Intersecting Metrics
AND
FEHR & PEERS

MEMORANDUM

To: Jacob Armstrong and Damon Davis, County of San Diego
From: Stephen Cook, Intersecting Metrics; Katy Cole, Fehr & Peers
Date: December 8, 2022
Regarding: **County of San Diego Screening Criteria for Transportation Related Impacts – Wineries**

1.0 Background and Purpose

The purpose of this technical memorandum is to identify the characteristics (size, event capacity and/or location) for wineries located within the unincorporated portions of San Diego County which are able to be screened out from conducting a vehicle miles traveled (VMT) analysis under CEQA. The County of San Diego permits the use of wineries through various permit types in accordance with the Zoning Ordinance depending on the operations and type of winery. This technical memorandum is intended to provide additional substantial evidence to supplement the information, analysis results, and thresholds contained within the *County of San Diego Transportation Study Guidelines, September 2022 (TSG).* As such, this technical memorandum is not intended change or modify the currently adopted TSG.

2.0 Transportation Related Impacts - Significance Thresholds

The TSG was adopted by the County Board of Supervisors on September 28. The County's TSG establishes SB-743 compliant VMT based significance thresholds for transportation related impacts under CEQA, within the unincorporated portions of San Diego County. Section 3.3.1 of the County's TSG identifies various screening thresholds for land use projects. Land Use projects that meet at least one of the seven screening criteria outlined in the TSG can be assumed to have a less than significant VMT related impact. Therefore, the seven screening criteria outlined in the TSG were reviewed and the following two were identified to be most relevant to wineries:

- *Small Projects* – Following the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018*[1] (Technical Advisory), projects generating less than 110 daily vehicle trips may be presumed to have a less than significant impact.
- *Locally Serving Retail/Service Projects* – Following guidance provided by OPR, locally serving retail/service projects less than 50,000 square feet may be presumed to have a less than significant impact.

Wineries, specifically the tasting rooms, are considered commercial and can be considered locally serving as they may attract local residents to visit a winery closer to home. These trips would fall under the "Locally Serving Retail/Service Projects" criteria and would have a less than significant VMT related

[1] https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

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impact. Wineries that are located in rural areas of the County may not qualify as locally serving. However, these wineries may fall under the small project criteria if their trip generation is less than 110 vehicle trips per day, thus, resulting in a less than significant VMT related impact. The determination of the locations within the County where a winery location would be considered locally serving and the maximum size of a winery that would fall within "small project" is described in the subsequent sections.

3.0 Small Winery Trip Generation - Day to Day Operations

To determine the largest winery size that can qualify for the small project screening criteria, daily trip generation rates were derived from the *Institute of Transportation Engineers (ITE) - Trip Generation Manual 10th Edition, September 2017.* Trip generation rates for the Winery land use (970) were utilized to determine their associated daily trip generation. As outlined on Page 426 of the second volume of the ITE Trip Generation Manual, "For the purposes of this land use, the independent variable "1,000 sq. foot gross floor area" refers to the square footage of the building that houses the tasting room." As such, the provided trip generation rates are representative to the tasting area component of a winery.

The ITE Trip Generation Manual provides separate daily vehicular trip generation rates for weekdays (Monday through Thursday), Fridays, Saturdays, and Sundays. Therefore, the daily vehicular trip generation was calculated for each day of the week and then averaged across the full week to determine the average trip daily generation across the entire week. Based on these rates the maximum size of a winery to yield an average number of 110 vehicular trips per day could be calculated, as displayed in **Table 1**. Relevant pages from the ITE Trip Generation Manual are provided in **Attachment 1**.

Table 1: Winery Trip Generation

Day	Size	Rate	ADT	Days Per Week	Total Weekly Trip Gen
Weekday	1,135	SF	45.96	53	4
Friday			80.73	92	1
Saturday			203.48	231	1
Sunday			205.11	233	1
			Weekly Total	**7**	**768**
			Average Number of Vehicular Trips Per Day		**110**

Source: ITE Trip Generation Manual 10th Edition, September 2017

As shown in Table 1, the maximum size of a winery that can qualify as a small project is 1,135 square feet. Therefore, any proposed winery with a tasting room smaller than 1,135 square feet can be assumed to have a less than significant VMT related impact, under the small project screening criteria.

4.0 Small Winery Trip Generation - Special Events

In addition to tasting rooms, some wineries may have areas dedicated as event space that may attract non-local guests, thus potentially resulting in a VMT related impact. **Table 2** calculates the event capacity that may generate 110 daily vehicular trips. This represents the maximum capacity the winery event space can host before exceeding the County's prescribed daily trip threshold for small projects.

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Table 2: Trip Generation – Event Space

Land Use	Capacity	Vehicle Occupancy	Total Trips	In	Out
Event Space	137 People	2.5[1]	110	55	55

Note:
[1]FHWA states that "[a] vehicle occupancy factor of 2.5 persons per vehicle represents a common metric, however for forecasting purposes, practitioners should consider a range of factors from 2.2 to 2.8 depending on local conditions." An average of 2.5 vehicle occupancy factor was used as it represents groups larger traveling to the winery together, but also smaller groups or single patrons traveling to more rural wineries.

As shown in Table 2, a winery's event space can accommodate up to 137 attendees before it exceeds the County's threshold for "Small Residential and Employment Projects." Therefore, wineries that host events with more than 137 people will be required to apply for a special event permit from the Department of Public Works with the County of San Diego, as is typical with events of this size. Wineries with events shall also obtain the applicable permit in accordance with the Zoning Ordinance depending on the operating characteristics of the winery.

5.0 Locally Serving Winery

The County of San Diego has many existing wineries which offer tasting rooms and small event space. Many of these wineries are clustered together and as a result, patrons may visit multiple wineries in one trip. In addition, adding additional wineries within locations that already have wineries are not expected to generate brand new winery trips; they will simply become additional stops or perhaps a new stop/diverted stop for patrons that would have been visiting other wineries in the area. In addition, creating more winery options in San Diego County may reduce winery trips originating in the San Diego Region to the Temecula Wine Country. These factors allow us to qualitatively conclude that additional wineries within San Diego County that are nearby the existing wineries will not generate additional VMT. Additionally, there is a potential to reduce VMT by providing more robust winey options as it would attract some trips that would otherwise be destined for farther away Temecula wine country.

Figure 1 displays the location of wineries in San Diego County and the Temecula area. In San Diego County, the map shows clusters of wineries in the San Pasqual Valley, Ramona Valley, Fallbrook area, and Valley Center area. Figure 2 shows a 3-mile capture area around each winery, overlayed on population density based on the base year of the current SANDAG travel demand model (ABM2+). The average population density within a 3-mile radius of the clustered wineries (San Pasqual Valley, Ramona Valley, Fallbrook area, and Valley Center area) is 2,200 people per square mile. Three miles is generally considered a rule of thumb market capture distance for locally serving projects. In other words, we would consider a three-mile trip between an existing winery and a new winery to be a local trip. In addition, we would consider the population within three miles of a winery to be the wineries local community.

Based on the assessment above, a winery that is located within a three-mile buffer of one of the existing winery clusters (San Pasqual Valley, Ramona Valley, Fallbrook area, and Valley Center area) or that has a population density within a three-mile radius of 2,200 people per square mile would be considered locally serving. Note that as described above, wineries that host events with more than 137 people will

be required to apply for a special event permit from the Department of Public Works with the County of San Diego, as is typical with events of this size. Wineries with events shall also obtain the applicable permit in accordance with the Zoning Ordinance depending on the operating characteristics of the winery.

6.0 Conclusions

Based on the information in this memorandum, if a winery with a tasting room/event space meets any of the following characteristics it would be presumed to have a less than significant transportation VMT impact:

- Small project screening: the maximum size of a winery tasting room that qualifies for the small project screening criteria is 1,135 square feet. In addition, wineries that have an event space that can host 137 people or less would also be considered a small project. In the case that winery does host an event with more than 137 people they will be required to apply for a special event permit from the Department of Public Works with the County of San Diego. Wineries with events shall also obtain the applicable permit in accordance with the Zoning Ordinance depending on the operating characteristics of the winery.
- Wineries that are located within a three-mile radius of an existing winery cluster (San Pasqual Valley, Ramona Valley, Fallbrook area, and Valley Center area) as shown on Figure 2.
- Wineries that are located such that the three-mile radius around them has a population density of 2,200 people per square mile or greater.

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Figure 1

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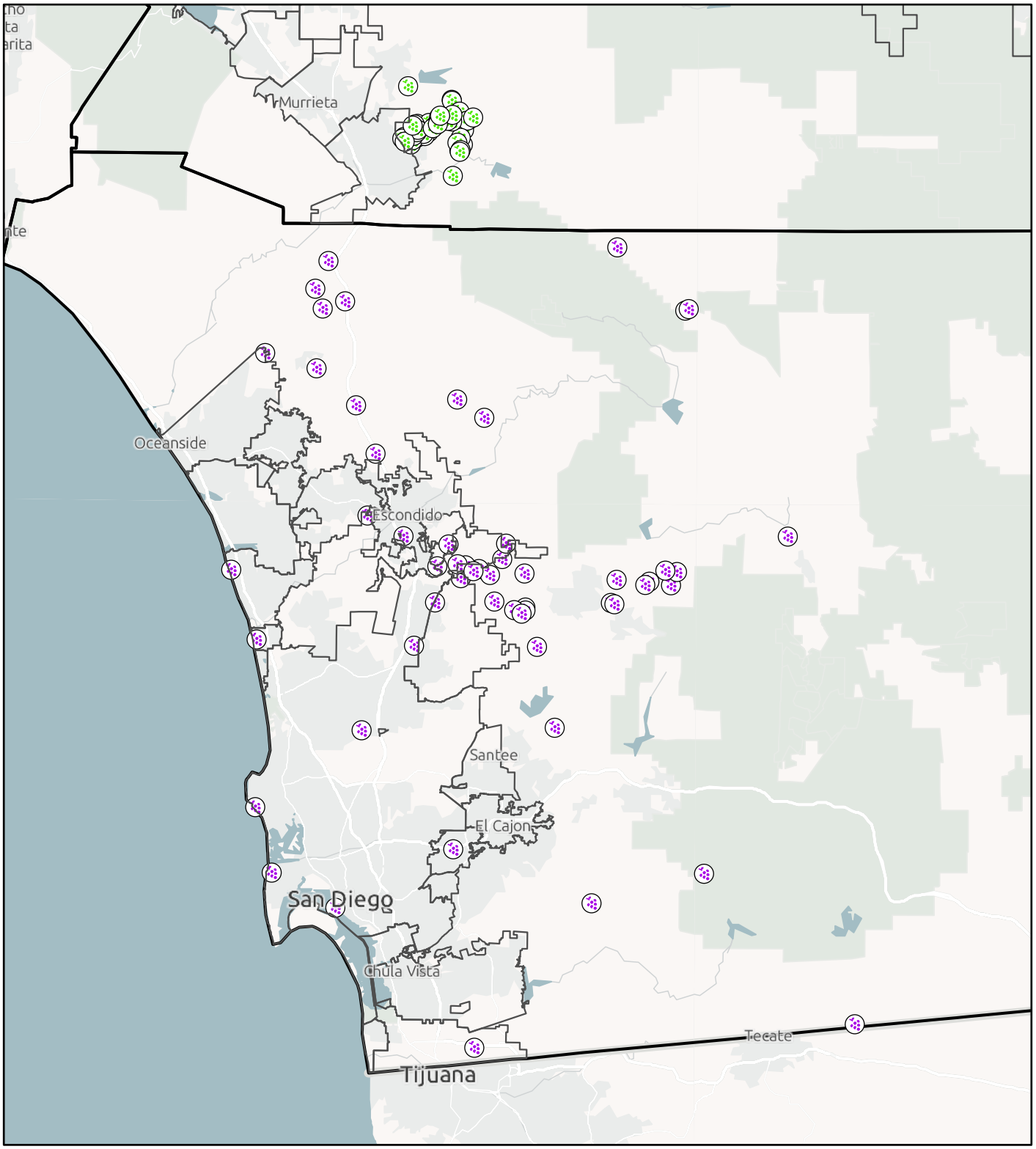

Figure 1

San Diego County and Neighboring Riverside County Winery Locations

Data Source: Google Maps

Figure 2

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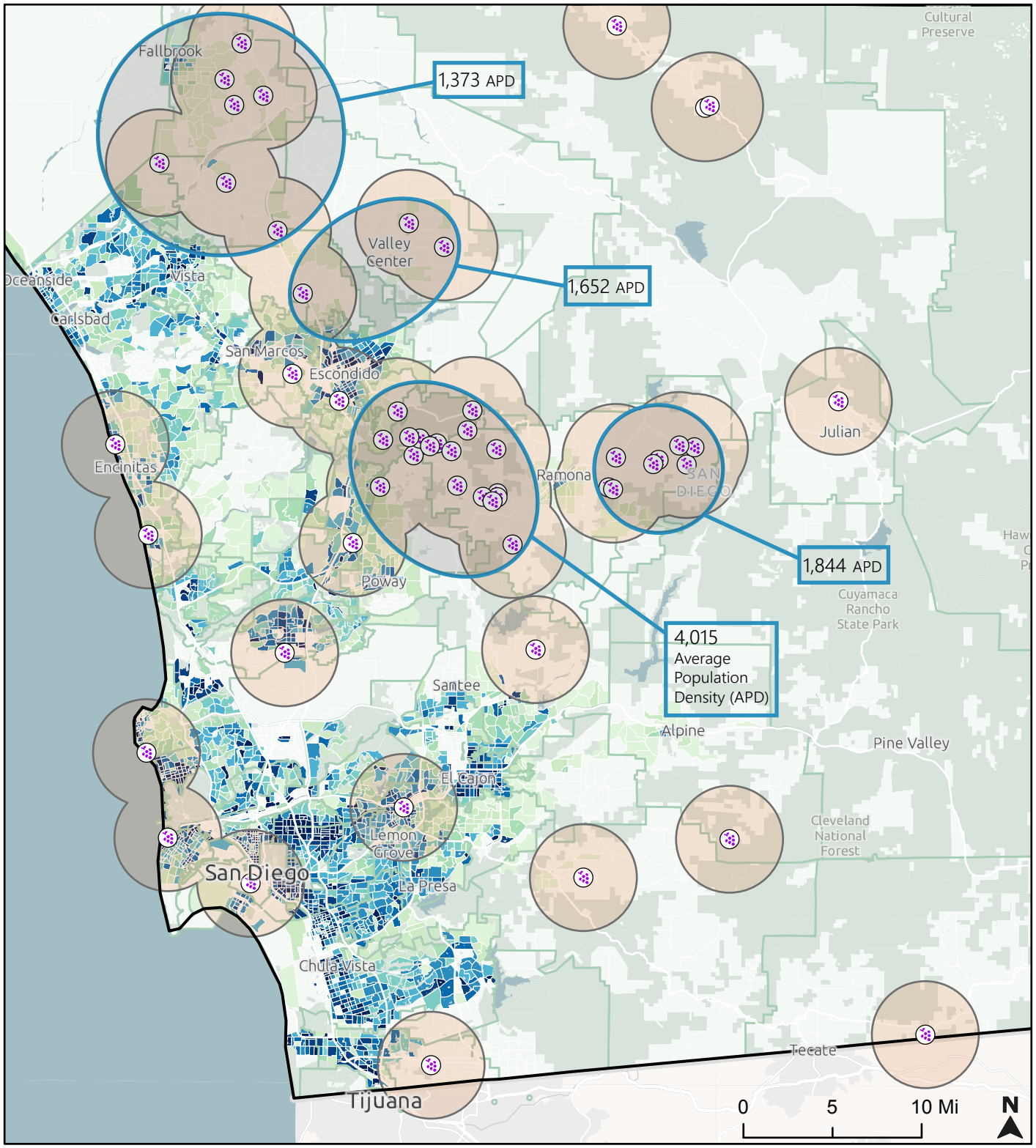

Population (Density/Square Mile)

- Less than 470
- 470 - 1,610
- 1,610 - 2,890
- 2,890 - 4,350
- 4,350 - 5,710
- 5,710 - 7,130
- 7,130 - 9,060
- 9,060 - 12,100
- 12,100 - 17,500
- Greater than 17,500

- San Diego County Wineries
- 3 Mile Winery Buffer
- County Boundaries
- CPA Boundaries
- Parks

Figure 2

San Diego County Population Density: 3 Mi Buffer On Wineries

Analysis Based on ABM2+

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Attachment 1

Relevant Pages from the ITE Trip Generation Manual

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Land Use: 970
Winery

Description

A winery is a property used primarily for the production of wine. Wineries typically include tasting room facilities and may offer special events such as weddings or parties. Wineries often offer complimentary tours and wine tasting. Visitors also may purchase wine or wine-related products.

Additional Data

For the purposes of this land use, the independent variable “1,000 sq. foot gross floor area” refers to the square footage of the building that houses the tasting room.

Time-of-day distribution data for this land use for a weekday, Friday, Saturday, and Sunday are presented in Appendix A. For the sites with weekday, Saturday, and Sunday data, the overall highest vehicle volumes during the PM were counted between 1:45 and 2:45 p.m. For the sites with Friday data, the PM peak hour was between 4:00 and 5:00 p.m. For all four days, the AM peak hour was between 11:45 a.m. and 12:45 p.m.

The sites were surveyed in the 2010s in California, Illinois, and Virginia.

Source Numbers

807, 851, 894

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

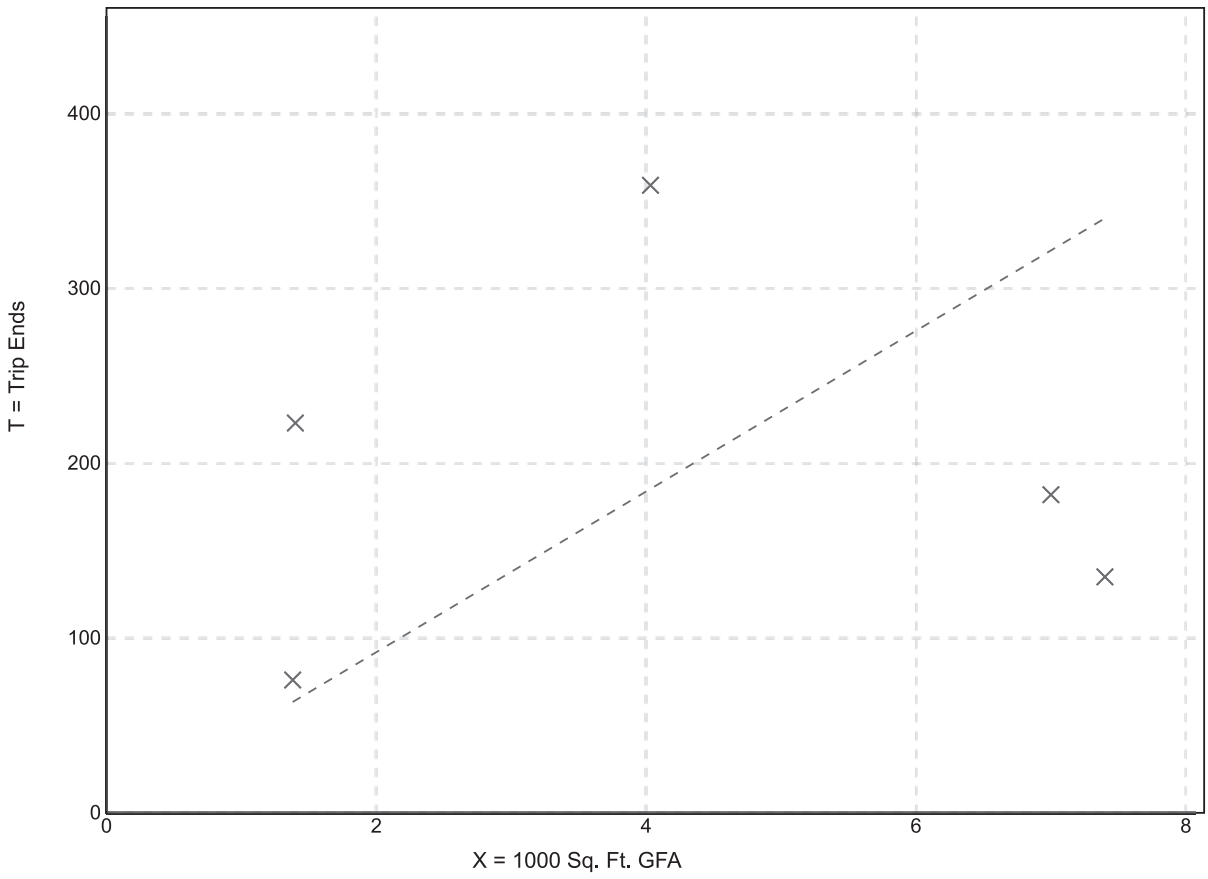
Setting/Location: **Rural**
Number of Studies: 5
1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
45.96	18.24 - 159.29	44.79

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

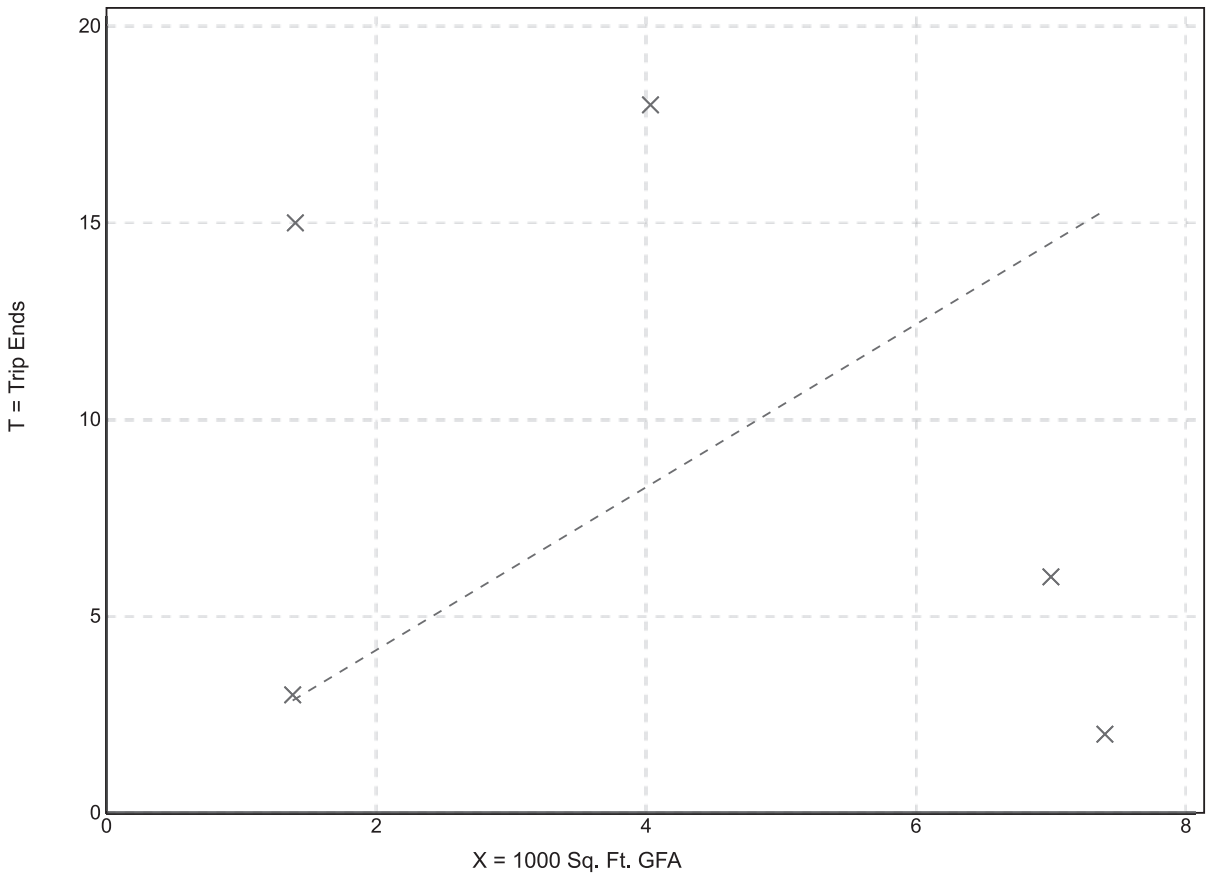
Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**Rural**
Number of Studies:	5
1000 Sq. Ft. GFA:	4
Directional Distribution:	70% entering, 30% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.07	0.27 - 10.71	3.09

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

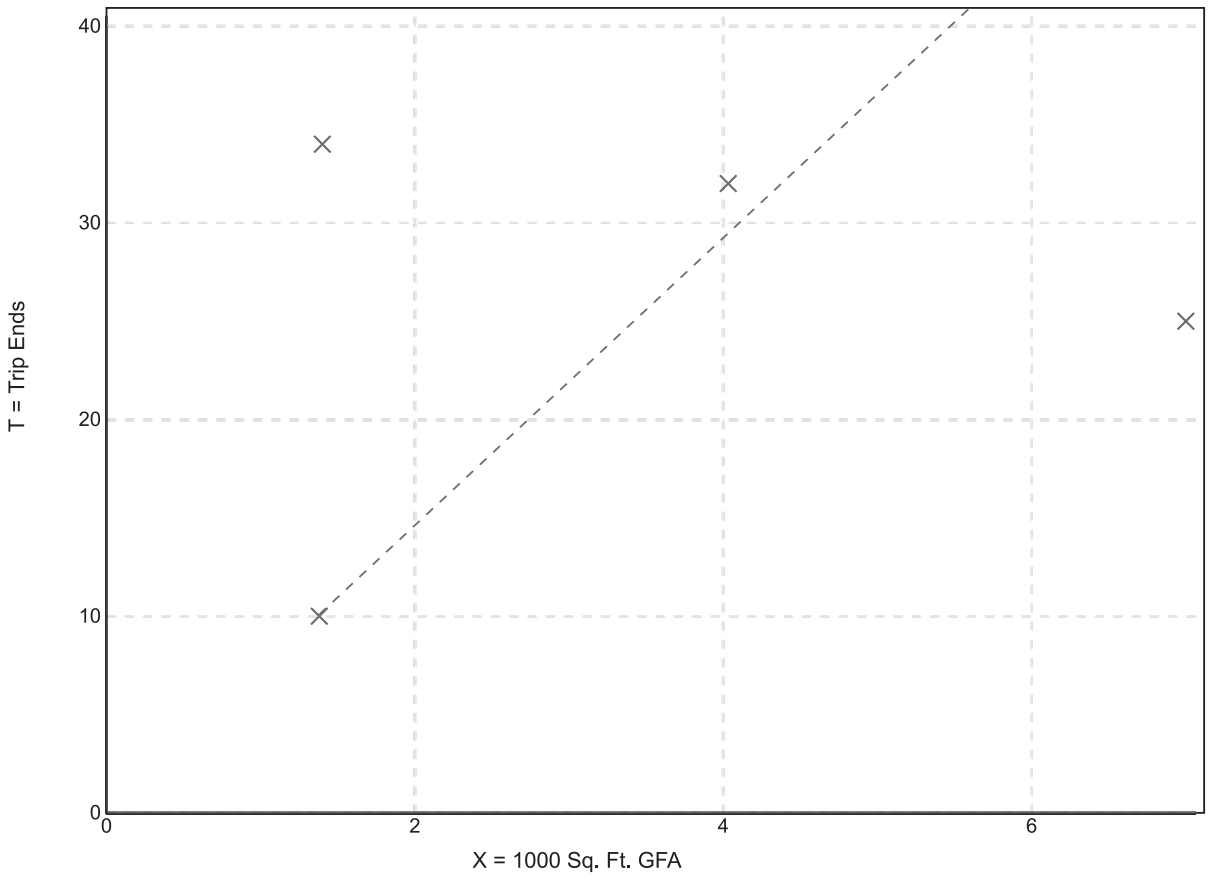
Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**Rural**
Number of Studies:	4
1000 Sq. Ft. GFA:	3
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
7.31	3.57 - 24.29	6.97

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
AM Peak Hour of Generator

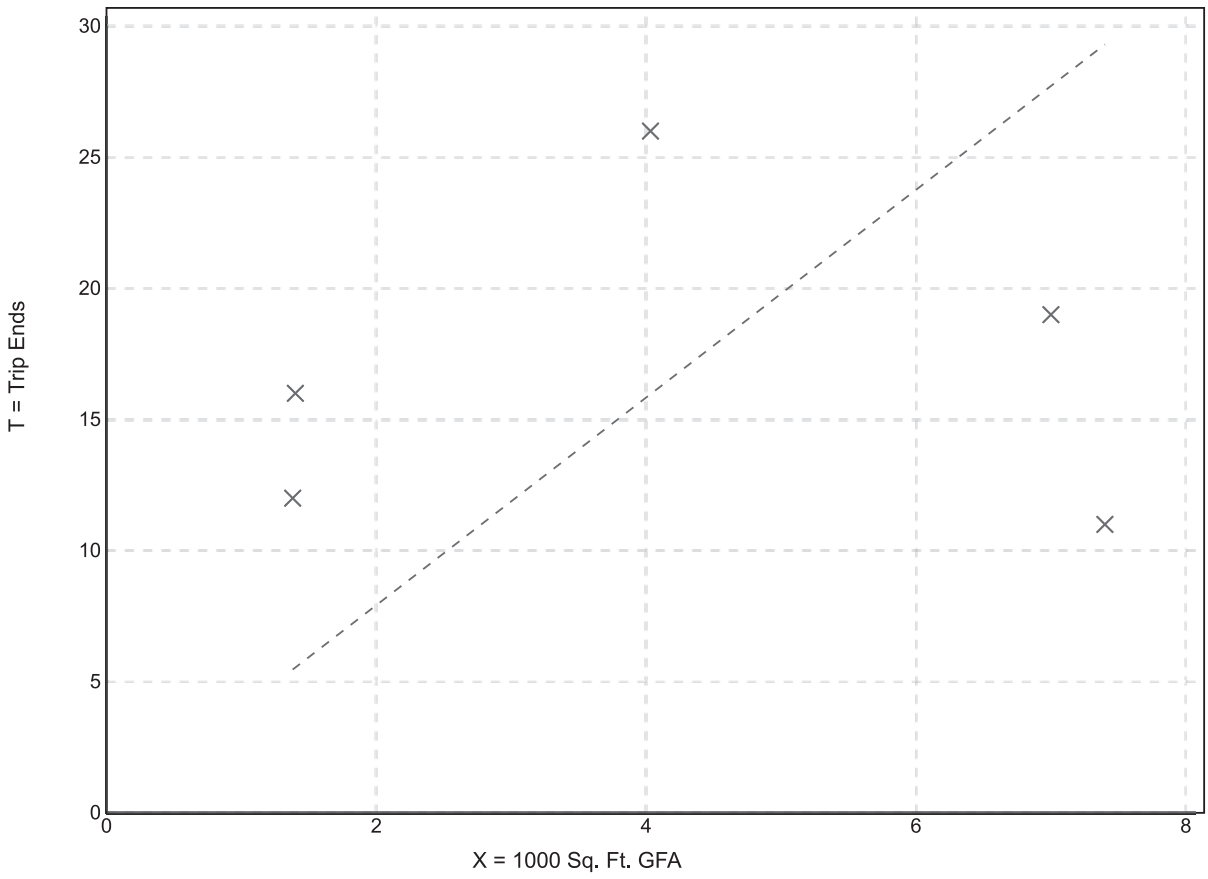
Setting/Location: **Rural**
Number of Studies: 5
1000 Sq. Ft. GFA: 4
Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.96	1.49 - 11.43	3.35

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
PM Peak Hour of Generator

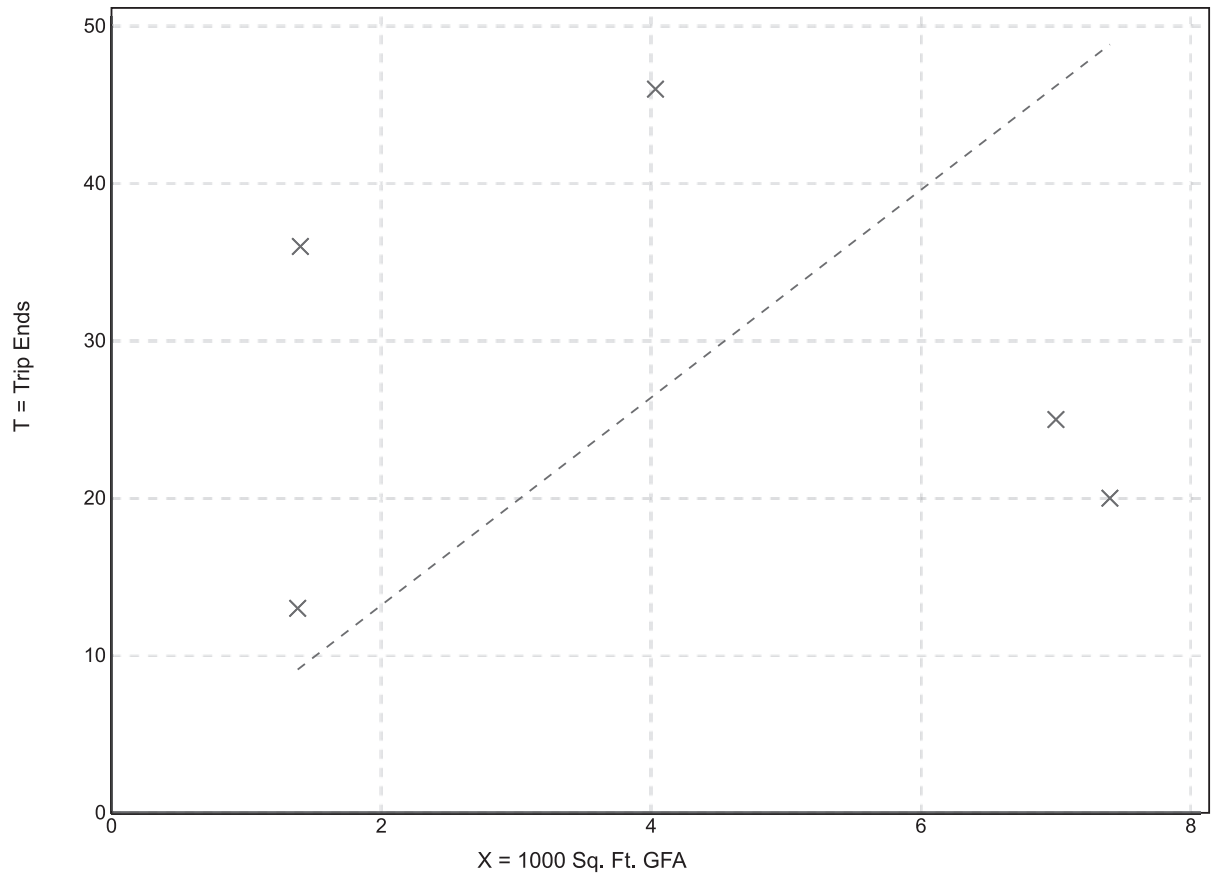
Setting/Location: **Rural**
Number of Studies: 5
1000 Sq. Ft. GFA: 4
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
6.60	2.70 - 25.71	6.83

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Friday**

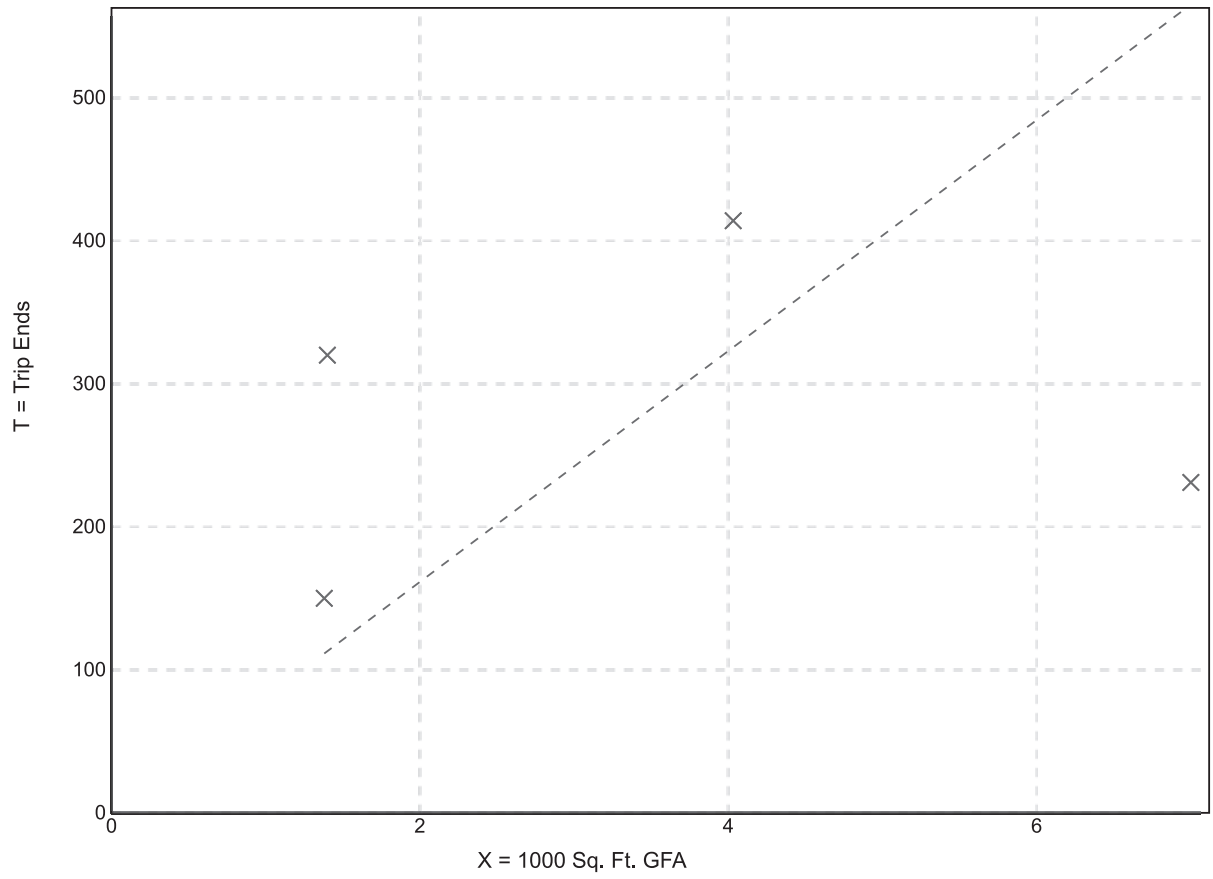
Setting/Location: **Rural**
Number of Studies: 4
1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
80.73	33.00 - 228.57	69.17

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

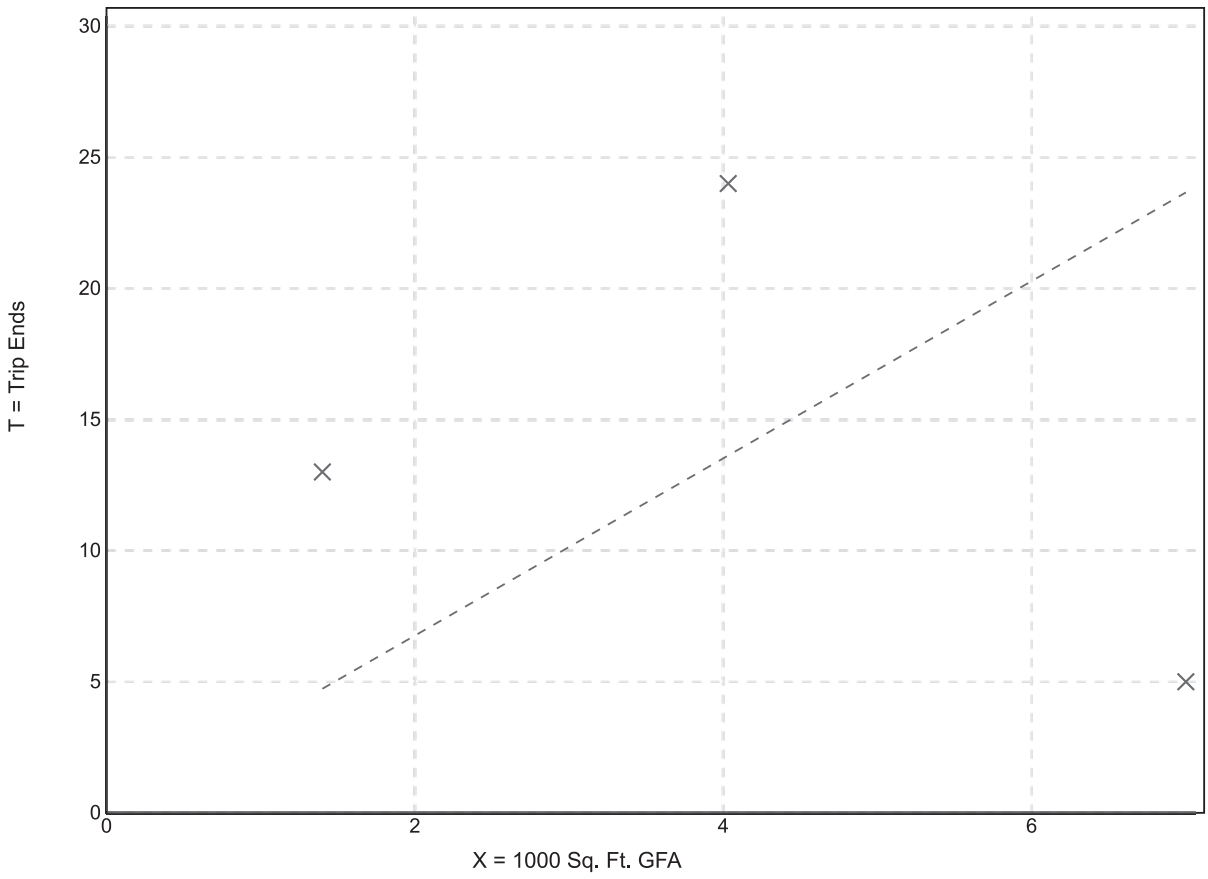
Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Friday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**Rural**
Number of Studies:	3
1000 Sq. Ft. GFA:	4
Directional Distribution:	46% entering, 54% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.38	0.71 - 9.29	7.82

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

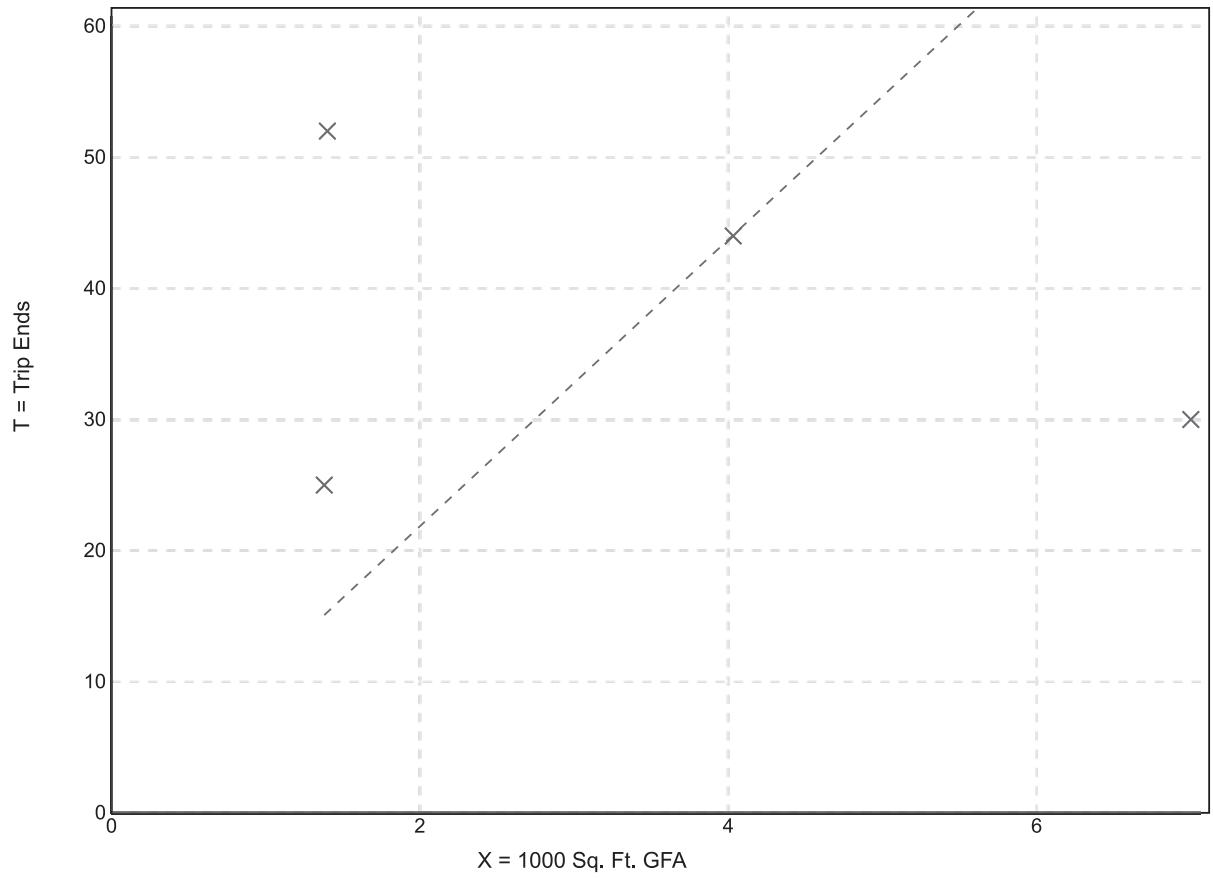
Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Friday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**Rural**
Number of Studies:	4
1000 Sq. Ft. GFA:	3
Directional Distribution:	30% entering, 70% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.93	4.29 - 37.14	11.38

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Friday,**
AM Peak Hour of Generator

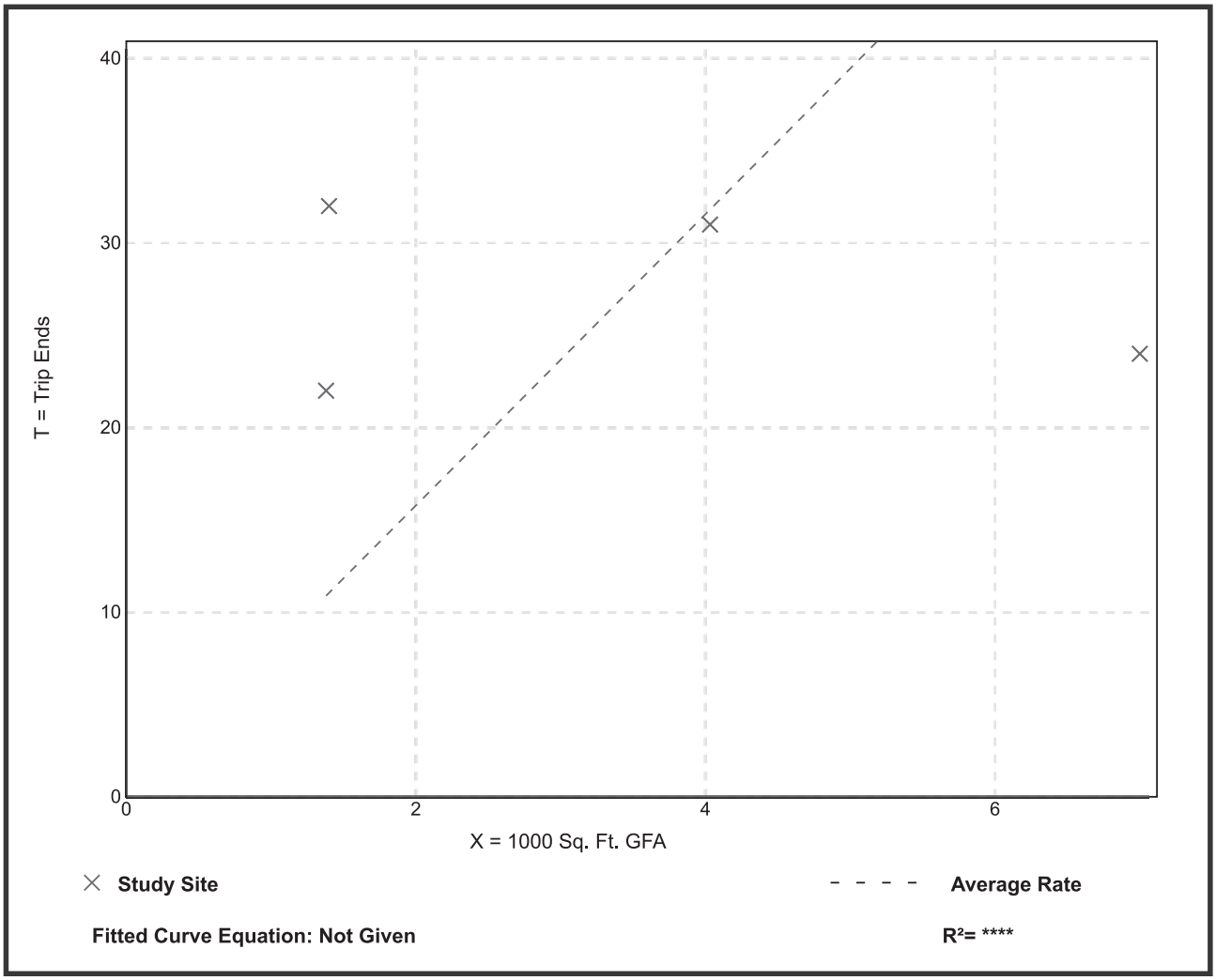
Setting/Location: **Rural**
Number of Studies: 4
1000 Sq. Ft. GFA: 3
Directional Distribution: 71% entering, 29% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
7.89	3.43 - 22.86	7.24

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Friday,**
PM Peak Hour of Generator

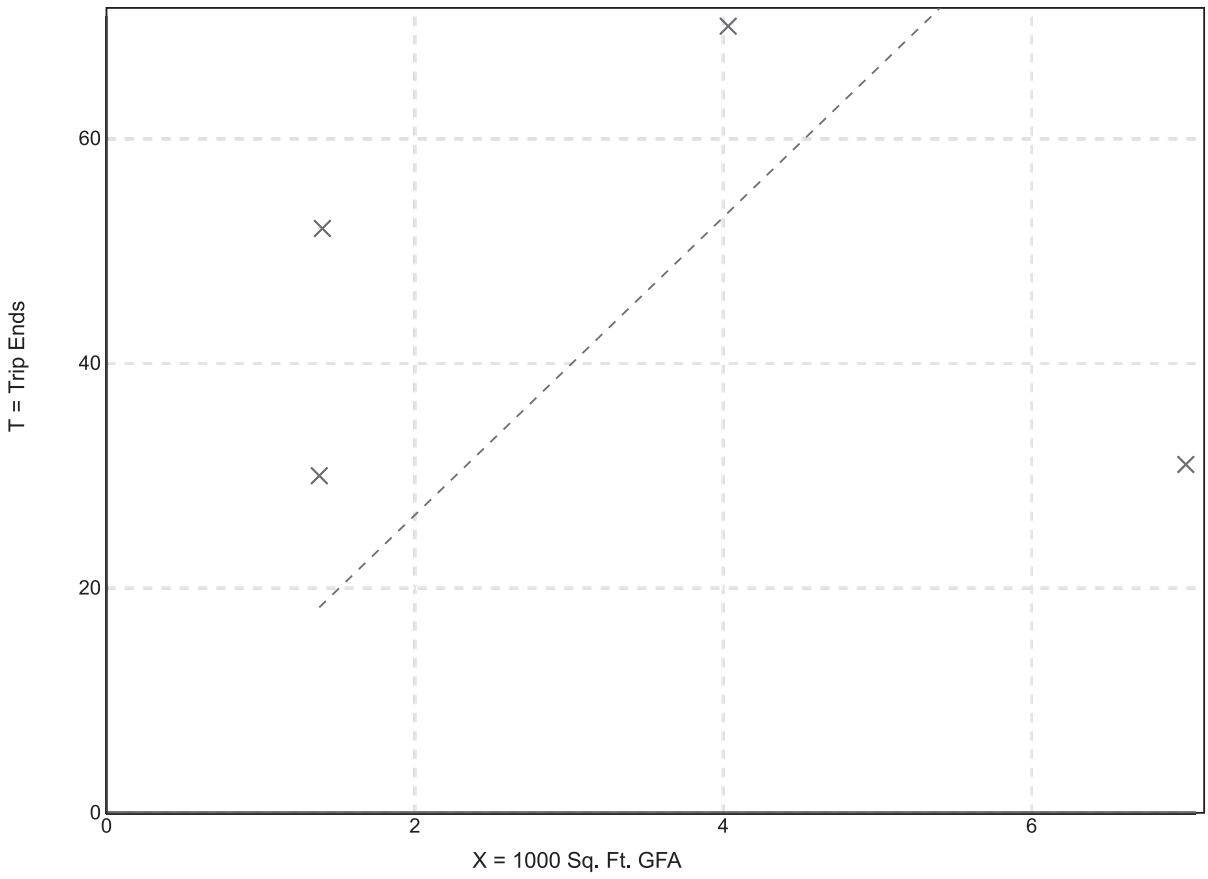
Setting/Location: **Rural**
Number of Studies: 4
1000 Sq. Ft. GFA: 3
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
13.25	4.43 - 37.14	12.08

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Winery
(970)

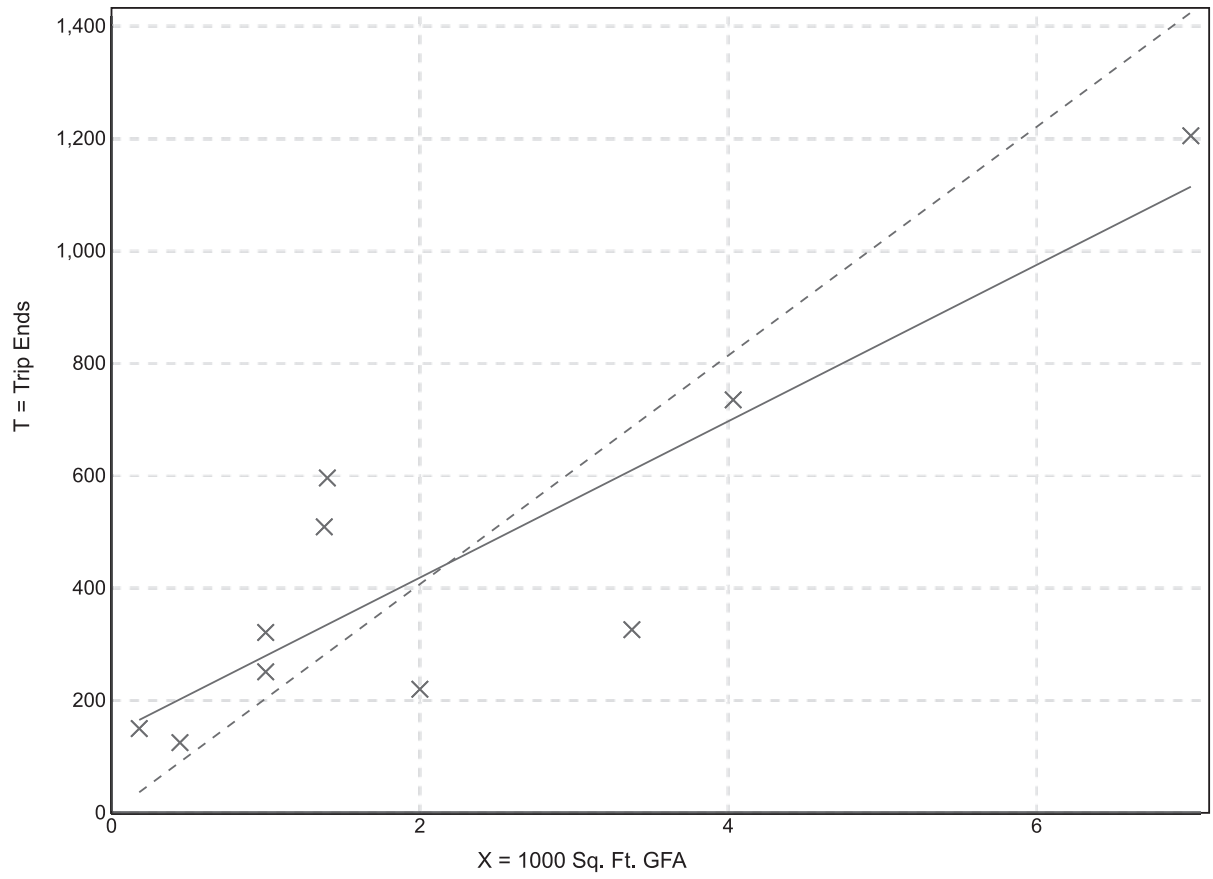
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday**

Setting/Location: **Rural**
Number of Studies: 10
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
203.48	96.59 - 833.33	115.48

Data Plot and Equation



Fitted Curve Equation: T = 139.15(X) + 140.30

R^2= 0.76

Winery
(970)

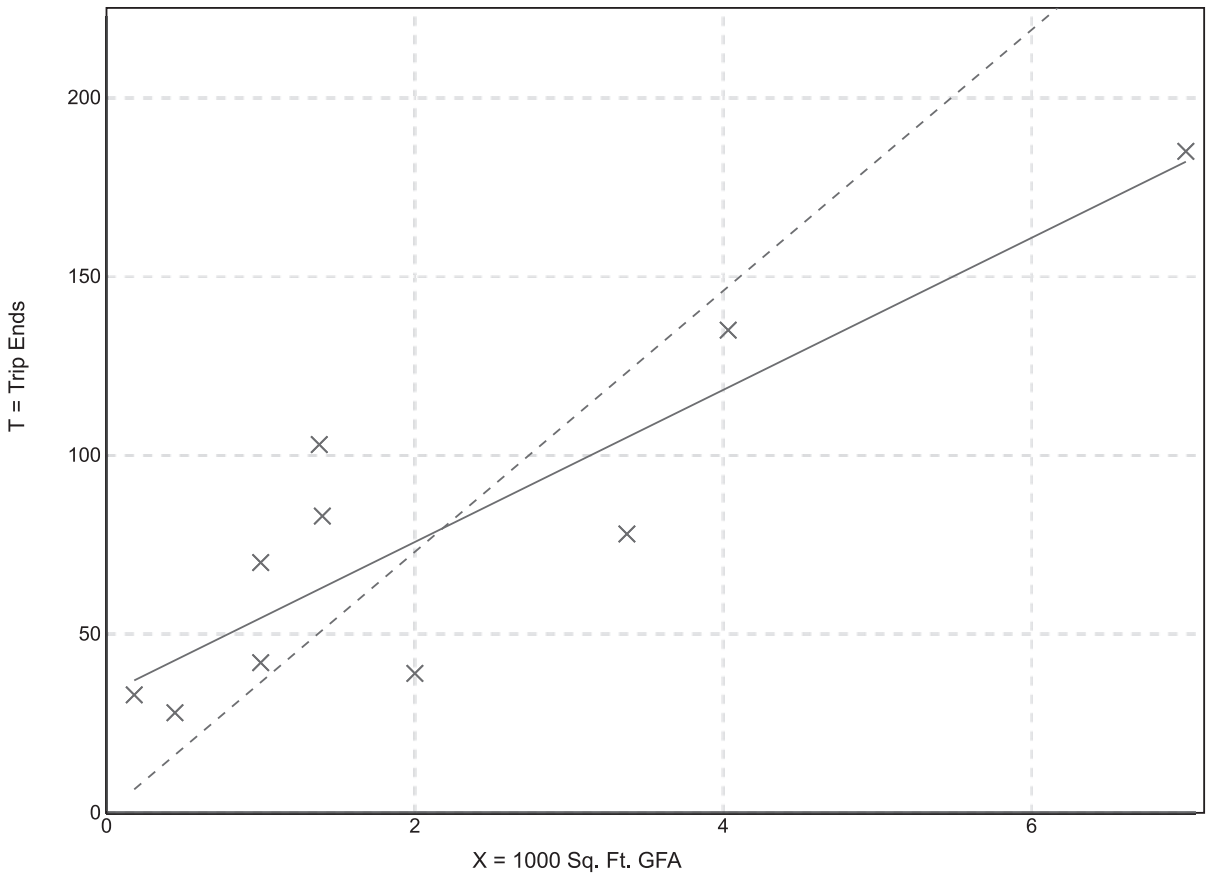
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **Rural**
Number of Studies: 10
1000 Sq. Ft. GFA: 2
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
36.50	19.50 - 183.33	22.58

Data Plot and Equation



Fitted Curve Equation: T = 21.27(X) + 33.21

R^2= 0.78

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Sunday**

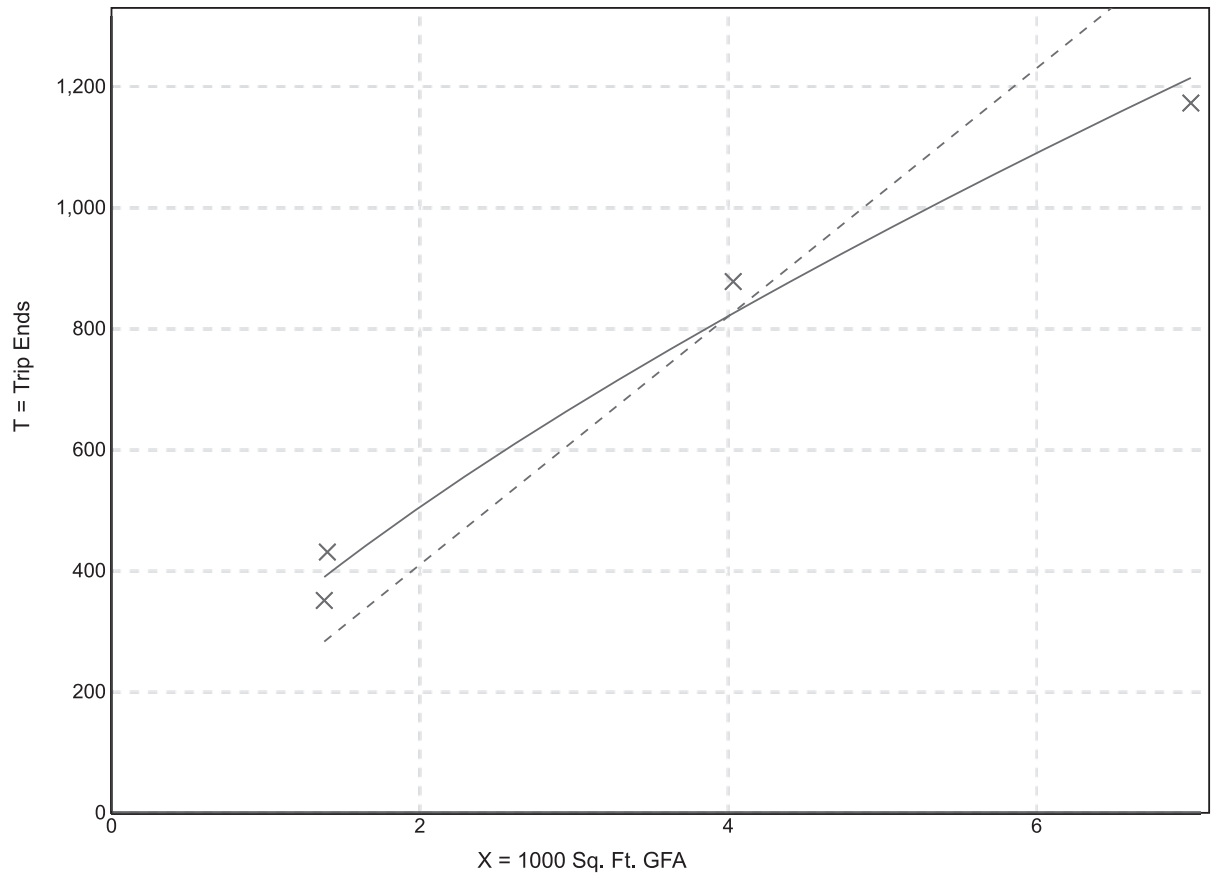
Setting/Location: **Rural**
Number of Studies: 4
1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
205.11	167.57 - 307.86	52.58

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Ln(T) = 0.70 Ln(X) + 5.74

R^2= 0.98

Winery
(970)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Sunday, Peak Hour of Generator**

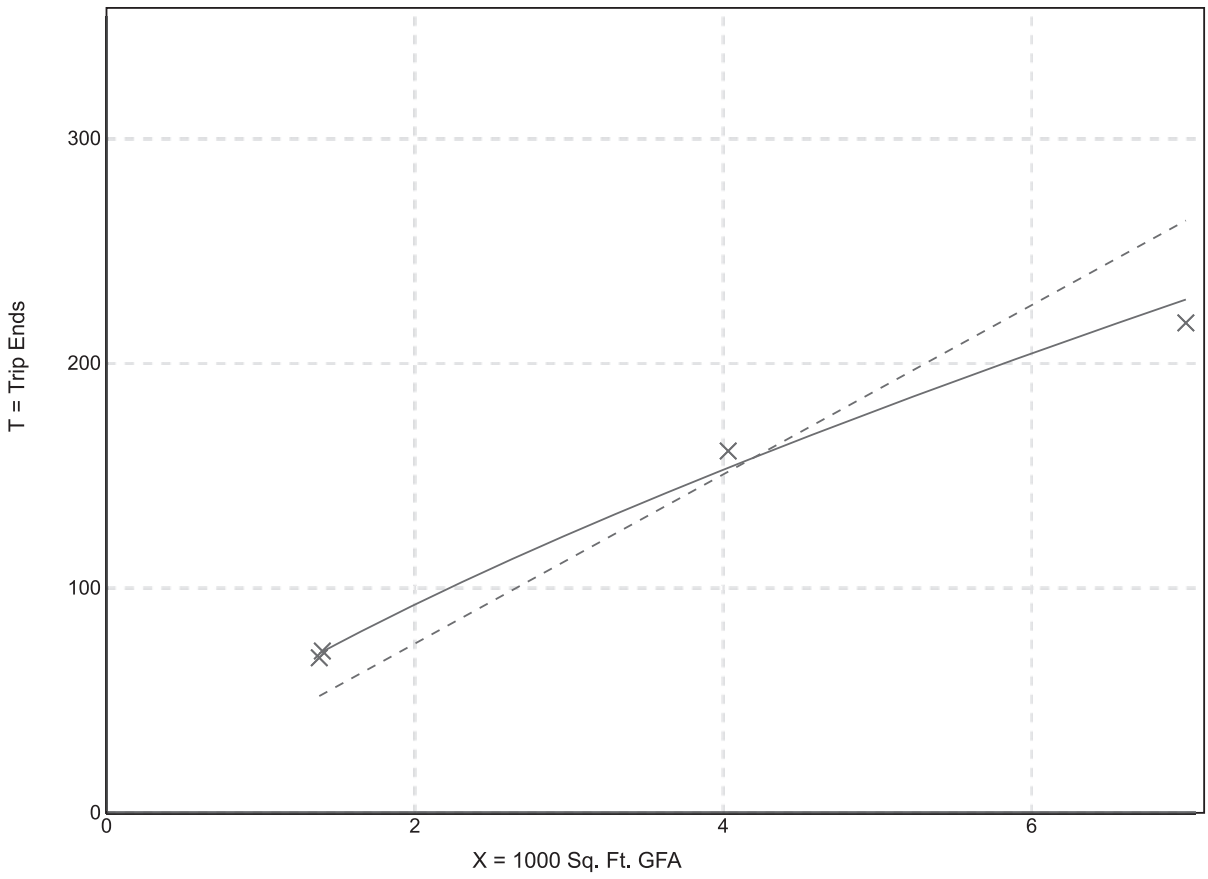
Setting/Location: **Rural**
Number of Studies: 4
1000 Sq. Ft. GFA: 3
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
37.65	31.14 - 51.43	8.75

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Ln(T) = 0.72 Ln(X) + 4.03

R^2= 0.99