

# Transportation Planners and Traffic Engineers

### **MEMORANDUM**

To: Jesse Hannahs, PE, City of Marysville

From: Brad Lincoln, PE

Subject: Evans Park

Traffic Analysis

Date: December 8, 2021 Project: GTC #21-402



Gibson Traffic Consultants, Inc. (GTC) has been retained to provide a traffic analysis for the Evans Park development, located along the west side of 25<sup>th</sup> Avenue NE, north of 172<sup>nd</sup> Street NE. A site vicinity map is included in Figure 1.



Figure 1: Site Vicinity Map

Evans Park Traffic Analysis

The Evans Park development is proposed to consist of 15 single-family residential units. There is one existing single-family residential unit on the site that will be removed and is creditable to the development. The units are proposed to have access to 25<sup>th</sup> Avenue NE via a shared access along the north property line. The site is also proposed to have a stub-road to connect with the development to the south. 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 Evans Park development are based on data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual*, 10<sup>th</sup> Edition (2017). The average trip generation rates for ITE Land Use Code 210, Single-Family Detached Housing, have been utilized for the trip generation calculations. The trip generation of the 14 new units of the Evans Park development is summarized in Table 1.

14 New Single-Family Residential Units	Average Daily Trips			AM Peak-Hour Trips			PM Peak-Hour Trips		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Generation Rate	9.44 trips per unit			0.74 trips per unit			0.99 trips per unit		
Splits	50%	50%	100%	25%	75%	100%	63%	37%	100%
Trips	66.08	66.08	132.16	2.59	7.77	10.36	8.73	5.13	13.86

**Table 1: Trip Generation Summary** 

The Evans Park development is anticipated to generate approximately 132 average daily trips with approximately 10 AM peak-hour trips and approximately 14 PM peak-hour trips.

### 2. TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution for the development is based on trip distribution data established by the City of Marysville for the Lakewood area north of  $172^{nd}$  Street NE. It is anticipated that 37% of the trips generated by the development will travel along Interstate-5, twelve percent to and from the north and twenty-five percent to and from the south. Approximately 20% of the trips generated by the development will travel along  $172^{nd}$  Street NE, east of Interstate-5. It is estimated that approximately 9% of the trips generated by the development will travel to and from local areas in the vicinity of the interchange of Interstate-5 at  $172^{nd}$  Street NE. The remaining 34% of the trips generated by the development are anticipated to travel to and from the west. The distribution of trips in the vicinity of the site is not anticipated to change with future roadway connections.

The City of Marysville threshold for level of service is 25 PM peak-hour trips. Additionally, the City of Marysville has an interlocal agreement with Snohomish County that requires Snohomish County intersections impacted with 3 directional peak-hour trips to be identified. The development does not generate 25 PM peak-hour trips and therefore analysis of impacts to City of Marysville intersections

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is not required. The development generates more than 3 directional peak-hour trips, but the trips are not anticipated to impact any Snohomish County key intersections with 3 directional peak-hour trips.

### 3. SITE ACCESS

The Evans Park development is proposed to consist of 15 residential units. The access to 25<sup>th</sup> Avenue NE is proposed to be complete the southern section of the shared access along the north property line. The posted speed limit along 25<sup>th</sup> Avenue NE is 25 mph in the site vicinity. The City of Marysville *Engineering Design and Development Standards* identify a stopping sight distance of 155 feet and an entering sight distance of 200 feet. The access to 25<sup>th</sup> Avenue NE will have over 155 feet of stopping sight distance and 200 feet of entering sight distance in each direction, meeting the sight distance requirements.

#### 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 residential rate of \$6,300.00 per unit. The 14 new units will therefore result in City of Marysville traffic mitigation fees of \$88,200.00.

## 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 developments in the City of Marysville. Traffic mitigation fees are based on predetermined area impacts or impacts to actual improvement projects. None of the Snohomish County improvement projects will be impacted by more than 34% of the trips generated by the Evans Park development, which equates to 3 directional PM peak-hour trips. Snohomish County traffic mitigation fees should therefore not be required for the Evans Park development.

## 4.3. Washington State Department of Transportation

There are no current WSDOT improvement projects listed on the WSDOT Exhibit C List that are significantly impacted by trips from the Evans Park development. WSDOT traffic mitigation fees should therefore not be required for the Evans Park development.