

TRANSIT ORIENTED DEVELOPMENT TOOLBOX:

REGIONAL & STATEWIDE COORDINATION EFFORTS

TOD TOOLBOX: **Florida TOD Guidebook**

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Treasure Coast Regional Planning Council
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TOD TOOLBOX:

Florida TOD Guidebook

PURPOSE: Provide statewide guidance to promote, define, and advance transit-oriented development in appropriate locations across the State of Florida

AUDIENCE: Local governments (staff & elected officials), agencies & organizations, private sector, and the general public



Why Should I Care About Transportation and Land Use?





Report: I-95 In Fla. Most Dangerous Roadway In Country

*662 Fatal Accidents, 765 Total Fatalities
Occurred On I-95 From 2004 To 2008*

2010 Most Congested Regions in US:

Southeast Florida Rankings

#7 in Travel Delay

140 Million hours lost per year

#8 in Congestion Costs

\$3.2 Billion wasted per year

SOURCE: TTI 2010 Urban Mobility Report (Dec 2010)



Report: I-95 In Fla. Most Dangerous Roadway In Country

*662 Fatal Accidents, 765 Total Fatalities
Occurred On I-95 From 2004 To 2008*

Predictability?



"Let our advance worrying become
advance thinking and planning."
-- Winston Churchill

Is Green on the Agenda?



400 cars = 8 Buses = 1 Commuter Rail

**Taking Transit to Work is the Best Way
to Reduce Household Carbon Footprint**

Science Applications International Corporation (2007)

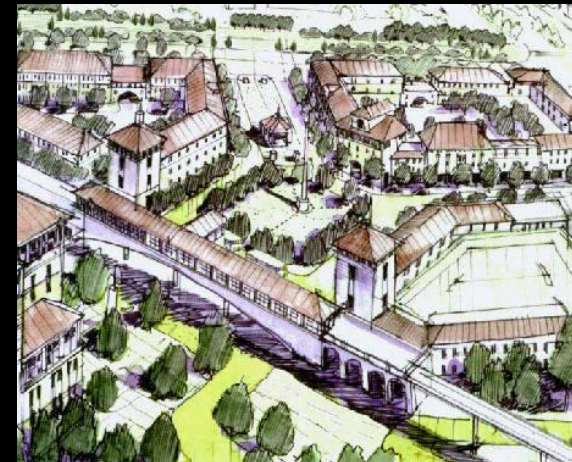


A Paradigm Shift

What is TOD ...

Transit Oriented Development

- Walkable “villages” located at & around transit stations in a ¼ to ½ mile ring
- Contains broad mix of uses (such as residential, office, retail, entertainment, civic/cultural)
- Tie-into local transit (Palm-Tran, trolleys)
- Densities appropriate to context
- More compact than surrounding areas
- Built around civic plazas & community spaces
- Appropriate treatment of parking (shared, reduced & structured)



TOD vs. TAD



- Transit Oriented Development

vs.

- Transit Adjacent Development

- Auto-oriented uses
- Large surface parking lots
- Suburban office campuses
- Big-box format retail
- Pedestrian unfriendly



TOD “Typology”



City Center



Town Center



Neighborhood Station



Employment Center Station

TOD “Typology”



Local Park-n-Ride



Regional Park-n-Ride



Airport / Seaport



Special Event Venue

Different Transit “Technologies”



Intercity Passenger Rail (Amtrak)



Trolley or Streetcar



High Speed Rail



Commuter Rail (SunRail; Tri-Rail)



Local/Regional Bus



Bus Rapid Transit



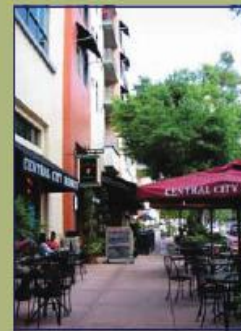
Light Rail



Florida Transit-Oriented Development



Florida TOD Framework (PHASE I)



A FRAMEWORK FOR TRANSIT ORIENTED DEVELOPMENT IN FLORIDA

Prepared for:

Florida Department of Transportation and
Department of Community Affairs

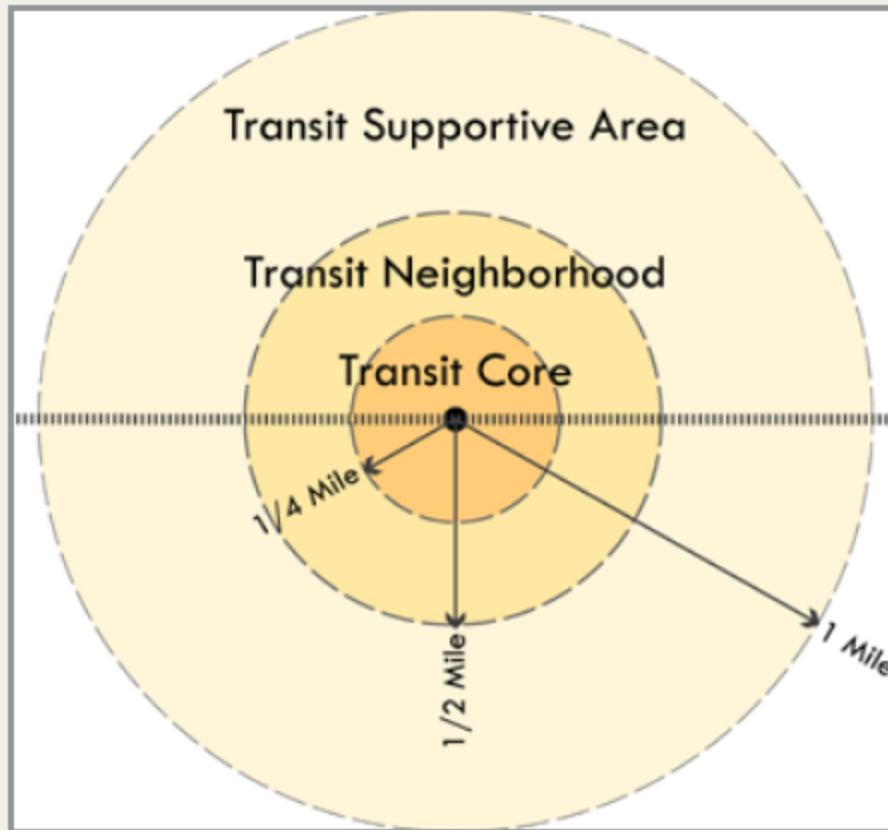
MARCH 2011



www.fltod.com

Florida TOD “Framework”

TOD Overview



Station Area: one-half mile or approximately 500 acres around transit station composed of transit core and transit neighborhood

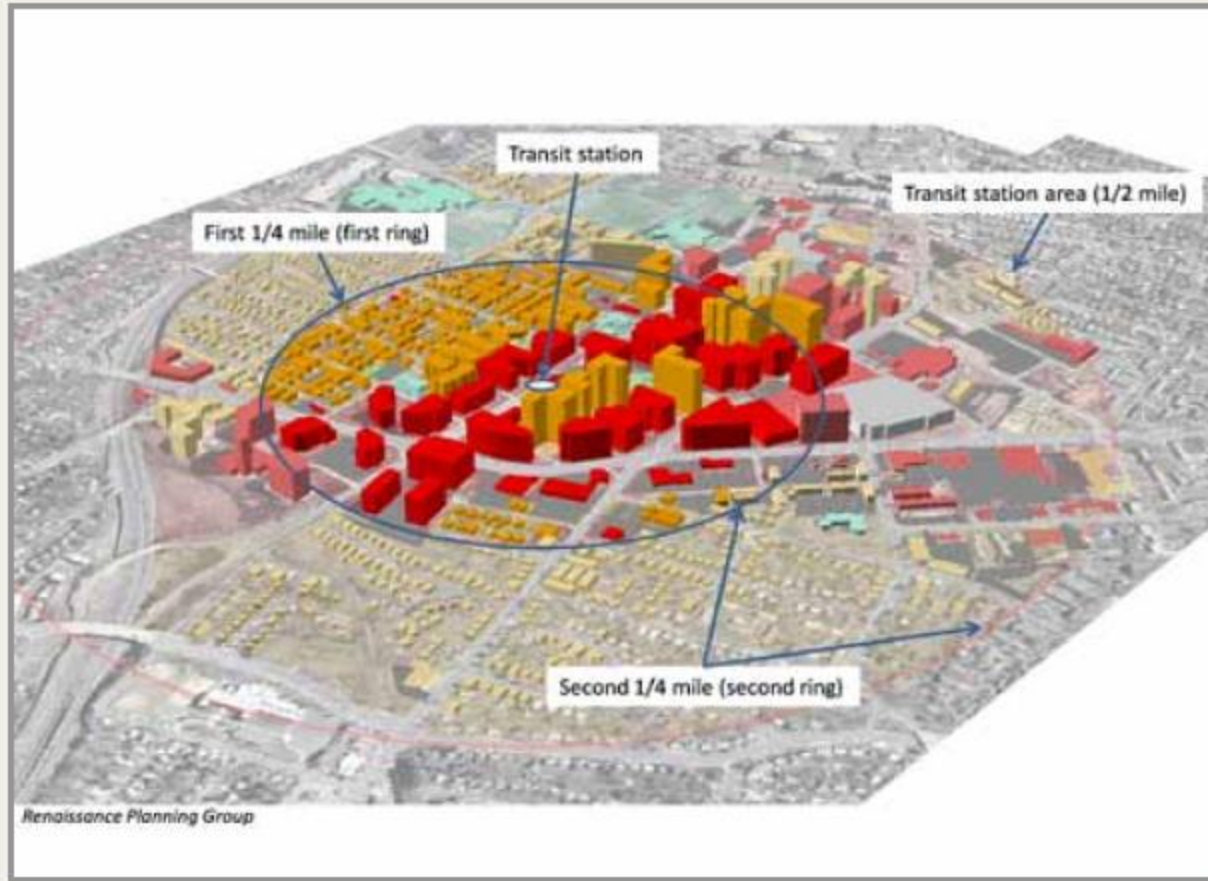
Transit Core: first-quarter mile or approximately 125 acres around transit station

Transit Neighborhood: second-quarter mile or approximately 375 acres surrounding transit core

Transit Supportive Area: one mile around transit station

Florida TOD “Framework”

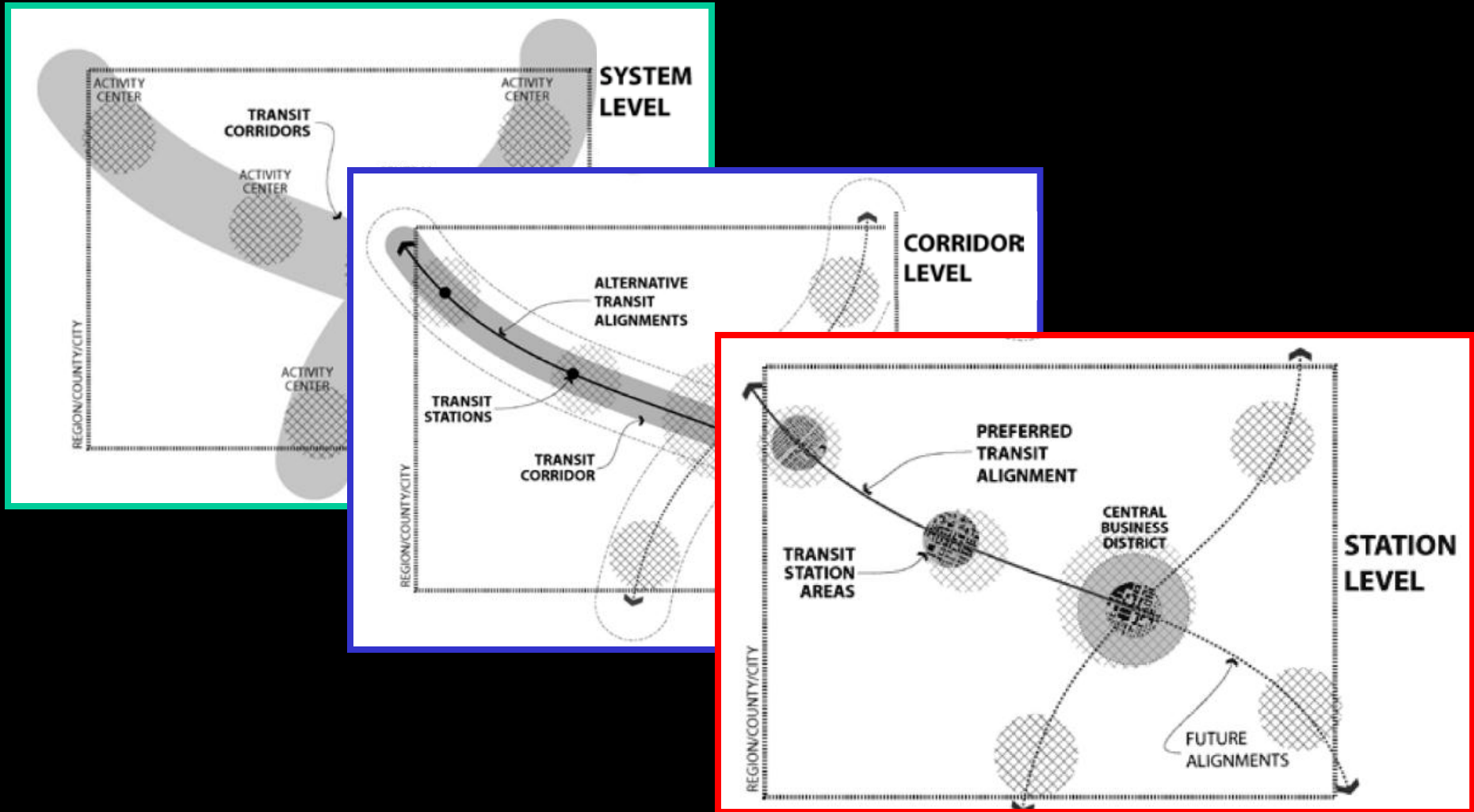
Illustrative Examples



More information on the Ballston Metro Station and associated Rosslyn-Ballston Corridor is provided with Figure 11 in Section 2.0.

Florida TOD “Framework”

TOD Planning Scale

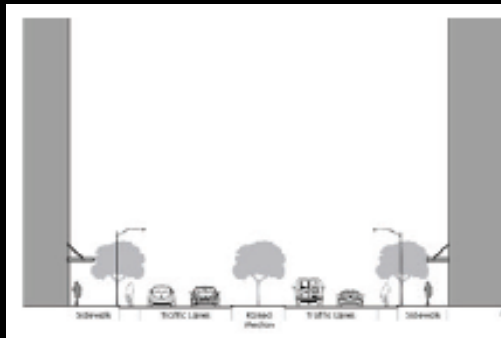


Available on www.fltod.com

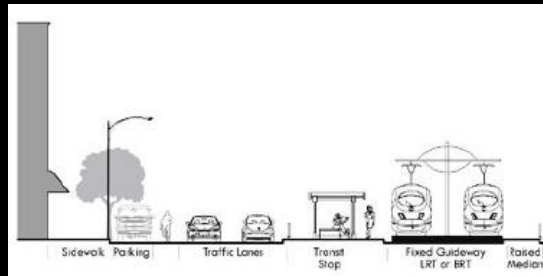
Florida TOD “Framework”

TOD Typology

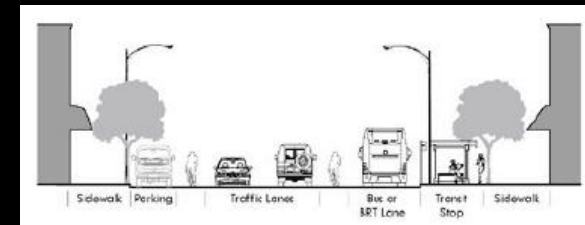
REGIONAL CENTER



COMMUNITY CENTER



NEIGHBORHOOD CENTER



Metrorail Station, Downtown Miami, Florida



Civic plaza, west coast of Florida



Downtown Stuart, Florida

Available on www.fltod.com



Florida Transit-Oriented Development



Florida TOD Guidebook & Training

(PHASE II)

Research & Bibliography

TOD Typology

Florida Place Type Analysis

Model Conceptual Plans

Model Comp. Plan Policies
& LDRs

Guidebook Development

Statewide Training

Project Website



[Home](#)

[Phase I - TOD Framework](#)

[Project Background](#)

[Framework Document](#)

[Phase II - TOD Handbook](#)

[Project Background](#)

[Project Schedule](#)

[Research](#)

[Case Studies](#)

[Place Type Analyses](#)

[Pilot Locations](#)

[Model Policies/Codes](#)

[Florida TOD Guidebook](#)

[Local Agency Training](#)

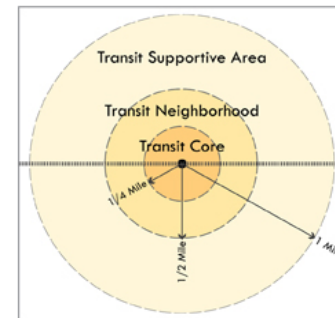
[Links](#)

[Search Site](#)

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What is TOD?

In simplest terms, Transit-Oriented Developments (TODs) are compact, moderate to high intensity and density, mixed use areas within one half mile of a transit stop or station that is designed to maximize walking trips and access to transit. They also are characterized by streetscapes and an urban form oriented to pedestrians to promote walking trip to stations and varied other uses within station areas. One quarter-mile and one-half mile distances represent a 5 to 10 minute walk time, which is the amount of time most people are willing to walk to a destination. The most intense and dense development is typically located within the one quarter mile radius (transit core). Developments' intensities and densities gradually decrease out to the one-half mile radius (transit neighborhood) and the one mile radius (transit supportive area). The transit core, the transit neighborhood, and the transit supportive area are depicted in the image below.



Florida's TOD Efforts

The Florida Department of Transportation is focusing on the development of TOD strategies and guidance to promote land use policies and designs to leverage statewide investments in multimodal transportation systems. Phase I of the TOD planning effort is complete with the publication of A Framework for TOD in Florida. Phase II is currently ongoing and involves the development of a Handbook containing model land use policies and land development codes in support of TOD. The Framework and Handbook are designed to be used in partnership with the FDOT to assist in promoting multimodal system planning and managing congestion on state roadways, especially on the Strategic Intermodal System (SIS). By focusing land use and urban design policies towards transit, local governments can help optimize future transit investments and potential transit ridership.

Contact:

[Florida Department of Transportation](#)

[Diane Quigley](#), Transit Planning Administrator

Preliminary TOD Typology

PROPOSED TYPOLOGY ~ STATION AREA TYPES

(VARY BY TYPE OF TRANSIT; INCLUDES BOTH BUS & RAIL)

Rural	Suburban	Urban
		Urban Downtown (City Center)
		<i>(local, commuter, intercity)</i>
(Rural) Town Center	Commuter (Suburban) Town Center	Urban Town Center
<i>(local, commuter)</i>	<i>(local, commuter, intercity)</i>	<i>(local, commuter, intercity)</i>
	Suburban Neighborhood Station	Urban Neighborhood Station
	<i>(local, commuter)</i>	<i>(local, commuter)</i>
	Suburban Employment Center	Urban Employment Center
	<i>(local, commuter)</i>	<i>(local, commuter)</i>
	Local Park-and-Ride	Local Park-and-Ride
	<i>(local, commuter)</i>	<i>(local, commuter)</i>
	Regional Park-and-Ride	
	<i>(local, commuter)</i>	
	Special Event Venue *	Special Event Venue *
	Airport/Seaport *	Airport/Seaport *

Project Website



Home

Phase I - TOD Framework

Project Background

Framework Document

Phase II - TOD Handbook

Project Background

Project Schedule

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Case Studies

Place Type Analyses

Pilot Locations

Model Policies/Codes

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Phase I - TOD Framework Project Background Framework Document

The Florida Department of Transportation is focusing on the development of TOD strategies and guidance to promote land use policies and designs to leverage statewide investments in multimodal transportation systems. Phase I of the TOD planning effort is complete with the publication of A Framework for TOD in Florida. Phase II is currently ongoing and involves the development of a Handbook containing model land use policies and land development codes in support of TOD. The Framework and Handbook are designed to be used in partnership with the FDOT to assist in promoting multimodal system planning and managing congestion on state roadways, especially on the Strategic Intermodal System (SIS). By focusing land use and urban design policies towards transit, local governments can help optimize future transit investments and potential transit ridership.

Contact:

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[Diane Quigley](#), Transit Planning Administrator

Project Website



242

Documents
(and counting)
(1.9 Gigabytes)

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[Project Background](#)

[Framework Document](#)

[Phase II - TOD Handbook](#)

[Project Background](#)

[Project Schedule](#)

[Research](#)

[Case Studies](#)

[Place Type Analyses](#)

[Pilot Locations](#)

[Model Policies/Codes](#)

[Florida TOD Guidebook](#)

[Local Agency Training](#)

[Links](#)

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General TOD

Sustainability

Marketability

Transportation

Housing

Bus Rapid Transit

Florida DOT

About Form-Based Codes

TOD and Form-Based Codes in Florida

TOD and Form-Based Codes outside Florida

Urban Design

Search Site

Project Website



[Home](#)

[Phase I - TOD Framework](#)

[Project Background](#)

[Framework Document](#)

[Phase II - TOD Handbook](#)

[Project Background](#)

[Project Schedule](#)

[Research](#)

[Case Studies](#)

[Place Type Analyses](#)

[Pilot Locations](#)

[Model Policies/Codes](#)

[Florida TOD Guidebook](#)

[Local Agency Training](#)

[Links](#)

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Place Type Analyses

Urban

[Miami](#)

[Orlando](#)

[Tallahassee](#)

[West Palm Beach](#)

Suburban

[East Naples](#)

[Daytona Beach](#)

[Plantation](#)

[Pasco](#)

Rural

[Sebring](#)



Interactive Map of Place Type Analyses

Place Type Analysis

Aerial

*West Palm Beach
Example*

West Palm Beach

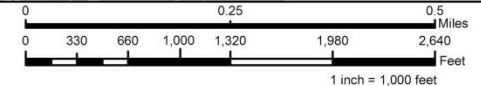
Existing Conditions

Revised 6/27/11



Legend

●	Transit Station	○	1/4 mi Radius	○	1/2 mi Radius
Land Area (Acres)					
1/4 mile	138.05				
1/2 mile	415.53				
Total	553.58				



Place Type Analysis

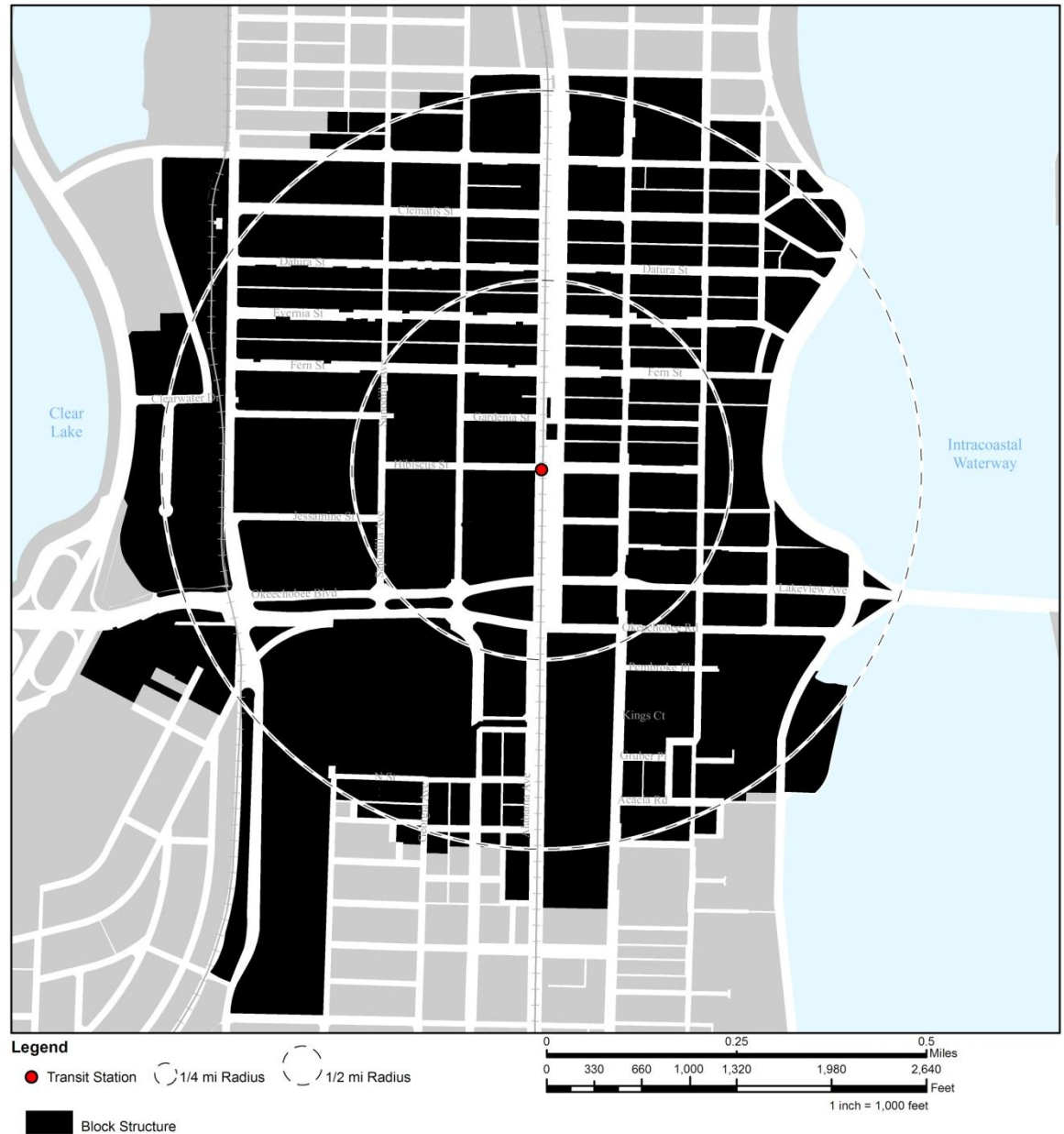
Block Structure

*West Palm Beach
Example*

West Palm Beach

Block Structure

Revised 6/27/11



Place Type Analyses

Figure Ground

*West Palm Beach
Example*

West Palm Beach

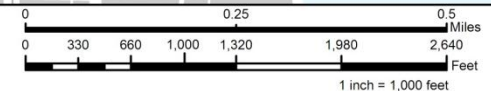
Figure Ground

Revised 6/27/11



Legend

- Transit Station
- 1/4 mi Radius
- 1/2 mi Radius
- Buildings



Place Type Analysis

Existing Land Use

West Palm Beach Example

West Palm Beach

Existing Land Use

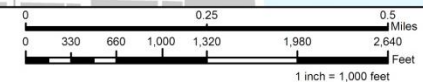
Revised 6/27/11



Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

Existing Land Use	1/2 Mile	%	1/4 Mile	%
Single Family	5.82	1.4%	0.33	0.2%
Multi-Family	51.74	12.5%	31.62	22.9%
Hotel / Motel	9.34	2.2%	1.05	0.8%
Mixed Use	12.76	3.1%	6.32	4.6%
Office	51.49	12.4%	22.16	16.1%
Retail	23.95	5.8%	16.92	12.3%
Commercial	3.87	0.9%	3.64	2.6%
Institutional	171.29	41.2%	44.21	32.0%
Industrial	19.96	4.8%	1.87	1.4%
Open Space / Recreation	39.50	9.5%	0.98	0.7%
Vacant	25.80	6.2%	8.96	6.5%
Total	415.52	100.0%	138.05	100.0%



Place Type Analysis

Future Land Use

*West Palm Beach
Example*

West Palm Beach

Future Land Use

Revised 6/27/11



Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

- Single Family
- Multifamily
- Commercial
- Urban Central Business District
- Commercial Incentive District
- Community Service
- Industrial
- Special Impact Zone / Industrial

Place Type Analyses

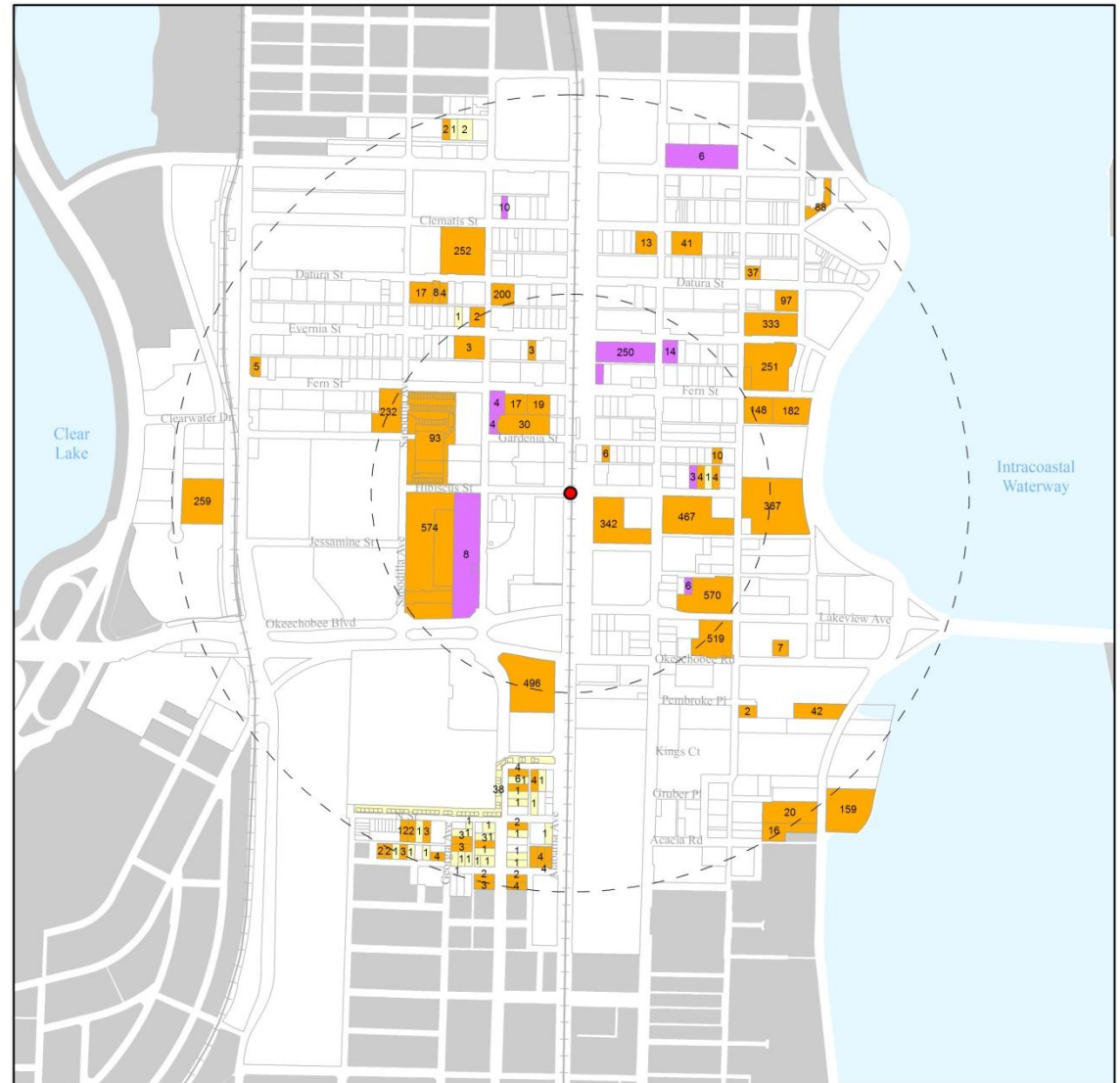
Residential Density

West Palm Beach Example

West Palm Beach

Residential Density

Revised 6/27/11



Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

Single Family
Multi-Family
Mixed Use (Residential / Retail)

Place Type Analyses

Residential Intensity

West Palm Beach Example

West Palm Beach

Residential Intensity

Revised 6/27/11

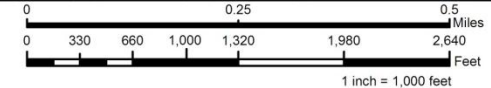


Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

1/2 mi radius (3,808 units / 488.92 acres = 7.79 units/acre)

1/4 mi radius (680 units / 132.87 acres = 5.12 units/acre)



Place Type Analysis

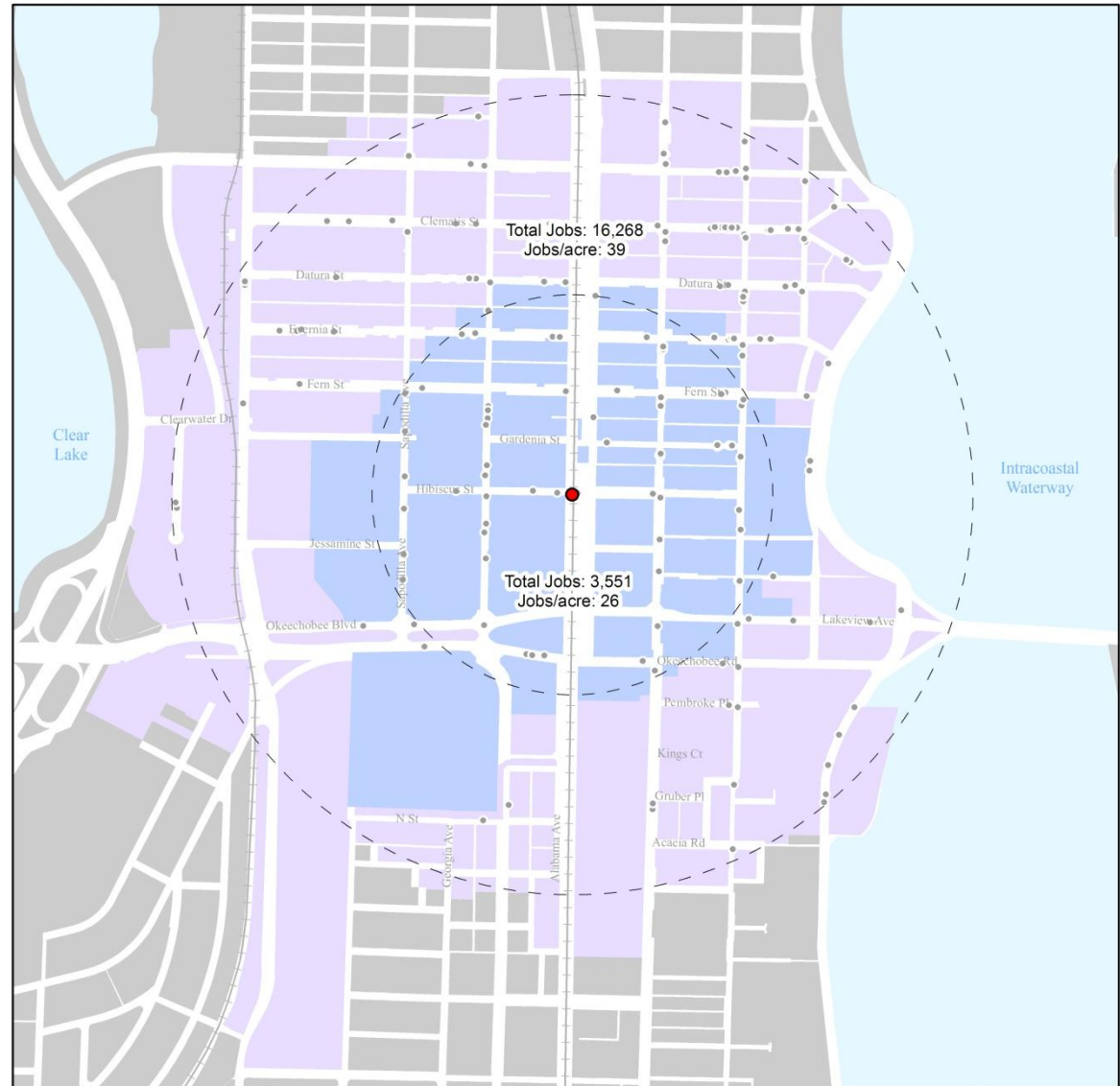
Employment Intensity

West Palm Beach Example

West Palm Beach

Employment Intensity

Revised 6/27/11

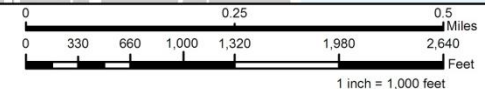


Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

1/2 mi radius (37,417 jobs / 488.92 acres = 77 jobs/acre)

1/4 mi radius (23,757 jobs / 132.87 acres = 178.79 jobs/acre)



Place Type Analyses

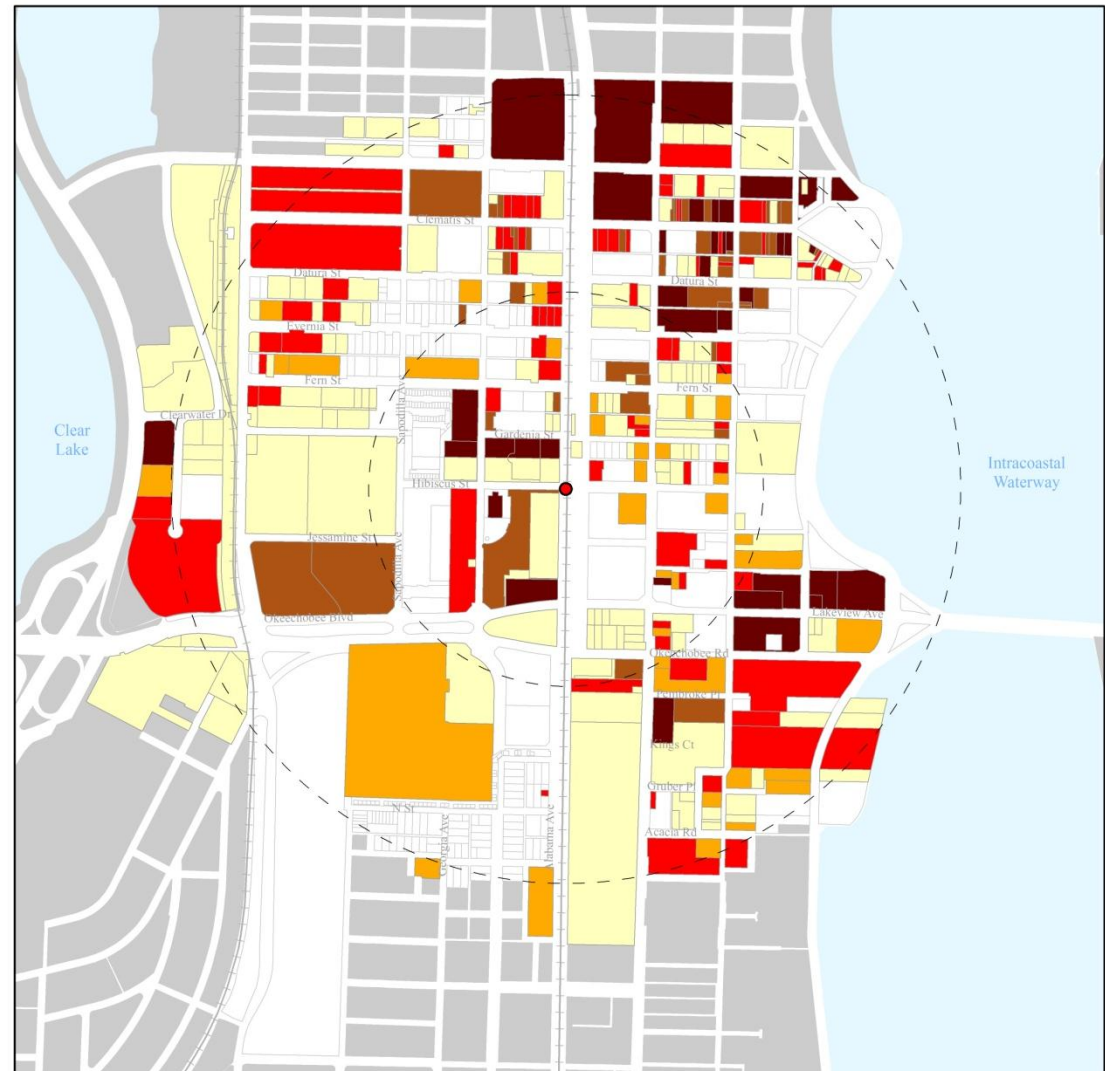
Commercial Intensity

*West Palm Beach
Example*

West Palm Beach

Commercial Intensity

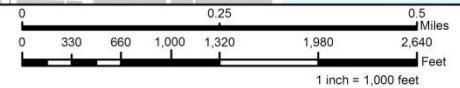
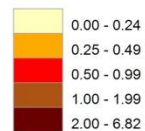
Revised 6/27/11



Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

Floor Area Ratio



Place Type Analyses

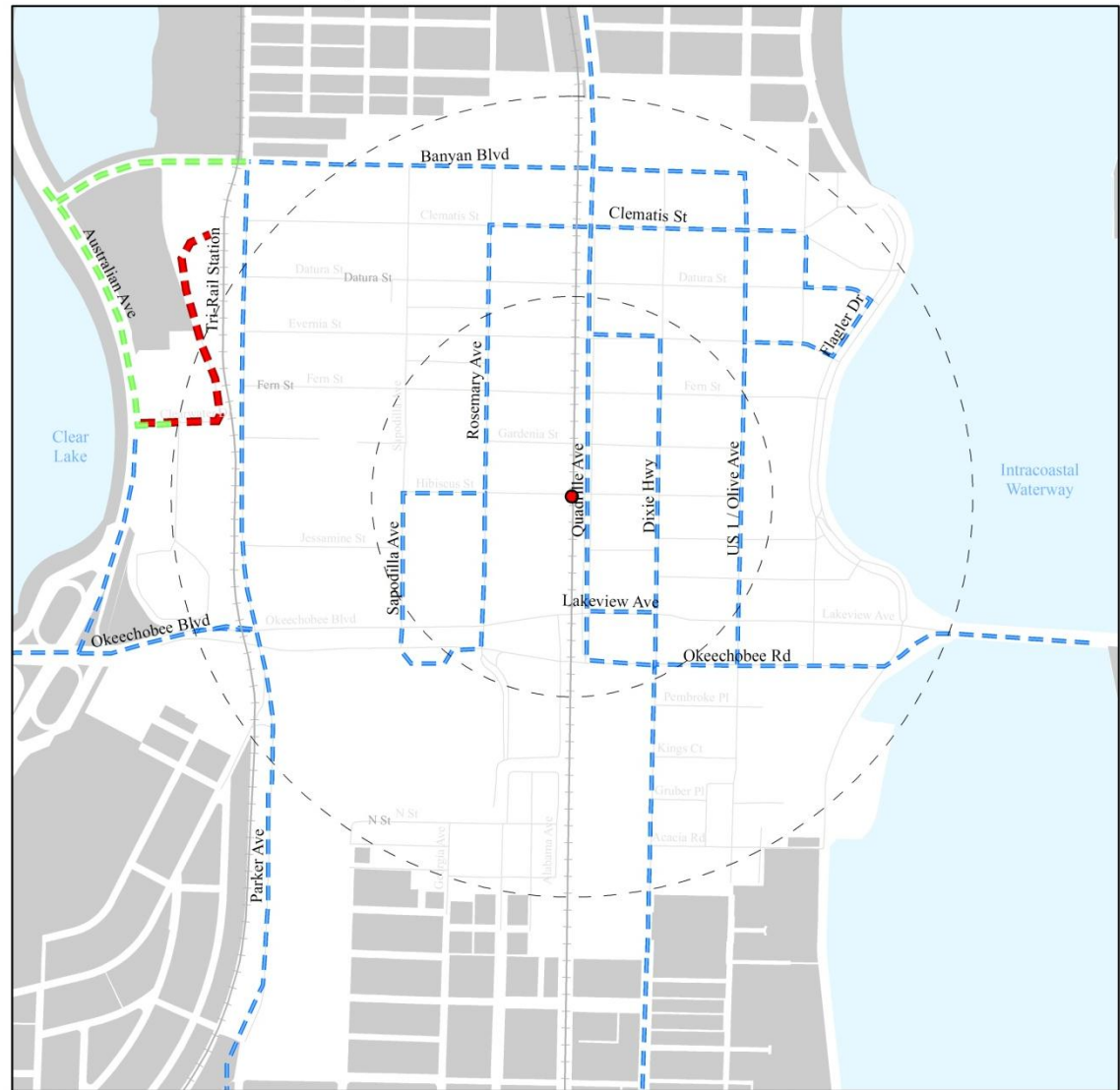
Public Transit Intensity

*West Palm Beach
Example*

West Palm Beach

Public Transit Intensity

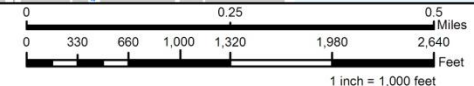
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Legend

● Transit Station ○ 1/4 mi Radius ○ 1/2 mi Radius

— 1 - 2 Routes
— 5 - 7 Routes
— 9 Routes



Place Type Analysis



Tallahassee
Block Structure



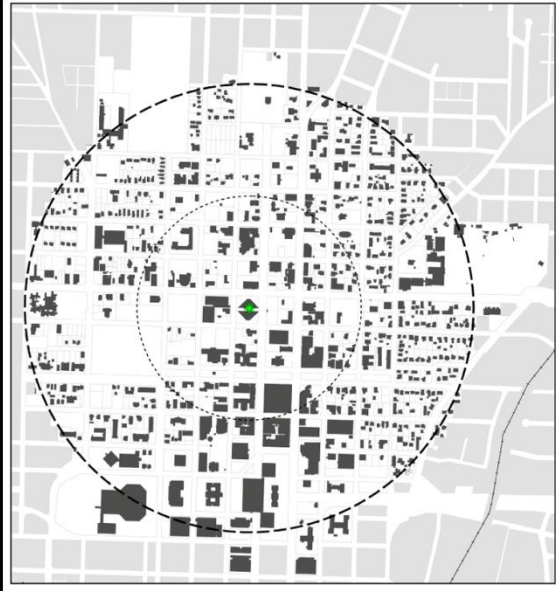
Plantation
Block Structure



Orlando
Block Structure

Comparative Analysis

Place Type Analysis



Tallahassee
Figure Ground



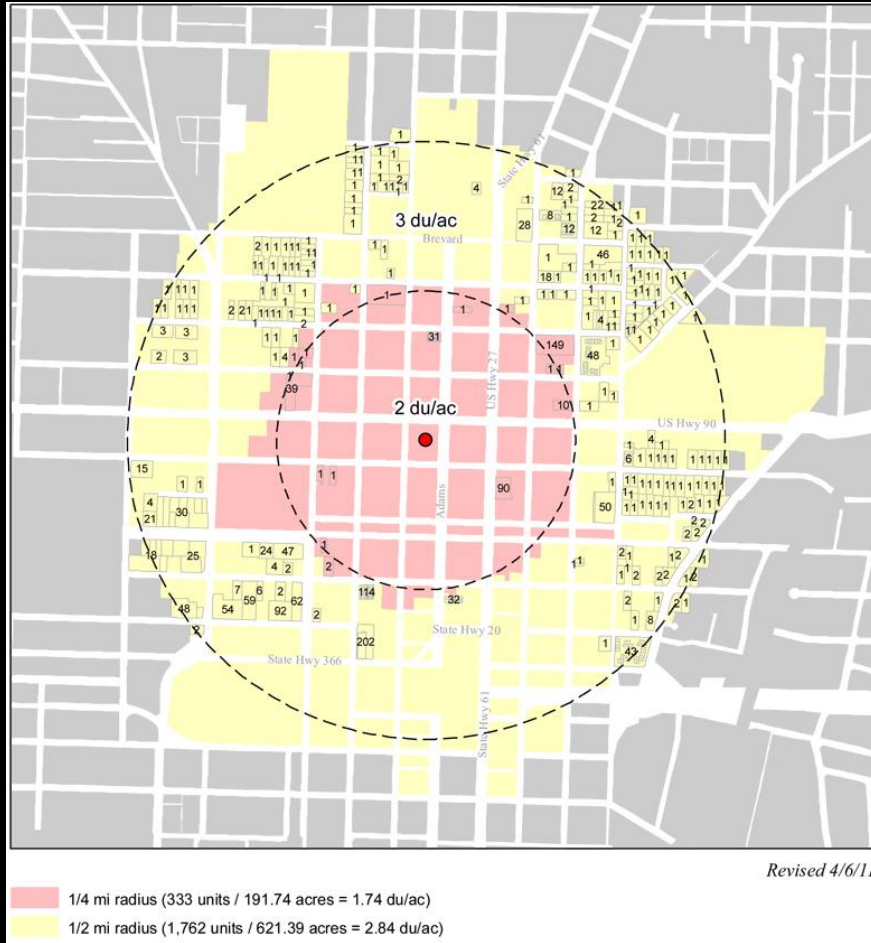
Plantation
Figure Ground



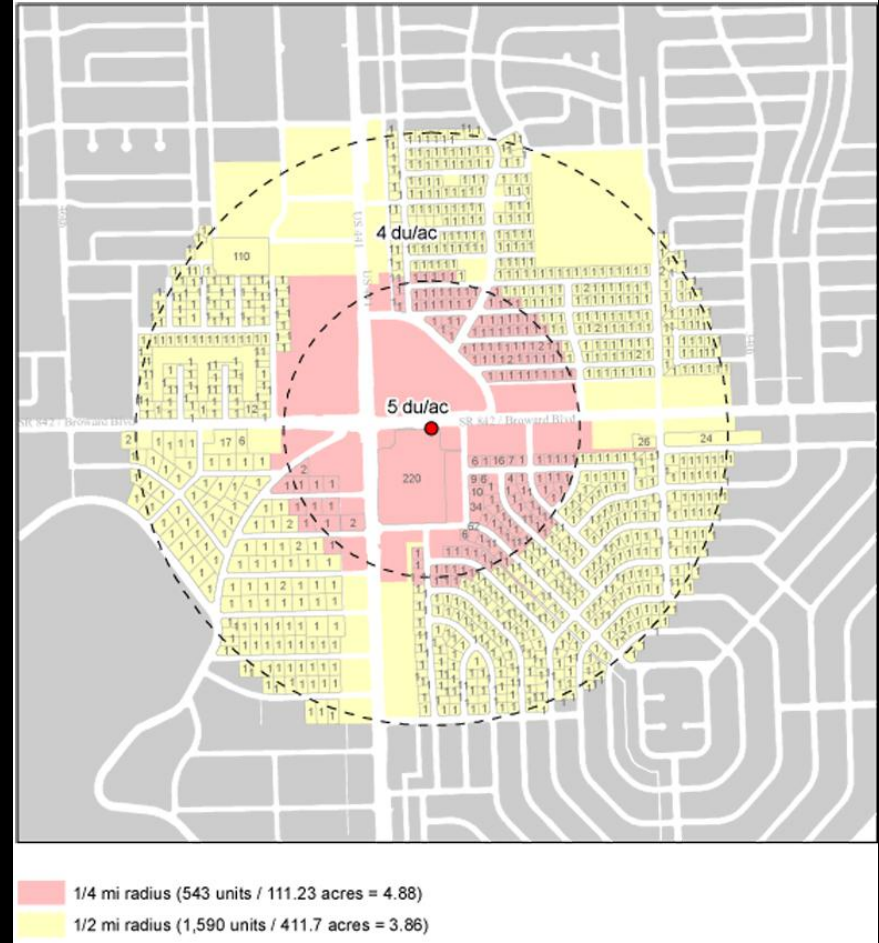
Orlando
Figure Ground

Comparative Analysis

Place Type Analysis



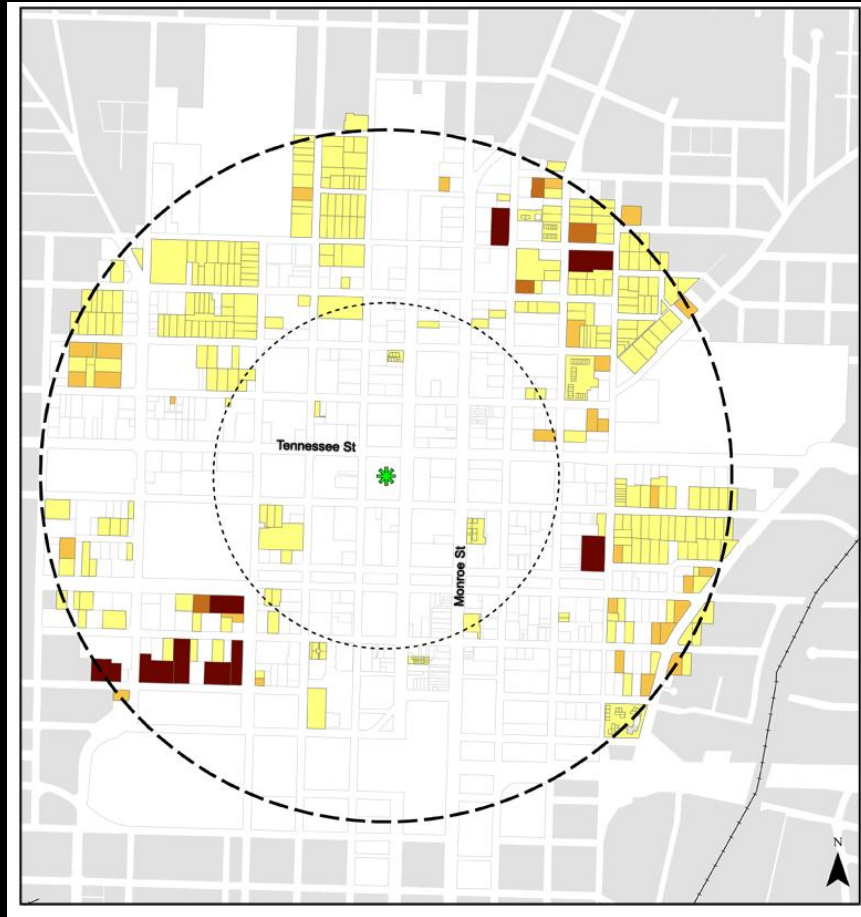
Tallahassee
Residential Densities



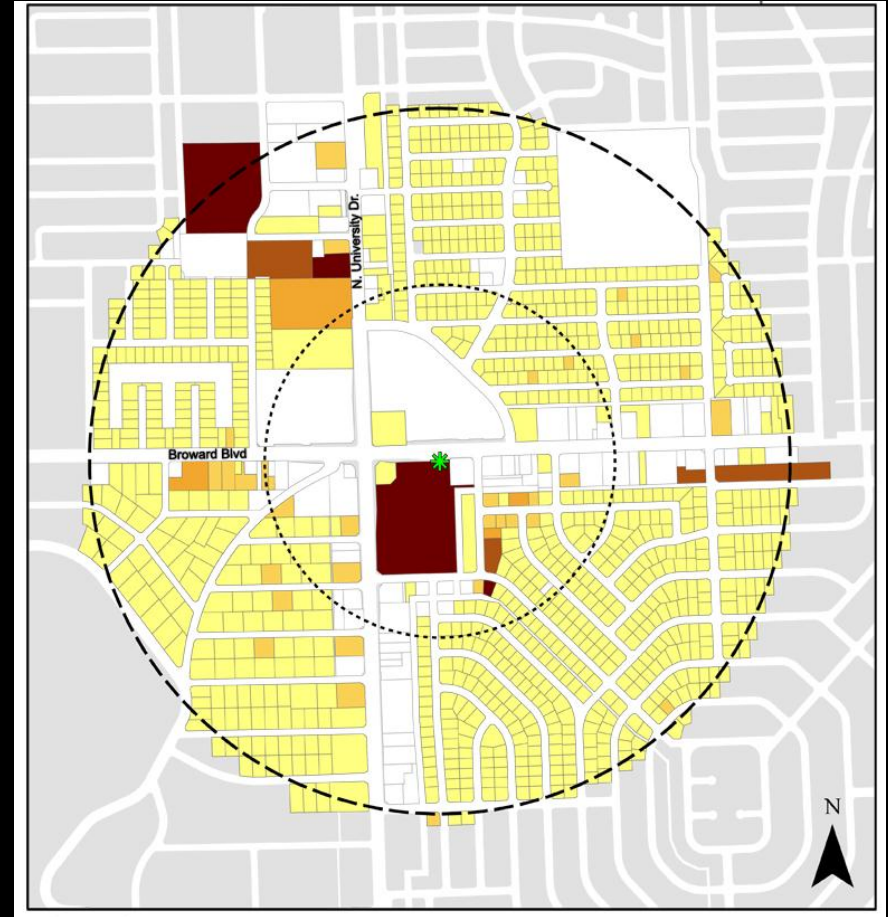
Plantation
Residential Densities

Comparative Analysis

Place Type Analysis

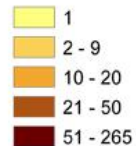


Tallahassee
Residential Intensities



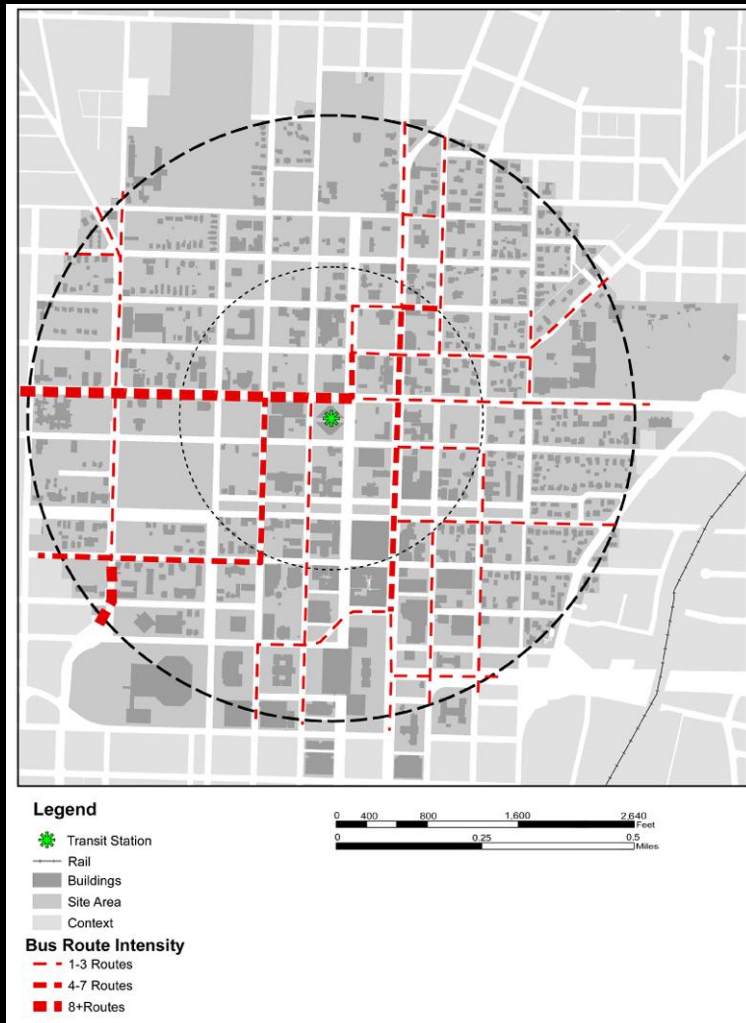
Plantation
Residential Intensities

Residential Units Per Parcel

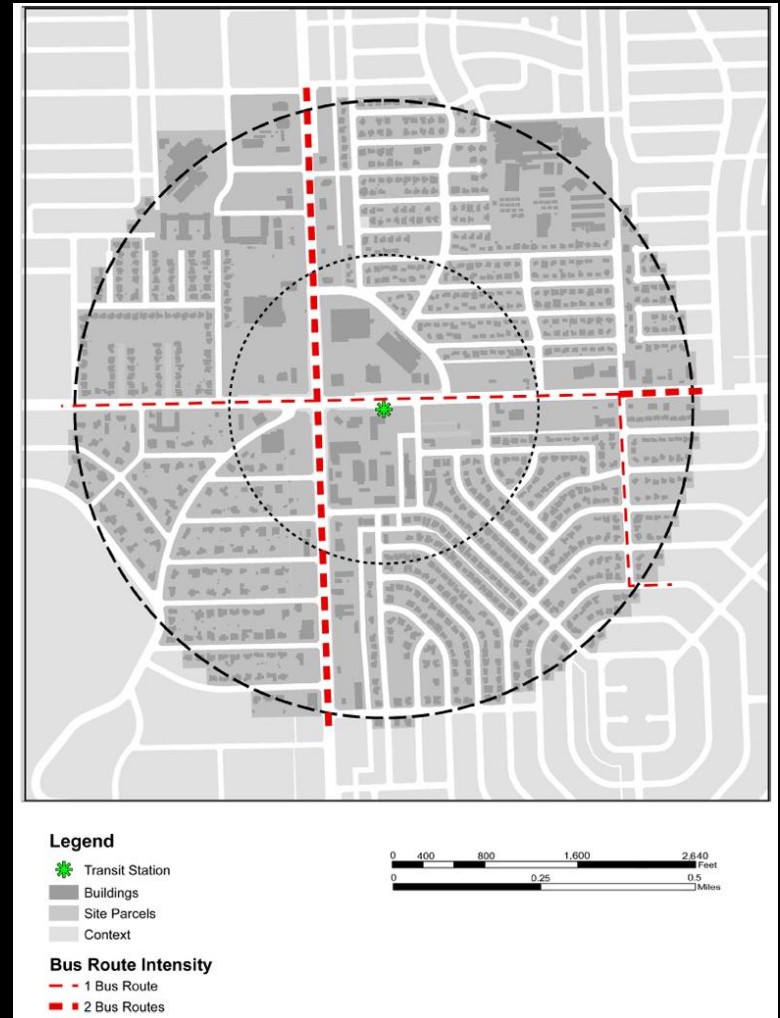


Comparative Analysis

Place Type Analysis



Tallahassee
Transit Intensities



Plantation
Transit Intensities
Comparative Analysis

Completing the Analysis

URBAN

Miami

Orlando

Tallahassee

West Palm Beach

SUBURBAN

Daytona Beach

East Naples

Pasco

Plantation

RURAL

Sebring

Provide Greatest Statewide
Coverage Possible



Florida Transit-Oriented Development



Florida TOD Guidebook & Training

(PHASE II)

Research Bibliography

TOD Typology

Florida Place Type Analysis

Model TOD Conceptual Plans

Model Comp. Plan Policies & LDRs

Guidebook Development

Statewide Training

TOD TOOLBOX:

TBARTA TOD Resource Guide

Jennifer Willman, AICP

Project Manager/Land Use Coordinator

JACOBS

www.jacobs.com

Tampa Bay Area Regional Transportation Authority

www.tbarta.com



TOD TOOLBOX:

TBARTA TOD Resource Guide

PURPOSE: Discussion of a variety of TOD topics, and how they relate to the TBARTA region, and to land use and economic development criteria set by the Federal Transit Administration.

AUDIENCE: Government agencies, the development community, non-profit organizations, and citizens.



TBARTA Vision

A Balanced, Multimodal System



TBARTA Land Use Working Group

Purpose

- Provide input to the Regional Transportation Master Plan's technical team about land use planning issues, relating to:
 - ▣ Existing land use patterns
 - ▣ Long-range land use plans
 - ▣ Growth projections
 - ▣ Affect of hypothetical shifts in growth (land use scenarios)



Goals

- Create a common language for transportation and land use planners
- Understand other regional efforts like One Bay
- Learn how Transit Oriented Development (TOD) can be successful
- Understand importance of FTA New Starts Evaluation Process
- Develop TOD Resource Guide

TBARTA's Role in TOD

- Enabling legislation provides that TBARTA will coordinate with local governments for TOD.

“The authority shall coordinate and consult with local governments on transit or commuter rail station area plans that provide for compact, mixed-use, TOD that will support transit investments and provide a variety of workforce housing choices, recognizing the need for housing alternatives for a variety of income ranges.”

- TBARTA's role is convener and facilitator of the regional conversation about transportation.



Benefits of TOD

TOD has enormous potential to help us:

- ❑ Rethink the transportation-land use connection
- ❑ Retrofit existing development where needed
- ❑ Reinvest in neighborhoods to become more economically vibrant, sustainable and livable.



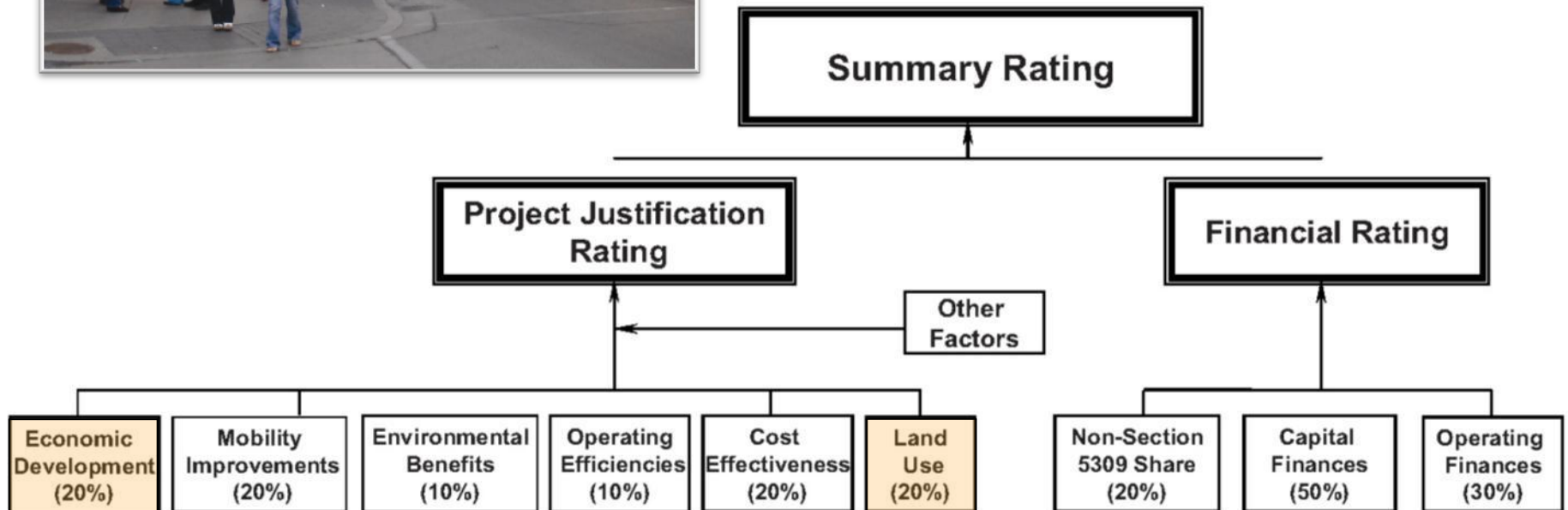
Transportation-Land Use Connection

- Transportation systems and land use patterns influence each other.
- Mixed-use compact developments can provide travel choices that include walking, biking, and transit.
- Land use is a key component to supporting and funding transit.



Santa Clara, CA

FTA New Starts Evaluation Process



FTA New Starts Criteria

Land Use Factors

- ❑ Existing corridor and station area development/character
- ❑ Existing station area pedestrian facilities, including ADA
- ❑ Existing corridor and station area parking supply.

Economic Development Effects Factors

- ❑ Transit Supportive Plans and Policies
 - ▣ Growth management
 - ▣ Transit supportive corridor policies
 - ▣ Transit supportive zoning regulations
 - ▣ Tools to implement land use policies.
- ❑ Performance and Impacts of Policies
 - ▣ Performance of land use policies
 - ▣ Potential impact of transit project on regional land use.



TOD Resource Guide Contents

Introduction: TBARTA TOD Guiding Principles

Chapter 1. Comprehensive Plan Policies

2. Station Typologies
3. Station Area Plans
4. Zoning and Design Standards
5. Parking Management
6. Affordable and Workforce Housing
7. Infrastructure
8. Economic Development
9. Funding and Financing
10. Public Engagement and Education



TOD Resource Guide Structure

- Standalone chapters with common thread
- Research and methodology statements
- Important topics and considerations
- Relation to FTA New Starts Criteria
- Menu of tools and strategies
- Opportunities for and challenges to implementation in TBARTA Region
- Identification of Potential Partners
- Case Studies
- Suggested Reading and Additional Resources



Introduction: Guiding Principles

- Coordination, Economic Development and Implementation
- Land Use
- Mobility
- Community Design



Ch. 1 Comprehensive Plan Policies

- Model Comprehensive Plan Policies
 - ▣ Goals, Objectives and Policies Relating to:
 - Coordination and Economic Development
 - Future Land Use and Densities/Intensities
 - Bicycle and Pedestrian Mobility
 - Parking
 - Community Design
 - Building and Site Design
- Relationship of Comp Plans to Land Development Codes
- Discussion of transit-supportive land use planning activities within the TBARTA Region



Ch. 2 Station Typologies

- Relationship of Comprehensive Plans and Land Development Codes to Station Typologies
- Variation within the TBARTA Region
- System-Wide Planning Considerations
- Station Typologies
 - ▣ Matrix of Urban Form
 - ▣ Role of Transit Mode



Ch. 3 Station Area Planning

- Relationship of Station Area Plans to:
 - ▣ Comprehensive Planning
 - ▣ Land Development Codes
 - ▣ Station Typologies
 - ▣ Transportation Improvement Plans
 - ▣ Capital Improvement Plans
- Plan Development Process
- Public Participation
- Concept Planning and Station Area Identity



Ch. 4 Zoning and Design Standards

- Regulatory Framework
- Incentives vs. Requirements
- Regulating Uses within TOD
- Multimodal Connectivity and ADA
- Menu of Options
- Importance of Each Standard
 - ▣ Connectivity
 - ▣ Structure Specific
 - ▣ Site Specific



Ch. 5 Parking Management

- Important Topics
 - ▣ Consumer Behavior
 - ▣ Cost and funding/financing of infrastructure
 - ▣ Affect on Transit Ridership
 - ▣ Integration into Surrounding Community
 - ▣ Needs by Station Type
 - ▣ Affect on Housing Cost
- Supply and Management
 - ▣ Parking Management Districts
 - ▣ Controlled or Market-Based
 - ▣ Shared Parking
 - ▣ On-Street Parking



Ch. 6 Affordable & Workforce Housing

- Important Topics
 - ▣ Historical Approaches in Florida
 - ▣ Long vs. Short Term Affordability
 - ▣ Affect of Housing Type
 - ▣ Variation within the TBARTA Region
- Existing Providers of Affordable Housing
 - ▣ Governmental, Quasi-Governmental and Non-Profit Entities
- Strategies and Tools
 - ▣ Privately and publically provided housing
 - ▣ Market, Incentive and Regulatory Based Approaches



Ch. 7 Infrastructure

- Stormwater
 - ▣ Master planned ponds and utility agreements
 - ▣ Partnerships with water management districts
 - ▣ Low Impact Development techniques
- Police/Fire/EMS
 - ▣ Urban fire system flows
 - ▣ Roadway design
- Shared Utility Easements
- Schools
 - ▣ Reduction of footprint
 - ▣ Urban partnership schools



Ch. 8 Economic Development

- Local Government Assistance
 - ▣ Impact Fee Credits
 - ▣ Application Fast Tracking and Review Fee Waivers
 - ▣ Voluntary Area-wide Zoning Approvals
 - ▣ Special Districts
- Infrastructure Investments
- Property Tax Exemptions
- Federal Tax Credits
- Brownfields Redevelopment
- Marketing and Promotions



Ch. 9 Funding and Financing

- Recurring Revenue Generators
 - ▣ Community Development Districts
 - ▣ Lease Agreements and Station Concession Fees
- One-Time Revenue Generators
 - ▣ Federal and State Grants
 - ▣ Station Connection Fees
- Station / Amenity Naming Rights
- Risk Sharing and Partnerships
 - ▣ Public-Private Partnerships like Joint Development
 - ▣ Alternative Project Delivery Approaches

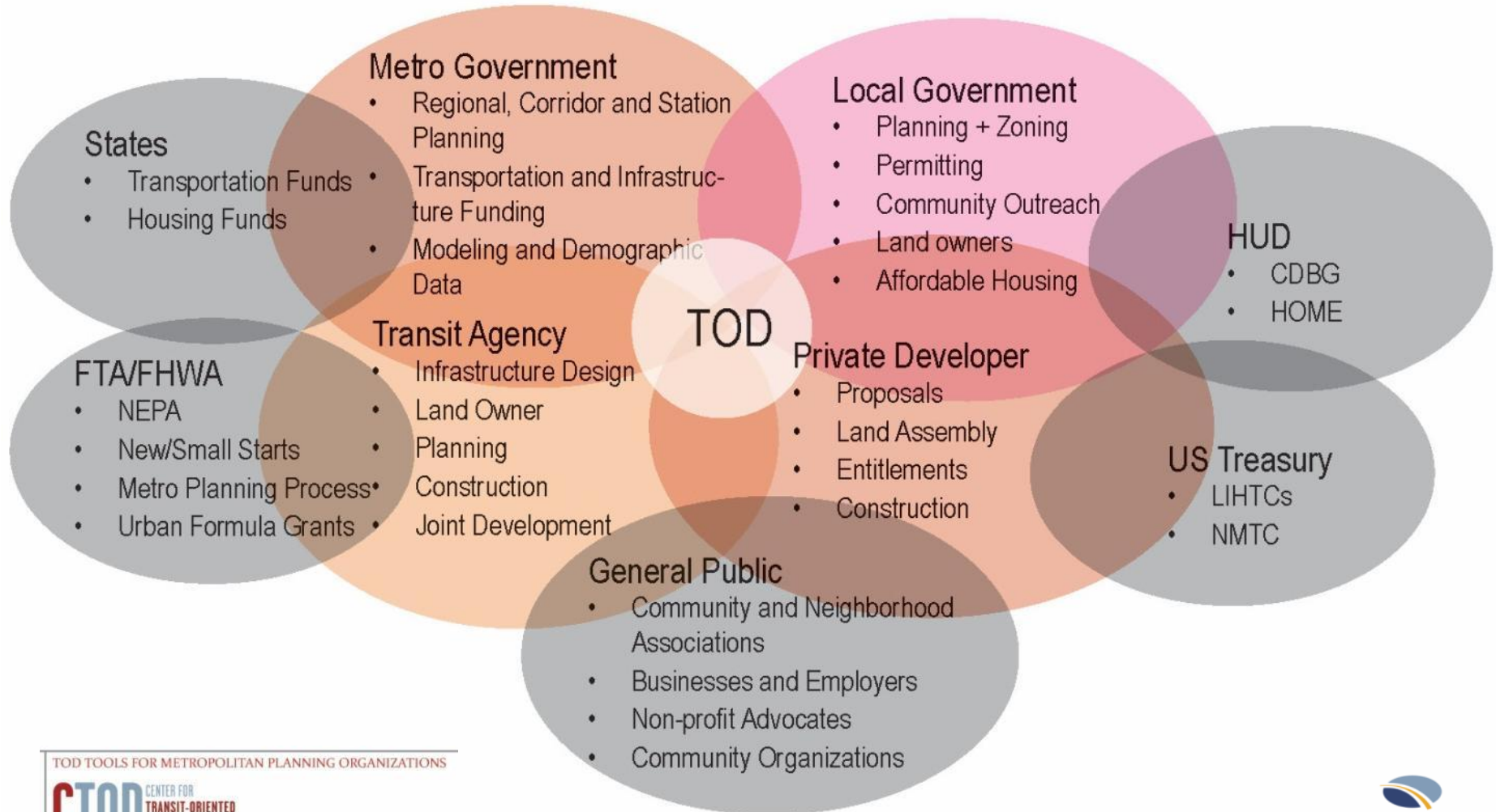


Ch. 10 Public Engagement & Information

- Important Topics
 - ▣ Need for Increased Public Awareness & Participation
 - ▣ Variations within the TBARTA Region
 - ▣ Historical Attitudes
 - ▣ Importance of Leadership
- Methods of Engagement
 - ▣ Social Media and the Internet
 - ▣ Traditional Media
 - ▣ Community Meetings
 - ▣ Survey Instruments and other feedback techniques
 - ▣ Visualization Techniques



Partners in TOD



Stay Connected with TBARTA

- Provide Your Feedback on the Land Use Working Group (LUWG) and TOD Resource Guide
 - ▣ TBARTA website (www.tbarta.com)
 - Click on “Join Our Mailing List” (left-hand side of home page) & check “Land Use Working Group”
 - Click on “About” → “LUWG” → “TOD Resource Guide”
 - Comment on LUWG Topics



TOD TOOLBOX:

Tri-Rail Station Evaluation Project

Lynda Kompelien-Westin, AICP
Transportation Planning Manager,
Real Estate

South Florida Regional Transportation Authority
www.sfrta.gov



TOD TOOLBOX:

Tri-Rail Station Evaluation Project

PURPOSE: How do you tell if TOD is working?

AUDIENCE:

- ☐ Developers
- ☐ Policy Makers
- ☐ Planners
- ☐ Budget Analysts
- ☐ CRA's
- ☐ BID's
- ☐ Downtown Development Authorities
- ☐ Transit Agencies



June 20, 2003

Tri-Rail Becomes SFRTA

343.54(1)(b) (Powers and duties) It is the intent of the Legislature that the South Florida Regional Transportation Authority shall have overall authority to coordinate, develop, and operate a regional transportation system within the area served.

343.54(4) (Powers and duties) 4) The authority shall develop and adopt a plan for the operation, maintenance, and expansion of the transit system tri-county commuter rail service. Such plan shall address the authority's plan for the development of public and private revenue sources, and the service to be provided, including expansions of current service which are consistent, to the maximum extent feasible, with approved local government comprehensive plans. The plan shall be reviewed and updated annually.

2003-159 LAWS OF FLORIDA Ch. 2003-159



SFRTA TOD Definition

Transit-Oriented Development: T.O.D.

Land Use & Transportation Working Together

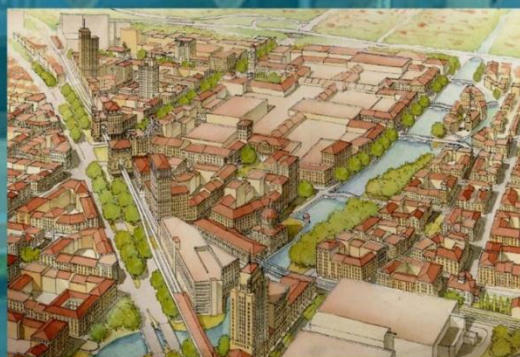


Proposed
West Palm Beach
"Transit Village"

What is T.O.D.?

"Transit Oriented Development (TOD) is moderate to higher-density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use."

Source: California Department of Transportation



Proposed Kendall TOD



Why is TOD Good for South Florida?

"TOD is not just development near transit. It's development that also":

Increases "location efficiency" so that people can walk, bike and take transit

Boosts transit ridership and minimizes impacts on traffic

Provides a rich mix of housing, jobs, shopping and recreational choices

Provides value for the public and private sectors, and for both new and existing residents; and

Creates a sense of community

Source: Reconnecting America and the Center for Transit-Oriented Development



September 28, 2007
SFRTA Board of Directors



2005 Existing Conditions



2005 Existing Conditions



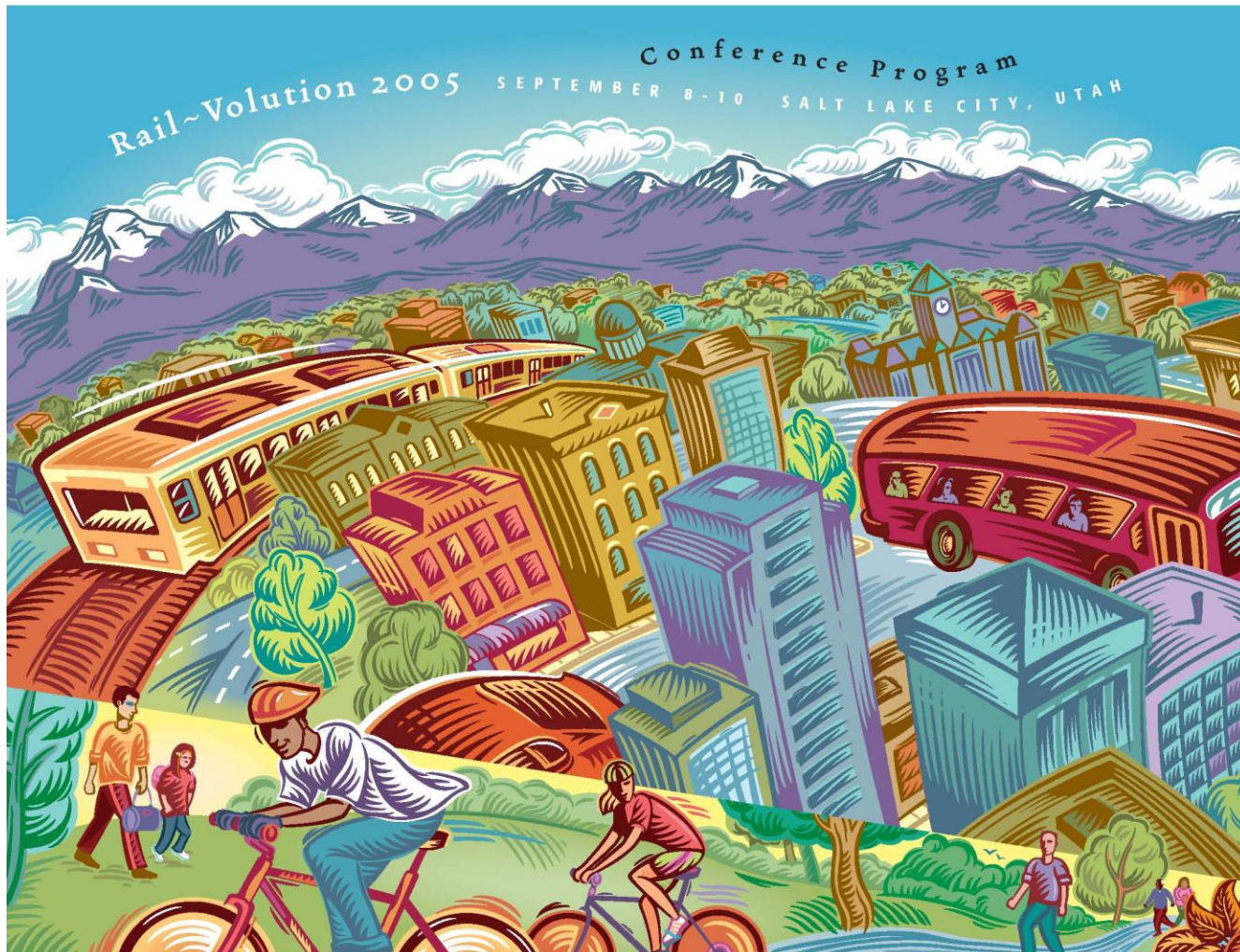
2005 Existing Conditions



2005 Existing Conditions



IDEAS : Rail~Volution 2005





Community Building **SOURCEBOOK**



Land use and
transportation
initiatives in
Portland, Oregon

Revised
August 2005

Profiles Transit Supportive:

- Plans & Policies
- Programs
- Organizations

IDEAS : Rail~Volution 2005



SLC
HUB
TOD



Thank You!

Rail-Volution 2005

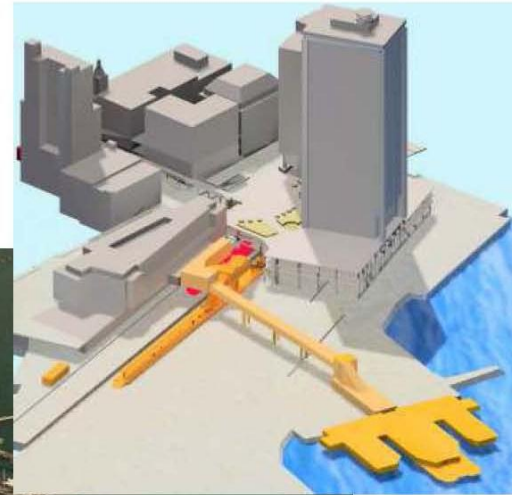
IDEAS : Rail~Volution 2005

Inside the Fulton Street Transit Center



IDEAS : Rail~Volution 2005

Waterfront Station

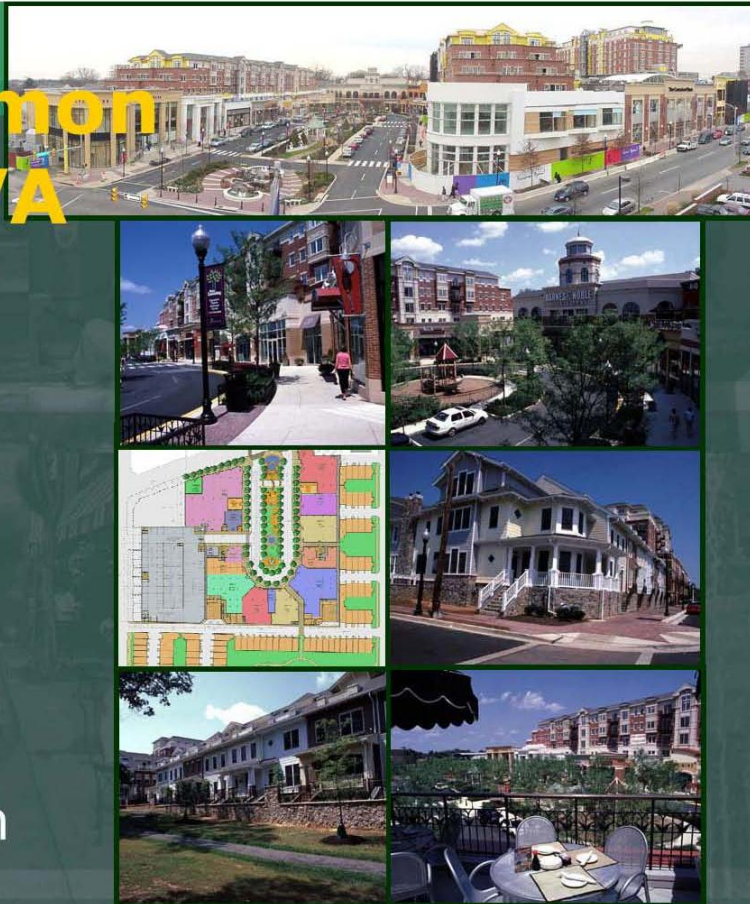


CITY OF VANCOUVER

IDEAS : Rail~Volution 2005

PLAN Market Common Clarendon, VA

- US Best practice
 - ▶ 240k retail
 - ▶ 100k office
 - ▶ 300 apartments
 - ▶ 87 townhomes
- Opened in Nov '01
 - ▶ 100% leased
- Worked closely with neighborhoods



IDEAS : Arlington County, VA

CLARENDON 1970s



IDEAS : Arlington County, VA

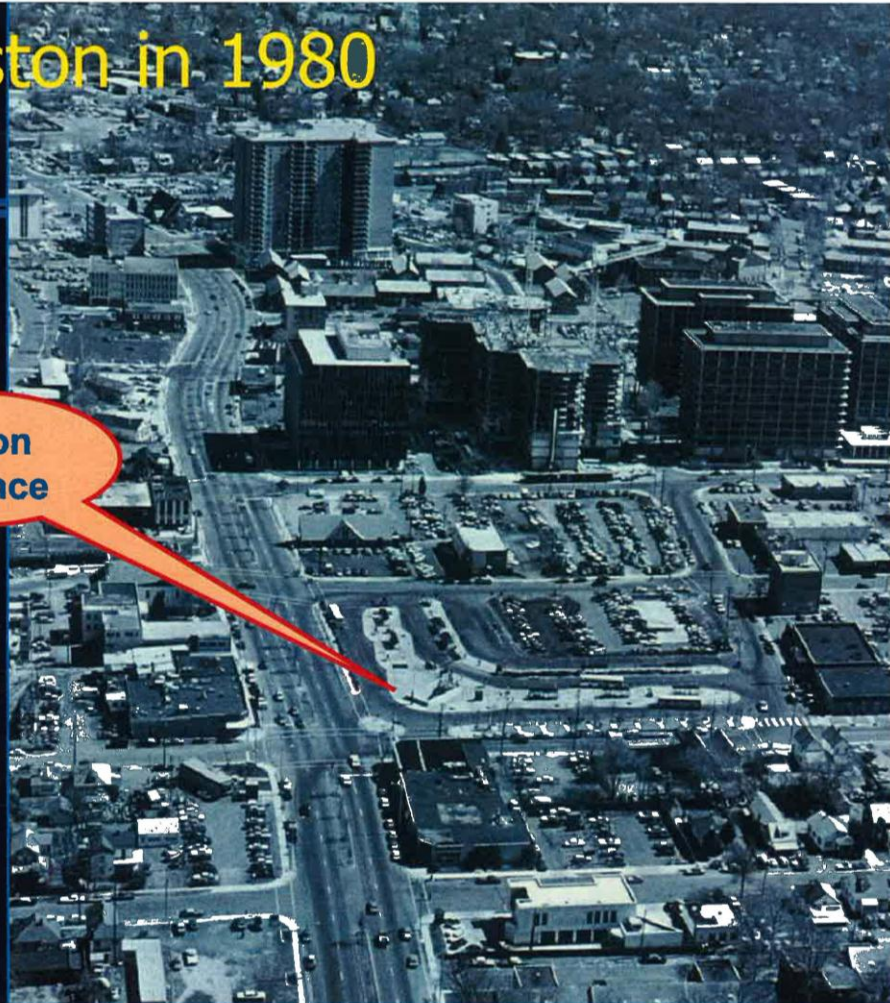
VIRGINIA SQUARE - THEN



IDEAS : Arlington County, VA

Ballston in 1980

Station
Entrance



IDEAS : Arlington County, VA

KEY TO SUCCESS

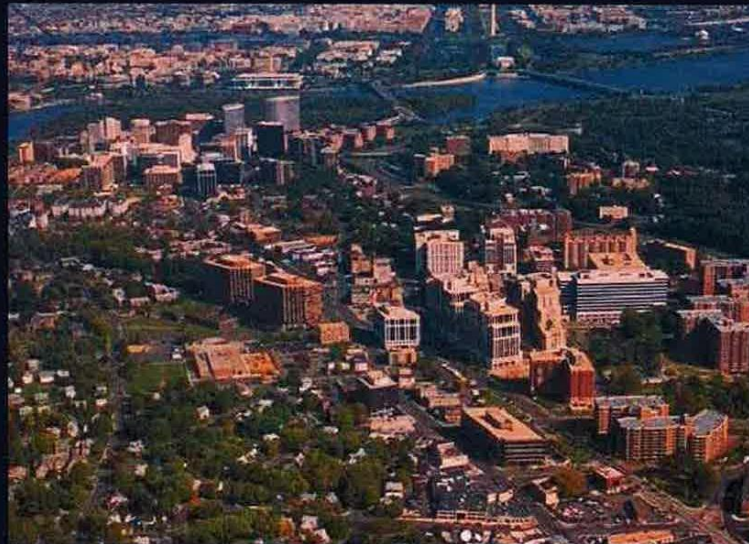
When the planning started for metro:

- 89% of county planned low residential, garden apartment/TH or retail
- 11 % of county (2 rail corridors) were re-planned to encourage mixed-use, high density development
- Zoning in the 89 % was primarily low density so little unplanned development can happen

IDEAS : Arlington County, VA

MEASURING SUCCESS

1970
22,000 jobs
5.5 million sf
office
7,000 housing
units



2008
90,000 jobs
20.8 million
sf office
26,572
housing
units



MEASURING THE BENEFITS OF REDEVELOPMENT

Publication of the Florida
Redevelopment Association

Compiled by Gary Wolforth, Director of
Economic Development
City of North Miami Beach

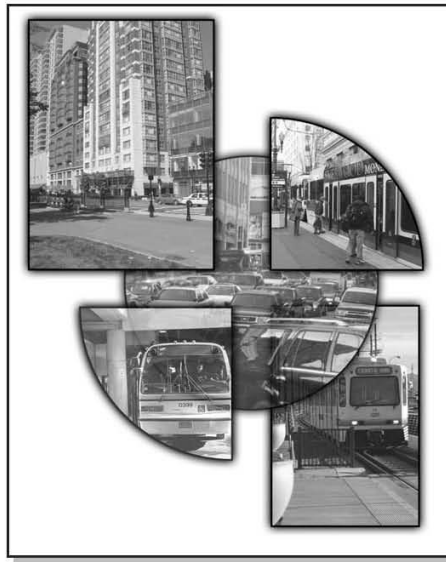
Circa 2000

<http://redevelopment.net/wp-content/uploads/2010/09/Measuring-the-Benefits-of-Redevelopment.pdf>

Nuts and Bolts of Benchmarking

1. Assessed Values
2. Types of Uses
3. Vacancy
4. Employers and Employees
5. Occupational Licenses

Guidelines and Standards for Assessing Transit-Supportive Land Use



Federal Transit Administration
Office of Planning

May 2004

RESOURCES: June 2005 Interlocal Agreement for Planning Services

**South Florida
Regional Planning Council**



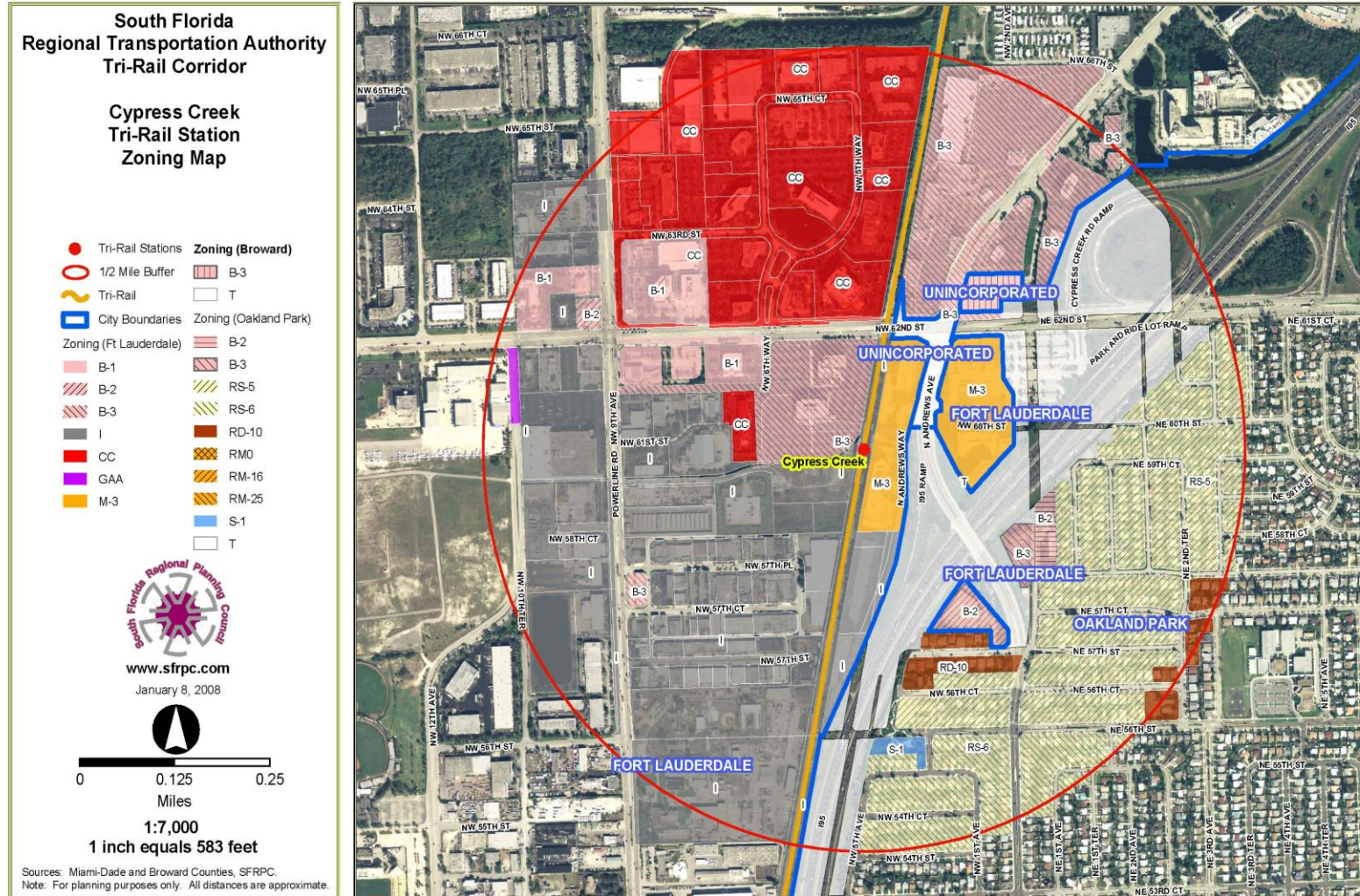
**Treasure Coast
Regional Planning Council**



RESULTS: Station Area Maps

- Aerial
- Parcel
- Folio
- Land Use
- Zoning
- Assessed Value/Sq. Ft.
- Homestead Exemptions
- DOR Code
- Land Use/Zoning/Employment Density

RESULTS: Station Area Maps



RESULTS: Station Area Real Estate Analysis

- Vacancy
- Density/FAR
- Assessed Land Value

**South Florida Regional Transportation Authority
Tri-Rail System Summary
2005 Existing Land Use and Density**

Station Location	Vacant Land		Non-Vacant Land						All Land			
Palm Beach County Stations	Lot Size (acres)	Assessed Value (\$ million)	Lot Size (acres)	Building (square ft)	Units	Assessed Value (\$ million)	Existing Density (units/ac)	Existing FAR	Lot Size (acres)	Assessed Value (\$ million)	Existing Density (units/ac)	Existing FAR
Mangonia Park	137.2	\$16.5	390.8	3,987,063	691	\$169.1	1.77	0.23	528.0	\$185.6	1.31	0.17
West Palm Beach	103.7	\$128.3	267.8	7,207,686	917	\$489.4	3.42	0.62	371.6	\$617.7	2.47	0.45
Lake Worth	82.9	\$29.2	277.4	2,687,025	2,182	\$155.6	7.87	0.22	360.3	\$184.7	6.06	0.17
Boynton Beach	246.2	\$47.6	267.8	3,439,494	1,459	\$166.2	5.45	0.29	513.9	\$213.8	2.84	0.15
Delray Beach	101.8	\$9.2	362.4	2,692,780	987	\$151.0	2.72	0.17	464.3	\$160.2	2.13	0.13
Boca Raton	322.4	\$68.9	367.8	3,939,235	9	\$300.7	0.02	0.25	690.2	\$369.6	0.01	0.13
Palm Beach Total	994.3	\$299.7	1,934.0	23,953,283	6,245	\$1,432.0	3.23	0.28	2,928.3	\$1,731.7	2.13	0.19
Broward County Stations	Lot Size (acres)	Assessed Value (\$ million)	Lot Size (acres)	Building (square ft)	Units	Assessed Value (\$ million)	Existing Density (units/ac)	Existing FAR	Lot Size (acres)	Assessed Value (\$ million)	Existing Density (units/ac)	Existing FAR
Deerfield Beach	143.5	\$15.8	337.6	4,203,769	660	\$336.5	1.96	0.29	481.1	\$352.3	1.37	0.20
Pompano Beach	150.3	\$6.7	197.6	2,751,862	1,150	\$216.1	5.82	0.32	347.9	\$222.8	3.31	0.18
Cypress Creek	213.9	\$23.0	280.2	5,634,424	530	\$483.9	1.89	0.46	494.1	\$506.9	1.07	0.26
Fort Lauderdale	100.8	\$21.7	295.5	2,577,382	1,432	\$272.6	4.85	0.20	396.3	\$294.3	3.61	0.15
Fort Lauderdale Hollywood	144.0	\$48.3	173.2	2,374,421	150	\$255.4	0.87	0.31	317.3	\$303.7	0.47	0.17
Sheridan	51.6	\$11.8	382.3	2,698,645	1,314	\$245.4	3.44	0.16	433.9	\$257.3	3.03	0.14
Hollywood	53.3	\$15.0	239.8	3,311,220	1,141	\$269.4	4.76	0.32	293.1	\$284.4	3.89	0.26
Broward Total	857.6	\$142.3	1,906.1	23,551,723	6,377	\$2,079.4	3.35	0.28	2,763.7	\$2,221.7	2.31	0.20
Miami-Dade County Stations	Lot Size (acres)	Assessed Value (\$ million)	Lot Size (acres)	Building (square ft)	Units	Assessed Value (\$ million)	Existing Density (units/ac)	Existing FAR	Lot Size (acres)	Assessed Value (\$ million)	Existing Density (units/ac)	Existing FAR
Golden Glades	99.3	\$7.2	285.0	5,137,140	1,318	\$184.4	4.63	0.41	384.2	\$191.5	3.43	0.31
Opa Locka	135.7	\$8.6	261.5	2,641,097	1,960	\$131.2	7.50	0.23	397.2	\$139.8	4.93	0.15
Metrorail	24.9	\$8.4	299.2	4,831,358	970	\$219.3	3.24	0.37	324.1	\$227.7	2.99	0.34
Hialeah Market	61.7	\$22.3	289.3	5,420,284	582	\$210.0	2.01	0.43	351.1	\$232.3	1.66	0.35
Miami Airport	312.5	\$132.7	327.8	3,233,832	288	\$232.3	0.88	0.23	640.3	\$365.0	0.45	0.12
Miami-Dade Total	634.1	\$179.2	1,462.7	21,263,711	5,118	\$977.2	3.50	0.33	2,096.9	\$1,156.4	2.44	0.23
Tri-Rail System Total	2,486.0	\$621.2	5,302.9	68,768,717	17,740	\$4,488.6	3.35	0.30	7,788.8	\$5,109.8	2.28	0.20

Data Sources: Palm Beach County Property Appraiser (2005), Broward County Property Appraiser (2005) and Miami-Dade County Property Appraiser (2005).

RESULTS: Station Area Economic Analysis

- Employers
- Employees
- Employees/acre
- Employees/square mile
- Average Employees/Employer
- Occupational Liscences

Regional Tri-Rail Corridor Employment Density Within 1/2 Buffer

	Station	Total Employers	Total Employees	Acres	Square Miles	Employees per Acre (Approx.)	Employees per Sq. Mile (Approx.)	Average Employees Per Employer
Palm Beach County	Mangonia Park	298	2,976	502	0.78	5.93	3,815	9.99
	West Palm Beach	265	6,072	502	0.78	12.10	7,784	22.91
	Lake Worth	116	1,378	501	0.78	2.75	1,767	11.88
	Boynton Beach	115	1,178	501	0.78	2.35	1,510	10.24
	Delray Beach	248	2,681	502	0.78	5.93	3,815	10.81
	Boca Raton	145	4,583	502	0.78	9.13	5,876	31.61
Broward County	Deerfield Beach	388	8,291	502	0.78	16.52	10,629	21.37
	Pompano Beach	166	3,171	502	0.78	6.32	4,065	19.10
	Cypress Creek	519	6,902	502	0.78	13.75	8,849	13.30
	Fort Lauderdale	112	1,543	503	0.78	3.07	1,978	13.78
	Fort Lauderdale Hollywood	219	2,050	502	0.78	4.08	2,628	9.36
	Sheridan	163	3,229	502	0.78	6.43	4,140	19.81
	Hollywood	220	2,824	502	0.78	5.63	3,621	12.84
Miami-Dade	Golden Glades	163	3,313	502	0.78	6.60	4,247	20.33
	Opa Locka	177	1,573	503	0.78	3.13	2,016	8.89
	MetroRail	402	2,324	502	0.78	4.63	2,979	5.78
	Hialeah Market	372	6,054	502	0.78	12.06	7,762	16.27
	Miami Airport	133	3,431	502	0.78	6.83	4,399	25.80
Totals By Counties	Palm Beach County Subtotal	1,187	18,868	494	0.78	38.19	24,567	15.90
	Broward County Subtotal	1,787	28,010	502	0.78	55.80	35,910	15.67
	Miami-Dade County Subtotal	1,247	16,695	502	0.78	33.25	21,403	13.39
System Total	Total - All Counties	4,221	63,573	10,533	16	127.24	81,880	15.06

Source: InfoUSA, December 2006

Prepared By: South Florida Regional Planning Council

Occupational Licenses
Within 1/2 Mile of Tri-Rail Station

Station Location	Station Location	Total # of Occupational Licenses	% of Total Licenses
Palm Beach County	Mangonia Park	176	3.1%
	West Palm Beach	281	4.9%
	Lake Worth	85	1.5%
	Boynton Beach	90	1.6%
	Delray Beach	121	2.1%
	Boca Raton	207	3.6%
Broward County	Deerfield Beach	274	4.8%
	Pompano Beach	153	2.7%
	Cypress Creek	482	8.4%
	Fort Lauderdale	146	2.5%
	Fort Lauderdale/Hollywood	180	3.1%
	Sheridan Street	111	1.9%
	Hollywood	155	2.7%
Miami-Dade County	Golden Glades	191	3.3%
	Opa Locka	221	3.8%
	Hialeah Market	451	7.8%
	Metrorail Transfer	1,212	21.0%
	Miami Airport	1,224	21.3%
	Total	5,760	100.0%

Total Occupational Licenses By County	Total	% of Total
Palm Beach County	960	17%
Broward County	1,501	26%
Dade County	3,299	57%
Total	5,760	100%

Sources:

Palm Beach Property Appraiser Office 2007

Palm Beach Tax Collector Office 2007

Broward County Revenue Collection Department March 2007

Miami-Dade County Enterprise Technology Service Department July 2007

RESULTS: Station Area Demographic Analysis

- Population
- Ethnicity
- Education level
- Household Type and Size
- Place of Work
- Transportation To Work
- Commute Duration and Time of Day
- Income
- Housing Units, Tenure, Vacancy,
Median Rent, and Median Value

**South Florida Regional Transit Authority
Socio-Economic Profile
Stations in Miami-Dade, Broward and Palm Beach Counties**

	Miami Airport	Hialeah Market	Metrorail Transfer	Opa-Locka	Golden Glades	Hollywood
TOTAL POPULATION BY RACE / ETHNICITY						
Total:	2,063	9,327	11,290	7,965	9,774	12,135
White alone, non-Hispanic	248	984	804	295	972	6,141
Black or African American alone, non-Hispanic	17	1,260	708	4,694	7,068	2,421
Other non-Hispanic, including 2 or more races	0	143	16	306	577	733
Hispanic or Latino	1,798	6,940	9,762	2,670	1,157	2,840
TOTAL POPULATION BY AGE						
Total:	2,063	9,327	11,290	7,965	9,774	12,135
Under 5	73	698	570	784	747	750
5-17	322	1,466	1,853	2,039	2,091	1,821
18-24	158	864	1,013	1,082	881	1,142
25-64	1,118	5,110	5,879	3,440	4,923	6,968
65 and over	392	1,189	1,975	620	1,132	1,454
EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER						
Total:	1,510	6,299	7,854	4,060	6,055	8,422
No Schooling through 12th Grade, no diploma	762	2,825	4,053	2,166	1,765	1,714
High School Graduate (includes equivalency)	302	1,581	2,258	1,033	1,607	2,479
Some college, no degree	217	896	713	509	1,218	1,861
Associate Degree	114	238	281	123	453	653
Bachelor's Degree	84	406	422	135	648	1,176
Master's degree	17	218	30	67	250	306
Professional school degree	14	126	83	11	59	143
Doctorate degree	0	9	14	16	55	90
POPULATION BY HOUSEHOLD TYPE (INCLUDING LIVING ALONE)						
Total:	2,063	9,327	11,290	7,965	9,774	12,135
In households:	2,063	9,258	11,189	7,577	9,301	12,002
In family households	1,839	8,240	10,556	6,705	8,113	8,755
In nonfamily households:	224	1,018	633	872	1,188	3,247
Living alone	155	580	463	615	867	2,029
Not living alone	69	438	170	257	321	1,218
In group quarters	0	69	101	388	473	133

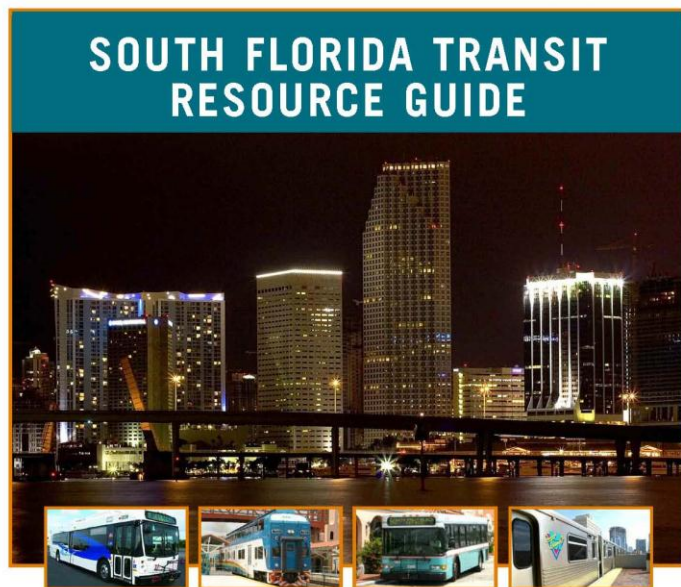
RESULTS: Station Area Capital Improvement Analysis

South Florida Regional Transportation Authority Public Investments in the Vicinity of Tri-Rail Stations (2006-2011) Three County Summary

Station Location		Total Cost (000)	Systemwide Expenditures	By County Expenditures
Palm Beach County	Mangonia Park	78,413	4.0%	28%
	West Palm Beach	131,602	6.8%	48%
	Lake Worth	13,443	0.7%	5%
	Boynton Beach	23,547	1.2%	9%
	Delray Beach	13,345	0.7%	5%
	Boca Raton	15,360	0.8%	6%
	County Total	275,711	14.2%	100%
Broward County	Deerfield Beach	91,769	4.7%	8%
	Pompano Beach	423,868	21.8%	36%
	Cypress Creek	126,229	6.5%	11%
	Fort Lauderdale	117,437	6.0%	10%
	Fort Lauderdale/Hollywood	214,098	11.0%	18%
	Sheridan Street	97,197	5.0%	8%
	Hollywood	101,629	5.2%	9%
	County Total	1,172,227	60.3%	100%
Miami-Dade County	Golden Glades	157,101	8.1%	32%
	Opa Locka	-	0.0%	0%
	Metrorail Transfer	298,777	15.4%	60%
	Hialeah Market	-	0.0%	0%
	Miami Airport	41,776	2.1%	8%
	County Total	497,654	25.6%	100%
System Total		1,945,592	100.0%	N/A



RESULTS: South Florida Transit Resource Guide



AGENCIES AND PROGRAMS
SUPPORTING TRANSIT
IN SOUTH FLORIDA

SEPTEMBER 2008



OFFICE OF PLANNING & CAPITAL DEVELOPMENT

Award Winner

2010 Transportation Planning
Excellence Awards

Sponsored by the Federal Highway
Administration, Federal
Transportation Administration, and
the American Planning Association



RESULTS: South Florida Transit Resource Guide

- Regional Snapshot
- Major Transportation Hubs
- Transportation Planning Coordinators
- Public Transportation Providers
- Transportation Supportive Plans
- Transportation Supportive Policies and Programs
- Organizations

RESULTS: Station Area Profiles

Metrorail Transfer



The Metrorail Transfer station is Tri-Rail's busiest station and serves as the transfer point for its patrons to connect with Miami-Dade Transit's Metrorail system. The station is located along the north side of NW 79th Street, at its intersection with East 11th Avenue. Forty-one surface parking spaces are available at the station.

Land use immediately around the station is industrial and commercial, and this pattern continues to the north and south along the railroad tracks. However, uses quickly transition to residential a few blocks to the east and west.

TOD Activity: Low. Despite being the location where the region's two passenger rail systems converge, development activity in the Metrorail Transfer station area tends to be small scale commercial and industrial. Access to both rail systems presents strong long term potential for TOD in this station area. An area plan has been developed for the neighborhood east of and including the station. Implementation is being pursued by a local non-profit.

The Metrorail Transfer station ranks 10th in population and 4th in employment. The station area's population is 9,327 and the station area employs 6,054 people.

- Mangonia Park Station
- West Palm Beach Station
- Lake Worth Station
- Boynton Beach Station
- Delray Beach Station
- Boca Raton Station
- Deerfield Beach Station
- Pompano Beach Station
- Cypress Creek Station
- Ft. Lauderdale Station
- Ft. Lauderdale/Hollywood International Airport at Dania Beach
- Sheridan Street Station
- Hollywood Station
- Golden Glades Station
- Opa-locka Station
- Tri-Rail/Metrorail Transfer Station
- Hialeah Market Station
- Miami Airport Station

METRORAIL TRANSFER STATION AREA SUMMARY

Existing Land Use	Industrial, Residential, Commercial, and Institutional.
Daily Ridership	1,898 boardings per weekday (1st)
Parking Capacity	44 park-and-ride spaces and 2 taxicab spaces.
Bus/Shuttle Connectivity	Miami-Dade Transit Routes L, 42 and 500. Metrorail and Amtrak.
Transit Oriented Development Activity	Low. Area Redevelopment Plan for the area finalized.

Miami Dade County Station Area Characteristics Existing land use within a half-mile of the Tri-Rail Station

Transportation Features	
Parking Capacity ¹	4 (18th)
Transit Connectivity ¹	MDT routes L, 42 & 500, Metrorail, Amtrak.
Average Daily Traffic Volume (2007) ²	TBD
Planned Public Investment ³	\$298,777,000

Demographic Information ⁴	
Population	11,290 (7th)
% Ages 25-64	0.5207% (8th)
Median Income	\$30,368 (13th)
Bachelors and Above	0.07% (17th)
Households	3,330 (10th)
Ave. Household Size	3.39 (2nd)

Land use Characteristics ⁵	
Single Family Density	5.58 units/acre
Multi-Family Density	10.22 units/acre
Average FAR	0.34
Vacant Acres	0.077
Single Family Acres	129.4
Multi-Family Acres	22.1
Retail Acres	16.5
Office Acres	3
Industrial Acres	146.8
Institutional Acres	4.2
Public Land Acres	2.1
Total Acres	324.1
Assessed Value (2005)	\$227,723.6 (11th)

Passenger Characteristics	
Ave. Weekday Bldgs. ¹	1898 (1st)
Average Trip Length ¹	30.3 m (6th)
Passengers Arrive From: ⁵	Ft. Lauderdale Ft. Lauderdale Airport Hollywood
Passengers Go To: ⁵	Ft. Lauderdale Sheridan Street Cypress Creek.

Housing Information	
Housing Units ⁵	3,451 (10th)
% Owner Occupied ¹⁰	0.598% (4th)
% Rental ¹⁰	0.367% (12th)
% Vacant ¹⁰	5.80%
Single Family Units ⁷	360
Multi-Family Units ⁷	320

Employment Characteristics	
Occupational Licenses ⁶	451 (4th)
Employers ⁷	372 (10th)
Employees ⁷	6054 (4th)

Sources:

¹ South Florida Regional Transportation Authority 2009-2019 Transit Development Plan Major Update, December 2008.

² Palm Beach County Traffic Division Historic Traffic Growth Table Current Year - 2010, June 1, 2010.

³ South Florida Regional Transportation Authority Public Investments in the Vicinity of Tri-Rail Station Council, March 12, 2008.

⁴ SFRTA TDP 2007 Update Technical Memorandum, Task 3.4- Service Sufficiency Analysis, Table 1.

⁵ 2008 Tri-Rail On-Board Survey: Final Report, 2008

⁶ Occupational Licenses within 1/4 Mile of Tri-Rail Stations, South Florida Regional Planning Council

⁷ Regional Tri-Rail Corridor Employment Density Within 1/2 Mile, South Florida Regional Planning Council

⁸ South Florida Regional Transportation Authority Socio-Economic Profile Stations in Miami-Dade

⁹ South Florida Regional Transportation Authority Home Ownership within 1/2 Mile of Tri-Rail Stations: two different data sources.

¹⁰ South Florida Regional Transportation Authority 2005 Palm Beach County Summary Existing



Take Away

- ❑ Go to conferences.
- ❑ Learn from peer examples.
- ❑ Learn from peer organizations
- ❑ Utilize existing resources.
- ❑ Property appraiser records are a Byzantine maze.
- ❑ Data will be useful at unexpected times.
- ❑ It takes time.

TRANSIT ORIENTED DEVELOPMENT TOOLBOX:

REGIONAL AND STATEWIDE
COORDINATION EFFORTS

QUESTIONS & COMMENTS?