

## MEMORANDUM

**DATE:** January 19, 2023

**TO:** Bryan Roberts / Hans Hunger  
City of Puyallup

**FROM:** Amy Wasserman / Chris Bicket  
TENW

**SUBJECT:** Updated Preliminary Traffic Information for Puyallup School District Capital Project at Downtown Operations and South Hill Support Campuses  
City of Puyallup Project #P-21-0132/0133  
TENW Project #2022-079/080

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The purpose of this memorandum is to provide preliminary traffic information for the Puyallup School District's proposed capital project at their Downtown Operations and South Hill Support Campuses. This memo includes a description of the proposed project, trip generation estimate, project trip distribution and impact fee estimate. We are requesting your review of this information and confirmation of the scope of work for the traffic impact analysis.

### Project Description

The Puyallup School District's existing Downtown Operations Campus (DOC) is located at 323 12<sup>th</sup> Street NW and the District's small "special education" (SPED) bus fleet is currently stored at the site. The District's existing South Hill Support Campus is located at 3607 17<sup>th</sup> Street SW and the District's large bus fleet is currently stored at the site.

The proposed Puyallup School District (PSD) capital project includes the addition of new surface parking at the South Hill Support Campus to accommodate the SPED bus fleet (including spare buses) and its associated bus drivers and staff that will be relocated from the DOC campus to the South Hill Support Campus.

Based on detailed information provided by PSD, a total of 60 staff (56 SPED bus drivers and 4 transportation admin) are anticipated to be relocated from the DOC to the South Hill Support Campus as a result of the proposed capital project. The relocation of the SPED bus fleet from the DOC to South Hill Support Campus is not anticipated to result in any new staff.

District owned autos and trucks used by PSD staff (the "white fleet") are currently stored at the DOC site and will remain at the DOC site with the proposed capital project. Additionally, fueling of the District's gasoline vehicles and buses (including the relocated SPED bus fleet) that currently occurs at the DOC site will continue to occur at the DOC site with the proposed capital project. Also, all repairs and maintenance of PSD vehicles (including buses, trucks, and autos) are currently conducted at the DOC site and will continue to be conducted at the DOC site with the proposed capital project.

This capital project is anticipated to be in place by the start of the 2023 school year. A project vicinity map illustrating the Downtown Operations Campus and South Hill Support Campus locations is included below. A preliminary site plan for the South Hill Support Campus is included in **Attachment A**.



Line of sight distance not relevant. These two sites are 11 minutes apart (without congestion).  
[CUP Traffic Memo]

## Project Trip Generation

The Puyallup School District's existing Downtown Operations and South Hill Support Campuses are located approximately 2.5 miles apart. The proposed PSD capital project would result in a shift in existing trips from their DOC to South Hill Support Campus as a result of relocating the small SPED bus fleet. Therefore, it is anticipated that there will be a reduction in vehicular trips within the immediate (local) vicinity of the DOC and an increase in vehicular trips within the immediate (local) vicinity of the South Hill Support Campus.

Based on information provided by the District and correspondence with the City of Puyallup, the proposed relocation of the SPED bus fleet from the DOC to the South Hill Support Campus is not consistent with a specific land use category established in the current Institute of Transportation Engineers (ITE) *Trip Generation*

manual. As such, the weekday vehicular trip generation estimates for the proposed project were based on detailed information provided by the District.

To estimate weekday trip generation for the proposed capital project, the District and their transportation department provided detailed forecasts of the existing trips that would shift from the DOC to the South Hill Support Campus as a result of the relocation of the SPED bus fleet. The weekday trips are comprised of the following categories:

**SPED Bus Driver Trips** – A total of 56 SPED bus drivers arrive in their private vehicles between 5:00 and 7:15 AM and depart between 4:30 and 5:30 PM.

**Transportation Admin Trips** – A total of four (4) transportation admin staff arrive between 5:00 and 8:15 AM and depart between 2:30 and 5:30 PM.

**SPED Bus Trips** – A total of 244 SPED bus trips (122 in, 122 out) occur over a typical weekday.

As noted above, fueling of the SPED bus fleet would continue to occur at the DOC site with the proposed capital project. Based on information provided by the District and their transportation department, SPED buses who need to refuel would either exit the South Hill Support Campus and travel to the DOC to refuel on their way to their route or they would refuel at the DOC before travelling back to the South Hill Support Campus once they are done with their route. Thus, any vehicular trips associated with refueling of the SPED buses are included in the detailed **SPED Bus Trips** forecasts included in **Attachment B**.

Additionally, any new vehicular trips associated with the SPED buses travelling to/from the South Hill Support Campus where they will be stored and the Downtown Operations Campus site for repairs or maintenance are expected to occur infrequently and would not result in additional trips during the weekday AM or PM peak periods (7-9 AM and 4-6 PM) since transporting for repair/maintenance would occur outside of these periods.

The resulting new weekday daily, AM peak hour, and PM peak hour trip generation estimates for the South Hill Support Campus as a result of the PSD capital project are summarized below in **Table 1**. The detailed trip generation calculations are included in **Attachment B**.

**Table 1**  
**PSD South Hill Support Campus Capital Project**  
**Trip Generation Summary**

Weekday Time Period	New Trips Generated		
	In	Out	Total
Daily	182	182	364
AM Peak Hour	3	10	13
PM Peak Hour	37	58	95

As shown in **Table 1**, relocation of the District’s small SPED bus fleet would result in a total of 364 new weekday daily trips at the South Hill Support Campus, of which 13 new trips would occur during the weekday AM peak hour (3 in, 10 out) and 95 new trips would occur during the weekday PM peak hour (37 in, 58 out). *It should be noted that although these trips are “new” to the South Hill Support Campus, these trips are*

*not new to the overall transportation system. These trips are existing trips that will be relocated from the PSD Downtown Operations Campus to the South Hill Support Campus, resulting in a reduction in vehicular trips in the immediate vicinity of the DOC, an increase vehicular trips in the immediate vicinity of the South Hill Support Campus, and thus, no net new vehicular trip impact to the overall City transportation system.*



## Project Trip Distribution

The estimated distribution of new weekday PM peak hour trips at the South Hill Support Campus as a result of the proposed capital project was based on school boundaries and SPED bus routing provided by the District and their transportation department. The estimated project trip distribution also accounts for staff exiting the site during the PM peak hour. The estimated distribution and assignment of new weekday PM peak hour project trips is provided in **Attachment C**.

## Transportation Impact Fees

To mitigate long-term transportation impacts, the City of Puyallup administers a Transportation Impact Fee (TIF) to new developments to improve the transportation system to accommodate the higher travel demand added by new development. The City of Puyallup's currently adopted transportation impact fee is \$4,500 per net new PM peak hour trip.

As discussed in this memorandum, the Puyallup School District's proposed capital project to relocate their small SPED bus fleet from their Downtown Operations Campus to South Hill Support Campus would result in a reduction in vehicular trips within the immediate (local) vicinity of the DOC and an increase in vehicular trips within the immediate (local) vicinity of the South Hill Support Campus. Thus, there would be no impact (i.e. no increase in vehicular trips) as a result of the capital project to the overall transportation system during the weekday PM peak hour.

However, the City of Puyallup has indicated that they do not allow trip credit to be transferred between parcels, even if the parcels are related to a singular project and are owned by the same entity. Therefore, as a result of the proposed PSD capital project to relocate their small SPED bus fleet to their South Hill Support Campus, the estimated transportation impact fee is \$427,500 (95 new PM peak hour trips per **Attachment B** X \$4,500 per PM peak hour trip).

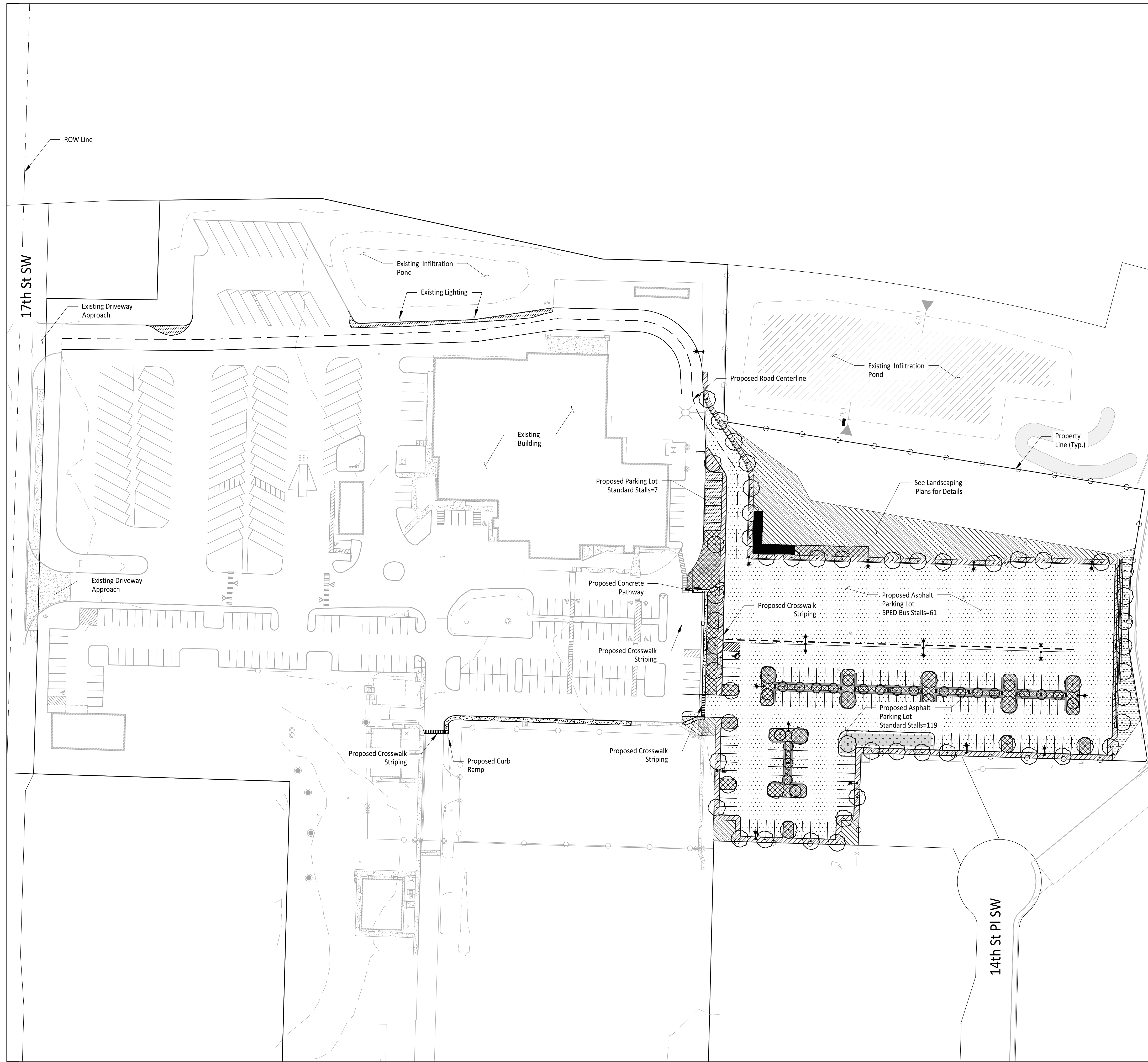
## Next Steps

Once the City has had a chance to review the information presented in this memorandum, we would like to confirm the scope of work for the traffic impact analysis for this project.


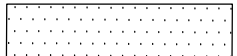

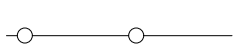
Attachments:   A. Preliminary Site Plan for South Hill Support Campus  
                      B. Trip Generation Calculations  
                      C. PM Peak Hour Project Trip Distribution and Assignment

## ATTACHMENT A

### Preliminary Site Plan for South Hill Support Campus



**LEGEND**

-  Concrete
-  Asphalt
-  Bioretention Swale (Typ.)
-  Property Fence

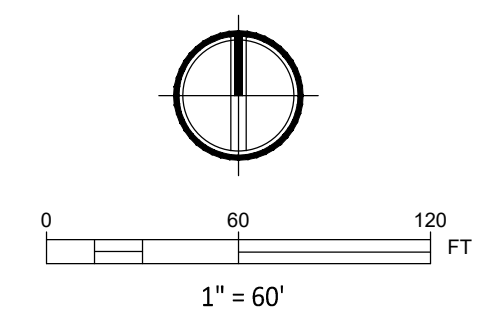
**GENERAL NOTES**

- Total Proposed Impervious Areas = 118,583 SF

Criteria	Count	Total:
Existing # of Stalls	158	
Proposed # of New Stalls	125	
		<b>283</b>
# of Required ADA Parking:		7
Existing # of ADA Stalls	9	
Proposed # of New ADA Stalls	1	
		<b>10</b>



CONDITIONAL USE PERMIT  
NOT FOR CONSTRUCTION



## ATTACHMENT B

### Trip Generation Calculations

**Puyallup School District South Hill Campus  
Trip Generation Summary**

Land Use	Directional Distribution <sup>1</sup>		New Trips Generated <sup>1</sup>		
	In	Out	In	Out	Total
<b>Daily</b>					
<u>Proposed Change in Use:</u> SPED Bus Fleet Relocation	50%	50%	182	182	364
<b>AM Peak Hour</b>					
<u>Proposed Change in Use:</u> SPED Bus Fleet Relocation	23%	77%	3	10	13
<b>PM Peak Hour</b>					
<u>Proposed Change in Use:</u> SPED Bus Fleet Relocation	39%	61%	37	58	95

Notes:

<sup>1</sup> Based on detailed information provided by the Puyallup School District.



**Puyallup School District**  
**South Hill Site**

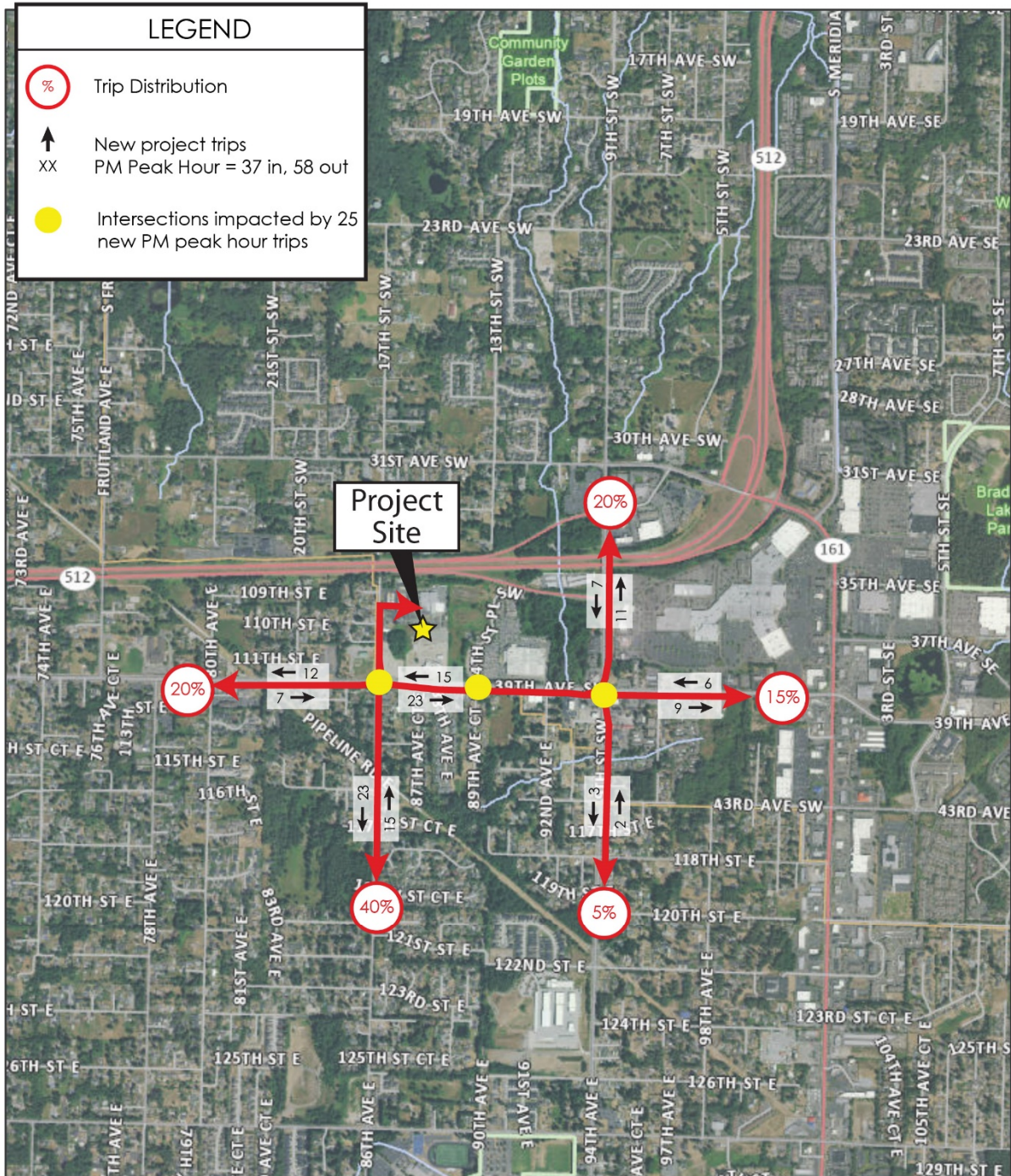
**Trip Generation Forecasts - Average Weekday**

Time Period	Bus Driver Trips (moving from DOC to SHSC) <sup>1</sup>			Transportation Admin staff (moving from DOC to SHSC) <sup>2</sup>			SPED Bus Trips (moving from DOC to SHSC) <sup>3</sup>			Trip Totals			Hourly Trip Totals			
	Entering	Exiting	Comment	Entering	Exiting	Comment	Entering	Exiting	Comment	Entering	Exiting	Total	Hour	Entering	Exiting	Total
12:00 - 1:00 AM	0	0		0	0		0	0		0	0	0	12:00-1:00 AM	0	0	0
1:00 - 2:00	0	0		0	0		0	0		0	0	0	1:00-2:00 AM	0	0	0
2:00 - 3:00	0	0		0	0		0	0		0	0	0	2:00-3:00 AM	0	0	0
3:00 - 4:00	0	0		0	0		0	0		0	0	0	3:00-4:00 AM	0	0	0
4:00 - 5:00	0	0		0	0		0	0		0	0	0	4:00-5:00 AM	0	0	0
5:00 - 6:00	14	0		1	0		0	0		15	0	15	5:00-6:00 AM	15	0	15
6:00 - 6:30	26	0		0	0		0	21		26	21	47				
6:30 - 7:00	14	0		1	0		0	15		15	15	30				
7:00 - 7:15	2	0		0	0		0	4		2	4	6				
7:15 - 7:30	0	0		0	0		0	6		0	6	6	6:00-7:00 AM	41	36	77
7:30 - 7:45	0	0		1	0		0	0		1	0	1	6:30-7:30 AM	17	25	42
7:45 - 8:00	0	0		0	0		0	0		0	0	0	7:00-8:00 AM	3	10	13
8:00 - 8:15	0	0		1	0		1	0		2	0	2	7:15-8:15 AM	3	6	9
8:15 - 8:30	0	0		0	0		1	0		1	0	1	7:30-8:30 AM	4	0	4
8:30 - 8:45	0	0		0	0		0	0		0	0	0	7:45-8:45 AM	3	0	3
8:45 - 9:00	0	0		0	0		5	0		5	0	5	8:00-9:00 AM	8	0	8
9:00 - 9:30	0	0		0	0		28	0		28	0	28	8:30-9:30 AM	33	0	33
9:30 - 10:00	0	0		0	0		10	1		10	1	11	9:00-10:00 AM	38	1	39
10:00 - 10:30	0	0		0	0		1	3		1	3	4	9:30-10:30 AM	11	4	15
10:30 - 11:00	0	0		0	0		0	5		0	5	5	10:00-11:00 AM	1	8	9
11:00 - 11:30	0	0		0	0		2	6		2	6	8	10:30-11:30 AM	2	11	13
11:30 - Noon	0	0		0	0		3	8		3	8	11	11:00-12:00 PM	5	14	19
12:00 - 12:30 PM	0	0		0	0		6	4		6	4	10	11:30-12:30 PM	9	12	21
12:30 - 1:00	0	0		0	0		6	2		6	2	8	12:00-1:00 PM	12	6	18
1:00 - 1:30	0	0		0	0		10	15		10	15	25	12:30-1:30 PM	16	17	33
1:30 - 2:00	0	0		0	0		0	21		0	21	21	1:00-2:00 PM	10	36	46
2:00 - 2:30	0	0		0	0		0	9		0	9	9	1:30-2:30 PM	0	30	30
2:30 - 3:00	0	0		0	1		0	0		0	1	1	2:00-3:00 PM	0	10	10
3:00 - 3:30	0	0		0	0		1	0		1	0	1	2:30-3:30 PM	1	1	2
3:30 - 4:00	0	0		0	1		2	0		2	1	3	3:00-4:00 PM	3	1	4
4:00 - 4:15	0	0		0	0		6	0		6	0	6	3:30-4:30 PM	8	1	9
4:15 - 4:30	0	0		0	0		12	0		12	0	12				
4:30 - 4:45	0	14		0	1		20	0		20	15	35				
4:45 - 5:00	0	26		0	0		3	2		3	28	31	4:00-5:00 PM	41	43	84
5:00 - 5:15	0	14		0	1		2	0		2	15	17	4:15-5:15 PM	37	58	95
5:15 - 5:30	0	2		0	0		0	0		0	2	2	4:30-5:30 PM	25	60	85
5:30 - 5:45	0	0		0	0		1	0		1	0	1	4:45-5:45 PM	6	45	51
5:45 - 6:00	0	0		0	0		0	0		0	0	0	5:00-6:00 PM	3	17	20
6:00 - 6:30	0	0		0	0		2	0		2	0	2	5:30-6:30 PM	3	0	3
6:30 - 7:00	0	0		0	0		0	0		0	0	0	6:00-7:00 PM	2	0	2
7:00 - 8:00	0	0		0	0		0	0		0	0	0	7:00-8:00 PM	0	0	0
8:00 - 9:00	0	0		0	0		0	0		0	0	0	8:00-9:00 PM	0	0	0
9:00 - 10:00	0	0		0	0		0	0		0	0	0	9:00-10:00 PM	0	0	0
10:00 - 11:00	0	0		0	0		0	0		0	0	0	10:00-11:00 PM	0	0	0
11:00 - 12:00	0	0		0	0		0	0		0	0	0	11:00 PM - 12:00 AM	0	0	0
<b>TOTAL TRIPS</b>	<b>56</b>	<b>56</b>		<b>4</b>	<b>4</b>		<b>122</b>	<b>122</b>		<b>182</b>	<b>182</b>	<b>364</b>				
AM subtotal	56	0		4	0		51	69								
PM subtotal	0	56		0	4		71	53								

- NOTES**  
1) 56 SPED Bus drivers will move from DOC to SHSC.  
2) 4 Transportation Admin will move from DOC to SHSC.  
3) SPED bus trips only.

## ATTACHMENT C

### PM Peak Hour Project Trip Distribution and Assignment



**Puyallup SD South Hill Site:**  
 PM Peak Hour Project Trip Distribution and Assignment

