City of Puyallup Traffic Scoping Worksheet

PROJECT INFORMATION

Project Title: 330 3rd St Multi Date: 8/30/2022

Applicant Name: Matt Cyr Telephone Number: 253-752-2185 (Ext. 217)

Project Description: 93 multifamily dwelling units & 1,200 sq ft of commercial space

Year of Occupancy: 2025

Project Location: PN: 5745001371 Parcel Size: 1.11-acres

Proposed Number of Access Point(s): 2 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)					
Undeveloped/Parking Lot	-	-	-	-	-
Proposed Use(s)					
LUC 220 Multifamily Housing (Low-Rise)	93 Units	220	626.8	37.2	47.4
LUC 936 Coffee Shop without Drive-Through	1,200 Sq Ft	936	N/A	55.9	19.4
Net New Trips			626.8	93.1	66.8
Traffic Impact Fees: Net New PM Peak Hour Trips x $4,500 = $300,600.00					

* The project trips shall be rounded to the nearest tenth.
* The project trips shall be estimated using the ITE's *Trip Generation*, 11th Edition.
* Trip generation regression equations shall be used when the R^2 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. W Pioneer Ave & 3rd St SW
2. W Pioneer Ave & 4th St SW
4.
5.

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

Address: 1011 E Main Suite 453, Puyallup, WA 98371 avanaken@heathtraffic.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

August 30, 2022

Bryan Roberts, P.E.
Traffic Engineer
City of Puyallup

Subject: Traffic Impact Analysis Scoping Memo

The intent of this assessment is to provide the City of Puyallup with a trip generation summary and site characteristics for the proposed project herein referred to as 330 3rd Street Multifamily. A project description is provided below.

PROJECT DESCRIPTION

- 330 3rd Street Multifamily proposes for the construction of a multifamily development comprised of either scenario: Scenario 1: 93 apartment dwelling units; or Scenario 2: 79 condominium units. In either scenario, approximately up to 1,200 square feet of ground floor commercial space fronting Pioneer would be provided. No tenant is known at this time so a coffee shop without a drive through was utilized to represent worst case conditions, per city comments.

- Site Address: 330 3rd St SW

- Tax parcel #: 5745001371, comprised of 1.11-acres. Existing on-site is a parking lot.

- Site ingress/egress is proposed via two new accesses. One access is proposed from 3rd St SW and one access on the south end of the site via an alley—both providing access to the parking garage.

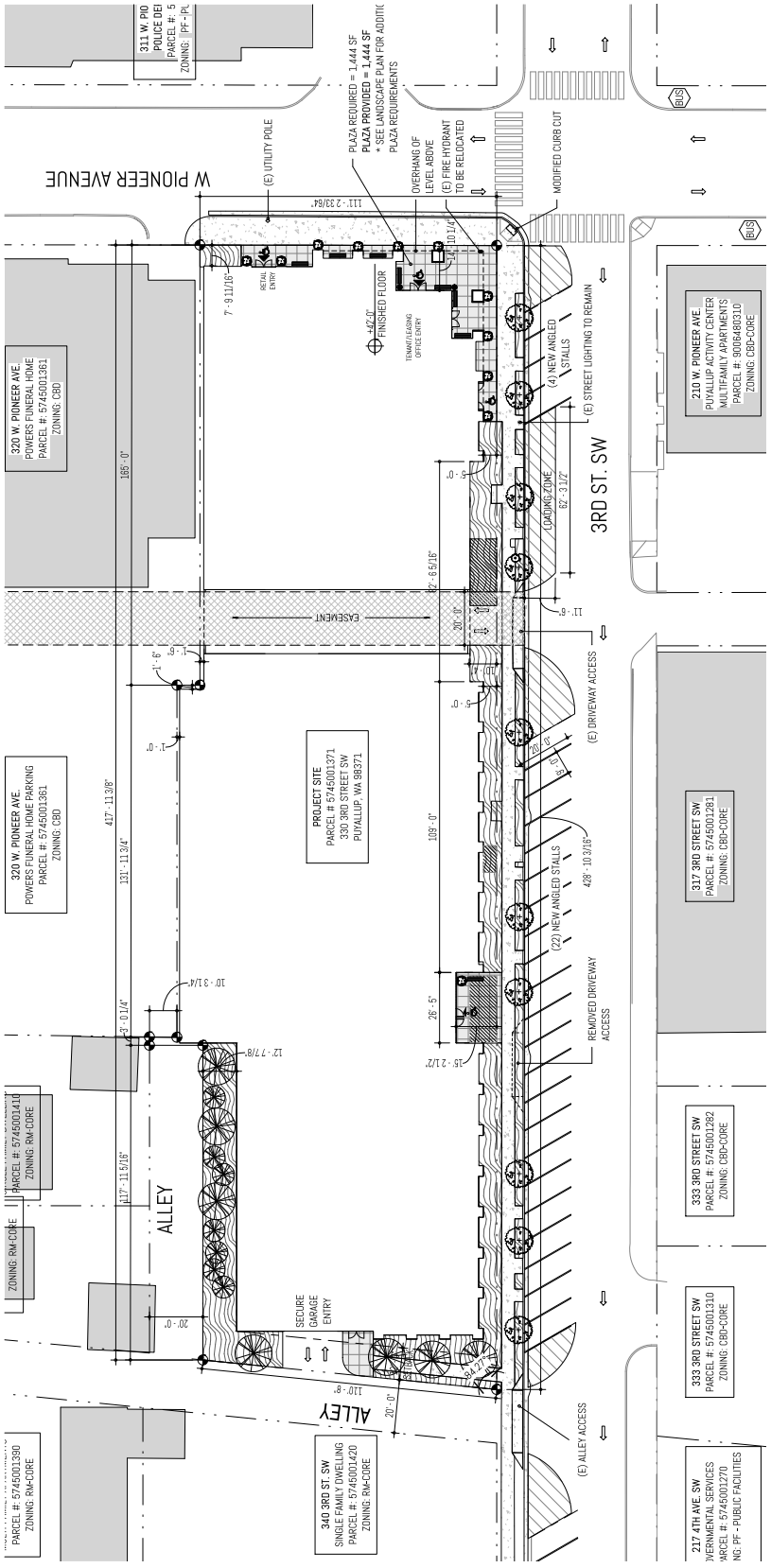
- 20 parking spaces within the north portion of the parking garage would be reserved and dedicated for the adjacent senior center to the east.

- The proposal includes reconfiguration of 3rd Street SW from the current two way north/south travel to one-way southbound flow only. Included with the reconfigured one-way street is approximately 30 head-in angle parking spaces on the west side of 3rd Street SW

- A vicinity map of the surrounding roadway network is provided on the following page with the subject parcel outlined in blue. A conceptual site plan is illustrated on Figure 2.

Figure 1: Vicinity Map

Figure 2: Site Plan



TRIP GENERATION

Depending on market factors and final design, the project may consist of either rentable apartment units with up to 93 dwellings (Scenario 1) or 79 condominium units in which prospective residents could purchase to own (Scenario 2). Either scenario includes an approximate 1,200 square foot commercial space in the north end of the building (Coffee Shop without drive-through, per city comments). For purposes of the scoping analysis, the higher unit scenario (Scenario 1) has been selected for trip generation and distribution to present conservatively. According to Institute of Transportation Engineers (ITE) publication, *Trip Generation Manual,* 11th Edition, *LUC 220 – Multifamily Housing (Low-Rise)* consists of apartments, townhouses, and condominiums and would therefore be applicable under either scenario. Dwelling units (LUC-220) or square footage (LUC 936) was utilized as the input variable and average rates were used to determine trips ends.

At the time of this analysis, no defined tenant is available for the small commercial space on the ground level. Therefore, *LUC 936 – Coffee/Donut Shop without Drive-through,* was utilized as a probable tenant occupancy for the building. Should a tenant deviate from this assumption, reevaluation could be made. Table 1 below highlights trip generation from the proposed 330 3rd Street Multi project.

Table 1: Project Trip Generation

Land Use	Variable	Trip Type	AWDT	AM Peak-Hour Trips			PM Peak-Hour Trips		
				In	Out	Total	In	Out	Total
LUC – 220 Multifamily Housing	93 units		627	9	28	37	29	18	47
LUC – 936 Coffee/Donut Shop	1,200 sq. ft.	Primary	*195	29	27	56	9	10	19
		Pass-By	*195	28	28	56	10	10	20
Total Primary Project Trips			**822**	38	55	**93**	38	28	**66**
Total Pass-By Project Trips			**195**	28	28	**56**	10	10	**20**

*No ADT was available for LUC-936, the PM peak hour trips have been multiplied by 10 and applied accordingly.

Based on ITE data, the proposed project is estimated to generate 149 total AM peak hour trips (66 inbound / 83 outbound) and 86 PM peak hour trips (48 inbound / 38 outbound). The proposed project will also produce pass-by trips. Pass-by trips are considered as motorists already passing by the site who decide to make an intermediate stop before proceeding to their primary destination. As no pass-by data was available through ITE, 50 percent of generated trips are expected to be in the form of pass-by for the coffee shop use derived from a comparable use (fast-food). The proposed project is anticipated to generate 56 AM pass-by trips (28 inbound / 28 outbound) and 20 PM pass-by trips (10 inbound / 10 outbound).

TRIP ASSIGNMENT AND DISTRIBUTION

Preliminary primary trip distribution has been prepared and is illustrated in Figure 3. The pass-by trip distribution is illustrated in Figure 4. Travel assignments reflect the conversion of 3rd Street SW to a one-way southbound flow along the subject site's frontage. Percentages are based on proximity to major arterial routes and amenities. Approximately 70% of all generated trips are anticipated to use the alley access on the west side of the property, the remaining ~30% is anticipated to use the provided head-in angle parking along 3rd Street SW.

ADDITIONAL COMMENTS

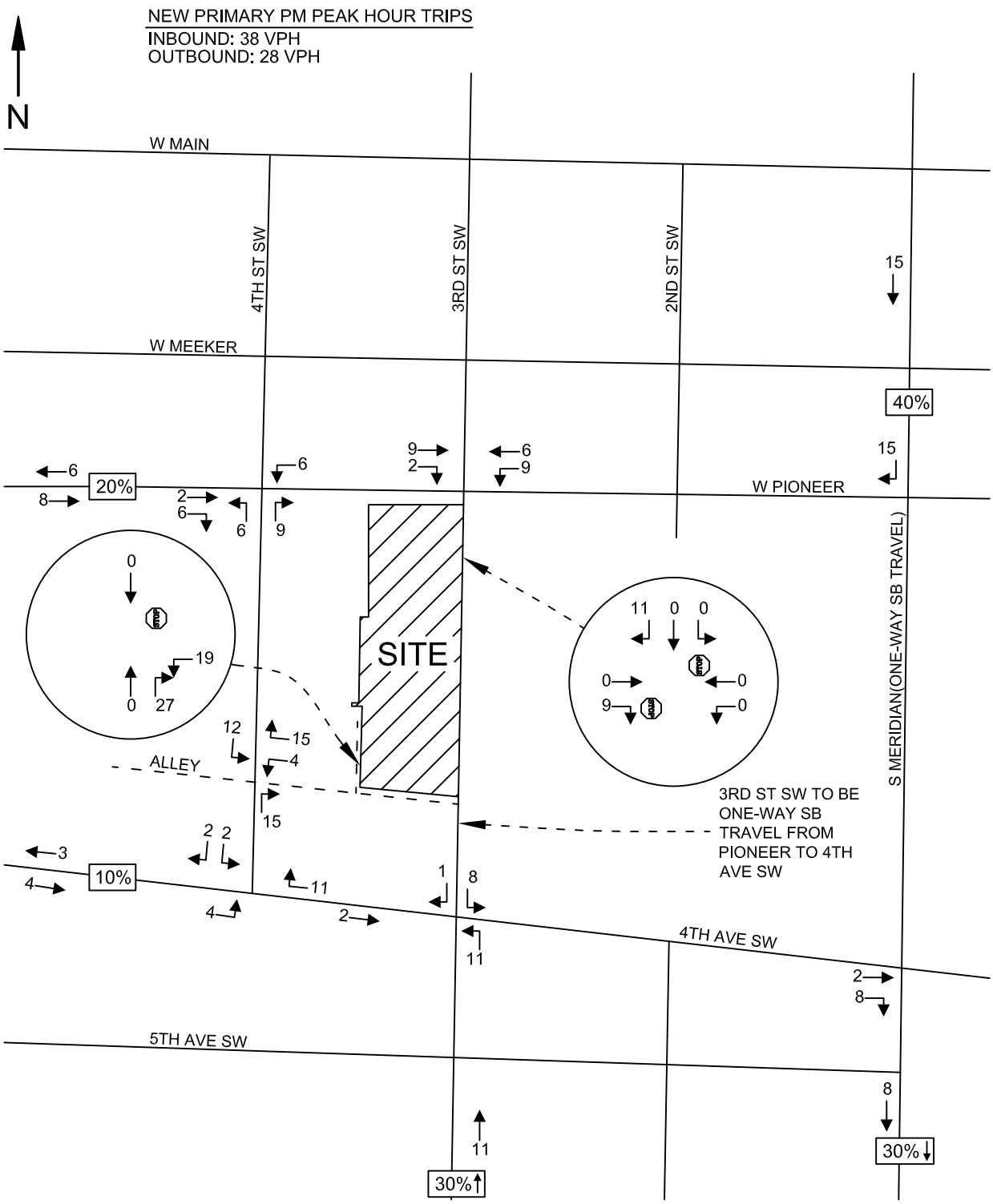
Should the City require further evaluation in the form of a Transportation Impact Analysis (TIA), the following are suggested and/or requested information to be used in subsequent analysis.

- Time Period to Evaluate: 4:00-6:00 PM
- Horizon Year: 2025
- Background Growth: 2%
- Pipeline Projects: To be determined by the city
- Intersections to Study:
    1. 3rd Street SW & Access
    2. 4th Street SW & Alley Access
    3. Any other location determined after City review.

Call if you require anything further,

Aaron Van Aken, P.E. PTOE

08/30/2022

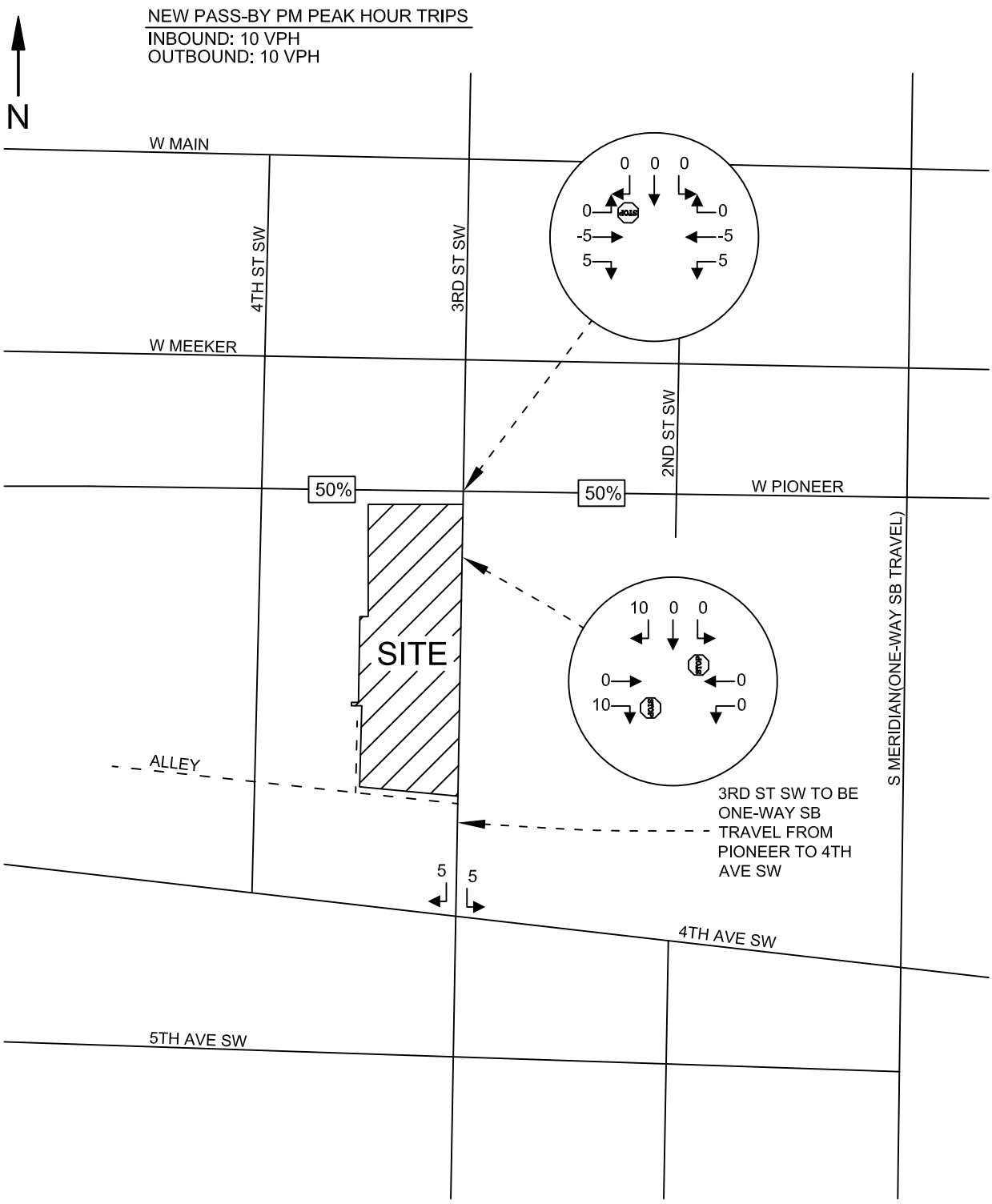


HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

330 3RD STREET MULTI

PRIMARY PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
FIGURE 3



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330 3RD STREET MULTI

PASS-BY PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
FIGURE 4

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

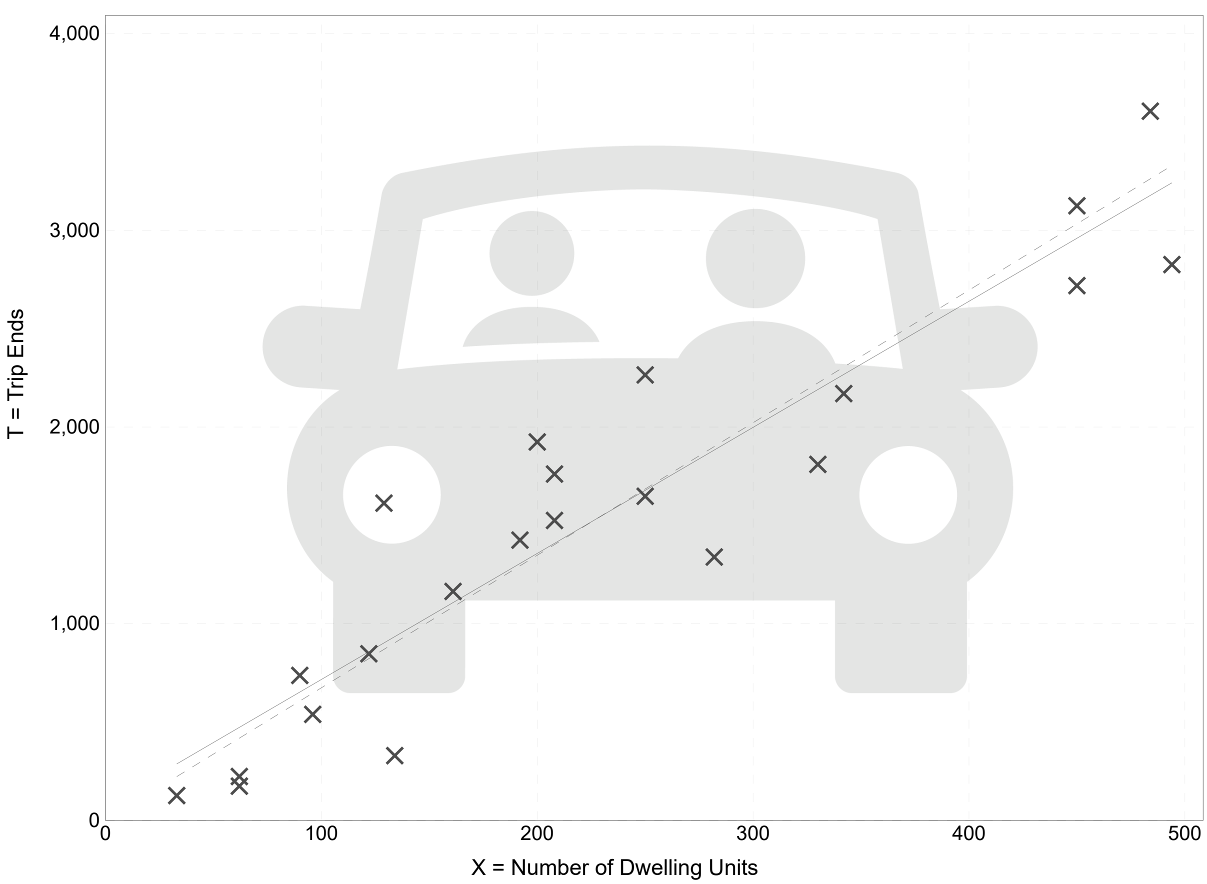
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



× **Study Site** ——— **Fitted Curve** - - - **Average Rate**

Fitted Curve Equation: T = 6.41(X) + 75.31 **R^2= 0.86**

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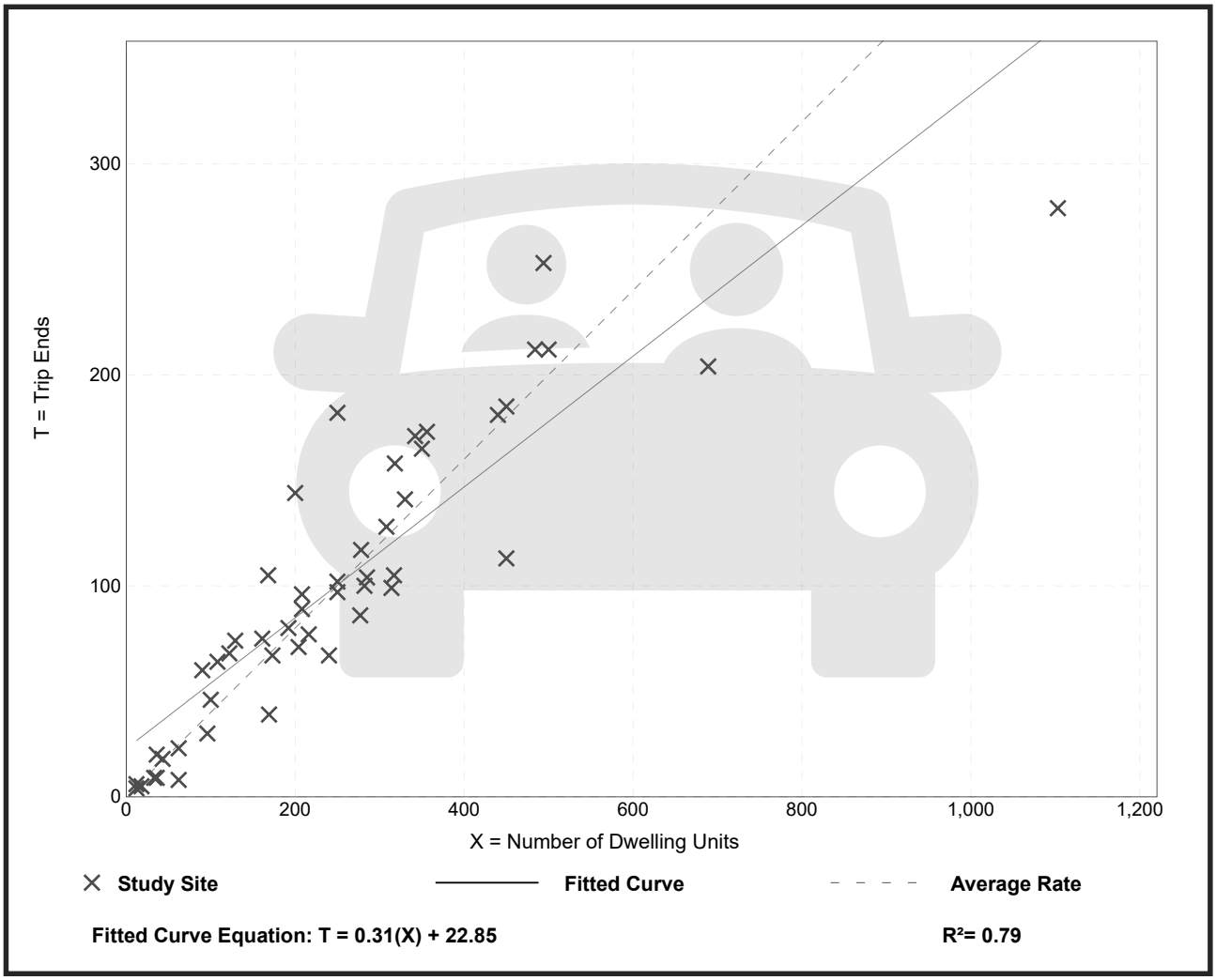
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

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: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



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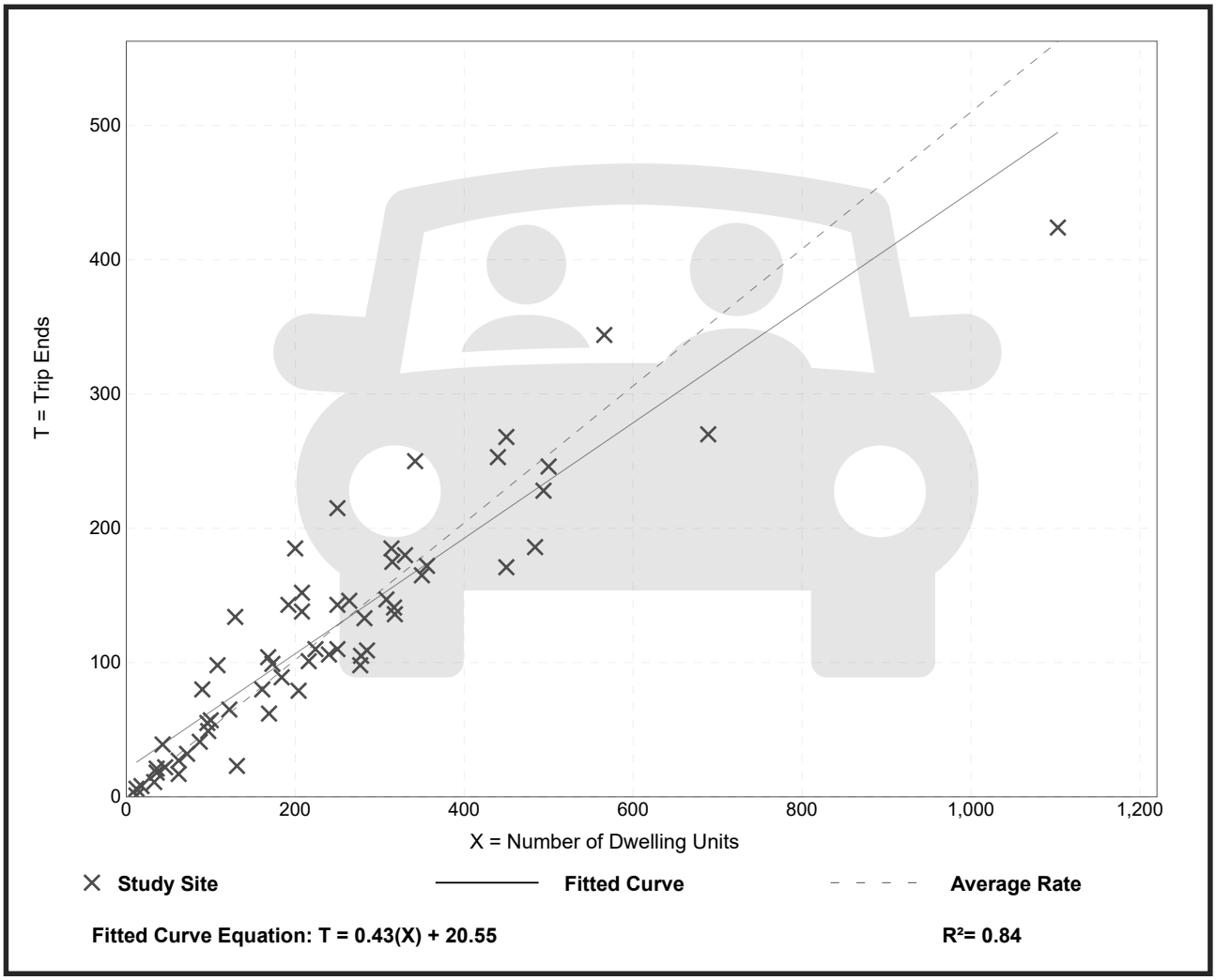
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

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: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



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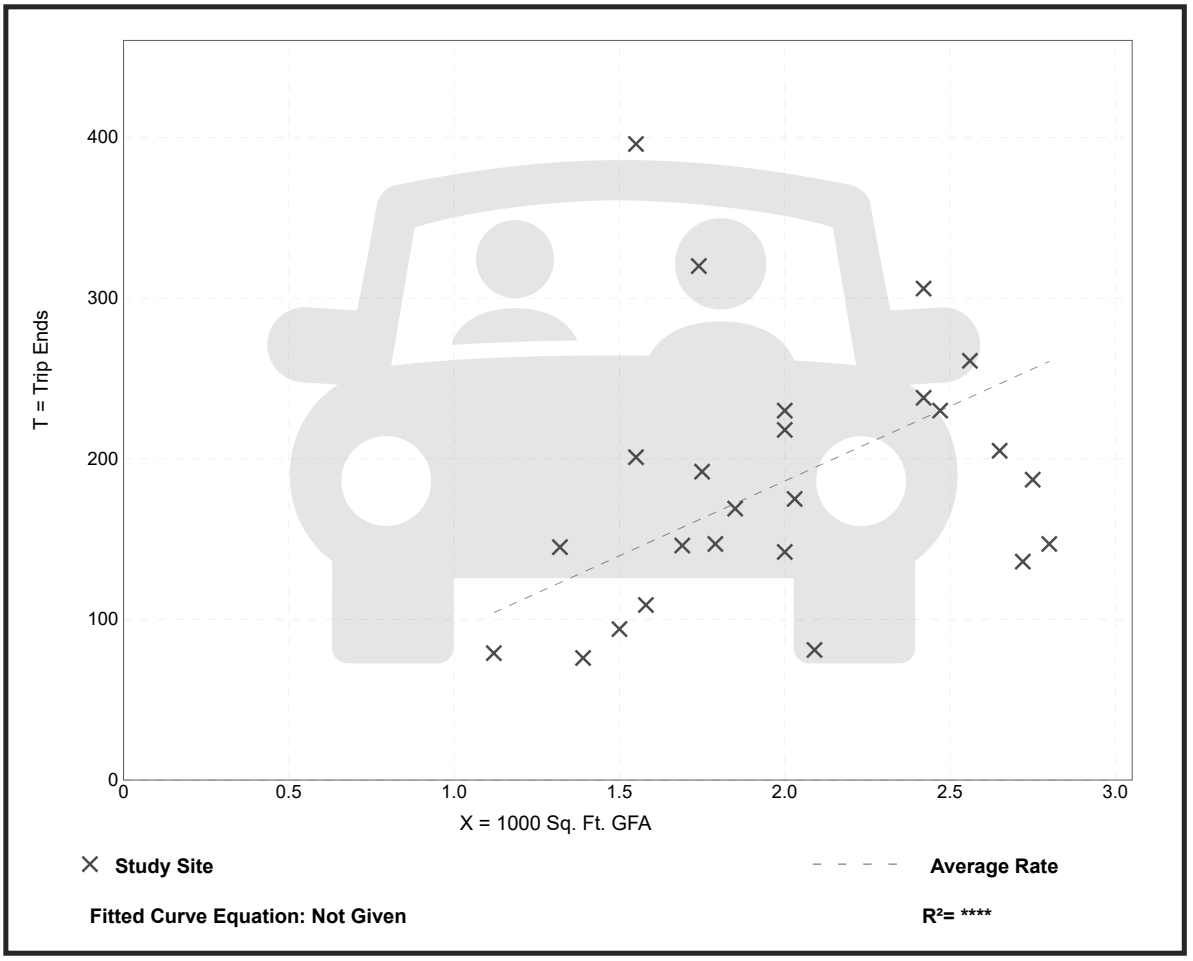
Coffee/Donut Shop without Drive-Through Window
(936)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
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: 25
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
93.08	38.76 - 255.48	42.71

Data Plot and Equation



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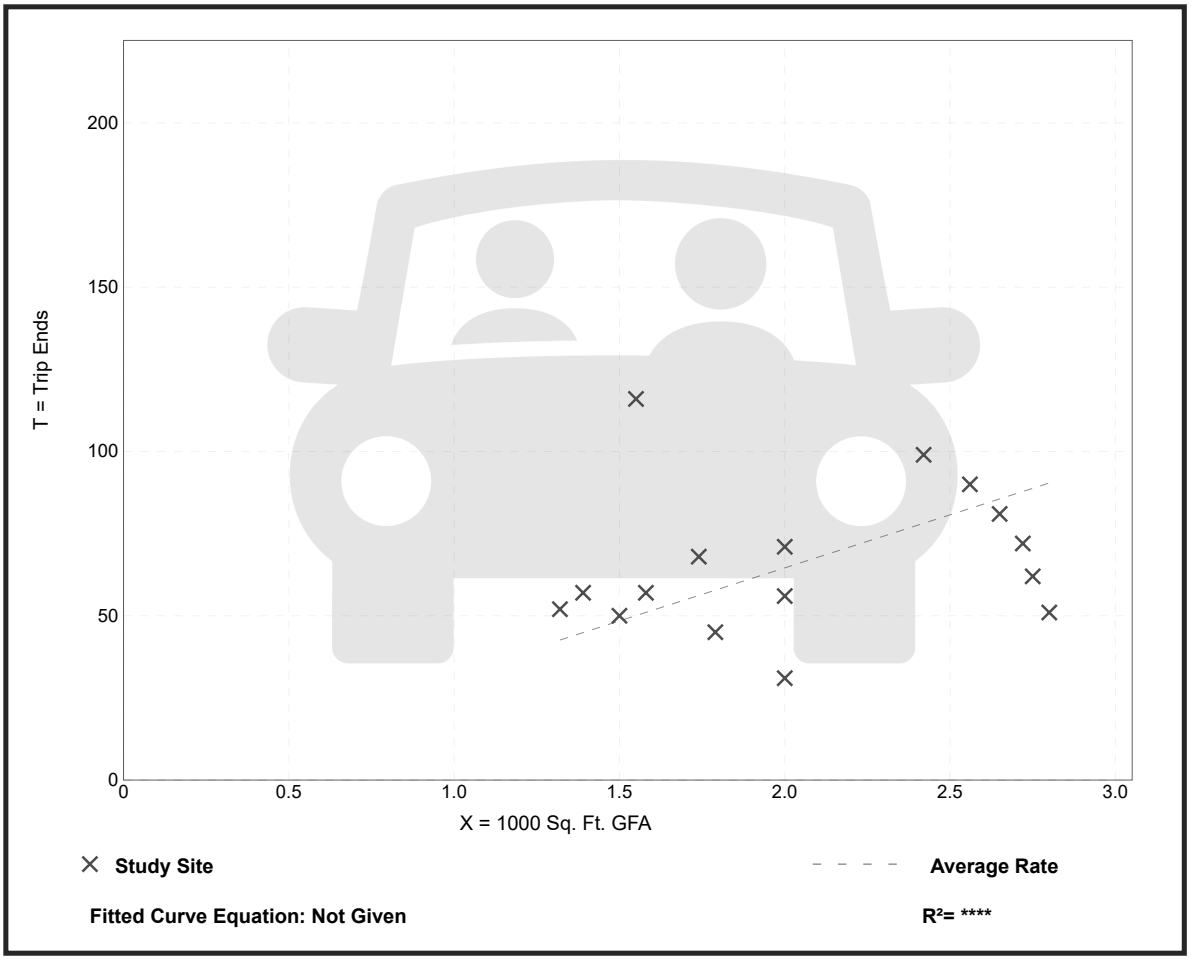
Coffee/Donut Shop without Drive-Through Window
(936)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
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: 16
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
32.29	15.50 - 74.84	12.64

Data Plot and Equation



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