

**CITY OF OCOEE
COMPREHENSIVE PLAN**

**TRANSPORTATION ELEMENT
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I. INTRODUCTION

Ocoee, as described in other elements of this Comprehensive Plan, is a rapidly growing community of about 26,000 people with an annual percentage growth rate exceeding that of the Metro area. The rate of growth is expected to continue due, in significant part, to the city's excellent transportation access.

The Transportation Element was developed based on a study area larger than the current and foreseen corporate limits of the City and includes the Orange County/City of Ocoee Joint Planning Area. All tables and figures will represent the Joint Planning Area, which includes the City of Ocoee, unless otherwise noted. This Element is based primarily on data and analysis contained in the Ocoee Master Transportation Plan, which was adopted in 1998.

The sophistication and detail of the Ocoee Transportation Master Plan represents an effort unusual in communities the size of Ocoee. For example, the Orlando Urban Area Transportation Study (OUATS) Traffic Analysis Zone grid, which is the base for Metropolitan Planning Organization (MPO) planning in the region, was refined and expanded for the study area from 24 to 106 zones to gain greater modeling and assessment accuracy. The MPO recently incorporated the Ocoee area zones into its base data and modeling processes. Detailed analysis of land use, population and employment were conducted at this detailed grain.

The sophistication and effort of the Ocoee Transportation Master Plan is reflected in subsequent transportation-related efforts of the City. For example, an access management and intersection study was developed for the SR 50 corridor from Good Homes Road to Florida's Turnpike. This study is being utilized by FDOT in the design for the reconstruction of SR 50.

Traffic studies are required for all significant development proposals. Direct and mitigation improvements addressing transportation needs are standard practice. An active Concurrency Management System is maintained and Transportation Impact fees are levied. Traffic counts are conducted annually on all roads in the Concurrency Management System. An annual traffic count program report reviewing levels of service, transportation improvement progress, and any deficiencies, is presented to the City Commission in public hearing and adopted by formal resolution.

As shown in the existing and future transportation map series, Figures 7-12, the transportation study area addressed in this Element is essentially the same as the City of Ocoee-Orange County Joint Planning Area. The study area is bounded by:

- Roberson and Moore Roads to the south
- Good Homes and Apopka/Vineland Roads to the east
- McCormick Road to the north
- Lake-Apopka, East Crown Point, and Windermere Roads to the west.

There are several major roads that currently serve the City of Ocoee: West Colonial Drive (SR 50), the East-West Expressway (SR 408), Florida's Turnpike (SR 91), and the Western Expressway (SR 429). SR 50 is a major arterial running from Florida's west coast to the east coast. The East-West Expressway's western terminus is at SR 50 and Clarke Road in Ocoee. It provides an express route to downtown Orlando and destinations east.

Florida's Turnpike is a four-lane limited-access roadway that runs southeast from Wildwood to Homestead; access to Ocoee is provided by an interchange with SR 50. The Western Expressway is a new toll road that will link the northwestern metropolitan region to I-4 in the southwestern portion of the region. The City is also served and bisected by Silver Star Road (SR 438). Silver Star Road functions as a minor arterial route serving area-to-area and cross-area travel and connects with principal arterials.

The main objective of the Transportation Element is to determine future transportation needs and establish transportation improvement priorities for the City of Ocoee to the year 2020.

II. EXISTING CONDITIONS

The existing roadway transportation system is defined as all segments within the City's Concurrency Management System (CMS), as well as the existing transportation systems that are identified within the City of Ocoee-Orange County Joint Planning Area (JPA). All maps in the Transportation Element show the entire JPA. Road segments in the City's existing CMS are inventoried for a wide range of characteristics. Non-CMS segments are addressed in less detail in this Element; however, they will be included in the analysis of future conditions. In addition, because this Transportation Element is intended to be multi-modal in nature, this Element also describes bicycle, pedestrian, and transit services and facilities serving Ocoee.

III. POPULATION AND EMPLOYMENT TRENDS

A. Comparisons with Orange County and the Region

Ocoee's more rapid growth in relation to Orange County and the region is driven by the availability of inexpensive developable land, and excellent roadway access. The latter provides easy access to employment centers in the region, including, most importantly, downtown Orlando. The City's location relative to Walt Disney World and other tourist attractions has also played a large role in its growth. The City's growth in relation to Orange County and the Orlando metropolitan area is shown in Table 1.

**Table 1
Population and Employment Growth**

Area	Population					Employment		
	1980	1990	2000	Change 1980- 1990	Change 1990- 2000	1990	1995	Change 1990- 1995
City of Ocoee	7,803	14,850	24,391	+ 64%	+ 64%	5,382	7,049	+ 31%
Orange County	470,865	677,491	896,344	+ 44%	+ 32%	350,953	403,167	+ 15%
Orlando Metropolitan Area - OMA	739,058	1,224,844	1,644,560	+ 66%	+ 34%	612,750	717,367	+ 17%

Note: Orlando Metropolitan Area includes Lake, Orange, Osceola, and Seminole Counties.

Sources: 1980, 1990 and 2000 Census of Population for Ocoee, Orange County & OMA, 1990 Census for Employment for Orange County OMA, 1995 FDOL for Employment for Orange County and OMA 1990, and 1995 Employment for Ocoee derived from TAZ data from Central Florida Metropolitan Planning Organization.

B. Population and Employment within Ocoee

Historically, the City of Ocoee's economy was predominantly fueled by agricultural, livestock and related activities. However, the series of crop freezes in the 1980s virtually eliminated Ocoee's status as an agricultural center. The subsequent abundance of developable land, coupled with excellent access to regional transportation facilities, paved the way for rapid residential growth within the City. Not only is Ocoee a residential community serving major employment centers in downtown Orlando and Disney, but Ocoee is increasingly becoming its own employment center in the commercial, service and industrial sectors, as evidenced by the recent opening of the West Oaks Mall and Health Central Hospital.

A summary of estimated population and employment characteristics completed in 1997 for the JPA is shown in Tables 2 and 3. These estimates, based on land use information available in 1997, are substantially consistent with more recent information based on data derived from land use studies conducted in conjunction with this Comprehensive Plan update.

**Table 2
Population by Residential Unit, 1997**

Residence Type	Units	% of Total	Population	% of Total
Single-family	11,038	92%	33,445	95%
Multi-family	967	8%	1,660	5%
Total	12,415	100%	35,105	100%

**Table 3
Employment by Sector, 1997**

Employment Sector	Jobs	% of Total
Industrial	2,590	29%
Commercial	4,185	47%
Service	2,117	24%
Total	8,891	100%

Source: Ocoee Master Transportation Plan and Ocoee Planning Department, 1997.

Figure 1 in the Future Land Use Element shows major trip generators in Ocoee along with other land uses in the City. These land uses are relevant because they will be analyzed for access in relation to the travel modes addressed in this Element. The West Oaks Mall, a major generator, is the largest employer in Ocoee with a 1997 employment estimated at more than 3,000, and a projected employment of over 6,000 at build-out in the year 2020. Health Central, the other major generator, is a regional hospital, which had a 1997 employment of almost 500. Other major employers include the industrial park, with approximately 1,000 employees, SYSCO, with 560 employees, and the Florida Auto Auction, with 428 employees. In addition to these land uses, also displayed on this map are parks, shopping centers, and schools/administrative facilities.

C. External Growth Influences

Ocoee's status as both a suburban community and a shopping destination is directly influenced by population and development trends in surrounding areas. More specifically, this influence originates from several key sources:

- Orlando - Accessibility to Orlando via the East-West Expressway and arterials such as SR 50 and Silver Star Road (SR 438) make it a popular destination for many Ocoee commuters. According to the 1990 Census Transportation Planning Package, just over 31 percent of commuters traveled from Ocoee to Orlando to work in 1990 (the most recent year for which data was available). As downtown Orlando continues to

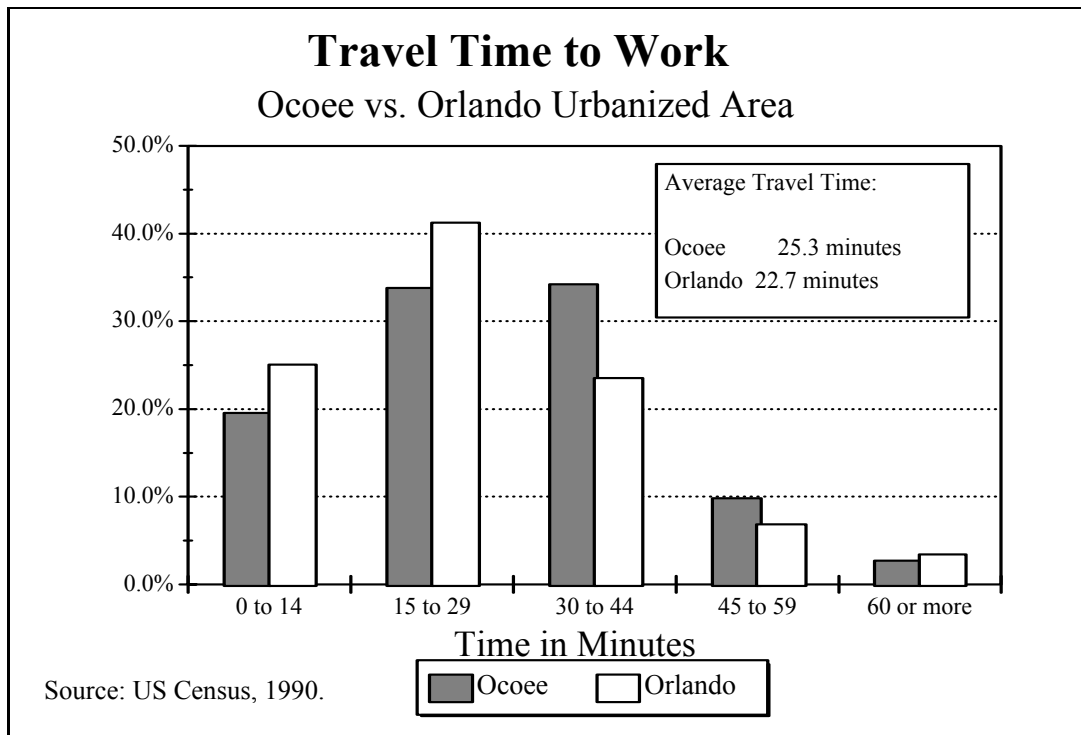
attract employment, Ocoee will absorb many of the resulting commuters because of its access and proximity via the expressway.

- Disney/International Drive ("I-Drive") - Tourist attractions such as Walt Disney World and "I-Drive" in southwest Orange County draw employees from Ocoee and other communities in the area. As Disney and Universal Studios build new theme parks and expand their existing ones, this area of Orange County will continue to expand and generate additional employment. Similar to downtown Orlando, Ocoee will absorb many of the resulting commuters. Access to this area from Ocoee is provided by Florida's Turnpike and SR 535, and will be greatly enhanced by the completion of the Western Expressway (SR 429) toll road.
- Lake County - Lake County is a developing area located on the western fringe of the Orlando metropolitan area. Between 1990 and 2000, Lake County grew in population from 152,000 to 210,000, a rate of over 38 percent. A significant portion of this development has occurred in areas with direct transportation linkages to Ocoee via SR 50 and the Turnpike, including Clermont and unincorporated south Lake County. For example, Kings Ridge, a DRI in Clermont is a 4,000 unit residential development nearing completion. Many of these residents will travel to and through Ocoee for shopping and work trips.
- West Orange County - This area of Orange County consists of the communities of Ocoee, Apopka, Oakland, Winter Garden, Windermere, and unincorporated Orange County. In southwest Orange County, a new future land use classification called "Village" was adopted as part of the Horizon West Plan, which sets the framework for much of the future growth in West Orange County. The Horizon West Plan provides for the development of compact, integrated master-planned villages through a specific planning process that addresses regional environmental, transportation and housing issues. Lakeside Village and the Village of Bridgewater are the first of nine villages approved under the Horizon West Plan. In approximately 20 years, this area of Orange County is expected to reach a population of 60,000. According to plans for Horizon West, the primary regional shopping destination for its residents is expected to be the West Oaks Mall.

D. Journey to Work

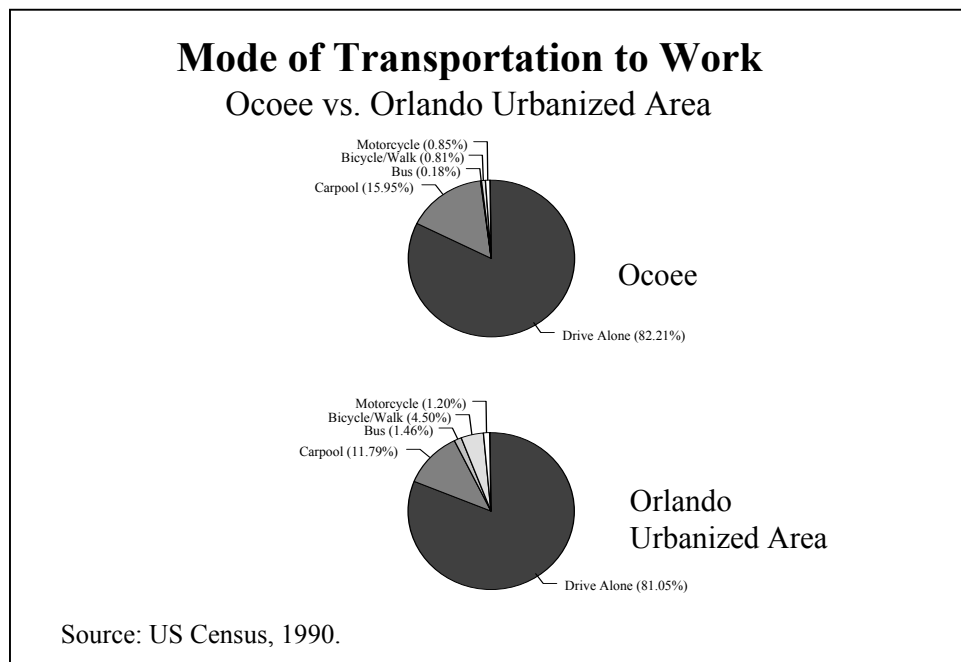
As shown in Table 1, the population of Ocoee grew 64 percent between 1990 and 2000. However, between 1990 and 1995, employment grew only 25 percent, meaning the City was proportionately gaining residents more rapidly than jobs over the period. Furthermore, Table 2 and 3 show that in 1997, while there were 12,415 dwelling units, there were only 8,891 jobs in the Joint Planning Area. This represents a jobs-housing ratio of approximately 0.72, or 0.72 job per dwelling unit, an imbalance indicating that Ocoee supports a large commuter population living in the City but working elsewhere in the region. This notion is supported by the fact that, as illustrated in Exhibit 1, commuters from Ocoee spend more time traveling to work than commuters overall in the region.

Exhibit 1



In addition, Exhibit 2 demonstrates commuters in Ocoee are more inclined to rely on the automobile by either driving alone (82%) or carpooling (12%) to get to work than commuters elsewhere in the region. If future trends continue, however, the proportion of commuter trips will decrease as more commercial, service and industrial jobs are created within the JPA.

Exhibit 2



E. Existing Roadway Network

Physical Characteristics

Figure 7 depicts various physical characteristics of Concurrency Management System (CMS) roads within the City of Ocoee, which total almost 47 miles in length. The most significant change to the roadway network since the adoption of Ocoee's Comprehensive Plan has been the paved four-lane extension of Clarke Road south to State Road 50 and north to Clarcona-Ocoee Road.

With the exception of Clarke Road and SR 50, all CMS segments within the City are two-lane roadways. Maguire Road from SR 50 to Roberson Road is currently being widened to four lanes. Traffic control is maintained by signals on major east-west roads, including SR 50 and Silver Star Road (SR 438), as well as significant north-south roads, including Ocoee-Apopka Road, Bluford Avenue, Clarke Road, Apopka-Vineland Road and Maguire Road.

Functional Classification

Figure 8 shows the existing roadway functional classification in Ocoee. Each road in Ocoee's Concurrency Management System, as well as Florida's Turnpike, East-West Expressway (SR 408) and the Western Expressway (SR 429) was classified according to its purpose and importance within the City's transportation system. These roads were classified into three general categories:

Freeways. Freeways are designed for the movement of high volumes of traffic; access is limited to a small number of interchanges. These roads are almost exclusively utilized for regional and statewide travel. The freeway category may include toll roads. Three freeways, Florida's Turnpike, the East-West Expressway and Western Expressway, traverse the study area.

Arterial Roads. Arterial roads, such as Silver Star Road (SR 438) and SR 50, emphasize mobility and through traffic movement. Access to adjacent property is relatively limited.

Collector Roads. Collector roads, such as A.D. Mims Road and White Road, emphasize access to adjacent land uses as well as provide a connection between the local street system and arterial roads. They are predominantly local in character.

Ocoee's roads are classified in this manner to guide both the purpose and character of the roads themselves as well as the development of land adjacent to them. Thus, smaller roads, such as collectors, are intended to remain local in nature and character, with lower speeds and a greater number of driveway connections, while larger roads, such as arterials, are intended to carry through-traffic, with higher speeds and a fewer number of driveway connections.

Maintenance Responsibility

The State of Florida, Orange County, Orlando/Orange County Expressway Authority, and City of Ocoee all maintain roads that traverse the study area. This distribution of maintenance responsibility is defined by Rule 14-12.016, Florida Administrative Code. Many vital roads that serve Ocoee, such as SR 50, SR 438, and Maguire Road, are controlled by FDOT or Orange County, but are partially maintained by the City of Ocoee. Because these roads are a significant part of Ocoee’s transportation system, it is important to coordinate with the primary administrative jurisdictions. The administrative maintenance responsibility of roads in the study area is shown in Table 4.

**Table 4
Maintenance Responsibility for Major Roads**

Responsible Entity	Major Roads
City of Ocoee	Ocoee-Apopka Road, Fuller’s Cross Road, Clarcona-Ocoee Road, Wurst Road, A.D. Mims Road, Adair Street, Lakewood Avenue, Kissimmee Avenue, Marshall Farms Road, Maguire Road, Professional Parkway, Clarke Road, Johio Shores Road, Ocoee Hills Road, Flewelling Street, Rewis Street, Russell Street, Geneva Street, and Story Road
Orange County	Good Homes Road, Apopka-Vineland Road, Old Winter Garden Road, and White Road east of Clarke Road
Orlando-Orange County Expressway Authority	East-West Expressway (SR 408) and Western Expressway (SR 429)
State of Florida FDOT and Turnpike Authority	SR 50 (W. Colonial Avenue), SR 438 (Silver Star Road, Bowness Road between Silver Star Road and Franklin Street), SR 439 (Franklin Street between Bowness Road and Taylor Street, Taylor Street between Franklin Street and McKey Street, McKey Street between Kissimmee Avenue and Bluford Avenue, Bluford Avenue between McKey Street and SR 50, and Florida’s Turnpike)

Existing Traffic Volumes and Level of Service

Pursuant to Rule 9J-5, Florida Administrative Code, all local governments in Florida are required to adopt level of service (LOS) standards for roads in their jurisdiction. LOS standards are a measure of traffic volume on a given road in relation to its capacity. LOS capacities are determined based several factors, including adjacent land uses, intersection characteristics, and the speed of the road. Exhibit 3 depicts the relationship between LOS and road capacity.

Existing peak hour directional levels of service (LOS) for CMS roads in Ocoee is depicted in Figure 9 and listed by roadway segment in Table 5. This analysis used 1997 traffic volumes and adopted LOS capacities. The results of the analysis indicates that most roads in the City maintained the LOS standard of at least “C” or “D” for traffic volumes in 1997.

**Exhibit 3
Relationship Between
Level of Service and Roadway Capacity**



LOS A Traffic flows freely; vehicles operate almost completely uninterrupted.



LOS D Speeds begin to decline slightly with increasing traffic levels; freedom to maneuver is more noticeably limited.



LOS B Traffic flow is virtually free; vehicle movement is only slightly restricted.



LOS E The road is at capacity; there is very little room to maneuver.



LOS C Traffic flows at or near the same speed; however, vehicle movement is noticeably restricted.



LOS F Breakdown in traffic flow; virtual gridlock.

Source: *Highway Capacity Manual*.

Table 5
Existing Peak Hour / Peak Direction Levels of Service, 1997

Roadway	From / To	No. of Lanes	Adopted LOS Standard	Pk Hr/ Pk Dir Volume	Pk Hr/ Pk Dir Capacity	Pk Hr/ Pk Dir V/C Ratio	Pk Hr/Pk Dir Level of Service Performance
A. D. Mims	Wurst Rd. to Clarke Rd.	2	E	402	920	0.44	A
A. D. Mims	Wurst Rd. to Apopka-Vineland Rd.	2	E	324	920	0.35	A
Adair St.	Wurst Rd. to Clarcona-Ocoee Rd.	2	D	132	490	0.27	C
Apopka-Vineland Rd.	SR 438 to A.D. Mims Rd.	2	E	526	820	0.64	A
Apopka-Vineland Rd.	A.D. Mims Rd. to Clarcona-Ocoee Rd.	2	E	554	820	0.68	A
Apopka-Vineland Rd.	Clarcona Ocoee Rd. to McCormick Rd.	2	E	541	820	0.66	A
SR 439 (Bluford Ave.)	SR 50 to Geneva St.	2	D	579	690	0.84	C
SR 439 (Bluford Ave.)	Geneva St. to Orlando Ave.	2	D	579	690	0.84	C
SR 439 (Bluford Ave.)	Orlando Ave. to McKey St.	2	D	533	690	0.77	C
SR 439 (Bluford Ave.)	McKey St. to Silver Star Rd.	2	D	625	690	0.91	D
Bowness Rd.	Kissimmee Ave. to SR 438	2	D	603	810	0.74	C
Clarcona-Ocoee Rd.	Fullers Cross Rd. to Clarke Rd.	2	E	347	800	0.43	A
Clarcona-Ocoee Rd.	Clarke Rd. to Apopka-Vineland Rd.	2	E	315	800	0.39	A
Clarke Rd.	SR 50 to White Rd.	4	D	1,265	1,810	0.70	A
Clarke Rd.	White Rd. to Silver Star Rd.	4	D	1,267	1,810	0.70	A
Clarke Rd.	SR 438 to A.D. Mims Rd.	4	D	600	1,810	0.33	A
Clarke Rd.	A.D. Mims Rd. to Clarcona-Ocoee Rd.	2	D	96	900	0.11	A
Flewelling St.	Ocoee Hills Rd. to Russell Dr.	2	D	134	500	0.27	C
Fullers Cross Rd.	Ocoee-Apopka to Clarcona-Ocoee	2	E	183	630	0.29	B
Geneva St.	Kissimmee Ave. to Bluford Ave.	2	D	350	800	0.44	A
Good Homes Rd.	SR 50 to White Rd.	2	E	858	840	1.02	F
Good Homes Rd.	White Rd. to SR 438	2	E	410	840	0.49	A
Hackney-Prairie Rd.	Clarke Rd. to Apopka-Vineland Rd.	2	D	18	690	0.03	A
Johio Shores Rd.	SR 438 to A.D. Mims Rd.	2	D	63	630	0.10	B
Kissimmee Ave.	Maguire Rd. to Bowness Rd.	2	D	249	810	0.31	B
Lakewood Ave.	SR 438 to Fuller's Cross Rd.	2	B	188	800	0.24	A
Maguire Rd.	Gotha Rd. to Roberson Rd.	2	D	572	920	0.62	A
Maguire Rd.	Roberson Rd. to Tomyn Rd.	2	D	731	920	0.79	A
Maguire Rd.	Tomyn Rd. to Professional Parkway	2	D	731	920	0.79	A
Maguire Rd.	Professional Parkway to SR 50	2	D	677	920	0.74	A
Maguire Rd.	SR 50 to Story Rd.	2	D	536	810	0.66	B
Marshall Farms Rd.	SR 50 to Maguire Rd.	2	D	335	640	0.52	C

Roadway	From / To	No. of Lanes	Adopted LOS Standard	Pk Hr/ Pk Dir Volume	Pk Hr/ Pk Dir Capacity	Pk Hr/ Pk Dir V/C Ratio	Pk Hr/Pk Dir Level of Service Performance
McKey St./Taylor St./Franklin St.	Kissimmee Ave. to Bluford Ave.	2	E	336	620	0.54	C
Ocoee-Apopka Rd.	SR 438 to Fuller's Cross Rd.	2	B	593	920	0.64	A
Ocoee-Apopka Rd.	Fullers Cross Rd. to McCormick Rd.	2	B	717	920	0.78	A
Ocoee Hills Rd.	SR 438 to Flewelling St.	2	D	230	500	0.46	C
Old Winter Garden Rd.	SR 50 to Blackwood Ave.	2	E	708	840	0.84	B
Old Winter Garden Rd.	Blackwood Ave. to Hempel Ave.	2	E	675	840	0.80	B
Professional Parkway	Maguire Rd. to Old Winter Garden Rd.	2	D	254	550	0.46	C
Russell Dr.	Flewelling St. to Willow Creek Rd.	2	D	86	500	0.17	C
SR 50 (W. Colonial Dr.)	Wofford Rd. to Maguire Rd.	4	D	1,683	1,750	0.96	D
SR 50 (W. Colonial Dr.)	Maguire Rd. to Old Winter Garden Rd.	4	D	1,803	1,750	1.03	F
SR 50 (W. Colonial Dr.)	Old Winter Garden Rd. to Clarke Rd.	4	D	1,491	1,750	0.85	C
SR 50 (W. Colonial Dr.)	Clarke Rd. to Good Homes Rd.	4	D	1,370	1,750	0.78	B
SR 438 (Silver Star Rd.)	E. Crown Point Rd. to Bowness	2	E	541	900	0.60	A
SR 438 (Silver Star Rd.)	Bowness Rd. to Bluford Ave.	2	E	619	900	0.69	A
SR 438 (Silver Star Rd.)	Bluford Ave. to Clarke Rd.	2	E	544	900	0.60	A
SR 438 (Silver Star Rd.)	Clarke Rd. to Good Homes Rd.	2	E	818	900	0.91	C
Story Rd.	Wofford Rd. to Kissimmee Ave.	2	E	403	800	0.50	A
White Rd./Orlando Ave.	Bluford Ave. to. to Clarke Rd.	2	D	283	740	0.38	A
White Rd./Orlando Ave.	Clarke Rd. to Good Homes Rd.	2	D	316	740	0.43	A
Willow Creek Rd.	Russell Dr. to Wurst Rd.	2	D	39	500	0.08	C
Wurst Rd.	Lakewood Ave. to A.D. Mims Rd.	2	D	409	630	0.65	B

Source: Final Report Annual Traffic Count Program 2001 Data Summary and Analysis, City of Ocoee, 2001.

One CMS segment, SR 50 from Maguire Road to Old Winter Garden Road, is currently LOS deficient in terms of daily traffic. Two segments, Good Homes Road from SR 50 to White Road, and SR 50, Maguire Road to Old Winter Garden Road, are LOS deficient for vehicle travel during the peak hour and in the peak direction. Segments with a LOS of "D" and a proportion of vehicle volume to road capacity (known as the V/C ratio) of close to 1.00 are approaching a LOS deficiency. Vehicle capacities and LOS thresholds for roads in the study area were determined by a computer model developed by FDOT, which takes into account several factors, including the number of lanes, number of signals, the posted speed and roadway length.

As the traffic volumes in Table 5 indicate, the most heavily traveled road in the study area by far is State Road 50. This is due in large part to its status as the City's main east-west thoroughfare and the large number of adjacent commercial developments, as well as the regional access it provides. Other heavily traveled roads in Ocoee include Clarke Road, SR 438 (Silver Star Road), Maguire Road, Apopka-Vineland Road, Bluford Avenue, Bowness Road, and Good Homes Road.

Traffic Volume Trends

Table 6 depicts recent trends in traffic volume from 1993 to 2001. As this table indicates, several roads in the study area exhibited tremendous gains in volume over the last eight years. Conversely, some roads exhibited a decline. Clarke Road experienced the largest gains, both in relative and absolute terms, during this period. This increase is due in large part to the opening of the West Oaks Mall in 1996. Similarly, the two segments of SR 50 adjacent to Clarke Road exhibited large increases as well. These increases can be attributed to trips from areas outside of Ocoee, to the mall. CMS segments exhibiting the largest gains between 1993 and 2001 are shown in Table 7.

Overall, the greatest increase in traffic volume, both in absolute and relative terms, occurred on arterial roadways such as Clarke Road, SR 50, and Maguire Road. In general, traffic volume growth on these roads is attributed to three factors, those being increases in the number of:

- 1) Trips to and from the study area.
- 2) Adjacent residential and commercial developments.
- 3) Trips through the study area from places such as Lake County and Winter Garden.

**Table 6
Traffic Volume Change, 1993-2001**

Road	From - To	Daily Trip Volume			
		1993	2001	Change	
A.D. Mims Rd.	Wurst Rd.- Clarke Rd.	7,343	6,998	(345)	-5%
A.D. Mims Rd.	Clarke Rd. - Apopka-Vineland Rd.	5,950	4,124	(1,826)	-31%
Adair St.	Wurst Rd. - Clarcona-Ocoee Rd.	1,500	3,121	1,621	108%
Apopka-Vineland Rd.	SR 438 - A.D. Mims Rd.	12,031	12,653	622	5%
Apopka-Vineland Rd.	A.D. Mims Rd. - Clarcona-Ocoee Rd.	12,285	10,741	(1,544)	-13%
Apopka-Vineland Rd.	Clarcona-Ocoee Rd. - McCormick Rd.	12,762	12,742	(20)	0%
Bowness Rd.	Kissimmee Ave. - SR 438	9,457	13,686	4,229	45%
Bowness Rd.	Story Rd. - Kissimmee Ave.	13,703	15,561	1,858	14%
Citrus Oaks Ave.	Old Winter Garden Rd. - SR 50	No Data	3,513		
Clarcona-Ocoee Rd.	Fuller's Cross Rd. - Adair St.	No Data	5,376		
Clarcona-Ocoee Rd	Adair Street - Clarke Rd.	*5,831	5,732	(99)	-2%
Clarcona-Ocoee Rd	Clarke Rd. - Apopka-Vineland Rd.	3,569	9,516	5,947	167%
Clarke Rd.	Clarcona Ocoee - Hackney Prairie Rd.	No Data	5,749		
Clarke Rd.	Hackney Prairie Rd. - A.D. Mims Rd.	*1,726	7,304	5,578	323%
Clarke Rd.	A.D. Mims Rd. - SR 438	4,020	15,544	11,124	287%
Clarke Rd.	SR 438 - White Rd.	8,896	26,727	17,831	200%
Clarke Rd.	White Rd. to SR 50	8,274	22,601	14,327	173%
Fullers Cross Rd.	Ocoee-Apopka Rd. - Clarcona-Ocoee Rd.	7,499	3,873	(3,626)	-48%
Geneva St.	Kissimmee Ave. - Bluford Ave.	6,799	13,044	6,244	92%
Good Homes Rd.	Old Winter Garden Rd. - E-W Expressway	No Data	13,938		
Good Homes Rd.	E-W Expressway - SR 50	No Data	13,931		
Good Homes Rd.	SR 50 - Balboa Dr.	*13,284	14,880	1,596	12%
Good Homes Rd.	Balboa Dr. - White Rd.	*13,284	14,169	885	7%
Good Homes Rd.	White Rd. - SR 438	10,289	6,990	(3,299)	-32%
Hackney-Prairie Rd.	Clarke Rd. - Apopka-Vineland Rd.	235	704	469	200%
Hempel Ave.	Gotha Rd. - Old Winter Garden Rd.	No Data	12,882		
Johio Shores Rd.	SR 438 - A.D. Mims Rd.	449	829	380	85%
Kissimmee Ave.	Bowness Rd. - McKey St.	10,098	4,723	(5,375)	-53%
Lakewood Ave.	SR 438 - Rewis St.	7,965	9,115	1,150	14%
Lakewood Ave.	Rewis St. - Wurst Rd.	*3,385	7,354	3,969	117%
Lakewood Ave.	Wurst - Fuller's Cross Rd	*5,831	3,199	(2,632)	-45%
Maguire Rd.	Gotha Rd. - Roberson Rd.	8,338	11,136	2,798	34%
Maguire Rd.	Roberson Rd. - Tonym Rd.	8,560	19,553	10,993	128%
Maguire Rd.	Tonym Rd. - Professional Parkway	9,155	20,352	11,197	122%
Maguire Rd.	Professional Parkway - SR 50	12,013	19,029	7,016	58%
Maguire Rd.	SR 50 - Marshall Farms Rd.	14,439	12,856	(1,583)	-11%
Maguire Rd.	Marshall Farms Rd. - Story Rd.	*10,948	17,796	6,848	63%
Marshall Farms Rd.	SR 50 - Maguire Rd.	3,884	6,406	2,522	65%
McCormick Rd.	East of Ocoee - Apopka Rd.	No Data	2,755		
McCormick Rd.	West of Apopka - Vineland Rd.	No Data	2,690		
McKey/Taylor/Franklin	Kissimmee Avenue - Bluford Ave	4,200	4,956	756	18%
Ocoee-Apopka Rd.	SR 438 - Fuller's Cross Rd.	6,818	10,876	4,058	30%
Ocoee-Apopka Rd.	Fuller's Cross Rd. - McCormick Rd.	10,130	9,021	(1,109)	-11%

Road	From - To	Daily Trip Volume			
		1993	2001	Change	
Ocoee Hills Rd.	SR 438 - Flewelling St.	2,800	2,421	(379)	-14%
Old Winter Garden Rd.	SR 50 - Professional Parkway	7,878	12,264	4,416	56%
Old Winter Garden Rd.	Professional Pkwy. - Blackwood Ave.	7,878	18,209	10,331	131%
Old Winter Garden Rd.	Blackwood Ave - Hempel Ave.	13,678	18,193	4,515	33%
Old Winter Garden Rd.	Hempel Ave. - Citrus Oaks Ave.	No Data	17,966		
Old Winter Garden Rd.	Citrus Oaks Ave. - Good Homes Rd.	No Data	16,494		
Old Winter Garden Rd.	Good Homes Rd. - Apopka-Vineland Rd.	No Data	17,947		
Orlando Ave.	Bluford Ave. - Montgomery Ave.	3,981	5,361	1,380	35%
Professional Parkway	Maguire Rd. - Old Winter Garden Rd	3,423	7,436	4,013	117%
Rewis St.	Lakewood Ave. - Flewelling St.	No Data	1,265		
Roberson Rd.	Windermere Rd. - Maguire Rd.	No Data	7,204		
Russell Dr.	Flewelling St. - Willow Creek Rd.	3,200	1,629	(1,571)	-49%
SR 438 (Silver Star Rd.)	E. Crown Point Rd. - Bowness Rd.	10,400	13,953	3,553	34%
SR 438 (Silver Star Rd.)	Bowness Rd. - Ocoee-Apopka Rd.	*13,541	14,571	1,030	8%
SR 438 (Silver Star Rd.)	Ocoee-Apopka Rd. - Bluford Ave.	*13,541	14,412	871	6%
SR 438 (Silver Star Rd.)	Bluford Ave. - Ocoee-Hills Rd.	*11,988	14,748	2,760	23%
SR 438 (Silver Star Rd.)	Ocoee-Hills Rd. - Clarke Ave.	*11,988	16,618	4,630	39%
SR 438 (Silver Star Rd.)	Clarke Rd. - Johio Shores Rd.	*17,321	18,302	981	6%
SR 438 (Silver Star Rd.)	Johio Shores Rd. - Good Homes Rd.	*17,321	17,526	205	1%
SR 439 (Bluford Ave.)	SR 50 - Geneva St.	9,100	11,420	2,320	25%
SR 439 (Bluford Ave.)	Geneva St. - Orlando Ave.	11,110	11,852	742	7%
SR 439 (Bluford Ave.)	Orlando Ave. - McKey St.	9,800	10,129	329	3%
SR 439 (Bluford Ave.)	McKey St. to - SR 438	11,557	10,753	(804)	-7%
SR 50 (West Colonial Dr.)	Ninth St. - Wofford Rd.	*42,405	52,101	9,696	23%
SR 50 (West Colonial Dr.)	Wofford Rd. - Marshall Farms Rd	*42,997	55,653	12,656	29%
SR 50 (West Colonial Dr.)	Marshall Farms Rd. - Maguire Rd.	*42,997	48,272	5,275	12%
SR 50 (West Colonial Dr.)	Maguire Rd. - Old Winter Garden Rd.	36,800	50,393	13,593	37%
SR 50 (West Colonial Dr.)	Old Winter Garden Rd. - Blackwood Ave.	*38,441	42,351	3,910	10%
SR 50 (West Colonial Dr.)	Blackwood Ave. - Clarke Rd.	*38,441	47,386	8,945	23%
SR 50 (West Colonial Dr.)	Clarke Rd. - Good Homes Rd.	22,500	38,187	15,687	70%
SR 50 (West Colonial Dr.)	East of Good Homes Rd.	No Data	36,609		
Story Rd.	Ninth St. - Wofford Rd.	*6,387	8,615	2,228	35%
Story Rd.	Wofford Rd. - Kissimmee Ave.	6,075	10,184	4,109	68%
Taylor St.	Franklin St. - McKey St.	No Data	3,484		
White Rd./Orlando Ave	Montgomery Ave. - Clarke Rd.	3,981	7,162	3,181	80%
White Rd./Orlando Ave	Clarke Rd. - Good Homes Rd.	5,168	8,377	3,209	62%
Wurst Rd.	Lakewood Ave. - Adair St.	6,237	6,667	430	7%
Wurst Rd.	Adair St. - A.D. Mims Rd.	6,237	8,100	1,863	30%

* Denotes 1996 Traffic Count Data

Source: Final Report Annual Traffic Count Program 2001 Data Summary and Analysis, 2001.

Table 7
Road Segments Exhibiting Greatest Change, 1993 – 2001

Relative Change				
Road	From/To	1993	2001	Change
Clarke Rd.	SR 438 - A.D. Mims Rd.	4,020	15,544	287%
Clarke Rd.	White Rd. - Silver Star Rd.	8,896	26,727	200%
Clarke Rd.	SR 50 - White Rd.	8,274	22,601	173%
Clarcona-Ocoee Rd.	Clark Rd. - Apopka-Vineland Rd.	3,559	9,516	167%
Old Winter Garden Rd.	Professional Pkwy.- Blackwood Ave.	7,878	18,209	131%
Maguire Rd.	Roberson Rd. - Tonym Rd.	8,560	19,553	128%
Maguire Rd.	Tonym Rd. - Professional Pkwy.	9,155	20,352	122%
Professional Pky.	Maguire Rd. - Old Winter Garden Rd.	3,423	7,436	117%
Lakewood Ave.	Rewis St. - Wurst Rd.	3,385	7,354	117%
Adair St.	Wurst Rd. - Clarcona-Ocoee Rd.	1,500	3,121	108%
Geneva St.	Kissimmee Ave. - Bluford Ave.	6,799	13,044	92%
Absolute Change				
Road	From/To	1993	2001	Change
Clarke Rd.	White Rd. - Silver Star Rd.	8,896	26,727	17,831
SR 50	Clarke Rd. - Good Homes Rd.	22,500	38,187	15,687
Clarke Rd.	SR 50 - White Rd.	8,274	22,601	14,327
SR 50	Maguire Rd. - Old Winter Garden Rd.	36,800	50,393	13,593
SR 50	Wofford Rd. - Marshall Farms Rd.	*42,997	55,653	12,656
Maguire Rd.	Tonym Rd. - Professional Pkwy.	9,155	20,352	11,197
Clarke Rd.	SR 438 - A.D. Mims Rd.	4,020	15,544	11,124
Maguire Rd.	Roberson Rd. - Tonym Rd.	8,560	19,553	10,993
Old Winter Garden Rd.	Professional Pkwy. - Blackwood Ave.	7,878	18,209	10,331

*Denotes 1996 Traffic Count Data

Source: 1993 volumes from Ocoee Comprehensive Plan; 1997 volumes from 1997 Traffic Count Program.

F. Bicycle and Pedestrian Facilities

With the passage by Congress of the Intermodal Surface Transportation Efficiency Act (ISTEA), its successor, the Transportation Equity Act for the 21st Century (TEA21), and the opening of the West Orange Trail, there has been increasing awareness of the need for and value of safe and convenient non-motorized transportation facilities. This section addresses the accessibility of both local and regional bicycle and pedestrian transportation facilities within the City of Ocoee. Emphasis is placed on gaps in the existing system, with the intent of highlighting the need for a connected bicycle and pedestrian system within the City.

In this Element, the following definitions/distinctions are utilized for clarity of discussion. Bicycle and pedestrian facilities are divided into three categories: sidewalks; bikeways; and recreational trails. It is anticipated that sidewalks and bikeways serve principally a function of connecting generators and attractors with a secondary function of recreation. Recreational trails are envisioned as serving principally aesthetic/scenic/ recreation functions with a secondary function of connectivity.

Sidewalk Access/Coverage

An inventory of sidewalk coverage within Ocoee is displayed in Table 7. As this table indicates, sidewalks on at least one side cover just under half of the total length of Ocoee's Concurrency Management System segments. The remaining proportion of CMS segment length (52 percent) represents where gaps in the sidewalk system presently exist. These system gaps are most significant in areas where the potential for pedestrian activity exists, such as areas adjacent to neighborhoods, schools, parks, and commercial areas.

Table 8
Sidewalk Coverage

Segment	From / To	One-Sided and Two-Sided			Two-Sided Only		
		%	Segment Length (mi)	Length Covered (mi)	%	Segment Length (mi)	Length Covered (mi)
A.D. Mims Rd.	Wurst Rd. to Clarke Rd.	100	0.93	0.93	0	0.93	0.00
A.D. Mims Rd.	Clarke Rd. to Apopka-Vineland Rd.	25	0.76	0.19	0	0.76	0.00
Adair St.	Wurst Rd. to Clarcona-Ocoee Rd.	100	0.80	0.80	0	0.80	0.00
Apopka-Vineland Rd.	SR 438 to A.D. Mims Rd.	100	0.75	0.75	0	0.75	0.00
Apopka-Vineland Rd.	A.D. Mims to Clarcona-Ocoee Rd.	100	1.69	1.69	10	1.69	0.17
Apopka-Vineland Rd.	Clarcona-Ocoee to McCormick Rd.	100	0.65	0.65	0	0.65	0.00
SR 439 (Bluford Ave.)	SR 50 to Geneva St.	25	0.61	0.15	0	0.61	0.00
SR 439 (Bluford Ave.)	Geneva St. to Orlando Ave.	100	0.25	0.25	0	0.25	0.00
SR 439 (Bluford Ave.)	Orlando Ave. to McKey St.	100	0.47	0.47	50	0.47	0.24
SR 439 (Bluford Ave.)	McKey St. to Silver Star Rd.	100	0.30	0.30	50	0.30	0.15
Bowness Rd.	Kissimmee Ave. to SR 438	0	0.78	0.00	0	0.78	0.00
Clarcona-Ocoee Rd.	Fuller's Cross Rd. to Clarke Rd.	33	2.94	0.97	0	2.94	0.00
Clarcona-Ocoee Rd.	Clarke Rd. to Apopka-Vineland Rd.	0	1.17	0.00	0	1.17	0.00
Clarke Rd.	SR 50 to White Rd.	100	0.81	0.81	100	0.81	0.81
Clarke Rd.	White to Silver Star Rd.	100	0.76	0.76	100	0.76	0.76
Clarke Rd.	SR 438 to A.D. Mims Rd.	100	1.01	1.01	100	1.01	1.01
Clarke Rd.	A.D. Mims to Clarcona-Ocoee Rd.	0	1.51	0.00	0	1.51	0.00
Flewelling St.	Ocoee Hills Rd. to Russell Dr.	100	0.13	0.13	0	0.13	0.00
Fuller's Cross Rd.	Ocoee-Apopka Rd. to Clarcona-Ocoee Rd.	0	0.62	0.00	0	0.62	0.00
Geneva St.	Kissimmee Ave. to Bluford Ave.	0	0.17	0.00	0	0.17	0.00
Good Homes Rd.	SR 50 to White Rd.	100	0.76	0.76	80	0.76	0.61
Good Homes Rd.	White Rd. SR 438	0	1.20	0.00	0	1.20	0.00
Hackney-Prairie Rd.	Clarke Rd. to Apopka-Vineland Rd.	0	1.14	0.00	0	1.14	0.00
Johio Shores Rd.	SR 438 to A.D. Mims Rd.	100	1.01	1.01	0	1.01	0.00
Kissimmee Ave.	Maguire Rd. to Bowness Rd.	0	1.05	0.00	0	1.05	0.00
Lakewood Avenue	SR 438 to Fuller's Cross Rd.	100	1.01	1.01	33	1.01	0.33
Maguire Rd.	Gotha Rd to Roberson Rd.	0	0.93	0.00	0	0.93	0.00
Maguire Rd.	Roberson Rd. to Tomynd Rd.	0	1.01	0.00	0	1.01	0.00
Maguire Rd.	Tomynd Rd. to Professional Pky	0	0.25	0.00	0	0.25	0.00
Maguire Rd.	Professional Pky to SR 50	0	0.25	0.00	0	0.25	0.00
Maguire Rd.	SR 50 to Story Rd.	0	0.66	0.00	0	0.66	0.00

Segment	From / To	One-Sided and Two-Sided			Two-Sided Only		
		%	Segment Length (mi)	Length Covered (mi)	%	Segment Length (mi)	Length Covered (mi)
Marshall Farms Rd.	SR 50 to Maguire Rd.	67	0.46	0.31	0	0.46	0.00
McKey/Taylor/Franklin	Kissimmee Ave. to Bluford Ave.	100	0.15	0.15	100	0.15	0.15
Ocoee-Apopka Rd.	SR 438 to Fuller's Cross Rd.	0	1.47	0.00	0	1.47	0.00
Ocoee-Apopka Rd.	Fuller's Cross Rd. to McCormick Rd.	0	1.93	0.00	0	1.93	0.00
Ocoee Hills Rd.	SR 438 to Flewelling St.	75	0.51	0.38	0	0.51	0.00
Old Winter Garden Rd.	SR 50 to Blackwood Ave.	100	0.37	0.37	50	0.37	0.18
Old Winter Garden Rd.	Blackwood Ave. to Hempel Ave.	100	0.67	0.67	0	0.67	0.00
Professional Pky.	Maguire Rd. to Old Winter Grdn Rd.	0	0.51	0.00	0	0.51	0.00
Russell Dr.	Flewelling St. to Willow Creek Rd.	100	0.44	0.44	50	0.44	0.22
SR 50 (W. Colonial Dr.)	Wofford Rd. to Maguire Rd.	50	1.60	0.80	50	1.60	0.80
SR 50 (W. Colonial Dr.)	Maguire Rd. to Old Winter Grdn Rd.	100	0.25	0.25	100	0.25	0.25
SR 50 (W. Colonial Dr.)	Old Winter Garden Rd. to Clarke Rd.	90	1.07	0.96	20	1.07	0.21
SR 50 (W. Colonial Dr.)	Clarke Rd. to Good Homes Rd.	50	0.94	0.47	0	0.94	0.00
SR 438 (Silver Star Rd.)	E. Crown Point Rd. to Bowness Rd.	0	0.74	0.00	0	0.74	0.00
SR 438 (Silver Star Rd.)	Bowness Rd. to Bluford Ave.	100	0.41	0.41	0	0.41	0.00
SR 438 (Silver Star Rd.)	Bluford Ave. to Clarke Rd.	50	1.76	0.88	20	1.76	0.35
SR 438 (Silver Star Rd.)	Clarke Rd. to Good Homes Rd.	33	1.23	0.40	0	1.23	0.00
Story Rd.	Wofford Rd. to Kissimmee Ave.	0	1.37	0.00	0	1.37	0.00
White Rd./Orlando Ave.	Bluford Ave. to Clarke Rd.	100	1.63	1.63	50	1.63	0.82
White Rd./Orlando Ave.	Clarke Rd. to Good Homes Rd.	75	0.75	0.57	67	0.75	0.51
Willow Creek Rd.	Russell Dr. to Wurst Rd.	100	0.16	0.16	100	0.16	0.16
Wurst Rd.	Lakewood Ave. to A.D. Mims Rd.	80	1.18	0.95	80	1.18	0.95
			46.00	22.45		46.00	8.67
Total Percent Covered			49%		19%		

Access to these land uses by sidewalks is depicted in Table 9. Although it is important that these types of land uses have direct access to sidewalks, it is equally important that the sidewalk system be well connected to ensure that pedestrian activity is possible between these uses as well as to and from residential areas.

Examples of gaps in the system where such activity is currently not possible include SR 438 from Johio Shores Road to Clarke Road, where pedestrian access from residential areas in northeast Ocoee is limited, and Maguire Road south of SR 50, where pedestrian travel from neighborhoods adjacent to Maguire to other areas in Ocoee, such as the SR 50 activity corridor, is not possible due to insufficient sidewalk coverage. However, roadway widening that is under construction or nearing construction is ameliorating both of these gaps.

Furthermore, many subdivisions in Ocoee have limited access such that pedestrian travel between other subdivisions, schools, shopping, etc. is not possible. This lack of pedestrian interconnectivity on non-roadways is another example of gaps in the existing transportation system.

Table 9
Sidewalk Access to Major Generators and other Key Land Uses

Land Use/Facility	Sidewalk Access	Adjacent CMS Segment
Parks		
Central Park	Yes	Lakewood Ave./Flewelling St.
Forest Oaks Park	No	A.D. Mims Road
Riverside/Coventry Park	Yes	Silver Star Road (SR 438)
Russell Park	Yes	Russell Drive
Sorenson Field	Yes	Adair Street
Vignetti Park	Yes	Adair Street
Palm Drive Park	No	Ocoee-Crown Point Road
Tiger Minor Park	Yes	Bluford Road
Community Center	Yes	Bluford Road
Forest Lake Golf Club	No	Clarcona-Ocoee Road
Silver Glen Park	Yes	Clarke Road
Schools		
Ocoee Elementary	Yes	Bluford Road
West Orange High	No	Beulah Road
West Orange 9th Grade Center	No	Beulah Road
Evans 9th Grade Center	Yes	Apopka-Vineland Road
Ocoee Middle	Yes	Bluford Road
Citrus Elementary	Yes	SR 438, Clarke Road
Spring Lake Elementary	Yes	A.D. Mims Road
Administrative Facilities		
Municipal Complex	Yes	Bluford Road
Orange County Services Building	No	Story Road
Post Office	Yes	Ocoee-Apopka Road
Major Generators		
Health Central	Yes	SR 50; Blackwood Avenue
West Oaks Mall	Yes	Clarke Road
Shopping Centers		
Good Homes Plaza	Yes	SR 50; Good Homes Road
Ocoee Plaza	Yes	SR 438; Bluford Avenue
Town Square	Yes	SR 50
Lake Olympia	Yes	SR 438; Clarke Road
Albertsons	Yes	SR 438; Clarke Road

Bikeways

Bikeways, considered an integral part of the transportation system, include wide curb lanes, signed routes, striped lanes along an existing roadway, and paths. There are currently no bikeways within the City of Ocoee. However, Orange County intends to include bikeways in all new roads, improvements to existing roads, and resurfacing projects when feasible. Such improvements are currently planned for Old Winter Garden Road, Clarcona-Ocoee Road, and the extension of Apopka-Vineland Road from A.D. Mims Road to SR 50. In addition, Objectives 2.8, 2.9 and 3.2 this Element of the Comprehensive Plan provide for the City to establish guidelines regarding bicycle and pedestrian ways connecting residential areas with other areas, the provision of bicycle storage areas, and the accommodation of bicycles and pedestrians in all new developments.

West Orange Trail

The West Orange Trail is a regional multiple use recreational corridor for use by non-motorized forms of transportation. It is considered both a valuable recreational amenity as well as a tool for economic development. The trail currently extends from the Lake/Orange County line through Oakland, Winter Garden, Ocoee and portions of unincorporated Orange County to Apopka. As noted earlier, the portion in northern Ocoee is receiving refined location and facilities through cooperation of Orange County.

Access to the West Orange Trail is an important consideration for Ocoee's future transportation system as it is used by all forms of non-motorized modes and is located to provide access to residential areas and a growing number of attractors.

Other Recreational Trails

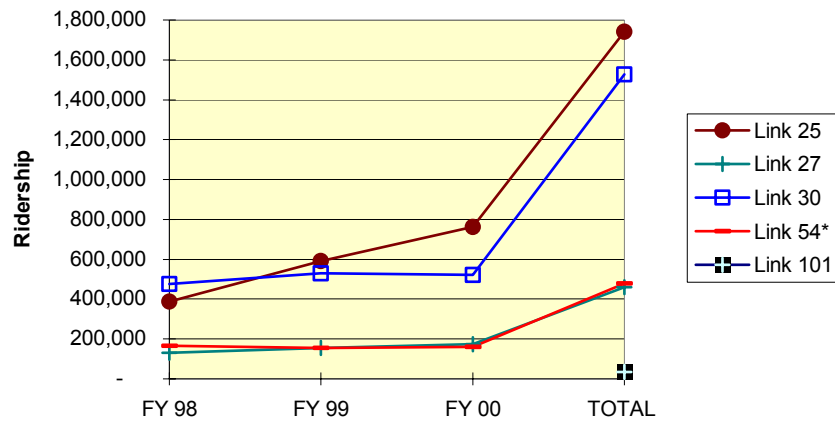
A system of other recreational trails does not currently exist in the City or JPA. However, the need to identify a network of recreational trails to provide citizens access to scenic and aesthetic amenities has been recognized and is addressed later in this Element.

G. Transit Service

Transit service in Ocoee is provided by LYNX, the regional public transportation company which serves Orange, Osceola, and Seminole Counties. Current transit service in Ocoee consists of five bus routes, which converge at the West Oaks Mall. These routes reflect a significant change in transit service beginning November 1996 as a direct result of the opening of the mall.

Average annual ridership for routes serving Ocoee is displayed in Exhibit 4. As this Exhibit demonstrates, all routes have experienced an increase in ridership since the 1996 service changes especially Routes 25. Route 101 is the new cross-town express route that went into service in early 2001. Increased ridership indicates that the mall is a significant destination and transit trip generator.

**Exhibit 4
Ocoee Lynx Ridership**



Note: Link 54 service began in November 1996 and Link 101 service began February 2001. Link 101 ridership is total for first six months.

It should be noted that new Link bus routes, such as Link 101, typically require time to build ridership; thus, these routes will likely continue to acquire more riders in the future. Table 10 describes the LYNX transit routes serving Ocoee. Figure 10 is a map of these five bus routes, or "links." West Oaks Mall is the hub for all five routes.

**Table 10
Transit Service Characteristics**

Link No.	Bus Route Description	Frequency	Hours of Operation	
			Monday-Saturday	Sunday & Holidays
25	West Oaks Mall to Downtown Orlando via Silver Star Road	60 minutes	5:15 AM - 1:35 AM <i>Sat. 5:15 - 10:45 PM</i>	5:45 AM - 6:45 PM
27	Ocoee/Winter Garden Circulator	60 minutes	5:45 AM - 9:00 PM	None
30	West Oaks Mall to UCF via SR 50 (W. Colonial Drive)	60 minutes	5:00 AM - 11:20 PM	5:45 AM - 9:00 PM
54	West Oaks Mall to Downtown Orlando via Old Winter Garden Road	60 minutes	5:30 AM - 7:15 PM	None
101	West Oaks Mall to Downtown Orlando, Waterford Lakes, and UCF via the East-West Expressway (SR 408)	30 minutes	5:55 AM - 7:40 PM <i>No Sat. Service</i>	None

Table 11 lists transit access to major trip generators. Figure 10 and Table 11 indicate both of the City's major trip generators, the West Oaks Mall and Health Central Hospital, are served by transit. Conversely, several areas in the study area have experienced recent population growth and are not served by transit. These locations, which represent a significant share of the joint planning area population, include:

- Apopka-Vineland Road and Clarke Road north of Silver Star Road (SR 438)
- Maguire Road south of SR 50
- White Road
- Good Homes Road
- A.D. Mims Road

Given the dramatic increase in population in these areas, especially where multi-family residences are located, further evaluation as a potential unmet public transit need will be required. This evaluation will be presented in the next update of Ocoee's Master Transportation Plan.

Table 11
Transit Access to Major Facilities

Facility	Transit Access	Bus Route(s)
Parks		
Community Center	Yes	27
Forest Lake Golf Club	Yes	27
Palm Drive Park	Yes	27
Russell Drive Park	Yes	27
Sorenson Field	Yes	27
Vignetti Park	Yes	27
Central Park	No	N/A
Forest Oaks Park	No	N/A
Parkside/Coventry Park	No	N/A
Silver Glen Park	No	N/A
Tiger Minor Park	No	N/A
Schools		
Citrus Elementary	Yes	27
Evans 9th Grade Center	Yes	25
West Orange 9th Grade Center	Yes	27
West Orange High	Yes	27
Ocoee Elementary	No	N/A
Ocoee Middle	No	N/A
Spring Lake Elementary	No	N/A
Public Services		
Ocoee Municipal Complex	Yes	27
Orange County Services Building	Yes	27
Ocoee Post Office	Yes	27
Health Central Hospital	Yes	27
Shopping Centers		
Albertsons	Yes	25, 27
Good Homes Plaza	Yes	30, 54, 101
Lake Olympia	Yes	25, 27
Ocoee Plaza	Yes	27
Olympia Square	Yes	27
Silver Crossings	Yes	27
Town Square	Yes	27
West Oaks Square	Yes	27
West Oaks Mall	Yes	25, 27, 30, 54, 101
West Orange Industries	Yes	27
Village Marketplace	Yes	27
Plantation Grove	No	N/A

Note: Access is defined as within 1/4 mile of a transit route.

H. Other Public and Private Transportation Services

In addition to fixed route bus service, other public and private transportation services include formal carpools and vanpools, dial-a-ride demand responsive services, transportation management associations (TMAs) and express bus service.

A+ Link, a demand response service operated by LYNX, currently provides special transportation services to elderly and handicapped residents in Ocoee. According to LYNX records, 358 Ocoee residents are registered users of the service, of which 277 are regular customers. It is estimated that 74% of A+ Link trips are made in Orange County and 1.63% of those trips are contracted by Ocoee customers. Using this proportion it was determined that in 2000, Ocoee residents made 8,638 trips on A+ Link. (There were 716,122 trips in Orange County that year.) Regular Ocoee customers make an average of 720 trips per month.

LYNX also administers a vanpool fleet and provides ride-matching services for potential carpools, although no such services are known to be currently utilized by Ocoee residents. Transportation management associations (TMAs) provide many services to commuters. These services are geared to reduce single occupant vehicle trips. Such services include ride matching, vanpools, telecommuting assistance, and marketing for transit. Although there are currently no TMAs within the Ocoee area, the West Oaks Mall in conjunction with LYNX, is scheduled to create a TMA to serve mall employees.

I. Traffic Accidents

The most recently mapped traffic accident data for roads included in Ocoee's Concurrency Management System (CMS) accounted for the 1994-1997 period. This data was obtained from the Ocoee Police Department. This data is summarized in Table 12. As this data indicates, more crashes occurred on SR 50 than any other road in the study area, and accounted for over 37 percent of the total crashes on Ocoee's CMS segments. Almost 13 percent of all accidents occurred on Silver Star Road (SR 438). Together, these two roads accounted for just over half of the accidents that occurred on CMS roads from January 1994 to September 1997.

Table 12
Accident Data on Concurrency Management Road Segments
January 1994-September 1997

Road	From / To	Accidents					Property Damage	
		Total	% of Total	Accident Rate*	Fatalities	Involving Bike/Ped	\$ Total	\$ Per Accident
A.D. Mims Rd.	Wurst Rd. to Clarke Rd.	14	0.8	2.09	0	1	11,200	800
A.D. Mims Rd.	Clarke Rd. to Apopka-Vineland Rd.	16	0.9	2.39	0	2	25,351	1,584
Adair St.	Wurst Rd. to Clarcona-Ocoee Rd.	13	0.7	4.81	0	1	14,605	1,123
Apopka-Vineland Rd.	SR 438 to A.D. Mims Rd.	13	0.7	1.17	0	0	43,350	3,335
Apopka	A.D. Mims Rd. to Clarcona-Ocoee Rd.	40	2.1	3.43	1	0	93,555	2,339
Apopka	Clarcona-Ocoee Rd. to McCormick Rd.	0	0.0	0.00	0	0	0	0
SR 439 (Bluford Ave.)	SR 50 to Geneva St.	14	0.8	1.34	0	0	15,171	1,084
SR 439 (Bluford Ave.)	Geneva St. to Orlando Ave.	26	1.4	2.40	0	1	66,465	2,556
SR 439 (Bluford Ave.)	Orlando Ave. to McKey St.	17	0.9	1.70	0	4	28,515	1,677
SR 439 (Bluford Ave.)	McKey St. to Silver Star Rd.	28	1.5	2.84	0	3	21,820	779
Bowness Rd.	Kissimmee Ave. to SR 438	13	0.7	0.85	0	0	35,700	2,746
Clarcona-Ocoee Rd.	Fuller's Cross Rd. to Clark Rd.	6	0.3	1.03	0	1	9,200	1,533
Clarcona-Ocoee Rd.	Clarke Rd. to Apopka-Vineland Rd.	0	0.0	0.00	0	0	0	0
Clarke Rd.	SR 50 to White Rd.	30	1.6	1.65	0	0	89,125	2,971
Clarke Rd.	White Rd. to Silver Star Rd.	65	3.5	2.91	0	1	253,085	3,894
Clarke Rd.	SR 438 to A.D. Mims Rd.	8	0.4	0.78	2	0	25,250	3,156
Clarke Rd.	A.D. Mims Rd. to Clarcona-Ocoee Rd.	1	0.1	0.58	0	0	450	450
Flewelling St.	Ocoee Hills Rd. to Russell Dr.	9	0.5	4.13	0	0	13,300	1,478
Fuller's Cross Rd.	Ocoee-Apopka Rd. to Clarcona-Ocoee Rd.	0	0.0	0.00	0	0	0	0
Geneva St.	Kissimmee Ave. to Bluford Ave.	12	0.6	1.93	0	0	21,825	1,819
Good Homes Rd.	SR 50 to White Rd.	100	5.4	7.53	0	3	301,021	3,010
Good Homes Rd.	White Rd. SR 438	25	1.3	3.48	0	0	57,150	2,286
Hackney-Prairie Rd.	Clarke Rd. to Apopka-Vineland Rd.	0	0.0	0.00	0	0	0	0
Johio Shores Rd.	SR 438 to A.D. Mims Rd.	5	0.3	6.11	0	0	18,800	3,760
Kissimmee Ave.	Maguire Rd. to Bowness Rd.	24	1.3	2.38	0	1	36,750	1,531
Lakewood Ave.	SR 438 to Fuller's Cross Rd.	14	0.8	4.14	0	1	15,380	1,099
Maguire Rd.	Gotha Rd. to Roberson Rd.	3	0.2	0.29	0	0	4,750	1,583

Road	From / To	Accidents					Property Damage	
		Total	% of Total	Accident Rate*	Fatalities	Involving Bike/Ped	\$ Total	\$ Per Accident
Maguire Rd.	Roberson Rd. to Tomynd Rd.	15	0.8	1 .06	0	0	41,500	2,767
Maguire Rd.	Tomynd Rd. to Professional Pkwy.	35	1.9	2.33	0	0	106,520	3,043
Maguire Rd.	Professional Pkwy. to SR 50	59	3.2	3.95	0	1	118,532	2,009
Maguire Rd.	SR 50 to Story Rd.	49	2.6	4.48	0	0	133,650	2,728
Marshall Farms Rd.	SR 50 to Maguire Rd.	18	1.0	4.84	1	0	16,700	928
McKey/Taylor/Franklin St.	Kissimmee Ave. to Bluford Ave.	5	0.3	1.04	0	0	2,600	520
Ocoee-Apopka Rd.	SR 438 to Fuller's Cross Rd.	21	1.1	2.37	0	0	47,882	2,280
Ocoee-Apopka Rd.	Fuller's Cross Rd. to McCormick Rd.	0	0.0	0.00	0	0	0	0
Ocoee Hills Rd.	SR 438 to Flewelling St.	8	0.4	2.34	0	0	9,750	1,219
Old Winter Garden Rd.	SR 50 to Blackwood Ave.	50	2.7	3.21	0	0	151,530	3,031
Old Winter Garden Rd.	Blackwood Ave. to Hempel Ave.	0	0.0	0.00	0	0	0	0
Professional Pkwy.	Maguire Rd. to Old Winter Garden Rd.	18	1.0	3.64	0	0	21,070	1,171
Russell Dr.	Flewelling St. to Willow Creek Rd.	11	0.6	7.51	0	2	11,950	1,086
SR 50 (W. Colonial Dr.)	Wofford Rd. to Maguire Rd.	97	5.2	2.26	0	0	308,126	3,177
SR 50 (W. Colonial Dr.)	Maguire Rd. to Old Winter Garden Rd.	348	18.7	7.58	3	0	893,271	2,567
SR 50 (W. Colonial Dr.)	Old Winter Garden Rd. to Clarke Rd.	145	7.8	3.77	1	0	544,634	3,756
SR 50 (W. Colonial Dr.)	Clarke Rd. to Good Homes Rd.	100	5.4	2.82	1	0	243,705	2,437
SR 438 (Silver Star Rd.)	E. Crown Point Rd. to Bowness Rd.	9	0.5	0.79	0	1	9,250	1,028
SR 438 (Silver Star Rd.)	Bowness Rd. to Bluford Ave.	87	4.7	6.42	0	6	158,685	1,824
SR 438 (Silver Star Rd.)	Bluford Ave. to Clarke Rd.	56	3.0	4.67	0	1	147,050	2,626
SR 438 (Silver Star Rd.)	Clarke Rd. to Good Homes	88	4.7	5.08	0	1	300,920	3,420
Story Rd.	Wofford to Kissimmee Ave.	51	2.7	8.84	0	1	91,651	1,797
White Rd./Orlando Ave.	Bluford Ave. to Clarke Rd.	7	0.4	1.36	0	0	16,950	2,421
White Rd./Orlando Ave.	Clarke Rd. to Good Homes Rd.	28	1.5	5.09	0	0	68,900	2,461
Willow Creek Rd.	Russell Dr. to Wurstd Rd.	2	0.1	2.74	0	0	3,150	1,575
Wurstd Rd.	Lakewood Ave. to A.D. Mims Rd.	58	3.1	8.07	0	2	67,830	1,169

Source: Ocoee Police Department accident report records.

*Accident rate expressed in terms of accidents per 1,000 average daily vehicle trips.

Other hot spots for traffic crashes during this period, as measured by the number of accidents per 1,000 average daily vehicle trips, include: Story Road from Wofford Road to Kissimmee Avenue, Wurst Road from Clarcona-Ocoee Road to A.D. Mims Road, Good Homes Road from SR 50 to White Road, Russell Drive from Flewelling Street to Willow Creek Road, and Johio Shores Road from SR 438 to A.D. Mims Road.

There were nine fatalities involving automobile crashes on CMS segments during the three and a half-year period. Most notably, SR 50 from Maguire Road to Old Winter Garden Road experienced three fatalities during this period. There were 34 automobile crashes involving bicycles and/or pedestrians on CMS segments. These crashes were most frequent on Silver Star Road (SR 438) between Bowness Avenue and Bluford Avenue, with six crashes involving bicycles and/or pedestrians, and Bluford Avenue from White Road to McKey Street, with four such crashes. Safety concerns with respect to the existing transportation system are greatest along these segments.

The Florida Department of Transportation conducts Fatal Accident Reports for incidents occurring on state roads to determine if roadway design features contributed to the cause of the accident. FDOT conducted three such reports on SR 50 over the three and half year period. For each incident, FDOT concluded that roadway features clearly were not contributory factors.

IV. FUTURE CONDITIONS

Two types of future conditions are identified. First, the characteristics of the City's future transportation system are examined, in terms of both what exists today as well as what is funded for construction. Second, changes in socioeconomic conditions, such as population and employment growth, which will have an effect on travel within the City, are identified. This forms the basis of the existing plus committed (E+C) or "no-build" analysis.

The ability of the E+C transportation system to satisfy future travel demand is examined to determine where future transportation deficiencies will occur. A deficiency occurs when projected traffic volumes exceed the roadway's available capacity to handle the traffic, based on its number of lanes. Other transportation deficiencies may occur where an area lacks sidewalks and transit service, or unsafe conditions exist for walking and bicycling. This information will serve to establish a baseline condition to identify potential transportation improvements.

A. Committed Transportation Improvements

Committed transportation improvements are projects which have an identified funding source and are scheduled for construction. Three types of improvements were identified as part of the future conditions analysis: improvements to the roadway system, new bicycle and pedestrian facilities, and transit service enhancements. The main source for identifying committed improvements was the five-year Transportation Improvement Program (TIP), adopted annually by MetroPlan Orlando, the regional transportation-planning agency for the Orlando urban area.

The TIP includes all federal and state funded transportation projects, as well as locally funded projects. In addition to the TIP, the City’s budget and plans for the City of Winter Garden, Orange County and LYNX were all examined for programmed improvements. Given the uncertain nature of future funding allocations, only those projects with committed construction funding were included.

Roads

The TIP includes funding for several significant road improvements both in and adjacent to the City. Several arterial roads that serve the City are programmed for widening, including Clarcona-Ocoee Road, SR 438 (Silver Star Road) and Old Winter Garden Road, while Apopka-Vineland Road will be extended south to SR 50. Construction is beginning on Part C of the Western Expressway. These committed improvements are identified in Table 13.

**Table 13
Roadway Projects with Committed Construction Funding***

Road	Description	Improvement	Responsible Agency
SR 438 (Silver Star Rd)	Apopka-Vineland Road to Hiawassee Road	Widen to 6 lanes	FDOT
SR 438 (Silver Star Rd)	Clarke Road to Apopka-Vineland Road	Widen to 4 lanes	FDOT
Apopka-Vineland Rd	A.D. Mims Road to SR 50	New 4 lane road	Orange County
Apopka-Vineland Rd	Old Winter Garden Road to Conroy-Windermere Road	Widen to 4 lanes	Orange County
Clarcona-Ocoee Rd	Ocoee-Apopka Road to Hiawassee Road	Widen to 4 lanes	Orange County
Old Winter Garden Rd	Maguire to US 441	Widen to 4 lanes	Orange County
Western Expressway**	Part C - Florida’s Turnpike to CR 545	New 4 lane expressway	Orlando-Orange County Expressway Authority

* Note: Subsequent to this analysis, the City has initiated the widening of Maguire Road from Roberson Road to SR 50 and is in design from SR 50 to Story Road. Also, subsequent to the preparation of this Section of the report and completion of the alternative analysis, the City of Ocoee committed funds in Fall 1998 for the widening of Professional Parkway from Maguire Road to Old Winter Garden Road.

** Note: This is a portion of the 1998 Florida Legislature’s approved funding for the Western Expressway from the Turnpike to US 192 in Osceola County.

Bicycle and Pedestrian Facilities

As noted previously, bicycle and pedestrian facilities can include sidewalks, bicycle lanes and off-road pathways and trails. At this time, the only programmed bicycle or pedestrian project in or near the City that has funding committed is the West Orange Trail, which has recently been completed north of the City. In addition, Orange County

calls for the inclusion of bicycle lanes, when feasible, on all county roadway projects. Three of the programmed road improvements identified above – Clarcona-Ocoee Road, Apopka-Vineland Road and Old Winter Garden Road – are Orange County projects, and could therefore very likely include bicycle facilities and sidewalks. However, because the future presence of bicycle lanes on these roads is not certain, they will not be considered as committed improvements.

In addition, new developments and roadways are being reviewed for providing rights of way for or access to future bicycle and pedestrian facilities, based upon the Bicycle and Pedestrian Facilities network identified on Figure 12 at the end of this Element.

Transit

LYNX, the public transportation provider for the region, implement improvements to transit service in Ocoee and West Orange County. Future transit improvements may consist of new routes serving the City, enhancements to routes that currently serve the City, and the construction of transit facilities, such as shelters. Although LYNX has programmed many improvements to its system that could potentially serve Ocoee, including transit centers and super stops, the specific locations and timing of the improvements have not yet been identified. Therefore, no transit improvements are currently committed within the City.

B. Future Socioeconomic Conditions

Population and employment are two important variables that affect transportation demand. Therefore, a significant part of the future conditions analysis is projecting population and employment totals to the year 2020 within the City and its surrounding area. The existing conditions inventory in the previous section demonstrated Ocoee's substantial increases in population and employment over the last several years, with the anticipation that such increases would continue into the future.

To build upon this task, the Ocoee Planning Department in 1997 projected population and employment growth to the year 2020 for each traffic analysis zone (TAZ) within the City's joint planning area for use in the City's 1998 Master Transportation Plan. These projections, reflect a consistency with projections prepared by the Planning Department in 2000 for this Comprehensive Plan that does not require re-evaluation of the Master Transportation Plan at this time; however, the more recent projections will be utilized when the Master Transportation Plan is updated.

The 1997 projections were the result of a comprehensive review of numerous data sources related to population and employment, including:

- Determination of future zoning and permitted uses, consistent with the Future Land Use Map of the Ocoee Comprehensive Plan.
- Inventory of all undeveloped land.
- Inventory of all wetlands, floodplains and conservation areas.

- Inventory of all approved and proposed developments, subdivision plans and planned unit developments (PUDs).
- Institute of Transportation Engineers (ITE) data.
- Trends in population growth.
- Consultation with the Orange County School Board (for future school enrollment and construction).

Population Growth

Table 14 contains information from the Land Use Element and compares the 1997 and 2001 based projections for the Joint Planning Area. Upon comparison, it is evident that any differences in the projections are statistically insignificant and would not justify re-evaluation of the 1997 projection data at this time for transportation planning purposes; however, the 2001 projections will be utilized in the next update of the Transportation Master Plan.

**Table 14
Comparison of 2020 Population Projections**

Year	Total Population
1997 Projections	
1997	35,171
2020	76,899
2001 Projections	
2000	39,099
2020	78,062

Source: Ocoee Planning Department.

The prevailing pattern of single-family residence subdivisions will likely continue into the future. However, sizable growth will occur in multi-family residences as well. As many as 4,000 multi-family units are expected to be built in the JPA between now and 2020, with a majority of the development occurring along the SR 50 activity corridor, Maguire Road, and Clarke Road, particularly where it intersects A.D. Mims Road. Overall, the Ocoee JPA is anticipated to increase from approximately 35,000 people in 1997 to over 78,000 people in the year 2020. This represents a 120 percent increase in population.

Employment Growth

While an analysis of recent socioeconomic trends revealed that Ocoee added only one new job for every four new residents since 1990, this gap between residents and jobs is anticipated to narrow in the future, according to projections. The Ocoee Planning Department projects the area’s employment to grow by nearly 21,000 by the year 2020; this increase represents one new job for every two new residents, as shown in Table 15.

**Table 15
Employment Projections by Sector, 1997-2020**

Sector	1997 Employment	2020 Employment	Increase
Commercial	4,185	16,291	12,106
Industrial	2,590	6,354	3,764
Service	2,117	9,094	6,977
Total	8,892	31,739	22,847

Overall, the study area is anticipated to experience a 239 percent increase in employment from just over 9,000 jobs in 1997 to almost 31,000 jobs in the year 2020, a substantial departure from recent employment growth rates

Much of the employment growth is clustered around the SR 50 corridor; this employment is primarily commercial in nature, although a significant amount of it is service employment as well. New employment in this corridor will consist of commercial activities related to the Lake Lotta DRI, medical/professional offices and other related activities near Health Central Hospital, and commercial developments directly adjacent to SR 50. Commercial and service employment growth is also projected to occur along Maguire Road south of SR 50 and between Clarcona-Ocoee Road and Ocoee-Apopka road in northwest Ocoee. The area's prime regional access will also encourage construction of more office buildings and their related uses, such as restaurants.

Growth in industrial employment, which comprises about 20 percent of the total employment growth to 2020 in the study area, is anticipated to be concentrated in the industrial area west of Kissimmee and Maguire Roads, bounded by SR 438 and SR 50. This area contains distribution centers, such as SYSCO, as well as activities related to the Florida Auto Auction; increases in employment here will likely be of the same industrial nature. The recently constructed Western Expressway in this sector of the City is expected to make a substantial contribution to its status as a regional distribution center.

C. Future Transportation Deficiencies

The previous section of this Section highlighted the substantial growth and development that the Ocoee area will experience over the next 20 years. As this growth occurs, the transportation system will be affected. New homes and businesses generate trips, which will cause traffic volumes on the area's roads to increase. As a result of increasing traffic volumes, congestion and automobile crashes are likely to become more prevalent without corresponding improvements to transportation facilities. Additionally, new subdivisions built in previously undeveloped areas often result in gaps in the existing sidewalk system and decrease the proportion of total population served by transit and bicycle/pedestrian facilities; the area's limited direct access to regional bicycle and pedestrian facilities, such as the West Orange Trail, will become more pronounced.

The purpose of this section is to examine the adequacy of the existing plus committed (E+C) transportation system to effectively serve projected growth and development in the study area to the year 2020, and to identify resulting deficiencies. These

deficiencies will form a baseline condition for identifying future improvements to the transportation system. Deficiencies in the roadway network are identified first, followed by an analysis of the adequacy of overall mobility within the joint planning area.

Roadways

Future deficiencies in Ocoee's roadway network were determined from a forecast of traffic volumes in the year 2020 on roads in and adjacent to the study area. These projected traffic volumes were compared against each road's estimated capacity to identify congested roadway segments. The distribution of 2020 traffic volumes on the roadway network was also used to determine areas where safety could potentially be a problem.

Forecasting Future Traffic Volumes: The Ocoee Sub-Area Model

Year 2020 traffic volumes were forecast in the Ocoee Sub-Area Model, a computer model created from the Orlando Urban Area Transportation Study (OUATS) regional model for the Transportation Element. Essentially, this model uses population and employment projections to forecast vehicle trips on existing plus committed roadways in the study area. Because the Comprehensive Plan has a planning horizon of 2020, the model forecast was based on 2020 conditions as well. The existing plus committed (E+C) network consists of roadways existing, plus those with funding committed for construction.

Future Roadway Congestion

Levels of congestion in the year 2020 for roads in the E+C network were identified by the volume to capacity (V/C) ratio, a comparison of daily traffic volume to roadway capacity. The capacity of each road was estimated by ART-TAB, a computer application developed by the Florida Department of Transportation (FDOT), which takes into account such aspects as road length, number of lanes, number of traffic signals, posted speed and surrounding development.

If the projected traffic volume of a given road consumed less than 80 percent of a road's capacity (a V/C ratio of less than 0.80), it was not considered congested; if the projected volume consumed between 80 and 100 percent of a road's capacity (a V/C ratio of 0.80 to 0.99), it was considered as borderline congested; if the projected volume consumed between 100 and 120 percent of a road's capacity (a VC ratio of 1.00 to 1.19), it was considered marginally congested; if the projected volume consumed 120 percent or more of a road's capacity (a V/C ratio of 1.20 or greater), it was considered significantly congested.

In general, roads experiencing borderline congestion should be closely monitored and traffic operations improvements (signalization, turn lanes, access management) considered. Marginally congested roadways may operate acceptably with the enhancement of transit service, system management and operational improvements, but widening the road eventually may be needed. Roads that are projected to have significant congestion levels will need some sort of capacity improvement to the congested roadway or a parallel roadway, to make it operate at an acceptable level.

Several roads in the study area will experience varying levels of congestion in the year 2020. The most significant congestion, as defined by a VC ratio of 1.20 or greater, is projected to occur on several key east-west roads, including portions of:

- West Colonial Drive (SR 50)
- Silver Star Road (SR 438)
- Story Road
- Professional Parkway
- Old Winter Garden Road
- Apopka-Vineland Road
- Bluford Avenue

Marginally congested roads, with traffic volumes slightly exceeding capacity (a V/C ratio of less than 1.20), include portions of A.D. Mims Road, Clarcona-Ocoee Road, Maguire Road, SR 50, SR 438 and Old Winter Garden Road. Based on an analysis of future roadway congestion in the study area, three general deficiencies are projected to occur:

- East-west travel into and within the study area – Travel on east-west roads is generally constrained throughout the study area, particularly with respect to trips on the west side of Ocoee; the SR 50 corridor is significantly congested for virtually its entire length within the study area.
- North-south travel into the study area – Primary north-south roads which serve areas outside of Ocoee, such as Apopka-Vineland Road in the north and Maguire Road in the south, exhibit projected deficiencies in the year 2020.
- SR 50 Activity Center at the West Oaks Mall and Health Central Hospital – The activity center associated with development where roads such as Maguire Road, Bluford Avenue and Old Winter Garden Road intersect SR 50 exhibits severely constrained traffic flow.

Safety Issues

As traffic volumes increase on study area roadways, safety becomes more of an issue along with congestion. Burgeoning development adjacent to the SR 50 corridor will add to concerns related to vehicular access along this major arterial. Accidents along key roads, including SR 50, SR 438, Old Winter Garden Road, Clarcona-Ocoee Road, Clarke Road and Apopka-Vineland Road, are expected to become more frequent, particularly at major intersections. Existing alignments of roads will need to be examined for their potential to safely carry projected traffic volumes. These issues represent potential safety deficiencies in Ocoee's future transportation network for which improvements will need to be identified.

When the arterial system breaks down, such as significant levels of congestion on Silver Star Road or SR 50, then drivers begin performing unsafe maneuvers and cut-through residential areas to save time. This leads to unsafe speeds, failure to watch for

pedestrians and overly aggressive driving, all of which threaten vehicular and pedestrian safety, and reduce the quality of life in residential areas.

Mobility and Access

Beyond the adequacy of the City's roadway network in serving future traffic growth and land development, the ability to travel within as well as to and from the study area via other modes of transportation is also examined. Apart from the automobile, alternative modes of transportation include bicycling, walking, riding transit, carpooling and vanpooling.

It is important to consider these modes when evaluating the future transportation system. The priority given to walking, bicycling and using public transit reflects greatly on the character of an urban area and its quality of life. Creating safe, convenient and pleasant opportunities for walking and bicycling sends a strong signal that Ocoee is a desirable and attractive place to live, work and play.

Bicycling and Walking

Future deficiencies for bicycling and walking occur where sidewalks and bicycle facilities are absent adjacent to existing or planned development, as well as where linkages do not exist between recreational, shopping and employment opportunities and residential areas. As noted in the earlier section, many areas in Ocoee exhibit sidewalk deficiencies, including A.D. Mims Road, Maguire Road and Silver Star Road. In addition, many areas where major development is planned will need to include sidewalks, including Clarcona-Ocoee Road and the northern portions of Clarke Road.

There are no designated bicycle facilities within the City of Ocoee, although Orange County has plans to include them concurrent with the widening of Clarcona-Ocoee Road and Old Winter Garden Road, if economically feasible, and the City will incorporate them into the design of the Maguire Road and Professional Parkway widening. Some cyclists choose to share the road with automobiles.

However, as traffic volumes increase in the future, such travel will become more hazardous. Therefore, separate or specially designated bicycle facilities are needed along key travel corridors, including Clarke Road, Maguire Road and Bluford Avenue. The City recently opened the Beech Recreation Center at A.D. Mims Road, while the West Orange Trail has recently been completed in the northern portion of the City. Safe bicycle access and parking at these facilities is absolutely essential for citizens of all ages.

Transit

Two primary work trip destinations currently exist for many Ocoee commuters: downtown Orlando, and the attraction area in southwest Orange County. The recent addition of Link 101, the direct LYNX bus route using the East-West Expressway, will provide access to the former. However, the latter is not directly or efficiently served by transit from the City. This represents a significant deficiency in Ocoee’s transportation system. In addition, as the City begins to experience more employment growth over the next two decades, enhanced service in areas currently served by transit will be required. By 2020, it is likely that more workers will likely either remain in Ocoee or commute into the area from other parts of the urbanized area.

V. TRANSPORTATION IMPROVEMENT STRATEGIES

A set of improvement strategies was developed to address the City’s future transportation needs. These improvements build upon the existing transportation system plus those improvements that are already committed for construction. They are proposed not only to remedy the deficiencies identified above, but also to achieve the goals and objectives that were developed for the Transportation Element. This section describes the steps that were taken in identifying improvements for the future transportation system.

A key consideration in the development of alternative transportation improvements for Ocoee is that they are compatible with and further the values of the community. This was made possible through the creation of goals and objectives for the Transportation Element. These goals and objectives were primarily derived from interviews with key community leaders in an effort to reflect community values. Furthermore, they were examined in relation to goals, objectives, and policies of relevant local, regional and state plans for consistency. A summary of the goals and objectives for the Transportation Element is located in Table 16.

**Table 16
Summary of Transportation Element Goals and Objectives**

Preservation	Access and Mobility	Safety
<ul style="list-style-type: none"> ❖ Preserve residential and community character ❖ Direct growth ❖ Use the existing system efficiently 	<ul style="list-style-type: none"> ❖ Provide adequate roadway capacity ❖ Improve access to Turnpike and expressways ❖ Develop alternative modes of transportation ❖ Provide connections for all modes between complimentary land uses ❖ Improve access to the West Orange Trail and other recreational amenities 	<ul style="list-style-type: none"> ❖ Reduce the number of traffic accidents ❖ Make the City a safer place for bicycles and pedestrians

Improvement Categories

As part of the transportation improvement identification process, improvements were classified based on their function within the transportation system. Specifically, three broad categories were developed:

- A. Category I: System Management - Operational and safety improvements to the existing roadway network.
- B. Category II: Mobility and Demand Management - The consideration of alternative modes of transportation.
- C. Category III: Increase Roadway Capacity/Connectivity - Relieve traffic congestion.

Typically, transportation plans are focused on improvements that fall under Category III because they are the traditional and most obvious responses to increasing levels of traffic congestion. However, Category I and II improvements are also significant components of a transportation plan because they address projected deficiencies as well as many of the goals and objectives developed for the Transportation Element, including:

- Making the city a safer place to travel.
- Providing for the more efficient use of existing roads.
- Contributing to the identity of the city as a unique place.
- Making the city more visually attractive.
- Improving options for non-automobile modes of travel, including biking, walking and using public transit.

Presented below is a description of all three categories of improvements identified in the Transportation Element.

A. Category I: System Management

System management strategies address future roadway needs by focusing on operational and safety improvements to the existing roadway network. Generally, they consist of intersection improvements, such as signalization or use of turn lanes, and managing roadway access. The strategies tend to focus on issues related to safety and improving travel efficiency. Candidate projects for Category I improvements, including safety and roadway enhancements, are shown in the Roadway Improvement Master Plan 2020 map in Figure 11. Some of these improvements will need to be undertaken by Orange County.

Safety Enhancements

Safety enhancements are intended to resolve potentially unsafe conditions on roadways within the study area, and primarily involve improvements to existing intersections, including signalization and the addition of turn lanes, realignment of roadways and improvements related to access management. Access management treatments may

include restricted access, such as right-in/right-out-only configurations to eliminate unsafe maneuvers. Several roads in Ocoee were identified as candidates for safety improvements based on a review of existing roadway and intersection design in relation to several characteristics, including recent accident data, existing traffic volumes, and projected traffic volumes. These roads include:

- SR 50 - including the key intersections at Maguire, Bluford, Blackwood, Clarke and Good Homes Roads, as identified in the SR 50 Access Management and Intersection Operations Study.
- Clarke Road - including the key intersections of SR 438 and A.D. Mims Road.
- Maguire Road - including the key intersections of SR 50, Professional Parkway and Moore Road.
- Silver Star Road (SR 438) - including realignments at the Western Expressway and east of Johio Shores Road.
- Clarcona-Ocoee Road - including the key intersections at Fuller's Cross Road, Adair Street, Clarke Road and Apopka-Vineland Road.
- Bluford Avenue - in the vicinity of the elementary and middle schools.
- Old Winter Garden Road - including key intersections at Professional Parkway, Blackwood Avenue, Hempel Avenue and Citrus Oaks Avenue.

Operational Improvements

The second type of system management improvements are sometimes referred to as gateway treatments because they involve roadway enhancements which convey a sense of place and attempt to change traveler behavior by slowing speeds. These improvements may include traffic calming measures and aesthetic features, such as landscaped medians, brick pavers, roundabouts and signage. Several key locations have been identified along roadways entering the study area for gateway treatments. Some of these locations are:

- Maguire Road in the vicinity of Roberson and Moore Roads.
- Old Winter Garden Road in the vicinity of Hempel Avenue and Citrus Oaks Boulevard.
- Silver Star Road in the vicinity of Apopka-Vineland Road.
- Clarcona-Ocoee Road in the vicinity of Apopka-Vineland Road.
- SR 50, as described by the activity center study recently adopted by the Ocoee City Commission.

In addition to enhancements at points entering the City, locations along other key roads were recommended for enhancement, which identify Ocoee's traditional downtown as a unique area. The long-term objective for this area is to create a more pedestrian-friendly place supportive of arts/crafts and antique shops, as well as small-scale commercial land uses. This area would include the types of improvements listed above

as well as the provision of on street parking on selected streets. Locations for special street treatments include:

- Taylor Street just east of SR 438 (Silver Star Road).
- Bluford Avenue between Silver Star Road and McKey Street.
- Bluford Avenue just north of SR 50.

Access Management

Managing access through measures such as the provision of medians, limiting driveways to private property, requiring joint access for adjacent properties, requiring cross access between properties, and exercising median opening control is an integral part of Ocoee's System Management program. In 1998, the City adopted the Access Management and Intersection Operations Study covering SR 50 through the City. This study, which was coordinated with the FDOT, is an important component in designs for reconstruction of that facility and is a valuable tool in reviewing private developments adjacent to SR50. All of the principles of access management noted above are applied citywide.

B. Category II: Mobility and Demand Management

Mobility and demand management improvements address non automobile-oriented mobility enhancements to the transportation system, as well as ways to encourage the use of alternative modes of transportation. They consist of both design and policy recommendations. Emphasizing mobility and demand management can improve the quality of life of the City's residents and help reduce the number of automobiles on its roads.

As part of the Transportation Element, three general types of Category II improvements have been identified for Ocoee: bicycle and pedestrian improvements, transit improvements and the formation of a transportation management association promoting ride sharing and transit at the West Oaks Mall. Candidate projects for Category II improvements are shown in the Bicycle, Pedestrian and Transit Master Plan 2020 map in Figure 12.

Bicycle and Pedestrian Improvements

Several improvements have been identified to address bicycling and walking in Ocoee. Bicycle improvements are primarily concerned with connecting residential land uses with other land uses via either an on-street facility, such as a bike lane, or an entirely separated facility, such as a path. Pedestrian improvements typically involve the provision of sidewalks, crosswalks and other safety accommodations that connect land uses and areas.

The main areas of bicycle and pedestrian improvements are connections to the City's new Beech Recreation Center, the West Orange Trail and downtown Ocoee. Specifically, the bicycle and pedestrian improvements identified for this plan are listed as follows.

Bicycle facilities at key locations along roads in the City, including:

- Clarke Road - connecting the West Orange Trail trailhead in the north and the West Oaks Mall in the south, as well as providing access to commercial areas for residents along Clarke Road. Ideally, this should be an off-road path so all experience levels and ages of users could be accommodated; however, right-of-way constraints may limit it to an on-road facility.
- Clarcona-Ocoee Road - providing east-west access to the West Orange Trail trailhead, as well as connecting residential areas to the planned middle and elementary schools.
- Wurst Road and A.D. Mims Road - providing east-west access to the City's new park, connecting to the City's new park via Bluford Avenue, Lakewood Avenue and A.D. Mims Road and downtown via Bluford Avenue.
- Maguire Road south of SR 50 - providing access to the new South Park and adjacent new elementary school with new residential areas in the southern sector of the City and providing connectivity of the southern sector to other portions of the City.
- Hempel Avenue - including its planned extension north of SR 50, connecting to Bluford Avenue to the west.
- Maine Street – providing a parallel “internal” access between Hempel Avenue and Bluford Avenue north of the SR 50 corridor.
- Old Winter Garden Road – providing a parallel access south of the SR 50 corridor and providing access to Health Central Hospital in Ocoee as well as connection to points east.
- SR 50 (West Colonial Drive) – providing access along the City's principal commercial artery and providing access to the West Oaks Mall and Health Central Hospital for significant multi-family developments east of the City/JPA.
- Silver Star Road – providing east-west access across town with access to municipal facilities.
- Lakeview Avenue – connecting the West Orange Trail to downtown and other bicycle and pedestrian facilities.

Improvements to the City's street network pedestrian facilities, including:

- Filling in of all existing gaps in the sidewalk system.
- Two-sided sidewalk coverage on key roads connecting schools and residential areas, such as White Road.
- Improving pedestrian accessibility around portions of Starke Lake.
- On-street parking in the downtown to foster a more pedestrian-friendly environment, to provide a buffer between pedestrians and passing motor vehicles. Many communities are using on-street parking as a design element to enhance their traditional down towns.

Recreational trails at key locations in the City/JPA including:

- A recreational trail connecting Tiger Minor Park with planned commercial and residential land uses between White Road and SR 50, as identified in the SR Activity Center Study.
- Recreational trails around Lake Meadow and Prairie Lake with access to surrounding roads and bicycle pedestrian facilities. These trails provide opportunities for citizens to enjoy some of the more scenic amenities in the JPA.
- A recreational trail off and to the west of the West Orange Trail to Lake Apopka through the City-owned conservation areas adjacent to the "Coke" property. This trail will provide stunning scenic beauty to JPA residents and visitors to the West Orange Trail.

Transit Improvements

Several projects have been identified to improve public transit service in Ocoee, both in terms of new service and enhancements to existing routes. The map in Figure 12 shows proposed new transit routes. Transit service enhancements not only provide improved options for travel to areas in and around Ocoee, but also provide an alternative mode of travel for commuters to employment centers in the region, such as downtown Orlando and the attractions. Ultimately, LYNX will determine its needs and suitable operations for transit service in the study area based on funding availability; however, it is important to communicate to LYNX the City's desires and objectives for public transit. Potential transit improvements identified for this plan include:

- The reduction of headways (service frequency) to 30 minutes on all routes which presently serve the City (all are currently 60 minutes except the new Link 101).
- A new north south route connecting Ocoee to the attractions and other development in southwest Orange County, via either Maguire Road or Apopka-Vineland Road.
- A new north south route connecting the West Oaks Mall to Apopka and northwest Orange County, via Clarke Road, Silver Star Road (SR 438) and Apopka-Vineland Road.
- The development of the West Oaks Mall into a hub for transit service in West Orange County, with provisions for service to Health Central and other developments along the SR 50 activity corridor.

Transportation Management Association (TMA)

The West Oaks Mall has made provisions to form a TMA. The TMA will serve as a mobility manager for travel related to the mall and the surrounding area, including such functions as rideshare matching for carpools and vanpools and support for other alternative modes of transportation. The Transportation Element recommends that the city supports the formation of the TMA, and encourages its expansion to serve all commuters and employers in the Ocoee travel market.

C. Category III: Roadway Capacity Improvements

This category of improvement options includes projects that increase the capacity of roadways in the Ocoee joint planning area that are currently experiencing congestion or are projected to experience congestion in the future. Projects may involve widening a road (for example, from two to four lanes), extending an existing road to improve connections with developing areas, or upgrading a road through paving and/or design.

It should be noted that some projects in this category may include making improvements to a non-congested roadway that is parallel to a congested road by creating an alternative route for traffic. The sources of these alternative roadway improvements are from the community leader interviews, discussions with staff, a public workshop held on June 9, 1998, coordination with other agencies and through an assessment of projected congestion problems.

The Ocoee Master Transportation Plan study, conducted in 1997/98, analyzed and evaluated three alternative roadway improvement scenarios: Regional Long Range Improvements (Alternative A), Capacity Improvements (Alternative B), and Connectivity Improvements (Alternative C). These were compared in terms of their effectiveness in addressing future transportation deficiencies as well as the goals and objectives created for the Transportation Element, with the intent of identifying roadway improvement needs and recommending a set of improvements to be made over the next 20 years.

Future traffic volumes (2020 conditions) on study area roads under the three alternatives were forecast using the Ocoee sub-area model. The modeling results for each alternative were evaluated based on criteria developed from the goals and objectives of the Transportation Element. Specifically, these criteria consisted of:

- Level of service (LOS) on Ocoee's major and minor arterial roadways.
- Volume change on collector and local/residential roads.
- Conformance of road segments to the City's adopted LOS standard.
- Lane miles that meet the LOS standard.
- Overall volume to capacity (V/C) ratio.
- Traffic volumes at Florida's Turnpike and expressway interchanges.
- Volumes on SR 50 in relation to Florida's Turnpike and East-West Expressway.

Beyond the output of the model, other criteria incorporating the goals and objectives for this study were taken into consideration when evaluating each of the alternatives, including:

- Number of new roadways bisecting existing neighborhoods.
- Number of roadway improvements adjacent to neighborhoods.
- Change in capacity on north-south and east-west roads.

- Improved access to areas of anticipated growth and development.
- The development of a more balanced and interconnected network providing alternatives to travel on SR 50 and other major corridors. In fact, a very significant objective of this network is to ensure interconnectivity of the street system to minimize point loading on main arterials.

Based on this analysis, it became clear that certain improvements within each alternative were individually effective in achieving one or more of the objectives of the Transportation Element. These improvements were combined into a single "hybrid" roadway network. This network became the recommended Roadway Improvement mater Plan 2020. The development of the recommended roadway plan is described below.

Recommended Roadway Improvements

The recommended plan is comprised of both connectivity and capacity roadway enhancements that will be pursued by the City over the next 20 years. In addition, the recommended plan contains improvements that fall under the responsibility of the Florida Department of Transportation (FDOT), Orange County, the Orlando-Orange County Expressway Authority (OOCEA) and the City of Winter Garden. Although not responsible for completing these improvements, the City of Ocoee will support them as priority items in their respective agency work programs. This section highlights the findings of the analysis of the recommended roadway improvement plan in comparison to the other four scenarios: E+C, and Alternatives A, B, and C, as described above.

Reducing Congestion

An initial evaluation of the model output revealed that the improvements included in Alternative A relieved a substantial amount of the City's congestion problems. Key road improvements, such as widening SR 50 to six lanes throughout the City and widening Silver Star Road to four lanes, have a positive impact on reducing congestion on other east-west roads in Ocoee. These capacity improvements have the effect of drawing traffic away from other non-regional roads in the City where congestion would otherwise occur.

However, these improvements do not totally eliminate congestion. For example, although SR 50 and SR 438 are widened under this scenario, many segments of these two roads will still experience borderline congestion problems in the year 2020. Old Winter Garden Road, which is committed to be widened to four lanes, will experience significant congestion problems even at four lanes.

Other key roads in the vicinity of the SR 50 corridor, such as Maguire Road, Professional Parkway and Bluford Avenue, will experience significant congestion levels as well. Therefore, additional improvements, beyond those identified in Alternative A, were identified and evaluated for their potential in reducing congestion in the City.

Many other road improvements within the City were identified for their ability to address congestion problems, including widening the remainder of Maguire Road to four lanes north of Tomyrn Road. To relieve congestion on SR 50, parallel routes were identified for improvement, including the widening of Story Road, Bluford Avenue, and Professional Parkway to four lanes.

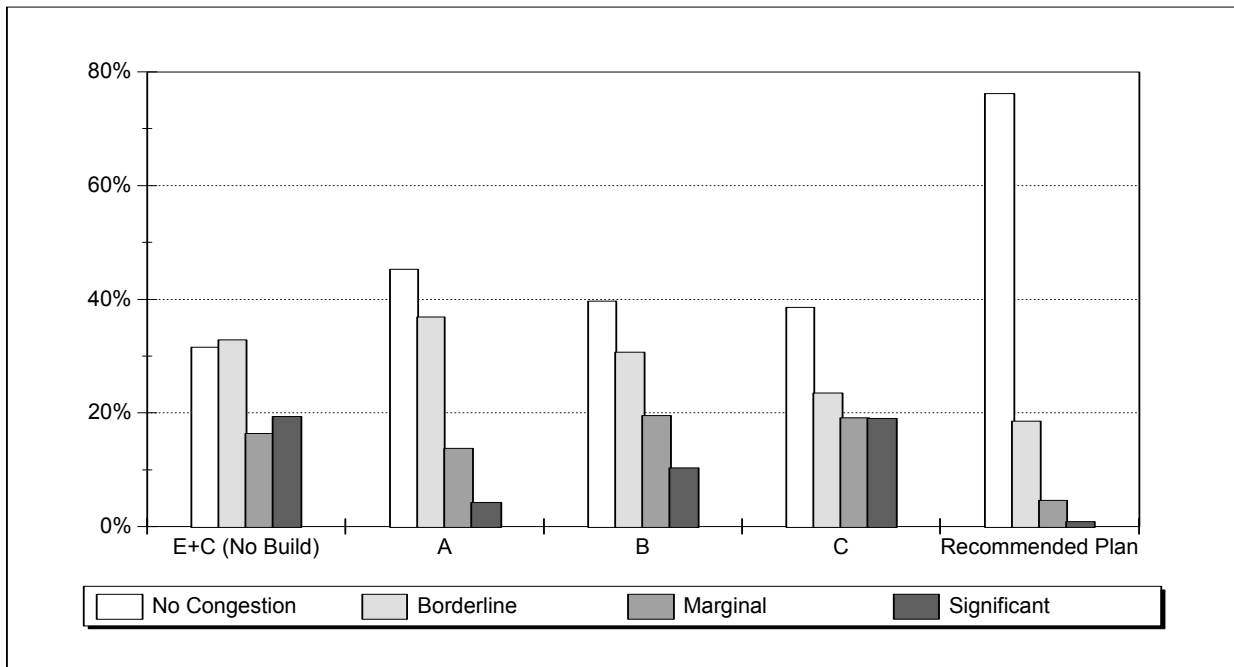
Several improvements have been identified for Clarke Road to provide better north-south capacity within the City, including widening to six lanes between SR 438 and SR 50, widening to four lanes between Clarcona-Ocoee Road and A.D. Mims Road and its eventual four-lane extension north of Clarcona-Ocoee Road to McCormick Road. Projected year 2020 levels of congestion under the three alternatives and the recommended roadway improvement plan are shown in Table 17. 2020 congestion levels on the recommended roadway network are shown in Exhibit 5.

It is projected that in system-wide congestion levels will fall substantially under the recommended improvement plan. Only one small segment of roadway, SR 438 between Good Homes Road and Apopka-Vineland Road, is projected to experience significant congestion in the year 2020, compared to almost 19 percent of study area roadways under the no-build scenario. Significant congestion levels experienced under Alternatives A, B, and C range between four and 19 percent of total lane miles.

**Table 17
Projected Lane Miles of Congestion, 2020**

Congestion Level	Alternative								Recommended Plan	
	E+C "No Build"		A		B		C			
	Miles	%	Miles	%	Miles	%	Miles	%	Miles	%
Less than 0.80 No Congestion	47.1	32%	79.1	45%	69.8	40%	67.7	38%	168.6	76%
0.8 to 1.0 Borderline	49.0	33%	64.4	37%	53.9	31%	41.2	23%	41.0	19%
1.0 to 1.2 2.0 Marginal	24.4	16%	24.0	14%	34.3	19%	33.6	19%	10.0	5%
>1.2 Significant	28.9	19%	7.4	4%	18.1	10%	33.3	19%	1.7	1%
Total	149.4	100%	174.9	100%	176.1	100%	175.8	100%	221.3	100%

Exhibit 5
Projected Levels of Congestion by Lane Mile Percentage, 2020



Access and Connectivity

As a further step to reduce congestion and provide better access to areas where development is planned, several connectivity improvements were identified. Improvements such as the extension of Moore Road to Parkridge-Gotha Road, and the paving of Ingram Road between McCormick Road and Clarcona-Ocoee Road. Provide new options for east-west and north-south travel within the City. They balance traffic volumes over the roadway network by providing adequate arterial spacing.

Other improvements, such as the completion of Roper Parkway between SR 438 and SR 50 in the industrial area, and the extensions of Hempel Avenue, Montgomery Avenue and construction of Maine Street, will provide better access to future development in those areas, as well as relieve traffic pressure on heavily congested arterial roads such as SR 50. In the industrial area, improved connectivity of roads providing better access to regional roadways will enhance that area’s economic viability.

Access to the Turnpike and Expressways

One of the objectives of the Transportation Element is to provide better access to Florida’s Turnpike and other expressways. Therefore, several projects were identified in the recommended roadway improvement plan to accomplish this objective. The Marshall Farms Interconnect, a proposal that calls for a new interchange with Florida’s Turnpike via the southern extension of Marshall Farms Road, represents a significant improvement to Turnpike access.

Other Turnpike and expressway improvements identified in the recommended roadway plan include interchange improvements on the East-West Expressway at Good Homes Road and at Florida's Turnpike. Individual improvements are described in greater detail in the next section.

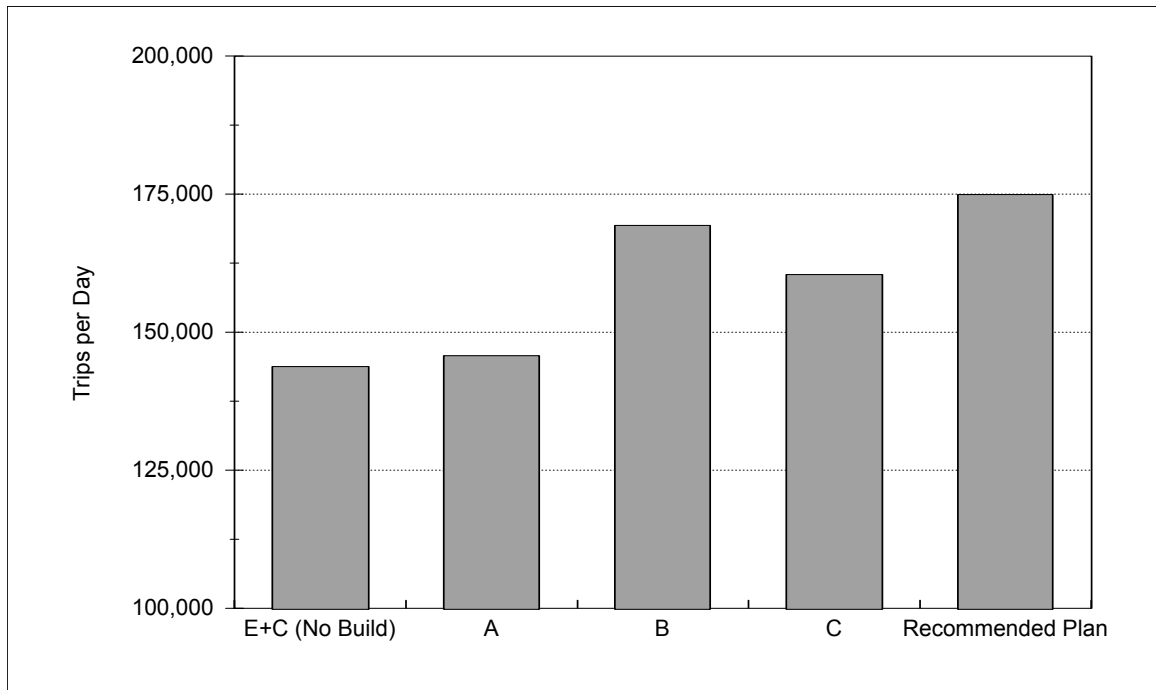
These improvements represent significant access improvements to the City by eliminating the need for many Turnpike- and expressway-bound trips to travel on SR 50 and other local roads. They also represent improvements for the Turnpike and Expressway authorities by increasing the total volume of trips accessing the facilities, thereby likely increasing revenues. Projected ramp volumes on Florida's Turnpike, the East-West Expressway and the Western Expressway under the three alternatives and the recommended plan are shown in Table 18 and Exhibit 6.

Table 18
Projected Turnpike and Expressway Ramp Volumes, 2020

Interchange	E+C No Build	A	B	C	Recommended Plan
Florida's Turnpike					
SR 50	15,900	11,700	11,500	N/A	N/A
Marshall Farms Interconnect	N/A	N/A	N/A	33,200	27,700
East-West Expressway					
Clarke Road	32,500	32,400	37,200	32,900	35,700
Good Homes Road	7,600	10,300	44,200	11,000	36,100
Western Expressway					
West Road	34,700	26,600	31,700	36,200	22,300
SR 438	31,100	36,600	25,500	31,000	26,000
SR 50	21,900	28,100	19,200	16,100	27,100
Total Ramp Activity	143,700	145,700	169,300	160,400	174,900

Note: Ramp volumes were projected using the Ocoee Sub-Area Model. Volumes may vary from projections of the Turnpike and Expressway Authority.

**Exhibit 6
Projected Total Ramp Activity, 2020
Florida’s Turnpike and Expressways**

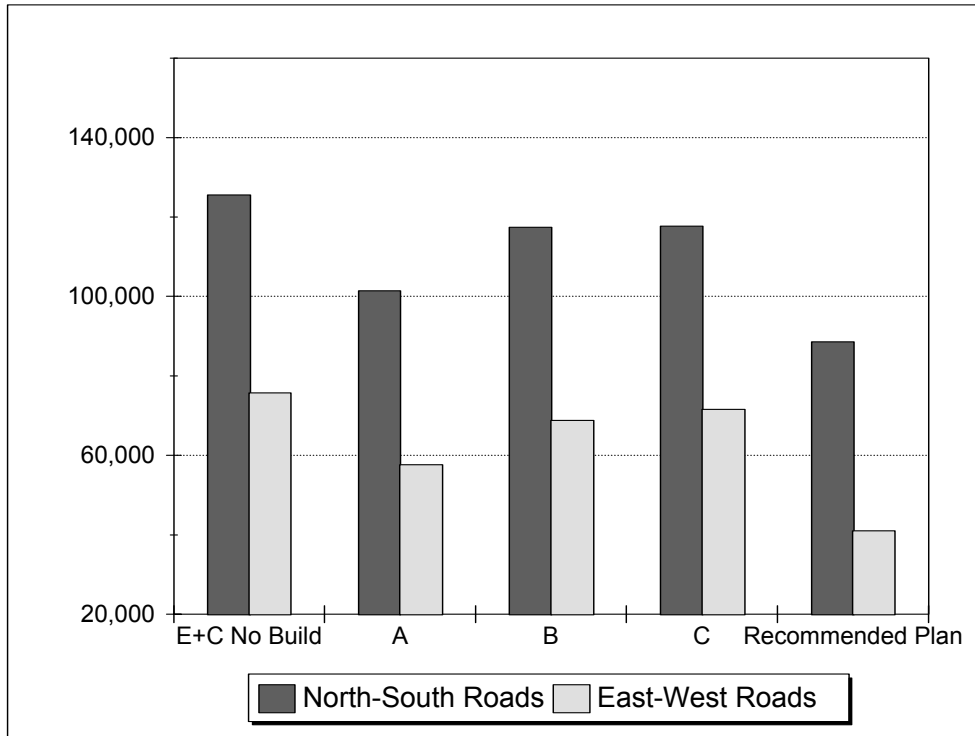


Preservation of Residential and Community Character

One of the goals identified for the Transportation Element is preservation of Ocoee’s unique community and residential character. With this goal in mind, alternative improvement strategies were evaluated with the intent of recommending improvements that had the potential for reducing traffic on local and collector roads, which were residential in nature.

The traffic volumes on these local and collector roads were monitored during the modeling process to ensure that they did not increase significantly. In addition, the levels of service on key arterial and major collector roadways were monitored to ensure they did not degrade to the point that cars would start cutting through neighborhood roads to avoid delays. Projected traffic volumes for selected local roads under each of the alternatives plus the recommended plan are shown in Table 19 and Exhibit 7.

Exhibit 7 Projected Traffic Volumes on Local Roads, 2020



**Table 19
Projected Traffic Volume Change on Local Roads, 2020**

Road	From/To	E+C		A		B		C		Recommended	
		No Build	Volume	Volume	Change	Volume	Change	Volume	Change	Plan	Volume
		Volume								Change	Change
North-South Roads											
SR 439 (Bluford Ave.)	Geneva St. to Orlando Ave.	25,500	19,100	-25%	21,100	-17%	18,000	29%	15,100	-41%	
SR 439 (Bluford Ave.)	Orlando Ave. to McKey St.	18,800	16,500	-12%	14,700	-22%	16,200	14%	13,700	-27%	
SR 439 (Bluford Ave.)	McKey St. to Silver Star Rd.	14,100	10,200	-28%	17,800	26%	17,000	21%	10,400	-26%	
Adair St.	Wurst Rd. to Clarcona-Ocoee Rd.	8,700	3,500	-60%	6,800	-22%	9,300	7%	2,600	-70%	
Johio Shores Rd.	SR 438 to A.D. Mims Rd.	800	600	-25%	900	13%	800	0%	600	-25%	
Ocoee Hills Rd.	SR 438 to Flewelling St.	6,900	4,600	-33%	5,000	-28%	7,200	4%	5,200	-25%	
Citrus Oaks Blvd.	Old Winter Garden Rd. to SR 50	14,100	13,200	-6%	12,300	-13%	14,800	5%	7,800	-45%	
Good Homes Rd.	SR 50 to White Rd.	12,300	12,400	1%	12,500	2%	11,000	11%	10,900	-11%	
Good Homes Rd.	White Rd. SR 438	11,700	9,700	-17%	13,800	18%	12,000	3%	10,800	-8%	
Hempel Ave.	Gotha Rd. to Old Winter Garden Rd.	12,600	11,600	-8%	12,500	-1%	11,400	10%	11,500	-9%	
Total		125,500	101,400	-19%	117,400	-6%	117,700	-6%	88,600	-29%	
East-West Roads											
Gotha Rd.	Maguire Rd. to Hempel Ave.	13,200	12,100	-8%	11,200	-15%	7,300	45%	6,800	-48%	
Flewelling St.	Ocoee Hills Rd. to Russell Dr.	3,700	2,600	-30%	3,600	-3%	3,600	-3%	500	-86%	
Rewis St.	Lakewood Ave. to Flewelling St.	3,800	2,600	-32%	3,600	-5%	3,800	0%	500	-87%	
McKey/Taylor/Franklin St.	Kissimmee Ave. to Bluford Ave.	17,700	14,500	-18%	15,700	-11%	15,800	11%	9,100	-49%	
White Rd./Orlando Ave.	Bluford Ave. to Clarke Rd.	13,900	10,100	-27%	13,200	-5%	16,000	15%	9,100	-35%	
White Rd./Orlando Ave.	Clarke Rd. to Good Homes Rd.	12,200	8,800	-28%	11,500	-6%	11,700	-4%	6,200	-49%	
Roberson Rd.	Windermere Rd. to Maguire Rd.	11,200	6,900	-38%	10,000	-11%	13,400	20%	8,800	-21%	
Total		75,700	57,600	-24%	68,800	-9%	71,600	-5%	41,000	-46%	

Recommended Roadway Improvements

A total of 71 new lane miles of roadways (not including Florida’s Turnpike or the expressways) have been identified as part of the recommended plan for roadway improvements. Individual projects within this plan were identified for their ability to achieve the Transportation Element objectives described above. This section provides a description of each improvement in the recommended plan. Improvements supported by Ocoee as priority projects for other agencies are listed first, followed by improvements which will be pursued by the City over the next 20 years, as part of the Roadway Improvement Master Plan for 2020. A map of roadway improvements can be found in Figure 11.

State Roads

- State Road 50 (West Colonial Drive) - widen to six lanes from the Lake County line to Kirkman Road (SR 435) in Orange County. This improvement, identified as financially feasible in the region’s adopted long range plan and is supported in the City of Winter Garden’s long range plan, provides a substantial benefit to relieving congestion on SR 50 and parallel roadways. As Table 20 demonstrates only those alternatives that included SR 50 as six lanes experienced a level of service (LOS) of better than F on SR 50. The recommended plan, which includes improvements to several roads parallel to SR 50 in addition to its six laning, further reduces congestion.

The better the level of service on SR 50, the less the potential for cut-through traffic on local and residential roads in the area. In addition to reducing congestion and cut-through traffic, this improvement is vital for the area for many other reasons. It will enhance and further SR 50’s status as Ocoee’s “main street” and as an activity center for commercial and office development in West Orange County. It is viable not only for the City of Ocoee, but also for Winter Garden and Lake County. This project will be supported by the City as a priority improvement for the Florida Department of Transportation.

**Table 20
Level of Service on SR 50**

SR 50 Characteristics	Alternative				Recommended Plan
	E+C "No Build"	A	B	C	
Number of Lanes	4	6	4	4	6
2020 Volume	58,600	64,900	51,800	57,300	55,100
Capacity	44,300	66,500	44,300	44,300	66,500
Level of Service	F	D	F	F	B

- SR 438 (Silver Star Road) - widen to four lanes from Dillard Street in Winter Garden to Clarke Road. This improvement, which is also in the region's long-range plan, builds on committed improvements to SR 438 east of Clarke Road. Not only does it address congestion problems on SR 438 (particularly in the vicinity of the Western Expressway), but it also reduces volumes on local, residential and collector roads in the area north of SR 50 and represents good arterial spacing. It is critical that SR 438 is improved to four lanes in this area to accommodate higher volumes, which will be attracted to the Western Expressway.

Florida's Turnpike

- New southbound and eastbound access to Florida's Turnpike at the East-West Expressway (SR 408) - permit trips heading west on the East-West Expressway to travel south on the Turnpike, and trips heading north on the Turnpike to travel east on the Expressway. Currently, westbound Expressway and northbound Turnpike trips must exit and travel on SR 50 to reach the other road. This improvement would allow direct access. By doing so, it eliminates the need for these trips to travel on SR 50.
- Marshall Farms Road Interconnect - based on model forecasts of traffic volumes, this interconnect for Florida's Turnpike, in conjunction with the realignment of Windermere Road and the paved widening and realignment of Tomy Road, substantially increases the number of trips that enter and leave the Turnpike, resulting in improved access. This improvement also reduces volumes on parallel roads in the area, such as Maguire Road, by providing a direct connection to the Turnpike from south of SR 50. Currently, many Turnpike-bound trips originating south of SR 50 must travel on Maguire Road and SR 50 to access the Turnpike.

Orlando-Orange County Expressway Authority

- Western Expressway extension Part C south from Florida's Turnpike to US 192 in Osceola County - included in the regional long-range plan and is identified in the recommended plan because it will provide improved access to the employment rich Disney and attractions areas in southwest Orange County and Osceola County. These areas will continue to be a source of employment for many Ocoee area residents. Included in this project is the realignment of Windermere Road to accommodate the Beltway. It is recommended that Windermere Road be widened to four lanes concurrent with its realignment to accommodate the increased volumes that will occur due to accessibility improvements, including the Marshall Farms Interconnect, that are planned for this area.
- New westbound access and eastbound exit ramps on the East-West Expressway at Good Homes Road - a significant access improvement for the East-West Expressway, model forecasts show it will substantially increase the number of trips entering the East-West Expressway at Good Homes Road. In addition, it will permit trips traveling to and from the east side of Ocoee to access the Expressway and Turnpike directly, eliminating the need for travel on SR 50 to get to and from Florida's Turnpike interchange on the west side of the City.

Orange County

- Apopka-Vineland Road – widen to four lanes from US 441 in Apopka to A.D. Mims Road. This project is identified in the regional long-range plan, and is part of a larger improvement strategy from SR 535 near Disney north. The widening of Apopka-Vineland Road north of A.D. Mims Road was identified in the recommended plan to satisfy the projected increase in traffic associated with the committed four-lane extension of the road from south A.D. Mims Road to SR 50. Once the project is complete, it will represent a true north-south corridor from Apopka to SR 50.
- Story Road - widen to four lanes from Wofford Road at the west JPA boundary to Bowness Road. This improvement was identified to address the increasing congestion problem associated with east-west travel on the west side of the City. Based on model forecasts, the widening of Story Road in conjunction with the widening of SR 50 and SR 438 makes a substantial difference in relieving this congestion.
- Good Homes Road - widen to four lanes from SR 50 to Old Winter Garden Road. This improvement was identified to address the anticipated increase in traffic associated with the recommended accessibility improvements on the East-West Expressway at Good Homes Road and to improve north-south arterial road spacing in the study area.
- Moore Road - extend east to Parkridge-Gotha Road. The extension of Moore Road was identified in the recommended plan in order to provide a more balanced and well-connected east-west transportation network south of SR 50.
- Roberson Road - widen to four lanes from Maguire Road to Windermere Road. This improvement as identified to add capacity to an important link in the City's rapidly growing southern sector. It also will help provide a more balanced and well-connected east-west transportation network south of SR 50.
- Clarcona-Ocoee Road - widen to four lanes from Ocoee-Apopka Road to Hiawassee Road in Orange County. This improvement was identified to address the need for an east-west facility in the northern portion of the JPA, which is expected to contain a significant portion of the future JPA/City growth. This facility will provide smoothed roadway alignments and will intersect with an interchange of the SR 429, the Western Expressway.

City of Winter Garden

- Roberson Road - four lane extension from Avalon Road in Winter Garden to Windermere Road. This improvement was recommended in the Winter Garden Area Transportation Study (WGATS). It is included in this Transportation Element because of the access and connectivity improvements it provides for east-west travel in areas south of SR 50.

City of Ocoee

- Maguire Road - widen to four lanes from Story Road to Maine Street. This improvement was identified to address capacity problems associated with the growing activity center at Maguire Road and SR 50, as well as the increasing travel demand associated with new and proposed developments south of SR 50. Maguire Road must be improved because it is the only north-south arterial in the study area south of SR 50. North of SR 50, it serves as the major connector of the City's industrial area and SR 50. The intersection of Maguire Road and SR 50 is expected to be one of the most heavily used in the City and this will be exacerbated by the industrial truck traffic. Widening of Maguire Road and improvements to the Maguire Road and SR 50 intersection, are thus critical to maintaining a functioning network.
- Tonym Road - widen to four lanes and extend as Tonym Boulevard from Windermere Road to Maguire Road. This improvement was identified to provide both accessibility to new development and capacity improvements to the fast developing areas south of SR 50. In combination with the realignment of Windermere Road and the Marshall Farms Road Interconnect, the paved extension of Tonym Boulevard will relieve travel demand on SR 50 by enabling direct access to Florida's Turnpike. By itself, Tonym Boulevard will enhance east-west travel options south of SR 50 and provide access to newly developing residential and commercial property.
- Professional Parkway - widen to four lanes from Maguire Road to Old Winter Garden Road and extend as two lanes from Marshall Farms Road (proposed) to Maguire Road. These improvements were identified to provide added east-west capacity and to address severe congestion problems on SR 50. The western extension of Professional Parkway also provides improved accessibility to office and industrial developments planned for that area. When coordinated with Orange County's widening of Old Winter Garden Road, this improvement will create a seamless four-lane arterial road providing increased mobility and access to adjacent property.
- Marshall Farms Road - widen to four lanes from Maguire Road to SR 50. Plans for the extension of Marshall Farms Road associated with the proposed Marshall Farms Interconnect specify that it be four lanes. The existing segment of Marshall Farms Road must be widened to four lanes as well to accommodate the increase in traffic volume. This project improves north-south travel flow and improves access to the industrial area along Marshall Farms and Maguire Roads.
- Geneva Street - widen to four lanes from Bowness Road to Bluford Avenue. (Story Road turns into Geneva Street at Bowness Road.) Geneva Street was identified for widening concurrent with the proposed widening of Story Road to address projected increases in traffic volume. This improvement, in combination with the widening of Story Road, will provide additional capacity to relieve severely congested portions of SR 50. In addition, Bluford Avenue is recommended for widening to four lanes from Geneva Street to SR 50. The widening of this segment of Bluford Avenue was identified to address projected capacity problems on Bluford Avenue, and to improve north-south access in the City.

- Bowness Road - widen to four lanes from Story Road to SR 438 (Silver Star Road). This improvement was identified to satisfy projected capacity problems associated with growing industrial developments in this area of the City. In combination with the proposed improvements on Ocoee-Apopka Road, Marshall Farms Road and Bluford Avenue (south of Geneva Street), this project forms a north-south corridor through the City which diverts trucks and other forms of through traffic from the downtown area near McKey Street and Bluford Avenue (north of Geneva Street), roads that are intended to remain local in nature with slower speeds.
- Ocoee-Apopka Road - widen to four lanes from SR 438 (Silver Star Road) to McCormick Road. This improvement was identified to provide increased capacity to address travel demand from future development in northwest Ocoee.
- Orlando Avenue - extend from Bluford Avenue to Bowness Road. This project was identified as a connectivity improvement to relieve traffic pressure on Bluford Avenue by providing access to Kissimmee Avenue and Bowness Road.
- Wurst Road - extend from Ocoee-Clarcona Road to Ocoee-Apopka Road. This improvement was identified to provide increased east-west capacity in northwest Ocoee to satisfy the increased travel demand from planned development and redevelopment.
- Roper Parkway - extend north to connect with Bowness Road and south to SR 50. The extensions of Roper Parkway were identified to provide improved accessibility to the growing industrial and distribution activities in west Ocoee north of SR 50.
- Hempel Avenue - extend north to SR 50 and the planned activity center north of SR 50. The extension of Hempel Avenue was identified as part of an activity center study for the SR 50 corridor, and will connect with the proposed extensions of Maine Street. The extension will provide improved connectivity in the activity center area, develop a more balanced, grid-like network and also provide a new north-south alternative for travel.
- Maine Street - widen to four lanes and extend the street from Maguire Road to Blackwood Avenue. The reconstruction of Maine Street was identified to serve the planned activity center and proposed new development north of SR 50. Initially, this project was evaluated as two lanes. However, a special analysis of projected traffic characteristics in this area revealed that Maine Street would ultimately need to be improved as four lanes in order to provide adequate access and capacity for trips associated with the future development in the area. The Maine Street improvements also provide a parallel route to SR 50. Studies have shown that this improvement would divert a significant number of trips off SR 50.
- Montgomery Avenue - improve and extend from White Road to Old Winter Garden Road and connect to the proposed extension of Hempel Avenue. The extension of Montgomery Avenue was identified as a connectivity enhancement for the planned activity center. The effects of this improvement on White Road traffic volumes were

closely monitored to ensure that it would not substantially increase traffic volumes and threaten the residential nature of the road.

- Clarke Road - widen to six lanes from SR 438 to SR 50. This widening was identified to provide sufficient capacity to satisfy future development associated with the Lake Lotta (West Oaks Mall) DRI. Initially, this improvement was evaluated as six lanes from only White Road to SR 50. However, the analysis revealed that the induced travel demand resulting from the widening of this segment would spill north to SR 438, and create capacity problems between SR 438 and White Road, unless that section is also widened. This would tie in to the four-laning of Silver Star Road.
- Clarke Road - widen to four lanes from Clarcona-Ocoee Road to A.D. Mims Road and extend as two lanes from Clarcona-Ocoee Road to McCormick Road. This improvement was identified to provide access and capacity to planned development north of Clarcona-Ocoee Road, and to provide some relief to congestion problems on Clarcona-Ocoee Road west of Clarke Road.
- Ingram Road - pave for two lanes from McCormick Road to Clarcona-Ocoee Road. The development of Ingram Road as a new connection between McCormick Road and Clarcona-Ocoee Road was identified to establish additional access for planned development north of Clarcona-Ocoee Road. If further develops the north-south street system in this rapidly growing area, helping to ensure that one road does not become overly congested.

Future Roadway Characteristics

Figures 11a, 11b, and 11c show the roadway characteristics of the Roadway Improvement Master Plan 2020. Figure 11a is a map of the Future Functional Classification of roads. Figure 11b identifies anticipated administrative maintenance responsibility which coincides with future roadway improvements planned through 2020. Figure 11c is a map of Future Through Lanes for Roadways.

Future Peak Hour Directional Levels of Service

The same Orlando Urban Area Transportation Study (OUATS) regional model used to project future roadway congestion was used to project future peak hour, peak direction levels of service (LOS) for the 2020 roadway master plan network. The OUATS model was created in 1997 for average daily trips. For this purpose, the data was manipulated to show peak hour, peak direction trips. Because the results are dated and the model is limited, anomalies exist. Given current conditions, it was assumed that volumes will shift along parallel segments connecting SR 50 and Old Winter Garden Road, and adjustments to the data were made accordingly. Although all major roadways are shown, the City is only responsible for those segments within City limits that are not under County or State administrative maintenance responsibility. Figure 11d is a map of Future Peak Hour Directional LOS for 2020. Table 15 lists the future peak hour, peak direction levels of service in 2020 for each roadway segment.

**Table 21
Future Peak Hour/Peak Direction Levels of Service, 2020**

Roadway	From	To	No. of Lanes	Adopted LOS Standard	Pk Hr/ Pk Dir Volume	Pk Hr/ Pk Dir Capacity	Pk Hr/ Pk Dir V/C Ratio	Level of Service Performance
A.D. Mims Rd.	Wurst Rd.	Clarke Rd.	2	E	686	899	0.76	D
A.D. Mims Rd.	Clarke Rd.	Apopka-Vineland Rd.	2	E	1,158	1,583	0.73	D
Adair St.	Wurst Rd.	Clarcona-Ocoee Rd.	2	D	258	837	0.31	B
Apopka-Vineland Rd.	SR 438	A.D. Mims Rd.	4	E	608	2,821	0.22	A
Apopka-Vineland Rd.	A.D. Mims Rd.	Clarcona-Ocoee Rd.	4	E	2,046	2,821	0.73	D
Apopka-Vineland Rd.	Clarcona-Ocoee Rd.	McCormick Rd.	4	E	1,865	2,821	0.66	C
Apopka-Vineland Rd. Ext.	SR 438	A.D. Mims Rd.	4	E	2,352	2,821	0.83	D
Blackwood Ave.	Old Winter Garden Rd.	SR 50	4	D	2,514	3,021	0.83	D
Bowness Rd.	Story Rd.	Kissimmee Ave.	2	D	1,063	1,401	0.76	D
Bowness Rd.	Kissimmee Ave.	SR 438	4	D	1,772	2,803	0.63	C
Citrus Oaks Ave.	Old Winter Garden Rd.	SR 50	2	D	655	1,101	0.60	C
Clarcona-Ocoee Rd.	Fuller's Cross Rd.	Adair St.	4	E	2,198	2,766	0.79	D
Clarcona-Ocoee Rd.	Adair St.	Clarke Rd.	4	E	1,978	2,766	0.72	D
Clarcona-Ocoee Rd.	Clarke Rd.	Apopka-Vineland Rd.	4	E	2,752	2,766	0.99	E
Clarke Rd.	SR 50	White Rd.	6	D	3,030	4,668	0.65	C
Clarke Rd.	White Rd.	SR 438	6	D	3,581	4,668	0.77	D
Clarke Rd.	SR 438	A.D. Mims Rd.	4	D	1,720	3,112	0.55	C
Clarke Rd.	A.D. Mims Rd.	Hackney-Prairie Rd.	4	D	1,755	3,112	0.56	C
Clarke Rd.	Hackney-Prairie Rd.	Clarcona-Ocoee Rd.	4	D	1,760	3,112	0.57	C
Clarke Rd. Extension	Clarcona-Ocoee Rd.	McCormick Rd.	4	D	639	3,112	0.21	A
FL Turnpike	SR 429	SR 408	6	E	4,841	5,759	0.84	E
FL Turnpike	East of SR 408		6	E	6,372	5,759	1.11	F
Flewelling St.	Ocoee Hills Rd.	Russell Dr.	2	D	530	855	0.62	C
Fullers Cross Rd.	Ocoee-Apopka Rd.	Clarcona-Ocoee Rd.	4	E	289	2,175	0.13	A
Geneva St.	Kissimmee Ave.	Bluford Ave.	4	D	1,849	2,748	0.67	C
Good Homes Rd.	Old Winter Garden Rd.	East-West Expressway	4	E	1,914	2,894	0.66	C
Good Homes Rd.	East-West Expressway	SR 50	4	E	1,914	2,894	0.66	C

Roadway	From	To	No. of Lanes	Adopted LOS Standard	Pk Hr/ Pk Dir Volume	Pk Hr/ Pk Dir Capacity	Pk Hr/ Pk Dir V/C Ratio	Level of Service Performance
Good Homes Rd.	SR 50	Balboa Dr.	2	E	944	1,447	0.65	C
Good Homes Rd.	Balboa Dr.	White Rd.	2	E	952	1,447	0.66	C
Good Homes Rd.	White Rd.	SR 438	2	E	890	1,447	0.62	C
Gotha Rd.	Maguire Rd.	Hempel Ave.	2	D	626	1,583	0.40	B
Hackney-Prairie Rd.	Clarke Rd.	Apopka-Vineland Rd.	2	D	1,062	1,310	0.81	D
Hempel Ave.	Gotha Rd.	Old Winter Garden Rd.	2	E	589	1,101	0.53	C
Hempel Ave. Ext.	Old Winter Garden Rd.	SR 50	2	D	1,070	1,274	0.84	D
Hempel Ave. Ext.	SR 50	White Rd.	2	D	757	1,274	0.59	C
Ingram Rd.	Clarcona-Ocoee Rd.	McCormick Rd.	2	D	101	1,556	0.06	A
Johio Shores Rd.	SR 438	A.D. Mims Rd.	2	D	64	1,083	0.06	A
Kissimmee Ave.	Bowness Rd.	McKey St.	2	D	1,213	1,463	0.83	D
Lakewood Avenue	SR 438	Rewis St.	2	E	669	1,383	0.48	B
Lakewood Avenue	Rewis St.	Wurst. Rd.	2	E	701	1,383	0.51	C
Lakewood Avenue	Wurst Rd.	Fuller's Cross Rd.	2	E	689	1,383	0.50	B
Maguire Rd.	Gotha Rd.	Roberson Rd.	2	D	1,309	1,583	0.83	D
Maguire Rd.	Roberson Rd.	Tomyn Rd.	4	D	2,129	3,167	0.67	C
Maguire Rd.	Tomyn Rd.	Professional Prkwy.	4	D	2,805	3,167	0.89	E
Maguire Rd.	Professional Prkwy.	SR 50	4	D	2,649	3,132	0.85	E
Maguire Rd.	SR 50	Marshall Farms Rd.	4	D	1,840	2,894	0.64	C
Maguire Rd.	Marshall Farms Rd.	Story Rd.	4	D	1,854	2,894	0.64	C
Maine St.	Bluford Ave.	SR 50	4	D	1,697	2,548	0.67	C
Maine St. Connector	Maine St.	Hempel Ave. Ext.	2	D	635	1,274	0.50	B
Marshall Farms Interconnect	Tomyn Rd.	SR 50	4	D	1,932	3,167	0.61	C
Marshall Farms Rd.	SR 50	Maguire Rd.	4	D	1,148	2,402	0.48	B
McCormick Rd.	Ocoee-Apopka Rd.	Clarke Rd. Extension	2	D	428	1,583	0.27	A
McCormick Rd.	Clarke Rd. Extension	Apopka-Vineland Rd.	2	D	428	1,583	0.27	A
McKey St.	Kissimmee Ave.	Bluford Ave.	2	E	850	1,065	0.80	D
Moore Rd.	East of Maguire Rd.		2	D	681	1,192	0.57	C
Ocoee Hills Rd.	SR 438	Flewelling St.	2	D	505	855	0.59	C
Ocoee-Apopka Rd.	SR 438	Fuller's Cross Rd.	4	E	1,688	3,167	0.53	C

Roadway	From	To	No. of Lanes	Adopted LOS Standard	Pk Hr/ Pk Dir Volume	Pk Hr/ Pk Dir Capacity	Pk Hr/ Pk Dir V/C Ratio	Level of Service Performance
Ocoee-Apopka Rd.	Fuller's Cross Rd.	McCormick Rd.	4	E	1,420	3,167	0.45	B
Old Winter Garden Rd.	SR 50	Professional Prkwy.	4	E	2,083	2,894	0.72	D
Old Winter Garden Rd.	Professional Prkwy.	Blackwood Ave.	4	E	2,081	2,894	0.72	D
Old Winter Garden Rd.	Blackwood Ave.	Hempel Ave.	4	E	2,547	3,053	0.83	D
Old Winter Garden Rd.	Hempel Ave.	Citrus Oaks Ave.	4	E	2,507	2,989	0.84	D
Old Winter Garden Rd.	Citrus Oaks Ave.	Good Homes Rd.	4	E	2,507	2,989	0.84	D
Old Winter Garden Rd.	Good Homes Rd.	Apopka-Vineland Rd.	4	E	2,507	2,989	0.84	D
Orlando Ave.	Bluford Ave.	Montgomery Ave.	2	D	884	1,274	0.69	C
Orlando Ave.	Bowness Rd.	Bluford Ave.	2	D	211	1,274	0.17	A
Professional Pkwy. Ext.	SR 50	Maguire Rd.	2	D	896	1,070	0.84	D
Professional Prkwy.	Maguire Rd.	Old Winter Garden Rd.	4	D	2,041	2,120	0.96	E
Rewis St.	Lakewood Ave.	Flewelling St.	2	D	42	1,083	0.04	A
Roberson Rd.	Windermere Rd.	Maguire Rd.	2	D	722	1,192	0.61	C
Roper Pkwy.	SR 50	Story Rd.	2	D	467	1,401	0.33	B
Roper Pkwy.	Story Rd.	Bowness Rd.	2	D	103	1,401	0.07	A
Russell Dr.	Flewelling St.	Willow Creek Rd.	2	D	564	855	0.66	C
SR 408 (E-W Expy.)	FL Turnpike	Clarke Rd.	6	E	2,807	5,759	0.49	B
SR 408 (E-W Expy.)	Clarke Rd.	Good Homes Rd.	6	E	5,554	5,759	0.96	E
SR 408 (E-W Expy.)	Good Homes Rd.	Hiawassee Rd.	6	E	4,758	5,759	0.83	D
SR 429 (Western Expy.)	South of FL Turnpike		6	E	2,642	5,759	0.46	B
SR 429 (Western Expy.)	FL Turnpike	SR 50	6	E	4,166	5,759	0.72	D
SR 429 (Western Expy.)	SR 50	SR 438	6	E	4,706	5,759	0.82	D
SR 429 (Western Expy.)	SR 438	West Rd.	6	E	4,683	5,759	0.81	D
SR 429 (Western Expy.)	North of West Rd.		6	E	3,498	5,759	0.61	C
SR 438 (Silver Star Rd.)	E. Crown Point Rd.	Bowness Rd.	4	E	2,761	3,162	0.87	E
SR 438 (Silver Star Rd.)	Bowness Rd.	Ocoee-Apopka Rd.	4	E	1,768	3,162	0.56	C
SR 438 (Silver Star Rd.)	Ocoee-Apopka Rd.	Bluford Ave.	4	E	1,807	3,162	0.57	C
SR 438 (Silver Star Rd.)	Bluford Ave.	Ocoee-Hills Rd.	4	E	2,168	3,162	0.69	C
SR 438 (Silver Star Rd.)	Ocoee-Hills Rd.	Clarke Rd.	4	E	2,052	3,162	0.65	C
SR 438 (Silver Star Rd.)	Clarke Rd.	Johio Shores Rd.	4	E	2,735	3,162	0.87	E

Roadway	From	To	No. of Lanes	Adopted LOS Standard	Pk Hr/ Pk Dir Volume	Pk Hr/ Pk Dir Capacity	Pk Hr/ Pk Dir V/C Ratio	Level of Service Performance
SR 438 (Silver Star Rd.)	Johio Shores Rd.	Good Homes Rd.	4	E	2,704	3,162	0.86	E
SR 438 (Silver Star Rd.)	Good Homes Rd.	Apopka-Vineland Rd. (east)	4	E	3,536	3,162	1.12	F
SR 439 (Bluford Ave.)	SR 50	Geneva St.	4	D	2,241	2,669	0.84	D
SR 439 (Bluford Ave.)	Geneva St.	Orlando Ave.	2	D	1,268	1,311	0.97	E
SR 439 (Bluford Ave.)	Orlando Ave.	McKey St.	2	D	1,132	1,311	0.86	E
SR 439 (Bluford Ave.)	McKey St.	SR 438	2	D	946	1,311	0.72	D
SR 50 (West Colonial Dr.)	Ninth St.	Wofford Rd.	6	D	3,738	6,185	0.60	C
SR 50 (West Colonial Dr.)	Wofford Rd.	Marshall Farms Rd.	6	D	3,738	6,185	0.60	C
SR 50 (West Colonial Dr.)	Marshall Farms Rd.	Maguire Rd.	6	D	3,644	6,185	0.59	C
SR 50 (West Colonial Dr.)	Maguire Rd.	Old Winter Garden Rd.	6	D	3,565	6,185	0.58	C
SR 50 (West Colonial Dr.)	Old Winter Garden Rd.	Blackwood Ave.	6	D	4,791	6,185	0.77	D
SR 50 (West Colonial Dr.)	Blackwood Ave.	Clarke Rd.	6	D	4,702	6,185	0.76	D
SR 50 (West Colonial Dr.)	Clarke Rd.	Good Homes Rd.	6	D	3,623	6,185	0.59	C
SR 50 (West Colonial Dr.)	East of Good Homes Rd.		6	D	3,805	6,185	0.62	C
Story Rd.	Ninth St.	Wofford Rd.	4	E	1,949	2,748	0.71	D
Story Rd.	Wofford Rd.	Kissimmee Ave.	4	E	1,948	2,748	0.71	D
Taylor St.	Franklin St.	McKey St.	2	D	850	1,065	0.80	D
Tomyn Rd.	Marshall Farms Interconnect	Maguire Rd.	4	D	622	2,384	0.26	A
Tomyn Rd.	Roberson Rd.	Marshall Farms Interconnect	4	D	622	2,384	0.26	A
West Rd.	Ocoee-Apopka Rd.	Clarcona-Ocoee Rd.	4	E	1,647	2,766	0.60	C
White Rd.	Montgomery Ave.	Clarke Rd.	2	D	873	1,274	0.69	C
White Rd.	Clarke Rd.	Good Homes Rd.	2	D	605	1,274	0.48	B
Willow Creek Rd.	Russell Dr.	Wurst Rd.	2	D	420	855	0.49	B
Windermere Rd.	McKinnon Rd.	Roberson Rd.	2	D	630	1,583	0.40	B
Wurst Rd.	Lakewood Ave.	Adair St.	2	D	1,174	1,310	0.90	E
Wurst Rd.	Adair St.	A.D. Mims Rd.	2	D	1,071	1,310	0.82	D
Wurst Rd. Extension	Ocoee-Apopka Rd.	Lakewood Ave.	2	D	576	1,083	0.53	C

Source: Final Report Annual Traffic Count Program 2001 Data Summary and Analysis, City of Ocoee, 2001.

VI. SUMMARY

Ocoee's status as a burgeoning suburban community and its emergence as a future employment center will continue, creating a level of travel demand that far exceeds the capacity of the City's existing plus committed transportation system. Furthermore, community goals and objectives require that the transportation system evolve to provide adequate levels of mobility and be balanced across various modes of transportation, while maintaining high standards of safety and preserving the character of the community, particularly residential areas.

A set of transportation improvements was identified to address these conditions, including new roads and road widening, intersection improvements, new bicycle and pedestrian facilities and new and enhanced transit service. Roadway improvement strategies were evaluated based on computer model forecasts of 2020 traffic conditions, and the most effective improvements were combined into a single roadway improvement plan. The City will pursue the improvements identified here over the next two decades to ensure the adequacy of the transportation system to the year 2020. While the City is not responsible for funding or constructing many of the improvements identified in this plan, it will support them as priority projects for implementation in the work programs of the responsible agencies. These improvements must now be prioritized into a phased plan that recognizes limited financial resources as well as the timing of growth and development within Ocoee.

VII. GOALS, OBJECTIVES, AND POLICIES**GOAL 1****DEVELOP A TRANSPORTATION SYSTEM WHICH PRESERVES OCOEE'S UNIQUE COMMUNITY CHARACTER AND QUALITY OF LIFE.****Objective 1.1**

The City shall preserve residential character by balancing traffic on residential streets.

Policy 1.1.1

The City shall establish and maintain adopted Levels of service on the City's arterial and collector roadways

Policy 1.1.2

The City shall monitor traffic volume changes on collector and local/residential roads.

Objective 1.2

The City shall define transportation systems and evaluate transportation-related actions to preserve community character.

Policy 1.2.1

The City shall provide transportation improvements, which convey a sense of place and uniqueness to travelers entering Ocoee.

Policy 1.2.2

The City shall provide transportation improvements, which avoid disruption of existing land uses.

Objective 1.3

The City shall direct the location of growth through the provision of multi-jurisdictional transportation facilities that are consistent with and enhance existing and planned uses.

Policy 1.3.1

The City shall ensure consistency of transportation improvements with the Future Land Use Element and Future Land Use Map of the Comprehensive Plan.

Policy 1.3.2

The City shall ensure consistency of transportation improvements with the plans of Orange County, FDOT, LYNX, the MPO, and neighboring jurisdictions through: participation in the MPO process; coordination of plans and projects that cross jurisdictional boundaries; utilization of interlocal agreements; and cooperation in efforts to secure necessary financing.

Policy 1.3.3

The City shall ensure transportation improvements that enhance the function of planned activity areas.

Policy 1.3.4

The City shall continue to coordinate transportation planning with future population densities, the location of future housing developments and development patterns, and future employment centers.

Objective 1.4

The City shall utilize the existing system as efficiently as possible.

Policy 1.4.1

The City shall provide operational improvements, such as intersection improvements and Transportation Management Strategies, including joint and cross access, limited ingress and egress, median controls, signal coordination, and intelligent transportation systems.

Policy 1.4.2

The City shall assist with the creation of a Transportation Management Association to encourage carpooling and other forms of alternative transportation to reduce reliance on the single occupant automobile.

Policy 1.4.3

The City shall establish Transportation Demand Management Strategies in the next update of the Transportation Master Plan scheduled to be completed in 2003. These strategies will then be proposed for amendment into the Comprehensive Plan and Regulations.

Policy 1.4.4

The City shall, in the next update of the Transportation Master Plan to be completed in 2003, establish quantitative indicators against which the achievement of the mobility goals of the community can be measured, such as modal split, annual transit trips per capita or automobile occupancy rates.

GOAL 2**DEVELOP A TRANSPORTATION SYSTEM WHICH PROVIDES RESIDENTS AND BUSINESSES AN ADEQUATE LEVEL OF ACCESS AND MOBILITY FOR ALL MODES OF TRANSPORTATION AND WHICH PROMOTES ENERGY EFFICIENCY.****Objective 2.1**

The City shall provide adequate capacity on Ocoee's arterial and collector roadways to accommodate projected traffic volumes.

Policy 2.1.1

The City shall monitor and annually evaluate volume to capacity ratios on all Concurrency Management System roadways.

Policy 2.1.2

The City shall ensure conformance with the City's adopted Level of Service standard.

Objective 2.2

The City shall develop corridors to meet the City's future travel needs.

Policy 2.2.1

The City shall provide adequate east-west travel.

Policy 2.2.2

The City shall provide adequate north-south travel.

Policy 2.2.3

The City shall continue to adopt access management Ordinances to ensure access management control on roadways in the City.

Policy 2.2.4

Through funding by developer contributions, the City shall preserve needed right-of-way, as determined by the concurrency management program for mitigation of traffic impacts and reservation through density credits.

Objective 2.3

The City shall assist in improving access to and operation of Florida's Turnpike, expressways, and other components of the Florida Intrastate Highway System.

Policy 2.3.1

The City shall advocate solutions to handling increased traffic volumes at Florida's

Turnpike and expressway interchanges.

Policy 2.3.2

The City shall advocate transportation improvements, which provide direct access to Florida's Turnpike and expressway.

Policy 2.3.3

The City shall support solutions to decreased volumes on existing feeder roads (ex. SR 50 and Maguire Road to Florida's Turnpike from the south).

Policy 2.3.4

The City shall continue to establish and implement strategies to facilitate local traffic to use alternatives to the Florida Intrastate Highway System (FIHS) by improving the local roadway network thereby directing traffic off of FIHS roads.

Policy 2.3.5

The City shall adopt the FDOT Level of Service (LOS) for the Florida Intrastate Highway System roadway segments within City limits: Florida's Turnpike (SR 91), the East-West Expressway (SR 408), and the Western Expressway (SR 429).

Objective 2.4

The City shall place renewed emphasis on Ocoee's traditional downtown area through improved access for all modes of transportation.

Policy 2.4.1

The City shall promote increased parking in the downtown area.

Policy 2.4.2

The City shall ensure streetscape improvements that accommodate pedestrian activity and encourage the use of transit.

Objective 2.5

The City shall provide improved access from and to areas north and south of the City to ensure connectivity and network functioning.

Policy 2.5.1

The City shall maximize the lane miles of roadways connecting areas north and south of Ocoee.

Policy 2.5.2

The City shall work with Lynx to realize a north-south link through the City/Joint Planning Area.

Objective 2.6

The City shall provide connections for all modes of transportation between complementary land uses.

Policy 2.6.1

The City shall increase the number of neighborhoods, commercial areas, parks, and recreation facilities served by transit and bicycle/pedestrian facilities.

Objective 2.7

The City shall ensure that adequate right of way is available to accommodate required transportation improvements.

Policy 2.7.1

The City shall identify the minimum right of way requirements to accommodate recommended transportation improvements of the Transportation Element.

Policy 2.7.2

The City shall coordinate transit planning with existing and proposed major trip generators and attractors by scheduling periodic meetings with LYNX to establish needed transit stops at major retail and employment sites as they are developed.

Policy 2.7.3

The City shall protect and secure adequate right of way for future transportation improvements through transportation planning, corridor studies, developer dedications and purchase.

Objective 2.8

The City shall assist with improving mobility and energy efficiency through non-automobile travel modes.

Policy 2.8.1

The City shall ensure connectivity of the sidewalk network and monitor number of sidewalk miles added.

Policy 2.8.2

The City shall ensure the connectivity of the bicycle network and monitor number of bike lane miles added.

Policy 2.8.3

The City shall expand the number of land uses served by bicycle and pedestrian facilities and transit.

Policy 2.8.4

The City shall advocate improved transit headway's on routes serving Ocoee.

Policy 2.8.5

The City shall advocate the presence of express/premium transit service.

Policy 2.8.6

The City shall promote the number of bicycle facilities serving activity centers.

Objective 2.9

The City shall provide access to the West Orange Trail and other recreational facilities.

Policy 2.9.1

The City shall increase the number of neighborhoods, commercial areas, parks, and recreation facilities served by bicycle/pedestrian facilities, which connect to the West Orange Trail.

GOAL 3**DEVELOP A TRANSPORTATION SYSTEM WHICH ENSURES THE SAFETY OF ALL USERS.****Objective 3.1**

The City shall seek to minimize the number of traffic accidents on the City's roadways.

Policy 3.1.1

The City shall facilitate intersection improvements to provide adequate safety and vehicle storage.

Policy 3.1.2

The City shall support improvements, which incorporate traffic calming measures on necessary roadways.

Policy 3.1.3

The City shall develop and support and require access management strategies on arterial roadways, including limited/joint access medians and turn bays.

Objective 3.2

The City shall make Ocoee a safe place for bicycles and pedestrians.

Policy 3.2.1

The City shall support the existence of facilities, which allow bicycles and pedestrians to travel separately from vehicles.

Policy 3.2.3

The City shall require the presence of two-sided sidewalk coverage on key roads connecting schools and residential areas.

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