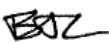


MEMORANDUM

To: Jesse Hannahs, PE, City of Marysville

From: Brad Lincoln, PE 

Subject: Kendall Subaru Development Scoping Analysis

Date: July 26, 2022

Project: 090222176

Kimley-Horn and Associates, Inc. has been retained to provide analysis regarding the trip generation and mitigation fees for the proposed Kendall Subaru development. The Kendall Subaru development is located along the east side of Smokey Point Boulevard, north of 156th Street NE. A site vicinity map is shown in Figure 1. The development is proposed to consist of a 67,546 square-foot (SF) automobile sales and service building.

Brad Lincoln, responsible for this memorandum, is a licensed professional engineer (Civil) in the State of Washington and member of the Washington State section of ITE.

1. TRIP GENERATION

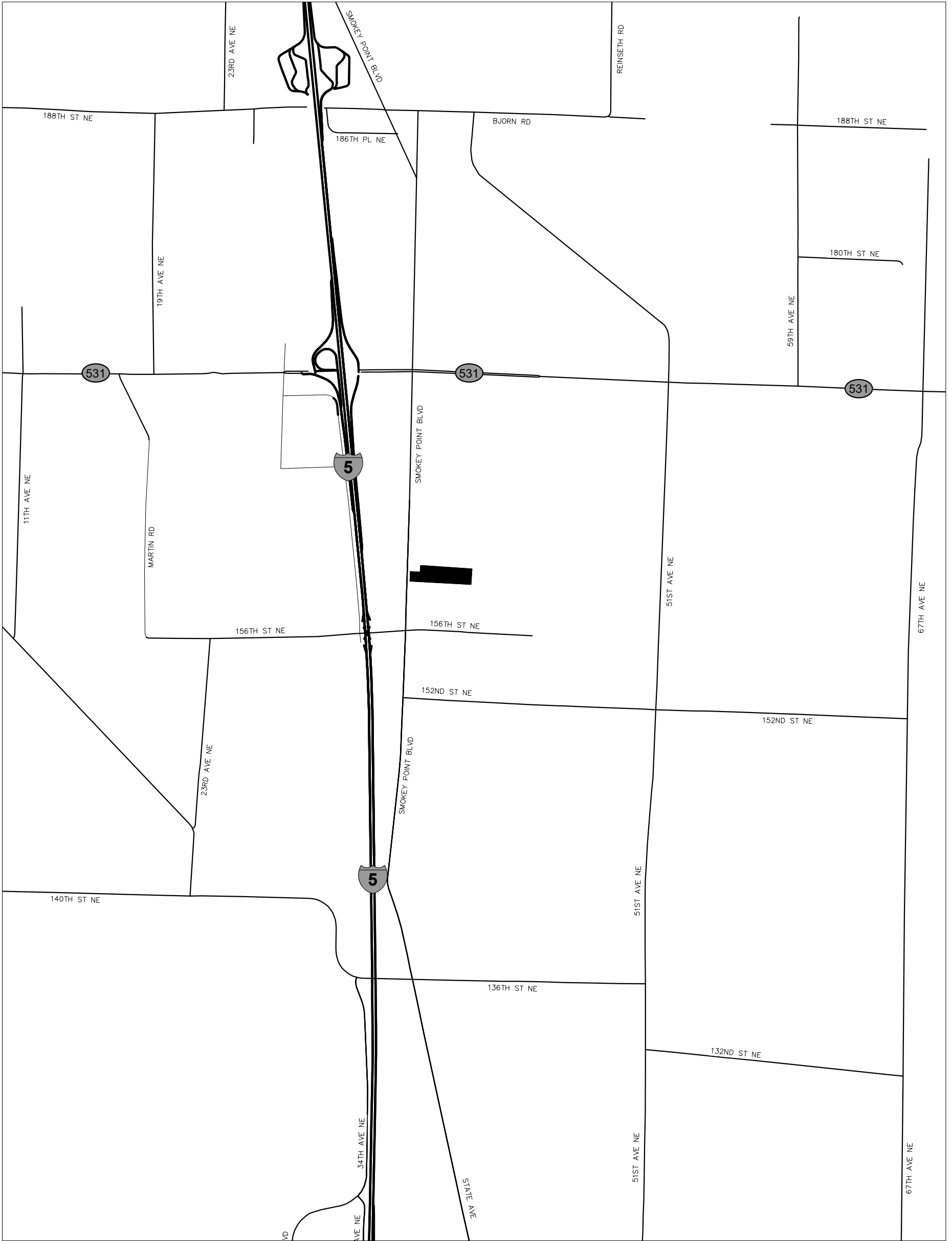
The trip generation calculations for the Kendall Subaru development are based on data published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual, 11th Edition (2021)*. The average trip generation rates for ITE Land Use Code 840, Automobile Sales (New), were used for the trip generation calculations. The weekday trip generation calculations for the Kendall Subaru development are summarized in Table 1.

Table 1: Automobile Sales (New) Trip Generation Summary

67,546 SF Automobile Sales (New)	Average Daily Trips			AM Peak-Hour Trips			PM Peak-Hour Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
Generation Rate	27.84 trips per 1000 SF			1.86 trips per 1000 SF			2.42 trips per 1000 SF		
Splits	50%	50%	100%	73%	27%	100%	40%	60%	100%
Trips	940.24	940.24	1,880.48	91.72	33.92	125.64	65.38	98.08	163.46

The Kendall Subaru development is anticipated to generate approximately 1,880 weekday average daily trips with approximately 126 weekday AM peak-hour trips and 163 weekday PM peak-hour trips.

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KENDALL SUBARU

CITY OF MARYSVILLE

LEGEND



DEVELOPMENT SITE



STUDY INTERSECTION

FIGURE 1
SITE VICINITY MAP

2. Trip Distribution

The trip distribution for the Kendall Subaru development is based on distributions provided by the City of Marysville for new developments in the site vicinity based on the MIC South distribution. The trip distribution has been evaluated for the 2025 Opening Year conditions and the 2031 Horizon Year conditions.

2.1. 2025 Opening Year

The opening year trip distribution is based on the existing roadway network. It is anticipated that 72% of the trips generated by the development will travel along Smokey Point Boulevard, twenty-one percent to and from the north and fifty-one percent to and from the south. Approximately 26% of the trips generated by the development will travel to and from the east 152nd Street NE. The remaining 2% of the trips generated by the development will travel to and from local retail areas along Twin Lakes Avenue. Detailed trip distributions are shown in Figure 2 and Figure 3 for the weekday AM and PM peak-hours, respectively.

2.2. 2031 Horizon Year

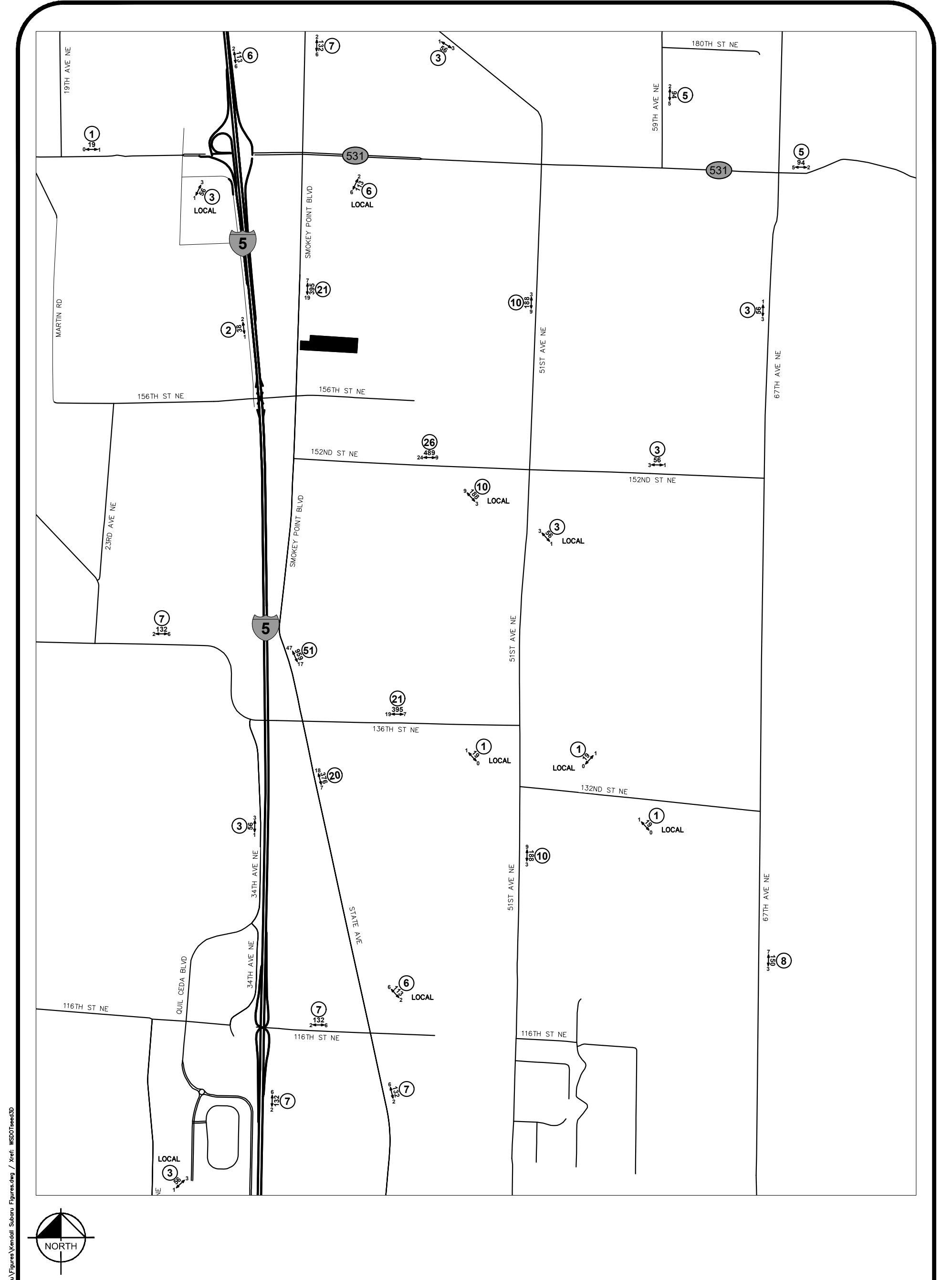
The horizon year distribution considers future roadway improvements, particularly the future interchange with Interstate-5 interchange with 156th Street NE and roadways east of Smokey Point Boulevard. These new roadways and the Interstate-5 interchange are anticipated to cause trips to divert from Smokey Point Boulevard and 152nd Street NE. It is anticipated that 66% of the trips generated by the development will travel along Smokey Point Boulevard, fifteen percent to and from the north and fifty-one percent to and from the south. Approximately 26% of the trips generated by the development will travel to and from the east, sixteen percent along 152nd Street NE and ten percent along 160th Street NE. It is estimated that 6% of the trips generated by the development will travel to and from the north along Interstate-5. The remaining 2% of the trips generated by the development will travel to and from local retail areas along Twin Lakes Avenue. The horizon year trip distributions for the weekday AM and PM peak-hours are shown in Figure 4 and Figure 5, respectively.

3. IMPACTS TO SURROUNDING INTERSECTIONS

The typical City of Marysville threshold for requiring analysis of impacts is 25 PM peak-hour trips. The intersections that are anticipated to be impacted by 25 peak-hour trips and require analysis are:

1. 156th Street NE at Smokey Point Boulevard – Signalized
2. 152nd Street NE at Smokey Point Boulevard – Signalized
3. 136th Street NE at 51st Avenue NE – Signalized
4. 136th Street NE at Smokey Point Boulevard – Signalized
5. 136th Street NE at 51st Avenue NE – Signalized
6. 128th Street NE at State Avenue – Signalized
7. Site Access at Smokey Point Boulevard – Two-Way Stop-Control

Analysis is not anticipated for the weekday AM peak-hour.



KENDALL SUBARU

LEGEND

AWDT
AM ← PEAK

(XX)

NEW DAILY TRAFFIC
NEW AM PEAK-HOUR TRIPS
TRIP DISTRIBUTION %

FIGURE 2

OPENING YEAR
TRIP DISTRIBUTION
AM PEAK-HOUR

CITY OF MARYSVILLE

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KENDALL SUBARU

LEGEND

AWDT
 PM ← PEAK

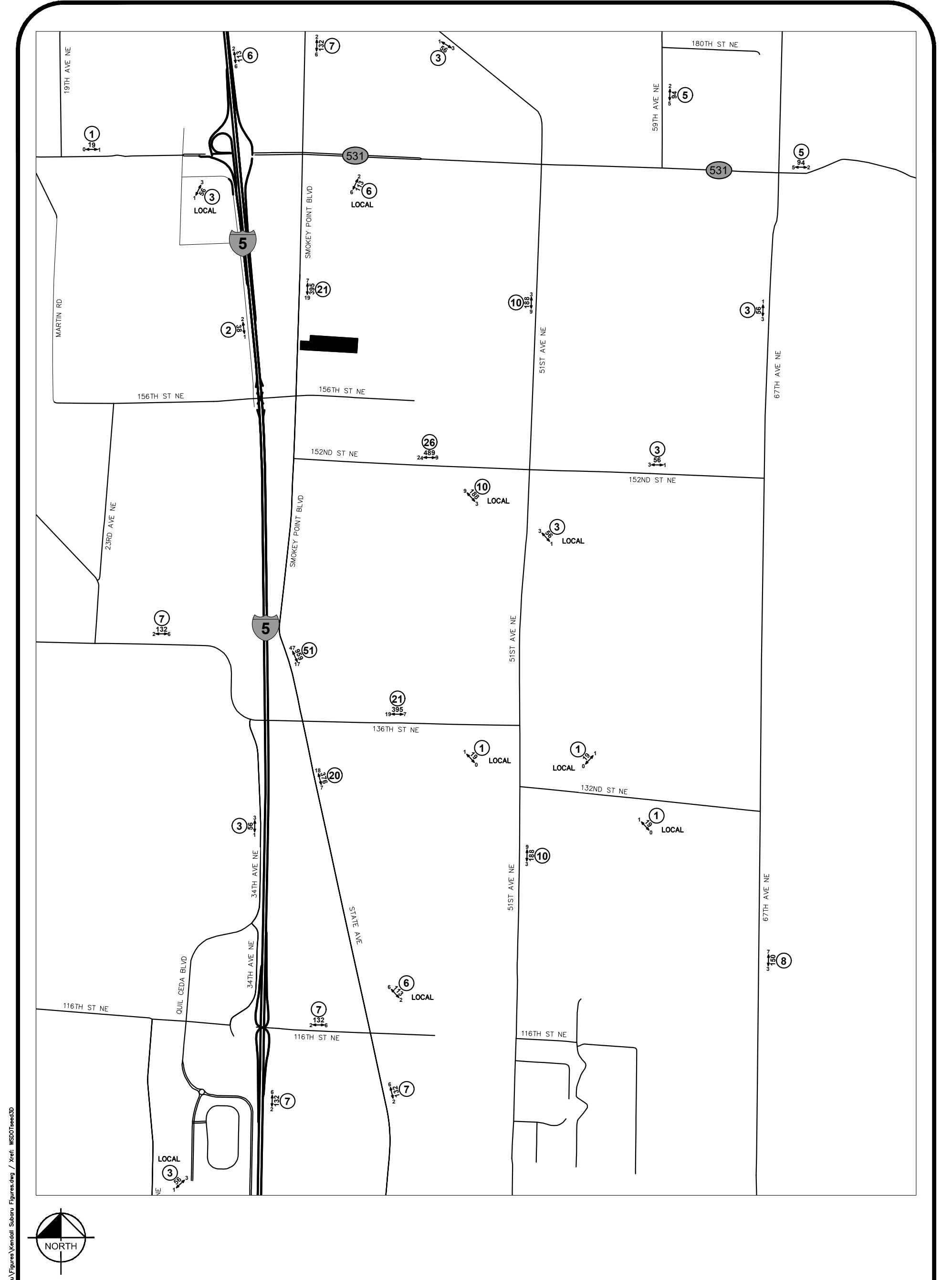


NEW DAILY TRAFFIC
 NEW PM PEAK-HOUR TRIPS
 TRIP DISTRIBUTION %

FIGURE 3

OPENING YEAR
 TRIP DISTRIBUTION
 PM PEAK-HOUR

CITY OF MARYSVILLE



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KENDALL SUBARU

LEGEND

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AM ← PEAK

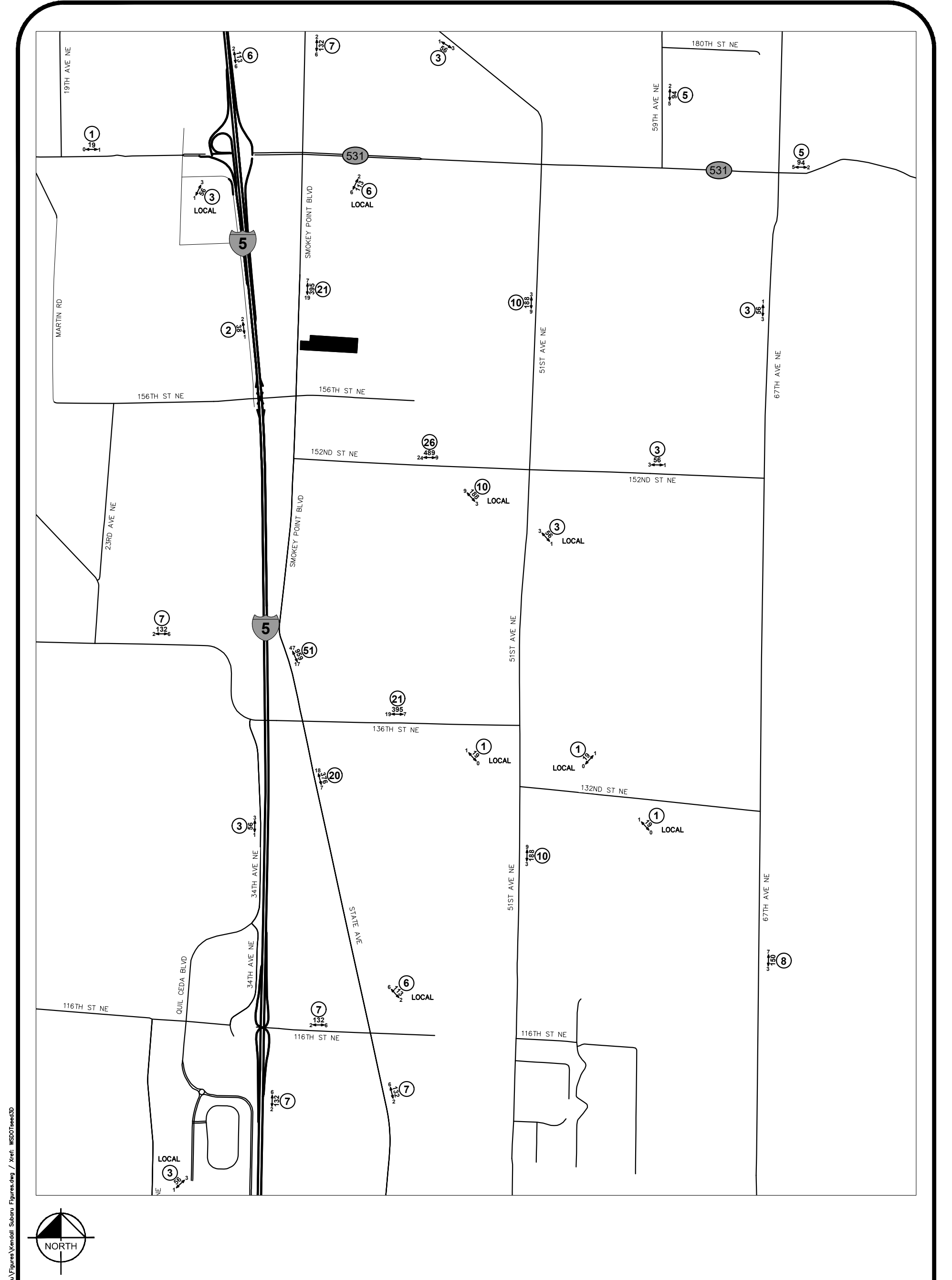
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NEW DAILY TRAFFIC
 NEW AM PEAK-HOUR TRIPS
 TRIP DISTRIBUTION %

FIGURE 4

HORIZON YEAR
 TRIP DISTRIBUTION
 AM PEAK-HOUR

CITY OF MARYSVILLE



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KENDALL SUBARU

LEGEND

AWDT
PM ← PEAK
XX

NEW DAILY TRAFFIC
NEW PM PEAK-HOUR TRIPS
TRIP DISTRIBUTION %

FIGURE 5

HORIZON YEAR
TRIP DISTRIBUTION
PM PEAK-HOUR

CITY OF MARYSVILLE



4. TRAFFIC MITIGATION FEES

The City of Marysville has an interlocal agreement with Snohomish County that provides for the payment of traffic mitigation fees to Snohomish County for City of Marysville developments. The City of Marysville also has an understanding with WSDOT for the payment of traffic mitigation fees.

4.1. City of Marysville

The City of Marysville traffic mitigation fees have been calculated using the rate of commercial land use, \$2,220 per PM peak-hour trip. The Kendall Subaru development is anticipated to generate 163.46 new PM peak-hour trips, resulting in City of Marysville traffic mitigation fees of \$362,881.20.

4.2. Snohomish County

The City of Marysville and Snohomish County have an interlocal agreement that provides for the payment of traffic mitigation for impacts to Snohomish County roadways by City of Marysville developments. Traffic mitigation fees are based on predetermined area impacts or impacts to actual improvement projects. The Kendall Subaru development is located in CI-MA-1, which has a predetermined impact to Snohomish County roadways of 20%. The current Snohomish County fee for commercial developments located in the City of Marysville is \$173 per daily trip. The generation of 1,880.48 new daily trips and a 20% impact result in a Snohomish County traffic mitigation fee of \$65,064.61.

4.3. Washington State Department of Transportation

There are no current WSDOT improvement projects listed on the WSDOT Exhibit C List that are impacted by trips generated by the Kendall Subaru development that are not currently identified as funded under the Connecting Washington legislation. WSDOT traffic mitigation fees are therefore not be anticipated for the Kendall Subaru development.

5. CONCLUSIONS

The Kendall Subaru development is proposed to consist of a 67,546 SF automobile sales building. The development could generate up to approximately 1,880 average weekday daily trips with 92 weekday AM peak-hour trips and 163 weekday PM peak-hour trips. There are seven intersections that are anticipated to be analyzed for the weekday PM peak-hour. The total traffic mitigation fees for the development could be up to \$362,881.20 for the City of Marysville and \$65,064.61 for Snohomish County. These fees do not include a credit for roadway improvements. WSDOT traffic mitigation fees should not be required for the Kendall Subaru development.