# MTPO URBAN DESIGN POLICY MANUAL

#### A COMPREHENSIVE GUIDE TO ADOPTED PLANNING POLICIES FOR THE GAINESVILLE METROPOLITAN AREA

#### Prepared for the

Metropolitan Transportation Planning Organization For The Gainesville Urbanized Area

By the

North Central Florida Regional Planning Council 2009 NW 67<sup>th</sup> Place, Suite A Gainesville, Florida 32653

> Approved December 14, 2000 Last Revised June 13, 2002

#### TABLE OF CONTENTS

		<u>Page</u>
I.	INTI	RODUCTION
II.		TROPOLITAN TRANSPORTATION PLANNING ORGANIZATION (PO) POLICIES
	1.0	BICYCLE POLICIES
	1.1	Bicycle Travel Facilities
	1.2	Bicycle Parking Facilities
	2.0	INTERMODAL AND MULTIMODAL PLANNING POLICY
	2.1	Intermodal and Multimodal Travel Facilities
	3.0	JOINT BICYCLE, PEDESTRIAN, INTERMODAL AND MULTIMODAL PLANNING POLICIES
	3.1	Advisory and Administrative Activities4
	3.2	Education, Encouragement and Enforcement Activities
	3.3	Facilities and Program Activities
	4.0	LANDSCAPING POLICIES
	4.1	MTPO Policy Development Referral
	4.2	Tree and Natural Area Protection Zones
	4.3	Mitigation of Trees to be Removed and Minimum Tree Planting Standards 7
	4.4	Drainage Retention Basin Landscaping
	4.5	Surface Waters and Wetlands
	5.0	PEDESTRIAN POLICIES
	5.1	Pedestrian Travel Facilities
	5.2	Materials Texture and Hue
	5.3	School Zone Safety (Stephen Foster Elementary)
	6.0	PLANNING POLICIES
	6.1	Transportation Language Policy
	6.2	Metropolitan Transportation Planning Organization Advisory Council
		(MPOAC) Participation
	6.3	Graphic Depictions
	6.4	Transportation Design for Livable Communities (TDLC)

#### **TABLE OF CONTENTS (Continued)**

		<u>Page</u>
	7.0	ROADWAY POLICIES
	7.1	Main Street [SW 16 <sup>th</sup> Avenue to Depot Avenue]
	7.2	Mast Arms
	7.3	Newberry Road [NW 43 <sup>rd</sup> Street to NW 38 <sup>th</sup> Street]
	7.4	Retention/Detention Basins
	7.5	Traffic Signal Preemption Devices
	7.6	Travel Demand Management TDM/
		Transportation System Management (TSM)
	7.7	Congestion Management System (CMS) Policy
	7.8	Signage Policy
	8.0	TRANSIT POLICIES
	8.1	Year 2020 Long Range Transportation Plan- Transit Element Activities 19
	8.2	Bus Bays
	9.0	TRANSPORTATION ENHANCEMENT PROJECT POLICY
	9.1	Enhancement Project Cost Increase Policy
	10.0	MTPO DESIGN TEAM
	10.1	MTPO Design Team Composition
	10.2	MTPO Design Team Project Referral Criteria
APPE	NDICI	ES
	Appei	ndix A Transportation Design for Livable Communities Design Criteria, Pedestrian & Bicycle Considerations and Techniques
	Appei	ndix B Gainesville Metropolitan Area Truck Route System
	Appei	ndix C MTPO Urban Design Policy Manual Revision (UDPM) Log C-1

S:\ms02\DT\policy.wpd

#### I. INTRODUCTION

#### **URBAN DESIGN & STREETSCAPE POLICIES**

On September 5, 1996, the Metropolitan Transportation Planning Organization (MTPO), which currently is composed of the City of Gainesville Mayor and four City Commissioners and the five Alachua County Commissioners, appointed a Design Team. The mission of the Design Team is to oversee, during the planning phases of a project, the construction details and specifications to ensure uniformity in design throughout the Gainesville Metropolitan Area (GMA).

#### **PROCEDURES**

In an effort to guide all applicable transportation projects through its Design Team, the MTPO approves the annual adoption of its Transportation Improvement Program (TIP) as the mechanism which alerts staff, Committee members and others of the project scope. Usually, the MTPO refers those projects with preliminary engineering scheduled in the first year of the TIP to the Design Team. This Report should serve as a guide to the minimum accepted standard for construction of transportation facilities within the GMA.

#### PROJECT MONITORING

The Design Team meets monthly to discuss projects that have been referred from the MTPO. The MTPO Design Team Status Report is the primary tool for monitoring those projects that are referred to the Design Team. These status reports are included in MTPO and its Advisory Committees' meeting packets. The status report includes:

- 1. designated permanent Design Team members;
- 2. designated project-specific Design Team members;
- 3. projects referred to the Design Team by the MTPO; and
- 4. status of the Design Team's review of each project.

#### **PURPOSE**

Over the past several years, the Design Team has met and recommended several independent policies to the MTPO. This Report is an effort to unify those policies and to provide a singular reference resource for future referrals.

#### **PUBLIC INVOLVEMENT**

The MTPO Public Involvement Plan is implemented to facilitate public participation in the transportation planning process within the GMA.

### II. METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION (MTPO) POLICIES

#### 1.0 BICYCLE POLICIES

The Metropolitan Transportation Planning Organization (MTPO) adopted bicycle policies on December 14, 1995, as part of the Year 2020 Long Range Transportation Plan update. These policies cover bicycle travel facilities and bicycle parking facilities.

- 1.1 **Bicycle Travel Facilities** The MTPO policies regarding the construction of bicycle travel facilities in conjunction with roadway construction projects are listed in the following paragraphs. These policies apply to state, county and city arterials and collectors (major and minor).
  - 1.1.1 Reconstruction or new construction of a roadway Projects for the reconstruction or new construction of an arterial or major collector within the Gainesville Metropolitan Area (GMA) shall:
    - A. include either instreet bicycle lanes or wide curb lanes to accommodate bicycle travel. The facility shall be bicycle lanes unless it can be documented that physical space constraints or excessive turning movements preclude such; and
    - B. include curb ramps for sidewalks at intersections to accommodate those bicyclists who choose to use the sidewalk.
  - 1.1.2 Resurfacing of a roadway Resurfacing projects on an arterial or major collector roadway within the GMA shall include provisions for bicycle travel to the extent possible as follows:
    - A. Curb-and-gutter cross-sections The roadway shall be striped to provide for outside travel lanes of width up to 15 feet by making the interior travel lanes and center turn lane of width 11 feet. In those cases where the existing width of the cross-section is not adequate to provide a 15 foot outside lane, the maximum possible width is to be provided. On the other hand, if sufficient width exists, bicycle lanes shall be provided.
    - B. Non curb-and-gutter cross-sections The pavement surface shall be extended at least four feet beyond the motorized vehicle travel lane. Within the GMA, this space shall be constructed, striped and marked according to the design criteria for bicycle lanes.

- 1.1.3 Negotiated Development Orders For reconstruction, construction or resurfacing of an arterial or collector roadway provided by a developer as the result of a negotiated development order, particular attention should be given to ensure that the provisions for bicycle facilities as described in paragraphs 1.1.1 and 1.1.2, above, are followed.
- 1.1.4 Subdivision ordinances The subdivision ordinances of the City of Gainesville and Alachua County should provide that any roadway constructed in the GMA with an average daily traffic of greater than 1,200 vehicles per day shall have a minimum of a 14 foot outer motorized vehicle travel lane.
- 1.1.5 The MTPO shall continue to encourage the Florida Department of Transportation (FDOT) to maintain policies which are consistent with the MTPO policies concerning the construction of bicycle travel facilities in conjunction with road improvements. This policy applies to all roads (both principal and minor arterials) on the State Highway System.
- 1.1.6 The MTPO shall encourage the City of Gainesville and Alachua County to adopt the MTPO policies concerning construction of bicycle travel facilities in conjunction with city and county road improvements.
- 1.1.7 The MTPO shall continue to develop a list of priorities for bicycle travel facilities projects for the GMA which shall be updated annually in accordance with the Transportation Improvement Program (TIP) process.
- 1.2 **Bicycle Parking Facilities** The MTPO policy regarding construction projects is that adequate, secure bicycle parking facilities should be provided. The MTPO recommends that the City of Gainesville and Alachua County require the provision of adequate, secure for bicycle parking facilities in local zoning regulations.

#### 2.0 INTERMODAL AND MULTIMODAL PLANNING POLICY

The MTPO adopted an intermodal and multimodal policy on December 14, 1995, as part of the Year 2020 Long Range Transportation Plan update. This policy covers intermodal and multimodal travel facilities.

2.1 **Intermodal and Multimodal Travel Facilities**- The MTPO policy regarding the construction of intermodal and multimodal travel facilities is that adequate intermodal travel facilities and programs, such as bus transfer facilities, bus shelters and bicycle racks on buses, be provided. The MTPO-designated multimodal corridors shall have priority for development of intermodal and multimodal travel facilities and programs.

#### 3.0 JOINT BICYCLE, PEDESTRIAN, INTERMODAL AND MULTIMODAL POLICIES

The MTPO adopted advisory and administrative; education, encouragement and enforcement; and facilities and program activities policies on December 14, 1995, as part of the Year 2020 Long Range Transportation Plan update. Theses policies cover bicycle, pedestrian, intermodal and multimodal planning.

- 3.1 **Advisory and Administrative Activities** Activities which have been identified as necessary to meet the vision and goal statements of the Year 2020 Long Range Transportation Plan Bicycle/Pedestrian Element include the following:
  - 3.1.1 Continue support for Bicycle/Pedestrian Advisory Board and the Bicycle/Pedestrian Program with a full-time coordinator;
  - 3.1.2 Maintain intergovernmental coordination to facilitate bicycle and pedestrian planning and implementation processes;
  - 3.1.3 Continue citizen involvement processes through the Bicycle/Pedestrian Advisory Board (BPAB), the Citizens Advisory Committee (CAC) and the Transportation Information Network (TIN);
  - 3.1.4 Continue to update the Bicycle Usage Trend Report program every five years to correspond with the development of the MTPO Long Range Transportation Plan;
  - 3.1.5 Continue Transportation Improvement Program (TIP) process to develop list of bicycle and pedestrian priorities;
  - 3.1.6 Support regular updates of the Gainesville Bikeway System map; and
  - 3.1.7 Support continuation of the City of Gainesville Traffic Engineering Department's maintenance of a traffic crash database, which includes crashes involving bicyclists and pedestrians, collected from Gainesville Police Department crash reports.
- 3.2 **Education, Encouragement and Enforcement Activities** Activities which have been identified as necessary to meet the vision and goal statements of the Year 2020 Long Range Transportation Plan Bicycle/Pedestrian Element include the following:
  - 3.2.1 Support continuation of Alachua County schools provision of bicycle and pedestrian safety programs which are operated in conjunction with the City of Gainesville's Bicycle/Pedestrian Coordinator, the Alachua County Sheriff's Office and the Gainesville Police Department;
  - 3.2.2 Support continuation of the University of Florida Police Department's sponsorship of a Bicycle Traffic Safety School;

- 3.2.3 Support establishment of a countywide bicycle and pedestrian enforcement and education program similar in nature to the University of Florida's Bicycle Traffic Safety School.
- 3.2.4 Support continuation of Alachua County's support of the Alachua County Traffic Safety Team (ACTST), which includes transportation and public safety staff from state and local government, as well as traffic safety-advocacy groups such as Mothers Against Drunk Driving (MADD) and the North Central Florida Safety Council;
- 3.2.5 Support development and implementation of programs to provide training and equipment to law enforcement in bicycle and pedestrian issues.
- 3.2.6 Support continuation of a bicycle and pedestrian safety information campaign;
- 3.2.7 Support continuation of the Gainesville Cycling Festival and other special events related to bicycling and walking; and
- 3.2.8 Support continuation of the BBOPP (Bus, Bike or Pool and Pedestrian-to Work) program.
- 3.3 **Facilities and Program Activities-** Activities which have been identified as necessary to meet the vision and goal statements of the Year 2020 Long Range Transportation Plan Bicycle/Pedestrian Element include the following:
  - 3.3.1 Provide offstreet multipurpose trails in the GMA;
  - 3.3.2 Support provision of bicycle parking facilities at major destinations and auto parking garages;
  - 3.3.3 Support continued provision of instreet bicycle facilities and sidewalks on newly constructed or reconstructed arterial and collector roadways and as independent projects within the GMA;
  - 3.3.4 Provide operational systems such as signal sensing devices capable of detecting bicycles at intersections, lighting, access management and safety projects along multimodal corridors when roadways are resurfaced;
  - 3.3.5 Support development and implementation of bicycle and pedestrian facility and safety-related regulations within local government land development regulations;
  - 3.3.6 Provide routine maintenance program for all bicycle and pedestrian facilities;
  - 3.3.7 Provide intermodal links to transit, including bike racks on buses, bicycle parking at bus stops, sidewalks to bus stops and benches and shelters at bus stops;

- 3.3.8 Provide programs in support of travel demand management (TDM) programs, such as employee-incentive bicycling and walking programs; and
- 3.3.9 Continue to encourage the FDOT to maintain policies which are consistent with the MTPO policies concerning the construction of bicycle and pedestrian travel facilities in conjunction with road improvements. This policy applies to all roads (both principal and minor arterials) on the State Highway System.

#### **4.0 LANDSCAPING POLICIES**

**INTENT**: At its September 23, 1999 meeting, the MTPO Landscape Subcommittee approved a motion to have the Design Team develop a draft MTPO Landscape Policy that included within the policy framework: tree banking; optimized landscaping; xeriscaping; use of native species; special features such as tree clustering and community gateways; and that the City of Gainesville, Alachua County and Florida Department of Transportation (FDOT) are recommended to include landscaping as a part of major road construction and reconstruction projects for collector and arterial streets, major thoroughfares, and inter- and intra-state highway systems. If any of these provisions cannot be followed, the agency will provide a written explanation. Shoulder construction projects are exempt. Subdivision streets are governed by ordinances in the City and County Codes. The City of Gainesville or Alachua County will be responsible for projects within their respective jurisdictions.

- 4.1 **General Landscaping Principles.** All roadways constructed within the urban reserve area of Gainesville shall be designed to result in a pleasing roadway environment enhanced by trees and landscaping that will present an attractive community appearance, calm traffic, enhance safety, reduce heat island effects, and provide shade for pedestrians, bicyclists and transit uses. Where possible, the existing natural landscape shall be retained or appropriately replicated in roadway design so as to maintain Gainesville's sense of place and environmental heritage.
  - 4.1.1 Apply **xeriscape principles** to highway landscape designs. Plan to save water. Utilize water-conserving plants; confine water-loving species to drainage basins or other areas where water naturally accumulates. Group plant species according to water needs. Improve the water-holding capacity of soils by incorporating organic matter. Mulch all plantings with organic materials. Utilize drip irrigation systems for woody material for projects with irrigation.
  - 4.1.2 **Trees** and natural areas adjacent to highways **will be preserved** and protected during road construction projects.
  - 4.1.3 **Roads** and streets will be **planned to avoid** as much as possible the **removal of trees** that meet the criteria for designation as <u>Heritage</u> trees (see 4.3.1). A tree survey or report from an Arborist certified by the International Society of Arboriculture dealing with <u>regulated</u> trees (see 4.3.1) to be removed will be submitted to the City or County Arborist prior to designing roadway construction

- (P.D.&E phase). An alternative to a comprehensive survey of all regulated trees is a modified survey showing trees of special interest and Heritage trees with commentary on those worthy of special consideration enumerated in a report from an Arborist with current certification by the International Society of Arboriculture or the American Society of Consulting Arborists. With either option, a copy of the report is to be given to the MTPO Design Team, City of Gainesville and Alachua County Arborists, and Utility Vegetation Management staff.
- 4.1.4 Grassed areas shall be planted with **sod** that has been **certified free of noxious weeds** by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry.
- 4.1.5 **Trees** to be removed to accommodate road construction on public property shall be **identified and mitigated** in accordance with local ordinances covering tree removal and mitigation, or mitigated in accordance with the standards hereafter stated in this document.
- 4.1.6 Species **native** to Florida will be used preferentially. Under environmental conditions where exotic species will perform more reliably, they may be used as long as they are not species listed as invasive by the Florida Exotic Pest Plant Council. Cultivars of native trees are acceptable but shall not comprise more than 50% of the trees on any project.
- 4.1.7 To encourage **plant diversity**, no more than 50% of the trees on a single project will be from the single genus; no more than 25% will be of a single species.
- 4.2 **Tree and Natural Area Protection Zones.** Protective barriers shall be plainly visible and shall create a continuous boundary between trees or vegetation clusters and construction activities. These barricades will prevent encroachment by machinery, vehicles or stored materials.
  - 4.2.1. **Barricades** must be at least 3 feet tall and must be constructed of either wooden corner posts at least 2 X 4 inches buried at least 1 foot deep, with at least 2 xcourses of wooden side slats at least 1 X 4 inches with colored flagging or colored mesh attached, or constructed of 1-inch angle iron comer posts with brightly colored mesh construction fencing attached.
  - 4.2.2 Barricades will be provided for in the construction documents with the advisory that they must be built prior to any clearing activities. Tree protection barricades will be subject to on-site inspections by City or County staff.
  - 4.2.3 On individual trees or clusters of trees to be preserved, the area enclosed within the barricade will equal at least 2/3 the area of the dripline of the canopy.
- 4.3 **Mitigation of trees to be removed and minimum tree planting standards.** Local ordinances governing tree removal will be followed if they are more restrictive than the following requirements.

4.3.1. **Defining** which Trees are governed and therefore may be subject to mitigation, based on the condition of the trees as evaluated by the City or County Arborist. Trees of all species native to Florida shall be considered as *regulated* when they are larger than 8" in diameter (except Loblolly Pine, Slash Pine, Sweetgum, Laurel Oak and Water Oaks trees, which are not considered regulated unless they are 18" in diameter or larger).

Trees larger than 20" in diameter are considered <u>Heritage</u> trees (again except for Loblolly Pine, Slash Pine, Sweetgum, Laurel Oak and Water Oaks trees, which qualify as Heritage trees only when larger than 30"). Heritage trees shall receive special consideration.

<u>Champion</u> trees are the largest of their species in the United States, Florida, or Alachua County, as documented in records maintained by the Florida Department of Agriculture, Division of Forestry. Champion trees shall receive special consideration.

- 4.3.2. **Tree-planting is required** on every major road construction or reconstruction project as defined in the "Intent" statement. Road designs shall include places for shade trees based on the following guidelines:
  - A. For curb-and-gutter sections, where practicable and applicable, a **5' wide tree lawn** will be planned between the curb and back of sidewalk. The width of the **tree lawn** should meet applicable guidelines to allow for the planting of shade trees. The City of Gainesville, Alachua County and the FDOT shall follow their guidelines so that road-edge plantings will meet their clear recovery zone requirements <u>and</u> include shade trees. Should none apply, then the grass strip between curb and sidewalk will be a minimum of 5' wide.
  - B. **Medians** in curb-and-gutter sections shall be **wide enough** to allow the planting of shade trees.
  - C. For swale design sections, the medians shall be wide enough to accommodate the planting of shade trees without violating the clear-recovery zone guidelines.
  - D. Sufficient right-of-way adjacent to the **sides of the road** shall also be acquired so that **shade trees** can be planted along the road edges.
  - E. The purchase, planting, establishment and maintenance of these trees shall be figured into the project and on-going maintenance costs. If **additional right-of-way is being acquired for reconstruction**, then the option will be presented to the MTPO to include the cost of additional right-of-way acquisition for tree-planting.
- 4.3.3. The **total number of trees** to be included in final landscaping can be calculated by **two methods**. Which ever will result in the greater number of trees to be planted or mitigated shall apply.

Method 1 bases the mitigation on the regulated and Heritage trees removed.

Regulated trees: Each regulated tree smaller than 20" in diameter will be mitigated by the replanting of one or more trees, with the total diameter inches replanted equaling 3" for each regulated tree removed. Mitigation can be in the form of two trees of 1.5" in diameter or one 3" diameter tree planted for each regulated tree removed.

*Heritage trees:* Heritage trees will be mitigated on a basis of one-half the diameter inches. For example: If four 30" diameter Heritage Red Maples are to be destroyed, the mitigation would be 60" of young trees.

Method 2 is for roadway projects that don't necessitate tree removals. It is based instead on *Minimum Tree Planting Standards*.

- A. New roadways shall be designed to accommodate the equivalent of one tree for every 100' of linear *road edge*. Trees will be spaced appropriately for their crowns and to respect driveways, intersections, and vision triangles.
- B. To calculate <u>road-edge</u> feet, each side of the roadway shall be considered separately. A road project 2 miles long would have the equivalent of one tree every 100' for 4 miles. The <u>total</u> length of the roadway project shall be considered as the basis of measurement; the area occupied by driveways, intersections, median breaks and clear-sight distances are included in the measurement.
- C. If the road includes medians, calculation of the minimum number of mitigation trees shall be based on one tree for every 100' linear of medians in the project.
- 4.3.4. All trees planted on highway projects will be nursery-grown and meet **Florida Grade** \*1 specifications as defined by the Florida Division of Plant Industry.
- 4.3.5 At least **two-thirds of trees planted should be shade trees** which, at maturity, will reach a height of at least 50' and have a crown spread of 30' or greater. The other one-third of the trees may be small decorative tree species or palms. Under extraordinary circumstances, the proportion of shade trees to small flowering trees and palms may be reduced to 50%-50%, but under no circumstances shall fewer than 50% of the trees required to meet the minimum tree-planting standard be shade trees. Where **overhead primary utility wires** limit height of acceptable trees, Drake Elms, Hollies, and other species with low canopies will be used. When palms are included in inch-for-inch mitigation, they shall count as the equivalent of one 3" diameter tree.
- 4.3.6 If, after meeting the tree-planting requirements for new construction or reconstruction projects as specified in 4.3.2, additional mitigation trees remain to be planted, the **remaining mitigation trees may be planted off-site**, with preference being given to retrofitting medians or road-edges of existing highways

in Alachua County in conjunction with other agency's existing design guidelines. Should the retrofitting option be unworkable, then arrangements may be made to convey the remaining mitigation trees to the City of Gainesville or Alachua County Arborist for another local tree planting effort. If at the time of the roadway landscaping, a FDOT Highway Beautification Council grant is being planted, trees purchased with grant funds may be used by FDOT to meet the off-site mitigation requirement. Trees planted within the maintenance guidelines of an entity shall become the maintenance responsibility of the jurisdictional entity unless otherwise provided.

- 4.4 **Drainage retention basin landscaping-** Retention/detention basins shall be designed to provide an aesthetic focal point, such as a pond or other water feature; to preserve tree groupings; or to utilize the existing terrain and/or geological features of the site. All areas devoted to stormwater management shall be landscaped with trees, shrubs, groundcovers and native perennials appropriate to the function as a wet or dry basin. This landscaping shall promote safety and integrate the basin with the overall design and landscaping of the site.
  - 4.4.1 An area equivalent to at least 25% of the entire basin, including the shoulders and maintenance area shall be landscaped. At a minimum, one shade tree shall be planted for every 35 linear feet, or part thereof, of basin perimeter. Spacing of trees may be closer when trees are planted in groups for aesthetic effect.
  - 4.4.2 The rim of the retention/detention basin should be a minimum of 25' wide on all sides to provide the space required to operate maintenance equipment and plantings; within the 25', the landscaped area should be no less wide at its narrowest point than 9'. Adequate land to accommodate this required landscaping shall be purchased when planning new facilities.
  - 4.4.3 Drainage retention/detention basins shall be of **irregular shape and shall have no parallel sides**. Maximum side slope shall be no greater than the 1' vertical rise to the horizontal run equal to the depth of the basin, where the basin is between 1' and 4' in depth, and no greater slope than 1' vertical rise to 4' horizontal run for basins more than 4' design high-water depth. When and where appropriate, vertical walls on basins may be approved; in such cases there will be additional landscaping and barriers as determined by the respective agencies.
  - 4.4.4 **Fencing to enclose stormwater management areas** shall be aesthetically pleasing and meet all safety requirements as put forth by the AASHTO *Policy of Geometric Design of Highways and Streets* "Green Book" design standards. Additional liability requirements may be necessary contingent upon the acting agency standard guidelines. If chainlink fencing is used, an additional area 5' wide outside the fence shall be landscaped with at least 3 shade trees, 2 understory trees, 8 large shrubs and 13 small shrubs for every 100' or part thereof of fencing.
  - 4.4.5 Stormwater management areas must maintain existing wetland functions by either preserving habitat or establishing new habitat for viable populations of native plant and animal species by including shrubs, herbaceous wildflowers or ferns, and emergent vegetation in the basin landscaping plan.

- 4.5 **Surface Waters and Wetlands** As far as possible, all roadway projects will be designed to avoid impacts to wetlands, creeks, lakes, ponds, rivers, and all other bodies of water. The City of Gainesville, Alachua County, and FDOT shall follow their respective ordinances and statutes regarding the avoidance and minimization of impacts, and these agencies shall follow permitting requirements as applicable.
  - 4.5.1 **Required mitigation**. If in the course of roadway construction, wetlands or surface waters will be impacted, then the City of Gainesville, Alachua County, and FDOT shall mitigate for the impacts. Mitigation shall be encouraged within the local watershed in which the impact occurs and within the boundaries of Alachua County. Mitigation ratios shall in no case be less than those currently used by the water management districts.
  - 4.5.2 **Use of Wetlands for Stormwater Management.** If wetlands are used in conjunction with stormwater management, the proposed systems shall not adversely affect the quality or quantity of receiving water or the wetland habitat function. Degradation of water quality or ecosystem function shall be addressed by the governmental entity responsible for project construction.

#### **5.0 PEDESTRIAN POLICIES**

The MTPO adopted pedestrian policies on December 14, 1995, as part of the Year 2020 Long Range Transportation Plan update. These policies cover pedestrian travel facilities.

- 5.1 **Pedestrian Travel Facilities** The MTPO policies regarding the construction of pedestrian travel facilities, such as crosswalks, ramps, refuge islands and sidewalks, in conjunction with roadway construction projects are listed in the following paragraphs. These policies apply to state, county and city arterials and collectors (major and minor).
  - 5.1.1 Reconstruction or new construction of a roadway Projects for the reconstruction or new construction of an arterial or major collector within the GMA shall include designated pedestrian access to accommodate pedestrian travel. Additional pedestrian facilities such as signalized crosswalks, refuge islands and underpasses shall be considered on a case-by-case basis. The facility shall be ramped sidewalks in accordance with the Americans with Disabilities Act (ADA) unless it can be documented that physical space constraints or excessive turning movements preclude such.
  - 5.1.2 Subdivision ordinances The subdivision ordinances of the City of Gainesville and Alachua County should provide that any arterial or collector roadway constructed in the GMA also include appropriate pedestrian travel facilities.
  - 5.1.3 Negotiated Development Orders For reconstruction, construction or resurfacing an arterial or collector roadway provided by a developer as the result of a negotiated development order, particular attention should be given to ensure that the provisions for pedestrian facilities as described in paragraphs 5.1.1 and 5.5.2, above, are followed.

- 5.1.4 The MTPO shall continue to encourage FDOT to maintain policies which are consistent with MTPO policies concerning the construction of pedestrian travel facilities in conjunction with road improvements. This policy applies to all roads (both principal and minor arterials) on the State Highway System.
- 5.1.5 The MTPO shall encourage the City of Gainesville and Alachua County to adopt the MTPO policies concerning construction of pedestrian travel facilities in conjunction with city and county road improvements.
- 5.1.6 The MTPO shall continue to develop a list of priorities for pedestrian travel facilities projects for the GMA which shall be updated annually in accordance with the TIP process.
- 5.2 **Material Texture and Hue** Materials be considered for use, when it is consistent with the guidelines listed below, on all new road construction projects, existing road projects which require reconstruction and resurfacing projects. In all cases, pedestrian safety, vehicle skid resistance and other highway safety measures take priority over aesthetic concerns.
  - 5.2.1 Material- Crosswalks and medians should be constructed with bricks whenever possible, and that, if it is not possible to construct the crosswalks with bricks, then they should be constructed with stamped asphalt.
  - 5.2.2 Pattern- The desired pattern surface is laid brick.
  - 5.2.3 Hue- The preferred hue for crosswalks constructed with stamped asphalt is Streetprint, Inc.'s brick (high traffic formula) color that is matched, as close as possible, to the color of the median's bricks.
  - 5.2.4 Locations- This policy applies to the following locations:
    - A. Traffic Separators (Medians)- Materials specified in this policy should be used in traffic separators (medians) where it is not possible to provide for a grassed or landscaped median. Exhibit 1 shows examples of the application of this policy within the GMA.
    - B. Pedestrian Crosswalks- Materials specified in this policy should be used in areas of high pedestrian traffic. Currently, areas with high pedestrian traffic are as follows:
      - 1. The Central City District (see Exhibit 2);
      - 2. at the University of Florida along West University Avenue and NW 13<sup>th</sup> Street; and
      - 3. near elementary, middle and high schools.

Exhibit 3 shows examples of the application of this policy within the GMA.

C. Where constrained by cost or State design requirements, incorporate the use of streetprint with hued asphalt to highlight pedestrian crosswalks. Elsewhere, allow flexibility to utilize pavers, bricks and alternate treatments that meet the following criteria:

- 1. minimize the gaps between paving slabs and any vertical deviation between textured pavers;
- 2. define the junction between the footway and roadway with a curb or tactile paying; and
- 3. construct all crosswalks and curbs in the most safe and stable manner.
- D. Pedestrian Refuge Islands- Materials specified in this policy should be used in pedestrian refuge islands where it is not possible to provide for a grassed or landscaped refuge island. Exhibit 4 shows examples of the application of this policy within the GMA.
- 5.3 **School Zone Safety** (Stephen Foster Elementary School)- Where schools are located at signalized intersections, the school zone signs should be placed adjacent to those lanes which approach the traffic signal, in appropriate proximity to the intersection. For example, a school zone sign on the westbound approach of NW 39<sup>th</sup> Avenue was moved from the west side to the east side of the NW 6<sup>th</sup> Street intersection.
- 5.4 **Pedestrian Traffic Signals** signalization to accommodate pedestrian traffic at designated crosswalks shall be in accordance with the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and the Americans with Disablility Act (ADA). Therefore, where appropriate, in new transportation projects and plans, the installation of pedestrian traffic signals shall feature audible traffic signals with accessible pedestrian signals actuators and countdown signal heads. This policy was approved on February 15, 2001.

#### **6.0 PLANNING POLICIES**

- 6.1 **Transportation Language Policy** Objective language will be used for all correspondences, resolutions, ordinances, plans, language at meetings, etc. and when updating past work. The intent of this policy is to remove the biases inherent in some of the current transportation language used at the MTPO. This change is consistent with the shift in philosophy as the MTPO works towards becoming a sustainable community. This policy was adopted on August 17, 1999.
  - 6.1.1 Transportation Language Guidelines-The following examples of biased and objective statements are to the used as guidelines for implementing the MTPO Transportation Language Policy.

	TRANSPORTATION LANGUAGE POLICY SAMPLES				
SAMPLE	BIASED	OBJECTIVE			
A	The following street improvements are recommended.	The following street modifications are recommended.			
	The intersection improvement will cost \$5,000.00.	The right turn channel will cost \$5,000.00.			
	The motor vehicle capacity will be improved.	The motor vehicle capacity will be <u>changed</u> .			
В	The level of service for motor vehicles was enhanced.	The level of service for motor vehicles was <u>changed</u> .			
		The level of service for motor vehicles was <u>increased</u> .			
	The level of service for motor vehicles deteriorated.	The level of service for motor vehicles was <u>decreased</u> .			
	The motor vehicle capacity enhancements will cost \$40,000.	The <u>increases</u> to motor vehicle capacity will cost \$40,000.			
C	Upgrading the street will require a wider right of way.	Widening the street will require a wider right of way.			
	The <i>upgrades</i> will lengthen sight distances.	The <u>changes</u> will lengthen sight distances.			
D	The level of service was "A".	The level of service for motor vehicle users was "A".			
		The level of service for pedestrians was "A".			
E	The problem is speeding traffic.	The problem is speeding motor vehicles.			
	The <i>traffic</i> queued back for one mile.	The motor vehicles queued back for one mile.			
F	The traffic demand will increase.	Motor vehicle use will increase.			
		<u>Travel demand</u> will increase.			
	The traffic demand projections will be complete soon.	The projections of motor vehicle use will be complete soon			
	The peak hour traffic demand is falling.	The peak hour motor vehicle use is falling.			
G	Alternative modes of transportation are important downtown.	Non-automobile modes of transportation are important downtown.			
		Non-motorized modes of transportation are important to the downtown.			
		Alternative modes of transportation to the automobile are important to the downtown.			
Н	Motor vehicle accidents kill 200 people every year.	Motor vehicle <u>crashes</u> kill 200 people every year.			
	He had an accident with a light pole.	He <u>crashed</u> into a light pole.			
	Here is the <i>accident</i> report.	Here is the <u>crash</u> report.			
I	We have <i>protected</i> this right of way.	We have <u>purchased</u> this right of way.			
		We have <u>designated</u> this a right of way.			
J	The traffic signal timings were adjusted to increase motor vehicle efficiency.	The traffic signal timings were adjusted to <u>increase</u> motor vehicle <u>speeds</u> .			

#### **EXAMPLE SUMMARY**

Biased Terms	Objective Terms
improve	change, modify
enhance, deteriorate	change, increase, decrease
upgrade	change, redesignate, expand, widen, replace
level of service	level of service for
traffic	motor vehicles
traffic demand	motor vehicle use
accident	collision, crash
protect	purchase, designate
efficient	fast

- 6.2 **Metropolitan Planning Organization Advisory Council (MPOAC) Participation** The MTPO will be sending staff to the MPOAC meetings on a regular basis, but not send a member with the understanding that staff would advise the MTPO as to when attendance by a member would be required. This policy was approved November 13, 1991.
- 6.3 **Graphic Depictions** It is a requirement, and the MTPO Citizens Advisory Committee, will only accept professional presentations that are depicted within 10 percent of relative scale. This policy was approved March 14, 2002.

#### 6.4 Transportation Design for Livable Community (TDLC)

The MTPO, at its April 11, 2002 meeting, amended its UDPM to incorporate the Florida Department of Transportation's TDLC policy and procedures.

#### 6.4.1 **TDLC Policy**

A. **General**- Consider the incorporation of TDLC on State-maintained, County-maintained and City-maintained roadway facilities when such features are desired, appropriate, and feasible. TDLC features shall be based upon consideration of the following principles:

- 1. Safety of pedestrians, bicyclists, motorists, and public transit users;
- 2. Balancing community values and mobility needs;
- 3. Efficient use of energy resources;
- 4. Protection of the natural and manmade environment;
- 5. Coordinated land use and transportation planning;
- 6 Local and state economic development goals; and
- 7. Complementing and enhancing existing standards, systems, and processes.
- B. **Planning** TDLC features are to be considered when they are desired, appropriate and feasible. Incorporating TDLC features are contingent upon involvement of the local stakeholders in the planning and project development processes. Therefore, it is essential that all stakeholders are included from the initial planning phase of the project through design, construction and maintenance.

During the initial planning and scoping phases it is important to identify and assess the desires and willingness of the community or stakeholder to accept all of the ramifications of TDLC, including funding allocations and maintenance agreements of the TDLC features included in a project.

C. Application- A team approach is recommended to evaluate TDLC projects or features. Depending on the complexity and/or controversial TDLC features and the district resources available, the team may include representation from Planning, Traffic Operations, Environmental Management, Roadway Design, Public Transportation, Maintenance, Safety, Pedestrian/Bicycle Coordinator and the Community Impact Assessment Coordinator. This team should also include the respective Metropolitan Planning Organization (s), local governments/agencies, transit agencies, citizen groups and any others affected by the proposed projects or features.

TDLC projects require a concept report documenting the desired project features determined to be appropriate and feasible for implementation and the respective responsibilities of all involved stakeholders.

TDLC features can be incorporated into new construction, reconstruction, and resurfacing, restoration and rehabilitation (RRR) projects using existing design standards and criteria found in the FDOT *Plans Preparations Manual* Chapters 2 and 25. For State-maintained roadway facilities, when a concept report identifies TDLC features for a project or segments of a project, the criteria provided in this policy may also be used with the approval of the District Design Engineer.

- D. **Techniques** Selected TDLC techniques applied by type of highway system are shown in Exhibits A-1, A-2, A-3 and A-4 of Appendix A. These techniques are intended as guidance for balancing the need for mobility with the desire for livable communities, and not as standards, policies or procedures of the MTPO.
- E. **Design Criteria** This criteria meets or exceeds AASHTO minimums. TDLC design criteria is in Appendix A. TDLC projects on State-maintained roadway facilities are subject to the requirements for Design Exceptions and Design Variations found in Chapter 23 of the FDOT *Plans Preparation Manual*.
- F. **Pedestrian\*and Bicycle Considerations-** TDLC pedestrian and bicycle considerations are in Appendix A.
- G. **Transit-Systems and Amenities** Transit accommodations should be developed in cooperation with the local jurisdictions and transit agencies.
- H. **TDLC Techniques** Selected TDLC techniques applied by type of highway system are shown in Exhibits A-1, A-2, A-3 and A-4 of Appendix A. These techniques are intended as guidance for balancing the need for mobility with the desire for livable communities, and not as standards, policies or procedures of the MTPO.
- 6.4.2 **TDLC-Designated Corridors** The MTPO has identified corridors within the Gainesville Metropolitan Area to which TDLC criteria is to be implemented.

TDLC-DESIGNATED CORRIDORS				
FACILITY	FROM	то	DESIGNATION DATE	
State Road 26	NW 38 <sup>th</sup> Street	North-South Drive	April 11,2002	
State Road 26A	NW 38 <sup>th</sup> Street	North-South Drive	April 11,2002	

#### 7.0 ROADWAY POLICIES

7.1 **Main Street [SW 16<sup>th</sup> Avenue to Depot Avenue]-** FDOT resurface South Main Street as shown in Alternative 1 with two 11-foot travel lanes in each direction, a 5-foot bikelane and 7.25-foot onstreet parking lane. This policy was approved July 14, 1994.

#### 7.2 Mast Arms-

- 7.2.1 FDOT staff shall install mast arms with horizontal signal heads on all FDOT projects from this date forward. This policy was approved March 9, 1995.
- 7.2.2 Black is the color that the mast arms are to be painted. This policy was approved August 10, 1995.
- 7.3 **Newberry Road [NW 43<sup>rd</sup> Street to NW 38<sup>th</sup> Street]-** Onstreet parking shall remain on Newberry Road between NW 43<sup>rd</sup> Street and NW 38<sup>th</sup> Street. This policy was approved July 14, 1994.
- 7.4 **Retention / Detention Basins** At its October 4, 1999 meeting, the MTPO discussed the design of retention/detention basins. During this discussion, the MTPO approved a motion to:
  - A. refer the City and County revisions of their land development codes for the design of retention/detention basins to the MTPO's Design Team;
  - B. request that the City, County and the FDOT look into developing a rehabilitation strategy for existing retention/detention basins consistent with the revised land development codes; and
  - C. request that the City and County Commissions direct their respective staffs to develop a joint recommendation regarding retention/detention basins for the City and County land development codes.
  - 7.4.1 Stormwater retention/detention policies are incorporated in MTPO Landscaping Policies 4.4 and 4.5.
- 7.5 **Traffic Signal Preemption Devices** Future modifications of all signalized intersections within the GMA should include the installation of traffic signal preemption system devices. This policy was adopted September 9, 1999.

7.6 **Travel Demand Management (TDM) / Transportation System Management (TSM)**Implement TDM and TSM strategies for all roadway segments that are identified as operating at 85 percent or more of the capacity of the roadway. This policy was adopted February 9, 1995.

#### 7.7 Congestion Management System (CMS) Policy-

7.7.1 **Freight Movement Policy**- The MTPO, along with FDOT, has developed a truck route system for the GMA. The purpose of the truck route system is to allow interurban movement of goods to pass through the GMA by avoiding the most congested areas, such as the University of Florida and the downtown area. The adopted truck route system is shown in Appendix B.

#### 7.8 **Signage Policy-**

7.8.1 **Center Turnlane Policy**- All agencies remove "center turnlane" signs in the Gainesville Metropolitan Area and insure proper striping where appropriate.

#### 7.8.2 Signage Co-location Policy-

- 7.8.2.1. Co-locate as many signs a possible on existing utility poles and report legal concerns, regarding sign co-location, to the MTPO;
- 7.8.2.2. Co-locate "stop" and "street-name" signs during future normal maintenance activities, where feasible.
- 7.8.2.3. Identify corridors where co-location of these signs would be appropriate.

#### 8.0 TRANSIT POLICIES

The MTPO adopted transit policies on December 14, 1995, as part of the Year 2020 Long Range Transportation Plan update. These policies cover transit travel facilities. In addition, the MTPO approved a policy for bus bay location guidelines on December 12, 1985.

#### 8.1 Year 2020 Long Range Transportation Plan- Transit Element Activities

- 8.1.1 Encourage a balanced transportation system.
- 8.1.2 Increase transit usage.
- 8.1.3 Provide transit services for disadvantaged residents.
- 8.1.4 Increase the effectiveness and efficiency of the transit system.
- 8.1.5 Adequately serve the existing and projected demand for transit.
- 8.1.6 Promote the usage of transit through land use planning.

#### 8.2 **Bus Bays**-

- 8.2.1 Bus bays are bus stop areas along a roadway which have been created to permit buses to pull off the travel lane while boarding or discharging passengers in a manner which reduces the interference between buses and other traffic. (See Exhibit 6.)
- 8.2.2 Bus bays should be located on a case-by-case basis after consideration of the following guidelines, none of which shall be considered controlling:
  - A. where parking spaces are not provided along the roadway;
  - B. where there are at least 500 vehicles in the curb lane during the peak hour or there is an average annual daily traffic (AADT) count of 5,000 vehicles per lane;
  - C. where there are posted traffic speeds of 45 miles per hour or greater or an 85<sup>th</sup> percentile actual traffic speed of 45 miles per hour or greater;
  - D. where the average time that the bus is actually stopped at bus stops (does not include time for bus deceleration or acceleration) exceeds ten seconds per stop;
  - E. where existing right-of-way width is adequate to allow constructing the bus bay without adversely affecting sidewalk pedestrian flow;
  - F. where existing right-of-way is sufficient to permit the provision of bus bays without having to purchase additional right-of-way. With respect to this guideline, the appropriate local governing body (either the City or County Commission) should be consulted before FDOT decides not to build a bus bay because they are unable to purchase additional right-of-way;
  - G. where an inside travel lane does not exist for other vehicles to go around buses as they stop at bus stops; and
  - H. where vertical and horizontal roadway geometrics, as they relate to sight distance, are adequate.
- 8.2.3 Bus Bay Construction Policy- Bus bays should only be constructed within the GMA at locations specifically recommended by the MTPO after consideration of the bus bay guidelines listed above and review comments from the MTPO Advisory Committees. In addition, where a roadway has (or will have) instreet bicycle facilities, bus bays should be striped so that the bicycle traffic is routed to the left of the bus bay area.

#### 9.0 TRANSPORTATION ENHANCEMENT PROJECT POLICY

9.1 **Enhancement Project Cost Increase Policy**- The MTPO, on February 9, 1995, authorized the Technical Advisory Committee (TAC) Subcommittee to monitor the cost of enhancement projects on a regular basis and to use the following guidelines to notify the MTPO of significant increases in transportation enhancement projects:

PROJECT COST	PERCENT INCREASE
\$0 to \$50,000	100%
\$50,001 to \$100,000	50%
\$100,001 to \$200,000	25%
\$200,001 to \$500,000	15%
more than \$500,000	10%

#### 10.0 MTPO DESIGN TEAM

The MTPO Design Team was created in 1996 to advise the MTPO regarding transportation system project design in the GMA. In addition, the MTPO Design Team advises the Alachua County Commission on projects outside the GMA.

10.1 MTPO DESIGN TEAM COMPOSITION		
PERMANENT MEMBERS		
Alachua County Department of Environmental Protection		
Alachua County Public Works Department		
Alachua County Transportation Disadvantaged Coordinating Board		
Bicycle/Pedestrian Advisory Board		
Bicycle/Pedestrian Advisory Board Staff		
City of Gainesville Arborist		
City of Gainesville Beautification Board		
City of Gainesville Community Development Department		
City of Gainesville Gainesville Regional Utilities		
City of Gainesville Public Works Department		
City of Gainesville Regional Transit System		
Florida Department of Environmental Protection		
Florida Department of Transportation District 2 Planning		
MTPO Citizens Advisory Committee		
PROJECT MEMBERS		
City of Gainesville Community Redevelopment Agency (as necessary)		
Citizen A dvoca te (as appointed by MTPO for each project)		
Florida Department of Transportation Project Representative		

- 10.2 **MTPO Design Team Project Referral Criteria** Use the review of the draft TIP each year as a process to identify proposed projects that should be referred to its Design Team and to make referrals when a new or revised project:
  - 1. has preliminary engineering (PE) listed in the first year of the TIP; or
  - 2. has construction (CST) listed in the third year of the TIP.

The MTPO adopted this policy on June 11, 1998 and revised it on June 13, 2002.

#### APPENDIX A

## TRANSPORTATION DESIGN FOR LIVABLE COMMUNITIES DESIGN CRITERIA, PEDESTRIAN & BICYCLE CONSIDERATIONS AND TECHNIQUES

#### **DESIGN CRITERIA**

This criteria meets or exceeds AASHTO minimums. TDLC projects on State-maintained roadway facilities are subject to the requirements for Design Exceptions and Design Variations found in Chapter 23 of the FDOT *Plans Preparation Manual*.

- 1. **Design Speed-** Recommended design speeds are found in Section 1.9 of the FDOT *Plans Preparation Manual*.
- 2. **Number of Lanes** In developed urban areas, reducing the number of lanes may provide space for pedestrians, bicycles, parking, landscaping etc. This technique may be appropriate depending on the volume and character of traffic, the availability of right. of way, the function of the street, the level of pedestrian crossing, the intensity of adjacent land use and availability of alternate routes.

The decision to reduce the number of lanes on a project shall be supported .by an appropriate traffic capacity study. If transit vehicles and school buses are currently operating in the area of the project, appropriate local agencies should be consulted.

3. **Lane Widths**- Minimum lane widths for TDLC projects or segments are shown in Table A-1.

TABLE A-1 LANE WIDTHS

Lane Types	Width (feet)
Through Lanes	11 <sup>1</sup>
Turn Lanes	11 <sup>1</sup>
Parking Lanes (parallel).	8 <sup>2</sup>
Bicycle Lanes	4 <sup>3</sup>

<sup>1</sup> May be reduced to 10 feet in highly restricted areas with design speed < 40 mph having little or no truck traffic.

May be reduced to 7 feet (measured from face of curb) in residential areas.

<sup>5</sup> feet adjacent to on-street parking.

- 4. **Horizontal Alignment** A curvilinear alignment can be used to control vehicle speed by introducing a bend or curve on a tangent roadway. Design should meet criteria in Chapter 2 of the FDOT *Plans Preparation Manual*.
- 5. **Medians-** Requirements for medians are provided in Section 2.2 of the FDOT *Plans Preparation Manual*. Where continuous raised medians are not provided, such as on 5-lane sections, refuge areas should be provided at appropriate locations. These locations are typically near high pedestrian generators such as schools, park entrances, transit stops and parking lots. Refuge Islands must provide a large enough area for several pedestrians at once while at the same time be of sufficient size and spacing as to not create a hazard. For wheelchair accessibility, it is preferable to provide at-grade cuts rather than ramps.

For landscaping in medians see Section 10 below.

6. **Horizontal Clearance and Clear Zones**- Horizontal clearance is the lateral distance from a specific point on the roadway such as the edge of travel lane or face of curb, to a roadside feature or object. Horizontal clearance applies to rural and urban highways with either flush shoulders or with curbs. Horizontal clearance requirements vary depending on the type of roadway and the feature or object.

Clear zone is the roadside area available for safe use by errant vehicles. Clear zone is further described in Chapter 4 of the FDOT *Plans Preparation Manual*.

Roadway horizontal clearances and clear zone widths for Utility Installations, Trees, and Other Roadside Obstacles are found in Tables A-1, A-2, and A-4 respectively. For TDLC clear zone widths see Table A-5. Requirements for other horizontal clearances and clear zone see Chapters 2, 4 and 25 of the FDOT *Plans Preparation Manual*.

## TABLE A-2 HORIZONTAL CLEARANCE TO UTILITY INSTALLATIONS

Shall not be located within the limited access right of way, except as allowed by the FDOT

Telecommunications Policy, (Topic No. 000-625-025)

Shall not be allowed in the median.

Flush Shoulders: Not within the clear zone. Install as close as practical to the right of way line without aerial encroachments onto private property.

Curb or Curb and Gutter: At the Right of way line as close to the right of way as practical. Must be 1.5 ft. clear

from the face of curb. Placement within sidewalks shall be such that an unobstructed sidewalk width of 4 ft. or more (not including the width of the curb). is provided.

See the FDOT Utility Accommodation Manual, (Topic No. 710-020-00) for additional information.

#### **TABLE A-3**

#### HORIZONTAL CLEARANCE TO TREES

Minimum horizontal clearance to trees where the diameter is or is expected to be greater than 4 inches measured 6 inches above the ground shall be:

- 1. Flush Shoulders; Outside the Clear zone; and
- 2. Curb or Curb and Gutter- 1.5 ft. from the fact of curb and 3 ft. from the edge of the inside traffic lane where median cur's is present.

#### **TABLE A-4**

#### HORIZONTAL CLEARANCE TO OTHER ROADSIDE OBSTACLES

Minimum horizontal clearance to other road side obstacles:		
Flush Shoulders: Outside the Clear zone.		
Curb or Curb and Gutter: 1.5 ft, from the face of curb.		
Note: Horizontal clearance to mailboxes. is specified in the construction details contained in the FDOT Roadway and Traffic Design Standards, Index 532.		

TABLE A-5
TDLC CLEAR ZONE

Design Speed (mph)	Clear Zone Width (feet)		
< 30	12		
35	14		
40	16		

- 7. **Intersections** Intersection designs must adequately meet the needs of motorists, transit riders, bicyclists and pedestrians. Large return radii increases the crossing distance for pedestrians while small return radii decreases a vehicle's ability to negotiate the turn. Return radii must balance the needs of the pedestrian and the design vehicle. See Figure 21.1.
- 8. **Lighting-** Lighting requirements are discussed in Chapters 2 and 7 of the FDOT *Plans Preparation Manual*.
- 9. **Traffic Control** Where traffic volumes are high enough to require traffic signals, they should be placed to allow good progression of traffic from signal to signal. Optimal spacing of signals depends on vehicle operating speeds and signal cycle

lengths. At speeds of 35 mph and standard cycle lengths, signals must be at least a fourth of a mile apart. Such spacing is consistent with FDOT's requirements for state highways, and with its recommended minimums for local arterials and collectors.

Where traffic volumes are not high enough to warrant traffic signals, 4-way stop signs and roundabouts should be considered. Four-way stops are considered to have a traffic calming effect and cause minimal delays under light traffic conditions. Roundabouts allow traffic from different directions to share space in the intersection, while signals require traffic to take turns.

Where traffic volumes are high enough to warrant traffic signals but does not require them, roundabouts should also be considered.

If Roundabouts are being considered in a TDLC project, refer to the FDOT *Florida Roundabout Guide* for requirements.

10. Landscaping- Landscaping on a TDLC project can be provided when a local agency or organization agrees to assume the maintenance of the landscaped area in accordance with all Department requirements. See Chapter 9 of the FDOT *Plans Preparation Manual* and the FDOT *Florida Highway Landscape Guide* for landscape requirements.

Landscaping shall not interfere with the visibility of "permitted" outdoor advertising in accordance with Rule 14-40 of the Florida Administrative Code. Landscaping shall provide required sight distances in accordance with the FDOT *Roadway and Traffic Design Standards, Index 546*. Landscaping shall also comply with the horizontal clearance requirements found in Section 5 above, and Chapters 2, 4, and 25 of the FDOT *Plans Preparation Manual*.

- 11. **Parking** On-street parallel parking is preferred over angled parking on low speed urban streets. Angled parking causes conflicts with cars and bicycles, since drivers have poor visibility when backing out. Parallel parking can provide space for bike lanes, medians and wider sidewalks. The design of parking facilities should be coordinated with local transit agencies. For parking lane widths see Table A-1.
- 12. **Alternative Roadway Paving Materials** Alternative paving materials such as stamped asphalt, colored asphalt, patterned concrete and pavers may be used to accent the roadway.

The use of architectural pavers is not recommended on the state highway system. However; when the use of pavers is desirable for aesthetic purposes, they should be limited to areas with design speeds of 35 mph or less. Refer to the FDOT *Flexible Pavement Design Manual, (Topic No. 625-070-002)*.

Brick pavers must meet the Americans with Disabilities Act (ADA) requirements and are restricted to local side streets, medians and islands, curb extensions, sidewalk, borders, etc.

13. **Conversion to One-Way Pairs**- Converting to one-way pairs is the conversion of 2 two-way corridors to 2 one-way corridors operating in opposite directions. This technique requires a great deal of consideration, planning and public involvement.

Advantages to one-way pairs are increased safety for pedestrians and motorists, increased traffic capacity, retention of on-street parking, and easier signal progression along the corridor. One-way pairs may allow enough space to create bus lanes, more bus stops and improve the safe boarding for transit riders.

Disadvantages to one-way pairs are, motorists are likely to drive faster, transit circulation is less direct, and signal progression for cross streets is difficult to achieve.

#### PEDESTRIAN & BICYCLE CONSIDERATIONS

- 1. Sidewalks- For criteria refer to Chapter 2, Section 2.1.4 and Chapter 8 of the FDOT *Plans Preparation Manual*.
- 2. **Crosswalks** Marked crosswalks should be provided at signalized intersections. Marked crosswalks should also be provided at midblock crossing locations that are controlled by traffic signals and pedestrian signals, and school crossing locations that are controlled by guards during school crossing periods.

The use of unsignalized midblock crosswalks should be carefully considered. When used, midblock crosswalks should be illuminated, marked and outfitted with advanced warning signs or warning flashers. Pedestrian-activated, signalized midblock crosswalks are preferred, but locations must meet the warrants established in the FHWA *Manual of Uniform Traffic Control Devices (MUTCD) Chapter* 4C-2. An engineering study should be required before they are installed at locations away from traffic signals or STOP signs. Refer to FDOT's *Traffic Engineering Manual, (Topic No.750-000-005) and Roadway and Traffic Design Standards, Index No. 17346*.

3. **Curb Extensions (Bulb-Outs)-** Curb extensions, sometimes called bulb-outs, may be used at intersections, or at mid-block locations where there is a marked crosswalk, provided there is a parking lane into which the curb may be extended. Curb extensions shorten the crossing distance, provide additional space at intersections allowing pedestrians to see and be seen before entering a crosswalk. A curb extension is not generally used where there is no parking lane because of potential hazard to bicycle travel. The design must also take into consideration the needs of transit vehicles. See Figure 21.1.

Curb extensions affect drainage. The design must take into consideration runoff, and ponding. When retrofitting existing facilities, drainage structures maybe affected.

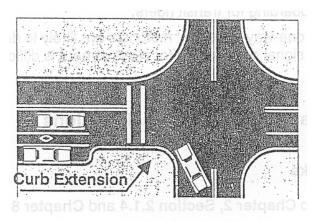


FIGURE 21.1

- 4. **Personal Security and Safety Amenities-** Personal security and safety is promoted by maximizing visibility in and along parking areas, building entrances, transit stops, sidewalks and roadways. This can be provided by the following techniques:
  - A. Providing fighting.
  - B. Lowering vegetation heights.
  - C. Removing hiding places.

The National Crime Prevention Council's publication, *Crime Prevention Through Environmental Design*, contains examples for designing safer communities.

5. **Bicycle Facilities**- Refer to Chapter 8 of the FDOT *Plans Preparation Manual* for design of bicycle facilities.

#### **TDLC TECHNIQUES**

Selected TDLC techniques applied by type of highway system are shown in the following Exhibits A-1, A-2, A-3 and A-4. These techniques are intended as guidance for balancing the need for mobility with the desire for livable communities, and not as standards, policies or procedures of the MTPO.

EXHIBIT A-1
TDLC GENERAL TECHNIQUES

	FIHS		SHS		
TECHNIQUE	LIMITED ACCESS	CONTROLLED ACCESS	URBAN	RURAL	NON- SHS
Improved location, oversized or redundant directional signs	A	A	A	M	М
Use of route markings/signing for historical and cultural resources	M	A	A	A	A
Increased use of variable message signing	A	A	A	M	М
Landscaping	M	M	M	M	M
Sidewalks or wider sidewalks	N	М	A	M	M
Street furniture	N	М	M	N	М
Bicycle lanes	N	М	M	M	М
Independent Shared Use Paths	N	M	M	M	M
Conversion to one-way street pairs	N	М	M	N	М
Alternative paving materials	N	N	M	N	M
Pedestrian signals, midblock crossings, median refuge areas	N	М	A	M	М
Parking modifications or restoration	N	N	M	N	М
Safety and personal security amenities	M	M	M	M	М
Street mall	N	N	N	N	М

A- Appropriate for the system or facility indicated.

M- May be appropriate for the system or facility indicated.

N- Not appropriate for the system or facility indicated.

EXHIBIT A-2
TDLC TECHNIQUES TO REDUCE SPEED OR TRAFFIC VOLUME

	FIHS		SHS		
TECHNIQUE	LIMITED ACCESS	CONTROLLED ACCESS	URBAN	RURAL	NON- SHS
Lower speed limits	N	N	N	N	N
Increase use of stop or multiway stop signs	N	N	N	N	N
Speed humps	N	N	N	N	M
On-street parking to serve as buffer between travel and pedestrian areas	N	N	M	N	M
Curb bulb-outs at ends of blocks	N	N	M	N	M
Traffic "chokers" oriented to slowing traffic	N	N	N	N	N
"Compact" intersections	N	A	A	A	A
Traffic roundabouts to facilitate intersection movement	N	М	M	M	M
Curviliear alignment (with redesign, chicanes, winding paths, etc.)	N	N	М	N	N
Street closing or route relocation	N	N	M	N	M

A- Appropriate for the system or facility indicated.

M- May be appropriate for the system or facility indicated.

N- Not appropriate for the system or facility indicated.

EXHIBIT A-3
TDLC TECHNIQUES TO SUPPORT SHIFTS BETWEEN MODES

	FIHS		SHS		
TECHNIQUE	LIMITED ACCESS	CONTROLLED ACCESS	URBAN	RURAL	NON- SHS
Sidewalks	N	M	A	M	М
"Pedestrian friendly" crosswalk design	N	M	A	M	M
Midblock pedestrian signals	N	M	M	M	M
Illuminated pedestrian signals	N	M	M	M	M
Bicycle lanes/paved shoulders	N	M	A	A	M
Independent Shared Use Path slowing traffic	N	M	M	M	M
"Bicycle friendly" design	N	M	A	A	A
Transit system amenities	N	M	A	M	M
HOV/Exclusive lanes	A	A	A	M	M
Linking modal facilities	A	A	A	A	A
Lower speed limits	N	N	N	N	N
Removal of street parking	N	N	M	M	М

A- Appropriate for the system or facility indicated.

M- May be appropriate for the system or facility indicated.

N- Not appropriate for the system or facility indicated.

EXHIBIT A-4
TDLC AREAWIDE TECHNIQUES

	FIHS		SHS		
TECHNIQUE	LIMITED ACCESS	CONTROLLED ACCESS	URBAN	RURAL	NON- SHS
Design the street network with multiple connections and relatively direct routes	N	N	N	N	М
Space through-streets no more than a half mile apart	N	N	N	N	М
Use traffic calming measures	N	M	M	N	M
Limit local speed to 20 mph	N	N	N	N	M
Limit lanes	M	M	M	M	M
Align streets to give buildings "energy-efficient" orientations	N	N	M	N	М
Avoid using traffic signals wherever possible. Space them for good traffic progression	N	A	A	A	A
Incorporate "transit-oriented" design	A	A	A	A	A
Use car pooling, flex-time and telecommuting	A	A	A	A	A
Design attractive "grænway" corridors	A	A	A	A	A
Design attractive storm water facilities	A	A	A	A	A

- A- Appropriate for the system or facility indicated.
- M- May be appropriate for the system or facility indicated.
- N- Not appropriate for the system or facility indicated.

[Page Left Blank Intentionally]

#### APPENDIX C

## MTPO URBAN DESIGN POLICY MANUAL (UDPM) REVISION LOG

UDPM REVISION			POLICY DESCRIPTION		
NUMBER	APPROVAL DATE	TYPE	NUMBER	DESCRIPTION	
01-01	February 15, 2001	Addition	5.4	Accessible pedestrian signals	
01-02	December, 13, 2001	Addition	7.8	Signage	
02-01	March 14, 2002	Addition	6.3	Graphic Depictions	
02-02	April 11, 2002	Addition	6.4	Transportation Design for Livable Community(TDLC)	
02-03	April 11, 2002	Addition	6.4.2	TDLC-Designated Corridor- State Roads 26/26A	
02-04	June 13, 2002	Revision	10.2	Revised Design Team project referral criteria	

S:\ms02\DT\policy.wpd

[Page Left Blank Intentionally]