

# City of Puyallup Traffic Scoping Worksheet

## PROJECT INFORMATION

Project Title: Valley Avenue Yard Date: 3/28/2023

Applicant Name: Kermit Jorgensen Telephone Number: 206-787-1475

Project Description: 1.835-acres of Outdoor Storage Yard Year of Occupancy: 2023

Project Location: 1124 & 1036 Valley Ave NW - PN: 042016-3077; 3042 Parcel Size(s): 1.835

Proposed Number of Access Point(s): 1 Existing Number of Access Point(s): 3

| Land Use  | Quantity         | ITE Land Use Code | Average Daily Trips | AM Peak Hour Trips* | PM Peak Hour Trips* |
|---|------------------|-------------------|---------------------|---------------------|---------------------|
| Existing Use(s): 2 Single Family dwelling units                             |                  |                   |                     |                     |                     |
| LUC 210 (Single Family Detached Housing)                                    | 2 dwelling units | 210               | 18.9                | 1.4                 | 1.9                 |
| Proposed Use(s): Outdoor Storage Yard                                       |                  |                   |                     |                     |                     |
| Outdoor Storage Yard  | 1.835-acres      | N/A               | -                   | -                   | 4.9                 |
| <b>Net New Trips</b>  |                  |                   | -                   | -                   | 3.0                 |
| <b>Traffic Impact Fees:</b> Net New PM Peak Hour Trips x \$4,500 = \$13,500 |                  |                   |                     |                     |                     |

- \* The project trips shall be rounded to the nearest tenth.
- \* The project trips shall be estimated using the ITE's *Trip Generation*, 11<sup>th</sup> Edition.
- \* Trip generation regression equations shall be used when the R<sup>2</sup> value is 0.70 or greater.
- \* For land uses that do not exist within the ITE's *Trip Generation*, actual field data shall be collected from three local facilities that have similar characteristics to the proposal.
- \* For single-family units and offices and specialty retail smaller than 30,000 SF, use ITE's *Trip Generation*, 11th Edition, average rate.

Identify all intersections that will be affected by 25 new project peak hour trips or more:

1. None 4. \_\_\_\_\_  
 2. \_\_\_\_\_ 5. \_\_\_\_\_

Prepared by: Traffic Engineer: Aaron Van Aken Telephone Number: 253-770-1401

Address: 1011 E Main, Suite 453, Puyallup, WA 98371 [avanaken@heathttraffic.com](mailto:avanaken@heathttraffic.com)

**Office Use Only**

TIS  TAS  TAIS  No Further Work Required

Checklist (Please make sure you have included the following information):  
 Completed Worksheet  Attach Site Plan  Attach Trip Assignment  Attach Trip Distribution  
 Mail or hand deliver to 333 South Meridian, Puyallup, WA 98371 or e-mail to [standle@ci.puyallup.wa.us](mailto:standle@ci.puyallup.wa.us)

SUPPLEMENTARY PROJECT SCOPING INFORMATION – March 27, 2023

Project Title: Valley Avenue Yard  
 Project Description: 1.835-acres of truck and trailer parking  
 Address: 1124; 1036 Valley Avenue NW  
 Parcel(s): 042016-3077; -3042

Project Description:

Valley Avenue Yard proposes for the construction of an Outdoor Storage Yard comprising approximately 1.835-acres, located within the city of Puyallup. On-site currently exist two single-family structures, which are to be demolished prior to new construction and a small office building and ancillary charge which will remain on site. Access to the site is proposed via one driveway extending west from Valley Avenue NW, as shown in the site plan provided in Figure 1.

Trip Generation:

Due to lack of applicable data from the ITE *Trip Generation Manual* pertaining to an outdoor storage yard / truck and trailer parking facilities, project trip generation is proposed to be derived using sample site data from four local sample sites in Pierce County. Data was gathered in April of 2019 and November of 2021, which was used to derive average PM peak hour trip rates. The four sample site locations and trip rate findings from the yard sample site trip generation studies are outlined below in Table 1. An independent variable of “acres” was utilized to derive trip rates given sample site operations and characteristics. Subsequently, Table 2 extrapolates average trip rates from Table 1 to show the estimated project trip generation associated with the proposed Valley Avenue Yard.

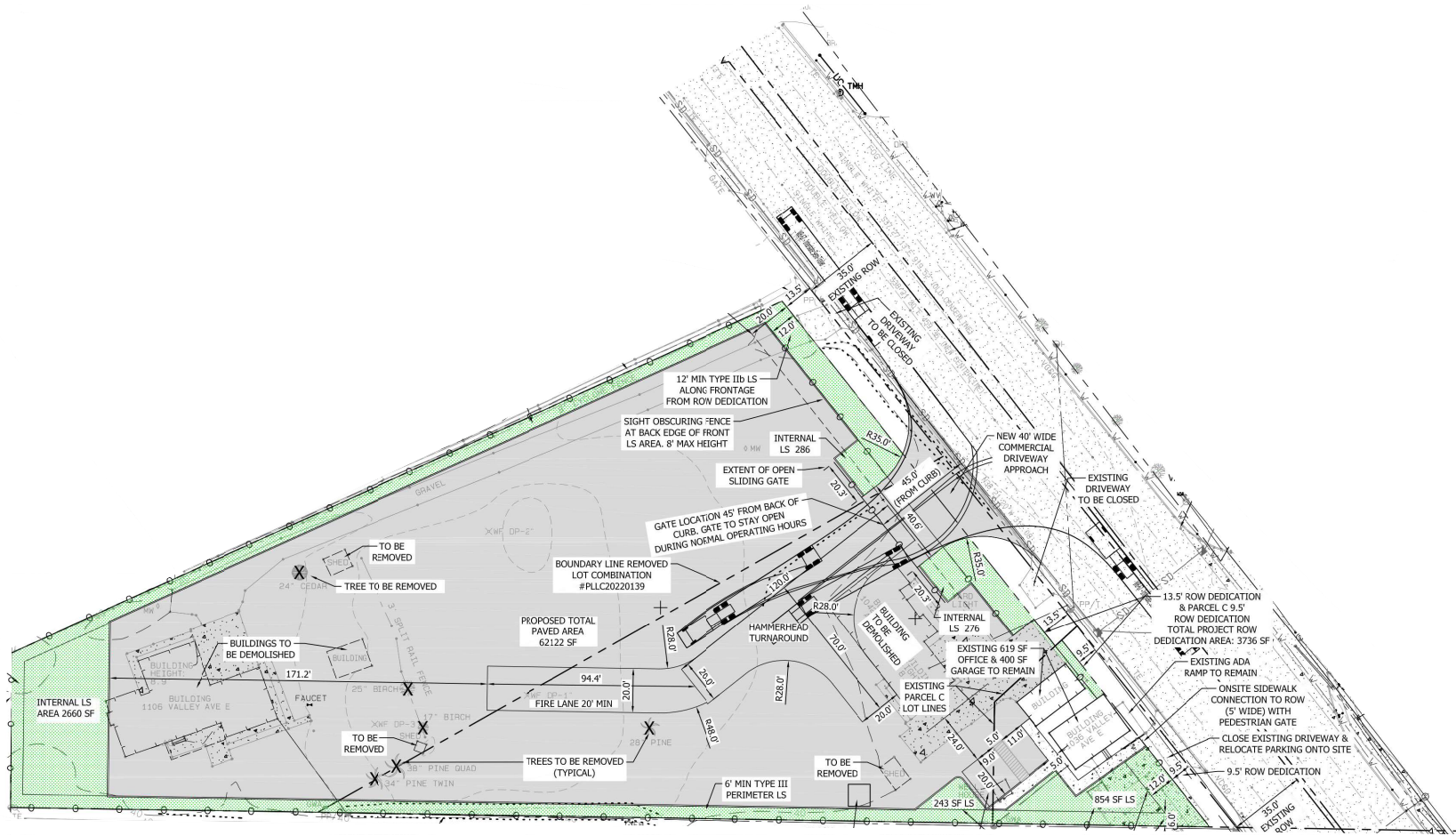
**Table 1: PM Peak Hour Trip Generation Rates:**

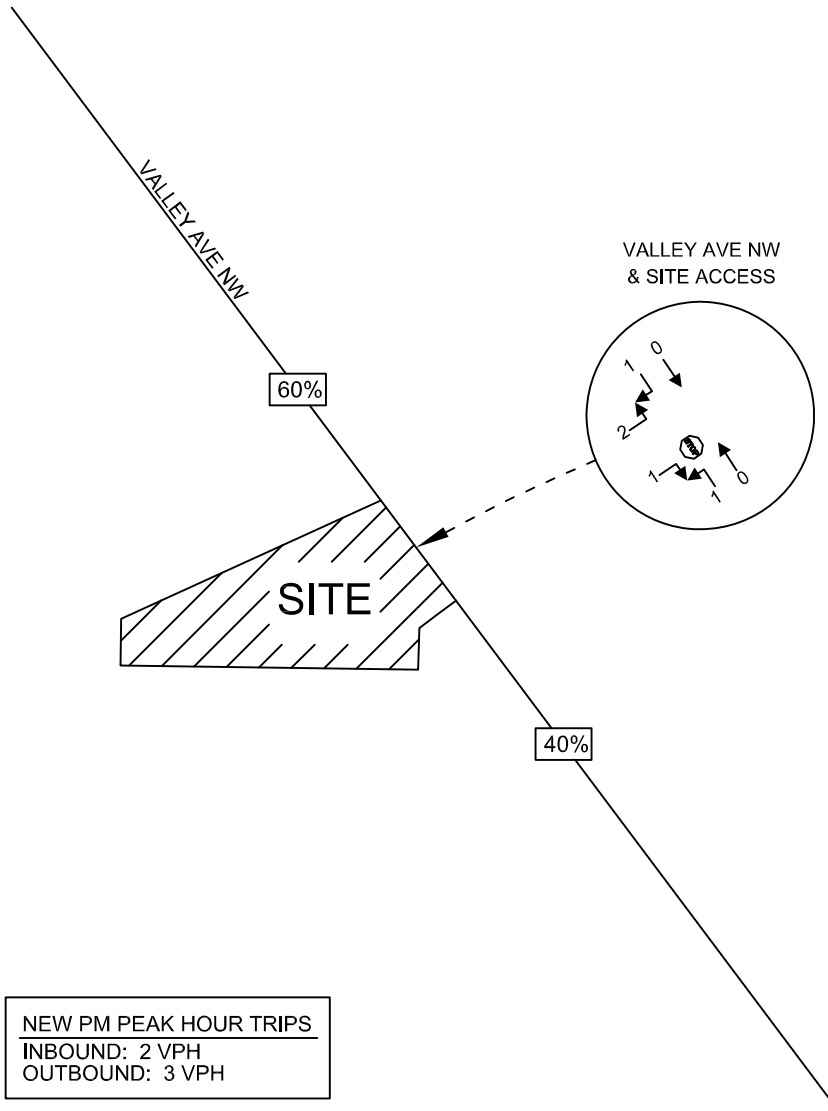
| Sample Site          | Date       | PM Peak Hour |     |       | Size<br>(acres) | Rate<br>(trips per acre) |             |             |
|----------------------|------------|--------------|-----|-------|-----------------|--------------------------|-------------|-------------|
|                      |            | In           | Out | Total |                 | In                       | Out         | Total       |
| 263 Roy Rd SW        | 4/23/2019  | 2            | 2   | 4     | 1.90            | 1.05                     | 1.06        | 2.11        |
| 893 Valentine Ave    | 4/24/2019  | 9            | 15  | 24    | 5.88            | 1.53                     | 2.55        | 4.08        |
| 1075 Valentine Ave   | 4/24/2019  | 4            | 4   | 8     | 3.37            | 1.19                     | 1.19        | 2.38        |
| 1221 Alexander Ave   | 11/17/2021 | 5            | 5   | 10    | 4.90            | 1.02                     | 1.02        | 2.04        |
| <b>Average Rates</b> |            |              |     |       |                 | <b>1.20</b>              | <b>1.45</b> | <b>2.65</b> |

**Table 2: Project PM Peak Hour Trip Generation**

| Land Use  | Size        | PM Peak-Hour Trips |          |       |
|---|-------------|--------------------|----------|-------|
|   |             | Inbound            | Outbound | Total |
| <u>Proposed:</u> Outdoor Storage Yard / Truck and Trailer Parking | 1.835-acres | 2                  | 3        | 5     |
| <u>Existing:</u> Single-Family                                    | 2 D.U.'s    | -1                 | -1       | -2    |
| Net New Trips   |             | 1                  | 2        | 3     |

As shown in Tables 1 and 2, sample site data extrapolated to the proposed development is anticipated to yield 5 total PM peak hour trips generated on-site (or 3 net new trips). Figure 2 illustrates the project’s anticipated PM peak hour trip distribution and assignment. Included are total anticipated project-generated PM peak hour trips (2 in / 3 out).





**HEATH & ASSOCIATES**  
TRAFFIC AND CIVIL ENGINEERING

**VALLEY AVENUE YARD**  
PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT  
FIGURE 2

# Single-Family Detached Housing (210)

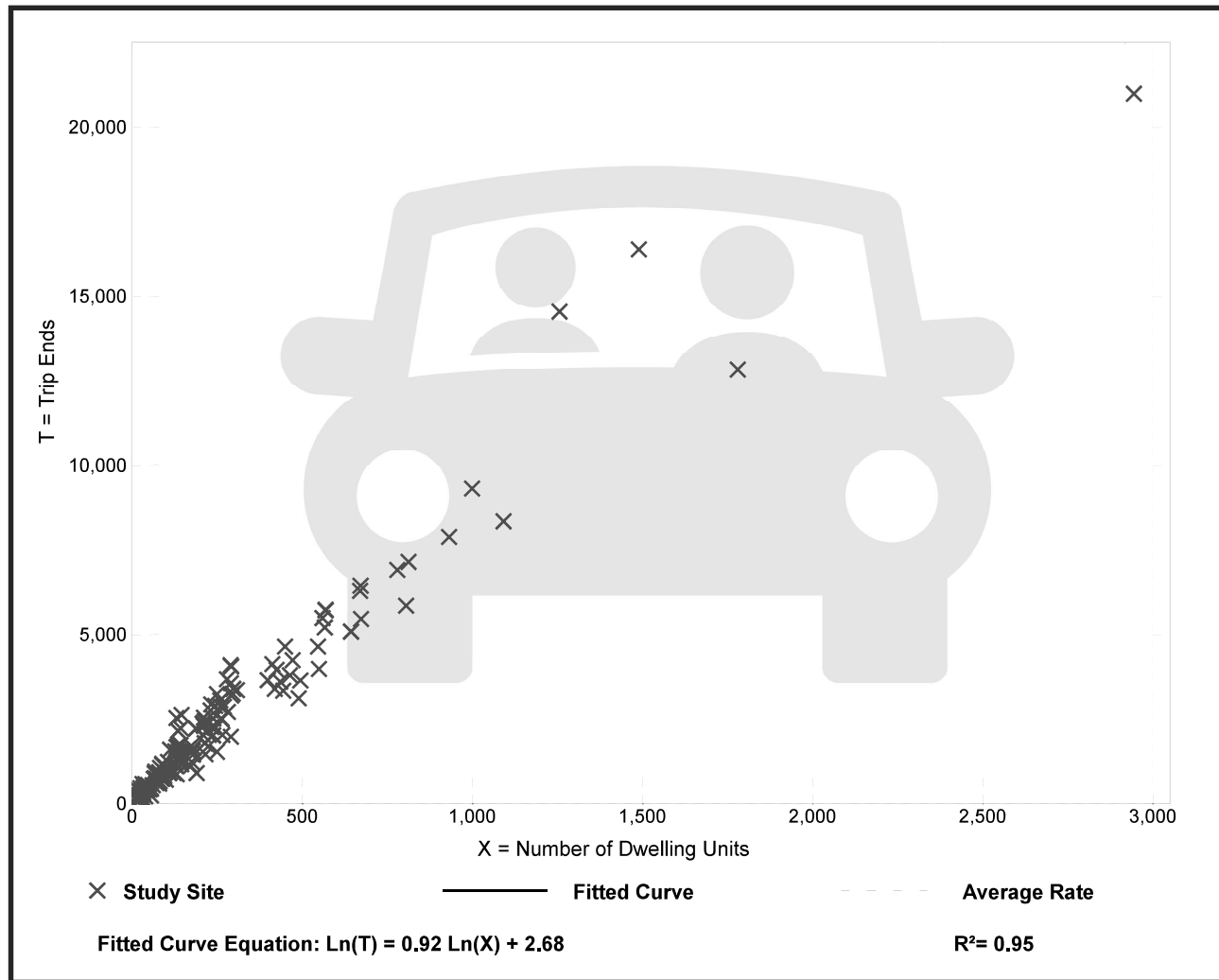
**Vehicle Trip Ends vs: Dwelling Units**  
**On a: Weekday**

**Setting/Location: General Urban/Suburban**  
Number of Studies: 174  
Avg. Num. of Dwelling Units: 246  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 9.43         | 4.45 - 22.61   | 2.13               |

## Data Plot and Equation



Trip Gen Manual, 11th Edition

● Institute of Transportation Engineers

# Single-Family Detached Housing (210)

**Vehicle Trip Ends vs: Dwelling Units**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**

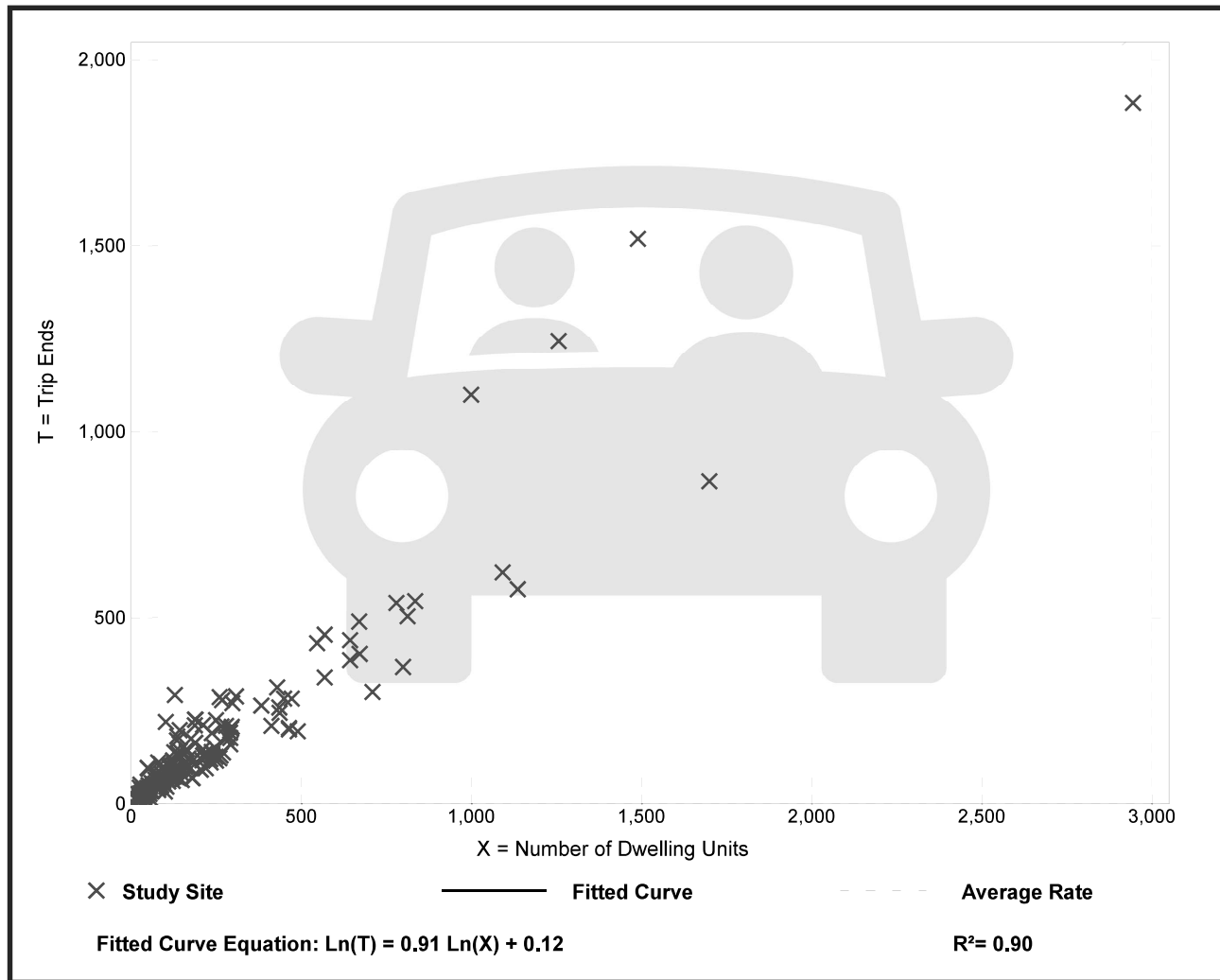
**Setting/Location: General Urban/Suburban**

Number of Studies: 192  
 Avg. Num. of Dwelling Units: 226  
 Directional Distribution: 26% entering, 74% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.70         | 0.27 - 2.27    | 0.24               |

## Data Plot and Equation



Trip Gen Manual, 11th Edition

Institute of Transportation Engineers

# Single-Family Detached Housing (210)

**Vehicle Trip Ends vs: Dwelling Units**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**

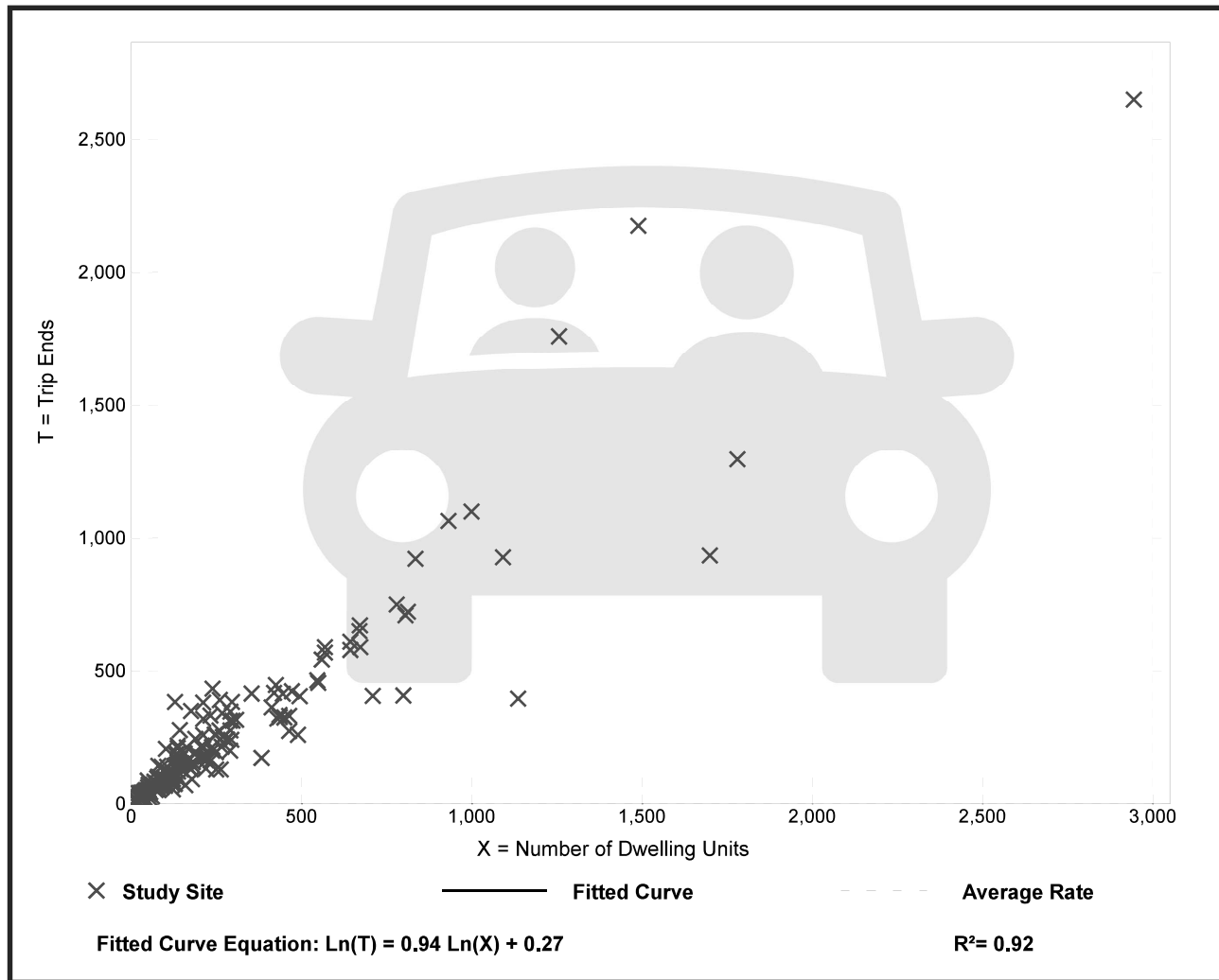
**Setting/Location: General Urban/Suburban**

Number of Studies: 208  
 Avg. Num. of Dwelling Units: 248  
 Directional Distribution: 63% entering, 37% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.94         | 0.35 - 2.98    | 0.31               |

## Data Plot and Equation

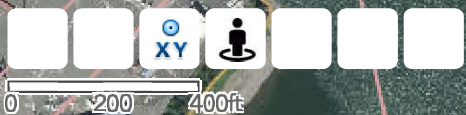


Trip Gen Manual, 11th Edition

Institute of Transportation Engineers



1225 E Alexander Ave  
~4.9 Acres



1,175,464.5 714,613.4 Feet  
1 : 4,800



# Heath & Associates

PO Box 397  
Puyallup, WA 98371

File Name : 4771b  
Site Code : 00004771  
Start Date : 11/17/2021  
Page No : 1

Groups Printed- Passenger + - Heavy

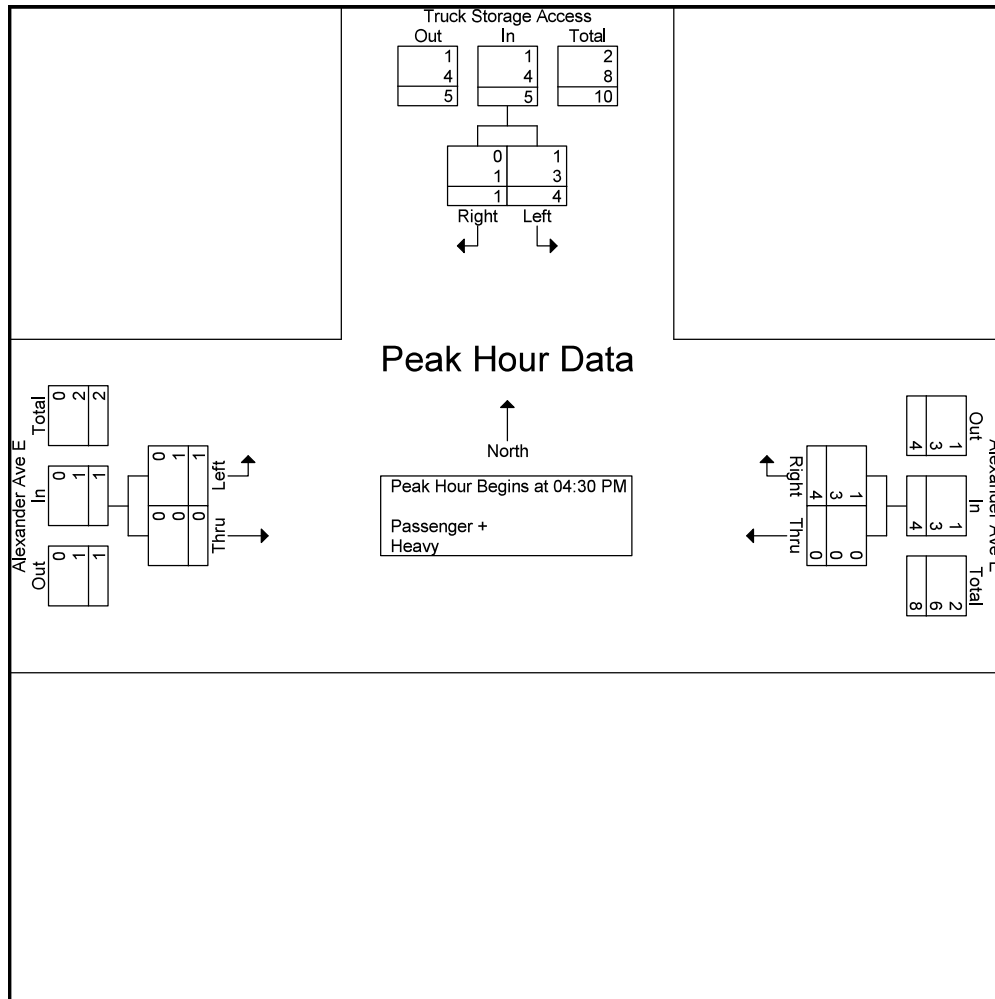
| Start Time    | Truck Storage Access Southbound |      |            | Alexander Ave E Westbound |      |            | Alexander Ave E Eastbound |      |            | Int. Total |
|---------------|---------------------------------|------|------------|---------------------------|------|------------|---------------------------|------|------------|------------|
|               | Right                           | Left | App. Total | Right                     | Thru | App. Total | Thru                      | Left | App. Total |            |
| 04:00 PM      | 0                               | 0    | 0          | 1                         | 0    | 1          | 0                         | 0    | 0          | 1          |
| 04:15 PM      | 0                               | 1    | 1          | 0                         | 0    | 0          | 0                         | 0    | 0          | 1          |
| 04:30 PM      | 0                               | 0    | 0          | 0                         | 0    | 0          | 0                         | 1    | 1          | 1          |
| 04:45 PM      | 1                               | 0    | 1          | 2                         | 0    | 2          | 0                         | 0    | 0          | 3          |
| Total         | 1                               | 1    | 2          | 3                         | 0    | 3          | 0                         | 1    | 1          | 6          |
| 05:00 PM      | 0                               | 2    | 2          | 2                         | 0    | 2          | 0                         | 0    | 0          | 4          |
| 05:15 PM      | 0                               | 2    | 2          | 0                         | 0    | 0          | 0                         | 0    | 0          | 2          |
| 05:30 PM      | 0                               | 0    | 0          | 0                         | 0    | 0          | 0                         | 1    | 1          | 1          |
| 05:45 PM      | 0                               | 0    | 0          | 1                         | 0    | 1          | 0                         | 0    | 0          | 1          |
| Total         | 0                               | 4    | 4          | 3                         | 0    | 3          | 0                         | 1    | 1          | 8          |
| Grand Total   | 1                               | 5    | 6          | 6                         | 0    | 6          | 0                         | 2    | 2          | 14         |
| Apprch %      | 16.7                            | 83.3 |            | 100                       | 0    |            | 0                         | 100  |            |            |
| Total %       | 7.1                             | 35.7 | 42.9       | 42.9                      | 0    | 42.9       | 0                         | 14.3 | 14.3       |            |
| Passenger +   | 0                               | 1    | 1          | 1                         | 0    | 1          | 0                         | 0    | 0          | 2          |
| % Passenger + | 0                               | 20   | 16.7       | 16.7                      | 0    | 16.7       | 0                         | 0    | 0          | 14.3       |
| Heavy         | 1                               | 4    | 5          | 5                         | 0    | 5          | 0                         | 2    | 2          | 12         |
| % Heavy       | 100                             | 80   | 83.3       | 83.3                      | 0    | 83.3       | 0                         | 100  | 100        | 85.7       |

# Heath & Associates

PO Box 397  
Puyallup, WA 98371

File Name : 4771b  
Site Code : 00004771  
Start Date : 11/17/2021  
Page No : 2

| Start Time   | Truck Storage Access Southbound |      |            | Alexander Ave E Westbound |      |            | Alexander Ave E Eastbound |      |            | Int. Total |
|--|---------------------------------|------|------------|---------------------------|------|------------|---------------------------|------|------------|------------|
|  | Right                           | Left | App. Total | Right                     | Thru | App. Total | Thru                      | Left | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                 |      |            |                           |      |            |                           |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                                 |      |            |                           |      |            |                           |      |            |            |
| 04:30 PM   | 0                               | 0    | 0          | 0                         | 0    | 0          | 0                         | 1    | 1          | 1          |
| 04:45 PM   | 1                               | 0    | 1          | 2                         | 0    | 2          | 0                         | 0    | 0          | 3          |
| 05:00 PM   | 0                               | 2    | 2          | 2                         | 0    | 2          | 0                         | 0    | 0          | 4          |
| 05:15 PM   | 0                               | 2    | 2          | 0                         | 0    | 0          | 0                         | 0    | 0          | 2          |
| Total Volume   | 1                               | 4    | 5          | 4                         | 0    | 4          | 0                         | 1    | 1          | 10         |
| % App. Total   | 20                              | 80   |            | 100                       | 0    |            | 0                         | 100  |            |            |
| PHF  | .250                            | .500 | .625       | .500                      | .000 | .500       | .000                      | .250 | .250       | .625       |
| Passenger +  | 0                               | 1    | 1          | 1                         | 0    | 1          | 0                         | 0    | 0          | 2          |
| % Passenger +  | 0                               | 25.0 | 20.0       | 25.0                      | 0    | 25.0       | 0                         | 0    | 0          | 20.0       |
| Heavy  | 1                               | 3    | 4          | 3                         | 0    | 3          | 0                         | 1    | 1          | 8          |
| % Heavy  | 100                             | 75.0 | 80.0       | 75.0                      | 0    | 75.0       | 0                         | 100  | 100        | 80.0       |





1,210,330.2 706,266.4 Foot\_US  
1 : 4,800

**Heath & Associates, Inc.**  
**2214 Tacoma Road**  
**Puyallup, WA 98371**

**Project Name: Milton Truck Storage**

Intersection: 263 Roy Ave

Jurisdiction: City of Pacific

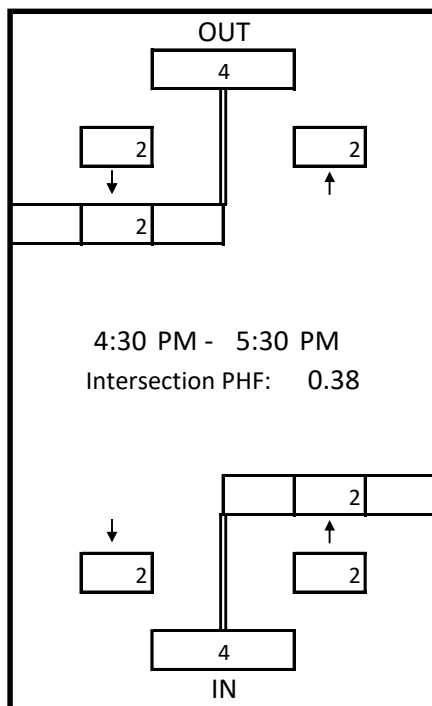
Date of Count: 4/23/2019

Project Number: 4273

| Time Period | Southbound<br>OUT |   |   |   | Westbound |   |   |   | Northbound<br>IN |   |   |   | Eastbound |   |   |   | Total |
|-------------|-------------------|---|---|---|-----------|---|---|---|------------------|---|---|---|-----------|---|---|---|-------|
|             | HV                | R | T | L | HV        | R | T | L | HV               | R | T | L | HV        | R | T | L |       |
| 4:00 PM     | 0                 | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0     |
| 4:15 PM     | 0                 | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0     |
| 4:30 PM     | 0                 | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 1                | 0 | 1 | 0 | 0         | 0 | 0 | 0 | 0     |
| 4:45 PM     | 0                 | 0 | 1 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 1     |
| 5:00 PM     | 0                 | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0     |
| 5:15 PM     | 0                 | 0 | 1 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 1 | 0 | 0         | 0 | 0 | 0 | 2     |
| 5:30 PM     | 1                 | 0 | 1 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0     |
| 5:45 PM     | 0                 | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0         | 0 | 0 | 0 | 0     |

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>Total</b> | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Peak Hour  | 4:30 PM to 5:30 PM |   |   |   |      |   |   |   |       |   |   |   |      |   |   |   | Total |
|------------|--------------------|---|---|---|------|---|---|---|-------|---|---|---|------|---|---|---|-------|
| Peak Total | 0                  | 0 | 2 | 0 | 0    | 0 | 0 | 0 | 1     | 0 | 2 | 0 | 0    | 0 | 0 | 0 | 4     |
| Heavy Veh. | 33.3%              |   |   |   | 0.0% |   |   |   | 50.0% |   |   |   | 0.0% |   |   |   |       |
| PHF        | 0.50               |   |   |   | 0.00 |   |   |   | 0.50  |   |   |   | 0.00 |   |   |   |       |



**Heath & Associates, Inc.**  
**2214 Tacoma Road**  
**Puyallup, WA 98371**

**Project Name: Milton Truck Storage**

Intersection: 893 Valentine Ave

Date of Count: 4/24/2019

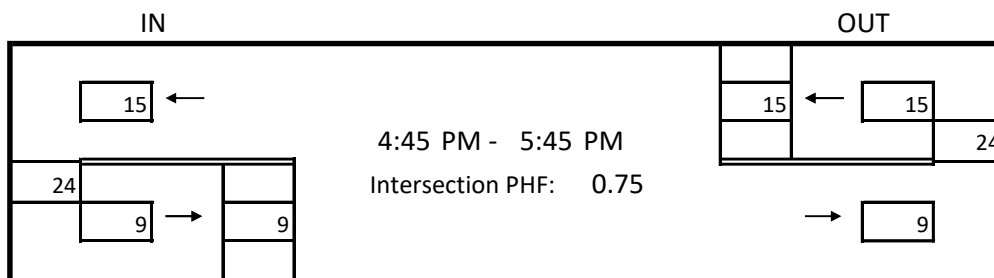
Jurisdiction: City of Pacific

Project Number: 4273

| Time Period | Soutbound |   |   |   | Westbound<br>OUT |   |   |   | Northbound |   |   |   | Eastbound<br>IN |   |   |   | Total |
|-------------|-----------|---|---|---|------------------|---|---|---|------------|---|---|---|-----------------|---|---|---|-------|
|             | HV        | R | T | L | HV               | R | T | L | HV         | R | T | L | HV              | R | T | L |       |
| 4:00 PM     | 0         | 0 | 0 | 0 | 1                | 0 | 1 | 0 | 0          | 0 | 0 | 0 | 0               | 0 | 1 | 0 | 2     |
| 4:15 PM     | 0         | 0 | 0 | 0 | 2                | 0 | 4 | 0 | 0          | 0 | 0 | 0 | 2               | 0 | 2 | 0 | 6     |
| 4:30 PM     | 0         | 0 | 0 | 0 | 0                | 0 | 0 | 0 | 0          | 0 | 0 | 0 | 1               | 0 | 2 | 0 | 2     |
| 4:45 PM     | 0         | 0 | 0 | 0 | 0                | 0 | 1 | 0 | 0          | 0 | 0 | 0 | 1               | 0 | 4 | 0 | 5     |
| 5:00 PM     | 0         | 0 | 0 | 0 | 0                | 0 | 2 | 0 | 0          | 0 | 0 | 0 | 1               | 0 | 2 | 0 | 4     |
| 5:15 PM     | 0         | 0 | 0 | 0 | 3                | 0 | 7 | 0 | 0          | 0 | 0 | 0 | 0               | 0 | 1 | 0 | 8     |
| 5:30 PM     | 0         | 0 | 0 | 0 | 0                | 0 | 5 | 0 | 0          | 0 | 0 | 0 | 2               | 0 | 2 | 0 | 7     |
| 5:45 PM     | 1         | 0 | 0 | 0 | 1                | 0 | 3 | 0 | 0          | 0 | 0 | 0 | 0               | 0 | 2 | 0 | 5     |

|              |   |   |   |   |   |   |    |   |   |   |   |   |   |   |    |   |    |
|--------------|---|---|---|---|---|---|----|---|---|---|---|---|---|---|----|---|----|
| <b>Total</b> | 1 | 0 | 0 | 0 | 7 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 16 | 0 | 39 |
|--------------|---|---|---|---|---|---|----|---|---|---|---|---|---|---|----|---|----|

| Peak Hour  | 4:45 PM to 5:45 PM |   |   |   |       |   |    |   |      |   |   |   |       |   |   |   | Total |
|------------|--------------------|---|---|---|-------|---|----|---|------|---|---|---|-------|---|---|---|-------|
| Peak Total | 0                  | 0 | 0 | 0 | 3     | 0 | 15 | 0 | 0    | 0 | 0 | 0 | 4     | 0 | 9 | 0 | 24    |
| Heavy Veh. | 0.0%               |   |   |   | 30.4% |   |    |   | 0.0% |   |   |   | 43.8% |   |   |   |       |
| PHF        | 0.00               |   |   |   | 0.54  |   |    |   | 0.00 |   |   |   | 0.56  |   |   |   |       |



**Heath & Associates, Inc.**  
**2214 Tacoma Road**  
**Puyallup, WA 98371**

**Project Name: Milton Truck Storage**

Intersection: 1075 Valentine Ave

Date of Count: 4/24/2019

Jurisdiction: City of Pacific

Project Number: 4273

| Time Period  | Soutbound |          |          |          | Westbound<br>OUT |          |          |          | Northbound |          |          |          | Eastbound<br>IN |          |          |          | Total     |
|--------------|-----------|----------|----------|----------|------------------|----------|----------|----------|------------|----------|----------|----------|-----------------|----------|----------|----------|-----------|
|              | HV        | R        | T        | L        | HV               | R        | T        | L        | HV         | R        | T        | L        | HV              | R        | T        | L        |           |
| 4:00 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 1        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 0        | 0        | 1         |
| 4:15 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 2        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 0        | 0        | 2         |
| 4:30 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 1        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 1        | 0        | 2         |
| 4:45 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 0        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 0        | 0        | 0         |
| 5:00 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 0        | 0        | 0          | 0        | 0        | 0        | 1               | 0        | 2        | 0        | 2         |
| 5:15 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 1        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 1        | 0        | 2         |
| 5:30 PM      | 0         | 0        | 0        | 0        | 0                | 0        | 1        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 1        | 0        | 2         |
| 5:45 PM      | 1         | 0        | 0        | 0        | 0                | 0        | 2        | 0        | 0          | 0        | 0        | 0        | 0               | 0        | 0        | 0        | 2         |
| <b>Total</b> | <b>1</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>         | <b>0</b> | <b>8</b> | <b>0</b> | <b>0</b>   | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b>        | <b>0</b> | <b>5</b> | <b>0</b> | <b>13</b> |

| Peak Hour  | 5:00 PM to 6:00 PM |   |   |   |      |   |   |   |      |   |   |   |       |   |   |   | Total |
|------------|--------------------|---|---|---|------|---|---|---|------|---|---|---|-------|---|---|---|-------|
| Peak Total | 1                  | 0 | 0 | 0 | 0    | 0 | 4 | 0 | 0    | 0 | 0 | 0 | 1     | 0 | 4 | 0 | 8     |
| Heavy Veh. | 0.0%               |   |   |   | 0.0% |   |   |   | 0.0% |   |   |   | 20.0% |   |   |   |       |
| PHF        | 0.00               |   |   |   | 0.50 |   |   |   | 0.00 |   |   |   | 0.50  |   |   |   |       |

