

**Boyers Road - Cosner  
PROJECT 2712**

**Entrance  
Year: 2018**

	Advancing Volume (North Bound) Rt. 704 Peak Hour	Opposing Volume (South Bound) Rt. 704 Peak Hour	Left Turn Volume (South Bound) Rt. 704 Peak Hour	Left Turn Volume as % of Advancing Volume	Left Turn Storage Length	Left Turn Taper
<b>Left Turn Lane</b> Boyers Road, Rt. 704-Northbound	Weekday-PM	232 PHV	223 PHV	9	4%	0' **

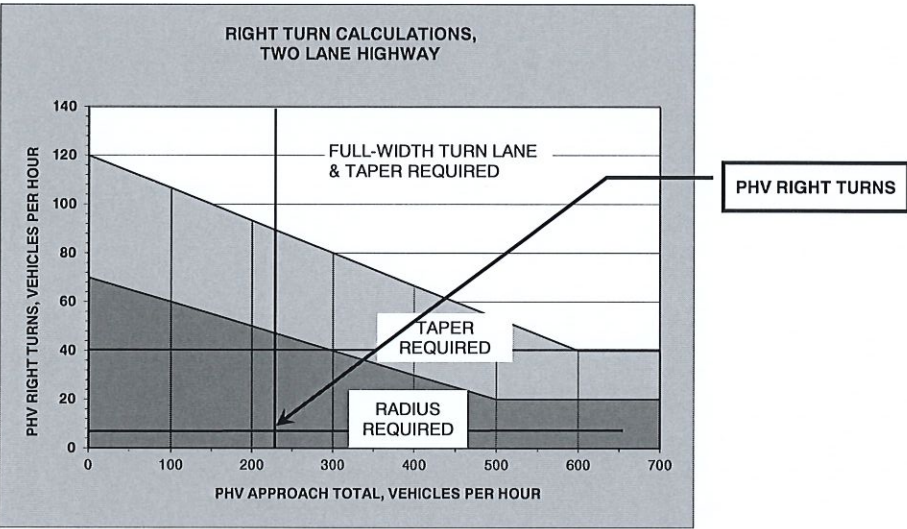
**No Left Turn Lane is required.**

\*\*VDOT Design Manual Appendix F, Figure 3-11  
\*\*\*VDOT Design Manual Appendix F, Figure N/A

	PHV Approach Volume	PHV Right Turn Volume
<b>Right Turn Lane</b> Boyers Road-Southbound	Weekday PM	232

**Only a radius is required.**

PHV APPROACH Total peak volume of vehicles per hour traveling in direction of Right Turn  
PHV RIGHT TURNS Total peak volume of vehicles per hour making a right turn



**Based on VDOT Traffic Data - 2010**  
Peak Hour Traffic 429 PHV 50.0% Traveling North Bound (estimate)  
Assumed growth rate/year: 2.0% 2 Years

Existing Peak Hour Traffic - North Bound:	223 PHV
- South Bound:	223 PHV

	Entering	Exiting
Generated Peak Hour Traffic:		
(Weekday PM)	18	11
(Weekday AM)	2	7
(Saturday)	-	-
Using Weekday PM (largest value) with	50.0%	traveling North Bound.
Right Turns into "Cosner-Boyers Road"	9 PHV	
Left Turns into "Cosner-Boyers Road"	9 PHV	

## Multifamily Housing (Low-Rise) (220)

**Vehicle Trip Ends vs: Dwelling Units**

**On a: Weekday,  
Peak Hour of Adjacent Street Traffic,  
One Hour Between 4 and 6 p.m.**

**Setting/Location: General Urban/Suburban**

Number of Studies: 50

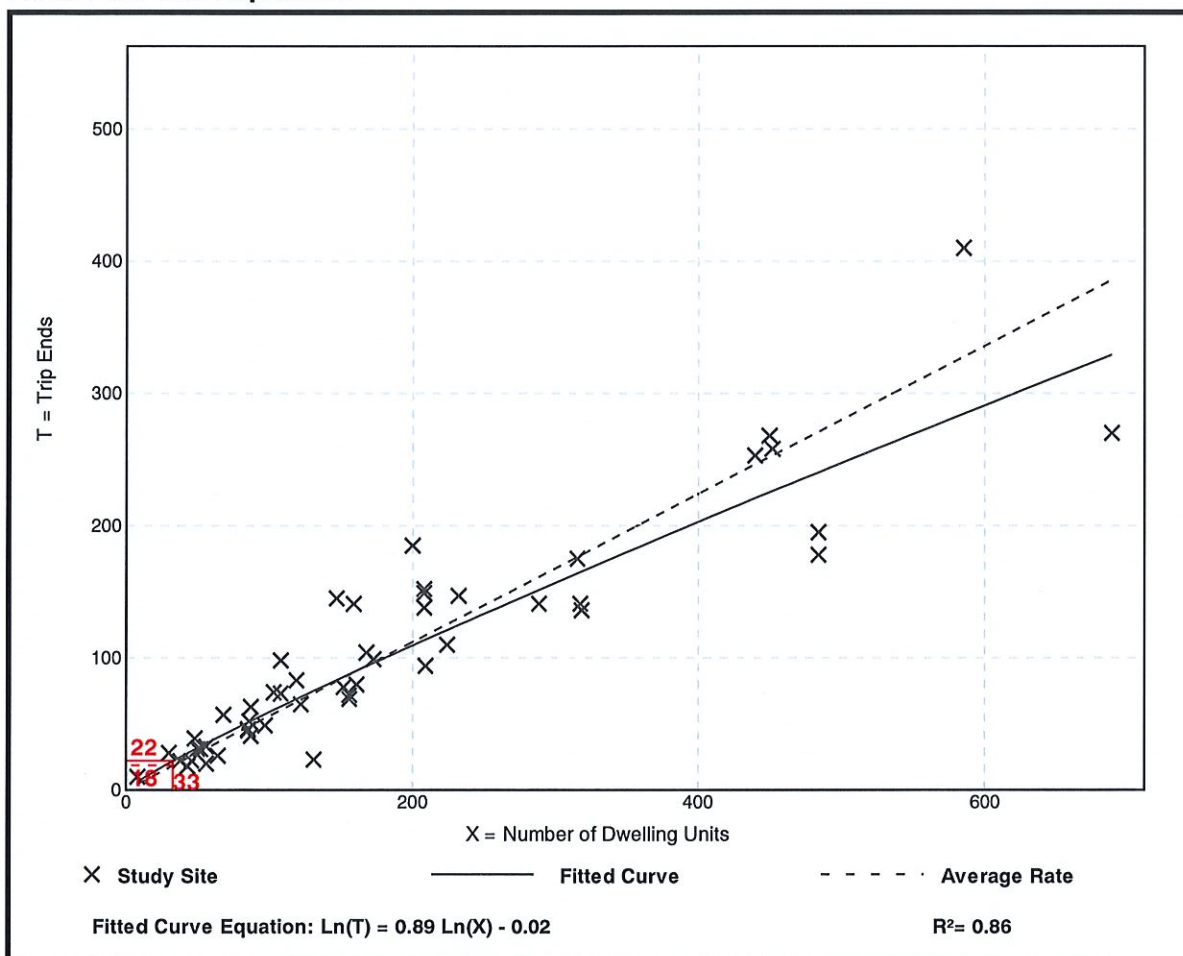
Avg. Num. of Dwelling Units: 187

Directional Distribution: 63% entering, 37% exiting

### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16

### Data Plot and Equation



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## Multifamily Housing (Low-Rise) (220)

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

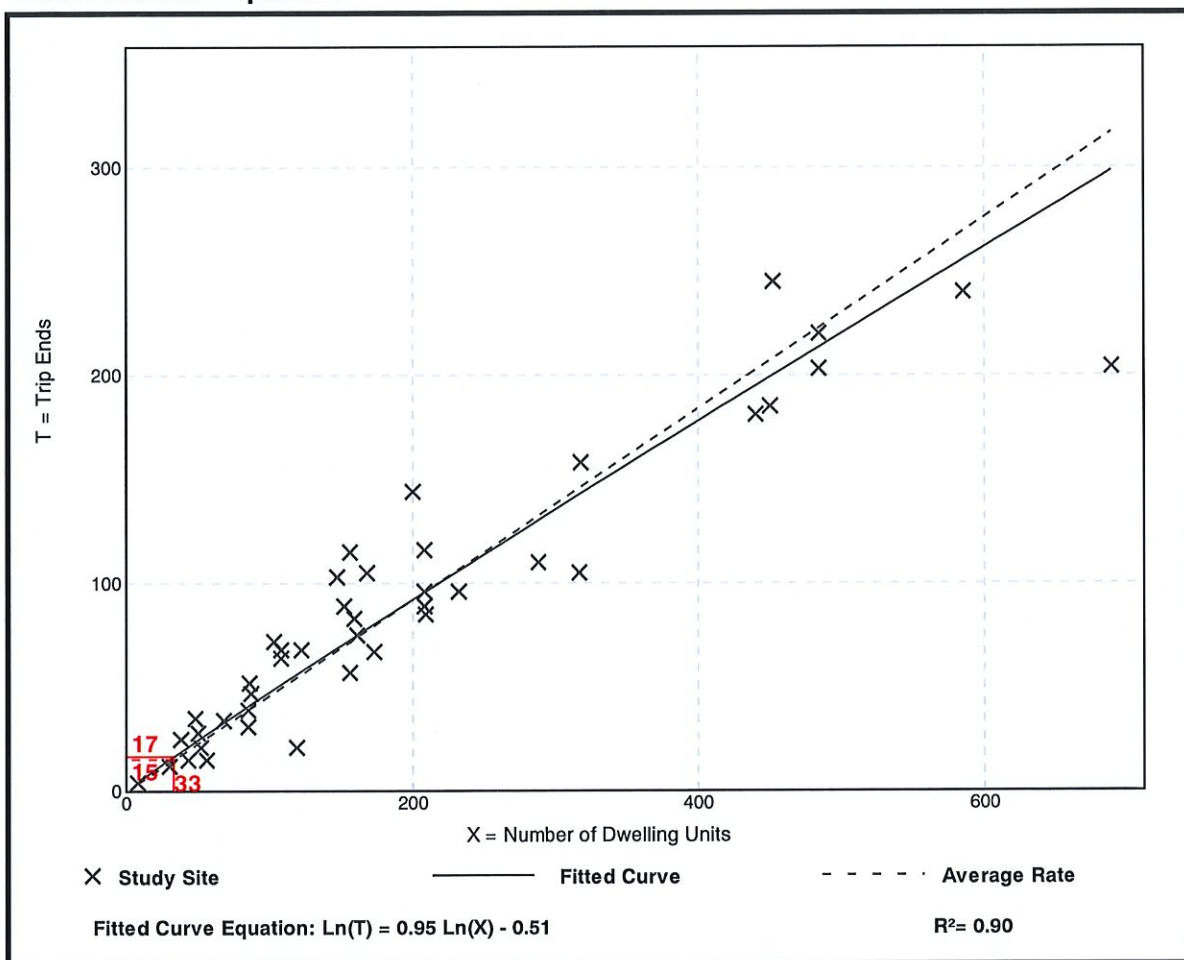
**Setting/Location: General Urban/Suburban**

Number of Studies: 42  
 Avg. Num. of Dwelling Units: 199  
 Directional Distribution: 23% entering, 77% exiting

### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.18 - 0.74	0.12

### Data Plot and Equation



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## Multifamily Housing (Low-Rise) (220)

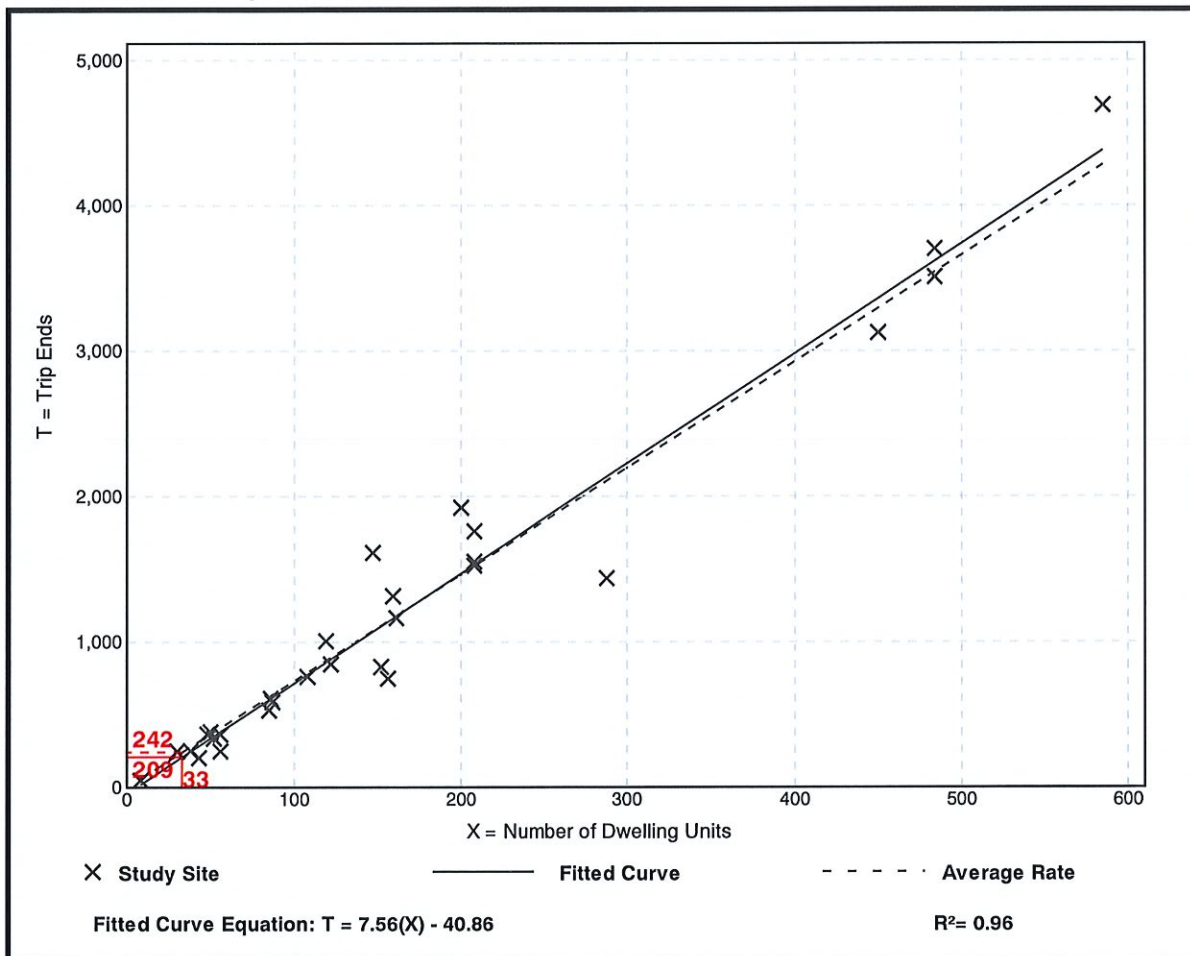
**Vehicle Trip Ends vs: Dwelling Units**  
**On a: Weekday**

**Setting/Location: General Urban/Suburban**  
Number of Studies: 29  
Avg. Num. of Dwelling Units: 168  
Directional Distribution: 50% entering, 50% exiting

### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31

### Data Plot and Equation



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Route Label	82-704	Route Atlas	Boyers Rd	Physical Jurisdiction	082 Rockingham	Maintenance Jurisdiction	082 Rockingham County	Link Length	1.50	Start Label	82-688 Taylor Spring Lane	End Label	US 33 Spotswood Trail	AAADT	3900	AAADT Quality	R	Percent 2 and 4 Tire Vehicles		Percent Busses		Percent Single Unit Trucks 2 Axle		Percent Single Unit Trucks 3+ Axle		Percent Combination Trucks on Tractor Trailer		Percent Combination Truck Classification	X	K Factor Quality	0.0000	Direction Factor	0.0000	AAADT Quality		Data Date	07/27/2012
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