

AGENDA

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TRAFFIC ASSUMPTIONS

Raw Traffic
Count Data

Traffic counts were collected in 2019 and 2016 on a weekday while schools were active.

Traffic counts include heavy vehicles (trucks).

DKS has found that traffic counts in this area are lower in 2022 compared to 2019 and 2016, likely due to shifts in commuting patterns as a result of COVID-19

Apply
Adjustments

The 2019 and 2016 traffic counts were grown by 2% per year, which is a rate that has been derived from the Wilsonville Travel Demand Model and used in dozens of past Wilsonville TIAs.

2021
Conditions

Stage II traffic was also included, which accounts for any developments in the area that have been approved by the City but not yet constructed (i.e., Frog Pond and Villebois housing developments, Fir Avenue Commons, etc).

LEVEL OF SERVICE (LOS) STANDARD

LOS at signalized intersections is based on the average delay of all vehicle movements at the intersection. Average delay is calculated using methodology from the Highway Capacity Manual (HCM).

Level of Service	Average Delay (seconds)	Description
A	<10	Free Flow/Insignificant Delays
B	10 – 20	Stable/Minimal Delays
C	20 – 35	Stable/Acceptable Delays
D	35 – 55	Approaching Unstable/Tolerable Delays
E	55 – 80	Unstable/Significant Delays
F	>80	Forced Flow/Excessive Delays

City of Wilsonville LOS Standard:
LOS D (up to 55 seconds of average delay)

BOONES FERRY ROAD INTERSECTION

Vehicle Operations for all analysis scenarios

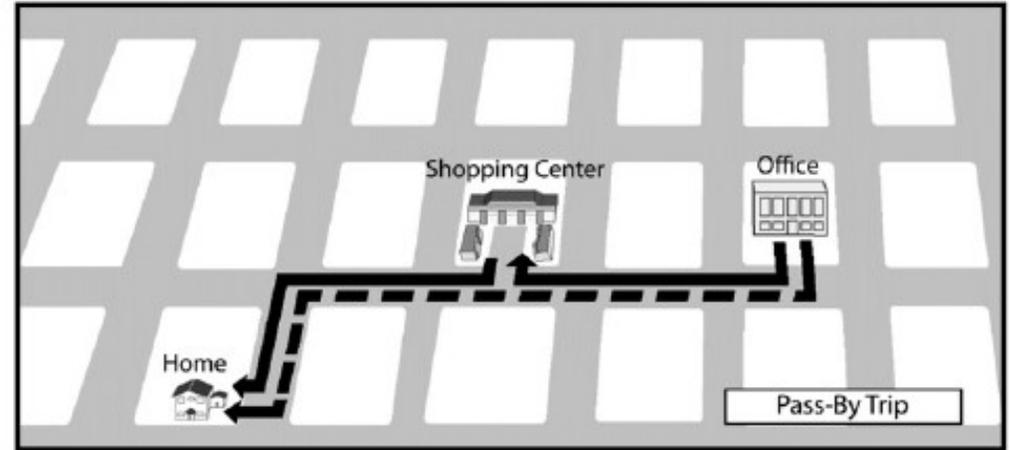
Scenario	Average Delay (seconds)	LOS
Existing (2021)	43 seconds	D
Existing + Stage II	45 seconds	D
Existing + Stage II + Project	48 seconds	D

Intersection meets City LOS standard for all scenarios.

However, vehicle queues at this intersection are subject to the congestion levels on I-5 and the queues on the southbound I-5 on-ramp, which is the “bottleneck” for traffic in this area of Wilsonville during the PM peak hour.

PASS-BY TRIPS

Pass-by trips represent an existing vehicle trip on an adjacent roadway to the proposed development that now makes an intermediate stop at the proposed development on the way to or from their original destination.



- The Institute of Transportation Engineers (ITE) Trip Generation Manual is the industry guide on trip generation.
- The ITE Handbook states that an average of 56% of total trips for Gas Stations are pass-by trips.

LAND USE (ITE CODE)	PM PEAK TRIPS			DAILY TRIPS
	IN	OUT	TOTAL	
SUPER CONVENIENCE MARKET/GAS STATION (960)	120	120	240	2,898
<i>Pass-By Trip Reduction (56%)</i>	<i>-67</i>	<i>-67</i>	<i>-134</i>	<i>-1,622</i>
TOTAL NET NEW TRIPS	53	53	106	1,276

TRIP DISTRIBUTION

- Trip Distribution is based on data from the Wilsonville Travel Demand Model
- Estimated 40% of net new trips will come from/go to Interstate 5
- Gas station will not likely attract more than 40% from I-5 with the existing Costco, Fred Meyer and several other Gas Stations along I-5.

