



G R E S H A M
S M I T H A N D
P A R T N E R S

September 15, 2015

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Louisville Metro Planning & Design Services
444 S. 5th St, Suite 200
Louisville, KY 40202

**Subject: Proposed Development Trip Generation
 Mercy Site Apartments
 1170 East Broadway, Louisville KY
 GS&P Project No. 40976.00**

As part of the Detailed District Development Plan, city staff requested a trip generation calculation of the proposed development. Based on the Institute of Transportation Engineers (ITE) methodology and reference tables in the ITE Trip Generation manual, the proposed development is expected to generate 62 total trips in the AM peak hour and 81 total trips in the PM peak.

These total trips are then split between trips into the development and leaving the development. Based on the distribution of spaces between the proposed podium parking below the proposed building and utilization of the existing parking deck, the following table shows expected trips onto/from Mercy Way based on the proposed deck and Broadway for those units utilizing the existing deck. No background traffic was analyzed in this study.

Proposed Development:

- 4-Story Apartment Building
- 195 Total Units
 - 50 Units allocated to proposed deck (Access to Mercy Way only)
 - 145 Units allocated to existing deck (Access to East Broadway Only)

Proposed Trip Generation
ITE Land Use: Mid-rise Apartment Building (3 – 10 Story) (ITE Land Use Code 223)



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AM PEAK HOUR	PM PEAK HOUR
<ul style="list-style-type: none">• Use Fitted Curve: $T = 0.46(x) - 14.01$• Trip Distribution: 29% Entering, 71% Exiting <p>Mercy Way (50 Units)</p> <ul style="list-style-type: none">• $T = 0.46(50) - 14.01 = 8.99 = 9$ Trips Total<ul style="list-style-type: none">○ 6.4 Trips Exiting○ 2.6 Trips Entering <p>East Broadway (145 Units)</p> <ul style="list-style-type: none">• $T = 0.46(145) - 14.01 = 52.69 = 53$ Trips Total<ul style="list-style-type: none">○ 37.63 Trips Exiting○ 15.37 Trips Entering	<ul style="list-style-type: none">• Use Fitted Curve: $T = 0.53(x) - 11.27$• Trip Distribution: 59% Entering, 41% Exiting <p>Mercy Way (50 Units)</p> <ul style="list-style-type: none">• $T = 0.53(50) - 11.27 = 15.23 = 15$ Trips Total<ul style="list-style-type: none">○ 6.15 Trips Exiting○ 8.85 Trips Entering <p>East Broadway (145 Units)</p> <ul style="list-style-type: none">• $T = 0.53(145) - 11.27 = 65.58 = 66$ Trips Total<ul style="list-style-type: none">○ 27.06 Trips Exiting○ 38.94 Trips Entering

Should you have any further questions, please do not hesitate to contact me.

Matthew A. McLaren, PE
Senior Engineer, Gresham Smith and Partners

Attachments:

- ITE AM Peak Chart
- ITE PM Peak Chart

Mid-Rise Apartment (223)

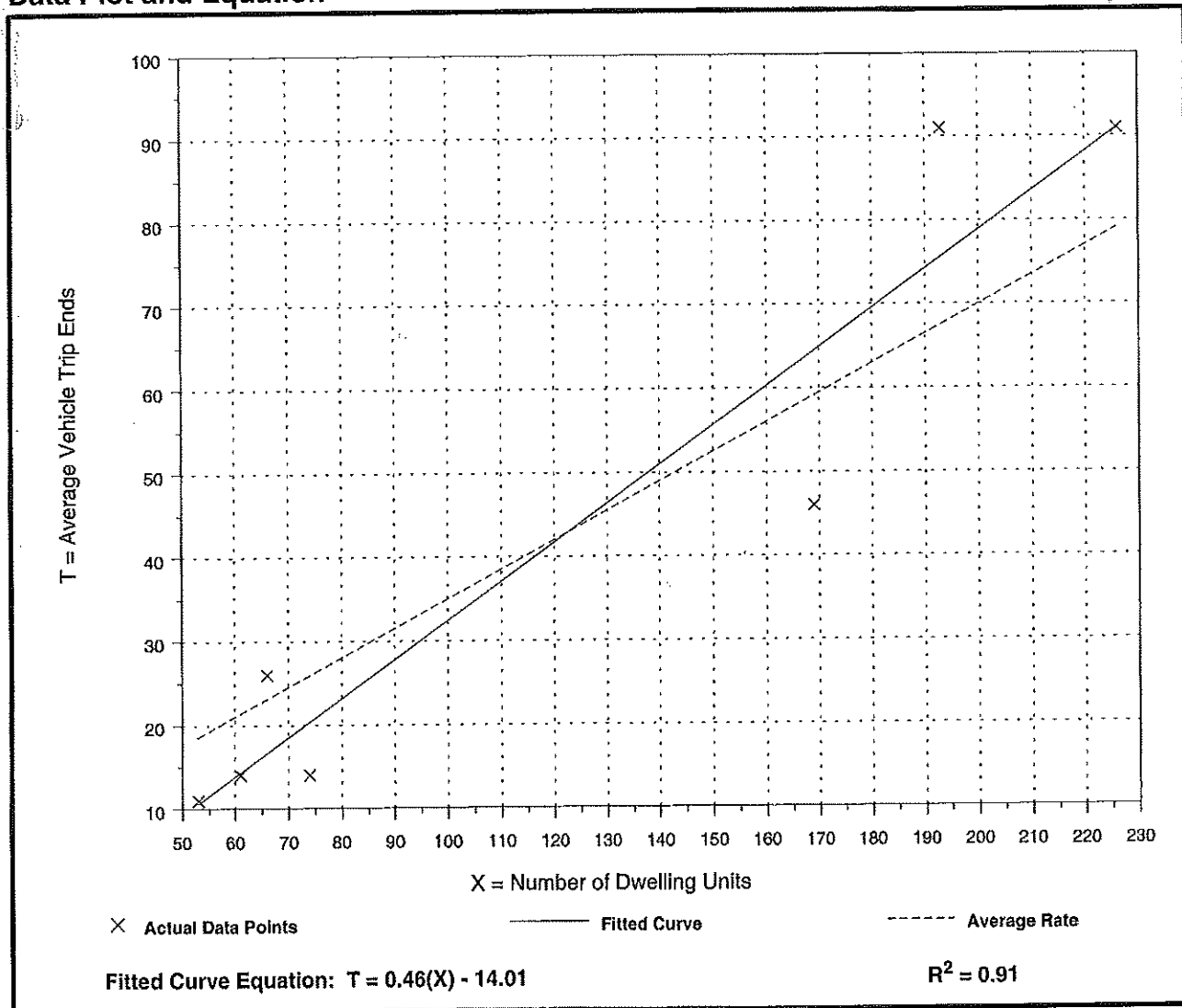
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 7
 Avg. Number of Dwelling Units: 120
 Directional Distribution: 29% entering, 71% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.35	0.19 - 0.47	0.60

Data Plot and Equation



Mid-Rise Apartment (223)

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

Number of Studies: 7
 Avg. Number of Dwelling Units: 120
 Directional Distribution: 59% entering, 41% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.19 - 0.60	0.67

Data Plot and Equation

