, Dec 6 2022

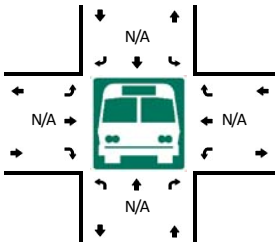
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

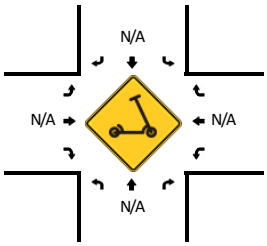












5-Min Count Period Beginning At	SE 172nd Ave (Northbound)				SE 172nd Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	3	0	0	0	1	0	1	29	7	0	3	50	1	0	98	
4:05 PM	1	0	0	0	0	0	1	0	1	27	3	0	3	44	0	0	80	
4:10 PM	4	0	1	0	0	0	0	0	3	30	4	0	1	54	0	0	97	
4:15 PM	3	0	1	0	0	0	2	0	4	24	9	0	3	33	0	0	79	
4:20 PM	3	0	3	0	0	0	1	0	3	37	8	0	3	29	0	0	87	
4:25 PM	4	0	0	0	0	0	0	0	0	31	3	0	2	33	0	0	73	
4:30 PM	3	0	3	0	1	0	1	0	1	33	9	0	1	25	0	0	77	
4:35 PM	6	0	2	0	0	0	0	0	3	28	5	0	2	57	1	0	104	
4:40 PM	2	0	2	0	1	0	2	0	3	33	3	0	5	54	0	0	105	
4:45 PM	4	0	4	0	0	0	0	0	2	35	9	0	2	34	2	0	92	
4:50 PM	2	3	1	0	1	0	0	0	3	38	4	0	2	46	0	0	100	
4:55 PM	3	0	2	0	0	0	0	0	2	27	8	0	5	43	0	0	90	1082
5:00 PM	4	0	1	0	0	0	1	0	1	37	7	0	3	50	1	0	105	1089
5:05 PM	4	0	4	0	0	1	1	0	0	32	5	0	0	38	0	0	85	1094
5:10 PM	2	1	2	0	1	0	0	0	5	32	2	0	0	42	0	0	87	1084
5:15 PM	2	0	1	0	0	0	0	0	2	31	6	0	0	27	0	0	69	1074
5:20 PM	4	0	1	0	0	0	2	0	0	33	8	0	1	33	1	0	83	1070
5:25 PM	2	0	2	0	0	0	0	0	0	41	4	0	4	40	0	0	93	1090
5:30 PM	1	0	0	0	0	0	2	0	0	33	9	0	2	34	0	0	81	1094
5:35 PM	1	0	0	0	0	0	0	0	1	38	5	0	7	38	0	0	90	1080
5:40 PM	3	0	3	0	0	0	1	0	1	37	3	0	7	29	0	0	84	1059
5:45 PM	2	0	2	0	1	0	0	0	1	36	3	0	2	31	0	0	78	1045
5:50 PM	1	0	0	0	0	0	1	0	0	24	6	0	4	22	1	0	59	1004
5:55 PM	3	1	2	0	0	0	2	0	0	18	5	0	1	18	0	0	50	964

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	48	0	32	0	4	0	8	0	32	384	68	0	36	580	12	0	1204
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	4	0		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

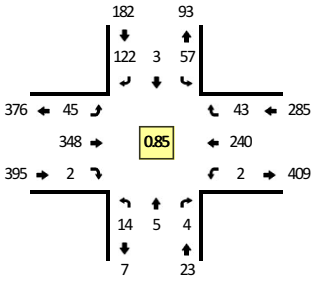
Type of peak hour being reported: Intersection Peak

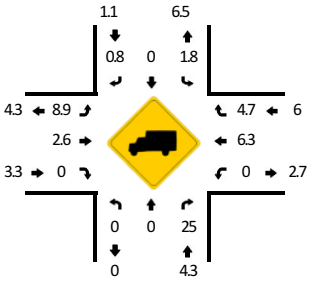
Method for determining peak hour: Total Entering Volume

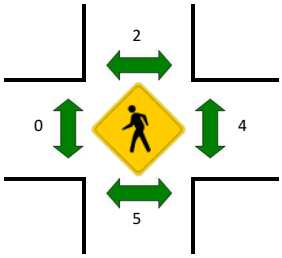
LOCATION: SE 176th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

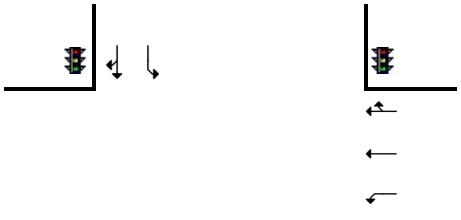
QC JOB #: 16019609
DATE: Tue, Dec 6 2022

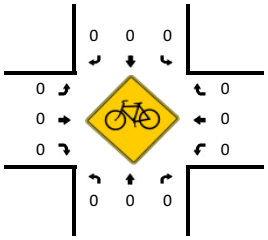
Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

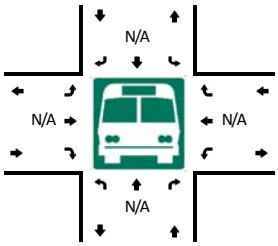


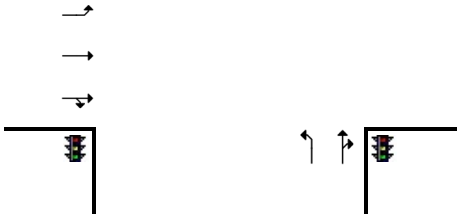


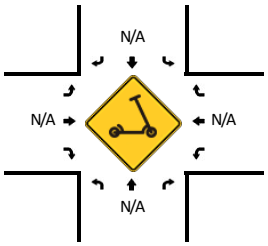












5-Min Count Period Beginning At	SE 176th Ave (Northbound)				SE 176th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	1	0	0	3	0	6	0	2	15	0	0	1	10	1	0	40	
7:05 AM	3	2	1	0	2	0	10	0	4	20	0	0	0	12	2	0	56	
7:10 AM	2	2	0	0	1	0	11	0	2	15	0	0	0	11	1	0	45	
7:15 AM	2	2	0	0	1	0	7	0	3	18	0	0	0	18	3	0	54	
7:20 AM	1	1	0	0	0	0	8	0	4	16	1	0	0	16	3	0	50	
7:25 AM	1	0	0	0	2	0	10	0	5	25	0	0	0	20	2	0	65	
7:30 AM	1	0	1	0	3	0	10	0	3	20	0	0	0	24	4	0	66	
7:35 AM	2	1	0	0	4	0	10	0	1	23	0	0	0	19	4	0	64	
7:40 AM	2	0	1	0	3	0	13	0	3	41	0	0	0	14	4	0	81	
7:45 AM	0	0	1	0	7	0	14	0	9	35	0	0	0	20	4	0	90	
7:50 AM	2	1	0	0	6	1	8	0	4	37	1	0	0	14	3	0	77	
7:55 AM	1	1	1	0	5	0	10	0	5	42	0	0	2	24	3	0	94	782
8:00 AM	1	0	0	0	3	1	12	0	6	28	0	0	0	21	2	0	74	816
8:05 AM	1	0	0	0	4	0	8	0	3	23	1	0	0	18	3	0	61	821
8:10 AM	1	1	0	0	2	1	10	0	2	27	0	0	0	30	6	0	80	856
8:15 AM	0	0	0	0	10	0	6	0	2	26	0	0	0	22	3	0	69	871
8:20 AM	2	1	0	0	8	0	11	0	2	21	0	0	0	14	5	0	64	885
8:25 AM	2	1	0	0	1	0	8	0	1	27	0	0	0	13	3	0	56	876
8:30 AM	0	0	0	0	7	0	8	0	2	27	0	0	0	10	6	0	60	870
8:35 AM	3	0	0	0	0	0	10	0	2	20	1	0	1	16	3	0	56	862
8:40 AM	0	0	0	0	8	1	20	0	2	21	2	0	0	20	7	0	81	862
8:45 AM	1	1	0	0	3	0	5	0	3	25	1	0	0	14	2	0	55	827
8:50 AM	3	0	0	0	5	1	8	0	4	35	0	0	0	24	5	0	85	835
8:55 AM	0	2	0	0	6	0	4	0	4	23	0	0	1	12	5	0	57	798

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	8	8	0	72	4	128	0	72	456	4	0	8	232	40	0	1044
Heavy Trucks	0	0	0		4	0	0		0	8	0		0	8	4		24
Buses																	
Pedestrians		8				4				0				4			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

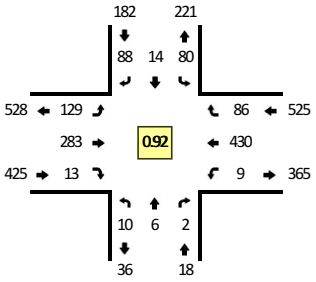
Type of peak hour being reported: Intersection Peak

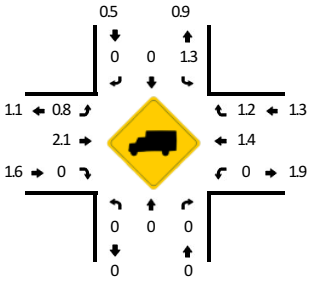
Method for determining peak hour: Total Entering Volume

LOCATION: SE 176th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

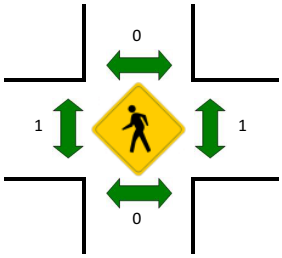
QC JOB #: 16019610
DATE: Tue, Dec 6 2022

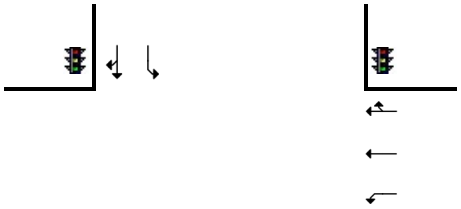
Peak-Hour: 4:35 PM -- 5:35 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

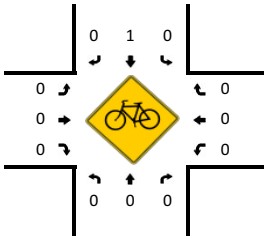


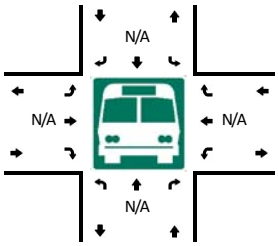


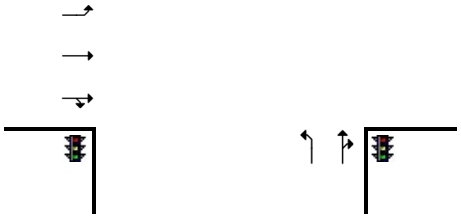
Quality Counts
DATA THAT DRIVES COMMUNITIES

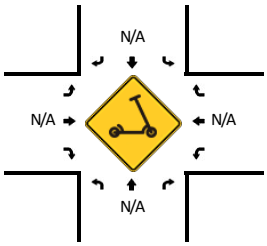












5-Min Count Period Beginning At	SE 176th Ave (Northbound)				SE 176th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	0	0	11	1	4	0	12	19	0	0	0	46	9	0	103	
4:05 PM	5	2	0	0	6	2	9	0	6	13	4	0	0	36	11	0	94	
4:10 PM	3	0	0	0	7	2	7	0	5	27	2	0	1	45	11	0	110	
4:15 PM	0	1	0	0	9	0	4	0	6	17	0	0	1	29	8	0	75	
4:20 PM	0	1	0	0	7	0	3	0	13	25	0	0	0	29	7	0	85	
4:25 PM	1	0	0	0	7	0	4	0	10	25	0	0	0	33	7	0	87	
4:30 PM	1	0	0	0	6	2	5	0	11	22	1	0	0	18	11	0	77	
4:35 PM	1	0	0	0	7	0	10	0	6	26	1	0	1	51	9	0	112	
4:40 PM	0	1	0	0	8	1	11	0	11	19	0	0	0	46	10	0	107	
4:45 PM	1	0	0	0	5	2	4	0	9	33	2	0	0	36	3	0	95	
4:50 PM	1	2	0	0	5	2	14	0	11	24	2	0	0	32	9	0	102	
4:55 PM	1	0	2	0	5	1	6	0	8	19	2	0	2	36	9	0	91	1138
5:00 PM	1	0	0	0	7	0	9	0	14	24	1	0	0	51	5	0	112	1147
5:05 PM	0	0	0	0	1	1	5	0	9	26	0	0	1	31	8	0	82	1135
5:10 PM	0	1	0	0	19	3	3	0	7	22	1	0	2	37	5	0	100	1125
5:15 PM	0	0	0	0	5	1	3	0	10	24	1	0	2	29	5	0	80	1130
5:20 PM	3	0	0	0	5	2	5	0	17	19	2	0	1	25	8	0	87	1132
5:25 PM	1	1	0	0	5	0	10	0	13	25	1	0	0	33	8	0	97	1142
5:30 PM	1	1	0	0	8	1	8	0	14	22	0	0	0	23	7	0	85	1150
5:35 PM	2	2	0	0	4	1	13	0	14	24	1	0	0	29	8	0	98	1136
5:40 PM	1	2	1	0	11	1	7	0	9	21	3	0	0	25	2	0	83	1112
5:45 PM	4	0	0	0	4	2	6	0	11	26	4	0	0	21	1	0	79	1096
5:50 PM	1	0	0	0	6	2	3	0	14	12	0	0	0	22	9	0	69	1063
5:55 PM	0	1	0	0	7	2	7	0	5	14	1	0	0	15	7	0	59	1031

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	4	0	0	80	12	100	0	104	312	12	0	4	532	88	0	1256
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	4	0		12
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

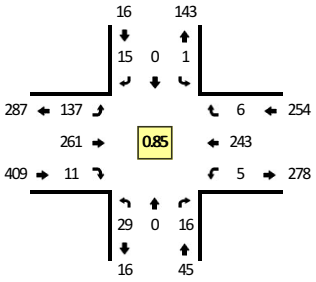
Type of peak hour being reported: Intersection Peak

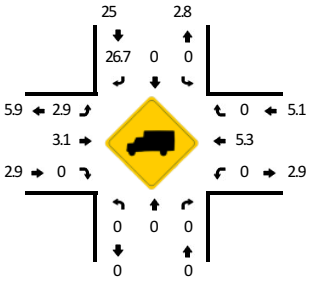
Method for determining peak hour: Total Entering Volume

LOCATION: SE 177th Ave -- SE 34th St
CITY/STATE: Vancouver, WA

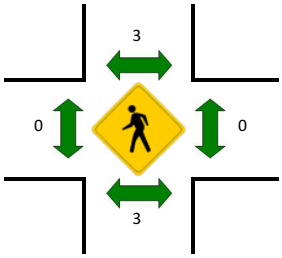
QC JOB #: 16019611
DATE: Tue, Dec 6 2022

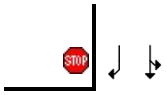
Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

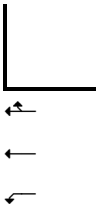


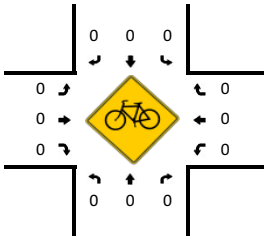


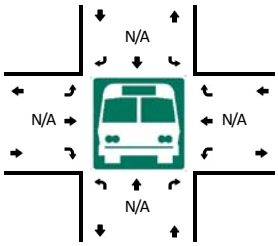
Quality Counts
DATA THAT DRIVES COMMUNITIES

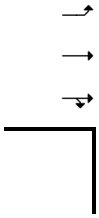


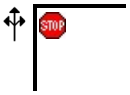


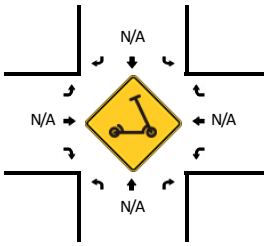












5-Min Count Period Beginning At	SE 177th Ave (Northbound)				SE 177th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	0	1	0	0	0	0	0	6	13	0	0	1	10	1	0	34	
7:05 AM	2	0	1	0	0	0	0	0	5	18	0	0	0	12	1	0	39	
7:10 AM	1	0	1	0	0	0	0	0	4	11	1	0	0	12	0	0	30	
7:15 AM	4	0	2	0	0	0	0	0	6	13	0	0	1	16	0	0	42	
7:20 AM	1	0	0	0	0	0	0	0	4	13	0	0	0	18	0	0	36	
7:25 AM	4	0	0	0	0	0	1	0	10	17	0	0	0	17	0	0	49	
7:30 AM	4	0	2	0	0	0	3	0	7	13	1	0	0	23	0	0	53	
7:35 AM	5	0	1	0	0	0	1	0	6	21	2	0	0	16	0	0	52	
7:40 AM	1	0	0	0	0	0	1	0	16	28	1	0	0	15	0	0	62	
7:45 AM	3	0	1	0	0	0	0	0	11	31	2	0	1	21	1	0	71	
7:50 AM	1	0	3	0	0	0	0	0	13	28	1	0	0	16	0	0	62	
7:55 AM	2	0	2	0	0	0	2	0	19	27	1	0	1	25	1	0	80	610
8:00 AM	1	0	1	0	1	0	1	0	16	16	0	0	1	22	0	0	59	635
8:05 AM	2	0	1	0	0	0	1	0	10	18	0	0	0	16	2	0	50	646
8:10 AM	2	0	0	0	0	0	3	0	12	15	0	0	1	32	1	0	66	682
8:15 AM	2	0	2	0	0	0	0	0	10	25	1	0	0	23	1	0	64	704
8:20 AM	2	0	3	0	0	0	2	0	7	22	2	0	1	17	0	0	56	724
8:25 AM	0	0	0	0	0	0	0	0	11	16	1	0	0	14	1	0	43	718
8:30 AM	0	0	0	0	1	0	3	0	7	23	2	0	1	14	0	0	51	716
8:35 AM	1	0	0	0	0	0	0	0	4	15	0	0	0	18	0	0	38	702
8:40 AM	4	0	3	0	0	0	1	0	9	22	0	0	0	21	0	0	60	700
8:45 AM	2	0	1	0	0	0	0	0	5	22	0	0	0	14	0	0	44	673
8:50 AM	2	0	1	0	0	0	0	0	7	25	1	0	0	27	2	0	65	676
8:55 AM	1	0	0	0	0	0	1	0	8	27	1	0	1	15	0	0	54	650

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	0	24	0	0	0	8	0	172	344	16	0	8	248	8	0	852
Heavy Trucks	0	0	0		0	0	4		0	12	0		0	8	0		24
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

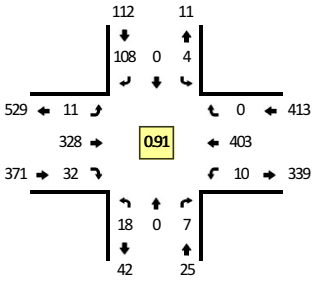
Report generated on 12/16/2022 6:45 AM

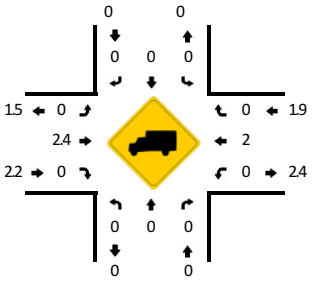
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

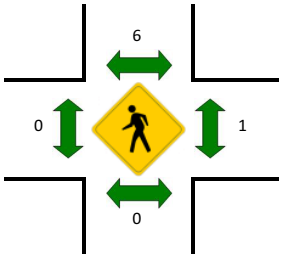
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

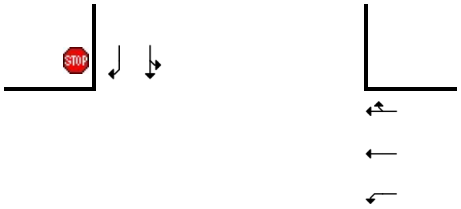
LOCATION: SE 177th Ave -- SE 34th St | **QC JOB #:** 16019612
CITY/STATE: Vancouver, WA | **DATE:** Tue, Dec 6 2022

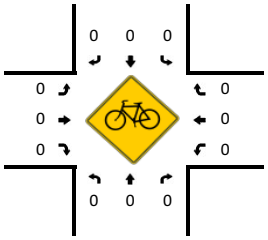
Peak-Hour: 4:20 PM -- 5:20 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

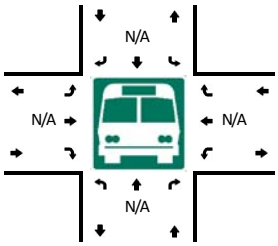


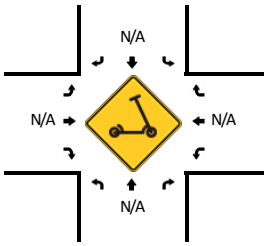












5-Min Count Period Beginning At	SE 177th Ave (Northbound)				SE 177th Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	0	0	0	0	0	4	0	0	29	2	0	1	49	1	0	88	
4:05 PM	1	0	1	0	0	0	10	0	0	20	1	0	1	39	0	0	73	
4:10 PM	2	0	0	0	0	0	5	0	0	32	1	0	1	47	1	0	89	
4:15 PM	0	0	0	0	1	0	9	0	0	25	1	0	1	28	0	0	65	
4:20 PM	1	0	1	0	1	0	8	0	2	26	4	0	0	27	0	0	70	
4:25 PM	1	0	0	0	0	0	5	0	1	29	1	0	1	35	0	0	73	
4:30 PM	1	0	0	0	0	0	7	0	3	21	4	0	0	24	0	0	60	
4:35 PM	1	0	0	0	0	0	12	0	0	29	4	0	1	44	0	0	91	
4:40 PM	4	0	0	0	1	0	20	0	0	25	1	0	0	41	0	0	92	
4:45 PM	2	0	0	0	0	0	6	0	0	36	2	0	1	23	0	0	70	
4:50 PM	1	0	0	0	0	0	3	0	2	24	3	0	2	38	0	0	73	
4:55 PM	0	0	1	0	1	0	10	0	0	23	2	0	0	38	0	0	75	919
5:00 PM	3	0	1	0	0	0	12	0	0	27	3	0	0	42	0	0	88	919
5:05 PM	3	0	0	0	0	0	11	0	1	28	1	0	0	24	0	0	68	914
5:10 PM	0	0	1	0	1	0	5	0	0	34	5	0	3	40	0	0	89	914
5:15 PM	1	0	3	0	0	0	9	0	2	26	2	0	2	27	0	0	72	921
5:20 PM	0	0	2	0	1	0	5	0	0	23	1	0	1	34	0	0	67	918
5:25 PM	0	0	0	0	0	0	6	0	0	27	3	0	0	32	0	0	68	913
5:30 PM	0	0	1	0	0	0	2	0	0	24	4	0	0	28	0	0	59	912
5:35 PM	2	0	0	0	0	0	4	0	0	24	6	0	0	31	0	0	67	888
5:40 PM	0	0	0	0	0	0	6	0	0	30	2	0	0	22	0	0	60	856
5:45 PM	3	0	1	0	1	0	3	0	2	24	3	0	3	16	0	0	56	842
5:50 PM	1	0	0	0	0	0	7	0	1	17	1	0	0	21	0	0	48	817
5:55 PM	0	0	0	0	0	0	0	0	0	17	4	0	0	24	0	0	45	787

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	0	0	0	4	0	152	0	0	360	28	0	8	432	0	0	1012
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	4	0		12
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

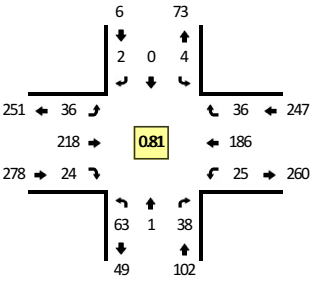
Type of peak hour being reported: Intersection Peak

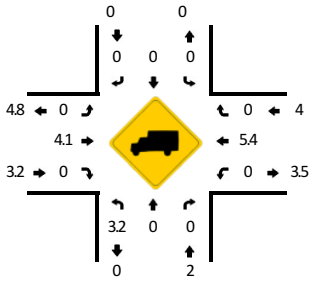
Method for determining peak hour: Total Entering Volume

LOCATION: SE Hiddenbrook Dr -- SE 34th St
CITY/STATE: Vancouver, WA

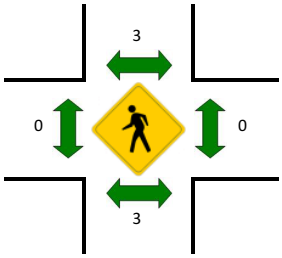
QC JOB #: 16019613
DATE: Tue, Dec 6 2022

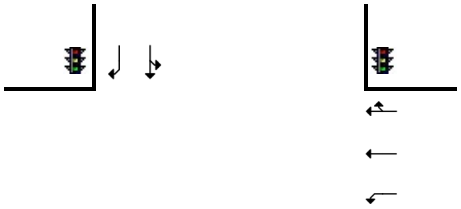
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

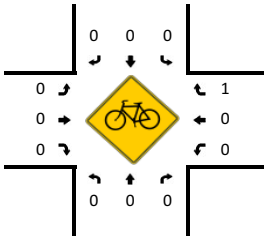


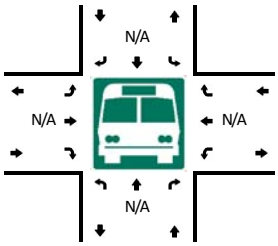


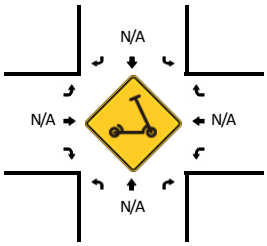
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	SE Hiddenbrook Dr (Northbound)				SE Hiddenbrook Dr (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	0	3	0	0	0	0	0	1	12	0	0	0	9	0	0	27	
7:05 AM	5	0	0	0	1	0	0	0	3	16	0	0	0	8	3	0	36	
7:10 AM	1	0	1	0	0	0	0	0	1	12	0	0	0	11	2	0	28	
7:15 AM	4	0	2	0	0	0	0	0	3	9	2	0	0	16	1	0	37	
7:20 AM	5	0	0	0	0	0	0	0	3	10	0	0	2	11	2	0	33	
7:25 AM	3	1	2	0	0	0	0	0	1	13	1	0	1	14	2	0	38	
7:30 AM	4	0	3	0	0	0	0	0	1	17	0	0	0	20	3	0	48	
7:35 AM	5	0	2	0	0	0	0	0	4	18	1	0	2	9	2	0	43	
7:40 AM	3	0	4	0	0	0	0	0	2	21	3	0	1	12	6	0	52	
7:45 AM	7	0	6	0	0	0	0	0	2	26	1	0	4	17	4	0	67	
7:50 AM	1	0	2	0	2	0	1	0	5	21	3	0	3	16	2	0	56	
7:55 AM	2	0	3	0	0	0	0	0	4	28	3	0	6	23	4	0	73	538
8:00 AM	7	0	2	0	0	0	0	0	3	14	1	0	2	16	3	0	48	559
8:05 AM	5	1	2	0	1	0	0	0	3	11	3	0	3	15	2	0	46	569
8:10 AM	12	0	1	0	0	0	0	0	3	8	2	0	1	23	4	0	54	595
8:15 AM	7	0	6	0	1	0	0	0	5	21	2	0	0	14	1	0	57	615
8:20 AM	5	0	5	0	0	0	0	0	2	21	2	0	1	12	2	0	50	632
8:25 AM	5	0	2	0	0	0	1	0	2	12	3	0	2	9	3	0	39	633
8:30 AM	4	1	2	0	0	0	0	0	4	16	3	0	4	13	0	0	47	632
8:35 AM	4	0	1	0	0	0	1	0	1	10	6	0	3	13	4	0	43	632
8:40 AM	9	0	0	0	0	0	1	0	2	19	5	0	2	11	2	0	51	631
8:45 AM	2	0	4	0	0	0	0	0	6	17	1	0	4	18	1	0	53	617
8:50 AM	4	0	3	0	0	0	0	0	4	15	5	0	4	19	2	0	56	617
8:55 AM	4	0	1	0	0	0	0	0	1	16	8	0	2	13	1	0	46	590

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	40	0	44	0	8	0	4	0	44	300	28	0	52	224	40	0	784
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	8	0		20
Buses																	
Pedestrians		12				0				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

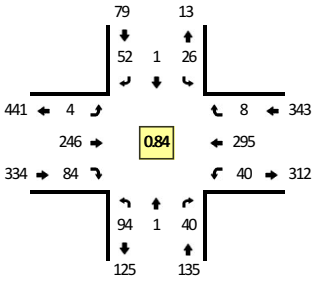
Type of peak hour being reported: Intersection Peak

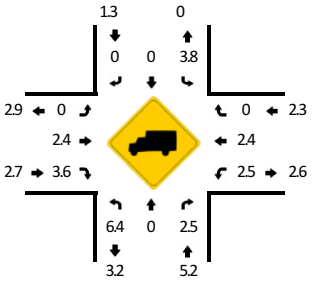
Method for determining peak hour: Total Entering Volume

LOCATION: SE Hiddenbrook Dr -- SE 34th St
CITY/STATE: Vancouver, WA

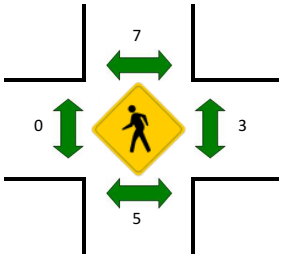
QC JOB #: 16019614
DATE: Tue, Dec 6 2022

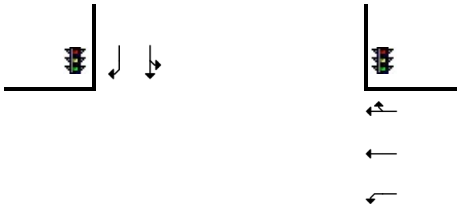
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

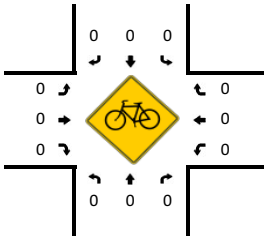


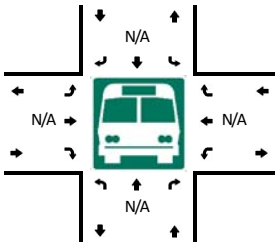


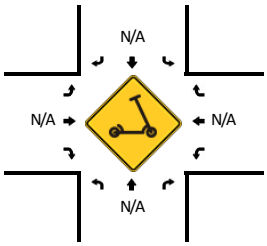
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	SE Hiddenbrook Dr (Northbound)				SE Hiddenbrook Dr (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	21	0	11	0	0	0	5	0	0	24	9	0	4	26	0	0	100	
4:05 PM	10	0	4	0	4	0	4	0	1	11	6	0	3	28	3	0	74	
4:10 PM	4	0	3	0	1	0	3	0	0	27	10	0	4	39	0	0	91	
4:15 PM	6	0	4	0	1	0	3	0	0	15	7	0	2	18	0	0	56	
4:20 PM	8	0	4	0	4	0	4	0	1	25	8	0	1	15	0	0	70	
4:25 PM	13	1	2	0	1	0	4	0	0	17	8	0	3	20	1	0	70	
4:30 PM	3	0	1	0	3	0	1	0	0	20	6	0	3	22	0	0	59	
4:35 PM	10	0	2	0	5	0	12	0	0	21	5	0	5	25	0	0	85	
4:40 PM	2	0	3	0	1	0	6	0	0	23	6	0	3	29	0	0	73	
4:45 PM	1	0	0	0	1	1	2	0	0	24	7	0	4	25	3	0	68	
4:50 PM	13	0	3	0	4	0	4	0	1	22	6	0	4	23	1	0	81	
4:55 PM	3	0	3	0	1	0	4	0	1	17	6	0	4	25	0	0	64	891
5:00 PM	3	0	5	0	1	0	9	0	0	23	6	0	3	33	1	0	84	875
5:05 PM	4	0	3	0	4	1	4	0	0	16	5	0	2	18	2	0	59	860
5:10 PM	4	0	0	0	3	1	6	0	1	30	12	0	1	30	0	0	88	857
5:15 PM	7	0	4	0	5	0	2	0	0	23	5	0	1	21	0	0	68	869
5:20 PM	5	0	1	0	2	0	3	0	0	20	7	0	2	24	0	0	64	863
5:25 PM	6	0	3	0	2	0	2	0	1	24	4	0	4	23	1	0	70	863
5:30 PM	7	0	1	0	0	0	7	0	0	19	2	0	2	19	0	0	57	861
5:35 PM	1	0	2	0	1	0	7	0	1	19	7	0	2	20	0	0	60	836
5:40 PM	1	0	1	0	2	0	8	0	1	29	3	0	1	12	2	0	60	823
5:45 PM	1	0	0	0	1	0	4	0	0	21	4	0	5	14	0	0	50	805
5:50 PM	3	0	0	0	1	0	2	0	0	15	4	0	0	15	0	0	40	764
5:55 PM	2	0	4	0	1	0	1	0	0	10	5	0	4	22	0	0	49	749

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	140	0	72	0	20	0	48	0	4	248	100	0	44	372	12	0	1060
Heavy Trucks	16	0	4		4	0	0		0	4	4		0	12	0		44
Buses																	
Pedestrians		4				4				0				4			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

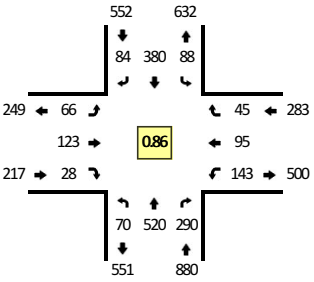
Type of peak hour being reported: Intersection Peak

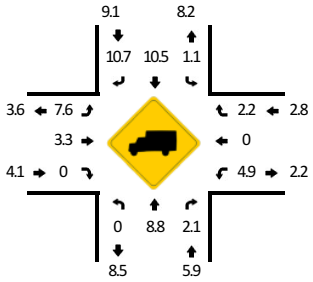
Method for determining peak hour: Total Entering Volume

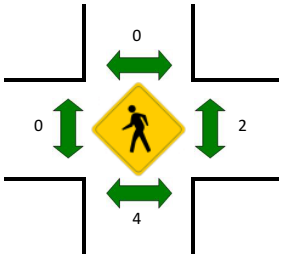
LOCATION: SE 192nd Ave -- SE 34th St
CITY/STATE: Vancouver, WA

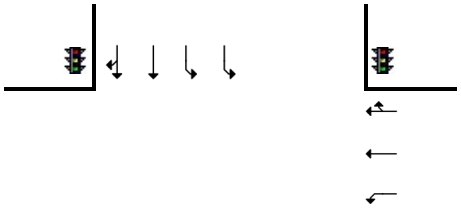
QC JOB #: 16019615
DATE: Tue, Dec 6 2022

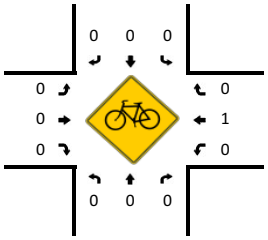
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

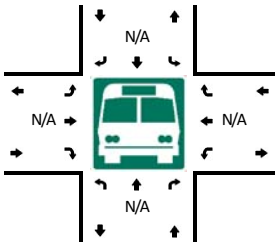


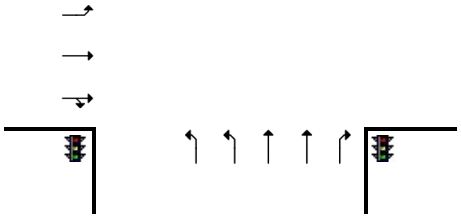


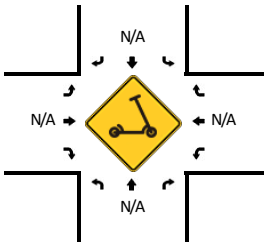












5-Min Count Period Beginning At	SE 192nd Ave (Northbound)				SE 192nd Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	3	28	36	0	5	29	2	0	3	6	2	0	11	4	1	0	130	
7:05 AM	2	30	26	0	12	30	6	0	4	15	3	0	12	3	3	0	146	
7:10 AM	0	30	19	0	5	38	7	0	2	10	2	0	14	5	5	0	137	
7:15 AM	1	30	24	0	2	24	4	0	1	3	1	0	8	7	4	0	109	
7:20 AM	1	43	24	0	11	24	6	0	4	7	0	0	14	6	7	0	147	
7:25 AM	7	42	16	0	8	30	5	0	3	8	1	0	11	4	1	0	136	
7:30 AM	8	40	26	1	6	30	6	0	6	9	2	0	14	9	3	0	160	
7:35 AM	4	36	20	1	7	27	1	0	6	10	3	0	16	7	5	0	143	
7:40 AM	4	51	31	0	3	28	14	0	5	8	4	0	7	7	0	0	162	
7:45 AM	8	57	30	0	8	30	5	0	11	17	1	0	18	7	1	0	193	
7:50 AM	9	50	29	0	10	32	7	0	9	17	3	0	8	8	3	0	185	
7:55 AM	11	49	22	0	13	35	11	0	5	11	1	0	10	15	3	0	186	1834
8:00 AM	4	48	31	0	8	29	11	1	4	7	4	0	6	5	5	0	163	1867
8:05 AM	3	35	23	0	8	36	3	0	2	4	2	0	10	11	5	0	142	1863
8:10 AM	7	38	22	0	7	35	7	0	3	10	1	0	21	12	3	0	166	1892
8:15 AM	2	29	17	0	6	29	4	0	6	6	4	0	16	8	6	0	133	1916
8:20 AM	5	46	20	0	7	30	3	0	7	13	5	0	5	10	5	0	156	1925
8:25 AM	5	41	21	0	4	32	5	0	4	14	0	0	10	2	4	0	142	1931
8:30 AM	3	34	22	0	9	29	9	0	5	7	1	0	9	4	5	0	137	1908
8:35 AM	9	42	22	0	4	35	5	0	5	9	2	0	23	6	5	0	167	1932
8:40 AM	3	38	10	0	9	38	4	0	3	13	1	0	18	12	12	0	161	1931
8:45 AM	9	48	14	1	12	38	4	0	3	12	3	0	17	7	11	0	179	1917
8:50 AM	5	43	17	0	8	29	3	0	1	7	7	0	10	15	3	0	148	1880
8:55 AM	3	46	7	0	13	42	5	0	4	6	1	0	4	9	5	0	145	1839

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	112	624	324	0	124	388	92	0	100	180	20	0	144	120	28	0	2256
Heavy Trucks	0	72	4		4	40	4		4	8	0		4	0	0		140
Buses																	
Pedestrians		8				0				0				4			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

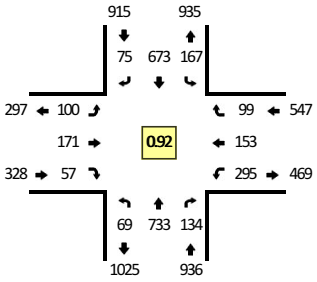
Type of peak hour being reported: Intersection Peak

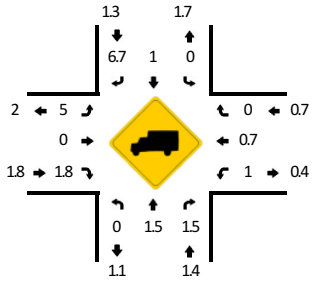
Method for determining peak hour: Total Entering Volume

LOCATION: SE 192nd Ave -- SE 34th St
CITY/STATE: Vancouver, WA

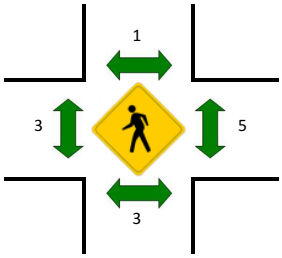
QC JOB #: 16019616
DATE: Tue, Dec 6 2022

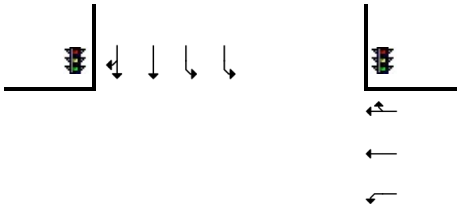
Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

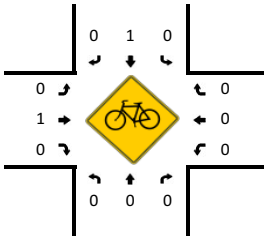


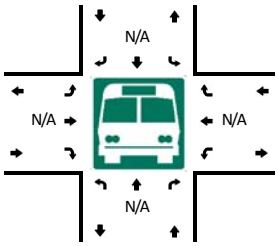


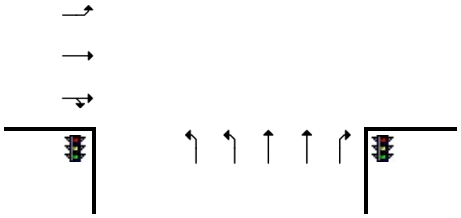
Quality Counts
DATA THAT DRIVES COMMUNITIES

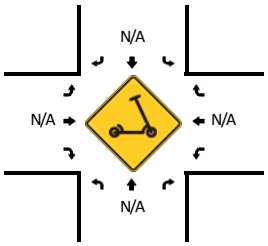












5-Min Count Period Beginning At	SE 192nd Ave (Northbound)				SE 192nd Ave (Southbound)				SE 34th St (Eastbound)				SE 34th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	10	64	13	0	17	44	9	0	12	18	4	0	28	11	11	0	241	
4:05 PM	11	68	11	0	5	68	11	0	4	9	7	0	26	12	5	0	237	
4:10 PM	12	54	13	0	13	62	9	0	9	16	3	0	26	15	11	0	243	
4:15 PM	6	61	10	0	9	48	4	1	6	18	5	0	26	12	5	0	211	
4:20 PM	4	57	7	0	11	64	5	0	12	8	3	0	22	10	10	0	213	
4:25 PM	6	72	9	0	11	65	3	0	9	13	5	0	29	14	2	0	238	
4:30 PM	8	78	12	0	10	46	7	0	4	11	2	0	22	11	11	0	222	
4:35 PM	6	65	9	0	16	57	5	0	15	15	3	0	18	13	14	0	236	
4:40 PM	5	62	18	0	19	83	6	0	9	15	4	0	33	19	6	0	279	
4:45 PM	6	56	10	0	14	38	15	0	5	15	6	0	24	15	6	0	210	
4:50 PM	8	57	7	0	9	48	6	2	9	20	5	0	16	12	5	0	204	
4:55 PM	3	41	15	0	15	49	7	0	5	11	6	0	21	10	7	0	190	2724
5:00 PM	7	62	10	0	15	50	4	0	9	7	5	0	24	14	10	0	217	2700
5:05 PM	3	59	14	0	10	66	6	0	12	11	7	0	27	9	9	0	233	2696
5:10 PM	6	51	9	0	16	61	4	0	5	18	8	0	27	15	10	0	230	2683
5:15 PM	4	62	10	0	14	69	6	0	13	18	1	0	33	11	8	0	249	2721
5:20 PM	7	68	11	0	15	41	6	1	5	17	5	0	21	10	11	0	218	2726
5:25 PM	7	51	14	0	19	52	5	0	4	18	7	0	21	16	16	0	230	2718
5:30 PM	5	55	16	0	19	31	3	0	3	19	1	0	14	12	12	0	190	2686
5:35 PM	3	46	9	1	6	39	5	0	7	10	2	0	12	7	4	0	151	2601
5:40 PM	3	52	14	0	17	46	5	0	4	17	4	0	15	4	5	0	186	2508
5:45 PM	6	60	13	0	12	43	7	0	12	9	2	0	9	4	5	0	182	2480
5:50 PM	2	42	7	0	10	60	5	0	4	7	3	0	12	9	9	0	170	2446
5:55 PM	9	49	8	0	14	41	4	0	4	9	6	0	16	8	2	0	170	2426

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	76	820	156	0	180	744	72	0	112	164	36	0	292	172	124	0	2948
Heavy Trucks	0	16	4		0	8	4		0	0	0		4	0	0		36
Buses																	
Pedestrians		0				4				0				12			16
Bicycles	0	0	0		0	4	0		0	4	0		0	0	0		8
Scooters																	

Comments:

Report generated on 12/16/2022 6:45 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C: Level of Service Results

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	110	99.6%	58.5	11.7	E
	Through	890	882	99.1%	22.5	4.4	C
	Right Turn	260	260	100.1%	6.3	1.1	A
	Subtotal	1,260	1,252	99.3%	22.8	3.5	C
SB	Left Turn	160	156	97.3%	55.2	8.7	E
	Through	630	633	100.4%	18.1	3.0	B
	Right Turn	40	42	103.8%	8.7	4.6	A
	Subtotal	830	830	100.0%	24.6	3.7	C
EB	Left Turn	30	28	93.3%	51.5	11.7	D
	Through	60	60	100.0%	52.2	8.3	D
	Right Turn	160	158	98.7%	6.1	1.5	A
	Subtotal	250	246	98.4%	23.0	3.8	C
WB	Left Turn	370	374	101.0%	44.1	3.8	D
	Through	120	127	106.0%	33.0	5.9	C
	Right Turn	110	108	98.0%	7.5	0.7	A
	Subtotal	600	609	101.4%	35.1	2.4	D
Total		2,940	2,936	99.9%	26.1	2.6	C

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	41	103.5%	17.8	5.9	B
	Through	10	9	94.0%	18.1	12.3	B
	Right Turn	10	10	104.0%	4.7	4.3	A
	Subtotal	60	61	102.0%	16.5	4.3	B
SB	Left Turn	20	20	100.0%	14.1	7.8	B
	Through	10	9	91.0%	14.6	10.2	B
	Right Turn	50	50	100.0%	5.0	1.4	A
	Subtotal	80	79	98.9%	8.8	3.0	A
EB	Left Turn	30	31	103.0%	8.6	5.6	A
	Through	430	430	99.9%	4.8	1.1	A
	Right Turn	20	20	98.0%	2.6	1.3	A
	Subtotal	480	480	100.0%	5.0	1.1	A
WB	Left Turn	10	10	102.0%	7.3	5.8	A
	Through	510	519	101.7%	3.4	0.9	A
	Right Turn	10	11	110.0%	1.4	2.3	A
	Subtotal	530	540	101.8%	3.5	0.8	A
Total		1,150	1,160	100.9%	5.2	0.4	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	60	64	107.3%	11.5	3.1	B
	Through	10	9	94.0%	14.7	9.3	B
	Right Turn	30	30	100.3%	6.9	1.9	A
	Subtotal	100	104	103.9%	10.6	3.5	B
SB	Left Turn	10	10	95.0%	10.0	4.0	A
	Through						
	Right Turn	20	19	96.5%	3.9	1.3	A
	Subtotal	30	29	96.0%	5.5	1.1	A
EB	Left Turn	10	8	82.0%	2.8	1.6	A
	Through	420	422	100.5%	0.7	0.2	A
	Right Turn	30	31	101.7%	0.3	0.4	A
	Subtotal	460	461	100.2%	0.7	0.2	A
WB	Left Turn	20	18	88.5%	2.9	1.5	A
	Through	450	459	101.9%	1.4	0.4	A
	Right Turn	10	11	109.0%	0.9	0.8	A
	Subtotal	480	487	101.5%	1.4	0.4	A
Total		1,070	1,081	101.0%	2.2	0.5	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	21	102.5%	42.3	11.3	D
	Through	10	10	104.0%	28.8	13.3	C
	Right Turn	10	12	119.0%	5.9	6.2	A
	Subtotal	40	43	107.0%	31.3	6.6	C
SB	Left Turn	70	66	94.4%	40.0	6.7	D
	Through	10	11	105.0%	39.8	18.1	D
	Right Turn	130	134	102.7%	7.5	2.9	A
	Subtotal	210	210	100.0%	20.7	4.0	C
EB	Left Turn	50	46	92.6%	5.2	1.3	A
	Through	390	401	102.7%	2.5	0.9	A
	Right Turn	20	19	96.0%	0.6	0.4	A
	Subtotal	460	466	101.3%	2.7	0.8	A
WB	Left Turn	10	8	77.0%	4.0	3.2	A
	Through	330	338	102.3%	3.4	0.3	A
	Right Turn	60	59	98.8%	1.5	0.9	A
	Subtotal	400	405	101.2%	3.1	0.3	A
Total		1,110	1,124	101.2%	7.3	1.3	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	40	99.3%	14.1	5.2	B
	Through	10	11	114.0%	13.3	4.5	B
	Right Turn	20	22	111.0%	6.2	3.1	A
	Subtotal	70	73	104.7%	11.7	3.7	B
SB	Left Turn	20	20	100.5%	10.1	5.8	B
	Through	10	11	112.0%	12.3	5.9	B
	Right Turn	80	82	103.0%	4.1	0.5	A
	Subtotal	110	114	103.4%	6.4	1.5	A
EB	Left Turn	170	171	100.5%	4.0	1.0	A
	Through	280	295	105.4%	1.2	0.2	A
	Right Turn	20	20	100.0%	0.6	0.4	A
	Subtotal	470	486	103.4%	2.1	0.4	A
WB	Left Turn	10	11	109.0%	2.8	1.6	A
	Through	280	275	98.3%	2.0	0.3	A
	Right Turn	20	19	96.0%	1.4	1.2	A
	Subtotal	310	305	98.5%	2.0	0.3	A
Total		960	979	101.9%	3.4	0.6	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	70	67	96.3%	35.8	5.3	D
	Through	10	10	99.0%	45.2	24.1	D
	Right Turn	40	41	101.8%	4.7	0.6	A
	Subtotal	120	118	98.3%	25.3	4.2	C
SB	Left Turn	20	19	97.0%	34.2	12.4	C
	Through						
	Right Turn	30	29	96.3%	4.0	1.2	A
	Subtotal	50	48	96.6%	20.6	9.8	C
EB	Left Turn	40	38	94.5%	41.0	6.9	D
	Through	250	254	101.6%	4.0	1.6	A
	Right Turn	30	31	103.7%	2.6	1.8	A
	Subtotal	320	323	100.9%	8.7	2.9	A
WB	Left Turn	30	26	87.0%	43.1	9.8	D
	Through	210	209	99.4%	4.8	1.5	A
	Right Turn	50	49	97.6%	2.7	0.9	A
	Subtotal	290	284	97.8%	7.8	1.9	A
Total		780	773	99.1%	11.8	2.0	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	75	93.3%	43.6	5.1	D
	Through	550	559	101.7%	14.3	1.6	B
	Right Turn	310	299	96.4%	8.4	1.5	A
	Subtotal	940	933	99.2%	15.1	1.3	B
SB	Left Turn	100	95	95.2%	55.1	15.2	E
	Through	400	395	98.7%	13.7	2.5	B
	Right Turn	100	100	99.9%	5.9	1.9	A
	Subtotal	600	590	98.3%	20.0	5.1	C
EB	Left Turn	80	78	97.0%	30.1	8.1	C
	Through	150	164	109.3%	33.5	5.6	C
	Right Turn	40	39	96.8%	20.2	5.1	C
	Subtotal	270	280	103.8%	30.9	4.8	C
WB	Left Turn	150	148	98.9%	33.6	4.7	C
	Through	120	120	100.2%	31.4	5.8	C
	Right Turn	50	54	107.4%	13.8	6.6	B
	Subtotal	320	322	100.7%	29.6	4.0	C
Total		2,130	2,125	99.8%	20.8	1.5	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 No Build**
Volume and Delay by Movement **PM**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	190	176	92.6%	311.0	62.1	F
	Through	1,170	1,146	97.9%	49.7	11.2	D
	Right Turn	330	332	100.5%	9.5	2.8	A
	Subtotal	1,690	1,653	97.8%	68.4	11.7	E
SB	Left Turn	160	159	99.6%	53.5	8.1	D
	Through	1,110	1,130	101.8%	21.2	2.9	C
	Right Turn	50	48	96.8%	11.8	3.5	B
	Subtotal	1,320	1,338	101.4%	25.0	3.2	C
EB	Left Turn	50	50	100.2%	68.6	16.9	E
	Through	100	100	99.6%	50.4	7.0	D
	Right Turn	190	190	100.2%	9.5	2.3	A
	Subtotal	340	340	100.0%	31.6	5.4	C
WB	Left Turn	360	363	100.9%	42.3	6.9	D
	Through	130	133	102.2%	39.1	6.3	D
	Right Turn	240	237	98.6%	11.6	2.0	B
	Subtotal	730	733	100.4%	32.2	4.1	C
Total		4,080	4,064	99.6%	44.0	4.8	D

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	43	106.8%	17.7	3.7	B
	Through	10	11	113.0%	14.0	9.2	B
	Right Turn	10	11	109.0%	6.0	3.5	A
	Subtotal	60	65	108.2%	15.6	4.3	B
SB	Left Turn	20	18	91.0%	14.9	8.2	B
	Through	10	10	104.0%	21.0	6.1	C
	Right Turn	50	51	101.2%	6.4	1.7	A
	Subtotal	80	79	99.0%	10.3	3.2	B
EB	Left Turn	70	67	95.4%	13.4	4.5	B
	Through	500	515	103.1%	4.9	0.9	A
	Right Turn	20	19	96.0%	2.1	1.9	A
	Subtotal	590	601	101.9%	5.7	1.3	A
WB	Left Turn	10	11	107.0%	5.8	4.5	A
	Through	640	645	100.8%	4.8	1.3	A
	Right Turn	40	40	100.8%	2.4	1.6	A
	Subtotal	690	696	100.9%	4.7	1.3	A
Total		1,420	1,441	101.5%	5.9	1.0	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 No Build**
Volume and Delay by Movement **PM**

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	48	95.6%	17.1	5.3	C
	Through	10	10	104.0%	20.2	11.0	C
	Right Turn	30	28	93.3%	8.7	5.5	A
	Subtotal	90	86	95.8%	15.2	4.8	C
SB	Left Turn	10	8	83.0%	10.0	10.8	B
	Through	10	11	112.0%	13.7	8.8	B
	Right Turn	10	9	90.0%	6.2	3.4	A
	Subtotal	30	29	95.0%	11.6	4.8	B
EB	Left Turn	30	29	96.0%	5.2	2.2	A
	Through	420	429	102.2%	0.9	0.2	A
	Right Turn	80	82	103.0%	0.8	0.4	A
	Subtotal	530	540	102.0%	1.1	0.2	A
WB	Left Turn	40	39	97.0%	5.4	1.8	A
	Through	630	647	102.7%	2.3	0.5	A
	Right Turn	10	9	89.0%	1.8	1.1	A
	Subtotal	680	695	102.2%	2.4	0.4	A
Total		1,330	1,350	101.5%	2.9	0.4	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	23	114.0%	34.6	5.3	C
	Through	10	9	93.0%	31.0	15.9	C
	Right Turn	10	11	111.0%	5.8	2.1	A
	Subtotal	40	43	108.0%	26.7	4.6	C
SB	Left Turn	90	94	104.4%	37.6	6.1	D
	Through	20	23	113.0%	37.7	11.0	D
	Right Turn	100	99	98.7%	9.8	2.0	A
	Subtotal	210	215	102.5%	24.7	3.5	C
EB	Left Turn	140	140	100.1%	11.9	2.7	B
	Through	300	311	103.8%	3.9	0.9	A
	Right Turn	20	21	106.0%	2.8	1.7	A
	Subtotal	460	473	102.8%	6.2	1.4	A
WB	Left Turn	20	20	101.5%	5.3	2.8	A
	Through	560	565	100.9%	8.3	2.7	A
	Right Turn	110	113	102.3%	5.5	2.3	A
	Subtotal	690	698	101.1%	7.8	2.6	A
Total		1,400	1,429	102.1%	10.5	1.4	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 No Build**
Volume and Delay by Movement **PM**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	102.0%	11.9	5.4	B
	Through						
	Right Turn	10	11	110.0%	5.7	4.2	A
	Subtotal	30	31	104.7%	10.0	3.9	A
SB	Left Turn	80	82	103.0%	17.5	4.6	C
	Through	10	10	99.0%	19.7	14.5	C
	Right Turn	130	126	97.0%	6.7	1.5	A
	Subtotal	220	218	99.3%	11.7	3.0	B
EB	Left Turn	40	39	98.3%	4.9	3.2	A
	Through	320	334	104.2%	1.2	0.1	A
	Right Turn	40	39	96.3%	0.6	0.3	A
	Subtotal	400	411	102.8%	1.4	0.2	A
WB	Left Turn	20	19	96.0%	4.1	2.2	A
	Through	540	560	103.6%	2.6	0.3	A
	Right Turn	10	10	98.0%	2.3	2.6	A
	Subtotal	570	589	103.2%	2.6	0.3	A
Total		1,220	1,250	102.4%	4.0	0.7	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	100	99	99.1%	41.5	7.0	D
	Through	10	9	88.0%	37.2	23.5	D
	Right Turn	50	53	106.6%	5.9	1.3	A
	Subtotal	160	161	100.8%	31.3	6.2	C
SB	Left Turn	40	40	100.3%	35.4	8.1	D
	Through	10	10	95.0%	32.4	22.4	C
	Right Turn	120	119	98.8%	8.1	3.1	A
	Subtotal	170	168	98.9%	15.0	4.8	B
EB	Left Turn	20	19	96.5%	46.3	11.9	D
	Through	300	318	106.0%	6.3	1.2	A
	Right Turn	90	92	102.2%	2.8	1.3	A
	Subtotal	410	429	104.7%	7.9	1.3	A
WB	Left Turn	50	50	99.4%	44.8	5.0	D
	Through	350	373	106.4%	5.4	1.8	A
	Right Turn	30	32	107.0%	4.2	2.8	A
	Subtotal	430	454	105.7%	9.7	1.5	A
Total		1,170	1,213	103.7%	12.7	1.5	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 No Build**
Volume and Delay by Movement **PM**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	85	106.5%	48.2	11.0	D
	Through	770	780	101.3%	23.4	3.3	C
	Right Turn	140	143	102.3%	6.6	0.9	A
	Subtotal	990	1,009	101.9%	23.1	3.7	C
SB	Left Turn	180	176	97.8%	70.9	8.2	E
	Through	710	714	100.6%	23.1	1.3	C
	Right Turn	90	93	103.3%	16.7	4.0	B
	Subtotal	980	983	100.3%	31.1	1.8	C
EB	Left Turn	120	126	104.8%	32.4	12.3	C
	Through	190	203	106.7%	38.1	4.8	D
	Right Turn	80	80	100.3%	26.6	6.8	C
	Subtotal	390	409	104.8%	34.2	4.7	C
WB	Left Turn	310	308	99.3%	42.5	5.6	D
	Through	230	236	102.7%	31.6	4.2	C
	Right Turn	110	111	101.3%	20.4	4.9	C
	Subtotal	650	655	100.8%	34.6	3.5	C
Total		3,010	3,056	101.5%	29.6	1.4	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	162	147.6%	370.2	43.6	F
	Through	890	1,207	135.7%	48.7	7.0	D
	Right Turn	260	386	148.4%	12.6	3.1	B
	Subtotal	1,260	1,756	139.3%	74.0	6.5	E
SB	Left Turn	160	169	105.5%	72.7	25.3	E
	Through	630	1,287	204.3%	23.5	1.9	C
	Right Turn	40	63	157.0%	14.1	6.3	B
	Subtotal	830	1,519	183.0%	28.3	4.5	C
EB	Left Turn	30	63	209.3%	64.9	16.6	E
	Through	60	130	216.7%	51.3	6.5	D
	Right Turn	160	208	130.1%	10.2	2.0	B
	Subtotal	250	401	160.4%	31.9	4.5	C
WB	Left Turn	370	414	111.8%	46.1	5.0	D
	Through	120	150	124.8%	40.4	8.2	D
	Right Turn	110	266	241.5%	12.6	2.6	B
	Subtotal	600	829	138.2%	34.0	2.4	C
Total		2,940	4,505	153.2%	47.8	3.1	D

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	40	99.5%	16.0	4.7	B
	Through	10	9	87.0%	20.7	11.1	C
	Right Turn	10	11	107.0%	4.9	4.2	A
	Subtotal	60	59	98.7%	15.4	4.3	B
SB	Left Turn	20	27	136.0%	19.8	3.9	B
	Through	10	21	206.0%	15.8	8.5	B
	Right Turn	50	66	132.0%	7.8	2.3	A
	Subtotal	80	114	142.3%	12.2	2.6	B
EB	Left Turn	30	66	220.0%	17.5	3.7	B
	Through	430	598	139.0%	6.0	1.3	A
	Right Turn	20	31	155.5%	4.2	4.0	A
	Subtotal	480	695	144.8%	7.2	1.3	A
WB	Left Turn	10	10	101.0%	11.0	6.1	B
	Through	510	728	142.7%	5.3	1.0	A
	Right Turn	10	39	394.0%	3.9	1.7	A
	Subtotal	530	778	146.7%	5.3	0.9	A
Total		1,150	1,645	143.1%	7.0	1.0	A

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	60	51	84.3%	24.0	9.9	C
	Through	10	10	96.0%	24.0	10.4	C
	Right Turn	30	34	111.7%	14.2	10.7	B
	Subtotal	100	94	93.7%	20.5	8.7	C
SB	Left Turn	10	10	96.0%	19.3	16.3	C
	Through						
	Right Turn	20	12	58.5%	7.6	4.6	A
	Subtotal	30	21	71.0%	12.8	5.7	B
EB	Left Turn	10	26	260.0%	4.9	2.4	A
	Through	420	516	122.9%	1.0	0.2	A
	Right Turn	30	86	287.7%	0.5	0.2	A
	Subtotal	460	629	136.6%	1.1	0.2	A
WB	Left Turn	20	37	186.5%	5.8	2.5	A
	Through	450	720	159.9%	2.4	0.4	A
	Right Turn	10	11	112.0%	1.5	1.7	A
	Subtotal	480	768	160.0%	2.6	0.4	A
Total		1,070	1,512	141.3%	3.2	0.6	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	31.6	10.1	C
	Through	10	9	86.0%	28.2	8.9	C
	Right Turn	10	9	94.0%	6.0	7.1	A
	Subtotal	40	38	94.0%	24.1	6.4	C
SB	Left Turn	70	103	146.9%	36.3	5.6	D
	Through	10	23	229.0%	33.7	14.7	C
	Right Turn	130	205	158.0%	15.4	7.1	B
	Subtotal	210	331	157.7%	23.2	5.3	C
EB	Left Turn	50	175	349.2%	11.9	2.1	B
	Through	390	376	96.4%	4.6	0.9	A
	Right Turn	20	19	93.5%	2.1	0.8	A
	Subtotal	460	569	123.7%	6.8	1.3	A
WB	Left Turn	10	15	147.0%	7.2	3.6	A
	Through	330	532	161.3%	9.0	2.3	A
	Right Turn	60	56	92.8%	5.9	2.8	A
	Subtotal	400	603	150.7%	8.7	2.2	A
Total		1,110	1,541	138.8%	11.6	2.4	B

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	29	73.0%	15.9	7.2	C
	Through	10	0	0.0%	0.0	0.0	A
	Right Turn	20	12	61.5%	11.1	11.3	B
	Subtotal	70	42	59.3%	14.5	7.7	B
SB	Left Turn	20	0	0.0%	0.0	0.0	A
	Through	10	0	0.0%	0.0	0.0	A
	Right Turn	80	0	0.0%	0.0	0.0	A
	Subtotal	110	0	0.0%	0.0	0.0	A
EB	Left Turn	170	0	0.0%	0.0	0.0	A
	Through	280	440	157.1%	1.2	0.2	A
	Right Turn	20	40	198.5%	0.8	0.4	A
	Subtotal	470	480	102.0%	1.2	0.1	A
WB	Left Turn	10	20	202.0%	5.1	1.1	A
	Through	280	581	207.5%	2.5	0.2	A
	Right Turn	20	0	0.0%	0.0	0.0	A
	Subtotal	310	601	194.0%	2.6	0.3	A
Total		960	1,122	116.9%	2.2	0.3	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	70	108	154.3%	25.1	5.2	C
	Through	10	21	212.0%	27.4	11.2	C
	Right Turn	40	51	128.0%	4.6	0.6	A
	Subtotal	120	180	150.3%	19.9	3.9	B
SB	Left Turn	20	370	1851.0%	26.3	1.9	C
	Through						
	Right Turn	30	212	705.3%	11.2	2.9	B
	Subtotal	50	582	1163.6%	20.6	1.3	C
EB	Left Turn	40	100	250.5%	47.6	7.2	D
	Through	250	251	100.5%	17.1	3.3	B
	Right Turn	30	100	334.3%	10.5	4.2	B
	Subtotal	320	452	141.2%	22.7	2.6	C
WB	Left Turn	30	52	172.3%	44.4	9.4	D
	Through	210	285	135.8%	20.2	2.9	C
	Right Turn	50	255	509.4%	14.9	4.0	B
	Subtotal	290	592	204.0%	19.8	2.6	B
Total		780	1,806	231.5%	20.8	1.5	C

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	157	196.3%	57.0	12.9	E
	Through	550	827	150.3%	27.0	3.3	C
	Right Turn	310	147	47.5%	6.7	1.1	A
	Subtotal	940	1,131	120.3%	28.6	3.8	C
SB	Left Turn	100	184	183.9%	75.2	7.9	E
	Through	400	788	197.0%	40.0	7.3	D
	Right Turn	100	199	198.6%	36.7	12.8	D
	Subtotal	600	1,171	195.1%	45.3	6.9	D
EB	Left Turn	80	246	307.6%	37.3	11.4	D
	Through	150	230	153.1%	38.0	3.4	D
	Right Turn	40	149	372.0%	31.1	7.6	C
	Subtotal	270	625	231.3%	36.3	4.6	D
WB	Left Turn	150	333	221.9%	60.0	14.2	E
	Through	120	227	189.0%	32.3	3.5	C
	Right Turn	50	114	227.6%	24.7	3.5	C
	Subtotal	320	673	210.4%	45.4	7.8	D
Total		2,130	3,600	169.0%	38.5	3.1	D

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	190	182	95.7%	122.2	42.4	F
	Through	1,170	1,158	99.0%	82.0	32.7	F
	Right Turn	330	330	100.1%	8.7	5.4	A
	Subtotal	1,690	1,670	98.8%	73.3	26.7	E
SB	Left Turn	160	163	101.6%	55.8	5.3	E
	Through	1,110	1,108	99.9%	25.5	2.7	C
	Right Turn	50	51	101.2%	16.4	8.7	B
	Subtotal	1,320	1,322	100.1%	29.2	2.7	C
EB	Left Turn	50	49	97.8%	55.7	10.2	E
	Through	100	101	100.6%	49.8	6.7	D
	Right Turn	190	194	101.8%	9.2	2.2	A
	Subtotal	340	343	100.9%	27.6	4.1	C
WB	Left Turn	360	373	103.5%	53.8	6.5	D
	Through	130	130	100.2%	34.5	6.6	C
	Right Turn	240	229	95.6%	8.3	1.6	A
	Subtotal	730	732	100.3%	36.3	4.4	D
Total		4,080	4,067	99.7%	49.0	11.3	D

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	38	95.0%	17.5	5.5	B
	Through	10	9	90.0%	12.5	12.3	B
	Right Turn	10	11	112.0%	6.3	6.0	A
	Subtotal	60	58	97.0%	15.5	5.1	B
SB	Left Turn	20	20	100.5%	16.3	7.4	B
	Through	10	10	95.0%	18.7	9.1	B
	Right Turn	50	47	94.6%	9.6	2.3	A
	Subtotal	80	77	96.1%	13.2	3.4	B
EB	Left Turn	70	70	100.3%	21.0	6.2	C
	Through	500	507	101.4%	6.0	1.8	A
	Right Turn	20	22	112.0%	4.8	3.0	A
	Subtotal	590	600	101.7%	7.7	1.8	A
WB	Left Turn	10	10	98.0%	11.7	6.8	B
	Through	640	648	101.3%	8.8	2.6	A
	Right Turn	40	39	98.3%	7.3	4.2	A
	Subtotal	690	697	101.0%	8.8	2.7	A
Total		1,420	1,432	100.8%	8.9	1.9	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	50	100.2%	16.9	3.9	C
	Through	10	11	113.0%	22.5	11.6	C
	Right Turn	30	27	91.3%	11.3	4.1	B
	Subtotal	90	89	98.7%	16.0	3.3	C
SB	Left Turn	10	8	84.0%	16.5	16.9	C
	Through	10	12	120.0%	19.2	8.5	C
	Right Turn	10	12	124.0%	8.7	5.8	A
	Subtotal	30	33	109.3%	15.6	5.6	C
EB	Left Turn	30	29	98.0%	4.8	1.9	A
	Through	420	421	100.3%	1.6	0.4	A
	Right Turn	80	81	101.3%	1.0	0.3	A
	Subtotal	530	532	100.3%	1.7	0.3	A
WB	Left Turn	40	39	97.0%	6.1	2.2	A
	Through	630	643	102.0%	2.3	0.5	A
	Right Turn	10	13	127.0%	1.7	0.5	A
	Subtotal	680	694	102.1%	2.5	0.4	A
Total		1,330	1,347	101.3%	3.4	0.4	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	21	106.0%	39.2	9.5	D
	Through	10	10	103.0%	26.8	18.1	C
	Right Turn	10	11	109.0%	4.1	2.8	A
	Subtotal	40	42	106.0%	26.8	6.6	C
SB	Left Turn	90	90	99.7%	40.5	5.6	D
	Through	20	18	91.0%	35.1	9.5	D
	Right Turn	100	102	102.4%	16.5	3.7	B
	Subtotal	210	210	100.1%	28.7	4.8	C
EB	Left Turn	140	140	99.6%	17.6	5.5	B
	Through	300	305	101.7%	4.3	0.9	A
	Right Turn	20	18	90.5%	2.9	2.3	A
	Subtotal	460	463	100.6%	8.6	2.5	A
WB	Left Turn	20	20	97.5%	10.1	5.8	B
	Through	560	559	99.8%	11.7	3.7	B
	Right Turn	110	103	93.9%	8.2	4.6	A
	Subtotal	690	682	98.8%	11.1	3.7	B
Total		1,400	1,397	99.8%	13.4	2.9	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	21	104.0%	22.7	12.9	C
	Through						
	Right Turn	10	10	96.0%	6.7	1.3	A
	Subtotal	30	30	101.3%	17.5	8.6	C
SB	Left Turn	80	81	101.4%	25.5	6.2	D
	Through	10	12	115.0%	20.5	10.0	C
	Right Turn	130	129	99.4%	14.6	6.6	B
	Subtotal	220	222	100.8%	19.2	5.1	C
EB	Left Turn	40	39	98.0%	7.0	1.6	A
	Through	320	318	99.2%	1.3	0.2	A
	Right Turn	40	42	105.3%	0.8	0.4	A
	Subtotal	400	399	99.7%	1.8	0.3	A
WB	Left Turn	20	20	97.5%	6.0	1.8	A
	Through	540	540	100.0%	4.2	1.5	A
	Right Turn	10	11	110.0%	3.5	1.9	A
	Subtotal	570	571	100.1%	4.2	1.4	A
Total		1,220	1,222	100.1%	6.6	1.6	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	100	95	95.1%	36.6	5.7	D
	Through	10	12	121.0%	44.4	20.5	D
	Right Turn	50	53	106.6%	6.5	1.3	A
	Subtotal	160	161	100.3%	26.9	4.1	C
SB	Left Turn	40	36	90.8%	37.2	8.9	D
	Through	10	8	77.0%	24.0	14.7	C
	Right Turn	120	118	98.4%	9.9	2.6	A
	Subtotal	170	162	95.4%	16.7	3.0	B
EB	Left Turn	20	21	106.0%	46.2	11.6	D
	Through	300	303	100.8%	9.1	1.4	A
	Right Turn	90	90	99.8%	6.5	2.2	A
	Subtotal	410	414	100.9%	10.4	1.8	B
WB	Left Turn	50	48	96.8%	42.5	8.5	D
	Through	350	358	102.3%	8.2	2.1	A
	Right Turn	30	31	103.0%	6.4	2.6	A
	Subtotal	430	437	101.7%	11.0	1.2	B
Total		1,170	1,173	100.3%	13.9	1.2	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	76	94.6%	55.5	11.0	E
	Through	770	763	99.0%	27.7	3.9	C
	Right Turn	140	148	105.7%	4.4	0.6	A
	Subtotal	990	986	99.6%	26.5	3.5	C
SB	Left Turn	180	172	95.5%	66.4	9.7	E
	Through	710	703	99.0%	25.3	2.6	C
	Right Turn	90	93	103.3%	20.4	4.1	C
	Subtotal	980	968	98.8%	32.0	3.1	C
EB	Left Turn	120	120	99.7%	33.8	4.0	C
	Through	190	190	99.9%	51.9	6.1	D
	Right Turn	80	80	99.8%	40.3	14.6	D
	Subtotal	390	389	99.8%	43.3	5.2	D
WB	Left Turn	310	316	101.8%	57.1	13.7	E
	Through	230	228	99.3%	39.2	9.4	D
	Right Turn	110	113	102.4%	7.0	1.9	A
	Subtotal	650	657	101.0%	42.9	10.7	D
Total		3,010	3,000	99.7%	33.9	3.0	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 AM No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	115	96.0%	70.8	32.6	E
	Through	940	941	100.1%	30.4	7.3	C
	Right Turn	380	376	99.0%	8.5	1.7	A
	Subtotal	1,440	1,432	99.4%	28.3	7.1	C
SB	Left Turn	170	168	98.6%	51.2	5.5	D
	Through	700	696	99.5%	19.4	2.2	B
	Right Turn	40	38	95.0%	5.5	2.9	A
	Subtotal	910	902	99.1%	24.9	2.4	C
EB	Left Turn	30	28	93.0%	63.4	20.3	E
	Through	60	59	99.0%	50.7	6.0	D
	Right Turn	170	165	97.1%	6.5	1.3	A
	Subtotal	260	252	97.0%	23.7	4.2	C
WB	Left Turn	430	429	99.7%	43.2	4.6	D
	Through	120	123	102.7%	32.6	4.5	C
	Right Turn	110	114	104.0%	8.1	1.1	A
	Subtotal	660	666	101.0%	35.3	2.7	D
Total		3,270	3,253	99.5%	28.6	3.3	C

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	38	94.5%	16.7	5.2	B
	Through	10	10	104.0%	14.7	9.1	B
	Right Turn	10	10	100.0%	6.0	3.2	A
	Subtotal	60	58	97.0%	13.9	3.5	B
SB	Left Turn	20	18	87.5%	17.1	8.2	B
	Through	10	10	98.0%	14.7	7.3	B
	Right Turn	60	63	105.0%	5.4	1.3	A
	Subtotal	90	90	100.3%	8.5	2.5	A
EB	Left Turn	40	41	103.5%	9.1	2.0	A
	Through	550	547	99.4%	5.0	1.5	A
	Right Turn	20	20	101.5%	2.2	1.6	A
	Subtotal	610	608	99.7%	5.2	1.3	A
WB	Left Turn	10	10	96.0%	7.8	6.9	A
	Through	560	568	101.4%	4.2	1.0	A
	Right Turn	10	11	111.0%	3.0	6.7	A
	Subtotal	580	589	101.5%	4.2	1.1	A
Total		1,340	1,345	100.4%	5.3	0.9	A

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	70	73	104.7%	15.2	3.8	C
	Through	10	12	120.0%	15.4	4.1	C
	Right Turn	30	28	92.0%	9.0	4.4	A
	Subtotal	110	113	102.6%	13.6	3.4	B
SB	Left Turn	10	8	84.0%	11.4	6.5	B
	Through						
	Right Turn	20	21	102.5%	6.3	5.3	A
	Subtotal	30	29	96.3%	7.9	4.4	A
EB	Left Turn	20	19	95.5%	4.6	3.1	A
	Through	530	527	99.5%	0.6	0.1	A
	Right Turn	30	31	103.0%	0.2	0.1	A
	Subtotal	580	577	99.5%	0.7	0.1	A
WB	Left Turn	20	17	85.0%	4.0	1.9	A
	Through	490	493	100.6%	1.5	0.2	A
	Right Turn	10	10	99.0%	0.8	0.7	A
	Subtotal	520	520	100.0%	1.6	0.2	A
Total		1,240	1,239	99.9%	2.5	0.4	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	17	85.0%	31.4	11.9	C
	Through	10	12	120.0%	27.7	13.6	C
	Right Turn	10	11	107.0%	5.3	4.9	A
	Subtotal	40	40	99.3%	23.5	11.4	C
SB	Left Turn	70	69	99.1%	34.3	5.2	C
	Through	10	10	96.0%	40.6	24.0	D
	Right Turn	170	173	101.8%	7.4	2.0	A
	Subtotal	250	252	100.8%	15.8	3.0	B
EB	Left Turn	220	216	98.3%	8.3	0.8	A
	Through	340	343	100.9%	3.2	0.7	A
	Right Turn	10	10	98.0%	0.5	0.4	A
	Subtotal	570	569	99.8%	5.2	0.6	A
WB	Left Turn	10	9	87.0%	6.4	4.2	A
	Through	330	335	101.6%	6.6	1.4	A
	Right Turn	60	62	103.5%	4.1	1.6	A
	Subtotal	400	406	101.6%	6.2	1.2	A
Total		1,260	1,267	100.6%	8.3	0.8	A

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	41	103.3%	9.5	2.5	A
	Through						
	Right Turn	20	19	95.5%	5.2	2.6	A
	Subtotal	60	60	100.7%	7.9	2.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	400	405	101.4%	1.1	0.2	A
	Right Turn	20	21	103.0%	0.6	0.5	A
	Subtotal	420	426	101.4%	1.1	0.2	A
WB	Left Turn	10	10	95.0%	2.9	1.8	A
	Through	360	361	100.2%	1.8	0.2	A
	Right Turn						
	Subtotal	370	370	100.1%	1.8	0.2	A
Total		850	857	100.8%	1.8	0.2	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	77	96.4%	29.6	4.8	C
	Through	20	20	102.0%	34.6	9.7	C
	Right Turn	50	53	105.8%	5.0	1.3	A
	Subtotal	150	150	100.3%	22.4	3.6	C
SB	Left Turn	240	237	98.7%	38.5	4.6	D
	Through	20	19	93.5%	26.5	15.9	C
	Right Turn	110	110	99.8%	6.0	3.2	A
	Subtotal	370	365	98.7%	28.3	2.7	C
EB	Left Turn	160	158	98.9%	40.7	5.4	D
	Through	230	223	97.1%	6.7	1.5	A
	Right Turn	30	30	100.3%	3.7	2.5	A
	Subtotal	420	412	98.0%	20.1	2.7	C
WB	Left Turn	30	29	96.0%	51.0	10.3	D
	Through	180	187	104.0%	12.0	2.2	B
	Right Turn	260	266	102.2%	7.7	2.0	A
	Subtotal	470	482	102.5%	12.4	2.0	B
Total		1,410	1,409	99.9%	19.8	1.7	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 AM No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	140	142	101.1%	45.3	5.0	D
	Through	580	568	98.0%	16.2	2.5	B
	Right Turn	320	316	98.7%	8.4	1.1	A
	Subtotal	1,040	1,026	98.6%	17.6	1.6	B
SB	Left Turn	100	99	98.9%	55.0	13.2	D
	Through	420	414	98.5%	19.7	2.7	B
	Right Turn	210	211	100.6%	11.8	2.6	B
	Subtotal	730	724	99.2%	22.9	4.1	C
EB	Left Turn	180	177	98.2%	32.5	2.9	C
	Through	170	180	105.9%	36.8	5.7	D
	Right Turn	120	121	100.8%	22.5	5.3	C
	Subtotal	470	478	101.7%	31.5	3.5	C
WB	Left Turn	160	159	99.4%	31.1	4.3	C
	Through	120	126	104.8%	34.0	5.4	C
	Right Turn	50	53	105.6%	20.7	5.3	C
	Subtotal	330	338	102.3%	30.3	3.3	C
Total		2,570	2,565	99.8%	23.4	1.9	C

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	200	162	81.2%	370.2	43.6	F
	Through	1,260	1,207	95.8%	48.7	7.0	D
	Right Turn	410	386	94.1%	12.6	3.1	B
	Subtotal	1,870	1,756	93.9%	74.0	6.5	E
SB	Left Turn	170	169	99.3%	72.7	25.3	E
	Through	1,270	1,287	101.4%	23.5	1.9	C
	Right Turn	60	63	104.7%	14.1	6.3	B
	Subtotal	1,500	1,519	101.3%	28.3	4.5	C
EB	Left Turn	60	63	104.7%	64.9	16.6	E
	Through	130	130	100.0%	51.3	6.5	D
	Right Turn	200	208	104.1%	10.2	2.0	B
	Subtotal	390	401	102.8%	31.9	4.5	C
WB	Left Turn	400	414	103.4%	46.1	5.0	D
	Through	140	150	106.9%	40.4	8.2	D
	Right Turn	260	266	102.2%	12.6	2.6	B
	Subtotal	800	829	103.6%	34.0	2.4	C
Total		4,560	4,505	98.8%	47.8	3.1	D

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	40	99.5%	16.0	4.7	B
	Through	10	9	87.0%	20.7	11.1	C
	Right Turn	10	11	107.0%	4.9	4.2	A
	Subtotal	60	59	98.7%	15.4	4.3	B
SB	Left Turn	30	27	90.7%	19.8	3.9	B
	Through	20	21	103.0%	15.8	8.5	B
	Right Turn	60	66	110.0%	7.8	2.3	A
	Subtotal	110	114	103.5%	12.2	2.6	B
EB	Left Turn	70	66	94.3%	17.5	3.7	B
	Through	610	598	98.0%	6.0	1.3	A
	Right Turn	30	31	103.7%	4.2	4.0	A
	Subtotal	710	695	97.9%	7.2	1.3	A
WB	Left Turn	10	10	101.0%	11.0	6.1	B
	Through	700	728	104.0%	5.3	1.0	A
	Right Turn	40	39	98.5%	3.9	1.7	A
	Subtotal	750	778	103.7%	5.3	0.9	A
Total		1,630	1,645	100.9%	7.0	1.0	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM No Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	51	101.2%	24.0	9.9	C
	Through	10	10	96.0%	24.0	10.4	C
	Right Turn	30	34	111.7%	14.2	10.7	B
	Subtotal	90	94	104.1%	20.5	8.7	C
SB	Left Turn	10	10	96.0%	19.3	16.3	C
	Through	10	10	104.0%	20.4	8.8	C
	Right Turn	10	12	117.0%	7.6	4.6	A
	Subtotal	30	32	105.7%	15.8	3.8	C
EB	Left Turn	30	26	86.7%	4.9	2.4	A
	Through	530	516	97.4%	1.0	0.2	A
	Right Turn	90	86	95.9%	0.5	0.2	A
	Subtotal	650	629	96.7%	1.1	0.2	A
WB	Left Turn	40	37	93.3%	5.8	2.5	A
	Through	690	720	104.3%	2.4	0.4	A
	Right Turn	10	11	112.0%	1.5	1.7	A
	Subtotal	740	768	103.8%	2.6	0.4	A
Total		1,510	1,522	100.8%	3.3	0.6	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	31.6	10.1	C
	Through	10	9	86.0%	28.2	8.9	C
	Right Turn	10	9	94.0%	6.0	7.1	A
	Subtotal	40	38	94.0%	24.1	6.4	C
SB	Left Turn	100	103	102.8%	36.3	5.6	D
	Through	20	23	114.5%	33.7	14.7	C
	Right Turn	200	205	102.7%	15.4	7.1	B
	Subtotal	320	331	103.5%	23.2	5.3	C
EB	Left Turn	180	175	97.0%	11.9	2.1	B
	Through	370	376	101.6%	4.6	0.9	A
	Right Turn	20	19	93.5%	2.1	0.8	A
	Subtotal	570	569	99.9%	6.8	1.3	A
WB	Left Turn	20	15	73.5%	7.2	3.6	A
	Through	520	532	102.3%	9.0	2.3	A
	Right Turn	60	56	92.8%	5.9	2.8	A
	Subtotal	600	603	100.4%	8.7	2.2	A
Total		1,530	1,541	100.7%	11.6	2.4	B

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	29	97.3%	15.9	7.2	C
	Through						
	Right Turn	10	12	123.0%	11.1	11.3	B
	Subtotal	40	42	103.8%	14.5	7.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	440	440	100.0%	1.2	0.2	A
	Right Turn	40	40	99.3%	0.8	0.4	A
	Subtotal	480	480	99.9%	1.2	0.1	A
WB	Left Turn	20	20	101.0%	5.1	1.1	A
	Through	570	581	101.9%	2.5	0.2	A
	Right Turn						
	Subtotal	590	601	101.9%	2.6	0.3	A
Total		1,110	1,122	101.1%	2.4	0.3	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	108	98.2%	25.1	5.2	C
	Through	20	21	106.0%	27.4	11.2	C
	Right Turn	50	51	102.4%	4.6	0.6	A
	Subtotal	180	180	100.2%	19.9	3.9	B
SB	Left Turn	370	370	100.1%	26.3	1.9	C
	Through	100	102	101.6%	21.6	3.0	C
	Right Turn	210	212	100.8%	11.2	2.9	B
	Subtotal	680	683	100.5%	20.8	1.3	C
EB	Left Turn	100	100	100.2%	47.6	7.2	D
	Through	250	251	100.5%	17.1	3.3	B
	Right Turn	100	100	100.3%	10.5	4.2	B
	Subtotal	450	452	100.4%	22.7	2.6	C
WB	Left Turn	50	52	103.4%	44.4	9.4	D
	Through	270	285	105.6%	20.2	2.9	C
	Right Turn	250	255	101.9%	14.9	4.0	B
	Subtotal	570	592	103.8%	19.8	2.6	B
Total		1,880	1,907	101.4%	20.8	1.4	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM No Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	157	98.1%	57.0	12.9	E
	Through	820	827	100.8%	27.0	3.3	C
	Right Turn	150	147	98.1%	6.7	1.1	A
	Subtotal	1,130	1,131	100.1%	28.6	3.8	C
SB	Left Turn	190	184	96.8%	75.2	7.9	E
	Through	760	788	103.7%	40.0	7.3	D
	Right Turn	190	199	104.5%	36.7	12.8	D
	Subtotal	1,140	1,171	102.7%	45.3	6.9	D
EB	Left Turn	250	246	98.4%	37.3	11.4	D
	Through	230	230	99.9%	38.0	3.4	D
	Right Turn	140	149	106.3%	31.1	7.6	C
	Subtotal	620	625	100.7%	36.3	4.6	D
WB	Left Turn	330	333	100.8%	60.0	14.2	E
	Through	220	227	103.1%	32.3	3.5	C
	Right Turn	120	114	94.8%	24.7	3.5	C
	Subtotal	670	673	100.5%	45.4	7.8	D
Total		3,560	3,600	101.1%	38.5	3.1	D

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 AM Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	120	99.8%	80.6	23.0	F
	Through	940	924	98.3%	38.3	12.8	D
	Right Turn	380	375	98.6%	5.5	1.1	A
	Subtotal	1,440	1,418	98.5%	33.3	8.3	C
SB	Left Turn	170	170	99.8%	70.3	15.9	E
	Through	700	706	100.9%	26.2	3.1	C
	Right Turn	40	40	99.8%	9.0	5.1	A
	Subtotal	910	916	100.6%	33.4	4.8	C
EB	Left Turn	30	31	102.3%	49.8	15.3	D
	Through	60	58	96.7%	55.0	8.3	D
	Right Turn	170	162	95.2%	6.3	1.5	A
	Subtotal	260	251	96.4%	22.8	3.2	C
WB	Left Turn	430	438	101.8%	46.7	6.3	D
	Through	120	123	102.8%	27.9	2.9	C
	Right Turn	110	111	100.7%	6.4	2.0	A
	Subtotal	660	672	101.8%	36.6	4.8	D
Total		3,270	3,256	99.6%	33.2	4.9	C

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	40	99.8%	19.6	3.8	B
	Through	10	10	99.0%	13.4	10.0	B
	Right Turn	10	11	110.0%	13.0	10.6	B
	Subtotal	60	61	101.3%	17.4	3.0	B
SB	Left Turn	20	20	100.0%	16.6	4.9	B
	Through	10	11	106.0%	16.0	6.6	B
	Right Turn	60	58	95.8%	8.5	3.7	A
	Subtotal	90	88	97.9%	11.3	3.6	B
EB	Left Turn	40	38	94.5%	14.0	5.7	B
	Through	550	548	99.7%	7.6	1.6	A
	Right Turn	20	21	106.5%	4.7	2.8	A
	Subtotal	610	607	99.6%	7.9	1.6	A
WB	Left Turn	10	10	99.0%	14.3	11.4	B
	Through	560	571	101.9%	6.7	2.0	A
	Right Turn	10	10	98.0%	3.3	2.6	A
	Subtotal	580	590	101.8%	6.7	1.9	A
Total		1,340	1,347	100.5%	8.1	1.4	A

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	70	71	101.1%	20.8	5.6	C
	Through	10	11	109.0%	18.2	9.5	C
	Right Turn	30	28	91.7%	12.4	5.8	B
	Subtotal	110	109	99.3%	18.4	4.4	C
SB	Left Turn	10	9	85.0%	10.8	4.9	B
	Through						
	Right Turn	20	22	108.0%	6.6	2.1	A
	Subtotal	30	30	100.3%	8.1	2.8	A
EB	Left Turn	20	20	99.0%	4.6	1.7	A
	Through	530	528	99.5%	1.3	0.2	A
	Right Turn	30	33	109.7%	0.8	0.3	A
	Subtotal	580	580	100.0%	1.4	0.2	A
WB	Left Turn	20	22	109.0%	4.7	1.9	A
	Through	490	503	102.6%	1.8	0.2	A
	Right Turn	10	10	102.0%	1.3	1.1	A
	Subtotal	520	535	102.8%	1.8	0.2	A
Total		1,240	1,254	101.1%	3.3	0.5	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	94.5%	37.9	12.7	D
	Through	10	10	96.0%	21.8	17.8	C
	Right Turn	10	10	104.0%	5.2	2.7	A
	Subtotal	40	39	97.3%	25.6	7.2	C
SB	Left Turn	70	73	103.7%	36.1	5.2	D
	Through	10	10	96.0%	35.5	22.3	D
	Right Turn	170	175	103.1%	8.4	1.6	A
	Subtotal	250	258	103.0%	17.2	2.6	B
EB	Left Turn	220	217	98.8%	9.2	1.0	A
	Through	340	340	99.9%	5.6	1.5	A
	Right Turn	10	10	98.0%	4.9	5.8	A
	Subtotal	570	567	99.4%	6.9	1.0	A
WB	Left Turn	10	11	114.0%	5.7	3.7	A
	Through	330	344	104.2%	8.9	2.1	A
	Right Turn	60	63	105.7%	5.4	2.8	A
	Subtotal	400	419	104.6%	8.4	2.0	A
Total		1,260	1,282	101.7%	10.2	0.9	B

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	42	105.0%	11.7	3.1	B
	Through						
	Right Turn	20	21	105.5%	5.4	1.5	A
	Subtotal	60	63	105.2%	9.2	2.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	400	406	101.4%	1.2	0.2	A
	Right Turn	20	20	100.5%	0.9	0.4	A
	Subtotal	420	426	101.4%	1.2	0.2	A
WB	Left Turn	10	9	86.0%	4.8	4.4	A
	Through	360	370	102.8%	2.4	0.3	A
	Right Turn						
	Subtotal	370	379	102.4%	2.5	0.3	A
Total		850	868	102.1%	2.3	0.2	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	84	104.4%	33.2	5.5	C
	Through	20	18	92.0%	37.5	14.8	D
	Right Turn	50	53	105.8%	5.7	1.2	A
	Subtotal	150	155	103.2%	24.9	4.1	C
SB	Left Turn	240	236	98.3%	39.1	5.4	D
	Through	20	19	93.5%	24.4	6.3	C
	Right Turn	110	106	96.4%	7.5	2.9	A
	Subtotal	370	361	97.5%	29.2	3.6	C
EB	Left Turn	160	153	95.4%	42.1	5.3	D
	Through	230	235	102.1%	11.5	2.6	B
	Right Turn	30	30	101.3%	7.5	3.4	A
	Subtotal	420	418	99.5%	21.5	3.6	C
WB	Left Turn	30	28	92.3%	41.4	12.4	D
	Through	180	190	105.6%	18.1	5.0	B
	Right Turn	260	259	99.5%	12.0	3.5	B
	Subtotal	470	476	101.3%	16.2	4.1	B
Total		1,410	1,410	100.0%	22.2	2.1	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 AM Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	140	139	99.3%	43.5	3.5	D
	Through	580	574	99.0%	18.0	2.3	B
	Right Turn	320	321	100.4%	5.6	1.2	A
	Subtotal	1,040	1,035	99.5%	17.3	1.8	B
SB	Left Turn	100	102	102.1%	54.8	13.3	D
	Through	420	422	100.4%	22.6	3.5	C
	Right Turn	210	212	101.1%	13.9	2.5	B
	Subtotal	730	736	100.8%	24.7	2.2	C
EB	Left Turn	180	180	100.2%	35.8	6.5	D
	Through	170	181	106.4%	36.9	5.2	D
	Right Turn	120	117	97.3%	31.4	6.2	C
	Subtotal	470	478	101.7%	35.3	4.2	D
WB	Left Turn	160	155	96.8%	39.0	17.2	D
	Through	120	126	104.8%	30.2	3.9	C
	Right Turn	50	50	99.8%	4.3	1.6	A
	Subtotal	330	330	100.1%	30.3	8.6	C
Total		2,570	2,579	100.3%	24.6	2.0	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	200	166	83.2%	370.5	39.7	F
	Through	1,260	1,152	91.5%	84.1	25.5	F
	Right Turn	410	389	94.8%	15.2	5.0	B
	Subtotal	1,870	1,707	91.3%	97.4	14.3	F
SB	Left Turn	170	170	99.8%	80.5	27.8	F
	Through	1,270	1,280	100.8%	29.8	4.5	C
	Right Turn	60	60	100.0%	17.4	7.0	B
	Subtotal	1,500	1,510	100.6%	34.8	6.6	C
EB	Left Turn	60	55	92.0%	56.6	9.5	E
	Through	130	126	97.2%	50.6	5.9	D
	Right Turn	200	205	102.6%	11.2	2.3	B
	Subtotal	390	387	99.2%	30.2	3.4	C
WB	Left Turn	400	396	99.1%	60.8	16.0	E
	Through	140	140	99.7%	32.5	4.6	C
	Right Turn	260	266	102.3%	10.3	3.4	B
	Subtotal	800	802	100.2%	38.8	10.1	D
Total		4,560	4,406	96.6%	60.0	6.8	E

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	39	98.3%	18.7	4.7	B
	Through	10	10	101.0%	15.8	8.5	B
	Right Turn	10	11	112.0%	11.1	7.4	B
	Subtotal	60	61	101.0%	16.6	3.1	B
SB	Left Turn	30	30	99.7%	18.9	6.8	B
	Through	20	23	115.0%	15.6	4.4	B
	Right Turn	60	61	101.5%	11.1	3.4	B
	Subtotal	110	114	103.5%	14.0	3.0	B
EB	Left Turn	70	68	97.6%	25.8	5.8	C
	Through	610	598	98.0%	9.1	2.5	A
	Right Turn	30	28	94.0%	6.8	2.4	A
	Subtotal	710	694	97.8%	10.7	2.6	B
WB	Left Turn	10	9	85.0%	16.0	14.4	B
	Through	700	711	101.6%	10.9	2.0	B
	Right Turn	40	40	100.5%	7.9	3.2	A
	Subtotal	750	760	101.3%	10.9	2.0	B
Total		1,630	1,629	99.9%	11.3	2.0	B

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	49	98.0%	31.4	13.6	D
	Through	10	11	110.0%	27.4	23.8	D
	Right Turn	30	25	84.3%	24.9	18.1	C
	Subtotal	90	85	94.8%	29.1	14.5	D
SB	Left Turn	10	10	102.0%	24.5	28.2	C
	Through	10	11	109.0%	30.7	11.9	D
	Right Turn	10	12	119.0%	9.8	6.0	A
	Subtotal	30	33	110.0%	20.1	7.4	C
EB	Left Turn	30	27	90.0%	5.8	1.6	A
	Through	530	527	99.4%	2.0	0.3	A
	Right Turn	90	81	90.1%	1.0	0.3	A
	Subtotal	650	635	97.7%	2.0	0.3	A
WB	Left Turn	40	41	103.0%	7.1	1.1	A
	Through	690	710	102.9%	2.3	0.2	A
	Right Turn	10	11	106.0%	1.7	1.4	A
	Subtotal	740	762	103.0%	2.6	0.3	A
Total		1,510	1,515	100.4%	4.4	1.2	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	23	114.0%	47.8	15.0	D
	Through	10	11	110.0%	33.8	12.3	C
	Right Turn	10	11	111.0%	6.3	5.8	A
	Subtotal	40	45	112.3%	34.3	9.2	C
SB	Left Turn	100	106	105.9%	40.0	5.3	D
	Through	20	23	114.0%	40.7	15.4	D
	Right Turn	200	200	100.2%	21.5	8.7	C
	Subtotal	320	329	102.8%	29.4	7.4	C
EB	Left Turn	180	177	98.1%	16.2	4.8	B
	Through	370	372	100.6%	6.2	1.0	A
	Right Turn	20	22	107.5%	6.1	5.4	A
	Subtotal	570	570	100.1%	9.3	2.1	A
WB	Left Turn	20	19	94.0%	12.0	4.2	B
	Through	520	526	101.2%	12.8	3.1	B
	Right Turn	60	64	106.8%	9.3	3.7	A
	Subtotal	600	609	101.5%	12.5	3.0	B
Total		1,530	1,553	101.5%	15.6	2.4	B

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	32	106.0%	16.5	6.0	C
	Through						
	Right Turn	10	10	100.0%	5.7	4.4	A
	Subtotal	40	42	104.5%	14.1	5.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	440	443	100.7%	1.5	0.2	A
	Right Turn	40	41	102.5%	1.1	0.3	A
	Subtotal	480	484	100.8%	1.5	0.2	A
WB	Left Turn	20	20	98.5%	5.8	2.7	A
	Through	570	584	102.5%	3.4	0.6	A
	Right Turn						
	Subtotal	590	604	102.3%	3.4	0.6	A
Total		1,110	1,130	101.8%	3.0	0.5	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	108	98.1%	53.0	15.9	D
	Through	20	20	101.5%	50.9	19.0	D
	Right Turn	50	50	99.8%	9.6	8.0	A
	Subtotal	180	178	98.9%	40.5	13.6	D
SB	Left Turn	370	365	98.6%	33.8	6.6	C
	Through	100	104	104.0%	23.7	3.7	C
	Right Turn	210	211	100.4%	13.6	1.7	B
	Subtotal	680	680	99.9%	26.0	3.6	C
EB	Left Turn	100	101	101.1%	61.5	17.4	E
	Through	250	253	101.2%	19.7	3.9	B
	Right Turn	100	101	100.9%	15.1	3.2	B
	Subtotal	450	455	101.1%	28.8	6.3	C
WB	Left Turn	50	50	100.0%	64.0	11.8	E
	Through	270	293	108.6%	42.8	16.7	D
	Right Turn	250	249	99.7%	36.0	15.9	D
	Subtotal	570	592	103.9%	41.6	15.4	D
Total		1,880	1,905	101.3%	32.8	5.6	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	158	98.9%	132.4	40.1	F
	Through	820	814	99.2%	29.6	3.2	C
	Right Turn	150	154	102.4%	5.2	0.6	A
	Subtotal	1,130	1,125	99.6%	42.4	8.2	D
SB	Left Turn	190	189	99.2%	70.8	8.8	E
	Through	760	763	100.4%	66.1	19.0	E
	Right Turn	190	190	99.8%	70.8	22.6	E
	Subtotal	1,140	1,141	100.1%	67.8	17.2	E
EB	Left Turn	250	255	101.9%	61.0	21.2	E
	Through	230	224	97.6%	70.6	17.0	E
	Right Turn	140	136	97.2%	63.3	17.7	E
	Subtotal	620	615	99.2%	65.2	18.1	E
WB	Left Turn	330	329	99.6%	43.0	14.8	D
	Through	220	228	103.6%	35.0	9.7	D
	Right Turn	120	124	103.2%	8.3	1.9	A
	Subtotal	670	681	101.6%	34.1	10.2	C
Total		3,560	3,563	100.1%	53.4	8.4	D

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	130	125	96.3%	42.8	6.6	D
	Through	1,050	1,043	99.4%	37.6	9.2	D
	Right Turn	500	505	101.1%	13.4	2.4	B
	Subtotal	1,680	1,674	99.6%	30.8	6.1	C
SB	Left Turn	180	173	96.1%	61.0	12.3	E
	Through	790	794	100.5%	28.3	3.4	C
	Right Turn	50	53	105.0%	14.4	4.4	B
	Subtotal	1,020	1,019	99.9%	33.4	4.3	C
EB	Left Turn	40	41	102.0%	60.5	15.4	E
	Through	70	71	100.7%	48.2	8.6	D
	Right Turn	190	196	102.9%	8.0	1.1	A
	Subtotal	300	307	102.3%	24.2	3.9	C
WB	Left Turn	470	473	100.6%	41.3	4.6	D
	Through	130	124	95.2%	32.0	5.3	C
	Right Turn	110	109	99.2%	9.0	2.1	A
	Subtotal	710	706	99.4%	34.8	3.0	C
Total		3,710	3,706	99.9%	31.7	3.2	C

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	47	93.6%	18.5	5.3	B
	Through	20	21	106.5%	17.3	3.1	B
	Right Turn	10	11	106.0%	8.7	4.4	A
	Subtotal	80	79	98.4%	16.7	2.3	B
SB	Left Turn	20	19	95.5%	15.0	6.8	B
	Through	10	10	99.0%	14.8	10.5	B
	Right Turn	60	60	100.2%	5.8	1.0	A
	Subtotal	90	89	99.0%	8.8	2.7	A
EB	Left Turn	40	39	97.0%	11.5	3.1	B
	Through	690	686	99.4%	5.6	0.7	A
	Right Turn	20	23	114.0%	1.8	1.0	A
	Subtotal	750	747	99.6%	5.8	0.7	A
WB	Left Turn	20	20	97.5%	10.3	3.9	B
	Through	600	600	99.9%	4.6	1.6	A
	Right Turn	20	20	101.0%	1.5	1.0	A
	Subtotal	640	639	99.9%	4.7	1.5	A
Total		1,560	1,554	99.6%	6.1	1.0	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	70	72	102.1%	17.9	5.3	C
	Through	10	11	105.0%	20.1	20.4	C
	Right Turn	40	41	103.0%	10.7	3.4	B
	Subtotal	120	123	102.7%	15.6	4.7	C
SB	Left Turn	10	11	113.0%	14.2	9.3	B
	Through						
	Right Turn	30	33	108.7%	4.9	1.6	A
	Subtotal	40	44	109.8%	7.4	2.7	A
EB	Left Turn	10	8	82.0%	2.8	1.6	A
	Through	680	678	99.8%	0.8	0.2	A
	Right Turn	30	29	95.0%	0.3	0.3	A
	Subtotal	720	715	99.3%	0.8	0.2	A
WB	Left Turn	20	19	93.0%	3.2	1.3	A
	Through	540	539	99.9%	1.7	0.2	A
	Right Turn	10	11	112.0%	1.8	1.1	A
	Subtotal	570	569	99.8%	1.8	0.2	A
Total		1,450	1,451	100.1%	2.5	0.4	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	18	90.5%	38.6	12.2	D
	Through	20	20	101.0%	30.4	12.1	C
	Right Turn	10	10	96.0%	5.2	3.5	A
	Subtotal	50	48	95.8%	27.3	8.3	C
SB	Left Turn	80	78	97.1%	36.0	4.5	D
	Through	10	9	90.0%	28.6	20.2	C
	Right Turn	230	226	98.3%	8.0	3.0	A
	Subtotal	320	313	97.7%	16.3	2.3	B
EB	Left Turn	290	286	98.7%	9.7	1.8	A
	Through	430	442	102.8%	4.3	1.1	A
	Right Turn	10	11	109.0%	1.5	1.3	A
	Subtotal	730	739	101.3%	6.3	1.2	A
WB	Left Turn	10	9	89.0%	5.9	5.4	A
	Through	320	325	101.4%	7.6	1.1	A
	Right Turn	70	66	94.7%	4.8	2.2	A
	Subtotal	400	400	99.9%	7.1	1.2	A
Total		1,500	1,500	100.0%	9.4	1.4	A

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	37	93.5%	8.7	2.5	A
	Through						
	Right Turn	30	32	105.7%	4.0	0.8	A
	Subtotal	70	69	98.7%	6.3	1.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	500	509	101.9%	1.1	0.2	A
	Right Turn	20	21	106.0%	0.6	0.5	A
	Subtotal	520	531	102.0%	1.1	0.2	A
WB	Left Turn	10	11	106.0%	4.3	3.1	A
	Through	360	361	100.4%	2.1	0.5	A
	Right Turn						
	Subtotal	370	372	100.5%	2.1	0.5	A
Total		960	972	101.2%	1.9	0.2	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	82	103.0%	33.3	7.6	C
	Through	60	62	103.2%	29.9	8.3	C
	Right Turn	50	51	101.4%	4.9	0.8	A
	Subtotal	190	195	102.6%	25.7	5.4	C
SB	Left Turn	210	202	96.3%	38.0	3.7	D
	Through	50	52	104.0%	29.1	8.8	C
	Right Turn	110	106	96.5%	15.7	5.2	B
	Subtotal	370	360	97.4%	30.5	2.8	C
EB	Left Turn	230	230	99.9%	41.9	6.7	D
	Through	270	277	102.6%	7.0	2.0	A
	Right Turn	30	33	110.3%	3.9	2.5	A
	Subtotal	530	540	101.9%	22.2	3.2	C
WB	Left Turn	40	36	90.0%	39.5	10.3	D
	Through	180	182	101.1%	16.5	3.9	B
	Right Turn	220	222	100.8%	10.9	2.6	B
	Subtotal	440	440	99.9%	15.6	2.9	B
Total		1,530	1,535	100.3%	22.7	2.4	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	130	129	99.5%	41.2	6.2	D
	Through	690	697	100.9%	19.7	2.4	B
	Right Turn	350	349	99.8%	10.6	2.1	B
	Subtotal	1,170	1,175	100.4%	19.3	2.4	B
SB	Left Turn	120	115	95.9%	75.9	23.6	E
	Through	510	513	100.6%	20.7	3.0	C
	Right Turn	150	150	100.1%	12.6	2.9	B
	Subtotal	780	778	99.8%	27.2	4.0	C
EB	Left Turn	140	131	93.6%	29.3	6.0	C
	Through	220	235	107.0%	34.8	4.6	C
	Right Turn	130	126	96.6%	25.0	4.5	C
	Subtotal	490	492	100.4%	30.9	3.8	C
WB	Left Turn	180	179	99.2%	29.3	4.1	C
	Through	170	170	99.7%	30.2	5.2	C
	Right Turn	80	78	97.9%	20.9	6.9	C
	Subtotal	430	426	99.2%	28.1	4.1	C
Total		2,870	2,872	100.1%	24.8	1.4	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	230	207	90.1%	119.0	7.5	F
	Through	1,420	1,312	92.4%	123.4	4.5	F
	Right Turn	480	447	93.1%	24.7	3.4	C
	Subtotal	2,130	1,966	92.3%	99.2	3.8	F
SB	Left Turn	190	197	103.7%	112.0	43.1	F
	Through	1,470	1,472	100.1%	38.6	4.9	D
	Right Turn	60	61	101.2%	25.3	9.4	C
	Subtotal	1,720	1,729	100.5%	47.5	9.1	D
EB	Left Turn	60	57	95.7%	78.8	17.8	E
	Through	150	157	104.5%	51.7	7.4	D
	Right Turn	230	237	103.0%	14.5	2.3	B
	Subtotal	440	451	102.5%	35.6	4.6	D
WB	Left Turn	440	437	99.4%	42.3	6.8	D
	Through	160	158	98.8%	31.7	4.1	C
	Right Turn	270	265	98.2%	13.1	2.0	B
	Subtotal	870	860	98.9%	31.6	4.4	C
Total		5,160	5,007	97.0%	62.9	3.7	E

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	40	99.5%	17.3	4.4	B
	Through	10	11	110.0%	16.6	12.2	B
	Right Turn	10	11	111.0%	5.3	2.7	A
	Subtotal	60	62	103.2%	15.9	4.6	B
SB	Left Turn	30	29	97.7%	18.3	8.4	B
	Through	20	21	104.5%	19.4	8.0	B
	Right Turn	60	60	100.7%	7.0	2.5	A
	Subtotal	110	111	100.5%	12.3	2.7	B
EB	Left Turn	80	80	100.5%	16.7	4.2	B
	Through	710	704	99.1%	6.5	1.6	A
	Right Turn	30	28	92.3%	4.1	3.4	A
	Subtotal	820	812	99.0%	7.4	1.6	A
WB	Left Turn	10	10	103.0%	10.0	8.9	A
	Through	770	763	99.1%	6.5	1.3	A
	Right Turn	50	53	105.4%	3.6	1.8	A
	Subtotal	830	826	99.5%	6.4	1.3	A
Total		1,820	1,810	99.5%	7.6	1.0	A

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	60	63	105.0%	27.5	12.3	D
	Through	10	9	92.0%	30.3	13.4	D
	Right Turn	40	42	104.3%	11.5	6.4	B
	Subtotal	110	114	103.5%	22.3	9.7	C
SB	Left Turn	10	12	117.0%	15.2	9.2	C
	Through	10	10	98.0%	22.8	16.6	C
	Right Turn	20	22	107.5%	6.9	3.1	A
	Subtotal	40	43	107.5%	14.3	7.8	B
EB	Left Turn	40	40	99.8%	5.5	1.7	A
	Through	610	595	97.5%	1.0	0.2	A
	Right Turn	100	100	100.1%	0.6	0.2	A
	Subtotal	750	735	98.0%	1.2	0.2	A
WB	Left Turn	40	41	101.3%	6.2	2.1	A
	Through	750	752	100.2%	2.2	0.3	A
	Right Turn	10	11	108.0%	1.9	2.0	A
	Subtotal	800	803	100.4%	2.4	0.3	A
Total		1,700	1,695	99.7%	3.6	0.9	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	18	91.5%	40.6	14.7	D
	Through	20	21	104.5%	33.1	7.4	C
	Right Turn	10	10	104.0%	9.3	8.9	A
	Subtotal	50	50	99.2%	30.9	7.8	C
SB	Left Turn	110	108	98.0%	38.1	5.5	D
	Through	20	20	100.5%	33.2	12.2	C
	Right Turn	240	240	100.1%	12.3	5.1	B
	Subtotal	370	368	99.5%	21.3	4.9	C
EB	Left Turn	220	221	100.3%	11.3	2.6	B
	Through	420	404	96.1%	4.9	0.6	A
	Right Turn	20	21	105.5%	3.0	1.4	A
	Subtotal	660	646	97.8%	7.1	1.2	A
WB	Left Turn	30	28	94.7%	6.2	2.8	A
	Through	540	531	98.4%	8.5	1.5	A
	Right Turn	130	135	103.5%	6.9	1.9	A
	Subtotal	700	694	99.1%	8.1	1.6	A
Total		1,780	1,757	98.7%	11.1	1.6	B

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	27	88.7%	13.6	7.4	B
	Through						
	Right Turn	10	11	112.0%	5.3	4.7	A
	Subtotal	40	38	94.5%	11.1	6.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	490	474	96.8%	1.2	0.2	A
	Right Turn	50	47	93.6%	1.2	0.6	A
	Subtotal	540	521	96.5%	1.2	0.2	A
WB	Left Turn	20	22	111.0%	5.0	1.3	A
	Through	670	674	100.6%	2.8	0.3	A
	Right Turn						
	Subtotal	690	696	100.9%	2.9	0.3	A
Total		1,270	1,255	98.8%	2.5	0.2	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	119	99.4%	31.1	8.9	C
	Through	30	31	102.7%	34.9	11.2	C
	Right Turn	60	60	99.5%	5.2	1.4	A
	Subtotal	210	210	99.9%	24.5	7.2	C
SB	Left Turn	330	336	101.9%	29.2	3.1	C
	Through	120	118	98.7%	24.6	5.9	C
	Right Turn	220	220	100.0%	13.8	4.1	B
	Subtotal	670	675	100.7%	23.6	2.4	C
EB	Left Turn	110	107	97.3%	43.3	7.8	D
	Through	280	270	96.3%	13.7	2.0	B
	Right Turn	110	110	99.7%	9.1	2.8	A
	Subtotal	500	486	97.2%	19.0	1.4	B
WB	Left Turn	60	60	99.3%	44.6	8.2	D
	Through	350	358	102.1%	18.0	2.5	B
	Right Turn	190	196	103.1%	15.6	5.4	B
	Subtotal	600	613	102.2%	19.9	2.2	B
Total		1,980	1,984	100.2%	21.4	1.0	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	140	143	102.2%	75.5	39.1	E
	Through	980	984	100.4%	35.9	13.2	D
	Right Turn	170	178	104.6%	8.5	1.5	A
	Subtotal	1,290	1,305	101.1%	36.8	13.4	D
SB	Left Turn	230	227	98.9%	81.5	9.2	F
	Through	890	895	100.6%	32.1	3.5	C
	Right Turn	120	119	98.8%	26.7	6.7	C
	Subtotal	1,240	1,241	100.1%	40.9	3.9	D
EB	Left Turn	200	198	99.2%	35.7	8.9	D
	Through	280	288	102.9%	38.3	3.2	D
	Right Turn	150	150	99.7%	32.4	4.3	C
	Subtotal	630	636	101.0%	36.4	3.0	D
WB	Left Turn	370	362	97.9%	81.2	35.0	F
	Through	310	317	102.3%	34.1	5.8	C
	Right Turn	140	136	96.9%	27.1	6.9	C
	Subtotal	820	815	99.4%	54.5	18.5	D
Total		3,980	3,997	100.4%	41.8	4.5	D

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 AM Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	130	133	102.6%	82.9	18.2	F
	Through	1,050	1,041	99.1%	70.4	21.4	E
	Right Turn	500	521	104.2%	8.1	2.4	A
	Subtotal	1,680	1,695	100.9%	53.0	15.0	D
SB	Left Turn	180	174	96.4%	69.8	19.2	E
	Through	790	786	99.5%	28.3	2.2	C
	Right Turn	50	46	92.8%	10.9	3.7	B
	Subtotal	1,020	1,006	98.6%	34.9	4.9	C
EB	Left Turn	40	43	107.0%	49.3	9.8	D
	Through	70	68	97.3%	52.8	7.7	D
	Right Turn	190	187	98.5%	6.3	1.2	A
	Subtotal	300	298	99.4%	23.2	4.0	C
WB	Left Turn	470	477	101.4%	43.5	6.6	D
	Through	130	136	104.8%	26.6	6.7	C
	Right Turn	110	110	99.6%	6.9	2.0	A
	Subtotal	710	723	101.8%	35.1	5.8	D
Total		3,710	3,722	100.3%	42.5	8.3	D

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	51	101.0%	18.0	4.1	B
	Through	20	22	110.5%	15.1	7.1	B
	Right Turn	10	11	113.0%	10.3	8.8	B
	Subtotal	80	84	104.9%	16.9	2.5	B
SB	Left Turn	20	18	91.0%	17.6	7.7	B
	Through	10	9	88.0%	16.8	11.2	B
	Right Turn	60	58	96.0%	9.0	2.9	A
	Subtotal	90	85	94.0%	11.8	3.4	B
EB	Left Turn	40	38	95.5%	16.5	5.8	B
	Through	690	708	102.6%	9.5	2.4	A
	Right Turn	20	20	99.0%	8.2	5.9	A
	Subtotal	750	766	102.1%	9.9	2.5	A
WB	Left Turn	20	16	81.0%	19.6	8.2	B
	Through	600	620	103.3%	8.2	1.0	A
	Right Turn	20	21	106.0%	6.6	2.6	A
	Subtotal	640	657	102.7%	8.4	0.8	A
Total		1,560	1,592	102.0%	9.7	1.5	A

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	70	70	100.6%	32.5	20.1	D
	Through	10	11	108.0%	36.0	29.8	E
	Right Turn	40	41	103.3%	23.7	15.9	C
	Subtotal	120	123	102.1%	30.2	17.9	D
SB	Left Turn	10	10	95.0%	15.6	15.2	C
	Through						
	Right Turn	30	33	110.0%	7.9	1.3	A
	Subtotal	40	43	106.3%	10.0	3.9	B
EB	Left Turn	10	8	83.0%	4.9	2.6	A
	Through	680	703	103.3%	1.7	0.3	A
	Right Turn	30	30	100.0%	0.8	0.5	A
	Subtotal	720	741	102.9%	1.6	0.3	A
WB	Left Turn	20	22	108.0%	7.6	2.4	A
	Through	540	553	102.5%	1.9	0.2	A
	Right Turn	10	11	108.0%	1.5	1.3	A
	Subtotal	570	586	102.8%	2.1	0.2	A
Total		1,450	1,492	102.9%	4.5	2.1	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	42.5	14.2	D
	Through	20	20	100.5%	31.3	17.6	C
	Right Turn	10	10	97.0%	7.1	7.7	A
	Subtotal	50	49	98.8%	32.4	6.1	C
SB	Left Turn	80	80	99.6%	44.1	9.5	D
	Through	10	10	99.0%	44.2	19.6	D
	Right Turn	230	232	100.8%	13.1	4.3	B
	Subtotal	320	322	100.5%	22.6	5.0	C
EB	Left Turn	290	299	103.0%	11.6	1.6	B
	Through	430	450	104.6%	5.7	1.0	A
	Right Turn	10	11	110.0%	2.4	1.8	A
	Subtotal	730	759	104.0%	8.1	1.2	A
WB	Left Turn	10	10	98.0%	8.9	6.1	A
	Through	320	338	105.7%	9.6	1.8	A
	Right Turn	70	67	95.0%	7.1	2.7	A
	Subtotal	400	414	103.6%	9.1	1.6	A
Total		1,500	1,545	103.0%	12.3	1.8	B

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 AM Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	37	93.0%	10.6	2.5	B
	Through						
	Right Turn	30	32	105.0%	6.2	2.2	A
	Subtotal	70	69	98.1%	8.7	2.3	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	500	518	103.6%	1.3	0.3	A
	Right Turn	20	22	110.5%	0.6	0.4	A
	Subtotal	520	540	103.8%	1.2	0.3	A
WB	Left Turn	10	9	93.0%	5.6	2.5	A
	Through	360	370	102.8%	2.5	0.2	A
	Right Turn						
	Subtotal	370	379	102.5%	2.6	0.3	A
Total		960	988	102.9%	2.3	0.3	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	84	105.4%	40.9	8.5	D
	Through	60	56	93.3%	39.2	9.5	D
	Right Turn	50	52	103.6%	6.5	2.2	A
	Subtotal	190	192	101.1%	30.6	5.6	C
SB	Left Turn	210	205	97.8%	36.7	4.2	D
	Through	50	50	99.8%	30.4	4.7	C
	Right Turn	110	118	107.2%	11.9	4.5	B
	Subtotal	370	373	100.8%	27.6	3.6	C
EB	Left Turn	230	222	96.7%	41.3	7.5	D
	Through	270	284	105.1%	12.0	3.5	B
	Right Turn	30	33	109.3%	8.6	3.5	A
	Subtotal	530	539	101.7%	24.1	4.8	C
WB	Left Turn	40	39	97.5%	40.0	6.6	D
	Through	180	176	97.7%	23.2	4.3	C
	Right Turn	220	222	100.9%	16.6	4.3	B
	Subtotal	440	437	99.3%	21.3	4.3	C
Total		1,530	1,541	100.7%	25.0	2.4	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 AM Build**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	130	134	103.2%	51.6	7.0	D
	Through	690	703	101.9%	22.5	2.3	C
	Right Turn	350	356	101.6%	6.7	1.2	A
	Subtotal	1,170	1,193	102.0%	20.9	1.9	C
SB	Left Turn	120	120	100.2%	62.1	12.3	E
	Through	510	516	101.2%	25.3	1.5	C
	Right Turn	150	143	95.1%	14.0	3.1	B
	Subtotal	780	779	99.9%	29.0	2.4	C
EB	Left Turn	140	144	103.0%	42.0	8.1	D
	Through	220	241	109.5%	49.6	9.8	D
	Right Turn	130	129	98.8%	41.3	7.4	D
	Subtotal	490	514	104.8%	45.4	8.0	D
WB	Left Turn	180	175	97.3%	33.1	4.9	C
	Through	170	172	101.2%	28.4	4.0	C
	Right Turn	80	76	94.8%	5.6	1.6	A
	Subtotal	430	423	98.4%	26.3	2.9	C
Total		2,870	2,909	101.4%	28.1	2.1	C

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	230	188	81.6%	135.5	17.6	F
	Through	1,420	1,184	83.4%	140.9	2.2	F
	Right Turn	480	411	85.7%	22.4	5.7	C
	Subtotal	2,130	1,783	83.7%	111.9	4.2	F
SB	Left Turn	190	169	89.0%	234.7	73.8	F
	Through	1,470	1,448	98.5%	85.3	26.8	F
	Right Turn	60	57	94.7%	66.4	28.0	E
	Subtotal	1,720	1,673	97.3%	101.5	29.6	F
EB	Left Turn	60	58	96.5%	56.7	11.8	E
	Through	150	150	100.1%	47.1	7.9	D
	Right Turn	230	235	102.2%	14.4	2.1	B
	Subtotal	440	443	100.7%	30.3	4.5	C
WB	Left Turn	440	431	98.0%	57.8	14.8	E
	Through	160	162	101.1%	30.8	4.6	C
	Right Turn	270	269	99.6%	11.4	5.5	B
	Subtotal	870	862	99.1%	39.0	9.6	D
Total		5,160	4,761	92.3%	87.7	10.7	F

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	40	39	98.0%	17.3	4.1	B
	Through	10	10	103.0%	15.5	13.2	B
	Right Turn	10	13	126.0%	12.3	10.3	B
	Subtotal	60	62	103.5%	15.9	4.2	B
SB	Left Turn	30	28	92.0%	18.3	4.1	B
	Through	20	19	96.5%	13.1	7.0	B
	Right Turn	60	63	105.2%	11.4	3.8	B
	Subtotal	110	110	100.0%	13.8	3.0	B
EB	Left Turn	80	72	90.0%	30.1	7.8	C
	Through	710	641	90.2%	9.8	2.4	A
	Right Turn	30	28	94.3%	6.3	3.2	A
	Subtotal	820	741	90.4%	11.6	2.8	B
WB	Left Turn	10	10	104.0%	18.7	12.3	B
	Through	770	770	100.0%	15.2	8.9	B
	Right Turn	50	51	102.6%	11.6	7.1	B
	Subtotal	830	832	100.2%	15.1	8.7	B
Total		1,820	1,745	95.9%	13.6	5.2	B

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	60	62	103.3%	40.0	13.7	E
	Through	10	10	101.0%	38.9	28.4	E
	Right Turn	40	41	102.8%	23.8	14.2	C
	Subtotal	110	113	102.9%	33.8	12.8	D
SB	Left Turn	10	9	94.0%	30.1	24.1	D
	Through	10	10	102.0%	39.0	28.4	E
	Right Turn	20	20	98.0%	13.3	7.8	B
	Subtotal	40	39	98.0%	23.4	9.0	C
EB	Left Turn	40	34	84.8%	6.8	2.2	A
	Through	610	556	91.1%	2.2	0.4	A
	Right Turn	100	85	85.1%	1.3	0.4	A
	Subtotal	750	675	90.0%	2.3	0.3	A
WB	Left Turn	40	41	103.0%	8.2	2.5	A
	Through	750	759	101.2%	2.4	0.2	A
	Right Turn	10	10	99.0%	1.2	0.7	A
	Subtotal	800	810	101.2%	2.7	0.3	A
Total		1,700	1,637	96.3%	5.2	1.0	A

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	101.0%	49.4	13.6	D
	Through	20	18	89.0%	37.0	15.9	D
	Right Turn	10	11	105.0%	11.9	6.4	B
	Subtotal	50	49	97.0%	35.8	10.4	D
SB	Left Turn	110	107	97.4%	40.7	6.7	D
	Through	20	22	111.5%	37.5	10.9	D
	Right Turn	240	239	99.5%	20.3	2.6	C
	Subtotal	370	368	99.5%	27.2	2.2	C
EB	Left Turn	220	198	90.0%	27.1	4.1	C
	Through	420	399	94.9%	8.4	1.9	A
	Right Turn	20	18	90.0%	5.3	3.5	A
	Subtotal	660	615	93.1%	14.7	2.1	B
WB	Left Turn	30	25	83.3%	17.2	7.2	B
	Through	540	541	100.1%	16.7	3.8	B
	Right Turn	130	131	100.5%	12.8	3.4	B
	Subtotal	700	697	99.5%	15.9	3.6	B
Total		1,780	1,728	97.1%	18.6	2.2	B

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	30	100.3%	24.8	9.3	C
	Through						
	Right Turn	10	10	104.0%	6.5	4.0	A
	Subtotal	40	41	101.3%	19.3	8.6	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	490	462	94.3%	1.6	0.4	A
	Right Turn	50	48	95.0%	1.1	0.6	A
	Subtotal	540	509	94.3%	1.6	0.4	A
WB	Left Turn	20	18	91.5%	7.7	2.5	A
	Through	670	675	100.7%	4.2	0.8	A
	Right Turn						
	Subtotal	690	693	100.5%	4.3	0.8	A
Total		1,270	1,243	97.9%	3.7	0.6	A

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	119	99.1%	51.9	21.9	D
	Through	30	33	108.7%	50.8	18.9	D
	Right Turn	60	61	101.0%	14.4	11.5	B
	Subtotal	210	212	101.0%	41.7	16.0	D
SB	Left Turn	330	317	95.9%	49.5	22.0	D
	Through	120	116	96.3%	24.1	4.7	C
	Right Turn	220	218	99.2%	16.7	3.4	B
	Subtotal	670	650	97.1%	34.3	11.9	C
EB	Left Turn	110	97	87.9%	70.9	36.8	E
	Through	280	276	98.5%	48.7	39.2	D
	Right Turn	110	107	97.5%	46.8	40.9	D
	Subtotal	500	480	95.9%	53.1	37.6	D
WB	Left Turn	60	55	91.5%	56.6	9.5	E
	Through	350	360	102.9%	33.4	13.5	C
	Right Turn	190	178	93.7%	29.5	12.5	C
	Subtotal	600	593	98.8%	34.7	12.3	C
Total		1,980	1,935	97.7%	40.4	12.2	D

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 PM Build**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	140	116	82.8%	403.3	71.1	F
	Through	980	914	93.3%	67.0	14.2	E
	Right Turn	170	157	92.3%	12.0	3.8	B
	Subtotal	1,290	1,187	92.0%	91.6	12.2	F
SB	Left Turn	230	229	99.6%	189.4	67.0	F
	Through	890	874	98.2%	81.2	18.9	F
	Right Turn	120	120	99.8%	84.1	24.4	F
	Subtotal	1,240	1,223	98.6%	102.5	19.0	F
EB	Left Turn	200	181	90.4%	89.6	6.1	F
	Through	280	259	92.6%	107.2	11.4	F
	Right Turn	150	135	90.1%	95.3	10.6	F
	Subtotal	630	575	91.3%	98.9	8.5	F
WB	Left Turn	370	369	99.6%	62.8	14.8	E
	Through	310	310	99.9%	38.6	11.6	D
	Right Turn	140	147	104.6%	10.7	3.8	B
	Subtotal	820	825	100.6%	45.1	10.9	D
Total		3,980	3,810	95.7%	85.7	8.8	F

Appendix D: Queue Results

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	12	75	29	100	37	0%	0%
	Through	350	75	7	125	18	150	25	0%	0%
	Right Turn	350	75	5	100	8	125	16	0%	0%
WB	Left Turn	925	175	8	250	17	275	45	0%	0%
	Through	925	100	6	175	15	200	30	1%	0%
	Right Turn	175	50	8	100	31	175	47	0%	0%
NB	Left Turn	400	125	11	200	25	225	33	0%	0%
	Through	875	225	11	350	20	375	27	0%	0%
	Right Turn	875	75	4	100	9	125	14	0%	0%
SB	Left Turn	250	125	11	225	23	275	31	1%	0%
	Through	1,200	150	10	225	31	275	100	0%	0%
	Through/Right	1,200	50	8	125	18	175	25	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	5	50	16	100	51	0%	0%
	Through	925	50	4	100	9	150	38	0%	0%
	Through/Right	925	50	4	100	11	125	32	0%	0%
WB	Left Turn	125	25	3	25	7	50	6	0%	0%
	Through	600	50	3	100	12	150	38	0%	0%
	Through/Right	600	50	4	100	12	125	30	0%	0%
NB	Shared	375	50	5	75	7	100	17	0%	0%
SB	Shared	350	50	4	75	11	100	22	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	1	25	4	50	13	0%	0%
	Through/Right	475	25	1	25	9	25	26	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
	Through/Right	275	25	0	25	0	25	0	0%	0%
	Through/Right	825	25	1	25	7	25	20	0%	0%
NB	Shared	450	50	4	100	8	100	23	0%	0%
SB	Shared	75	25	3	50	2	50	12	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	3	50	5	75	8	0%	0%
	Through	825	50	5	75	9	100	14	0%	0%
	Through/Right	825	25	5	75	10	75	22	0%	0%
WB	Left Turn	100	25	2	25	5	50	1	0%	0%
	Through	325	25	5	75	14	100	34	0%	0%
	Through/Right	325	50	5	100	10	125	16	0%	0%
NB	Left Turn	400	25	4	75	7	75	12	0%	0%
	Through/Right	400	25	3	50	4	75	20	0%	0%
SB	Left Turn	175	75	6	125	12	150	27	0%	0%
	Through/Right	300	75	5	100	16	150	36	0%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	4	75	10	100	23	0%	0%
	Through/Right	325	25	0	25	2	25	5	0%	0%
WB	Left Turn	175	25	2	25	7	25	8	0%	0%
	Through	1,650	25	1	25	6	25	18	0%	0%
	Through/Right	1,650	25	1	25	12	25	33	0%	0%
NB	Shared	300	50	3	75	5	100	16	0%	0%
SB	Left/Through	200	25	3	50	7	75	17	0%	0%
	Right Turn	200	50	2	75	5	75	15	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	4	75	9	100	23	0%	0%
	Through	1,650	25	3	75	11	100	24	0%	0%
	Through/Right	1,650	50	5	75	11	100	16	0%	0%
WB	Left Turn	150	25	3	50	6	75	13	0%	0%
	Through	875	25	5	50	13	75	20	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Left/Through	250	75	6	125	13	150	14	1%	0%
	Right Turn	125	25	3	50	5	75	19	0%	0%
SB	Left Turn	175	25	5	75	10	75	18	0%	0%
	Through/Right	175	25	5	75	7	75	15	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM No Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	75	8	125	12	150	28	0%	0%
	Through	450	75	8	125	13	150	26	0%	0%
	Through/Right	450	100	6	150	14	175	36	0%	0%
WB	Left Turn	175	100	7	175	11	200	29	1%	0%
	Through	425	50	7	100	24	150	60	0%	0%
	Through/Right	425	50	5	100	9	150	21	0%	0%
NB	Left Turn	375	75	7	100	9	125	31	0%	0%
	Through	875	150	10	225	25	250	39	0%	0%
	Right Turn	375	75	7	125	13	150	31	0%	0%
SB	Left Turn	325	100	10	150	31	175	41	0%	0%
	Through	625	100	8	175	12	200	27	0%	0%
	Through/Right	625	75	9	150	17	175	36	0%	0%

Intersection 1 **SE 164th Avenue /SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	28	100	55	125	73	0%	0%
	Through	350	100	7	175	25	225	55	1%	0%
	Right Turn	350	75	9	125	24	150	49	0%	0%
WB	Left Turn	925	150	10	225	18	275	41	0%	0%
	Through	925	100	7	200	22	275	48	2%	0%
	Right Turn	175	100	7	150	19	200	21	0%	0%
NB	Left Turn	400	400	35	525	37	475	0	62%	0%
	Through	875	625	112	1,025	130	925	41	3%	16%
	Right Turn	875	150	96	400	309	600	382	0%	1%
SB	Left Turn	250	150	10	250	21	300	26	1%	0%
	Through	1,200	225	12	325	26	375	47	3%	0%
	Through/Right	1,200	150	9	250	17	275	32	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	4	75	6	100	26	0%	0%
	Through	925	50	4	100	10	125	17	0%	0%
	Through/Right	925	50	3	100	12	125	25	0%	0%
WB	Left Turn	125	25	3	50	6	50	6	0%	0%
	Through	600	75	9	125	17	175	41	1%	0%
	Through/Right	600	75	7	125	15	175	31	0%	0%
NB	Shared	375	50	4	100	10	100	20	0%	0%
SB	Shared	350	50	3	75	9	100	14	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	50	4	50	11	0%	0%
	Through/Right	475	25	0	25	3	25	11	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
	Right Turn	275	25	0	25	0	25	0	0%	0%
NB	Shared	450	50	4	100	15	125	46	0%	0%
SB	Shared	75	25	3	50	4	75	11	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	6	100	13	125	28	0%	0%
	Through	825	25	2	75	5	75	16	0%	0%
	Through/Right	825	50	3	75	6	100	17	0%	0%
WB	Left Turn	100	25	4	50	11	50	29	0%	0%
	Through	325	50	6	125	10	150	25	2%	0%
	Through/Right	325	100	6	175	14	200	22	0%	0%
NB	Left Turn	400	25	6	50	11	75	15	0%	0%
	Through/Right	400	25	5	50	7	75	16	0%	0%
SB	Left Turn	175	75	4	125	11	150	15	0%	0%
	Through/Right	300	75	4	100	14	150	40	0%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	50	5	75	17	0%	0%
	Through	325	25	0	25	3	25	9	0%	0%
	Through/Right	325	25	0	25	2	25	6	0%	0%
WB	Left Turn	175	25	2	25	5	50	10	0%	0%
	Through/Right	1,650	25	0	25	3	25	10	0%	0%
NB	Shared	300	25	2	75	4	75	11	0%	0%
SB	Left/Through	200	50	4	100	14	125	33	0%	0%
	Right Turn	200	50	5	75	11	100	21	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	4	50	7	75	11	0%	0%
	Through	1,650	50	8	100	19	125	35	0%	0%
	Through/Right	1,650	50	5	100	10	125	26	0%	0%
WB	Left Turn	150	50	8	100	13	125	20	0%	0%
	Through	875	25	5	75	15	125	24	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Left/Through	250	100	7	175	18	200	36	4%	0%
	Right Turn	125	50	5	75	22	125	60	0%	0%
SB	Left Turn	175	50	6	75	11	100	31	0%	0%
	Through/Right	175	75	7	100	18	150	27	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 PM No Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	100	11	150	26	175	32	1%	0%
	Through	450	100	8	150	14	175	43	0%	0%
	Through/Right	450	125	6	200	13	225	22	0%	0%
WB	Left Turn	175	175	7	250	9	225	1	19%	0%
	Through	425	125	20	300	47	350	41	0%	0%
	Through/Right	425	125	11	200	33	250	75	0%	0%
NB	Left Turn	375	75	8	125	19	150	33	0%	0%
	Through	875	200	21	300	26	300	29	0%	0%
	Right Turn	375	50	3	100	6	100	10	0%	0%
SB	Left Turn	325	150	15	225	25	250	35	0%	0%
	Through	625	175	9	275	14	300	23	0%	0%
	Through/Right	625	150	11	250	20	300	50	0%	0%

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	8	75	18	100	35	0%	0%
	Through	350	75	9	125	15	150	29	0%	0%
	Right Turn	350	50	5	100	8	100	20	0%	0%
WB	Left Turn	425	275	16	400	23	450	24	1%	0%
	Through	925	100	18	200	89	325	227	0%	0%
	Right Turn	200	50	4	75	20	100	53	0%	0%
NB	Left Turn	400	125	18	200	53	300	121	0%	0%
	Through	900	275	14	400	35	450	68	2%	0%
	Right Turn	900	50	6	100	11	150	15	0%	0%
SB	Left Turn	250	150	18	250	29	275	31	2%	0%
	Through	1,025	175	16	250	29	300	44	0%	0%
	Through/Right	1,025	75	9	150	17	200	31	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	6	75	23	100	73	0%	0%
	Through/Right	925	100	15	175	35	225	44	1%	0%
WB	Left Turn	125	25	1	50	3	50	7	0%	0%
	Through/Right	600	100	10	175	24	225	64	2%	0%
NB	Shared	375	50	4	75	7	100	16	0%	0%
SB	Shared	350	50	4	75	7	100	15	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	25	6	50	1	0%	0%
	Through/Right	475	25	1	25	10	25	28	0%	0%
WB	Left Turn	150	25	3	50	5	50	8	0%	0%
		150	25	0	25	0	25	0	0%	0%
	Through/Right	150	25	0	25	0	25	0	0%	0%
NB	Shared	450	50	4	100	6	100	10	0%	0%
SB	Shared	500	25	4	50	4	50	10	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	5	75	19	125	65	0%	0%
	Through/Right	825	75	12	175	27	225	43	1%	0%
WB	Left Turn	100	25	2	50	5	50	10	0%	0%
	Through/Right	325	75	10	150	24	200	50	4%	0%
NB	Left Turn	400	25	6	50	9	75	12	0%	0%
	Through/Right	400	25	5	50	7	75	14	0%	0%
SB	Left Turn	175	75	6	100	5	125	20	0%	0%
	Through/Right	300	75	7	100	14	150	25	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	3	100	7	125	12	0%	0%
	Through/Right	325	25	1	25	5	25	15	0%	0%
	Through/Right	325	25	0	25	0	25	0	0%	0%
WB	Left Turn	175	25	1	25	5	25	8	0%	0%
	Through	1,650	25	1	25	8	25	18	0%	0%
	Right Turn	175	25	1	25	5	25	12	0%	0%
NB	Shared	325	50	4	75	12	100	26	0%	0%
SB	Left/Through	200	25	4	50	8	75	20	0%	0%
	Right Turn	200	50	3	75	7	75	14	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	5	100	12	100	22	0%	0%
	Through/Right	1,650	75	5	150	12	175	48	0%	0%
WB	Left Turn	150	25	5	75	16	100	39	0%	0%
	Through/Right	875	50	7	150	23	200	53	1%	0%
NB	Left/Through	275	75	6	100	8	125	18	0%	0%
	Right Turn	125	25	3	50	5	75	7	0%	0%
SB	Left Turn	200	25	3	50	8	75	14	0%	0%
	Through/Right	200	25	2	50	3	75	9	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 AM Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	10	150	24	225	36	0%	0%
	Through/Right	450	150	12	250	15	325	26	9%	0%
WB	Left Turn	175	100	8	175	12	200	21	3%	0%
	Through	425	75	12	150	26	200	52	1%	0%
	Right Turn	425	25	3	50	5	75	8	0%	0%
NB	Left Turn	375	75	9	125	13	150	24	0%	0%
	Through	725	150	18	225	25	225	36	0%	0%
	Right Turn	375	75	7	125	15	150	23	0%	0%
SB	Left Turn	325	100	6	150	17	175	30	0%	0%
	Through	525	100	8	175	24	225	42	0%	0%
	Through/Right	525	75	4	150	9	175	16	0%	0%

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	7	100	16	125	31	0%	0%
	Through	350	100	7	150	12	175	22	0%	0%
	Right Turn	350	75	7	125	17	150	33	0%	0%
WB	Left Turn	425	275	16	425	29	450	31	1%	0%
	Through	925	125	21	250	106	425	197	1%	0%
	Right Turn	200	100	12	150	30	200	32	0%	0%
NB	Left Turn	400	400	36	575	30	475	0	37%	0%
	Through	900	775	41	1,100	36	950	16	40%	34%
	Right Turn	900	500	139	1,150	194	925	15	0%	20%
SB	Left Turn	250	175	16	275	26	300	2	1%	0%
	Through	1,025	275	12	375	15	400	37	8%	0%
	Through/Right	1,025	175	15	250	11	275	19	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	9	100	28	150	56	0%	0%
	Through/Right	925	100	15	200	31	275	49	2%	0%
WB	Left Turn	125	25	3	50	16	75	53	0%	0%
	Through/Right	600	150	22	300	43	400	84	8%	0%
NB	Shared	375	50	5	100	12	125	34	0%	0%
SB	Shared	350	50	3	75	11	100	18	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	3	50	5	50	15	0%	0%
	Through/Right	475	25	1	25	8	25	18	0%	0%
WB	Left Turn	150	25	4	50	6	75	14	0%	0%
	Through	150	25	0	25	0	25	0	0%	0%
	Through/Right	150	25	0	25	0	25	0	0%	0%
NB	Shared	450	50	4	100	12	125	29	0%	0%
SB	Shared	500	25	3	75	5	75	15	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	5	125	9	125	28	0%	0%
	Through/Right	825	50	9	125	14	150	31	0%	0%
WB	Left Turn	100	25	3	50	13	100	42	0%	0%
	Through/Right	325	175	13	300	19	325	7	14%	1%
NB	Left Turn	400	25	4	50	6	75	15	0%	0%
	Through/Right	400	25	5	50	7	75	13	0%	0%
SB	Left Turn	175	75	6	125	10	150	21	0%	0%
	Through/Right	300	75	8	125	17	150	32	0%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	4	50	6	75	9	0%	0%
	Through/Right	325	25	1	25	6	25	18	0%	0%
	Through/Right	325	25	0	25	0	25	0	0%	0%
WB	Left Turn	175	25	2	25	4	50	9	0%	0%
	Through	1,650	25	4	50	24	125	61	0%	0%
	Right Turn	175	25	3	25	23	25	66	0%	0%
NB	Shared	325	25	3	75	4	75	15	0%	0%
SB	Left/Through	200	50	5	100	16	125	35	0%	0%
	Right Turn	200	75	8	125	19	150	28	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	6	75	23	100	47	0%	0%
	Through/Right	1,650	100	13	200	33	250	57	2%	0%
WB	Left Turn	150	50	7	100	20	150	44	0%	0%
	Through/Right	875	100	14	200	29	275	54	2%	0%
NB	Left/Through	275	100	11	175	26	200	34	4%	0%
	Right Turn	125	50	5	75	21	150	54	0%	0%
SB	Left Turn	200	50	6	75	11	100	18	0%	0%
	Through/Right	200	75	6	100	13	125	14	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2024 PM Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	100	9	200	17	225	0	0%	0%
	Through/Right	450	200	18	350	26	425	44	19%	0%
WB	Left Turn	175	175	9	250	7	225	0	21%	0%
	Through	425	200	32	375	55	400	27	5%	1%
	Right Turn	425	50	5	75	12	100	24	0%	0%
NB	Left Turn	375	75	4	125	8	175	30	0%	0%
	Through	725	225	14	325	26	350	45	0%	0%
	Right Turn	375	50	3	75	8	100	24	0%	0%
SB	Left Turn	325	150	14	225	19	250	20	0%	0%
	Through	525	200	14	300	27	325	38	0%	0%
	Through/Right	525	175	16	275	23	300	41	0%	0%

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	11	75	27	100	40	0%	0%
	Through	350	75	7	125	13	175	26	0%	0%
	Right Turn	350	75	5	100	11	125	18	0%	0%
WB	Left Turn	925	175	12	250	24	275	29	0%	0%
	Through	925	100	4	175	16	225	43	1%	0%
	Right Turn	175	50	5	100	24	175	44	0%	0%
NB	Left Turn	400	150	31	250	61	275	58	0%	0%
	Through	875	250	15	400	35	450	62	1%	0%
	Right Turn	875	100	6	150	13	175	24	0%	0%
SB	Left Turn	250	150	9	250	21	275	33	1%	0%
	Through	1,200	150	13	250	30	300	79	0%	0%
	Through/Right	1,200	75	10	150	18	175	34	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	3	75	7	75	13	0%	0%
	Through	925	50	7	100	15	150	36	0%	0%
	Through/Right	925	50	5	100	13	125	28	0%	0%
WB	Left Turn	125	25	3	50	6	50	10	0%	0%
	Through	600	50	7	125	17	150	28	0%	0%
	Through/Right	600	50	4	100	6	125	16	0%	0%
NB	Shared	375	50	4	75	8	100	15	0%	0%
SB	Shared	350	50	3	75	7	100	15	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	4	50	9	50	17	0%	0%
	Through	475	25	1	25	6	25	17	0%	0%
	Through/Right	475	25	0	25	4	25	13	0%	0%
WB	Left Turn	150	25	4	50	7	50	1	0%	0%
		150	25	0	25	0	25	0	0%	0%
	Through/Right	150	25	0	25	0	25	0	0%	0%
NB	Shared	450	50	5	100	17	125	34	0%	0%
SB	Shared	75	25	3	50	4	75	11	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	5	125	12	150	25	0%	0%
	Through	825	25	3	75	7	100	15	0%	0%
	Through/Right	825	25	2	75	5	100	21	0%	0%
WB	Left Turn	100	25	2	25	5	50	9	0%	0%
	Through	325	50	5	100	11	100	19	1%	0%
	Through/Right	325	50	6	100	11	125	16	0%	0%
NB	Left Turn	400	25	5	50	9	75	11	0%	0%
	Through/Right	400	25	4	50	7	75	14	0%	0%
SB	Left Turn	175	75	9	125	17	125	36	0%	0%
	Through/Right	300	75	6	125	18	150	44	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 AM No Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	1	25	5	25	15	0%	0%
	Through/Right	325	25	0	25	0	25	0	0%	0%
WB	Left Turn	175	25	1	25	6	25	1	0%	0%
	Through/Right	1,650	25	0	25	3	25	9	0%	0%
NB	Shared	300	50	3	75	5	75	11	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	125	10	200	22	200	16	4%	0%
	Through	1,650	50	10	125	45	175	98	0%	0%
	Through/Right	1,650	50	6	100	13	125	30	0%	0%
WB	Left Turn	150	25	4	75	9	100	13	0%	0%
	Through	875	50	4	100	14	125	37	0%	0%
	Through/Right	875	100	8	175	19	200	38	0%	0%
NB	Left/Through	250	75	5	125	9	150	16	1%	0%
	Right Turn	125	25	4	75	12	75	36	0%	0%
SB	Left Turn	175	150	4	225	5	200	15	0%	11%
	Through/Right	175	75	9	100	17	125	31	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 AM No Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	7	200	12	225	11	4%	0%
	Through	450	100	8	150	22	225	55	0%	0%
	Through/Right	450	125	9	200	15	250	27	0%	0%
WB	Left Turn	175	100	7	175	14	200	26	1%	0%
	Through	425	50	5	100	15	125	34	0%	0%
	Through/Right	425	75	11	125	17	150	29	0%	0%
NB	Left Turn	375	100	9	150	22	175	43	0%	0%
	Through	875	150	15	225	22	250	36	0%	0%
	Right Turn	375	100	5	125	12	150	25	0%	0%
SB	Left Turn	325	100	10	150	25	175	32	0%	0%
	Through	625	125	12	200	18	250	32	0%	0%
	Through/Right	625	125	12	225	23	275	37	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM No Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	37	100	71	150	83	0%	0%
	Through	350	125	11	200	22	225	35	3%	0%
	Right Turn	350	75	8	125	19	150	41	0%	0%
WB	Left Turn	925	175	13	275	30	300	54	0%	0%
	Through	925	125	12	200	30	275	53	2%	0%
	Right Turn	175	100	9	175	18	200	2	0%	0%
NB	Left Turn	400	450	31	500	33	475	0	81%	0%
	Through	875	775	99	1,050	106	925	14	7%	43%
	Right Turn	875	350	146	925	277	925	18	0%	5%
SB	Left Turn	250	175	19	300	30	300	7	5%	0%
	Through	1,200	275	15	375	52	425	90	7%	0%
	Through/Right	1,200	175	11	275	14	300	34	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	5	75	9	100	24	0%	0%
	Through	925	50	8	100	18	125	27	0%	0%
	Through/Right	925	75	7	125	16	150	23	0%	0%
WB	Left Turn	125	25	3	25	8	50	10	0%	0%
	Through	600	75	5	125	12	175	29	1%	0%
	Through/Right	600	75	8	150	14	175	15	0%	0%
NB	Shared	375	50	5	75	10	100	16	0%	0%
SB	Shared	350	50	2	100	7	125	16	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	3	50	4	50	9	0%	0%
	Through	475	25	1	25	8	25	17	0%	0%
	Through/Right	475	25	1	25	4	25	12	0%	0%
WB	Left Turn	150	25	3	50	7	75	19	0%	0%
		150	25	0	25	0	25	0	0%	0%
	Through/Right	150	25	0	25	0	25	0	0%	0%
NB	Shared	450	50	6	100	15	125	29	0%	0%
SB	Shared	75	25	4	75	6	75	13	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	7	125	13	150	18	0%	0%
	Through	825	50	5	100	14	125	30	0%	0%
	Through/Right	825	50	5	100	10	125	21	0%	0%
WB	Left Turn	100	25	3	50	7	50	15	0%	0%
	Through	325	75	8	125	21	175	37	3%	0%
	Through/Right	325	75	8	150	16	175	25	0%	0%
NB	Left Turn	400	25	2	50	4	75	12	0%	0%
	Through/Right	400	25	3	50	6	75	13	0%	0%
SB	Left Turn	175	75	6	150	13	175	26	0%	0%
	Through/Right	300	100	8	175	30	250	52	1%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	0	25	2	25	4	0%	0%
	Through/Right	325	25	0	25	0	25	0	0%	0%
WB	Left Turn	175	25	2	25	4	50	11	0%	0%
NB	Shared	300	50	3	75	5	75	21	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	7	150	17	175	25	1%	0%
	Through	1,650	75	8	125	15	150	14	0%	0%
	Through/Right	1,650	75	9	150	16	175	29	0%	0%
WB	Left Turn	150	50	5	100	12	125	31	0%	0%
	Through	875	75	9	150	18	175	48	0%	0%
	Through/Right	875	125	10	200	18	250	39	0%	0%
NB	Left/Through	250	100	13	150	28	200	38	4%	0%
	Right Turn	125	50	9	75	32	125	64	0%	0%
SB	Left Turn	175	175	4	225	6	200	14	0%	23%
	Through/Right	175	125	9	200	11	200	11	0%	6%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM No Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	150	15	225	19	225	1	10%	0%
	Through	450	125	17	250	51	325	45	1%	0%
	Through/Right	450	150	8	250	14	325	47	0%	0%
WB	Left Turn	175	200	12	275	11	225	0	31%	0%
	Through	425	200	34	400	59	425	22	0%	2%
	Through/Right	425	125	12	250	43	300	85	0%	0%
NB	Left Turn	375	125	7	175	21	250	58	0%	0%
	Through	875	225	13	325	28	350	44	0%	0%
	Right Turn	375	50	4	100	7	100	20	0%	0%
SB	Left Turn	325	150	12	275	32	350	63	0%	0%
	Through	625	250	20	400	59	500	126	4%	0%
	Through/Right	625	250	22	400	67	475	105	0%	0%

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	6	75	12	100	25	0%	0%
	Through	350	75	6	125	13	150	27	0%	0%
	Right Turn	350	50	4	100	9	125	18	0%	0%
WB	Left Turn	425	300	18	475	23	475	21	4%	0%
	Through	925	125	29	350	114	600	222	0%	0%
	Right Turn	200	50	4	75	18	100	56	0%	0%
NB	Left Turn	400	150	26	275	62	375	119	0%	0%
	Through	900	325	26	475	60	525	80	4%	0%
	Right Turn	900	75	7	150	23	225	57	0%	0%
SB	Left Turn	250	175	13	275	23	300	19	3%	0%
	Through	1,025	200	12	300	23	325	47	2%	0%
	Through/Right	1,025	100	13	200	20	225	22	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	8	75	23	100	49	0%	0%
	Through/Right	925	100	20	200	38	275	59	2%	0%
WB	Left Turn	125	25	6	50	21	75	41	0%	0%
	Through/Right	600	100	18	200	36	275	72	4%	0%
NB	Shared	375	50	3	75	15	100	23	0%	0%
SB	Shared	350	50	6	75	10	100	18	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	50	5	50	7	0%	0%
	Through/Right	475	25	0	25	3	25	19	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Shared	450	75	5	100	12	125	23	0%	0%
SB	Shared	500	25	3	50	4	50	14	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	7	125	19	175	39	0%	0%
	Through/Right	800	75	11	150	26	200	38	1%	0%
WB	Left Turn	100	25	4	50	17	75	44	0%	0%
	Through/Right	325	100	8	200	21	275	45	9%	0%
NB	Left Turn	400	25	4	75	9	75	21	0%	0%
	Through/Right	400	25	3	50	5	75	10	0%	0%
SB	Left Turn	175	75	5	125	13	150	38	0%	0%
	Through/Right	300	75	6	125	21	200	58	1%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	1	25	10	25	34	0%	0%
WB	Left Turn	175	25	2	25	6	50	7	0%	0%
	Through	1,650	25	1	25	5	25	14	0%	0%
NB	Shared	325	50	4	75	7	75	20	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	125	9	200	12	225	13	4%	0%
	Through/Right	1,650	100	12	200	39	275	74	1%	0%
WB	Left Turn	150	50	4	100	20	150	49	0%	0%
	Through/Right	875	175	24	300	36	350	57	9%	0%
	Left/Through	275	25	0	25	0	25	0	0%	0%
NB	Left/Through	275	75	8	150	13	175	30	3%	0%
	Right Turn	125	25	4	75	11	75	39	0%	0%
SB	Left Turn	200	150	8	225	11	225	11	0%	5%
	Through/Right	200	75	6	100	13	125	33	0%	0%

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	150	9	250	15	225	0	4%	0%
	Through/Right	450	200	16	350	40	425	47	15%	0%
WB	Left Turn	175	100	12	175	27	200	31	3%	0%
	Through	425	100	10	175	28	200	49	1%	0%
	Right Turn	425	25	4	50	8	75	14	0%	0%
NB	Left Turn	375	125	12	200	12	225	34	0%	0%
	Through	725	150	9	250	22	275	46	0%	0%
	Right Turn	375	75	5	125	11	150	30	0%	0%
SB	Left Turn	325	100	14	150	27	200	53	0%	0%
	Through	525	125	11	225	24	250	54	0%	0%
	Through/Right	525	125	16	225	28	275	40	0%	0%

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	7	125	16	125	40	0%	0%
	Through	350	125	13	175	21	225	26	2%	0%
	Right Turn	350	75	8	125	20	175	36	0%	0%
WB	Left Turn	425	325	23	475	36	475	7	6%	0%
	Through	925	150	64	375	201	575	238	1%	0%
	Right Turn	200	75	9	150	21	175	30	0%	0%
NB	Left Turn	400	450	21	500	50	475	0	72%	0%
	Through	900	850	68	1,075	60	950	15	22%	59%
	Right Turn	900	575	139	1,200	136	950	17	0%	16%
SB	Left Turn	250	200	21	325	23	300	0	5%	0%
	Through	1,025	325	19	450	49	500	80	14%	0%
	Through/Right	1,025	225	15	325	16	375	39	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	7	100	23	175	57	0%	0%
	Through/Right	925	150	17	275	39	350	65	4%	0%
WB	Left Turn	125	25	4	50	22	100	68	0%	0%
	Through/Right	600	175	10	325	27	400	53	11%	0%
NB	Shared	375	50	3	100	8	100	20	0%	0%
SB	Shared	350	75	7	100	17	150	34	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	50	4	50	15	0%	0%
	Through/Right	475	25	1	25	6	25	11	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Shared	450	75	4	100	12	125	29	0%	0%
SB	Shared	500	25	3	75	7	75	16	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	9	125	21	150	38	0%	0%
	Through/Right	825	75	11	150	25	200	63	0%	0%
WB	Left Turn	100	25	4	75	20	100	33	0%	0%
	Through/Right	325	150	18	275	23	325	15	15%	0%
NB	Left Turn	400	25	5	75	9	75	20	0%	0%
	Through/Right	400	25	3	50	6	75	10	0%	0%
SB	Left Turn	175	100	7	150	12	200	16	1%	0%
	Through/Right	300	100	9	200	28	250	48	2%	1%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	0	25	3	25	7	0%	0%
WB	Left Turn	175	25	2	25	7	50	13	0%	0%
	Through	1,650	25	5	25	28	75	55	0%	0%
NB	Shared	325	50	3	75	6	75	12	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	100	9	175	18	225	19	1%	0%
	Through/Right	1,650	150	7	250	27	325	73	5%	0%
WB	Left Turn	150	75	10	175	21	200	1	0%	0%
	Through/Right	875	250	44	475	118	525	164	23%	0%
	Left/Through	275	25	0	25	0	25	0	0%	0%
NB	Left/Through	275	100	13	200	32	225	56	10%	2%
	Right Turn	125	50	9	100	39	125	58	0%	0%
SB	Left Turn	200	200	10	275	10	250	9	0%	18%
	Through/Right	200	150	8	225	11	225	12	0%	2%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2030 PM Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	200	10	275	12	225	0	17%	0%
	Through/Right	450	375	31	525	23	475	3	46%	14%
WB	Left Turn	175	175	10	250	12	225	1	23%	0%
	Through	425	200	51	375	84	400	32	4%	2%
	Right Turn	425	50	2	75	7	100	18	0%	0%
NB	Left Turn	375	225	49	375	73	425	64	5%	0%
	Through	725	250	38	400	105	475	141	0%	0%
	Right Turn	375	50	4	75	6	100	20	0%	0%
SB	Left Turn	325	225	29	400	46	400	19	0%	0%
	Through	525	350	39	550	51	550	18	18%	7%
	Through/Right	525	350	42	550	44	550	8	0%	8%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	20	100	43	125	65	0%	0%
	Through	350	75	7	125	12	175	34	0%	0%
	Right Turn	350	75	5	125	11	150	31	0%	0%
WB	Left Turn	925	175	12	275	26	300	33	0%	0%
	Through	925	100	8	150	24	225	70	0%	0%
	Right Turn	175	50	4	100	19	150	58	0%	0%
NB	Left Turn	400	125	16	250	59	350	134	0%	0%
	Through	875	325	19	475	40	525	81	3%	0%
	Right Turn	875	125	9	225	25	300	50	0%	0%
SB	Left Turn	250	175	10	275	19	300	22	2%	0%
	Through	1,200	200	13	300	27	325	45	2%	0%
	Through/Right	1,200	125	11	200	17	225	24	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	75	4	75	11	0%	0%
	Through	925	75	7	125	17	150	31	0%	0%
	Through/Right	925	50	5	100	7	125	22	0%	0%
WB	Left Turn	125	25	3	50	6	50	12	0%	0%
	Through	600	75	7	125	15	150	22	1%	0%
	Through/Right	600	50	7	100	14	125	28	0%	0%
NB	Shared	375	50	5	100	11	125	27	0%	0%
SB	Shared	350	50	3	75	5	100	20	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	25	5	50	10	0%	0%
	Through	475	25	1	25	9	25	27	0%	0%
	Through/Right	475	25	1	25	7	25	20	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Shared	450	75	6	100	14	125	19	0%	0%
SB	Shared	75	50	3	75	6	75	16	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	8	150	19	175	28	0%	0%
	Through	825	50	7	100	11	125	21	0%	0%
	Through/Right	825	25	5	75	11	100	20	0%	0%
WB	Left Turn	100	25	1	25	4	50	8	0%	0%
	Through	325	50	7	100	10	125	24	1%	0%
	Through/Right	325	75	7	125	13	150	26	0%	0%
NB	Left Turn	400	25	4	50	11	75	24	0%	0%
	Through/Right	400	25	6	75	8	75	15	0%	0%
SB	Left Turn	175	75	7	125	13	150	32	0%	0%
	Through/Right	300	75	9	150	32	200	48	1%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
WB	Left Turn	175	25	1	25	3	50	1	0%	0%
NB	Shared	300	50	3	75	5	75	9	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	150	5	225	9	225	1	11%	0%
	Through	1,650	75	18	200	56	300	74	0%	0%
	Through/Right	1,650	50	6	100	7	125	16	0%	0%
WB	Left Turn	150	50	5	75	9	100	11	0%	0%
	Through	875	50	3	100	9	125	22	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Left/Through	250	100	7	175	12	225	34	5%	0%
	Right Turn	125	25	5	75	19	125	63	0%	0%
SB	Left Turn	175	150	8	200	6	200	7	0%	7%
	Through/Right	175	75	9	150	17	175	21	0%	1%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	100	8	150	13	175	25	1%	0%
	Through	450	100	8	175	17	200	29	1%	0%
	Through/Right	450	150	10	225	14	250	32	0%	0%
WB	Left Turn	175	100	11	175	21	200	26	2%	0%
	Through	425	75	9	125	30	175	58	0%	0%
	Through/Right	425	100	12	150	21	200	45	0%	0%
NB	Left Turn	375	100	8	150	16	175	18	0%	0%
	Through	875	175	10	275	17	300	33	0%	0%
	Right Turn	375	100	7	150	18	175	26	0%	0%
SB	Left Turn	325	125	10	175	22	200	31	0%	0%
	Through	625	150	9	250	14	275	31	0%	0%
	Through/Right	625	150	13	250	23	300	55	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	35	75	73	125	106	0%	0%
	Through	350	125	8	225	22	275	52	4%	0%
	Right Turn	350	100	9	175	19	225	37	0%	0%
WB	Left Turn	925	175	10	250	21	300	53	0%	0%
	Through	925	125	16	250	50	325	96	3%	0%
	Right Turn	175	100	11	175	19	200	5	1%	0%
NB	Left Turn	400	400	18	600	18	475	0	1%	0%
	Through	875	875	44	1,000	69	925	12	56%	45%
	Right Turn	875	775	76	1,200	46	925	13	0%	38%
SB	Left Turn	250	250	24	350	17	325	0	20%	0%
	Through	1,200	400	47	600	98	650	120	20%	0%
	Through/Right	1,200	275	26	425	62	500	105	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	4	75	6	100	13	0%	0%
	Through	925	75	7	125	19	150	44	0%	0%
	Through/Right	925	75	8	125	19	150	40	0%	0%
WB	Left Turn	125	25	3	50	8	50	16	0%	0%
	Through	600	75	11	150	20	200	38	1%	0%
	Through/Right	600	75	8	150	18	200	35	0%	0%
NB	Shared	375	50	6	100	9	100	11	0%	0%
SB	Shared	350	50	3	100	5	125	10	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	3	50	6	75	14	0%	0%
	Through/Right	475	25	1	25	5	25	12	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Shared	450	75	8	125	19	150	36	0%	0%
SB	Shared	75	50	4	75	8	75	19	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	7	125	15	175	37	0%	0%
	Through	825	50	5	100	7	100	13	0%	0%
	Through/Right	825	50	5	100	9	125	15	0%	0%
WB	Left Turn	100	25	5	75	16	100	42	0%	0%
	Through	325	75	9	150	20	175	47	4%	0%
	Through/Right	325	100	12	175	24	200	34	0%	0%
NB	Left Turn	400	25	4	50	6	75	12	0%	0%
	Through/Right	400	25	5	75	5	75	11	0%	0%
SB	Left Turn	175	100	7	150	13	200	20	0%	0%
	Through/Right	300	100	9	175	20	250	42	1%	0%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	0	25	2	25	5	0%	0%
WB	Left Turn	175	25	2	25	5	50	7	0%	0%
NB	Shared	300	50	3	75	4	75	9	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	8	150	16	175	22	1%	0%
	Through	1,650	75	5	125	11	150	17	0%	0%
	Through/Right	1,650	100	8	150	14	175	24	0%	0%
WB	Left Turn	150	50	7	125	15	150	32	0%	0%
	Through	875	100	13	175	23	200	37	1%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Left/Through	250	100	10	175	22	250	40	7%	1%
	Right Turn	125	50	4	100	17	150	55	0%	0%
SB	Left Turn	175	175	6	225	7	200	15	0%	20%
	Through/Right	175	150	11	225	8	200	14	0%	8%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 No Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	11	200	21	225	15	4%	0%
	Through	450	125	5	225	16	250	55	2%	0%
	Through/Right	450	175	10	250	20	275	30	0%	0%
WB	Left Turn	175	225	10	275	7	225	0	55%	0%
	Through	425	300	59	525	53	425	4	0%	14%
	Through/Right	425	175	20	325	50	400	42	0%	0%
NB	Left Turn	375	125	20	225	68	300	108	0%	0%
	Through	875	300	34	425	82	500	144	3%	0%
	Right Turn	375	75	14	125	72	200	154	0%	0%
SB	Left Turn	325	175	26	275	31	325	76	0%	0%
	Through	625	250	15	375	38	425	66	2%	0%
	Through/Right	625	250	16	375	39	425	74	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 AM Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	4	100	11	125	23	0%	0%
	Through	350	75	7	125	17	150	29	0%	0%
	Right Turn	350	75	7	125	14	150	35	0%	0%
WB	Left Turn	425	325	17	475	33	475	11	6%	0%
	Through	925	150	54	400	176	675	210	1%	0%
	Right Turn	175	50	5	100	20	125	48	0%	0%
NB	Left Turn	400	225	38	450	62	450	0	0%	0%
	Through	900	475	69	725	134	825	99	21%	1%
	Right Turn	900	125	14	250	101	375	282	0%	0%
SB	Left Turn	250	175	21	300	31	300	19	5%	0%
	Through	1,025	225	21	350	71	425	128	3%	0%
	Through/Right	1,025	125	8	225	13	250	32	0%	0%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	50	6	100	22	175	68	0%	0%
	Through/Right	925	150	11	250	29	300	68	3%	0%
WB	Left Turn	125	25	5	75	17	100	59	0%	0%
	Through/Right	600	125	5	225	16	300	54	5%	0%
NB	Shared	375	50	6	100	11	100	21	0%	0%
SB	Shared	350	50	4	75	8	100	19	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	2	25	7	50	12	0%	0%
	Through/Right	475	25	2	25	17	25	49	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
		275	25	0	25	0	25	0	0%	0%
NB	Shared	450	75	7	125	27	150	54	0%	0%
SB	Shared	550	50	2	75	5	75	15	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	100	9	175	21	200	29	1%	0%
	Through/Right	825	100	8	175	27	275	75	1%	0%
WB	Left Turn	100	25	4	50	18	100	41	0%	0%
	Through/Right	325	125	11	225	25	275	40	11%	0%
NB	Left Turn	400	25	4	75	9	100	20	0%	0%
	Through/Right	400	50	4	75	10	100	16	0%	0%
SB	Left Turn	175	75	11	125	21	175	34	0%	0%
	Through/Right	300	100	11	175	34	250	65	2%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 AM Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	2	25	14	50	37	0%	0%
WB	Left Turn	175	25	2	25	4	50	8	0%	0%
	Through	1,650	25	1	25	8	25	24	0%	0%
NB	Shared	325	50	4	75	7	100	25	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	150	9	225	6	225	1	10%	0%
	Through/Right	1,650	150	26	300	72	425	133	1%	0%
WB	Left Turn	150	50	7	125	26	175	34	0%	0%
	Through/Right	875	150	13	275	28	325	58	10%	0%
	Left/Through	275	25	0	25	0	25	0	0%	0%
NB	Left/Through	275	100	9	175	20	225	41	8%	0%
	Right Turn	125	50	5	100	23	150	59	0%	0%
SB	Left Turn	175	150	8	200	12	200	5	0%	6%
	Through/Right	175	75	8	150	21	200	21	0%	1%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 AM Build**
Queue Length By Lane Group **AM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	150	9	275	9	225	0	1%	0%
	Through/Right	450	300	26	475	24	450	6	36%	2%
WB	Left Turn	175	125	12	200	12	225	18	2%	0%
	Through	425	100	8	200	17	250	39	2%	0%
	Right Turn	425	50	4	75	5	100	19	0%	0%
NB	Left Turn	375	125	17	200	28	225	44	0%	0%
	Through	725	200	10	300	29	325	64	0%	0%
	Right Turn	375	75	8	150	17	175	43	0%	0%
SB	Left Turn	325	100	10	175	24	225	67	0%	0%
	Through	525	150	11	250	24	300	48	0%	0%
	Through/Right	525	150	11	250	22	275	38	0%	0%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 PM Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 1 **SE 164th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	6	125	20	200	41	0%	0%
	Through	350	125	11	225	28	250	50	4%	0%
	Right Turn	350	100	11	175	16	225	28	0%	0%
WB	Left Turn	425	375	29	525	29	475	2	12%	0%
	Through	925	225	68	575	183	800	189	1%	0%
	Right Turn	175	100	5	175	13	200	1	0%	0%
NB	Left Turn	400	400	29	600	22	475	0	3%	0%
	Through	900	900	11	950	32	950	6	63%	59%
	Right Turn	900	900	38	1,025	128	950	11	0%	49%
SB	Left Turn	250	300	20	350	23	325	0	58%	0%
	Through	1,025	675	117	950	145	950	88	34%	5%
	Through/Right	1,025	475	127	725	205	775	146	0%	1%

Intersection 2 **SE 168th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	75	12	150	33	200	47	0%	0%
	Through/Right	925	150	16	275	41	375	73	5%	0%
WB	Left Turn	125	25	3	75	19	125	63	0%	0%
	Through/Right	600	225	33	400	74	500	101	14%	0%
NB	Shared	375	50	4	100	7	100	19	0%	0%
SB	Shared	350	75	4	125	8	125	18	0%	0%

Intersection 3 **SE 172nd Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	25	4	50	7	75	14	0%	0%
	Through/Right	475	25	1	25	7	25	15	0%	0%
WB	Left/Through	275	25	0	25	0	25	0	0%	0%
	Right Turn	275	25	0	25	0	25	0	0%	0%
NB	Shared	450	75	7	125	18	175	40	0%	0%
SB	Shared	525	50	4	75	9	75	19	0%	0%

Intersection 4 **SE 176th Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	100	5	175	12	200	14	2%	0%
	Through/Right	825	100	10	175	23	250	49	1%	0%
WB	Left Turn	100	25	9	75	22	125	28	0%	0%
	Through/Right	325	200	16	350	15	325	3	23%	2%
NB	Left Turn	400	25	4	75	8	75	16	0%	0%
	Through/Right	400	25	3	75	6	75	11	0%	0%
SB	Left Turn	175	100	9	175	13	200	17	1%	0%
	Through/Right	300	125	14	225	36	275	58	4%	1%

Intersection 5 **SE 177th Avenue / SE 34th Street** **Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Through/Right	325	25	0	25	2	25	6	0%	0%
WB	Left Turn	175	25	2	50	16	75	53	0%	0%
	Through	1,650	25	8	100	33	175	64	0%	0%
NB	Shared	325	50	3	75	7	75	15	0%	0%

Intersection 6 **SE Hiddenbrook Drive / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	125	17	200	23	225	1	4%	0%
	Through/Right	1,650	200	56	450	182	575	283	14%	0%
WB	Left Turn	150	75	12	175	19	200	1	0%	0%
	Through/Right	875	275	60	500	134	575	139	26%	0%
	Left/Through	275	25	0	25	0	25	0	0%	0%
NB	Left/Through	275	150	24	250	40	275	17	23%	6%
	Right Turn	125	50	13	150	33	200	0	0%	0%
SB	Left Turn	175	175	9	250	5	225	10	0%	31%
	Through/Right	175	150	11	225	16	225	12	0%	10%

SimTraffic Post-Processor **SE 34th Street**
Average Results from 10 Runs **2040 PM Build**
Queue Length By Lane Group **PM Peak Hour**

Intersection 7 **SE 192nd Avenue / SE 34th Street** **Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft) Average	Average Queue (ft) Std. Dev.	95th Queue (ft) Average	95th Queue (ft) Std. Dev.	Maximum Queue (ft) Average	Maximum Queue (ft) Std. Dev.	Block Time Pocket	Block Time Upstream
EB	Left Turn	175	225	8	275	12	225	0	7%	0%
	Through/Right	450	500	15	550	34	550	18	71%	58%
WB	Left Turn	175	200	12	275	11	225	0	37%	0%
	Through	425	300	44	475	45	425	8	10%	10%
	Right Turn	425	50	13	125	44	150	80	0%	0%
NB	Left Turn	375	425	42	550	41	475	0	65%	0%
	Through	725	600	78	875	55	775	14	14%	43%
	Right Turn	375	125	57	375	145	450	119	0%	0%
SB	Left Turn	325	300	45	450	56	400	56	6%	0%
	Through	525	425	60	600	71	550	23	31%	20%
	Through/Right	525	425	57	600	73	550	20	0%	18%

Appendix E: LOS by Movement

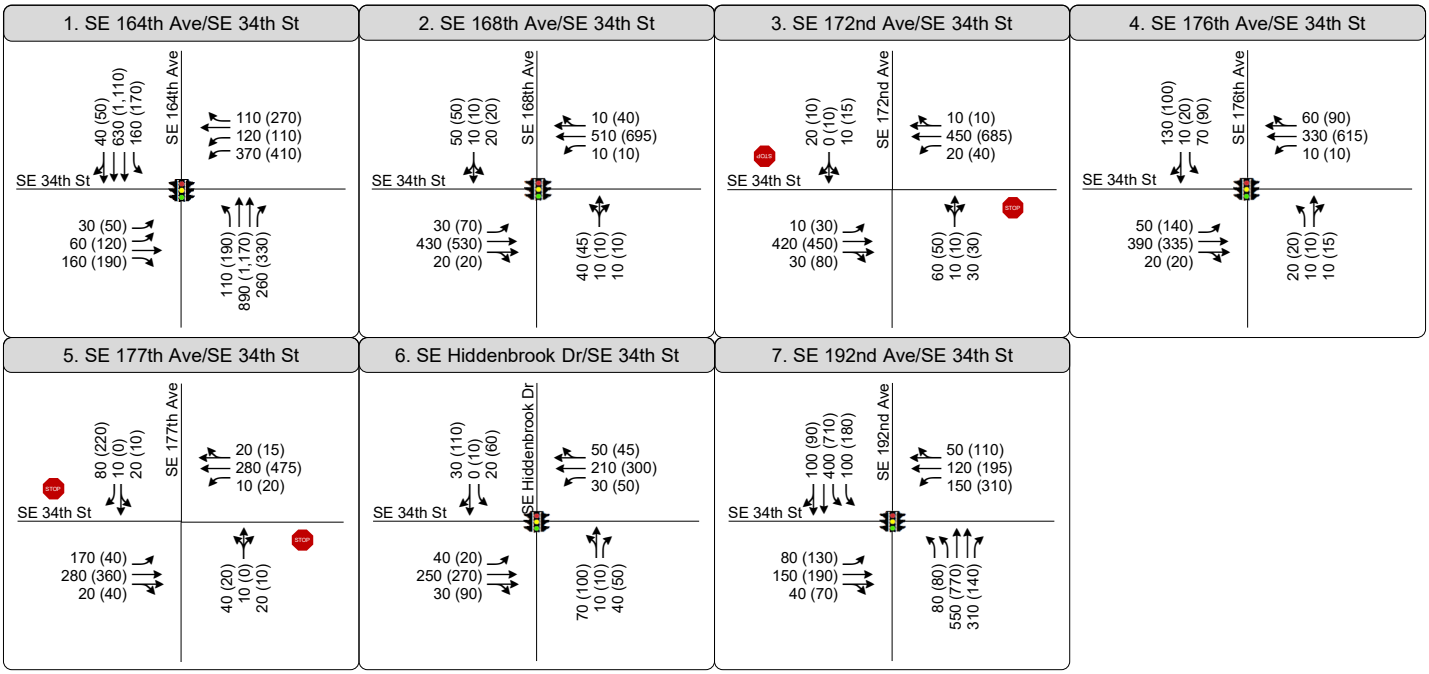
AM Peak Hour Intersection Operations Summary

Intersection	Approach	Movement	2024					2030					2040				
			No Build		Build		Delta (Seconds)	No Build		Build		Delta (Seconds)	No Build		Build		Delta (Seconds)
			Delay (Seconds)	LOS	Delay (Seconds)	LOS		Delay (Seconds)	LOS	Delay (Seconds)	LOS		Delay (Seconds)	LOS	Delay (Seconds)	LOS	
SE 164th Avenue & SE 34th Street	NB	Left Turn	58	E	370	F	312	71	E	81	F	10	43	D	83	F	40
		Through	22	C	49	D	26	30	C	38	D	8	38	D	70	E	33
		Right Turn	6	A	13	B	6	9	A	5	A	-3	13	B	8	A	-5
		Approach	23	C	74	E	51	28	C	33	C	5	31	C	53	D	22
	SB	Left Turn	55	E	73	E	18	51	D	70	E	19	61	E	70	E	9
		Through	18	B	23	C	5	19	B	26	C	7	28	C	28	C	0
		Right Turn	9	A	14	B	5	5	A	9	A	4	14	B	11	B	-4
		Approach	25	C	28	C	4	25	C	33	C	8	33	C	35	C	2
	EB	Left Turn	51	D	65	E	13	63	E	50	D	-14	60	E	49	D	-11
		Through	52	D	51	D	-1	51	D	55	D	4	48	D	53	D	5
		Right Turn	6	A	10	B	4	7	A	6	A	0	8	A	6	A	-2
		Approach	23	C	32	C	9	24	C	23	C	-1	24	C	23	C	-1
	WB	Left Turn	44	D	46	D	2	43	D	47	D	3	41	D	43	D	2
		Through	33	C	40	D	7	33	C	28	C	-5	32	C	27	C	-5
		Right Turn	8	A	13	B	5	8	A	6	A	-2	9	A	7	A	-2
		Approach	35	D	34	C	-1	35	D	37	D	1	35	C	35	D	0
	Intersection		***26***	***C***	***48***	***D***	***22***	***29***	***C***	***33***	***C***	***5***	***32***	***C***	***43***	***D***	***11***
SE 192nd Avenue & SE 34th Street	NB	Left Turn	44	D	57	E	13	45	D	43	D	-2	41	D	52	D	10
		Through	14	B	27	C	13	16	B	18	B	2	20	B	23	C	3
		Right Turn	8	A	7	A	-2	8	A	6	A	-3	11	B	7	A	-4
		Approach	15	B	29	C	14	18	B	17	B	0	19	B	21	C	2
	SB	Left Turn	55	E	75	E	20	55	D	55	D	0	76	E	62	E	-14
		Through	14	B	40	D	26	20	B	23	C	3	21	C	25	C	5
		Right Turn	6	A	37	D	31	12	B	14	B	2	13	B	14	B	1
		Approach	20	C	45	D	25	23	C	25	C	2	27	C	29	C	2
	EB	Left Turn	30	C	37	D	7	33	C	36	D	3	29	C	42	D	13
		Through	33	C	38	D	5	37	D	37	D	0	35	C	50	D	15
		Right Turn	20	C	31	C	11	22	C	31	C	9	25	C	41	D	16
		Approach	31	C	36	D	5	31	C	35	D	4	31	C	45	D	15
	WB	Left Turn	34	C	60	E	26	31	C	39	D	8	29	C	33	C	4
		Through	31	C	32	C	1	34	C	30	C	-4	30	C	28	C	-2
		Right Turn	14	B	25	C	11	21	C	4	A	-16	21	C	6	A	-15
		Approach	30	C	45	D	16	30	C	30	C	0	28	C	26	C	-2
	Intersection		***21***	***C***	***39***	***D***	***18***	***23***	***C***	***25***	***C***	***1***	***25***	***C***	***28***	***C***	***3***

PM Peak Hour Intersection Operations Summary

Intersection	Approach	Movement	2024					2030					2040				
			No Build		Build		Delta (Seconds)	No Build		Build		Delta (Seconds)	No Build		Build		Delta (Seconds)
			Delay (Seconds)	LOS	Delay (Seconds)	LOS		Delay (Seconds)	LOS	Delay (Seconds)	LOS		Delay (Seconds)	LOS	Delay (Seconds)	LOS	
SE 164th Avenue & SE 34th Street	NB	Left Turn	305	F	122	F	-182	370	F	370	F	0	119	F	136	F	16
		Through	45	D	82	F	37	49	D	84	F	35	123	F	141	F	18
		Right Turn	9	A	9	A	0	13	B	15	B	3	25	C	22	C	-2
		Approach	68	E	73	E	5	74	E	97	F	23	99	F	112	F	13
	SB	Left Turn	58	E	56	E	-2	73	E	80	F	8	112	F	235	F	123
		Through	21	C	26	C	5	23	C	30	C	6	39	D	85	F	47
		Right Turn	9	A	16	B	7	14	B	17	B	3	25	C	66	E	41
		Approach	25	C	29	C	4	28	C	35	C	6	47	D	101	F	54
	EB	Left Turn	59	E	56	E	-3	65	E	57	E	-8	79	E	57	E	-22
		Through	53	D	50	D	-3	51	D	51	D	-1	52	D	47	D	-5
		Right Turn	8	A	9	A	1	10	B	11	B	1	14	B	14	B	0
		Approach	29	C	28	C	-2	32	C	30	C	-2	36	D	30	C	-5
	WB	Left Turn	45	D	54	D	8	46	D	61	E	15	42	D	58	E	15
		Through	41	D	35	C	-6	40	D	33	C	-8	32	C	31	C	-1
		Right Turn	13	B	8	A	-4	13	B	10	B	-2	13	B	11	B	-2
		Approach	33	C	36	D	3	34	C	39	D	5	32	C	39	D	7
	Intersection		***45***	***D***	***49***	***D***	***4***	***48***	***D***	***60***	***E***	***12***	***63***	***E***	***88***	***F***	***25***
SE 192nd Avenue & SE 34th Street	NB	Left Turn	45	D	56	E	10	57	E	132	F	75	76	E	403	F	328
		Through	23	C	28	C	5	27	C	30	C	3	36	D	67	E	31
		Right Turn	7	A	4	A	-2	7	A	5	A	-2	9	A	12	B	3
		Approach	22	C	26	C	4	29	C	42	D	14	37	D	92	F	55
	SB	Left Turn	70	E	66	E	-3	75	E	71	E	-4	82	F	189	F	108
		Through	22	C	25	C	3	40	D	66	E	26	32	C	81	F	49
		Right Turn	17	B	20	C	4	37	D	71	E	34	27	C	84	F	57
		Approach	30	C	32	C	2	45	D	68	E	22	41	D	102	F	62
	EB	Left Turn	33	C	34	C	0	37	D	61	E	24	36	D	90	F	54
		Through	38	D	52	D	14	38	D	71	E	33	38	D	107	F	69
		Right Turn	26	C	40	D	14	31	C	63	E	32	32	C	95	F	63
		Approach	34	C	43	D	9	36	D	65	E	29	36	D	99	F	63
	WB	Left Turn	40	D	57	E	17	60	E	43	D	-17	81	F	63	E	-18
		Through	31	C	39	D	8	32	C	35	D	3	34	C	39	D	5
		Right Turn	19	B	7	A	-12	25	C	8	A	-16	27	C	11	B	-16
		Approach	33	C	43	D	10	45	D	34	C	-11	54	D	45	D	-9
	Intersection		***29***	***C***	***34***	***C***	***5***	***39***	***D***	***53***	***D***	***15***	***42***	***D***	***86***	***F***	***44***

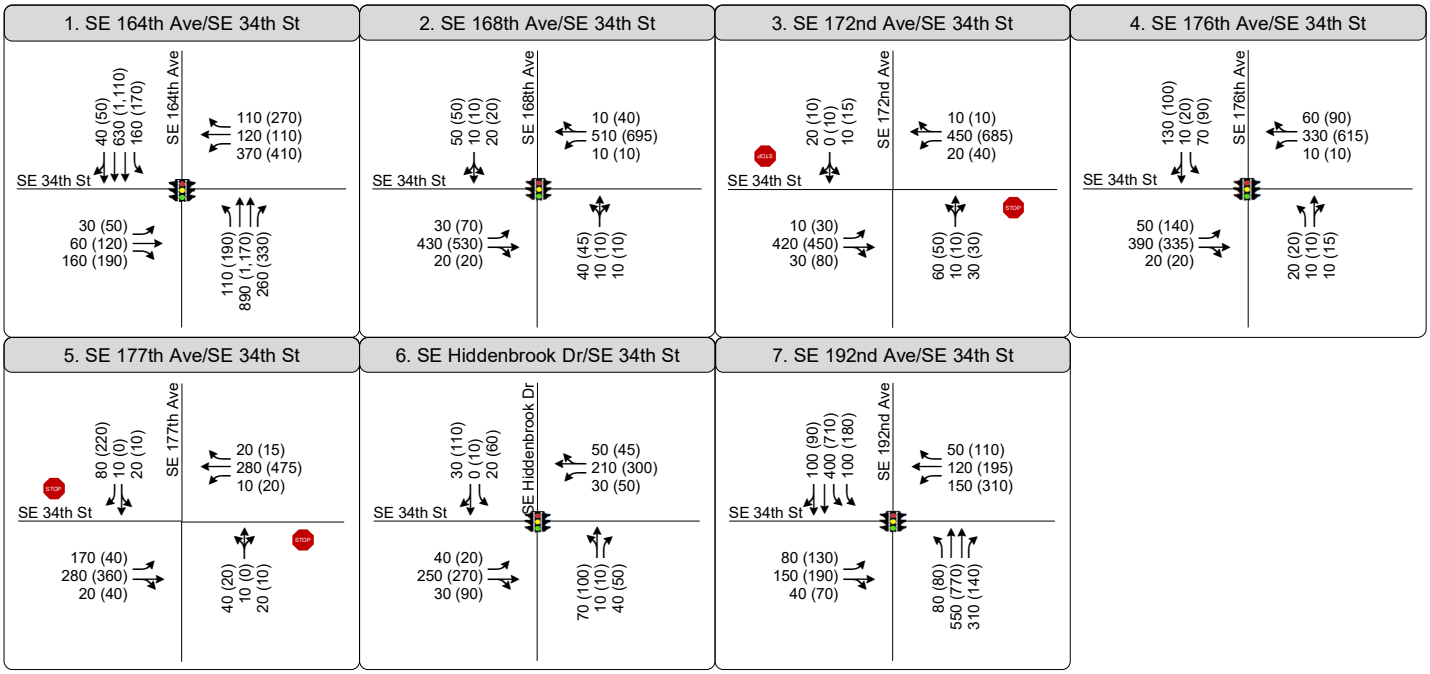
Appendix D: Traffic Volume & Lane Configurations



Legend:

- Study Intersection
- Stop Control
- Signal Control
- Lane Configuration

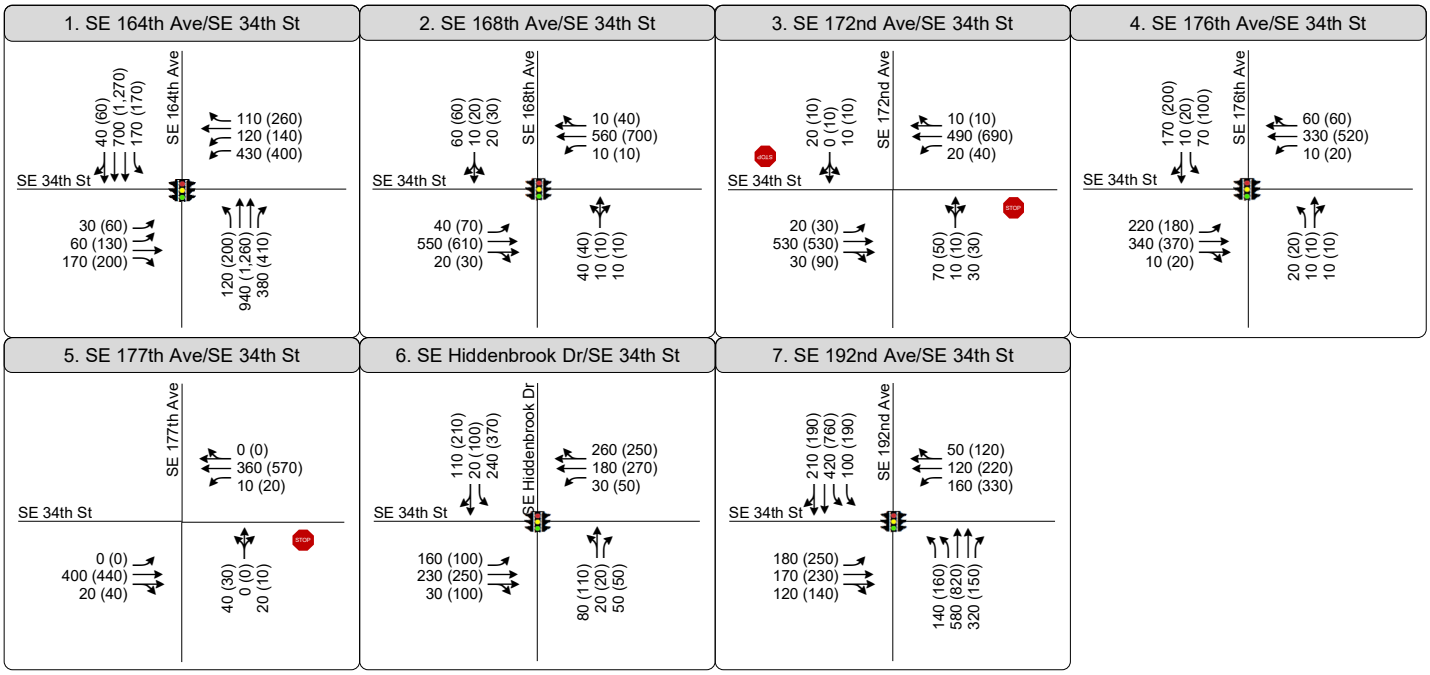
Peak Hour Traffic Volumes and
Lane Configurations (AM(PM))
2024 No Build



Legend:

- Study Intersection
- Stop Control
- Signal Control
- Lane Configuration

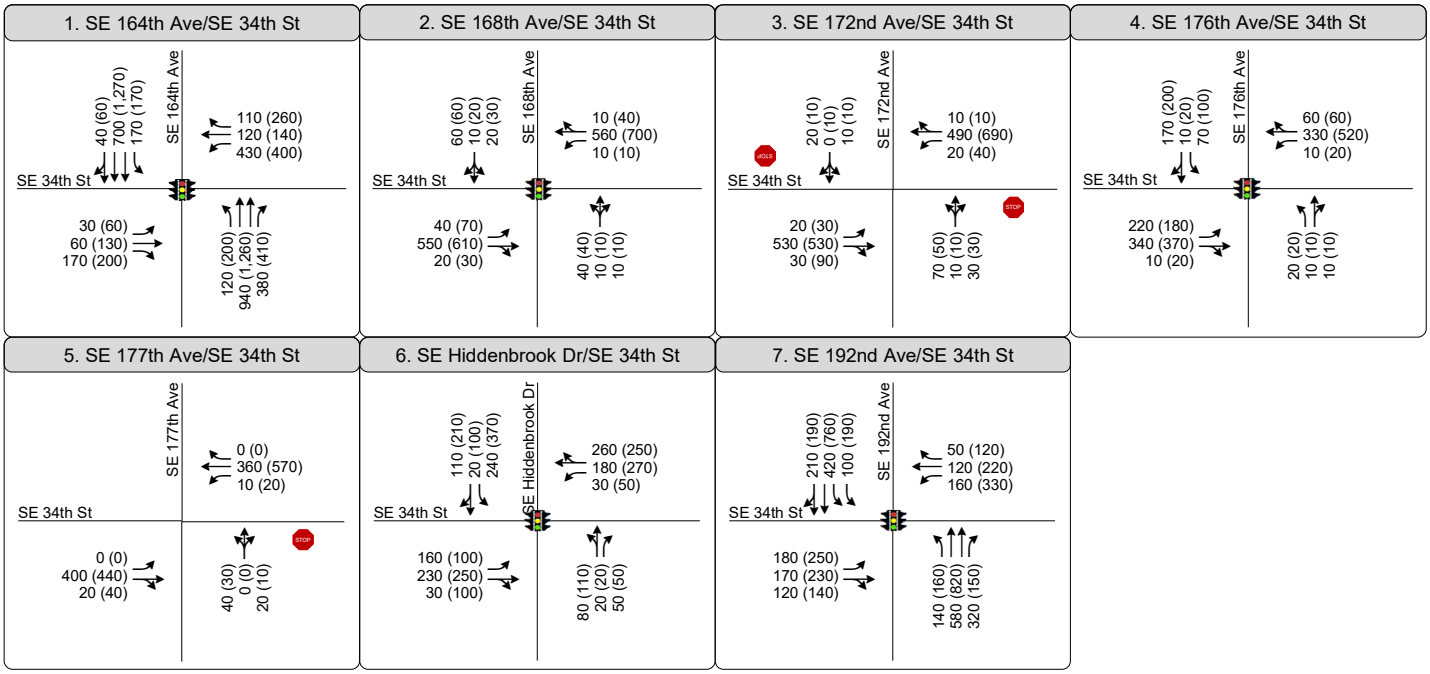
Peak Hour Traffic Volumes and
Lane Configurations (AM(PM))
2024 With Repurposed Lane



Legend:

- Study Intersection
- Stop Control
- Signal Control
- Lane Configuration

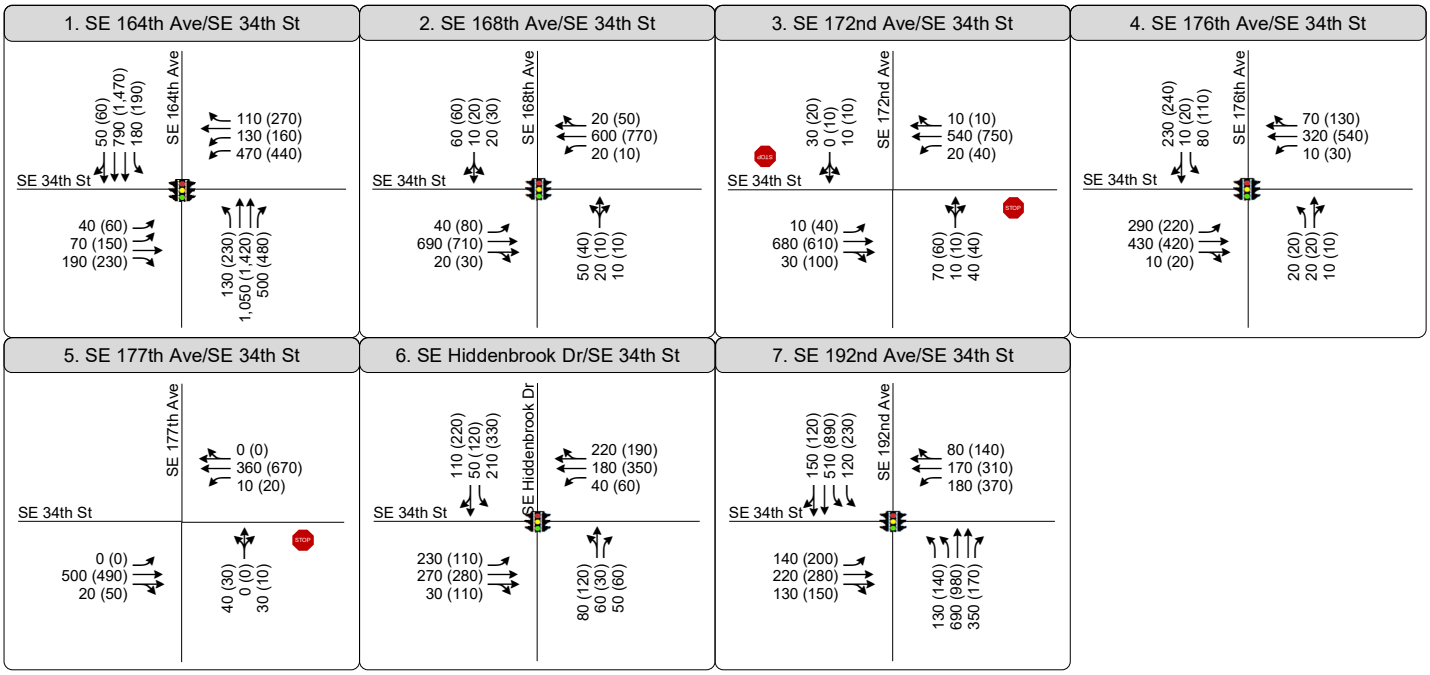
Peak Hour Traffic Volumes and
Lane Configurations (AM(PM))
2030 No Build



Legend:

- X — Study Intersection
- STOP — Stop Control
- Signal Control
- Lane Configuration

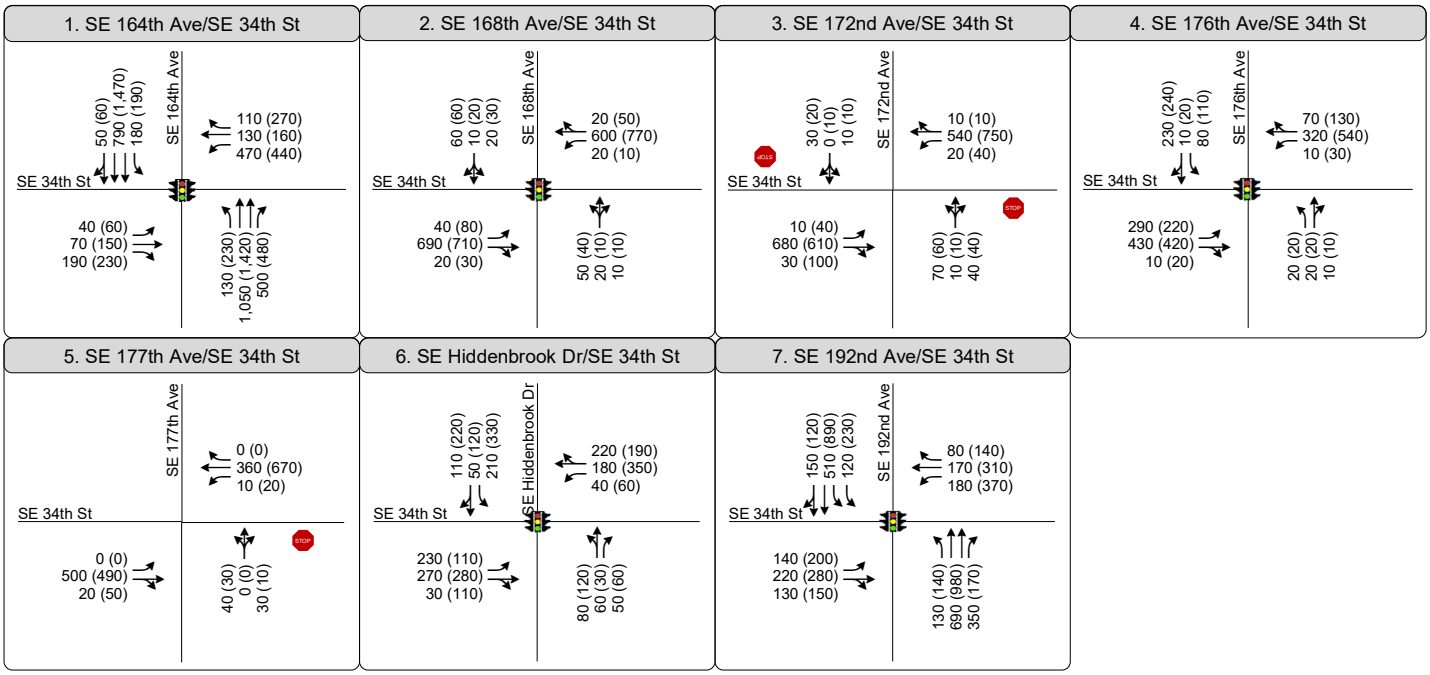
Peak Hour Traffic Volumes and
Lane Configurations (AM(PM))
2030 With Repurposed Lane



Legend:

- X — Study Intersection
- STOP — Stop Control
- Signal Control
- Lane Configuration

Peak Hour Traffic Volumes and
Lane Configurations (AM(PM))
2040 No Build



Legend:

- X — Study Intersection
- STOP — Stop Control
- Signal Control
- Lane Configuration

Peak Hour Traffic Volumes and
Lane Configurations (AM(PM))
2040 With Repurposed Lane