

Gables On Wabash Traffic Impact Statement – Short Form

1. Project: Gables on Wabash Block: 92 Lot: 25,28,29,33,34
 Applicant: Homes for All Municipality Northfield
 Address: 1823 Wabash Ave, Northfield, NJ

3. ITE Land Use Code: 252 Description: Senior Adult Housing - Detached

4. Size of Development: 77 units

5. Greatest number of vehicle trips in any peak hour based on the ITE Trip Generation Manual: 28

Supporting data:

Trip Generation					
Weekday Daily Volume	Weekday AM Peak Hour Volume	Weekday PM Peak Hour Volume	Saturday Daily Volume	Saturday Peak Hour Volume	Sunday Peak Hour Volume
284	15	21	246	25	28
Trip Distribution at Site Access Point					
Main: 187 Secondary: 94	Main: 10 Secondary: 5	Main: 14 Secondary: 7	Main: 162 Secondary: 81	Main: 17 Secondary: 8	Main: 19 Secondary: 9
Existing Adjacent Roadway Volumes					
1152	87	149	897	81	79

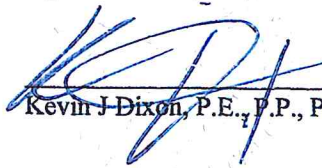
6. For commercial/retail land uses provide a brief statement as the type, frequency, and scheduling of delivery vehicles:
N/A not commercial

7. Is access to the site provided on a Municipal Roadway? Yes: No:
 If "Yes" provide Roadway Name(s): Wabash Avenue

8. Is access to the site provided on a County Roadway? Yes: No:
 If "Yes" provide County Route No.(s) and Roadway Name(s): _____

9. Is access to the site provided on a State Highway? Yes: No:
 If "Yes" provide State Route No.(s) and Roadway Name(s): _____
 If "Yes" is a NJDOT Access Permit Required? Minor: Major: Major (w/ planning): None:

Signature and Seal of New Jersey Licensed Professional Engineer



Kevin J Dixon, P.E., P.P., P.T.O.E., C.M.E. NJ PE License 29678

11/22/21

Date

Land Use: 252

Senior Adult Housing—Attached

Description

Senior adult housing consists of attached independent living developments, including retirement communities, age-restricted housing, and active adult communities. These developments may include limited social or recreational services. However, they generally lack centralized dining and onsite medical facilities. Residents in these communities live independently, are typically active (requiring little to no medical supervision) and may or may not be retired. Senior adult housing—detached (Land Use 251), congregate care facility (Land Use 253), assisted living (Land Use 254), and continuing care retirement community (Land Use 255) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the one general urban/suburban site with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, and the 2000s in Alberta (CAN), California, Illinois, New Hampshire, New Jersey, New York, and Pennsylvania.

Source Numbers

272, 501, 576, 602, 703, 734, 741, 902, 970

Senior Adult Housing - Attached (252)

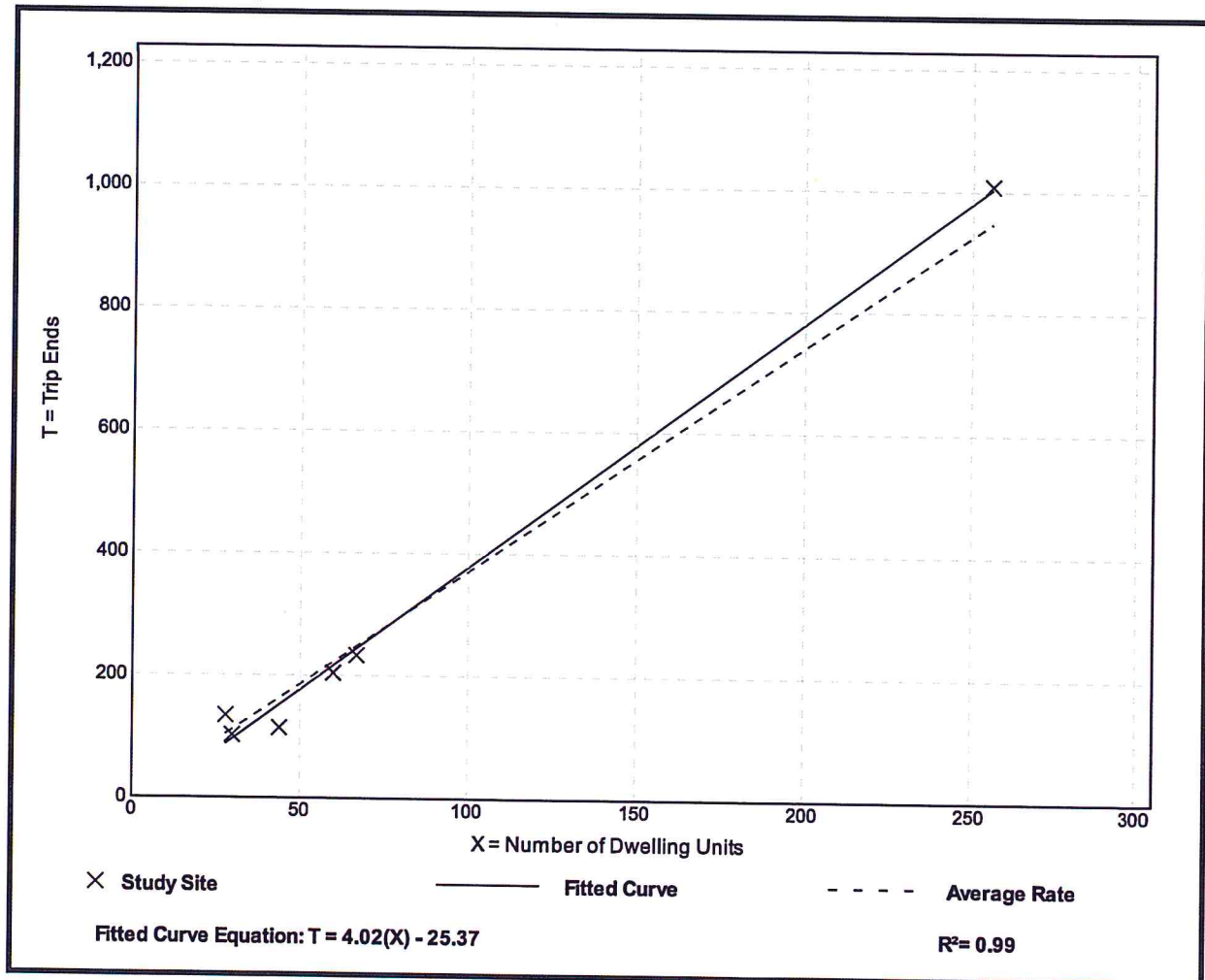
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. Num. of Dwelling Units: 81
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
3.70	2.59 - 4.79	0.53

Data Plot and Equation



Senior Adult Housing - Attached (252)

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: 11

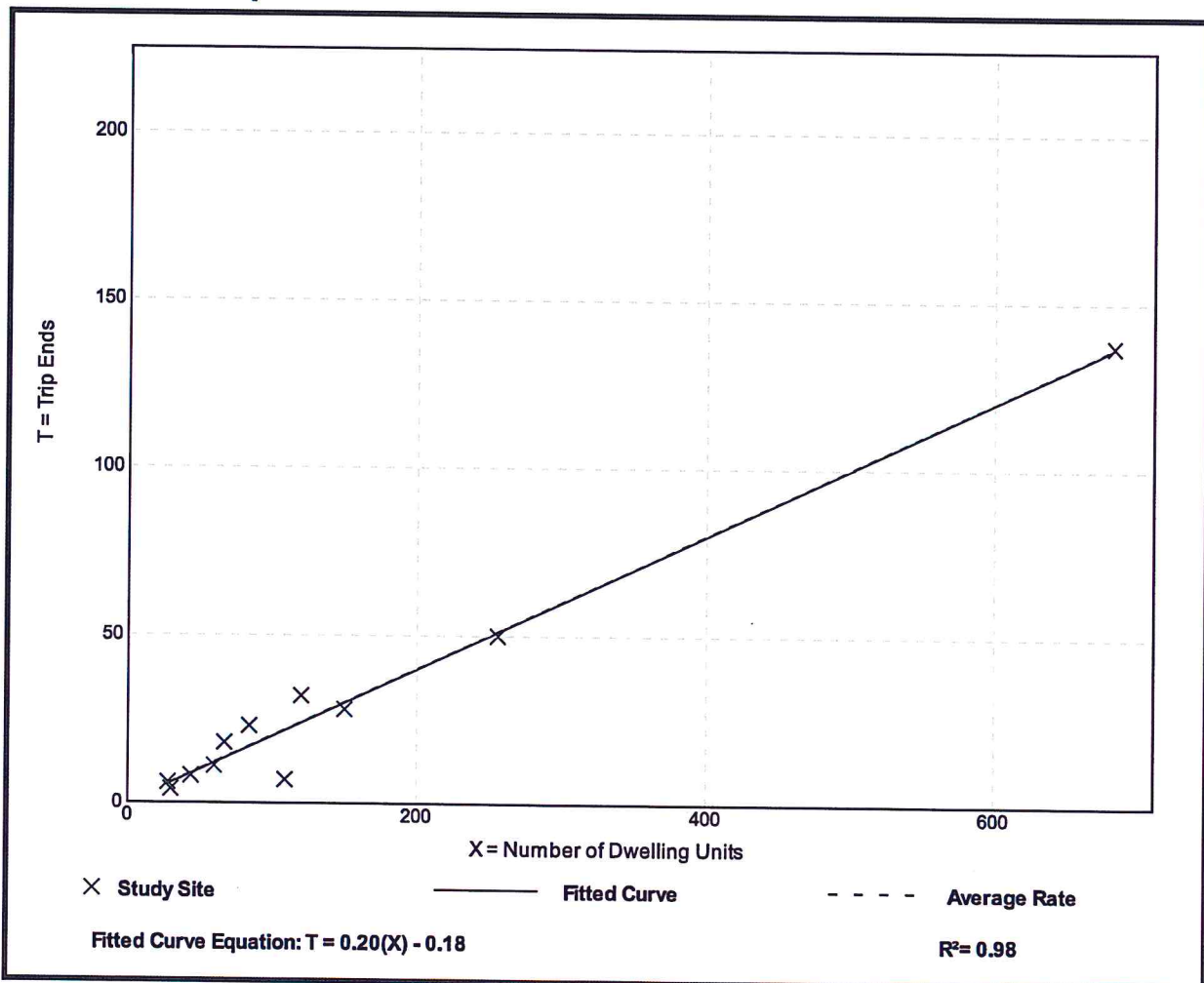
Avg. Num. of Dwelling Units: 148

Directional Distribution: 35% entering, 65% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.20	0.06 - 0.27	0.05

Data Plot and Equation



Senior Adult Housing - Attached (252)

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: 11

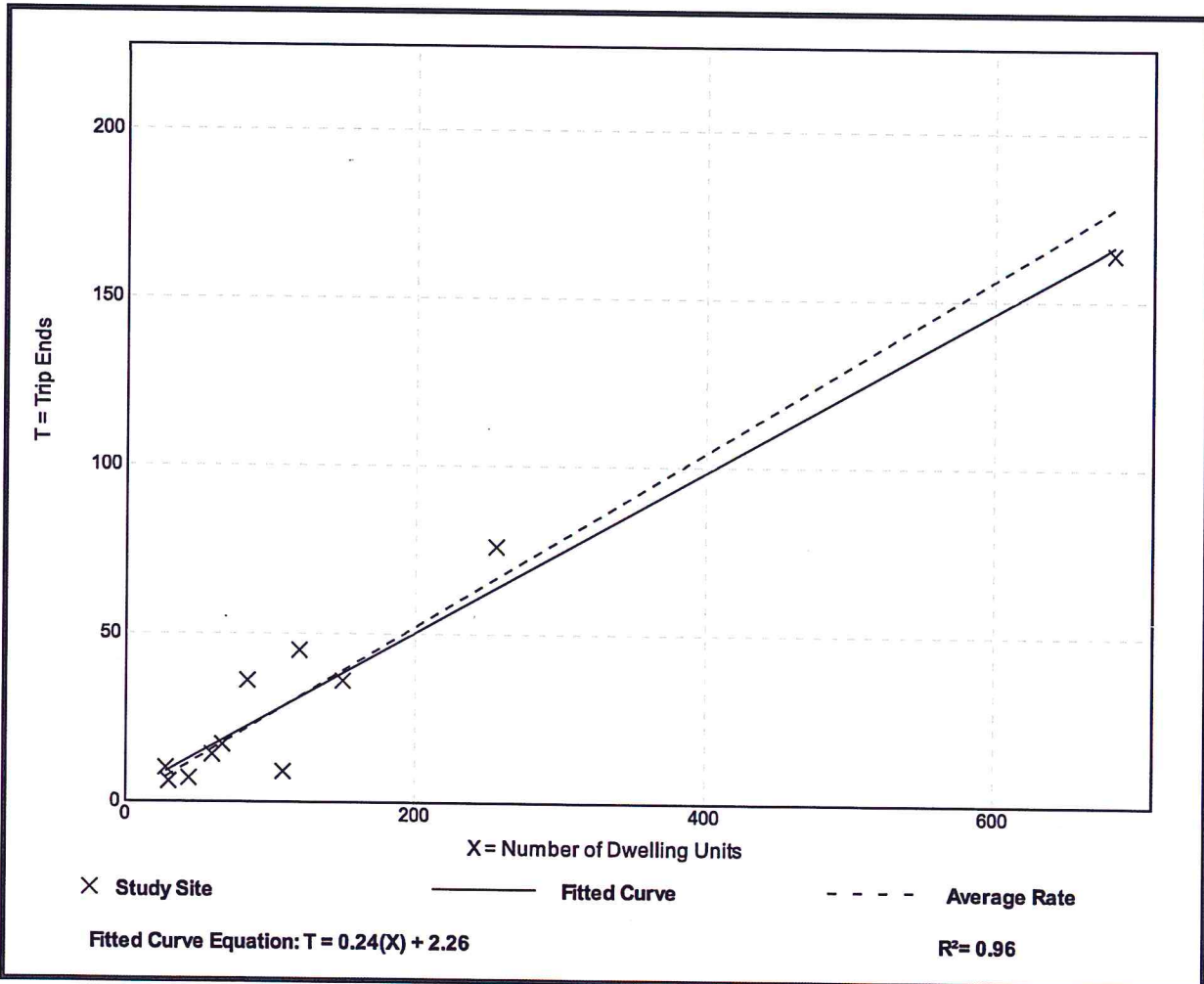
Avg. Num. of Dwelling Units: 148

Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.26	0.08 - 0.43	0.08

Data Plot and Equation



Senior Adult Housing - Attached (252)

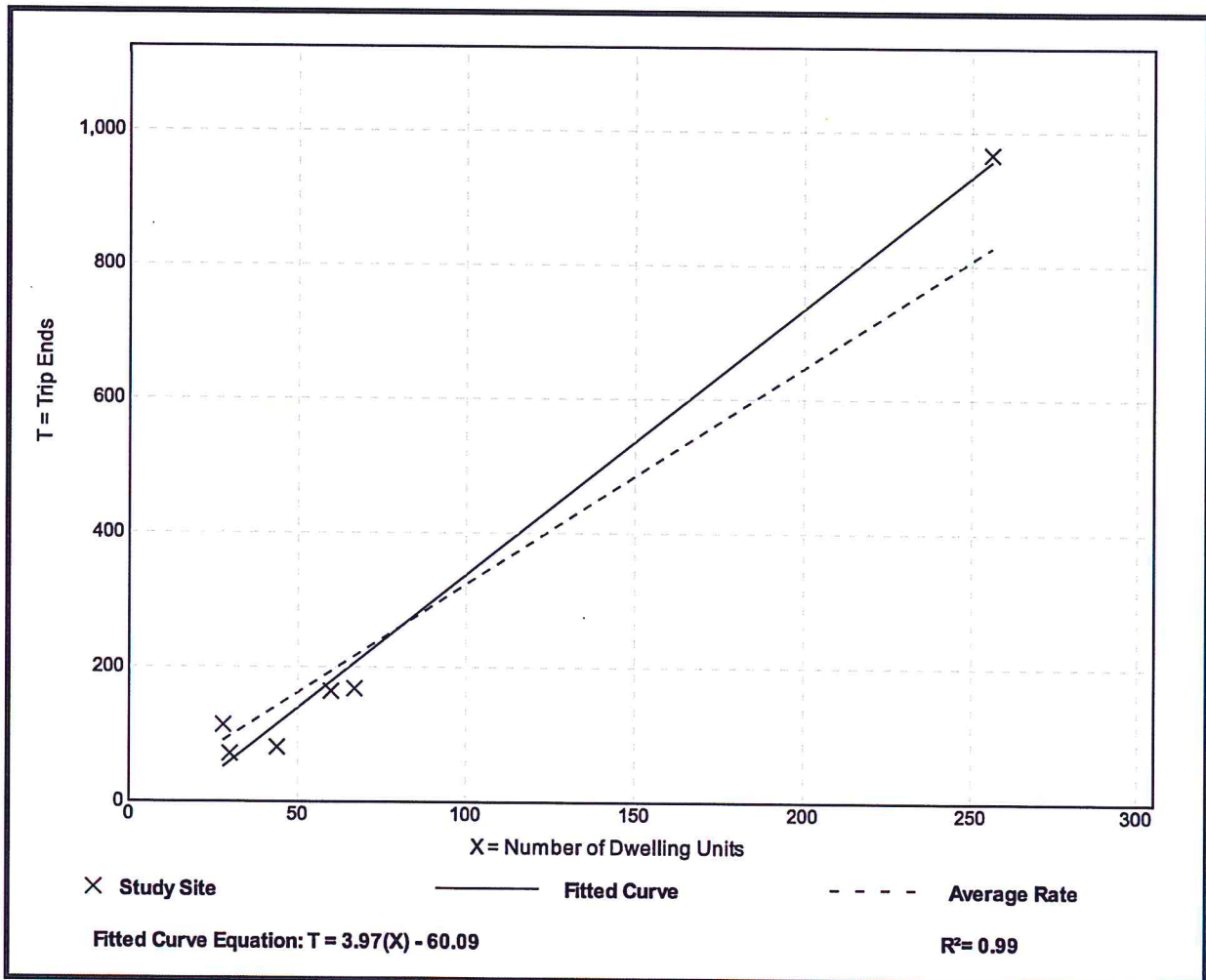
Vehicle Trip Ends vs: Dwelling Units
On a: **Saturday**

Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. Num. of Dwelling Units: 81
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
3.23	1.84 - 4.07	0.79

Data Plot and Equation



Senior Adult Housing - Attached (252)

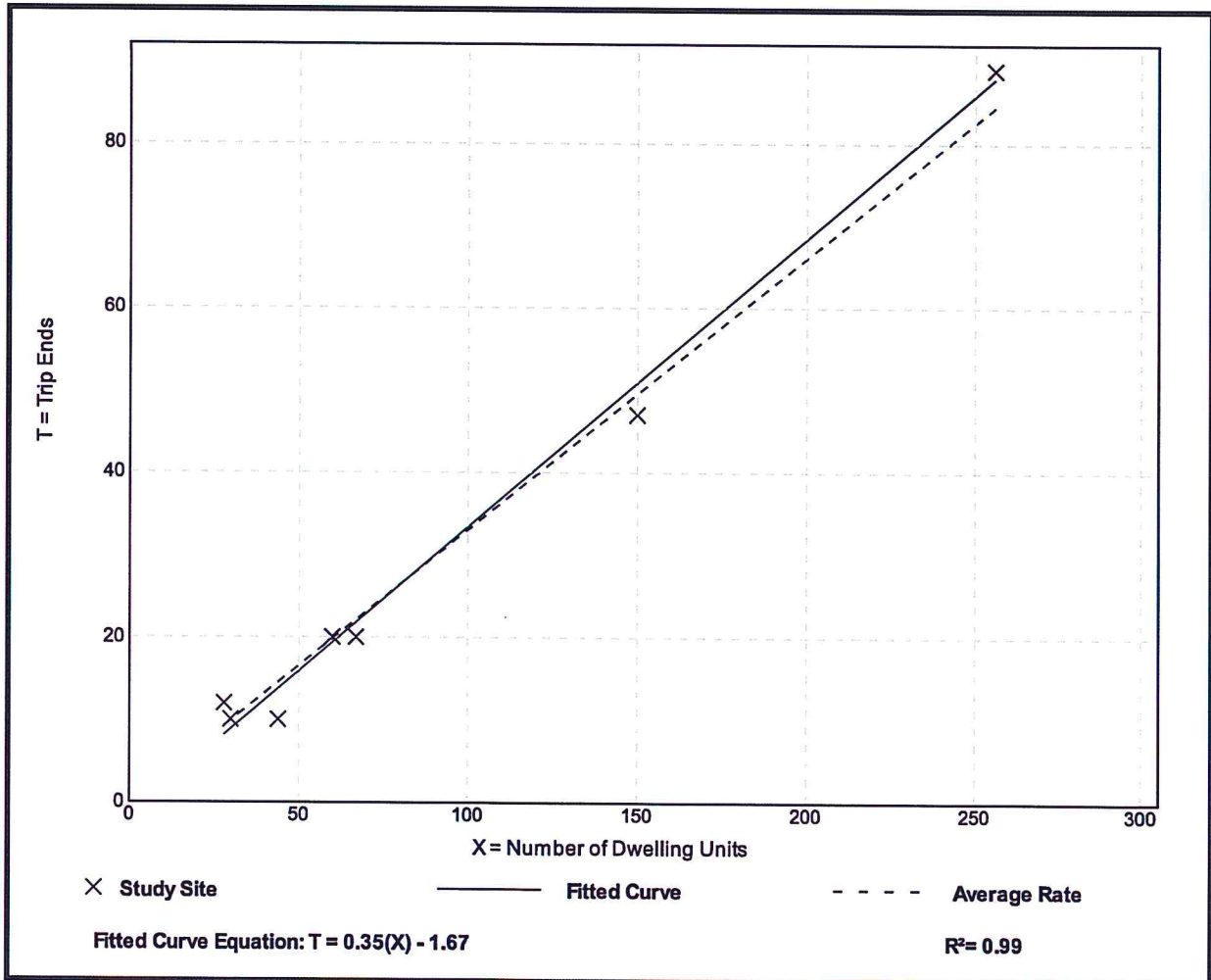
Vehicle Trip Ends vs: Dwelling Units
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 7
 Avg. Num. of Dwelling Units: 91
 Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.33	0.23 - 0.43	0.04

Data Plot and Equation



Senior Adult Housing - Attached (252)

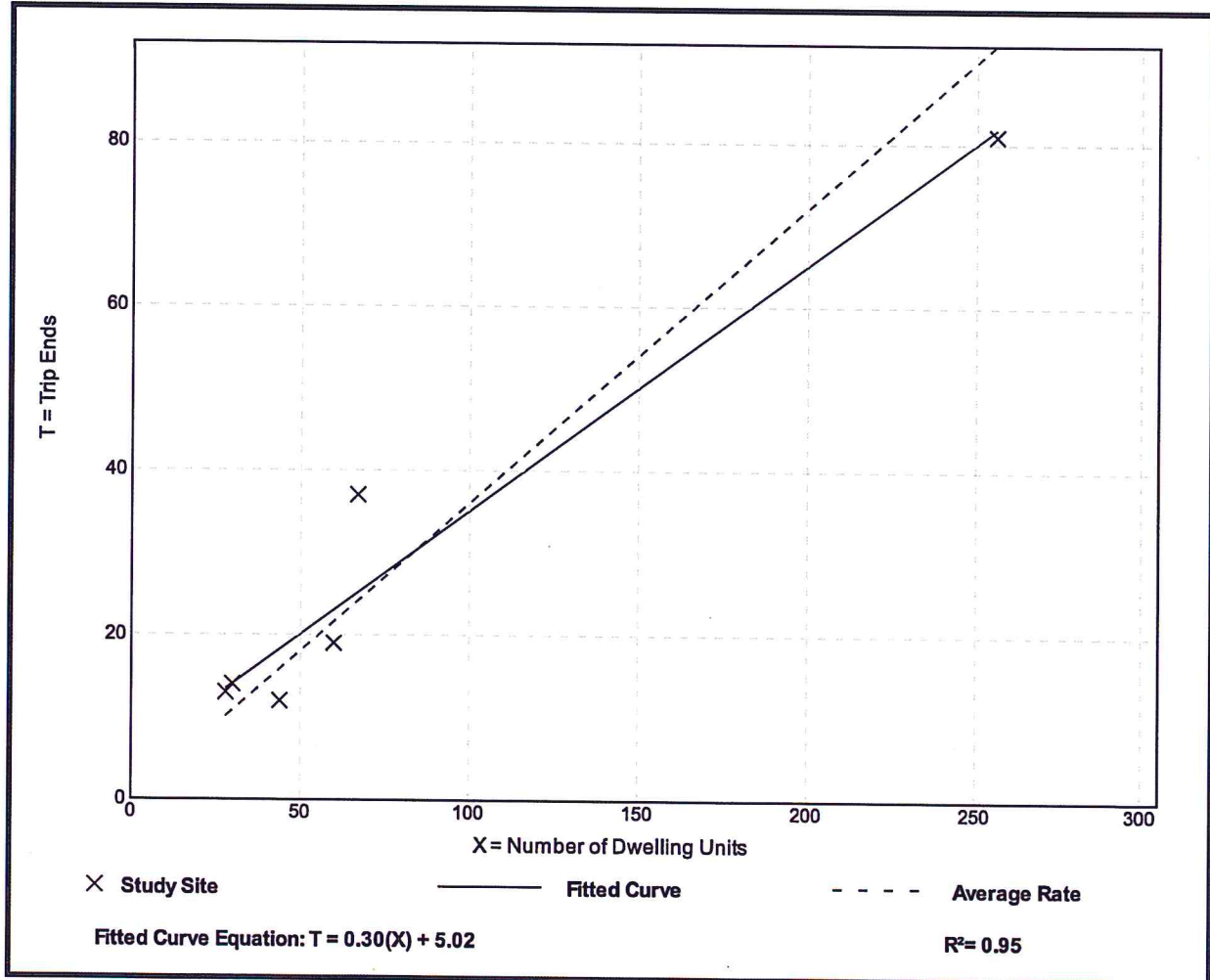
Vehicle Trip Ends vs: Dwelling Units
On a: Sunday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 6
 Avg. Num. of Dwelling Units: 81
 Directional Distribution: 64% entering, 36% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.27 - 0.55	0.10

Data Plot and Equation



DIXON ASSOCIATES ENGINEERING, LLC

335 E. JIMMIE LEEDS RD. 2ND FLOOR

GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/11/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
12:00 PM	*	*	0
1:00	*	*	0
2:00	16	17	33
3:00	59	72	131
4:00	53	58	111
5:00	30	52	82
6:00	26	45	71
7:00	17	20	37
8:00	15	18	33
9:00	5	22	27
10:00	1	5	6
11:00	2	4	6
Total	224	313	537
Percent	41.7%	58.3%	
AM Peak Volume			
PM Peak Volume	3:00 59	3:00 72	3:00 131

DIXON ASSOCIATES ENGINEERING, LLC

335 E. JIMMIE LEEDS RD. 2ND FLOOR

GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/12/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	0	2	2
1:00	2	0	2
2:00	0	1	1
3:00	0	0	0
4:00	1	0	1
5:00	4	2	6
6:00	8	4	12
7:00	18	46	64
8:00	39	37	76
9:00	26	26	52
10:00	20	34	54
11:00	22	33	55
12:00 PM	24	33	57
1:00	33	47	80
2:00	38	68	106
3:00	56	63	119
4:00	50	53	103
5:00	39	42	81
6:00	30	31	61
7:00	8	22	30
8:00	14	10	24
9:00	11	16	27
10:00	9	12	21
11:00	6	6	12
Total	458	588	1046
Percent	43.8%	56.2%	
AM Peak	8:00	7:00	8:00
Volume	39	46	76
PM Peak	3:00	2:00	3:00
Volume	56	68	119

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335 E. JIMMIE LEEDS RD. 2ND FLOOR

GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash_

Station ID: 1

Location 1: Wabash Ave. in front of site

Latitude: 39.367383
Longitude: -74.553536

11/13/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	4	4	8
1:00	1	1	2
2:00	0	0	0
3:00	0	1	1
4:00	0	0	0
5:00	2	2	4
6:00	5	5	10
7:00	8	9	17
8:00	17	17	34
9:00	33	36	69
10:00	28	40	68
11:00	37	44	81
12:00 PM	31	47	78
1:00	32	48	80
2:00	25	40	65
3:00	21	38	59
4:00	27	39	66
5:00	37	36	73
6:00	28	42	70
7:00	6	23	29
8:00	13	12	25
9:00	16	16	32
10:00	8	14	22
11:00	2	2	4
Total	381	516	897
Percent	42.5%	57.5%	
AM Peak	11:00	11:00	11:00
Volume	37	44	81
PM Peak	5:00	1:00	1:00
Volume	37	48	80

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335 E. JIMMIE LEEDS RD. 2ND FLOOR

GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/14/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	2	2	4
1:00	3	1	4
2:00	1	1	2
3:00	0	2	2
4:00	2	1	3
5:00	1	1	2
6:00	6	2	8
7:00	8	6	14
8:00	12	16	28
9:00	19	17	36
10:00	30	24	54
11:00	33	41	74
12:00 PM	32	47	79
1:00	29	37	66
2:00	27	34	61
3:00	33	41	74
4:00	34	36	70
5:00	21	36	57
6:00	14	18	32
7:00	16	13	29
8:00	11	14	25
9:00	6	8	14
10:00	3	2	5
11:00	1	3	4
Total	344	403	747
Percent	46.1%	53.9%	
AM Peak	11:00	11:00	11:00
Volume	33	41	74
PM Peak	4:00	12:00 PM	12:00 PM
Volume	34	47	79

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335 E. JIMMIE LEEDS RD. 2ND FLOOR

GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/15/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	2	0	2
1:00	0	0	0
2:00	0	0	0
3:00	2	0	2
4:00	1	1	2
5:00	4	0	4
6:00	7	8	15
7:00	17	43	60
8:00	39	48	87
9:00	23	29	52
10:00	30	33	63
11:00	24	37	61
12:00 PM	20	52	72
1:00	33	38	71
2:00	47	50	97
3:00	74	75	149
4:00	35	49	84
5:00	30	54	84
6:00	18	36	54
7:00	17	22	39
8:00	10	13	23
9:00	5	7	12
10:00	2	5	7
11:00	2	5	7
Total	442	605	1047
Percent	42.2%	57.8%	
AM Peak	8:00	8:00	8:00
Volume	39	48	87
PM Peak	3:00	3:00	3:00
Volume	74	75	149

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Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/16/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	0	0	0
1:00	1	1	2
2:00	1	0	1
3:00	0	1	1
4:00	0	0	0
5:00	6	0	6
6:00	9	6	15
7:00	18	48	66
8:00	46	38	84
9:00	31	34	65
10:00	22	40	62
11:00	19	36	55
12:00 PM	31	48	79
1:00	33	42	75
2:00	42	69	111
3:00	78	69	147
4:00	53	63	116
5:00	26	48	74
6:00	24	33	57
7:00	15	24	39
8:00	11	9	20
9:00	6	7	13
10:00	8	8	16
11:00	1	7	8
Total	481	631	1112
Percent	43.3%	56.7%	
AM Peak	8:00	7:00	8:00
Volume	46	48	84
PM Peak	3:00	2:00	3:00
Volume	78	69	147

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335 E. JIMMIE LEEDS RD. 2ND FLOOR

GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/17/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	2	0	2
1:00	2	2	4
2:00	0	1	1
3:00	1	0	1
4:00	1	0	1
5:00	4	0	4
6:00	11	7	18
7:00	14	44	58
8:00	43	36	79
9:00	33	38	71
10:00	30	35	65
11:00	29	40	69
12:00 PM	50	57	107
1:00	54	65	119
2:00	43	59	102
3:00	32	56	88
4:00	31	72	103
5:00	38	65	103
6:00	19	28	47
7:00	18	27	45
8:00	10	20	30
9:00	9	7	16
10:00	3	7	10
11:00	4	5	9
Total	481	671	1152
Percent	41.8%	58.2%	
AM Peak	8:00	7:00	8:00
Volume	43	44	79
PM Peak	1:00	4:00	1:00
Volume	54	72	119

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GALLOWAY, NJ 08205

(609)652-7131

Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/18/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	2	1	3
1:00	0	1	1
2:00	0	1	1
3:00	0	1	1
4:00	1	1	2
5:00	5	2	7
6:00	8	7	15
7:00	20	43	63
8:00	36	42	78
9:00	22	31	53
10:00	31	36	67
11:00	16	46	62
12:00 PM	31	55	86
1:00	39	49	88
2:00	38	56	94
3:00	62	52	114
4:00	44	74	118
5:00	45	66	111
6:00	19	33	52
7:00	21	29	50
8:00	9	12	21
9:00	18	18	36
10:00	3	5	8
11:00	1	4	5
Total	471	665	1136
Percent	41.5%	58.5%	
AM Peak	8:00	11:00	8:00
Volume	36	46	78
PM Peak	3:00	4:00	4:00
Volume	62	74	118

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Site Code: DA21-006 Gables on Wabash
 Station ID: 1
 Location 1: Wabash Ave. in front of site

Latitude: 39.367383
 Longitude: -74.553536

11/19/2021 Time	Direction X, Lane 1	Direction X, Lane 2	Total
12:00 AM	2	4	6
1:00	0	0	0
2:00	1	0	1
3:00	0	1	1
4:00	0	0	0
5:00	2	0	2
6:00	7	2	9
7:00	20	32	52
8:00	23	32	55
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
12:00 PM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
Total	55	71	126
Percent	43.7%	56.3%	
AM Peak	8:00	7:00	8:00
Volume	23	32	55
PM Peak			
Volume			
Grand Total	3337	4463	7800
Percent	42.8%	57.2%	
ADT		ADT: 867	AADT: 867