



Memo

February 6, 2024

RE: SP 23-05 Northwest RE LLC additional information

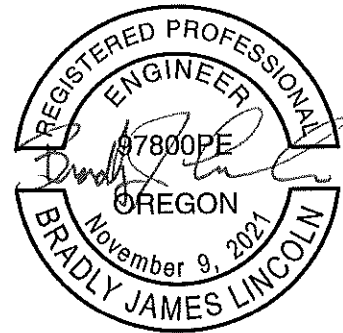
1. Staff proposes to change Condition of Approval number 3 so that it reads:
 3. *Applicant shall comply with all applicable federal and state laws for the site development, including, but not limited to, applying for all applicable federal and state permits. Applicant shall provide the City with copies of all applicable federal and state permits.*
2. The applicant has submitted additional details on the traffic impact study. Those are attached and hereby introduced to the record.
3. The Linn County Roads Department has provided comments for the record dated February 6, 2024. Those are attached and hereby introduced to the record.
4. As requested in the County comment email dated February 6, 2024, the following conditions of approval is proposed to be added to the project:

The applicant shall obtain a commercial access permit from the Linn County Road Department and provide evidence of the approved permit to the City.

Prior to the City final inspection, the applicant shall provide evidence to the City that all applicable requirements of the Linn County Road Department email dated February 6, 2024, have been met to the satisfaction of the Road Department.

MEMORANDUM

To: Janelle Booth, PE, City of Millersburg
From: Brad Lincoln, PE
Kimley-Horn and Associates, Inc.
Date: February 5, 2024
Subject: Delorean Development – Traffic Comment Response



EXPIRES: 12/31/2024

Kimley-Horn and Associates, Inc. (Kimley-Horn) has been retained to provide a comment response memorandum for the proposed Delorean Development (Development). This response memo addresses comments provided by City of Millersburg (City) staff pertaining to the trip generation and access evaluation.

1. Trip Generation

The trip generation calculations in the traffic impact analysis for the site were performed using average trip generation rates published by the Institute of Transportation Engineers (ITE) for Land Use Code (LUC) 140, Manufacturing. ITE identifies that "type of activity may vary substantially from one facility to another." This would lead to the assumption that the trip generation could also vary substantially from one facility to another. The trip generation in the traffic impact analysis was higher than what the site is anticipated to generate, but was meant to provide a conservatively high estimate to represent a factor of safety. The trip generation has therefore been revised based on other rates and land uses published by ITE and accounting for the anticipated uses of the site.

1.1. ITE Trip Generation

The trip generation has been updated using ITE data and broken into individual uses in the building. The Development is proposed to consist of manufacturing space, warehouse space, and office space. The trip generation has therefore been updated based on the following ITE LUC:

- ITE LUC 140, Manufacturing – 326,262 square-feet (SF)
- ITE LUC 150, Warehousing – 156,383 SF
- ITE LUC 710, General Office Building – 17,298 SF

Additionally, the low range of the ITE trip generation rates for manufacturing have been used for the calculations to account for shift changes not occurring during the peak-hours. The revised ITE trip generation calculations are summarized in **Table 1**.

Table 1. ITE Trip Generation Summary

Land Use	Size	Average Daily Trips (ADTs)			AM Peak-Hour Trips			PM Peak-Hour Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
Manufacturing	326,262 SF	136	135	271	2	1	3	7	16	23
Warehousing	156,383 SF	134	133	267	21	6	27	8	20	28
General Office	17,298 SF	94	94	188	23	3	26	4	21	25
Total	499,943 SF	364	362	726	46	10	56	19	57	76

The Development would be anticipated to generate approximately 726 ADT with 56 trips occurring during the AM peak-hour and 76 trips occurring during the PM peak-hour. The ITE trip generation would be inclusive of employee, visitor, and truck trips. The trip generation calculations using the ITE data is included in the attachments.

1.2. Anticipated Trip Generation

The trip generation calculations were also performed based on the anticipated use of the site, including the anticipated employment level and the manufacturing staff working in two 12-hour shifts. The trip generation based on the anticipated use has been calculated for the total employment, which could take several years to accomplish. The truck traffic has also been included separately since the employee numbers would not account for truck traffic. The anticipated use includes:

- First Shift – approximately 95 total employees
- Second Shift – approximately 55 total employees
- Trucks – 170 daily trucks

The trip generation has been calculated assuming each employee accounts for 3 daily trips, to include an inbound trip, an outbound trip, and half of the employees having a round-trip during the day. The trucks are anticipated to account for 2 daily trips, one inbound and one outbound trip. The peak-hour trip generation has been calculated to assume a full shift change and 10 total truck trips, based on anticipated distribution of truck trips throughout the day. Under this scenario the shift change is anticipated to occur during the AM and PM peak-hours. However, the shift changes are likely to occur before 7:00 AM and after 6:00 PM, which would be outside the AM peak-hour and the PM peak-hour. The anticipated trip generation is summarized in Table 2.

Table 2. Anticipated Trip Generation Summary

Generator	Size	Average Daily Trips (ADTs)			AM Peak-Hour Trips			PM Peak-Hour Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
First Shift	95 employees	143	143	286	95	0	95	0	95	95
Second Shift	55 employees	83	83	166	0	55	55	55	0	55
Trucks	170 trucks	170	170	340	5	5	10	5	5	10
Total	---	396	396	792	100	60	160	60	100	160

The Development would be anticipated to generate approximately 792 ADT with 160 trips occurring during the AM peak-hour and 160 trips occurring during the PM peak-hour, assuming there is a full shift change during the AM and PM peak-hours. This is not actually likely to occur based on two 12-hour shifts operating at the site and shifts starting before 7:00 AM and ending after 6:00 PM. The anticipated trip generation, particularly for the AM and PM peak-hours, should be considered conservative based on the actual operations.

1.3. Trip Generation Summary

The trip generation calculations based on the three separate uses in the building and using the low end of the ITE data shows daily trip generation rates that are similar to the anticipated daily trip generation for the site. The AM and PM peak-hour trip generation are still likely still higher than what will actually occur based on the anticipated shift changes. It is important to note that the trip generation using the separate ITE land uses and the anticipated use of the site are significantly lower than what was previously identified and analyzed in the traffic impact analysis.

2. Access Evaluation

Linn County (County) staff expressed concerns regarding the access to Old Salem Road, the potential for relocating that access, and what measures would be in place to ensure only trucks would utilize the Old Salem Road access. The access to Old Salem Road is only proposed to be used by trucks since separating truck and general vehicle access improves the safety of the site, particularly for pedestrians. The access to Old Salem Road is proposed to include signing designating it as a truck access only and will be gated to prevent general vehicles from using the access.

The access to Old Salem Road is also proposed since a truck access to the future Transition Parkway alignment would result in critical environmental impacts. Additionally, the trucks would have to use the roadway along the fire station frontage, which could lead to blockages. The access to Old Salem Road for trucks therefore results in safer operations and reduces impacts to critical areas.

Lastly, the truck access to Old Salem Road is not anticipated to have significant truck traffic, particularly during the AM and PM peak-hours. These factors should help reduce the impacts of the access to Old Salem Road on the general traffic along the roadway.

ATTACHMENTS

Land Use: 140 Manufacturing

Description

A manufacturing facility is an area where the primary activity is the conversion of raw materials or parts into finished products. Size and type of activity may vary substantially from one facility to another. In addition to the actual production of goods, a manufacturing facility typically has an office and may provide space for warehouse, research, and associated functions. General light industrial (Land Use 110) and industrial park (Land Use 130) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Minnesota, Missouri, New Jersey, New York, Oregon, Pennsylvania, South Dakota, Texas, Vermont, Washington, and West Virginia.

Source Numbers

177, 179, 184, 241, 357, 384, 418, 443, 583, 598, 611, 728, 747, 875, 879, 940, 969, 1067, 1068, 1082

Manufacturing (140)

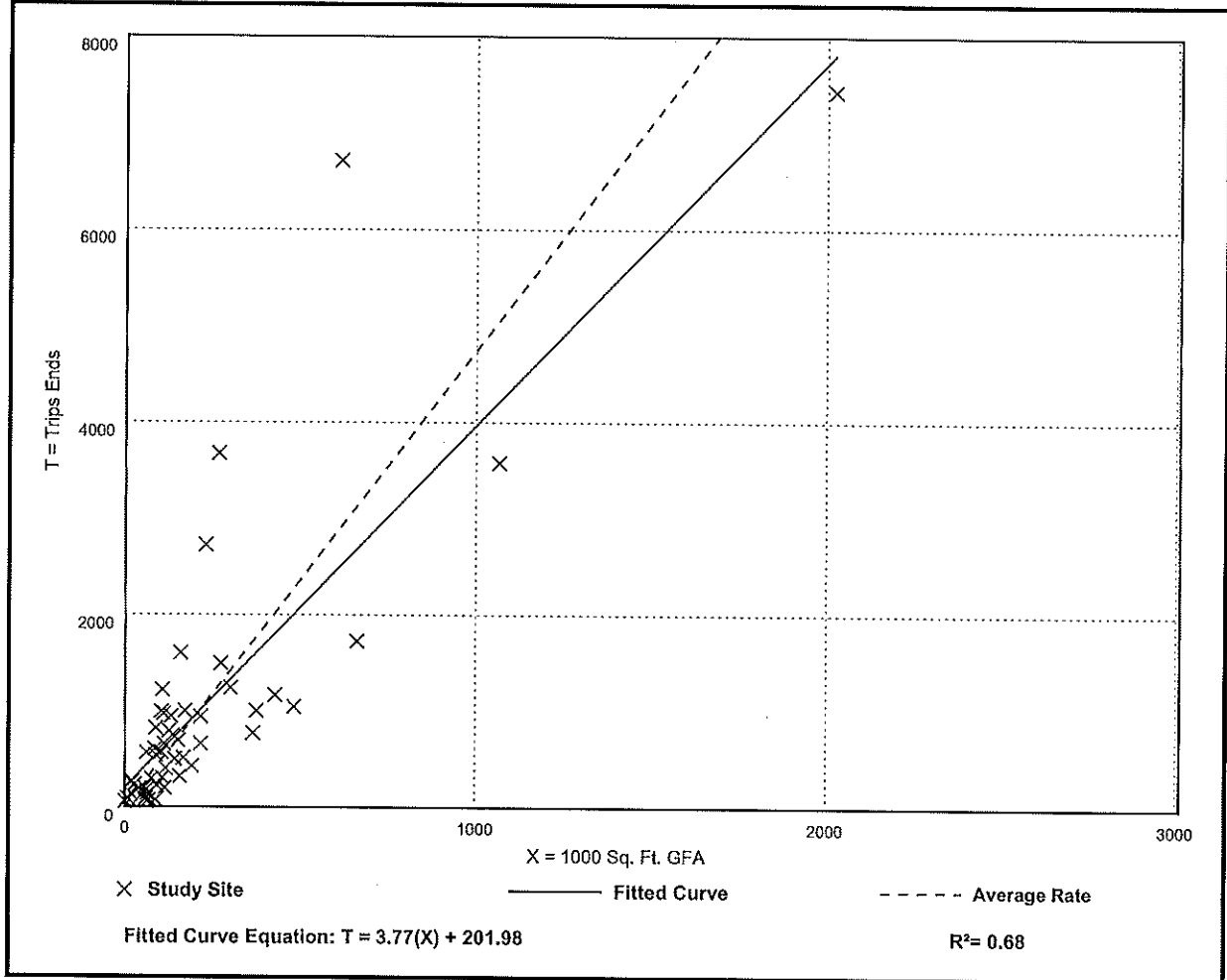
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 53
Avg. 1000 Sq. Ft. GFA: 208
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.75	0.83 - 49.50	3.20

Data Plot and Equation



Manufacturing (140)

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: 48

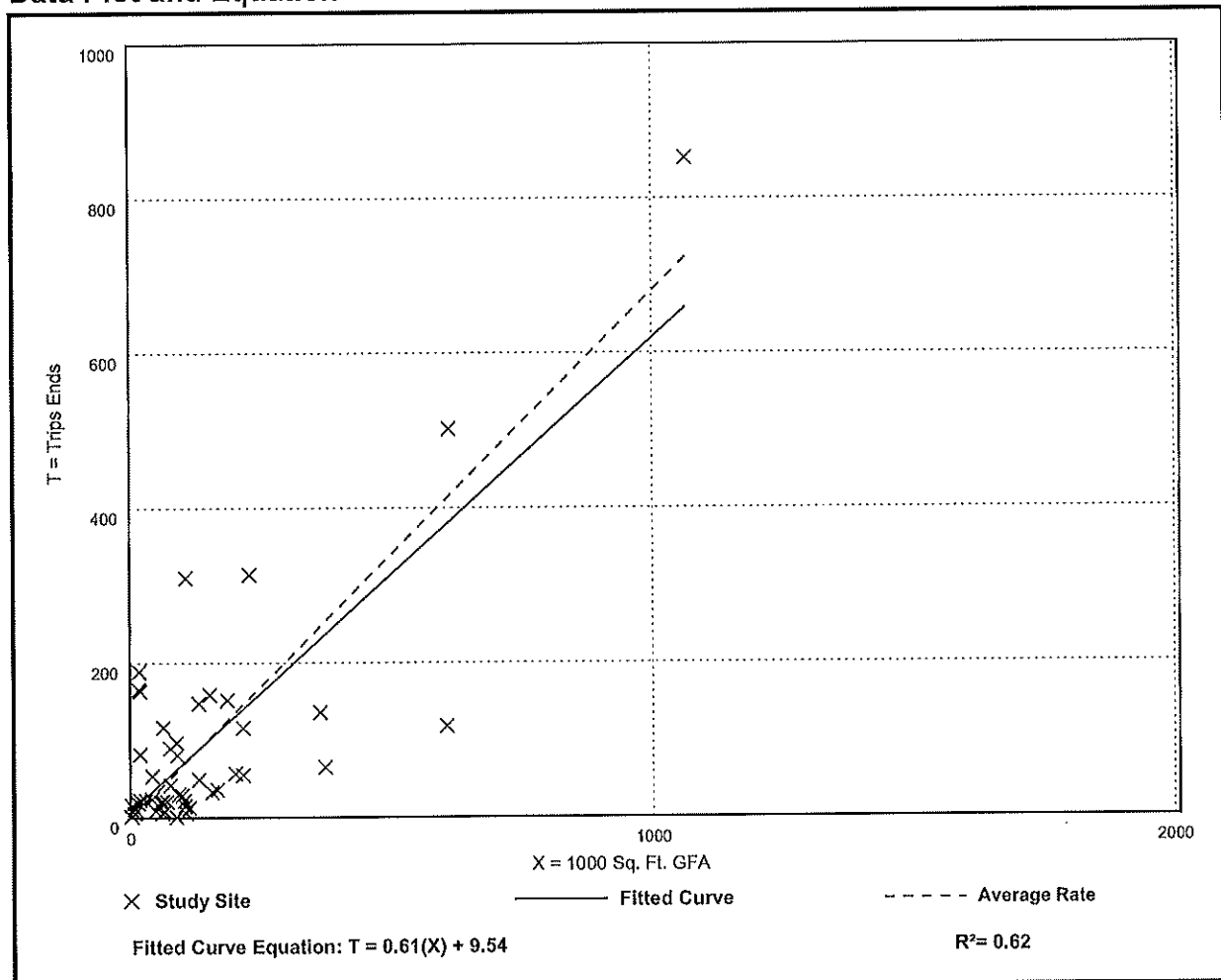
Avg. 1000 Sq. Ft. GFA: 138

Directional Distribution: 76% entering, 24% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.68	0.01 - 11.93	1.03

Data Plot and Equation



Manufacturing (140)

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: 55

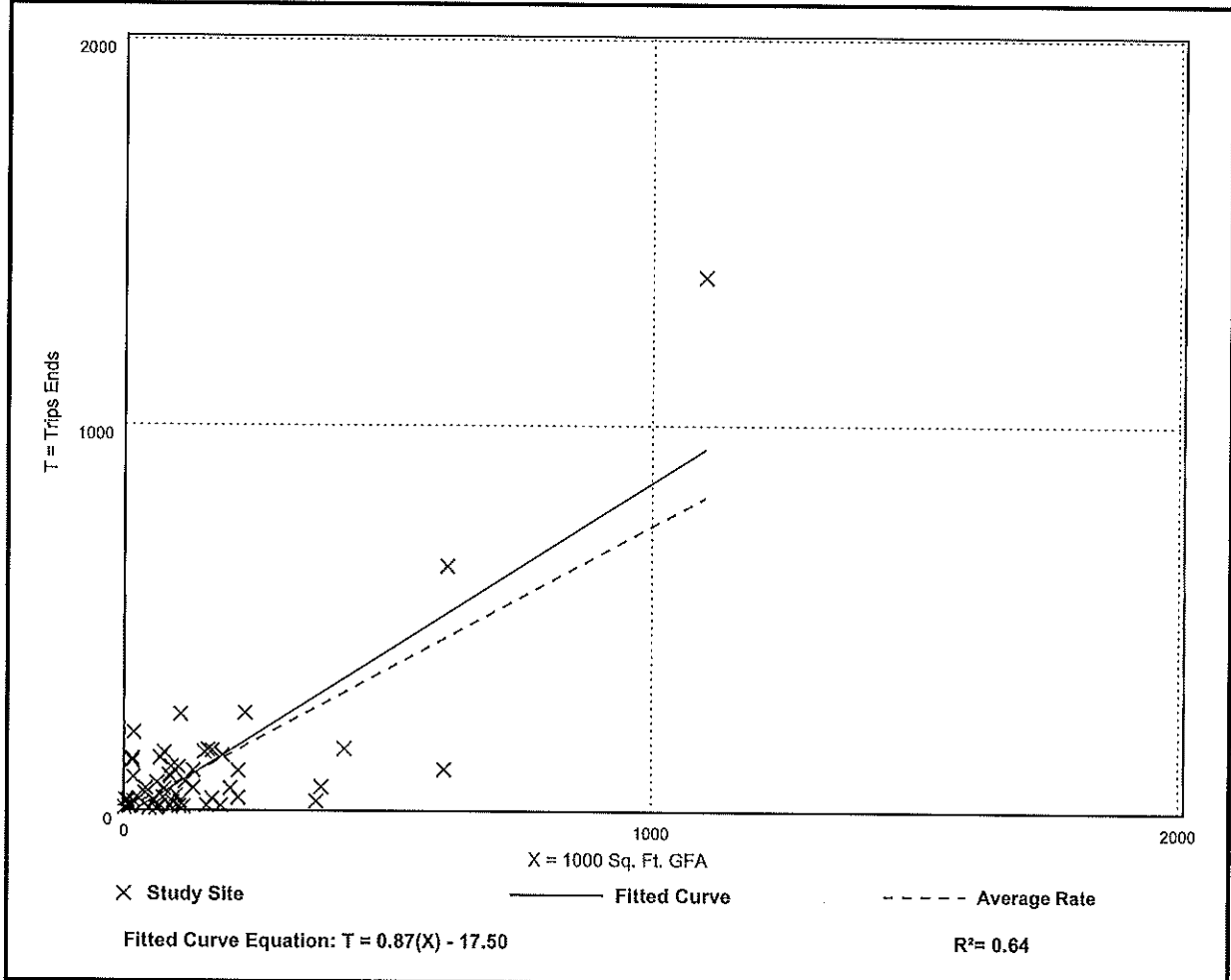
Avg. 1000 Sq. Ft. GFA: 142

Directional Distribution: 31% entering, 69% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.74	0.07 - 11.37	0.93

Data Plot and Equation



Land Use: 150

Warehousing

Description

A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas. High-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas.

Source Numbers

184, 331, 406, 411, 443, 579, 583, 596, 598, 611, 619, 642, 752, 869, 875, 876, 914, 940, 1050

Warehousing (150)

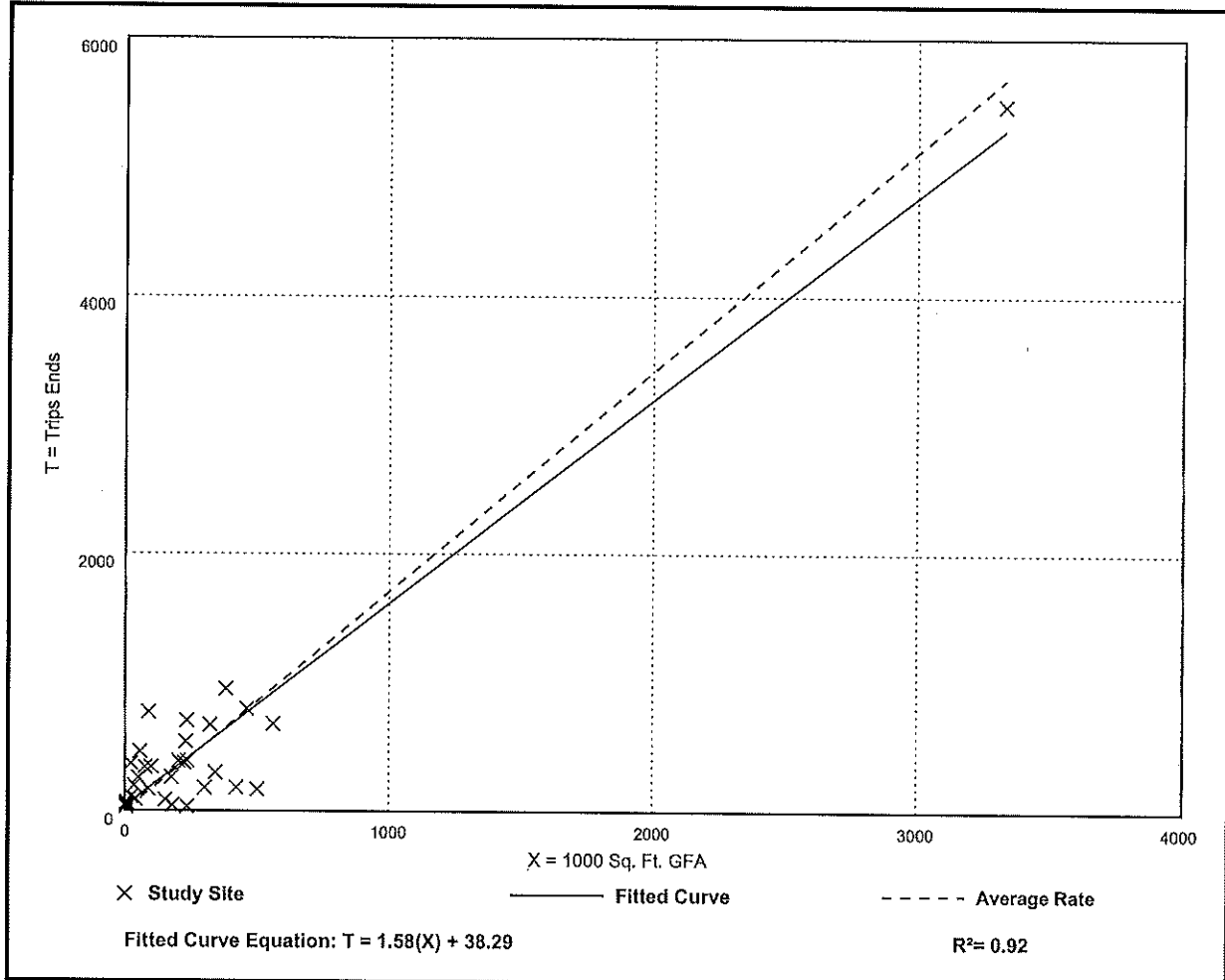
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. 1000 Sq. Ft. GFA: 292
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.71	0.15 - 16.93	1.48

Data Plot and Equation



Warehousing (150)

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: 36

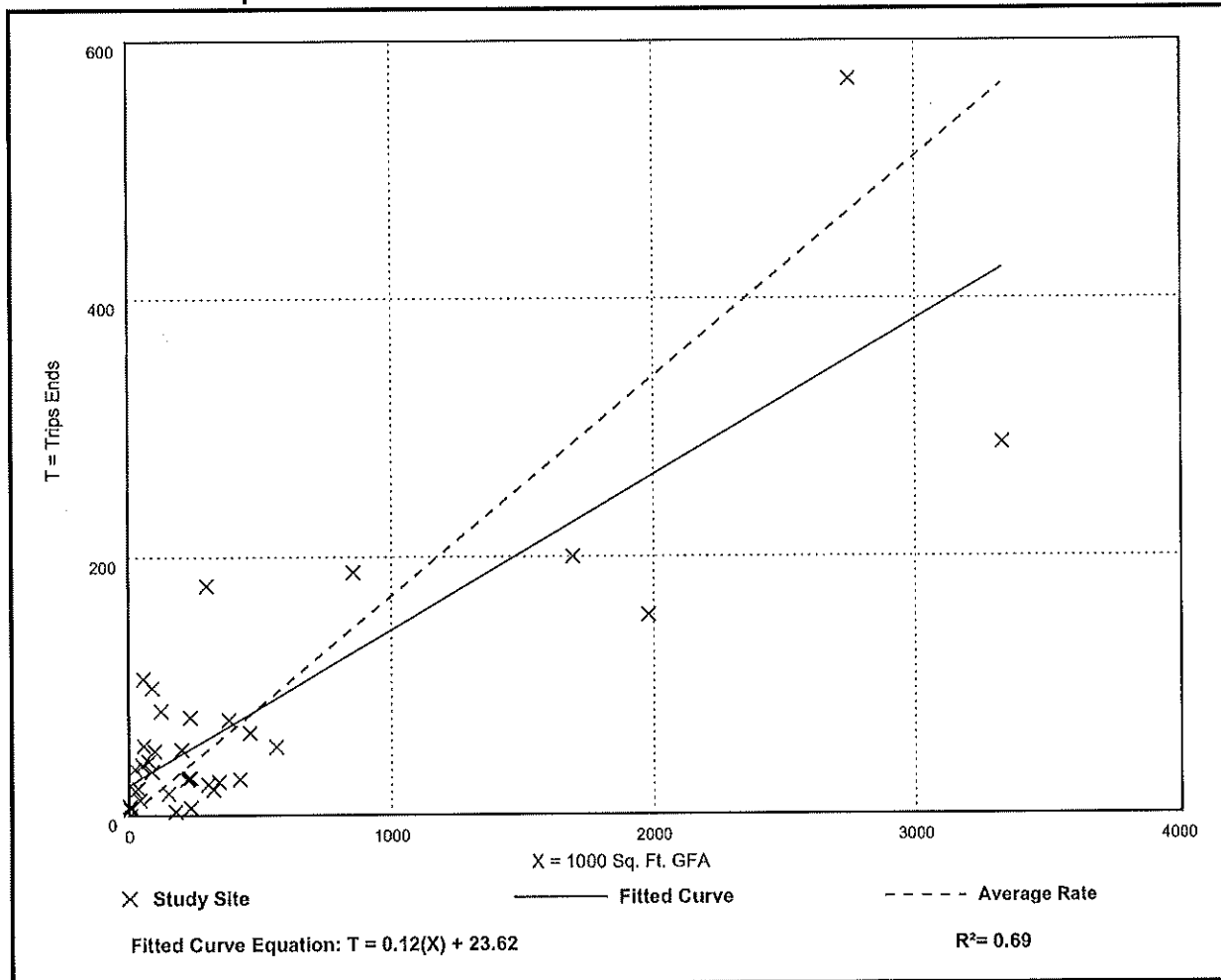
Avg. 1000 Sq. Ft. GFA: 448

Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.19

Data Plot and Equation



Warehousing (150)

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: 49

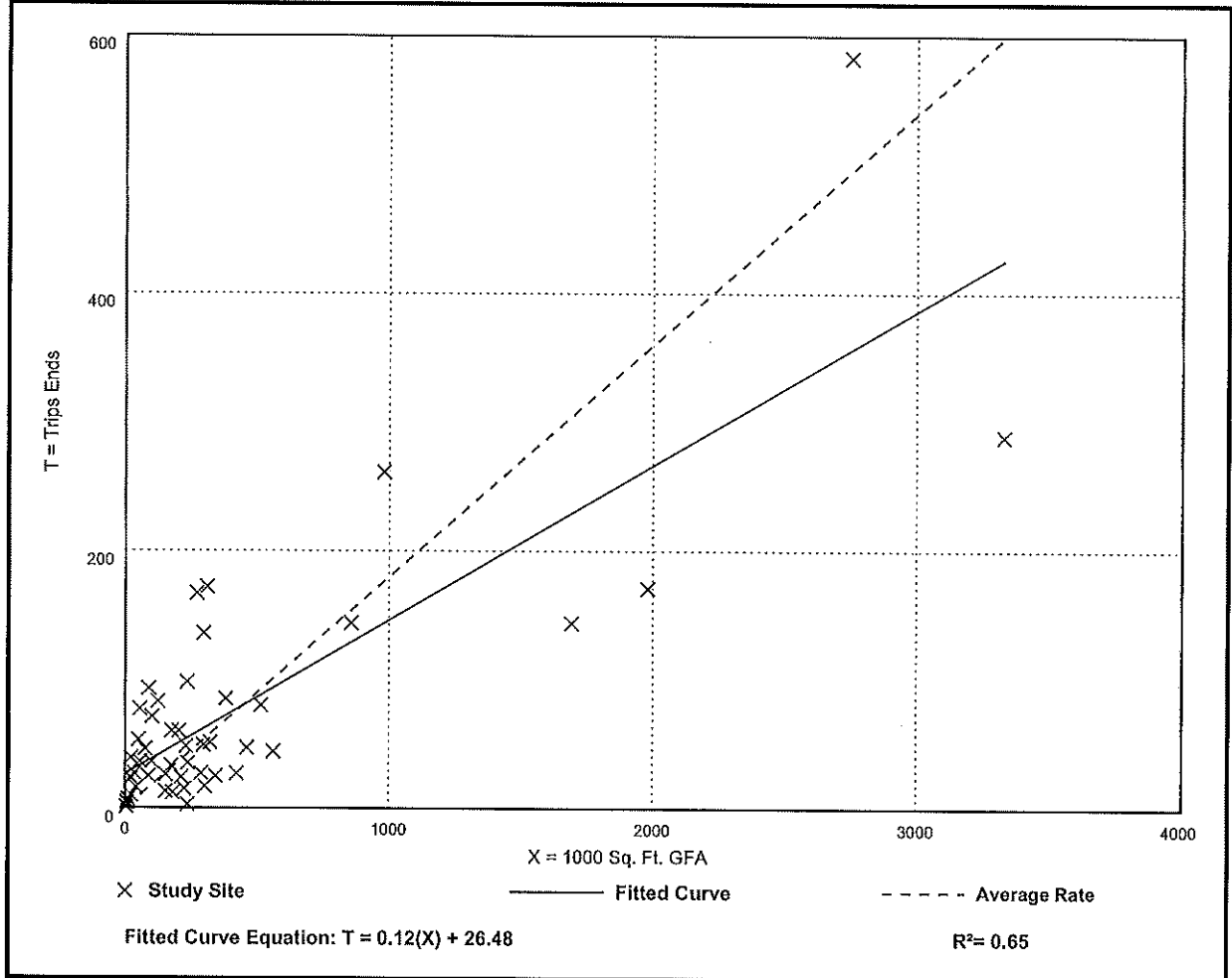
Avg. 1000 Sq. Ft. GFA: 400

Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.01 - 1.80	0.18

Data Plot and Equation



Land Use: 710

General Office Building

Description

A general office building is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building houses multiple tenants that can include, as examples, professional services, insurance companies, investment brokers, a banking institution, a restaurant, or other service retailers. A general office building with a gross floor area of 10,000 square feet or less is classified as a small office building (Land Use 712). Corporate headquarters building (Land Use 714), single tenant office building (Land Use 715), medical-dental office building (Land Use 720), office park (Land Use 750), research and development center (Land Use 760), and business park (Land Use 770) are additional related uses.

Additional Data

If two or more general office buildings are in close physical proximity (within a close walk) and function as a unit (perhaps with a shared parking facility and common or complementary tenants), the total gross floor area or employment of the paired office buildings can be used for calculating the site trip generation. If the individual buildings are isolated or not functionally related to one another, trip generation should be calculated for each building separately.

For study sites with reported gross floor area and employees, an average employee density of 3.3 employees per 1,000 square feet GFA (or roughly 300 square feet per employee) has been consistent through the 1980s, 1990s, and 2000s. No sites counted in the 2010s reported both GFA and employees.

The average building occupancy varies considerably within the studies for which occupancy data were provided. The reported occupied gross floor area was 88 percent for general urban/suburban sites and 96 percent for the center city core and dense multi-use urban sites.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The average numbers of person trips per vehicle trip at the eight center city core sites at which both person trip and vehicle trip data were collected are as follows:

- 2.8 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 2.9 during Weekday, AM Peak Hour of Generator
- 2.9 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 3.0 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 18 dense multi-use urban sites at which both person trip and vehicle trip data were collected are as follows:

- 1.5 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.5 during Weekday, AM Peak Hour of Generator
- 1.5 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.5 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 23 general urban/suburban sites at which both person trip and vehicle trip data were collected are as follows:

- 1.3 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.3 during Weekday, AM Peak Hour of Generator
- 1.3 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.4 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New York, Ontario (CAN) Pennsylvania, Texas, Utah, Virginia, and Washington.

Source Numbers

161, 175, 183, 184, 185, 207, 212, 217, 247, 253, 257, 260, 262, 273, 279, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 419, 423, 562, 734, 850, 859, 862, 867, 869, 883, 884, 890, 891, 904, 940, 944, 946, 964, 965, 972, 1009, 1030, 1058, 1061

General Office Building (710)

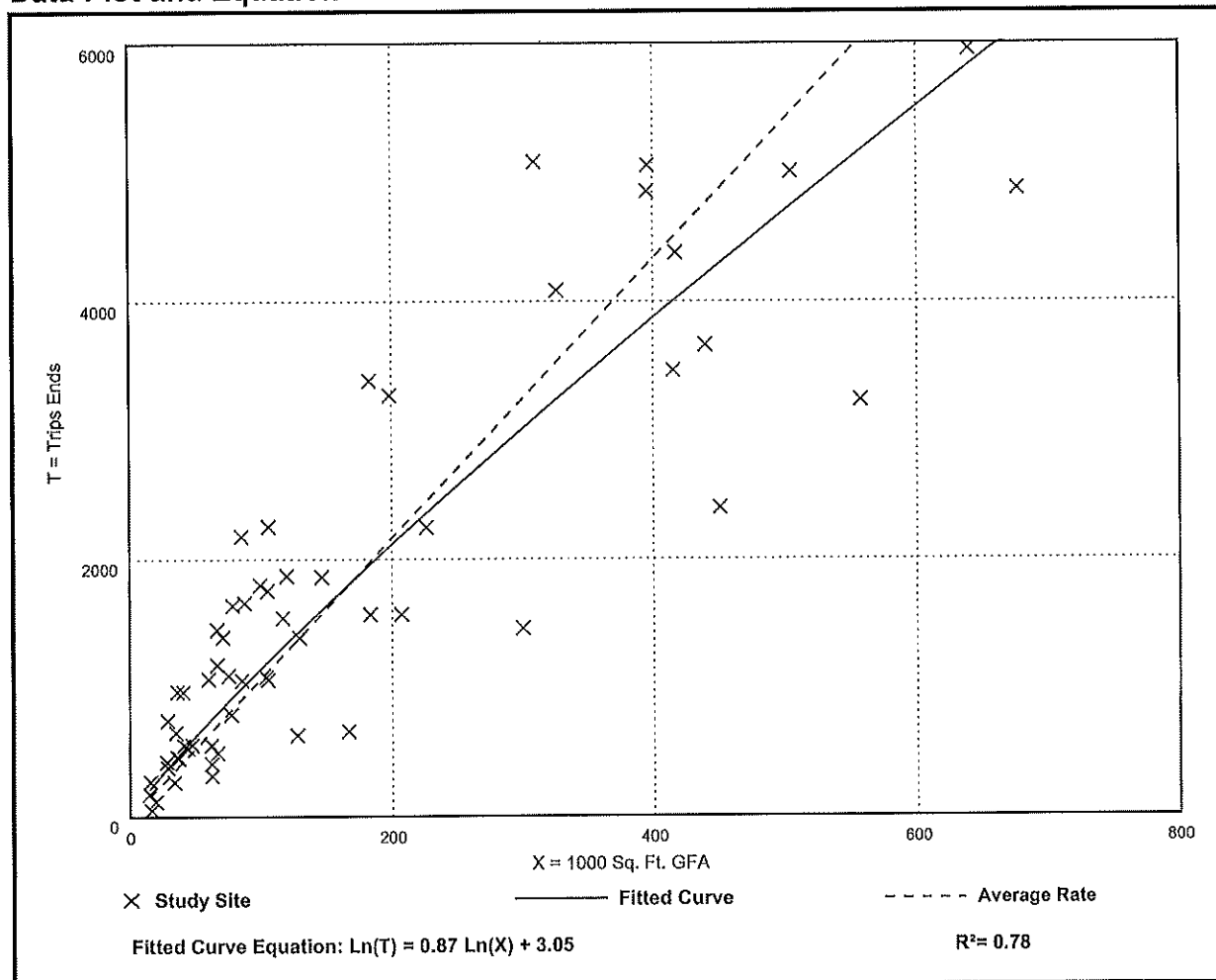
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 59
Avg. 1000 Sq. Ft. GFA: 163
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.84	3.27 - 27.56	4.76

Data Plot and Equation



General Office Building (710)

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: 221

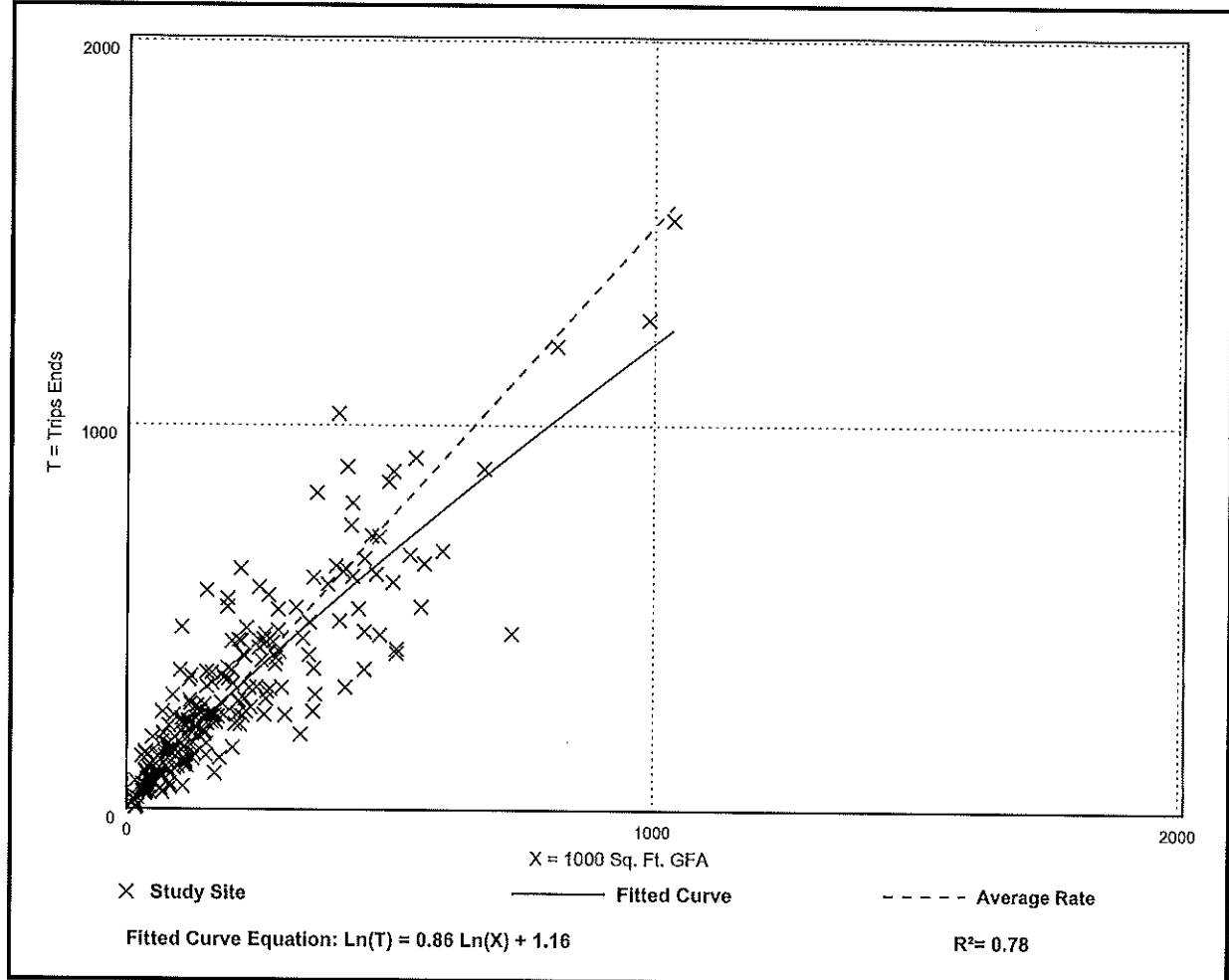
Avg. 1000 Sq. Ft. GFA: 201

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

Data Plot and Equation



General Office Building (710)

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: 232

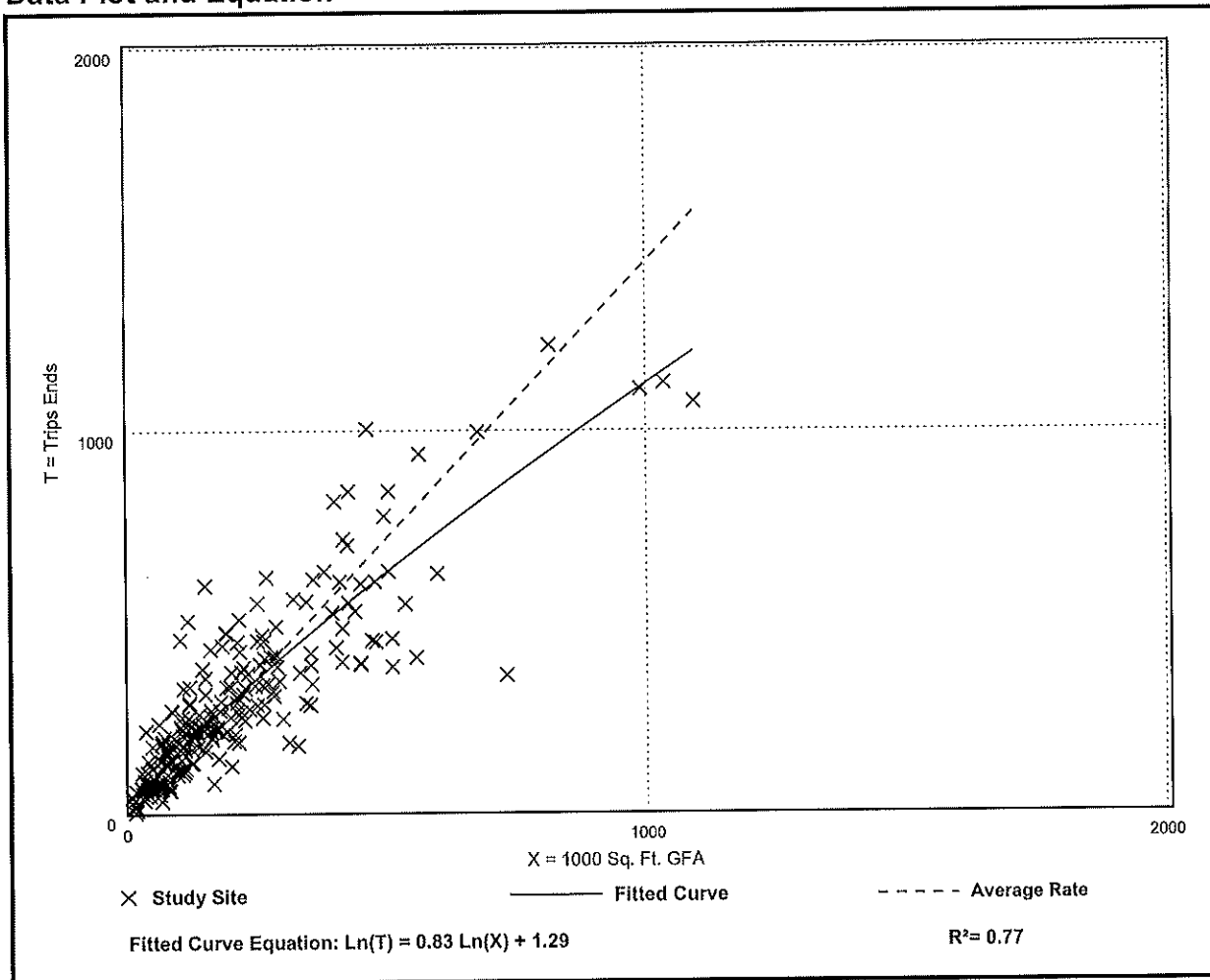
Avg. 1000 Sq. Ft. GFA: 199

Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



Project Delorean
090147000

Trip Generation for: Weekday
(a.k.a.): Average Weekday Daily Trips (AWDT)

LAND USES	VARIABLE	ITE LU code	Gross Trips				Internal Crossover	NET EXTERNAL TRIPS BY TYPE							
			Trip Rate	% IN	% OUT	In+Out (Total)		IN BOTH DIRECTIONS		DIRECTIONAL ASSIGNMENTS					
								TOTAL	PASS-BY	DIVERTED LINK	NEW	PASS-BY	DIVERTED LINK	NEW	
						In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In	Out	In	Out		
Manufacturing	326.262 K SF	140	0.83	50%	50%	271	0%	0	0%	0	0	0	0	136	135
Warehousing	156.383 K SF	150	1.71	50%	50%	267	0%	0	0%	0	0	0	0	134	133
General Office	17,298 K SF	710	10.84	50%	50%	188	0%	0	0%	0	0	0	0	94	94
Total						726		0		0		726		364	362

From: [Malone, Daineal](#)
To: [Janelle Booth](#)
Cc: [Matt Straite](#); [Kevin Krellman](#); [Hamilton, Kevin](#)
Subject: RE: DeLorean Traffic Memo
Date: Tuesday, February 6, 2024 12:14:09 PM

Janelle,

Thank you for sending the revised TIA (memo).

The County will require the applicant to obtain a commercial access permit at the time of development. If any stormwater will be conveyed to the County system, there will need to be a stormwater review. We are not anticipating this, just making sure it is noted.

As mentioned previously, the applicant needs to assure that there will be a gate, or some other mechanism, to eliminate employee traffic from utilizing the proposed truck access onto Old Salem Road.

Please let me know if you have any questions.

I also spoke with Wayne regarding the ROW transfer and he did not have any issues with it.

Thanks,

Daineal Malone, P.E.

County Engineer

Linn County Road Department
3010 Ferry St, SW
Albany, OR 97322

Phone: 541-967-3919

Fax: 541-924-0202

From: [Malone, Daineal](#)
To: [Janelle Booth](#)
Cc: [Matt Straite](#); [Kevin Kreitman](#); [Hamilton, Kevin](#)
Subject: RE: DeLorean Traffic Memo
Date: Tuesday, February 6, 2024 1:10:22 PM

Janelle,

Additional conditions –

Applicant shall agree to a future obligation of 30%, or not to exceed \$300,000, for a future signalization of Old Salem Road at, or near, NE Transition Road. This obligation will expire after 15 years.

Thanks,

Daineal Malone, P.E.

County Engineer

Linn County Road Department
3010 Ferry St, SW
Albany, OR 97322

Phone: 541-967-3919

Fax: 541-924-0202

From: [Taylor, Stephanie](#)
To: [Matt Straite](#)
Subject: RE: SB 23-05 Millersburg Project Review request
Date: Thursday, January 18, 2024 2:38:55 PM

Hello Matt,

RE: SP 23-05

Comments from the Linn County Road Department are as follows:

1. Is the proposed, new, access to Old Salem Rd. necessary? The Road Department is hesitant to approve the proposed access. We were under the impression that the City's proposal for "Transition Parkway" was that the accesses, for the development of these properties would all be off of "Transition Parkway".
2. **IF** we do allow the proposed access off of Old Salem, then a commercial access permit will be required.
3. A Traffic Impact Analysis will be required.
4. A Storm water permit and an Erosion control permit may be required.
5. Contact the Linn County Road Department with any questions.

Thanks,

Stephanie Taylor
Linn County Road Department
3010 Ferry Street SW
Albany, OR 97322
staylor@co.linn.or.us
(541) 967-3919

