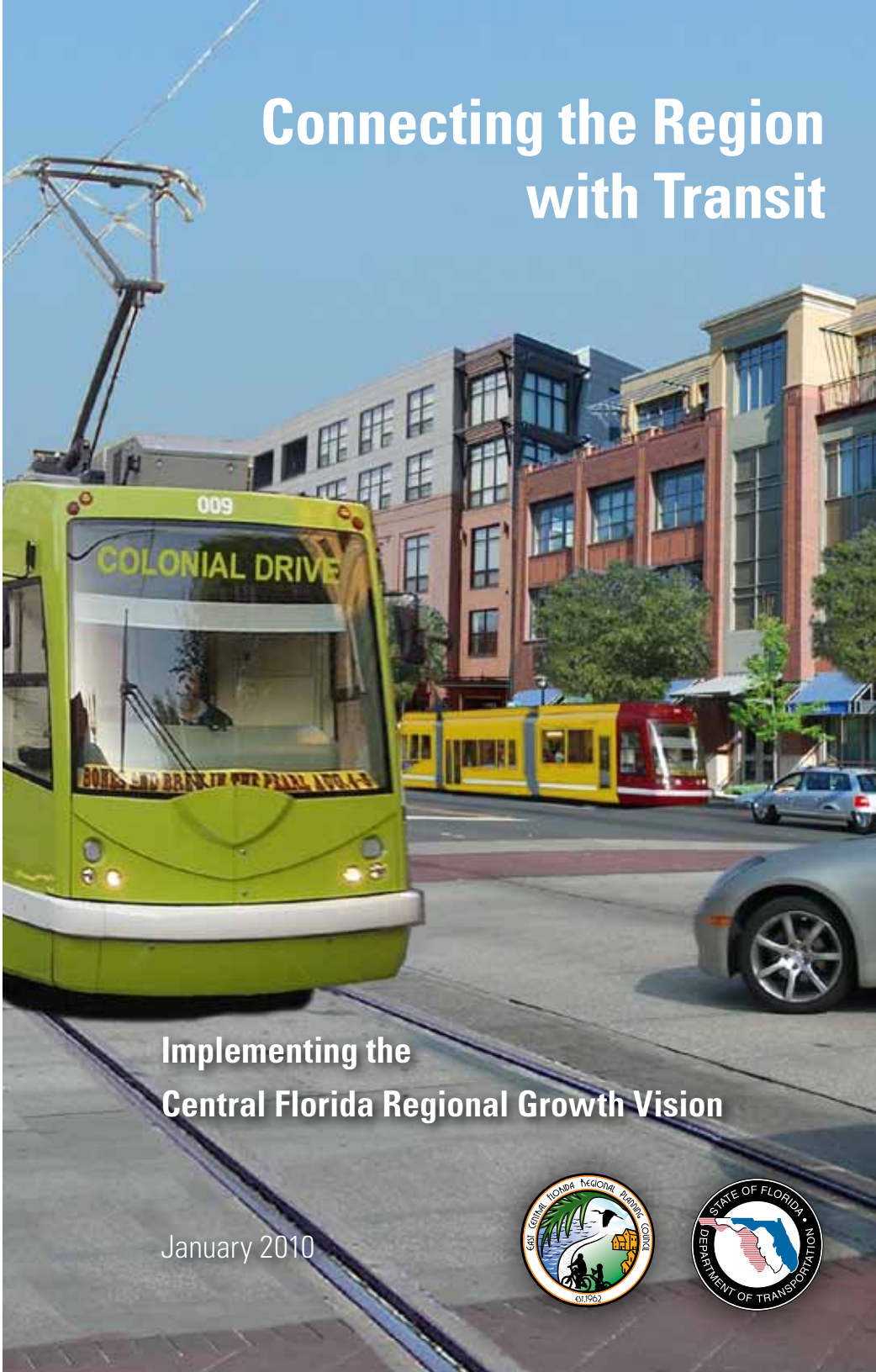
Connecting the Region with Transit



Implementing the Central Florida Regional Growth Vision

January 2010

East Central Florida Regional Planning Council
est.1962

State of Florida
Department of Transportation

Purpose of the Guidebook

The purpose of this document is to provide guidance to local governments of desirable growth characteristics that are consistent with the Central Florida 2050 Regional Growth Vision. The guidebook is intended for planners, elected officials, and developers and is a compilation of information from various sources. FDOT and ECFRPC encourage local governments in Central Florida to use this guide as a resource in their planning activities.

Acknowledgements

This guidebook was prepared through the mutual efforts of the **Florida Department of Transportation** – District Five and the **East Central Florida Regional Planning Council.** The guide is intended as a companion document to the "How Shall We Grow?" 2050 Regional Growth Vision for Central Florida. FDOT and ECFRPC were "How Shall We Grow?" funding partners. Project participants include the following:

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Lot map from Baldwin Park Master Plan.

Central Florida 2050 Regional Growth Vision

The East Central Florida Regional Planning Council (ECFRPC), in concert with *myregion.org,* FDOT, and other partners, completed the "How Shall We Grow?" regional visioning project in August 2007. The overwhelming choice of more than 20,000 Central Floridians is for a future that promotes more growth in mixed-use urban centers and provides great amenities like neighborhood parks, bikeways, and mass transit, which will enhance quality of life.

Local governments should consider six regional growth principles when making public, private, and civic investment decisions:

1. **Preserve open space, recreational areas, farmland, water resources, and regionally significant natural areas.**
2. **Provide a variety of transportation choices.**
3. **Foster distinct, attractive, and safe places to live.**
4. **Encourage a diverse, globally competitive economy.**
5. **Create a range of obtainable housing opportunities and choices.**
6. **Build communities with educational, health care, and cultural amenities.**

Artist rendering of the Central Florida Regional Growth Vision.
For additional information please visit **www.ecfrpc.org.**

Local Implementation — Best Practices

These local governments have set the tone for applying the shared regional vision at a community scale.

The East Central Florida Regional Planning Council worked with the **City of Cape Canaveral** on a community visioning project. Staff provided guidance to the City in their efforts to indentify redevelopment opportunities, plan a downtown, and determine the ideal architectural form, conceptualized through citizen engagement.

The **City of Tavares** led the region with the unveiling of their downtown Community Redevelopment Agency (CRA) Master Plan in 2007. The ECFRPC worked with the City to create a local vision that involved extensive citizen participation and input. Additionally, the city prioritized rail improvement projects to connect with SunRail in the future.

Seminole County restructured their entire comprehensive plan to support the principles of the 2050 Regional Vision, and has also engaged with the ECFRPC to conduct a 17-92 Corridor analysis (in partnership with the cities of Sanford and Winter Springs).

Osceola County amended their Comprehensive Plan to include policies for an Urban Growth Boundary and set minimum density thresholds within this boundary. The Urban Growth Boundary encompasses the already urbanized northwest quadrant of the county, which includes Kissimmee, St. Cloud, and Celebration. To complement these growth management policies the County developed a transit plan supporting commuter rail.

The **City of Maitland** Town Center is a planned infill redevelopment project near the proposed Maitland SunRail stop. The high density mixed-use plan includes park improvements to enhance connectivity between the parks and the Cultural Corridor, and features a new city hall and green roofs on all buildings.

The **City of Edgewater's** Restoration Development of Regional Impact is envisioned as a conservation-oriented, compact urban, transit-oriented, sustainable new town. This development, if built, could become the prototype for new development. It could also function as a relocation site if future sea level rise floods "old" Edgewater, leading to managed retreat.

Regional Transit System

The Federal Government supports a vision for high-speed rail to connect regions throughout the country. In Florida two high-speed rail corridors were identified to provide connections from Central Florida to Tampa and Miami.

The High-Speed Intercity Passenger Rail Program, under the American Recovery and Reinvestment Act, offers stimulus money for passenger rail projects throughout the United States. FDOT applied for four separate projects to receive funding: High-speed rail connecting Orlando to Tampa and Orlando to Miami, Central Florida Commuter Rail (SunRail), and Amtrak-Florida East Coast Passenger Service.

The Orlando-Tampa high-speed train will run along the I-4 median at speeds of up to 150 miles per hour. Stops include Orlando International Airport, the Orange County Convention Center, Walt Disney World, the City of Lakeland, and the old Morgan Street jail in Downtown Tampa.

The Florida Department of Transportation and Amtrak applied for Federal stimulus funds for the return of intercity passenger rail service along the Florida East Coast (FEC) corridor from Jacksonville to Miami.

METROPLAN Orlando recently developed a Regional Transit System Plan, displayed below. This plan, intended for aspirational purposes, illustrates the achievable multi-modal transportation opportunities intended to connect our region.

SunRail is Central Florida's planned 61.5-mile commuter rail service, which will travel through four counties from DeLand to Poinciana. As the spine of an integrated regional transportation system, SunRail is the first step to building a sustainable local economy.

The New Mexico Rail Runner Express is an example of one of the country's newest commuter rail systems.

Center Development

Types of Centers

Centers ranging from smaller hamlets and villages to larger towns and cities will be the region's focal point for future development. Each community should develop according to the size and character envisioned by its residents, consistent with the shared regional vision. Some communities may choose to create compact developments that can accommodate more residents; others may redevelop and redesign downtowns and central business districts to be more inviting; still others may remain much the same as they are today, whether they are rural communities or urban centers.

"The Rural-Urban Transect" has become an important tool for understanding and planning neighborhoods, towns, and cities. The six Transect Zones provide the basis for real neighborhood structure, which requires walkable streets, mixed-use development, transportation options, and housing diversity. The T-zones vary by the ratio and level of intensity of their natural, built, and social components. They may be coordinated to all scales of planning, from the regional to the community scale down to the individual lot and building.

(Source: Duany Plater-Zyberk & Company. The Rural-Urban Transect. 2003)

Elements of a Successful Center

Small blocks are a quality of great centers that provide enhanced visual interest, shorter walking distances, and more route choices than longer blocks by taking advantage of a traditional grid street pattern. A mixture of residential, commercial, service, employment, and public uses ensure that the center is utilized during all parts of the day. Sufficient residential densities reduce walking distances between residences and other destinations.

Although centers are designed to encourage walking, bicycling, and public transit, centers also incorporate the automobile. Parking should be placed artfully, mixing very visible locations with not so visible ones.

Buildings are primarily oriented to the street, with windows and main entrances connected to wide sidewalks and streetscape amenities, such as street trees, benches, kiosks, and plazas. All of the elements that make up a center should be designed to create vitality, variety, and visual interest, while deliberately mixing features and land uses to create a sense of place.

UPTOWN
ALTAMONTE

Corridor Development

Population densities and intensities throughout the corridor must be high enough to support transit ridership. Each transit component requires a minimum density for success.

High Speed Rail
High speed, high capacity; covers larger areas. Provides connections between regions.

Commuter Rail
Inner-city service between centers for inbound and outbound commuters during peak hours.

Light Rail/Streetcar
Faster than bus, slower than high speed rail; integrated into streetscapes; offers highest potential for reinvestment.

Bus Rapid Transit
Enhanced bus system; operates on fixed ROW and roads; combines flexibility of buses with the efficiency of rail.

Bus
Flexible, connects other modes of transit.

Aligning transportation and land use planning is essential to the success of corridors. Higher densities, a mix of uses, and a pedestrian scale help to create the corridor aesthetic.

Light Rail in Charlotte, NC

Streetcar in Memphis, TN

Transit Station Densities

Commuter Rail

Low	16 du/acre
Medium	30 du/acre
High	60 du/acre
Regional	100 du/acre

Station Density Radius: 1/4 mile

Light Rail/Streetcar

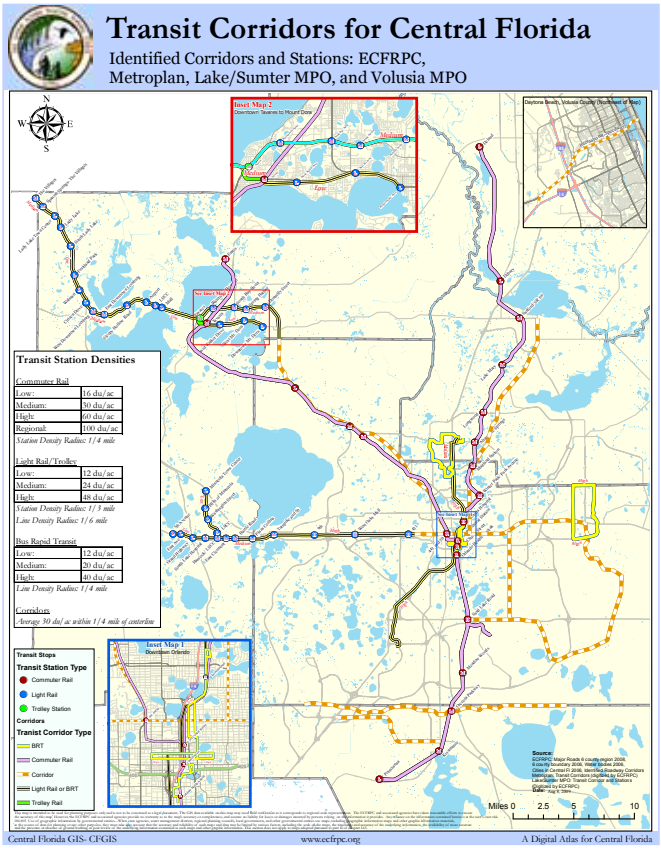
Low	12 du/acre
Medium	24 du/acre
High	48 du/acre

Station Density Radius: 1/3 mile
Line Density Radius: 1/6 mile

Bus Rapid Transit (BRT)

Low	12 du/acre
Medium	20 du/acre
High	40 du/acre

Line Density Radius: 1/4 mile



Corridors — *Average 30 dwelling units/acre, ¼ mile of centerline*

Bus Rapid Transit in Eugene, OR

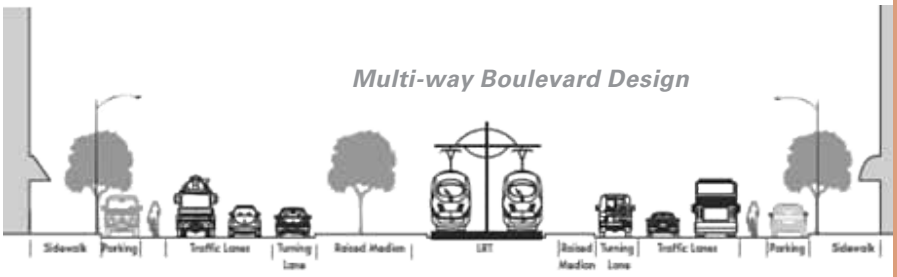
SR 50 in Central Florida
Potential Redevelopment Corridor

Planning for Transit

Streetcar neighborhoods, multi-way boulevards, and transit ready development work in conjunction to provide the foundation for an integrated transportation system. The key to successful planning is to establish the street network and reserve corridor rights-of-way before specific land use approvals are granted (Source: Canin Associates).

Streetcar Neighborhood

The streetcar neighborhood is a pedestrian friendly, walkable environment. Streetcars are fixed guideway transit, which is essential to leverage private investment as it reassures investors and new tenants that the public is committed to transit and its route. For example, in Portland, Oregon a $47 million dollar system resulted in $2 billion dollars in privately funded development; lesser known Kenosha, Wisconsin has seen $150 million dollars in new planned development following the City's $4 million dollar investment.



Multi-way Boulevard

Corridors should have sufficient rights-of-way for a multi-way boulevard. The multi-way boulevard balances the need to carry a high volume of through traffic with the need for local access and non-motorized transport. Multi-way boulevards are composed of two separate areas, a through-going central area, which carries high volumes of traffic on high capacity lanes, and a local pedestrian-oriented area, with a parallel frontage lane on each side that carries slower speed local traffic, contains on-street parking, and includes large accommodating sidewalks.

The Bus Rapid Transit (BRT) in Springfield, Oregon utilizes both the street network and a separate right-of-way.

Providing Transit Options

As the spine of the region's transportation system, SunRail will provide the foundation for feeder transit systems to connect nearby communities to the main line. Developing appropriate transportation linkages and land uses around each transit station will be critical for the success of the system.

Light Rail

In its 2035 Long Range Transportation Plan, METROPLAN Orlando identified Light Rail connecting International Drive to Medical City/Innovation Way (with stops at the Orlando International Airport and the Orange County Convention Center) as its second priority behind SunRail. Another potential Light Rail corridor is along Interstate 4 from Altamonte Springs south to Central Florida Parkway, providing more frequent stops than SunRail.

The conceptual Regional Transit System Plan (page 5) provides a framework for potential transit corridors.

The first streetcar built in the U.S. in over 60 years debuts in Portland, Oregon (Source: The Portland Sentinel)

Streetcar

METROPLAN Orlando is studying potential streetcar corridors in Orange County, Sanford, Kissimmee, Winter Park, and Downtown Orlando. Selection criteria for these corridors included connection to SunRail, high concentration of population and employment, existing pedestrian activity, and adequate right-of-way and lane width.

Bus Rapid Transit (BRT)

The LYMMO circulator is Downtown Orlando's first BRT service. It is a free service funded by parking revenues. Future expansion options include an East/West Downtown Circulator connecting the Thornton Park and Parramore neighborhoods to the future performing arts center, sports arena, and Citrus Bowl and a North/South Circulator from Orlando Regional Healthcare System to Florida Hospital. BRT has also been discussed for portions of U.S. Highway 17-92 and SR 50.

LYMMO Downtown Orlando Bus Circulator

FlexBus

FlexBus is a smart circulator that operates on a fixed route but deviates on demand to pick up riders requesting service at kiosks located throughout the service area. The FlexBus concept is an innovative transportation mode that is able to cost-effectively service low density suburban areas. FlexBus service is planned for Altamonte Springs. LYNX's PickUpLines are similar to FlexBus. Seven of these bus lines currently operate in the Orlando area.

BRT in Cleveland
(Source: Center for Neighborhood Technology)

Orange Blossom Express

The Orange Blossom Express is a proposed commuter rail branch that would connect Lake County to Metropolitan Orlando. Potential stations include Eustis, Tavares, Plymouth, Apopka, and Downtown Orlando.

Historic image of Lake County passenger train

Trails

Paved trails connecting to commuter rail stations have multiple benefits, including a reduced demand for park-and-ride lots, promotion of an active lifestyle, and the opportunity to capitalize on ecotourism. Both the DeLand and DeBary Stations are in close proximity to the Spring-to-Spring Trail which is part of the St. John's River to the Sea Loop, a 260-mile future heritage and ecotourism trail destination.

The Spring-to-Spring Trail in Volusia County

Transit Ready Development

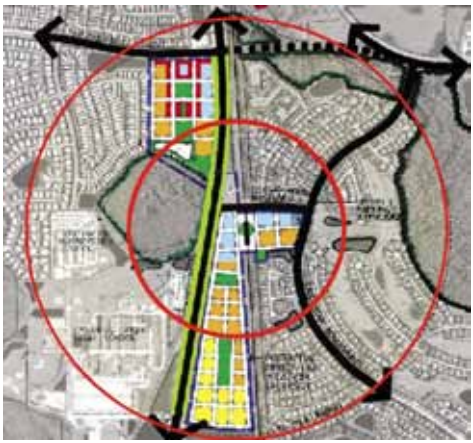
Transit Ready Development (TRD) is a strategy to preserve road right-of-way and to achieve appropriate land uses whether or not transit is immediately feasible.

Many communities face the challenge that the absence of high enough densities precludes future transit, and the absence of transit makes it difficult to develop appropriate densities. Advance planning can help solve this problem by fitting appropriate densities to appropriate modes of transportation.

Local governments should establish land use controls with minimum residential densities. If the local market does not support necessary densities, allow a section to be developed at a lower density, while reserving the higher density area for a later phase (Source: Canin Associates).

Elements of transit ready communities

- Designed to increase transit ridership. A mix of land uses and a pedestrian-friendly layout with sidewalks buffered from traffic by planting strips with street trees.
- Appropriate locations and routes for transit, either incorporated into current development or factored into future plans.
- An "urban" street grid with rights-of-way preserved for future transit opportunities.
- Public facilities designed as transit targets and appropriate housing densities to support transit.



The ¼ and ½ mile radius represent the 5 and 10 minute walk from the transit stop.

Transit Oriented Development

Transit Oriented Development (TOD) is a strategy to manage growth by planning for "moderate to high density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use." *(Source: California Department of Transportation Study Advisory Committee)*

Portland Streetcar route

Benefits of TOD

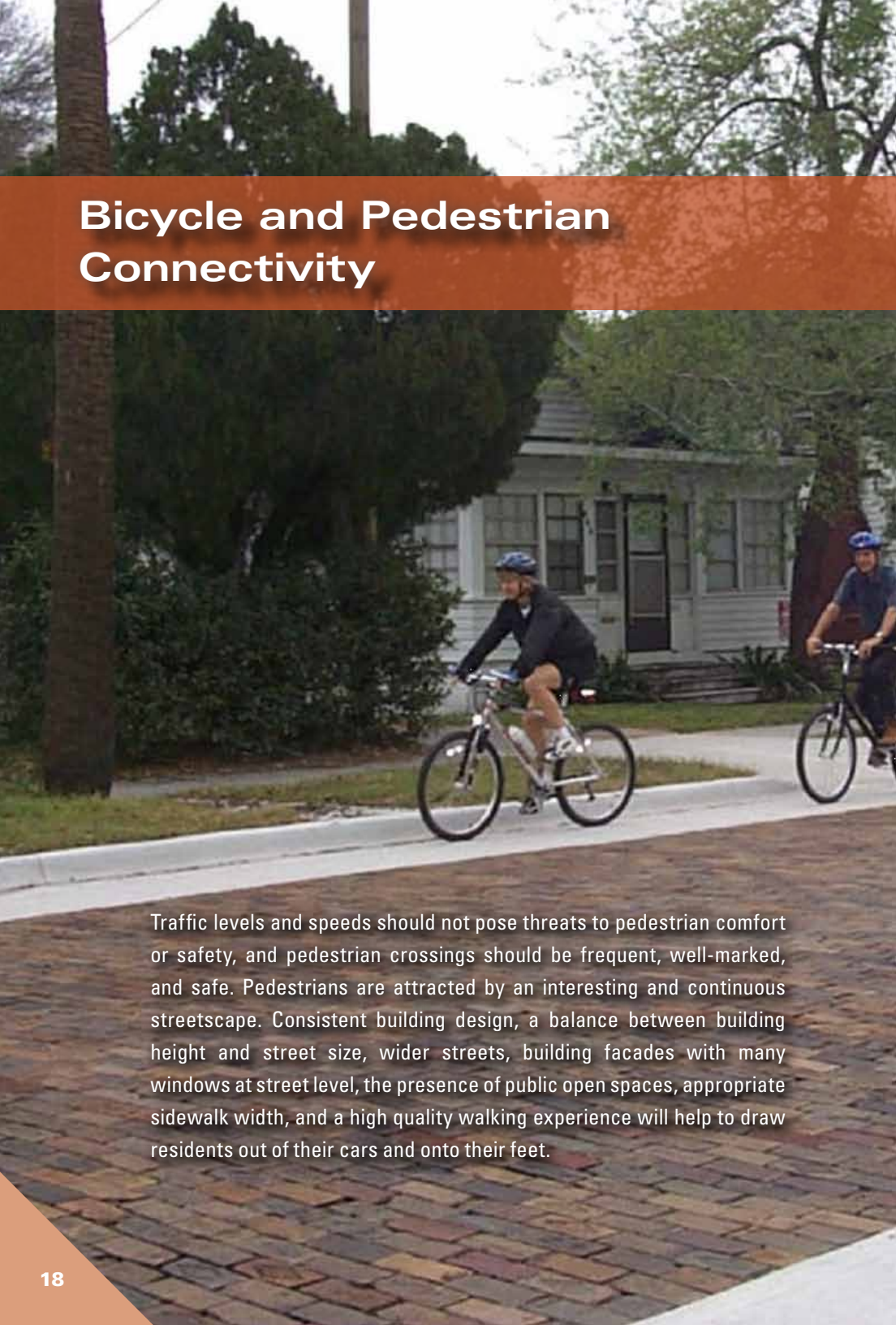
- Spurs local economic development
- Provides mobility choices
- Increases transit ridership
- Increases disposable household incomes
- Reduces air pollution and energy consumption rates
- Reduces rates of vehicle miles traveled (VMT)
- Decreases local infrastructure costs

Charlotte LYNX Blue Line stop

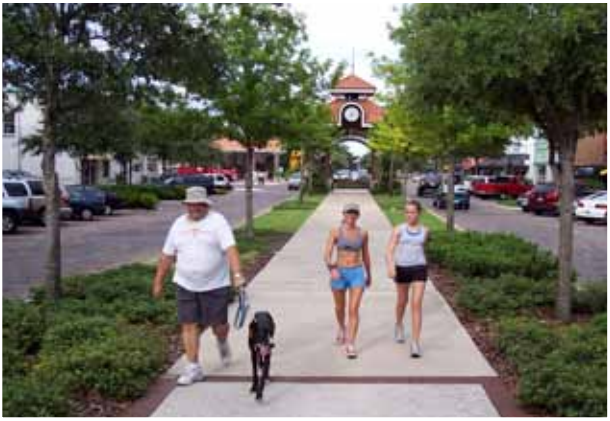
TOD seeks to align transit investments with a community's vision for how it wants to grow. A successful TOD will reinforce both community and transit systems.

SunRail is Central Florida's planned commuter rail project linking Volusia, Seminole, Orange, and Osceola counties. The 31-mile first phase of SunRail will serve 12 stations, linking DeBary to Orlando. Phase II will connect five additional stations, extending north to DeLand and south to Poinciana. SunRail will function as the transit spine for our region, effectively connecting people, goods, and services. SunRail is scheduled to begin operations in 2013 and is anticipated to serve as an alternative to I-4 as it undergoes major reconstruction. FDOT is developing a funding strategy for the I-4 reconstruction project.

Bicycle and Pedestrian Connectivity



Traffic levels and speeds should not pose threats to pedestrian comfort or safety, and pedestrian crossings should be frequent, well-marked, and safe. Pedestrians are attracted by an interesting and continuous streetscape. Consistent building design, a balance between building height and street size, wider streets, building facades with many windows at street level, the presence of public open spaces, appropriate sidewalk width, and a high quality walking experience will help to draw residents out of their cars and onto their feet.



The bicycle and pedestrian network is an important component of a true multimodal transportation system. Connecting these modes can enhance accessibility, reduce dependency on the automobile, and offer convenient recreational and fitness opportunities. In addition to enhancing the quality of life for residents, the increased use of bicycles and other non-motorized modes of transit can prevent environmental degradation and conserve energy.

Regional Planning Council Technical Assistance

The East Central Florida Regional Planning Council (ECFRPC) is a public agency that provides technical assistance to the public, private, and institutional sectors in a six-county area to address regional and community issues. The ECFRPC offers services to the local governments in Brevard, Lake, Orange, Osceola, Seminole, and Volusia counties.

ECFRPC Services

Community & Regional Visioning

ECFRPC engages citizens to determine strengths, weaknesses, opportunities, and threats in their communities in order to establish and implement a shared vision for future development. Assessment tools include visual preference surveys, which help citizens to conceptualize how their community will look at build out.

Corridor Analysis & Parcel Underutilization Analysis

ECFRPC staff conducts studies that focus on collecting, documenting, and analyzing current land use patterns. Staff reports identify potentially underutilized parcels and explore land readjustment opportunities in order to revitalize the study area's local economy. ECFRPC recently completed corridor analysis studies for sections of 17-92 between Sanford and Fern Park (study area excluded the City of Casselberry).

City of Cape Canaveral entrance feature and redevelopment illustration by Urban Design Solutions, Inc. developed from the results of the Cape Canaveral Vision Project (www.urbds.com).

The ECFRPC office is now located at 309 Cranes Roost Boulevard in Uptown Altamonte, a mixed-use, walkable urban center.

Charrette & Workshop Faciliation

ECFRPC engages the region in charrette and workshop facilitation to urge communities to support the 2050 Regional Vision. The ECFRPC recently worked with the City of Palm Bay on two sign code charrettes and coordinated a regional economic development and trails workshop ("Trails and the Green").

Mapping & Geographic Information Systems (GIS)

GIS technical assistance is available to local governments and other municipalities that do not have or have limited GIS capabilities.

This may include:

- GIS training
- Preliminary creation of future land use, conservation, and park layers
- GIS analysis (underutilization, redevelopment)
- Development of base map series for local governments

The **Central Florida Geographic Information System** (CFGIS) is a program of the ECFRPC, developed in partnership with FDOT. CFGIS has been serving 10 counties in Central Florida since 2001. The program provides GIS computer mapping professionals and data map users with a forum to communicate and share data. It also provides services in developing spatial mapping applications and modeling analysis for all.

Economic Development

Prosperous Economy = Flourishing Society

The ECFRPC provides technical assistance to help local governments analyze the impacts of policies and projects on the region's economy. Decisions regarding growth management, economic diversification, and land use must be made with the best available information.

Council staff specializes in studying the economic and fiscal effects of proposed initiatives or developments.

The program is made up of three parts:

1. Economic Impact Research and Analysis
2. Fiscal Impact Research and Analysis
3. Management of the region's Comprehensive Economic Development Strategy (CEDS), which integrates growth management and economic planning

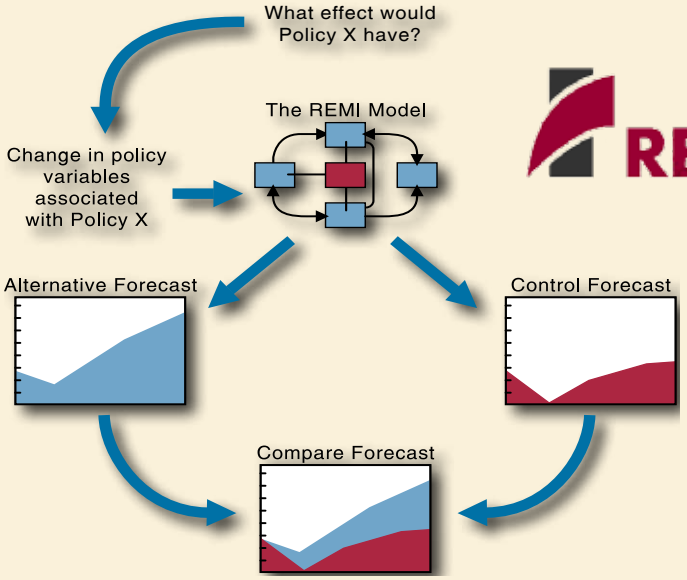
Image courtesy of Metro Orlando EDC

ECFRPC tools and models are industry leading.

ECFRPC utilizes the REMI policy insight model to assist local governments with economic development planning and economic impact analysis. Regional Economic Models, Inc. (REMI) was founded in 1980 on the transformative idea that government decision-makers should test the economic effects of their policies before they are implemented. REMI policy insight is now the world's leading policy analysis model. The REMI model is a dynamic forecasting and policy analysis tool that is utilized to create a comprehensive model that answers "what if...?" scenario questions about local economies.

In 2007, the ECFRPC developed the region's Comprehensive Economic Development Strategy (CEDS) and officially qualified as an Economic Development District. The CEDS promotes regional economic development through public and private sector collaboration in order to stay globally competitive in the 21st century. Included in the region's CEDS is a list of priority projects that are eligible for federal funding through the Economic Development Administration (EDA).

The Fiscal Analysis Tool (FAT) can be used to analyze any type or scale of development in the region. Once calibrated to the specific city or country, economists are able to measure any project's fiscal effects in terms of revenues generated and expenditures incurred as a result of new activities.



Helping decision makers with economic impact studies and economic development policy analysis.

Funding Opportunities

Financing for Center and Corridor Projects

Some funding is available through FDOT to implement the ideas in this guidebook, but additional funding sources are needed. The following financing techniques have been used to support center and corridor projects in communities throughout the U.S.

Special Assessment Districts/Tax Increment Financing

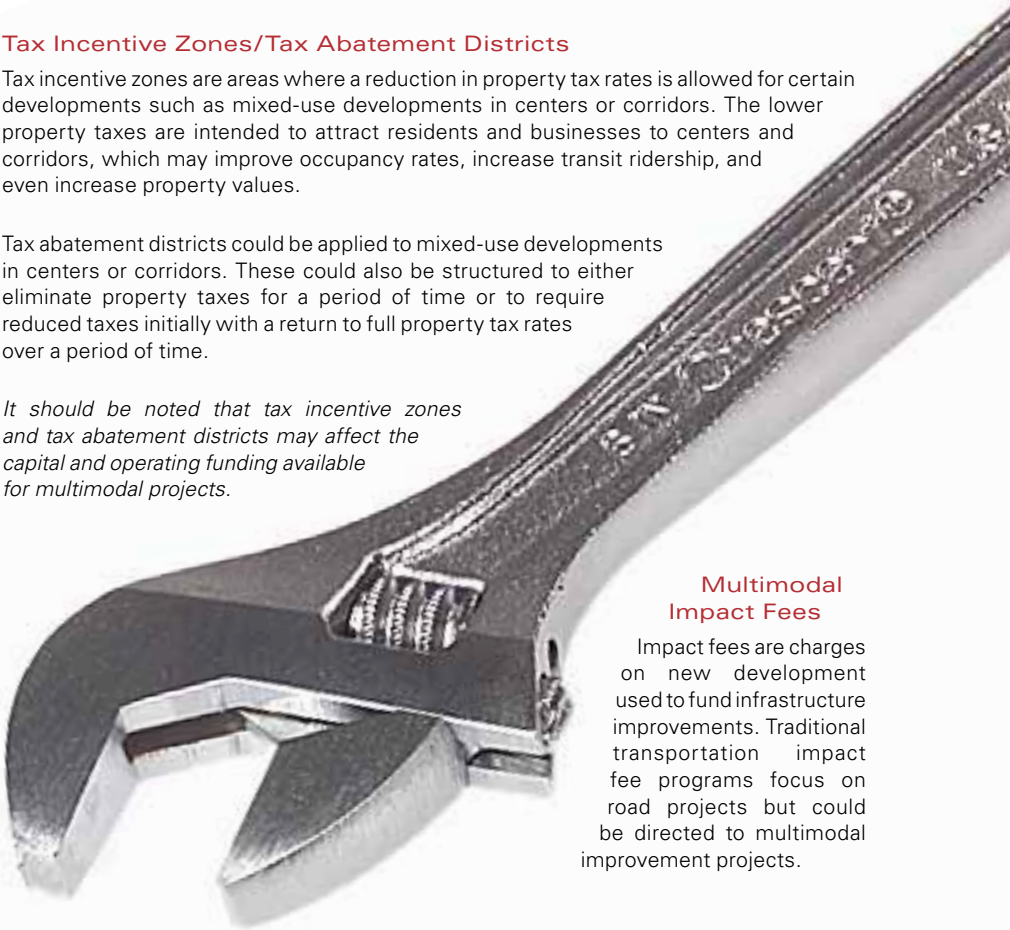
Districts with special tax rates can be developed to capture (1) the additional property taxes generated by new private development projects in the vicinity of centers and transit stations and (2) increases in the value of nearby property that result from investments in corridor or transit infrastructure. These revenues can be directed towards additional investments and/or transit operating costs.

Tax Incentive Zones/Tax Abatement Districts

Tax incentive zones are areas where a reduction in property tax rates is allowed for certain developments such as mixed-use developments in centers or corridors. The lower property taxes are intended to attract residents and businesses to centers and corridors, which may improve occupancy rates, increase transit ridership, and even increase property values.

Tax abatement districts could be applied to mixed-use developments in centers or corridors. These could also be structured to either eliminate property taxes for a period of time or to require reduced taxes initially with a return to full property tax rates over a period of time.

It should be noted that tax incentive zones and tax abatement districts may affect the capital and operating funding available for multimodal projects.



Multimodal Impact Fees

Impact fees are charges on new development used to fund infrastructure improvements. Traditional transportation impact fee programs focus on road projects but could be directed to multimodal improvement projects.

Advertising/Sponsorship

Private companies may pay a fee as a sponsor of a particular transit facility (such as a station) and receive advertising exposure in exchange. The Portland Streetcar, for example, offers numerous sponsorship and advertising opportunities for individual streetcars and stations as well as brochures and transit guides.

Parking Fees and Fines

A portion of parking fees and fines could be used to fund center and corridor projects. In addition to providing additional revenue, these funds could have the effect of encouraging commuters to switch from single-occupancy vehicle travel to alternative modes such as carpooling, vanpooling, and transit. Increased transit ridership can lead to increased farebox revenue.

Location Efficient Mortgage Programs

Location Efficient Mortgage Programs (currently available in Seattle, Chicago, San Francisco, and Los Angeles) take advantage of the fact that people who live in areas with plentiful transit options are likely to spend a lower percentage of their income on transportation. Such programs allow more people to live in centers that are supported by multimodal infrastructure, thus increasing the likelihood of the center's success.

Transit Service Development Grants

FDOT awarded a service development grant to LYNX to develop a fixed-route bus line serving Clermont and the Four Corners area. This line, the Clermont Express, connects to the LYNX Central Station in downtown Orlando and is supported by a park-and-ride lot constructed by FDOT.

Partnerships

Joint development describes collaborative partnerships between public and private entities to develop publicly owned lands in a manner that is transit-supportive. Public entities such as transit agencies may lease development rights to private entities or take an active role in design and cost-sharing. Potential revenues for the public entity may include lease income, a portion of the development's revenues, and increased farebox revenue.

FDOT Regional Commuter Assistance Program

FDOT promotes the use of alternative modes of transportation through reThink, the District 5 Regional Commuter Assistance Program. reThink's goals are to save commuters money, reduce congestion, improve air quality, and conserve natural resources by asking Central Florida workers to reThink their commute. This regional program offers ridematching, outreach, and incentive programs. More information is available at www.reThinkYourCommute.com.

For copies of the Guidebook please contact the **East Central Florida Regional Planning Council** at **(407) 262-7772**

Cover image courtesy of Canin Associates