

**CITY OF MACCLENNY  
2025 COMPREHENSIVE PLAN**

**TRAFFIC CIRCULATION  
ELEMENT**

---

---

**Section B**

Prepared by



**CONTENTS**

Goals, Objectives and Policies ..... B-2  
Inventory of Existing System..... B-9  
Analysis of Existing Deficiencies..... B-11  
Analysis of Projected Needs ..... B-16  
Issues and Opportunities ..... B-18

**TABLES**

Table B.1: LOS Analysis ..... B-13  
Table B.2: FDOT Five-Year Work Program ..... B-16

**FIGURES**

Illustration B.1: Existing Roadway Map..... B-10  
Illustration B.2: 2025 Projected Peak Hour LOS Map ..... B-12  
Illustration B.3: 2025 Future Transportation Plan Map ..... B-17

**CITY OF MACCLENNY  
2025 COMPREHENSIVE PLAN**

**TRAFFIC CIRCULATION  
ELEMENT**

---

---

**GOALS, OBJECTIVES  
AND POLICIES**

## Section B: Traffic Circulation Element

### City of Macclenny 2025 Comprehensive Plan

**GOAL 2** | **THE CITY WILL PROMOTE THE DEVELOPMENT OF A TRANSPORTATION SYSTEM WHICH WILL PROVIDE FOR THE SAFE AND EFFICIENT MOVEMENT OF PEOPLE AND GOODS AND THE USE OF ALTERNATIVE MODES OF TRANSPORTATION.**

**Objective 2.01** | **Level of Service.** The City will establish minimum acceptable Levels of Service for all roadway segments within the major roadway network. The City shall utilize the Florida Department of Transportation standards as they relate to guidelines for determining the operating conditions of its roadways and intersections.

**Policies** | 2.01.01 Peak Hour Level of Service standards. The minimum levels of service acceptable on all roads shall be as stated below, and applicable to the peak hour and 24 hour periods

Roadway Classification	Urban Areas
Principal Arterials	D
Minor Arterials & others	D

2.01.02 The City shall use the Institute of Transportation Engineers, *Trip Generation Manual*, latest edition, to determine the number of trips to be produced or attracted to a particular land use when assessing a manually-calculated trip generation and distribution analysis of traffic.

2.01.03 The City is within the Transitioning Area type. The City adopts the following standards from the Florida Department of Transportation Level of Service Report for State transportation facilities within the city limits:

Roadway Facility	Maximum Service Volume		Minimum LOS
	AADT	Peak Hour	
State Road 121	33,800	3,280	D
State Road 121 <sup>(1)</sup>	33,800	3,280	D
State Road 121 <sup>(2)</sup>	15,960	1,554	D
State Road 121 <sup>(3)</sup>	15,200	1,480	D
State Road 228 <sup>(4)</sup>	13,800	1,350	D
State Road 228 <sup>(5)</sup>	15,200	1,480	D
State Road 10 (US Hwy 90)	15,200	1,480	D
Interstate 10	49,900	4,860	C

(1) From I-10 to Lowder Street (4 lanes, divided)

(2) From Lowder Street to State Road 10/US 90 (2 lanes, divided)

(3) From State Road 10/US 90 to CR 228 (2 lanes, undivided)

(4) From I-10 to Barber Road (2 lanes, undivided)

2.01.04 Multi-use developments of regional impact may satisfy transportation concurrency requirements by payment of a proportionate share contribution.

2.01.05 Public transit facilities in the City shall not be subject to concurrency management requirements.

2.01.06 For the purpose of issuing a development order or permit, a proposed development which is deemed to have a de minimus impact, meeting the requirements of Rule 9J-5.0055(3)(C)1-4, F.A.C. shall not be subject to the concurrency requirements of Rule 9J-5.055(3). In this regard, the City shall implement a de minimus exemption provision as a component of its Concurrency Management System.

**Policy** | 2.01.07 All transportation facilities necessary to meet concurrency must be in place or under construction within three years after building permit approval.

<b>Objective 2.02</b>	<b>Safety and Efficiency: The City will emphasize the safe and efficient movement of people and goods.</b>	
Policies	2.02.01	Traffic Operation Improvements. Traffic operation improvements such as traffic signals, turn lanes, service roads, signing and pavement marking shall be undertaken when warranted to improve the safety and efficiency of the existing roadway network.
	2.02.02	High Accident Locations. Accident records shall be investigated on a regular basis to determine whether improvements to the roadway network are warranted to relieve high accident conditions.
	2.02.03	The City shall coordinate with Baker County and the Florida Department of Transportation in order to ensure that levels of service on backlogged facilities are improved to the minimum adopted standards identified in Policy 2.01.01. This coordinated effort will be achieved by giving priority to identified backlogged facilities when prioritizing projects in the FDOT Five-Year Work Program and the County and City's updates to their respective Capital Improvement Schedules.
	2.02.04	The maintenance of all roadway surfaces shall continue to be funded at levels which will permit resurfacing within seven (7) years of a facility segment being evaluated at less than the minimum accepted level according to the criteria established by the Building and Zoning Department and authorized by the City Commission.
	2.02.05	The City shall strive to bring each roadway segment into design conformity (shoulder widths, clear zone, turning lanes, etc.) concurrent with the implementation of its road resurfacing and reconstruction programs except where the roadway or roadway segment is constrained.
	2.02.06	The City shall require warrants for installation of all new traffic control devices and shall strive to eliminate unwarranted traffic signals on a regular basis.
	2.02.07	The City shall require that all traffic control devices installed on private property be in conformity with the most recent edition of the <i>Manual on Uniform Traffic Control Devices for Streets and Highways</i> , published by the U.S. Department of Transportation, Federal highway Administration. Existing traffic control devices installed on private property shall be required to comply with these standards if moved or replaced.
<b>Objective 2.03</b>	<b>Roadway Network and Land Use Consistency: The City shall develop, construct and maintain a major roadway network which is consistent with the existing and future land use patterns.</b>	
Policies	2.03.01	Roadway Project Evaluation Criteria. Proposed roadway improvement projects shall be evaluated, ranked and added to the Roadway Improvement Program based on the criteria established in Policy 8.01.02 in the Capital Improvements Element.
	2.03.02	Review and Update of Roadway Improvement Program. The Roadway Improvement Program shall be reviewed on at least an annual basis: to indicate the completion of projects; and, to add projects, as appropriate by the criteria listed in Policy 8.01.02 in the Capital Improvements Element, and as funding allows.
	2.03.03	Review of Development Proposals. Procedures shall be implemented and maintained such that all development proposals are reviewed prior to receipt of construction approval to insure consistency with the Objectives and Policies of the Traffic Circulation Element including the 2025 Future Transportation Plan Map.

## Section B: Traffic Circulation Element

### City of Macclenny 2025 Comprehensive Plan

Policies	<p>2.03.04 The City shall require that access to new residential parcels with frontage along two or more roadways be located on the roadway with the lower functional class, or the lower average daily traffic inclusive of development traffic for roadways of the same functional class, unless it can be demonstrated in a traffic study submitted for review and approval of the City Engineer that such access restrictions would:</p> <ul style="list-style-type: none"> <li>(a) Present a safety hazard,</li> <li>(b) Cause undue congestion or delay on adjacent road facilities,</li> <li>(c) Cause environmental degradation, or</li> <li>(d) Hinder adequate traffic circulation.</li> </ul> <p>2.03.05 The City shall require that access to new and redeveloped non-residential parcels with frontage along two or more roadways be limited to one access point per roadway. Access for the higher functional class roadway, or roadway with the higher average daily traffic inclusive of development traffic for roadways of the same functional class, shall be limited to right turn-in/right turn-out only, unless it can be demonstrated in a traffic study submitted for review and approval of the City Engineer that such access restrictions would:</p> <ul style="list-style-type: none"> <li>(a) Present a safety hazard,</li> <li>(b) Cause undue congestion or delay on adjacent road facilities,</li> <li>(c) Cause environmental degradation, or</li> <li>(d) Hinder adequate traffic circulation.</li> </ul> <p>2.03.06 The City shall encourage, through the development review process, development that will minimize external trip generation through the integration of land uses by requiring such measures as interconnecting land uses, sharing access drives and off-street parking areas, and encouraging planned unit developments.</p> <p>2.03.07 The City shall encourage, through the development review process, the interconnections of land uses that reduce the need for external trip generation and encourage alternative methods of movement.</p> <p>2.03.08 In cooperation with the FDOT, continue to implement strategies to facilitate local traffic to use alternatives to the Florida Intrastate Highway System (FIHS) as a means of protecting its interregional and intrastate functions. Among the strategies that the City will help implement are:</p> <ul style="list-style-type: none"> <li>(a) Maintain and strive to improve the level of service on City roads that parallel FIHS roads.</li> <li>(b) Coordinate and synchronize the signalization system along City roads that parallel FIHS roads.</li> </ul>								
<b>Objective 2.04</b>	<p><b>Right-of-Way Protection: The City shall institute a program of protection and acquisition of rights-of-way for the major roadway network; to ensure continuity of the roadway network; and, to protect the existing and future roadway network from development and other encroachments.</b></p>								
Policies	<p>2.04.01 Right-of-Way Standards. The following minimum right-of-way standards are recommended to be included in the Land Development Regulations for future new segments of the roadway network:</p> <table border="1" data-bbox="678 1749 1170 1869"> <thead> <tr> <th><u>Roadway Classification</u></th> <th><u>Right-of-Way Width</u></th> </tr> </thead> <tbody> <tr> <td>Arterial</td> <td>100 feet</td> </tr> <tr> <td>Collector</td> <td>60 feet</td> </tr> <tr> <td>Local</td> <td>50 feet</td> </tr> </tbody> </table>	<u>Roadway Classification</u>	<u>Right-of-Way Width</u>	Arterial	100 feet	Collector	60 feet	Local	50 feet
<u>Roadway Classification</u>	<u>Right-of-Way Width</u>								
Arterial	100 feet								
Collector	60 feet								
Local	50 feet								

Policies	<p>2.04.02 Right-of-Way Acquisition. Minimum right-of-way shall be acquired as part of roadway improvement projects undertaken on existing segments of the major roadway network, unless such acquisition is unreasonable because of cost or funding. If a property owner contributes right-of-way and expands a State transportation facility, such contribution may be applied as a credit against any future transportation concurrency requirement.</p> <p>2.04.03 Right-of-Way Dedication and Preservation. A program shall be instituted in connection with development approvals which promotes and encourages the dedication, preservation, or other protection of rights-of-way for the existing and future major roadway network as defined in the Traffic Circulation Element including the 2025 Future Transportation Plan Map.</p>
<b>Objective 2.05</b>	<p><b>Bicycle and Pedestrian Ways: The City shall encourage and promote the safe integration and utilization of bicycle and pedestrian movement on the major roadway network, within public facilities, commercial development, residential areas, recreational facilities and other areas that allow public access.</b></p>
Policies	<p>2.05.01 Bicycle Route Network. By January 1, 2013, a bicycle route network shall be designed to allow for safe bicycle use throughout the City.</p> <p>2.05.02 Bicycle Safety Education. Every effort shall be made to promote education in the safe and proper use of bicycles on roadways. This education should especially be oriented to schoolchildren.</p> <p>2.05.03 The City shall require developers of commercial property to provide for access by and securing of bicycles on site when the Building and Zoning Department determines the need based on the size and location of the development.</p> <p>2.05.04 The City shall require new dedicated local streets serving non-residential areas to include sidewalks five (5) feet in width within the dedicated right-of-way or an alternative pedestrian circulation system approved by the Building and Zoning Coordinator.</p> <p>2.05.05 The City shall require new dedicated local streets serving residential areas to include sidewalks on both sides of the street within the dedicated right-of-way or an alternative pedestrian circulation system approved by the Building and Zoning Coordinator.</p>
<b>Objective 2.06</b>	<p><b>Site Development Traffic Circulation: The City shall require that all major developments and planned unit developments provide a circulation system which: provides adequate access to the major roadway network; provides for sound design of local and collector streets within such development; and otherwise provides for the objectives and policies of the <del>Land Use and Transportation</del> Traffic Circulation Element including the 2025 Future Transportation Plan Map.</b></p>
Policies	<p>2.06.01 Encourage Circulation within Development. By January 1, 2015 the City shall adopt regulations that provide for on-site parking for motorized and non-motorized vehicles, internal automobile circulation, bicycle use, pedestrian movement and other features to minimize utilization of the major roadway network.</p> <p>2.06.02 Consistency with transportation System. The roadway and circulation systems of proposed developments should be developed in a manner consistent with the Objectives, Policies and standards of the Traffic Circulation Element including the 2025 Future Transportation Plan Map.</p>

## Section B: Traffic Circulation Element

### City of Macclenny 2025 Comprehensive Plan

---

Policies	2.06.03	Access to Major Roadway System. Development which provides access directly to the major roadway network shall be designed to: <ul style="list-style-type: none"><li>(a) Provide adequate and safe entrance intersection(s) including turn lanes, acceleration/deceleration lanes, signalization, signage and pavement marking, as appropriate;</li><li>(b) Prevent the creation of hazardous traffic conditions, such as excessive curb cuts which impede traffic flow; and</li><li>(c) Ensure the long-term adequacy of the major roadway network.</li></ul>
<b>Objective 2.07</b>		<b>Coordination with Other Transportation Agencies: The City will coordinate with the Department of Transportation's Five-Year Transportation Plan and with other agencies and local governments.</b>
Policy	2.07.01	Coordination with Department of Transportation Standards and Programs. Transportation activities will be accomplished by the minimum standards of the Florida Department of Transportation unless other standards are set by the City Commission.

**CITY OF MACCLENNY  
2025 COMPREHENSIVE PLAN**

**TRAFFIC CIRCULATION  
ELEMENT**

---

---

**DATA  
AND ANALYSIS**

## Section B: Traffic Circulation Element

### City of Macclenny 2025 Comprehensive Plan

---

The purpose of the Traffic Circulation Element is to plan for future motorized and non-motorized traffic circulation systems, pursuant to Chapter 163, F.S. and Chapter 9J-5, F.A.C. An essential basis for planning traffic circulation systems is the Future Land Use Map. Clearly, the map will direct where roadway facilities must be improved and where new roadway facilities may be needed. The criteria for determining the extent of facilities needed are the adopted level of service (LOS) standards.

Before a local government can responsibly plan for its future, it must assess the capability of its existing traffic circulation system to serve current demand. It is necessary to determine existing levels of service and to identify existing roadway deficiencies within the traffic circulation system.

Traffic circulation provides the linkage necessary for movement within the community as well as movement through, into and out, of the community. The hierarchy of the circulation system is comprised of limited access roads/highway, arterial roads and collector roads. They are all different in character and provide different levels of service based on perceived traffic requirements and engineering design criteria.

### B.1 Inventory of Existing System

The City has a primary circulation system which consists of principal and minor arterial roads. The primary east-west facility is US 90/SR 10 (Macclenny Avenue). This road is classified as principal arterial and bisects the City. The two north-south minor arterials, SR 121 (6<sup>th</sup> Street) and SR 228 (5<sup>th</sup> Street), parallel each other within the city limits and are separated by a city block. Each of these facilities intersects and connects with U.S. Interstate 10 (I-10). North of the city limits, SR 228 merges with and becomes SR 121. There is a third north-south minor collector, SR 23A, that parallels the western boundary of the City until it intersects with the City's southern boundary line. At this point, SR 23A makes a 90° turn to the east, follows the southern boundary, crosses SR 121 and then merges with SR 228.

The remainder of the traffic circulation system in Macclenny consists of local roads or streets which serve the residential and commercial activities within the City.

This inventory of the existing traffic circulation system was prepared as a basis for examining the existing roadway deficiencies and projected roadway needs of the City's traffic circulation system. Roads located within the City include those which are the responsibility of the Florida Department of Transportation (FDOT) for the state highway system, Baker County for county roads, and the City itself for all roads not privately owned, or previously mentioned. FDOT, Baker County and the City of Macclenny provided data necessary for the inventory of the existing system. These data included existing roadway functional classifications, the most recently available traffic volume counts of average daily traffic (ADT), and accident frequency data. The current system adopted by the State of Florida for the functional classification of highways and highway systems include the following:

#### State Highway System

- Principal arterials
- Minor arterials

#### County Road System

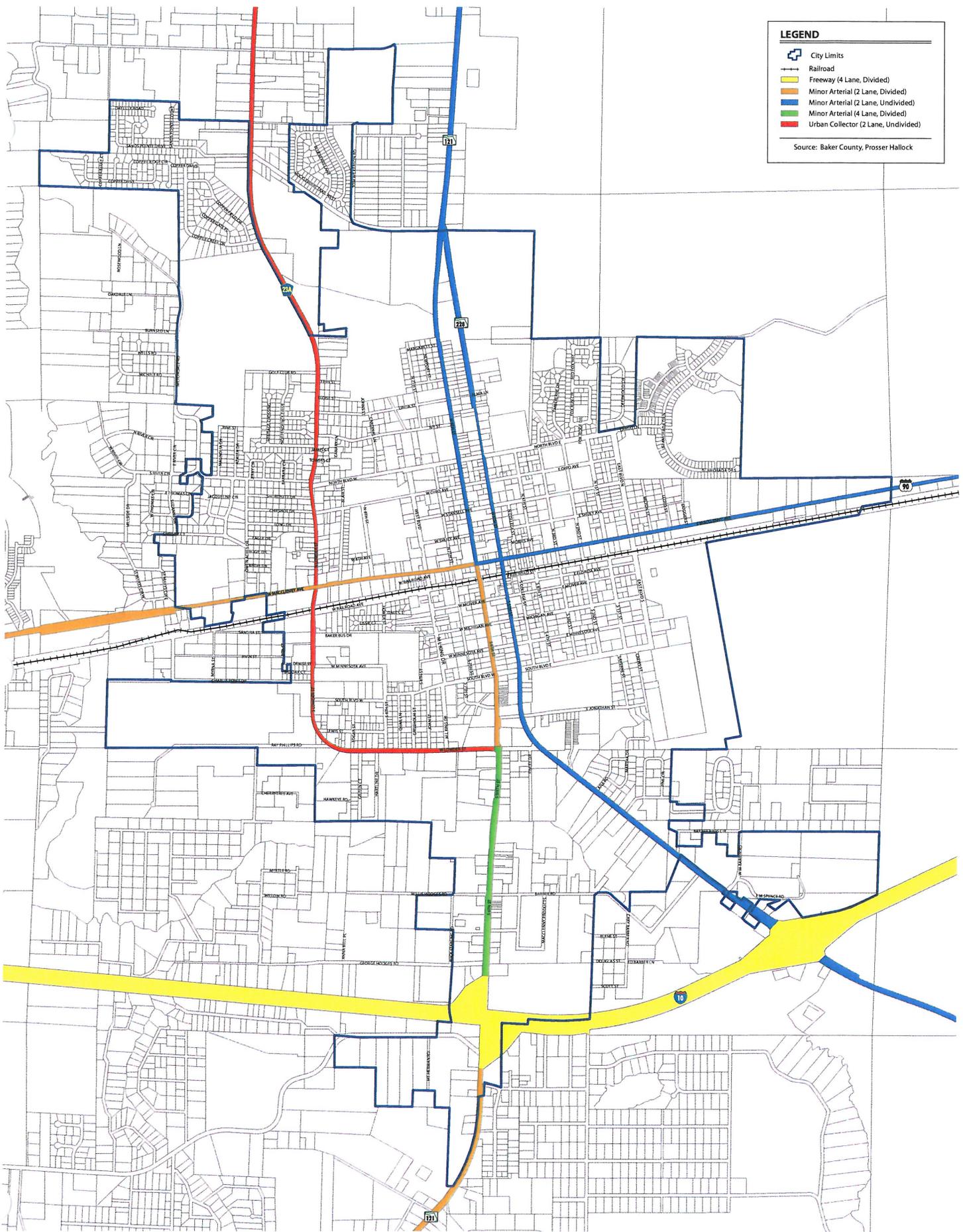
- Minor arterials
- Urban collectors

#### City Street System

- Urban collectors
- Local roads (within city limits)

Macclenny Avenue (US 90/SR 10) is included in the State Highway System and is classified as a principal arterial. Sixth Street (SR 121) is classified in the State Highway System and is classified as a minor arterial. Fifth Street (SR 228) is included in the State Highway System and is classified as a minor arterial from I-10 to US 90. Before this point, it is classified as a local street. Lowder Street (SR 23A) is included in the County Highway System and is classified as an urban collector.

Locations of the existing roadway functional types, the number of lanes, and rail lines are depicted on Illustration B.1. Ports, airports, high speed rail lines or related facilities are not found in the City and were, therefore, not considered. The City is not part of the North Florida Transportation Planning Organization; however, the results of the 2010 Census may lead to the TPO boundary being extended into Baker County and including the City.



**LEGEND**

- City Limits
- Railroad
- Freeway (4 Lane, Divided)
- Minor Arterial (2 Lane, Divided)
- Minor Arterial (2 Lane, Undivided)
- Minor Arterial (4 Lane, Divided)
- Urban Collector (2 Lane, Undivided)

Source: Baker County, Prosser Hallock

NORTH

0 600 1200  
Feet

April 13, 2010



**Illustration B.1 Existing Roadway Map**

Prosser Hallock  
PLANNERS & ENGINEERS

13901 Sutton Park Drive South, Suite 200 Jacksonville, Florida 32224-4229  
p 904.729.3655 f 904.729.3413 info@prosserhallock.com

Project No. 104101.02

P1104101.01Macclenny\_Roadway\_S104101.docx

## Section B: Traffic Circulation Element

### City of Macclenny 2025 Comprehensive Plan

---

Levels of service are a good summary of facility conditions. The LOS of a roadway is often defined as the ability of a maximum number of vehicles to pass over a given section of roadway or through an intersection during a specified time period, while maintaining a given operating condition. In order to establish a basis for adopting LOS standards at peak hour, the existing LOS for roadways was calculated using the ratio of “peak hourly demand volume” to “peak hourly capacity.”

The standardized descriptions of service levels used in transportation planning are as follows:

- **LOS A:** Highest LOS which describes primarily free-flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at intersections is minimal.
- **LOS B:** Represents reasonably unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tensions.
- **LOS C:** Represents stable traffic flow operations. However, ability to maneuver and change lanes may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds. Motorists will experience an appreciable tension while driving.
- **LOS D:** Borders on a range in which small increases in approach delay and, hence, decreases in speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combinations of these.
- **LOS E:** This represents traffic flow characterized by significant delays and lower operating speeds. Such operations are caused by some combination or adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
- **LOS F:** This represents traffic flow characterized at extremely low speeds. Intersection congestion is likely at critical signalized locations, with high approach delays resulting. Adverse signal progression is frequently a contributor to this condition.

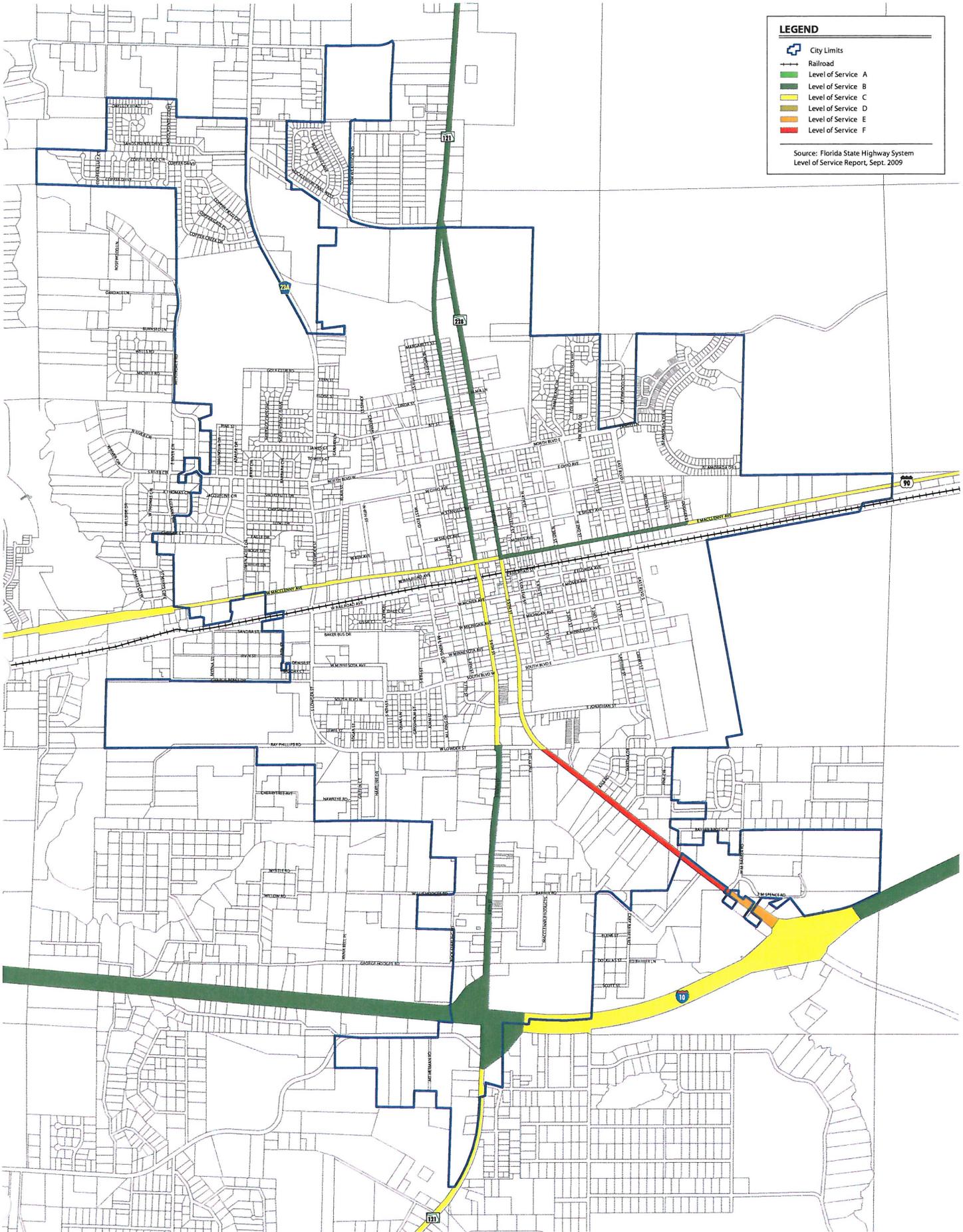
The capacity of a roadway is often defined as the maximum number of vehicles that have a reasonable expectation of passing over a given roadway section or through a given intersection under prevailing road and traffic conditions during a specified period of time. The peak hour capacities utilized are illustrated in Table B.1. Once the roadway capacities were ascertained, the peak hourly demand volume to peak hourly capacity (V/C) ratios were calculated.

## B.2 Analysis of Existing Deficiencies

Highway capacity analysis was based on the Florida Department of Transportation (FDOT) Level of Service Manual – Florida Highway System Plan, dated 1998, and the Generalized Daily Level of Service – Maximum Volumes.

The objectives of the analysis is to determine whether the four primary facilities identified in the inventory for which traffic counts are available have the needed capacity to accommodate vehicular traffic at an acceptable level of service.

As illustrated in Table B.1, all of the major roadways in the City are presently operating at an acceptable level of service and are projected to remain so through 2015. By 2025, the portion of SR 228 (5<sup>th</sup> Street) from the I-10 interchange to West Lowder Street is projected to operate at unacceptable levels of service (see Illustration B.2 on the following page).



**LEGEND**

- City Limits
- Railroad
- Level of Service A
- Level of Service B
- Level of Service C
- Level of Service D
- Level of Service E
- Level of Service F

Source: Florida State Highway System  
Level of Service Report, Sept. 2009

NORTH

0 600 1,200  
Feet

April 13, 2010

*City of Macclenny*

**Illustration B.2 2025 Projected Peak Hour LOS Map**

Prosser Hallock  
PLANNERS & ENGINEERS

13901 Sutton Park Drive South, Suite 200 Jacksonville, Florida 32224-4729  
p- 904.739.2655 f- 904.738.5113 info@prosserhallock.com

Project No. 104101.02

P104101.DWG/ProsserHallock/TWR/LOS\_2042.mxd

**Section B: Traffic Circulation Element**  
**City of Macclenny 2025 Comprehensive Plan**

**Table B.1**  
**LOS Analysis**

Road	Lanes	Type	Miles		Min. LOS	Max. Service Vol.	2007 Count	2008 Count	LOS	Growth Rate	Projections			
											2015	LOS	2025	LOS
I-10	4/D	Freeway Rural	2.31	From CR 125 to SR 121 (6 <sup>th</sup> Street)										
				AADT:	C <sup>(1)</sup>	49,900 <sup>(1)</sup>	26,000	22,500	B	1.1%	29,000	B	32,000	B
				Peak Hr.:	C <sup>(1)</sup>	4,860 <sup>(1)</sup>		2,329	B		3,002	B	3,312	B
I-10	4/D	Freeway Rural	1.19	From SR 121 (6 <sup>th</sup> Street) to SR 228 (5 <sup>th</sup> Street)										
				AADT:	C <sup>(1)</sup>	49,900 <sup>(1)</sup>	27,500	36,000	B	Var. 2.5%	39,700	C	48,000	C
				Peak Hr.:	C <sup>(1)</sup>	4,860 <sup>(1)</sup>		3,726	B		4,109	C	4,968	C
I-10	4/D	Freeway Rural	3.63	From SR 228 (5 <sup>th</sup> Street) to Nassau County Line										
				AADT:	C <sup>(1)</sup>	49,900 <sup>(1)</sup>	28,000	25,000	B	1%	32,600	B	35,700	B
				Peak Hr.:	C <sup>(1)</sup>	4,860 <sup>(1)</sup>		2,588	B		3,374	B	3,695	B
SR 10 (US 90)	2/D	Arterial I Transition	0.57	From CR 23 to SR 121										
				AADT:	D	15,200	11,200	11,750	C	Var. 1%	11,900	C	13,000	C
				Peak Hr.:	D	1,480		1,085	C		1,098	C	1,200	C
SR 10 (US 90)	2/U	Arterial I Transition	0.09	From SR 121 to SR 228 (5 <sup>th</sup> Street)										
				AADT:	D	15,200	9,100	9,400	C	1%	10,900	C	12,000	C
				Peak Hr.:	D	1,480		868	C		1,006	C	1,108	C

(1) Reflects January 2010 approval of I-10 variance lowering LOS from B to C.

**Table B.1 (cont.)**  
**LOS Analysis**

Road	Lanes	Type	Miles		Min. LOS	Max. Service Vol.	2007 Count	2008 Count	LOS	Growth Rate	Projections			
											2015	LOS	2025	LOS
SR 10 (US 90)	2/U	Arterial I Transition	0.67	From SR 228 (5 <sup>th</sup> Street) to Dugger Street										
				AADT:	D	15,200	6,700	6,450	B	1.5%	7,500	B	8,500	B
				Peak Hr.:	D	1,480		595	B		692	B	785	B
SR 10 (US 90)	2/U	Highway Rural	3.73	From Dugger Street to Nassau County Line										
				AADT:	D	13,800	3,950	4,150	B	3.4%	5,200	C	6,700	C
				Peak Hr.:	D	1,350		383	B		480	C	618	C
SR 121 (6 <sup>th</sup> St.)	2/D	Highway Transition	1.96	From Northeast Florida State Hospital entrance to I-10										
				AADT:	D	21,100	7,900	7,700	B	2.2%	9,500	C	11,300	C
				Peak Hr.:	D	2,040		711	B		877	C	1,043	C
SR 121 (6 <sup>th</sup> St.)	4/D	Arterial I Transition	0.95	From I-10 to Lowder Street										
				AADT:	D	33,800	13,000	11,900	B	1%	14,200	B	15,500	B
				Peak Hr.:	D	3,280		1,098	B		1,311	B	1,431	B
SR 121 (6 <sup>th</sup> St.)	2/D	Arterial I Transition	0.66	From Lowder Street to SR 10 (US 90) aka Macclenny Avenue										
				AADT:	D	15,960	11,350	11,550	C	1%	12,600	C	13,800	C
				Peak Hr.:	D	1,554		1,066	C		1,163	C	1,274	C

**Section B: Traffic Circulation Element**  
**City of Macclenny 2025 Comprehensive Plan**

**Table B.1 (cont.)**  
**LOS Analysis**

Road	Lanes	Type	Miles		Min. LOS	Max. Service Vol.	2007 Count	2008 Count	LOS	Growth Rate	Projections			
											2015	LOS	2025	LOS
SR 121 (6 <sup>th</sup> St.)	2/U	Arterial I Transition	1.19	From SR 10 (US 90) aka Macclenny Avenue to CR 228										
				AADT:	D	15,200	5,400	5,500	B	2.3%	6,700	B	8,100	B
				Peak Hr.:	D	1,480		508	B		618	B	748	B
SR 228 (5 <sup>th</sup> St.)	2/U	Highway Rural	0.27	From I-10 to W M Barber Road										
				AADT:	D	13,800	10,100	10,800	D	Var. 4.4%	12,100	D	<b>16,100</b>	<b>E</b>
				Peak Hr.:	D	1,350		997	D		1,117	D	<b>1,486</b>	<b>E</b>
SR 228 (5 <sup>th</sup> St.)	2/U	Arterial I Transition	0.88	From W M Barber Road to W. Lowder Street										
				AADT:	D	15,200	10,100	10,800	D	Var. 4.4%	12,100	C	<b>16,100</b>	<b>F</b>
				Peak Hr.:	D	1,480		997	D		1,117	C	<b>1,486</b>	<b>F</b>
SR 228 (5 <sup>th</sup> St.)	2/U	Arterial I Transition	0.68	From W. Lowder Street to SR 10 (US 90) aka Macclenny Avenue										
				AADT:	D	15,200	7,200	7,900	B	Var. 2.6%	8,400	B	10,200	C
				Peak Hr.:	D	1,480		729	B		775	B	941	C

Source: Florida Department of Transportation, District Two, Jacksonville Urban Planning Office, September 2009

### B.3 Analysis of Projected Needs

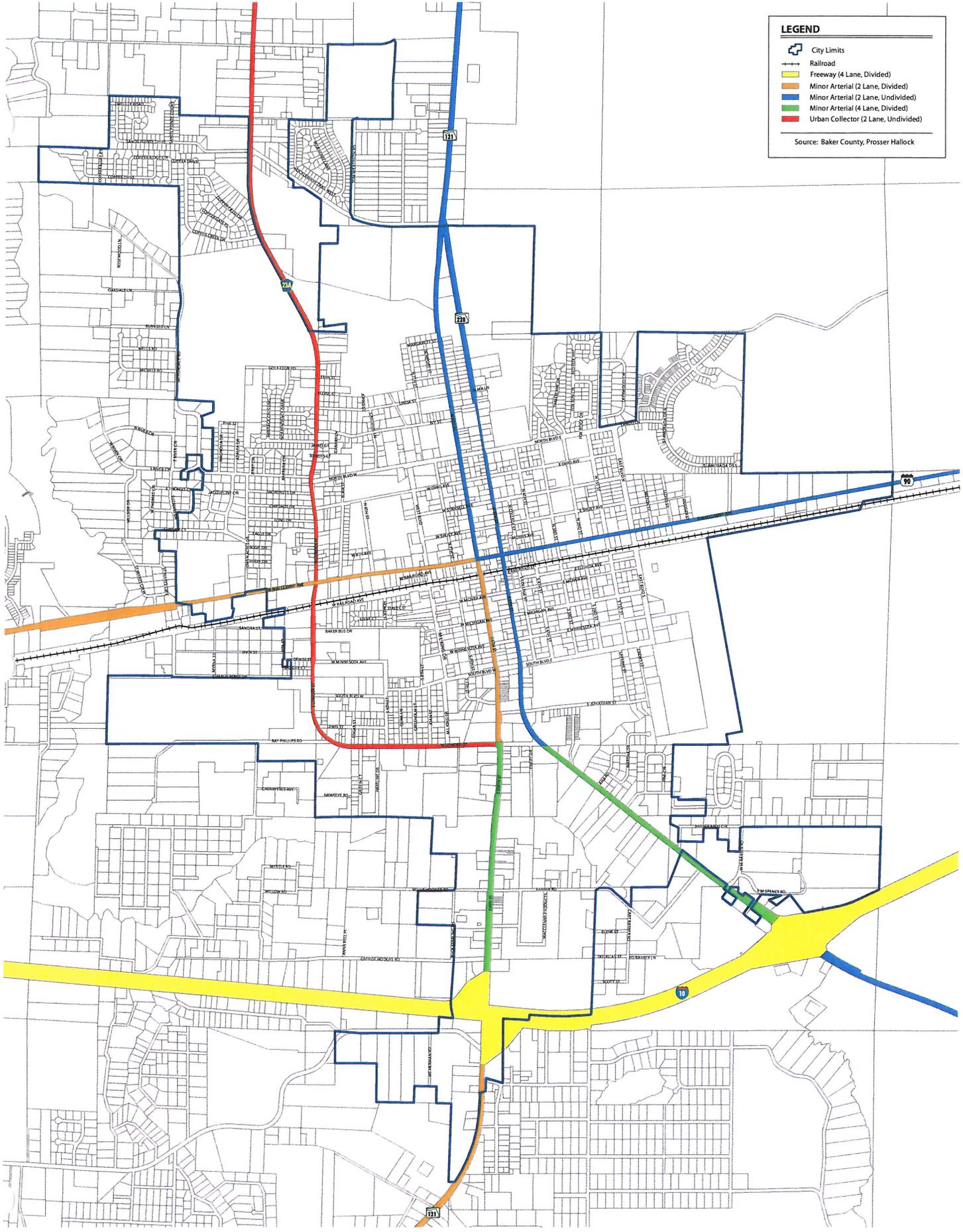
The City relied upon the FDOT Level of Service Report for analysis of existing and projected conditions. This Report provides historic volumes, projected volumes, and the estimated LOS for the years 2015 and 2025 (see Table B.1). This analysis is based upon the City's comprehensive plan and FDOT's Generalized LOS Tables.

Looking ahead to the year 2025, there are 2,023 more residents projected to be living in the City. The present system of local streets adequately serves existing development. FDOT does have some improvements for segments located within the City in their Five-Year Work Program, as shown in Table B.2. The Future Transportation Plan Map is shown on Illustration B.3 on the following page.

**Table B.2**  
**FDOT Five-Year Work Program**

Description	Item	2010	2011	2012	2013	2014
Baker Co. TD Commission Trip and Equipment Grant <b>Transportation Disadvantaged Commission - Capital</b>	217493-1	\$150,238	\$166,724	\$168,735	\$151,861	\$5,239
Baker Co. Safe Route To School: BCMS & Keller Intermediate School <b>Bike Lane / Sidewalk</b>	423246-1	\$15,000	\$836,524			
Baker Co. Fed. Sec. 5311 Rural Transit <b>Operating / Admin. Assistance</b>	423293-1	\$289,561	\$199,406			
Woodlawn Rd. (CR 23A) from SR 121 to CR 125 <b>Resurfacing</b>	424345-1	\$736,380				
Dist. 2-Baker Co. Traffic Signal Maintenance Agreement <b>Traffic Control Devices / System</b>	413518-1	\$15,701	\$17,591	\$18,120	\$18,665	\$19,220
Lighting Agreements Baker County <b>Lighting</b>	414404-1	\$42,779	\$44,063	\$45,384	\$46,745	\$48,147
SR 10 (US 90) from Sanderson to Nassau County Line <b>Resurfacing</b>	207914-4	\$8,034,604				
SR 10 (US 90) from 8 <sup>th</sup> St. to West Blvd. <b>Special Surveys</b>	427510-1	\$52,857				
SR 228 Railroad Crossing #620722-T <b>Rebuild Crossing</b>	207864-2	\$259,000				
<b>Totals</b>		<b>\$9,596,120</b>	<b>\$1,264,308</b>	<b>\$232,239</b>	<b>\$217,271</b>	<b>\$72,606</b>

Source: Florida Department of Transportation Five-Year Work Program 2010-2014, District Two, Updated February 3, 2010



**LEGEND**

- City Limits
- Railroad
- Freeway (4 Lane, Divided)
- Minor Arterial (2 Lane, Divided)
- Minor Arterial (2 Lane, Undivided)
- Minor Arterial (4 Lane, Divided)
- Urban Collector (2 Lane, Undivided)

Source: Baker County, Prosser Hallock

NORTH

0 600 1,200  
Feet

April 13, 2010

*City of Macclenny*

**Illustration B.3 2025 Future Transportation Plan Map**

**Prosser Hallock**  
PLANNERS & ENGINEERS

13931 Sutton Park Drive South, Suite 700 Jacksonville, Florida 32224-8729  
p: 904.728.3655 f: 904.728.3413 info@prosserhallock.com

Project No. 104101.02

P:\104101 01\Macclenny Future\Trans 30442.mxd

## **B.4 Issues and Opportunities**

The construction of roadway improvements is by far the City's largest fiscal challenge. The City must correct future improvements in order to maintain adopted LOS standards.

National, state and local transportation programs have long been supported by taxing the user. These "user taxes" have traditionally included motor fuel taxes, motor vehicle license fees, and revenue bonds secured either by tolls or a pledge of County motor fuel tax collections, as well as non-user taxes such as general obligation bonds. Some of these revenue sources, such as motor fuel tax and revenue bonds are available to both the City and the State. Other revenue sources are imposed only at the state level, such as the vehicle license fees.

The City has other transportation finance options available such as special assessment fees, redevelopment fees, and impact fees. The City may provide transportation improvements and impose special assessments upon properties that directly benefit from the improvements. This approach is often used by communities for improving local roads.

Intergovernmental coordination is essential for the most cost-efficient provision of traffic circulation system improvements. Clearly, the City of Macclenny does not possess the resources nor is it fiscally responsible for addressing all of the traffic circulation system needs identified in this element. It is necessary for the City to review the transportation improvement plans and programs prepared by the County and FDOT. In this way, the effort and dollars expended by the City to improve traffic circulation may be complemented and perhaps enhanced by the activities of the county and state.

One area of coordination should include the preservation and protection of rights-of-way for future roadway improvements and construction. With the escalating value of land and costs entailed in right-of-way acquisition, it is essential that the City protect roadway corridors in advance from building encroachment. Increased right-of-way costs reduce the funds available for actual construction.

Public transportation was not considered, at this time, as an appropriate solution for improving the level of service on the City's roadways due to Macclenny's population size and density. The population was found to be of neither sufficient magnitude nor density to ensure cost-effectiveness.

A change to the Growth Management Act during the last planning period offers the City an alternative to state transportation concurrency requirements. The 2009 Florida Legislature found that transportation concurrency has not adequately addressed the State's transportation needs. Senate Bill 360 eliminated State transportation concurrency and DRI requirements in Transportation Concurrency Exception Areas (TCEA) in Dense Urban Land Areas. On July 1, 2009, the Florida Legislative Office of Economic and Demographic Research transmitted to the Department of Community Affairs a list of counties and municipalities qualifying as Dense Urban Land Areas, a list that includes the City of Macclenny but not Baker County nor the Town of Glen St. Mary.

Under Senate Bill 360, the City has the following two options regarding transportation concurrency:

1. Retain and continue to apply the transportation concurrency provisions in the existing Comprehensive Plan and land development regulations; or
2. Amend the Comprehensive Plan and land development regulations to delete or modify transportation concurrency requirements or adopt alternatives to transportation concurrency.

It is important to note that the Department of Community Affairs no longer has the authority to review plan amendments in the TCEA for compliance with state-mandated transportation concurrency requirements, including the achieve and maintain standard.