Jonesboro Crime Distribution:

Spatial Distribution and Contributing Factors

Study Results

Presented to the City Council, Jonesboro, AR

July 17, 2012

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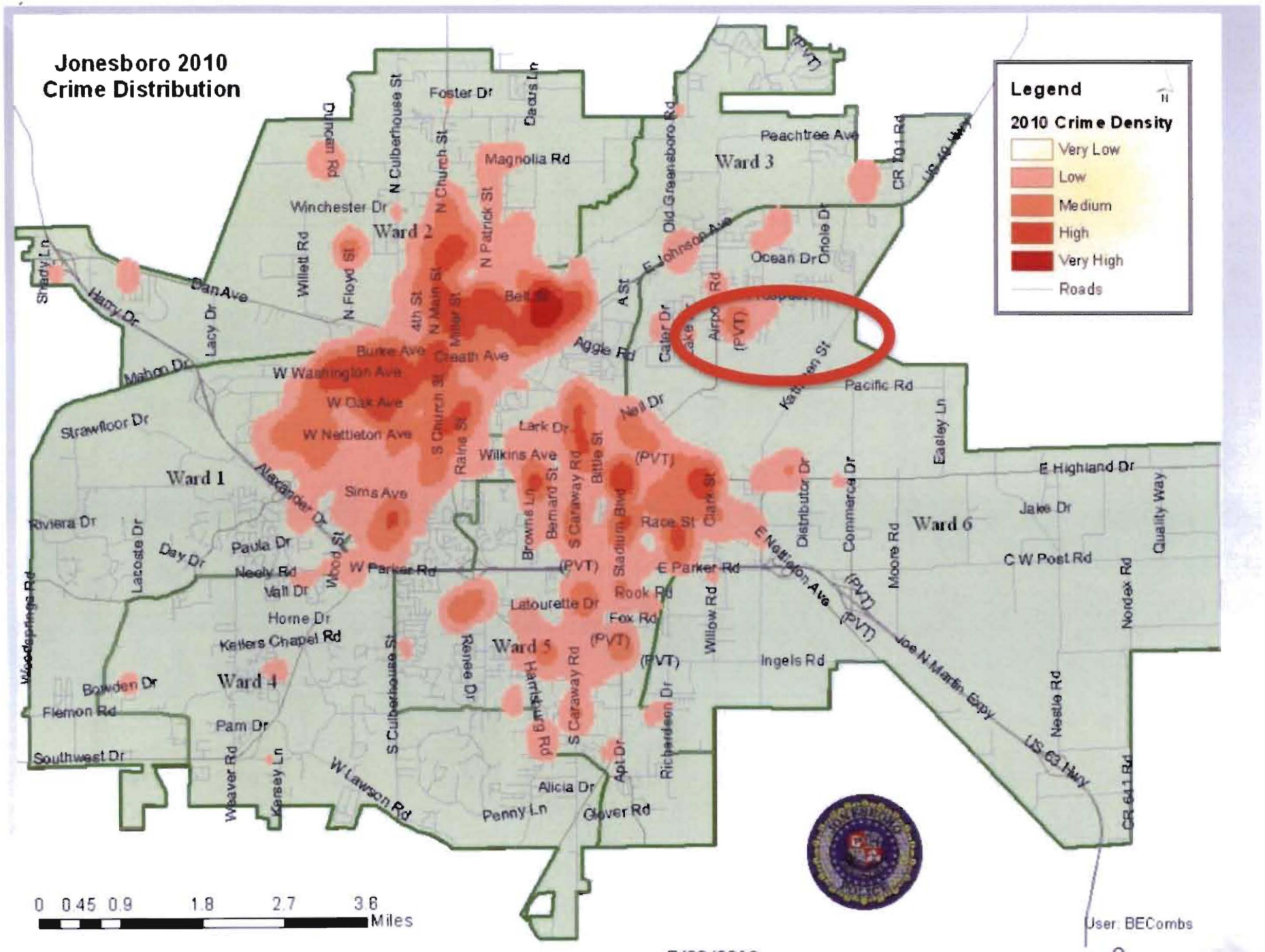
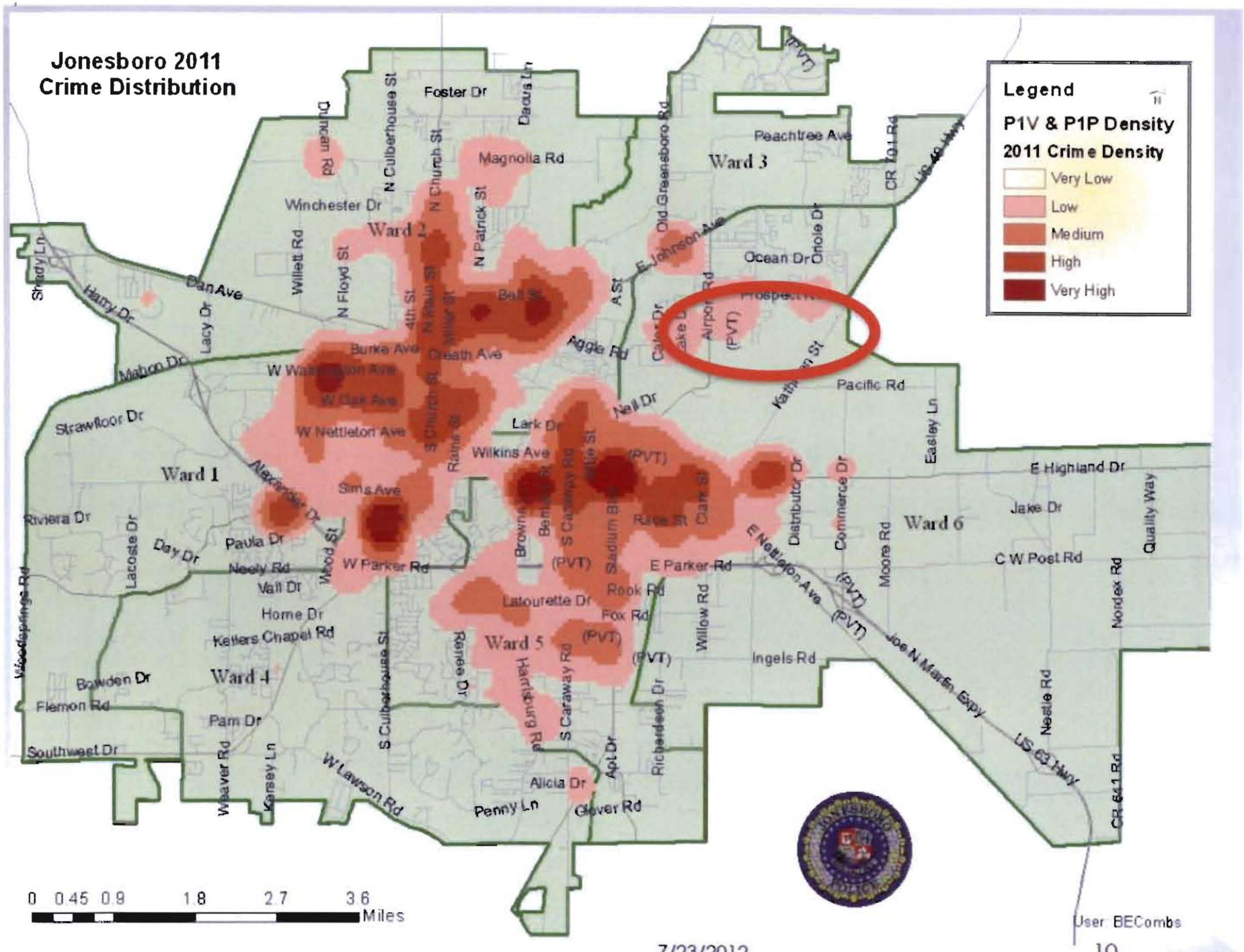
Jonesboro Police Department
Office of Crime Analysis & Criminal Intelligence


Jonesboro 2010
Crime Distribution
Legend
2010 Crime Density
Very Low
Low
Medium
High
Very High
Roads
Ward 1
Ward 2
Ward 3
Ward 4
Ward 5
Ward 6
Foster Dr
Magnolia Rd
Peachtree Ave
Winchester Dr
Ocean Dr
Pacific Rd
Aggie Rd
Burke Ave
Creath Ave
W Washington Ave
W Oak Ave
W Nettleton Ave
Sims Ave
Wilkins Ave
Lark Dr
Neil Dr
Race St
E Highland Dr
Jake Dr
C W Post Rd
Quality Way
Nordex Rd
Moore Rd
Commerce Dr
Distributor Dr
Easley Ln
E Nettleton Ave
E Parker Rd
W Parker Rd
Rook Rd
Fox Rd
Latourette Dr
Ingels Rd
Joe N Martin Expy
US 63 Hwy
Nestle Rd
CR 641 Rd
Willow Rd
Richardson Dr
Apt Dr
Alicia Dr
Penny Ln
Glover Rd
W Lawson Rd
Southwest Dr
Pam Dr
Flemon Rd
Bowden Dr
Keiters Chapel Rd
Horne Dr
Vail Dr
Neely Rd
Paula Dr
Day Dr
Lacoste Dr
Riviera Dr
Strawfloor Dr
Mahon Dr
Harry Dr
Shady Ln
Lacy Dr
Dan Ave
Willett Rd
N Floyd St
N Culberhouse St
N Church St
N Patrick St
4th St
N Main St
Miller St
S Church St
Raine St
Alexander Dr
Wood St
Woodsprings Rd
Kersey Ln
Weaver Rd
S Culberhouse St
Renae Dr
Hartsfield Rd
S Caraway Rd
Bernard St
Browns Ln
Bittle St
S Stadium Blvd
Clark St
Old Greensboro Rd
E Johnson Ave
Cater Dr
Airport Rd
Kathleen St
Onole Dr
CR 101 Rd
US 49 Hwy
Dunoon Rd
Dacus Ln
A St
(PVT)
0 0.45 0.9 1.8 2.7 3.6
Miles
User: BEColmbs
7/23/2012
9


Jonesboro 2011
Crime Distribution
Legend
P1V & P1P Density
2011 Crime Density
Very Low
Low
Medium
High
Very High
Ward 1
Ward 2
Ward 3
Ward 4
Ward 5
Ward 6
Foster Dr
Magnolia Rd
Peachtree Ave
Winchester Dr
Ocean Dr
Pacific Rd
Burke Ave
Death Ave
Aggie Rd
Lark Dr
Wilkins Ave
Sims Ave
W Nettleton Ave
W Parker Rd
E Parker Rd
E Highland Dr
C W Post Rd
Jake Dr
Ingels Rd
Latourette Dr
Rook Rd
Fox Rd
Home Dr
Keiters Chapel Rd
Pam Dr
Southwest Dr
Flemon Rd
Bowden Dr
Penny Ln
Glover Rd
Alicia Dr
W Lawson Rd
Strawfloor Dr
Riviera Dr
Paula Dr
Neely Rd
Vail Dr
Day Dr
Lacoste Dr
Woodsprings Rd
Dan Ave
Lacy Dr
Mahon Dr
Harry Dr
Shady Ln
Willett Rd
N Floyd St
N Culberhouse St
Duncan Rd
Dacus Ln
N Church St
N Patrick St
4th St
N Main St
Miller St
Ramey St
Old Greensboro Rd
E Johnson Ave
A St
Oriole Dr
CR 101 Rd
US 49 Hwy
Airport Rd (PVT)
Prospect St
Kathryn St
Nell Dr
Easley Ln
Distributor Dr
Commerce Dr
Moore Rd
Willow Rd
Quality Way
Nordex Rd
Nestle Rd
CR 641 Rd
US 63 Hwy
Joe N Martin Expy
E Nettleton Ave (PVT)
Brownfield Rd
Benton St
S Caraway Rd
Stadium Blvd
Race St
Clark St
Ramey Dr
Harrisburg Rd
Richardson Dr
Apt Dr
Wood St
Alexander Dr
Weaver Rd
Kersey Ln
S Culberhouse St
(PVT)
0 0.45 0.9 1.8 2.7 3.6
Miles
User BECombs
7/23/2012
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Crime Distribution in Relation to Rental Properties

- Some rental properties were observed to have a higher concentration of crime than others, apartments specifically
- Study 1: all apartment complexes in Jonesboro by ownership and their spatial relationship to crime (*Combs, 2011*)
  - 7 methods of analysis
  - Locations with highest crime concentration identified

Contributing Factors

Deduced from Neighborhood Hot Spots Theories

- Rental Properties
- Population Density
- Vacant Housing
- Probationers/Parolees
- Household Income
- Education
- Targets of Crime

Jonesboro Area MPO
2035 Metropolitan Transportation Plan

Prepared by
Jonesboro Metropolitan Planning Organization

In cooperation with
City of Jonesboro
City of Brookland
City of Bay
City of Bono
Craighead County
Jonesboro Economical Transportation System
Arkansas State Highway and Transportation Department
Federal Highway Administration
Federal Transit Administration

February 2011

TABLE 6-8: MPO Area Traffic Counts (continued)

Road	Location	Average Daily Traffic (2008)	Trend Period	Average Yearly Change
AR 351 (Industrial Drive)	Distribution Drive – Oliver Street	1,600	1999-2008	33
	Railroad – Sarah Street	5,400	1999-2008	0
AR 351 (Airport Road)	North of Nettleton Avenue	4,800	1999-2008	-122
	North of Aggie Road	4,200	1999-2008	100
AR 351 (Old Greensboro Road)	Lucille Drive – Cheshire Lane	8,600	1999-2008	289
AR 351	North of CR 766/754	4,900	1999-2008	78
	North of CR 762	4,100	1999-2008	67
AR 226	West of CR 201	2,000	1999-2008	33
AR 226 (Woodsprings Road)	East of Friendly Hope Road	4,500	1999-2008	213
	South of Catharine Drive	6,300	1999-2008	133
AR 158	East of CR 621	790	1999-2008	16
	West of US 63, North of CR 634	910	2000-2008	21
	Bay City	3,500	1995 - 2003	163
	Bay City	3,000	1999-2008	-44
	West of CR 673 in Bay City	760	1999-2008	-4
	North of CR 682/802	910	1999-2008	21
Washington Avenue	West of Freeman Street	3,800	1999-2008	-78
	Puryear Street – Wilson Street	3,300	2000-2008	-200
	McClure Street – Flint Street	3,900	2000-2008	-288
	East of Church Street	10,000	1999-2008	-111
Matthews Avenue	Ferrell Street – Freeman Street	2,800	1999-2008	33
	Floyd Street – Puryear Street	3,300	1999-2008	44
	East of Flint Street	4,300	1999-2008	-44
	Lakeshore Drive – Older Drive	8,800	1999-2008	-100
	Caraway Road – Washington Avenue	19,000	2000-2008	250
	Glendale Street – Tony Drive	11,000	1999-2008	0
	North of Nettleton Avenue	7,900	1999-2008	211
Aggie Road	East of Olympic Drive	7,900	1999-2008	156
	East of North Hunter Lane	5,700	1999-2008	211

Source: AHTD

Transit

The city of Jonesboro is served by Jonesboro Economical Transportation System (JETS), which has been in operation since 2006. JETS provides fixed-route and demand-response services to residents and visitors of the city of Jonesboro, including students, the elderly and the disabled.

As Table 6-9 suggests, a significant fraction of the households in the Jonesboro MPA have one or fewer vehicles. This relative scarcity of vehicles increases the potential demand for public transit services in this area.

211x4=844
5700+844=6544

6544 average daily traffic load on Aggie

Aggie Road Volume/Capacity Ratio: 1.28

	2-lane, one-way	15,000	19,900	21,100
Collector	5-lane	13,200	29,600	33,500
	4-lane	12,600	28,200	31,900
	3-lane	5,400	12,500	15,600
	2-lane	5,100	11,900	14,900
	2-lane, one-way	7,600	16,900	19,100

Source: Florida Department of Transportation, *Quality/Level of Service Handbook* (2009)

[1]For major city/county roadways, these values should be reduced by 10%. For other signalized roadways, these values should be reduced by 35%.

Linear extrapolation was applied to forecast the data for the years 2010, 2015, 2025, and 2035. Based upon forecasted annual average daily traffic (AADT) and street capacities, volume-to-capacity (V/C) ratios were computed. The V/C ratio is used to express the quality of traffic service on a segment of a road. A low ratio corresponds with a high level of service (LOS A or B), indicating relatively free-flowing traffic. A high V/C ratio (1.0 or higher) means conditions are congested (LOS E or F). V/C ranges are often used to define different levels of congestion. Four such ranges are listed in Table 7-4.

TABLE 7-4: Congestion Level

Ratio	Capacity	Level of Service	Congestion
V/C less than 0.8	Below Capacity	A, B, or C	Little or no congestion
V/C between 0.8 and 1.0	Approaching Capacity	C, D, or E	Some intermittent congestion
V/C between 1.0 and 1.2	At capacity	E, or F	Moderate consistent congestion
V/C more than 1.2	Over capacity	F	Severe or persistent congestion

Source: Jonesboro MPO