

***Trip Generation Manual, 9th Edition***  
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IR-016G

November 16, 2012

- Volume 1, User's Guide, all references to "Trip Generation" should be "Trip Generation Manual."
- Volume 1, User's Guide, Page 6, last sentence should read "The regression curves and related statistics were removed because they resulted in an illogical correlation between the independent variable and number of trips generated."
- Volume 1, User's Guide, Page 9, the last full line of the definition for "servicing position" has the term "serving" – it should read "servicing."
- Volume 1, User's Guide, Page 14, First paragraph, second line: R2 should be changed to R<sup>2</sup>.
- Volume 1, User's Guide, Page 19, Paragraph 2, Line 2- Change "should be" to "are normally."
- Volume 1, User's Guide, Page 41, reference number 547, the year should read "1997."
- Volume 1, User's Guide, Page 47, the year 2003 should be added to the end of the source for 735. Also, the text for source 747 should be listed under source 745 and "Blank source" should be listed for 747.
- Volume 1, User's Guide, Page 50, shading was shifted. See the following pages for an updated form.
- Volume 1, User's Guide, Page v, Trip Generation Handbook, see the following pages for an updated preface.
- Preface for each volume, line seven, should read "...the proper use of data presented in the *Trip Generation Manual* and to provide information on supplemental issues..."
- Volume 2, Page 902, Land Use Code 488, Under Description: 1st paragraph - add cross-references to City Park (411), County Park (412), State Park (413), and Regional Park (417), as related-uses.
- Volume 3, after page 1567, Land Use Code 820, two plot pages for the Christmas period are missing. See following pages for missing plots.
- Volume 3, Page 1568, Land Use Code 823, Specialized Land Use Data Section, change the title of the first table from "1,000 Square Feet Occupied Gross Floor Area" to "1,000 Square Feet Gross Leasable Area."
- Volume 3, Page 1735, Land Use Code 861, Source Numbers, delete source number 747 from list of sources.
- Volume 3, Page 1957, Land Use Code 938, delete the second row of the first table.
- Volume 3, Page 1974, Land Use Code 942, in 2nd table, rows 5-8 repeat rows 1-4; delete rows 5-8.
- Volume 3, after page 2015, Land Use Code 948, two plot pages are missing. See the following pages for missing plots.



## Preface

The *Trip Generation Handbook*, 2nd Edition is a recommended practice of ITE and has two primary purposes: to provide instruction and guidance in the proper use of data presented in the *Trip Generation Manual*, 9th Edition and to provide information on supplemental issues of importance in estimating trip generation for development sites.

Because the instruction and guidance in the main body of this handbook represents a recommended practice for estimating trip generation, its function is distinct from the informational portions of the *Trip Generation Manual*, 9th Edition.

The analysis methods presented in the *Handbook* have been developed to be simple and understood by the novice transportation planner/engineer, yet sufficiently accurate for the experienced transportation professional.

Prior to publishing the *Trip Generation Manual*, 9th Edition, ITE separated the processing and dissemination of the informational trip generation data from the development of recommendations on how to use and apply the data. To facilitate the use of these documents, the *Trip Generation Manual*, 9th Edition combines the informational report (User's Guide and volumes 2 and 3, data) with the recommended practice material contained in the *Trip Generation Handbook*, 2nd Edition.

**It should be noted that the *Trip Generation Handbook*, 2nd Edition is published in its current form and has not been updated to reflect changes in the *Trip Generation Manual*, 9th Edition.**

Work is underway to revise this recommended practice with an expected release date at the end of 2013 or beginning of 2014. The revised recommended practice will be released as an e-publication.

**ITE** Institute of Transportation Engineers  
**Trip Generation Data Form (Part 2)**

Summary of Driveway Volumes (All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent Street Traffic (7 - 9) Time (ex: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent Street Traffic (4 - 6) Time:																		
A.M. Peak Hour Generator <sup>1</sup> Time:																		
P.M. Peak Hour Generator <sup>2</sup> Time:																		
Peak Hour Generator <sup>3</sup> Time (Weekend):																		

- Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.
  - Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
  - Highest hourly volume during the entire day. Please specify the peak hour.
- Please refer to the Trip Generation User's Guide for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period		Exit		Total		P.M. Period		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
6:00-7:00							11:00-12:00					3:00-4:00						
6:15-7:15							11:15-12:15					3:15-4:15						
6:30-7:30							11:30-12:30					3:30-4:30						
6:45-7:45							11:45-12:45					3:45-4:45						
7:00-8:00							12:00-1:00					4:00-5:00						
7:15-8:15							12:15-1:15					4:15-5:15						
7:30-8:30							12:30-1:30					4:30-5:30						
7:45-8:45							12:45-1:45					4:45-5:45						
8:00-9:00							1:00-2:00					5:00-6:00						

Check if Part 3, 4 and/or additional information is attached.

Survey conducted by: Name: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City/State/Zip: \_\_\_\_\_  
 Telephone #: \_\_\_\_\_ Fax #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Please return to: Institute of Transportation Engineers  
 Technical Projects Division  
 1627 Eye Street, NW, Suite 600  
 Washington, DC 20006 USA  
 Telephone: +1 202-785-0060  
 Fax: +1 202-785-0609  
 ITE on the Web: www.ite.org

# Shopping Center - Christmas Season (820)

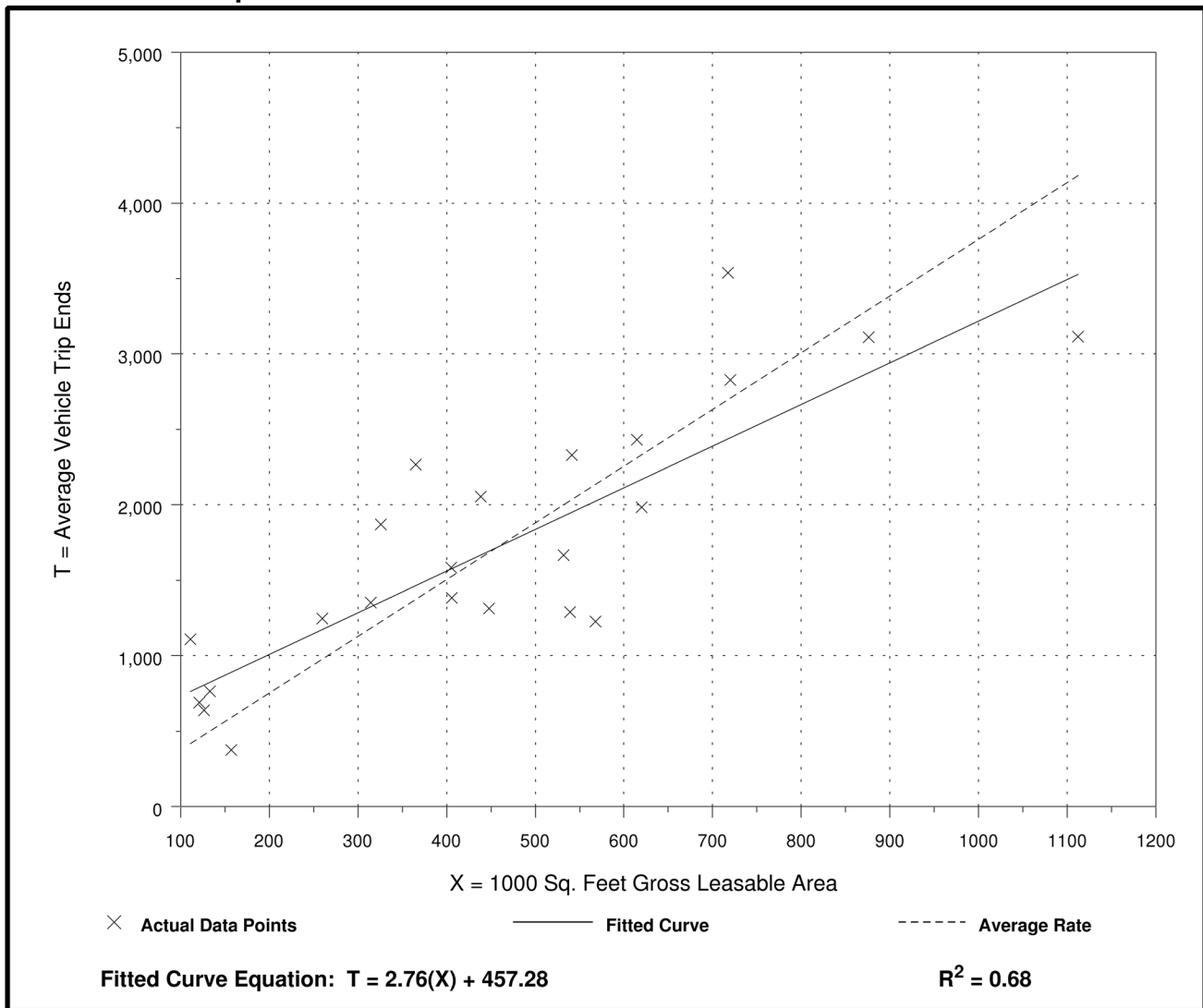
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**

Number of Studies: 24  
 Average 1000 Sq. Feet GLA: 459  
 Directional Distribution: 50% entering, 50% exiting

## Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
3.76	2.16 - 10.01	2.30

## Data Plot and Equation



# Shopping Center - Christmas Season (820)

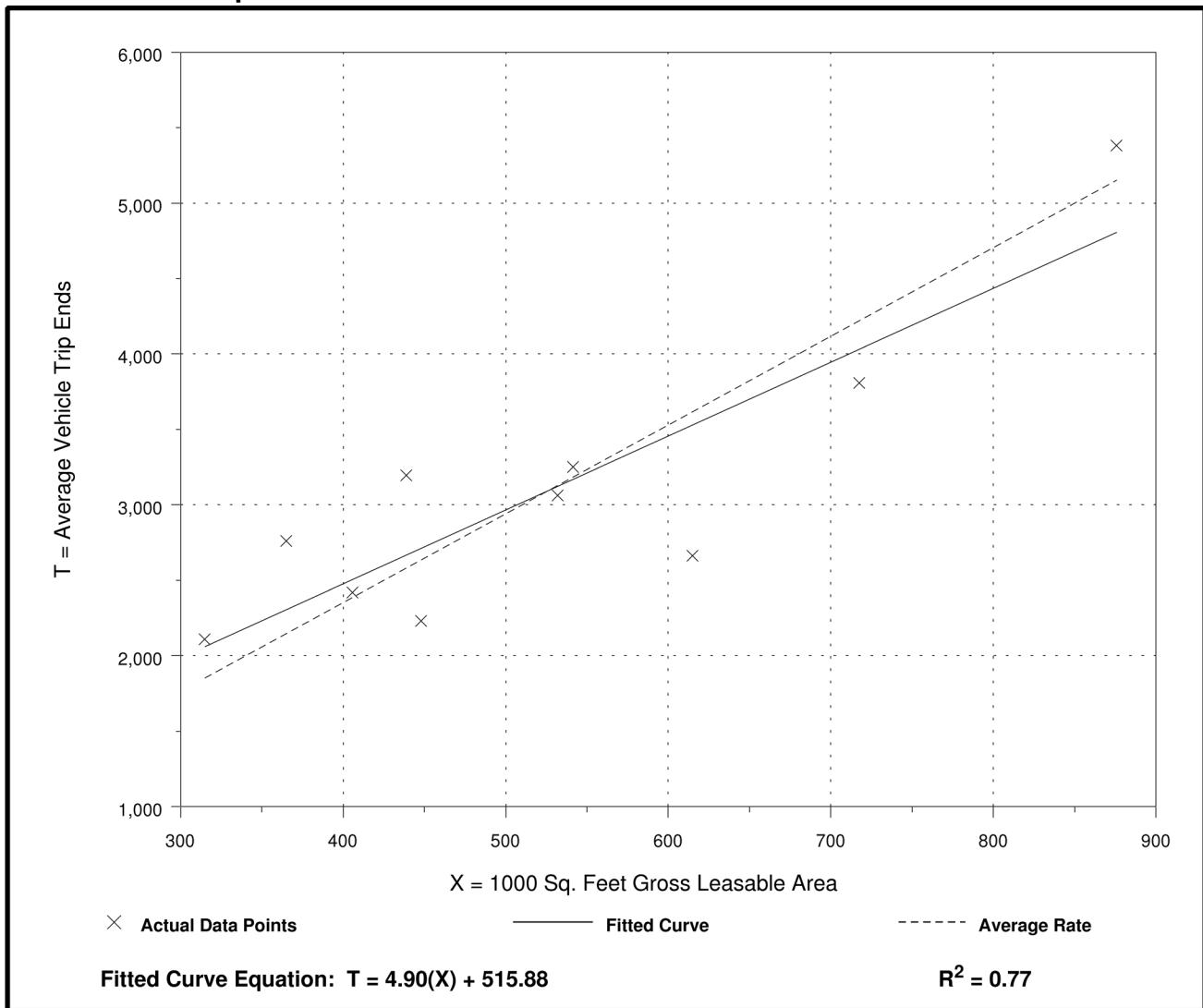
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area**  
**On a: Saturday,**  
**Peak Hour of Generator**

Number of Studies: 10  
 Average 1000 Sq. Feet GLA: 526  
 Directional Distribution: 51% entering, 49% exiting

## Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
5.88	4.33 - 7.57	2.58

## Data Plot and Equation



# Automated Car Wash (948)

**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area**  
**On a: Weekday,**  
**P.M. Peak Hour of Generator**

Number of Studies: 2  
 Average 1000 Sq. Feet GFA: 5  
 Directional Distribution: 50% entering, 50% exiting

## Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
11.64	8.33 - 16.59	*

## Data Plot and Equation

*Caution - Use Carefully - Small Sample Size*

