

TRAFFIC IMPACT STATEMENT

For



Proposed Senior Living Facility

Property Located at:

220 Stockton Street
Block 1901 – Lot 13
Town of Phillipsburg, Warren County, NJ

Prepared by:



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A handwritten signature in black ink, appearing to read "CWP", written over a horizontal line.

Craig W. Peregoy, PE
NJ PE License #45880

A handwritten signature in black ink, appearing to read "C7C", written over a horizontal line.

Corey M. Chase, PE
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Revised June 30, 2020
July 29, 2019

2362-99-010TE

INTRODUCTION

It is proposed to construct a new 67 unit senior living facility (The Project) located along Stockton Street, between its intersections with Chambers Street and Silk Avenue, in the Town of Phillipsburg, Warren County, New Jersey, as illustrated on Figure 1, in the Technical Appendix of this report. The site is designated as Block 1901 – Lot 13 on the Town Tax Maps and was previously occupied by a pallet factory. Access to the site is currently provided via one (1) driveway along Stockton Street. Under the proposed condition, access will be provided via one (1) full movement driveway centrally located on the property. Parking will be provided via 75 on-site parking spaces.

Dynamic Traffic, LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers.
- The proposed site driveway was inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The parking layout and supply was assessed based on accepted design standards and demand experienced at similar developments.

EXISTING CONDITIONS

A review of the existing site and roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the proposed senior living facility. This included field investigations of the surrounding roadways and intersections.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

Stockton Street is a local roadway under the jurisdiction of the Town of Phillipsburg. In the vicinity of the site the speed limit is posted 25 MPH in both directions proximate to the intersection of Stockton Street and Mercer Street. The roadway provides one travel lane in each direction with a general east/west orientation. On-street parking is not permitted along either side of the roadway with curb and sidewalk provided along the south side of the roadway. Stockton Street provides a straight horizontal alignment to the east of the site and a curved alignment to the west. The roadway slopes up from west to east along the site frontage. The land uses along Stockton Street in the vicinity of The Project are a mixture of residential, industrial and commercial.

FUTURE CONDITIONS

Traffic Generation

Projections of future traffic volumes were developed utilizing data as published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 10th Edition* for Land Use Code (LUC) 252 – Senior Adult Housing (Attached). Table I summarizes the projected trips generated by the proposed senior living facility utilizing the ITE data during the critical peak street hours (PSH). Copies of the ITE Trip Generation Manual references are contained in the Technical Appendix.

**Table I
Trip Generation**

Land Use	AM PSH			PM PSH			SAT PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
67 Unit Senior Living Facility	5	8	13	10	8	18	14	8	22

As shown in Table I, the proposed senior living facility would generate a maximum of only 22 trips during the critical PSH. Since no appreciable increase in trip generation is projected to be generated by the site, the operational conditions of the surrounding roadway network is not anticipated to change. The minimal delays and queues in the area will remain as existing and it is likely that there will be no perceptible change in the traffic conditions with the construction of The Project. In fact, both ITE and the New Jersey Department of Transportation (NJDOT) define a “significant” increase in traffic as 100 or more peak hour trips. As shown in Table I, the subject property will generate approximately only 20% of this threshold.

Additionally, the subject property is located within approximately 500’ of the NJ Transit bus stops for the 891 bus line located along Heckman Street. Given the close proximity to mass transit, the vehicular trip generation may be even less than what is stated in Table I. In efforts to provide a conservative assessment, no credit was taken for residents who may utilize mass transit.

SITE PLAN

Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will be provided via one (1) full movement driveway along Stockton Street and will replace the driveway which currently serves the property. This driveway layout offers sufficient geometry to allow safe and efficient access and is expected to be sufficient to accommodate the minimal, low-turnover site traffic.

The vehicle circulation plans have been reviewed for both fire and refuse vehicles and the on-site circulation provides sufficient geometry to accommodate the circulation patterns of both vehicles and would therefore accommodate delivery vehicles as well.

The site driveway meets the American Association of State Highway Transportation Officials (AASHTO) requirements for Stopping Sight Distance (200') and Intersection Sight Distance (335') for a design speed of 30 MPH as published in *A Policy on Geometric Design of Highway and Streets*, 7th Edition (2018). The required Intersection Sight Distance is depicted on the site plan.

Parking

The Town sets forth a parking requirement of 1 parking space per unit for senior living facilities which equates to a parking requirement of 67 spaces. The Project as proposed provides 75 parking spaces for the 67 unit senior living facility and satisfies the Ordinance requirements.

Based on data published by the ITE in *Parking Generation*, 5th Edition, LUC 223 – Senior Adult Housing (Attached) has an average peak parking demand of 0.61 vehicles per unit. This equates to a peak parking demand of 41 vehicles for The Project. Further, the proposed parking supply is consistent with ITE's 85th percentile peak parking demand of 1.12 spaces per unit which exceeds the ITE's peak parking demand. A copy of the ITE *Parking Generation* data is contained in the Technical Appendix. Additionally, the subject property is located within 500' of the NJ Transit bus stops on Heckman Street which could further reduce the parking demand. Therefore, the proposed 75 parking spaces provided is anticipated to be sufficient to serve the needs of the senior living facility.

It is proposed to provide parking stalls that are 9' wide by 18' deep served by two-way circulation aisles of 25' in width. These dimensions are in compliance with accepted engineering design standards and will adequately accommodate the low-turnover site traffic.

FINDINGS & CONCLUSIONS

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

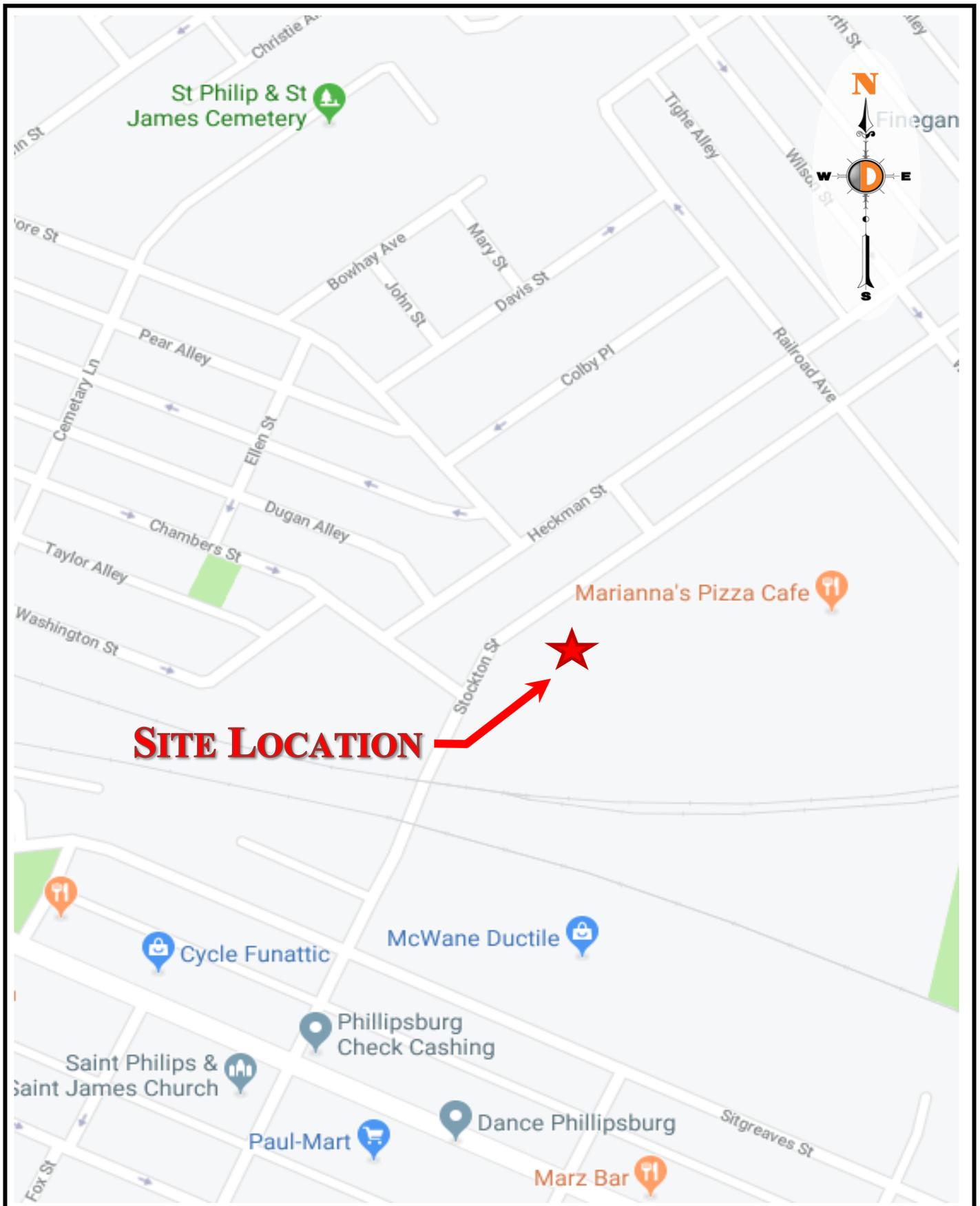
- The proposed 67 unit senior living facility will generate a maximum of 5 entering trips and 8 exiting trips during the morning peak hour, 10 entering trips and 8 exiting trips during the evening peak hour and 14 entering trips and 8 exiting trips during the Saturday peak hour. This equates to approximately only 20% of the threshold for a significant increase in traffic.
- Access to the site will be provided via one (1) full movement driveway along Stockton Street.
- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles and trucks.
- The proposed parking supply and design is sufficient to support the projected demand based on industry standards and exceeds the Ordinance requirements.

Conclusions

Based upon our Traffic Impact Statement as detailed in the body of this report, it is the professional opinion of Dynamic Traffic, LLC that the adjacent street system of the Town of Phillipsburg will not experience any significant degradation in operating conditions with the construction of The Project as a significant increase in traffic will not result. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

Technical Appendix

Site Location Map



Proposed Senior Living Facility
 Traffic Impact Statement
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 6/30/2020

Figure 1

Site Location Map

ITE Trip Generation Data

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)

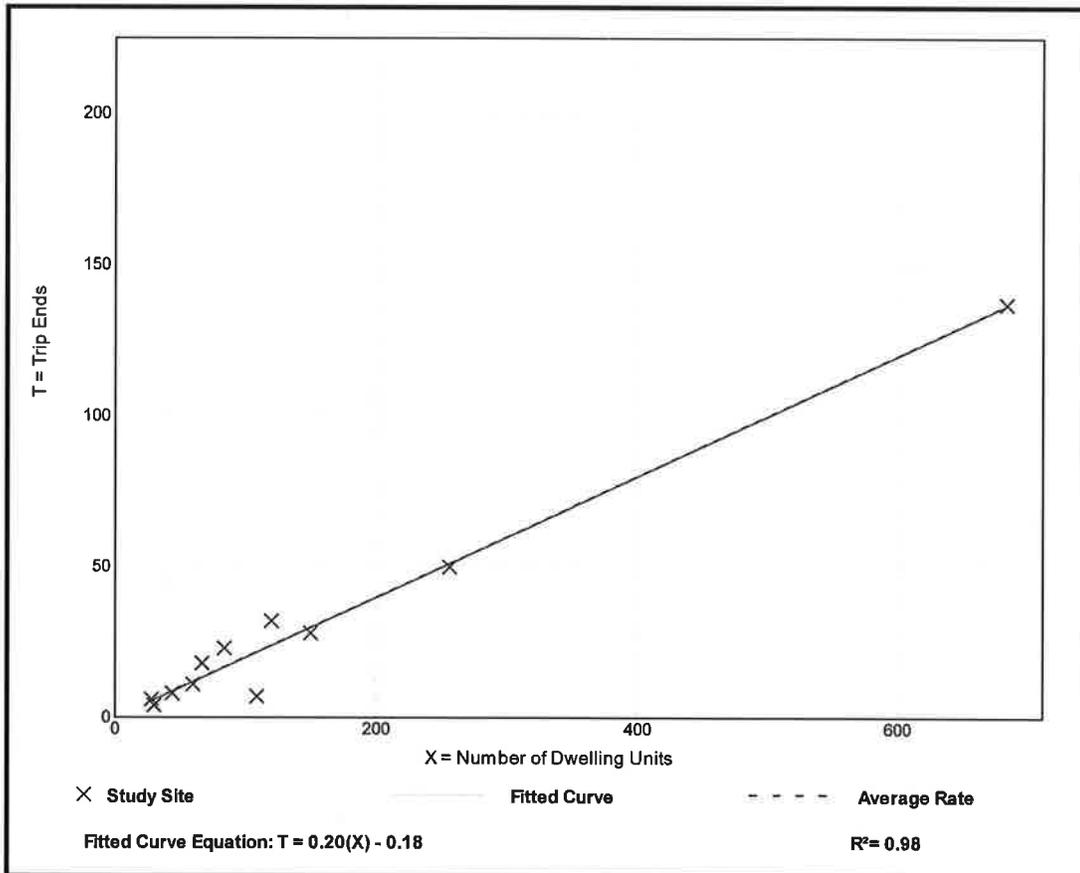
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

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)

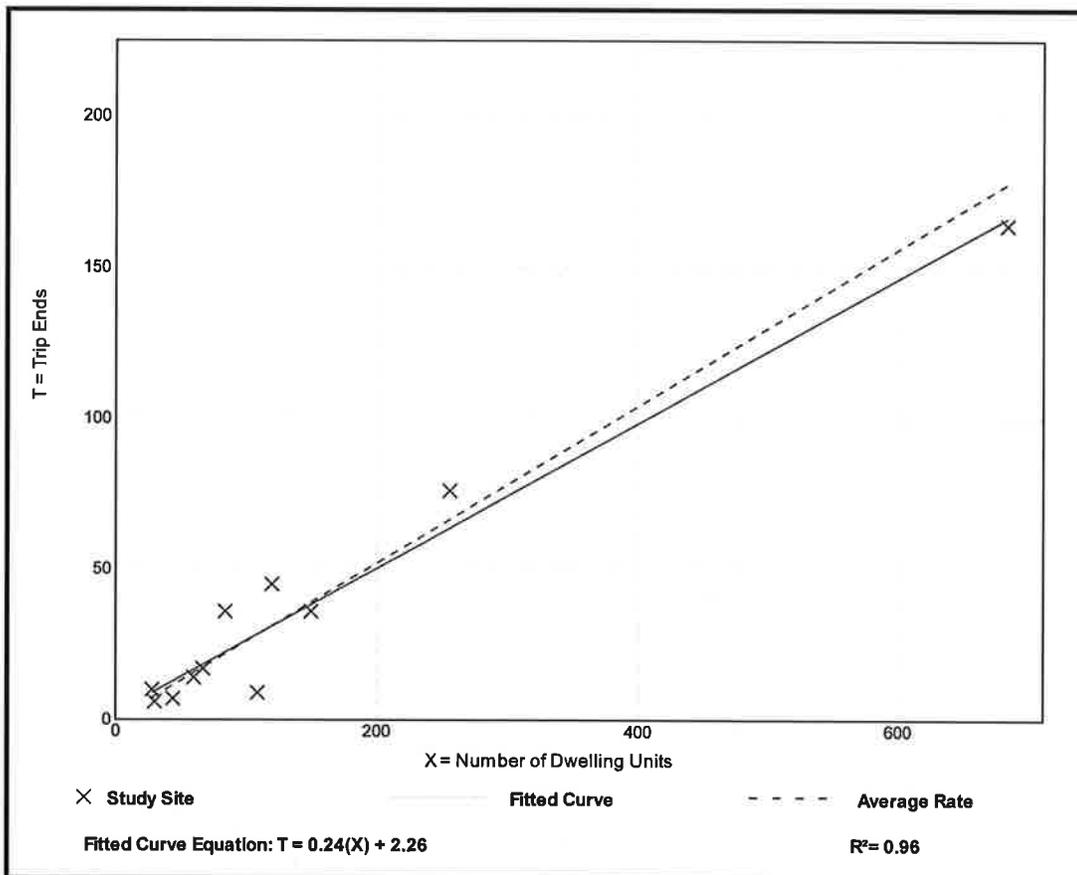
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

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)

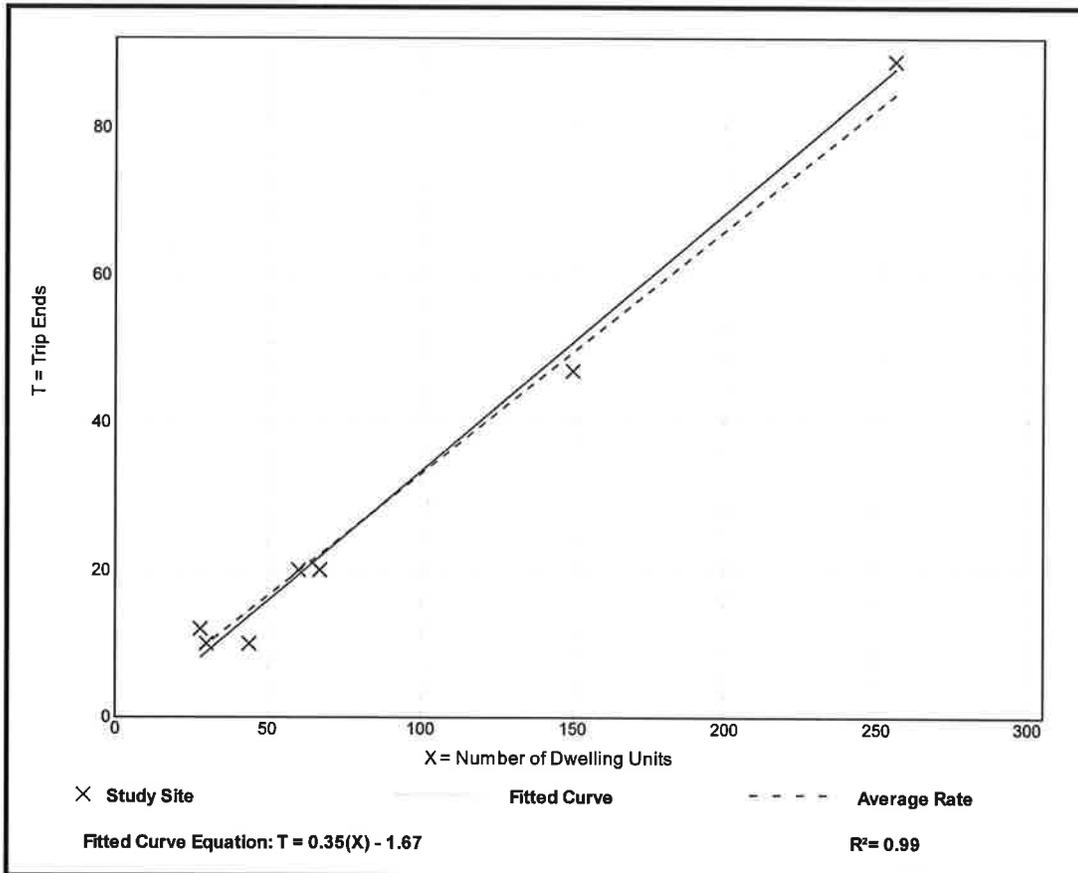
Vehicle Trip Ends vs: Dwelling Units
On a: Saturday, Peak Hour of Generator

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



ITE Parking Generation Data

Senior Adult Housing - Attached (252)

Peak Period Parking Demand vs: Occupied Dwelling Units

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

Peak Period of Parking Demand: 10:00 p.m. - 8:00 a.m.

Number of Studies: 3

Avg. Num. of Occupied Dwelling Units: 58

Peak Period Parking Demand per Occupied Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.61	0.45 - 0.67	0.51 / 0.67	***	0.11 (18%)

Data Plot and Equation

Caution – Small Sample Size

