

APPENDIX A
TRAFFIC CIRCULATION ELEMENT

DESIGNATION OF THE DELAND CENTRAL BUSINESS DISTRICT
AND THE OUTLYING BUSINESS AREAS ALONG STATE ROAD 44 AS A
SPECIAL TRANSPORTATION AREA

The City of DeLand is requested that FDOT designate the DeLand Central Business District and the outlying business areas along SR 44 (New York Avenue) as a Special Transportation Area (STA). The regulations and criteria for Special Transportation Areas are contained in Appendix C, GUIDELINES FOR DESIGNATING SPECIAL TRANSPORTATION AREAS, of the Florida Highway System Plan. Utilizing these guidelines, the City of DeLand prepared a submittal package to support the designation of the Special Transportation Area.

RESOLUTION SUPPORTING STA

On November 18, 1991, the DeLand City Commission passed Resolution 91-44 supporting a Permanent Special Transportation Area for the DeLand Central Business District and the outlying business areas along SR 44, from SR 15A to Hill Avenue.

DELINEATION OF STA AND NUMBER OF THROUGH LANES

The STA designation is for the DeLand Central Business District and the outlying commercial areas along SR 44. The northern limit of the STA is Michigan Avenue and the southern limit is Beresford Avenue. The western limit of the STA is SR 15A. The eastern terminus of the STA is Hill Avenue. The attached maps show the limits of the STA.

The area within the STA contains both US 17/92 and SR 44. US 17/92 and SR 44 each have two (2) through lanes.

ROADWAY CHARACTERISTICS AND LEVEL OF SERVICE

The portion of US 17/92 included in the STA runs from Michigan Avenue on the north to Beresford Avenue on the south. Within the limits of the STA, US 17/92 is a two (2) lane undivided principal arterial roadway. This section is approximately 1.36 miles in length and currently contains a total of seven signalized intersections. Thus, US 17/92 is classified as a Group F, two-lane arterial within the STA.

The portion of SR 44 included in the STA runs from SR 15A on the west to Hill Avenue on the east. The portion of SR 44 in-

cluded in the STA is approximately 2.5 miles in length and currently contains a total of seven (7) signalized intersections. The portion of SR 44, from SR 15A to US 17/92, is classified as Group D two lane minor arterial. The section of SR 44, from US 17/92 to Hill Avenue, is classified as a Group C two-lane minor arterial. In addition to the existing traffic signals, the City has been requested to petition FDOT to consider a traffic signal at the intersection of Garfield and SR 44. Additionally, it is the City's understanding that Volusia County has been requested to consider a traffic signal at the intersection of Blue Lake Avenue and SR 44. If these signals are constructed, it could effect the Group designation for the section of SR 44, from US 17/92 to Hill Avenue.

For the portion of SR 44 to be included in the STA, the City is requesting a maximum LOS E. For the portion of US 17/92 included in the STA, the City is proposing to retain the existing maximum LOS, as identified in the adopted DeLand Comprehensive Plan. Policy 3.1.7 of the traffic Circulation Element of the adopted City of DeLand Comprehensive Land Use Plan states that for US 17/92, from SR 472 to Plymouth Avenue, "the City may permit development to occur until the peak hour traffic volumes exceed a 20% increase over the peak hour traffic counts published in the FDOT's 1989 Traffic Data Report".

Since the City of DeLand is currently outside the limits of the Urbanized Area for West Volusia County, roadway levels of service would have to be determined using either the Other Existing Cities or Transitioning Urbanized or Incorporated Areas categories, both of which permit a maximum LOS C on principal arterials and LOS D on minor arterials. Based upon the table, Generalized Daily Level of Service Maximum Volumes for Florida's Urban/Urbanized (5,000+) Areas, the following is the group and the maximum allowable traffic volumes (ADT) at LOS D and LOS E for two-lane undivided arterial roadways:

1. SR 44 (from SR 15A to US 17/92), Group D, at LOS D = 13,700 ADT and at LOS E = 15,400 ADT;
2. SR 44 (from US 17/92 to Hill Avenue), Group C, at LOS D = 14,800 ADT and at LOS E = 15,700 ADT;
3. US 17/92 (from Beresford Avenue to Michigan Avenue), Group F, at LOS D = 10,300 ADT and at LOS E = 14,600 ADT.

Table I
Traffic Volumes and LOS

Roadway Section	1990*		1994		2010	
	ADT	LOS	ADT	LOS	ADT	LOS
SR 44 (New York Av):						
SR 15A to US 17/92	11,867	C	15,172	E	17,033	F
US 17/92 to Hill Av	11,266	B	13,605	D	14,466	D
US 17/92 (Woodland Blvd):						
Beresford Av to SR 44	19,988	F	18,583	F	21,000	F
SR 44 to Michigan Av	17,873	F	18,900	F	21,400	F

*= Per FDOT, 1990 is the latest traffic counts available.

Table #1 shows the actual 1990 ADT and LOS and the 1994 and 2010 ADT and LOS which are projected in the City's adopted comp plan. In 1990, the portion of SR 44 west of US 17/92 was operating between level of service C through E and the portion east of US 17/92 was at level of service A through D. For 1994, the ADT for the section of SR 44, from SR 15A to US 17/92 is projected to increase to E and to F by 2010. For the portion of SR 44, from US 17/92 to Hill Avenue, both the 1994 and 2010 ADT is projected to be D.

In light of the City's projected traffic volumes on SR 44 and a maximum volume of 14,800 ADT at LOS D, development within the City will virtually cease by 1994. However, if the City is permitted to utilize a LOS E, at 15,700 ADT, it is possible that some additional development can occur.

Currently, US 17/92, from Beresford Avenue to north of Minnesota Avenue, is operation at LOS F. Based upon the City's adopted comp plan, the existing LOS F is projected to continue for both 1994 and 2010. By 1994, the ADT for US 17/92 will exceed LOS E 3,983 vehicles per day.

Table #II shows the volume to capacity (V/C) ratios for US 17/92 for 1990, 1994 and 2010. Based upon the adopted LOS cri-

teria in the City's comp plan, the traffic volumes on US 17/92 are projected to be within the adopted capacity limits of the roadway for 1994. However, Table #II does show a potential problem for 2010. In 2010, traffic on the segment from US 17/92, SR 44 to Minnesota Avenue, is projected to be at 1.04% of capacity. Therefore, it would appear that, in the near future, additional development can occur.

Table II
Volume To Capacity (V/C) Ratio for US 17/92

Roadway Section	Adopted PH* LOS**	Projected		Projected	
		1994 PH LOS	1994 PH V/C	1994 PH LOS	2010 PH V/C
Beresford to SR 44	2,259	1,784	.79	2,016	.89
SR 44 to Minnesota	1,980	1,814	.92	2,054	1.04

*Peak Hour = PH

**= Level of Service (LOS) based upon FDOT's 9.6% peak hour factor of average daily traffic (ADT) for principal arterials.

SUPPORTING DOCUMENTATION FOR STA

The City of DeLand has made an ongoing commitment to promote development within the core area of the City and to protect the City's historic structures. The establishment of an STA for the Central Business District and for the outlying business areas along SR 44 will help the City accomplish both of these goals.

EFFECT OF STA ON DEVELOPMENT PATTERNS

The City of DeLand is committed to redeveloping the Central Business District (CBD), protecting the outlying commercial areas along SR 44, discouraging strip development on the periphery of the City, promoting in-fill and discouraging urban sprawl.

As identified in Table 1 of the City's Comprehensive Land Use Plan, amended June 1991, there is a total of approximately 5,336 acres of land within the City. Of this total, approximately 1,005 acres are classified as being vacant. The Southeast and the Southwest Quadrants of the City contain large tracts of vacant land. Also in the Southeast and Southwest Quadrants, the City has existing water and sewer lines. By promoting in-fill in these areas, development can take advantage of the existing water and sewer infrastructure. In addition to discouraging urban sprawl, the in-fill development should result in a lower cost to the consumer of urban services and a more efficient use of public facilities.

The City understands that in order to accomplish these goals, there are certain trade-offs. The most significant trade-off is the concentration of nonresidential development in and around the CBD which will result in increased traffic and reduced levels of service on roadways in the core of the City. The City understands and accepts this trade-off. Although the City will accept a lower LOS on CBD roads, the City will also consider such measures as Transportation System Management, Transportation Demand Management and transit improvements to improve the LOS of this roadway network.

In order to better accomplish these goals, the City is requesting that the Central Business District and the outlying business areas along SR 44, from SR 15A to Hill Avenue, be designated as a Special Transportation Area. The City understands that roadways within the STA would have a reduced LOS. However, in order to accomplish its goals, a reduced LOS is necessary.

The City is actively promoting redevelopment in the Central Business District by planning for both infrastructure and aesthetic improvements that will attract new retail and service uses. In addition to the retail and service uses, it is anticipated that both the City and Volusia County will expand their existing governmental offices in the downtown area. Unless there is adequate roadway capacity, redevelopment activities and new construction in the Central Business District would be prohibited. If development is halted in the Central Business District, it would be forced to locate on the periphery of the City. Such development would tend to create urban sprawl, which is contrary to the policies of both the City and the State.

PRESERVATION OF HISTORIC RESOURCES

The City of DeLand has a large number of structures which are 50 years old or older. Historically, development occurred along major highways, such as US 17/92 and SR 44. The portion of US 17/92 included in the STA forms the spine of the Central Business District. The Central Business District is designated as a Historic District. Within the last 10 years, the City, the Main Street DeLand Association, the West Volusia Historic Association and individual property owners have worked to restore the historic character of many of the structures within the downtown. The portion of SR 44 included in the STA also contains a significant number of historic residential structures.

The City is committed to preserving as many of these historic structures as possible. The City's Land Development Regulations contain historic preservation regulations which will better protect these historic treasures. Presently, the City has an ordinance which requires Commission approval before a historic structure may be demolished.

Because of the costs involved in rehabilitating these structures, there appears to be only a limited demand for the continued use of these historic structures as residences. Rather, there appears to be a greater demand for the conversion of these structures into offices and other nonresidential uses. If there is no demand for these structures as residences and if they cannot be converted to nonresidential use, there will be intense pressure on the City to have them demolished.

SR 15A is the western terminus of the STA. Development along West SR 44 is a mixture of nonresidential and residential land uses. Hill Avenue is the eastern terminus of the STA. Along both East and West SR 44, there is a large number of historic residences. Without the STA designation extending westward to

SR 15A and eastward to Hill Avenue, the traffic on SR 44 will reach the maximum LOS within 3 to 5 years, thereby preventing the conversion of historic structures from residential to non-residential land uses.

ANTICIPATED DEVELOPMENT WHICH WILL IMPACT THE ROADWAYS WITHIN THE STA

There are several areas within and without the City in which development is either planned or anticipated.

The City of DeLand has approved a development order for FDOT to build a new +/- 110,000 square foot headquarters building on South Woodland Boulevard. In light of the fact that FDOT still plans to retain their facility on North Kepler Road, it is anticipated that FDOT traffic going between the two facilities will continue to utilize a portion of SR 44 or Voorhis Avenue.

The Volusia County School District anticipates the need for additional classrooms at the existing DeLand High School. The first option is to expand the existing school facility, located on North Hill Avenue. The second option is to construct a new school near Daytona Beach Community College, in the vicinity of the intersection of SR 44 and CR 4139.

Additionally the Volusia County Comprehensive Land Use Plan has designated the area in the vicinity of SR 44 and I-4 as an Activity Center. An Activity Center will permit a wide range of residential and commercial land uses. Although the potential land uses will be primarily oriented to I-4, it is anticipated that any development in the Activity Center will also impact SR 44 and the City of DeLand.

PROPOSED FDOT ROADWAY IMPROVEMENTS WITHIN THE STA

Although there are several proposed and potential developments which will increase the traffic on SR 44 and the portion of US 17/92 within the STA, it does not appear that there are any major FDOT roadway projects programmed which would provide additional capacity in the STA. The portions of US 17/92 and SR 44 which are included in the STA are designated as constrained. It is an FDOT policy that constrained roadways have a very low priority for the scheduling of roadway improvements. Therefore, neither the existing FDOT Adopted Five-Year Transportation Plan, FY 92 through FY 96, nor the proposed FDOT Five-Year Transportation Plan, FY 93 through FY 97, show any major roadway improvement within the limits of the STA for either US 17/92 or SR 44.

OTHER ROADWAY IMPROVEMENTS WHICH WILL IMPROVE THROUGH TRAFFIC

Currently, travel in the DeLand area is served by three major roadways: US 17/92, SR 44 and SR 15A. SR 11, which is located to the northeast of DeLand, currently provides only minor service to the City of DeLand. In older Florida cities, major roadways usually ran through or adjacent to the central business district. The City of DeLand, which is over 100 years old, is characteristic of this situation. US 17/92 and SR 44 intersect in the Central Business District. Although SR 15A does provide some alternative for north/south traffic on US 17/92, there is no alternative for east/west traffic on SR 44. At this time, the majority of both north/south and east/west through traffic still goes through the DeLand Central Business District.

There are several proposed roadways or changes to existing roadways which will provide additional alternatives for through traffic to bypass the Central Business District. US 92, from US 17 to SR 15A, is currently under construction and is anticipated to be completed in the summer or fall of 1992. Volusia County is proposing to construct the West Volusia Beltline, which will be a parallel facility to US 17/92 from US 92 to SR 472. Additionally, Beresford Avenue and Taylor Road are proposed to be improved and extended eastward to intersect with the Beltline. The Beltline, Beresford Avenue, Taylor Road, SR 15A, and US 92 will form a loop system around DeLand which will provide an alternate route for through traffic to bypass the Central Business District.

Traffic going west on US 92 and wishing to continue on SR 44 currently use US 17/92 into the Central Business District where it picks up SR 44 and continues west to Lake County. The completion of US 92 allows traffic to use SR 15A to access SR 44, without going through the Central Business District.

The West Volusia Beltline is a partially new facility which will be constructed on DeLand's east side. The portion from US 92 to just south of SR 44 will utilize the existing Kepler Road. The portion of the Beltline, from just south of SR 44 to its terminus in Orange City will be a new two-lane facility, with future plans to expand it to four lanes. The Volusia County Five-Year Program shows that construction of the Beltline, from just south of SR 44 to SR 472, will begin in FY 92/93.

Although not currently included in its Adopted Five-Year Program, Volusia County plans to extend Beresford Avenue from its existing eastern terminus at Blue Lake Avenue to the proposed West Volusia Beltline. Beresford Avenue currently runs from

SR 15A to Blue Lake Avenue. When extended to the Beltline, Beresford Avenue will provide an alternate route to bypass SR 44 through the Central Business District.

Currently, SR 15A merges with US 17/92 and continues south toward Orange City. If SR 15A extended east of US 17/92, rather than merging, SR 15A and Taylor Road would be the same facility. When extended to the Beltline, Taylor Road will provide an alternate route to bypass SR 44 through the Central Business District.

The attached map shows the Beltline, Beresford Avenue, Taylor Road, SR 15A and US 92.

RELATIONSHIP OF IMPACT FEES TO DELAND'S FUTURE ROADWAYS

Volusia County collects road impact fees on all new construction and programs the roadways and improvements on which road impact fee revenues will be spent. Although the Volusia County solicits suggestions from the cities regarding the roadways on which road impact fee monies may be spent, the County has the final authority regarding the programming of roadway improvements which will be financed using road impact fees. However, the City of DeLand will encourage Volusia County to program road impact fee revenues for improvements on SR 15A and other collector or arterial roadways which serve as alternatives to SR 44 and US 17/92 through the STA.

Although the creation of the STA will result in lower levels of service on portions of SR 44 and US 17/92 within the STA, it will also permit continued development within the Central Business District and outlying business areas. Such development is necessary to generate impact fees required to construct the extension of US 92, the Beltline and other roadways which will provide alternate routes for through traffic to bypass the Central Business District.

Currently, Volusia County is divided into four impact fee zones. DeLand is in Impact Fee Zone 4. Development within the City of DeLand is a major source of the impact fee revenues for Zone 4. Within a three-year period, development within the City of DeLand generated a total of \$1,015,041 in impact fees. During the same period, the total amount of impact fees generated within Zone 4 equaled \$2,039,089. Therefore, the City of DeLand contributed approximately fifty percent (50%) of all road impact fees generated within Zone 4 for the three-year period.

As stated above, the STA designation is critical for continued development within the Central Business District and outlying

business areas along SR 44. Without the STA designation, future development would be severely curtailed, thereby severely reducing the amount of impact fees generated within the City. Since impact fees comprise a major funding mechanism for the extension of US 92, the West Volusia Beltline and other future roadway improvements, the loss of these impact fees would adversely affect the construction of those improvements required to provide alternate routes to the roadways within the STA.

Development on the periphery of DeLand could generate the impact fees necessary to construct the roadways. However, the City feels that extensive development on the periphery of the City will result in urban sprawl, which is contrary to the goals of the State Comprehensive Plan.

CONSISTENCY WITH THE COMPREHENSIVE LAND USE PLAN

The City's Comprehensive Land Use Plan contains several Goals, Objectives, and Policies which support lower levels of service on the roadways within the STA, including the concentration of development within the core of the City, residential in-fill, historic preservation and the discouragement of urban sprawl. Attached is a list of Goals, Objectives and Policies contained in the City's Comprehensive Land Use Plan which support the STA.

SUMMARY

The City's Comprehensive Land Use Plan supports the concentration of development within the core of the City. In order to support and facilitate such development, the City is proposing that the Central Business District and outlying business areas along SR 44 be designated as a Special Transportation Area. The STA will permit SR 44 to have a LOS E, rather than a LOS D. The LOS E designation will permit the maximum ADT to increase from 14,800 to 15,700, increasing the roadway capacity by 900 vehicles a day. This will facilitate the redevelopment of the City's CBD, promote in-fill development, allow for a more efficient use of existing water and sewer infrastructure, discourage urban sprawl and permit the conversion of historic residences into offices and other nonresidential land uses. Additionally, the STA will permit the development which will generate the impact fees required to construct the West Volusia Beltline and other state, county and city roadways necessary to provide alternate routes for traffic to bypass US 17/92 and SR 44 through the Central Business District.

Without the STA designation, it is possible that, within the foreseeable future, SR 44 will reach its maximum capacity under LOS D. Once SR 44 reaches its maximum level of service, the

City will not be able to permit additional development anywhere in the City which would further degrade the LOS on SR 44. This would prevent the redevelopment of the CBD, prohibit in-fill development, delay the construction of parallel roadways, impede through traffic, promote urban sprawl and result in the loss of historic structures, both in the CBD and along SR 44. Therefore, the STA designation is important not only to the economic viability of the Central Business District and the preservation of historic structures, but also to generate impact fees necessary to construct alternate routes for through traffic to bypass the Central Business District.

City of DeLand
Comprehensive Land Use Plan
Goals, Objectives and Policies Which Support the Proposed STA

- Policy 1.2.3: Encourage small apartment complexes near areas of commercial development and employment such as the Central Business District and local commercial by zoning these areas for such uses with a limit on the number of units allowed in any given complex.
- Policy 1.2.4: Target high density residential land uses to areas with adequate City services (e.g. roads, water, sewer)
- Policy 1.2.5: The City will encourage the renovation of large single-family homes to low and medium density residential units adjacent to the CBD by conversion of such units in proper zoning districts.
- Goal IV: Enhance the economic vitality of the Central Business District (CBD) and promote its role as the major commercial center in West Volusia.
- Objective 4.1: By 1991, encourage commercial and office in-fill development within the CBD.
- Objective 4.2: By 1994, promote the rehabilitation and adaptive reuse of historic buildings.
- Policy 4.2.1: The City shall encourage the renovation of historic buildings to promote commercial office and limited residential facilities within and around the designated CBD by working with others in the approval process and assisting them in obtaining possible funding from State and Federal sources.
- Objective 5.1: By 1991, encourage the development of small commercial centers outside of the CBD that provide neighborhood services.
- Objective 5.2: By 1991, allow the development of commercial land use to the extent that the general economy of the CBD is not adversely affected, that strip commercial development is discouraged, and that public facilities are not adversely impacted on the Future Land Use Map.

Goal 10: Maintain DeLand's historical identify by identifying, evaluating, and protecting the historical resources associated with the City's heritage.

Objective 10.4: By 1991, the City of DeLand will adopt a Historic Preservation Ordinance to facilitate protection of DeLand's Historic Resources.

Policy 10.6.3: The City of DeLand shall designate Woodland Boulevard from Plymouth to Beresford and those parts of New York Avenue in the City limits as a historical corridor overlay zone.

City of DeLand

