



West Virginia Department of Transportation Research Project #125

**TRIP GENERATION RATES,
PEAKING CHARACTERISTICS, AND
VEHICLE MIX CHARACTERISTICS OF
SPECIAL WEST VIRGINIA GENERATORS**

VOLUME 2: APPENDICES

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Final Report

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APPENDIX A
ITE Format Graphs
Residential Subdivisions

Subdivisions

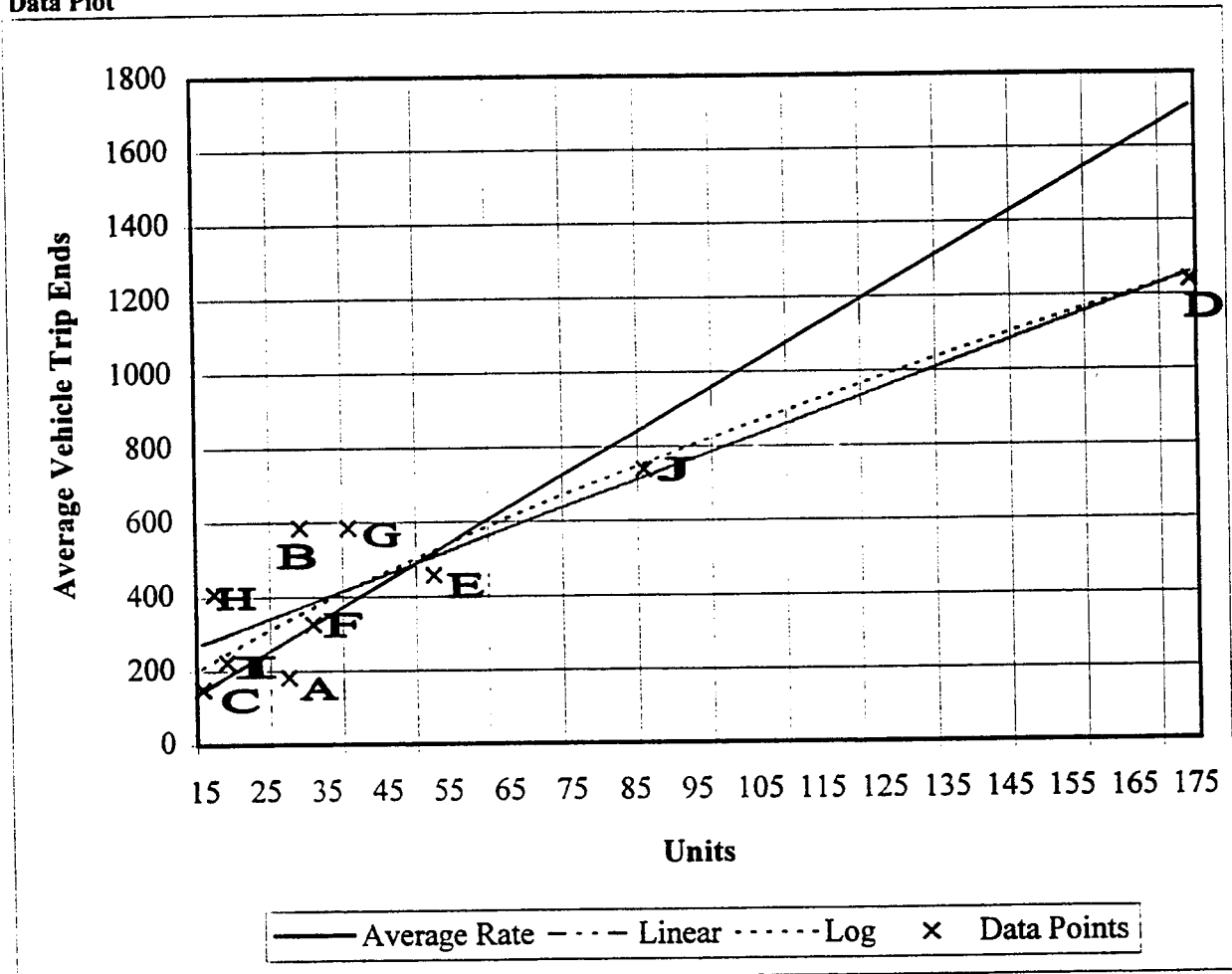
Average Vehicle Trip Ends V/S: Units
 On a: Weekday

Number of Studies: 10
 Average SEV Value: 50
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
9.78	6.28-22.63	5.36

Data Plot



Linear Equation

$$\text{Trip Ends} = 180.69 + 6.17(\text{Units})$$

$$r^2 = 0.85$$

Log Equation

$$\text{Trip Ends} = 28.50(\text{Units})^{0.73}$$

$$r^2 = 0.70$$

Subdivisions

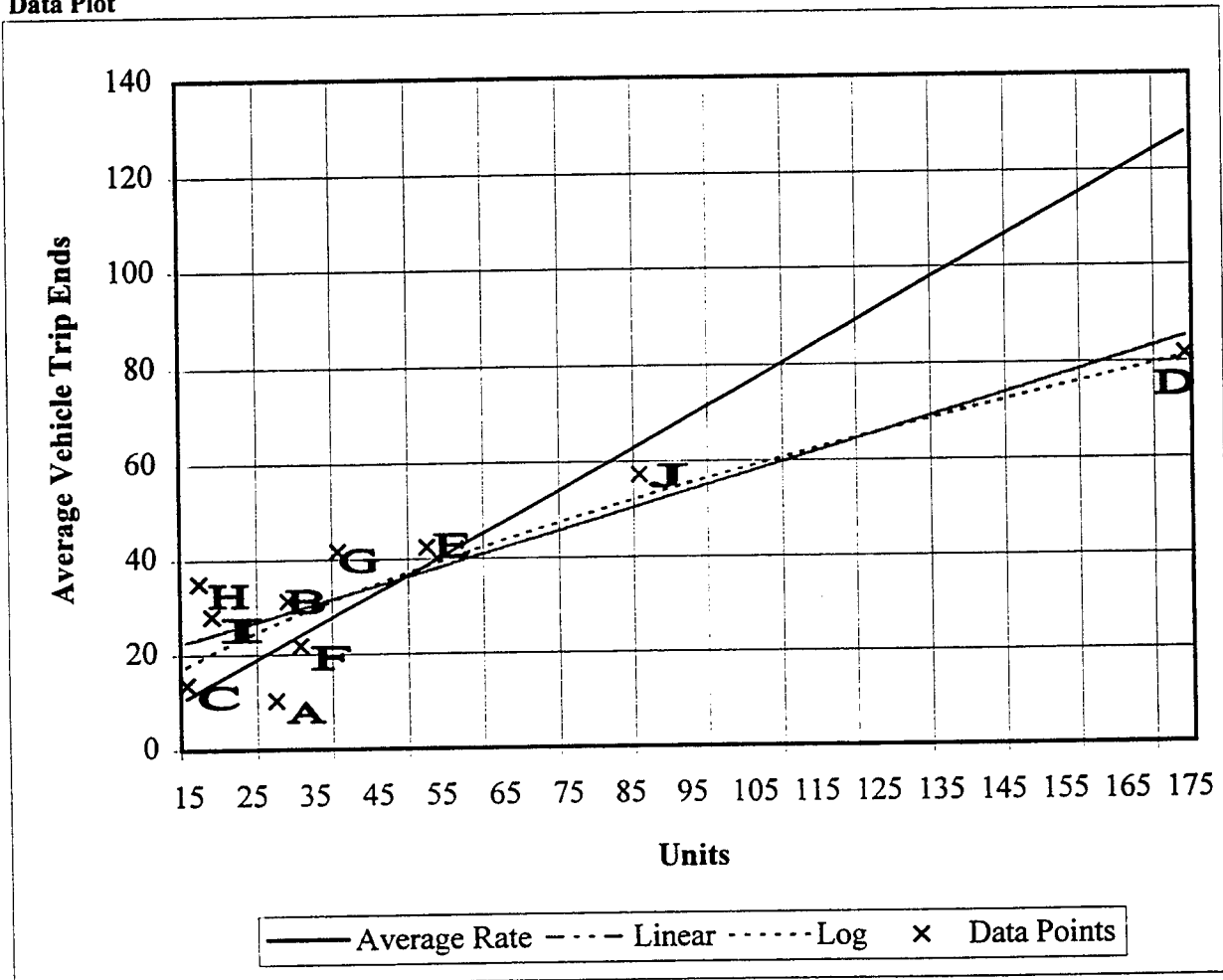
Average Vehicle Trip Ends V/S: Units
 On a: Weekday AM Peak

Number of Studies: 10
 Average SEV Value: 50
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.73	0.35-1.96	0.47

Data Plot



Linear Equation

$$\text{Trip Ends} = 16.71 + 0.39(\text{Units})$$

$$r^2 = 0.81$$

Log Equation

$$\text{Trip Ends} = 3.22(\text{Units})^{0.62}$$

$$r^2 = 0.56$$

Subdivisions

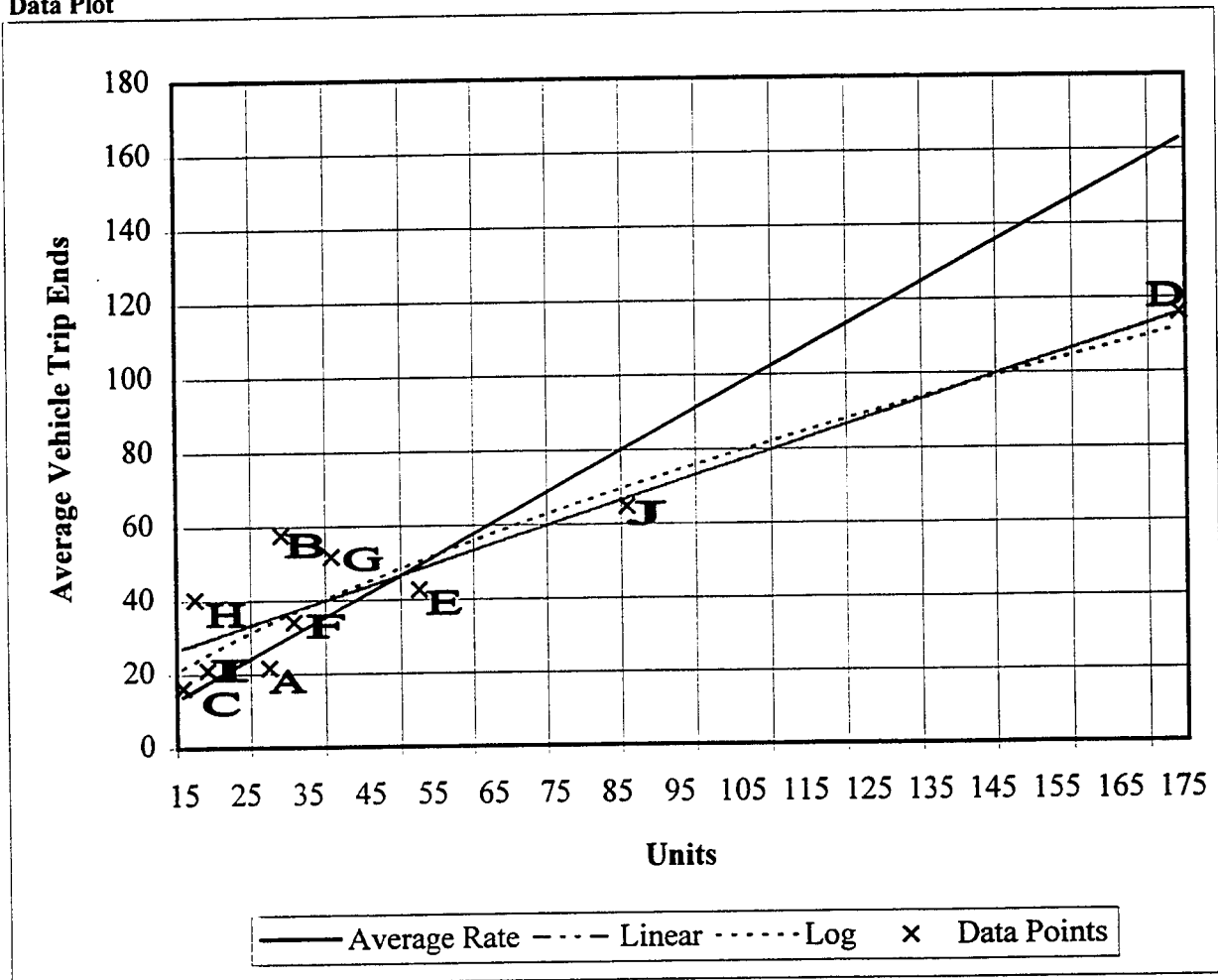
Average Vehicle Trip Ends V/S: Units
 On a: Weekday PM Peak

Number of Studies: 10
 Average SEV Value: 50
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.93	0.66-2.23	0.52

Data Plot



Linear Equation

$$\text{Trip Ends} = 18.80 + 0.55(\text{Units})$$

$$r^2 = 0.85$$

Log Equation

$$\text{Log Trip Rate} = 1.25 + 0.67 \text{ Log}(\text{Units})$$

$$r^2 = 0.71$$

Subdivisions

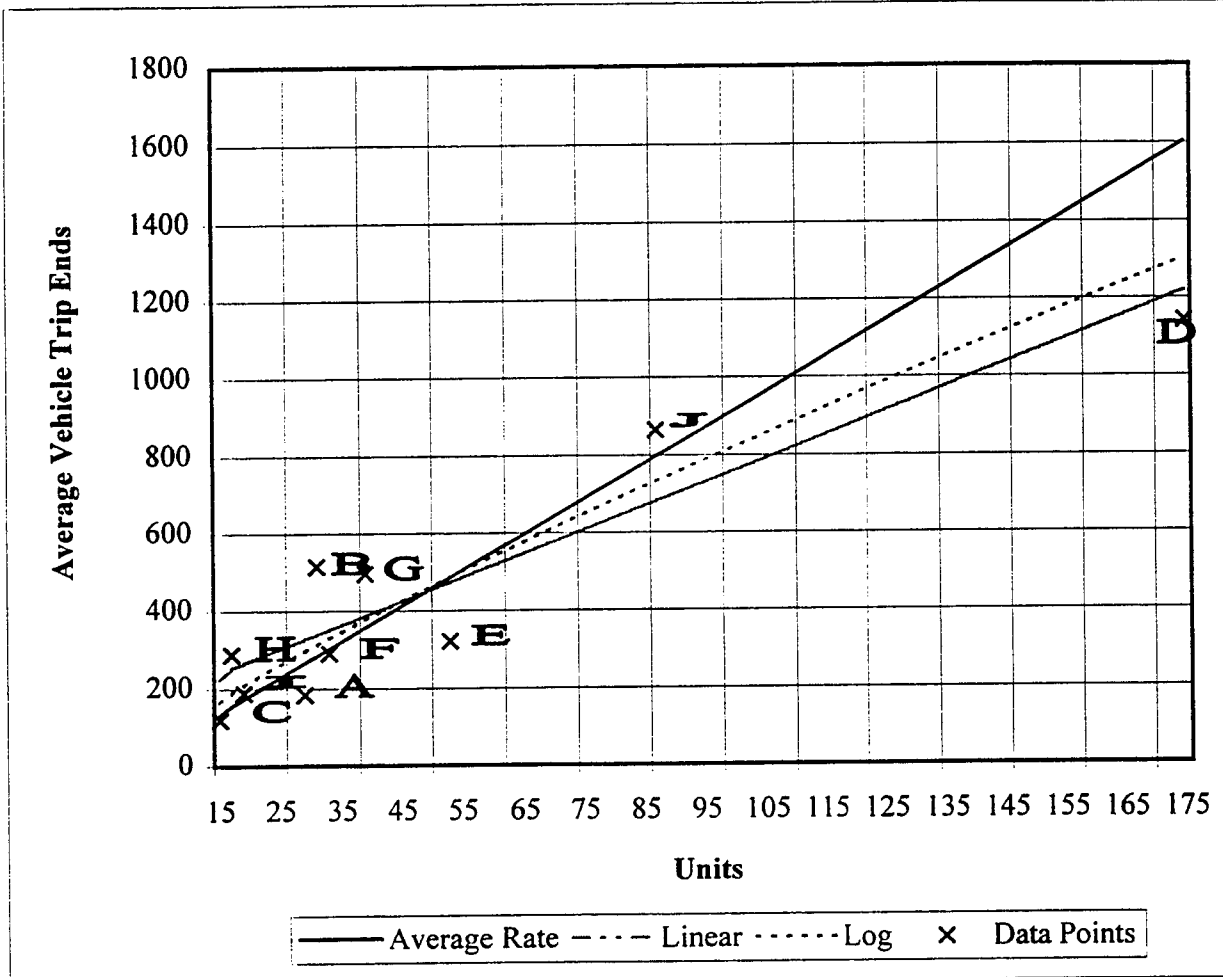
Average Vehicle Trip Ends V/S: Units
 On a: Saturday

Number of Studies: 10
 Average SEV Value: 50
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
8.80	6.04-16.58	3.85

Data Plot



Linear Equation

$$\text{Trip Ends} = 129.81 + 6.21(\text{Units})$$

$$r^2 = 0.85$$

Log Equation

$$\text{Trip Ends} = 17.64 (\text{Units})^{0.83}$$

$$r^2 = 0.77$$

Subdivisions

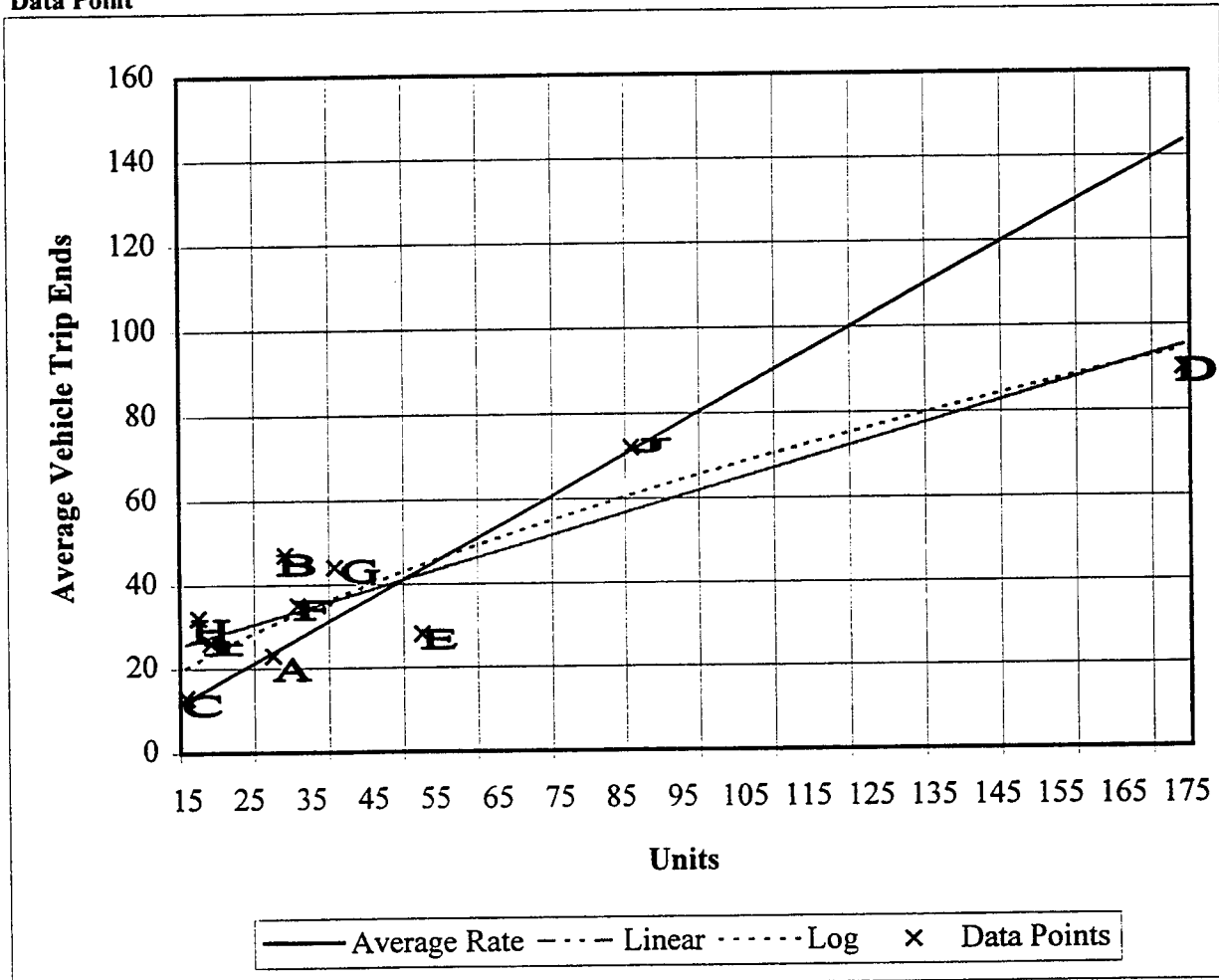
Average Vehicle Trip Ends V/S: Units
 On a: Saturday Peak

Number of Studies: 10
 Average SEV Value: 50
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.82	0.51-1.78	0.41

Data Point



Linear Equation

$$\text{Trip Ends} = 19.27 + 0.43(\text{Units})$$

$$r^2 = 0.80$$

Log Equation

$$\text{Trip Ends} = 3.67(\text{Units})^{0.63}$$

$$r^2 = 0.71$$

Subdivisions

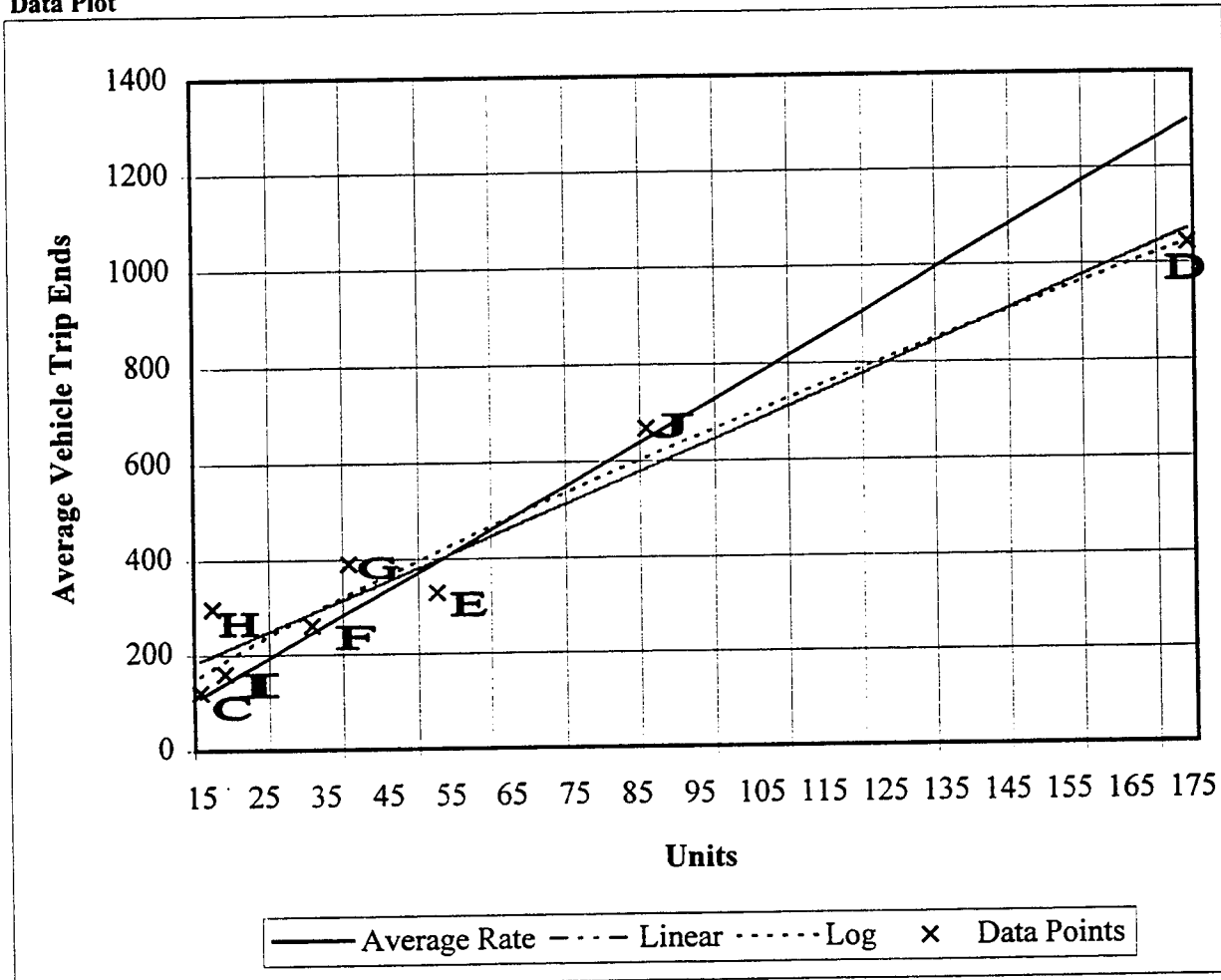
Average Vehicle Trip Ends V/S: Units
 On a: Sunday

Number of Studies: 8
 Average SEV Value: 55
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
7.42	5.95-16.44	3.34

Data Plot



Linear Equation

$$\text{Trip Ends} = 104.46 + 5.52(\text{Units})$$

$$r^2 = 0.95$$

Log Equation

$$\text{Trip Ends} = 19.11(\text{Units})^{0.77}$$

$$r^2 = 0.87$$

Subdivisions

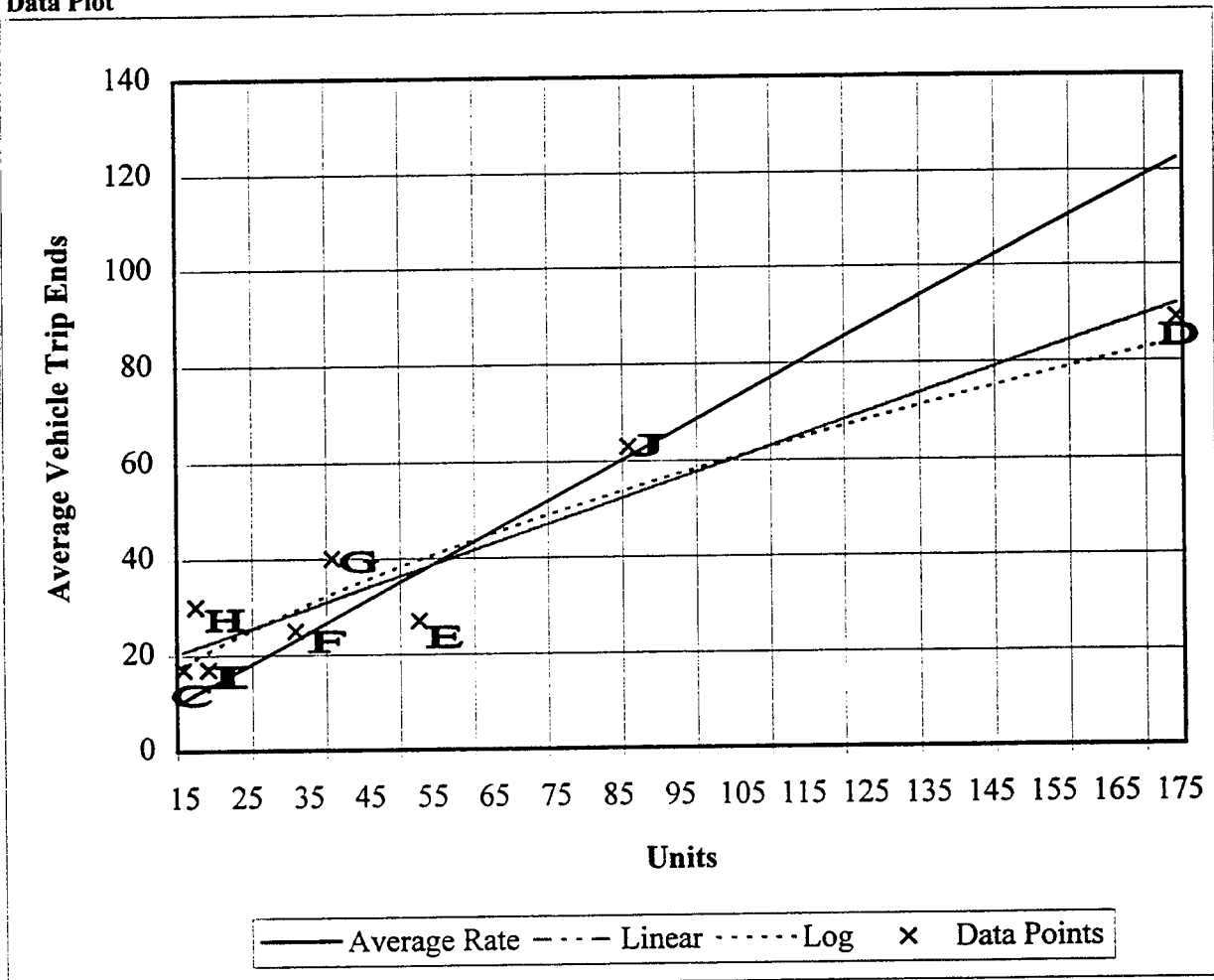
Average Vehicle Trip Ends V/S: Units
 On a: Sunday Peak

Number of Studies: 8
 Average SEV Value: 55
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.51-1.67	0.38

Data Plot



Linear Equation

$$\text{Trip Ends} = 14.01 + 0.44(\text{Units})$$

$$r^2 = 0.90$$

Log Equation

$$\text{Trip Ends} = 3.22(\text{Units})^{0.63}$$

$$r^2 = 0.81$$

APPENDIX B
ITE Format Graphs
Mobile Home Parks

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Weekday

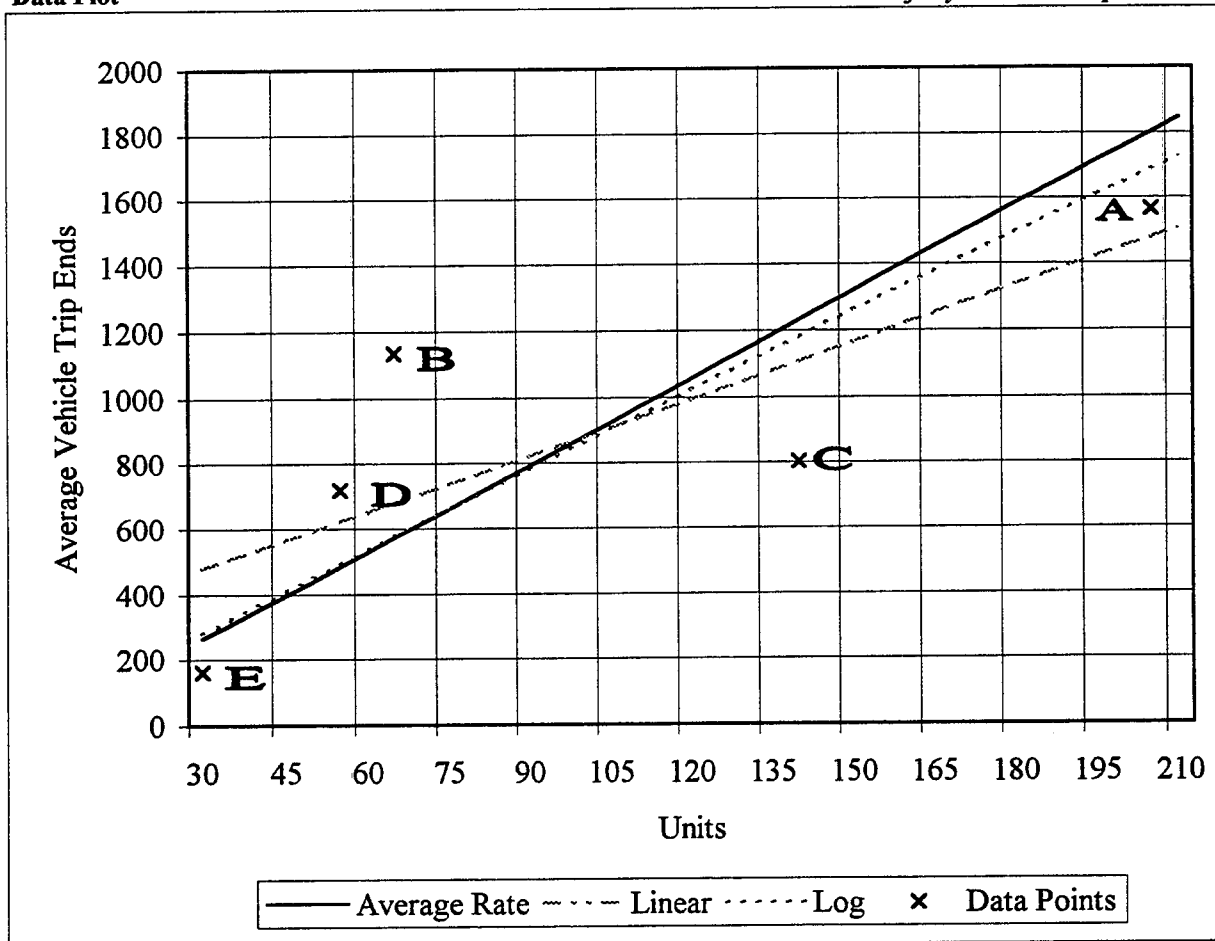
Number of Studies: 5
 Average SEV Value: 99.8
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
8.79	5.39-16.95	5.03

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 307.21 + 5.71(\text{Units})$$

$$r^2 = 0.62$$

Log Equation

$$\text{Trip Ends} = 11.59 (\text{Units})^{0.94}$$

$$r^2 = 0.67$$

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Weekday AM Peak

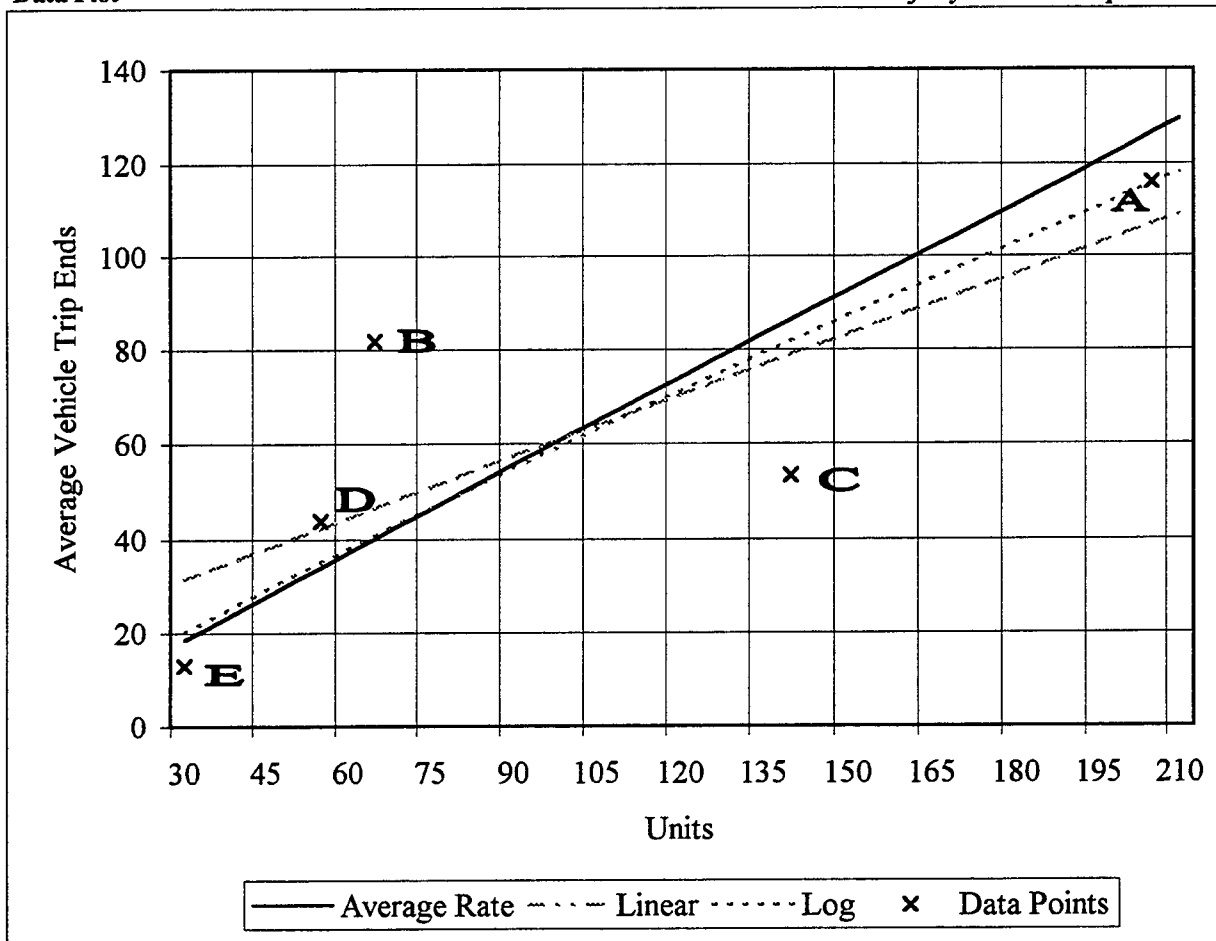
Number of Studies: 5
 Average SEV Value: 99.8
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.62	0.38-1.22	0.34

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=18.50+0.43(Units)

$r^2=0.63$

Log Equation Trip Ends=0.92 (Units)^{0.91}

$r^2=0.69$

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Weekday PM Peak

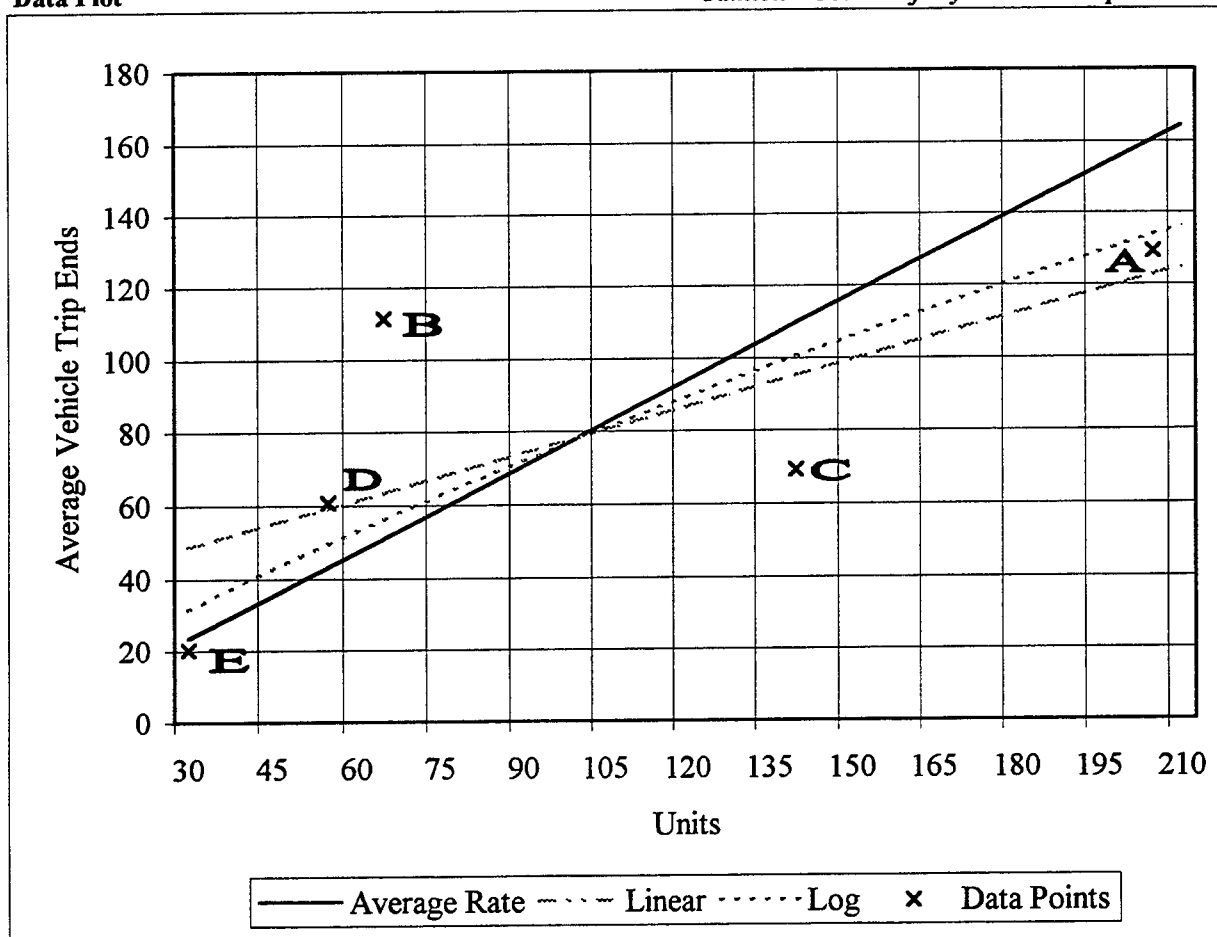
Number of Studies: 5
 Average SEV Value: 99.8
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.78	0.49-1.66	0.47

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends=35.91+0.42(Units)	$r^2=0.50$
Log Equation	Trip Ends=2.41(Units) ^{0.76}	$r^2=0.62$

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Saturday

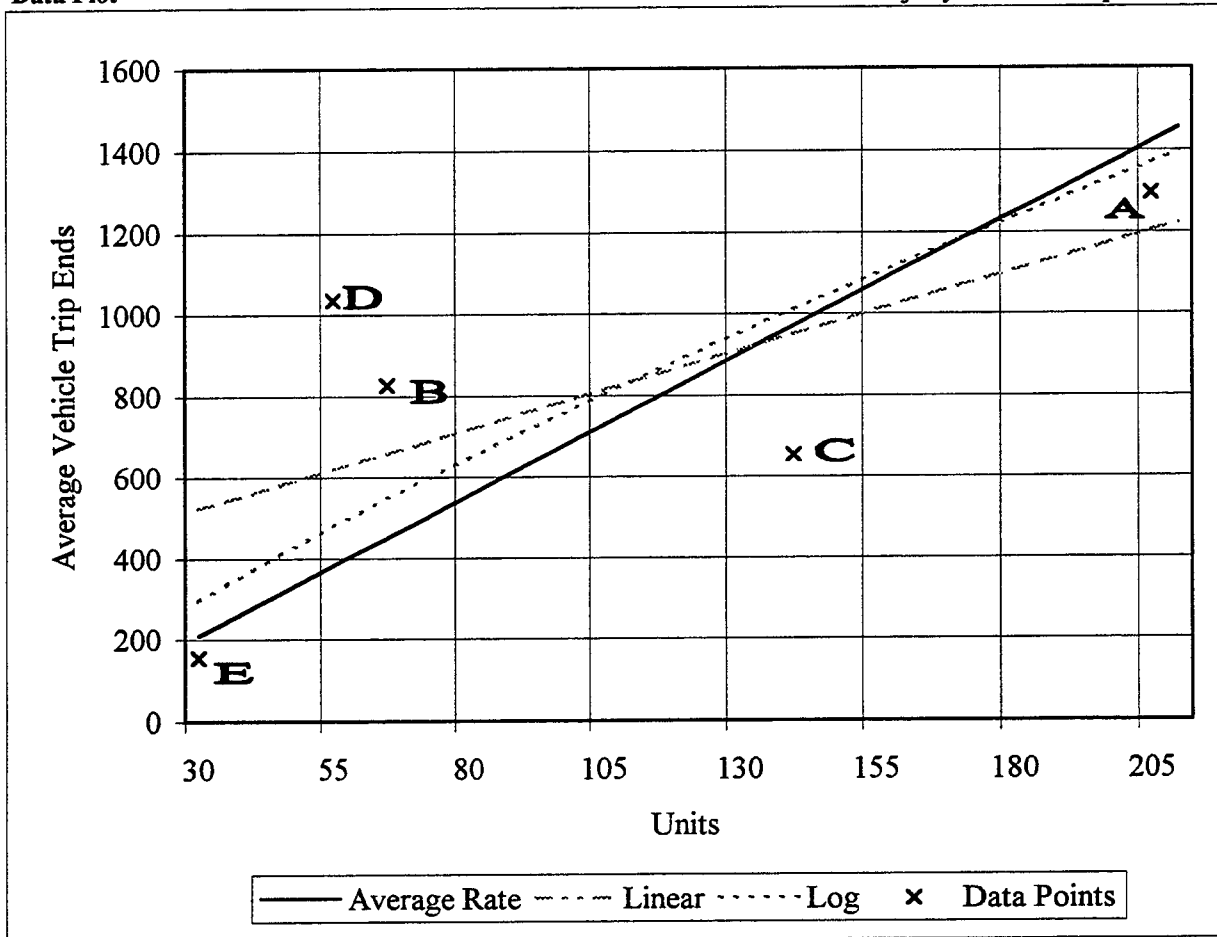
Number of Studies: 5
 Average SEV Value: 99.8
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
7.95	4.67-18.48	5.95

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=405.18+3.89(Units)

$r^2=0.42$

Log Equation Trip Ends=19.49(Units)^{0.80}

$r^2=0.53$

(Equations with $r^2 < 0.5$ are not recommended for use)

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Saturday Peak

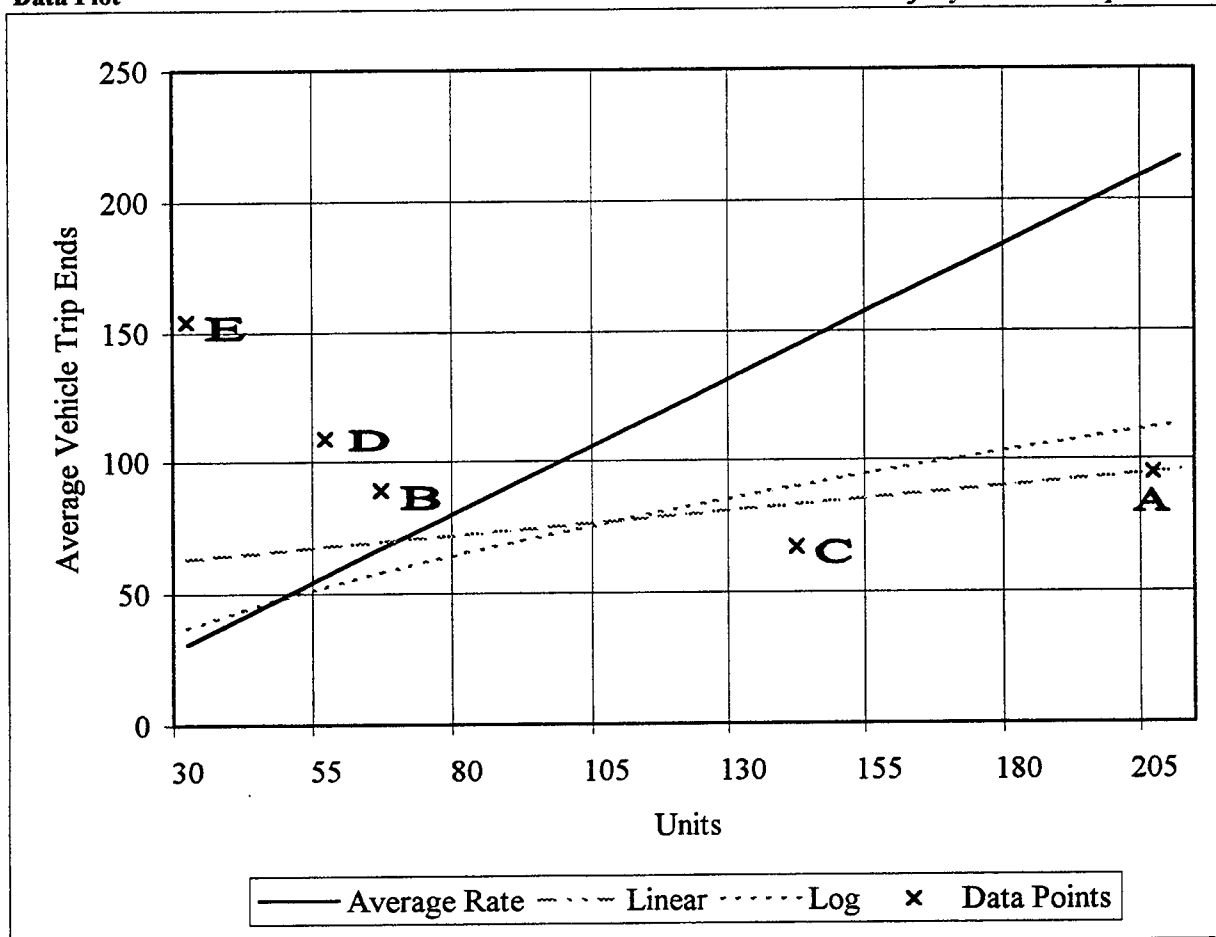
Number of Studies: 5
 Average SEV Value: 99.8
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
1.03	0.46-5.13	1.93

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=57.71+0.18(Units)
 Log Equation Trip Ends=5.21 (Units)^{0.58}
 (Equations with $r^2 < 0.5$ are not recommended for use)

$r^2=0.14$
 $r^2=0.38$

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Sunday

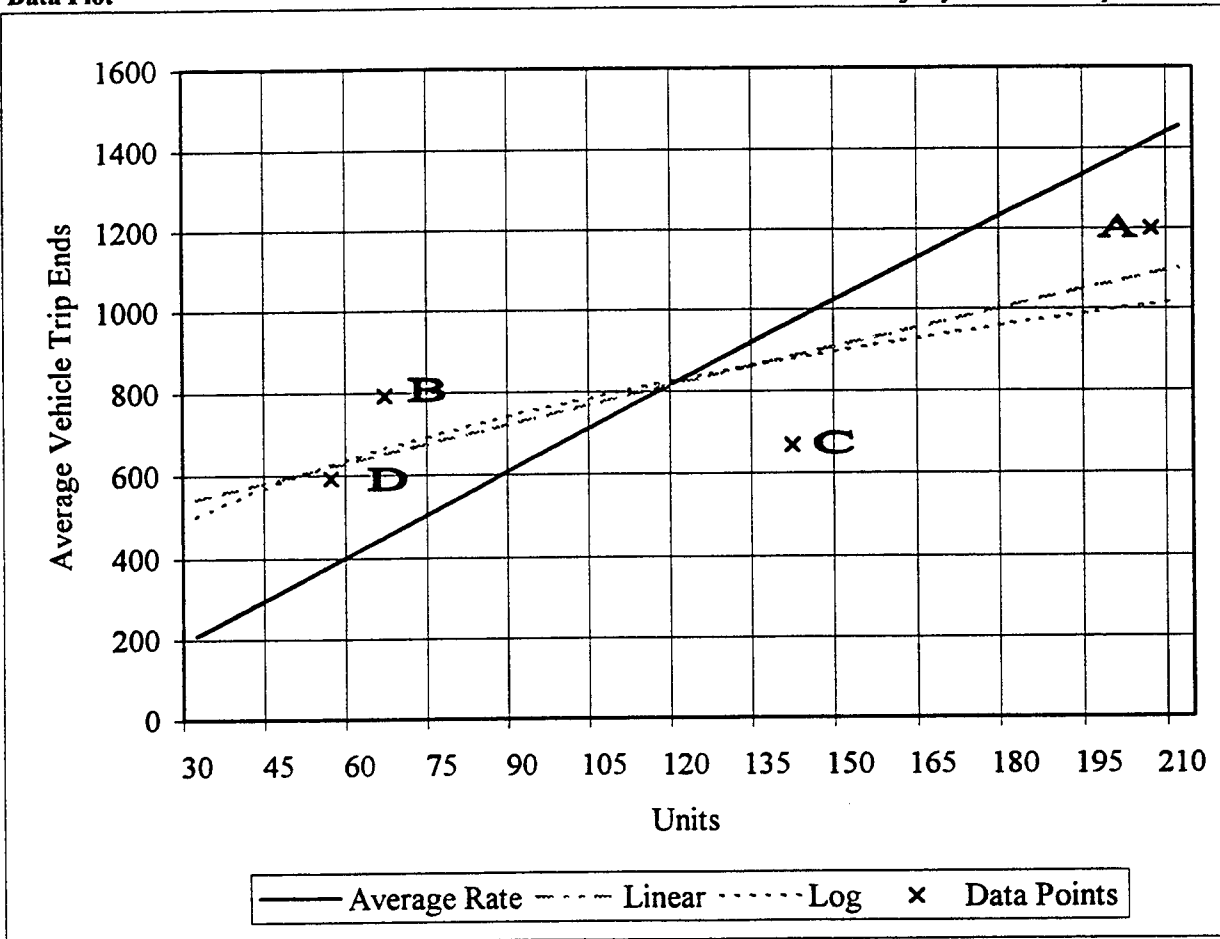
Number of Studies: 4
 Average SEV Value: 117.25
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
6.93	4.77-11.82	3.47

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 447.51 + 3.12(\text{Units})$$

$$r^2 = 0.65$$

Log Equation

$$\text{Trip} = 144.03 (\text{Units})^{0.37}$$

$$r^2 = 0.53$$

Mobile Homes

Average Vehicle Trip Ends V/S: Units
 On a: Sunday Peak

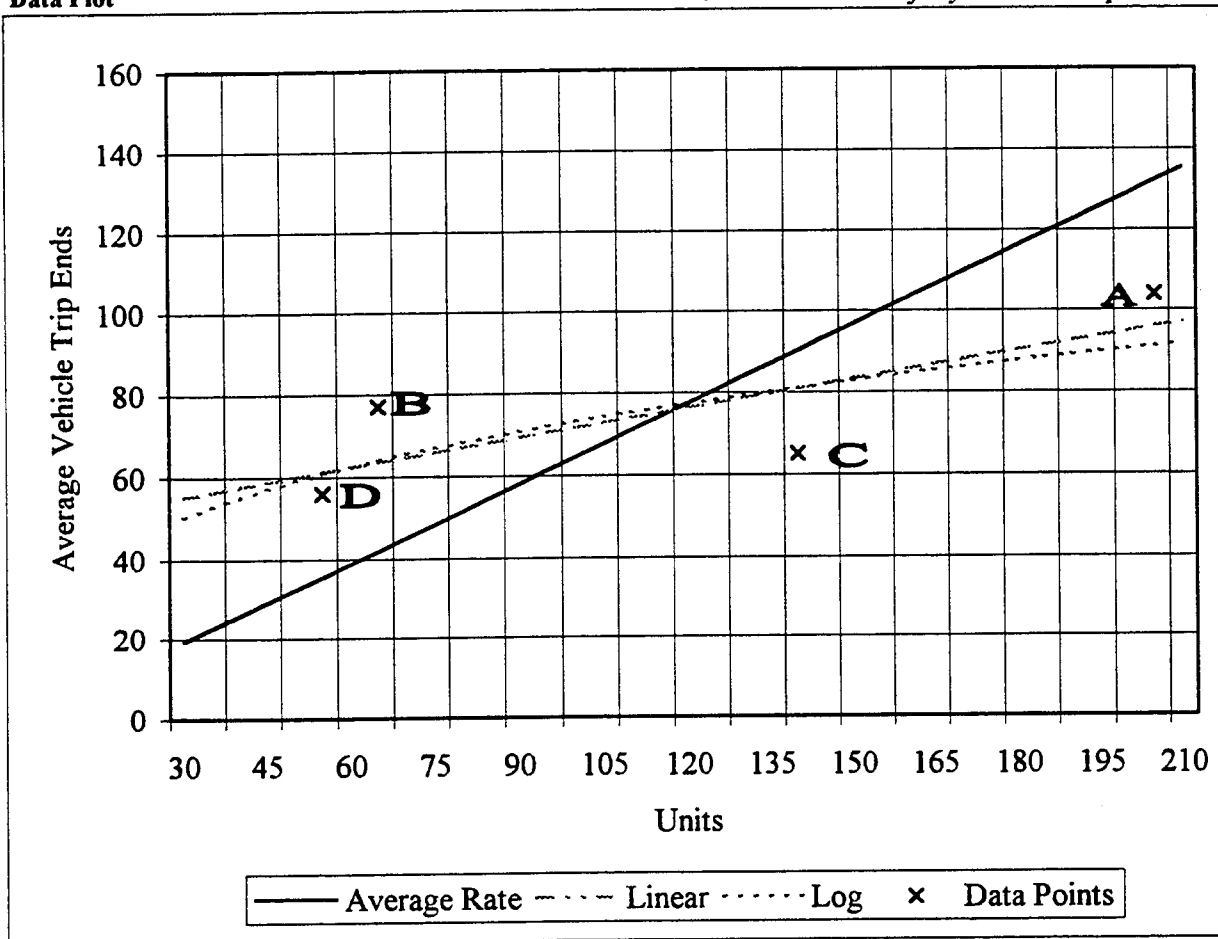
Number of Studies: 4
 Average SEV Value: 117.25
 Directional Distribution: Not Studied

Trip Generation per Unit

Average Rate	Range of Rates	Standard Deviation
0.64	0.46-1.15	0.35

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=48.25+0.23(Units)

$r^2=0.61$

Log Equation Trip Ends=17.64 (Units)^{0.31}

$r^2=0.51$

Mobile Home Park (240)

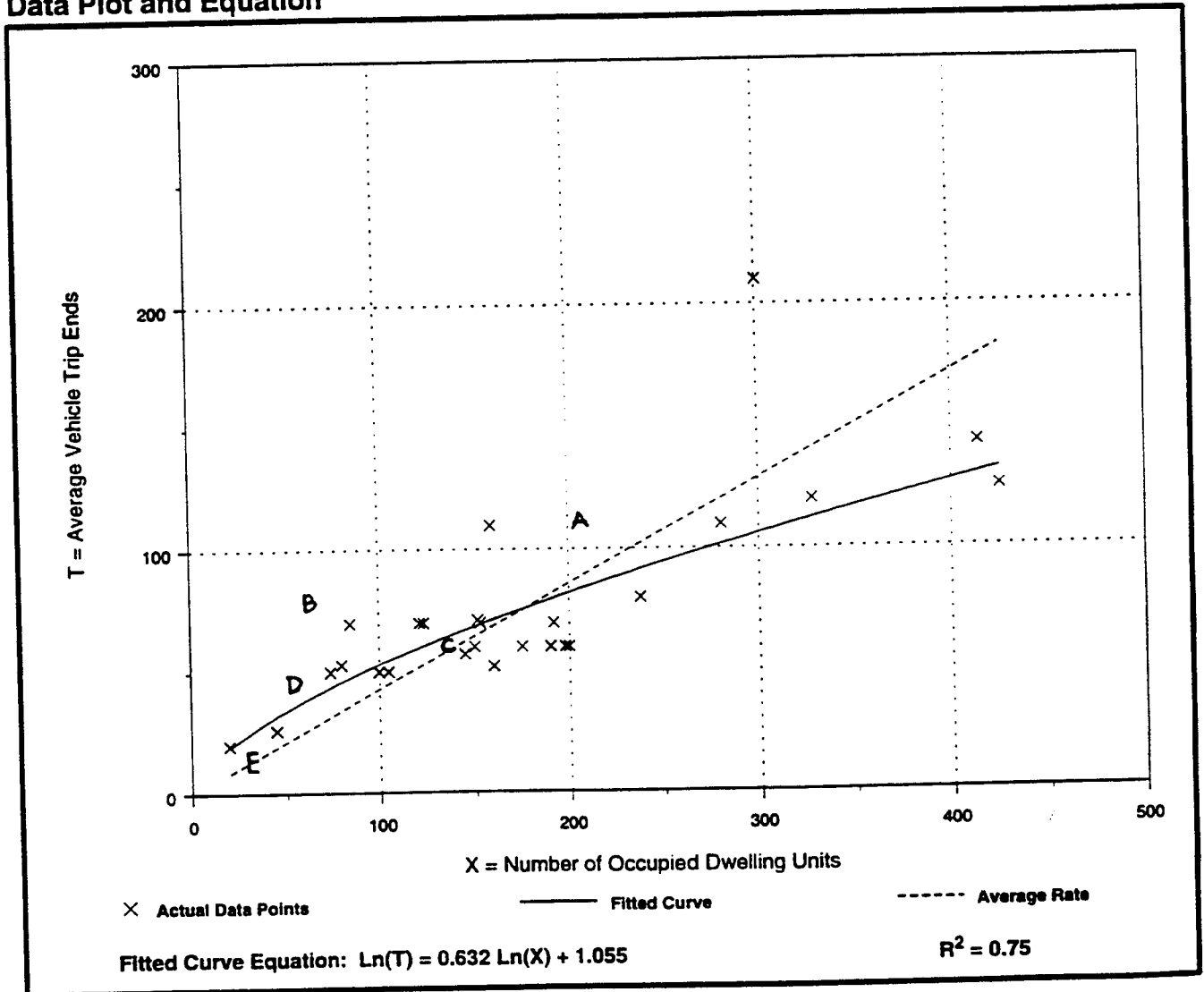
Average Vehicle Trip Ends vs: Occupied Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 26
 Avg. Num. of Occupied Dwelling Units: 177
 Directional Distribution: 26% entering, 74% exiting

Trip Generation per Occupied Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.43	0.29 - 1.00	0.67

Data Plot and Equation



Mobile Home Park (240)

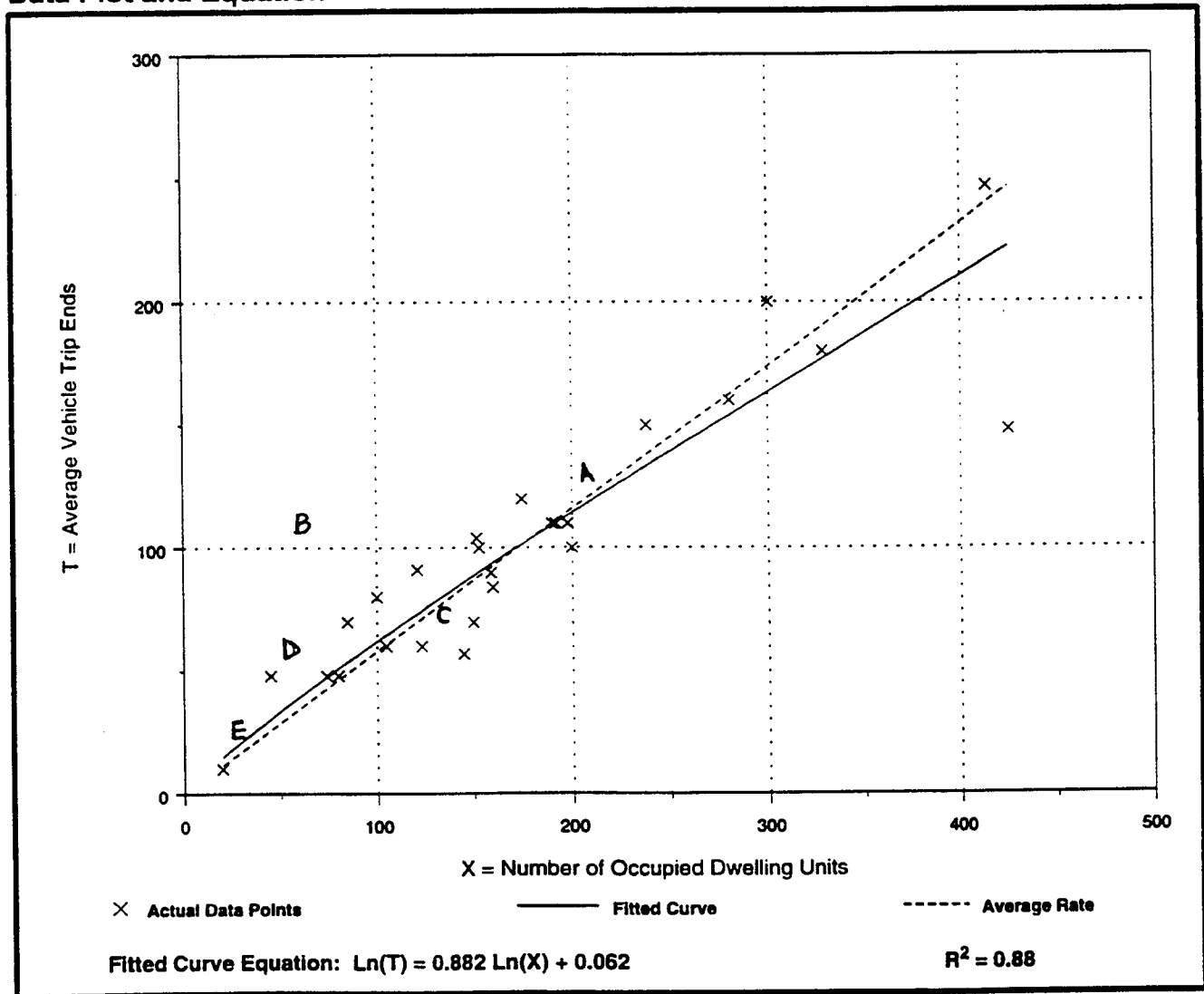
Average Vehicle Trip Ends vs: Occupied Dwelling Units
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 26
 Avg. Num. of Occupied Dwelling Units: 177
 Directional Distribution: 62% entering, 38% exiting

Trip Generation per Occupied Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.58	0.35 - 1.07	0.77

Data Plot and Equation



Mobile Home Park (240)

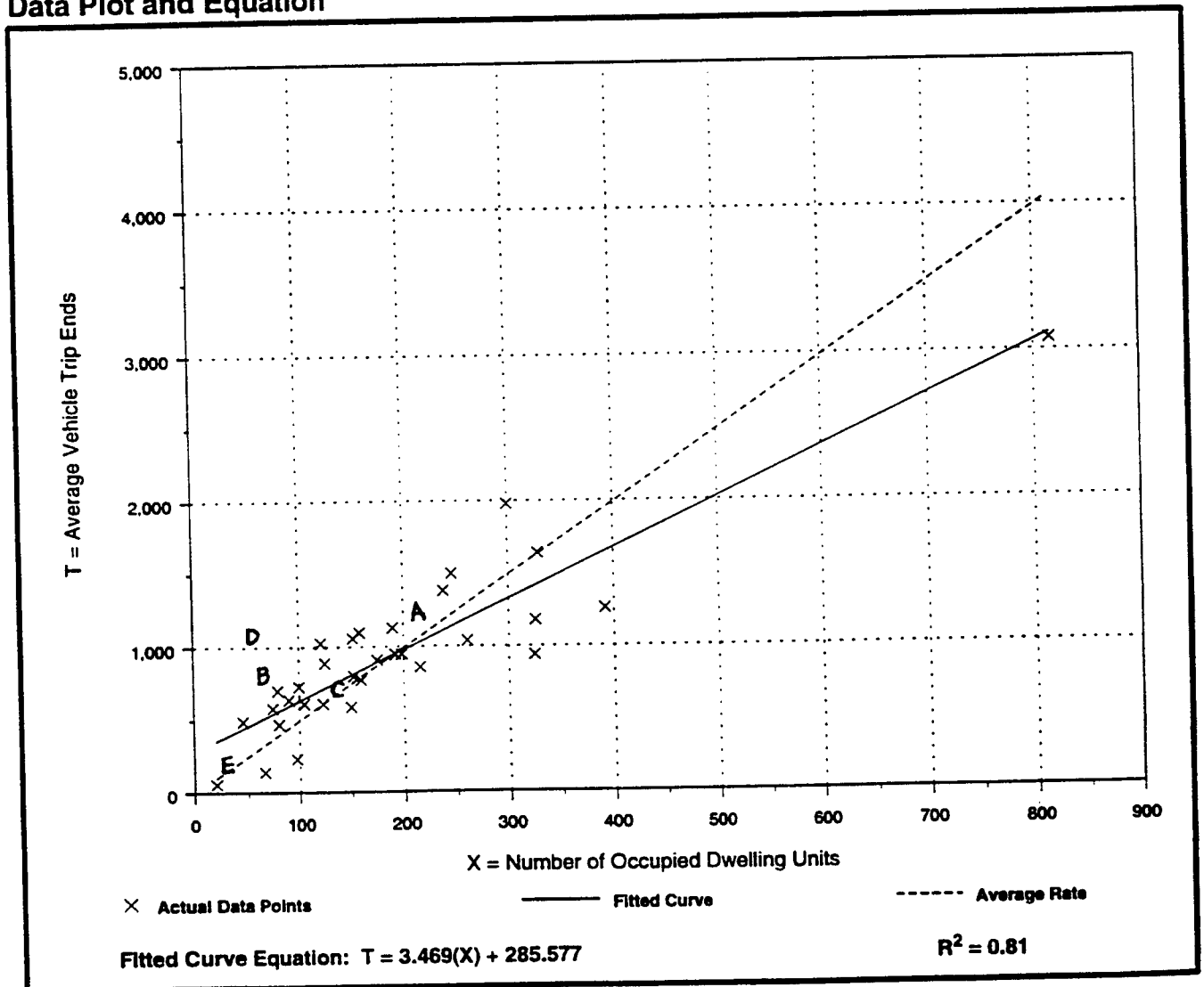
Average Vehicle Trip Ends vs: Occupied Dwelling Units
On a: **Saturday**

Number of Studies: 32
Avg. Num. of Occupied Dwelling Units: 191
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Occupied Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.97	2.12 - 10.93	2.73

Data Plot and Equation



Mobile Home Park (240)

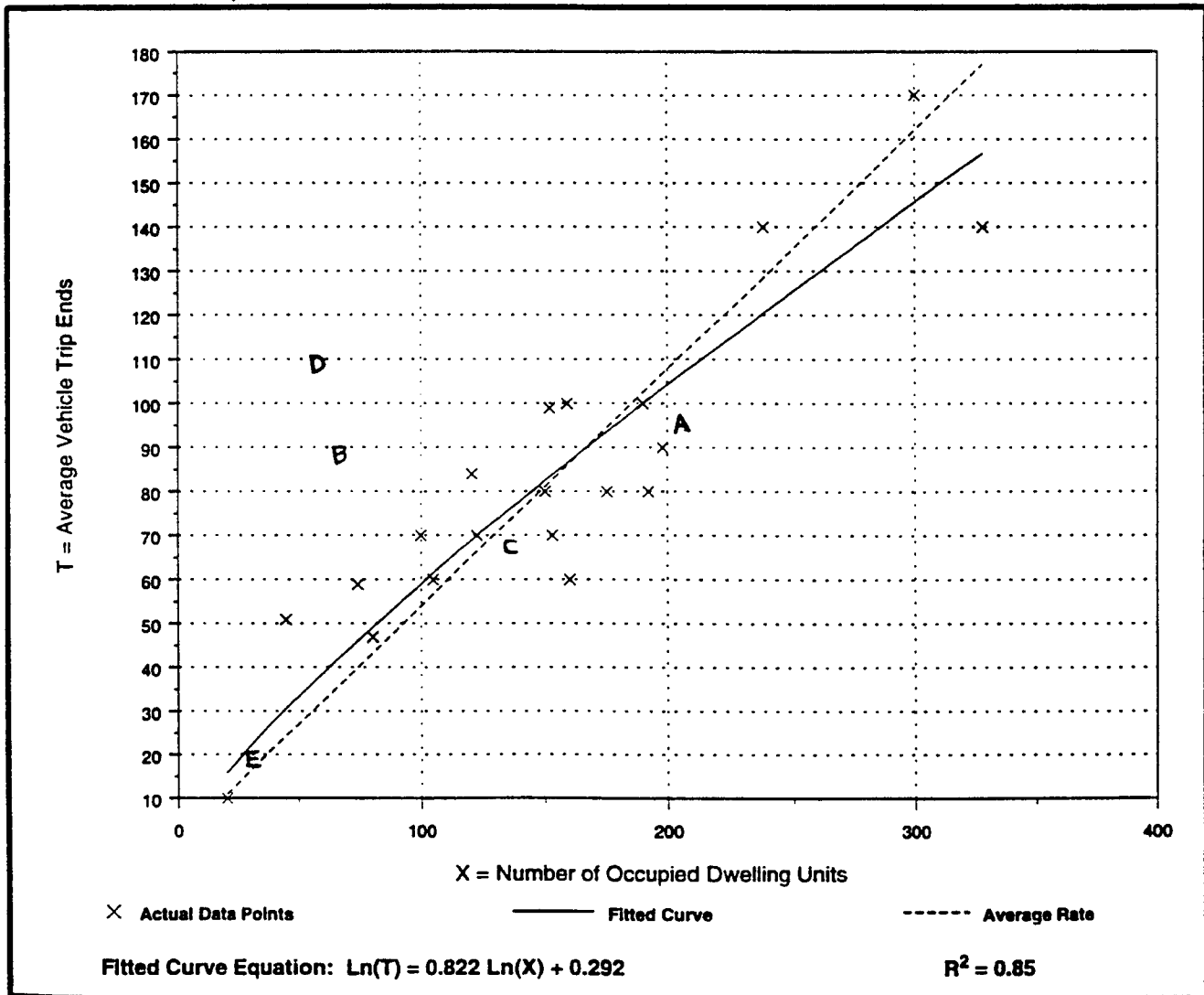
Average Vehicle Trip Ends vs: Occupied Dwelling Units
On a: Saturday,
Peak Hour of Generator

Number of Studies: 20
 Avg. Num. of Occupied Dwelling Units: 153
 Directional Distribution: 53% entering, 47% exiting

Trip Generation per Occupied Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.54	0.38 - 1.13	0.74

Data Plot and Equation



Mobile Home Park (240)

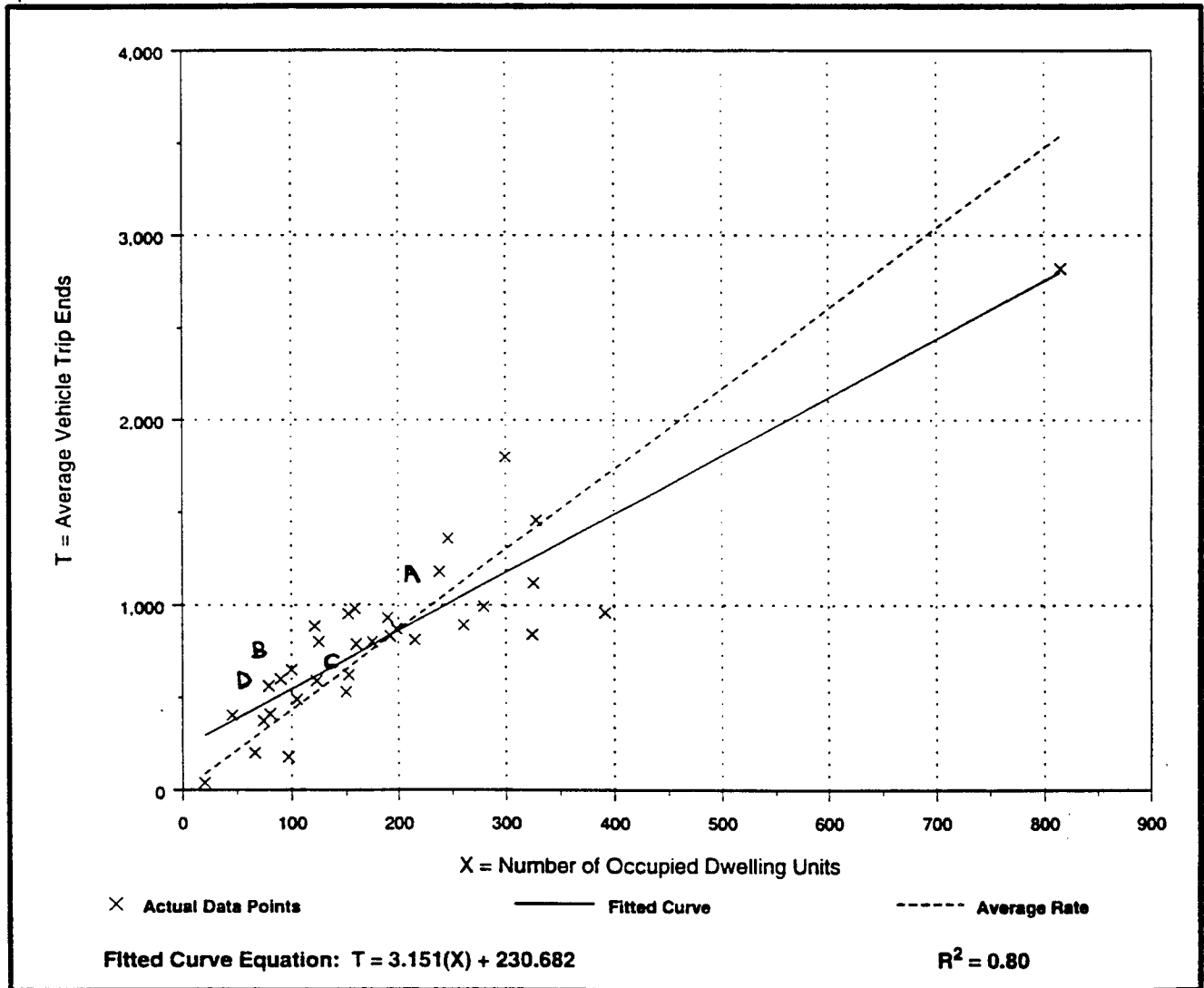
Average Vehicle Trip Ends vs: Occupied Dwelling Units
On a: **Sunday**

Number of Studies: 33
Avg. Num. of Occupied Dwelling Units: 193
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Occupied Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.34	1.86 - 8.98	2.47

Data Plot and Equation



Mobile Home Park (240)

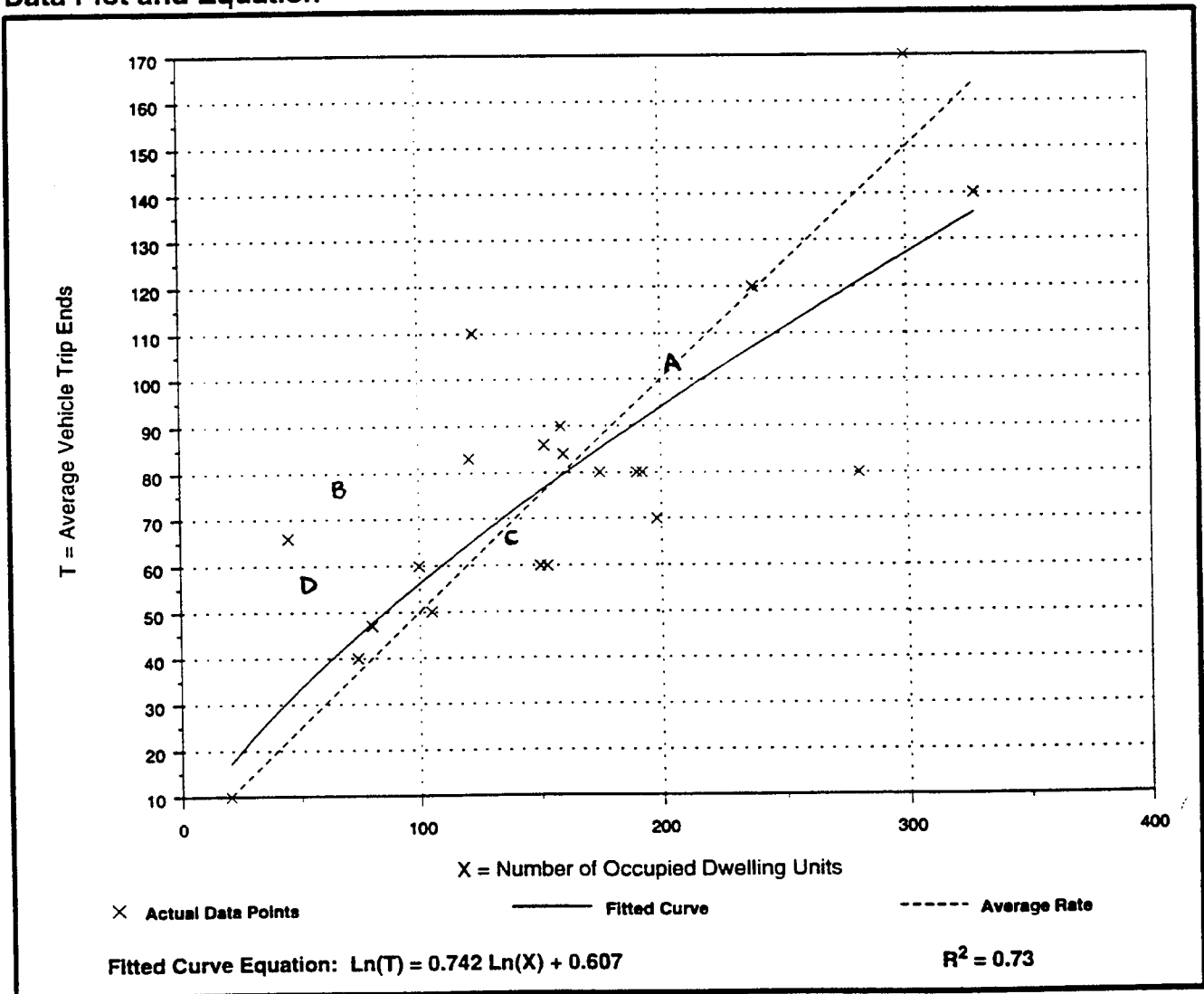
Average Vehicle Trip Ends vs: Occupied Dwelling Units
On a: Sunday,
Peak Hour of Generator

Number of Studies: 21
 Avg. Num. of Occupied Dwelling Units: 159
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per Occupied Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.50	0.29 - 1.47	0.72

Data Plot and Equation



APPENDIX C
ITE Format Graphs
Light Industrial Parks

Industrial Parks

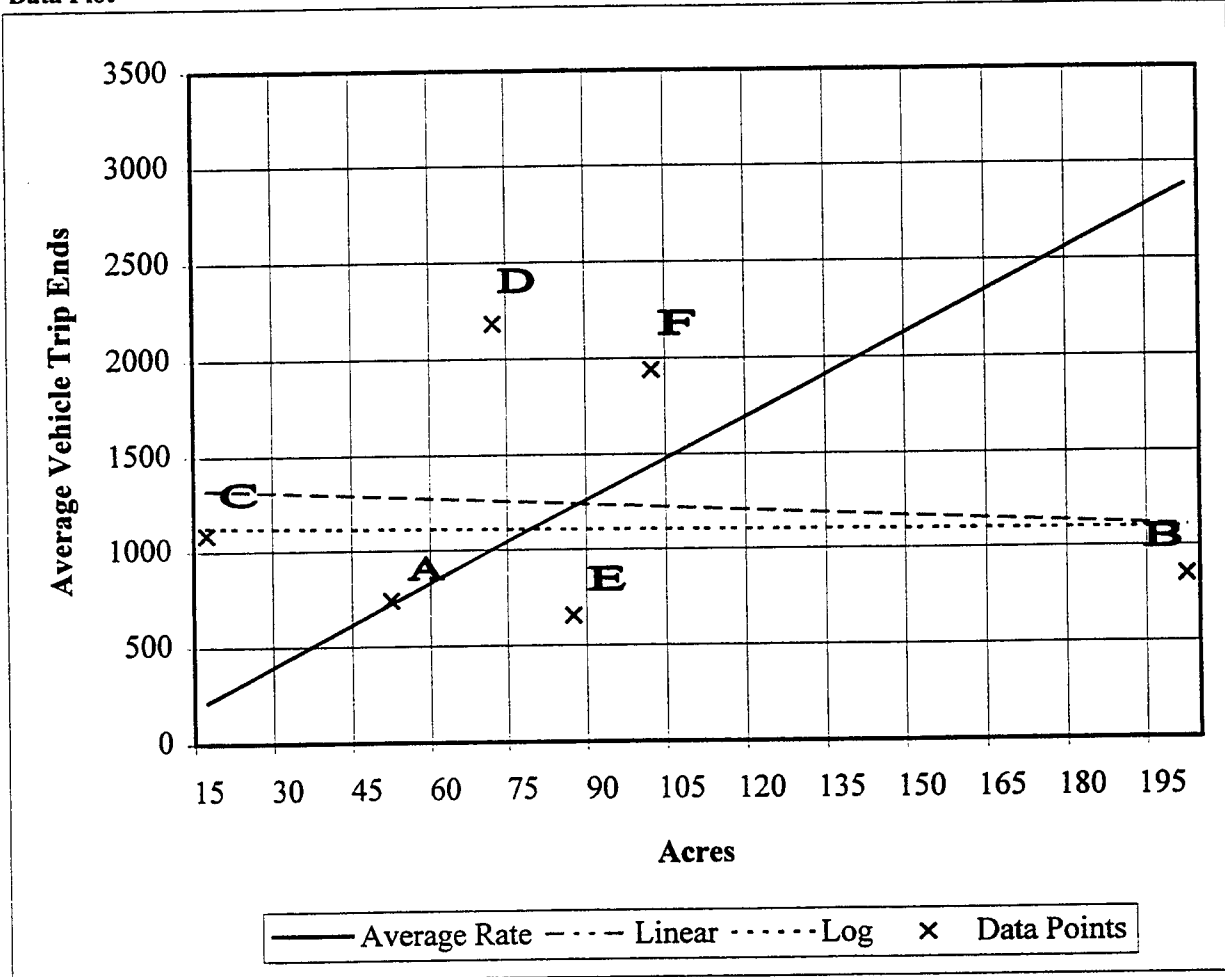
Average Vehicle Trip Ends V/S: Developed Acres
 On a: Weekday

Number of Studies: 6
 Average SEV Value: 86
 Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
14.40	4.24-72.32	25.09

Data Plot



Linear Equation Trip Ends=1339.45-1.15(Acres)

$r^2=0.01$

Log Equation Trip Ends=1153(Acres)^{-0.01}

$r^2=0.00$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Parks

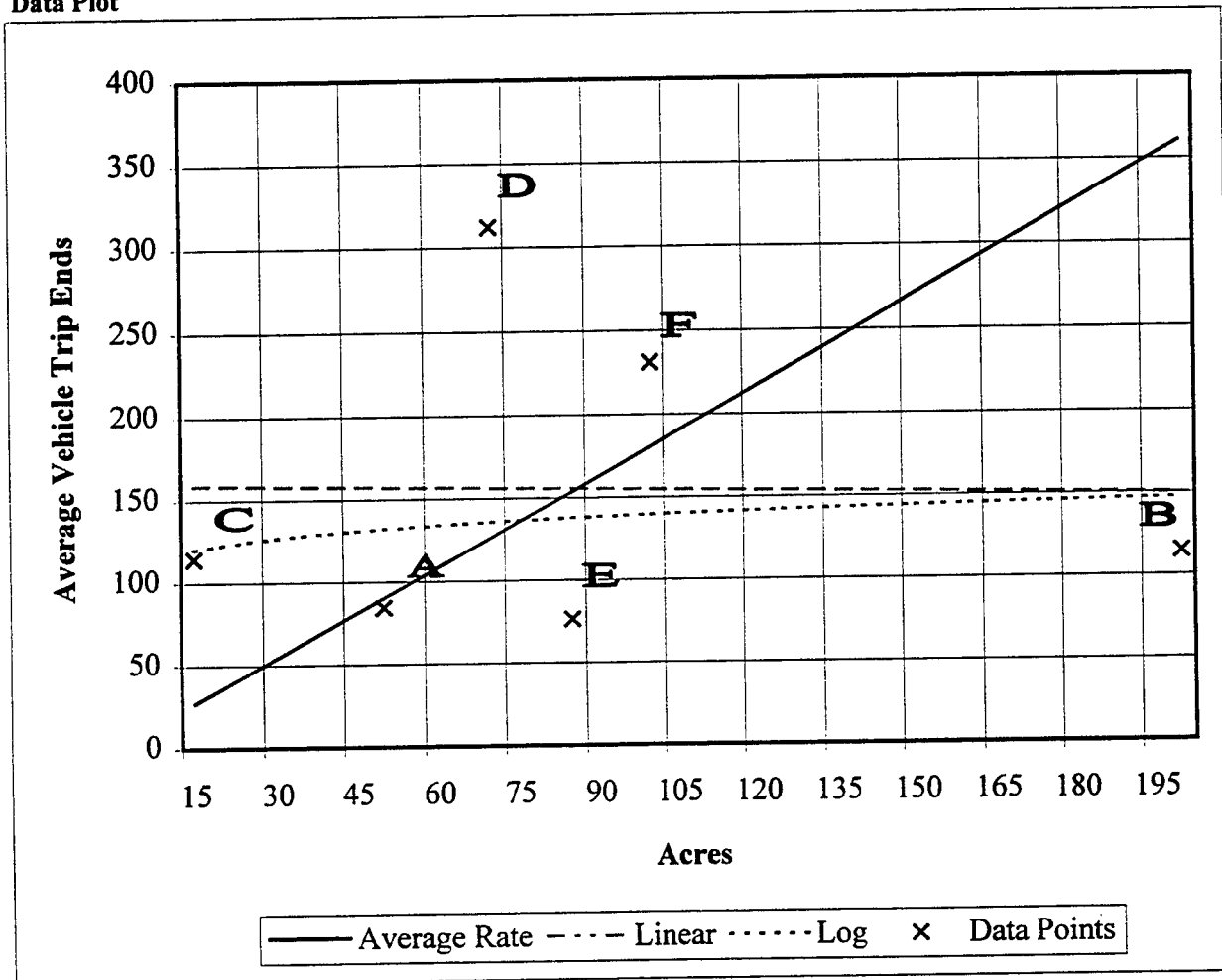
Average Vehicle Trip Ends V/S: Developed Acres
 On a: Weekday AM Peak

Number of Studies: 6
 Average SEV Value: 86
 Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
1.80	0.57-7.63	2.70

Data Plot



Linear Equation Trip Ends=159.50-0.05(Acres) $r^2=0.00$

Log Equation Trip Ends=96.5(Acres)^{0.08} $r^2=0.01$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Parks

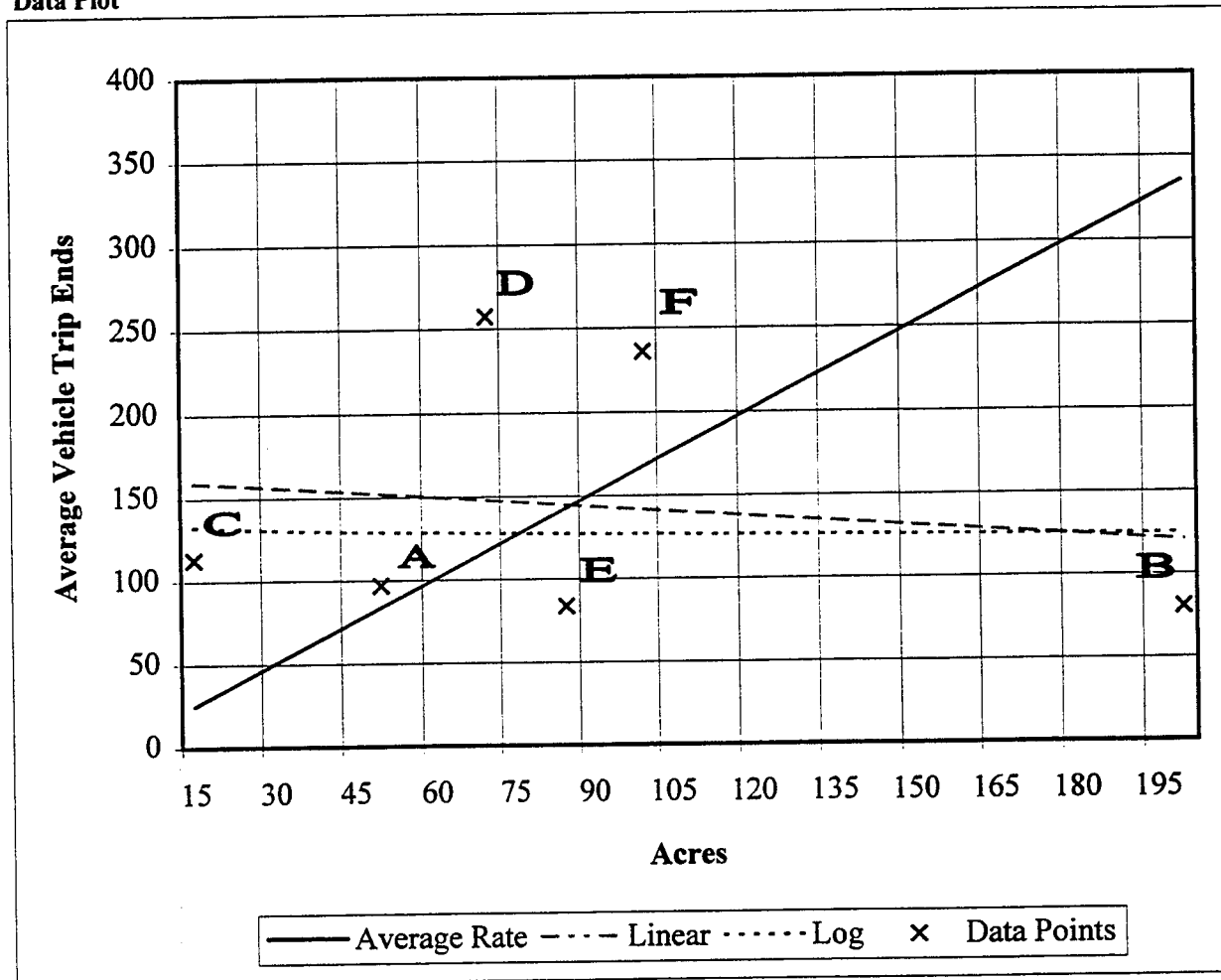
Average Vehicle Trip Ends V/S: Developed Acres
 On a: Weekday PM Peak

Number of Studies: 6
 Average SEV Value: 86
 Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
1.68	0.40-7.52	2.58

Data Plot



Linear Equation Trip Ends=162.33-0.21(Acres) $r^2=0.03$

Log Equation Trip Ends=141.2(Acres)^{-0.02} $r^2=0.00$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Parks

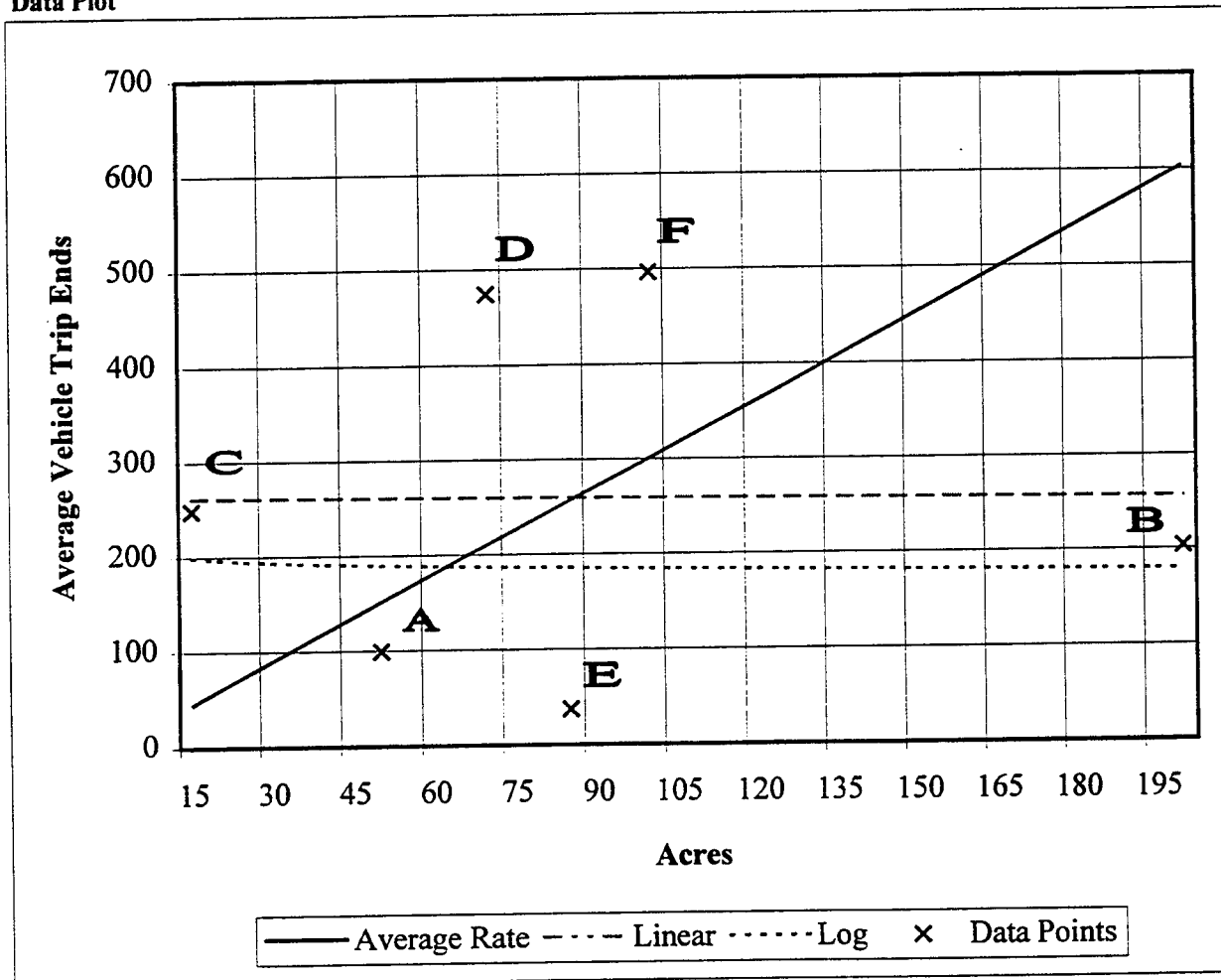
Average Vehicle Trip Ends V/S: Developed Acres
On a: Saturday

Number of Studies: 6
Average SEV Value: 86
Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
3.01	0.43-16.53	6.03

Data Plot



Linear Equation Trip Ends=261.81-0.03(Acres) $r^2=0.00$

Log Equation Trip Ends=221.4 (Acres)^{-0.04} $r^2=0.00$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Parks

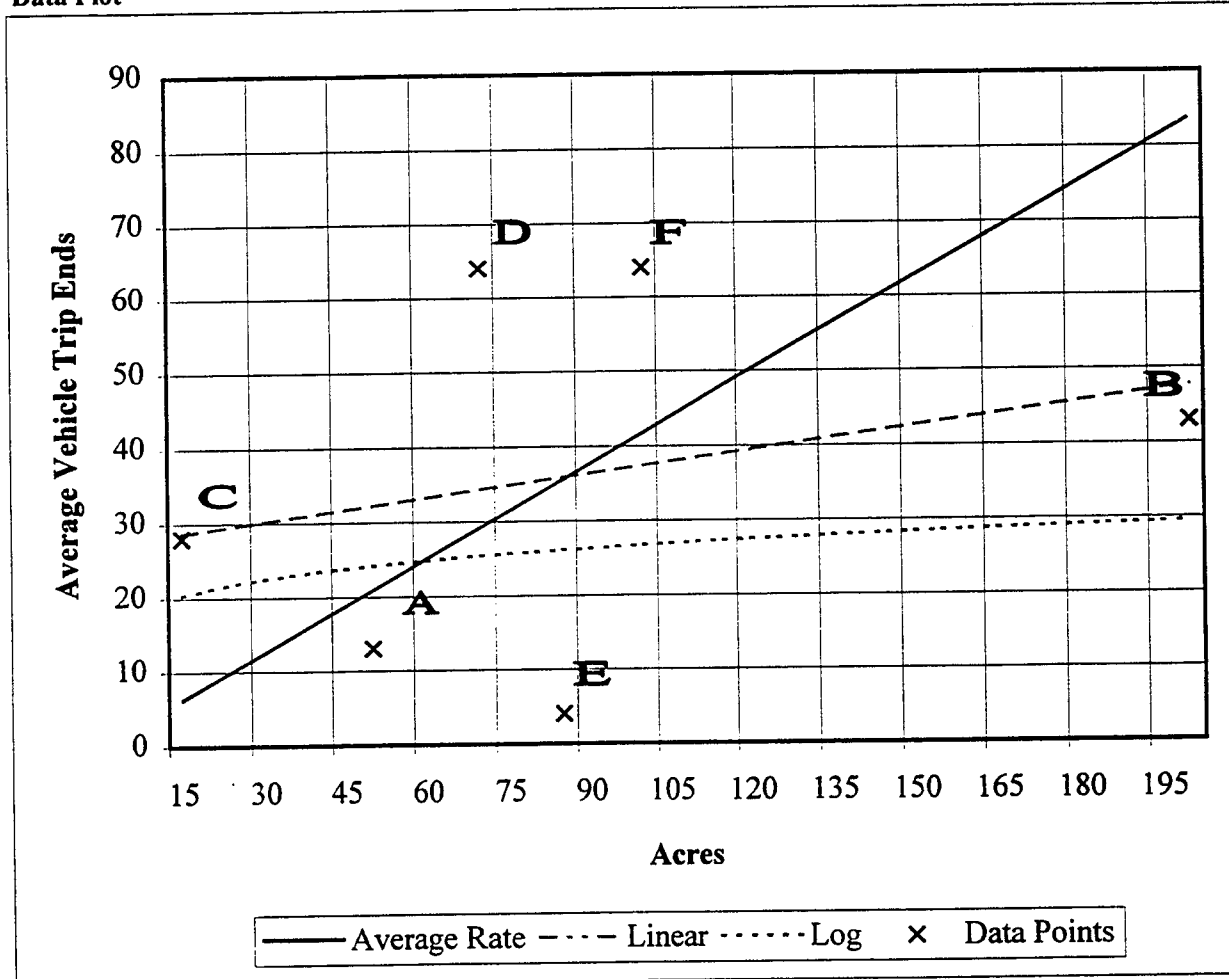
Average Vehicle Trip Ends V/S: Developed Acres
 On a: Saturday Peak

Number of Studies: 6
 Average SEV Value: 86
 Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.42	0.05-1.87	0.67

Data Plot



Linear Equation Trip Ends=27.08+0.10(Acres) $r^2=0.07$

Log Equation Trip Ends=13.7(Acres)^{0.14} $r^2=0.01$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Parks

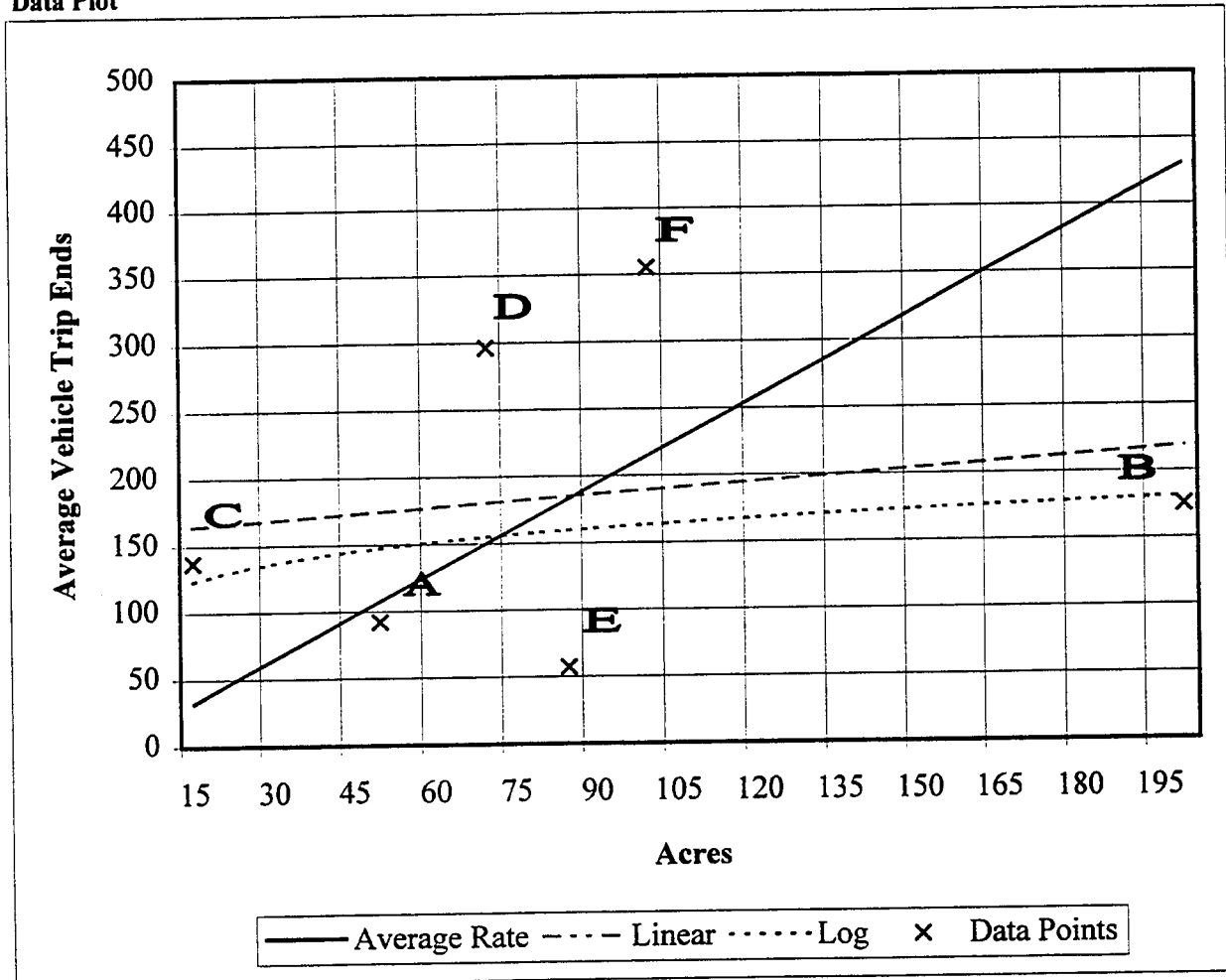
Average Vehicle Trip Ends V/S: Developed Acres
On a: Sunday

Number of Studies: 6
Average SEV Value: 86
Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
2.15	0.66-9.13	3.16

Data Plot



Linear Equation Trip Ends=159.94+0.29(Acres) $r^2=0.03$

Log Equation Trip Ends=82.3(Acres)^{0.15} $r^2=0.03$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Parks

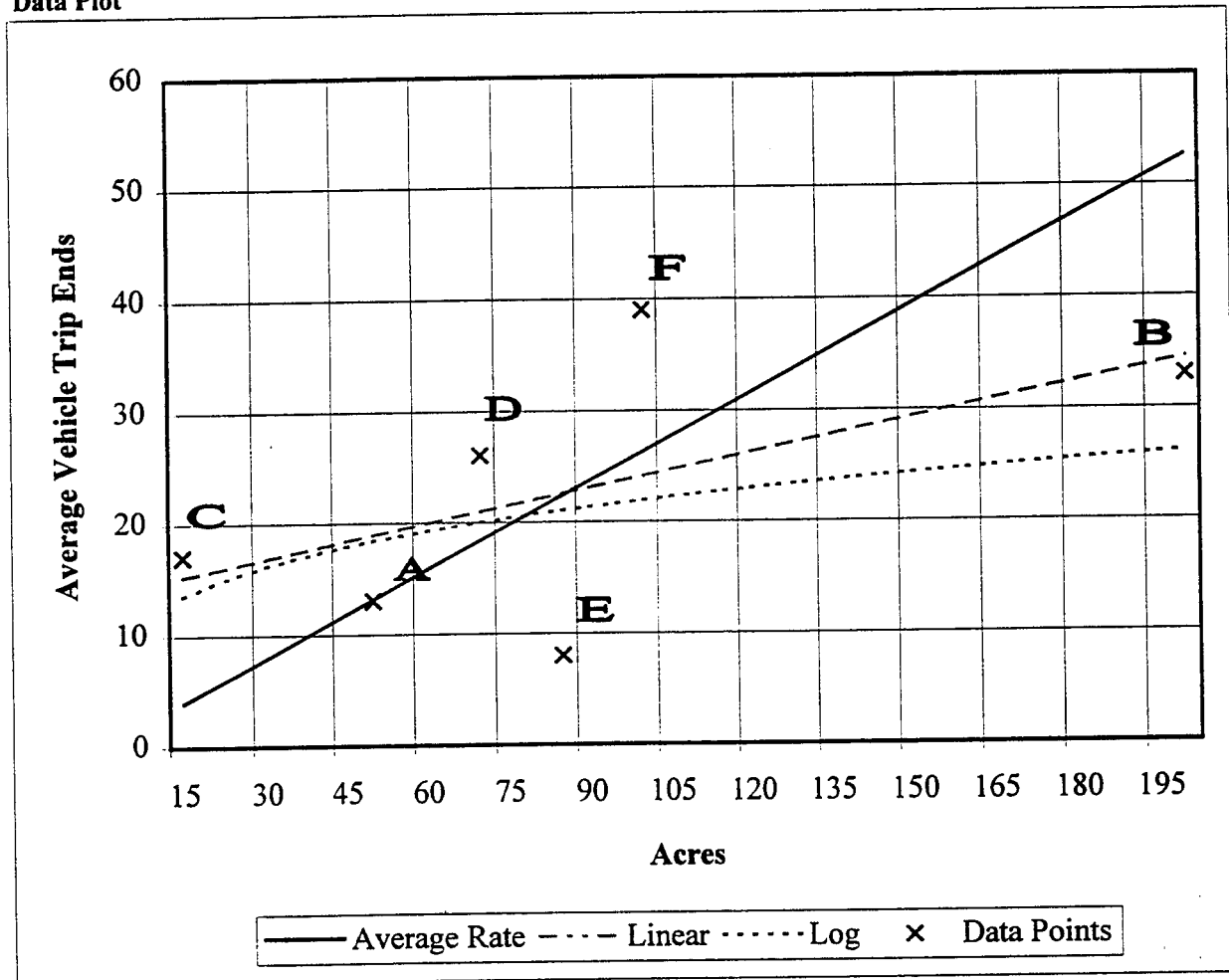
Average Vehicle Trip Ends V/S: Developed Acres
 On a: Sunday Peak

Number of Studies: 6
 Average SEV Value: 86
 Directional Distribution: Not Studied

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.26	0.09-1.13	0.38

Data Plot



Linear Equation Trip Ends=13.67+0.10(Acres) $r^2=0.30$

Log Equation Trip Ends=6.82(Acres)^{0.25} $r^2=0.13$

(Equations with $r^2 < 0.5$ are not recommended for use)

Industrial Park (130)

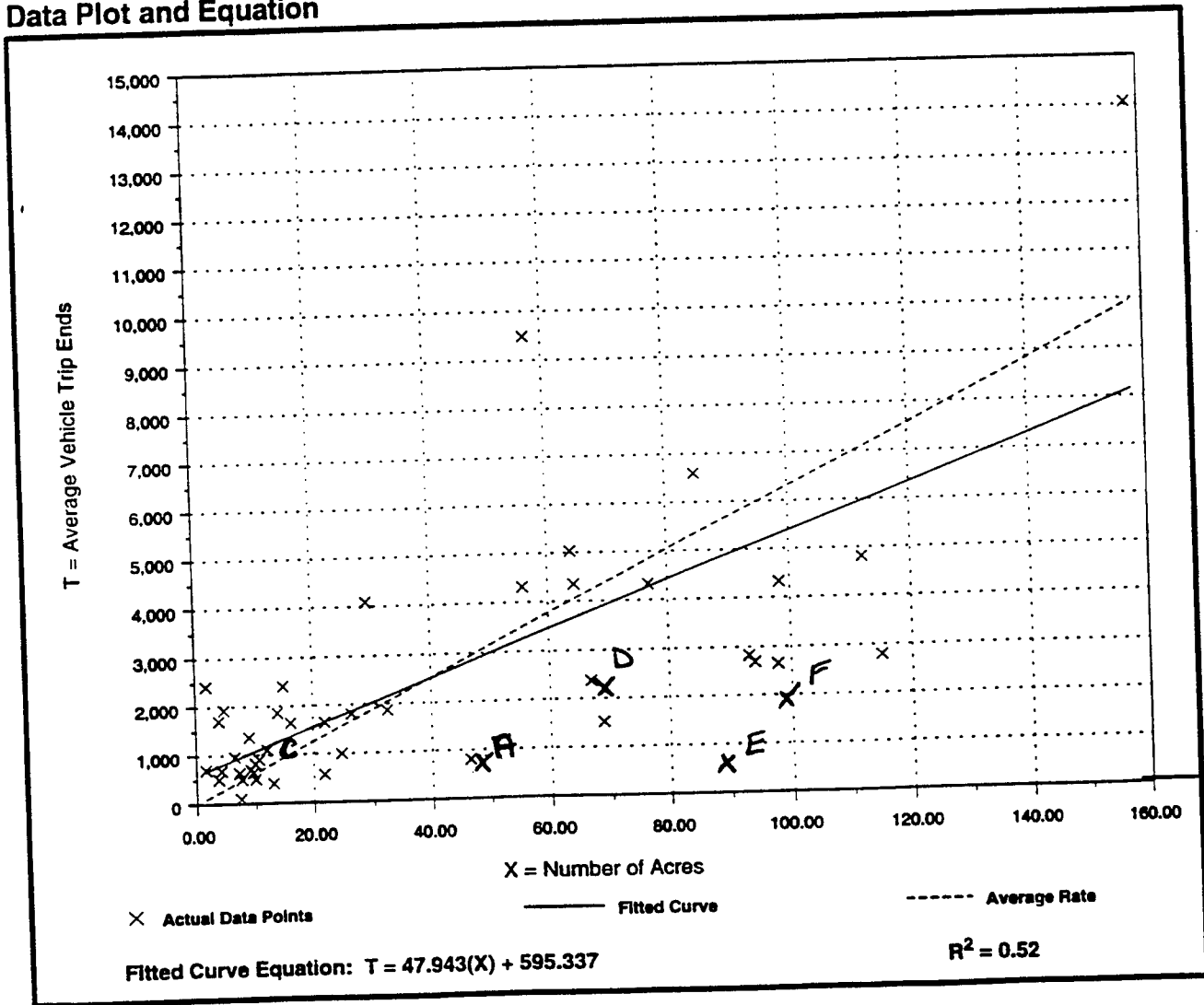
Average Vehicle Trip Ends vs: Acres
On a: Weekday

Number of Studies: 43
Average Number of Acres: 39
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
63.11	13.87 - 1272.63	62.04

Data Plot and Equation



Industrial Park (130)

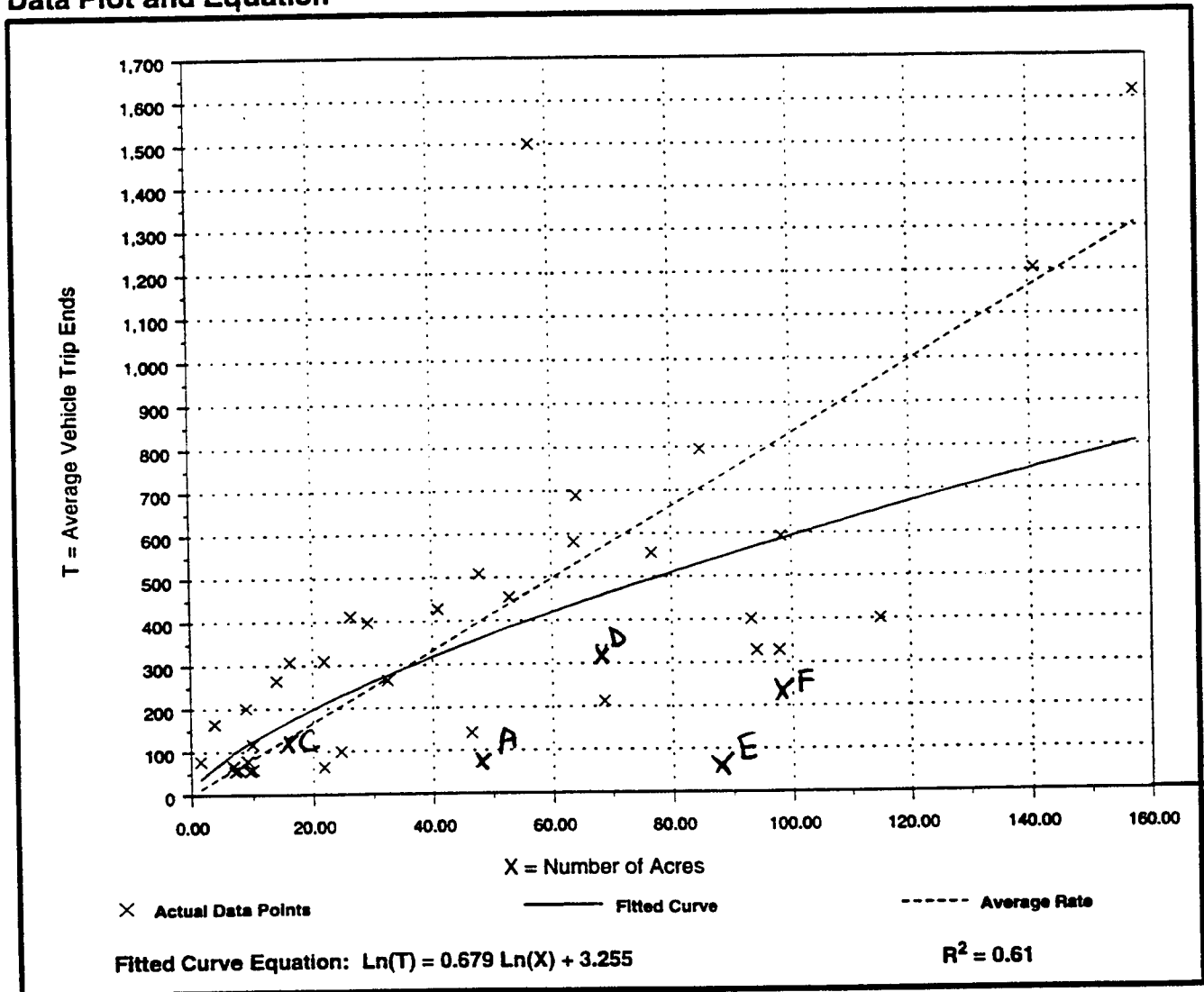
Average Vehicle Trip Ends vs: Acres
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 35
Average Number of Acres: 48
Directional Distribution: 87% entering, 13% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
8.29	2.94 - 48.75	6.12

Data Plot and Equation



Industrial Park (130)

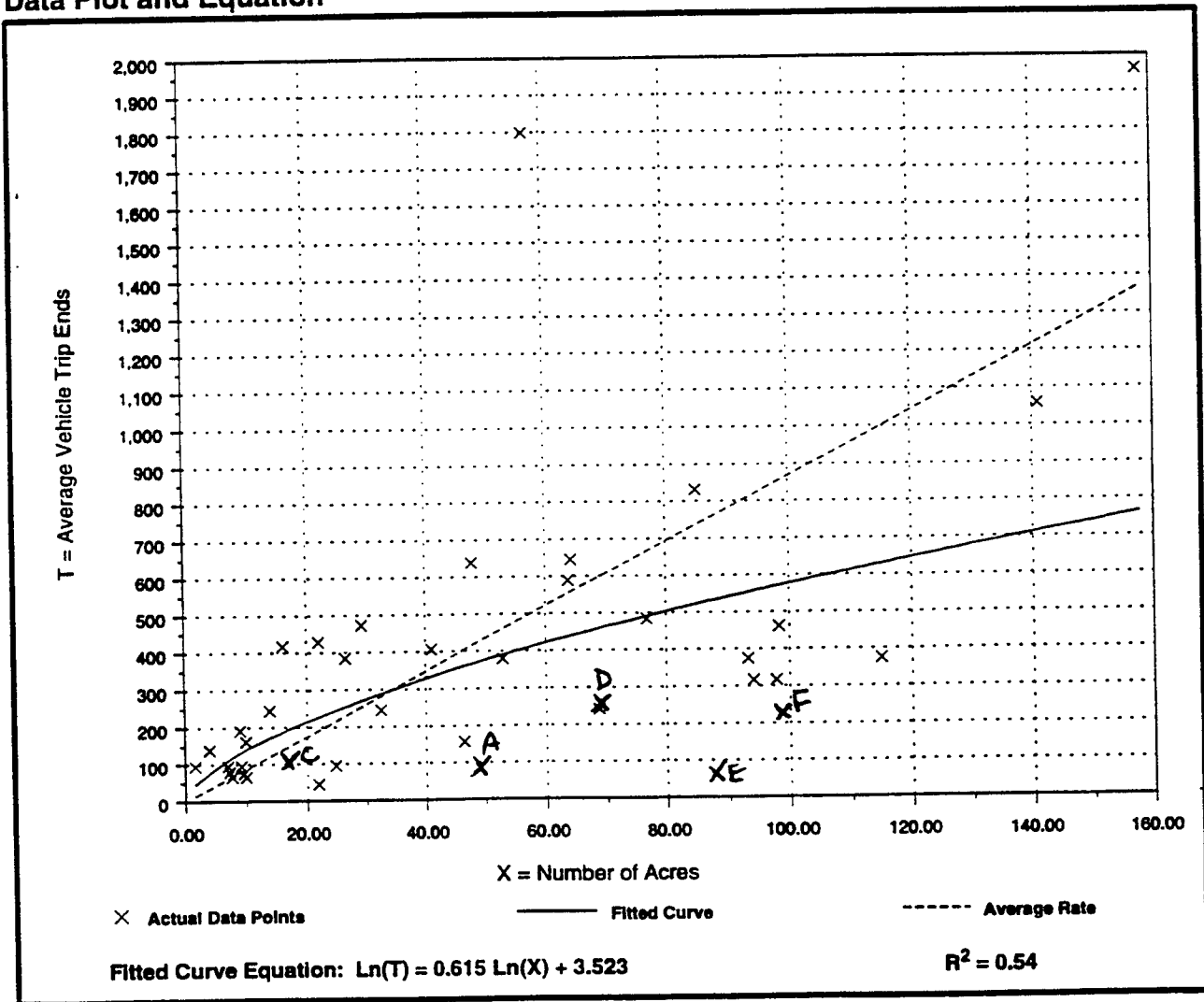
Average Vehicle Trip Ends vs: Acres
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 35
 Average Number of Acres: 48
 Directional Distribution: 21% entering, 79% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
8.67	2.11 - 59.38	7.16

Data Plot and Equation



Industrial Park (130)

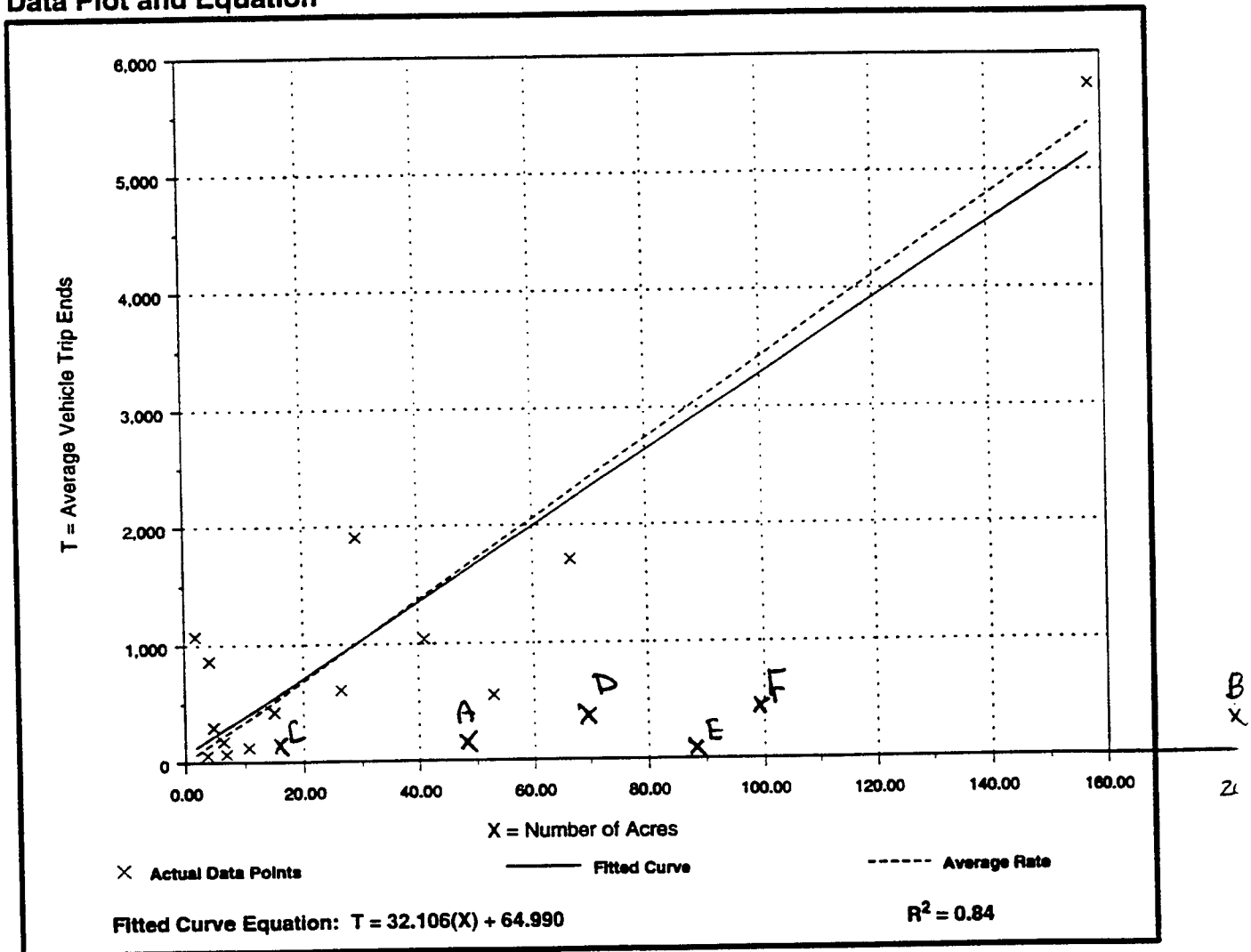
Average Vehicle Trip Ends vs: Acres
On a: **Saturday**

Number of Studies: 14
Average Number of Acres: 31
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
34.23	10.00 - 564.21	41.91

Data Plot and Equation



Industrial Park (130)

Average Vehicle Trip Ends vs: Acres
On a: Saturday,
Peak Hour of Generator

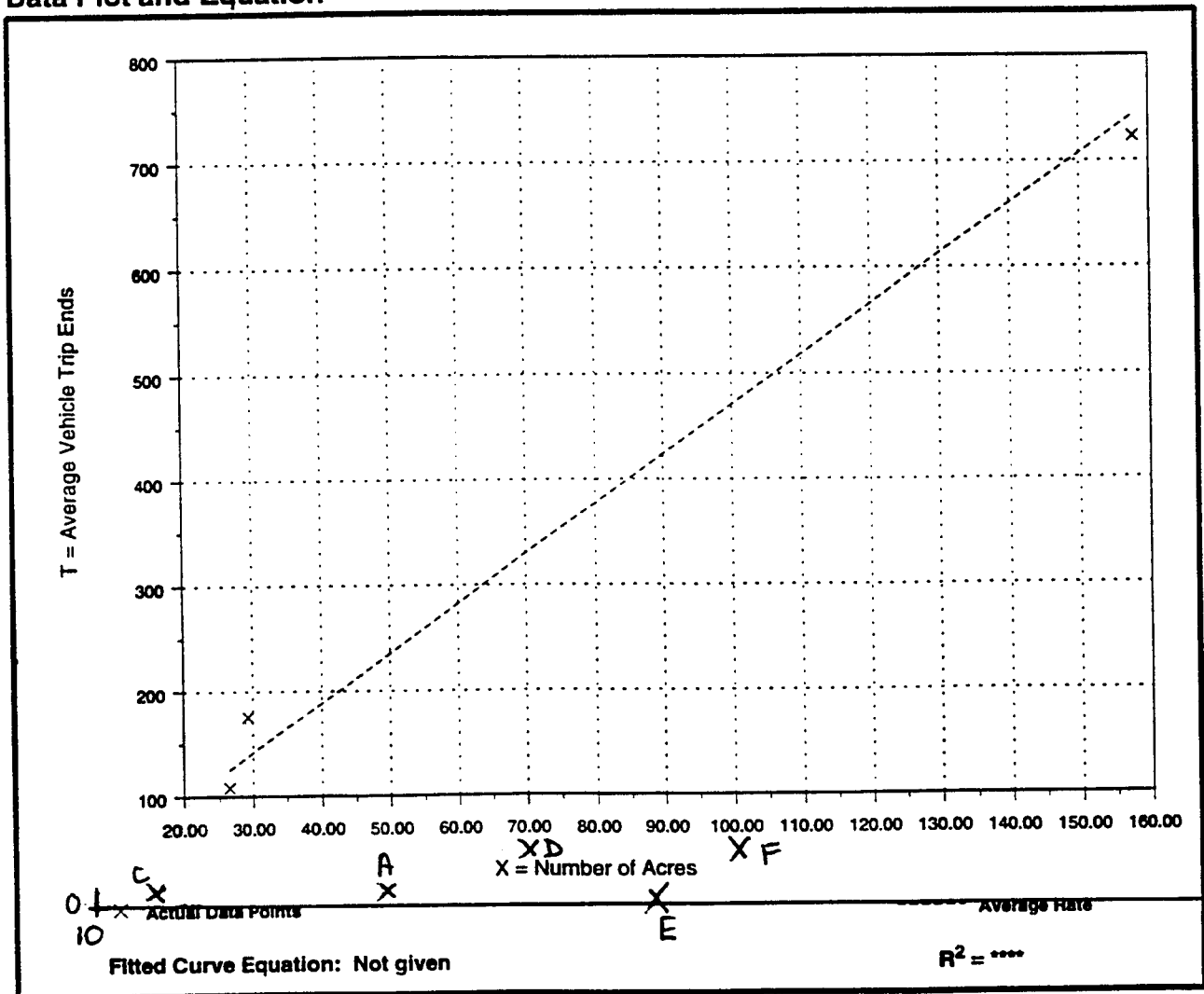
Number of Studies: 3
 Average Number of Acres: 71
 Directional Distribution: 32% entering, 68% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
4.71	4.08 - 6.01	2.23

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Industrial Park (130)

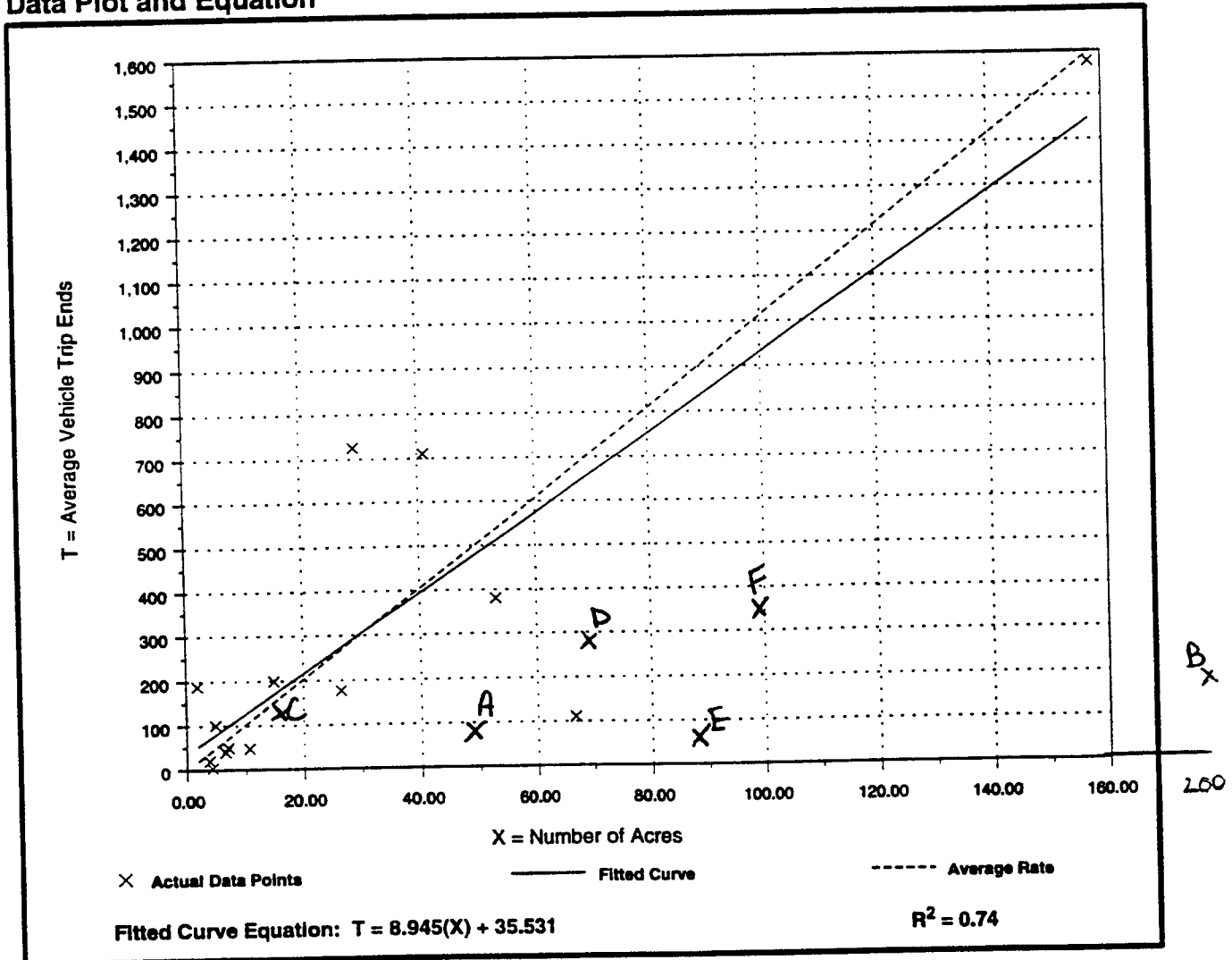
**Average Vehicle Trip Ends vs: Acres
On a: Sunday**

Number of Studies: 14
Average Number of Acres: 31
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
10.11	0.93 - 98.95	9.02

Data Plot and Equation



Industrial Park (130)

Average Vehicle Trip Ends vs: Acres
On a: Sunday,
Peak Hour of Generator

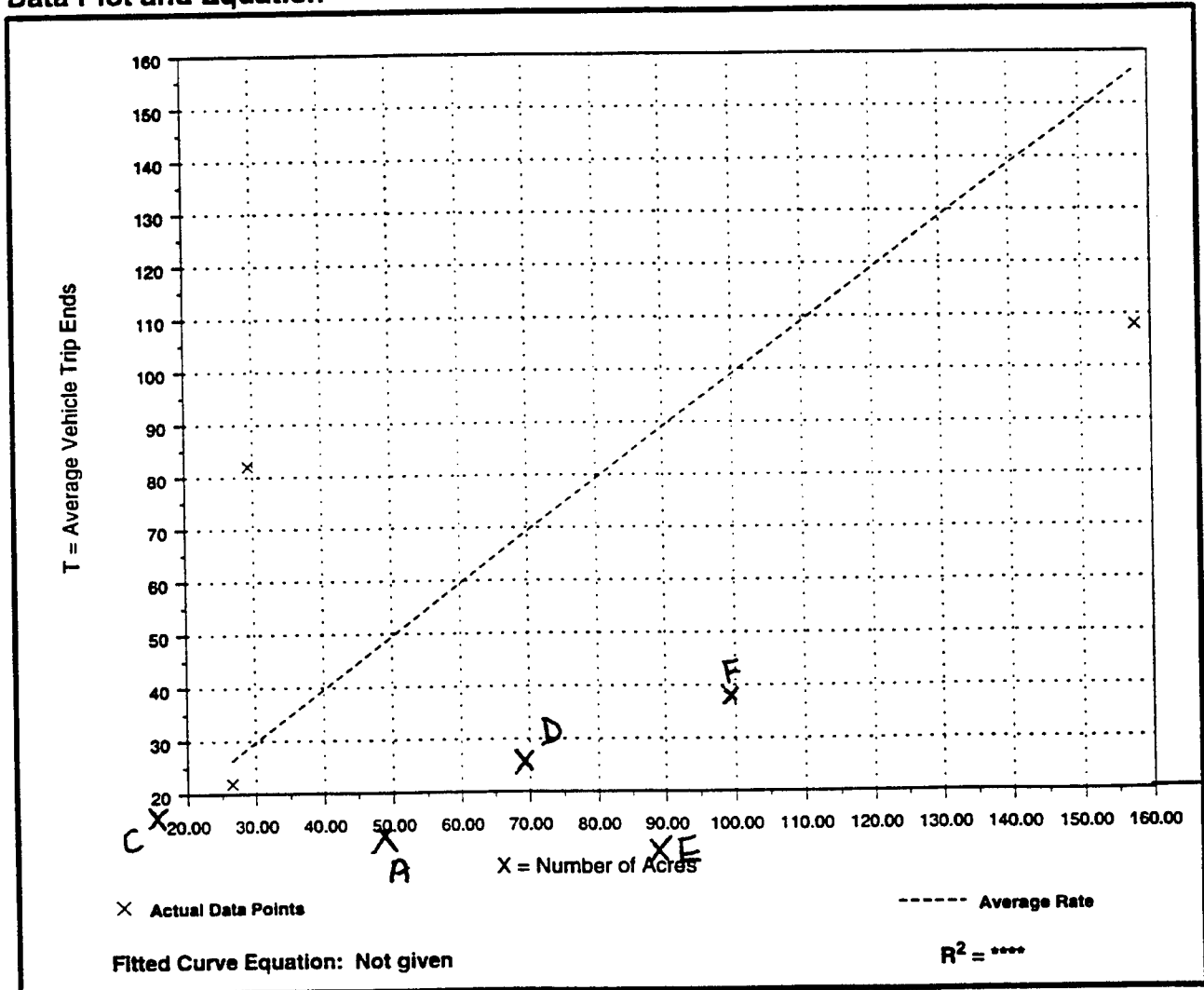
Number of Studies: 3
 Average Number of Acres: 71
 Directional Distribution: 46% entering, 54% exiting

Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.99	0.68 - 2.80	1.22

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



APPENDIX D
ITE Format Graphs
Regional Jails

Regional Jails

Average Vehicle Trip Ends V/S: Employees
On a: Weekday

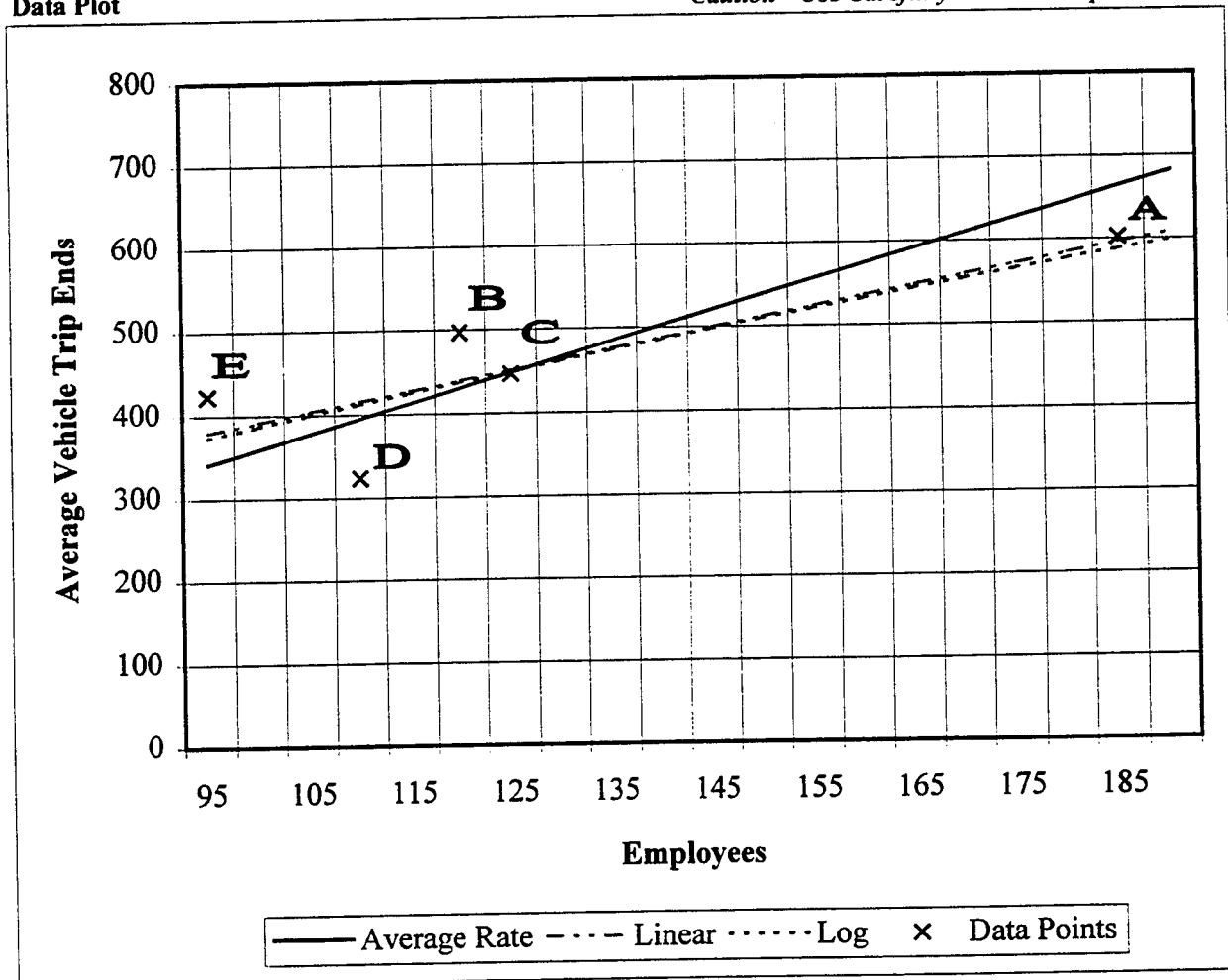
Number of Studies: 5
Average SEV Value: 128
Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.59	2.89-4.40	0.63

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 150.47 + 2.41(\text{Employees})$$

$$r^2 = 0.66$$

Log Equation

$$\text{Trip Ends} = 16.76(\text{Employees})^{0.68}$$

$$r^2 = 0.54$$

Regional Jails

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday AM Peak

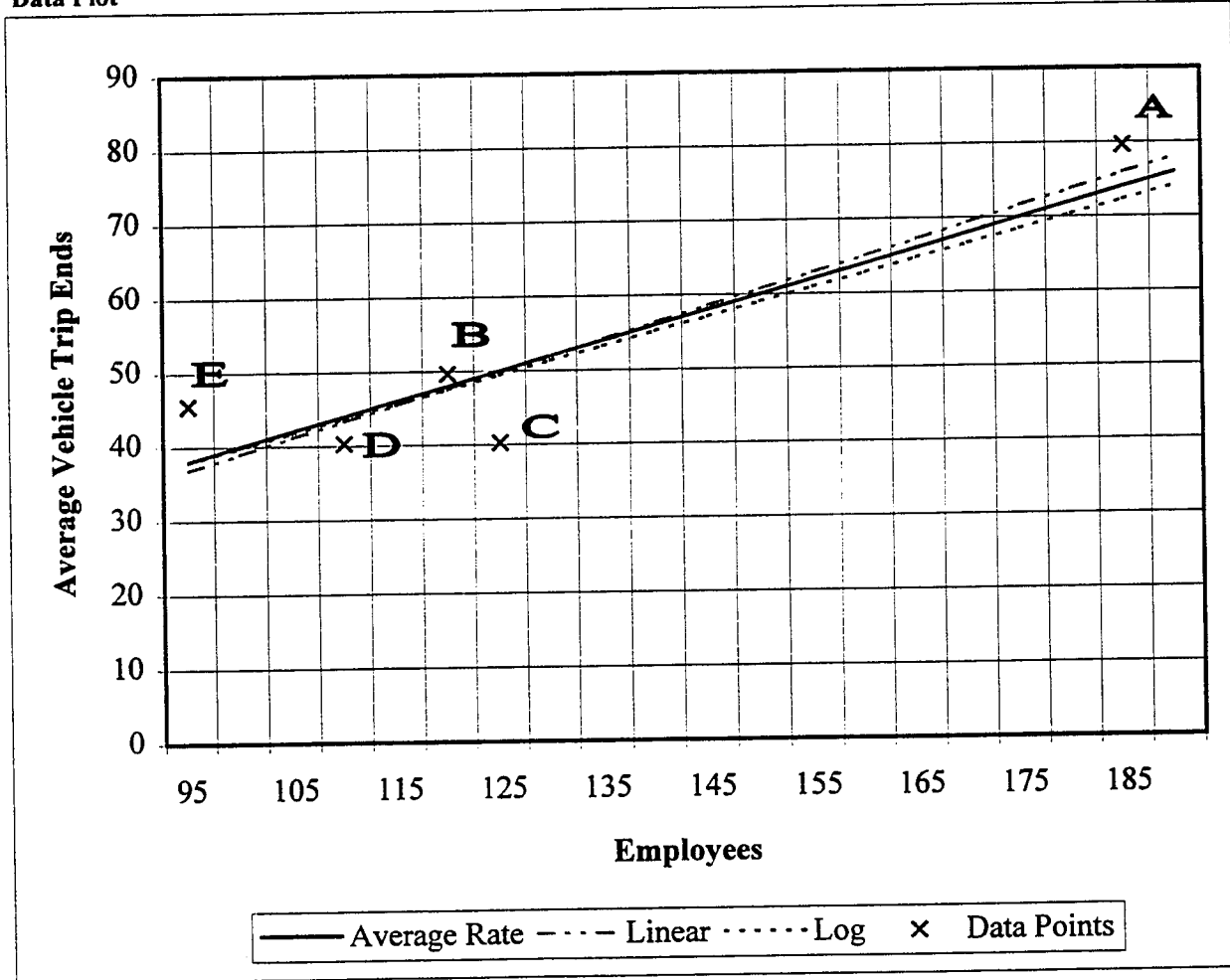
Number of Studies: 5
 Average SEV Value: 128
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.40	0.32-0.47	0.06

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = -4.53 + 0.43(\text{Employees})$$

$$r^2 = 0.82$$

Log Equation

$$\text{Trip Ends} = 0.46(\text{Employees})^{0.97}$$

$$r^2 = 0.71$$

Regional Jails

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

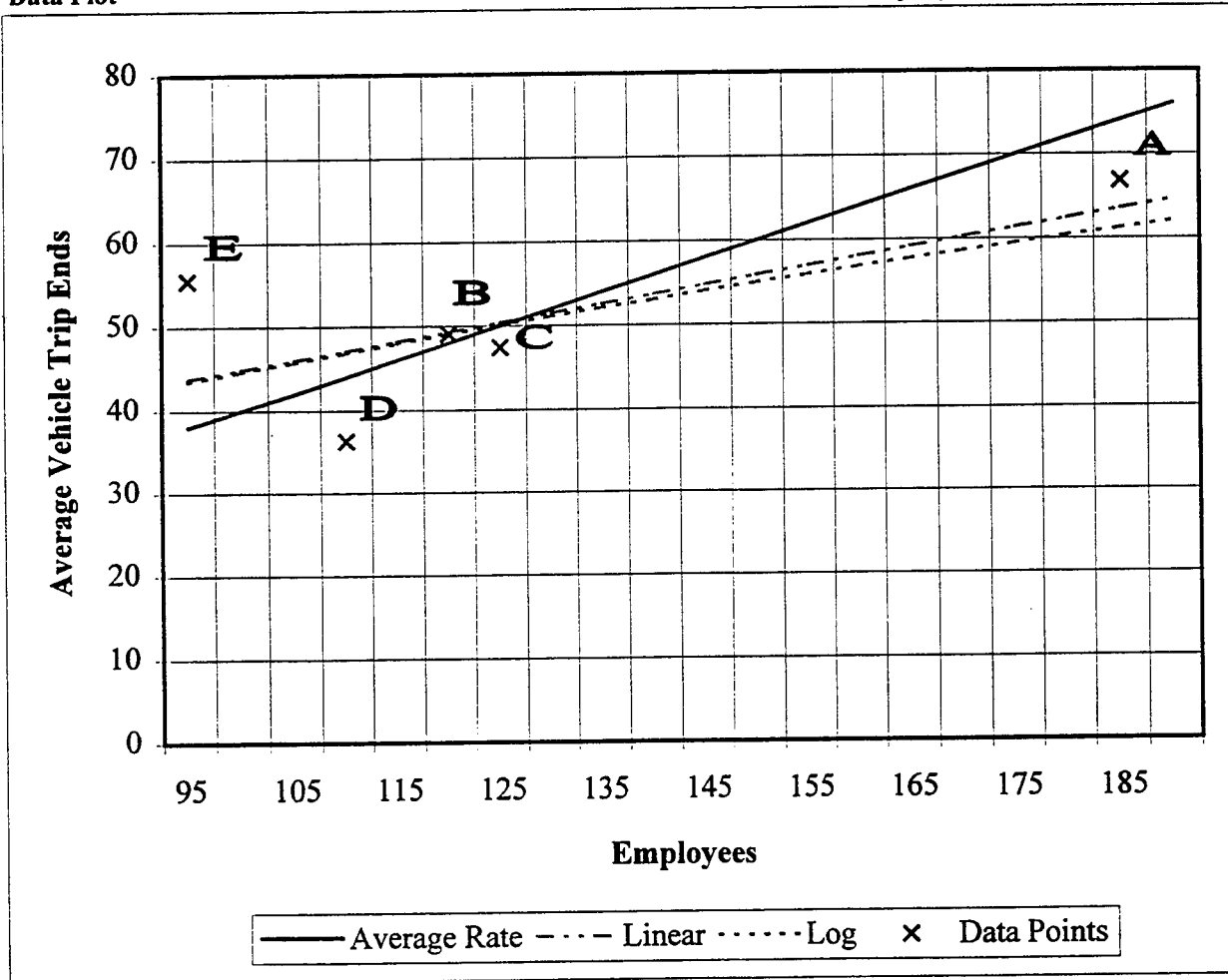
Number of Studies: 5
 Average SEV Value: 128
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.40	0.32-0.58	0.10

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=22.94+0.22(Employees) $r^2=0.45$

Log Equation Trip Ends=4.21(Employees)^{0.51} $r^2=0.31$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Employees
 On a: Saturday

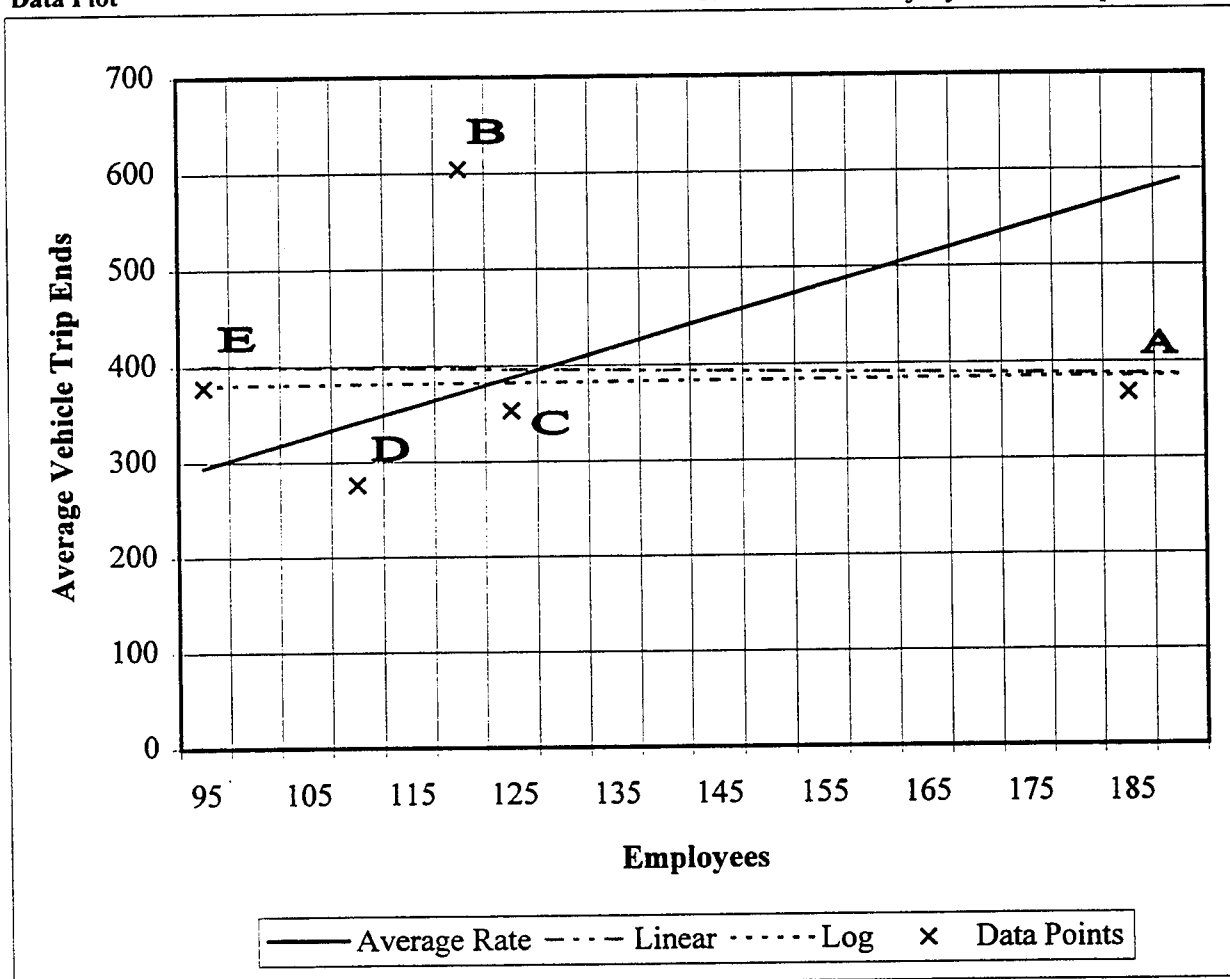
Number of Studies: 5
 Average SEV Value: 128
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.10	1.98-5.03	1.23

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=413.77-0.14(Employees) $r^2=0.00$

Log Equation Trip Ends=346.44(Employees)^{0.02} $r^2=0.00$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Employees
 On a: Saturday Peak

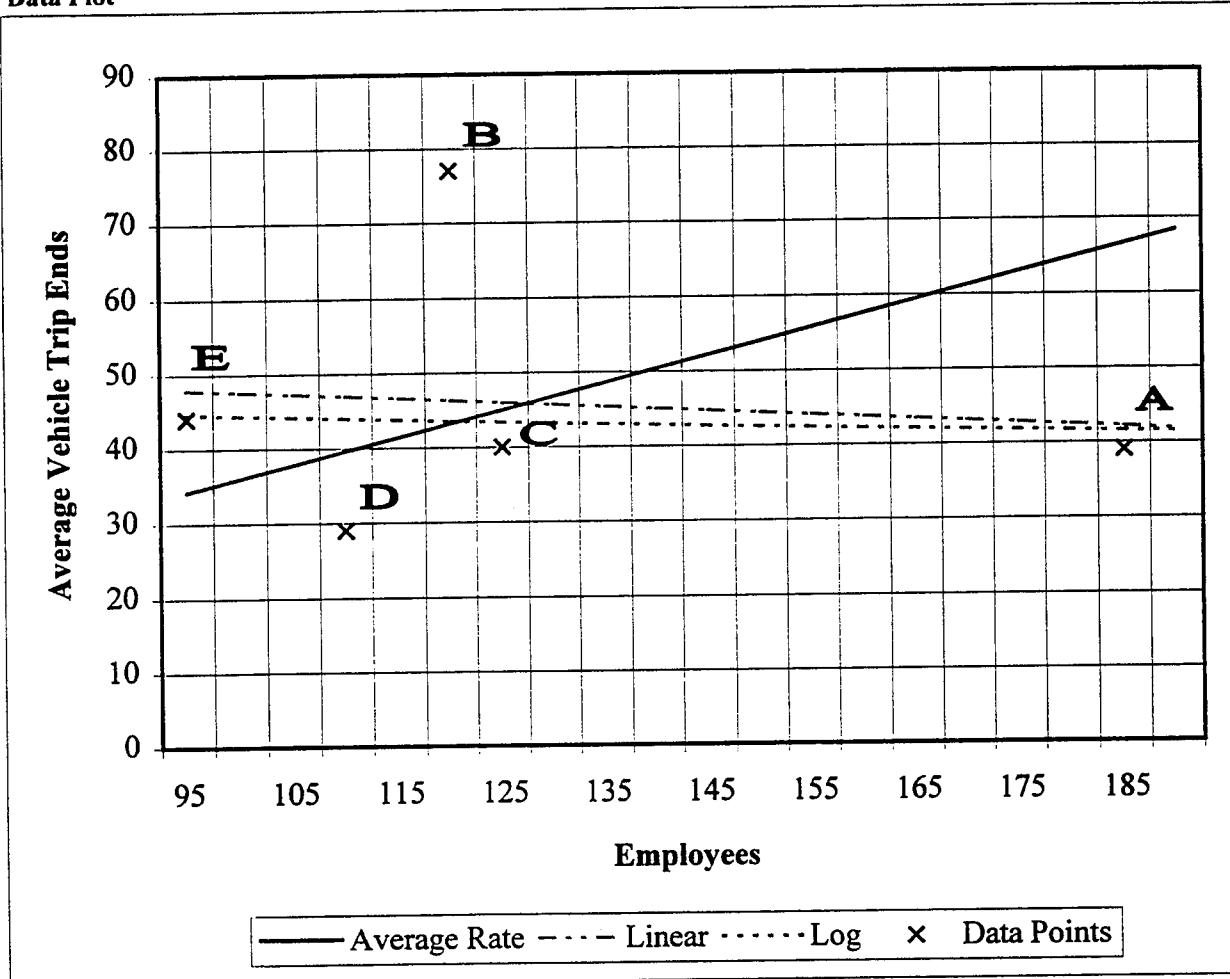
Number of Studies: 5
 Average SEV Value: 128
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.36	0.21-0.64	0.17

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=53.93-0.06(Employees) $r^2=0.01$

Log Equation Trip Ends=71.85(Employees)^{-0.10} $r^2=0.01$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Employees
 On a: Sunday

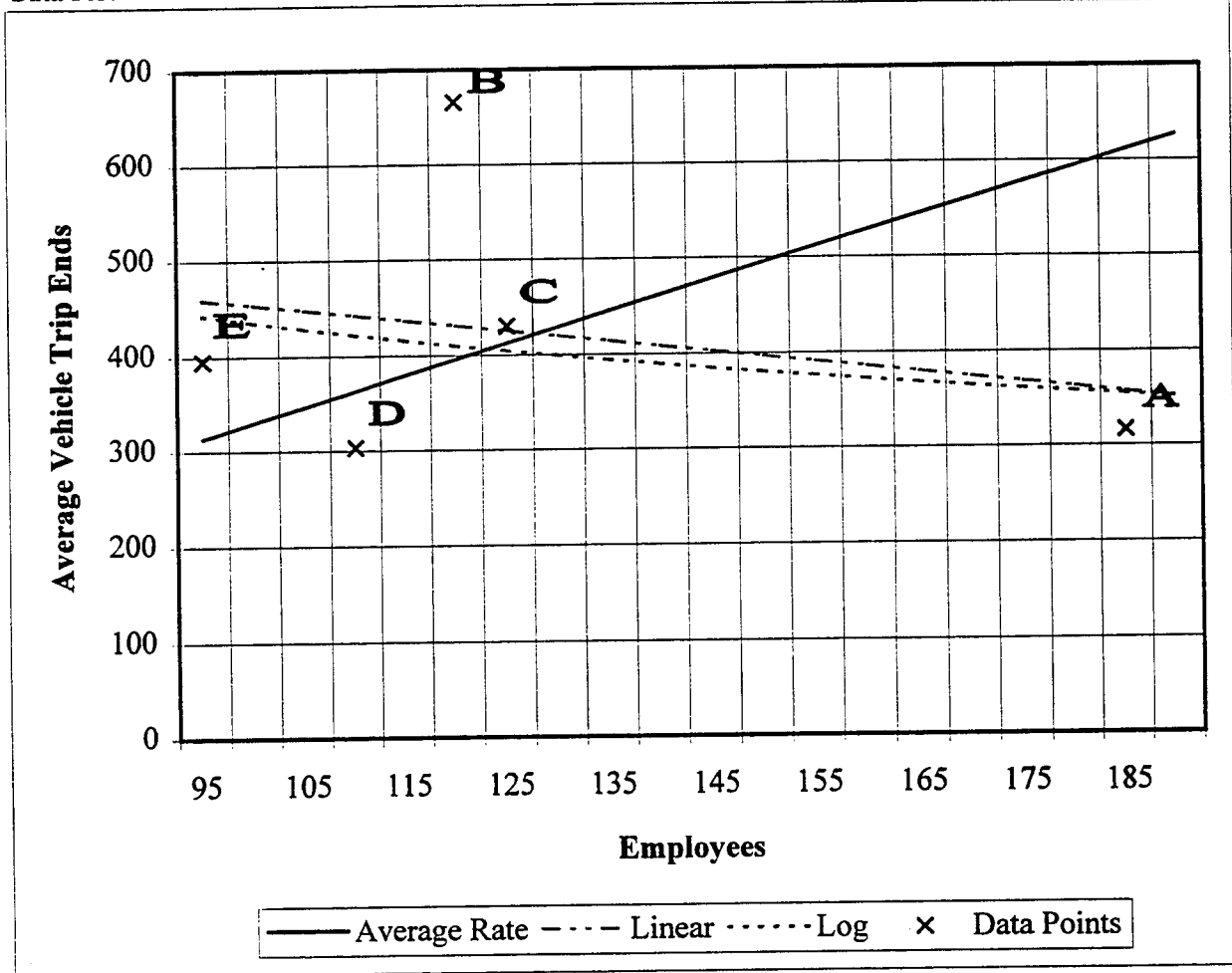
Number of Studies: 5
 Average SEV Value: 128
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.30	1.70-5.55	1.45

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=567.12-1.14(Employees) $r^2=0.07$

Log Equation Trip Ends=2022(Employees)^{-0.33} $r^2=0.07$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Employees
 On a: Sunday Peak

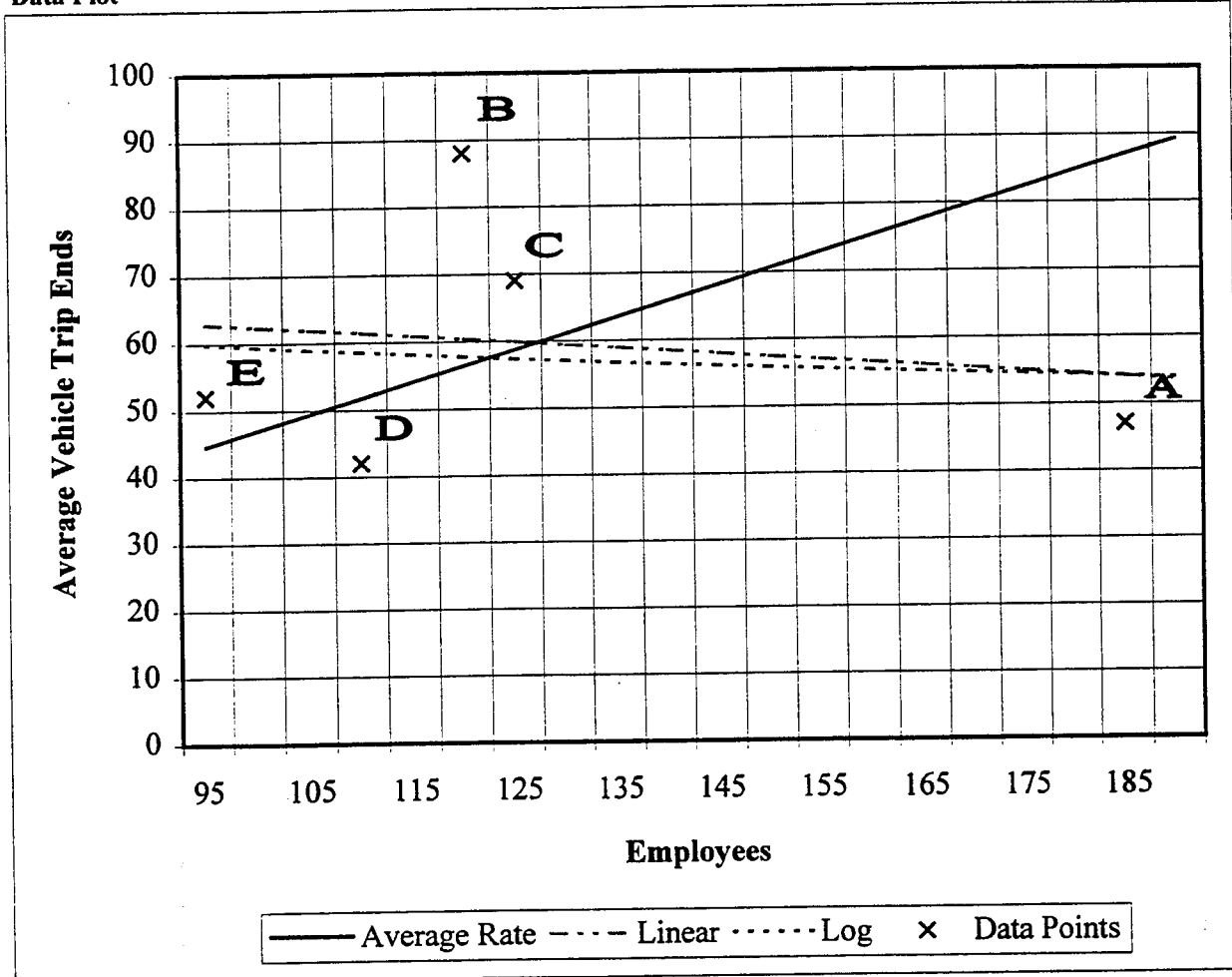
Number of Studies: 5
 Average SEV Value: 128
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.47	0.25-0.73	0.18

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=72.10-0.10(Employees) $r^2=0.03$

Log Equation Trip Ends=119.11(Employees)^{-0.15} $r^2=0.02$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Weekday

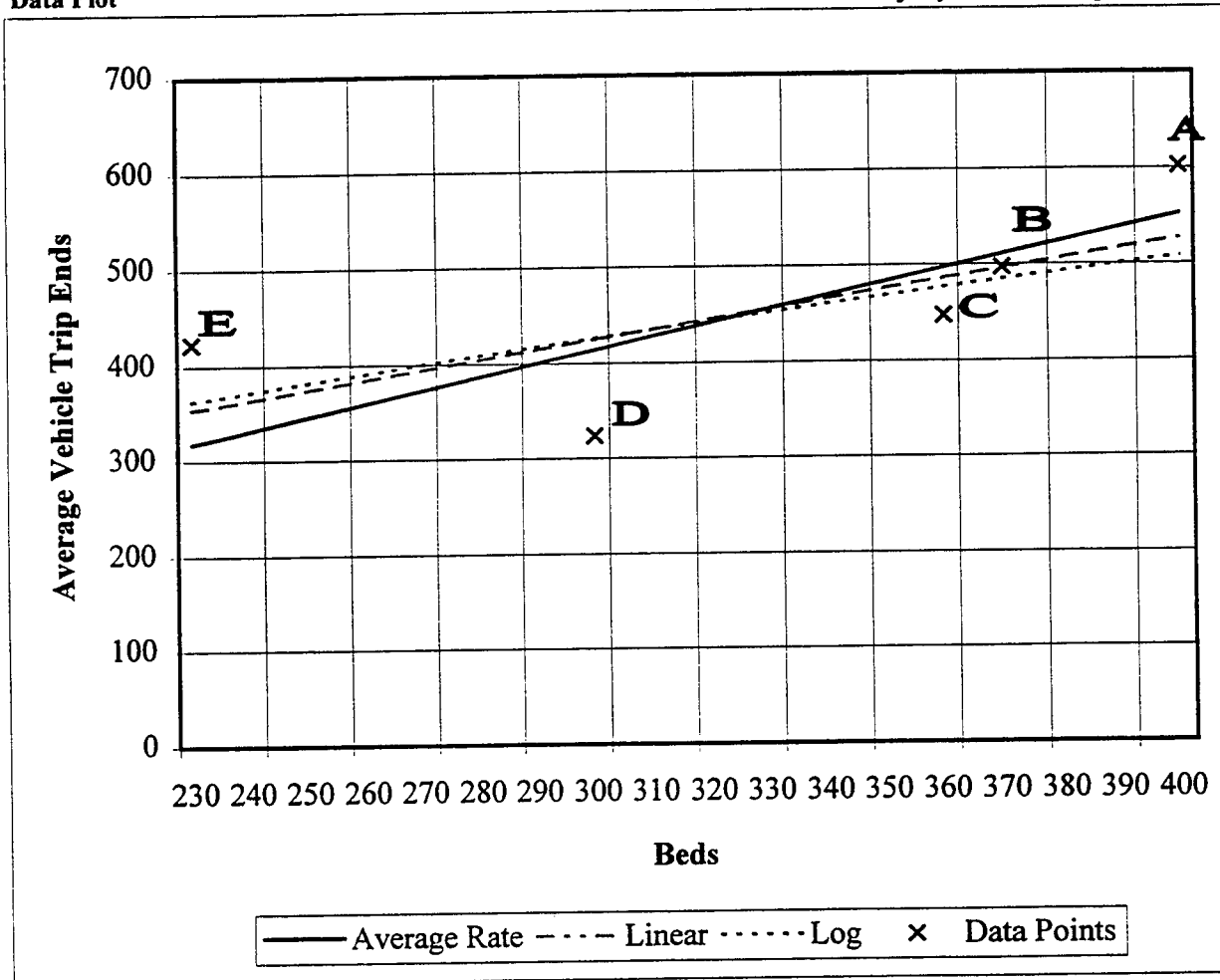
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
1.38	1.08-184	0.29

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=118.75+1.02(Beds) $r^2=0.46$
 Log Equation Trip Ends=13.15(Beds)^{0.60} $r^2=0.36$
 (Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Weekday AM Peak

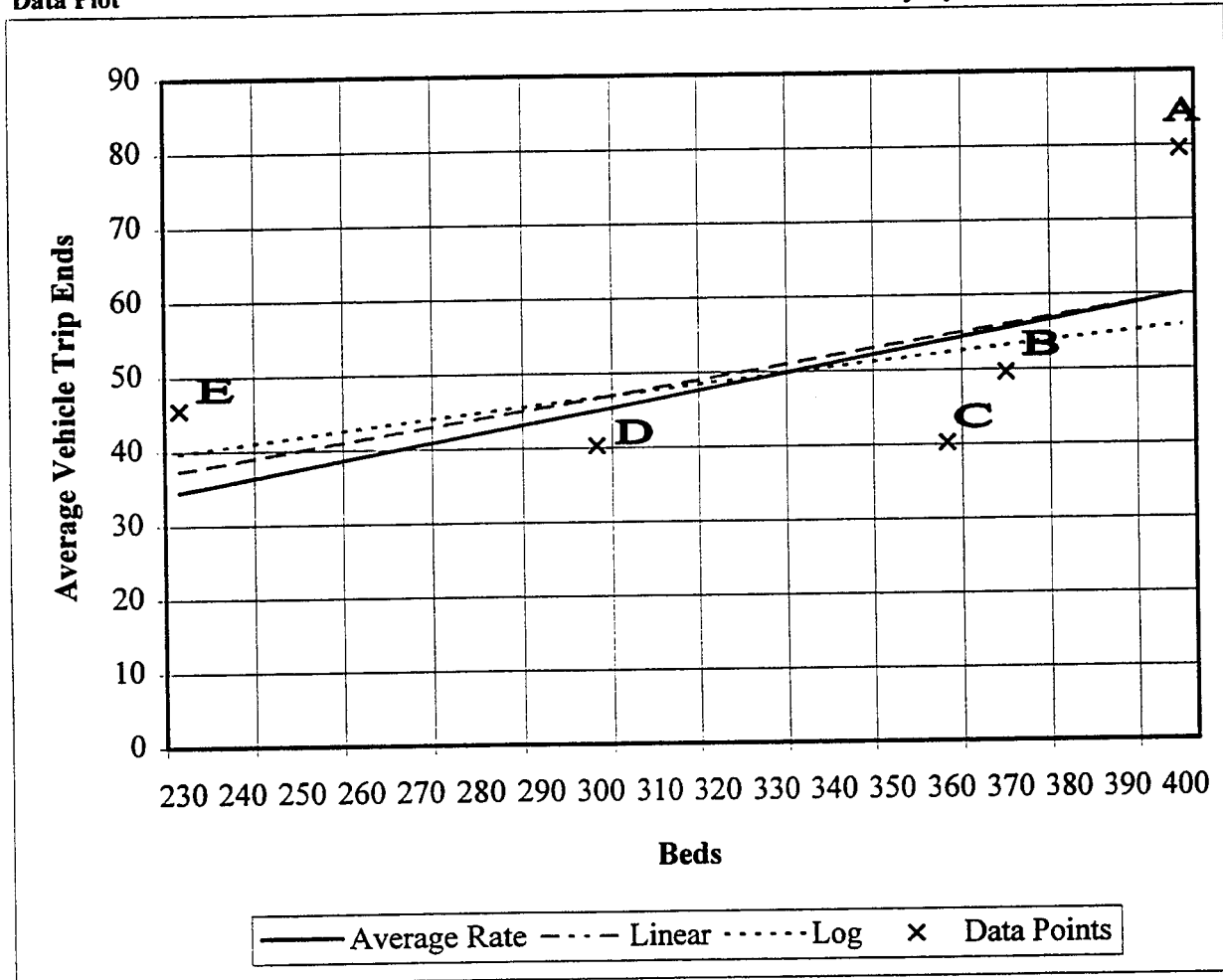
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.15	0.11-0.20	0.04

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=6.72+0.13(Beds) $r^2=0.30$

Log Equation Trip Ends=1.40(Beds)^{0.62} $r^2=0.24$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Weekday PM Peak

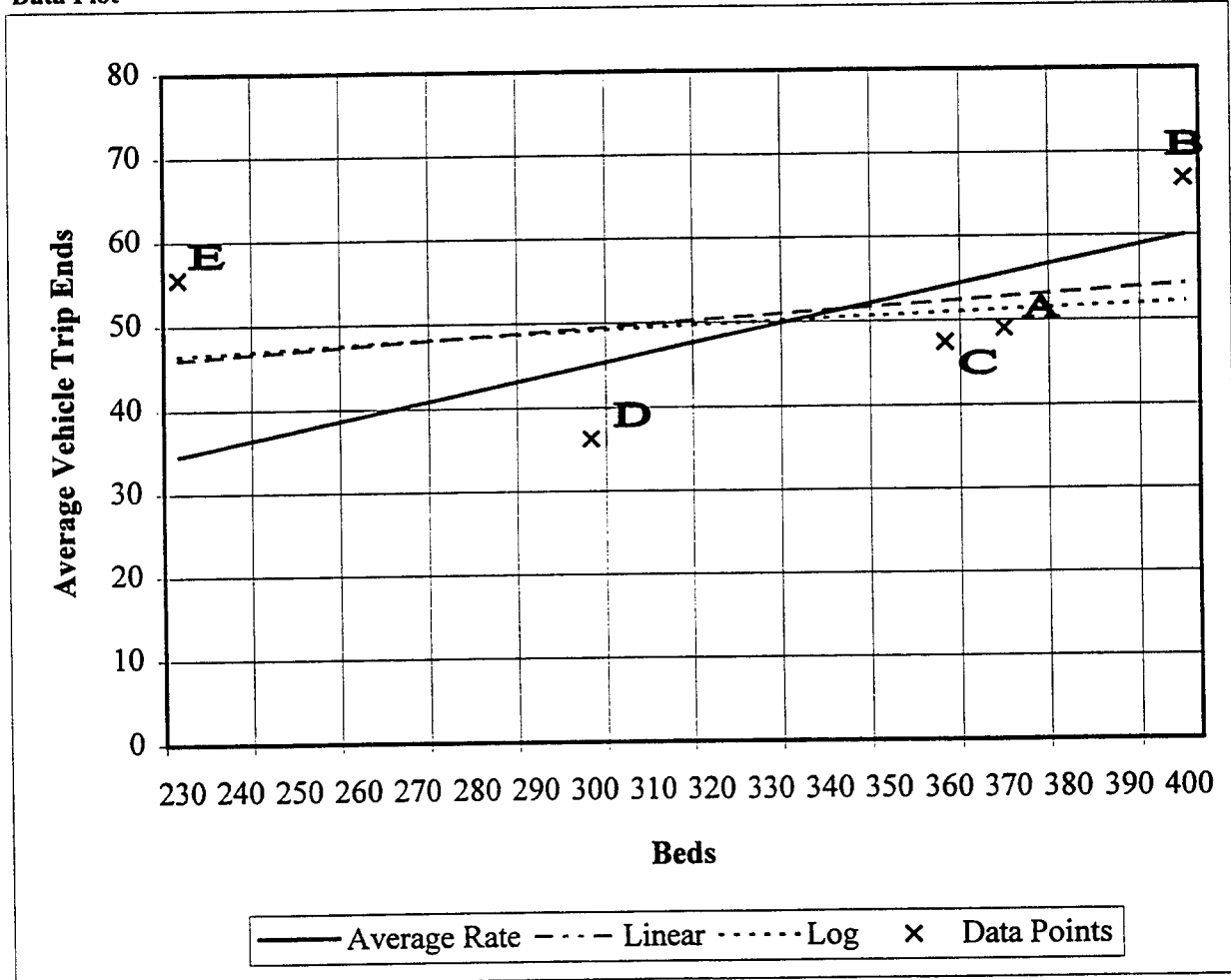
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.15	0.12-0.24	0.05

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=34.84+0.05(Beds) $r^2=0.09$

Log Equation Trip Ends=15.01(Beds)^{0.21} $r^2=0.04$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Saturday

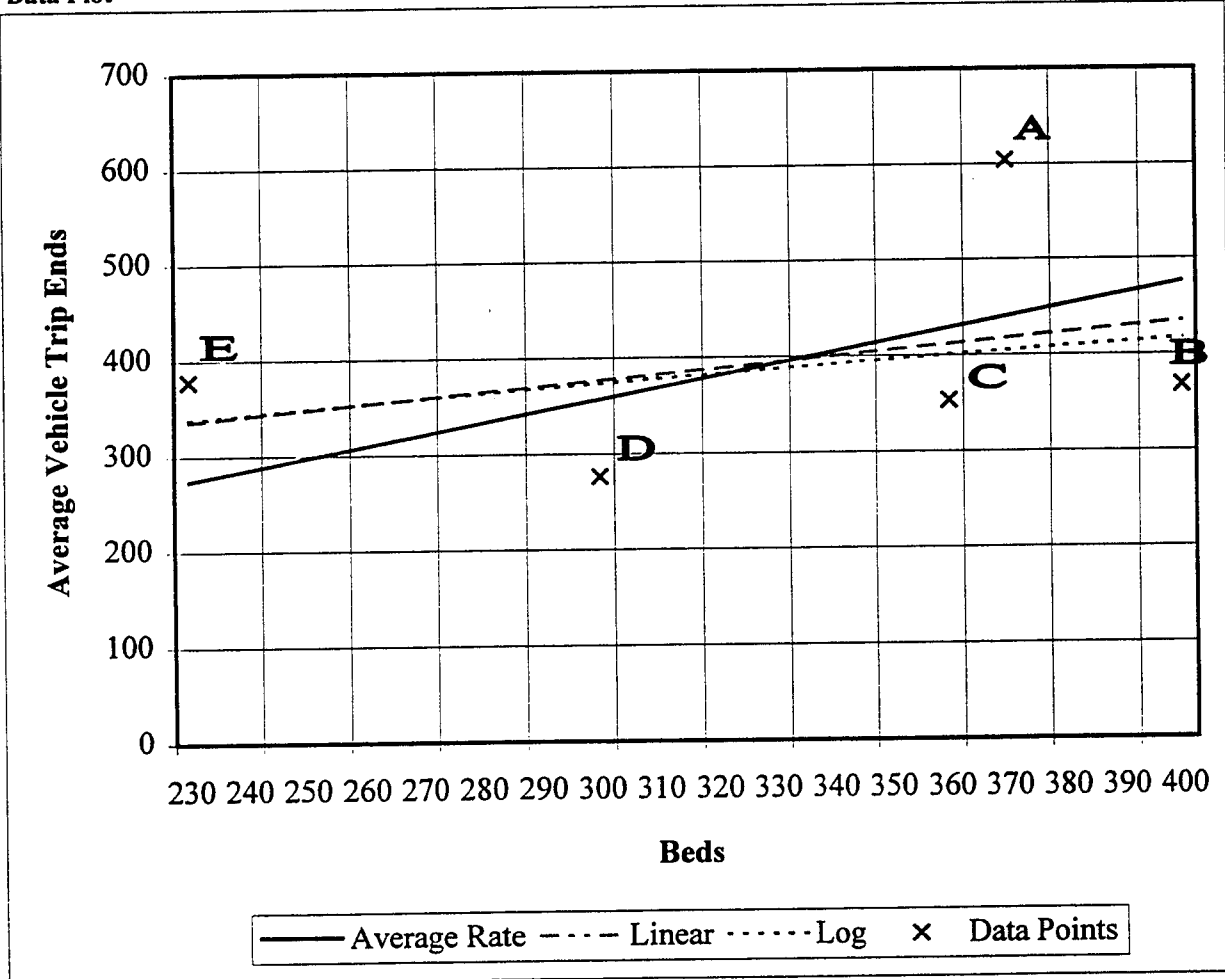
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
1.19	0.92-1.64	0.38

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=201.98+0.58(Beds) $r^2=0.10$

Log Equation Trip Ends=42.77(Beds)^{0.38} $r^2=0.09$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Saturday Peak

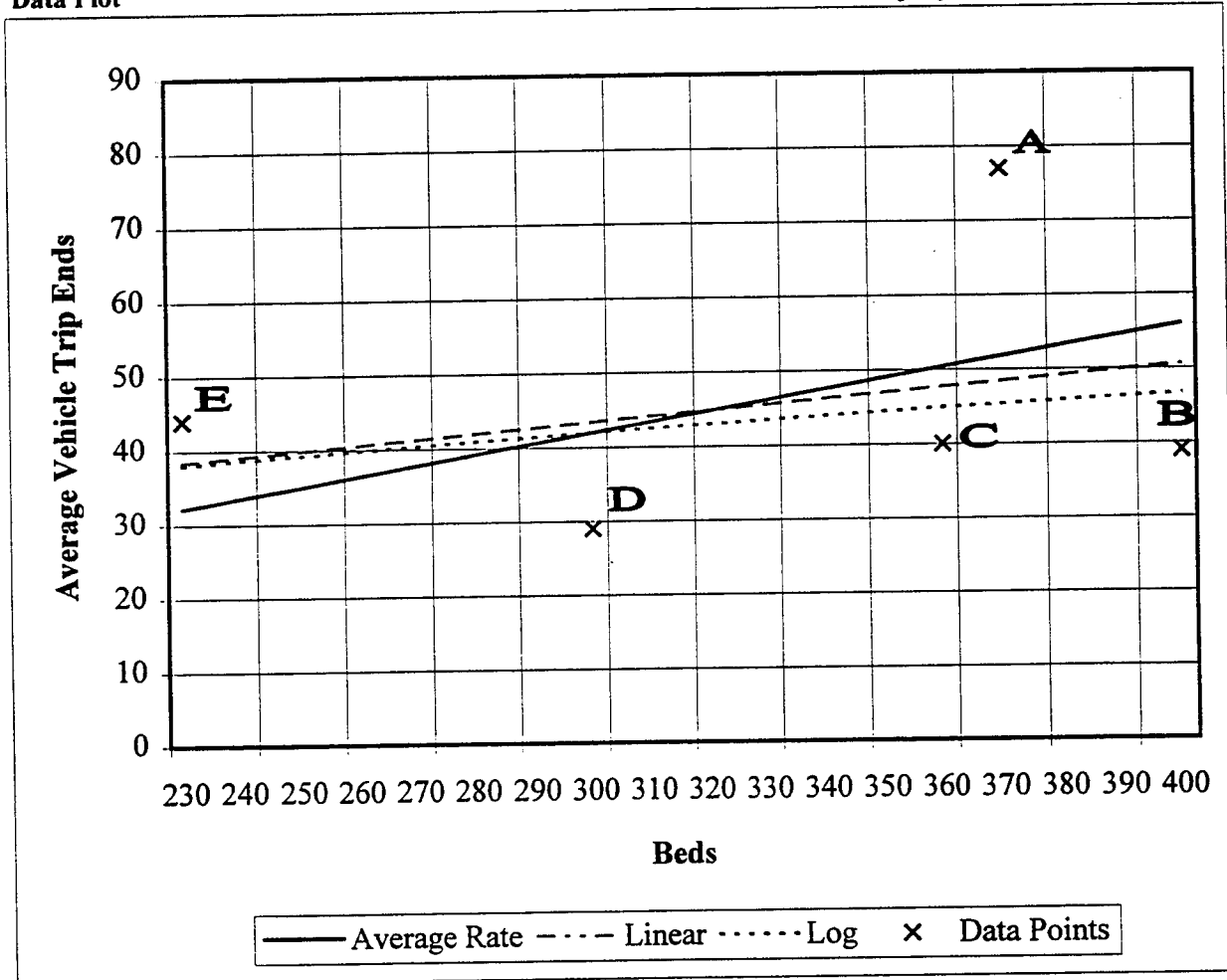
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.14	0.10-0.21	0.05

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=21.89+0.07(Beds) $r^2=0.07$

Log Equation Trip Ends=5.03(Beds)^{0.37} $r^2=0.05$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Sunday

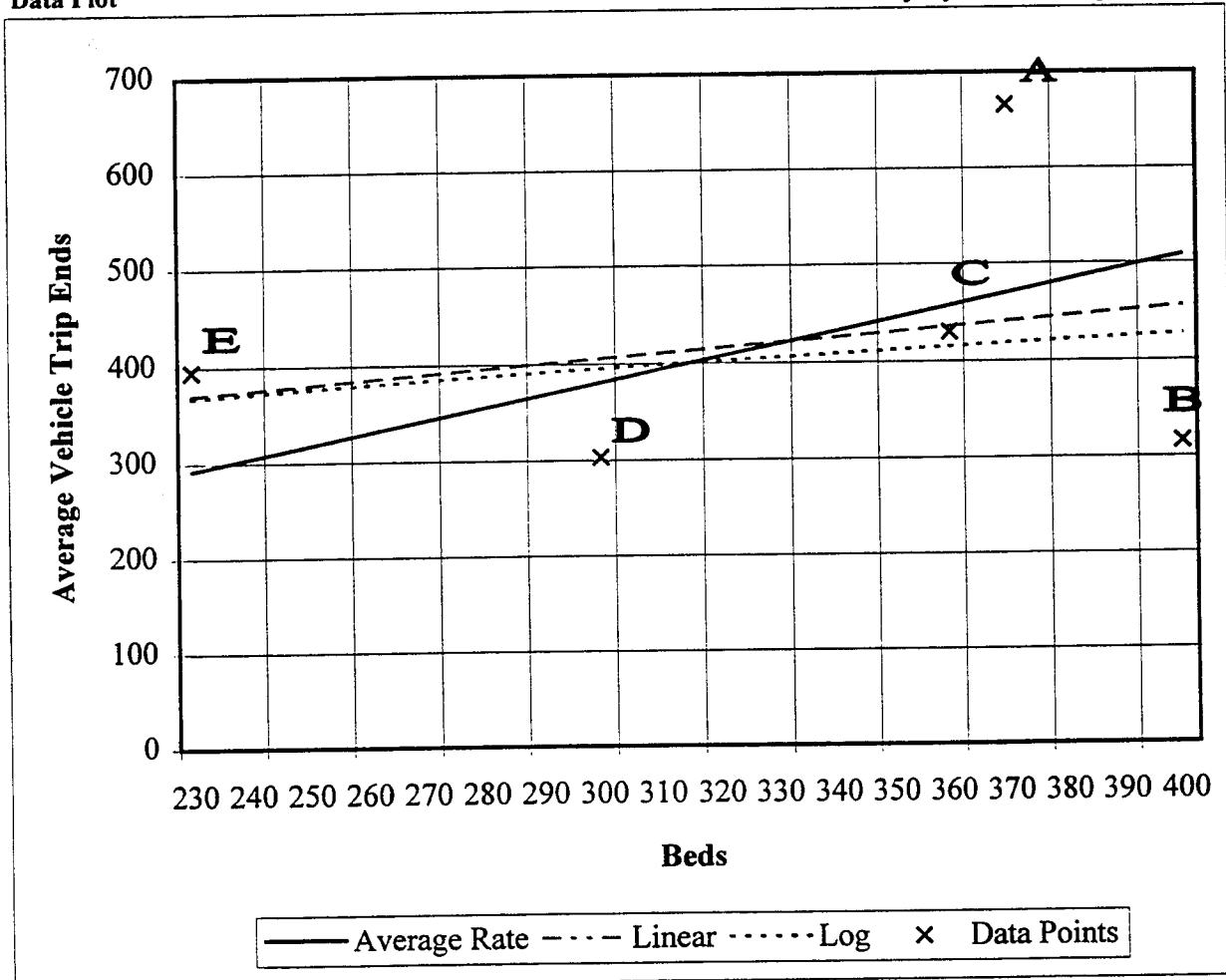
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
1.27	0.79-1.79	0.44

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=254.17+0.50(Beds)

$r^2=0.06$

Log Equation Trip Ends=83.92(Beds)^{0.27}

$r^2=0.04$

(Equations with $r^2 < 0.5$ are not recommended for use)

Regional Jails

Average Vehicle Trip Ends V/S: Beds
 On a: Sunday Peak

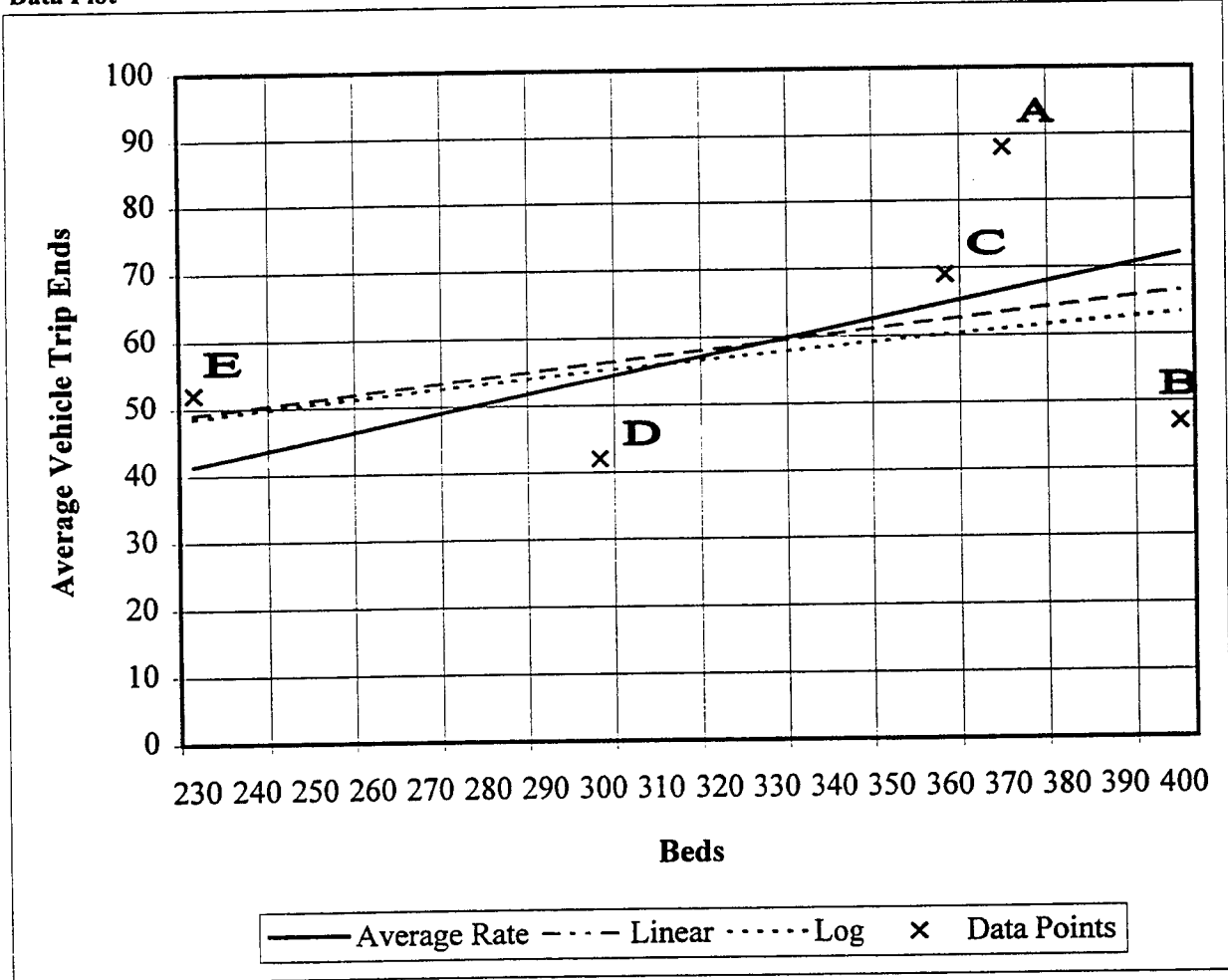
Number of Studies: 5
 Average SEV Value: 333
 Directional Distribution: Not Studied

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.18	0.12-0.24	0.05

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=25.52+0.10(Beds) $r^2=0.14$

Log Equation Trip Ends=3.59(Beds)^{0.48} $r^2=0.13$

(Equations with $r^2 < 0.5$ are not recommended for use)

APPENDIX E
ITE Format Graphs
Shopping Centers

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday

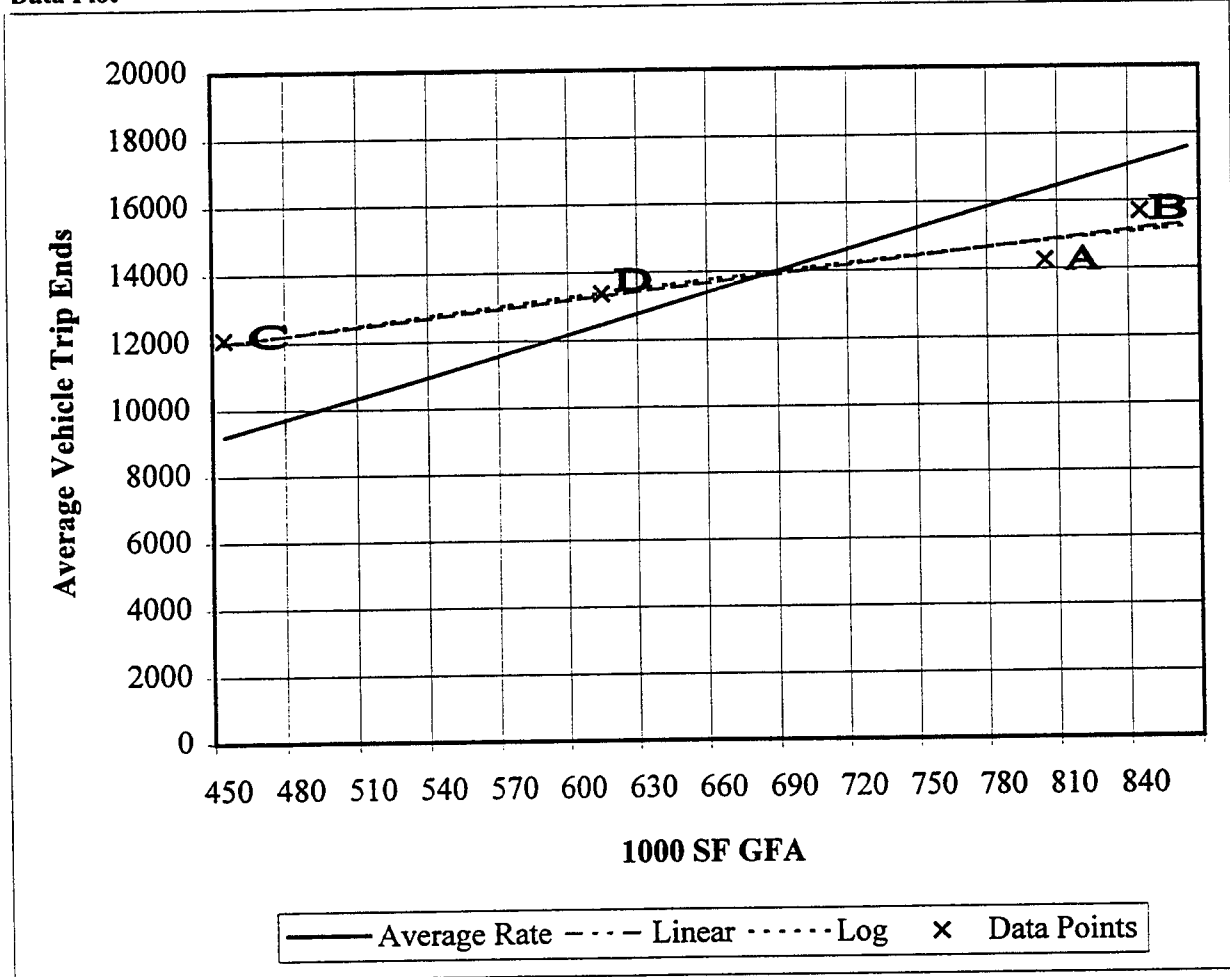
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
20.44	17.80-26.54	3.94

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 8341.02 + 8.13(1000 \text{ SF GFA})$$

$$r^2 = 0.91$$

Log Equation

$$\text{Trip Ends} = 1236.45(1000 \text{ SF GFA})^{0.37}$$

$$r^2 = 0.91$$

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday AM Peak

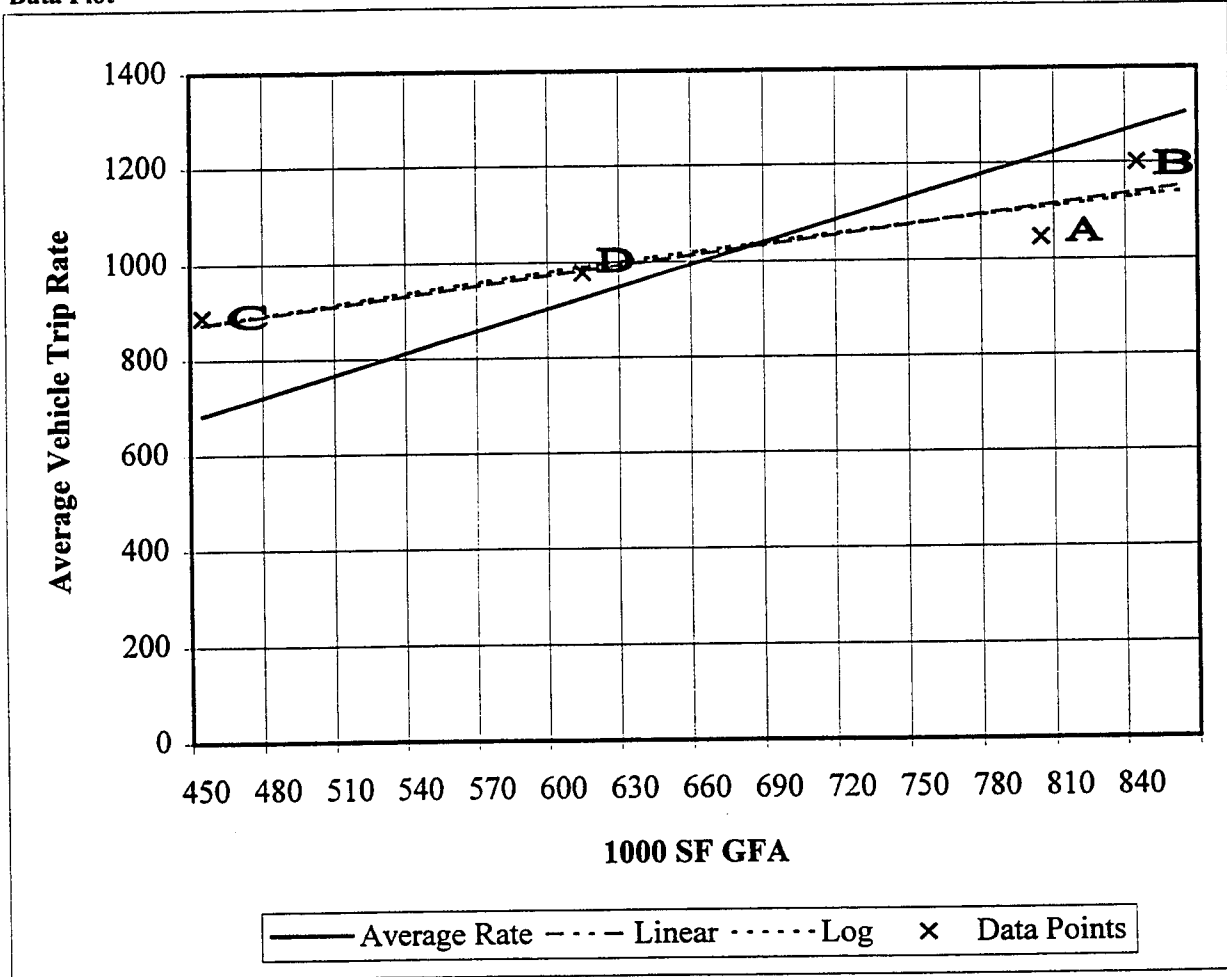
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
1.52	1.31-1.95	0.28

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends=570.24+0.68(1000 SF GFA)	$r^2=0.84$
Log Equation	Trip Ends=70.81(1000 SF GFA) ^{0.41}	$r^2=0.84$

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday PM Peak

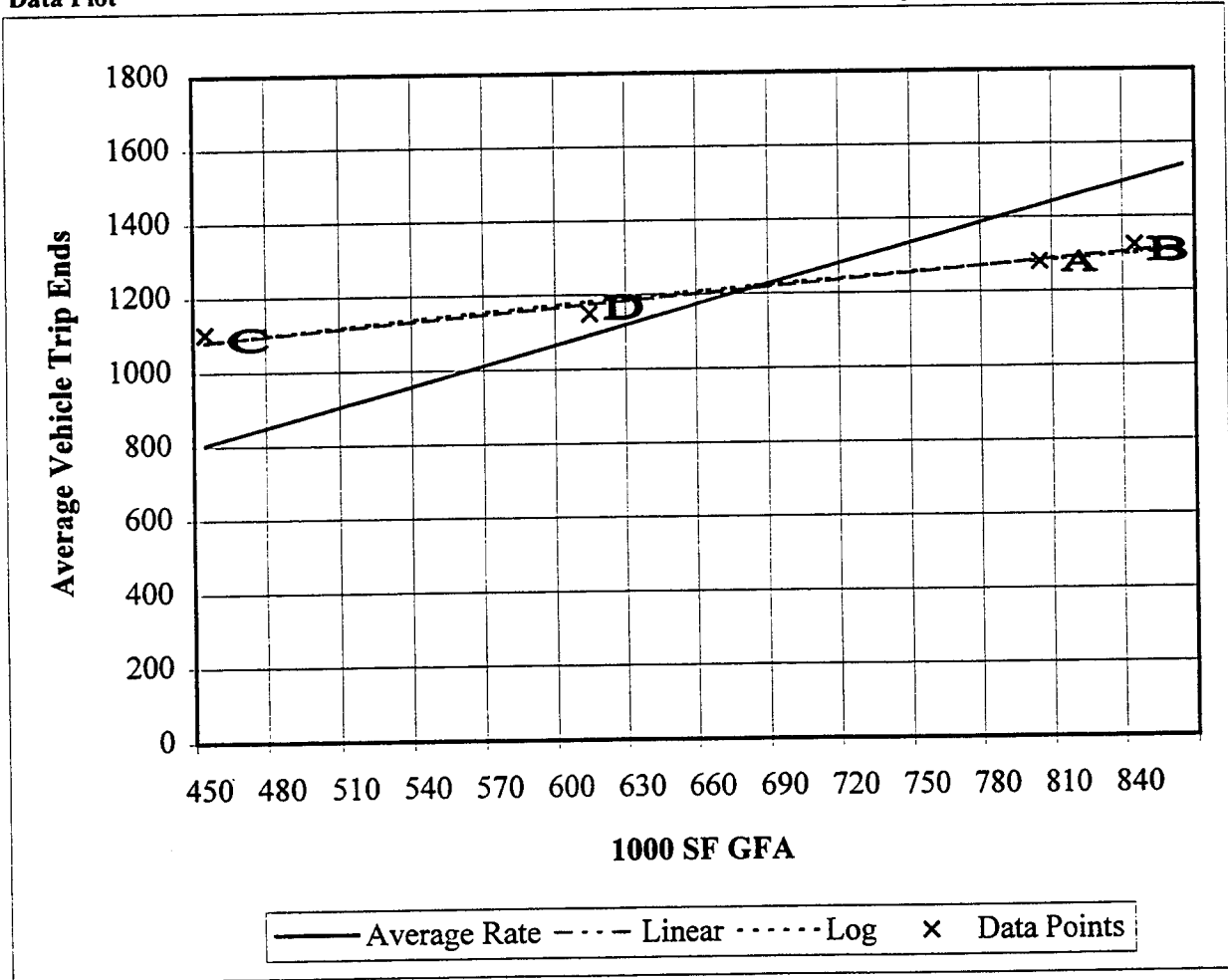
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
1.79	1.58-2.42	0.39

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=820.75+0.58(1000 SF GFA) r²=0.96
 Log Equation Trip Ends=175.91(1000 SF GFA)^{0.30} r²=0.93

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Saturday

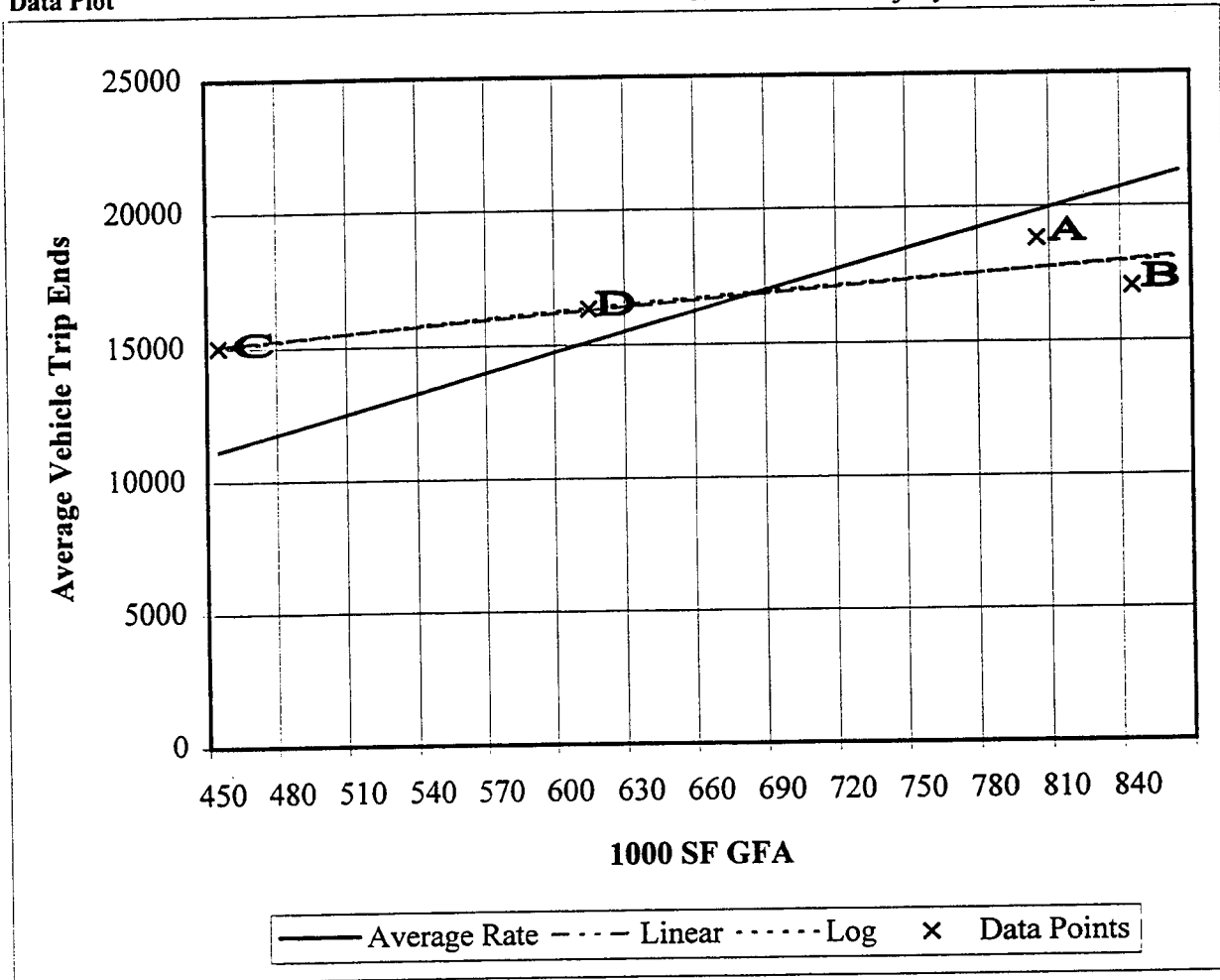
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
24.78	20.28-32.96	5.40

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 11717.00 + 7.49(1000 \text{ SF GFA})$$

$$r^2 = 0.71$$

Log Equation

$$\text{Trip Ends} = 2565.73(1000 \text{ SF GFA})^{0.29}$$

$$r^2 = 0.75$$

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Saturday Peak

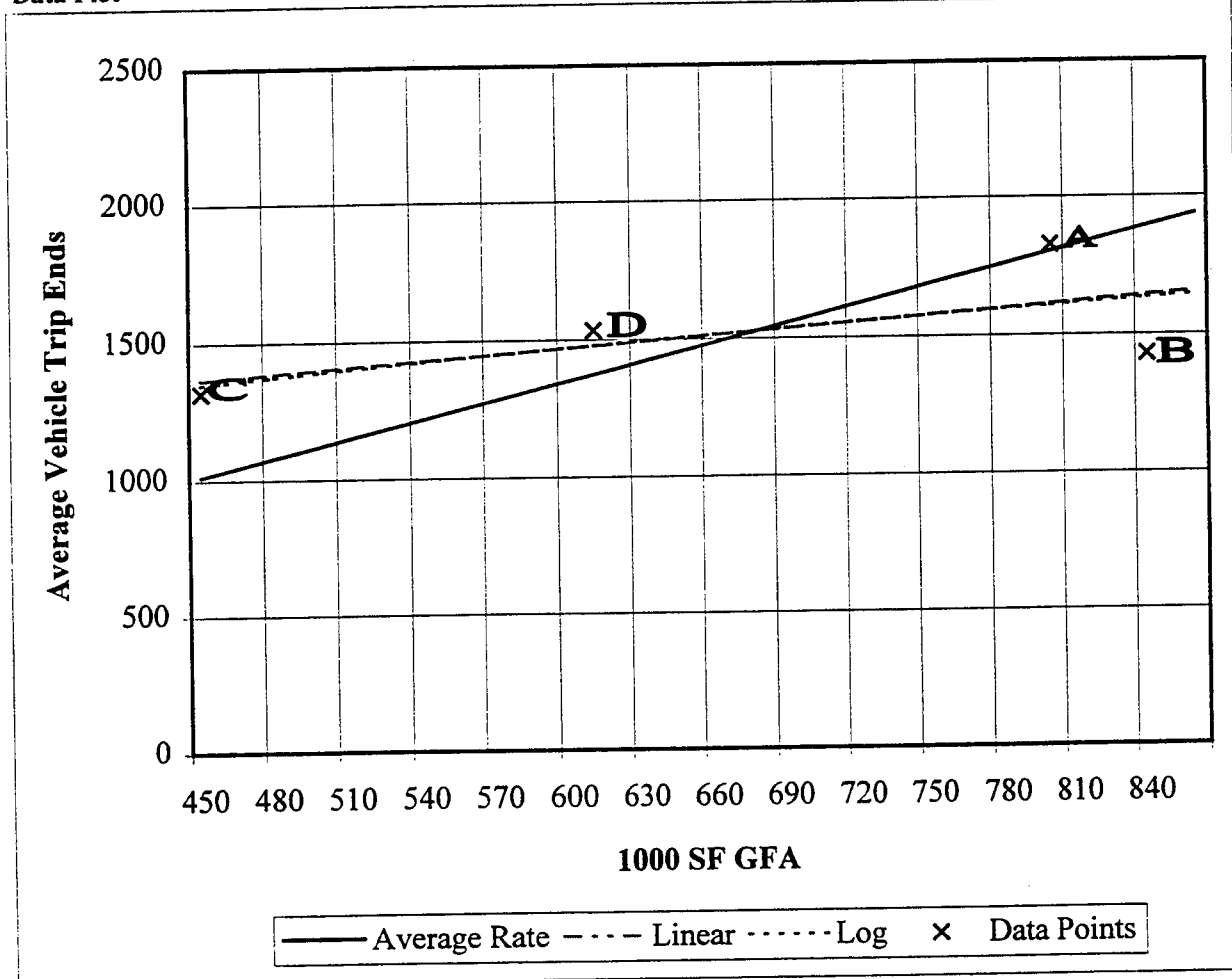
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
2.25	1.70-2.89	0.50

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=1045.51+0.71(1000 SF GFA) $r^2=0.33$
 Log Equation Trip Ends=206.44(1000 SF GFA)^{0.31} $r^2=0.39$
 (Equations with $r^2 < 0.5$ are not recommended for use)

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Sunday

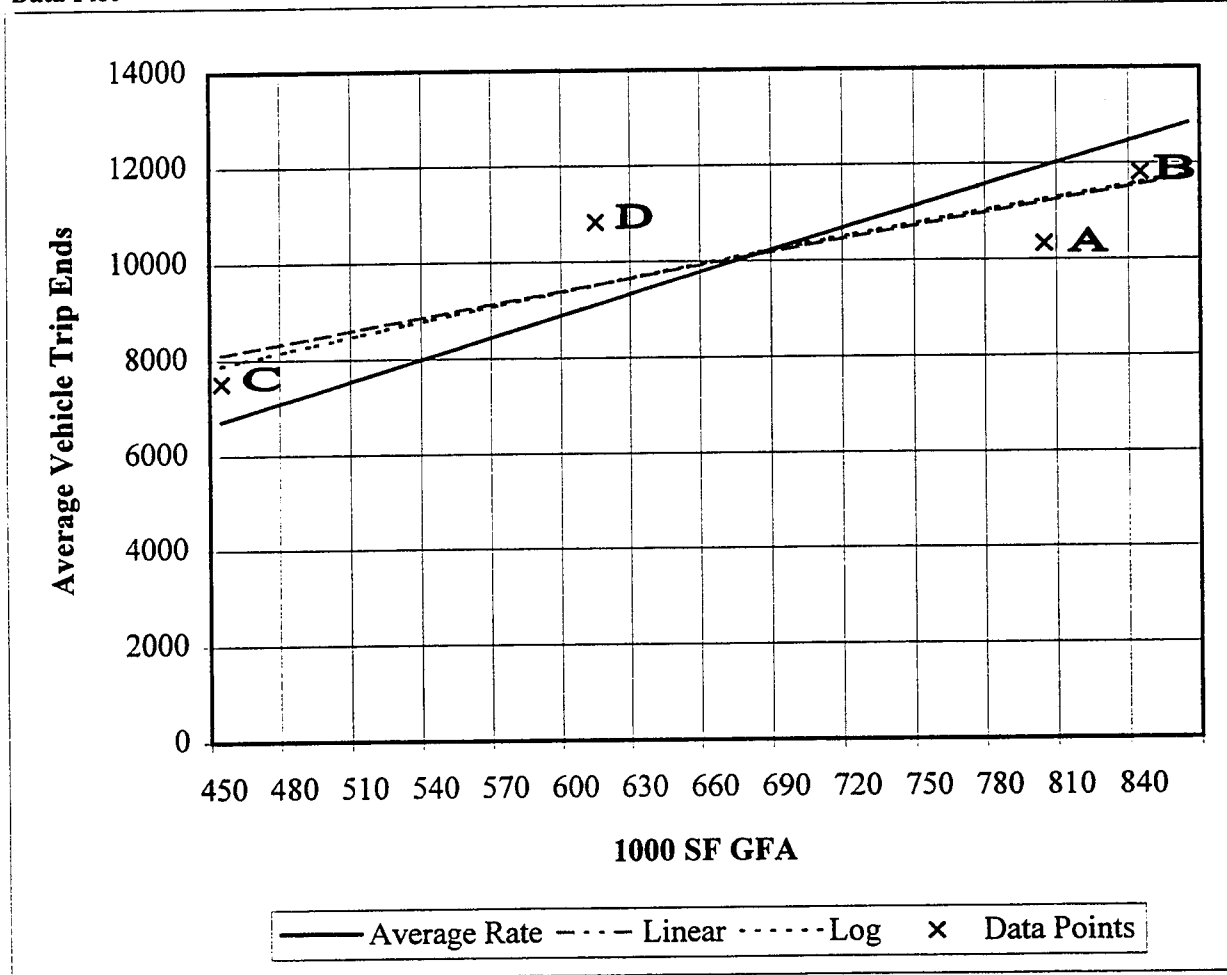
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
14.93	12.90-17.57	2.15

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 4134.47 + 8.23(1000 \text{ SF GFA})$$

$$r^2 = 0.72$$

Log Equation

$$\text{Trip Ends} = 181.27(1000 \text{ SF GFA})^{0.62}$$

$$r^2 = 0.78$$

Shopping Centers

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Sunday Peak

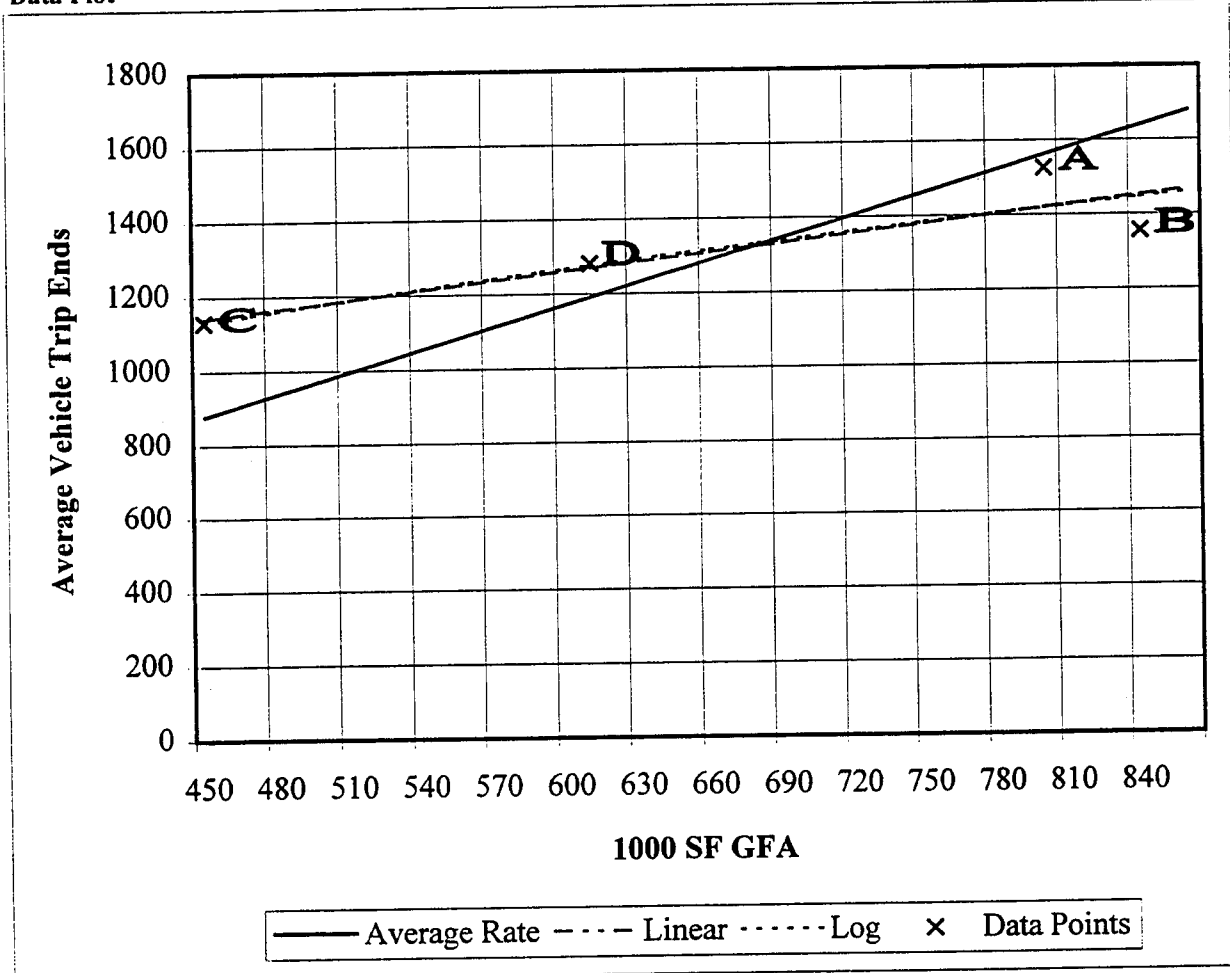
Number of Studies: 4
 Average SEV Value: 677.75
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
1.95	1.62-2.48	0.36

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 779.99 + 0.80(1000 \text{ SF GFA})$$

$$r^2 = 0.75$$

Log Equation

$$\text{Trip Ends} = 100.48(1000 \text{ SF GFA})^{0.40}$$

$$r^2 = 0.80$$

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday

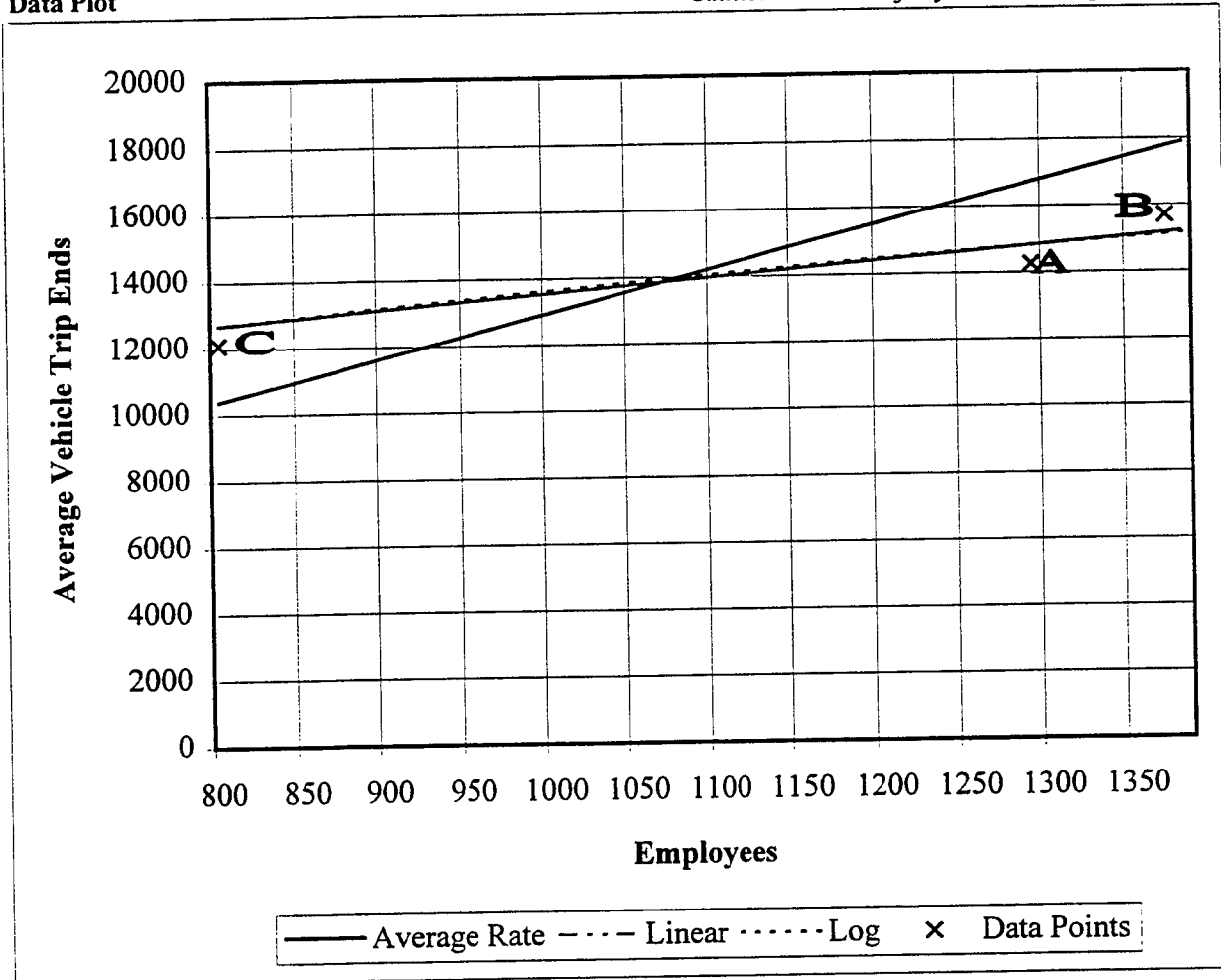
Number of Studies: 4
 Average SEV Value: 1068
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
12.97	10.96-16.65	2.78

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 9210.10 + 4.34(\text{Employees})$$

$$r^2 = 0.79$$

Log Equation

$$\text{Trip Ends} = 1422.26(\text{Employees})^{0.33}$$

$$r^2 = 0.77$$

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday AM Peak

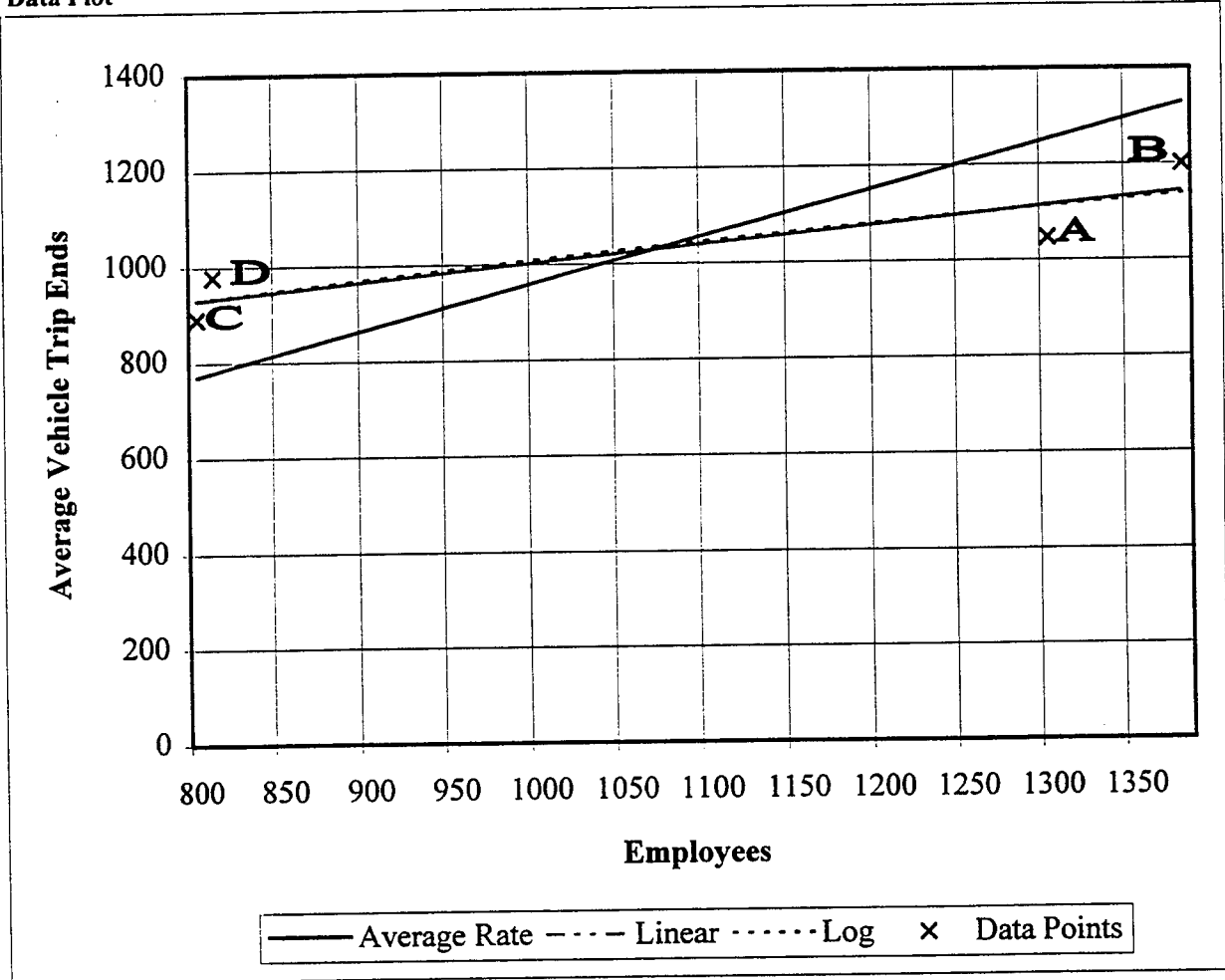
Number of Studies: 4
 Average SEV Value: 1068
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.96	0.80-1.22	0.19

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends=632.58+0.37(Employees)	$r^2=0.76$
Log Equation	Trip Ends=77.48(Employees) ^{0.37}	$r^2=0.76$

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

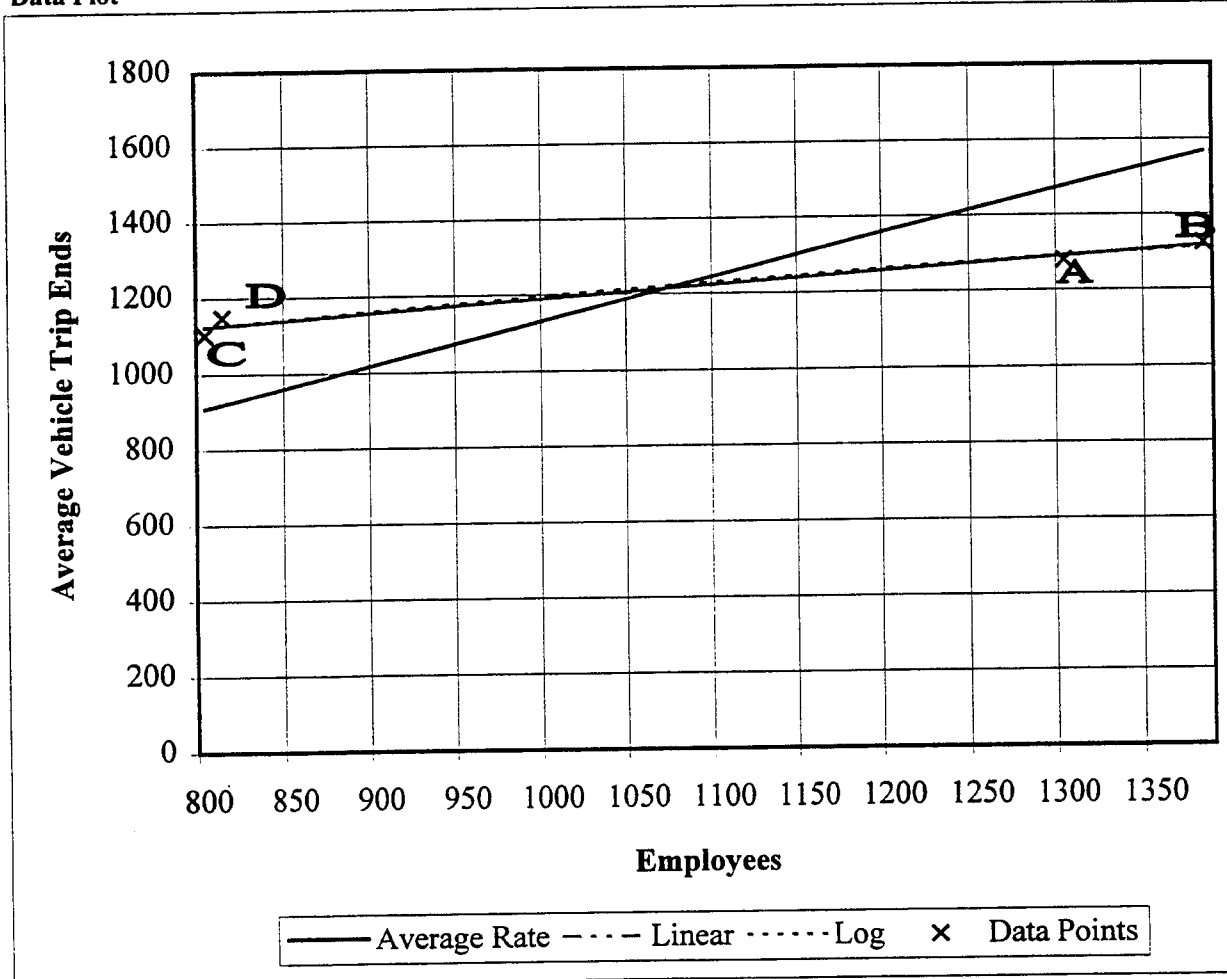
Number of Studies: 4
 Average SEV Value: 1068
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.14	0.97-1.43	0.25

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$Trip\ Ends = 857.34 + 0.33(Employees)$$

$$r^2 = 0.96$$

Log Equation

$$Trip\ Ends = 164.02(Employees)^{0.29}$$

$$r^2 = 0.96$$

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
On a: Saturday

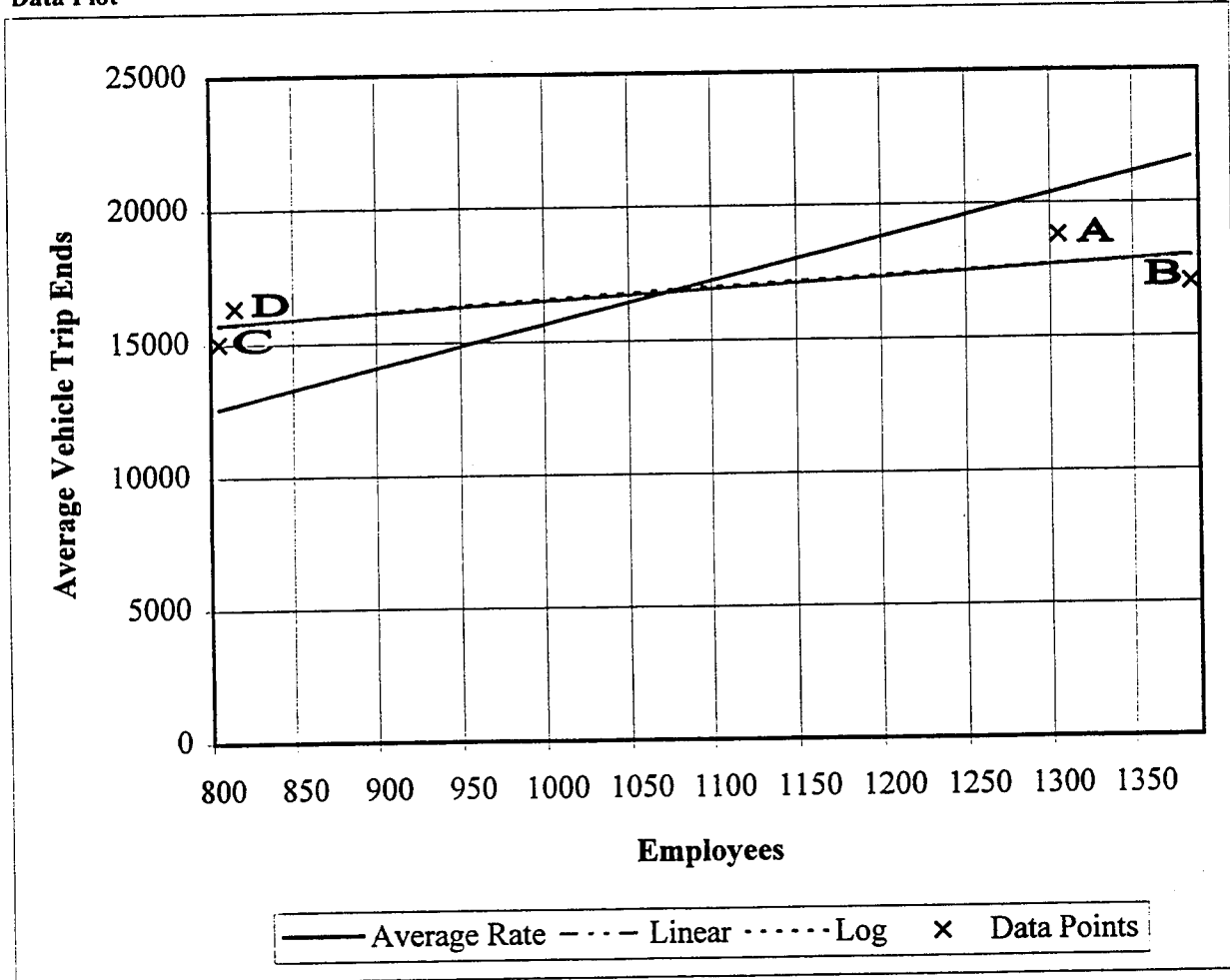
Number of Studies: 4
Average SEV Value: 1068
Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
15.72	12.44-20.33	3.67

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends=12560.10+3.96(Employees)	$r^2=0.60$
Log Equation	Trip Ends=2921.93(Employees) ^{0.25}	$r^2=0.63$

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
 On a: Saturday Peak

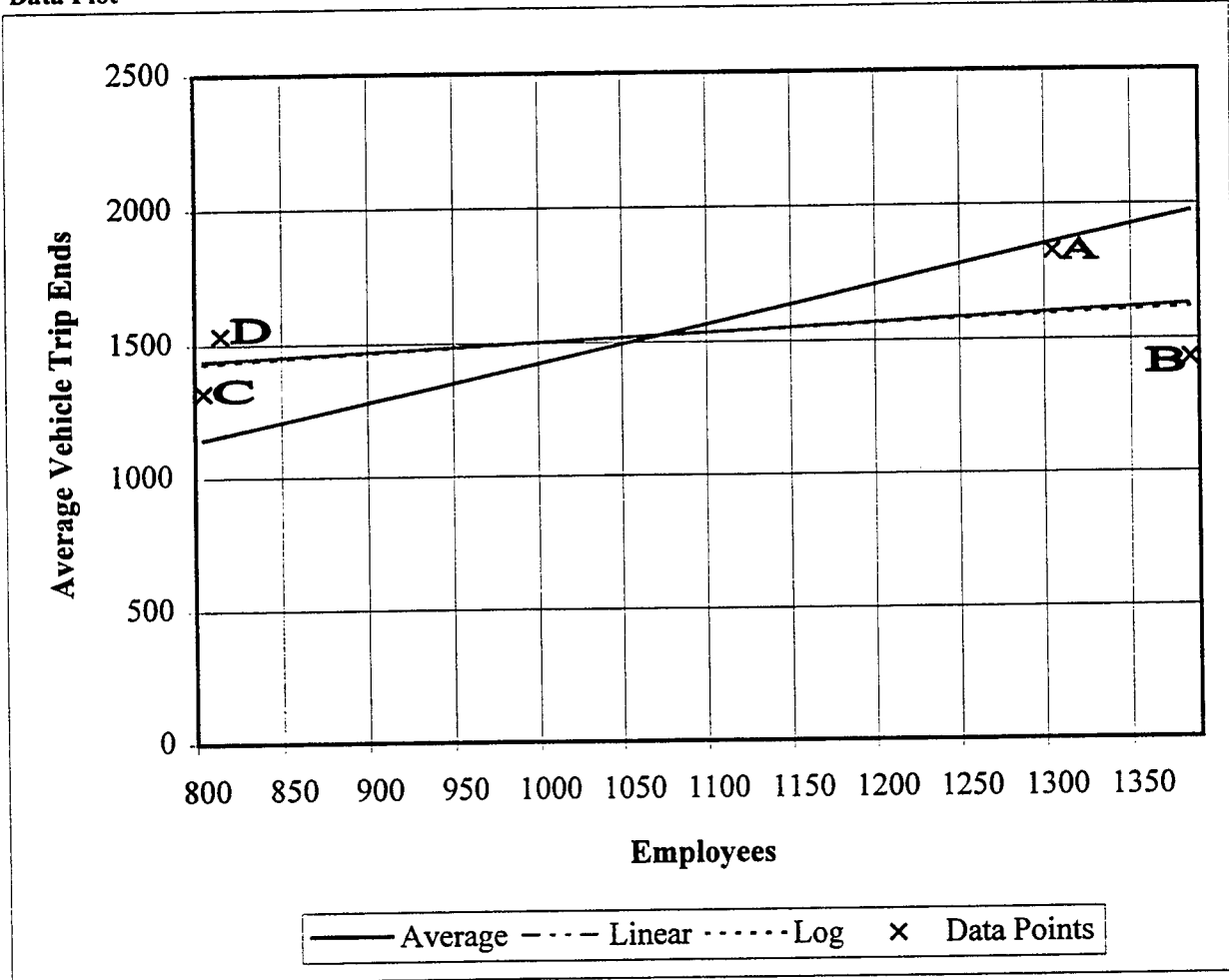
Number of Studies: 4
 Average SEV Value: 1068
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.43	1.04-1.91	0.37

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=1174.19+0.33(Employees) $r^2=0.22$

Log Equation Trip Ends=314.19(Employees)^{0.23} $r^2=0.23$

(Equations with $r^2 < 0.5$ are not recommended for use)

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
On a: Sunday

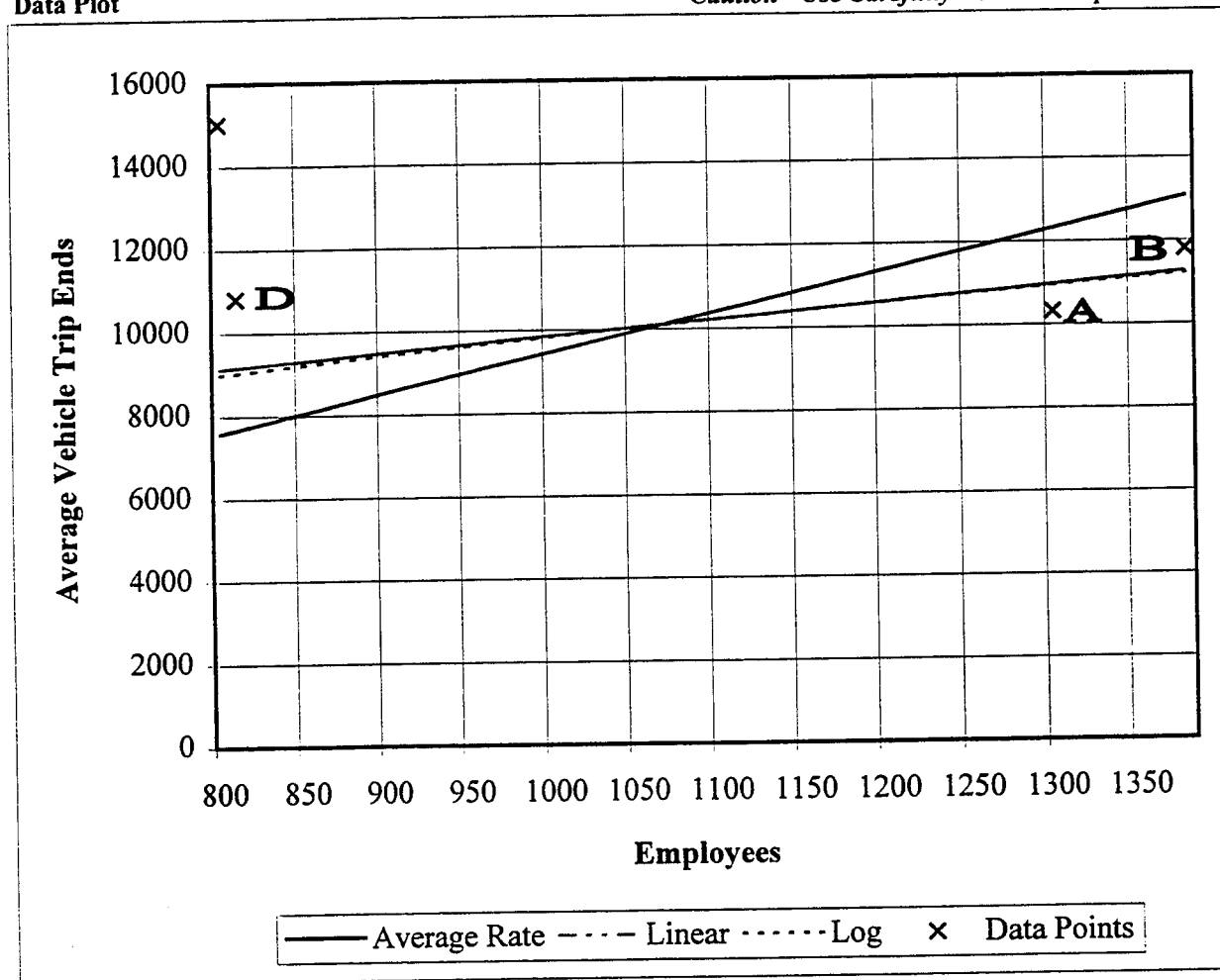
Number of Studies: 4
Average SEV Value: 1068
Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
9.47	7.94-13.47	2.48

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 6139.53 + 3.72(\text{Employees})$$

$$r^2 = 0.39$$

Log Equation

$$\text{Trip Ends} = 578.25(\text{Employees})^{0.41}$$

$$r^2 = 0.38$$

Shopping Centers

Average Vehicle Trip Ends V/S: Employees
 On a: Sunday Peak

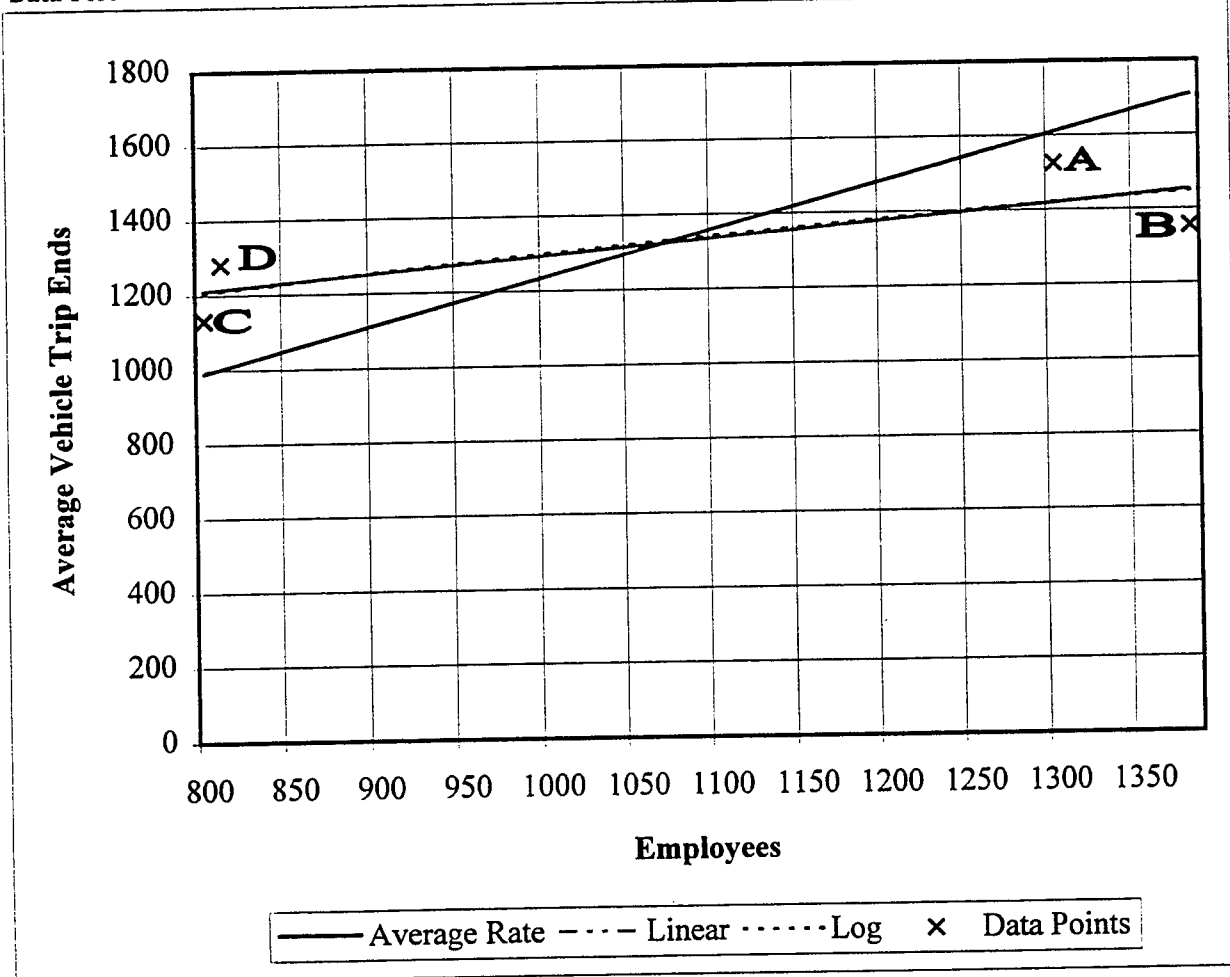
Number of Studies: 4
 Average SEV Value: 1068
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.24	0.99-1.59	0.36

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 875.85 + 0.42(\text{Employees})$$

$$r^2 = 0.62$$

Log Equation

$$\text{Trip Ends} = 76.71(\text{Employees})^{0.34}$$

$$r^2 = 0.64$$

APPENDIX F
ITE Format Graphs
Superstores

Super Stores

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday

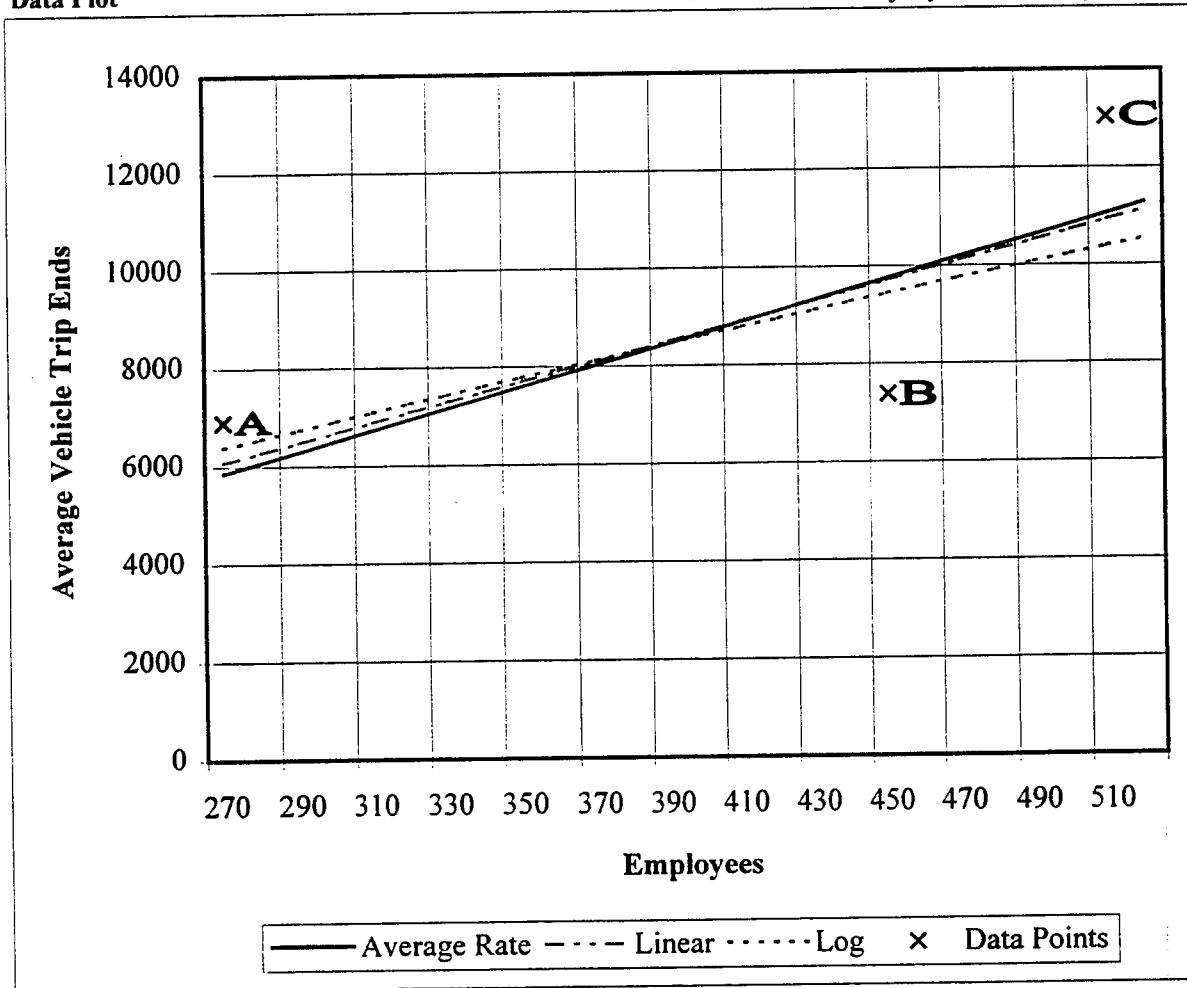
Number of Studies: 3
 Average SEV Value: 420
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
21.68	16.03-25.06	5.10

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 612.99 + 20.22(\text{Employees})$$

$$r^2 = 0.55$$

Log Equation

$$\text{Trip Ends} = 86.40(\text{Employees})^{0.77}$$

$$r^2 = 0.52$$

Super Stores

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

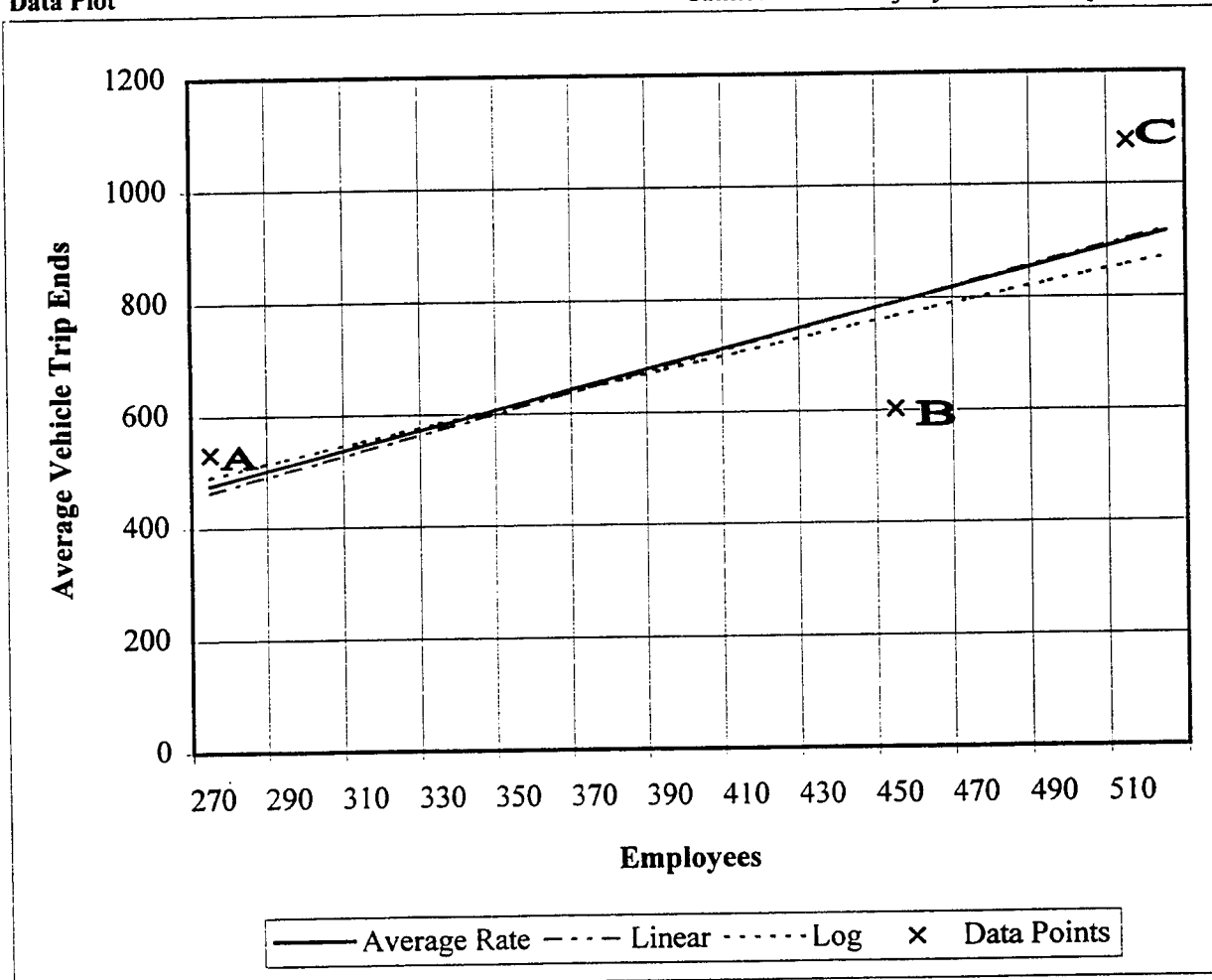
Number of Studies: 3
 Average SEV Value: 420
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.76	1.31-2.07	0.40

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = -31.16 + 1.83(\text{Employees})$$

$$r^2 = 0.60$$

Log Equation

$$\text{Trip Ends} = 3.56(\text{Employees})^{0.88}$$

$$r^2 = 0.59$$

Super Stores

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday

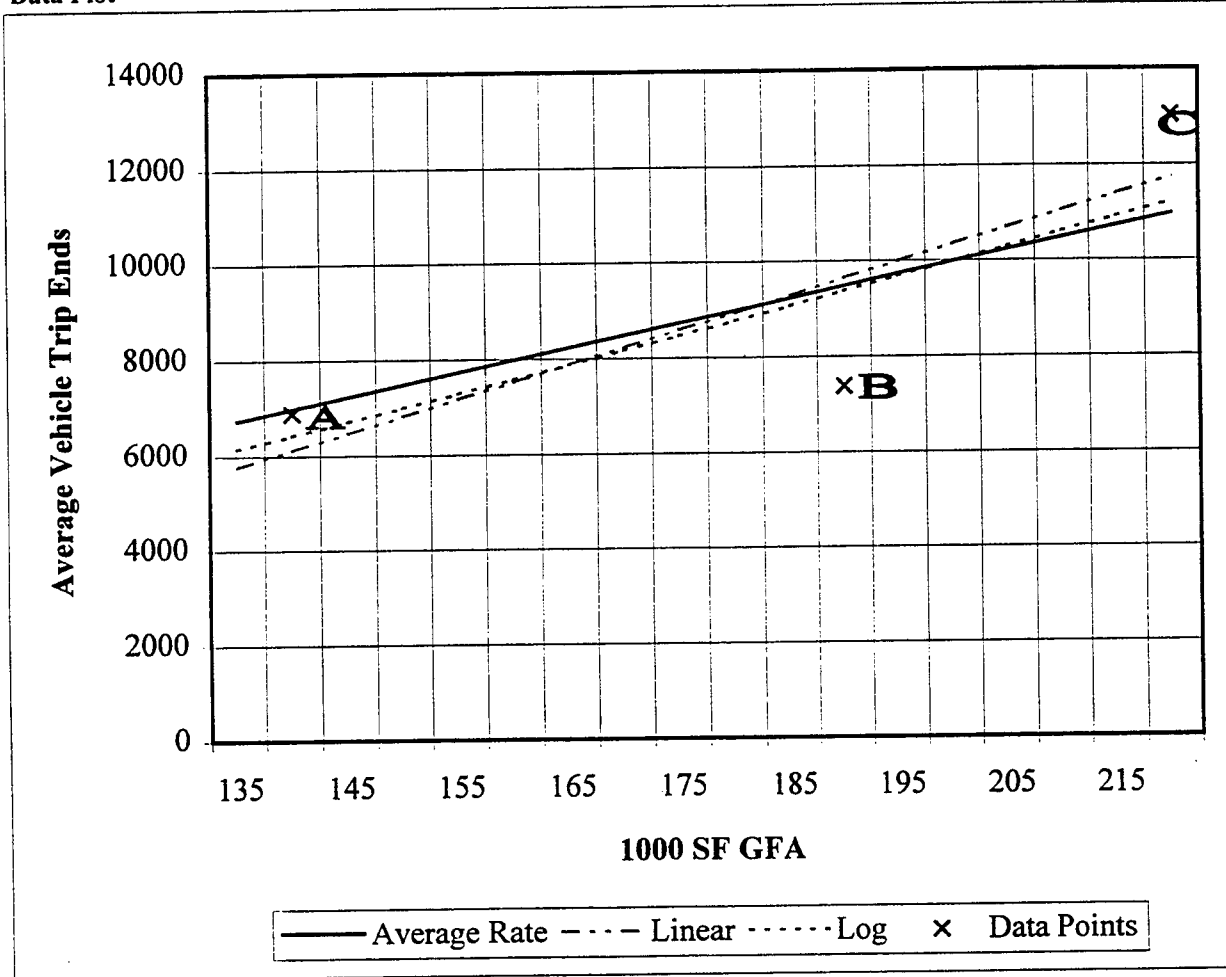
Number of Studies: 3
 Average SEV Value: 182.33
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
49.89	39.23-59.23	10.00

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends = -3735.30 + 70.3789(1000 SF GFA) $r^2=0.71$
 Log Equation Trip Ends = 14.44(1000 SF GFA)^{1.23} $r^2=0.68$

Super Stores

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday PM Peak

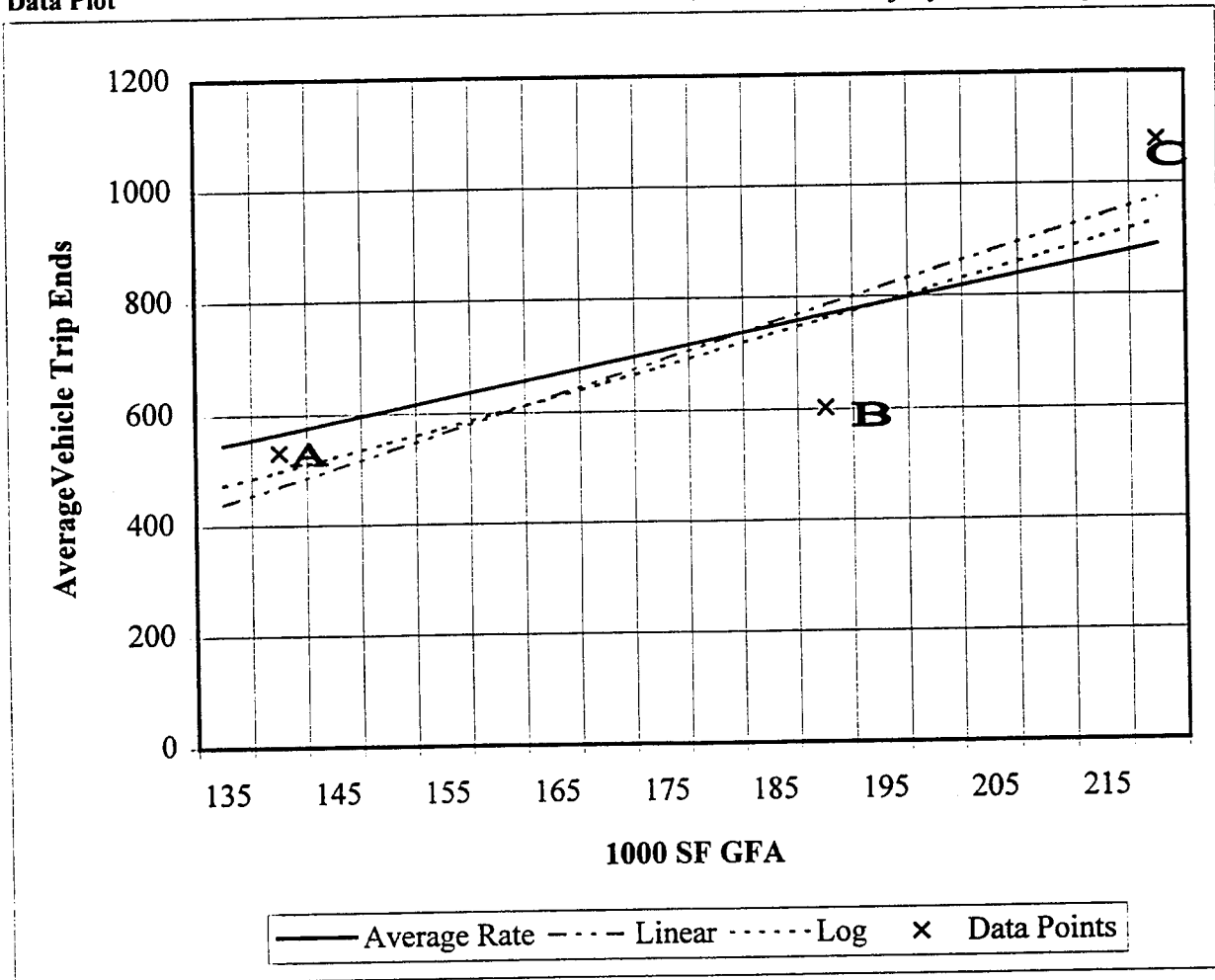
Number of Studies: 3
 Average SEV Value: 182.33
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
4.04	3.20-4.34	0.86

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends = -411.02 + 6.29(1000 SF GFA) $r^2 = 0.75$
 Log Equation Trip Ends = $0.52(1000 \text{ SF GFA})^{1.39}$ $r^2 = 0.74$

Free-Standing Discount Superstore (813)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Weekday**

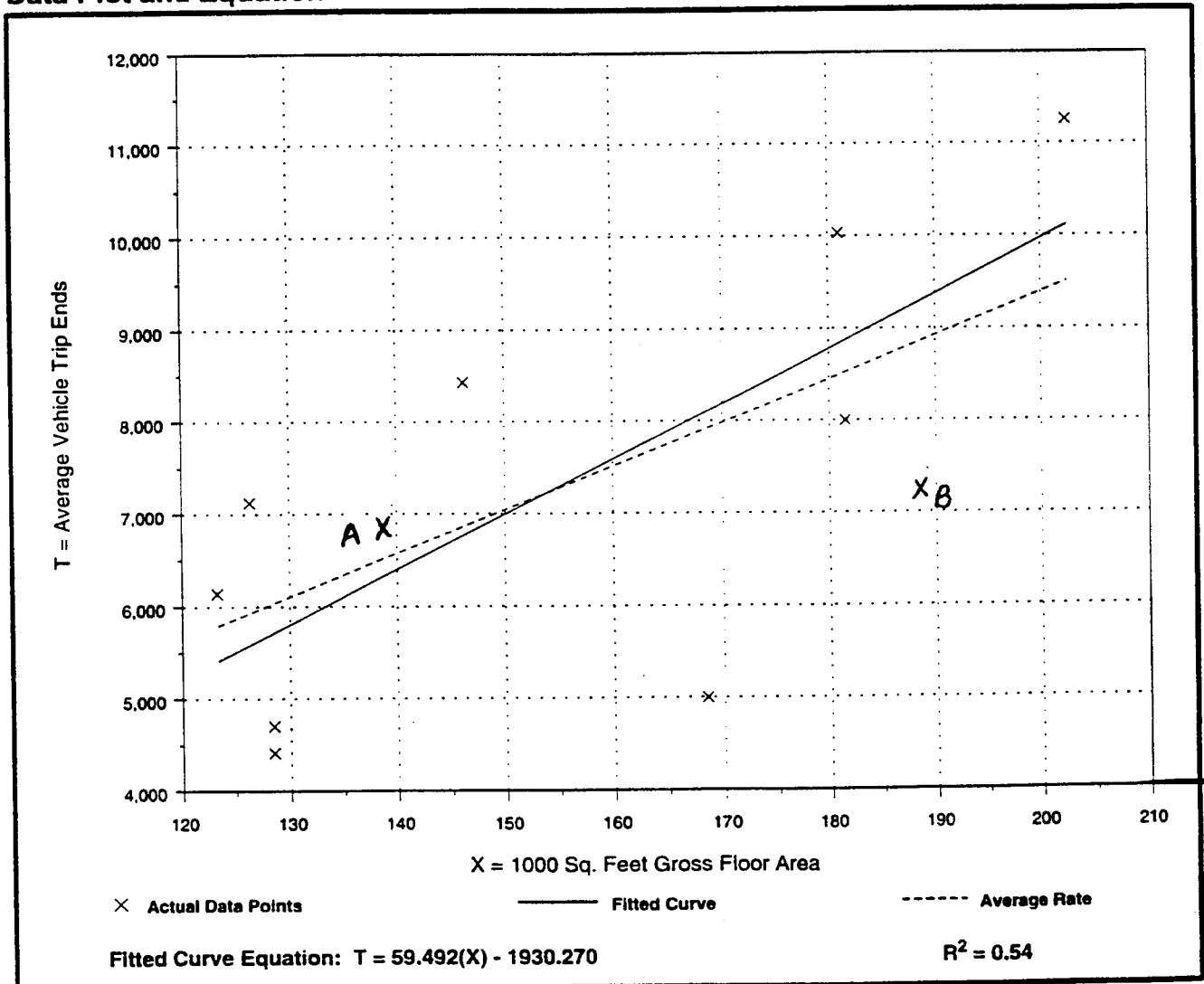
Number of Studies: 9
Average 1000 Sq. Feet GFA: 154
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
46.96	29.65 - 57.67	12.25

Data Plot and Equation

Xc



Free-Standing Discount Superstore (813)

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

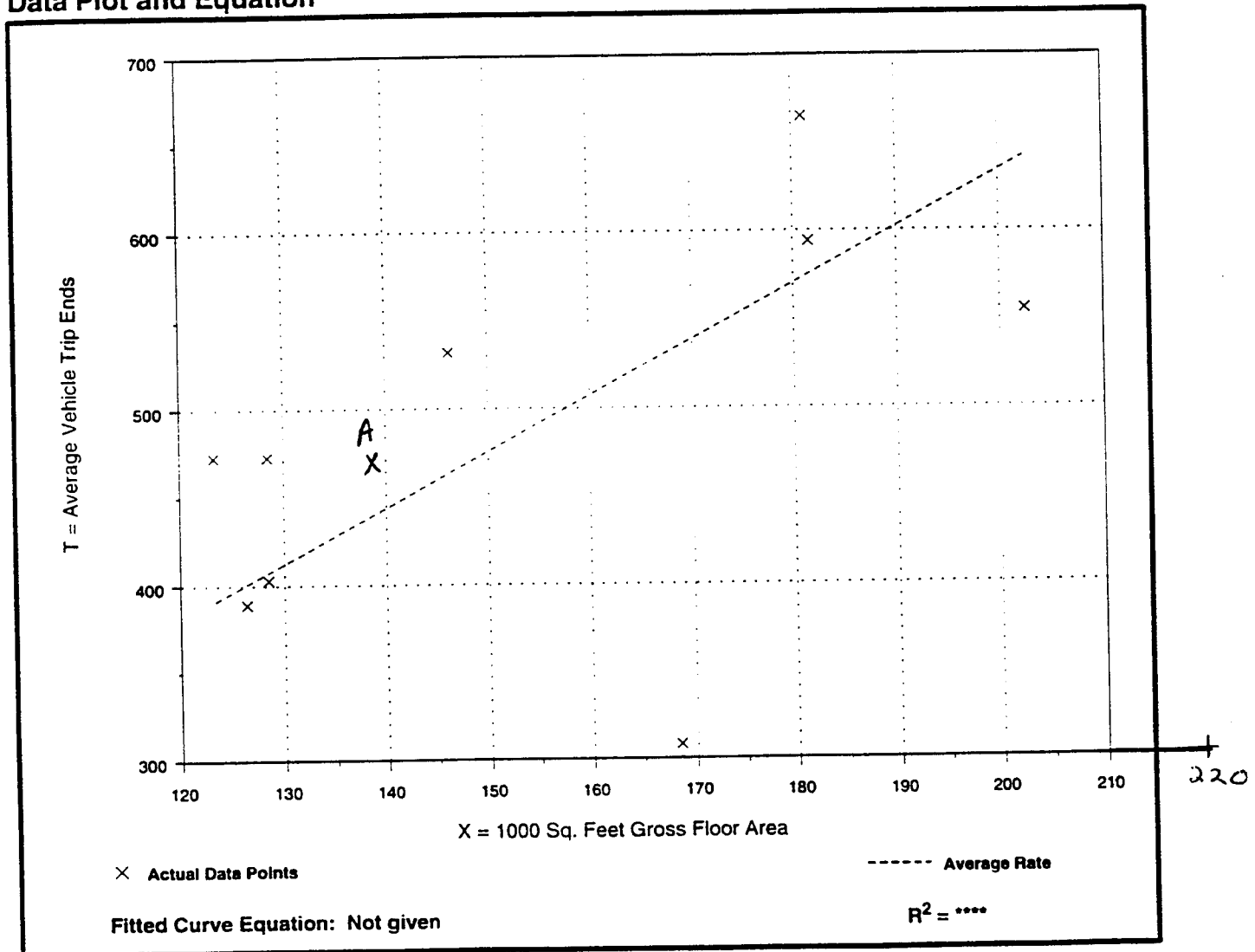
Number of Studies: 9
Average 1000 Sq. Feet GFA: 154
Directional Distribution: 53% entering, 47% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.17	1.83 - 3.84	1.88

C
X

Data Plot and Equation



Free-Standing Discount Superstore (813)

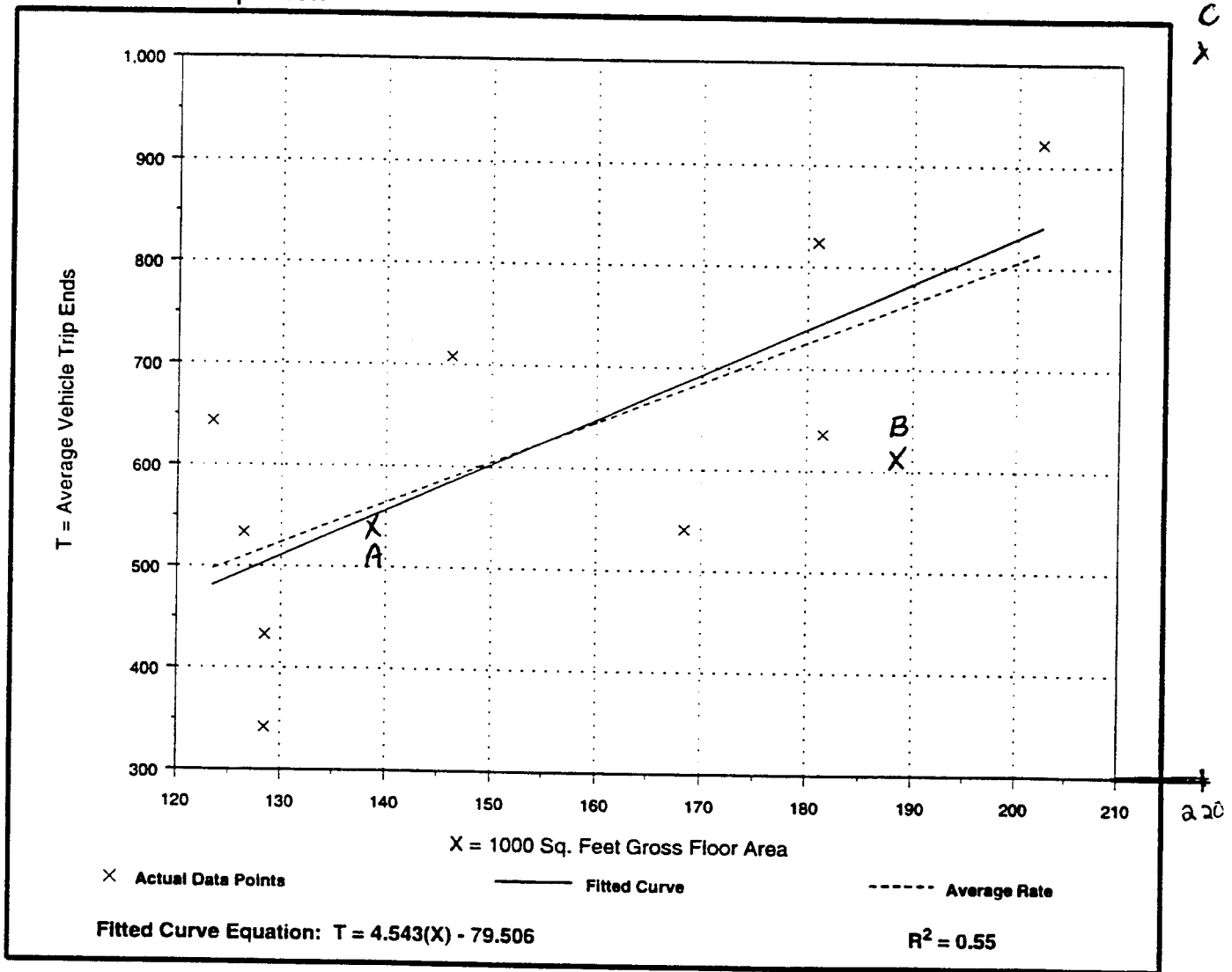
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 9
Average 1000 Sq. Feet GFA: 154
Directional Distribution: 52% entering, 48% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.03	2.66 - 5.21	2.15

Data Plot and Equation



Free-Standing Discount Superstore (813)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Saturday**

Number of Studies: 9
Average 1000 Sq. Feet GFA: 154
Directional Distribution: 50% entering, 50% exiting

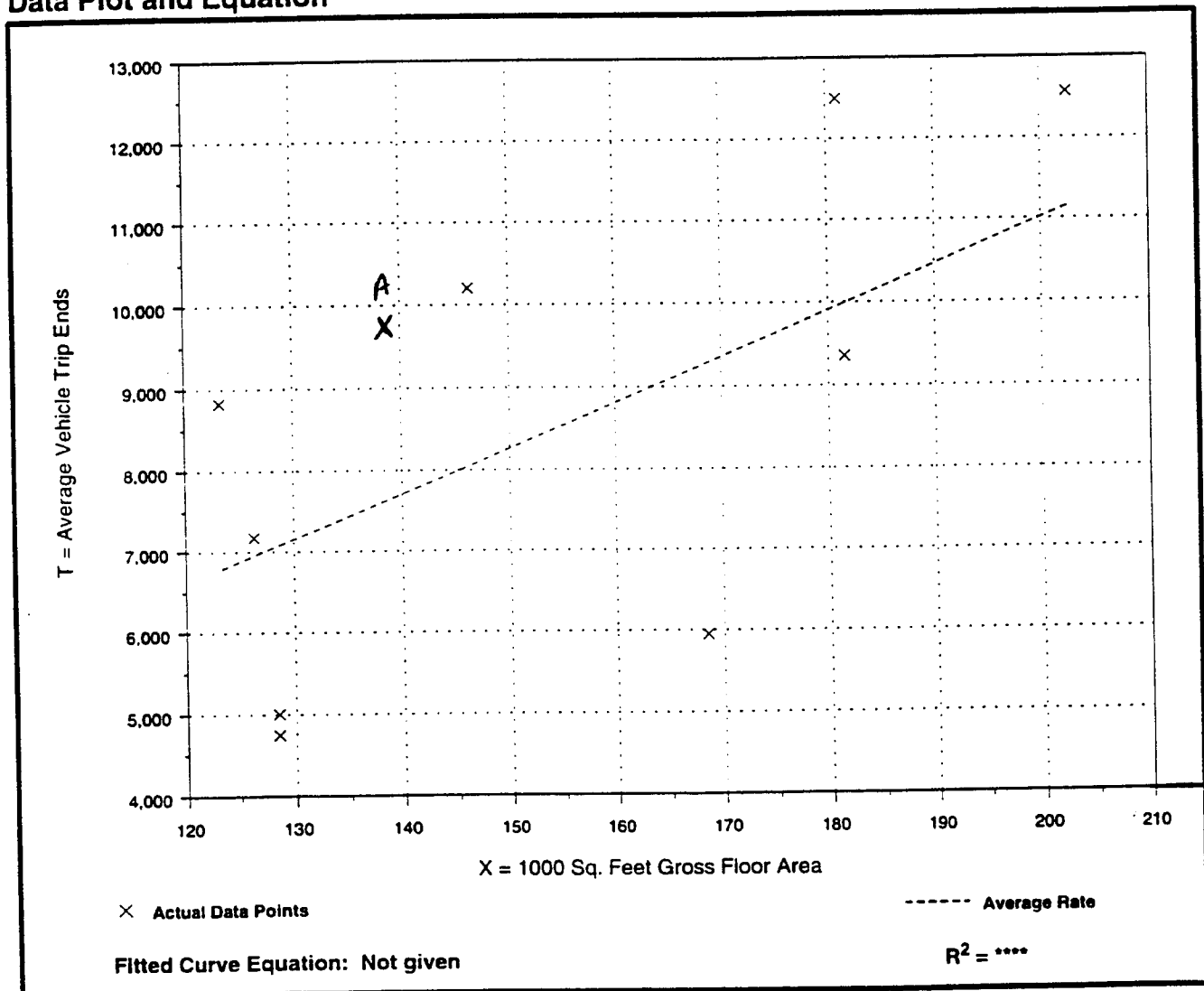
Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
55.06	35.32 - 71.62	15.44

(16929)

C X

Data Plot and Equation



220

Free-Standing Discount Superstore (813)

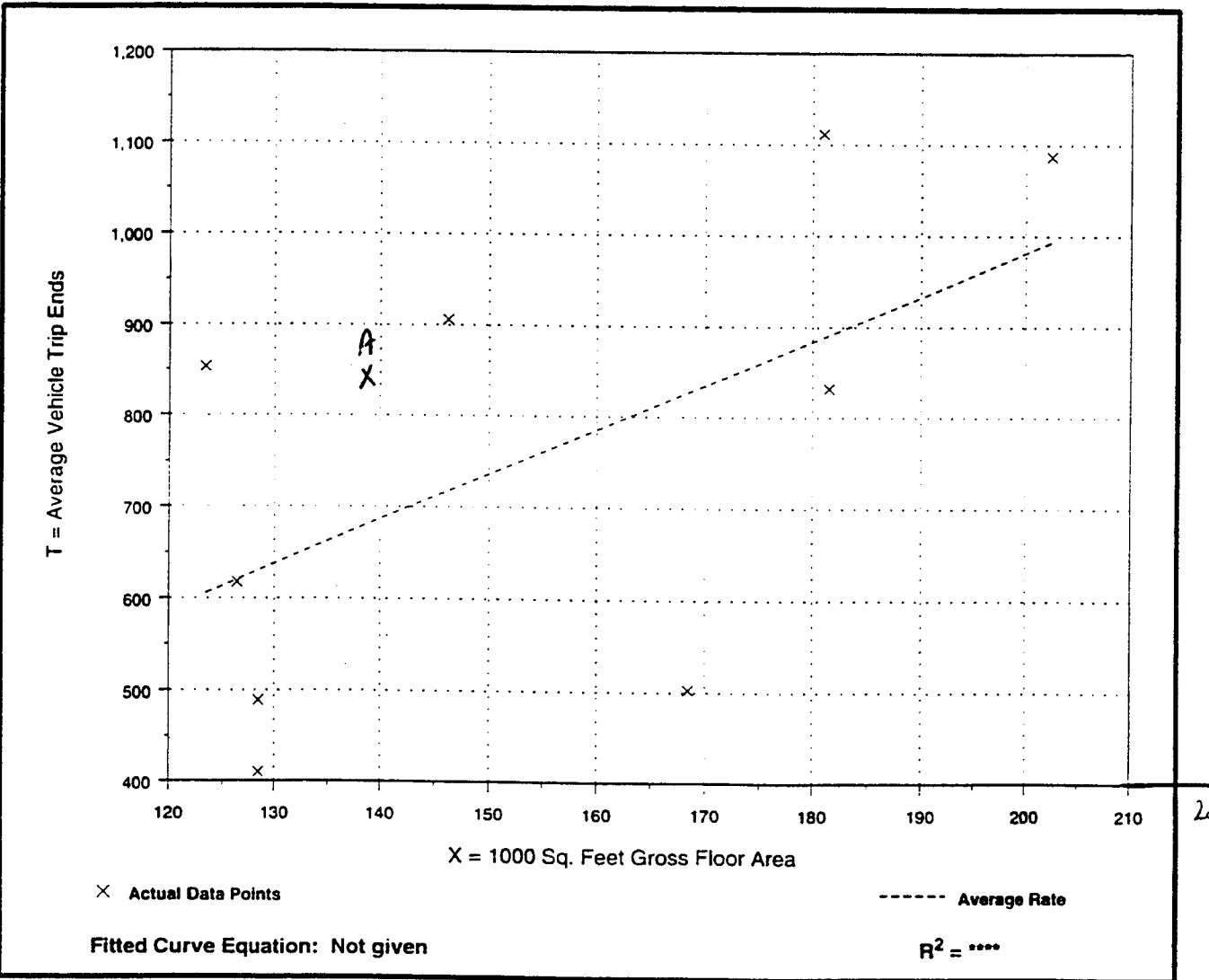
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday,
Peak Hour of Generator

Number of Studies: 9
Average 1000 Sq. Feet GFA: 154
Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.91	2.99 - 6.92	2.55

Data Plot and Equation



Free-Standing Discount Superstore (813)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Sunday

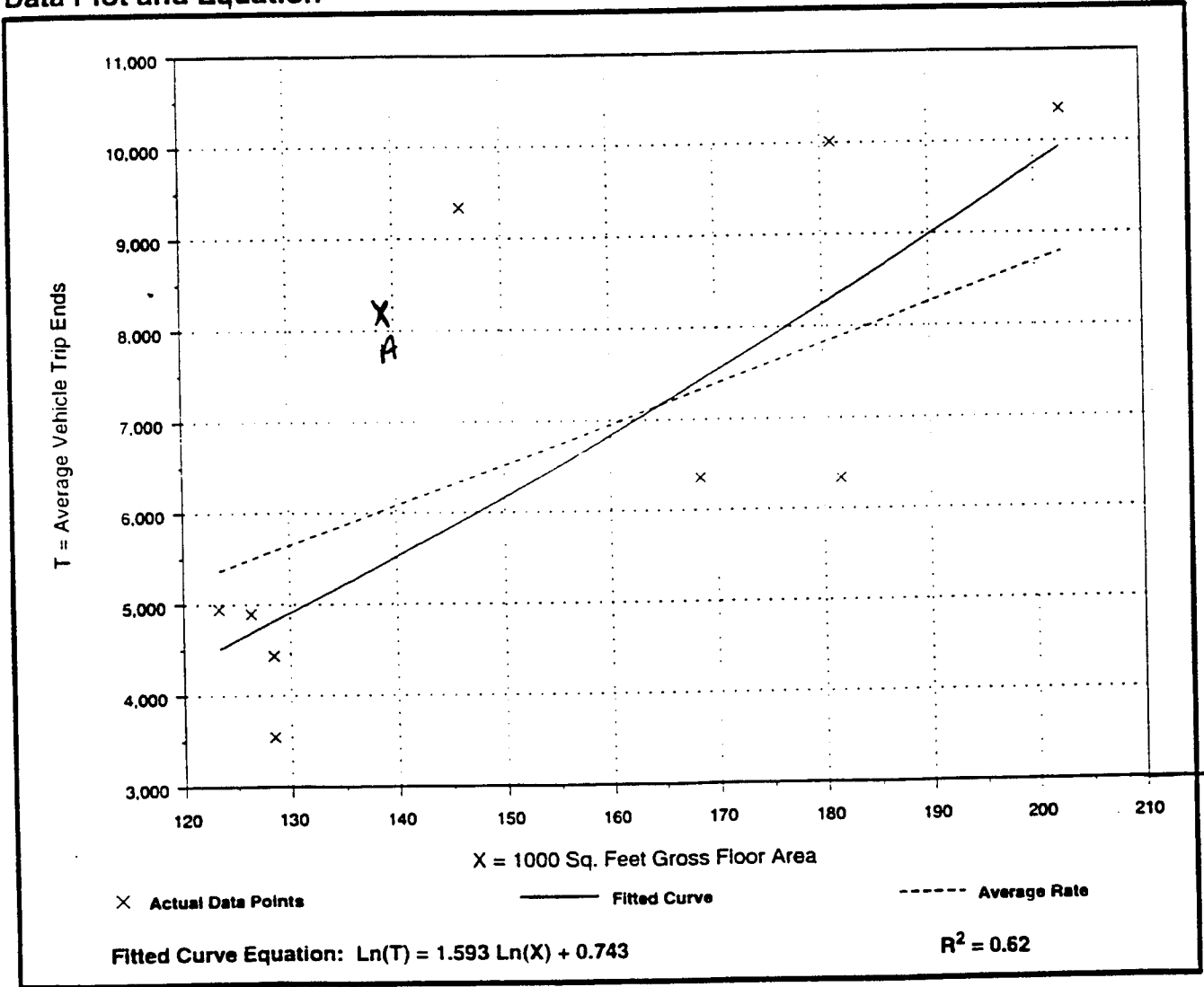
Number of Studies: 9
Average 1000 Sq. Feet GFA: 154
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
43.45	27.61 - 63.86	12.71

(14249)
X
C

Data Plot and Equation



220

Free-Standing Discount Superstore (813)

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

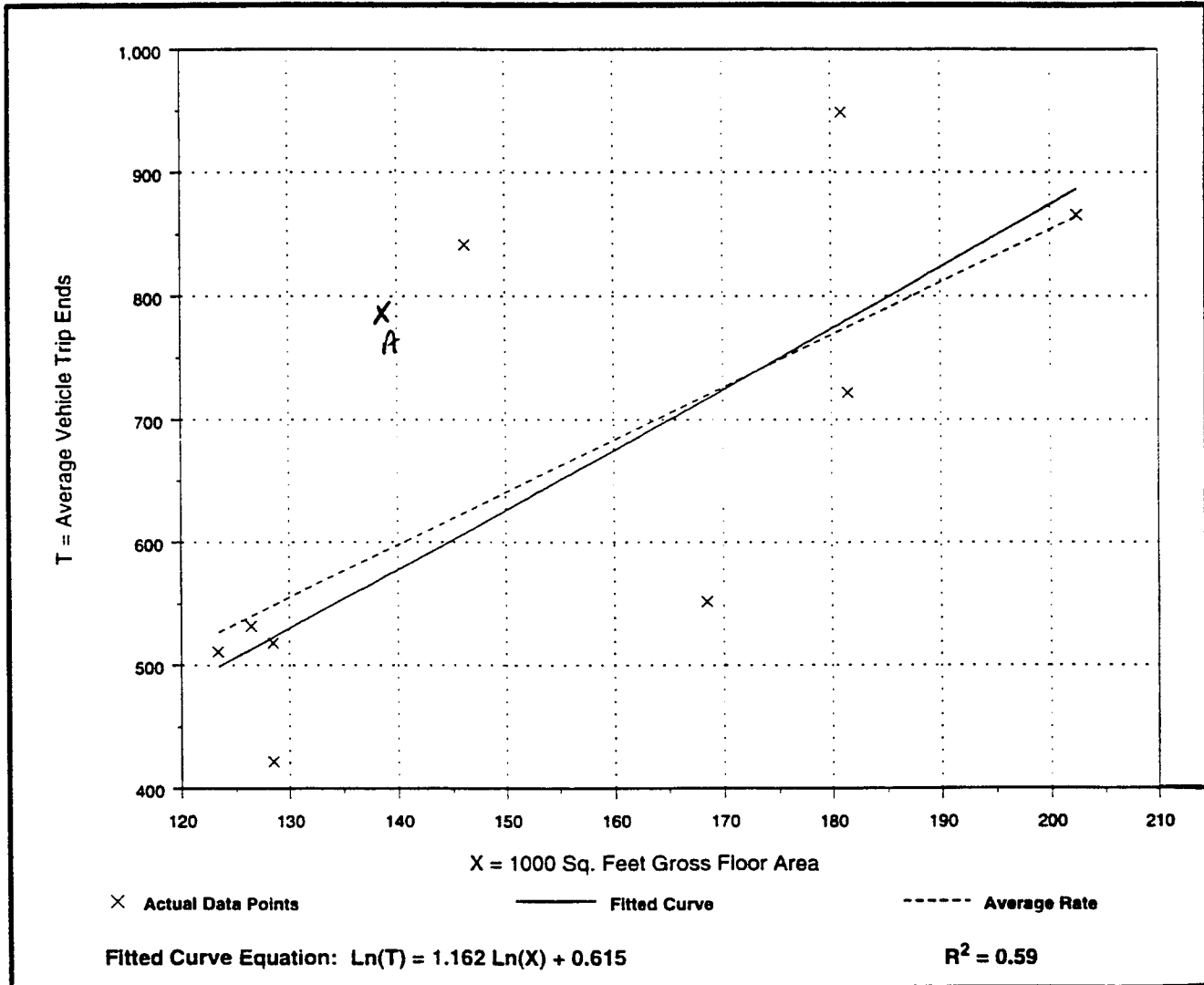
Number of Studies: 9
 Average 1000 Sq. Feet GFA: 154
 Directional Distribution: 52% entering, 48% exiting

(14)
X
C

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.27	3.28 - 5.76	2.20

Data Plot and Equation



220

APPENDIX G
ITE Format Graphs
Consolidated High Schools

High Schools

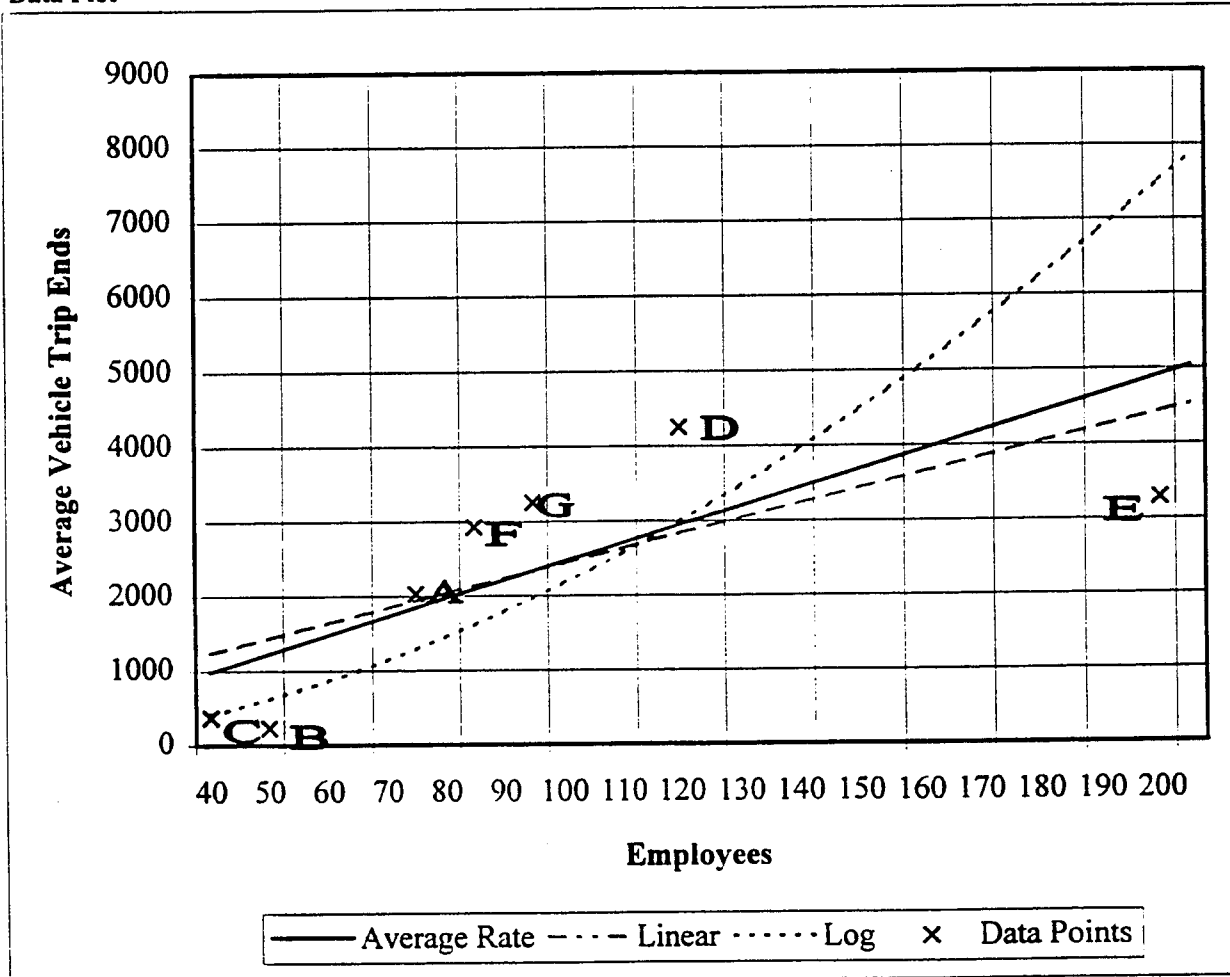
Average Vehicle Trip Ends V/S: Employees
 On a: Weekday

Number of Studies: 7
 Average SEV Value: 94.86
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
24.58	4.61-35.41	12.95

Data Plot



Linear Equation Trip Ends=437.46+19.97(Employees)

$r^2=0.50$

Log Equation Trip Ends=0.54(Employees)^{1.80}

$r^2=0.68$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

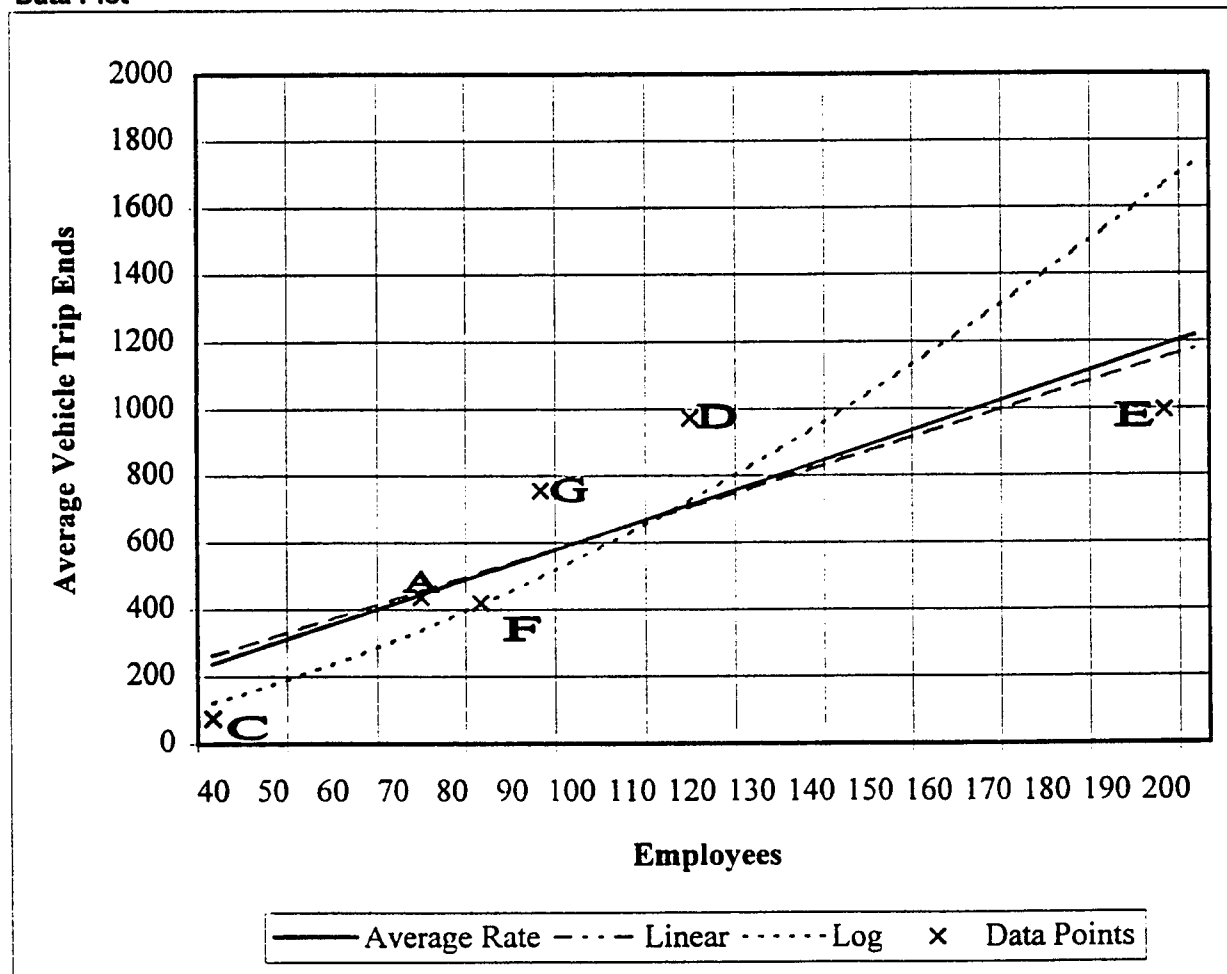
Average Vehicle Trip Ends V/S: Employees
 On a: Weekday AM Peak

Number of Studies: 6
 Average SEV Value: 102.5
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
5.94	1.89-8.10	2.33

Data Plot



Linear Equation

$$\text{Trip Ends} = 39.7232 + 5.55197(\text{Employees})$$

$$r^2 = 0.72$$

Log Equation

$$\text{Trip Ends} = 0.30(\text{Employees})^{1.63}$$

$$r^2 = 0.81$$

High Schools

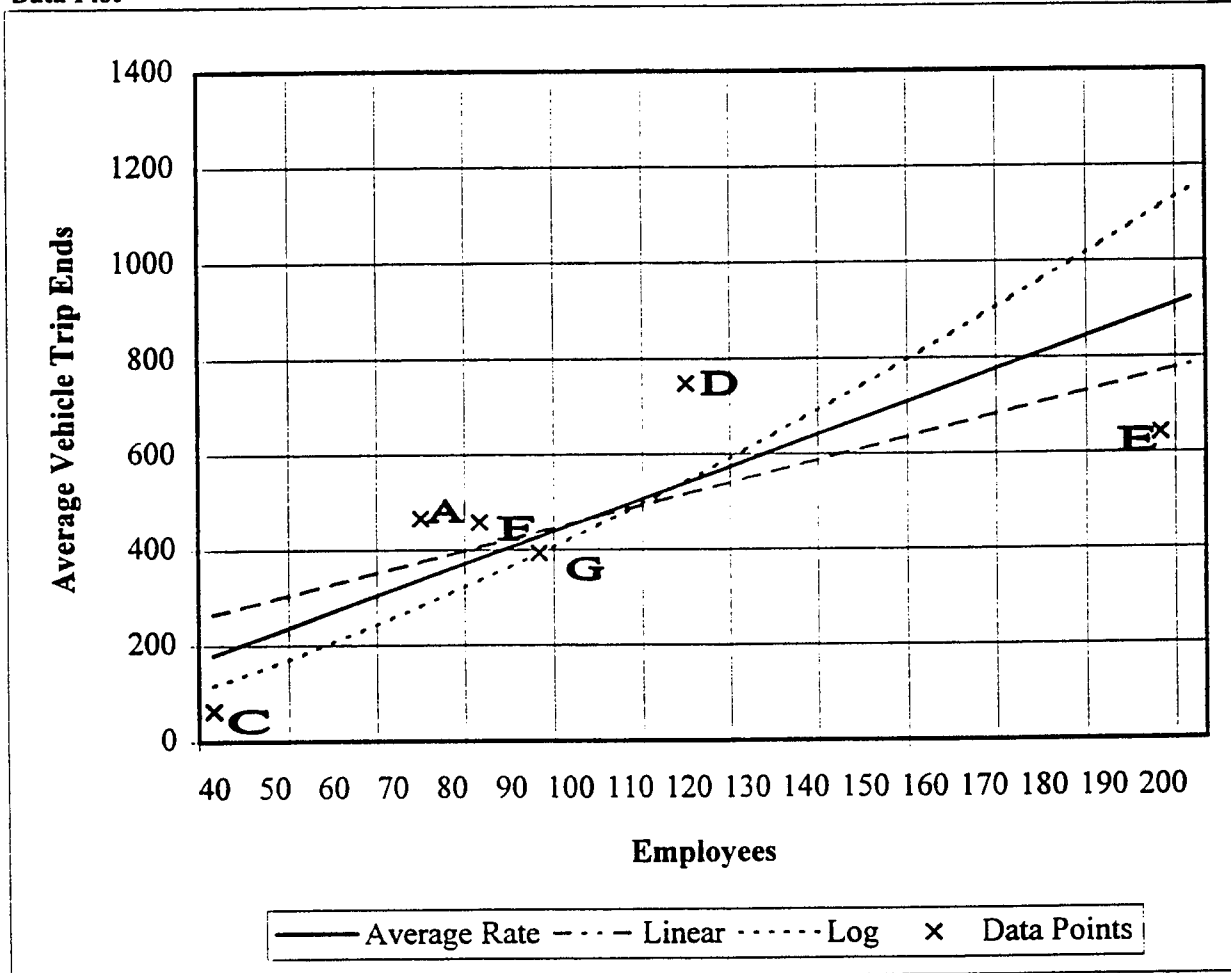
Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

Number of Studies: 6
 Average SEV Value: 102.5
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.50	1.59-6.37	1.87

Data Plot



Linear Equation Trip Ends=138.30+3.15(Employees) $r^2=0.55$
Log Equation Trip Ends=0.66(Employees)^{1.40} $r^2=0.71$

High Schools

Average Vehicle Trip Ends V/S: Employees
 On a: Saturday

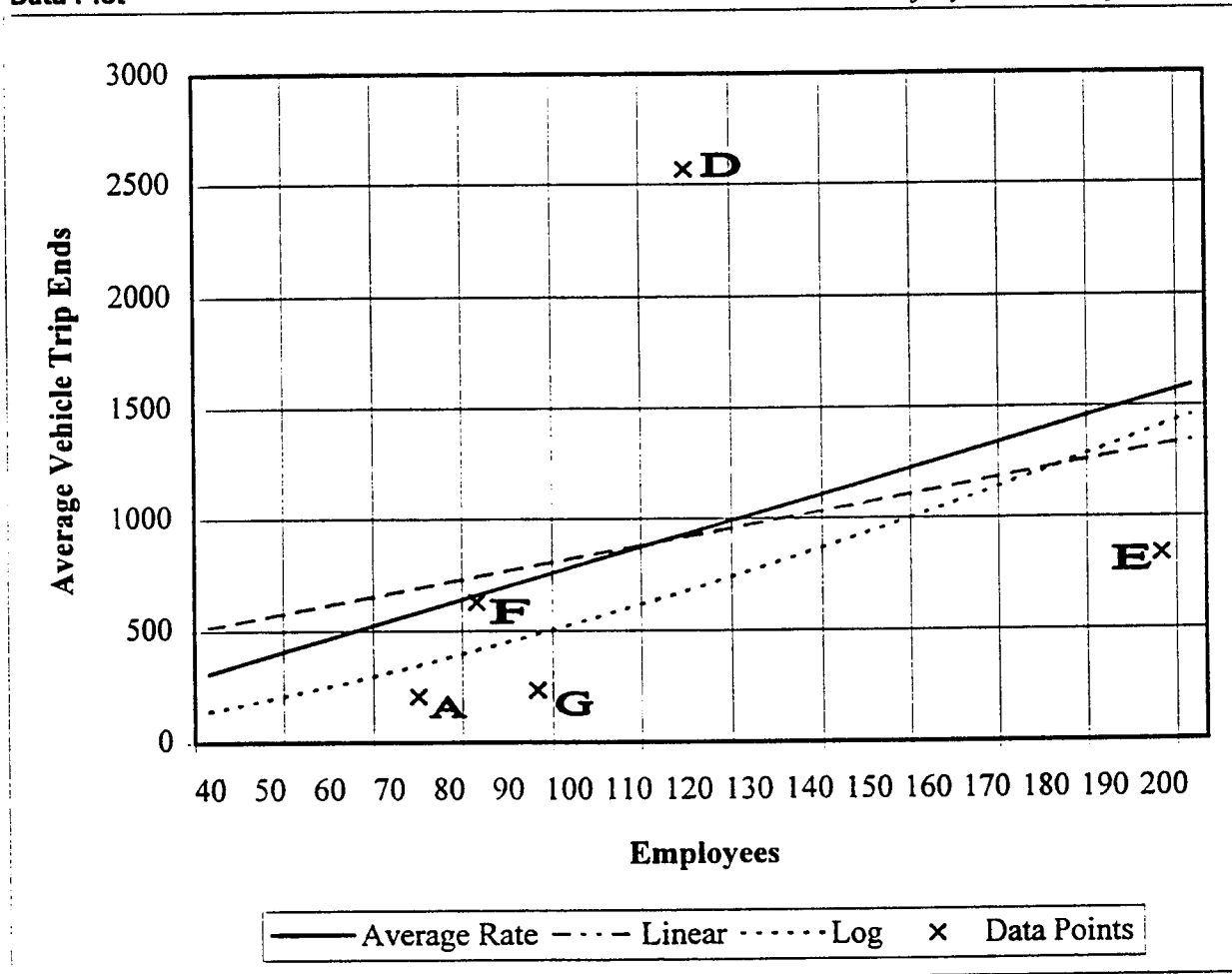
Number of Studies: 5
 Average SEV Value: 115
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
7.77	2.50-21.38	7.92

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=313.94+5.04(Employees) $r^2=0.07$

Log Equation Trip Ends=0.73(Employees)^{1.43} $r^2=0.30$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: Employees
 On a: Saturday Peak

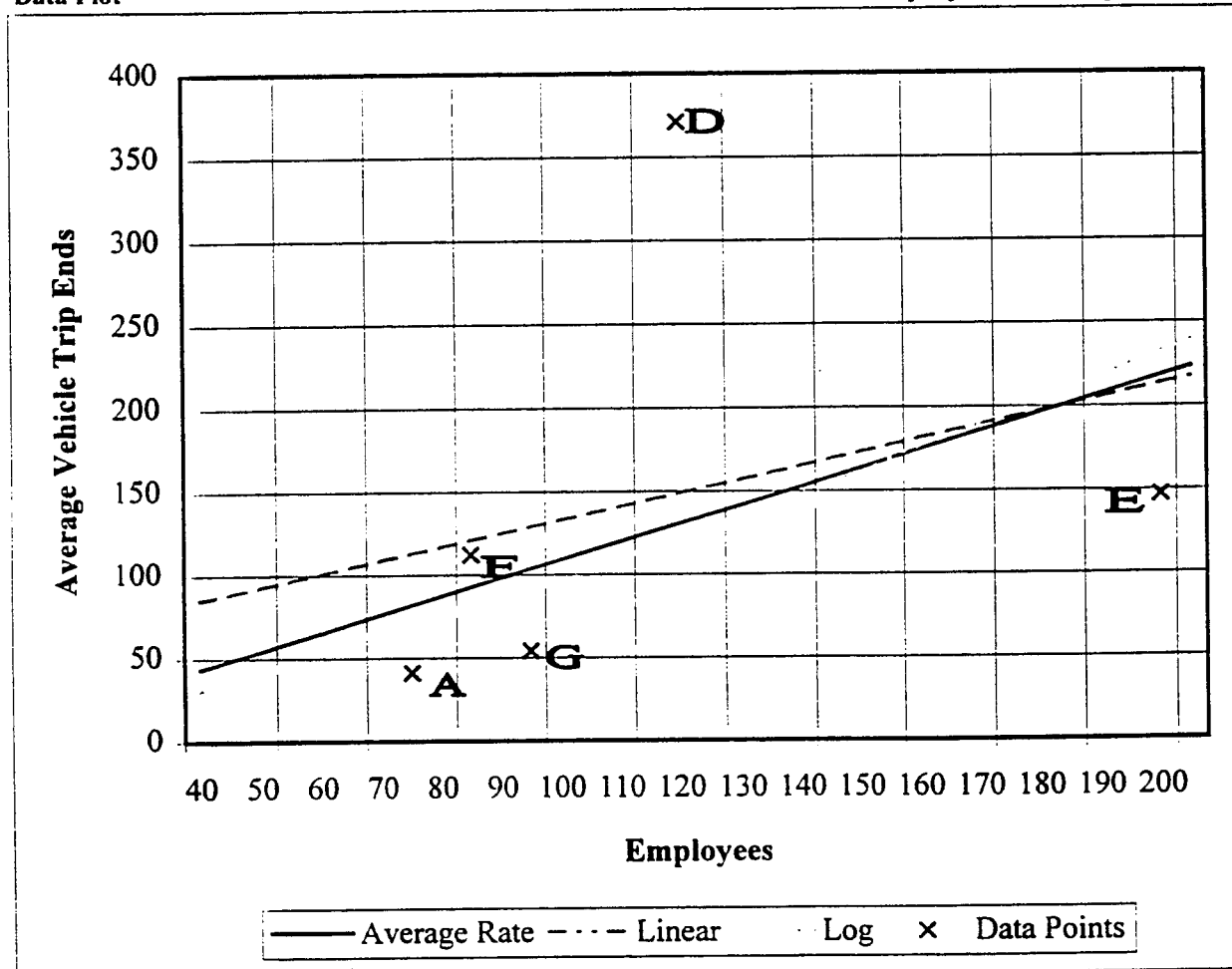
Number of Studies: 5
 Average SEV Value: 115
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.09	0.56-3.09	1.07

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 52.70 + 0.80(\text{Employees})$$

$$r^2 = 0.10$$

Log Equation

$$\text{Trip Ends} = 0.30(\text{Employees})^{1.26}$$

$$r^2 = 0.33$$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: Employees
 On a: Sunday

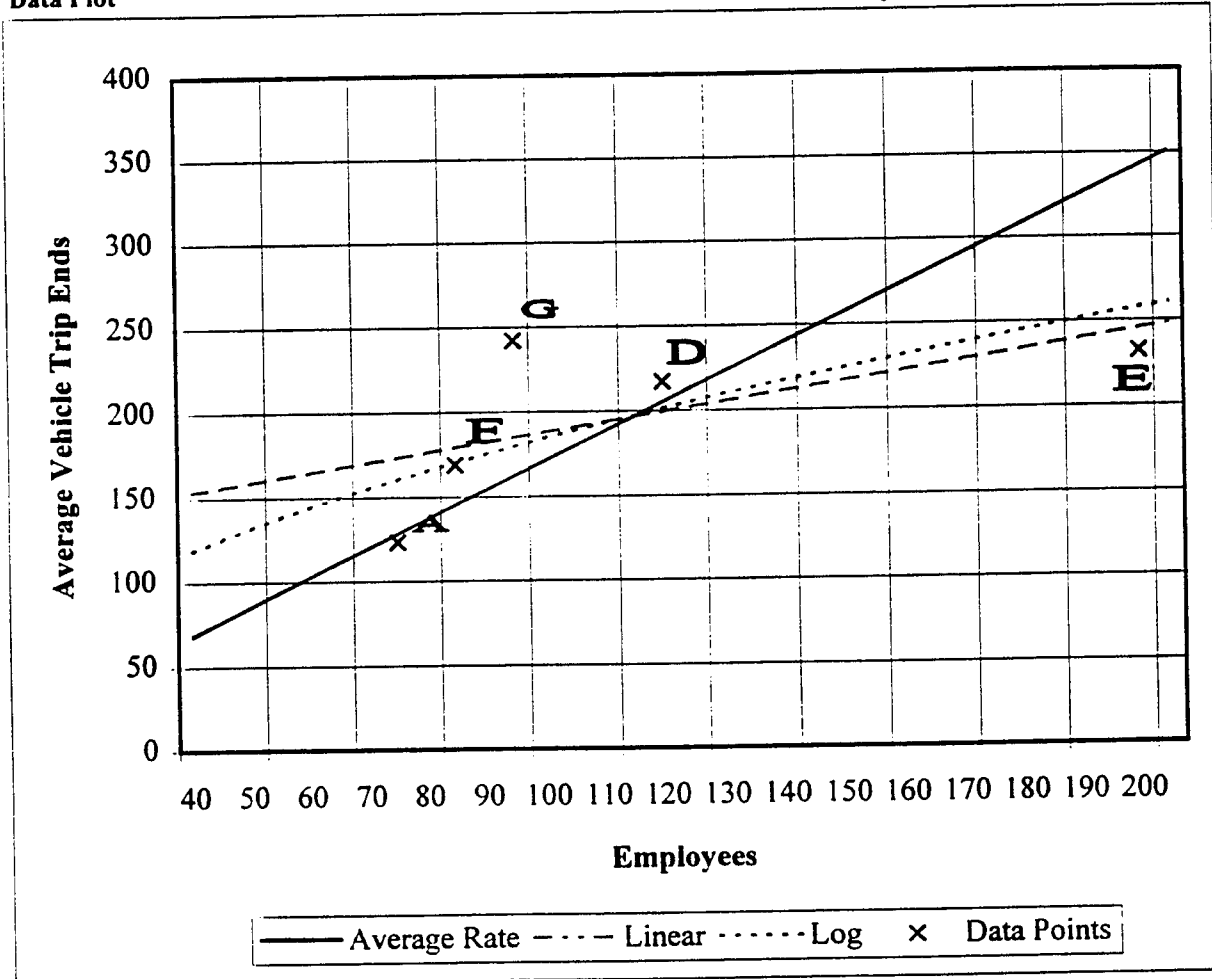
Number of Studies: 5
 Average SEV Value: 115
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.71	1.15-2.57	0.51

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=130.45+0.58(Employees)

$r^2=0.36$

Log Equation Trip Ends=20.09(Employees)^{0.48}

$r^2=0.46$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: Employees
 On a: Sunday Peak

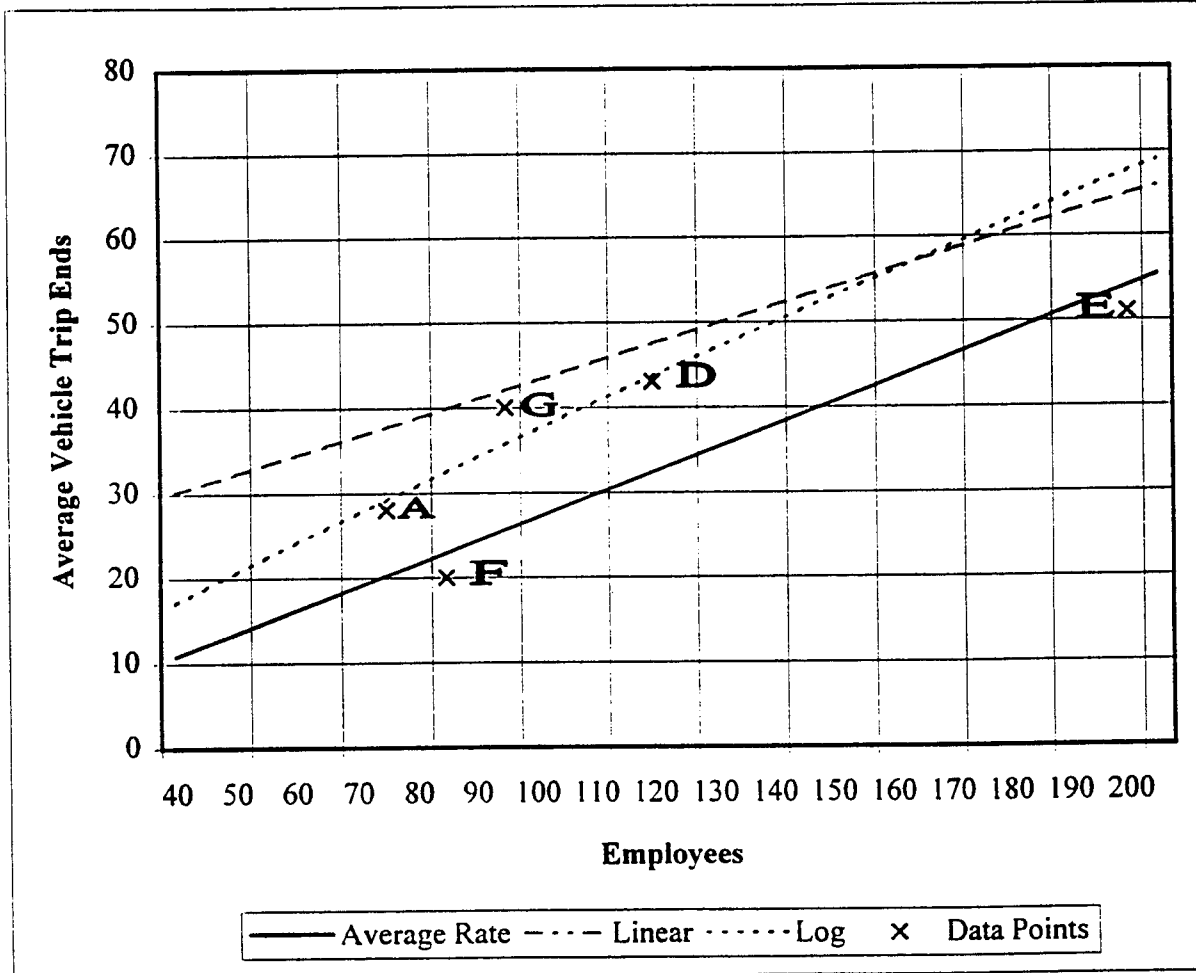
Number of Studies: 5
 Average SEV Value: 115
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.27	0.23-0.43	0.08

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=21.48+0.22(Employees) $r^2=0.15$

Log Equation Trip Ends=0.73(Employees)^{0.86} $r^2=0.34$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

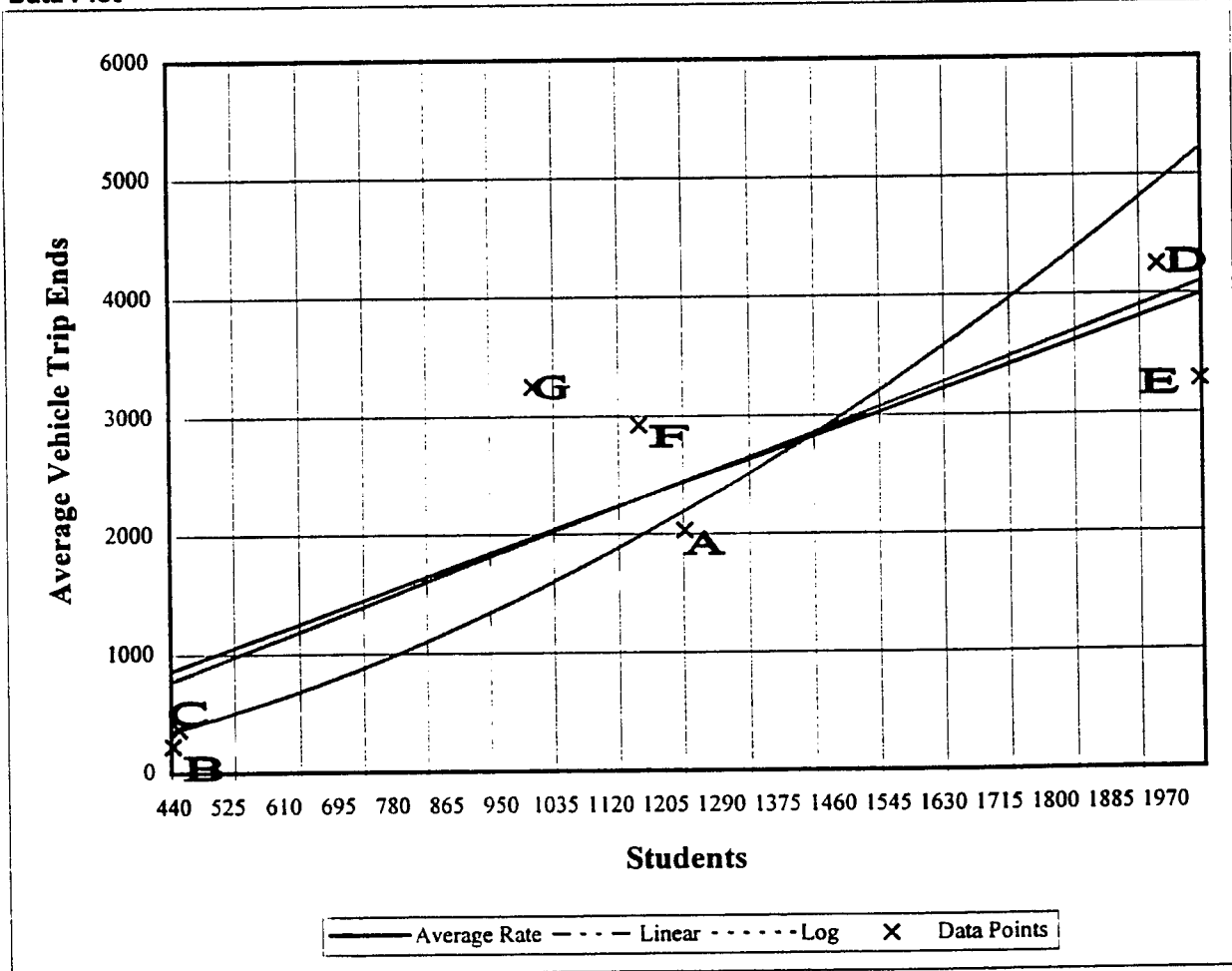
Average Vehicle Trip Ends V/S: Students
On a: Weekday

Number of Studies: 7
Average SEV Value: 1185.57
Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.97	0.51-3.23	0.94

Data Plot



Linear Equation

$$\text{Trip Ends} = -145.61 + 2.09(\text{Students})$$

$$r^2 = 0.76$$

Log Equation

$$\text{Trip Ends} = 0.01(\text{Students})^{1.76}$$

$$r^2 = 0.86$$

High Schools

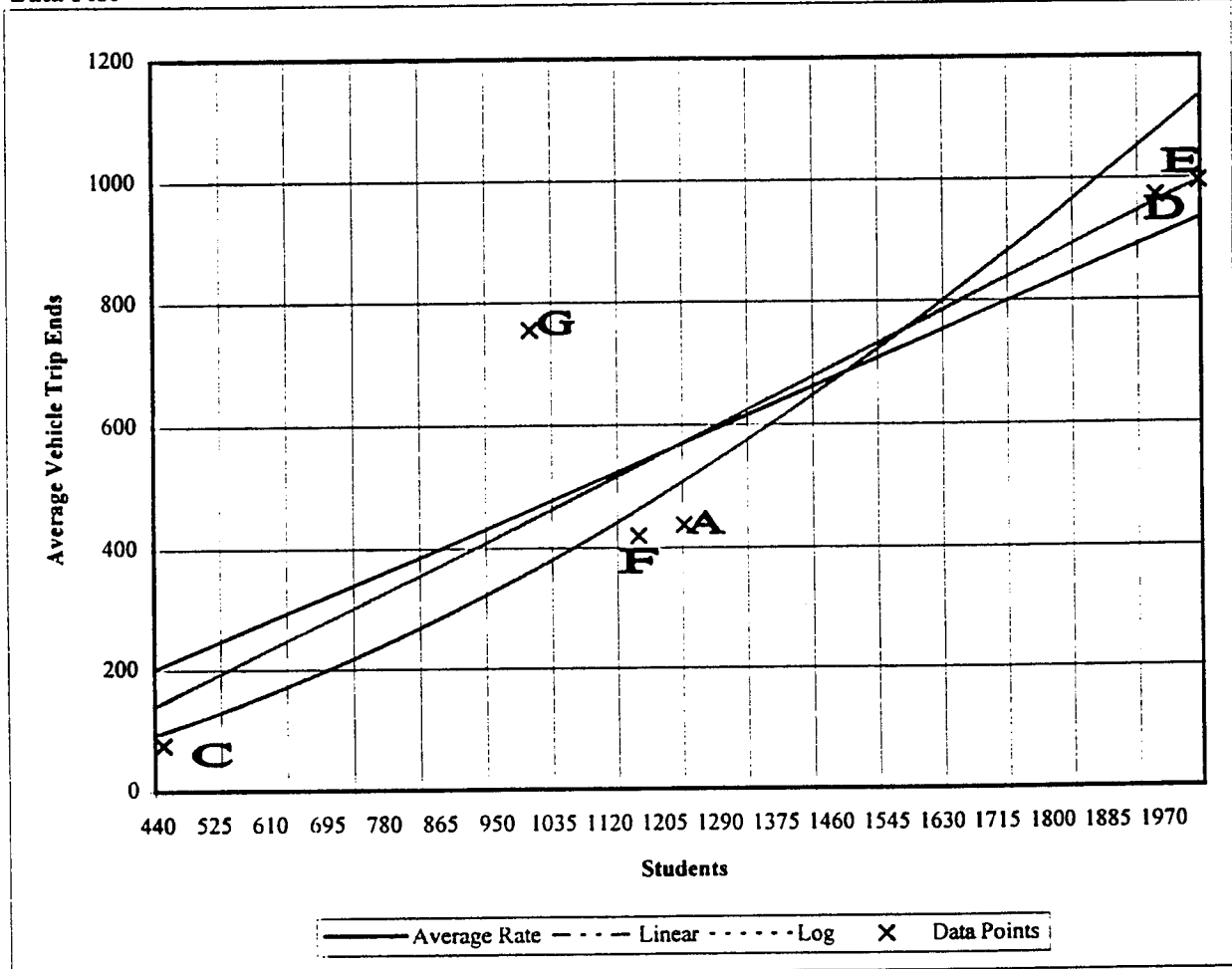
Average Vehicle Trip Ends V/S: Students
 On a: Weekday AM Peak

Number of Studies: 6
 Average SEV Value: 1309.83
 Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.46	0.17-0.75	0.2

Data Plot



Linear Equation

$$\text{Trip Ends} = -95.24 + 0.54(\text{Students})$$

$$r^2 = 0.80$$

Log Equation

$$\text{Trip Ends} = 0.005(\text{Students})^{1.63}$$

$$r^2 = 0.86$$

High Schools

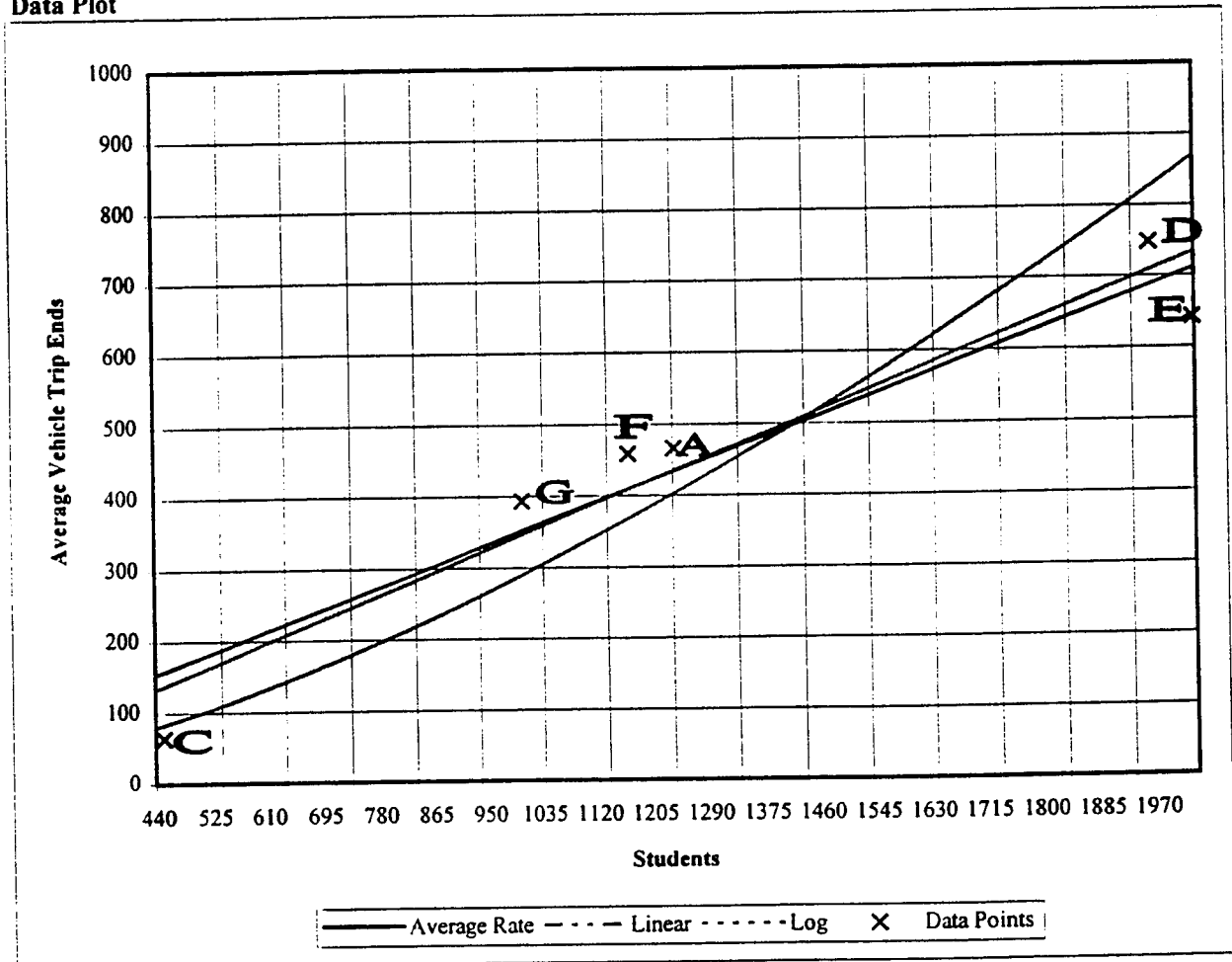
Average Vehicle Trip Ends V/S: Students
 On a: Weekday PM Peak

Number of Studies: 6
 Average SEV Value: 1309.83
 Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.35	0.14-0.39	0.10

Data Plot



Linear Equation

$$\text{Trip Ends} = -32.78 + 0.38(\text{Students})$$

$$r^2 = 0.93$$

Log Equation

$$\text{Trip Ends} = 0.006(\text{Students})^{1.56}$$

$$r^2 = 0.92$$

High Schools

Average Vehicle Trip Ends V/S: Students
On a: Saturday

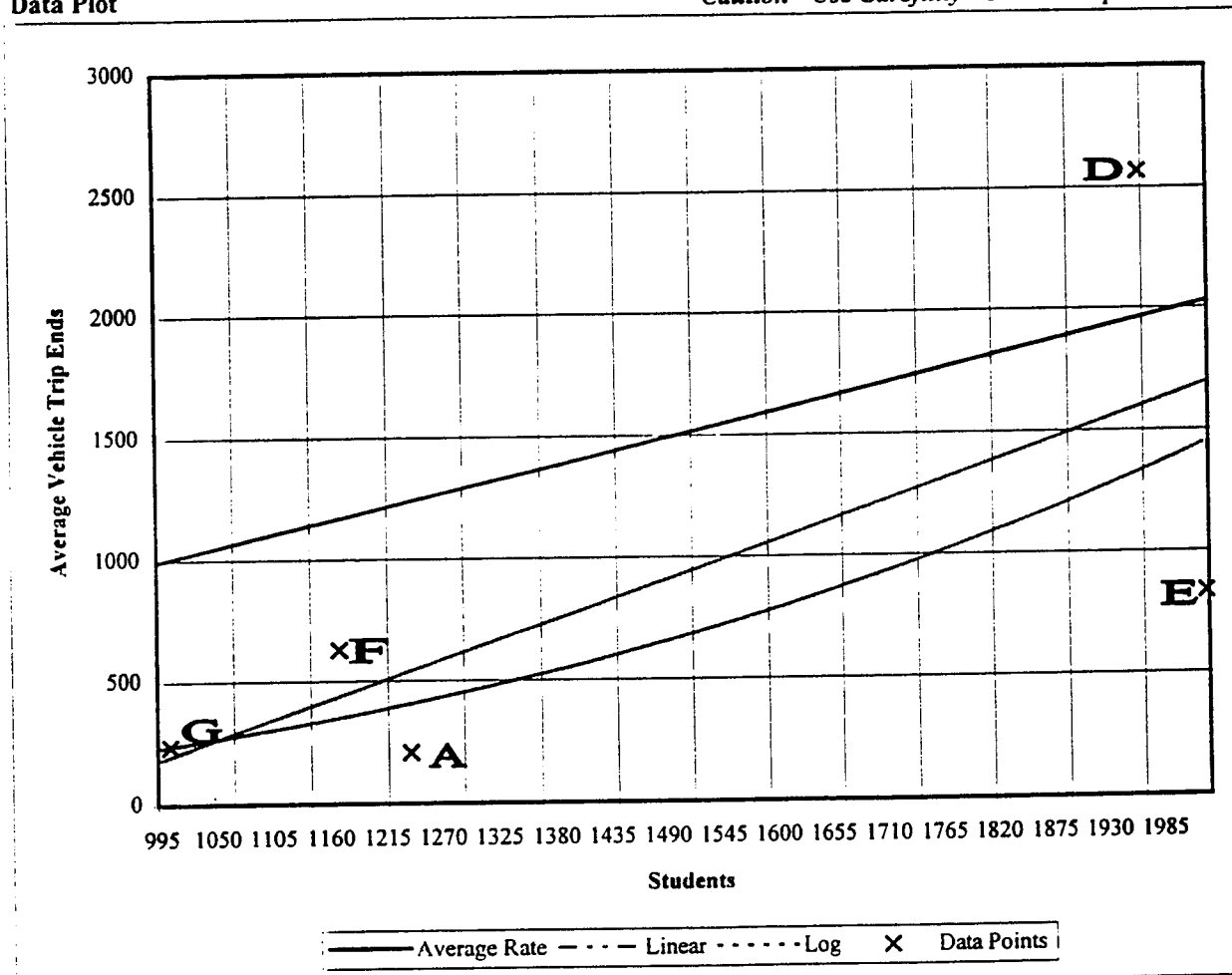
Number of Studies: 5
Average SEV Value: 1481.8
Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.00	0.17-1.31	0.46

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends = -1271.90 + 1.46(Students)	$r^2 = 0.52$
Log Equation	Trip Ends = 4.29(Students) ^{2.58}	$r^2 = 0.64$

High Schools

Average Vehicle Trip Ends V/S: Students
 On a: Saturday Peak

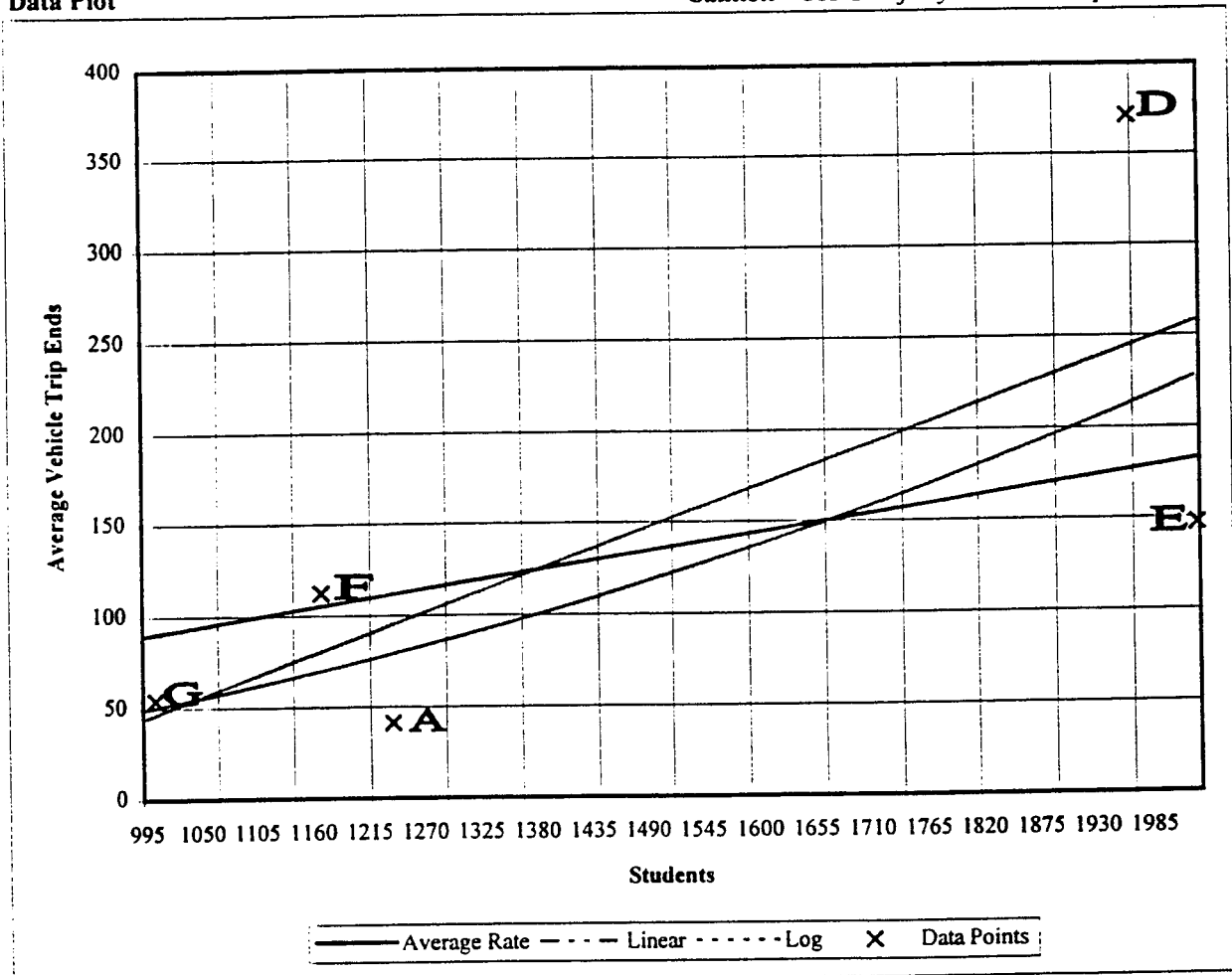
Number of Studies: 5
 Average SEV Value: 1481.8
 Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.09	0.03-0.19	0.06

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = -161.05 + 0.21(\text{Students})$$

$$r^2 = 0.55$$

Log Equation

$$\text{Trip Ends} = 1.77(\text{Students})^{2.15}$$

$$r^2 = 0.62$$

High Schools

Average Vehicle Trip Ends V/S: Students
On a: Sunday

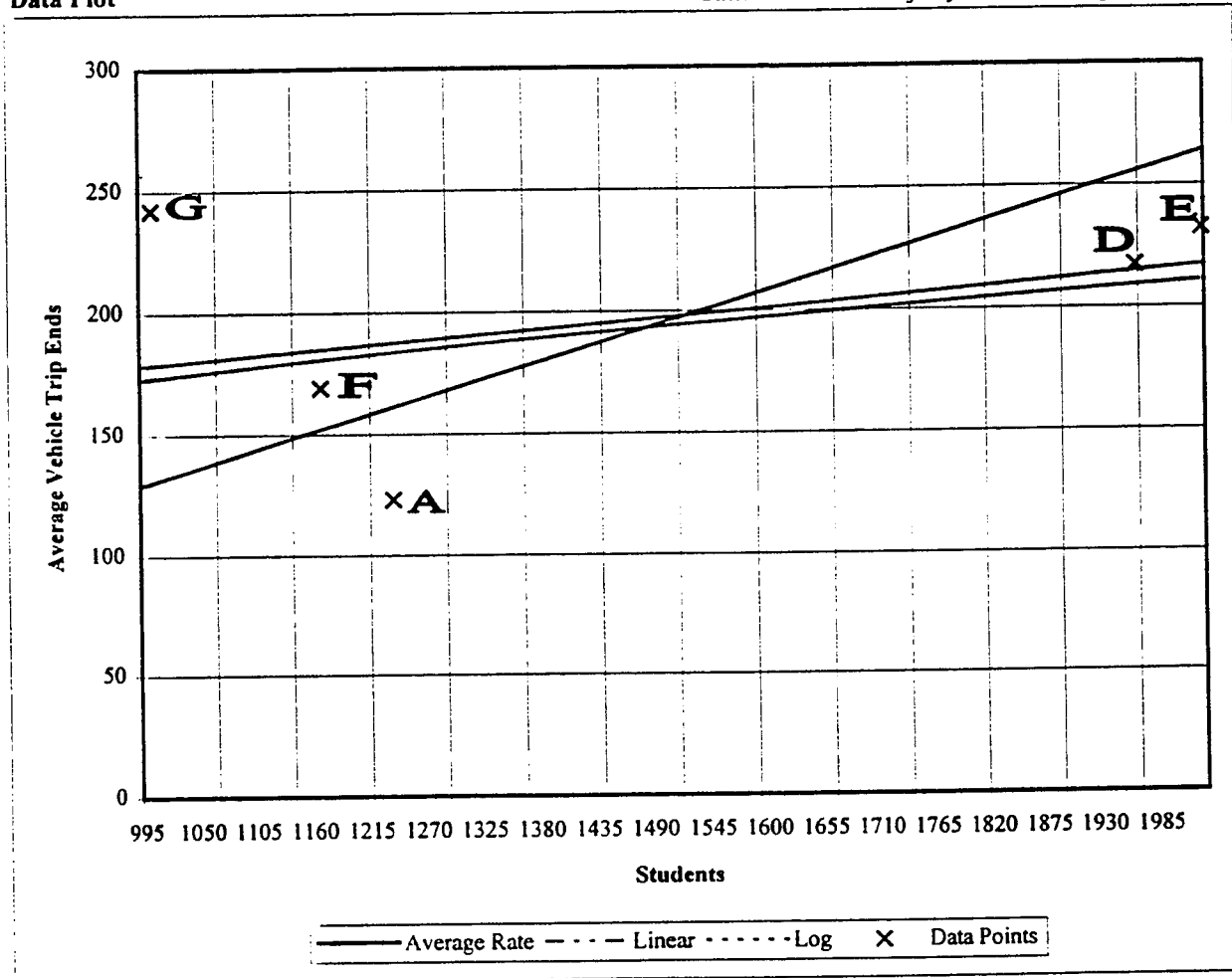
Number of Studies: 5
Average SEV Value: 1481.8
Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.13	0.10-0.24	0.06

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=141.22+0.04(Students)

$r^2=0.13$

Log Equation Trip Ends=25.28(Students)^{0.28}

$r^2=0.10$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: Students
On a: Sunday Peak

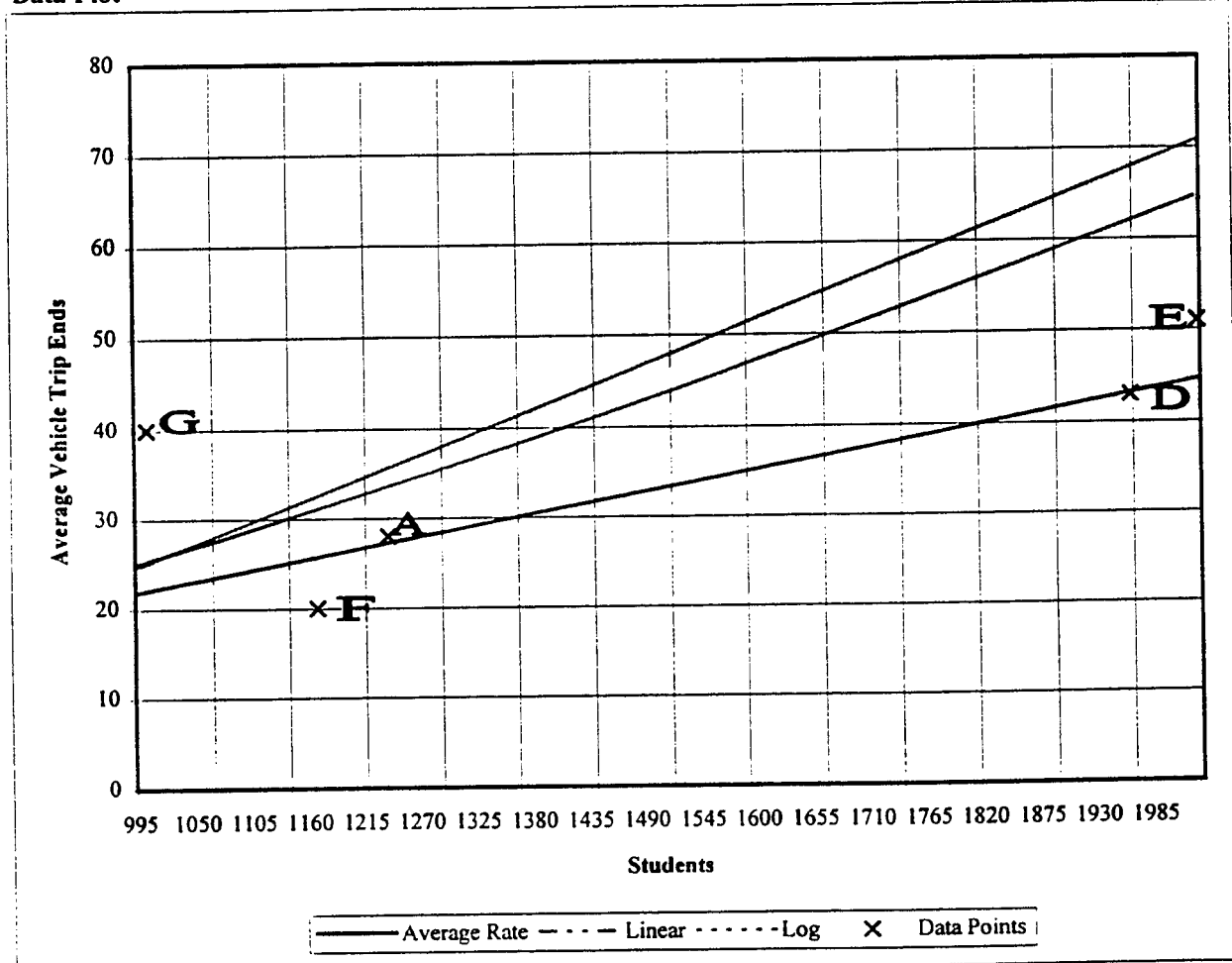
Number of Studies: 5
Average SEV Value: 1481.8
Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.02	0.02-0.04	0.01

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends = -19.52 + 0.04(Students)	$r^2 = 0.55$
Log Equation	Trip Ends = 0.02(Students) ^{2.16}	$r^2 = 0.52$

High Schools

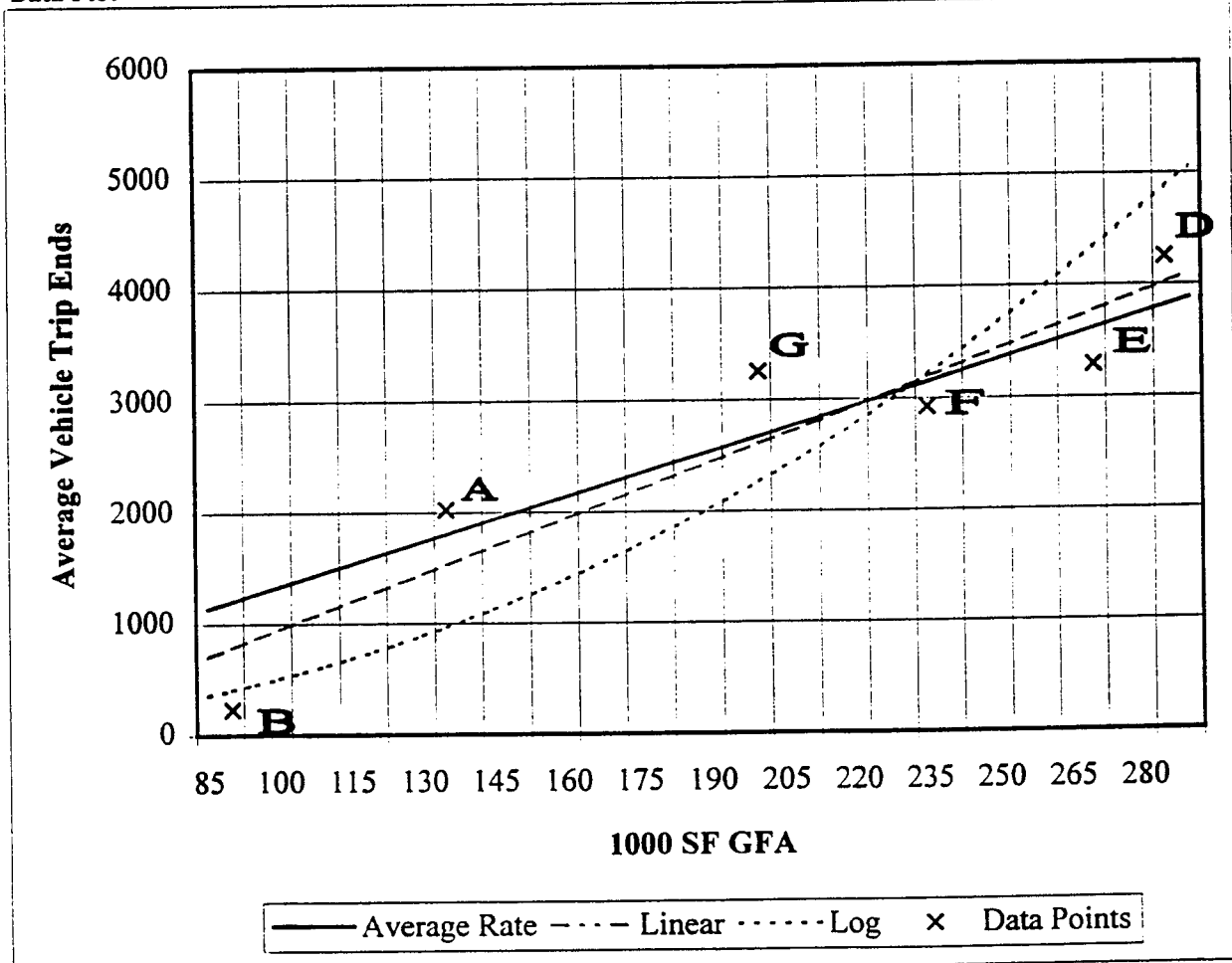
Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday

Number of Studies: 6
 Average SEV Value: 203.17
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
13.38	2.58-14.86	4.95

Data Plot



Linear Equation

$$\text{Trip Ends} = -707.42 + 16.57(1000 \text{ SF GFA})$$

$$r^2 = 0.87$$

Log Equation

$$\text{Trip Ends} = 3.78(1000 \text{ SF GFA})^{0.96}$$

$$r^2 = 0.83$$

High Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday AM Peak

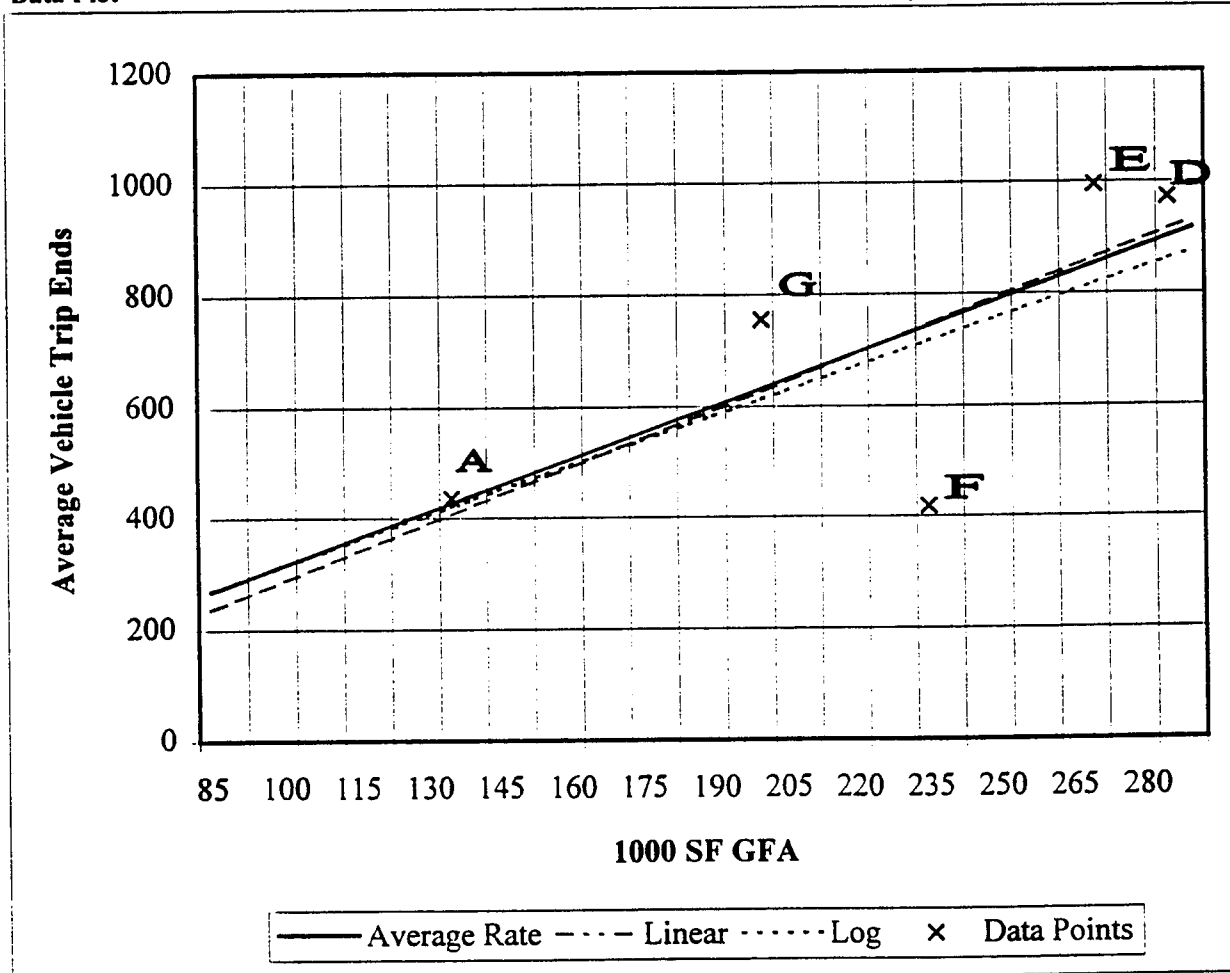
Number of Studies: 5
 Average SEV Value: 226.2
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
3.16	1.79-3.77	0.81

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends = -51.14 + 3.39(1000 SF GFA) $r^2 = 0.53$

Log Equation Trip Ends = 21.12(1000 SF GFA)^{0.60} $r^2 = 0.46$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday PM Peak

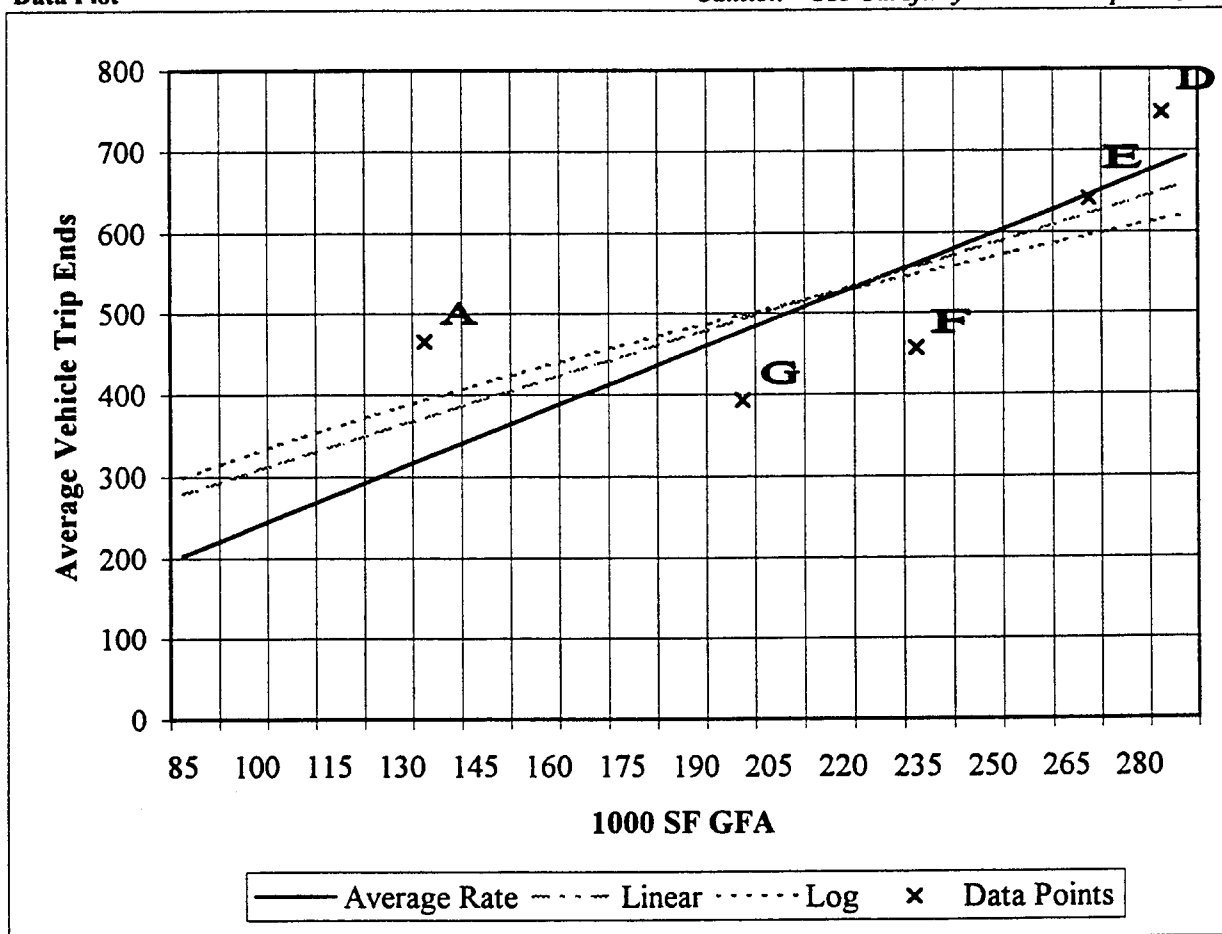
Number of Studies: 5
 Average SEV Value: 226.2
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
2.39	1.93-3.40	0.60

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=121.94+1.85(Employees) $r^2=0.57$

Log Equation Trip Ends=21.15(1000 SF GFA)^{0.60} $r^2=0.44$

(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Saturday

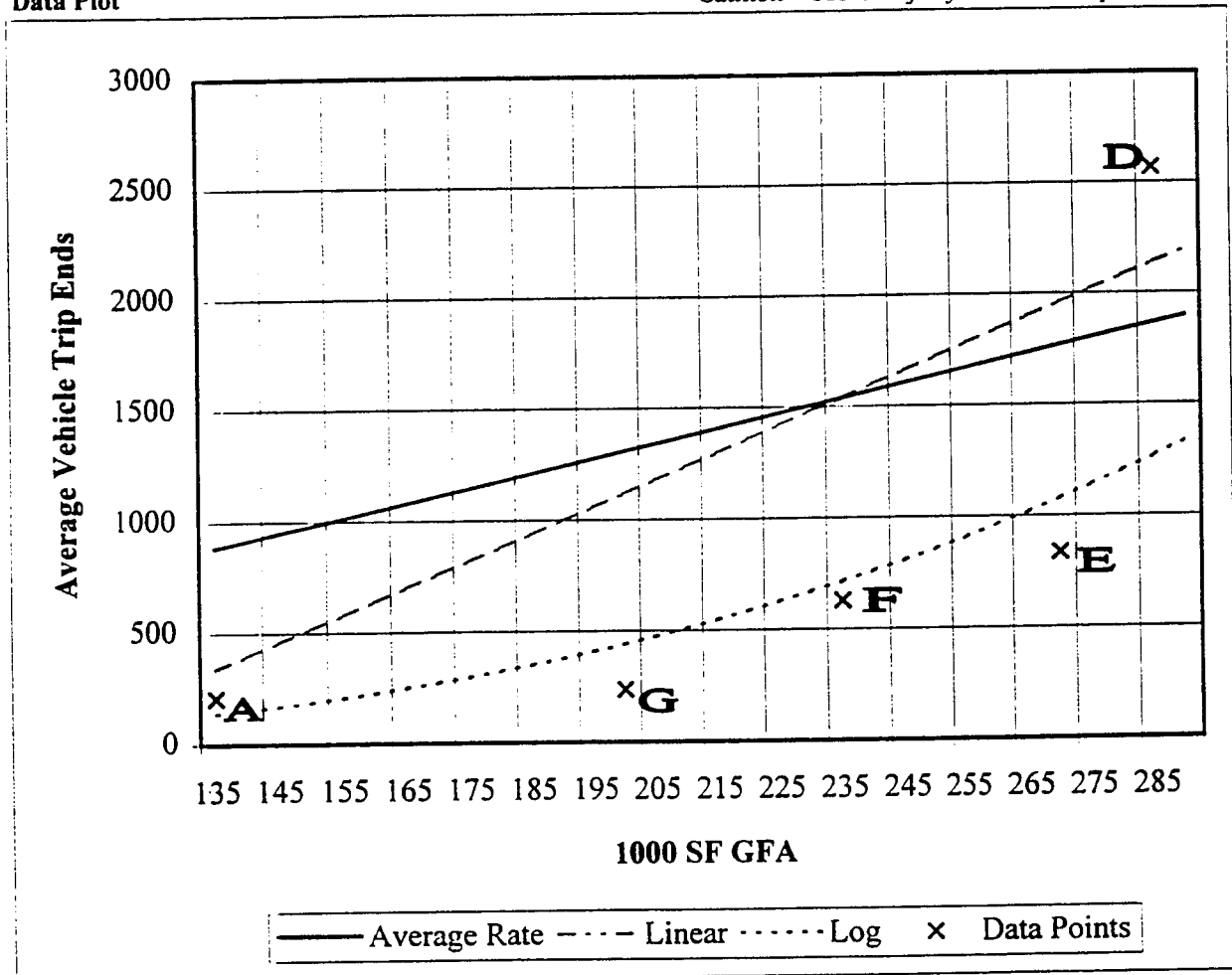
Number of Studies: 5
 Average SEV Value: 226.2
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
6.54	1.50-8.97	3.17

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = -1280.6 + 11.99(1000 \text{ SF GFA})$$

$$r^2 = 0.55$$

Log Equation

$$\text{Trip Ends} = 6.25 \times 10^{-5} (1000 \text{ SF GFA})^{2.98}$$

$$r^2 = 0.74$$

High Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Saturday Peak

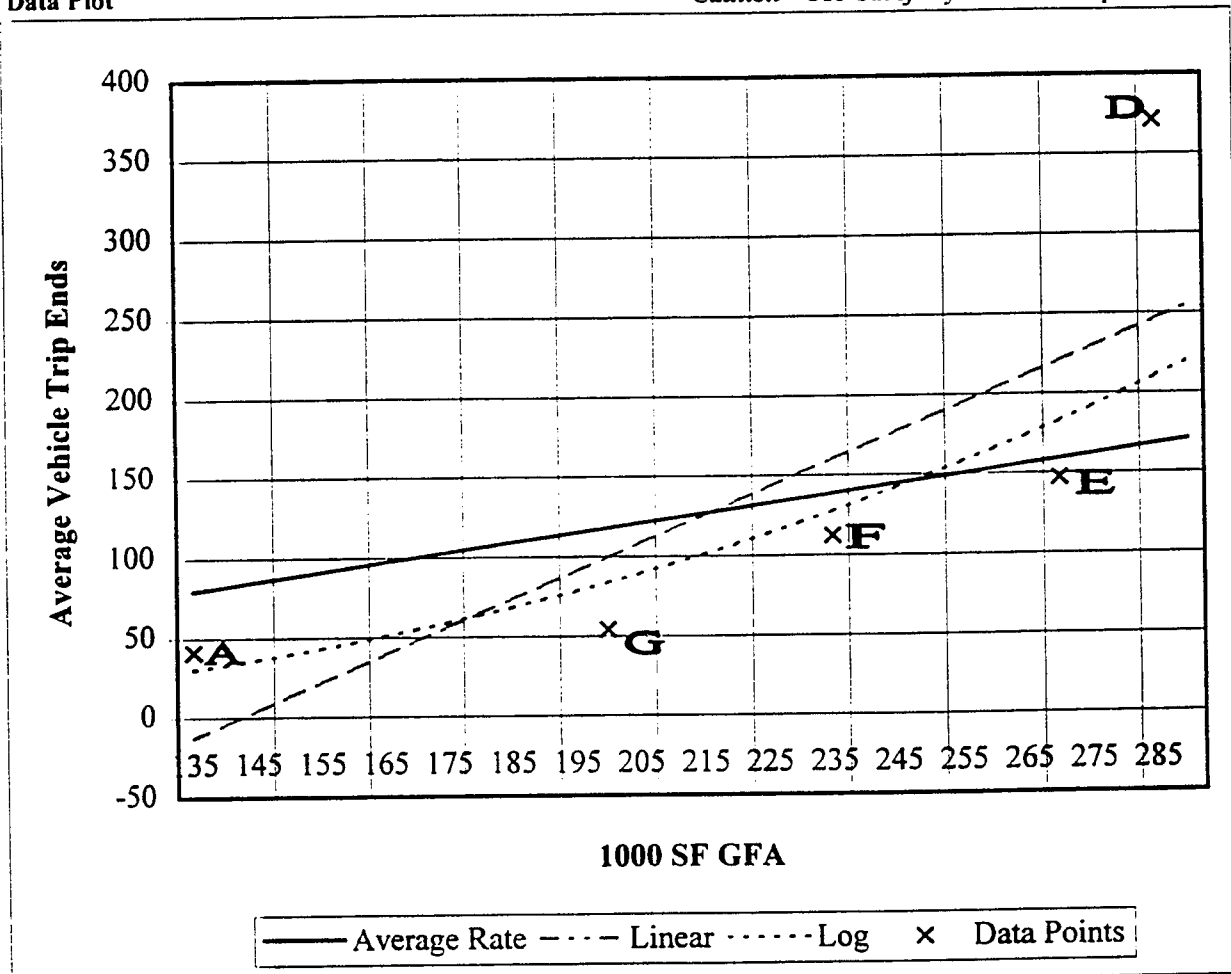
Number of Studies: 5
 Average SEV Value: 226.2
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.59	0.27-1.30	0.42

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends = -245.93 + 1.73(1000 SF GFA)	$r^2 = 0.60$
Log Equation	Trip Ends = $8.78 \times 10^{-5} (1000 \text{ SF GFA})^{2.60}$	$r^2 = 0.78$

High Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Sunday

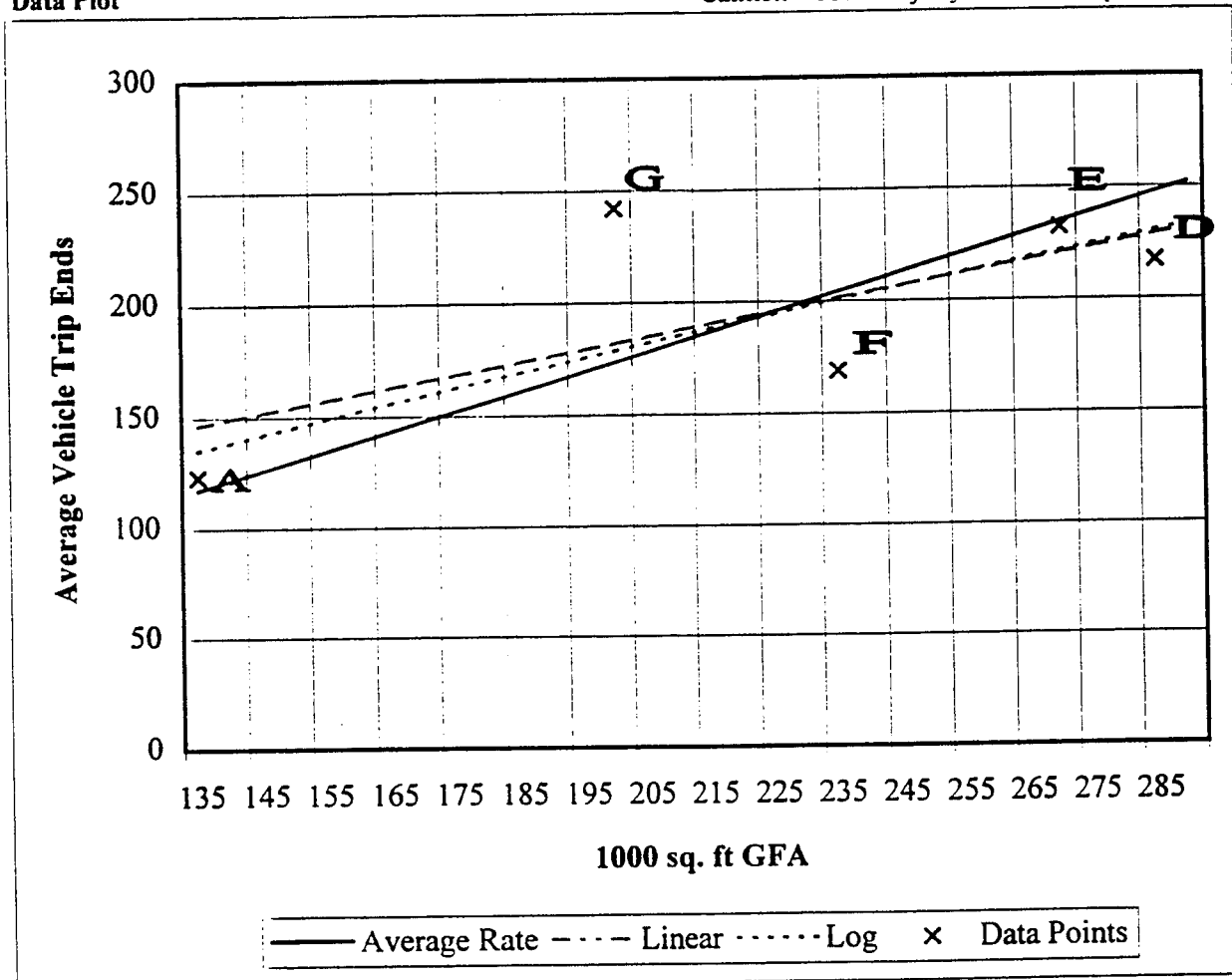
Number of Studies: 5
 Average SEV Value: 226.2
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.87	0.71-1.21	0.20

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=72.27+0.55(1000 SF GFA) $r^2=0.44$
 Log Equation Trip Ends=4.10(1000 SF GFA)^{0.71} $r^2=0.56$
(Equations with $r^2 < 0.5$ are not recommended for use)

High Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Sunday Peak

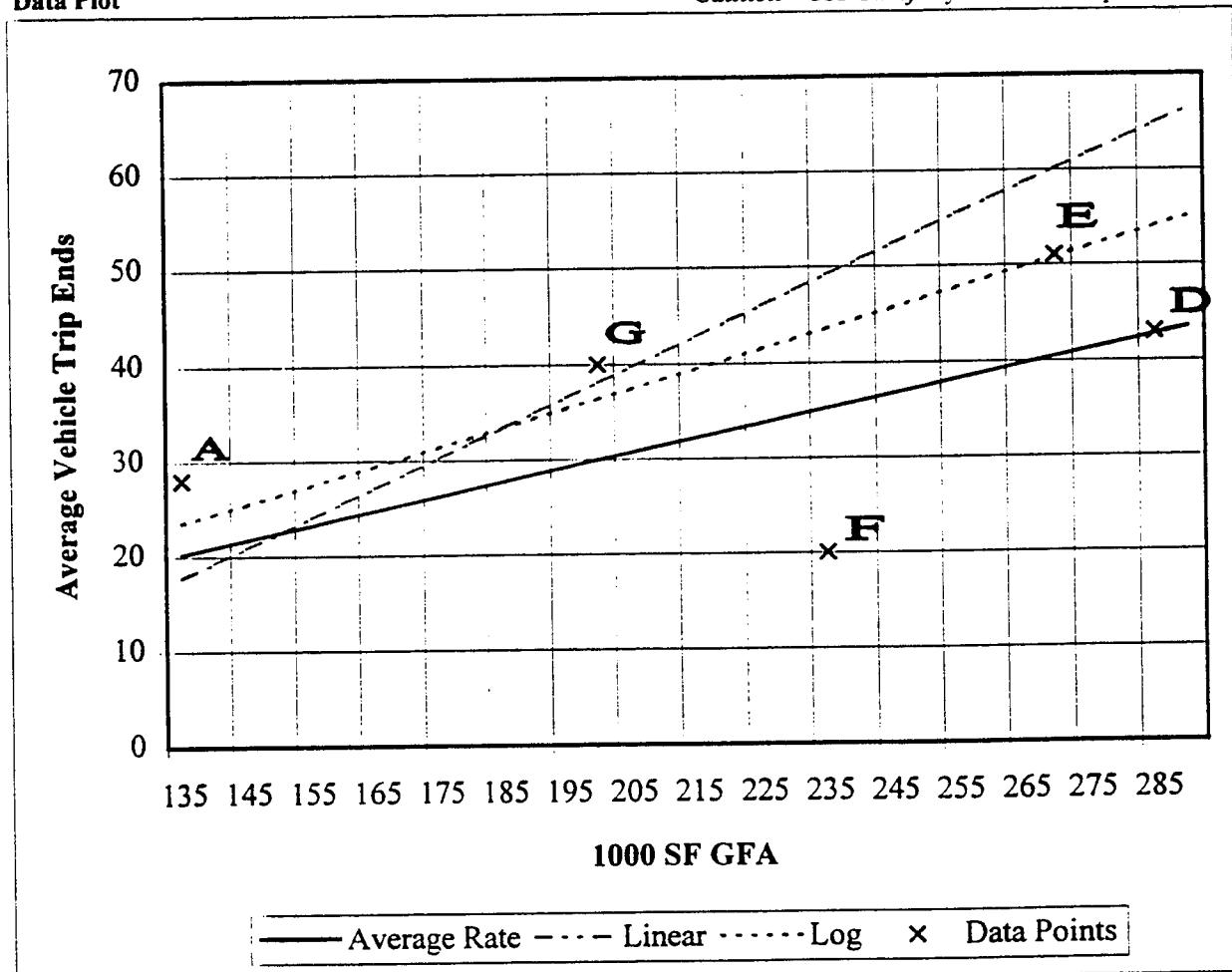
Number of Studies: 5
 Average SEV Value: 226.2
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.08-0.20	0.05

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends = -24.63 + 0.31(1000 SF GFA) $r^2 = 0.43$
 Log Equation Trip Ends = 0.10(1000 SF GFA)^{1.11} $r^2 = 0.31$
 (Equations with $r^2 < 0.5$ are not recommended for use)

High School (530)

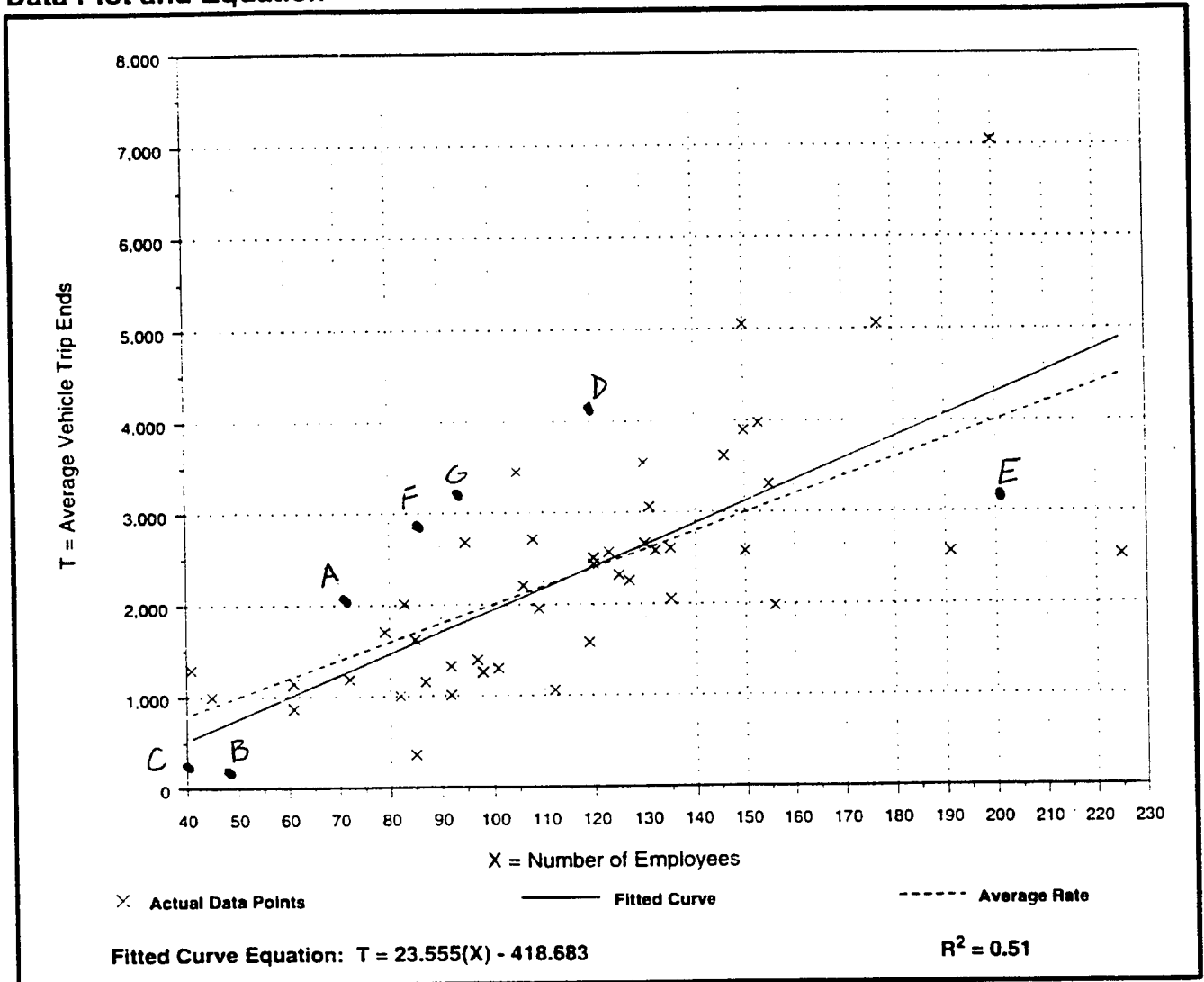
Average Vehicle Trip Ends vs: Employees On a: Weekday

Number of Studies: 45
Avg. Number of Employees: 117
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
19.98	4.28 - 35.26	8.30

Data Plot and Equation



High School (530)

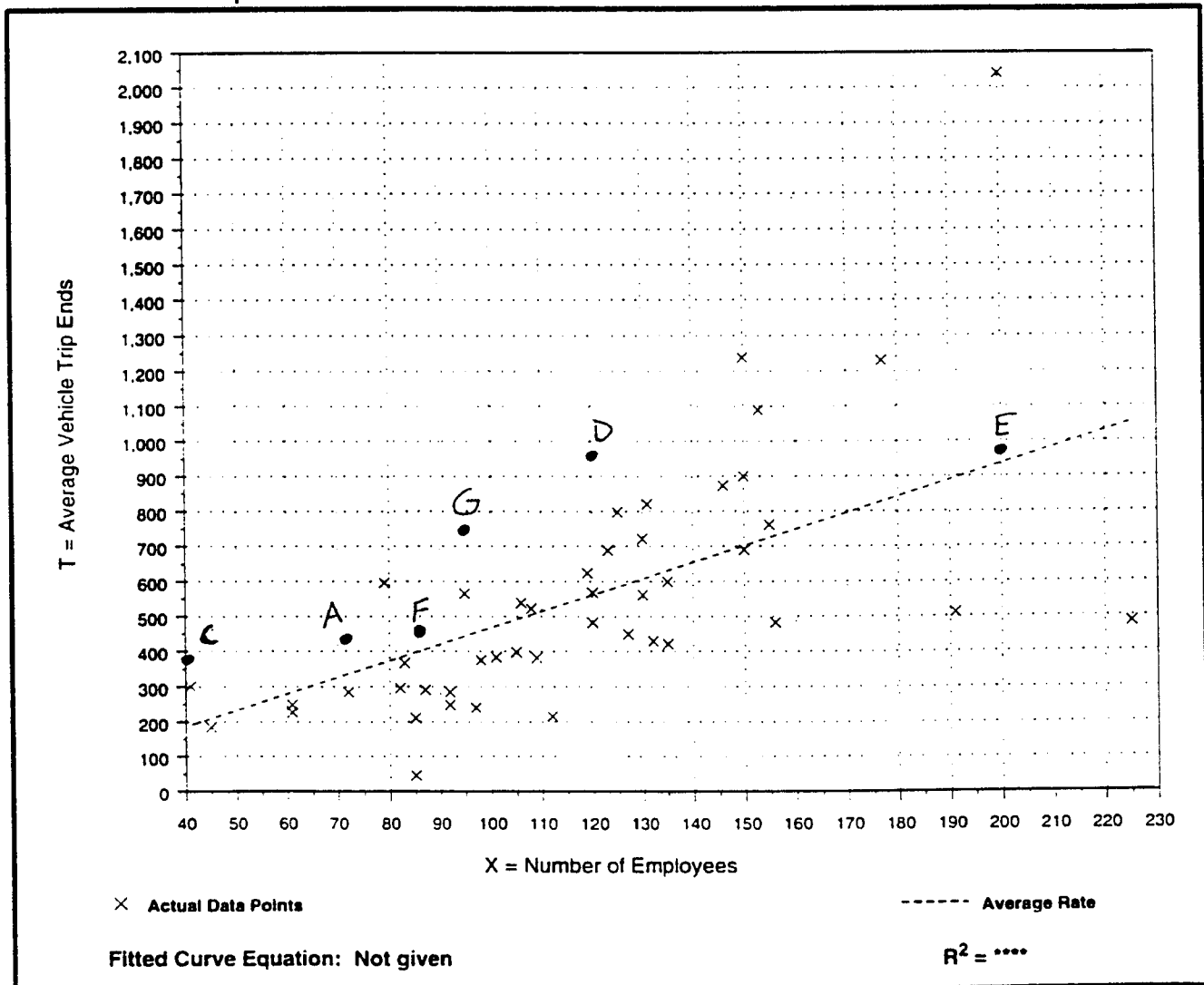
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 45
Avg. Number of Employees: 117
Directional Distribution: 72% entering, 28% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.68	0.54 - 10.20	2.92

Data Plot and Equation



High School (530)

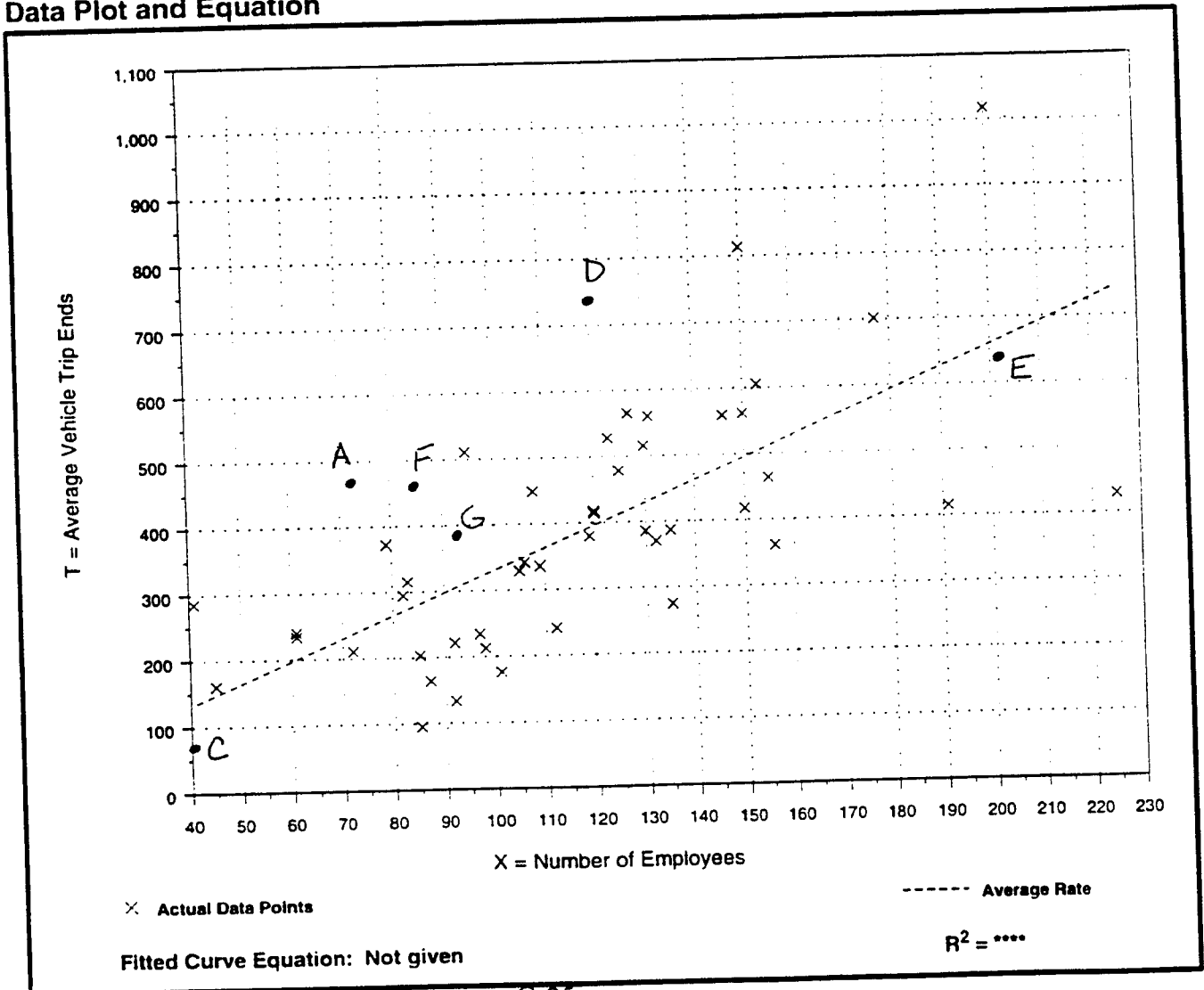
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 45
 Avg. Number of Employees: 117
 Directional Distribution: 30% entering, 70% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.30	1.13 - 6.98	2.10

Data Plot and Equation



High School (530)

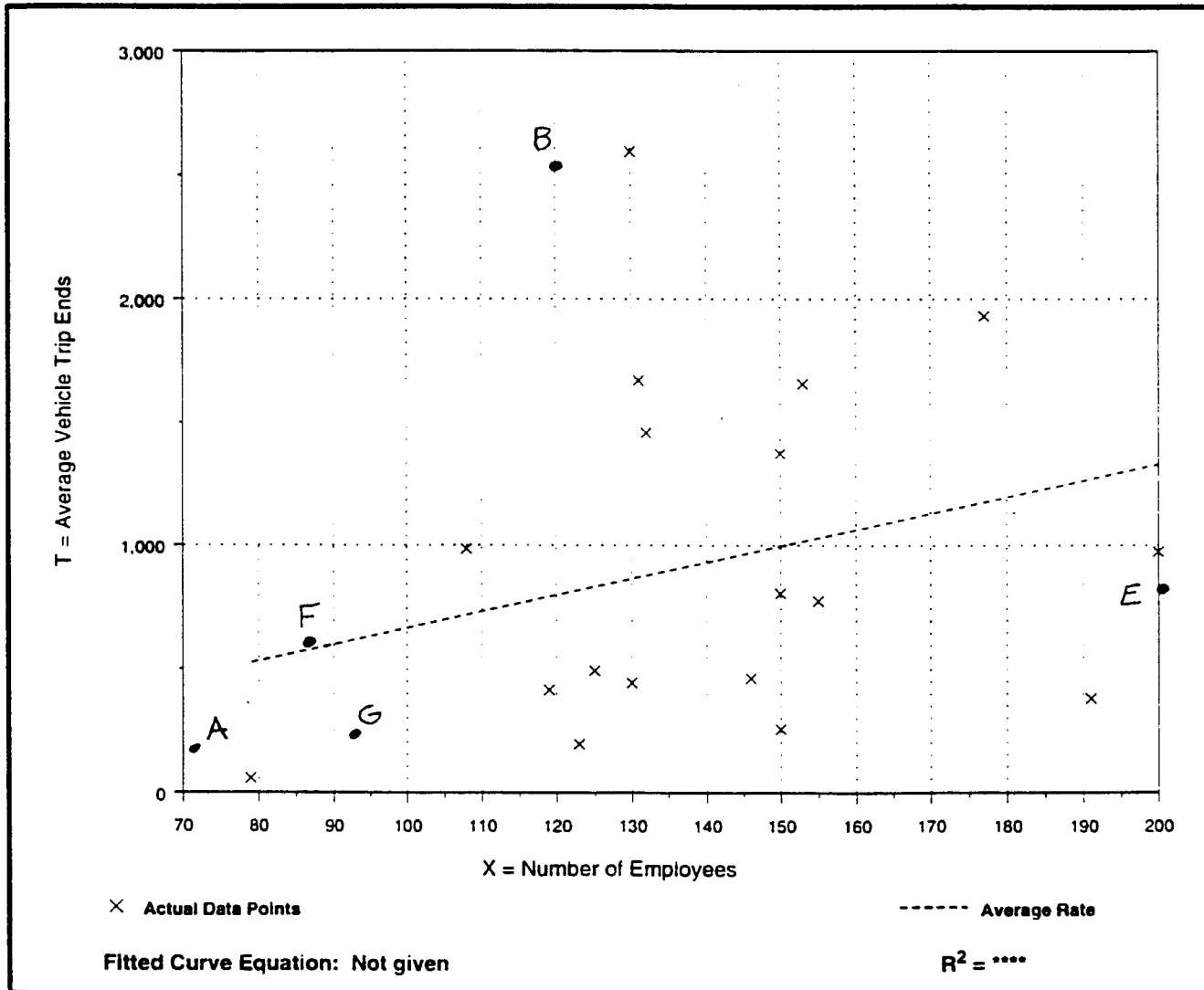
Average Vehicle Trip Ends vs: Employees
On a: **Saturday**

Number of Studies: 18
Avg. Number of Employees: 142
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
6.65	0.75 - 19.95	5.42

Data Plot and Equation



High School (530)

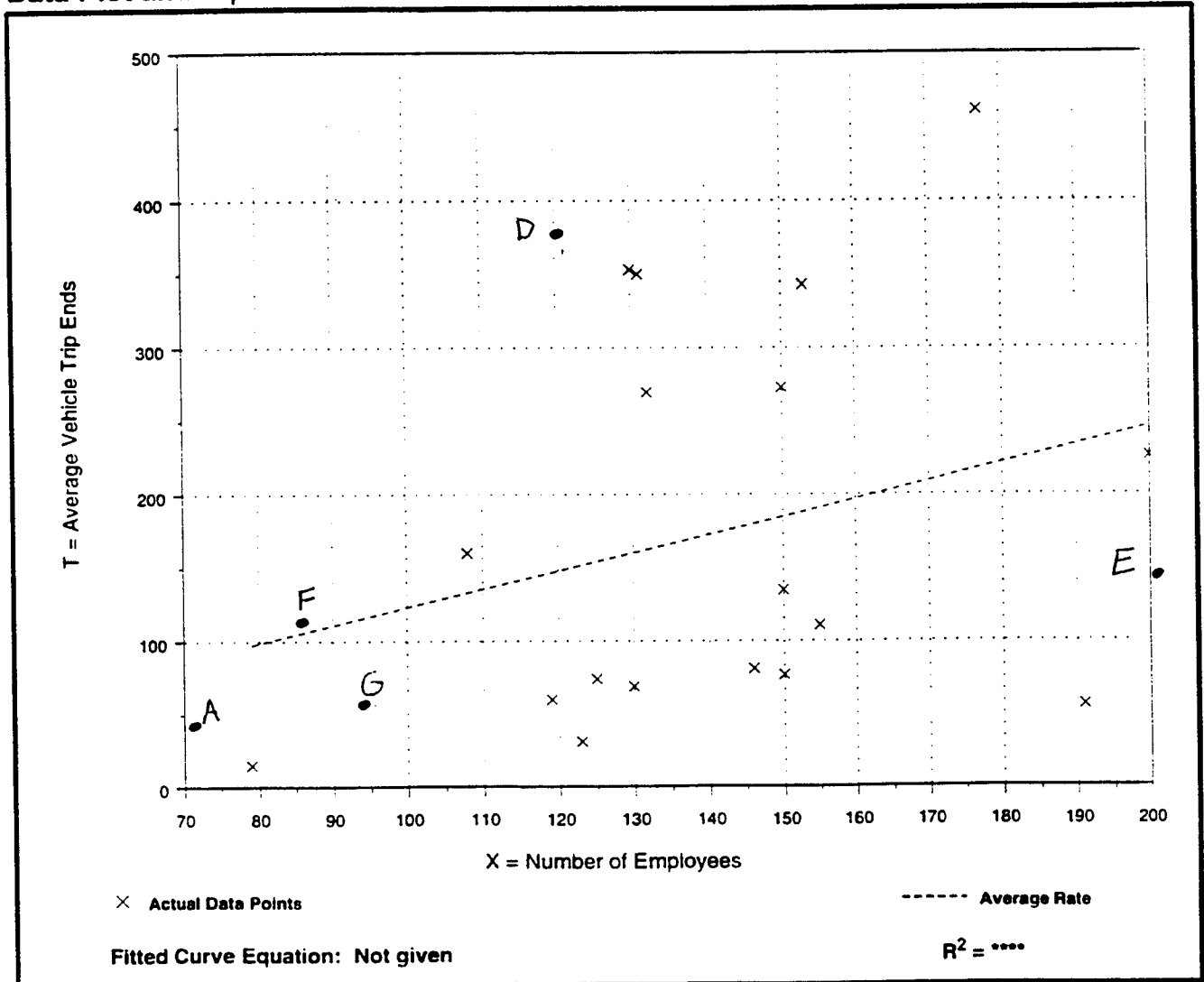
Average Vehicle Trip Ends vs: Employees
On a: Saturday,
Peak Hour of Generator

Number of Studies: 18
 Avg. Number of Employees: 142
 Directional Distribution: 74% entering, 26% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.23	0.19 - 2.72	1.41

Data Plot and Equation



High School (530)

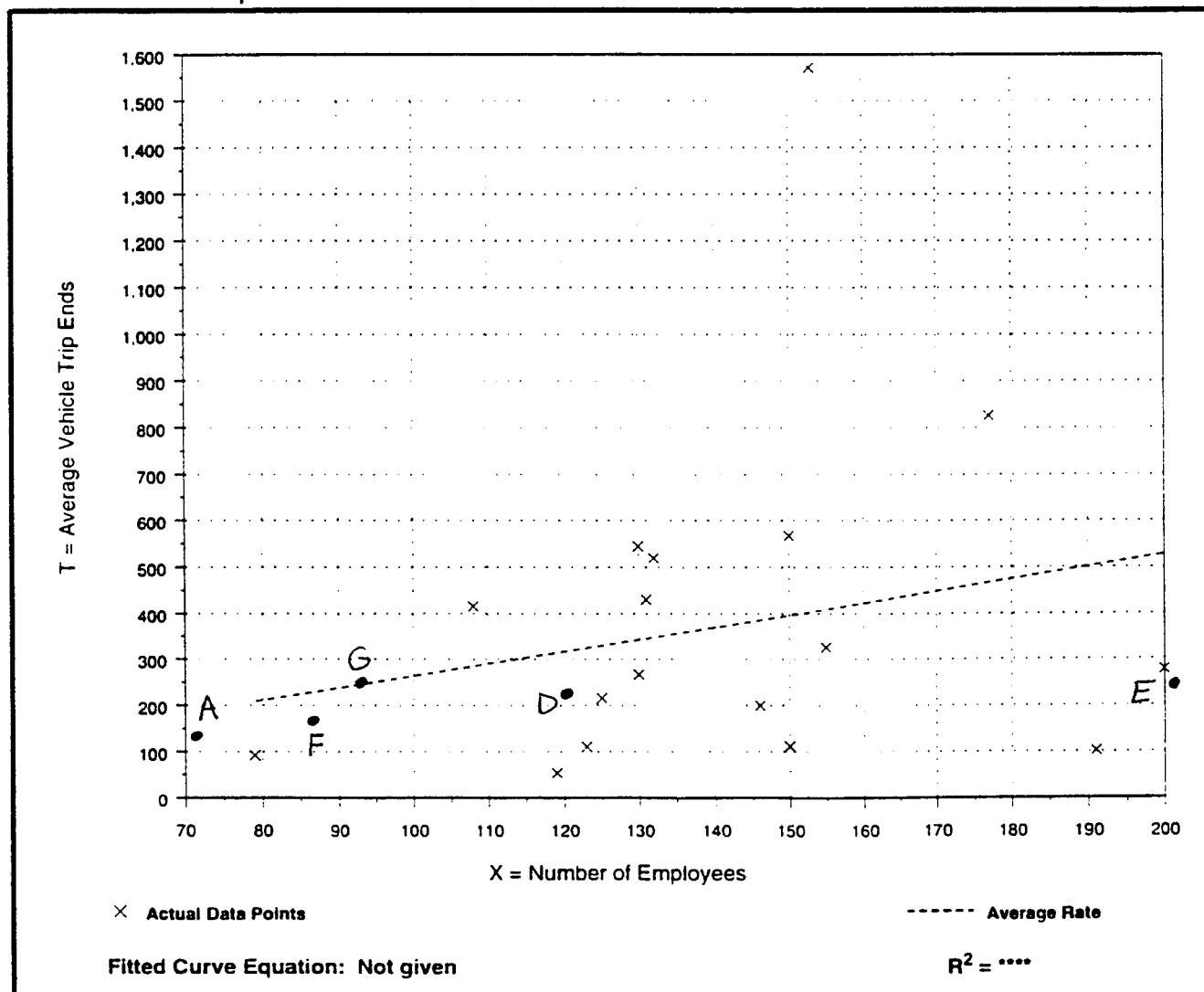
Average Vehicle Trip Ends vs: Employees
On a: **Sunday**

Number of Studies: 18
Avg. Number of Employees: 142
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
2.64	0.45 - 10.27	2.88

Data Plot and Equation



High School (530)

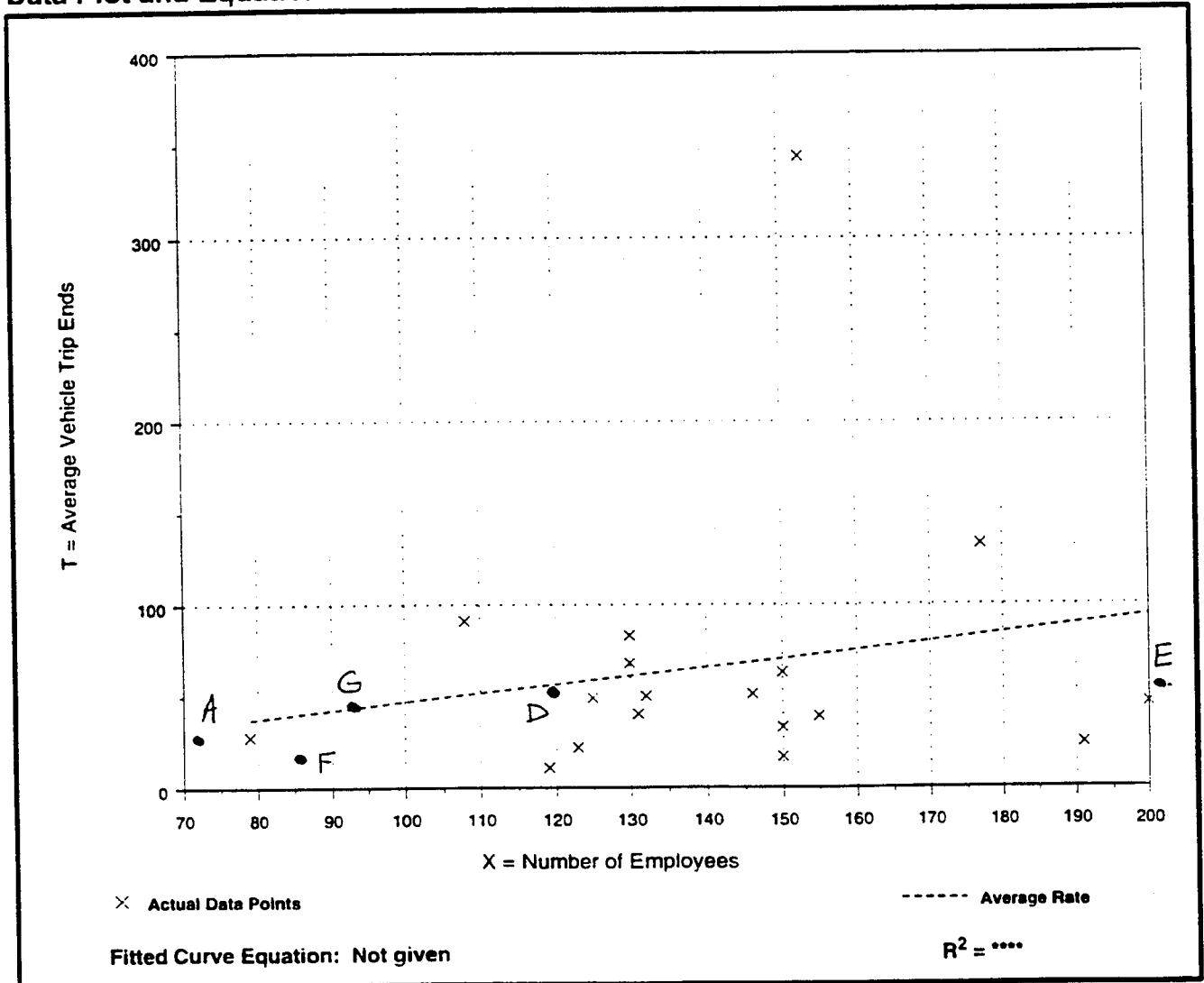
Average Vehicle Trip Ends vs: **Employees**
 On a: **Sunday,**
Peak Hour of Generator

Number of Studies: 18
 Avg. Number of Employees: 142
 Directional Distribution: 33% entering, 67% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.47	0.09 - 2.25	0.84

Data Plot and Equation



High School (530)

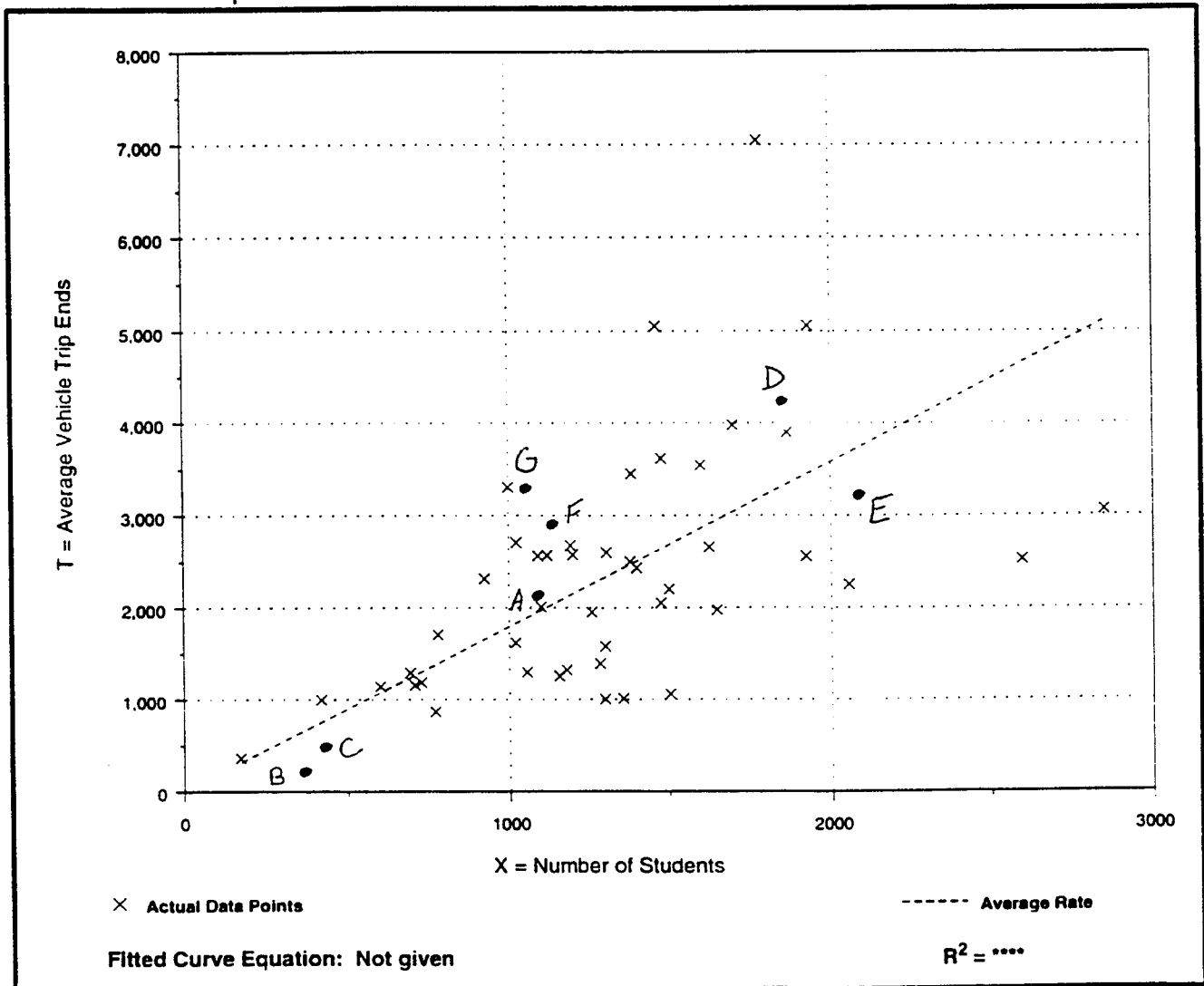
Average Vehicle Trip Ends vs: Students
On a: Weekday

Number of Studies: 45
Average Number of Students: 1,309
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.79	0.71 - 3.96	1.54

Data Plot and Equation



High School (530)

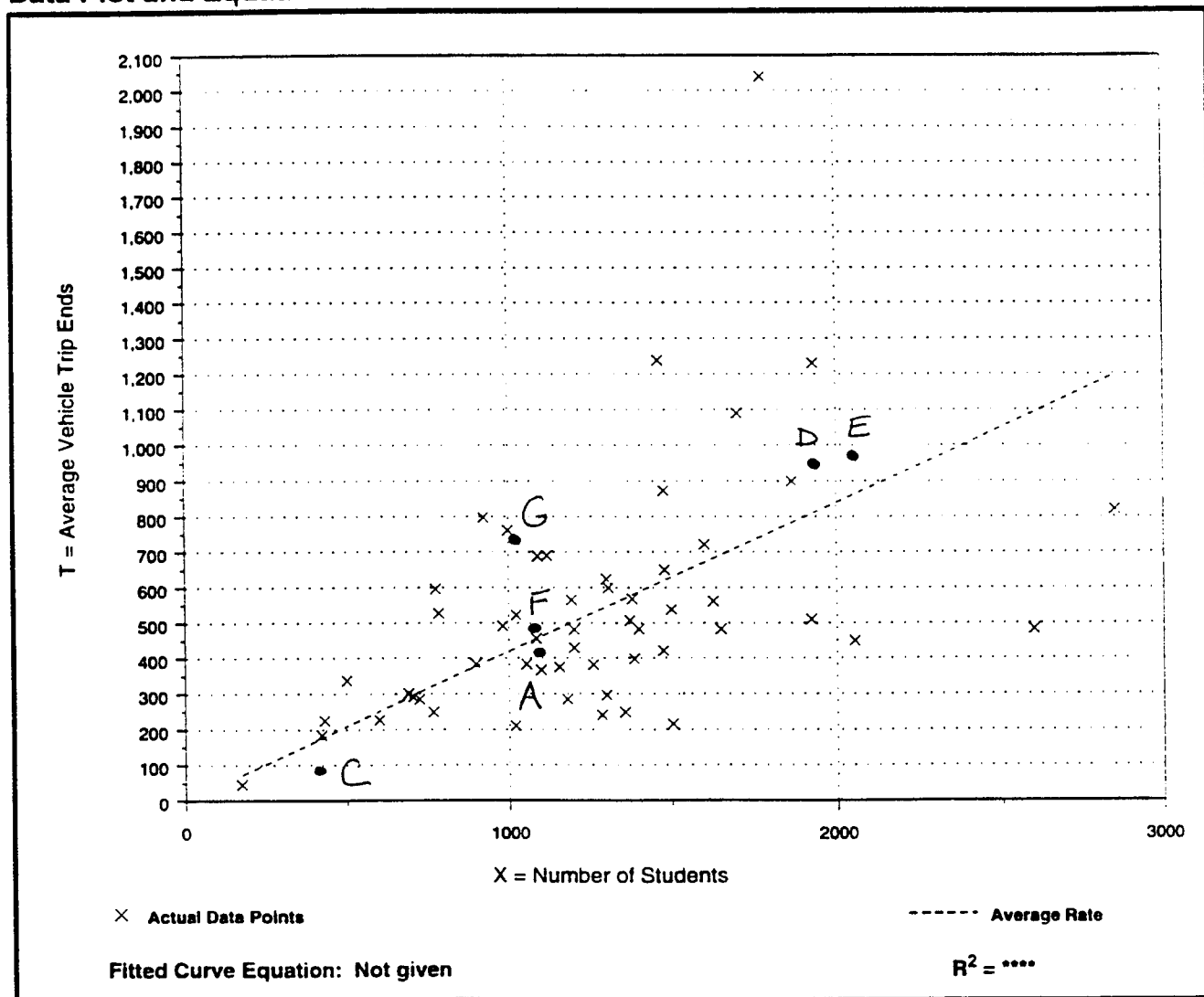
Average Vehicle Trip Ends vs: **Students**
 On a: **Weekday,**
A.M. Peak Hour of Generator

Number of Studies: 54
 Average Number of Students: 1,253
 Directional Distribution: 71% entering, 29% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.42	0.14 - 1.15	0.68

Data Plot and Equation



High School (530)

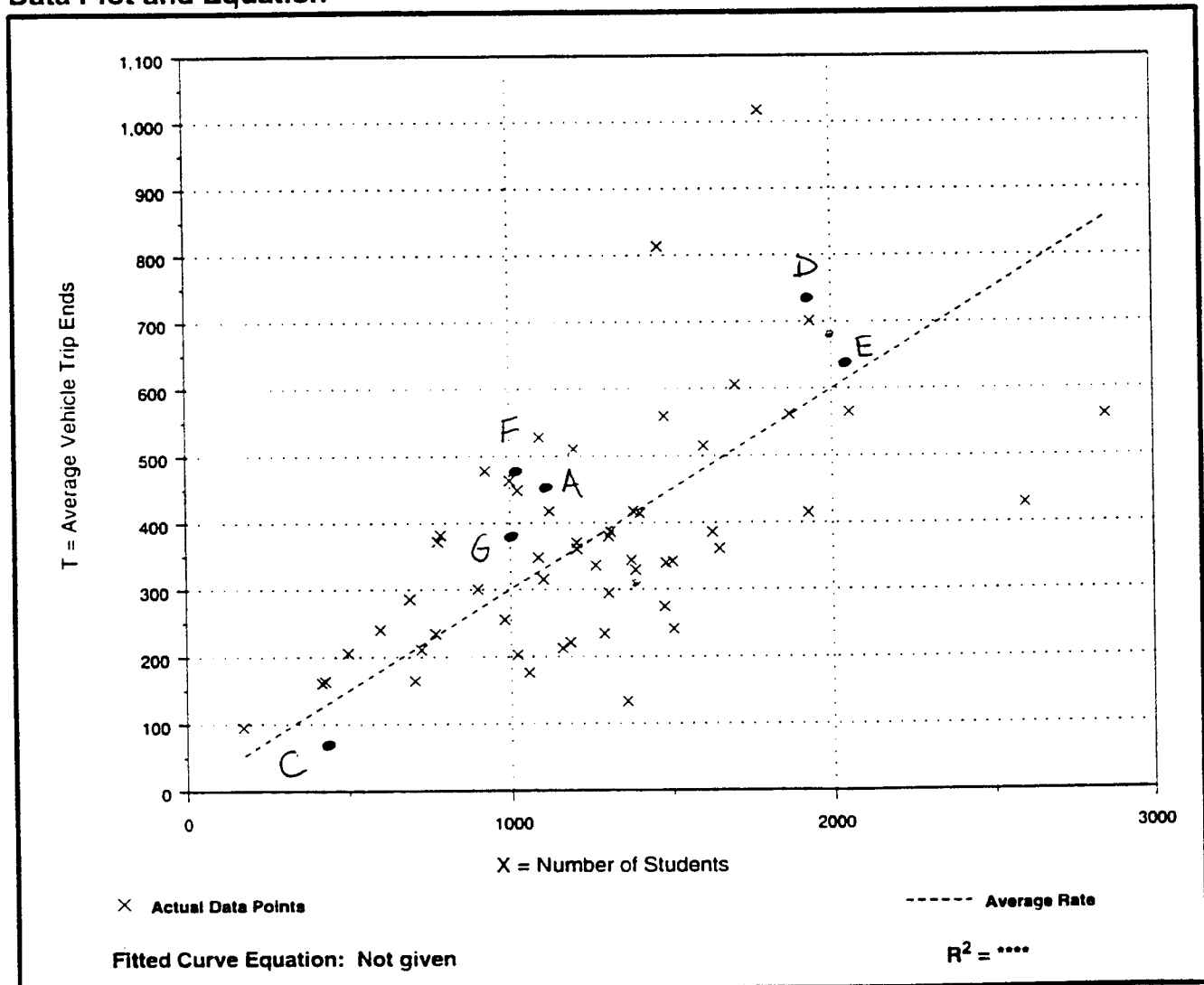
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 54
 Average Number of Students: 1,253
 Directional Distribution: 31% entering, 69% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.30	0.10 - 0.57	0.56

Data Plot and Equation



High School (530)

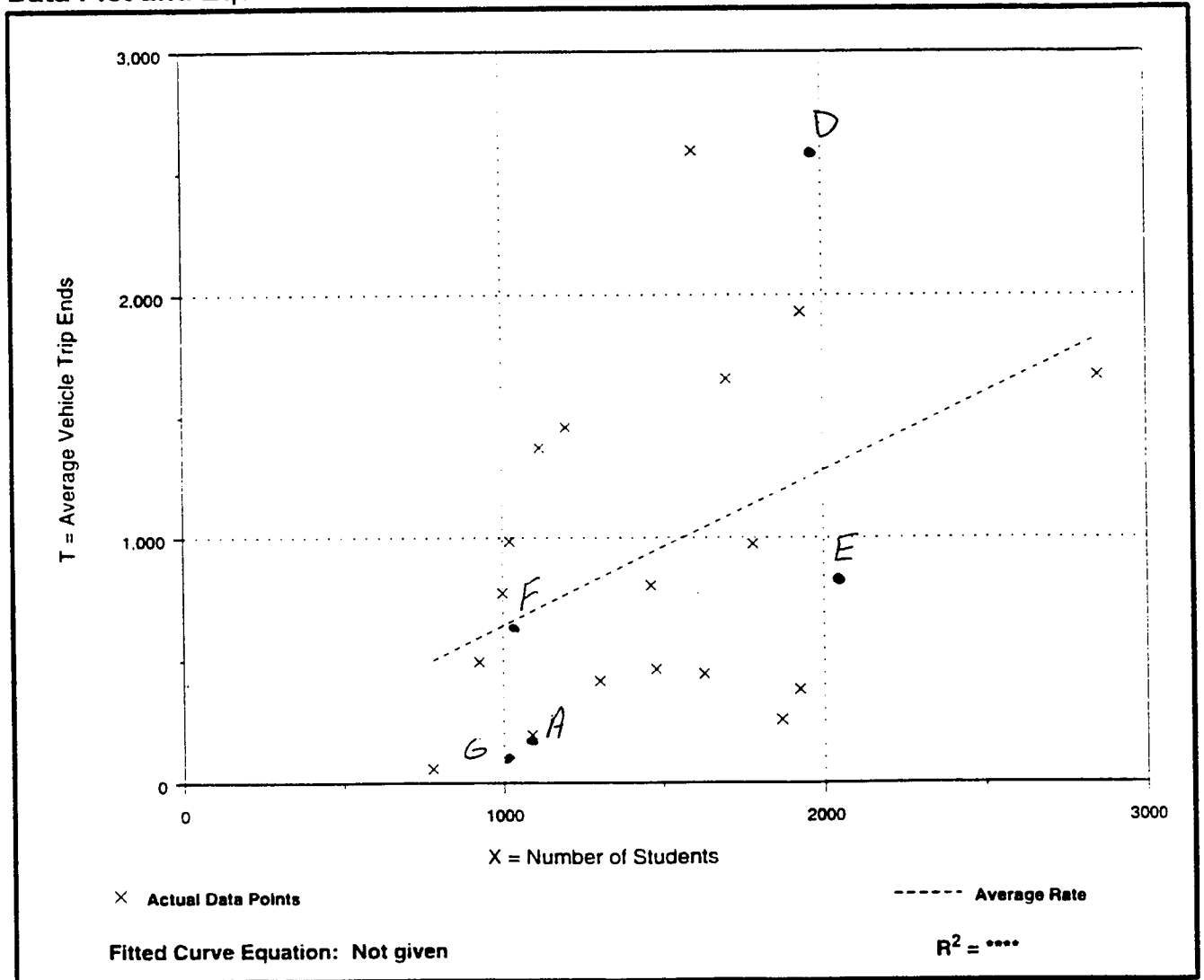
Average Vehicle Trip Ends vs: Students
On a: Saturday

Number of Studies: 18
Average Number of Students: 1,481
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.64	0.08 - 1.62	0.90

Data Plot and Equation



High School (530)

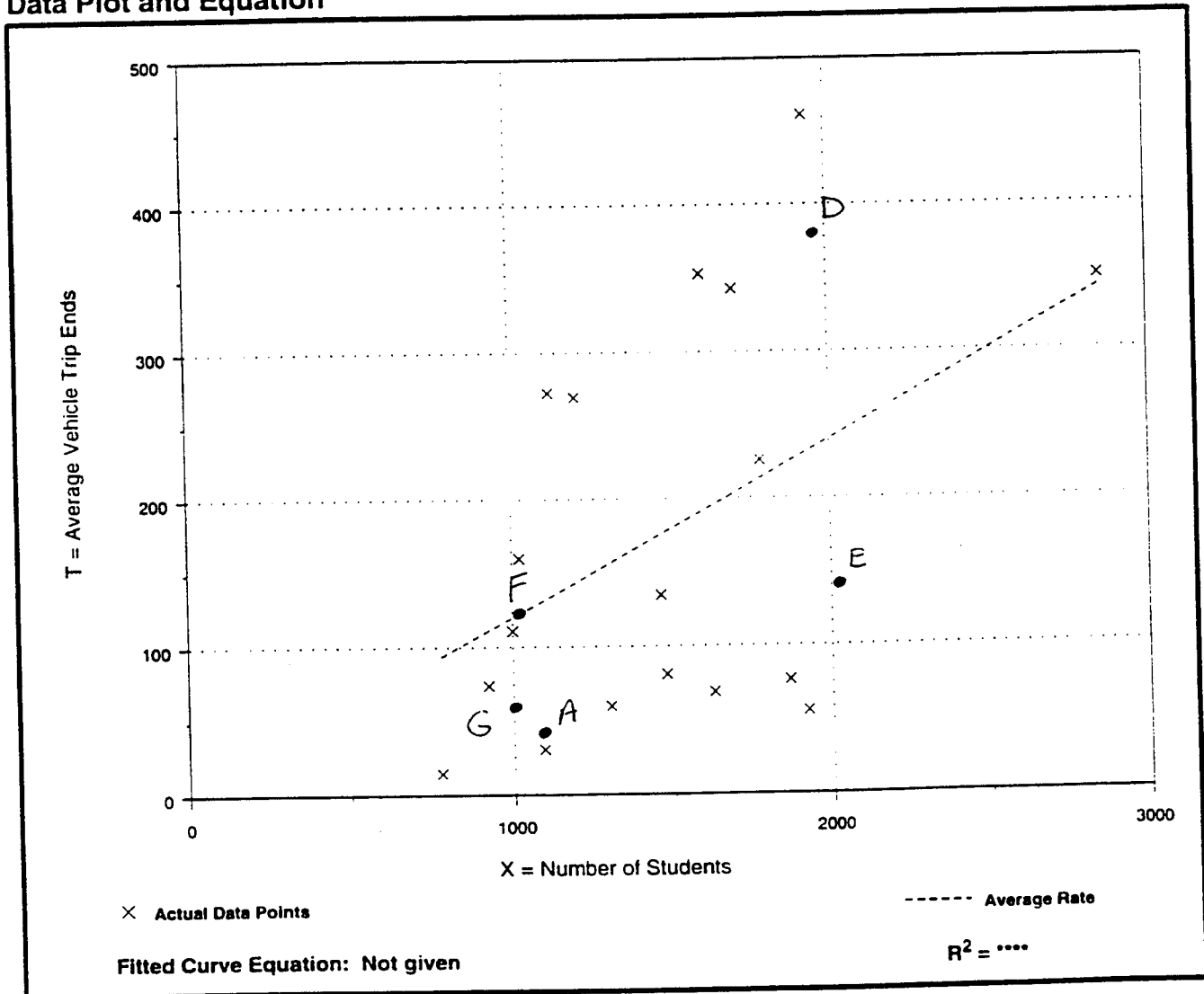
Average Vehicle Trip Ends vs: **Students**
 On a: **Saturday,**
Peak Hour of Generator

Number of Studies: 18
 Average Number of Students: 1,481
 Directional Distribution: 74% entering, 26% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.12	0.02 - 0.24	0.35

Data Plot and Equation



High School (530)

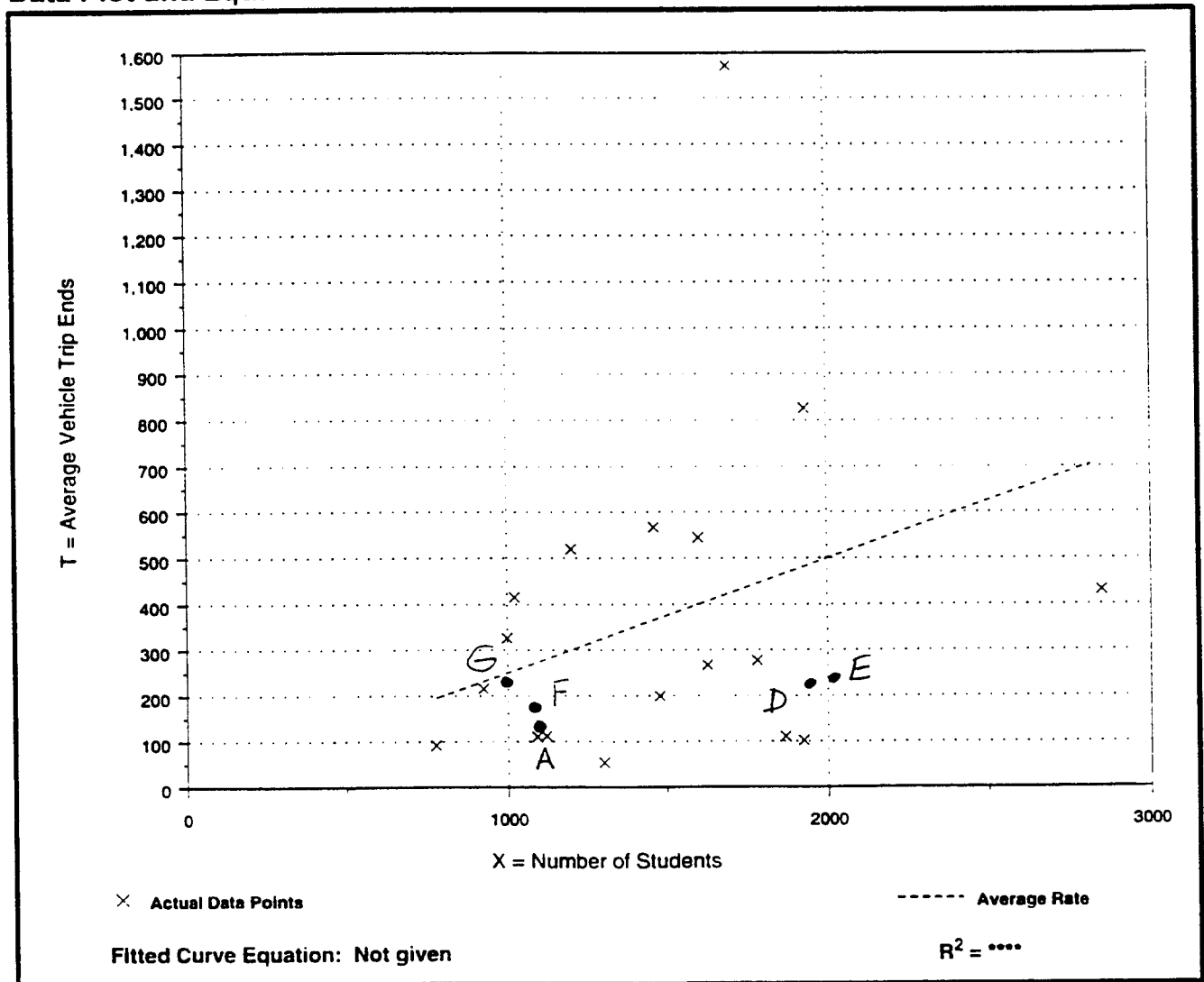
Average Vehicle Trip Ends vs: Students
On a: Sunday

Number of Studies: 18
Average Number of Students: 1,481
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.25	0.04 - 0.92	0.55

Data Plot and Equation



High School (530)

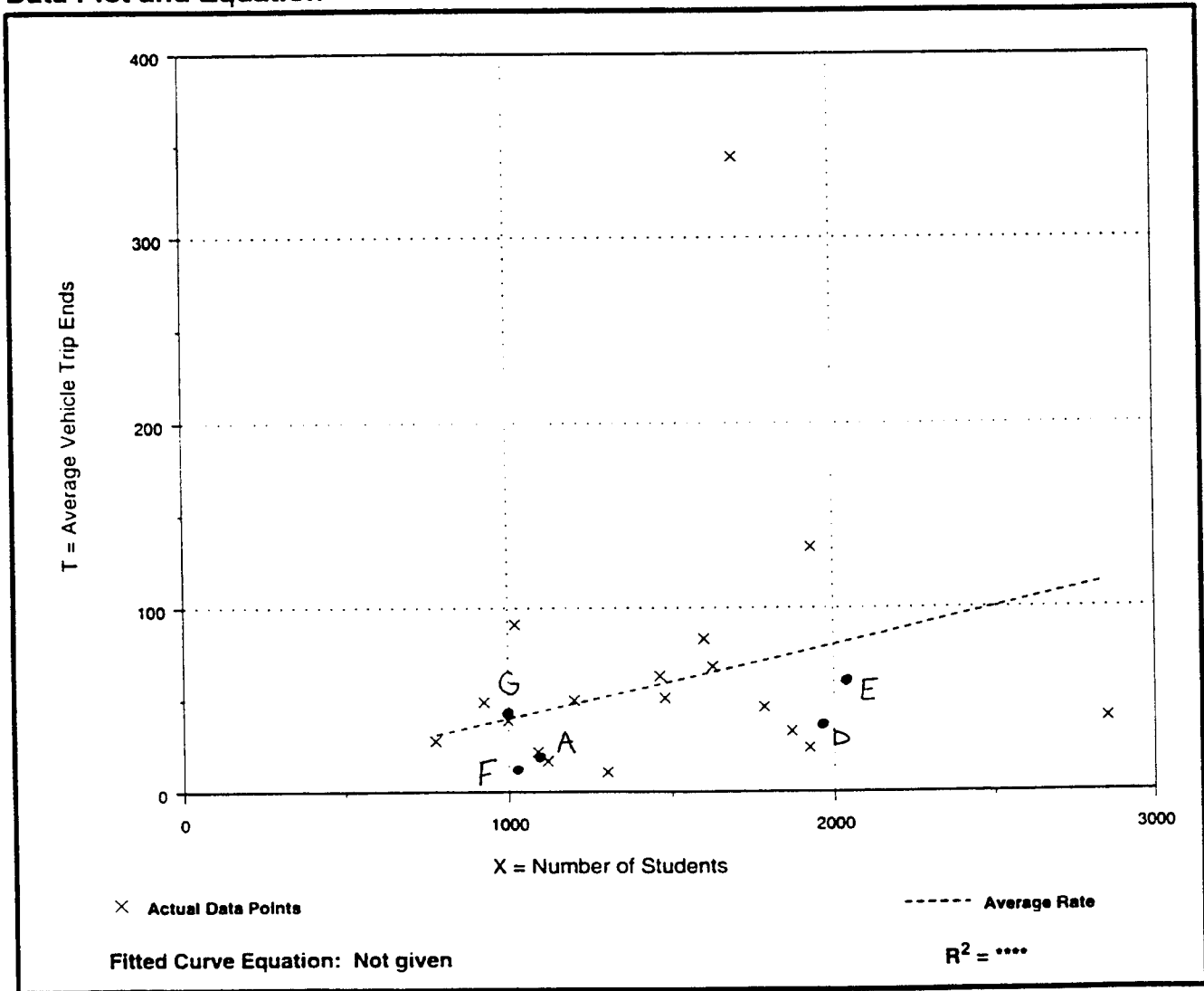
Average Vehicle Trip Ends vs: Students
On a: Sunday,
Peak Hour of Generator

Number of Studies: 18
 Average Number of Students: 1,481
 Directional Distribution: 33% entering, 67% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.04	0.01 - 0.20	0.22

Data Plot and Equation



High School (530)

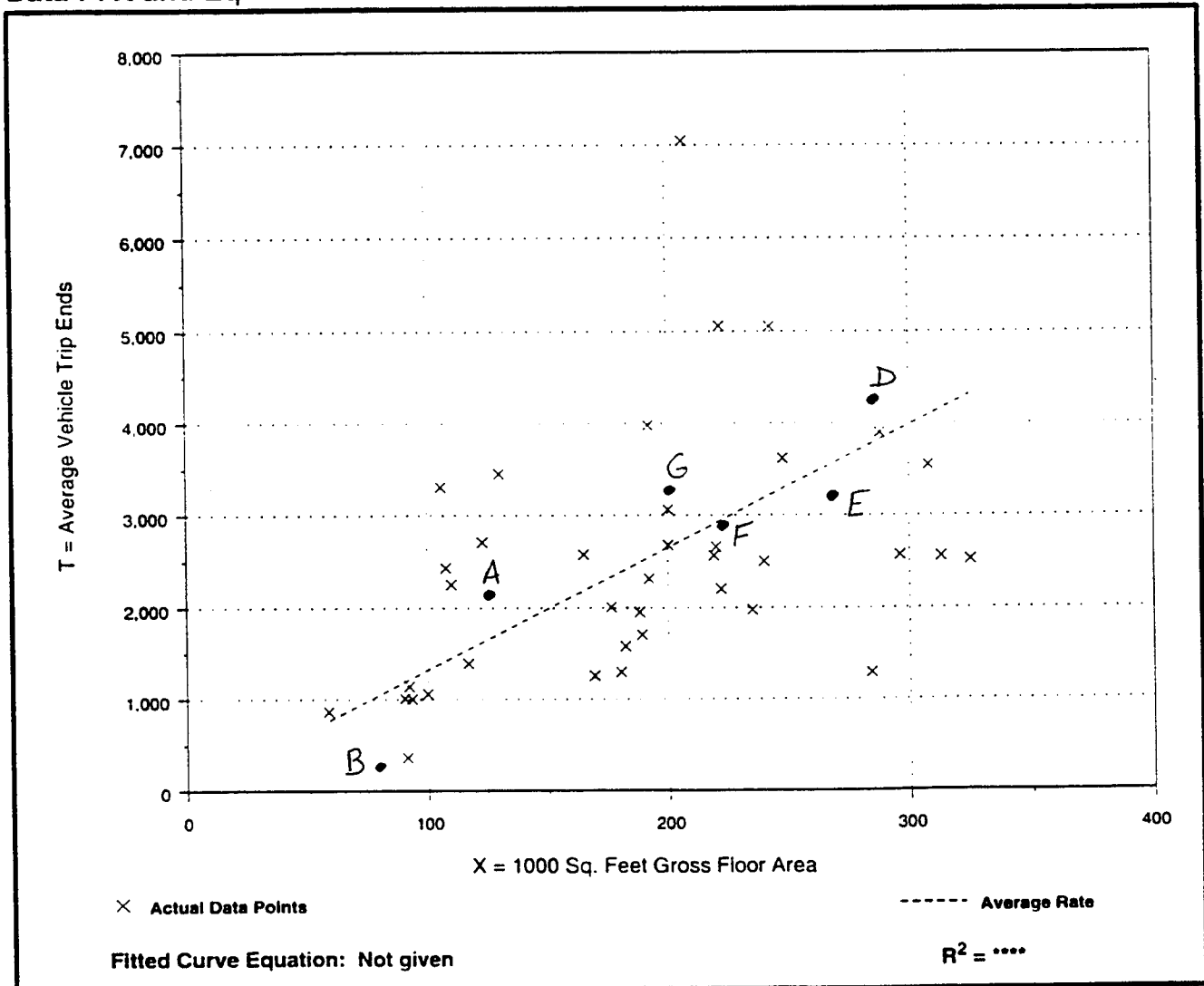
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 38
 Average 1000 Sq. Feet GFA: 187
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
13.27	4.00 - 34.06	7.51

Data Plot and Equation



High School (530)

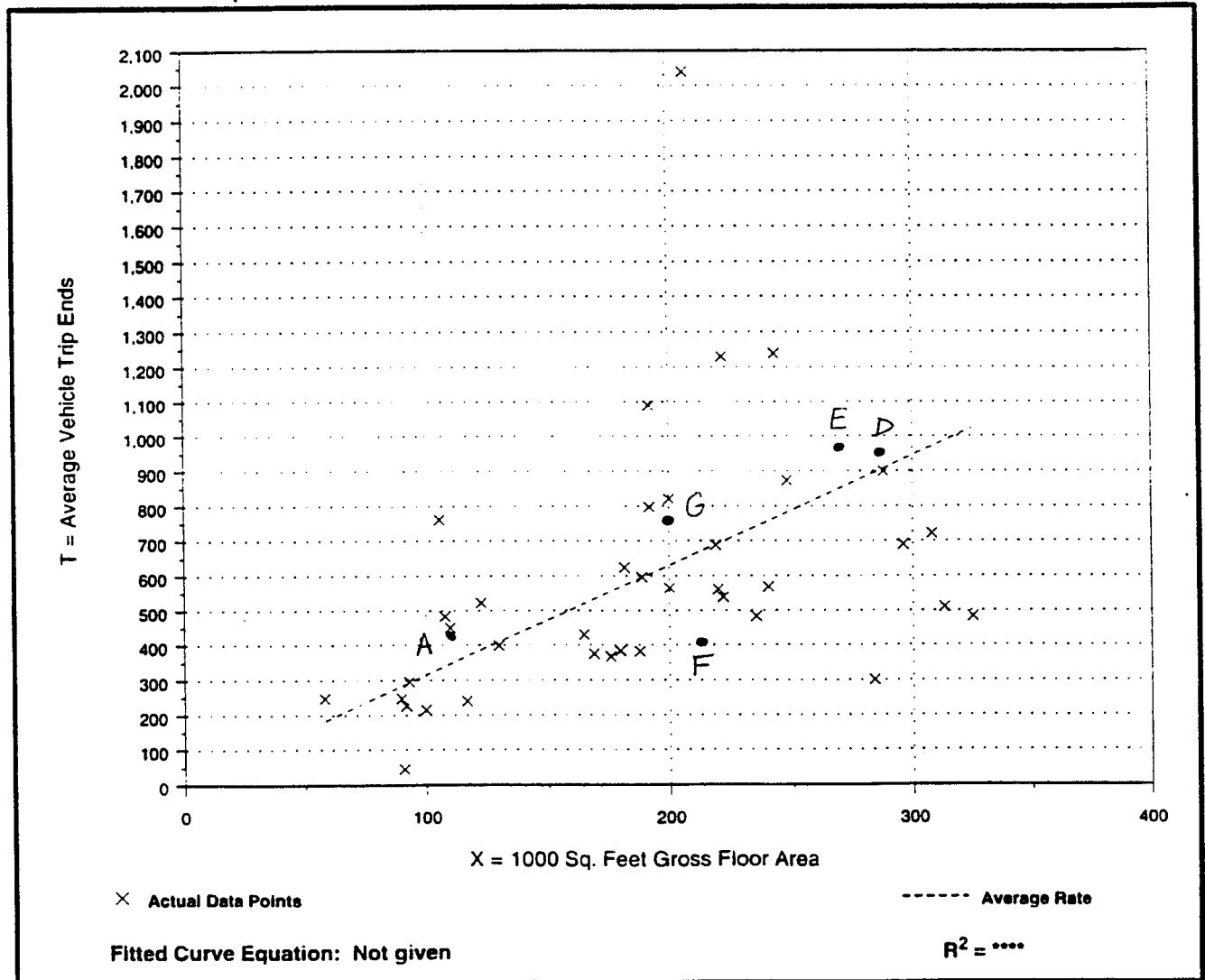
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 38
 Average 1000 Sq. Feet GFA: 187
 Directional Distribution: 72% entering, 28% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.15	0.51 - 9.86	2.47

Data Plot and Equation



High School (530)

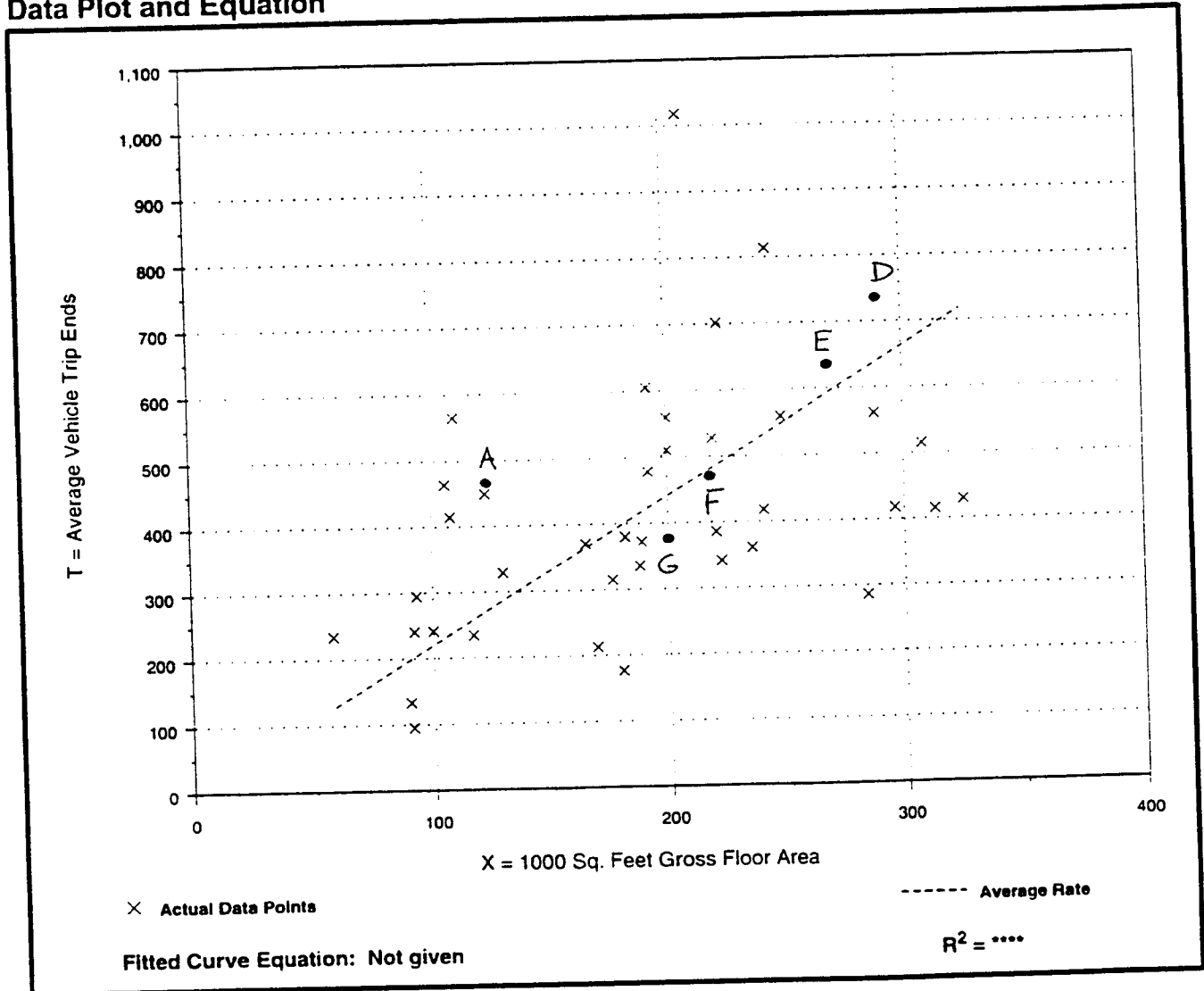
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 38
 Average 1000 Sq. Feet GFA: 187
 Directional Distribution: 30% entering, 70% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.21	0.98 - 5.14	1.78

Data Plot and Equation



High School (530)

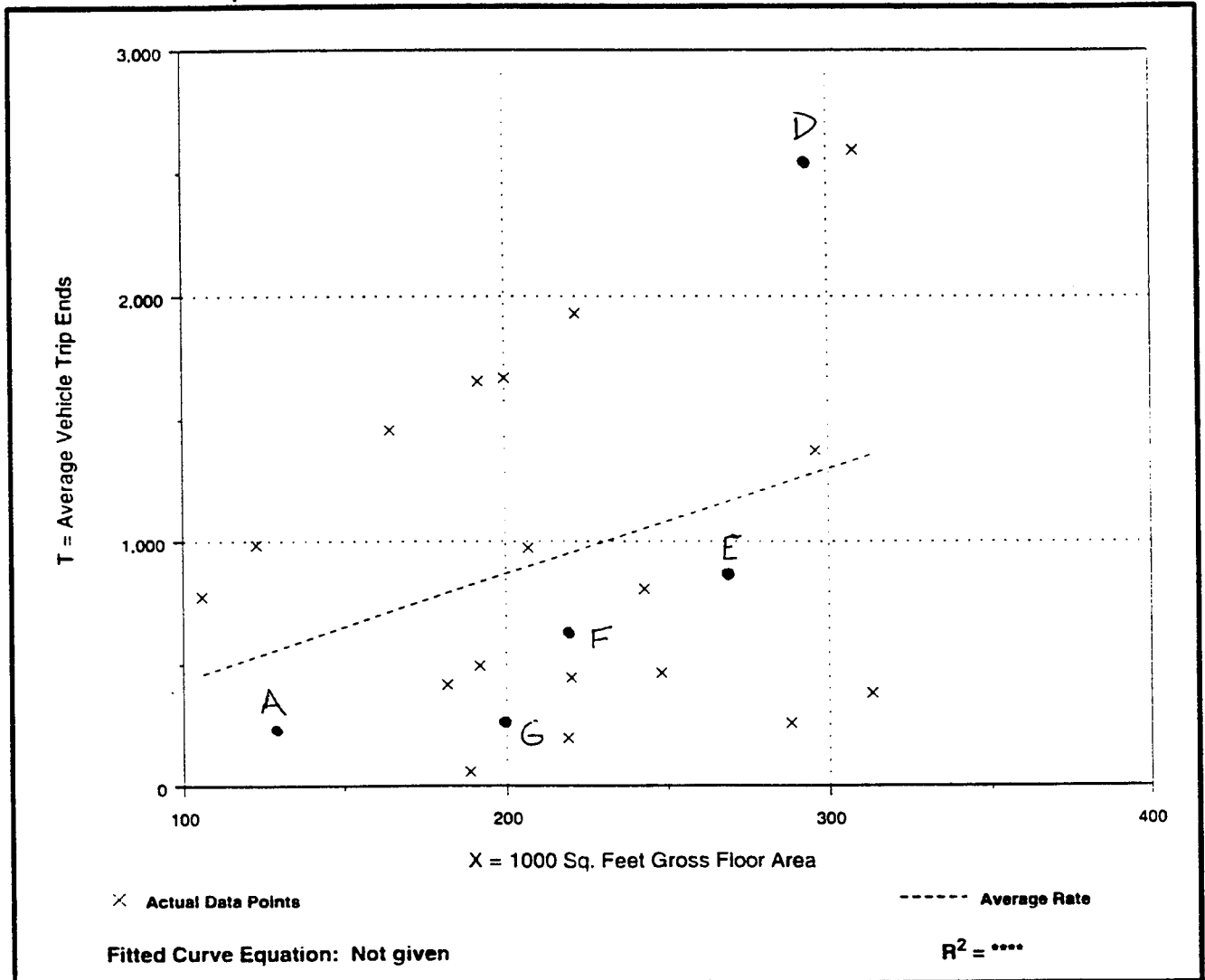
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday

Number of Studies: 18
 Average 1000 Sq. Feet GFA: 217
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.33	0.31 - 8.85	3.76

Data Plot and Equation



High School (530)

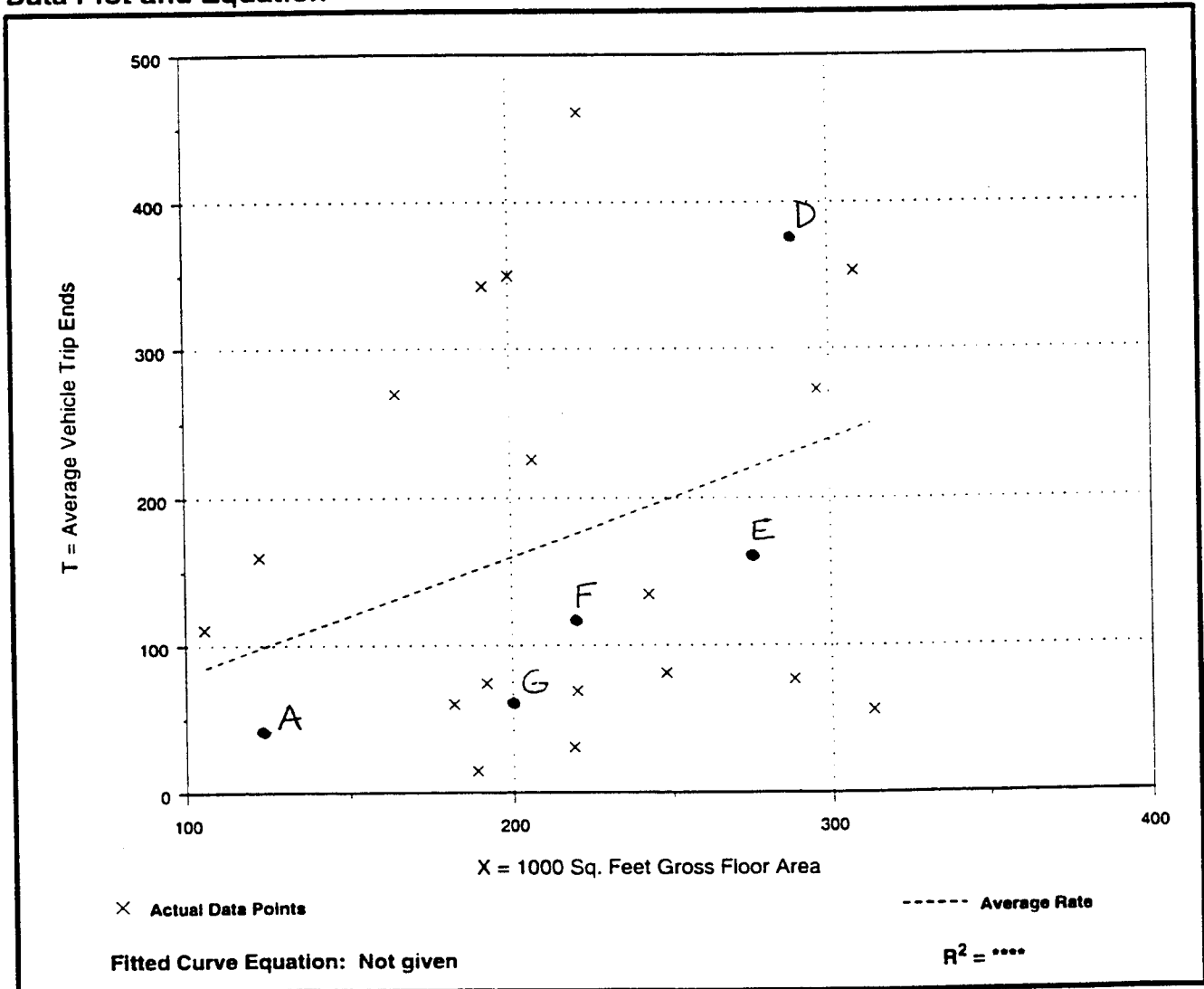
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday,
Peak Hour of Generator

Number of Studies: 18
 Average 1000 Sq. Feet GFA: 217
 Directional Distribution: 74% entering, 26% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.80	0.08 - 2.08	1.09

Data Plot and Equation



High School (530)

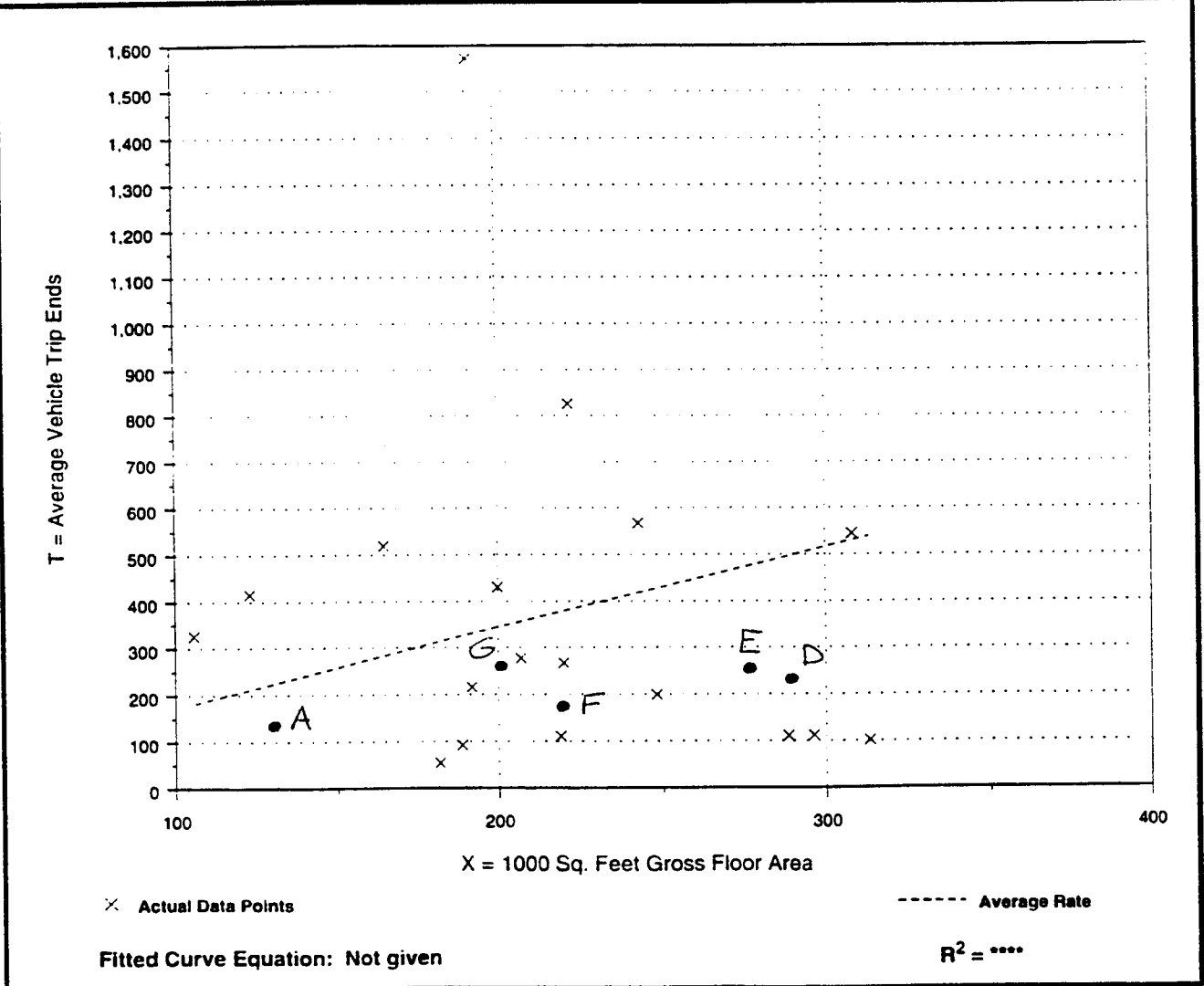
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Sunday**

Number of Studies: 18
Average 1000 Sq. Feet GFA: 217
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.72	0.30 - 8.19	2.24

Data Plot and Equation



High School (530)

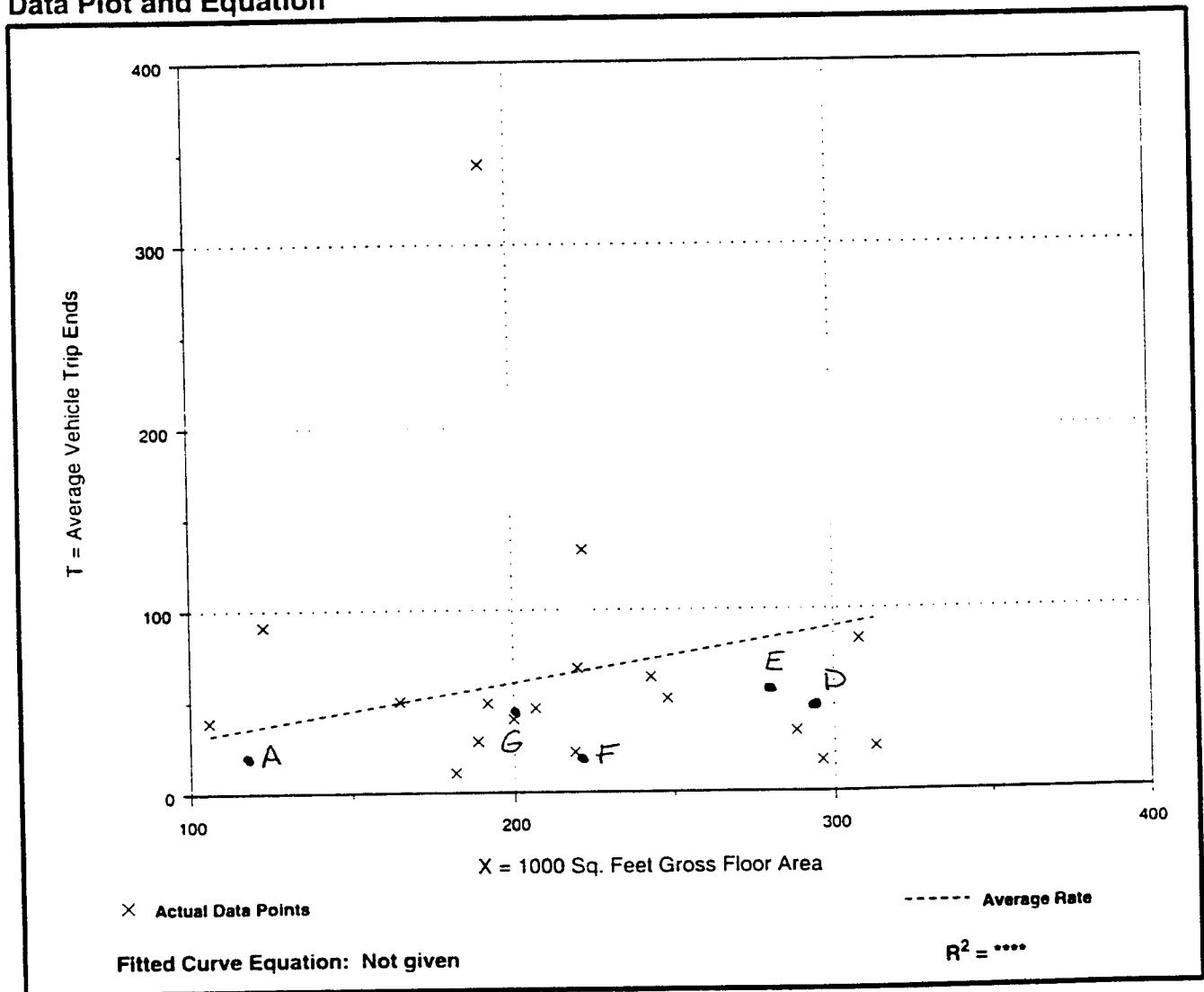
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Sunday,
Peak Hour of Generator

Number of Studies: 18
Average 1000 Sq. Feet GFA: 217
Directional Distribution: 33% entering, 67% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.30	0.06 - 1.79	0.67

Data Plot and Equation



APPENDIX H
ITE Format Graphs
Consolidated Middle Schools

Middle School/Junior High School (522)

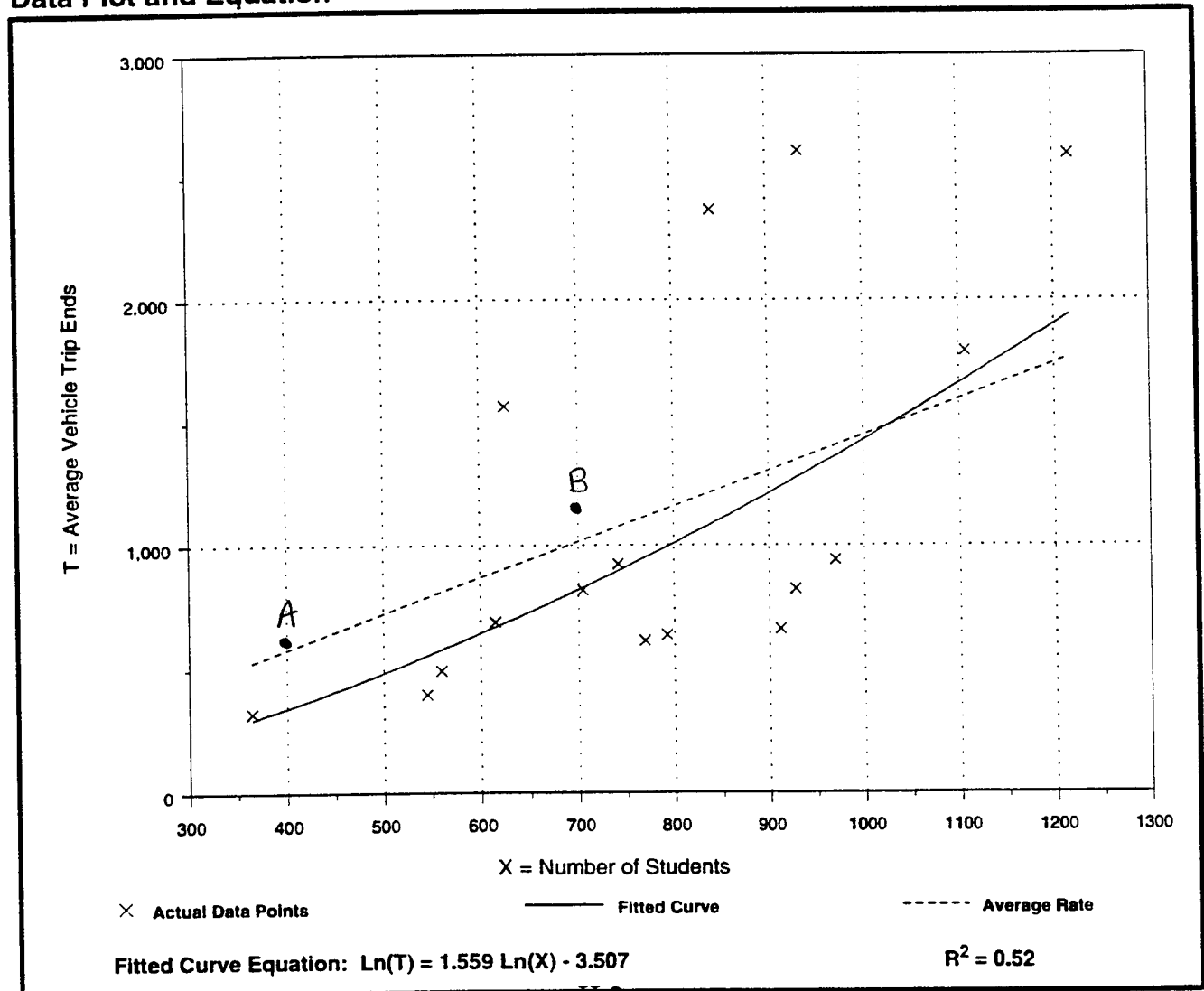
**Average Vehicle Trip Ends vs: Students
On a: Weekday**

Number of Studies: 16
Average Number of Students: 789
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.45	0.72 - 2.81	1.41

Data Plot and Equation



Middle School/Junior High School (522)

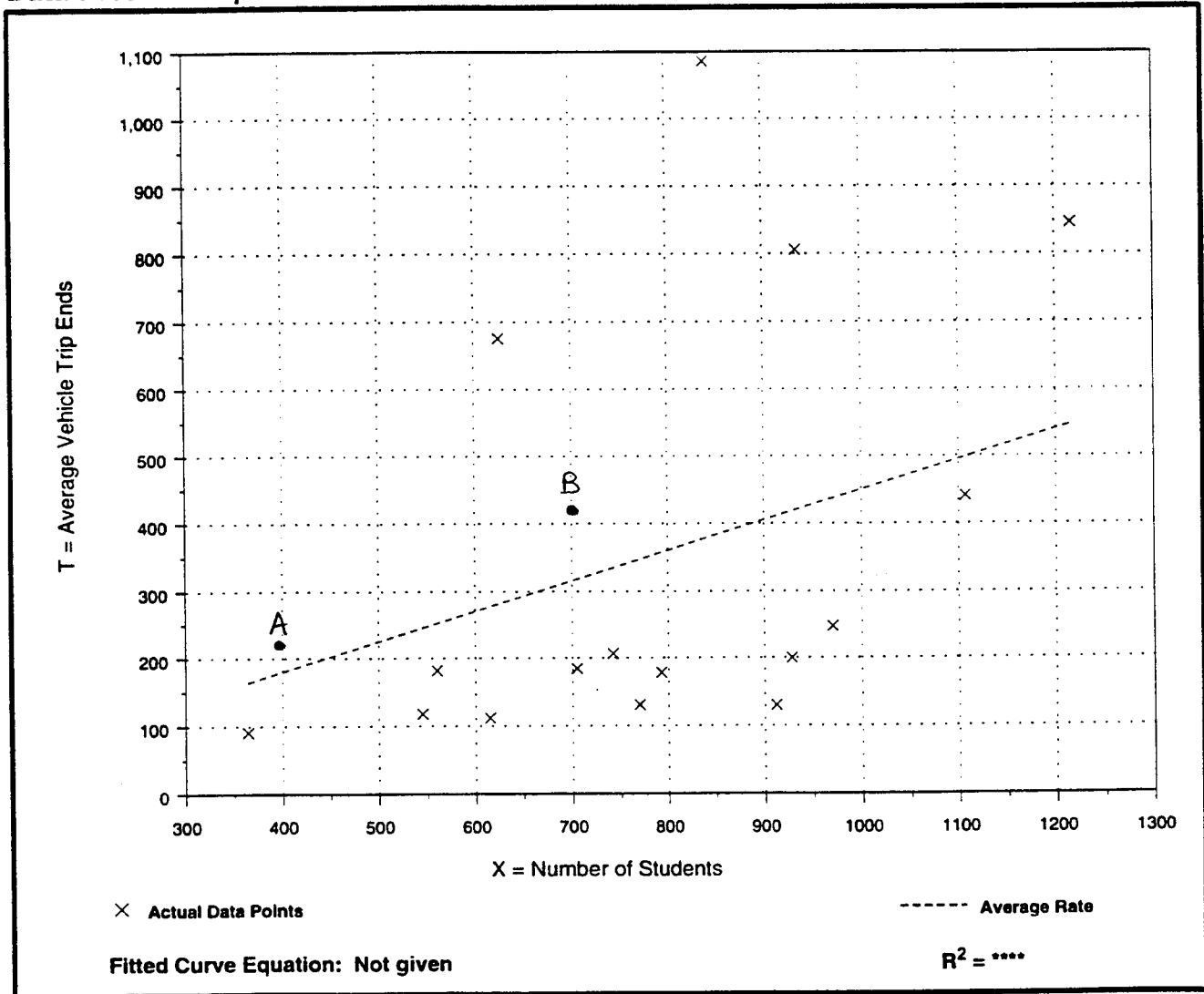
Average Vehicle Trip Ends vs: Students
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
 Average Number of Students: 789
 Directional Distribution: 57% entering, 43% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.45	0.14 - 1.29	0.75

Data Plot and Equation



Middle School/Junior High School (522)

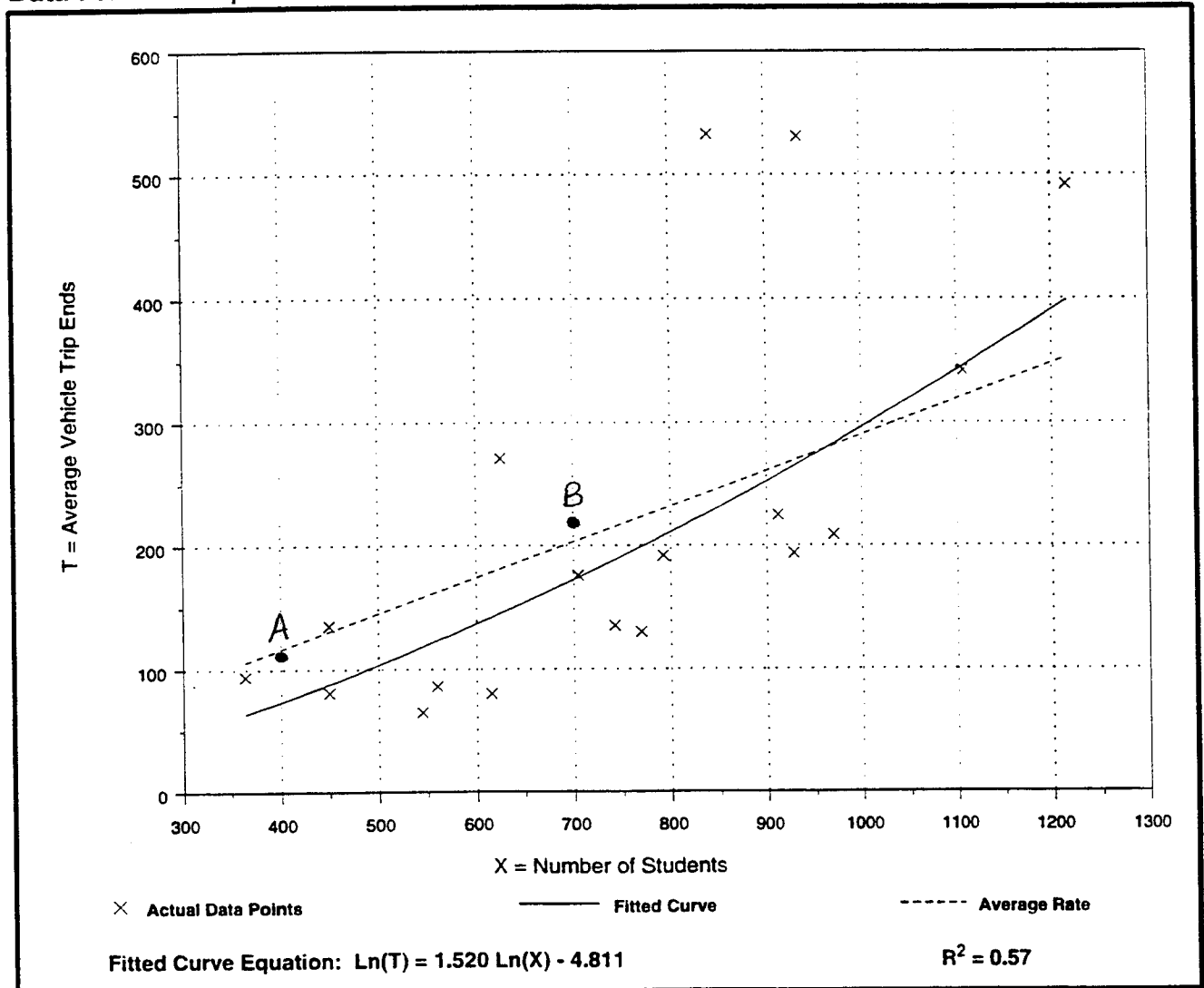
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 18
 Average Number of Students: 752
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.29	0.12 - 0.63	0.56

Data Plot and Equation



Middle School/Junior High School (522)

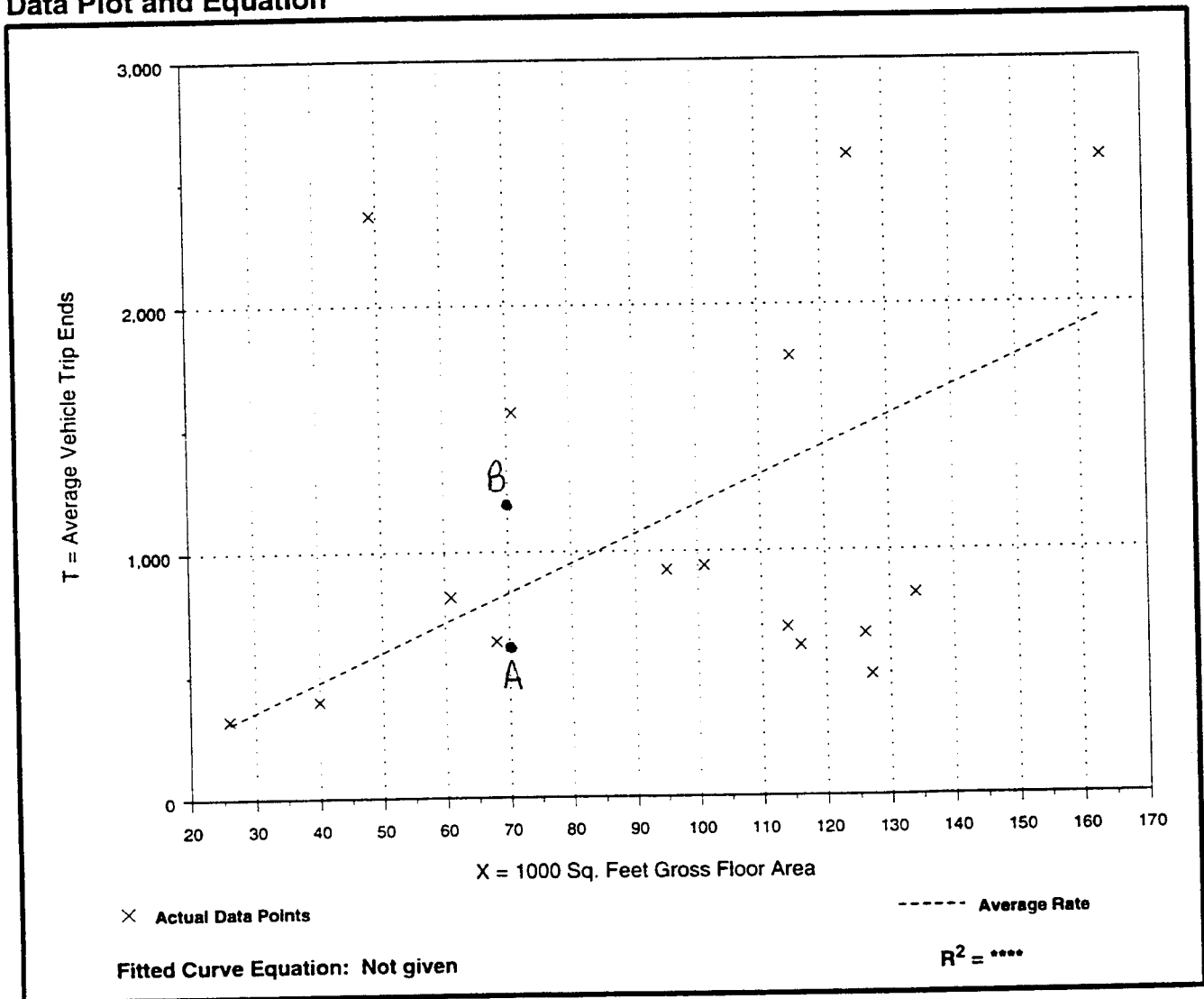
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

Number of Studies: 16
Average 1000 Sq. Feet GFA: 96
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
11.92	3.89 - 48.31	9.35

Data Plot and Equation



Middle School/Junior High School (522)

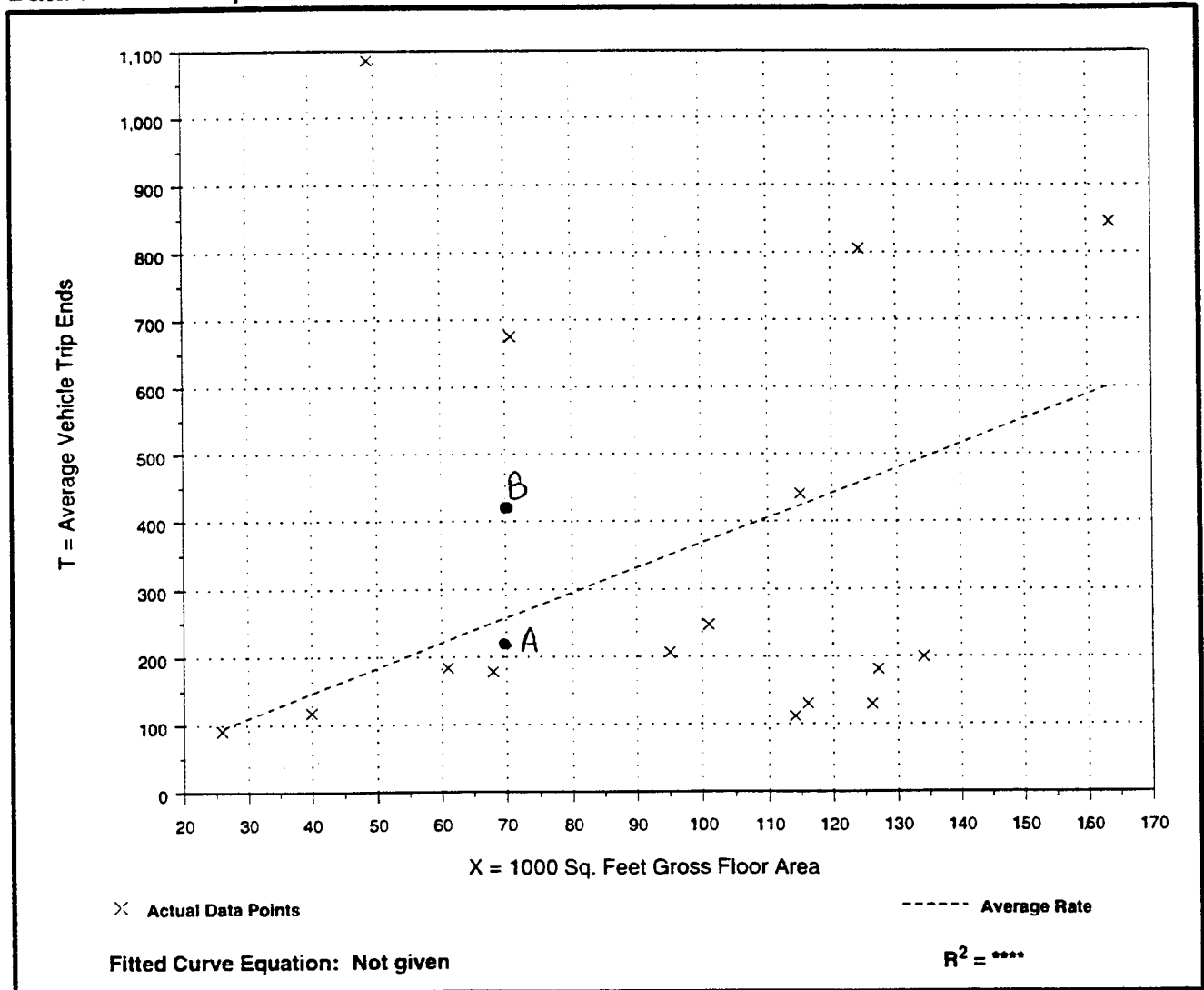
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
 Average 1000 Sq. Feet GFA: 96
 Directional Distribution: 57% entering, 43% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.68	0.98 - 22.16	4.45

Data Plot and Equation



Middle School/Junior High School (522)

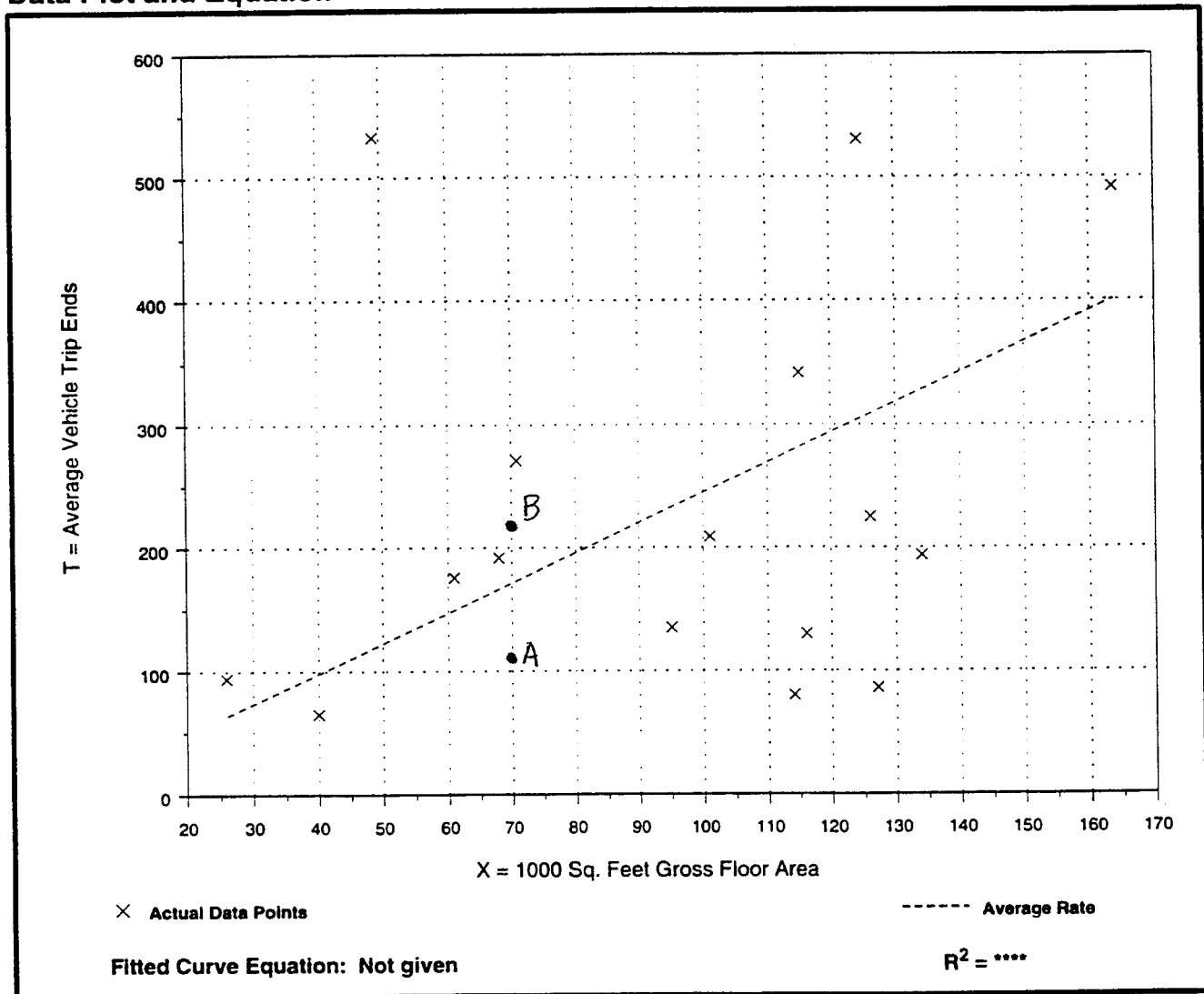
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 16
 Average 1000 Sq. Feet GFA: 96
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.45	0.68 - 10.88	2.45

Data Plot and Equation



APPENDIX I
ITE Format Graphs
Consolidated Elementary Schools

Elementary Schools

Average Vehicle Trip Ends V/S: Employees
On a: Weekday

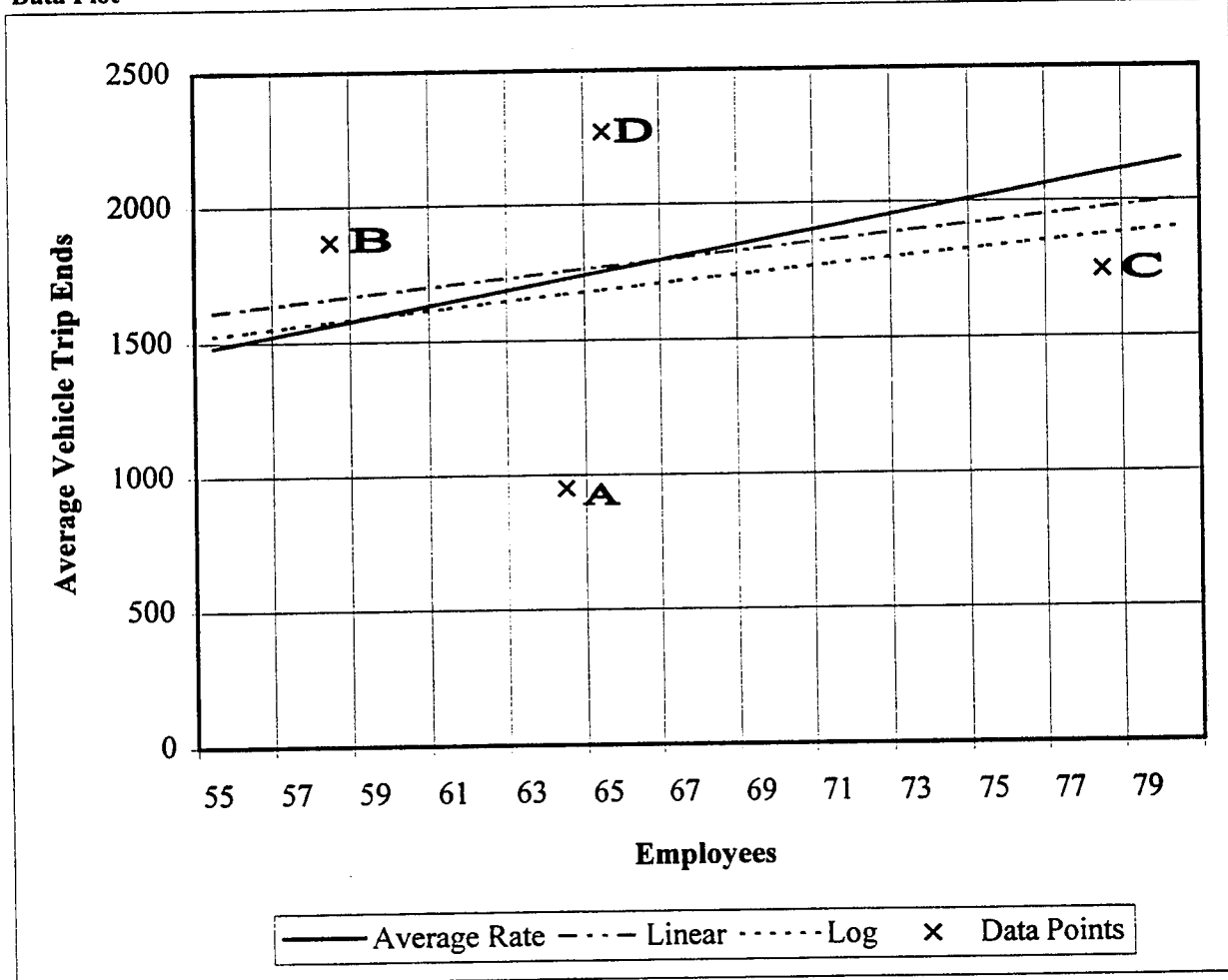
Number of Studies: 4
Average SEV Value: 67
Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
26.96	14.6-34.92	9.01

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=748.68+15.70(Employees) $r^2=0.05$

Log Equation Trip Ends=145.47(Employees)^{0.59} $r^2=0.03$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday AM Peak

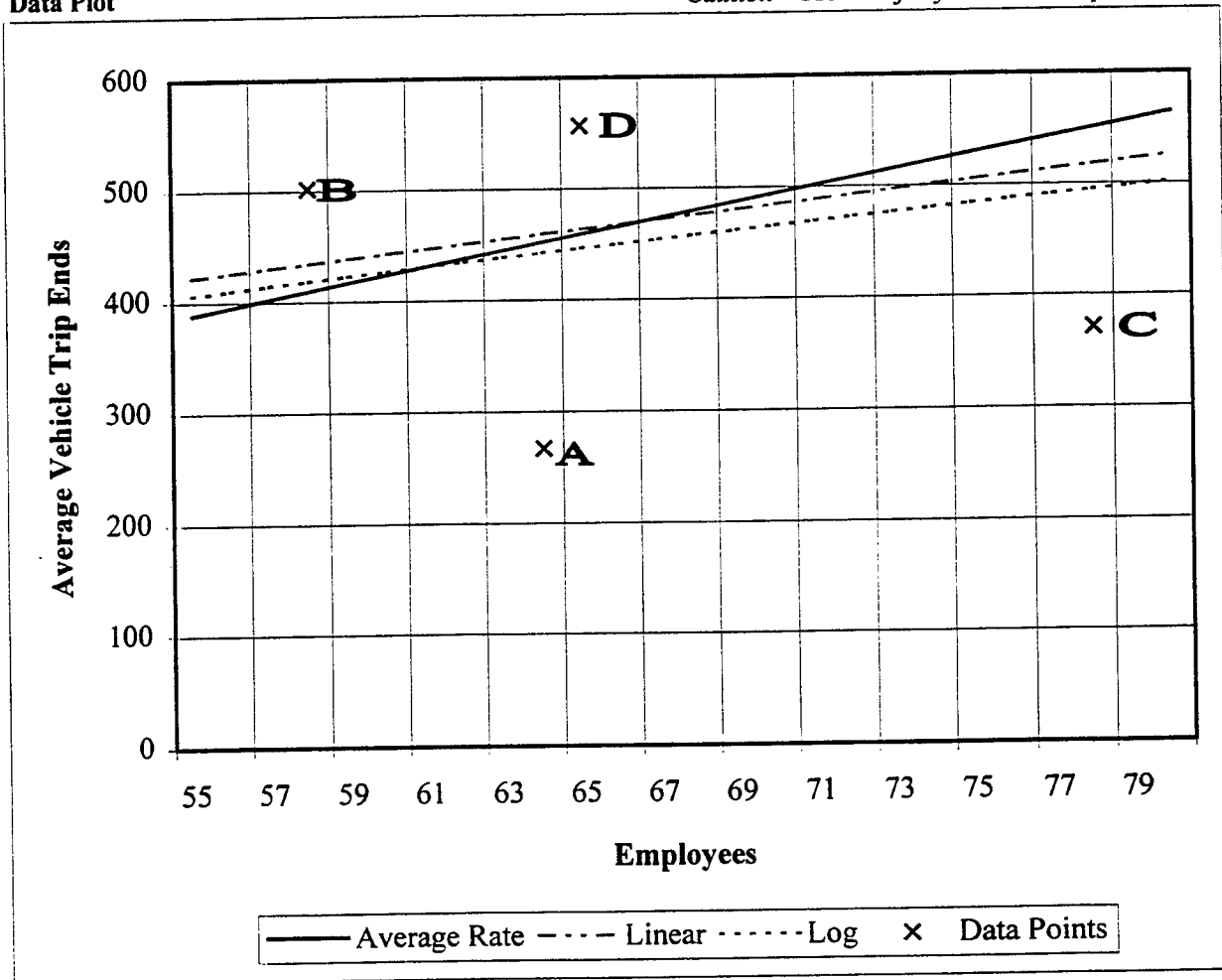
Number of Studies: 4
 Average SEV Value: 67
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
7.06	4.10-8.65	2.12

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=191.84+4.18(Employees) $r^2=0.06$

Log Equation Trip Ends=42.10(Employees)^{0.57} $r^2=0.04$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

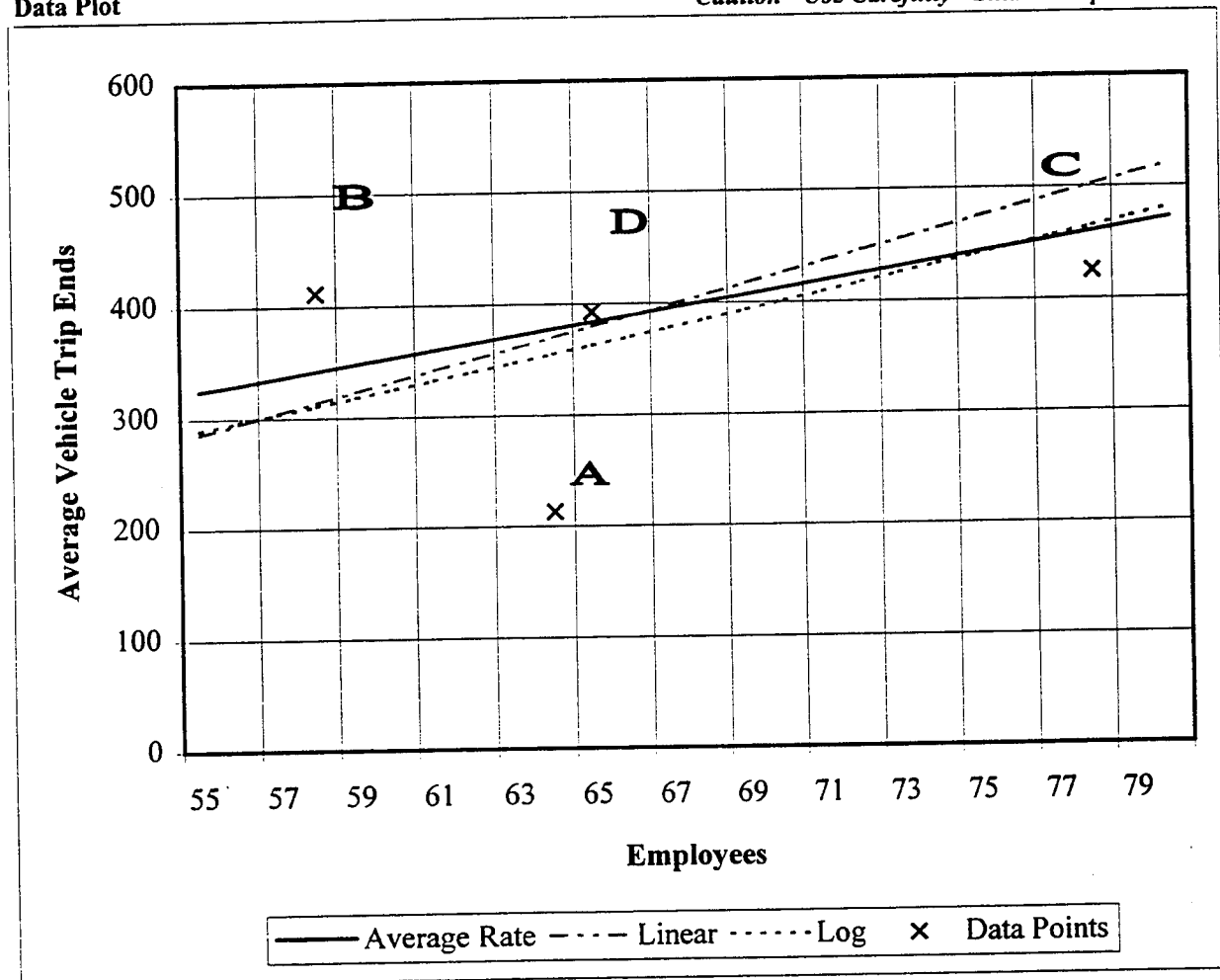
Number of Studies: 4
 Average SEV Value: 67
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
5.90	3.27-7.10	1.81

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends = -231.65 + 9.40(Employees) $r^2 = 0.31$

Log Equation Trip Ends = 1.25(Employees)^{1.36} $r^2 = 0.17$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: Students
On a: Weekday

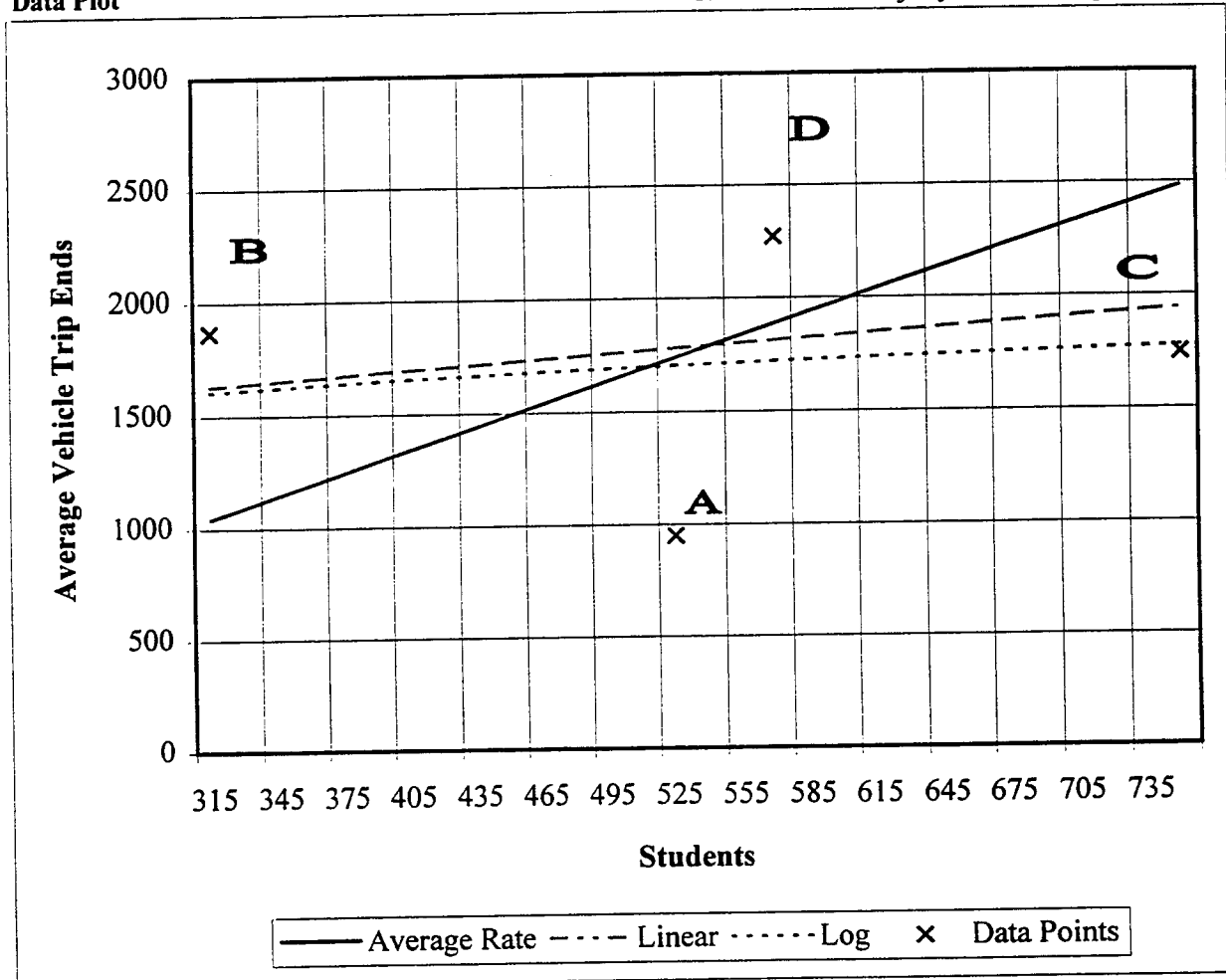
Number of Studies: 4
Average SEV Value: 542
Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
3.31	1.79-5.89	1.76

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=1401.83+0.72(Students) $r^2=0.05$

Log Equation Trip Ends=820.57(Students)^{0.12} $r^2=0.01$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: Students
 On a: Weekday AM Peak

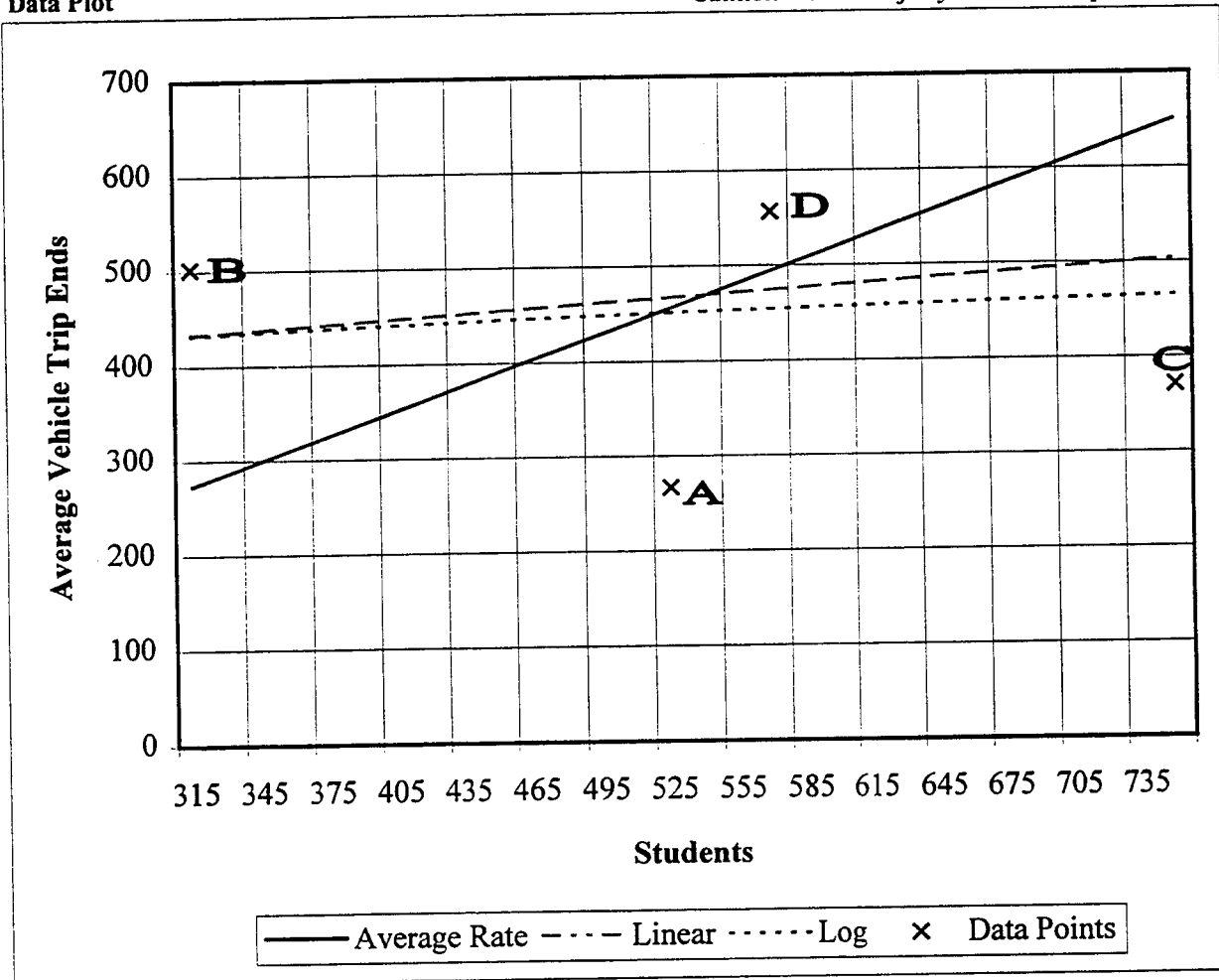
Number of Studies: 4
 Average SEV Value: 542
 Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.87	0.49-1.58	0.46

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=381.53+0.16(Students) $r^2=0.04$

Log Equation Trip Ends=265.07(Students)^{0.08} $r^2=0.01$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: Students
 On a: Weekday PM Peak

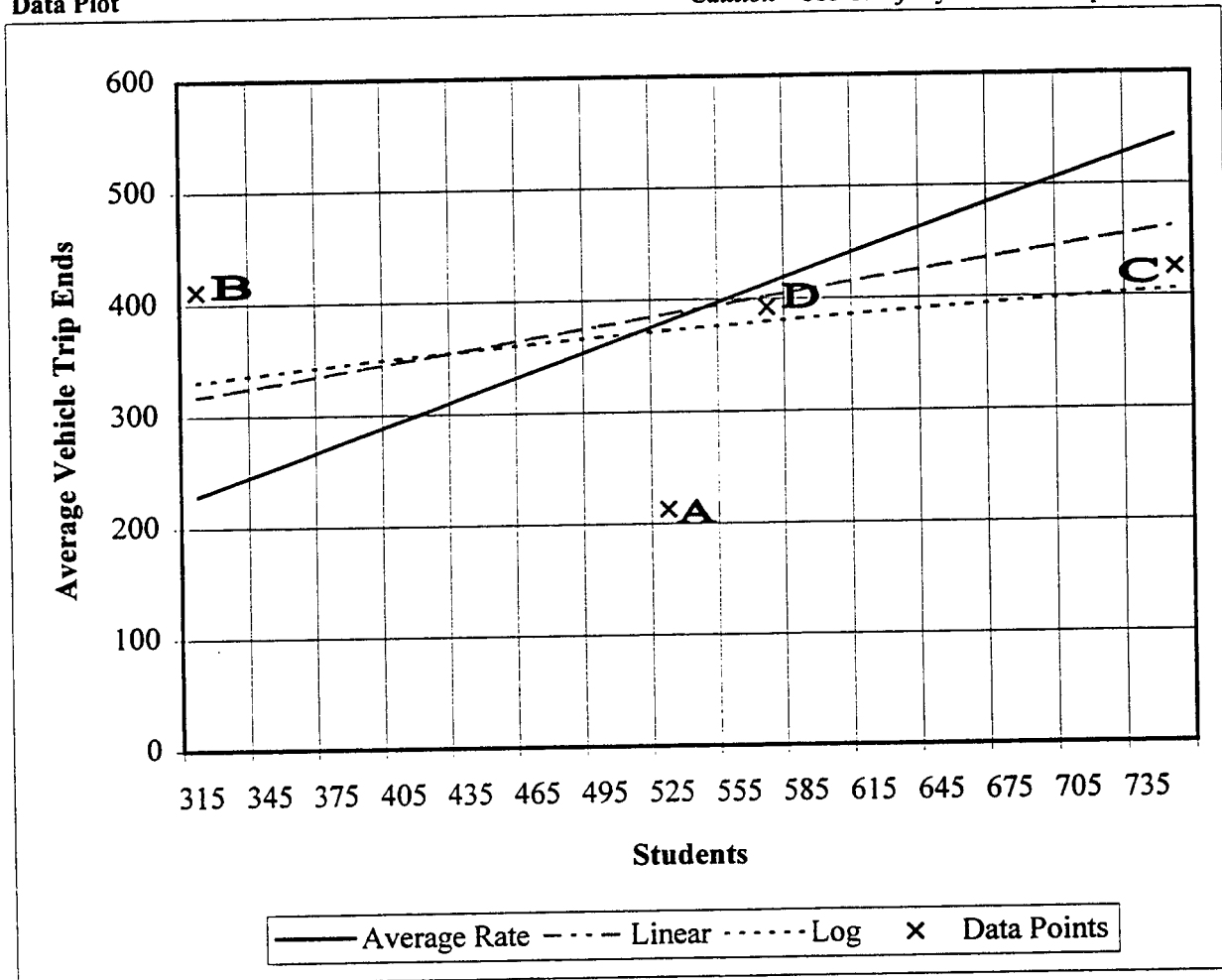
Number of Studies: 4
 Average SEV Value: 542
 Directional Distribution: Not Studied

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.73	0.40-1.30	0.37

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=212.04+0.33(Students) $r^2=0.18$
 Log Equation Trip Ends=85.63(Students)^{0.23} $r^2=0.04$
 (Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday

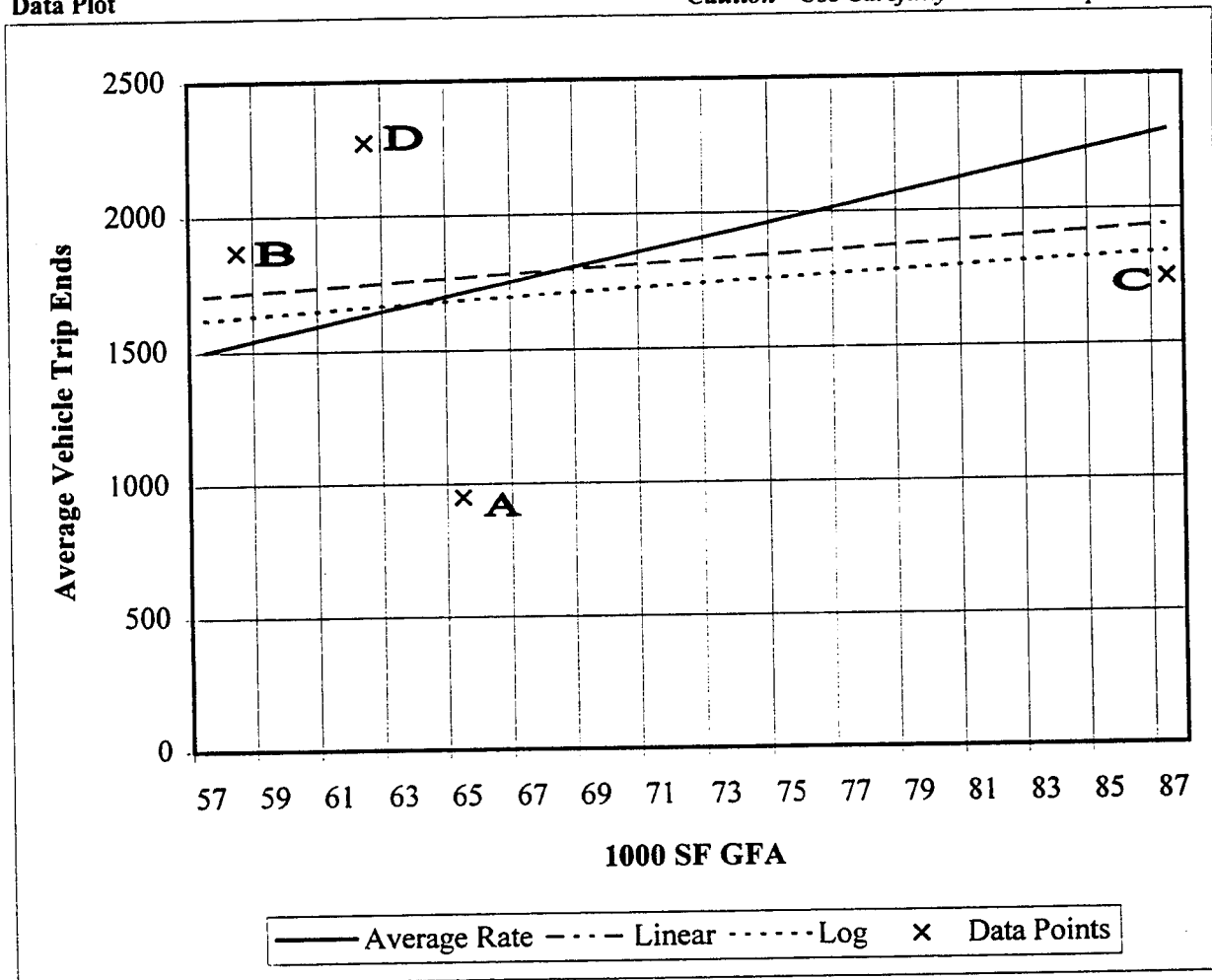
Number of Studies: 4
 Average SEV Value: 68
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
26.33	14.47-36.60	9.78

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=1262.84+7.78(1000 SF GFA) $r^2=0.03$
 Log Equation Trip Ends=478.19(1000 SF GFA)^{0.30} $r^2=0.02$
 (Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday AM Peak

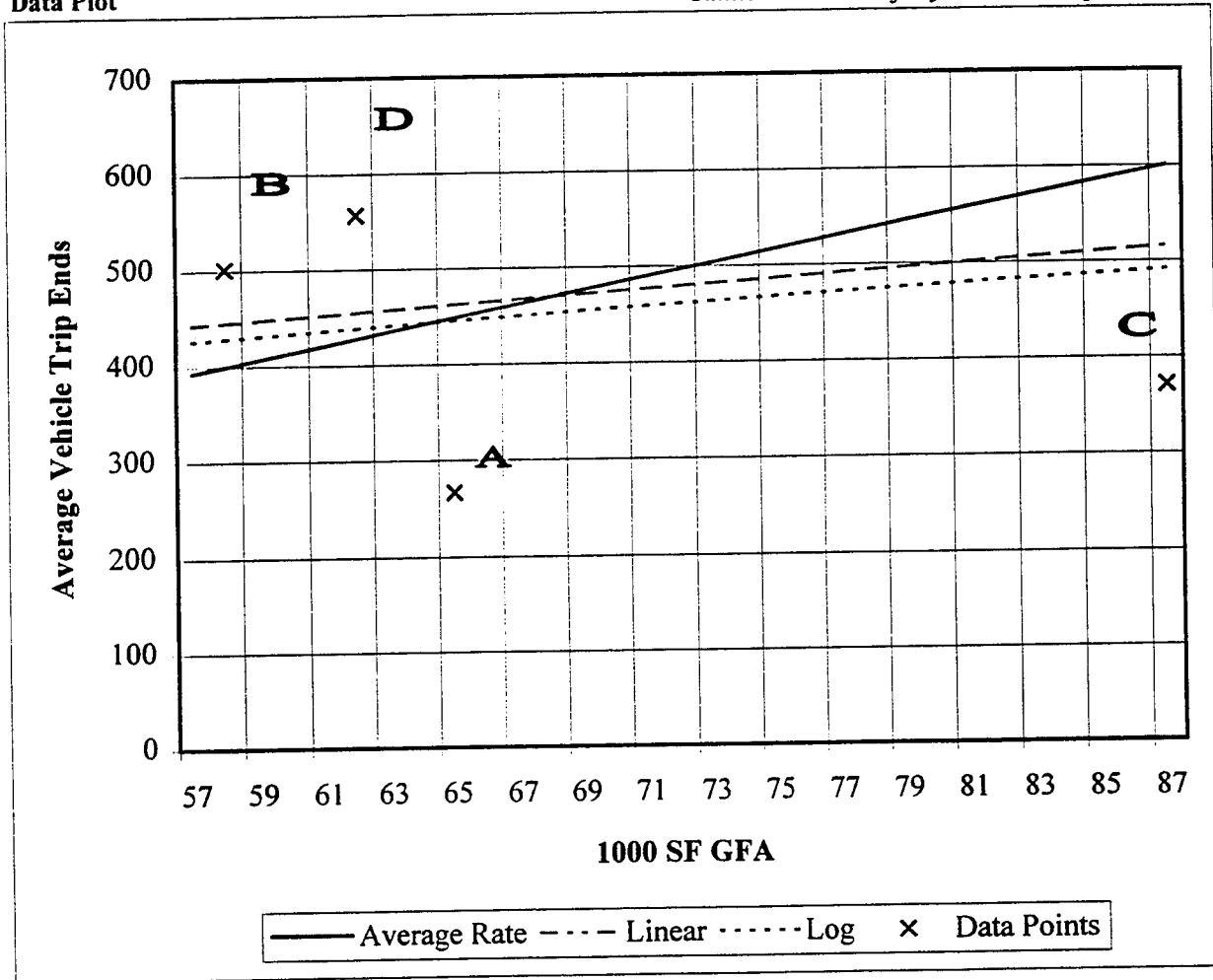
Number of Studies: 4
 Average SEV Value: 68
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
6.90	4.06-8.98	2.29

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=303.40+2.44(1000 SF GFA) $r^2=0.05$

Log Equation Trip Ends=108.85(1000 SF GFA)^{0.34} $r^2=0.03$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary Schools

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday PM Peak

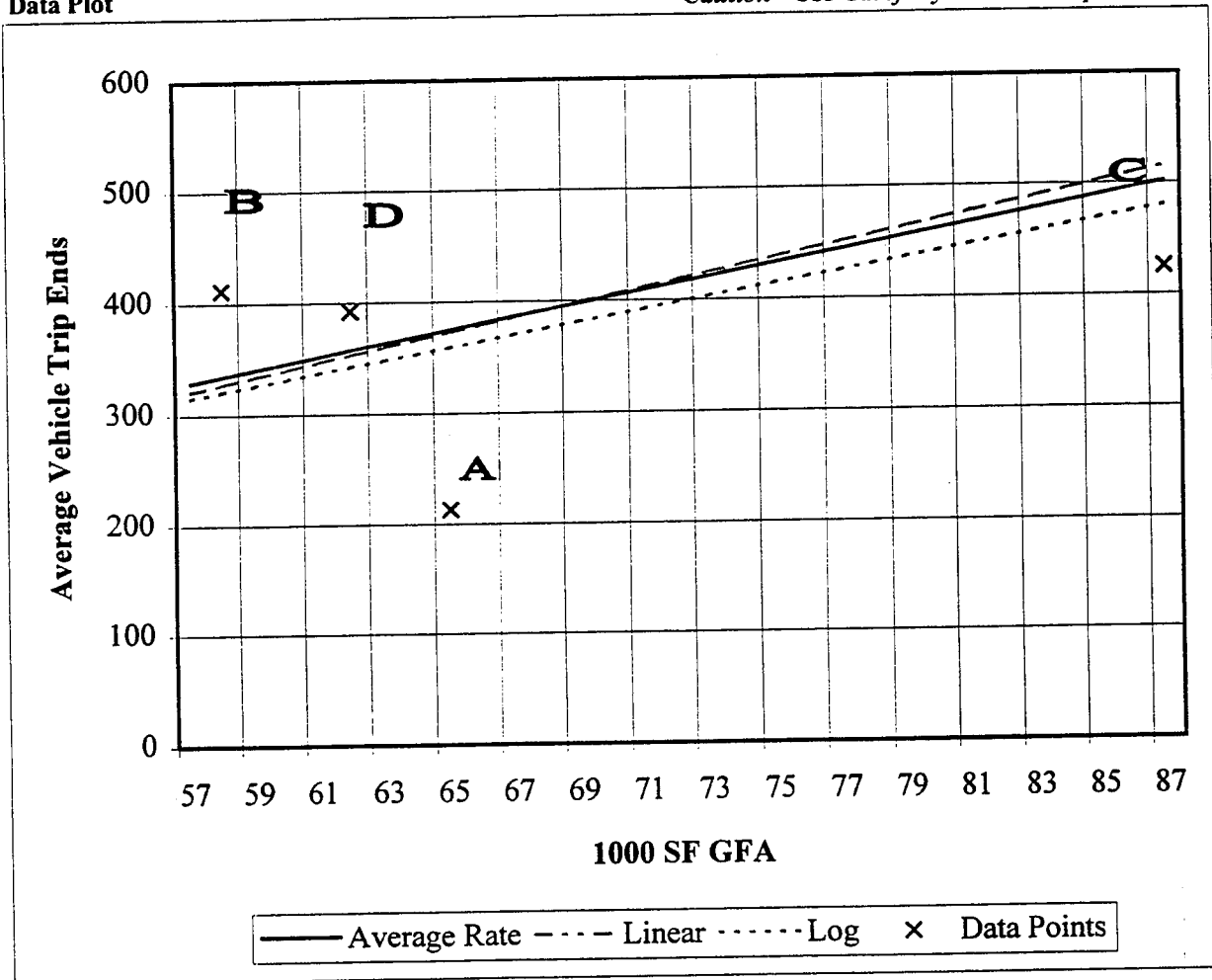
Number of Studies: 4
 Average SEV Value: 68
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
5.77	3.24-7.13	1.72

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends = -49.83 + 6.50(1000 SF GFA) $r^2 = 0.37$

Log Equation Trip Ends = 5.58(1000 SF GFA)^{1.00} $r^2 = 0.20$

(Equations with $r^2 < 0.5$ are not recommended for use)

Elementary School (520)

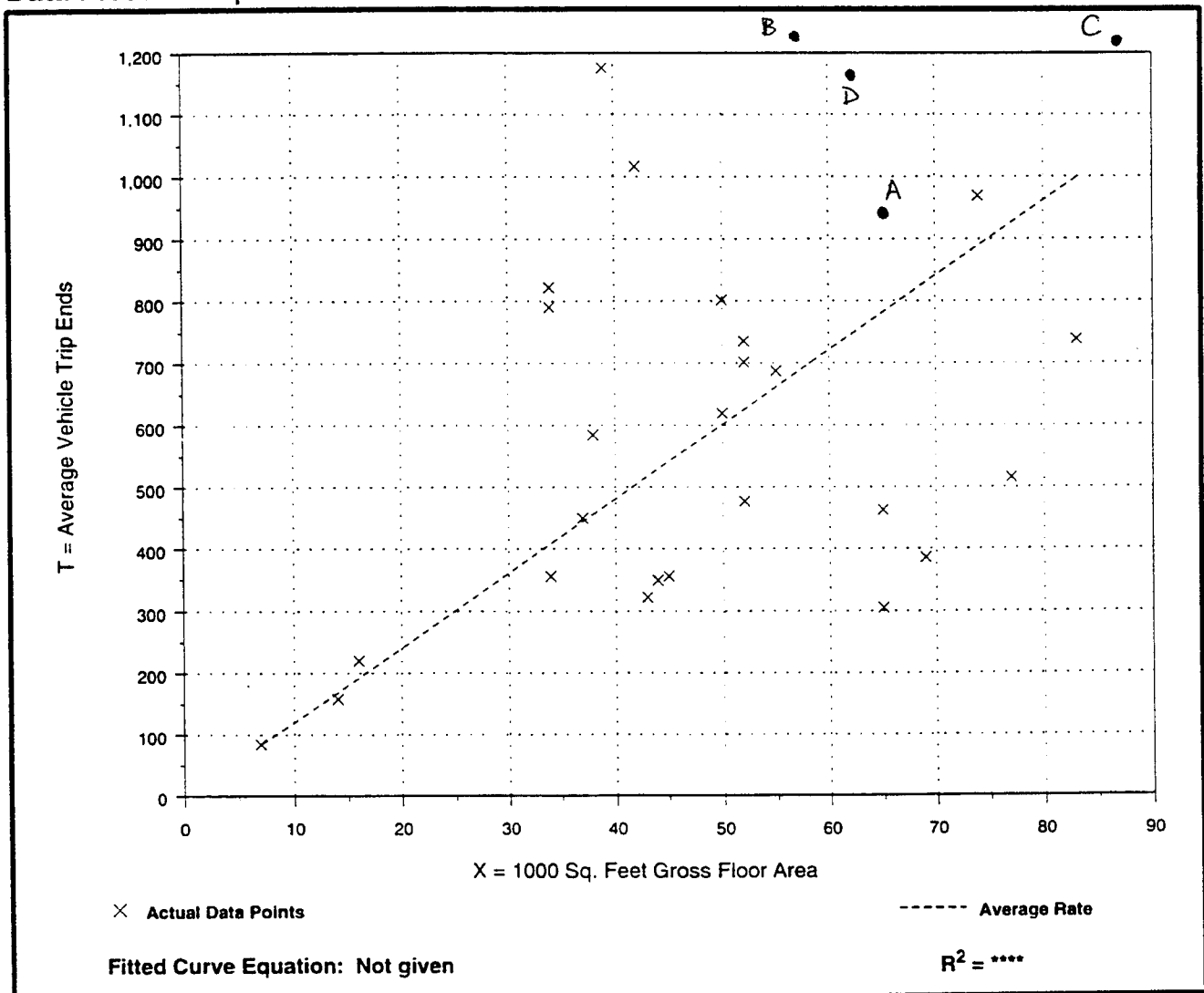
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Weekday**

Number of Studies: 25
Average 1000 Sq. Feet GFA: 47
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
12.03	4.69 - 30.15	7.02

Data Plot and Equation



Elementary School (520)

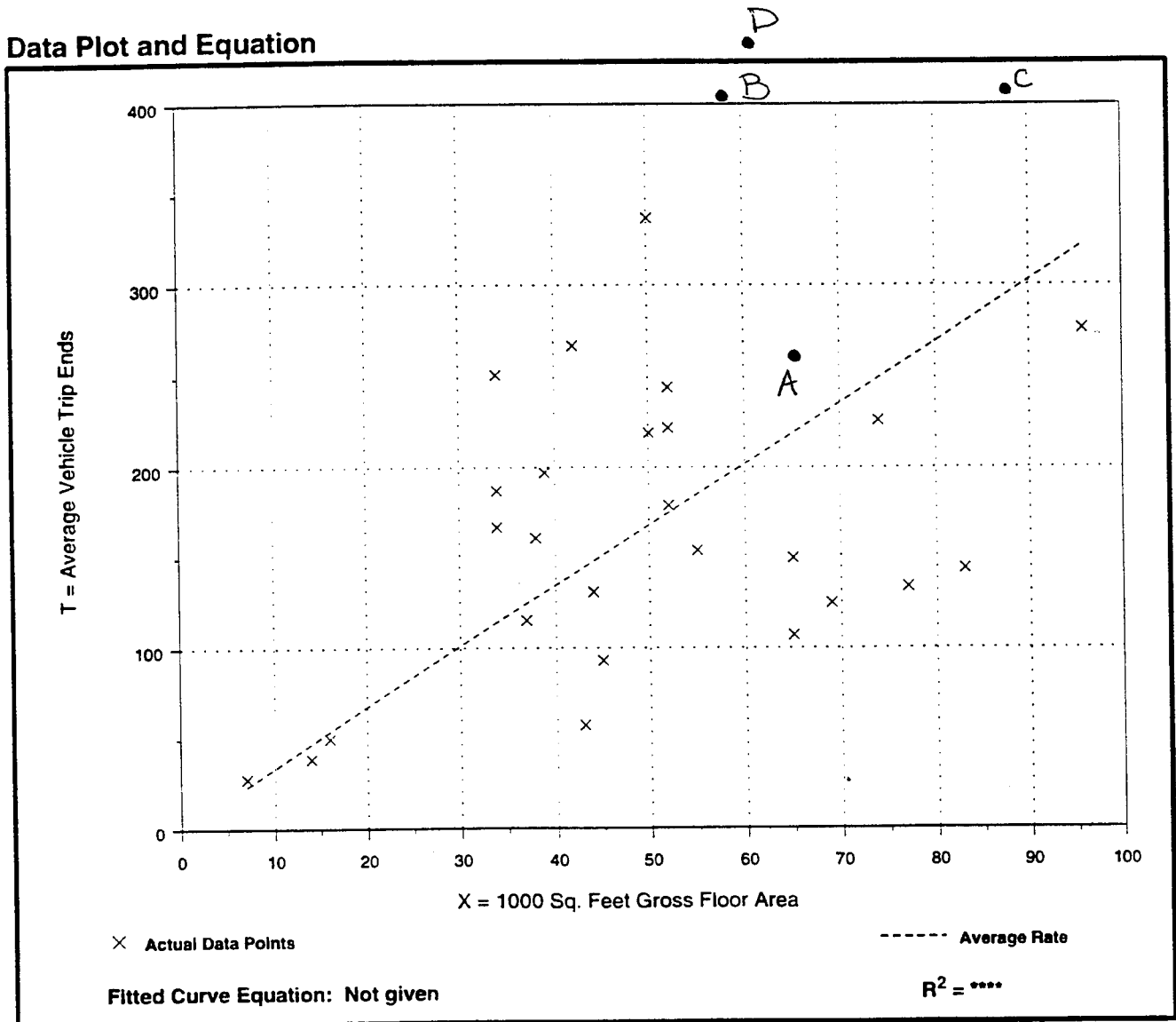
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 26
 Average 1000 Sq. Feet GFA: 49
 Directional Distribution: 61% entering, 39% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.36	1.33 - 7.38	2.42

Data Plot and Equation



Elementary School (520)

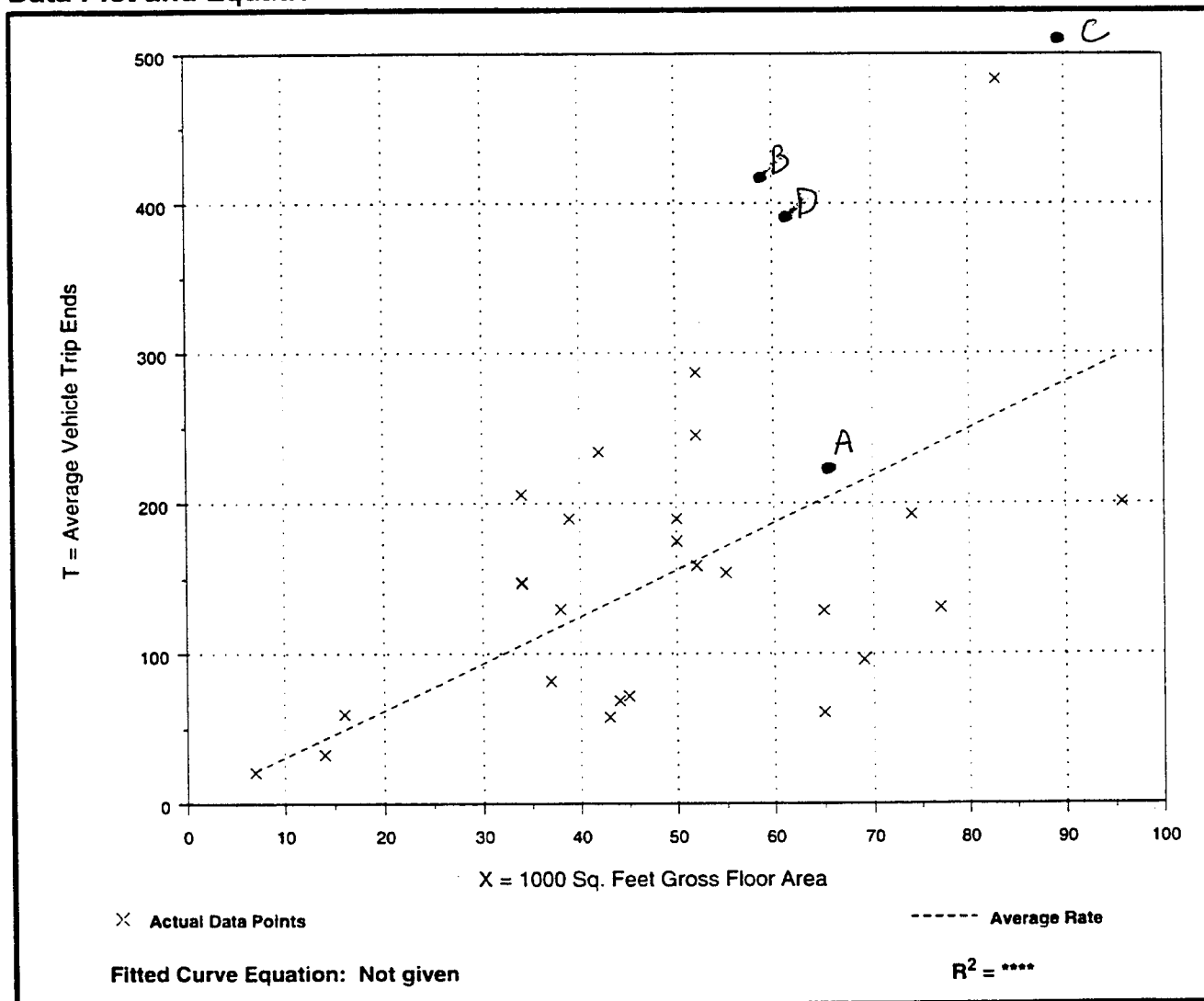
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 26
Average 1000 Sq. Feet GFA: 49
Directional Distribution: 26% entering, 74% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.12	0.94 - 6.06	2.35

Data Plot and Equation



Elementary School (520)

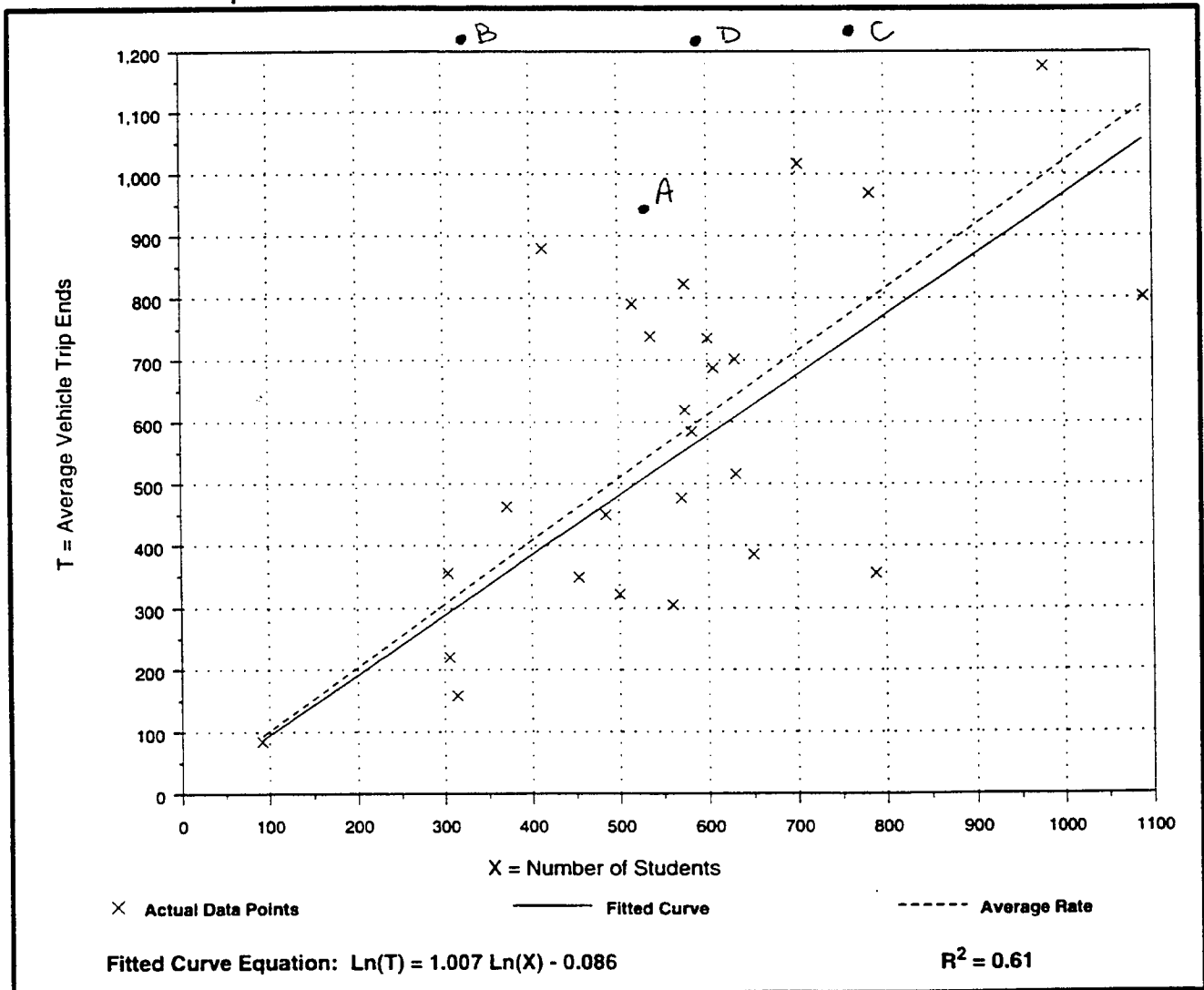
Average Vehicle Trip Ends vs: Students
On a: **Weekday**

Number of Studies: 26
Average Number of Students: 562
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.02	0.45 - 2.12	1.07

Data Plot and Equation



Elementary School (520)

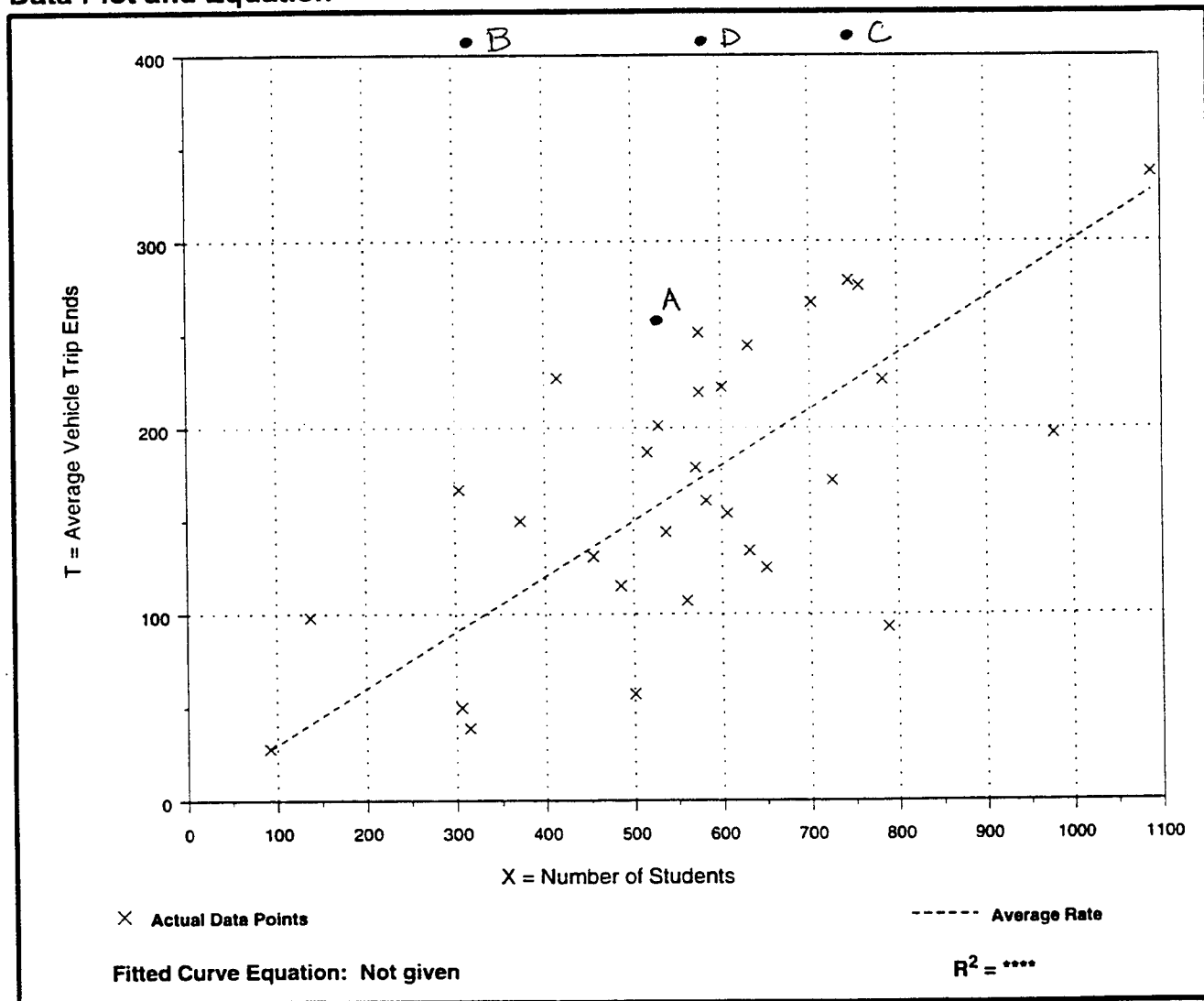
Average Vehicle Trip Ends vs: Students
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 31
 Average Number of Students: 565
 Directional Distribution: 58% entering, 42% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.30	0.11 - 0.71	0.56

Data Plot and Equation



Elementary School (520)

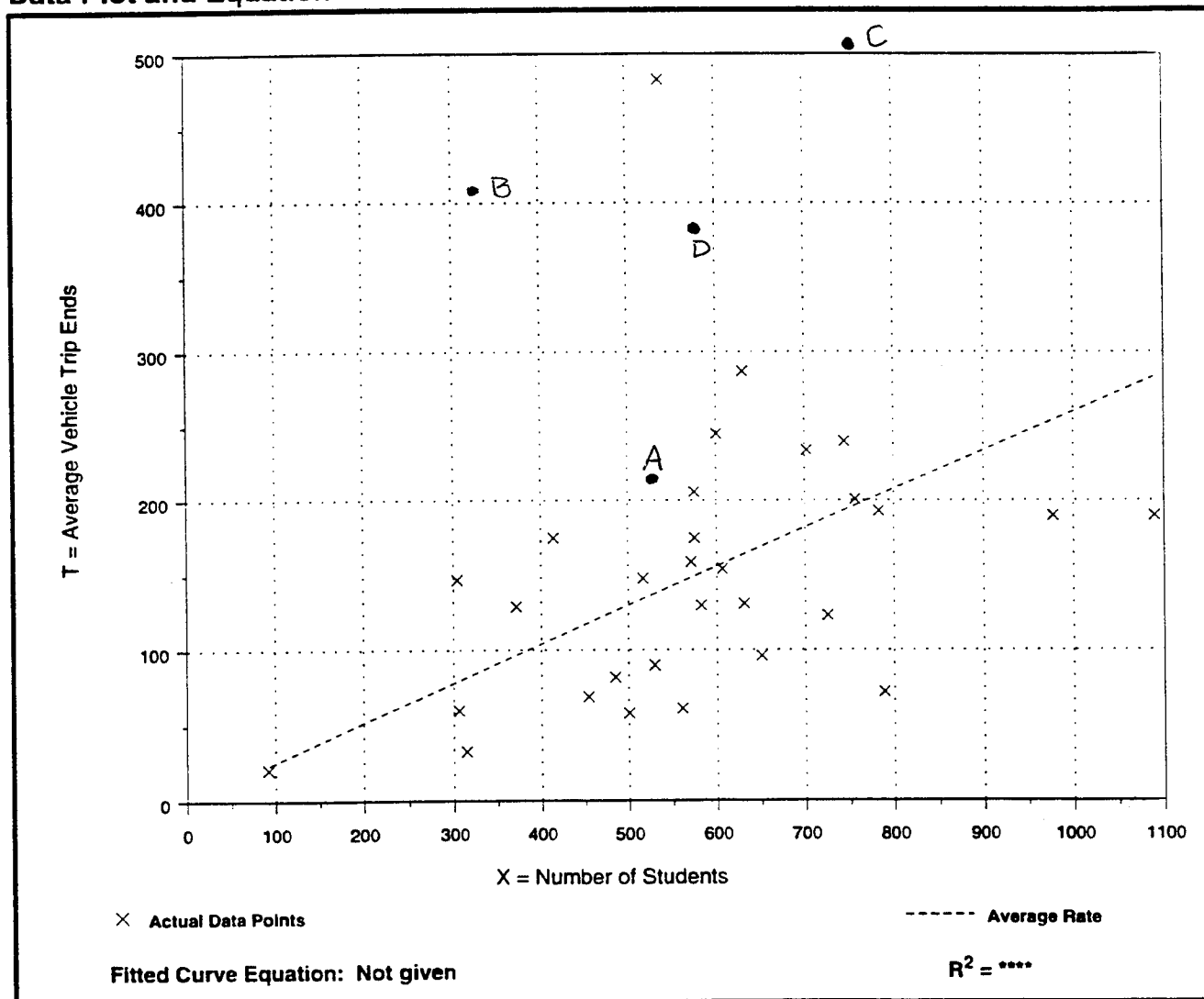
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 30
 Average Number of Students: 579
 Directional Distribution: 46% entering, 54% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.26	0.09 - 0.90	0.53

Data Plot and Equation



Elementary School (520)

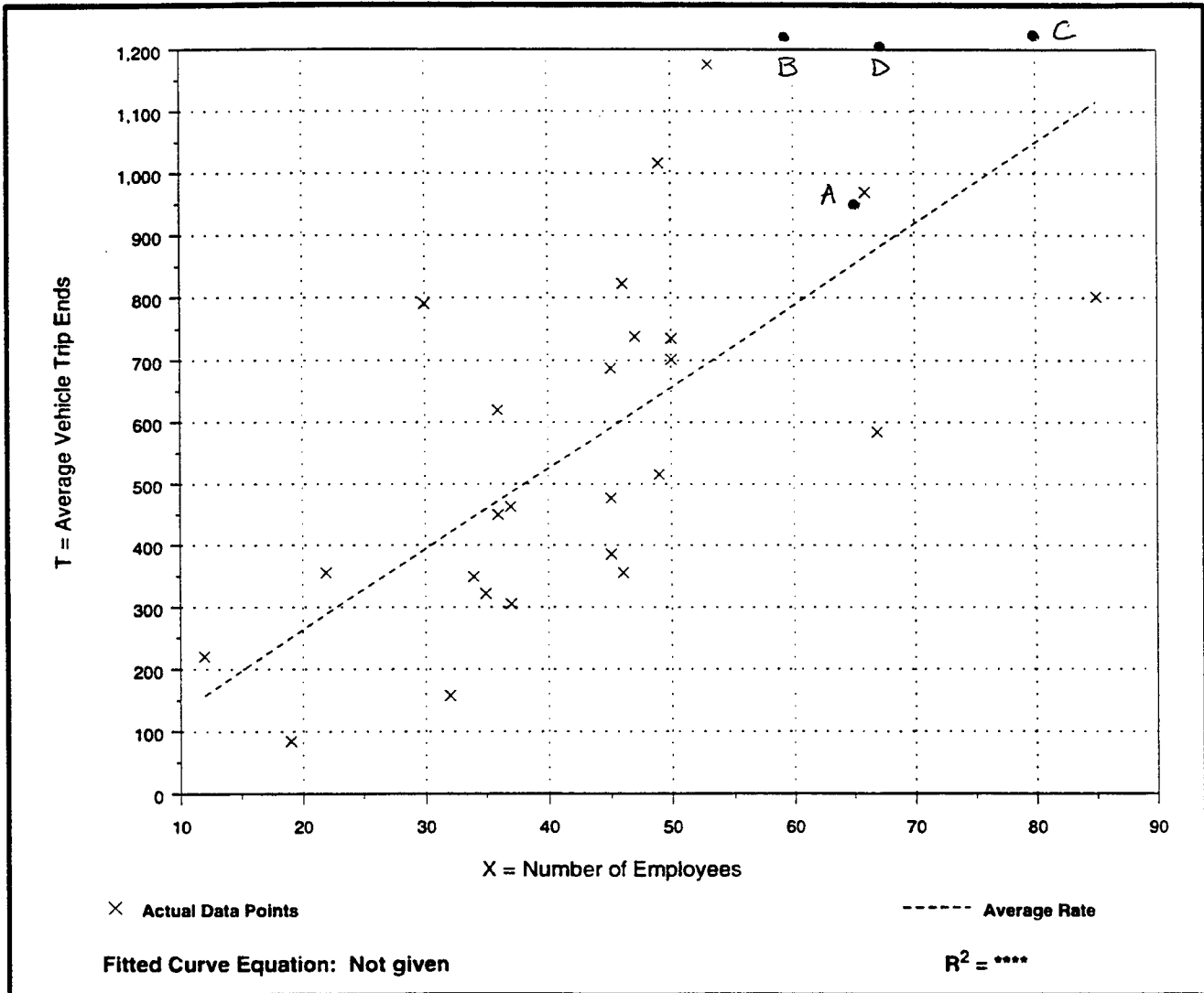
**Average Vehicle Trip Ends vs: Employees
On a: Weekday**

Number of Studies: 25
Avg. Number of Employees: 43
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
13.13	4.47 - 26.37	6.10

Data Plot and Equation



Elementary School (520)

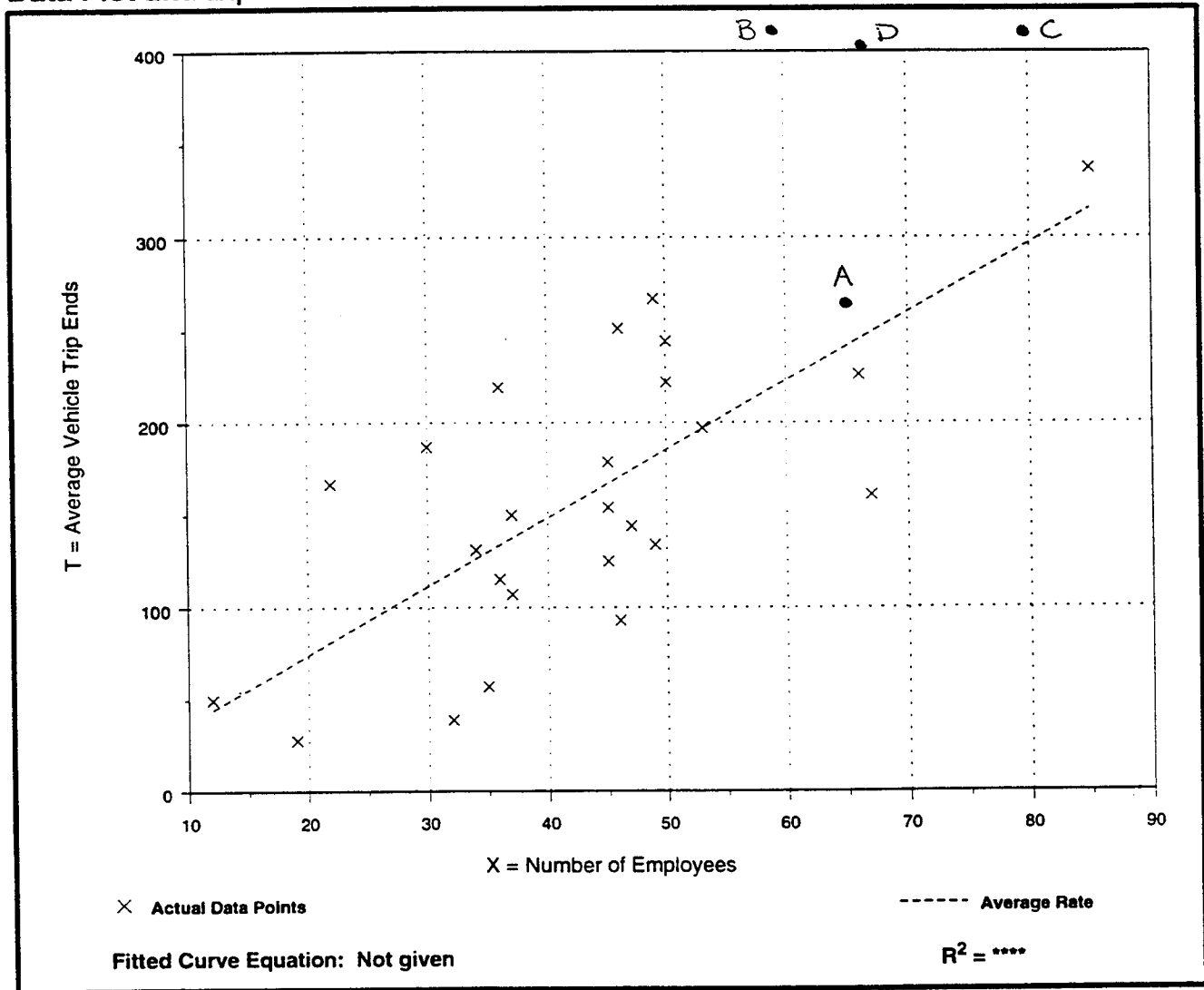
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 25
Avg. Number of Employees: 43
Directional Distribution: Not available

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.71	1.22 - 7.59	2.34

Data Plot and Equation



Elementary School (520)

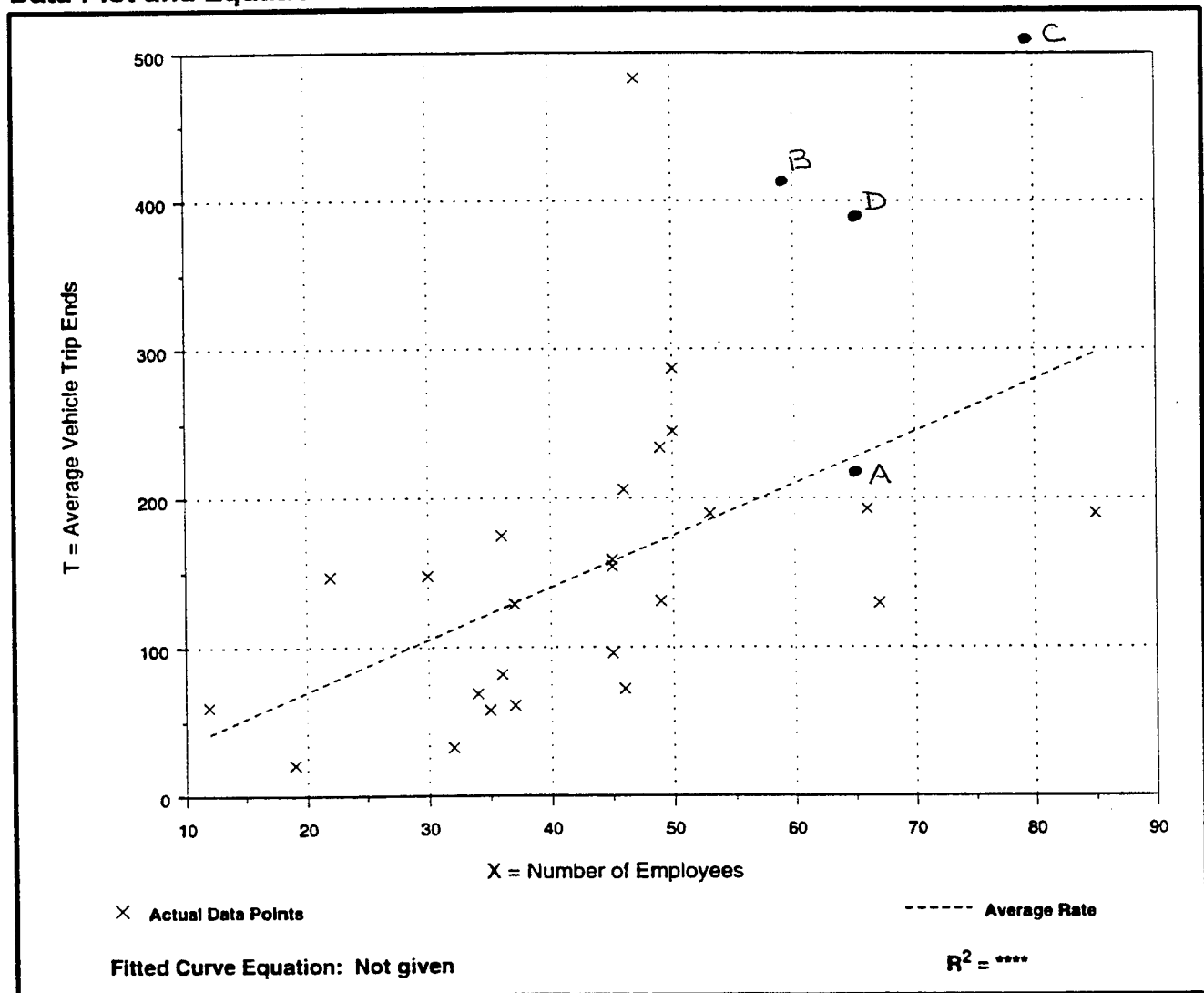
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 25
Avg. Number of Employees: 43
Directional Distribution: Not available

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.50	1.03 - 10.28	2.73

Data Plot and Equation



APPENDIX J
ITE Format Graphs
Combined Consolidated Schools

Elementary School (520)

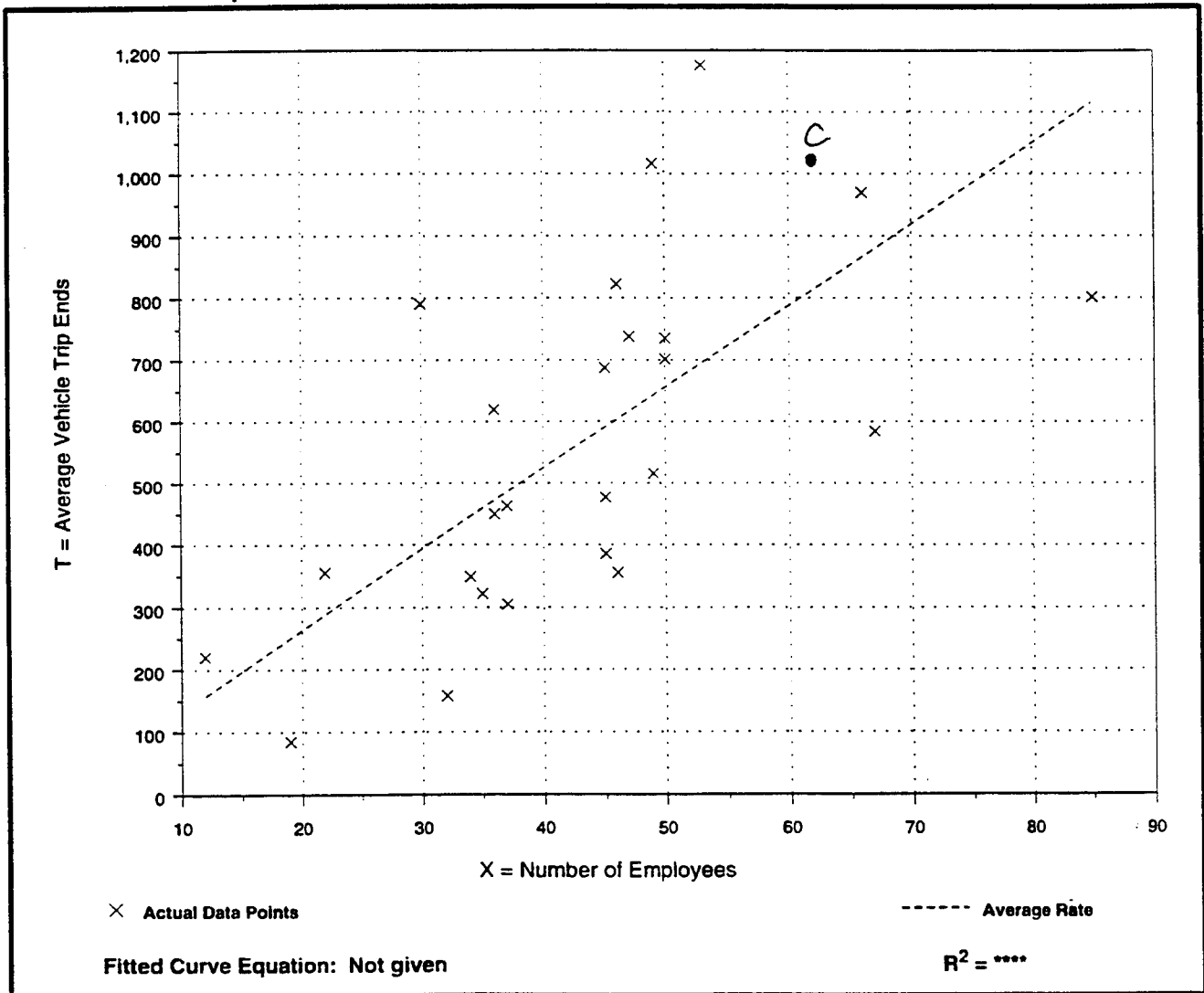
Average Vehicle Trip Ends vs: Employees
On a: Weekday

Number of Studies: 25
Avg. Number of Employees: 43
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
13.13	4.47 - 26.37	6.10

Data Plot and Equation



Elementary School (520)

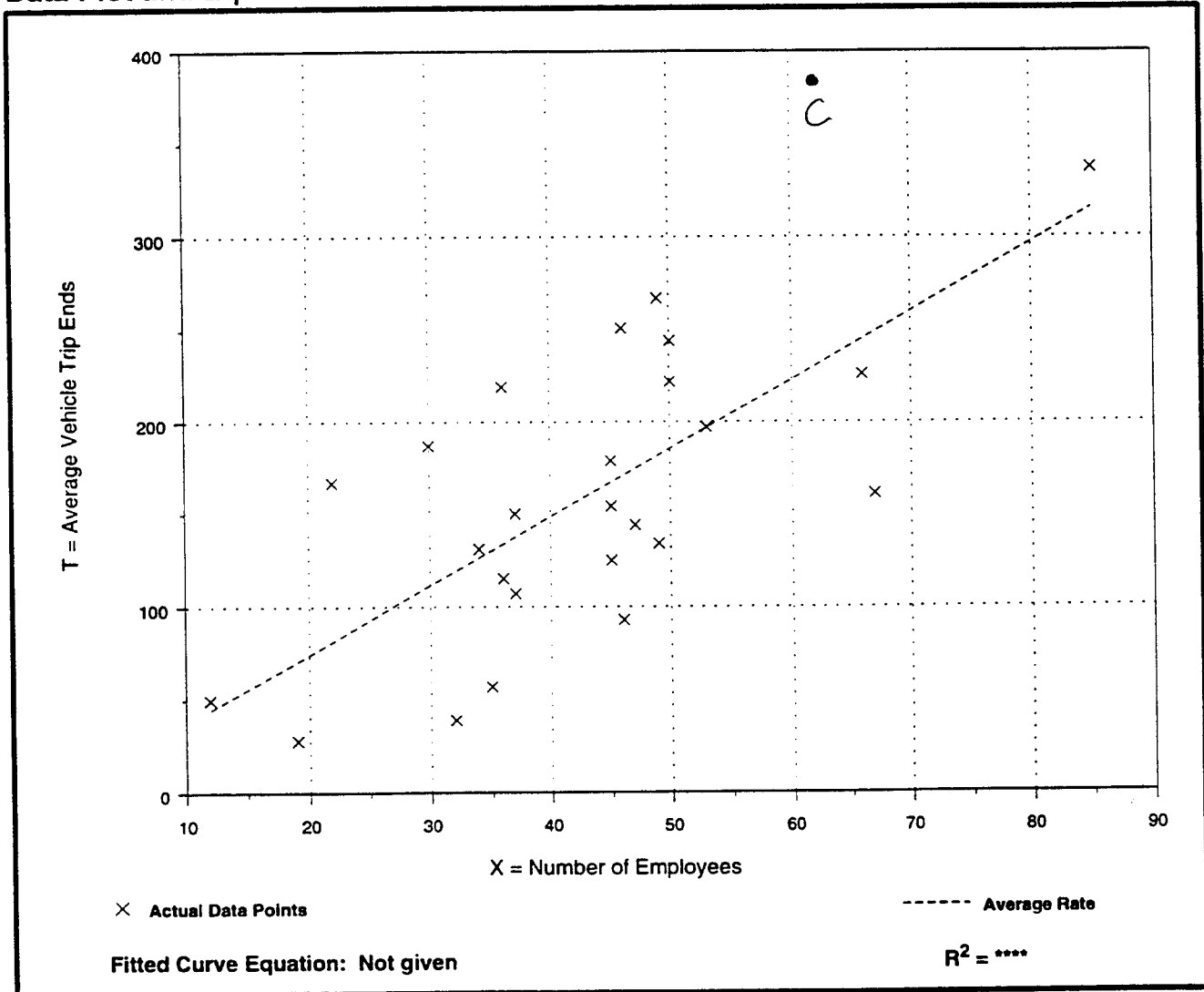
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 25
Avg. Number of Employees: 43
Directional Distribution: Not available

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.71	1.22 - 7.59	2.34

Data Plot and Equation



Elementary School (520)

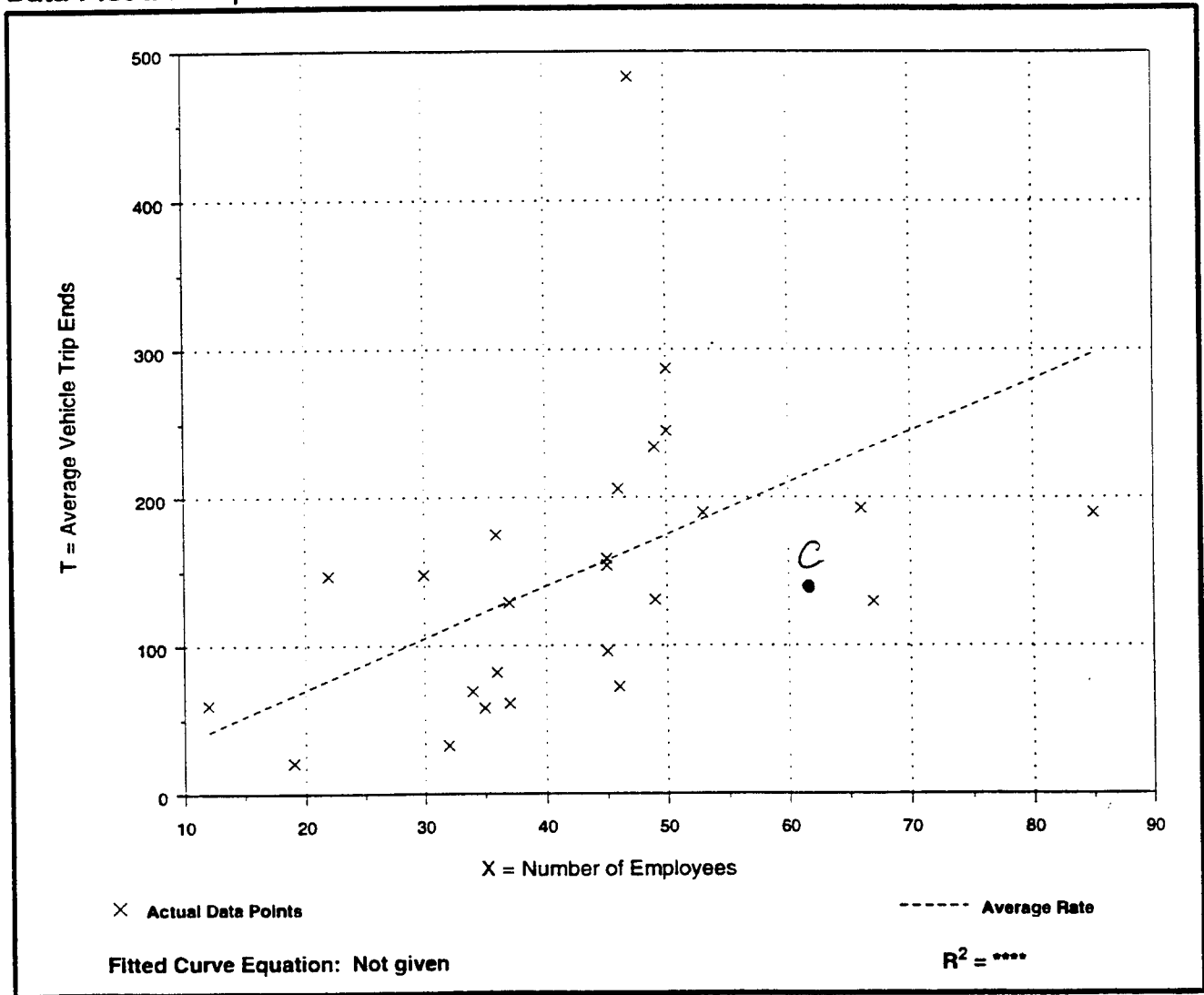
Average Vehicle Trip Ends vs: **Employees**
 On a: **Weekday,**
P.M. Peak Hour of Generator

Number of Studies: 25
 Avg. Number of Employees: 43
 Directional Distribution: Not available

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.50	1.03 - 10.28	2.73

Data Plot and Equation



Elementary School (520)

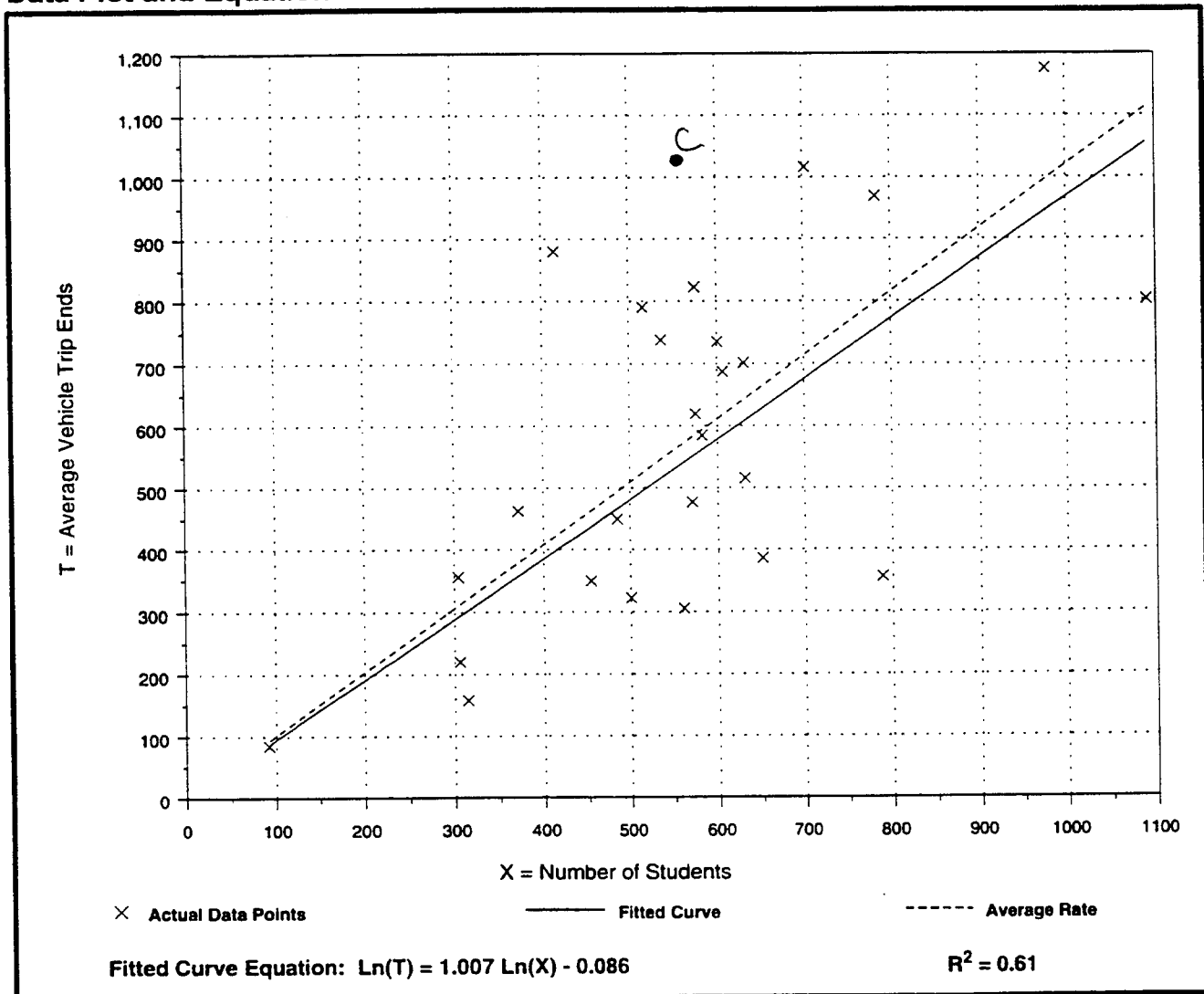
**Average Vehicle Trip Ends vs: Students
On a: Weekday**

Number of Studies: 26
Average Number of Students: 562
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.02	0.45 - 2.12	1.07

Data Plot and Equation



Elementary School (520)

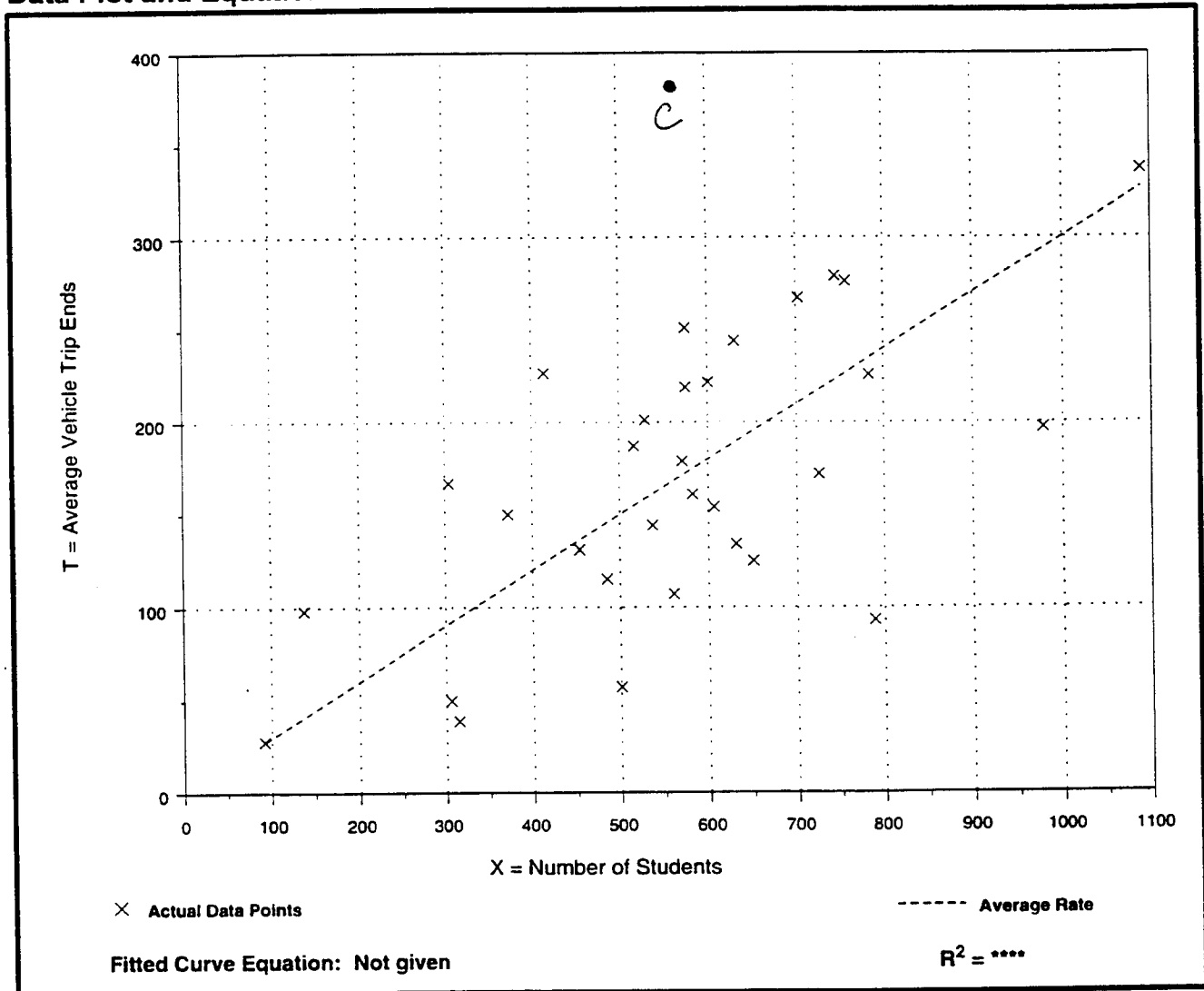
Average Vehicle Trip Ends vs: Students
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 31
 Average Number of Students: 565
 Directional Distribution: 58% entering, 42% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.30	0.11 - 0.71	0.56

Data Plot and Equation



Elementary School (520)

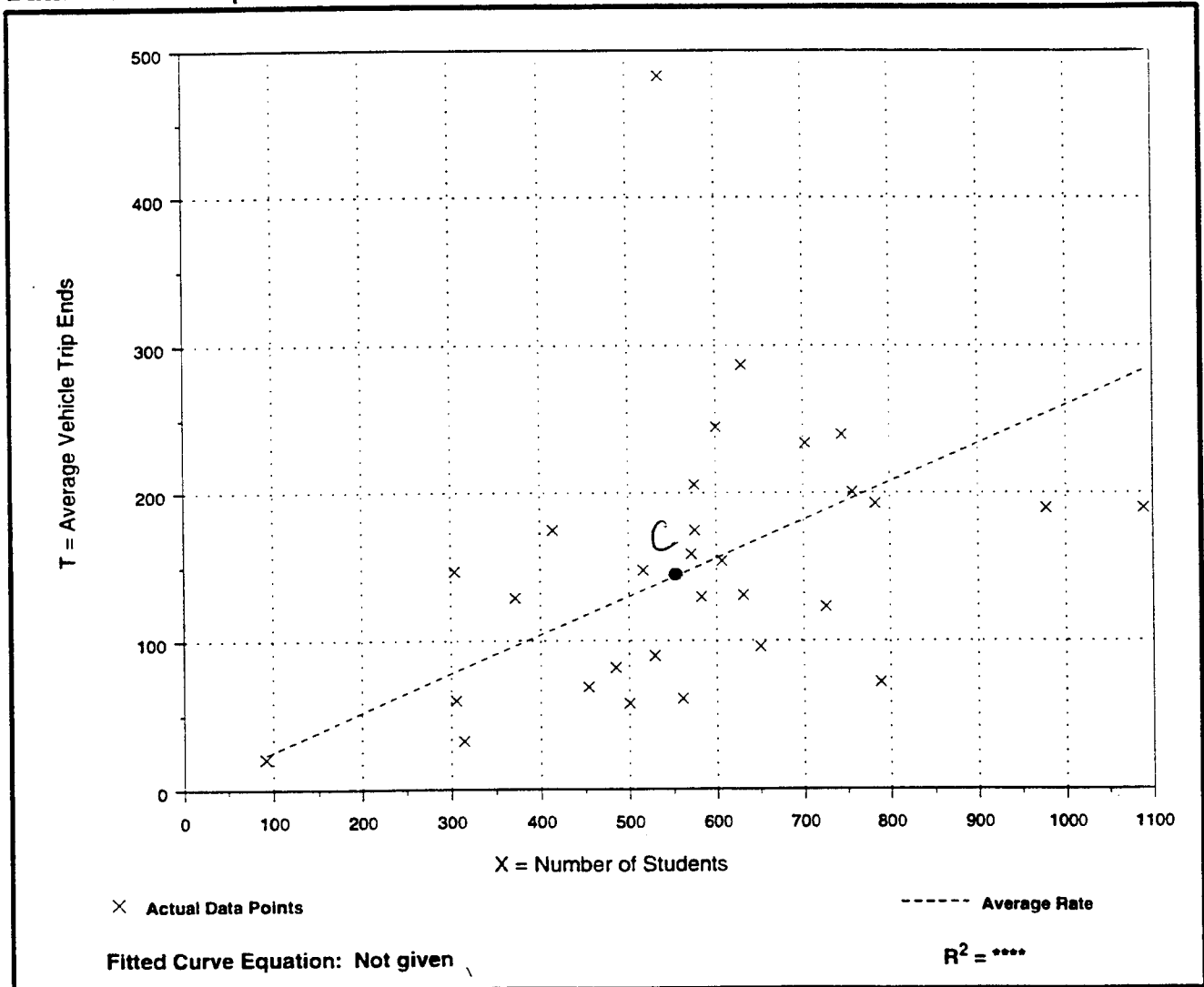
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 30
 Average Number of Students: 579
 Directional Distribution: 46% entering, 54% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.26	0.09 - 0.90	0.53

Data Plot and Equation



Elementary School (520)

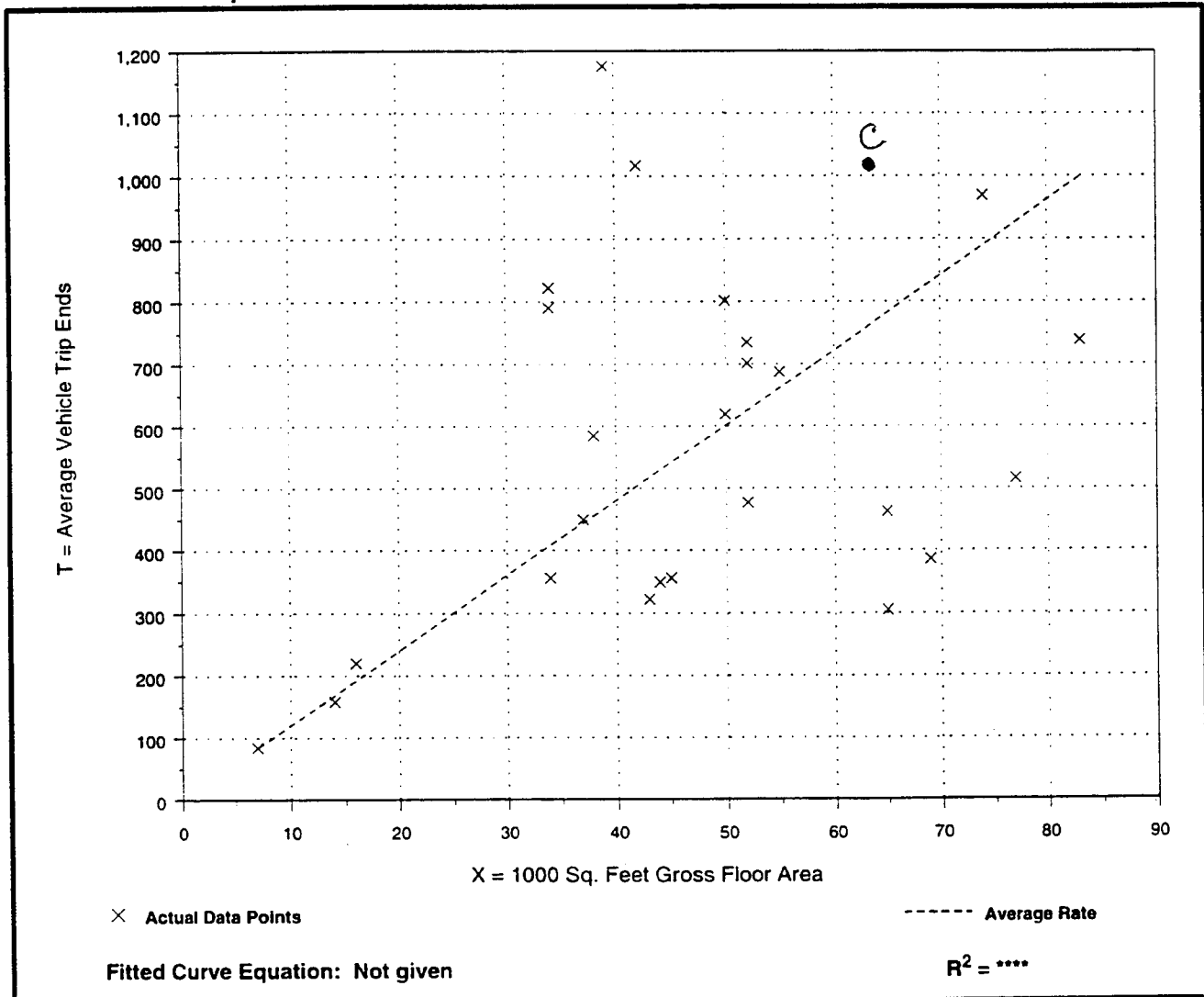
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Weekday**

Number of Studies: 25
Average 1000 Sq. Feet GFA: 47
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
12.03	4.69 - 30.15	7.02

Data Plot and Equation



Elementary School (520)

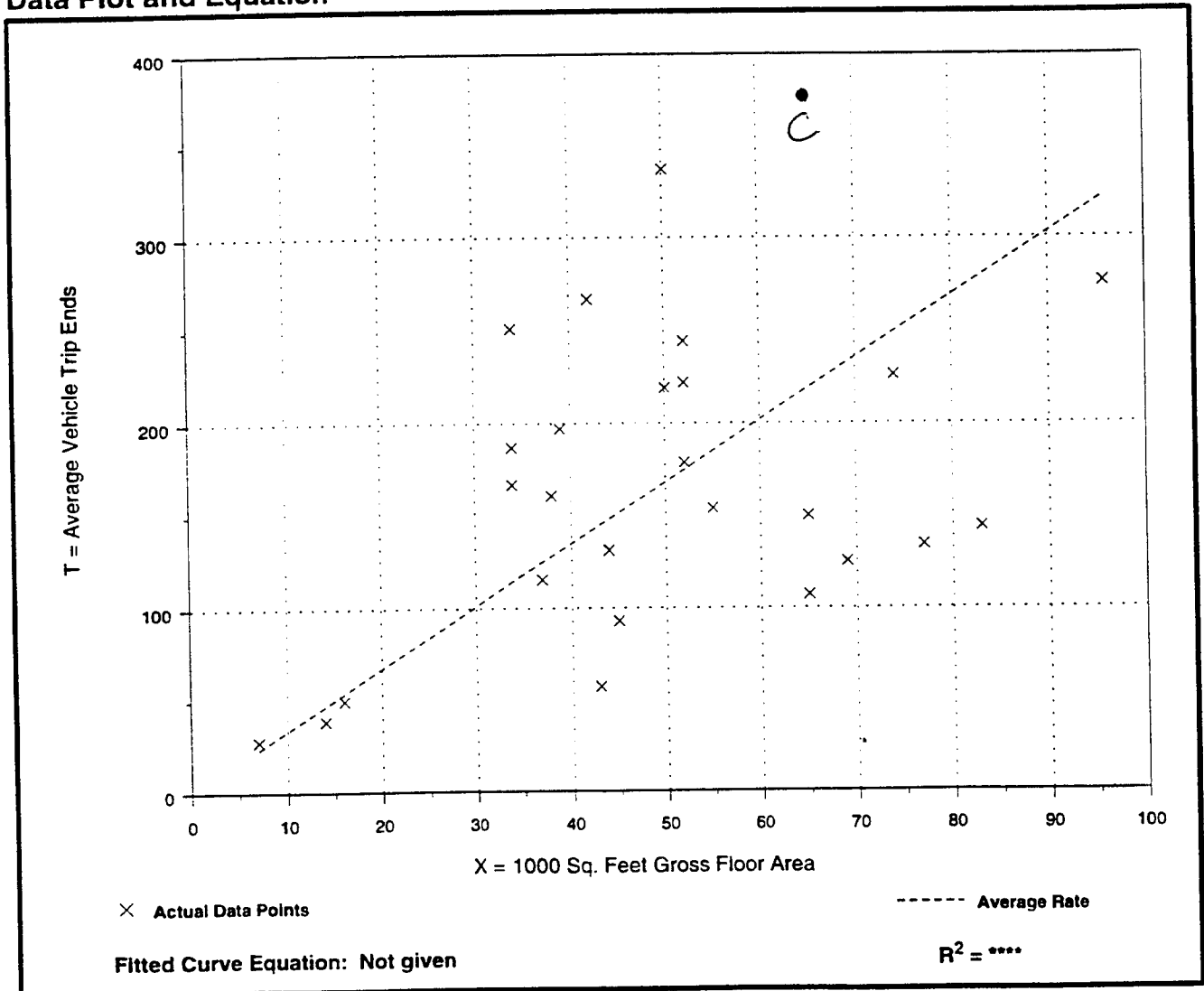
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 26
Average 1000 Sq. Feet GFA: 49
Directional Distribution: 61% entering, 39% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.36	1.33 - 7.38	2.42

Data Plot and Equation



Elementary School (520)

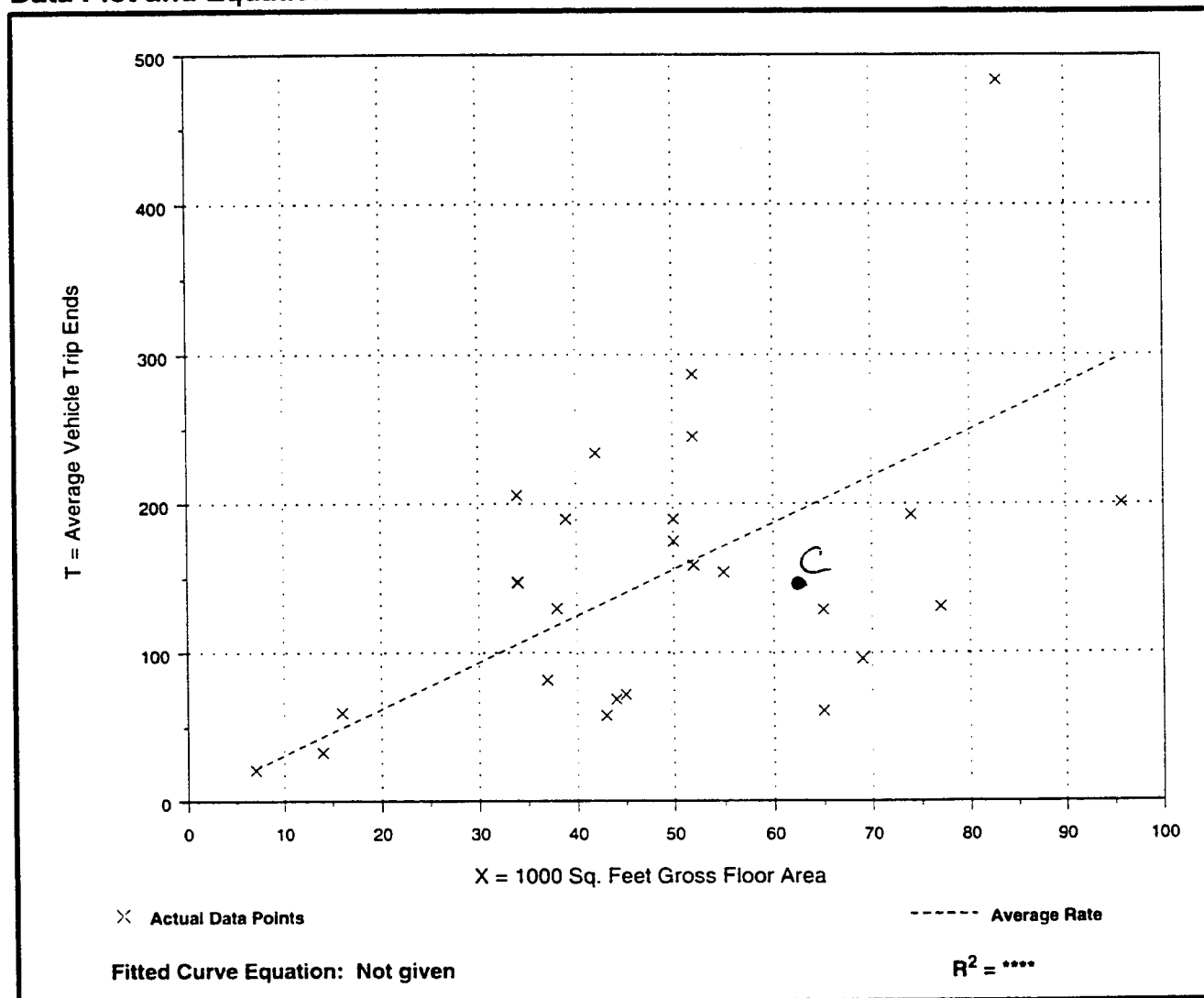
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator**

Number of Studies: 26
Average 1000 Sq. Feet GFA: 49
Directional Distribution: 26% entering, 74% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.12	0.94 - 6.06	2.35

Data Plot and Equation



Middle School/Junior High School (522)

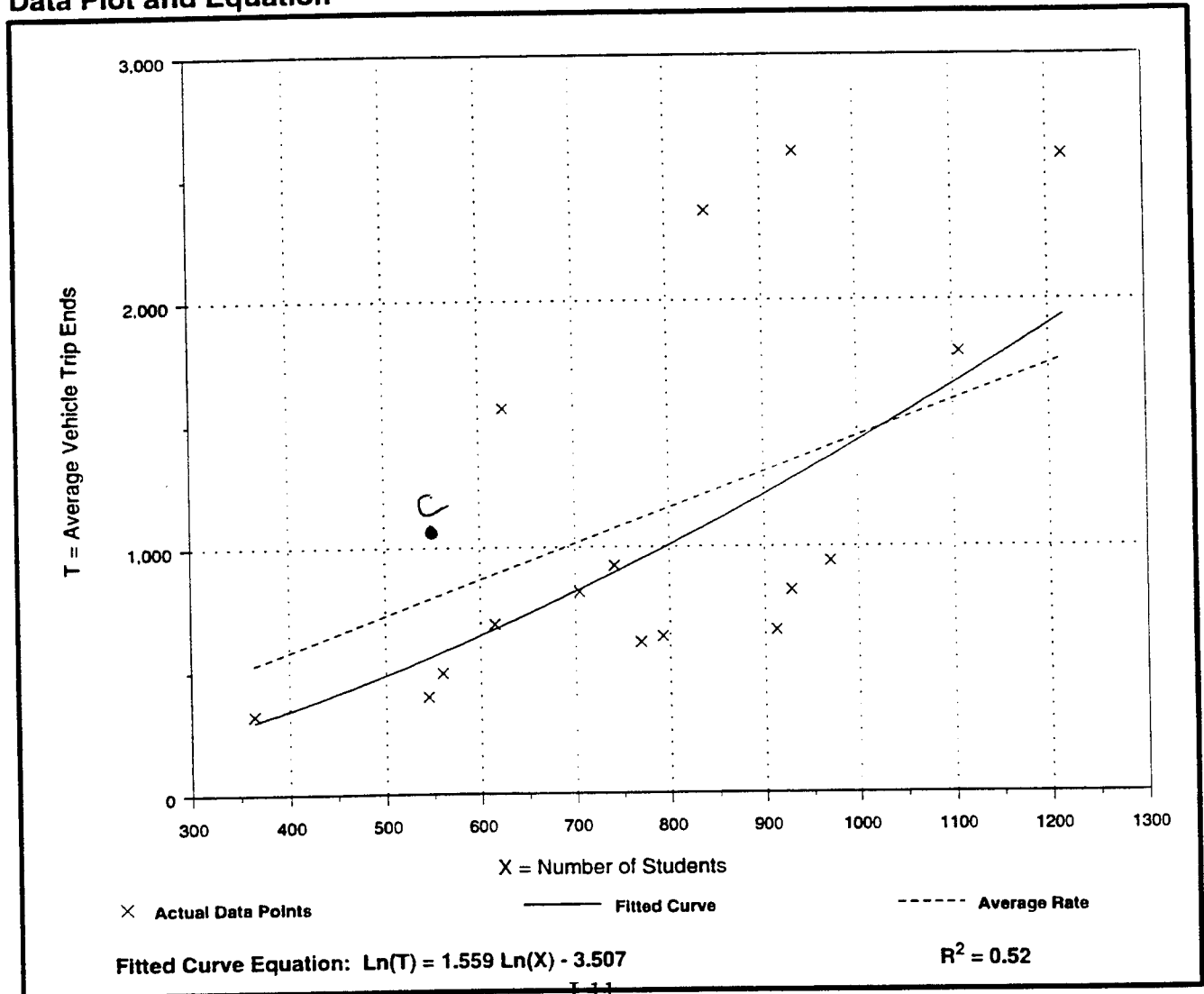
Average Vehicle Trip Ends vs: Students
On a: **Weekday**

Number of Studies: 16
Average Number of Students: 789
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.45	0.72 - 2.81	1.41

Data Plot and Equation



Middle School/Junior High School (522)

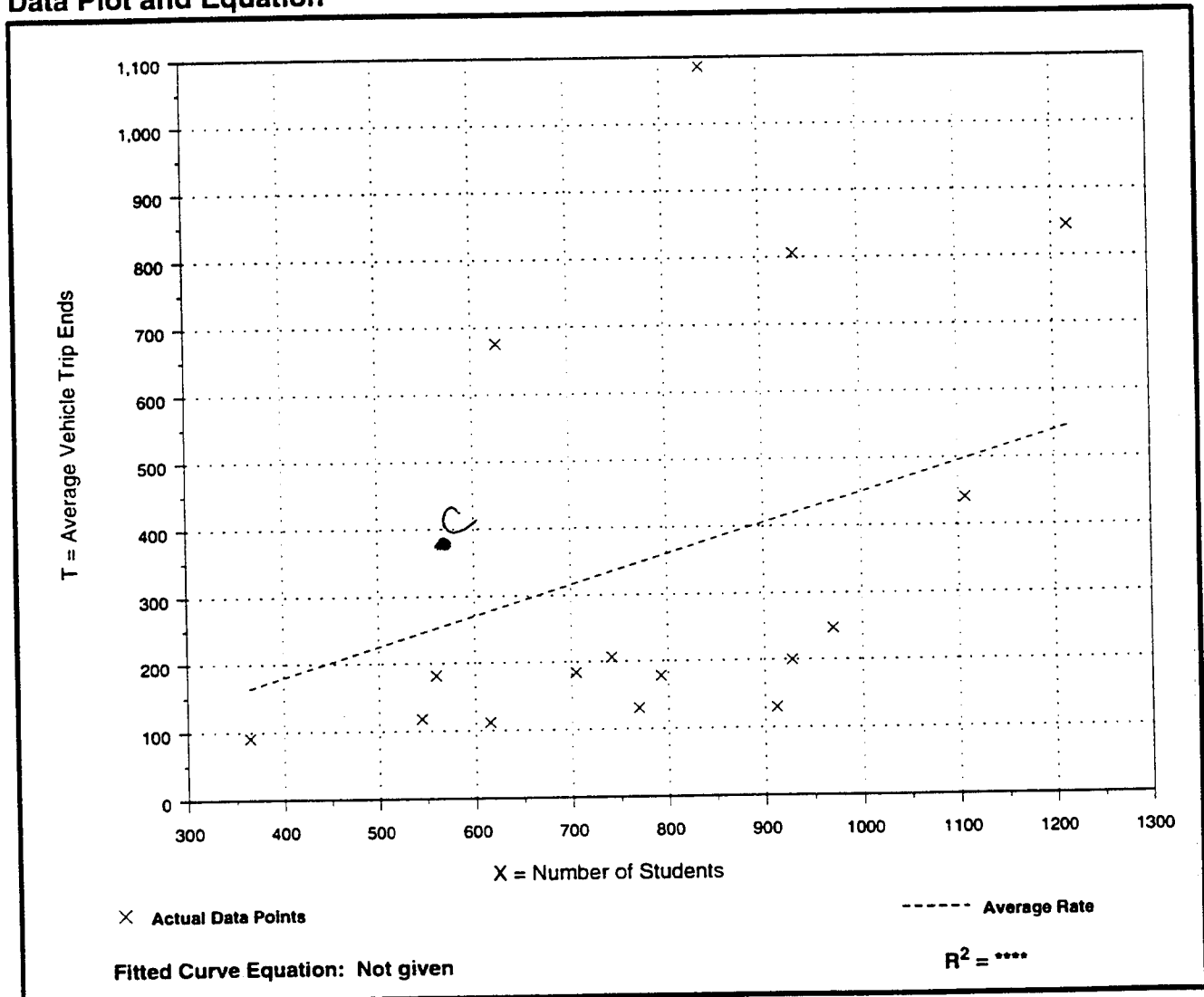
Average Vehicle Trip Ends vs: Students
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
 Average Number of Students: 789
 Directional Distribution: 57% entering, 43% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.45	0.14 - 1.29	0.75

Data Plot and Equation



Middle School/Junior High School (522)

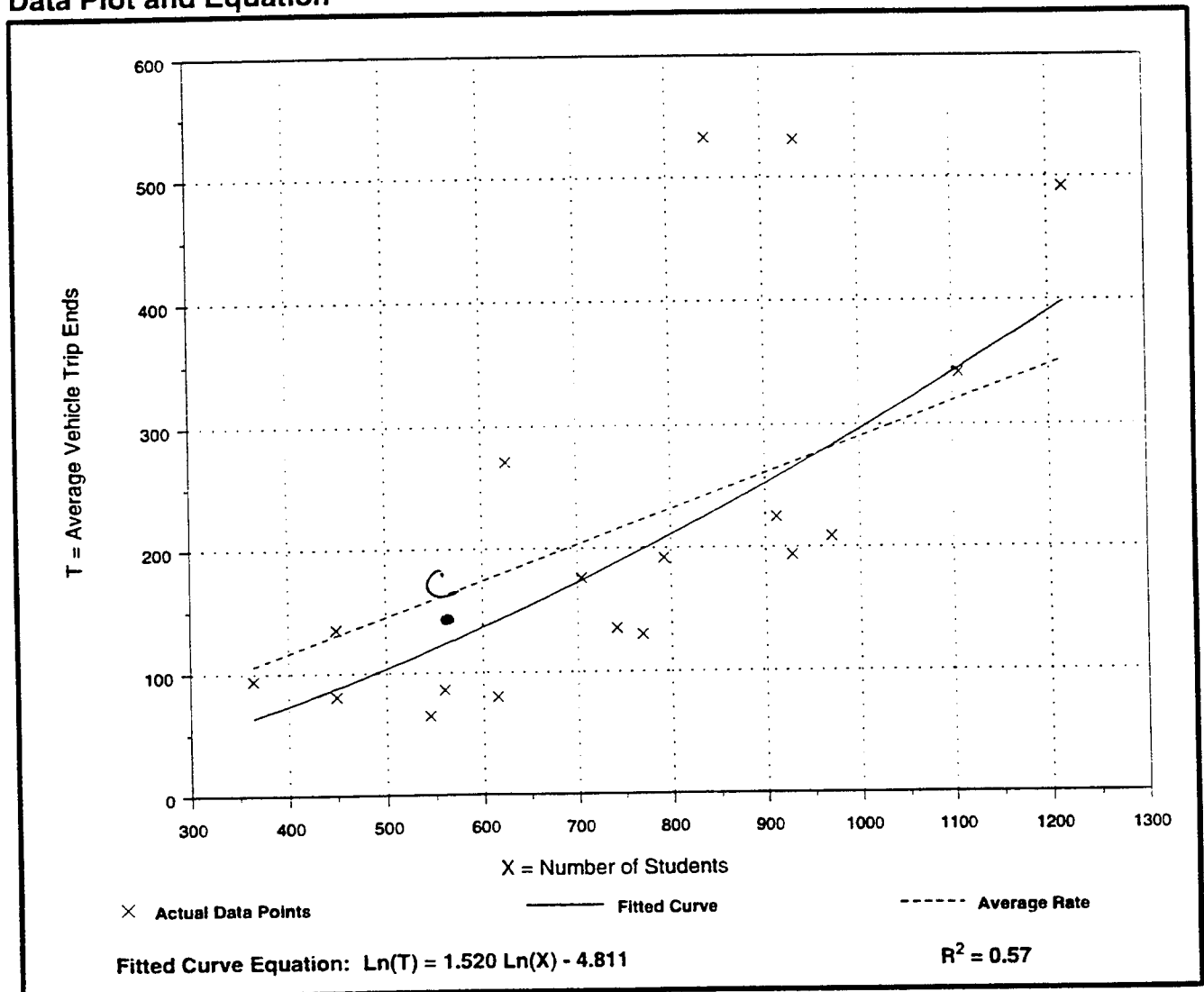
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 18
 Average Number of Students: 752
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.29	0.12 - 0.63	0.56

Data Plot and Equation



Middle School/Junior High School (522)

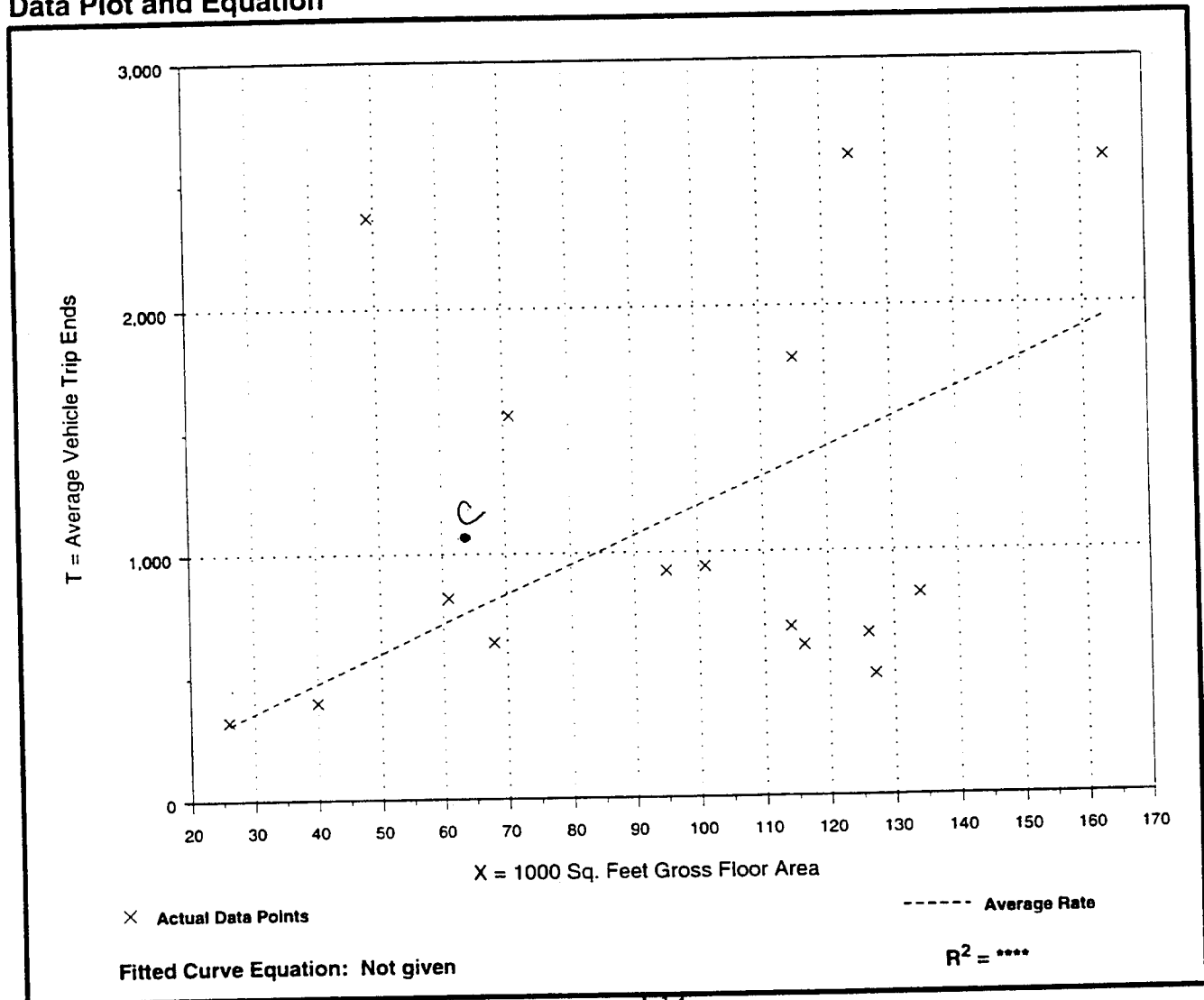
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Weekday**

Number of Studies: 16
Average 1000 Sq. Feet GFA: 96
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
11.92	3.89 - 48.31	9.35

Data Plot and Equation



Middle School/Junior High School (522)

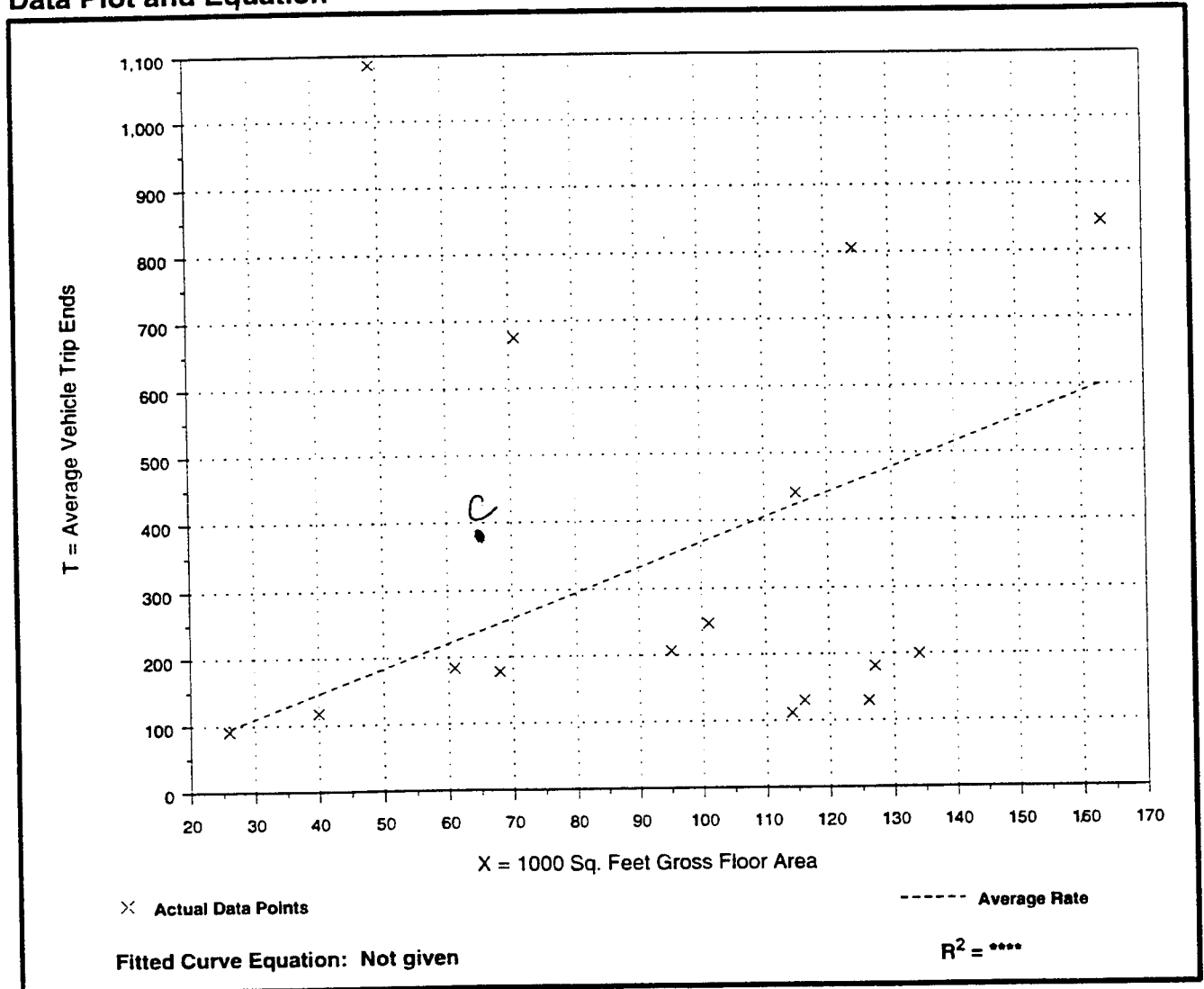
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
 Average 1000 Sq. Feet GFA: 96
 Directional Distribution: 57% entering, 43% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.68	0.98 - 22.16	4.45

Data Plot and Equation



Middle School/Junior High School (522)

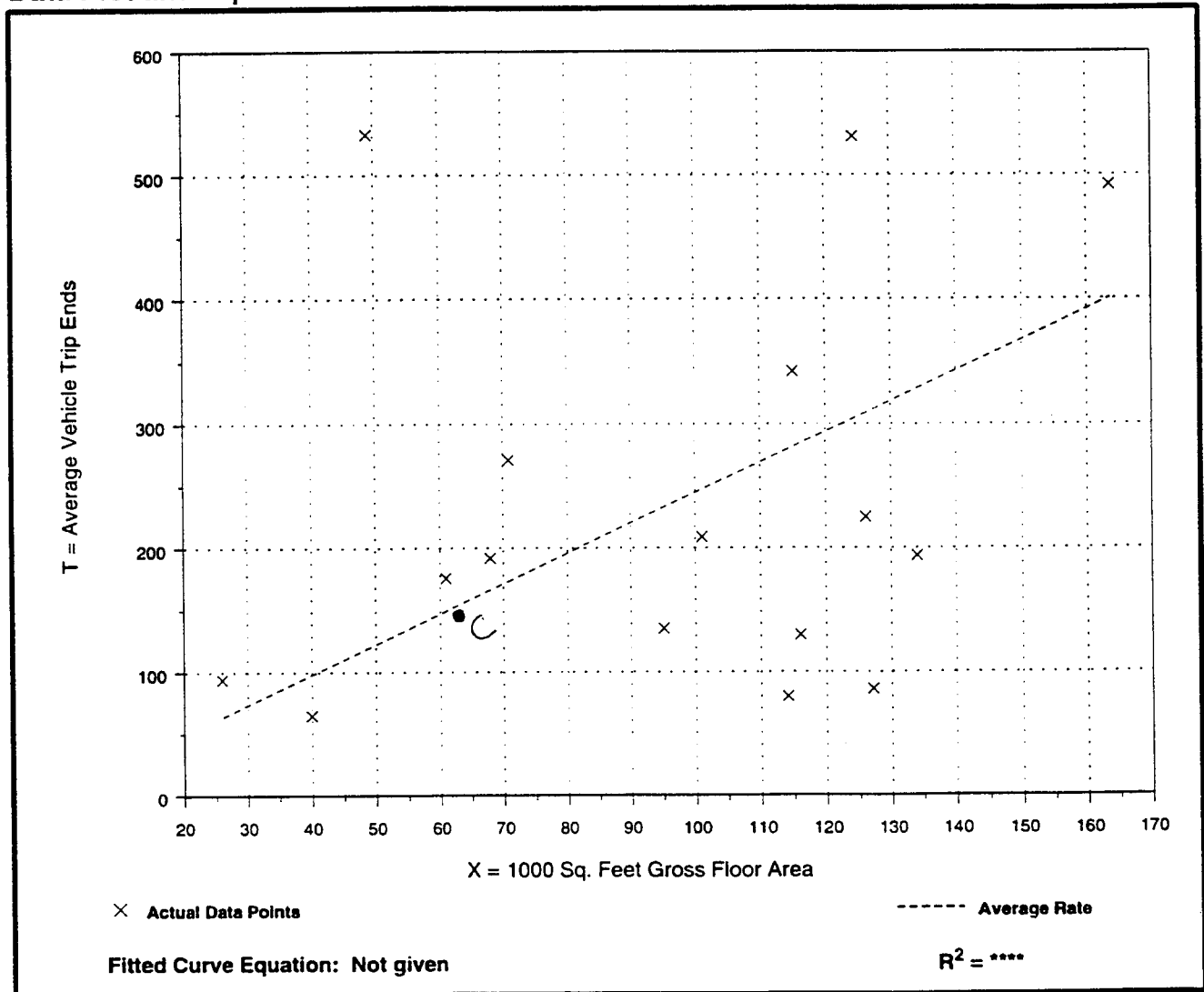
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 16
 Average 1000 Sq. Feet GFA: 96
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.45	0.68 - 10.88	2.45

Data Plot and Equation



High School (530)

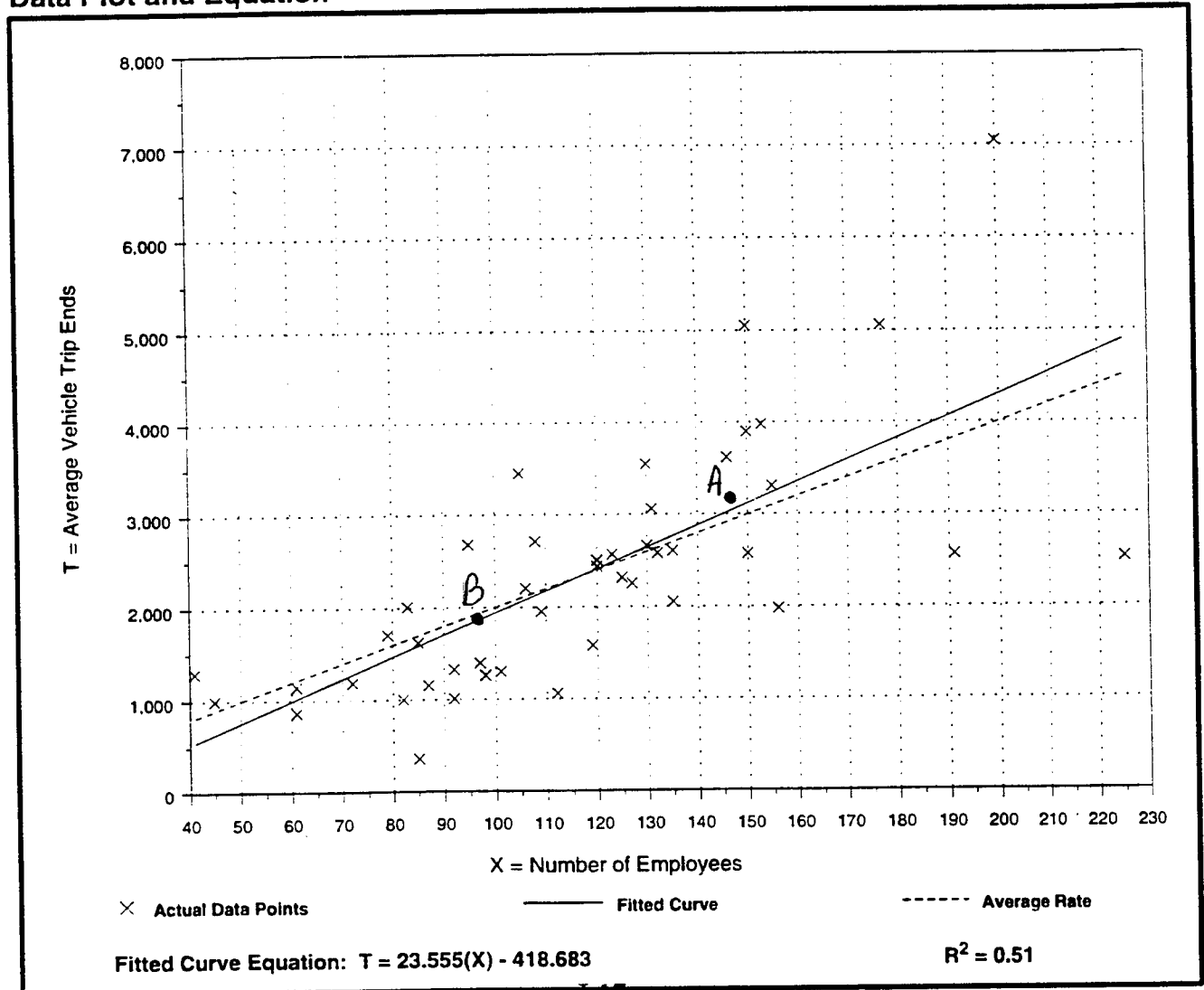
Average Vehicle Trip Ends vs: Employees
On a: **Weekday**

Number of Studies: 45
Avg. Number of Employees: 117
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
19.98	4.28 - 35.26	8.30

Data Plot and Equation



High School (530)

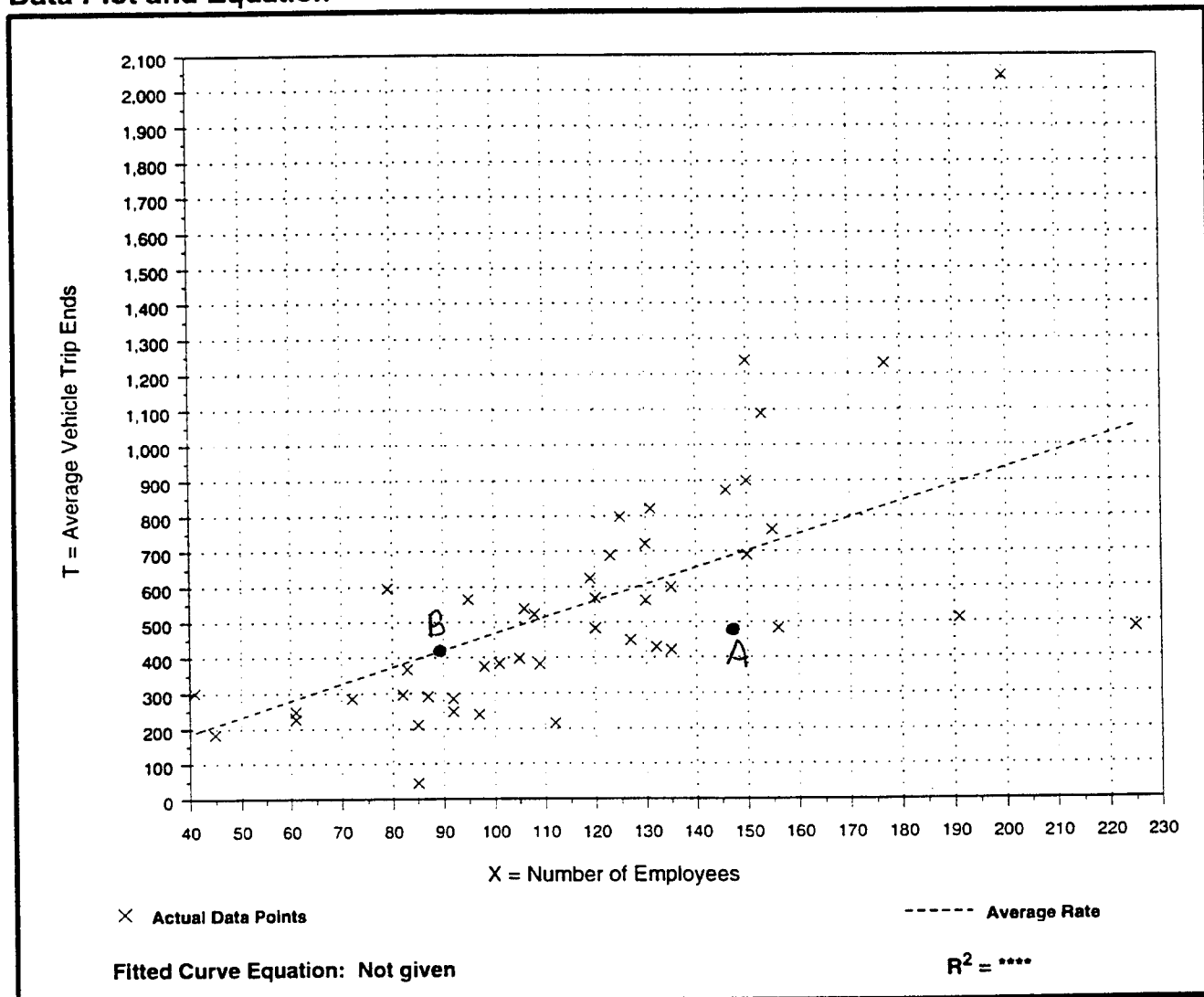
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 45
 Avg. Number of Employees: 117
 Directional Distribution: 72% entering, 28% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.68	0.54 - 10.20	2.92

Data Plot and Equation



High School (530)

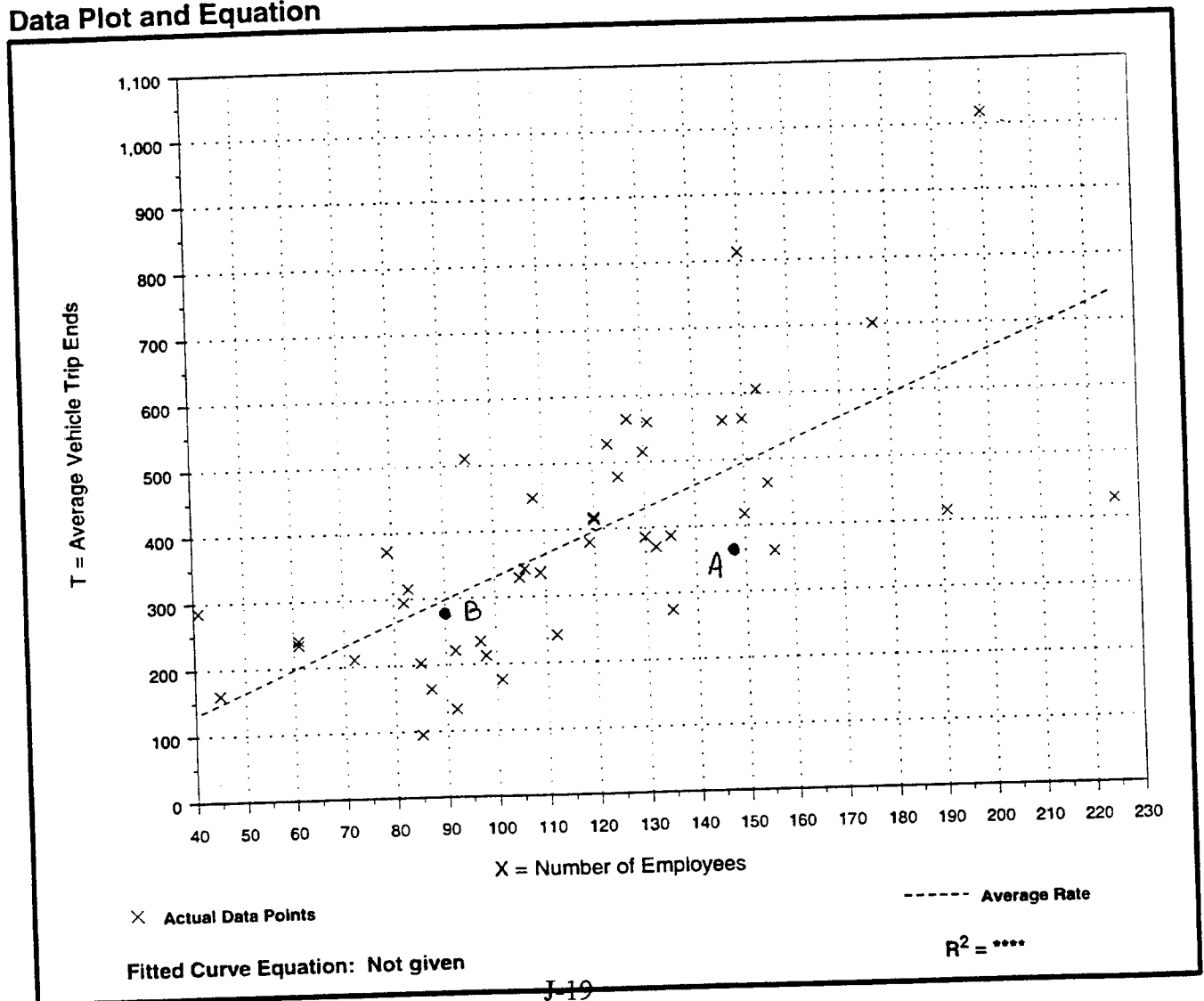
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 45
 Avg. Number of Employees: 117
 Directional Distribution: 30% entering, 70% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.30	1.13 - 6.98	2.10

Data Plot and Equation



High School (530)

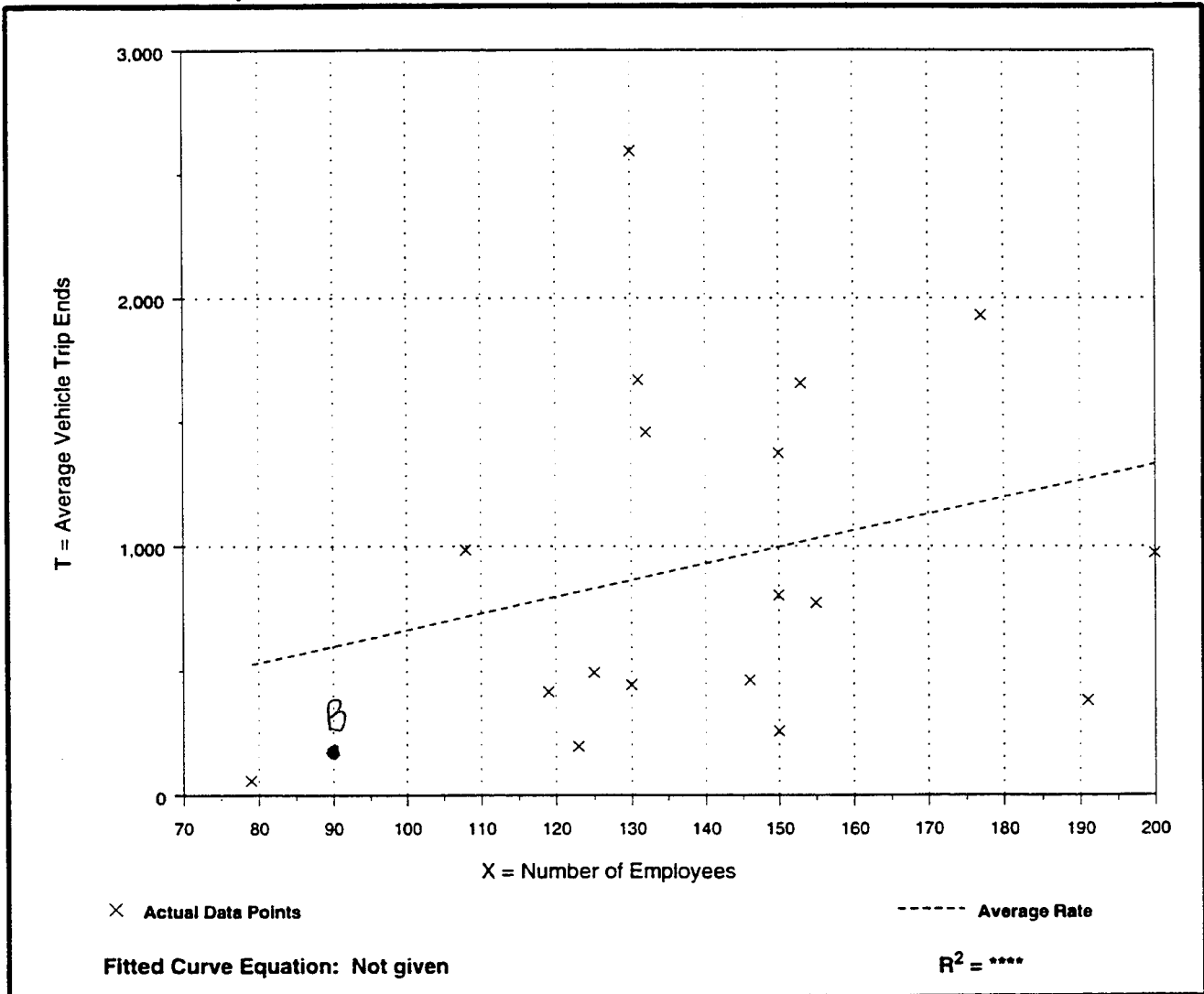
Average Vehicle Trip Ends vs: Employees
On a: **Saturday**

Number of Studies: 18
Avg. Number of Employees: 142
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
6.65	0.75 - 19.95	5.42

Data Plot and Equation



High School (530)

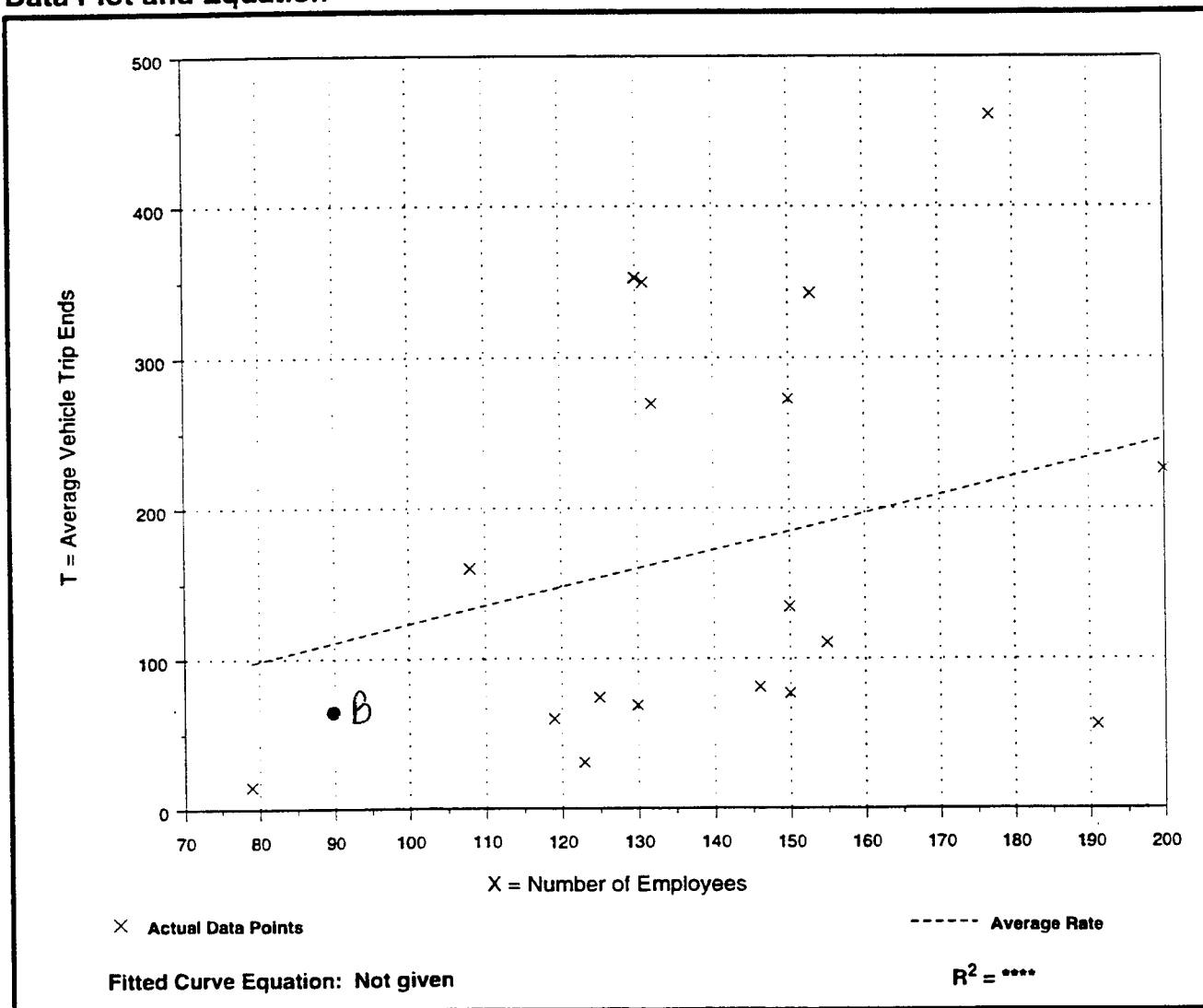
Average Vehicle Trip Ends vs: Employees
On a: Saturday,
Peak Hour of Generator

Number of Studies: 18
Avg. Number of Employees: 142
Directional Distribution: 74% entering, 26% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.23	0.19 - 2.72	1.41

Data Plot and Equation



High School (530)

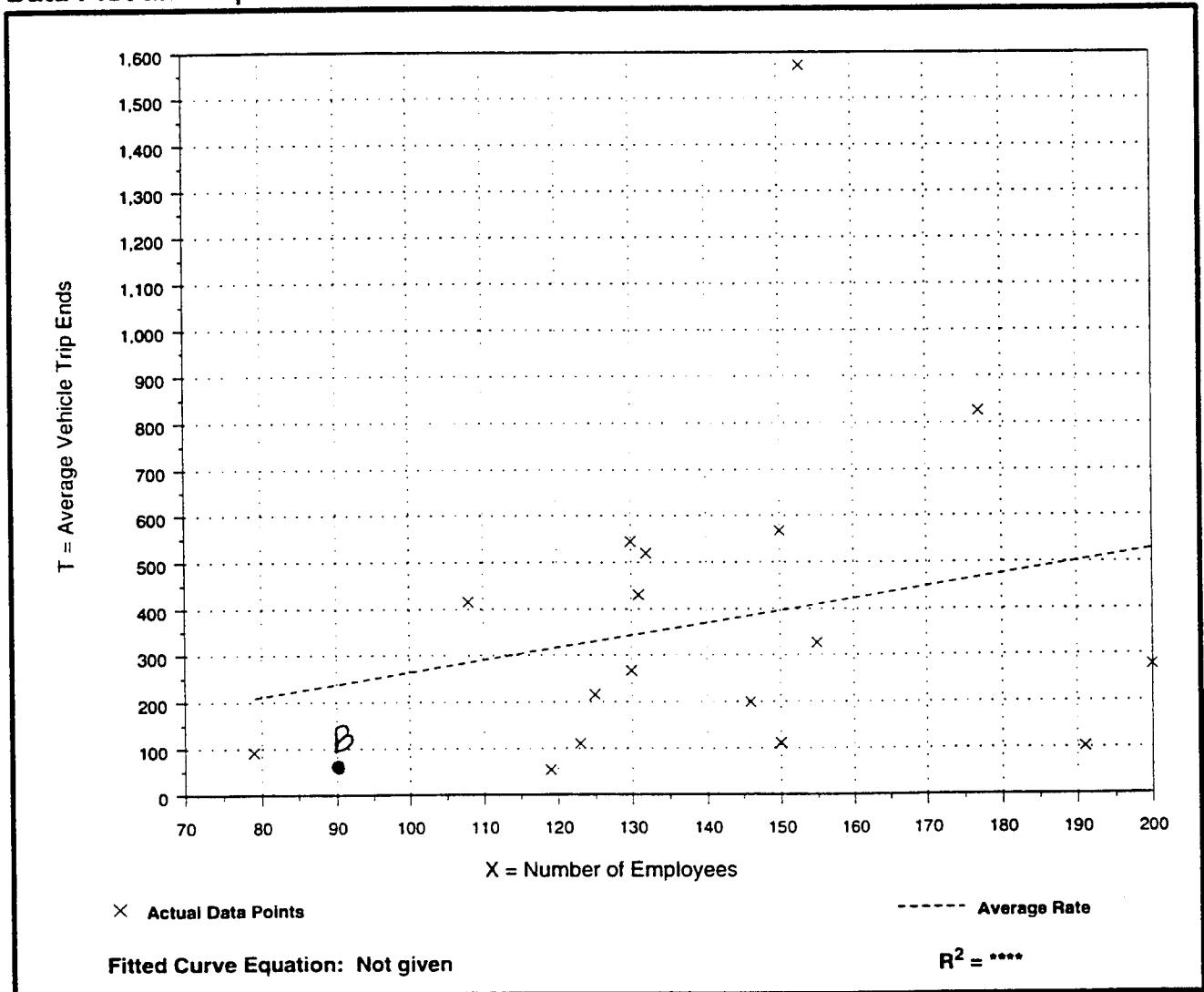
**Average Vehicle Trip Ends vs: Employees
On a: Sunday**

Number of Studies: 18
Avg. Number of Employees: 142
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
2.64	0.45 - 10.27	2.88

Data Plot and Equation



High School (530)

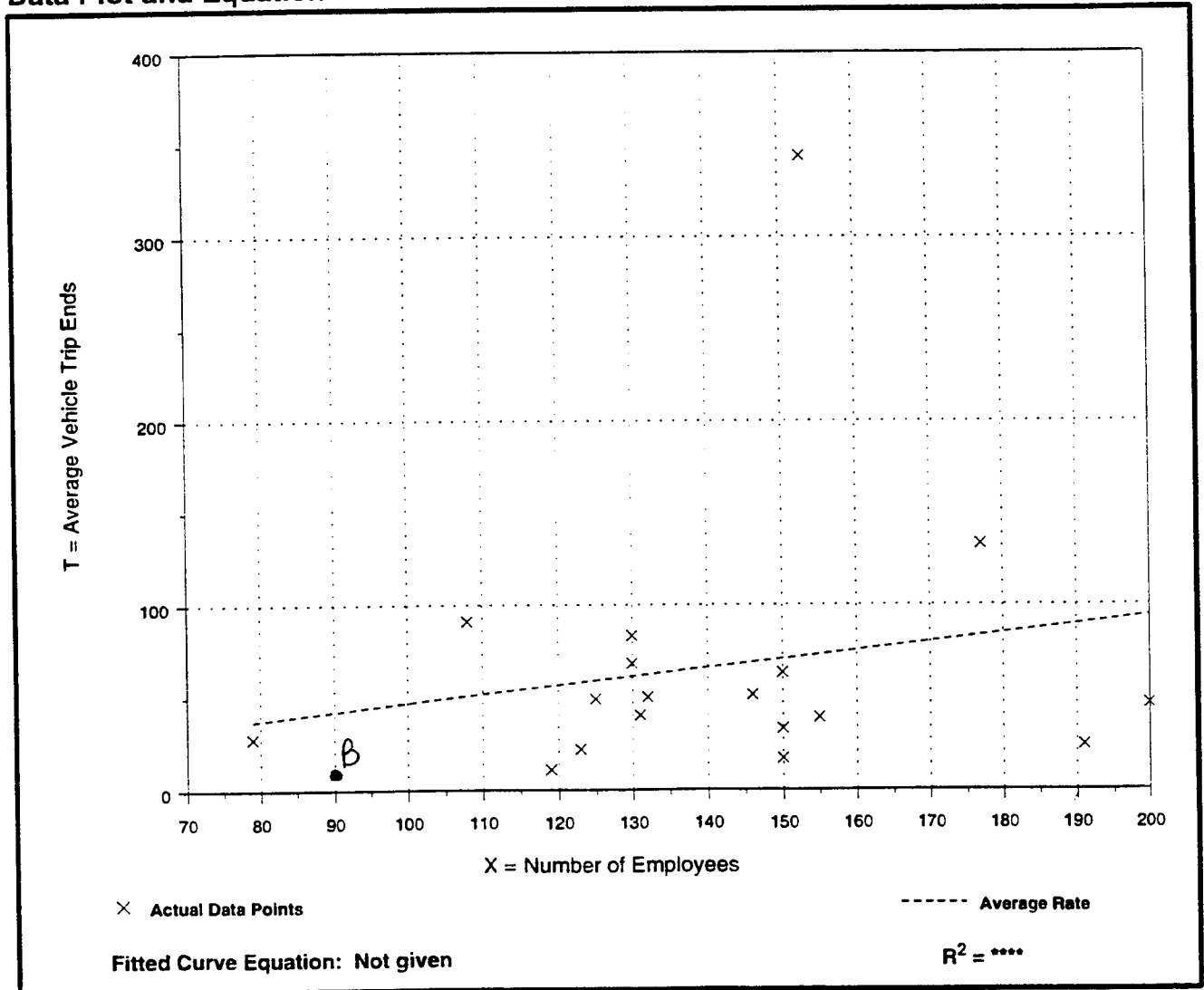
Average Vehicle Trip Ends vs: Employees
On a: Sunday,
Peak Hour of Generator

Number of Studies: 18
Avg. Number of Employees: 142
Directional Distribution: 33% entering, 67% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.47	0.09 - 2.25	0.84

Data Plot and Equation



High School (530)

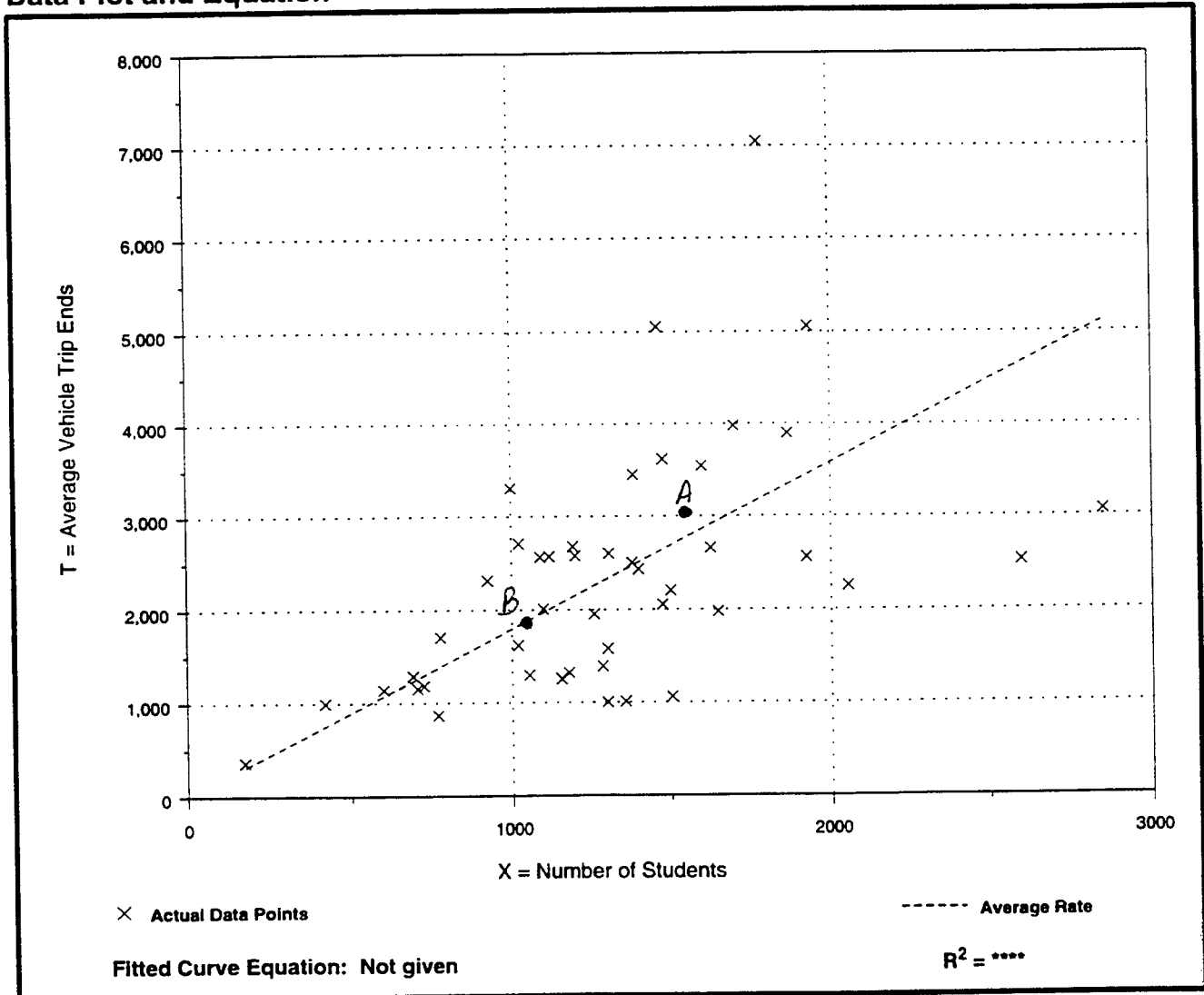
**Average Vehicle Trip Ends vs: Students
On a: Weekday**

Number of Studies: 45
Average Number of Students: 1,309
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.79	0.71 - 3.96	1.54

Data Plot and Equation



High School (530)

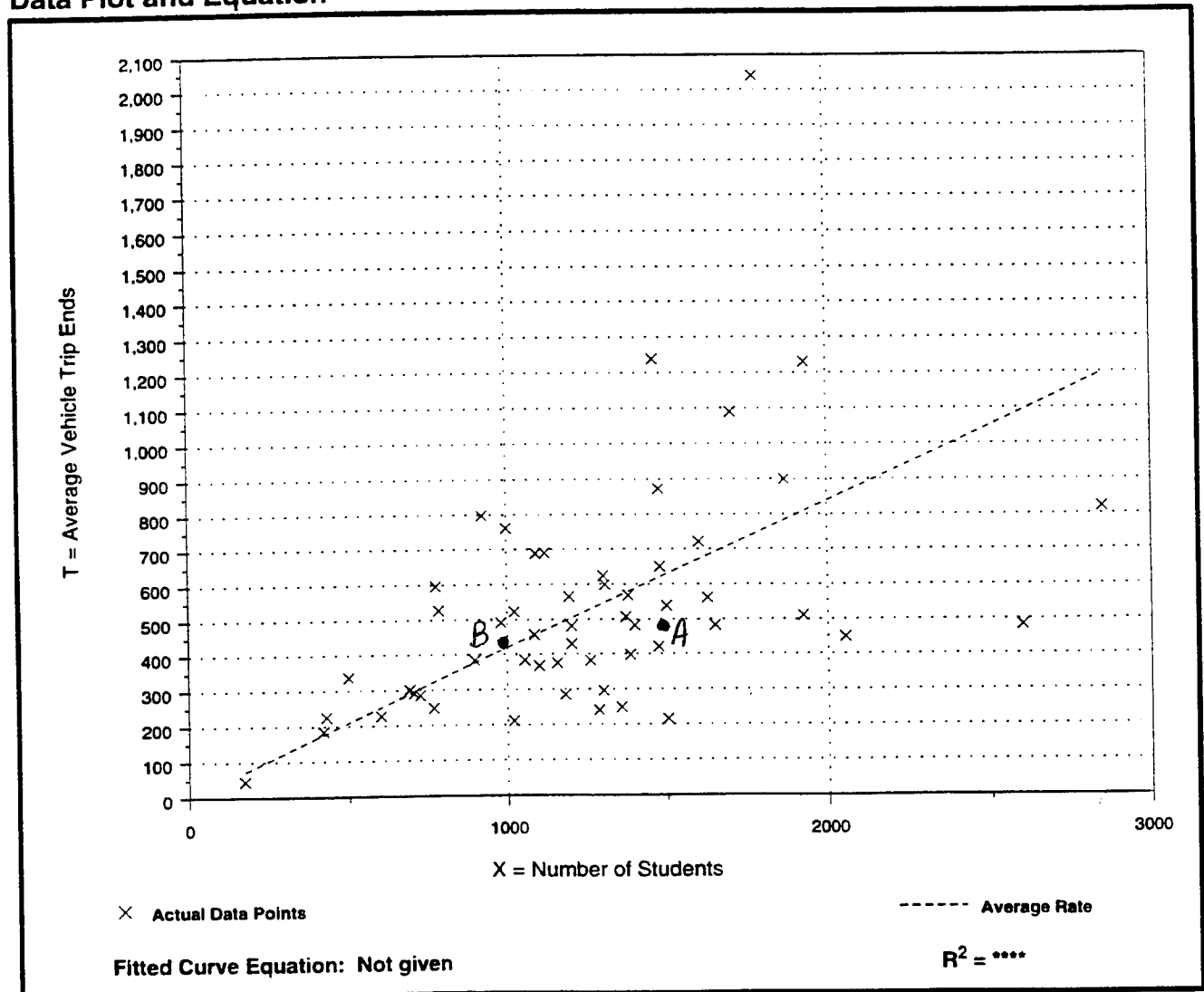
Average Vehicle Trip Ends vs: **Students**
 On a: **Weekday,**
A.M. Peak Hour of Generator

Number of Studies: 54
 Average Number of Students: 1,253
 Directional Distribution: 71% entering, 29% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.42	0.14 - 1.15	0.68

Data Plot and Equation



High School (530)

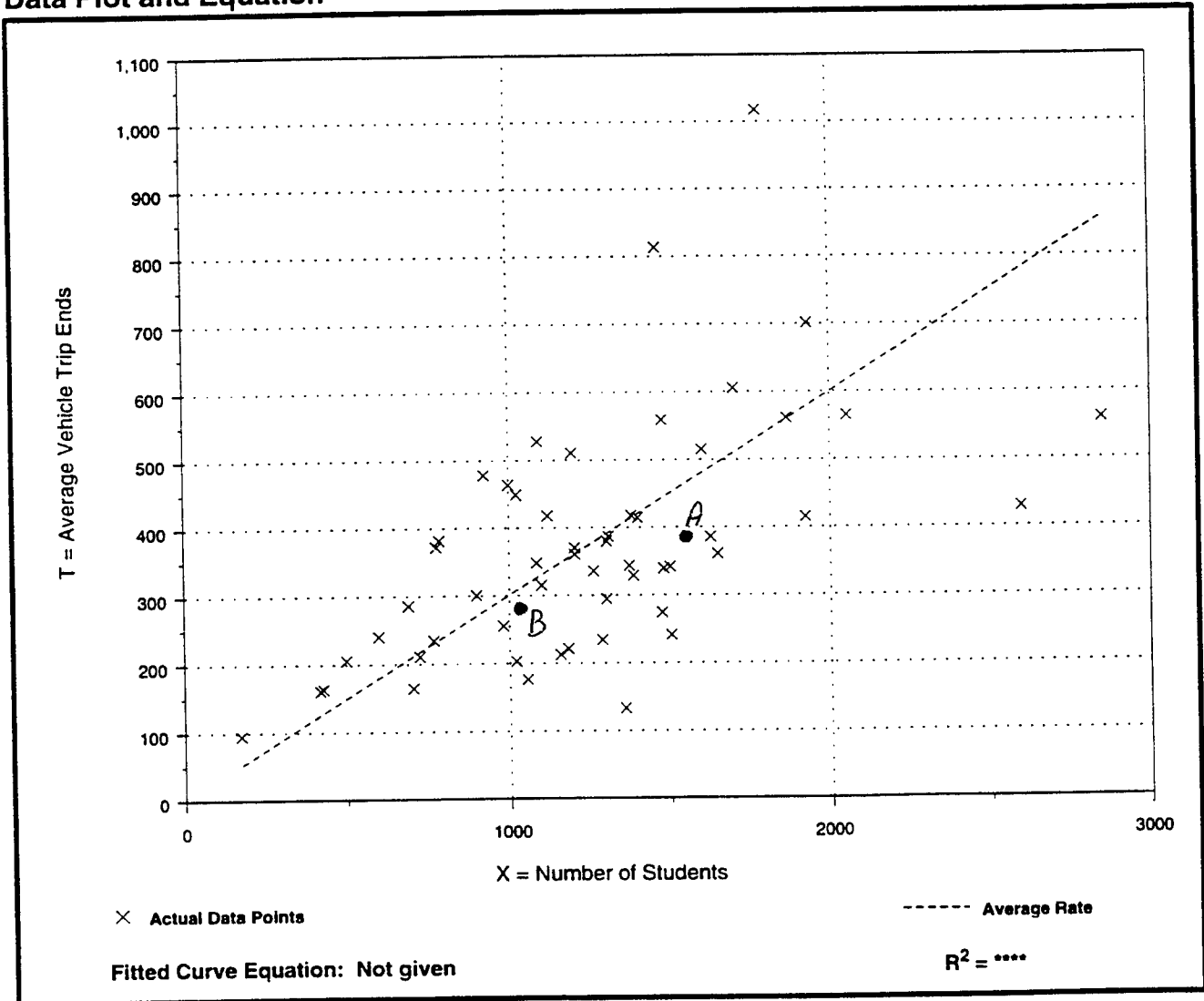
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 54
 Average Number of Students: 1,253
 Directional Distribution: 31% entering, 69% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.30	0.10 - 0.57	0.56

Data Plot and Equation



High School (530)

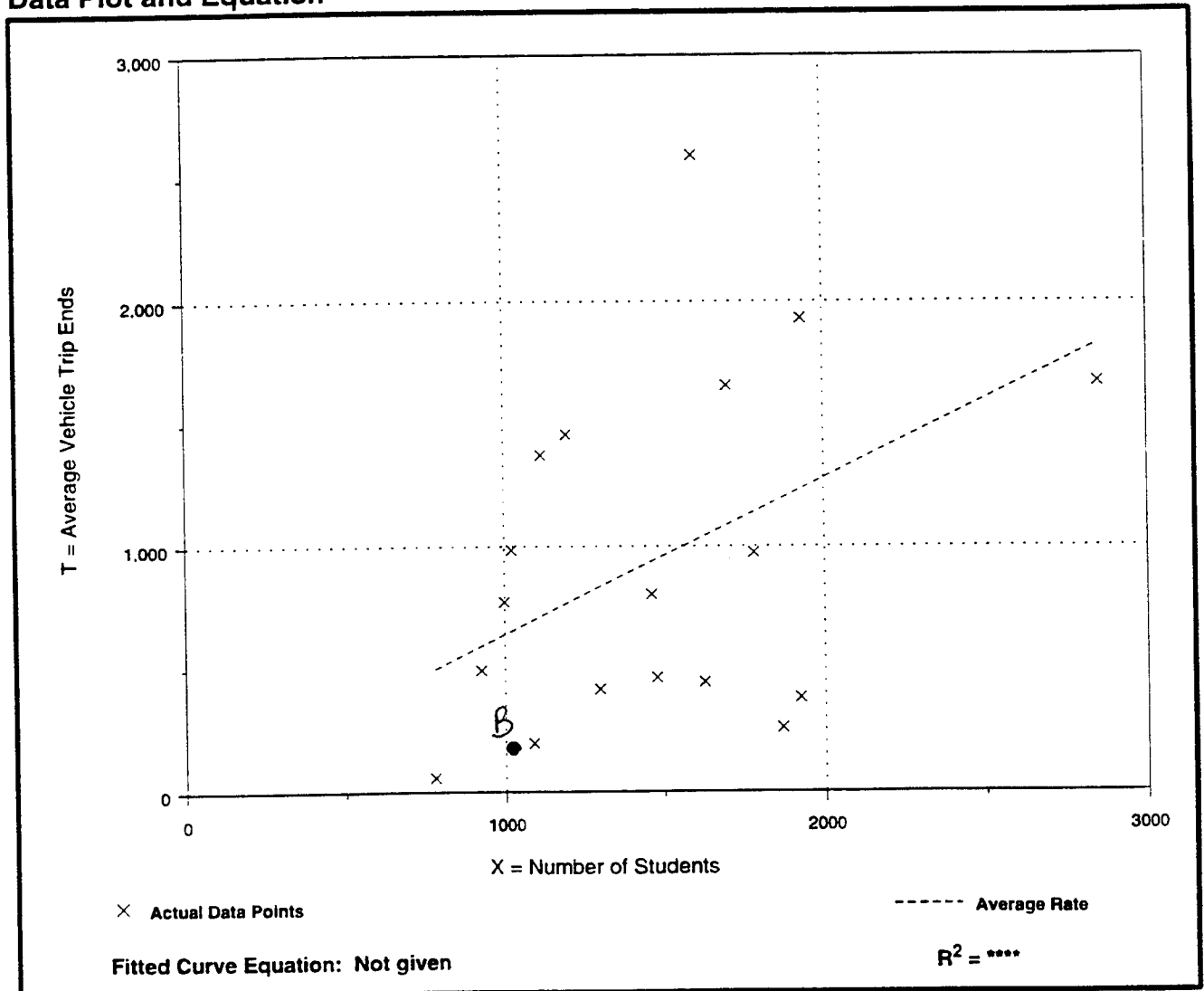
**Average Vehicle Trip Ends vs: Students
On a: Saturday**

Number of Studies: 18
Average Number of Students: 1,481
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.64	0.08 - 1.62	0.90

Data Plot and Equation



High School (530)

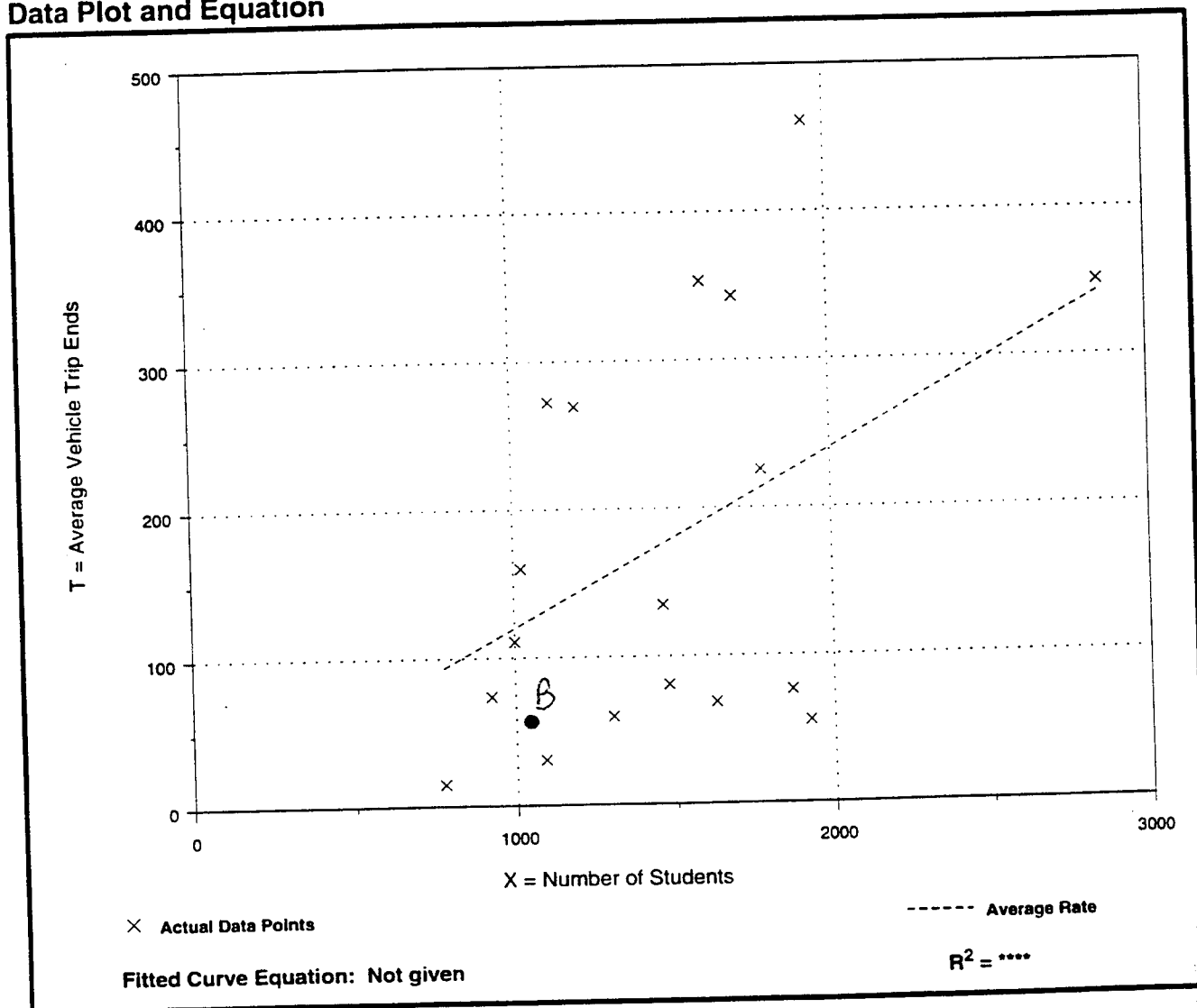
Average Vehicle Trip Ends vs: Students
On a: Saturday,
Peak Hour of Generator

Number of Studies: 18
Average Number of Students: 1,481
Directional Distribution: 74% entering, 26% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.12	0.02 - 0.24	0.35

Data Plot and Equation



High School (530)

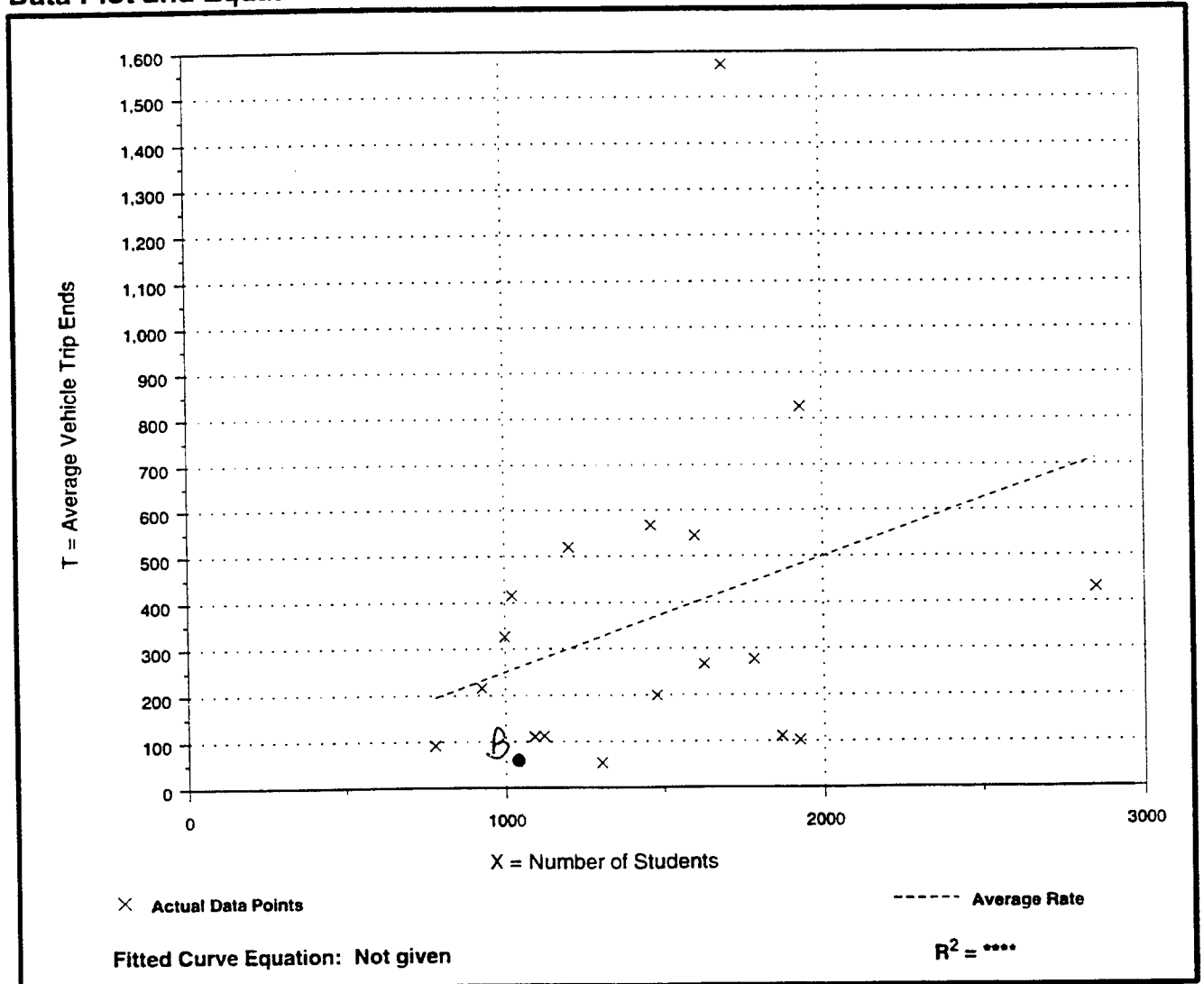
Average Vehicle Trip Ends vs: Students
On a: **Sunday**

Number of Studies: 18
Average Number of Students: 1,481
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.25	0.04 - 0.92	0.55

Data Plot and Equation



High School (530)

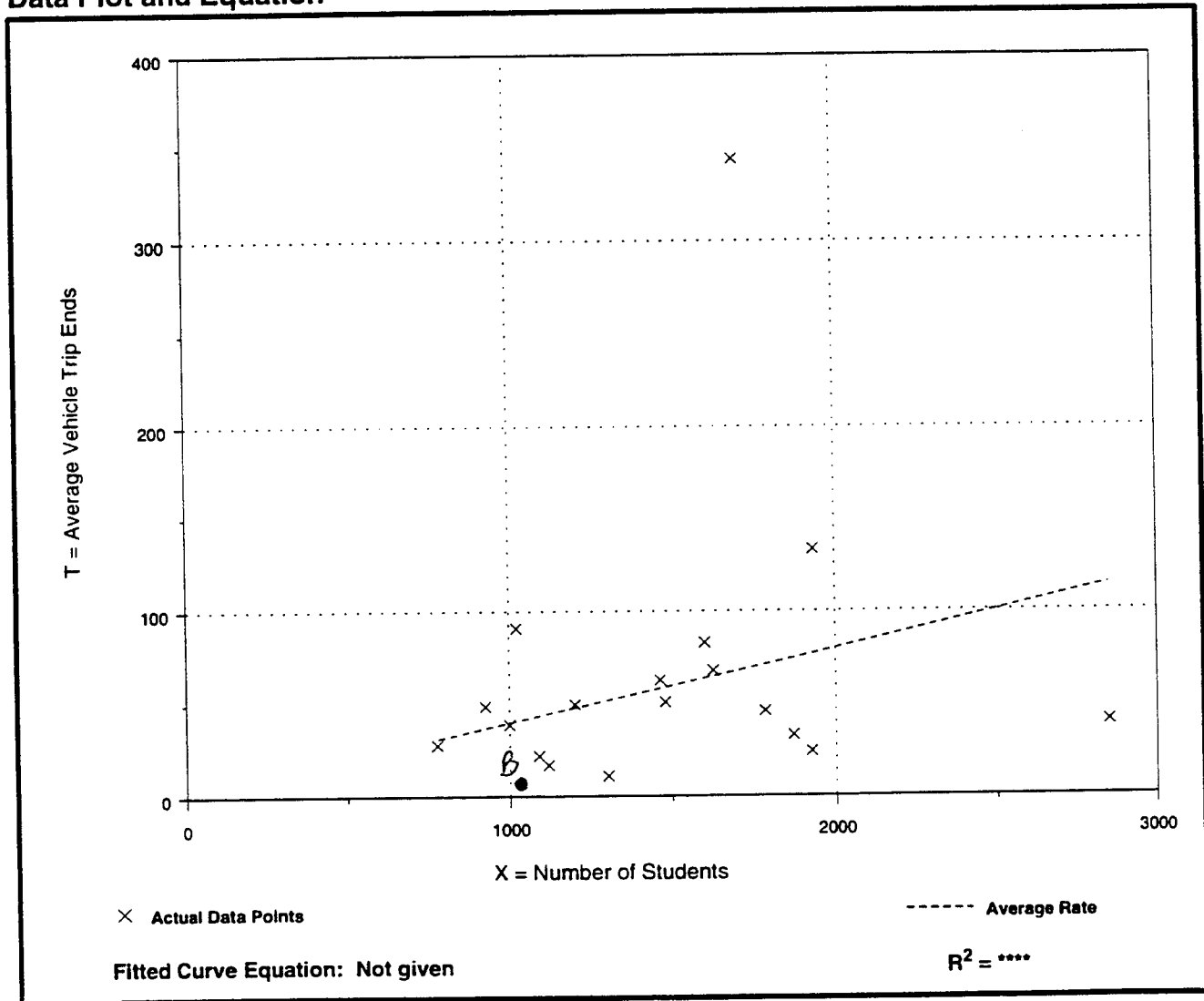
Average Vehicle Trip Ends vs: **Students**
 On a: **Sunday,**
Peak Hour of Generator

Number of Studies: 18
 Average Number of Students: 1,481
 Directional Distribution: 33% entering, 67% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.04	0.01 - 0.20	0.22

Data Plot and Equation



High School (530)

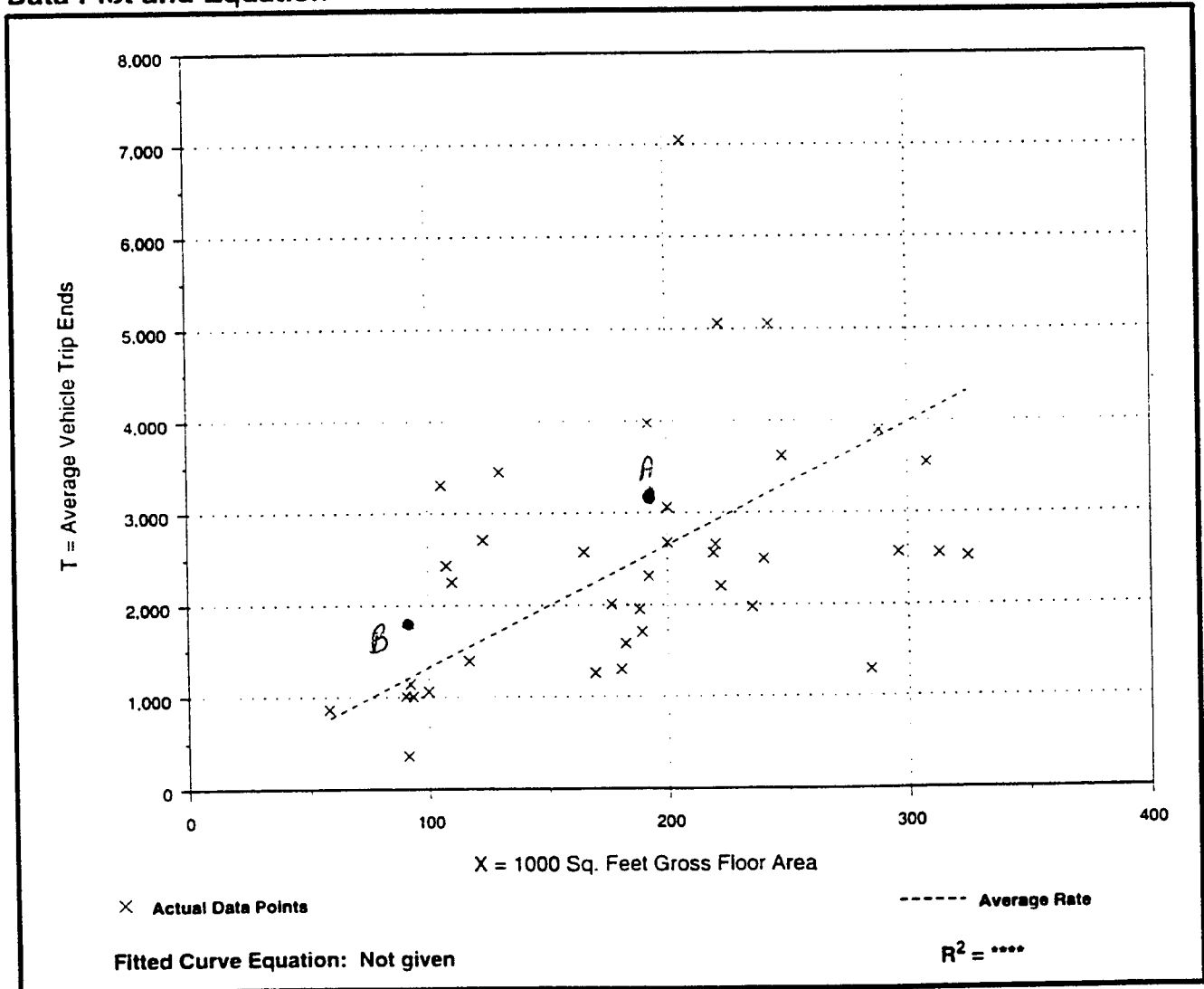
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

Number of Studies: 38
Average 1000 Sq. Feet GFA: 187
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
13.27	4.00 - 34.06	7.51

Data Plot and Equation



High School (530)

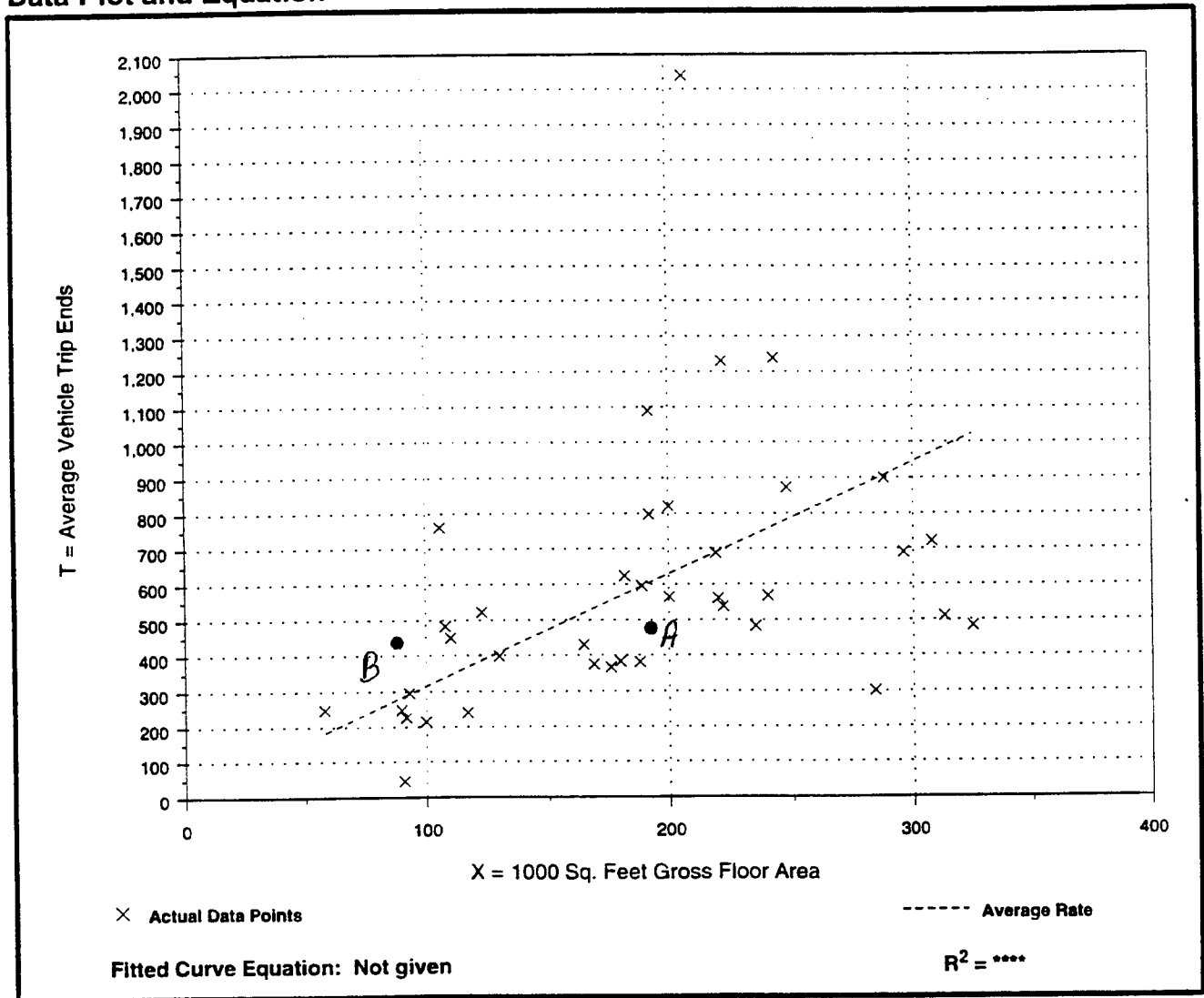
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 38
 Average 1000 Sq. Feet GFA: 187
 Directional Distribution: 72% entering, 28% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.15	0.51 - 9.86	2.47

Data Plot and Equation



High School (530)

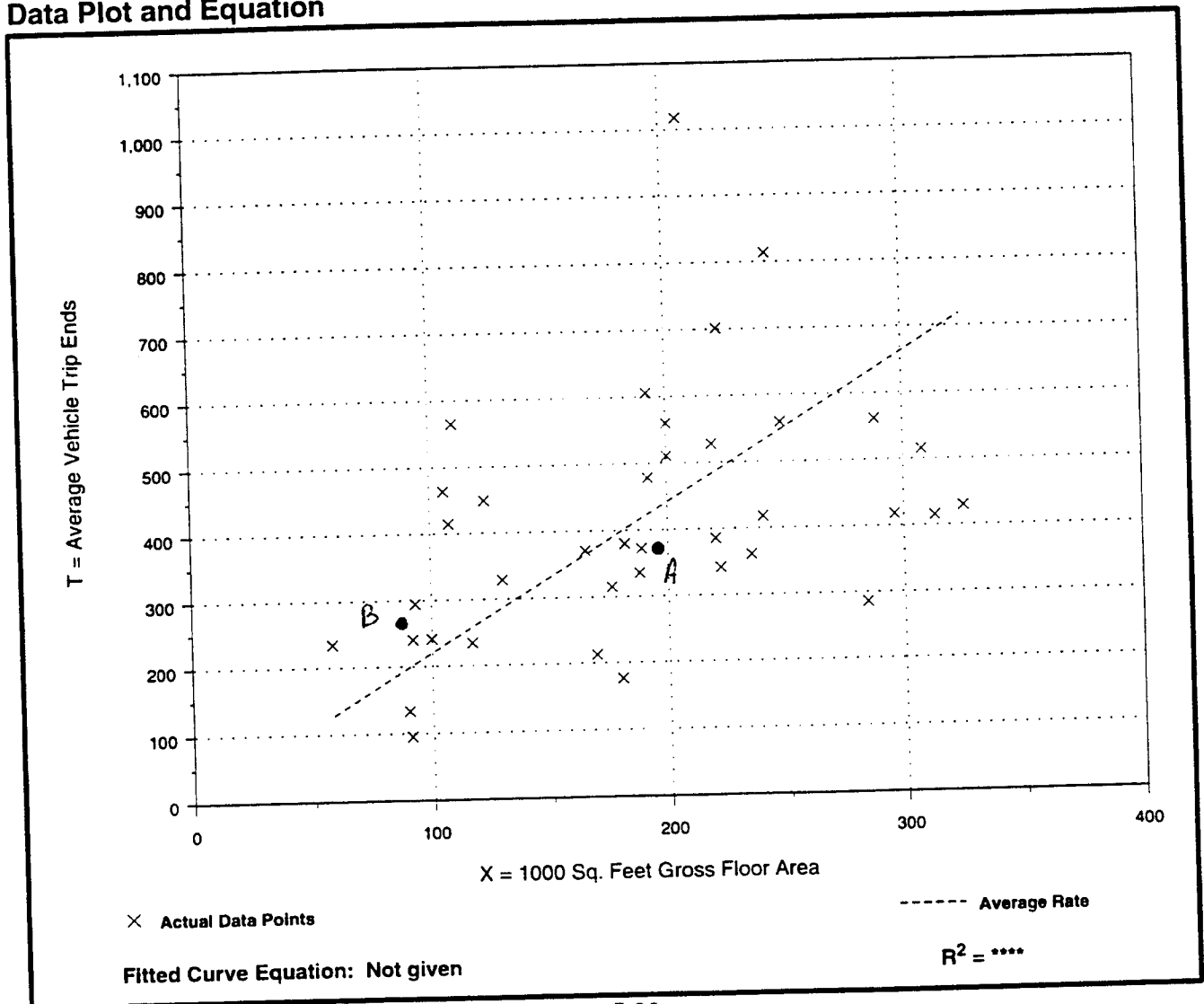
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 38
Average 1000 Sq. Feet GFA: 187
Directional Distribution: 30% entering, 70% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.21	0.98 - 5.14	1.78

Data Plot and Equation



High School (530)

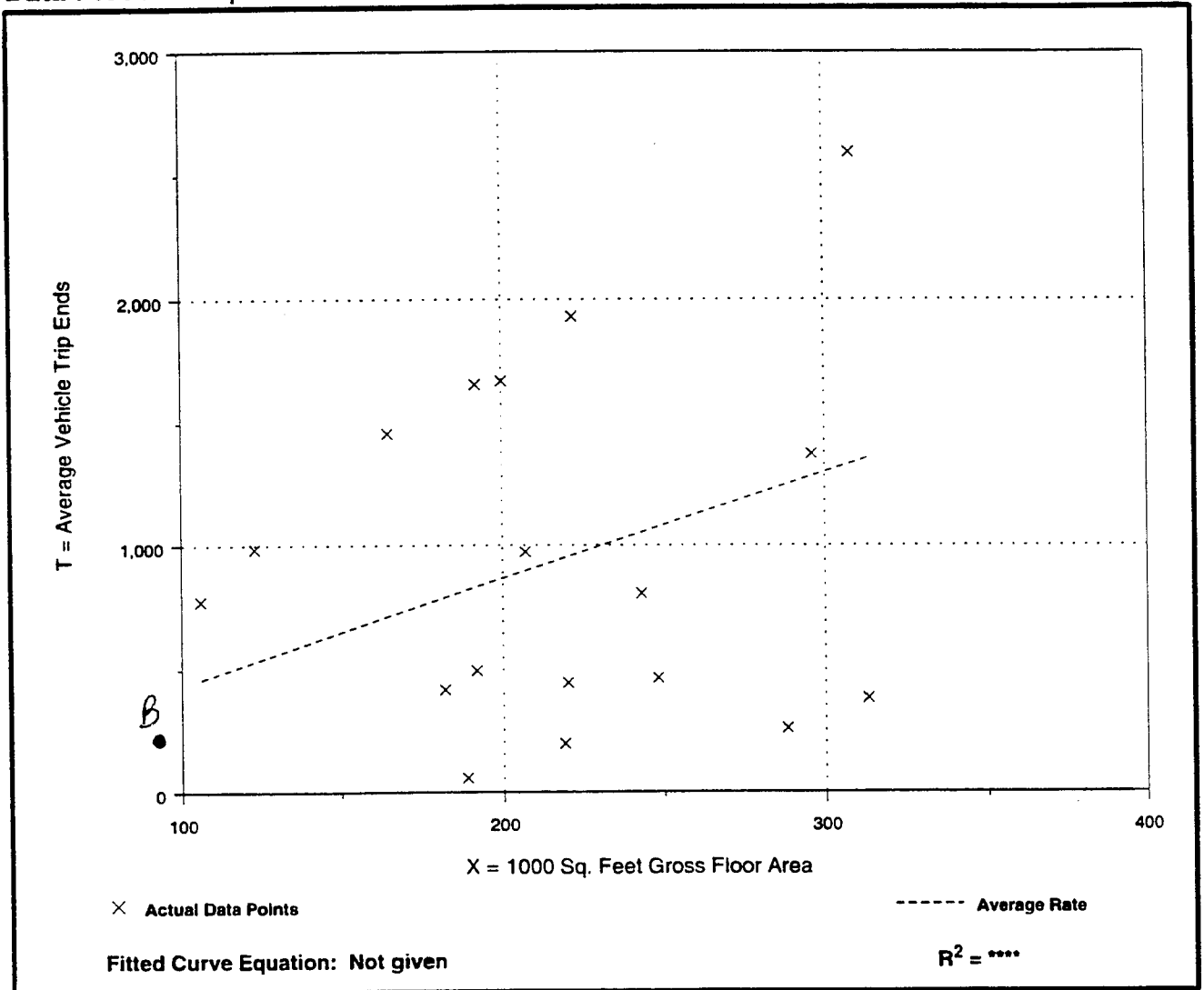
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Saturday**

Number of Studies: 18
Average 1000 Sq. Feet GFA: 217
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.33	0.31 - 8.85	3.76

Data Plot and Equation



High School (530)

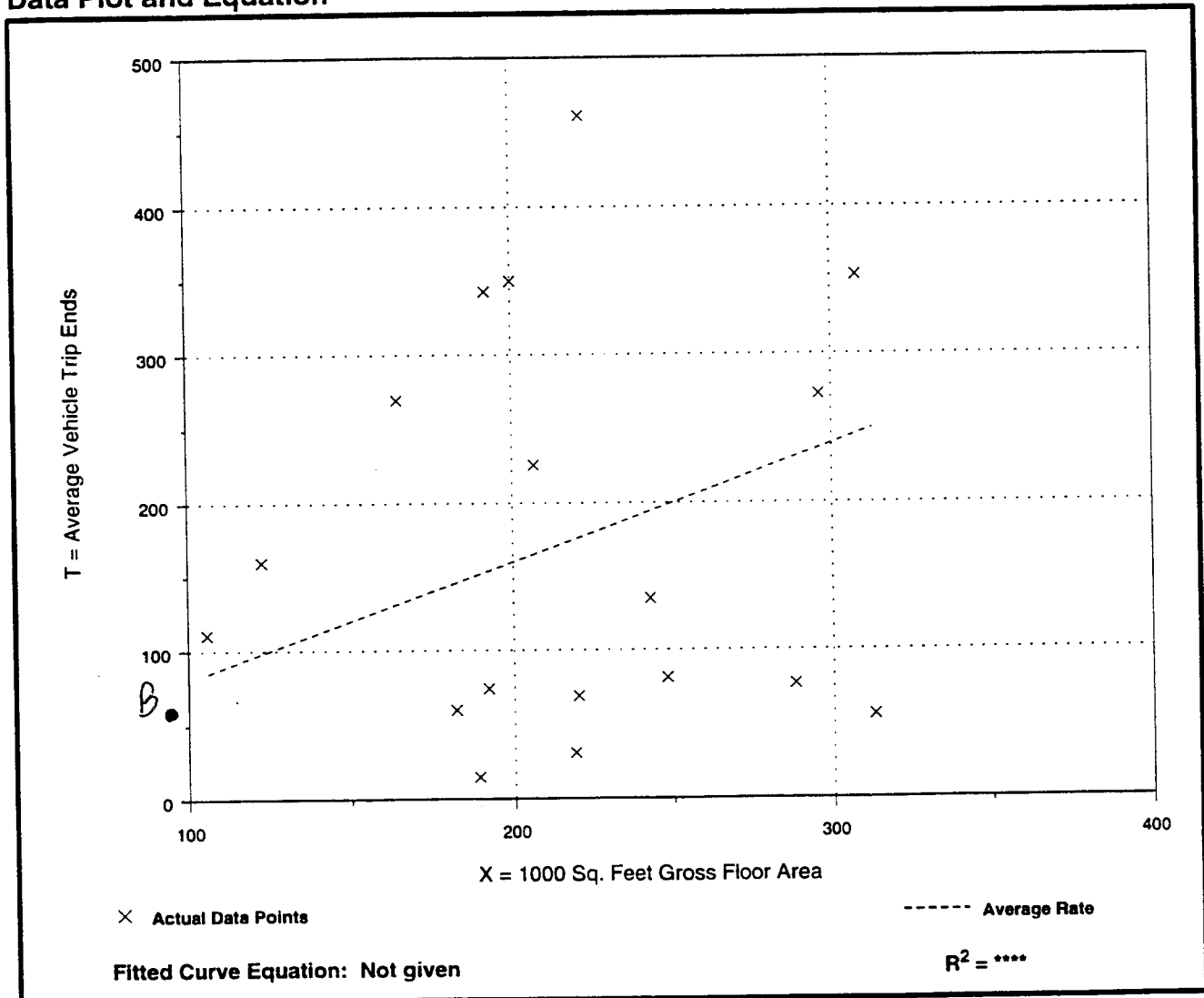
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday,
Peak Hour of Generator

Number of Studies: 18
 Average 1000 Sq. Feet GFA: 217
 Directional Distribution: 74% entering, 26% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.80	0.08 - 2.08	1.09

Data Plot and Equation



High School (530)

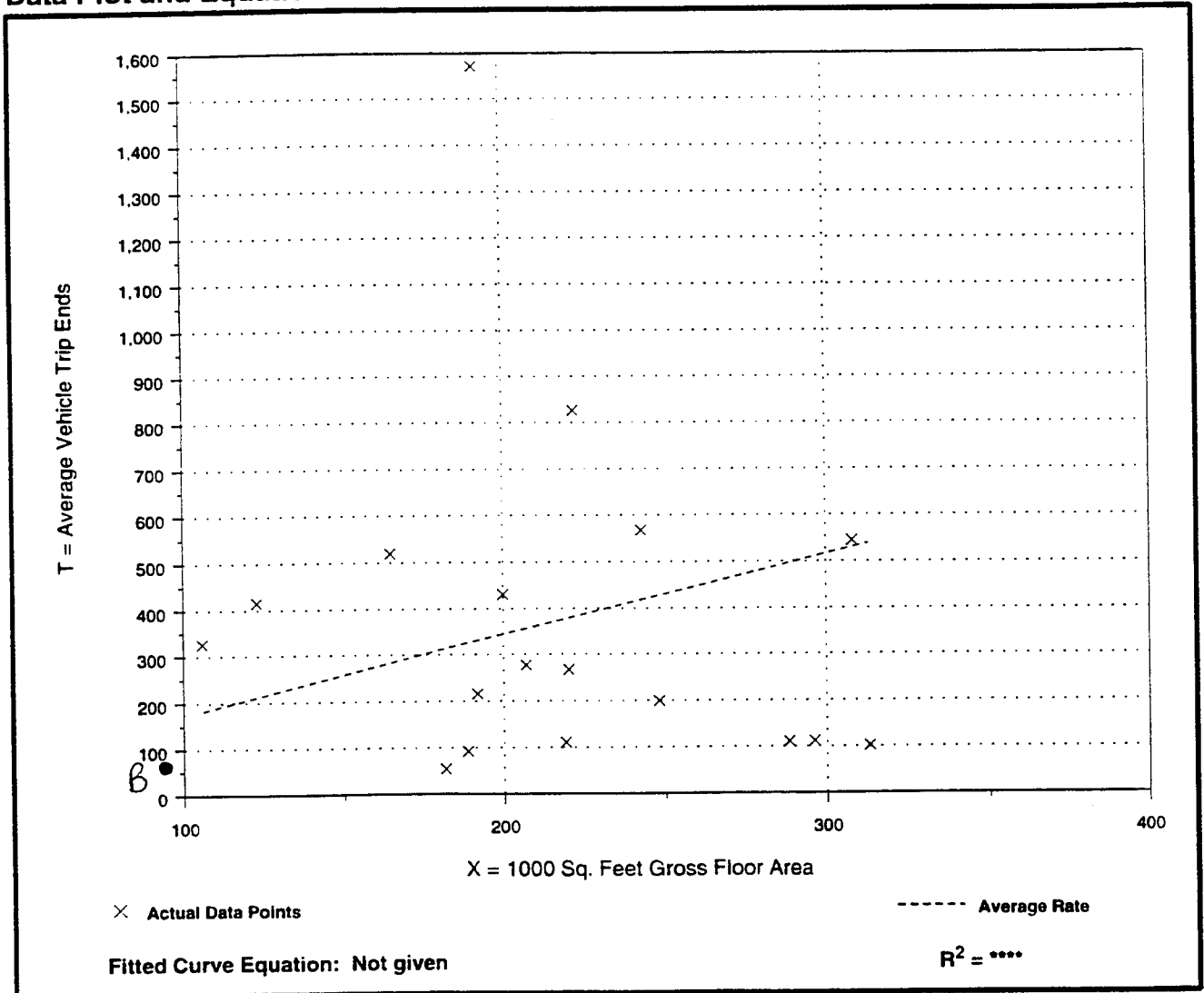
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Sunday**

Number of Studies: 18
Average 1000 Sq. Feet GFA: 217
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.72	0.30 - 8.19	2.24

Data Plot and Equation



High School (530)

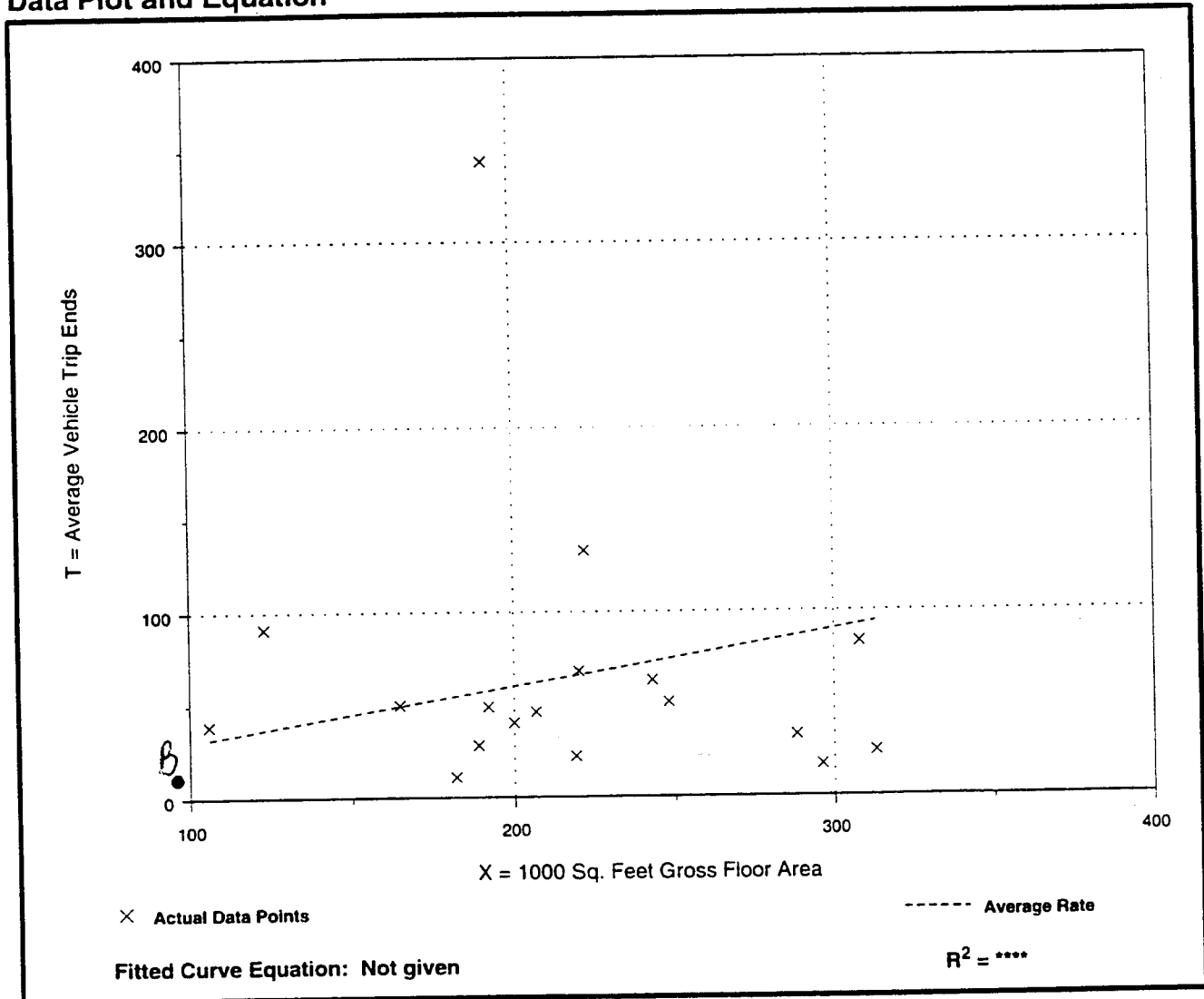
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Sunday,
Peak Hour of Generator

Number of Studies: 18
Average 1000 Sq. Feet GFA: 217
Directional Distribution: 33% entering, 67% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.30	0.06 - 1.79	0.67

Data Plot and Equation



Middle School/Junior High School (522)

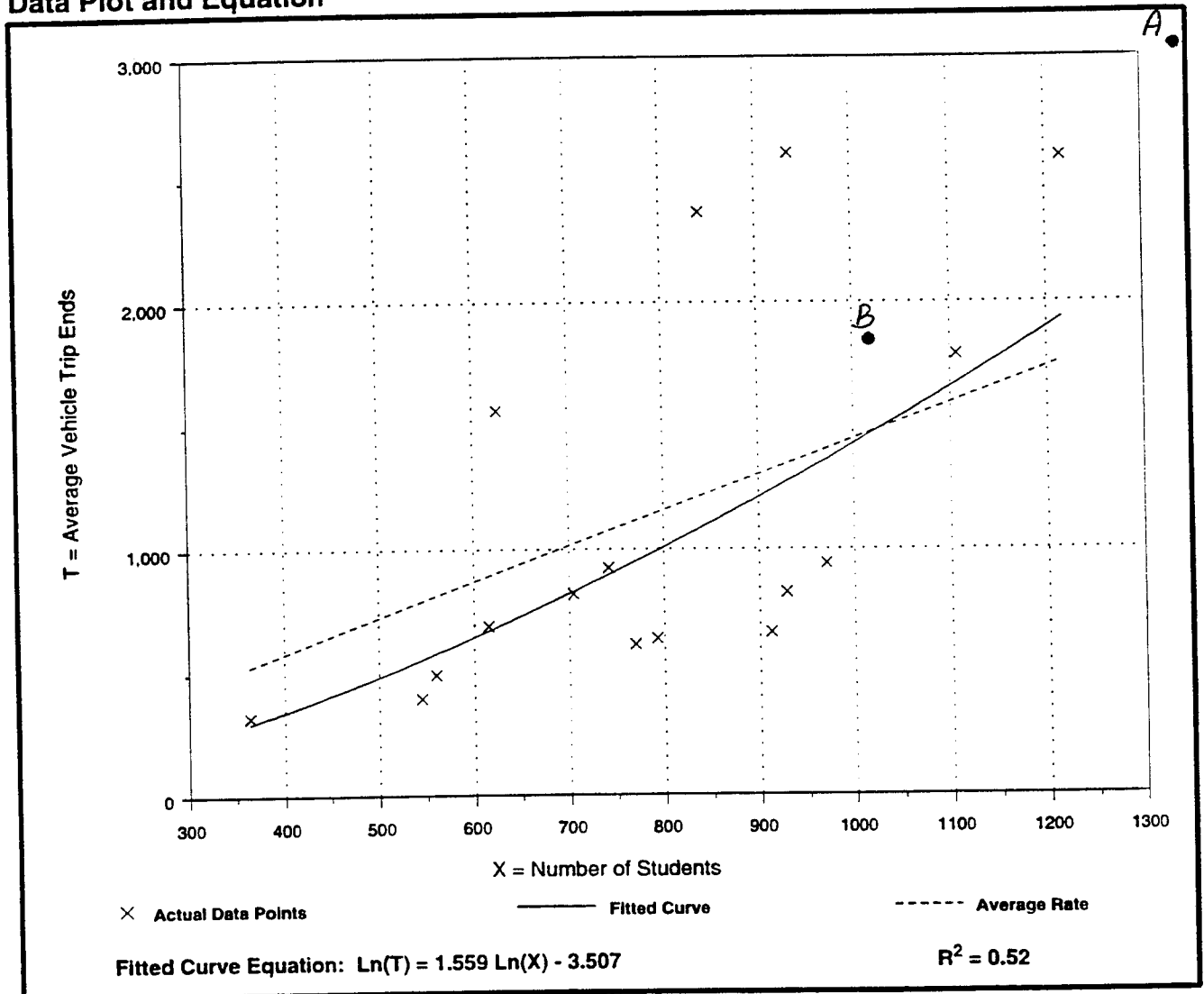
Average Vehicle Trip Ends vs: Students
On a: Weekday

Number of Studies: 16
Average Number of Students: 789
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.45	0.72 - 2.81	1.41

Data Plot and Equation



Middle School/Junior High School (522)

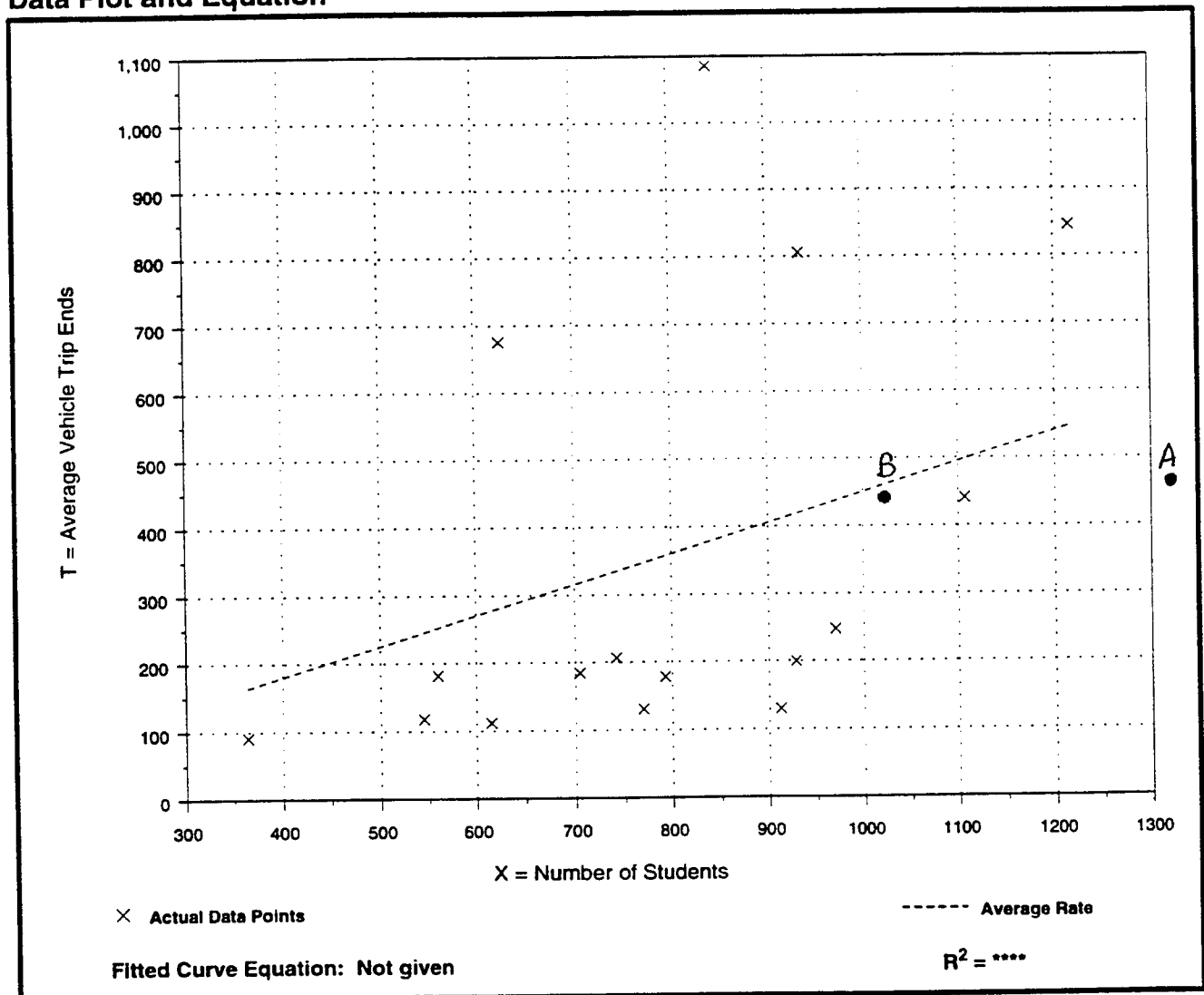
Average Vehicle Trip Ends vs: Students
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
 Average Number of Students: 789
 Directional Distribution: 57% entering, 43% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.45	0.14 - 1.29	0.75

Data Plot and Equation



Middle School/Junior High School (522)

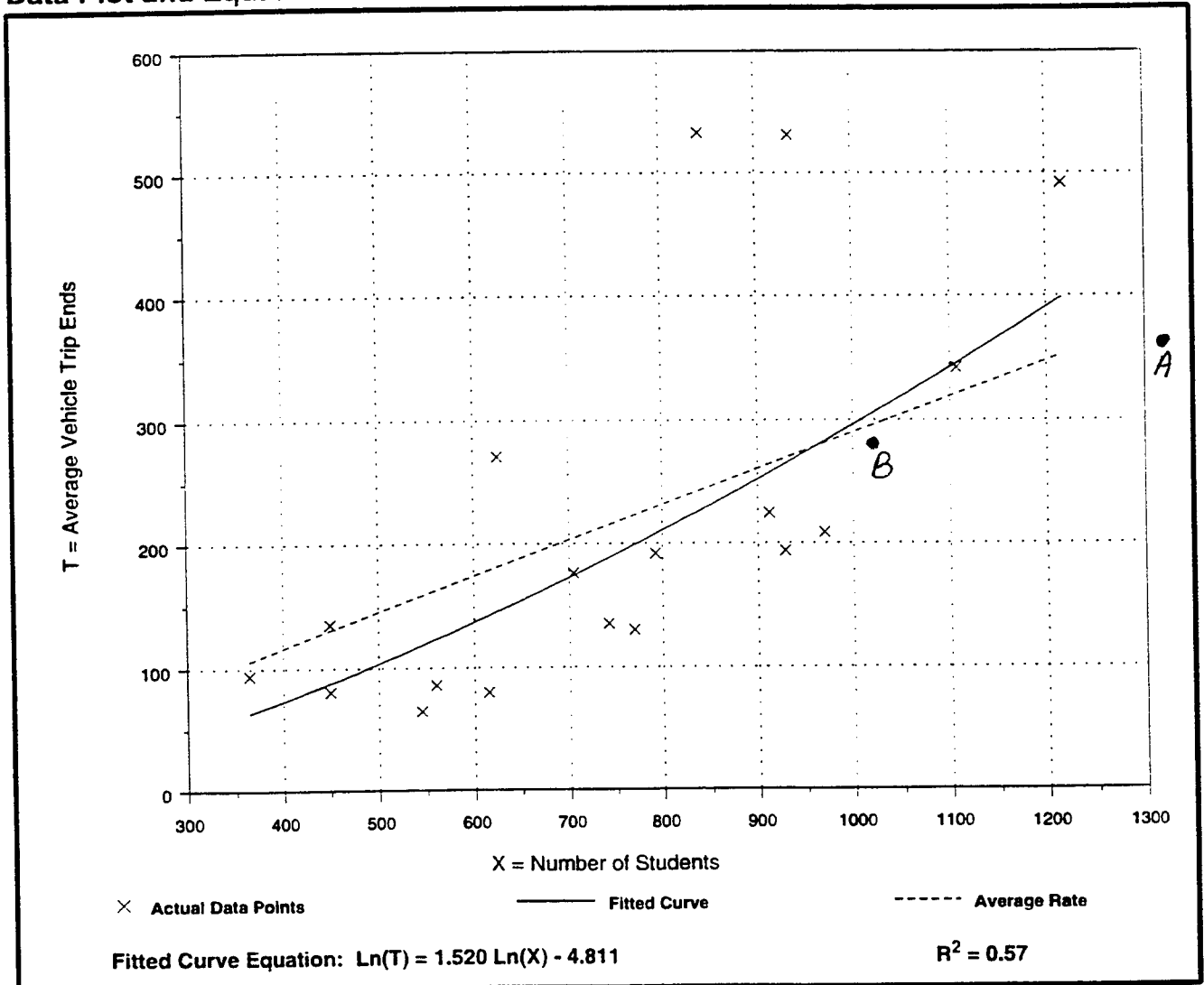
Average Vehicle Trip Ends vs: Students
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 18
 Average Number of Students: 752
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.29	0.12 - 0.63	0.56

Data Plot and Equation



Middle School/Junior High School (522)

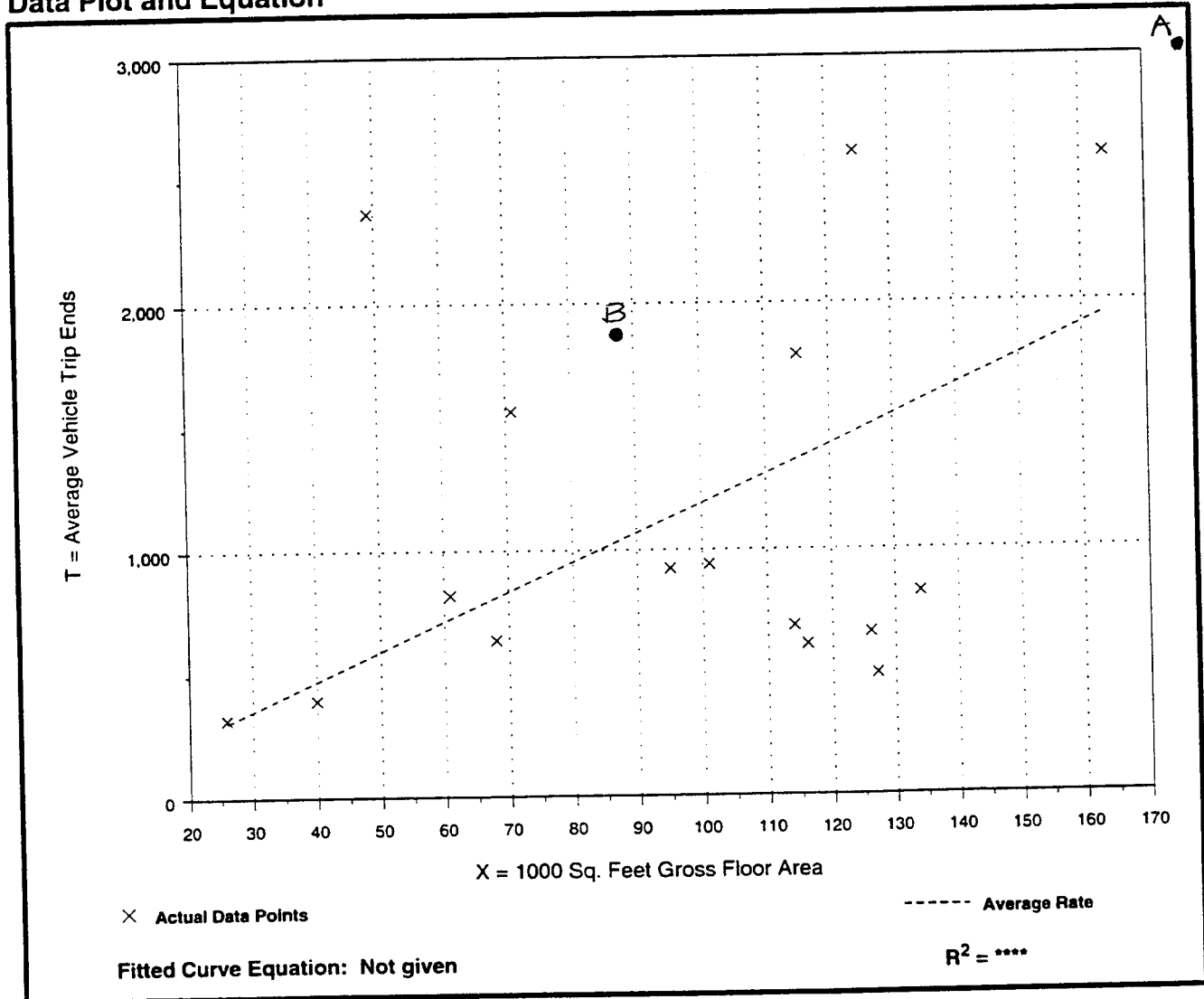
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

Number of Studies: 16
Average 1000 Sq. Feet GFA: 96
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
11.92	3.89 - 48.31	9.35

Data Plot and Equation



Middle School/Junior High School (522)

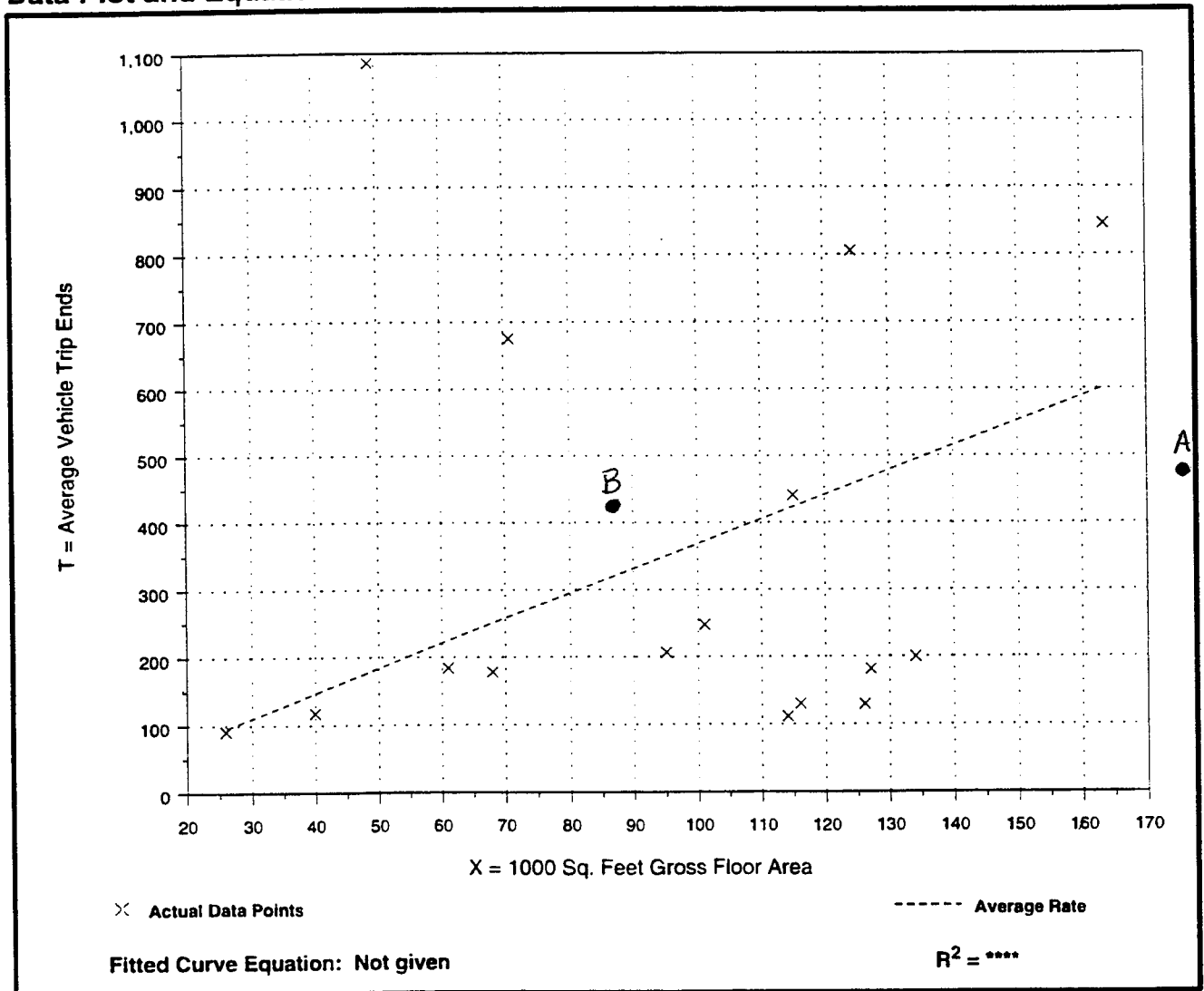
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
Average 1000 Sq. Feet GFA: 96
Directional Distribution: 57% entering, 43% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.68	0.98 - 22.16	4.45

Data Plot and Equation



Middle School/Junior High School (522)

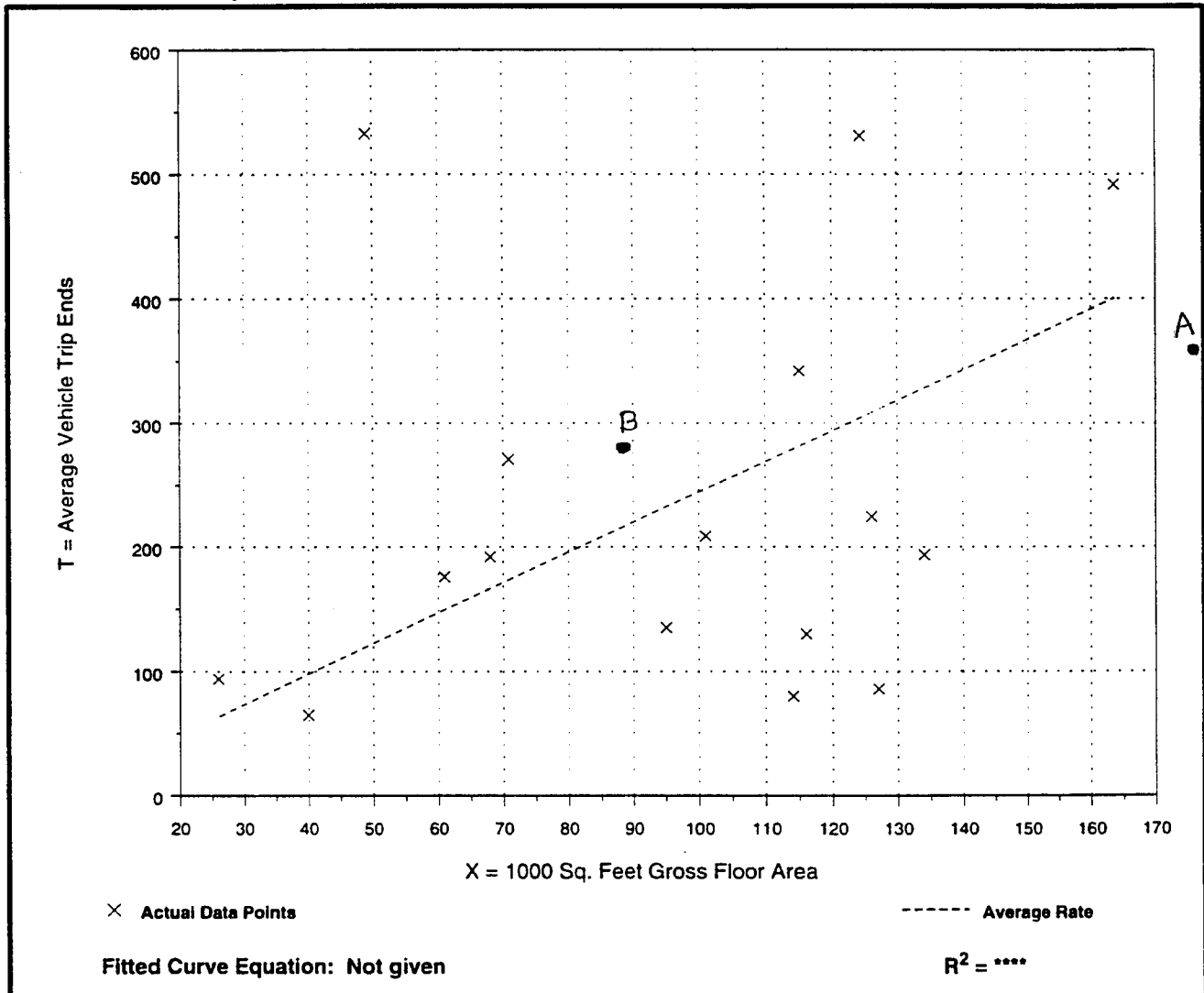
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 16
 Average 1000 Sq. Feet GFA: 96
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.45	0.68 - 10.88	2.45

Data Plot and Equation



APPENDIX K
ITE Format Graphs
Poultry-Related Facilities

Poultry Processing Facilities

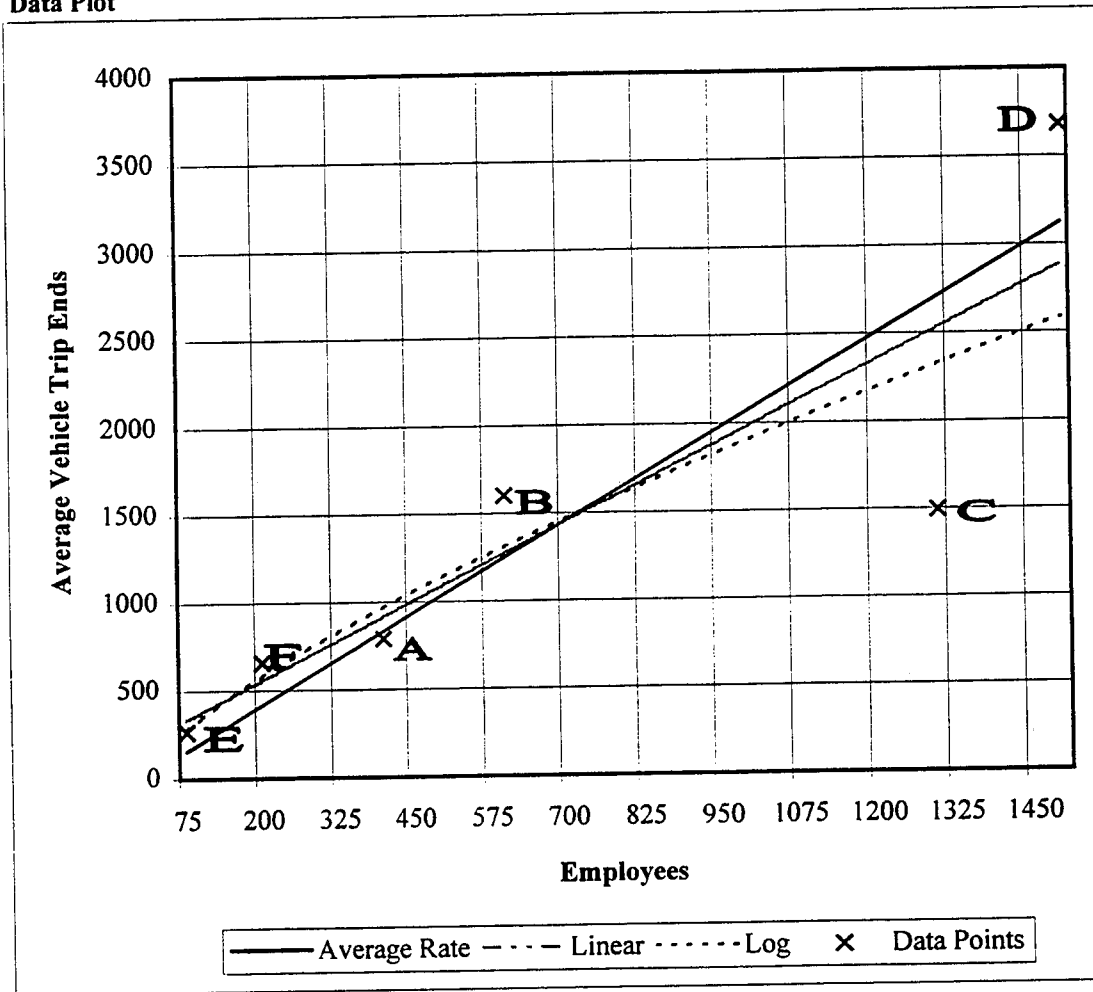
Average Vehicle Trip Ends V/S: Employees
 On a: Weekday

Number of Studies: 6
 Average SEV Value: 679
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
2.08	1.15-3.52	0.91

Data Plot



Linear Equation	Trip Ends=197.01+1.79(Employee)	$r^2=0.75$
Log Equation	Trip Ends=11.36(Employee) ^{0.74}	$r^2=0.89$

Poultry Processing Facilities

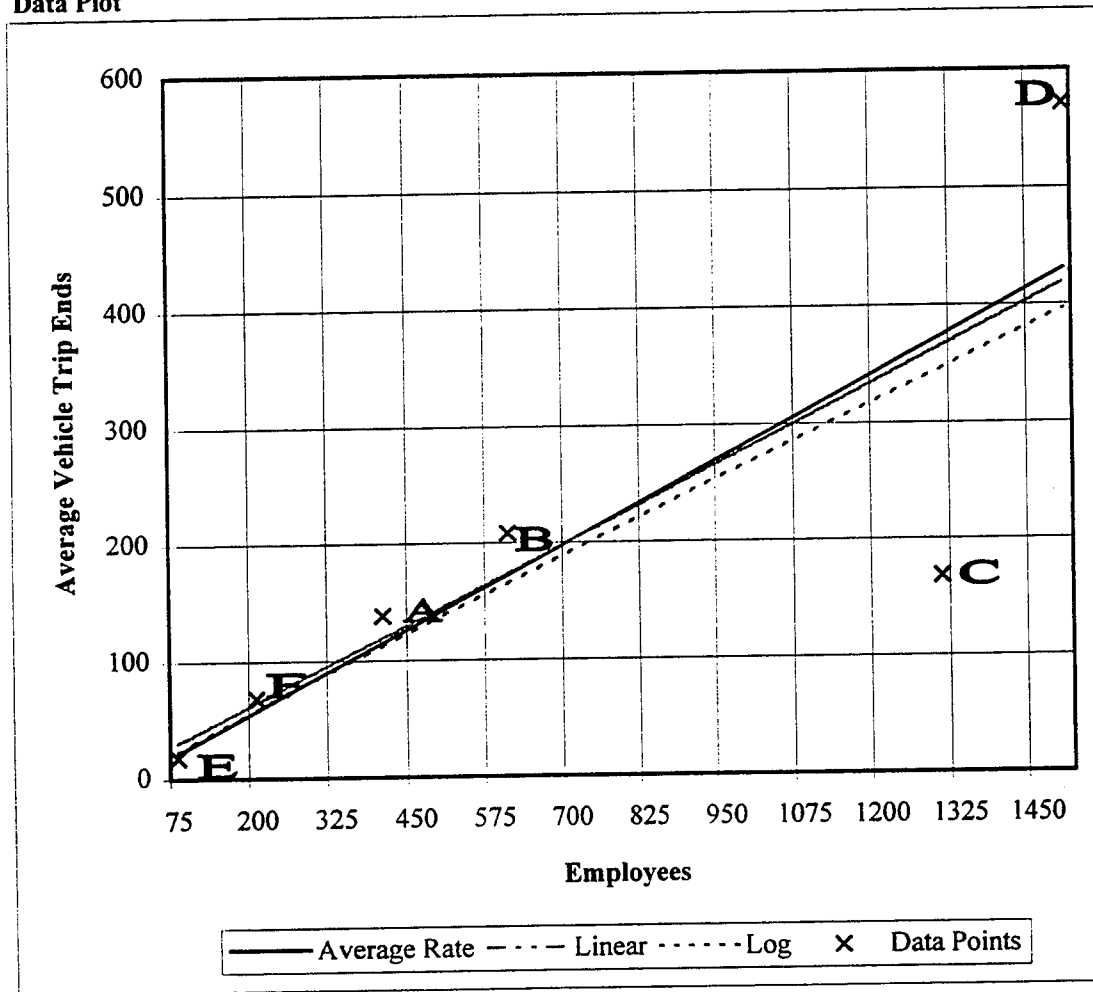
Average Vehicle Trip Ends V/S: Employees
 On a: Weekday AM Peak

Number of Studies: 6
 Average SEV Value: 679
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.29	0.13-0.38	0.10

Data Plot



Linear Equation	Trip Ends=9.78+0.27(Employee)	$r^2=0.67$
Log Equation	Trip Ends=0.37(Employee) ^{0.95}	$r^2=0.88$

Poultry Processing Facilities

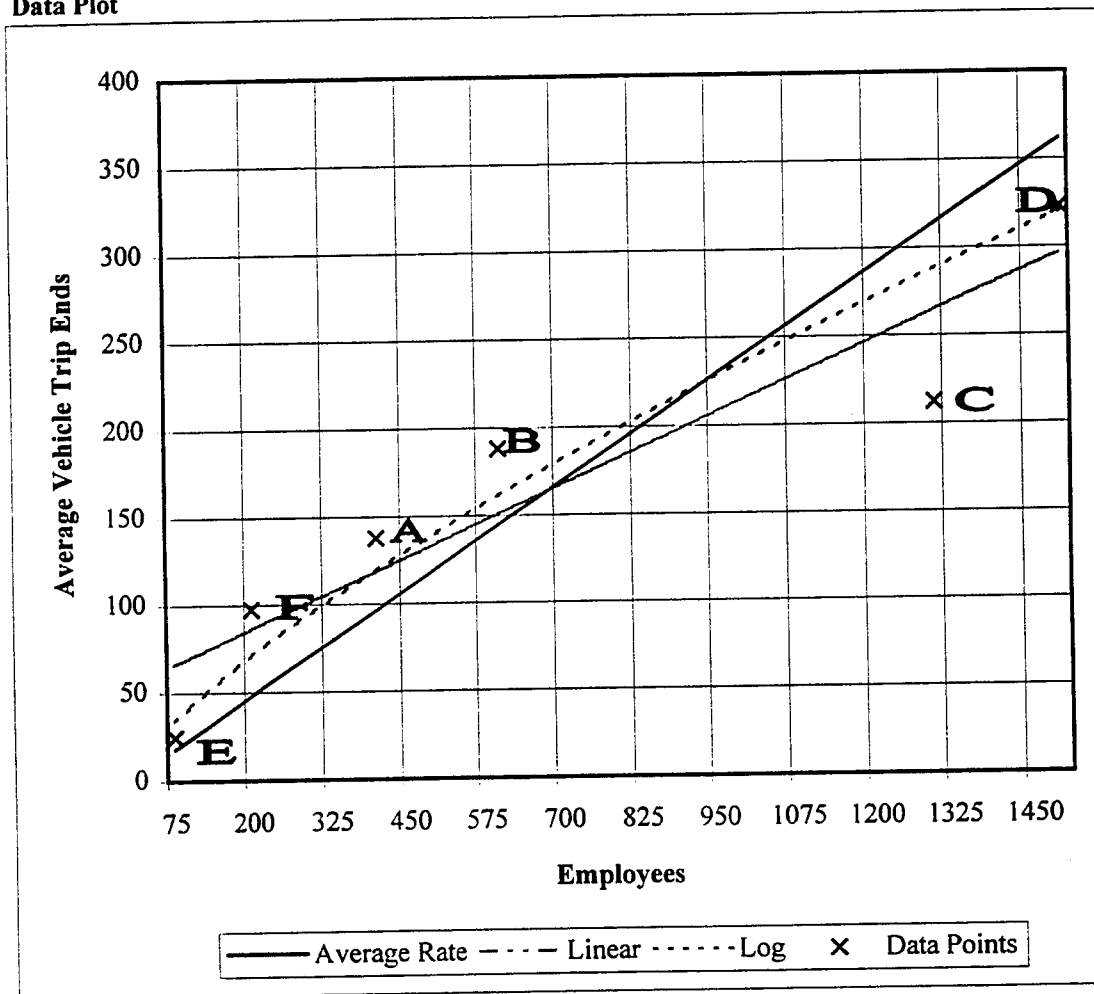
Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

Number of Studies: 6
 Average SEV Value: 679
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.24	0.16-0.51	0.12

Data Plot



Linear Equation	Trip Ends=53.69+0.16(Employee)	$r^2=0.87$
Log Equation	Trip Ends=1.36(Employee) ^{0.75}	$r^2=0.91$

Poultry Processing Facilities

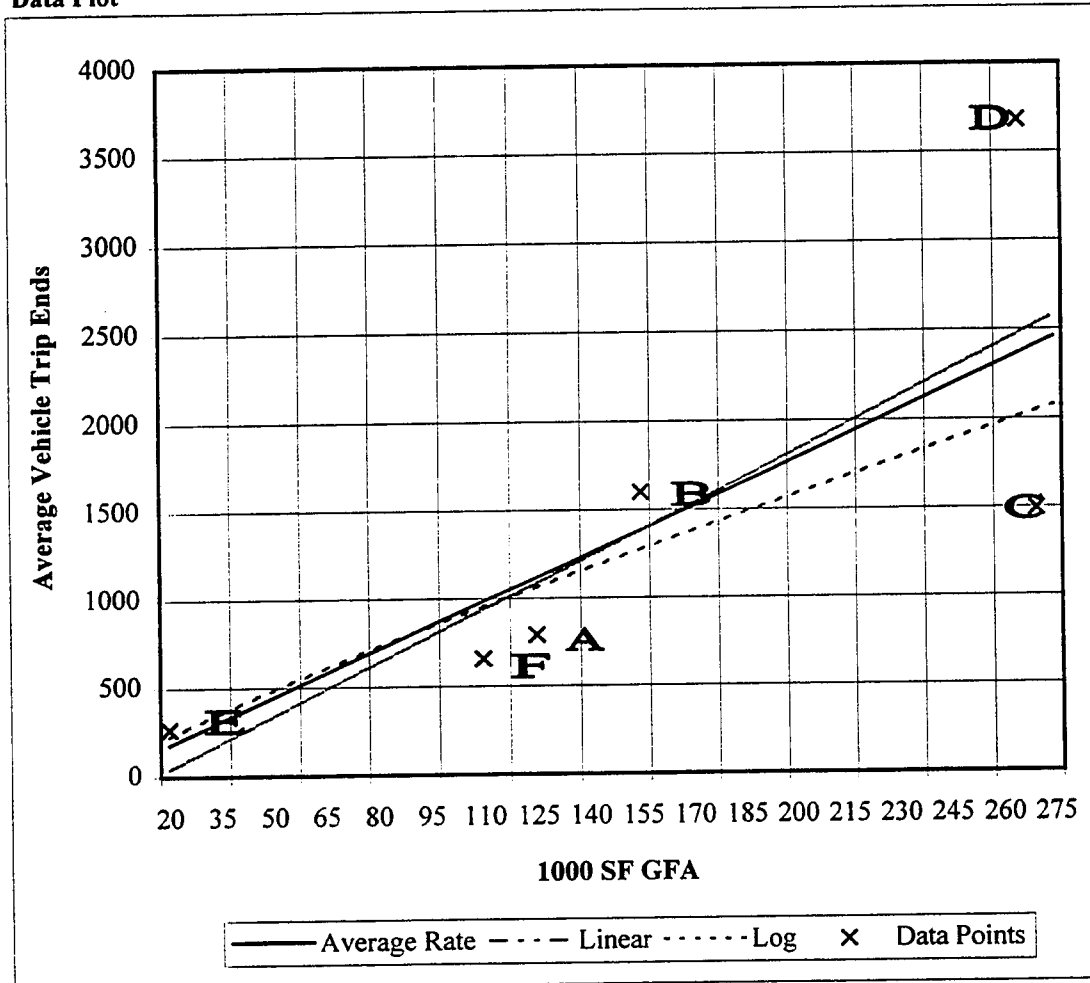
Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday

Number of Studies: 6
 Average SEV Value: 158
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
8.94	5.49-13.88	3.78

Data Plot



Linear Equation	Trip Ends=-158.87+9.95(1000 SF GFA)	$r^2=0.62$
Log Equation	Trip Ends=17.64(1000 SF GFA) ^{0.85}	$r^2=0.81$

Poultry Processing Facilities

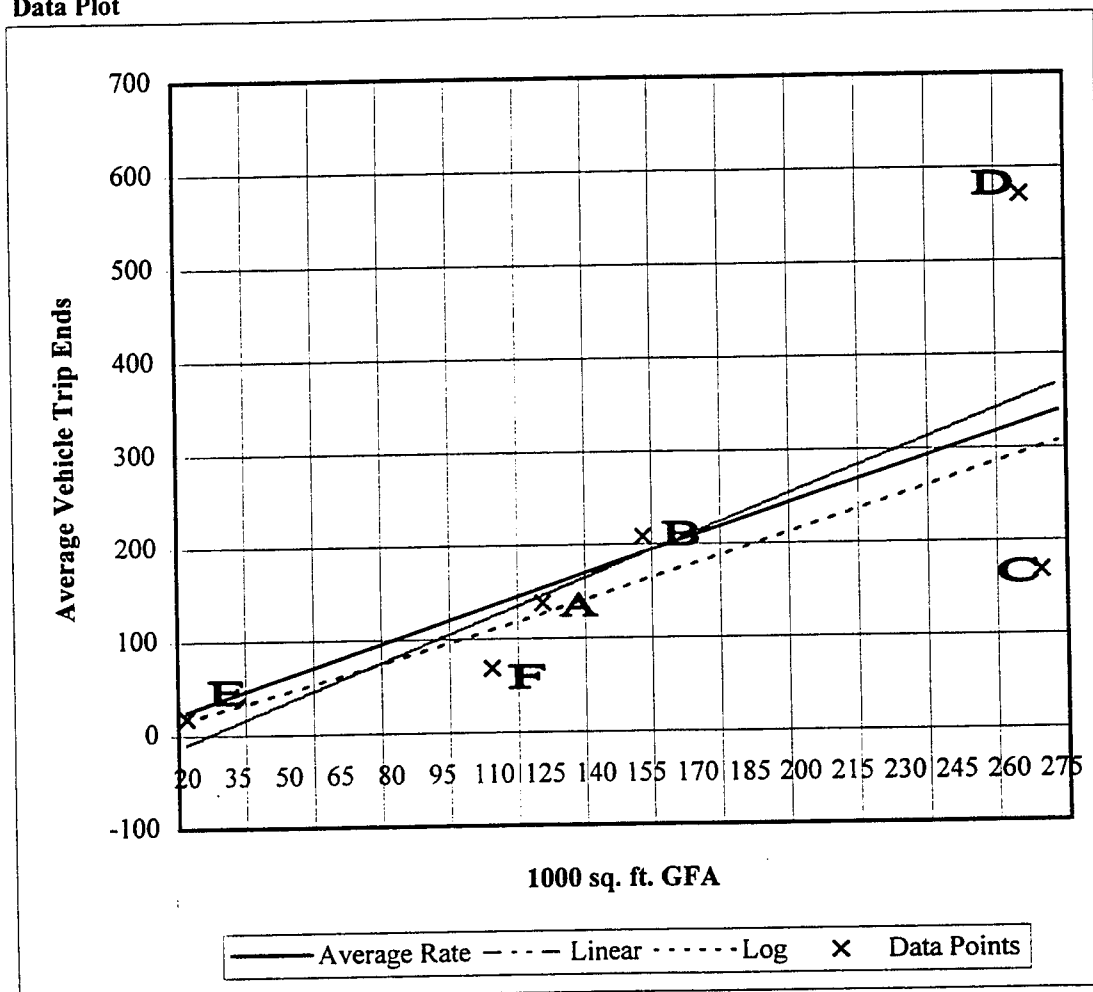
Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday AM Peak

Number of Studies: 6
 Average SEV Value: 158
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
1.23	0.62-2.15	0.58

Data Plot



Linear Equation

$$\text{Trip Ends} = -39.64 + 1.48(1000 \text{ SF GFA})$$

$$r^2 = 0.53$$

Log Equation

$$\text{Trip Ends} = 0.57(1000 \text{ SF GFA})^{1.12}$$

$$r^2 = 0.84$$

Poultry Processing Facilities

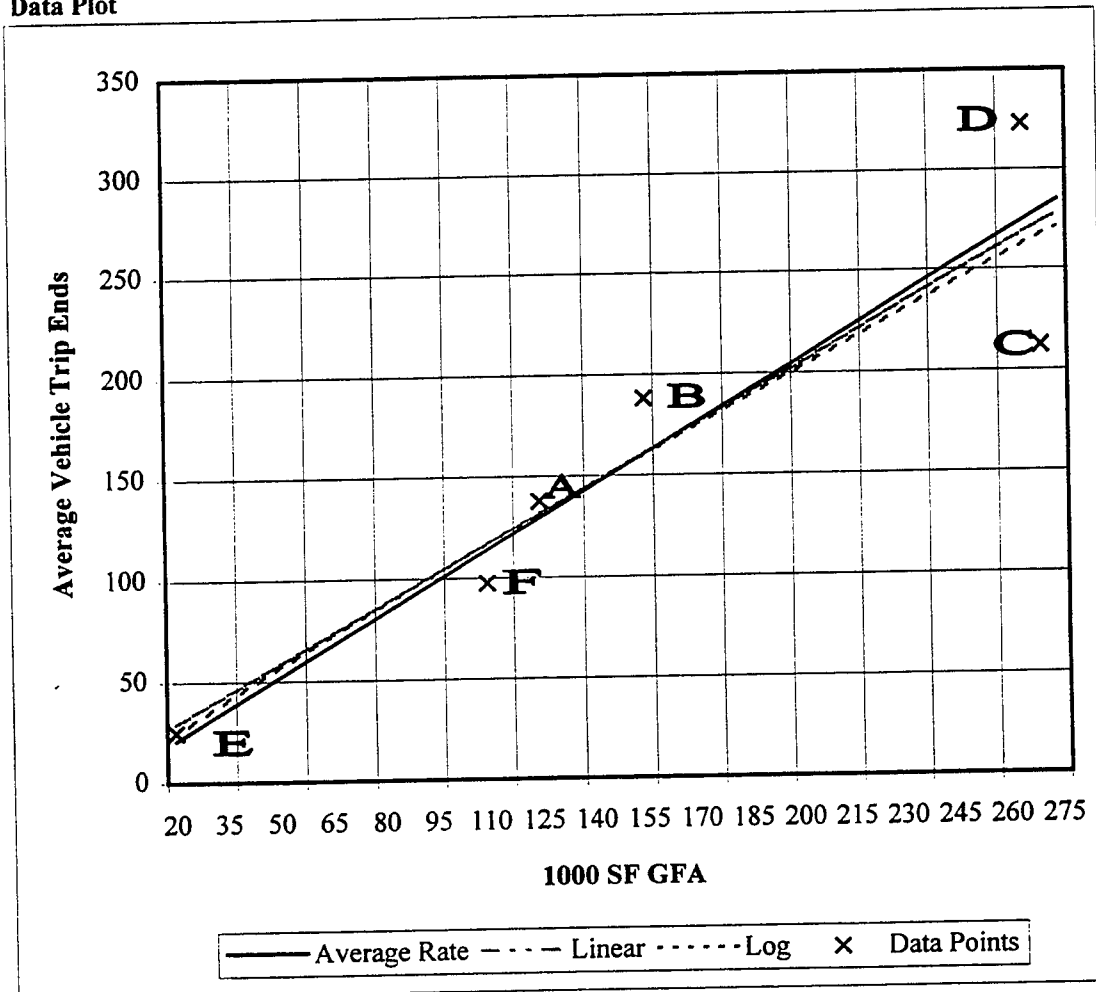
Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday PM Peak

Number of Studies: 6
 Average SEV Value: 158
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
1.04	0.78-1.22	0.19

Data Plot



Linear Equation Trip Ends=9.37+0.98(1000 SF GFA) $r^2=0.85$
 Log Equation Trip Ends=1.54(1000 SF GFA)^{0.92} $r^2=0.96$

APPENDIX L
ITE Format Graphs
Timber Processing Facilities

Timber Processing Facilities

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday

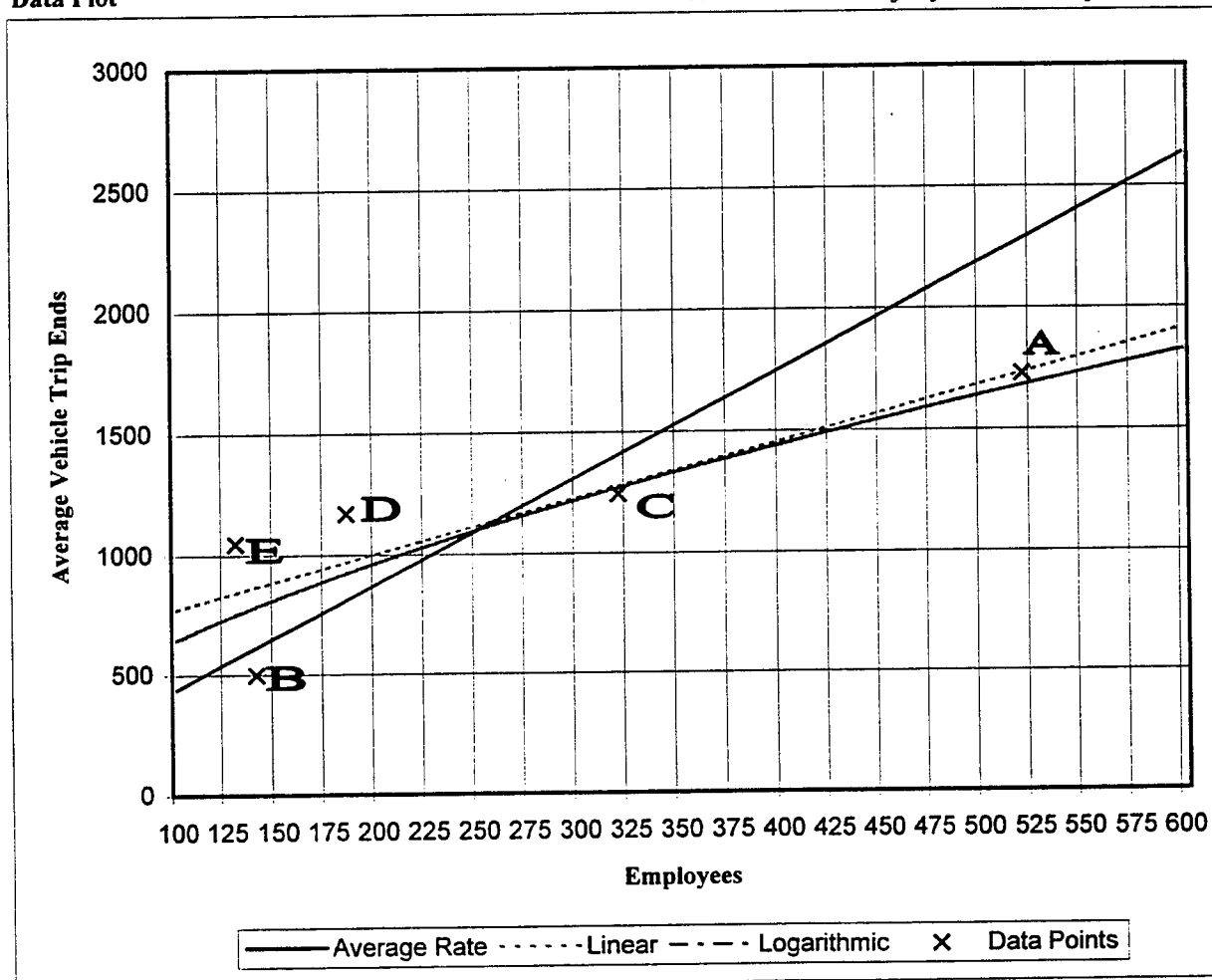
Number of Studies: 5
 Average SEV Value: 259
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.39	3.33-8.05	2.07

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation	Trip Ends = 546.4+2.28(Employees)	$r^2=0.72$
Log Equation	Trip Ends=44.70(Employees) ^{0.58}	$r^2=0.56$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday AM Peak

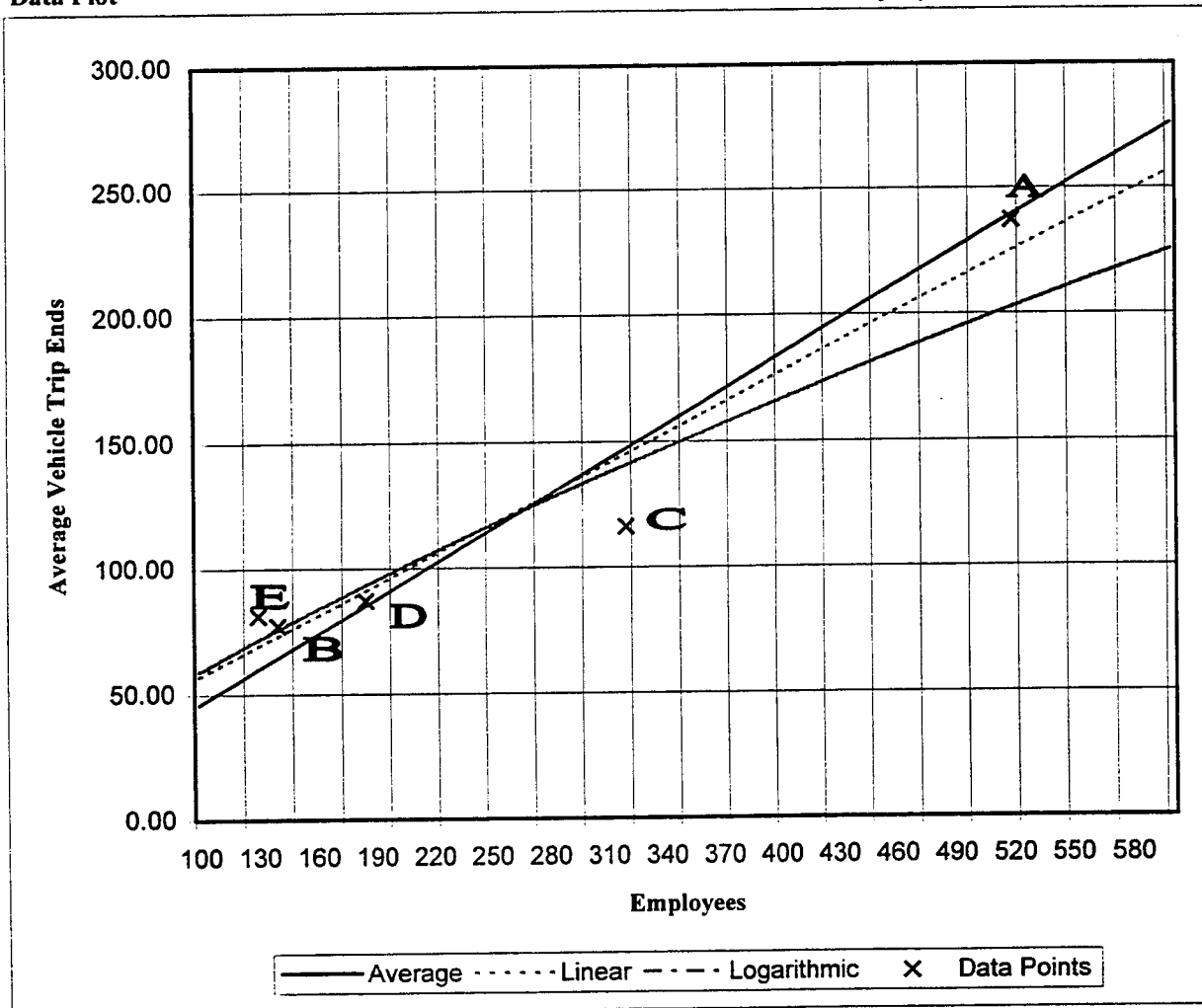
Number of Studies: 5
 Average SEV Value: 259
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.46	0.36-0.62	0.10

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 16.87 + .40(\text{Employees})$$

$$r^2 = 0.94$$

Log Equation

$$\text{Log Trip Ends} = 1.86(\text{Employees})^{0.75}$$

$$r^2 = 0.91$$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: Employees
 On a: Weekday PM Peak

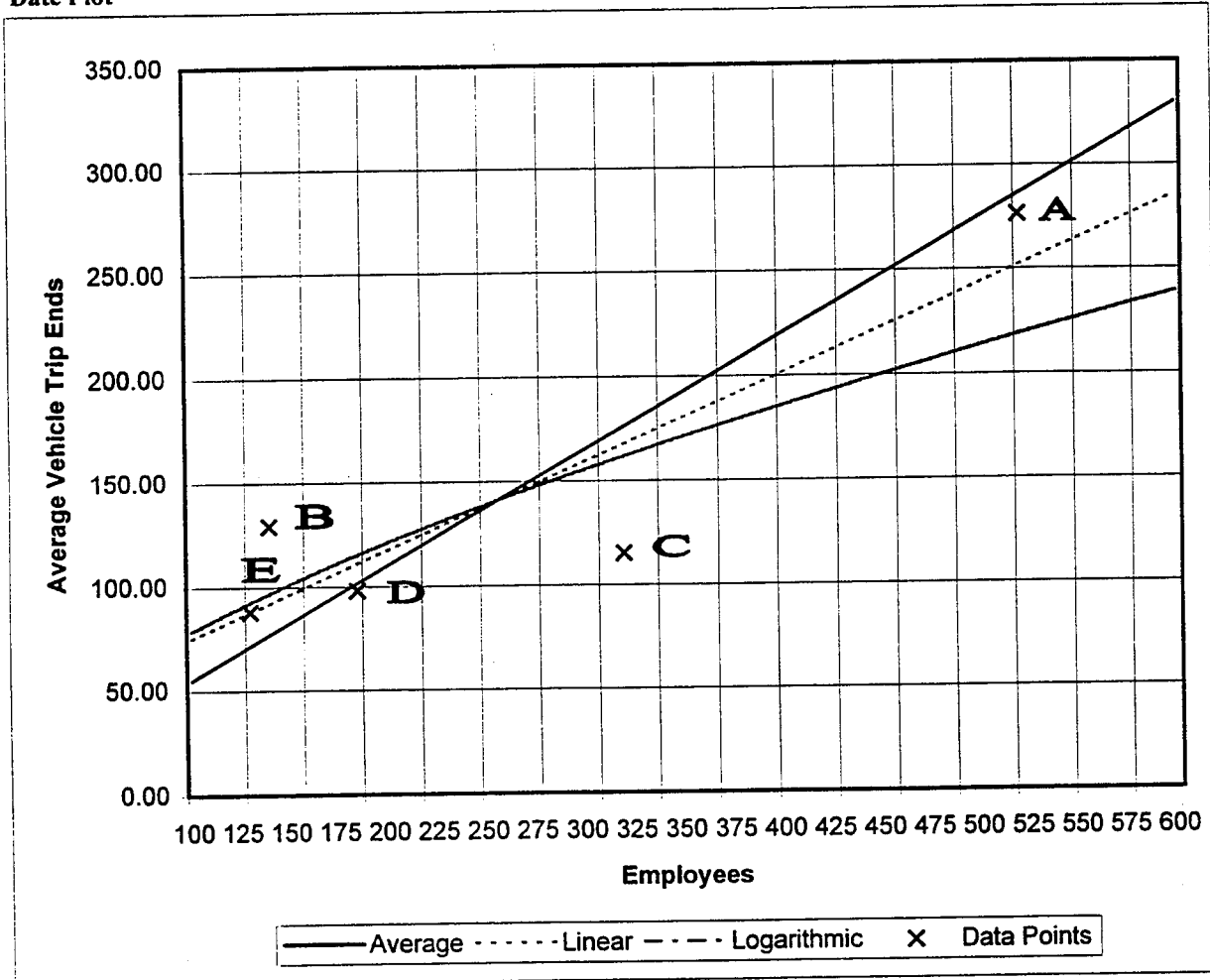
Number of Studies: 5
 Average SEV Value: 259
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.55	0.36-0.92	0.21

Date Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 33.17 + 0.42(\text{Employees})$$

$$r^2 = 0.79$$

Log Equation

$$\text{Trip Ends} = 4.53(\text{Employees})^{0.62}$$

$$r^2 = 0.65$$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: Employees
 On a: Saturday (Open)

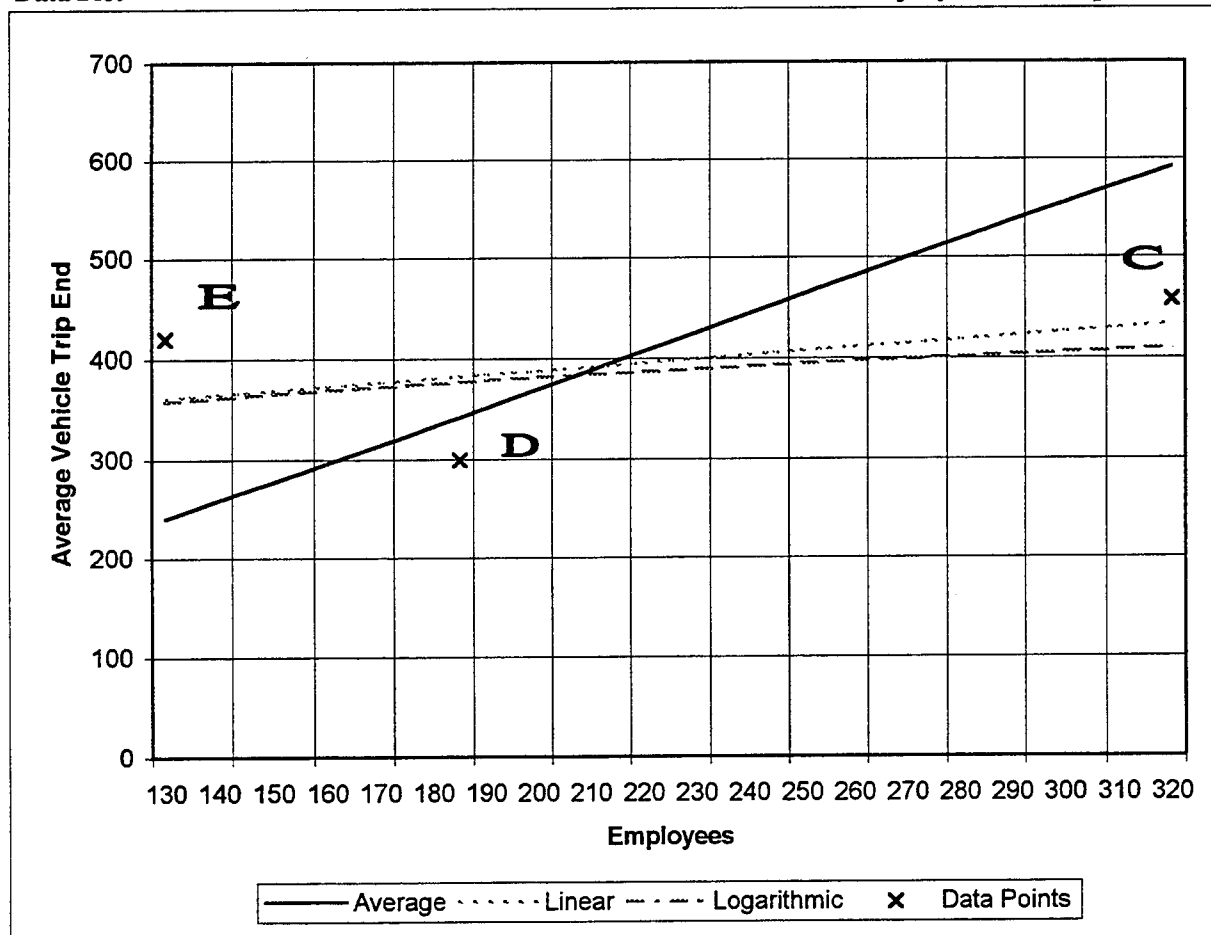
Number of Studies: 3
 Average SEV Value: 211.7
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.85	1.43-3.23	0.99

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 311.89 + 0.38(\text{Employees})$$

$$r^2 = 0.20$$

Log Equation

$$\text{Trip Ends} = 172.43(\text{Employees})^{0.15}$$

$$r^2 = 0.10$$

(Equations with $r^2 < 0.5$ are not recommended for use)

Timber Processing Facilities

Average Vehicle Trip Ends V/S: Employees
 On a: SaturdayPeak (Open)

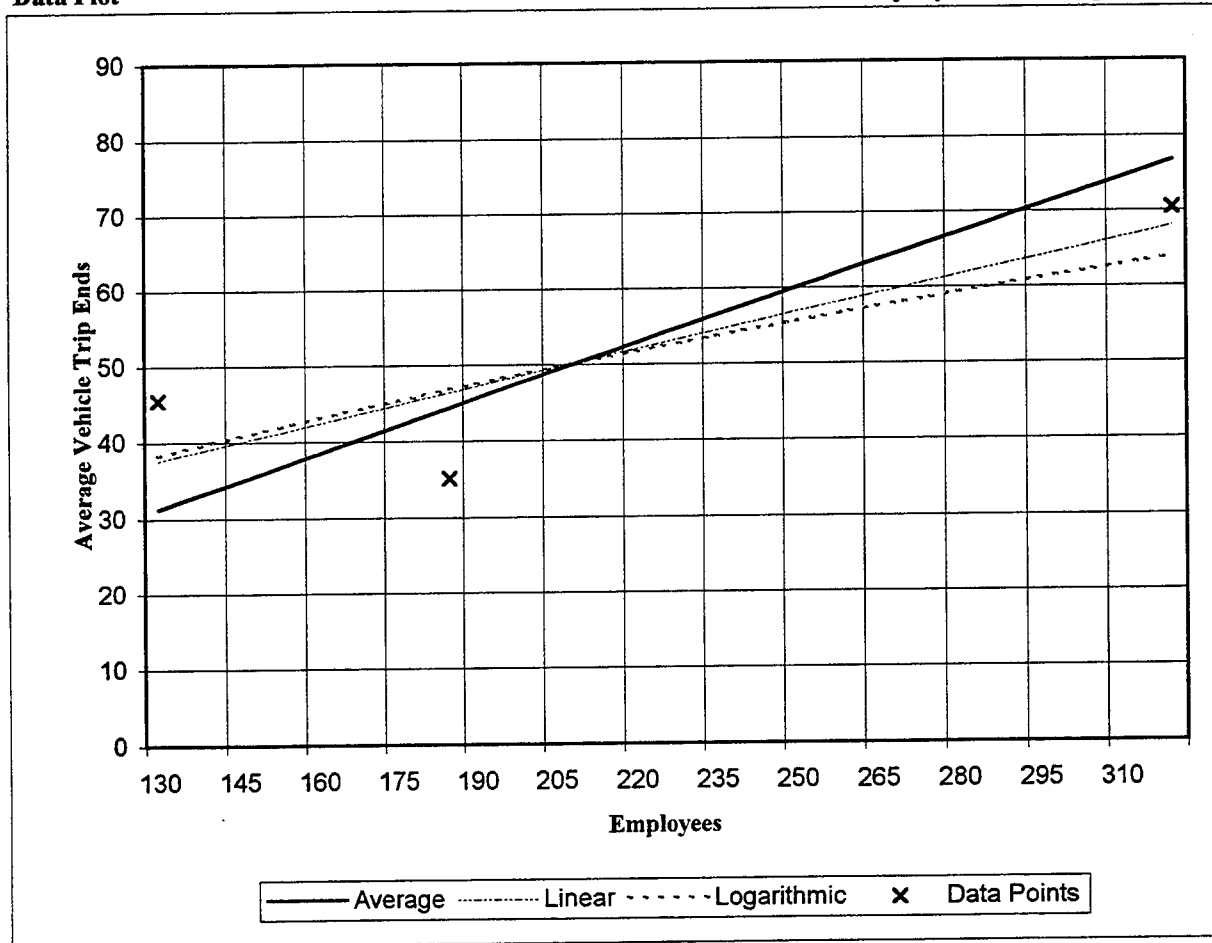
Number of Studies: 3
 Average SEV Value: 211.7
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.24	0.19-0.35	0.08

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 16.82 + 0.16 (\text{Employees})$$

$$r^2 = 0.74$$

Log Equation

$$\text{Trip Ends} = 2.39 (\text{Employees})^{0.57}$$

$$r^2 = 0.56$$

Timber Processing Facilities

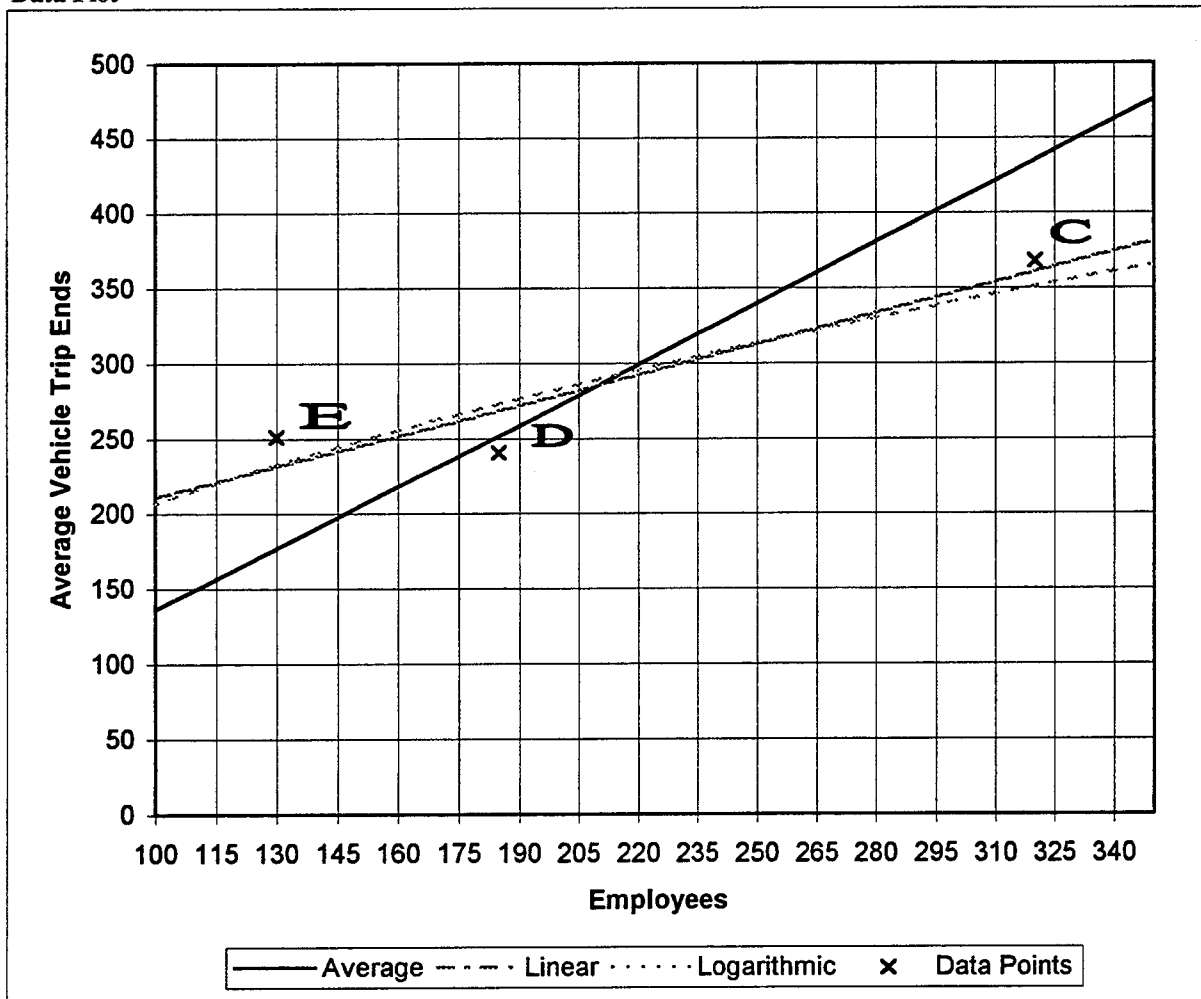
Average Vehicle Trip Ends V/S: Employees
 On a: Sunday (Open)

Number of Studies: 3
 Average SEV Value: 211.7
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.36	0.98-1.77	0.40

Data Plot



Linear Equation

Trip Ends= 142.51+0.68 (Employees)

$r^2 = 0.88$

Log Equation

Trip Ends= 25.00 (Employees)^{0.46}

$r^2 = 0.78$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: Employees
 On a: Sunday Peak (Open)

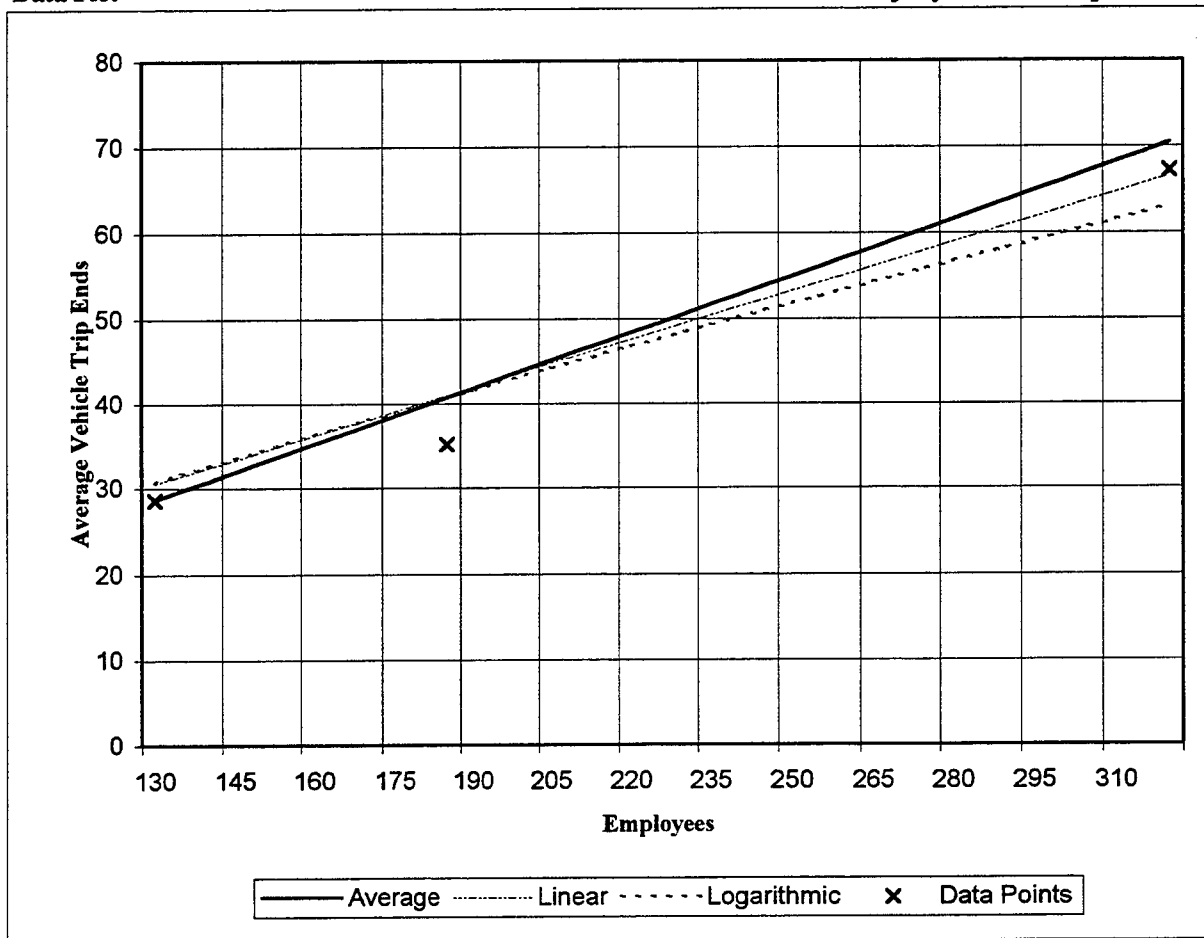
Number of Studies: 3
 Average SEV Value: 211.7
 Directional Distribution: Not Studied

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.22	0.19-0.26	0.03

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends= 5.81+0.19 (Employees) $r^2= 0.95$
Log Equation Trip Ends= 0.63 (Employees)^{0.80} $r^2= 0.90$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday

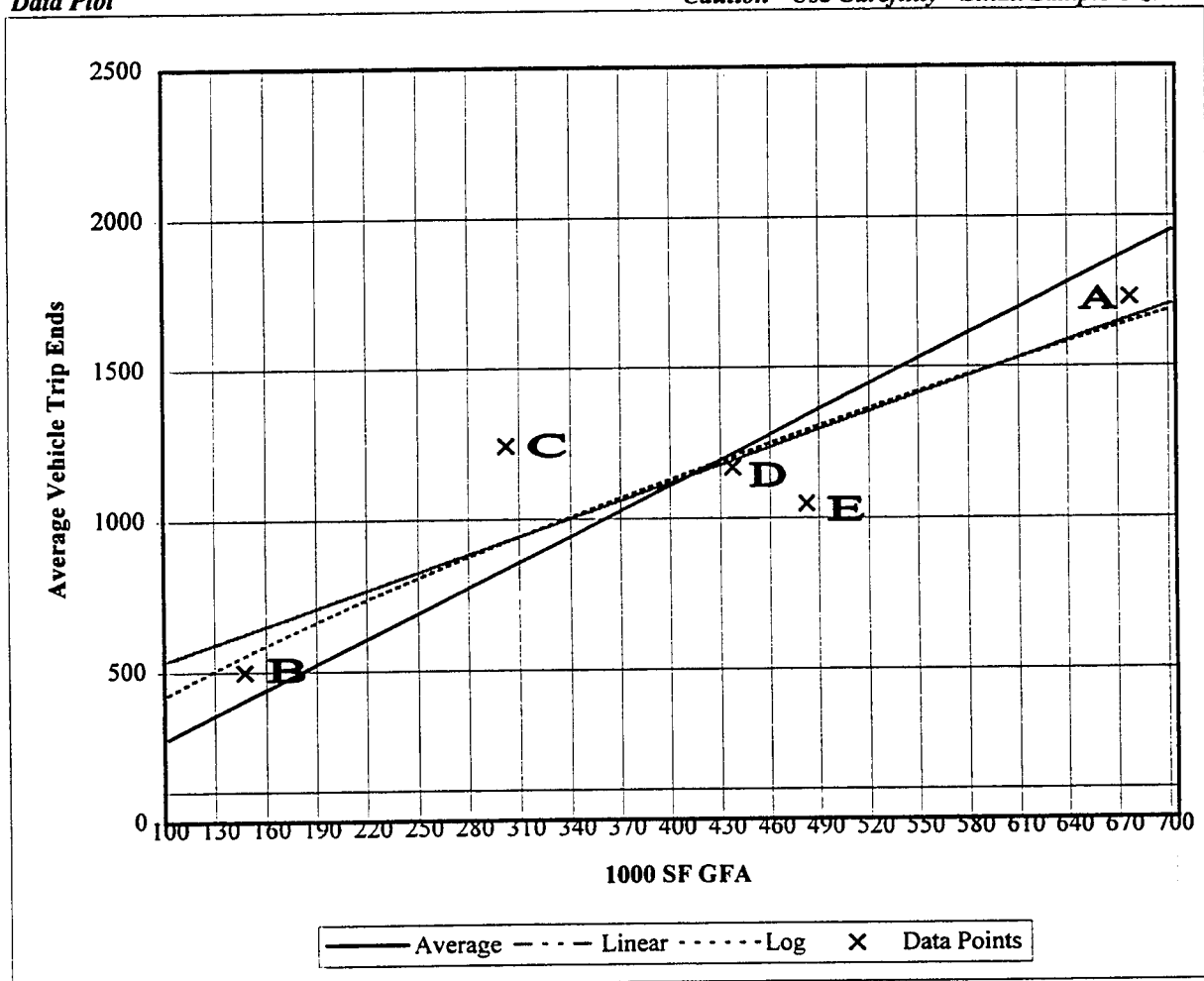
Number of Studies: 5
 Average SEV Value: 406.9
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
2.79	2.18-4.14	0.79

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 342.94 + 1.95(1000 \text{ SF GFA})$$

$$r^2 = 0.78$$

Log Equation

$$\text{Trip Ends} = 16.12(1000 \text{ SF GFA})^{0.71}$$

$$r^2 = 0.83$$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday AM Peak Hour

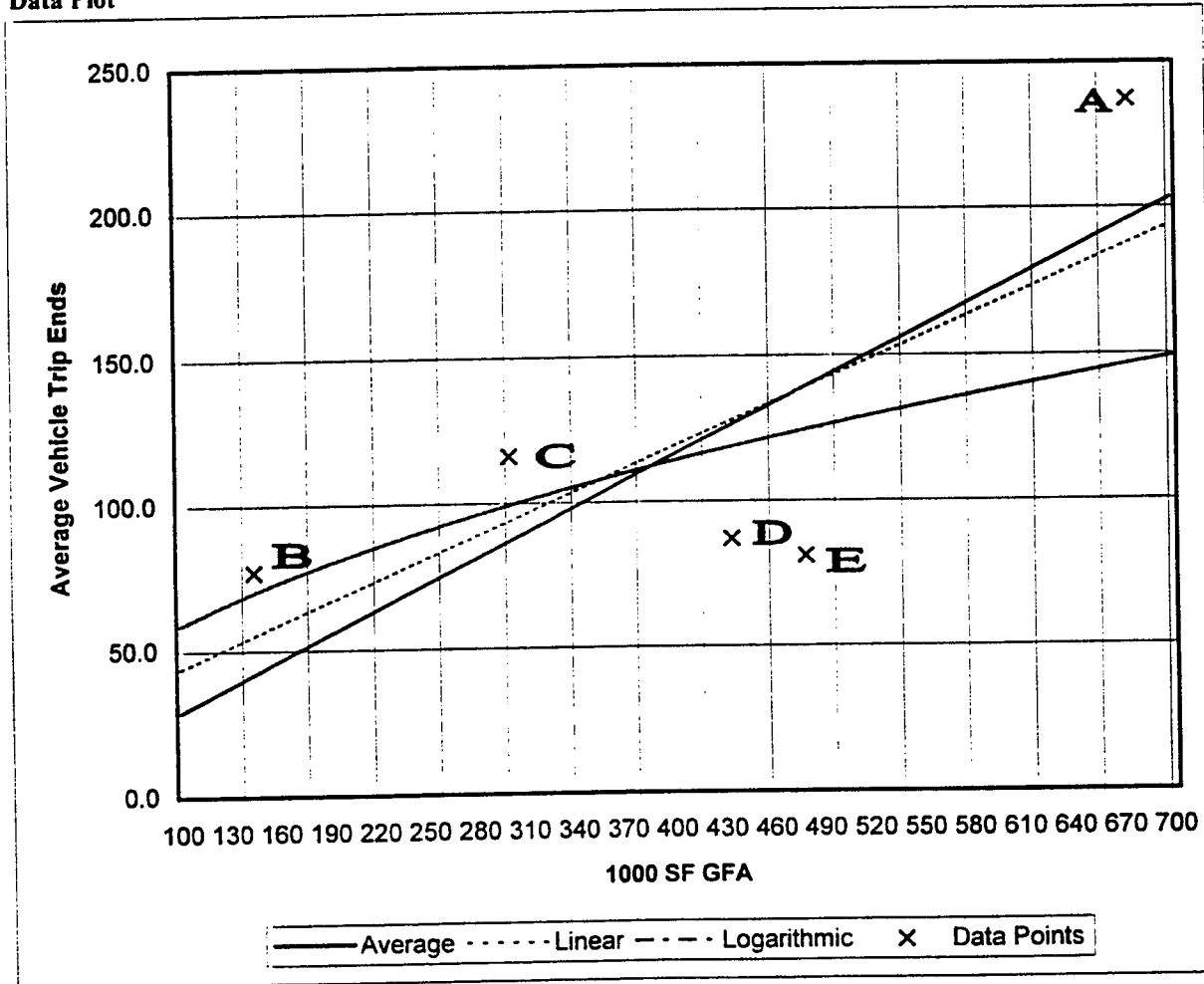
Number of Studies: 5
 Average SEV Value: 406.9
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.29	0.17-0.54	0.15

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trips Ends=18.84+0.25(1000 SF GFA) $r^2 = 0.54$

Log Equation Trips Ends=6.43(1000 SF GFA)^{0.48} $r^2 = 0.37$

(Equations with $r^2 < 0.5$ are not recommended for use)

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Weekday PM Peak Hour

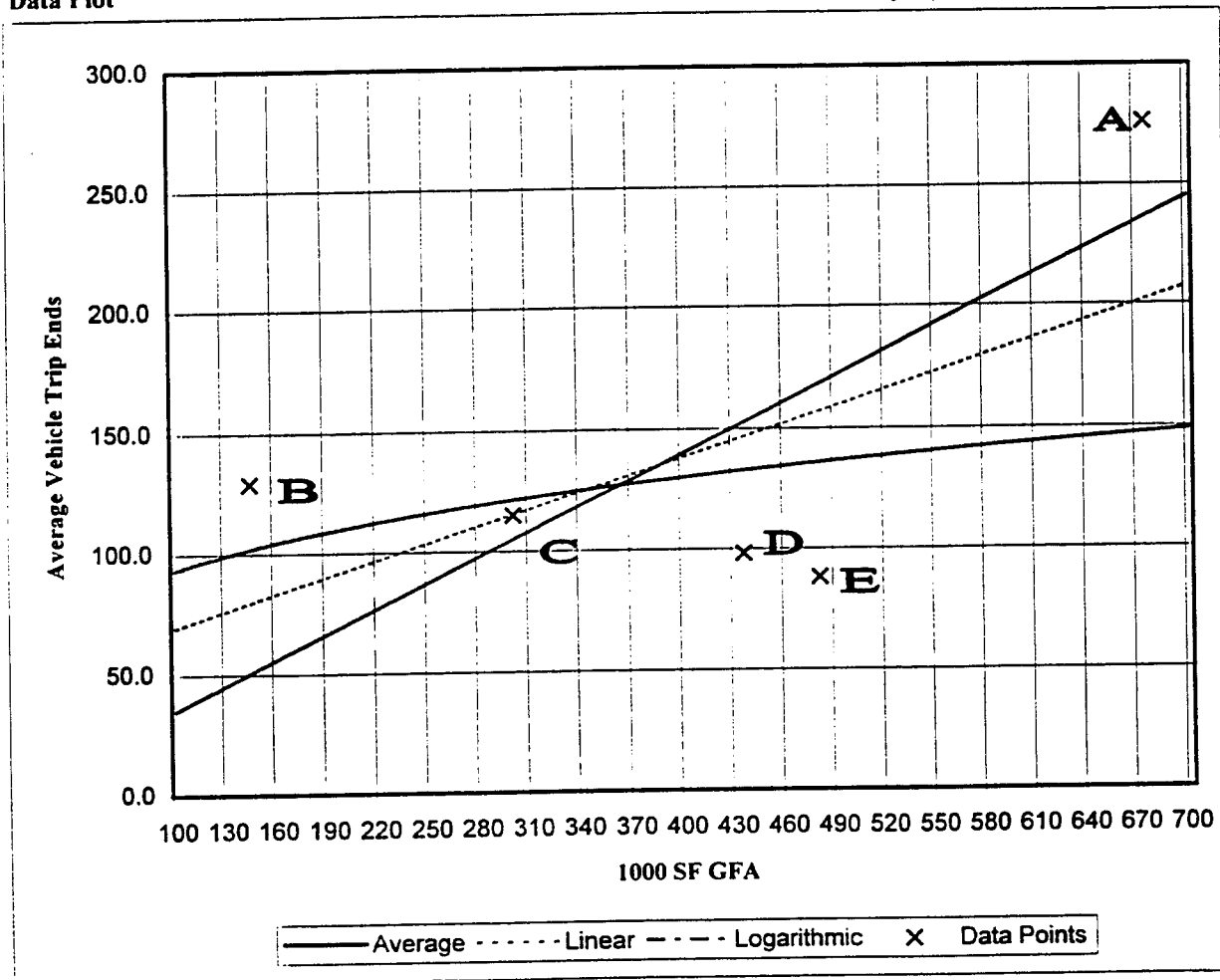
Number of Studies: 5
 Average SEV Value: 406.9
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.35	0.18-0.90	0.28

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=46.30+0.23(1000 SF GFA) $r^2 = 0.36$

Log Equation Trip Ends=30.88(1000 SF GFA)^{0.24} $r^2 = 0.10$

(Equations with $r^2 < 0.5$ are not recommended for use)

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Saturday (Open)

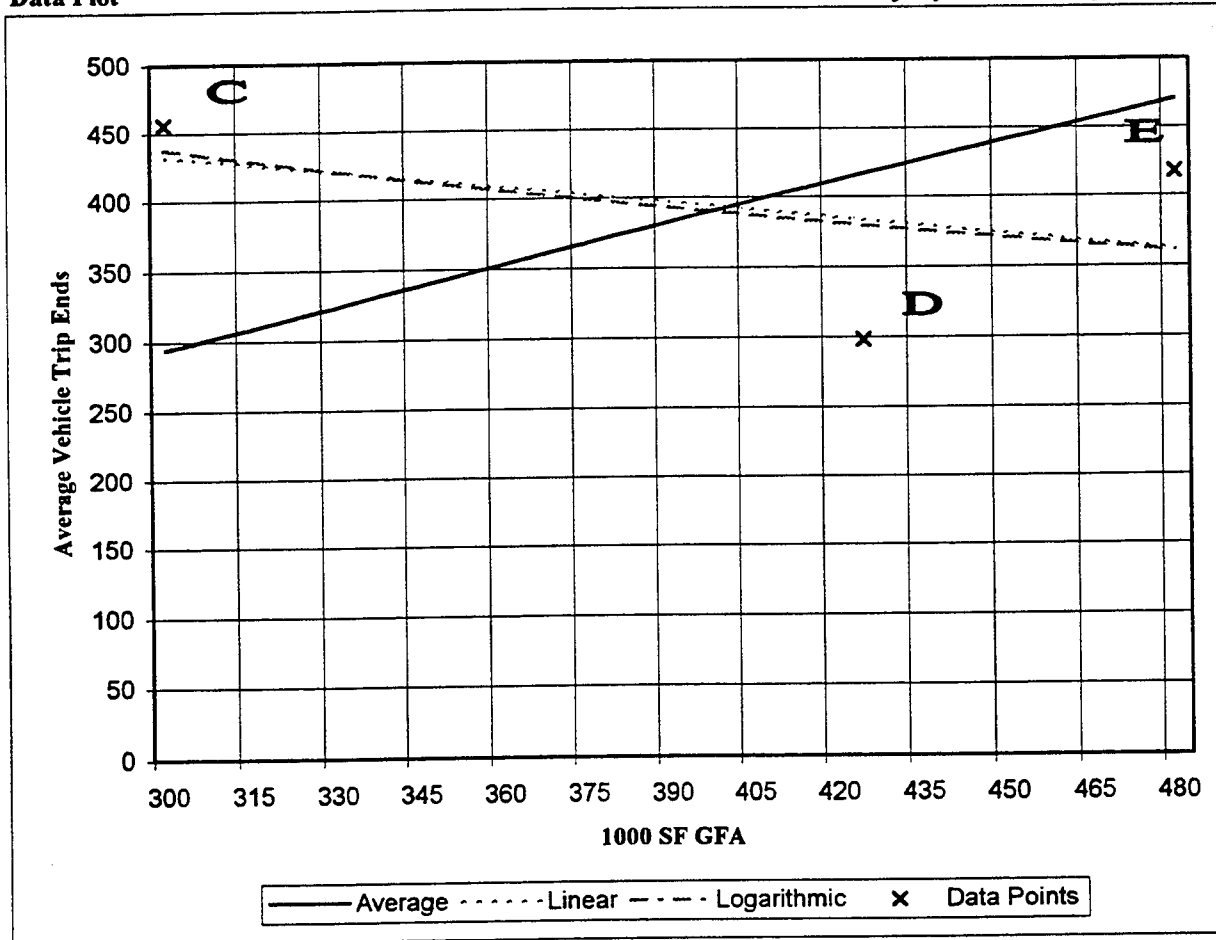
Number of Studies: 4
 Average SEV Value: 402
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.98	0.70-1.52	0.43

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=549.32-0.39(1000 SF GFA) $r^2 = 0.19$

Log Equation Trip Ends=4536.90(1000 SF GFA)^{-0.41} $r^2 = 0.20$

(Equations with $r^2 < 0.5$ are not recommended for use)

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Saturday Peak (Open)

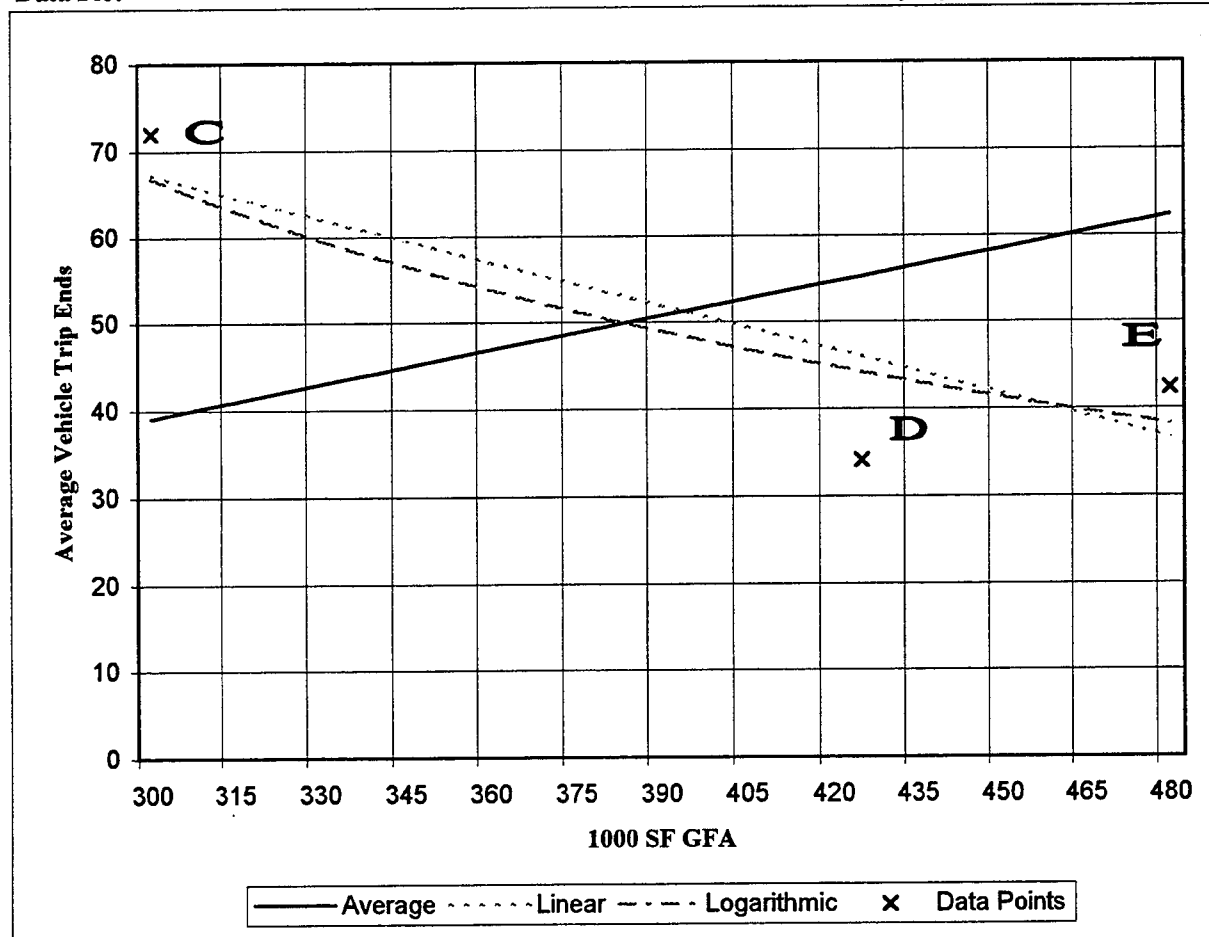
Number of Studies: 3
 Average SEV Value: 402
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.13	0.08-0.24	0.09

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation

$$\text{Trip Ends} = 118.23 - 0.17(1000 \text{ SF GFA})$$

$$r^2 = 0.73$$

Log Equation

$$\text{Trip Ends} = 59278.38(1000 \text{ SF GFA})^{-1.19}$$

$$r^2 = 0.70$$

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Sunday (Open)

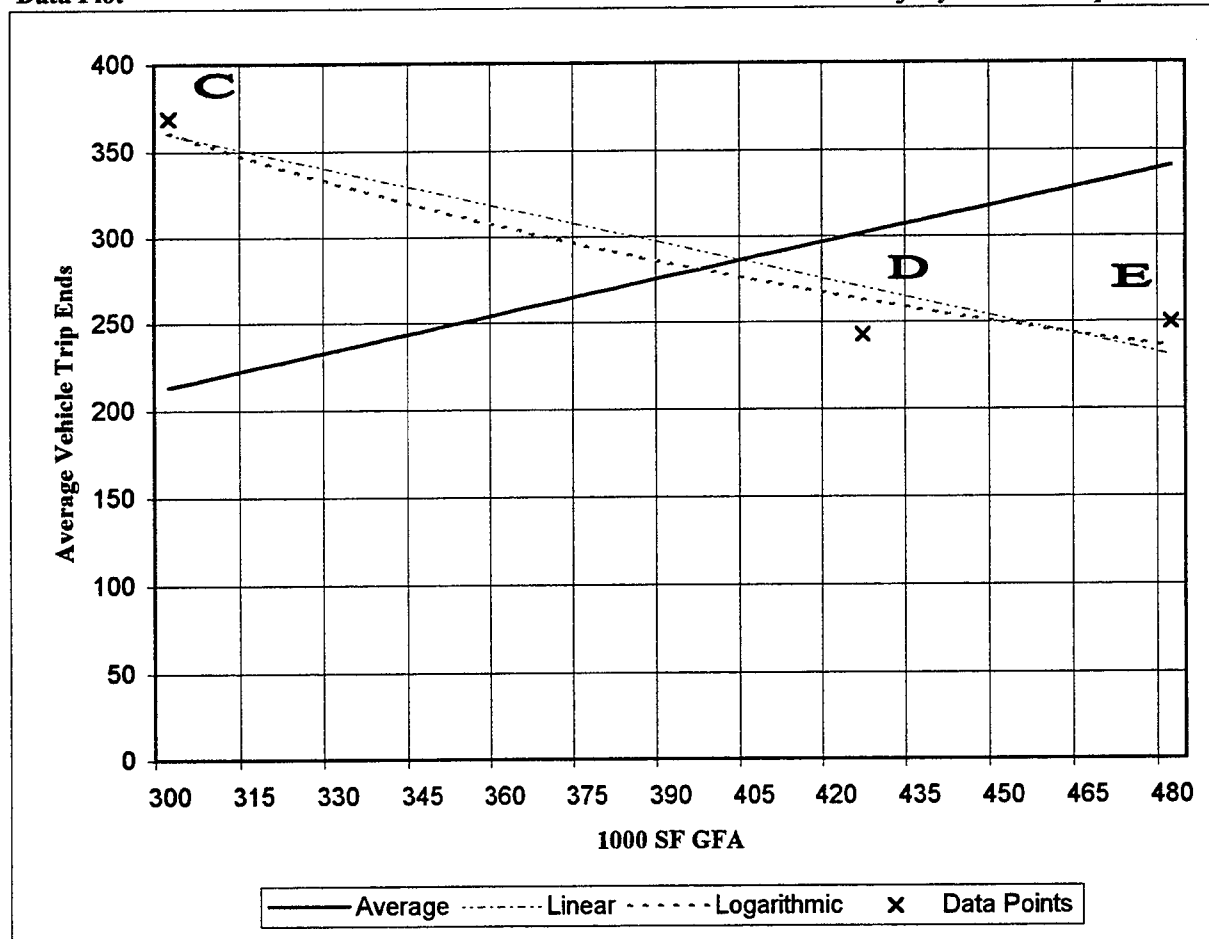
Number of Studies: 3
 Average SEV Value: 402
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.71	0.52-1.23	0.40

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=576.20-0.72(1000 SF GFA) $r^2 = 0.87$
Log Equation Trip Ends=64860.09(1000 SF GFA)⁻⁹¹ $r^2 = 0.20$
 (Equations with $r^2 < 0.5$ are not recommended for use)

Timber Processing Facilities

Average Vehicle Trip Ends V/S: 1000 SF GFA
 On a: Sunday Peak (Open)

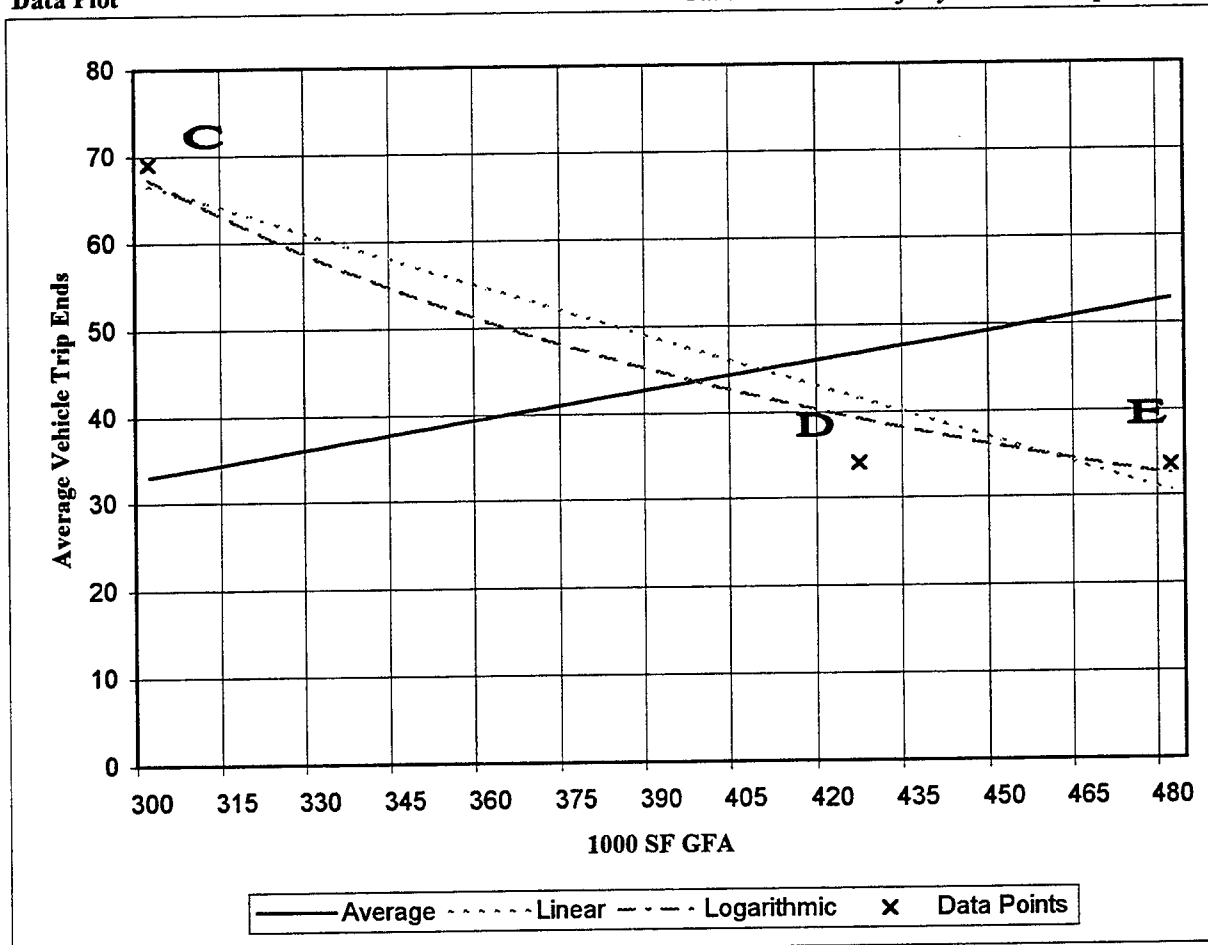
Number of Studies: 3
 Average SEV Value: 402
 Directional Distribution: Not Studied

Trip Generation per 1000 SF GFA

Average Rate	Range of Rates	Standard Deviation
0.11	0.07-0.23	0.09

Data Plot

Caution - Use Carefully - Small Sample Size



Linear Equation Trip Ends=126.57-0.20(1000 SF GFA) $r^2 = 0.94$
 Log Equation Trip Ends=465096.41(1000 SF GFA)^{-1.55} $r^2 = 0.97$

