Active transportation, land use, and successful TOD

Transportation and Land Use Interfaces

The land use context must both drive and respond to modal choices

- Applies to both existing as well as **planned** uses and development
- Full integration requires bringing together work at 3 scales:
  - ✓ Regional – integrated large scale vision
  - ✓ Corridor – connectivity & convenience
  - ✓ Site – location and design
- This is **HARD** – temporally, technically, procedurally and politically

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Transportation and Land Use Interfaces

The challenges are daunting …

- Competing interests – “winners and losers”
- Conflicts between travel needs and human activities
- Differences in public sector and private sector values
- Integration of public process with private sector decision-making
- Multiple decision-makers with discrete and overlapping authority
- Conflicts among regional agencies, local jurisdictions, and private sector priorities
- Diverse and complex market forces and externalities at play
- Wide range of consumer preferences or diverse community aspirations to address
- Difficult to maintain consensus given all of the above

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Common barriers to transit-friendly land use

- Fragmented and incremental decision-making
- Conflicting interests and priorities
- “Mode wars” and “silver bullet syndrome”
- Disparate time horizons for action
- Who pays?
- Difficulties in assessing costs and benefits
- Funding constraints
- Changing consumer behaviour and market conditions
- Inertia

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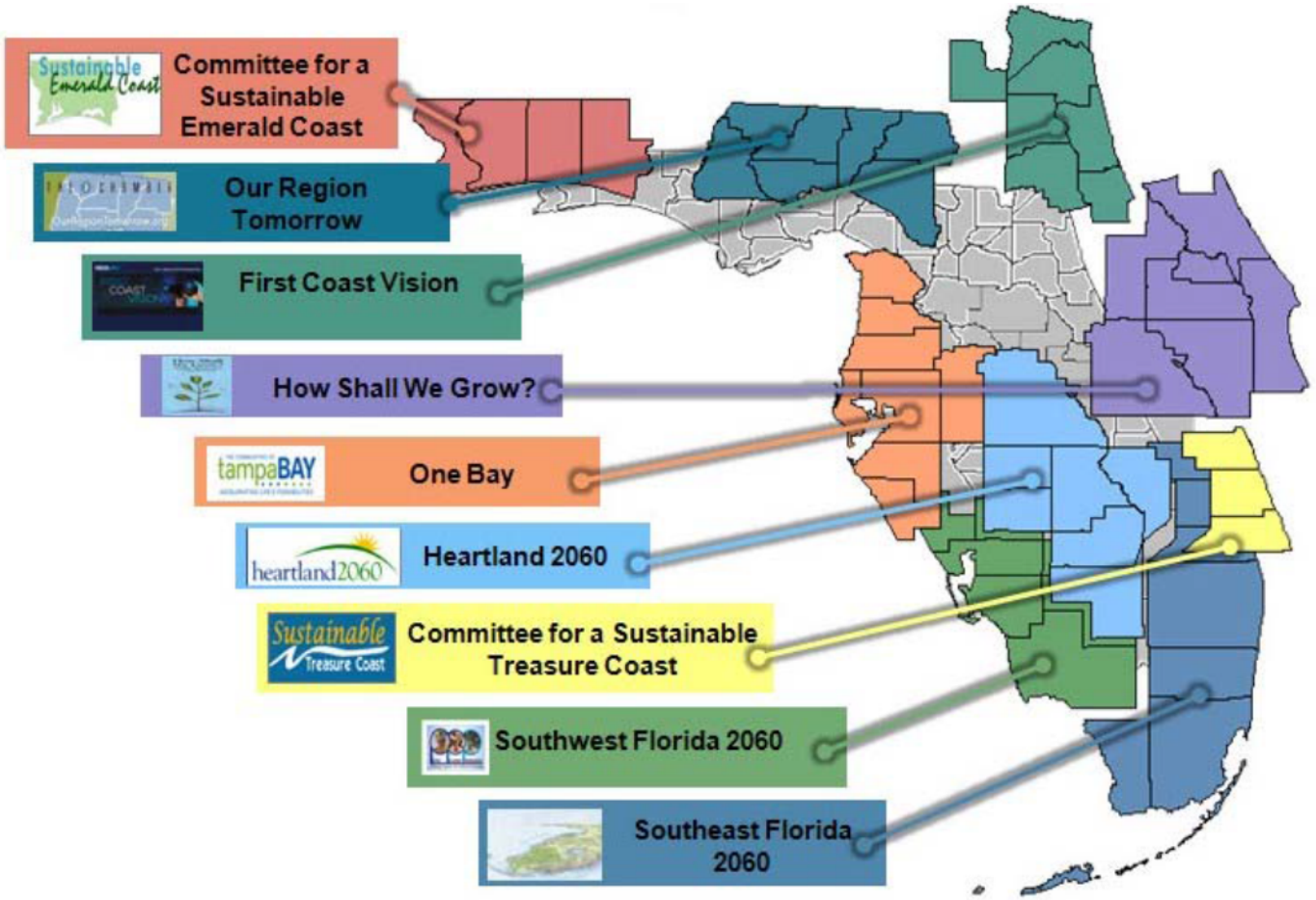
Regional planning initiatives



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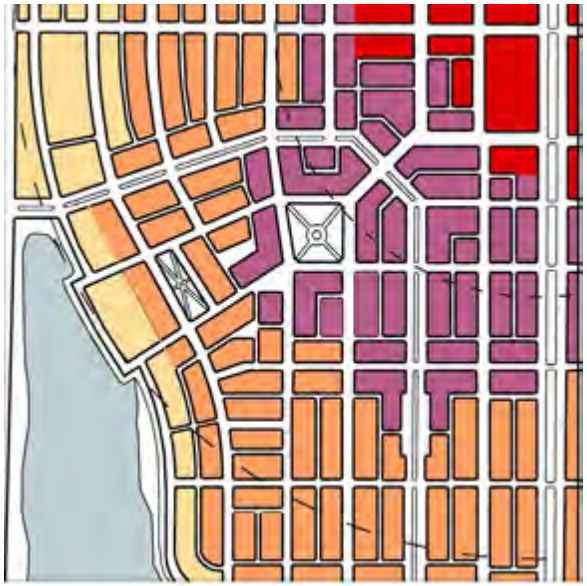
Transportation and land use interfaces

Scaling TOD appropriately to the context is essential to success

Regional Center



Community Center

Neighborhood Center

Source: Florida DOT Handbook, FDOT, December 2012

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Key pedestrian & transit friendly land use features*

- Medium to high densities
- Mixed land uses
- Short to medium length blocks
- Two-to-four lane streets
- Continuous, wide sidewalks
- Safe crossings
- Buffering from traffic
- Street-oriented buildings
- Comfortable, safe places to wait
- Nice facilities

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*From: *Pedestrian and Transit Friendly Design: A Primer for Smart Growth* by Reid Ewing

When it comes to transit, is density destiny?

"The central argument of this book is that density is not destiny. Transport policy itself has a bigger impact on transport patterns than urban planners have realized, and suburbs don't have to be totally reliant on the car. Planners who insist that car dominance can only be addressed by impossibly large increases in density may actually be entrenching the problem they are trying to solve."

– Paul Mees, Transport for Suburbia (2010)

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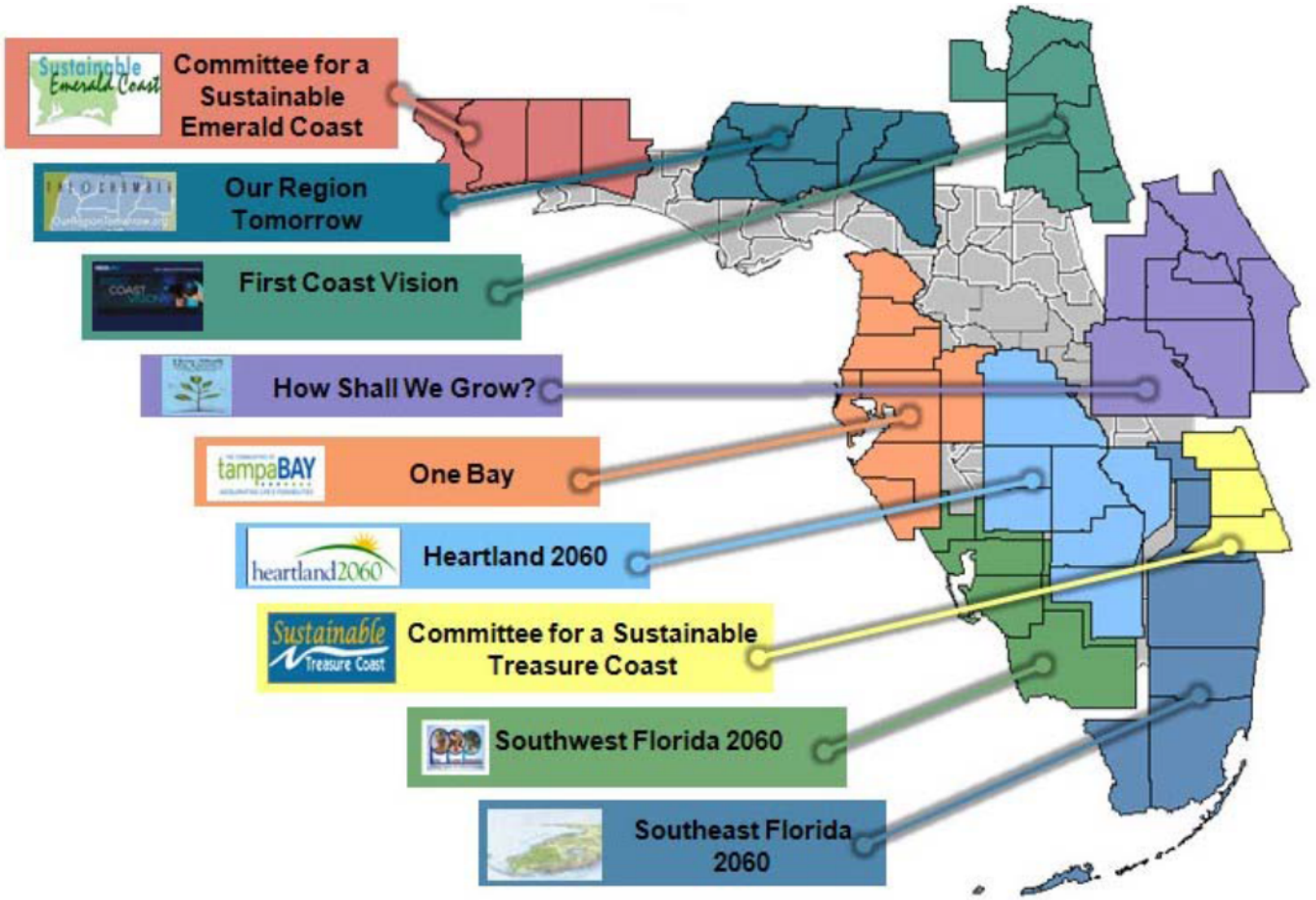
Many contributors



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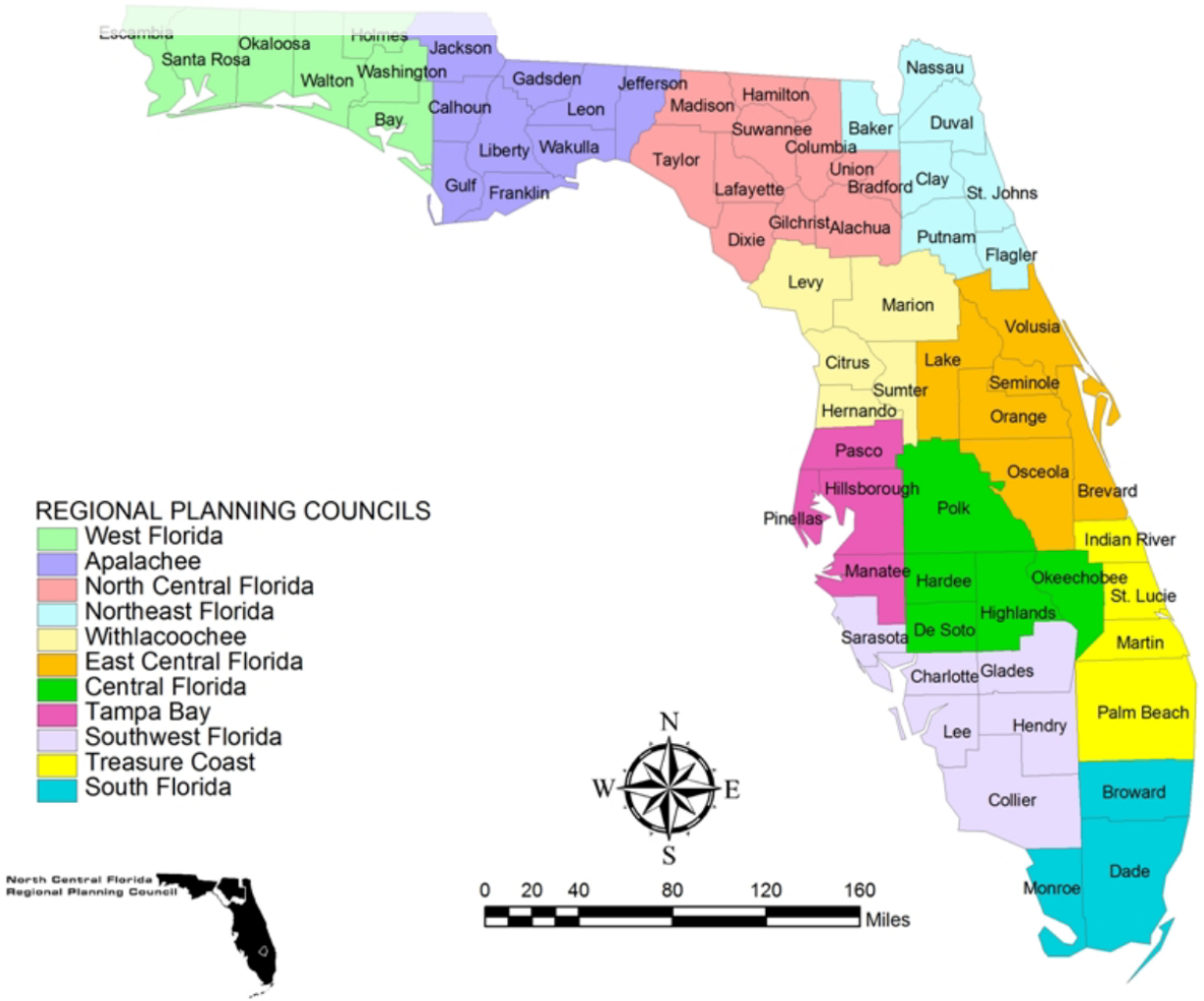

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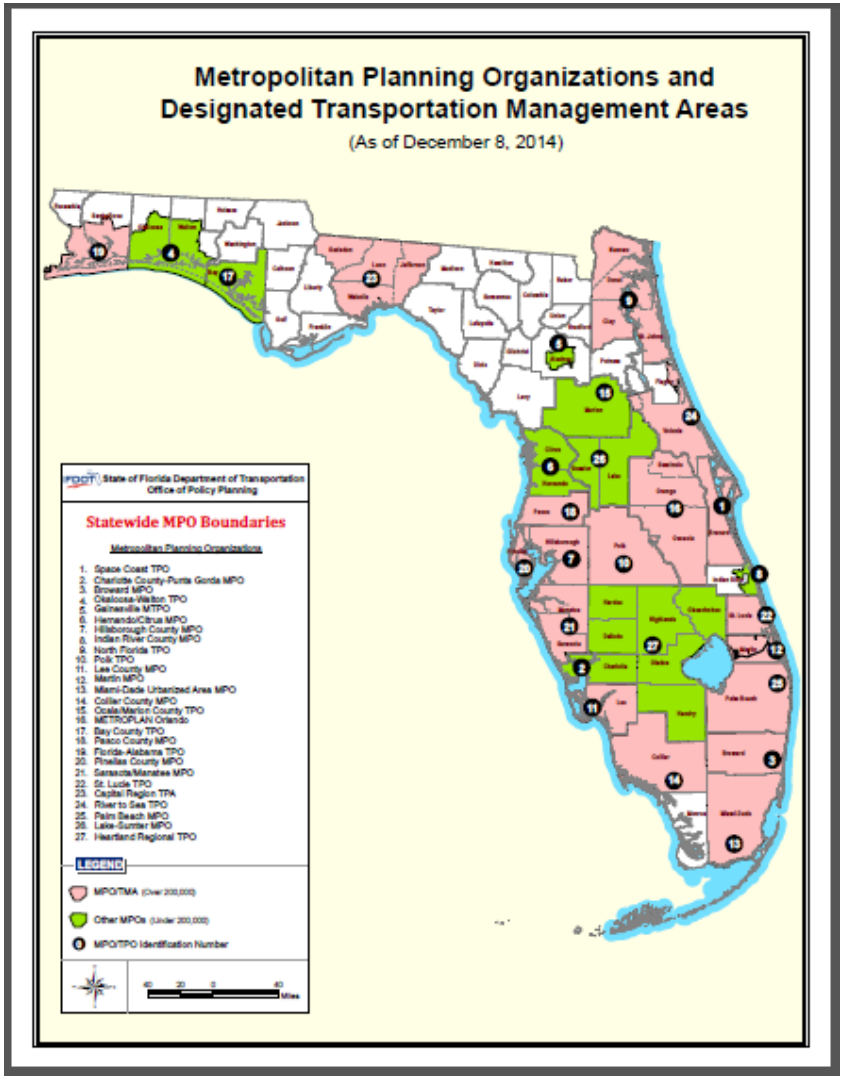

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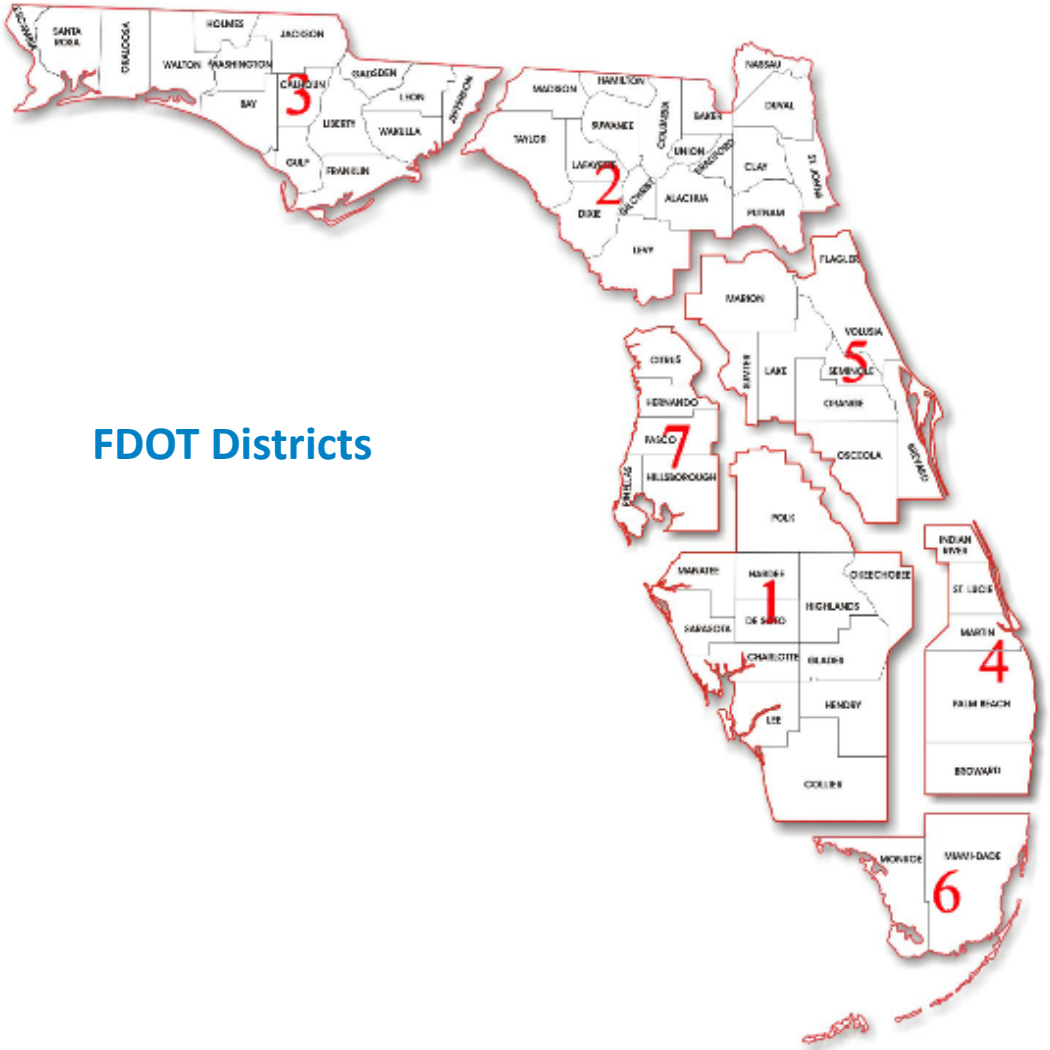

FDOT Districts

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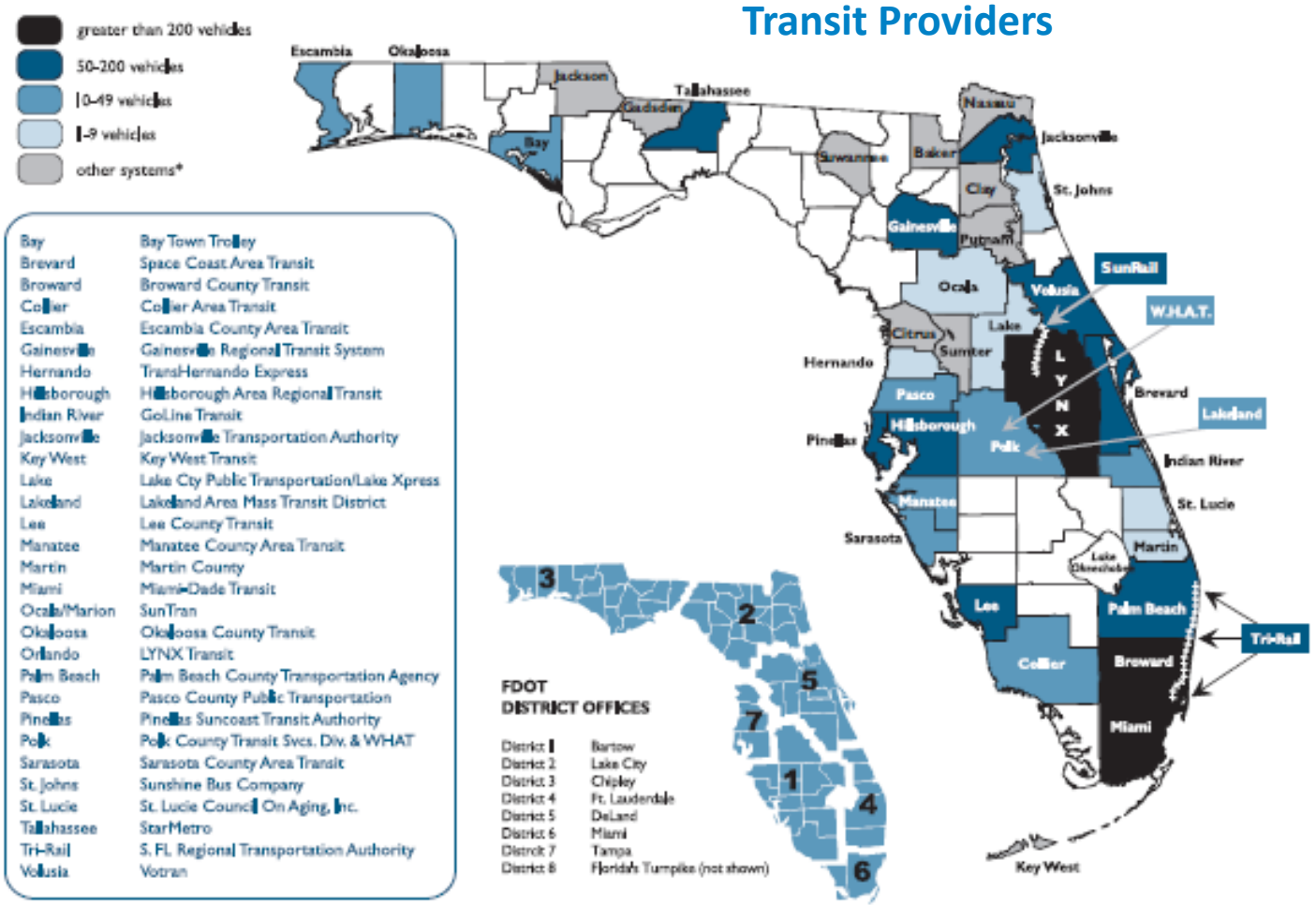

* *Key West Transit is classified as a rural system and does not report to NTD. Baker Council on Aging, Clay Transit, Big Bend Transit (Gadsden County), Citrus County Transit, JTrans (Jackson County), Nassau County Council on Aging, Putnam County Transit, Suwannee Valley Transit Authority, and Sumter County Transit are deviated-route systems and do not report in the urban NTD.*

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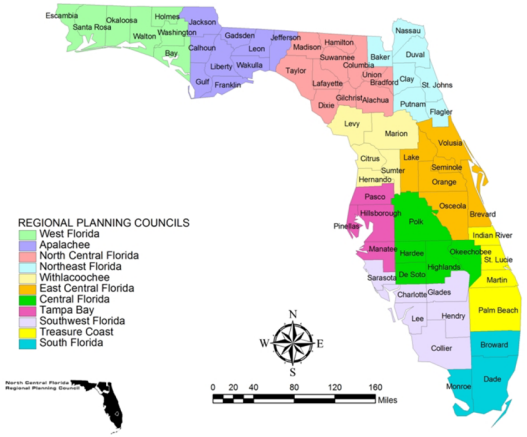

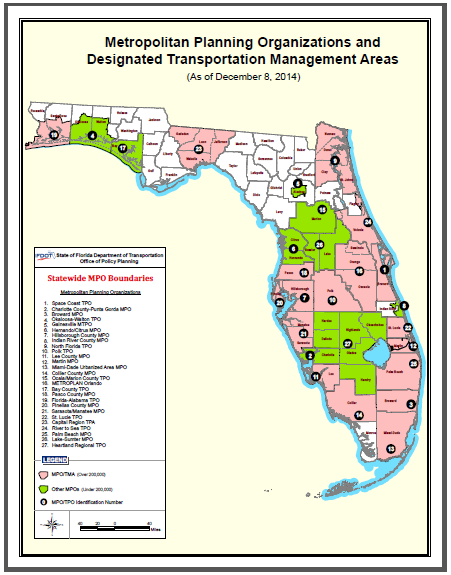

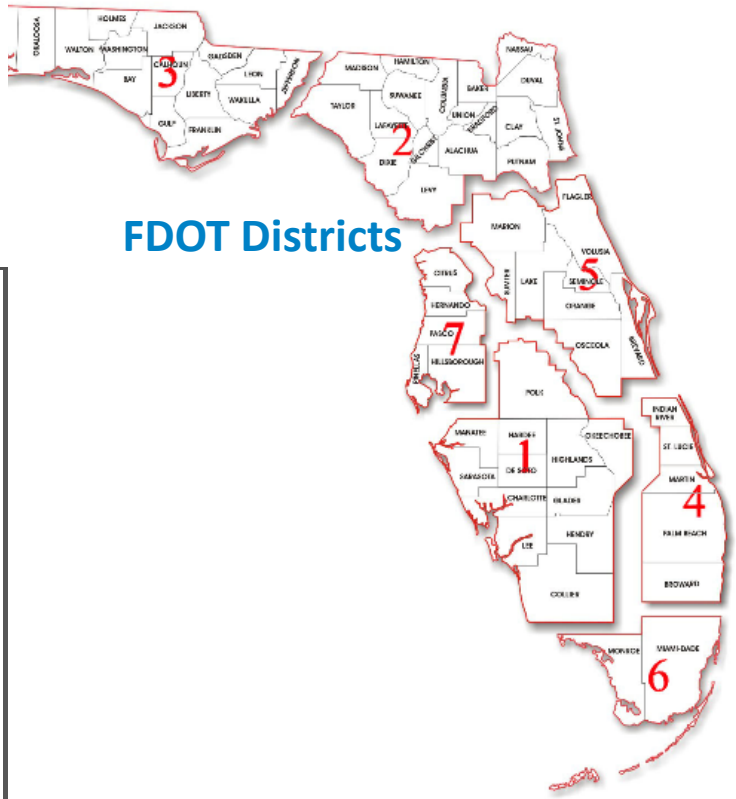

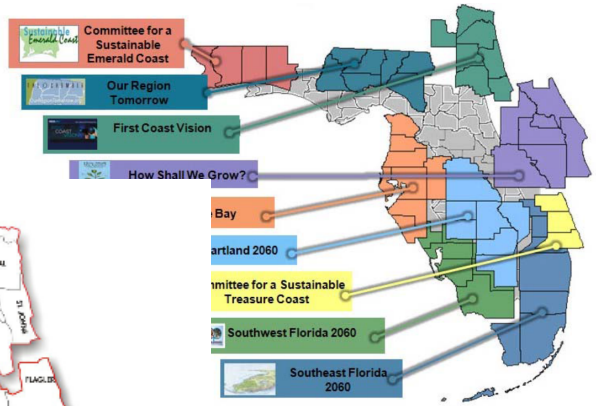

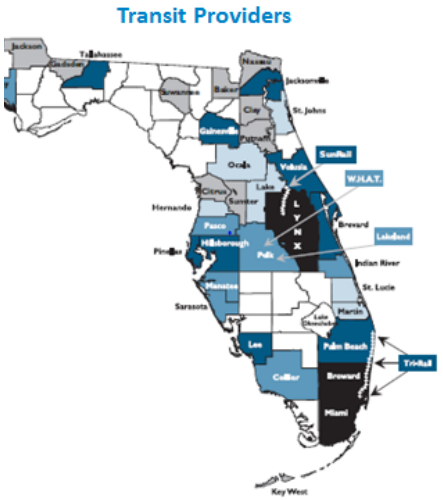

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Transportation and Land Use Interfaces

Whose job is it?

FDOT Public Transit Office Divisions

- **Grants Administration**
  The Transit Office administers Federal and State transit grants, monitors compliance with transit regulations, and provides planning and technical assistance to Florida's transit agencies and communities.

- **Transit Operations and Safety**
  The Transit Office reviews and implements safety programs, provides technical assistance in the design and procurement of buses for non-profit and governmental entities, and training programs for mechanics, fleet supervisors and operational transit staff.

- **Transit Planning**
  The Transit Office provides guidelines, handbooks, documents, planning software, and networking information for transit professionals.

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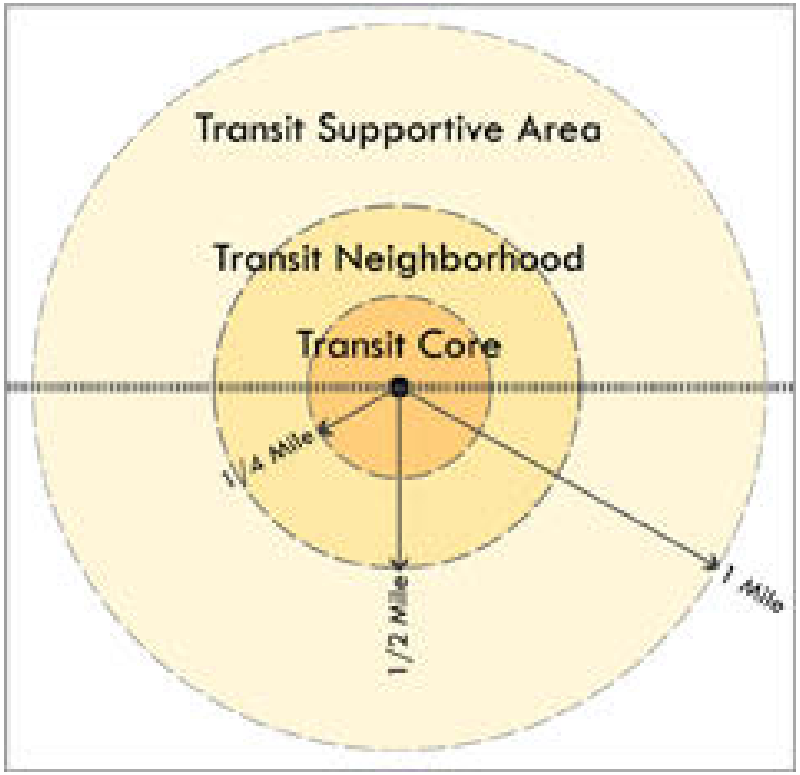
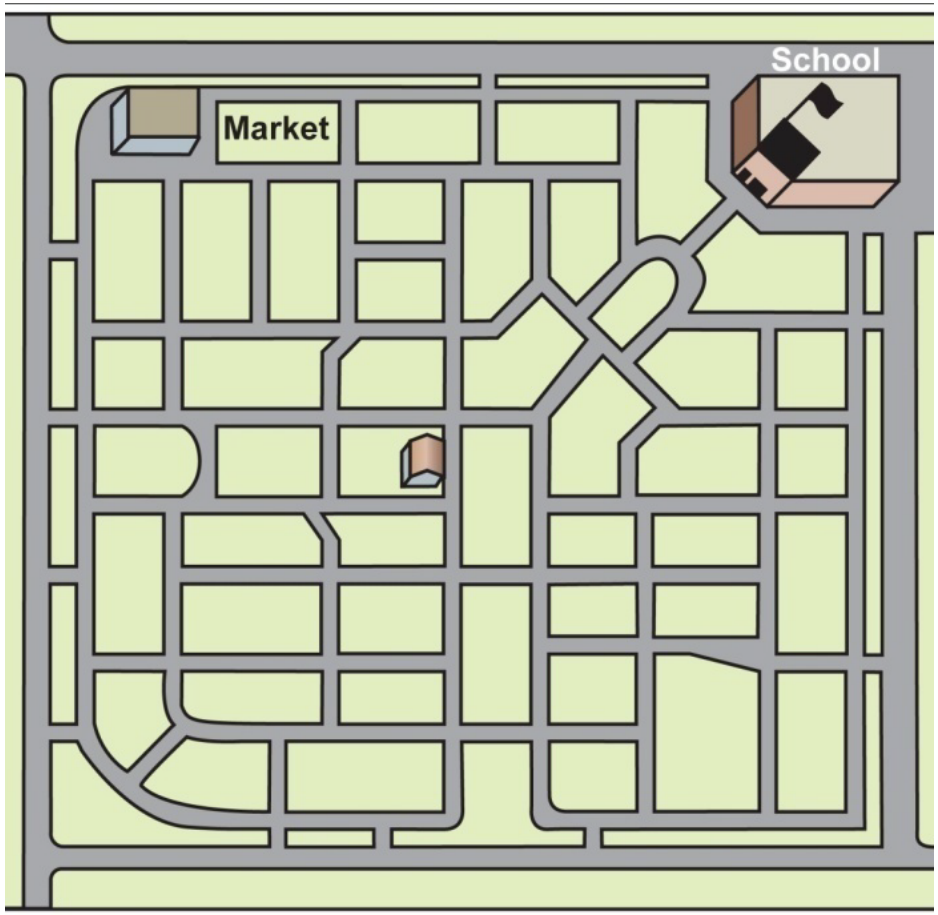
FDOT & TOD

- Compact
- Moderate-to-high intensity & density
- Mixed use
- Walkable:
  - ¼ mile = 5 minutes
  - **½ mile = 10 minutes**

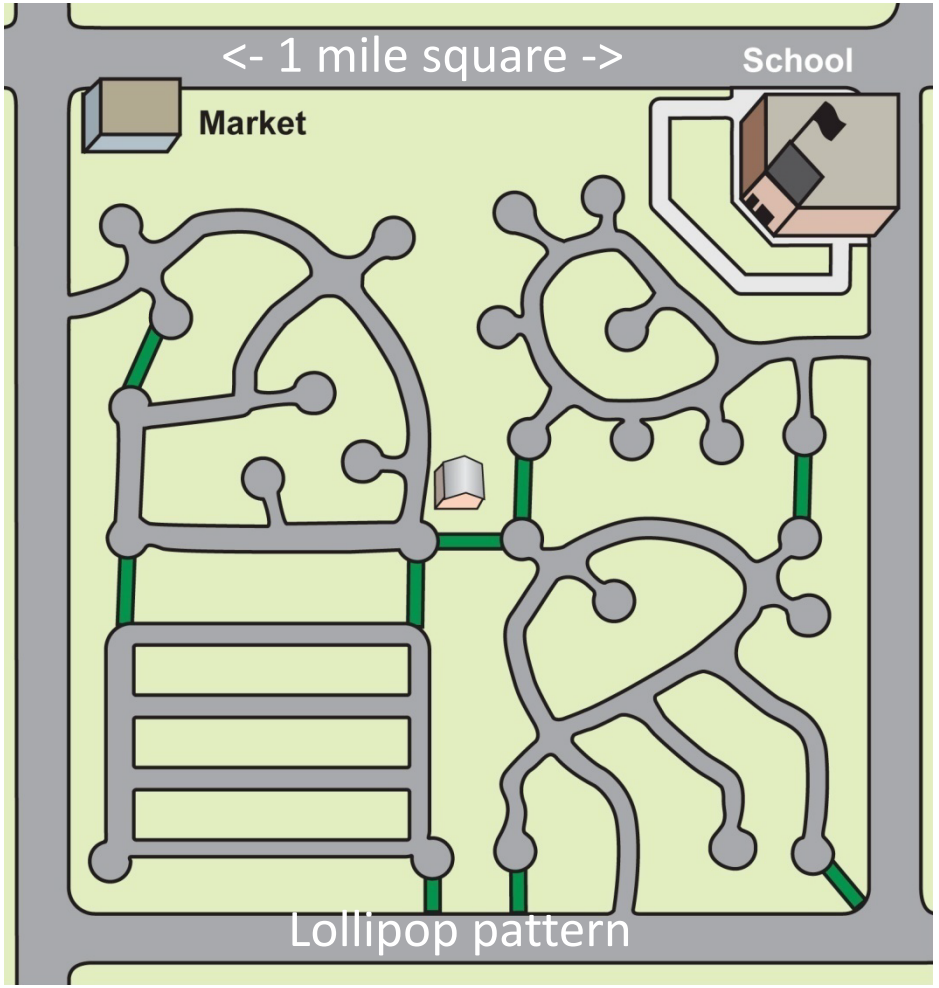


Street Connectivity



Can you increase connectivity with paths, greenways?

- Reduces walking distances: YES
- Offers more route choices: YES
- Disperses traffic: NO



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Continuous sidewalks & safe crossings

Measure walks in minutes not miles

Institute for Transportation & Development (ITDP)

The TOD Standard outlines eight core principles of urban design and land use, each supported by specific performance objectives and easily measurable indicators or metrics.

https://www.itdp.org/tod-standard/

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IDTP principles of urban development for transport in urban life

[walk] Develop neighborhoods that promote walking

[cycle] Prioritize non-motorized transport networks

[connect] Create dense networks of streets and paths

[transit] Locate development near high-quality public transport

[mix] Plan for mixed use

[densify] Optimize density and transit capacity

[compact] Create regions with short commutes

[shift] Increase mobility by regulating parking and road use

Principle 1 - Walk

Pedestrian realm should be:

- Safe and complete
- Active and vibrant
- Temperate and comfortable

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Principle 2 - Cycle

The cycling network should be:

- Safe and complete
- Cycle parking and storage ample and secure

Principle 3 - Connect

- Walking and cycling routes are short, direct, and varied
- Walking and cycling routes are shorter than motor vehicle routes

Principle 4 - Transit

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Principle 5 – Mix (Uses)

- Trip lengths are reduced by providing diverse and complementary uses
- Lower income groups have short commutes

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Principle 6 - Densify

Residential and job densities support high quality transit and local services

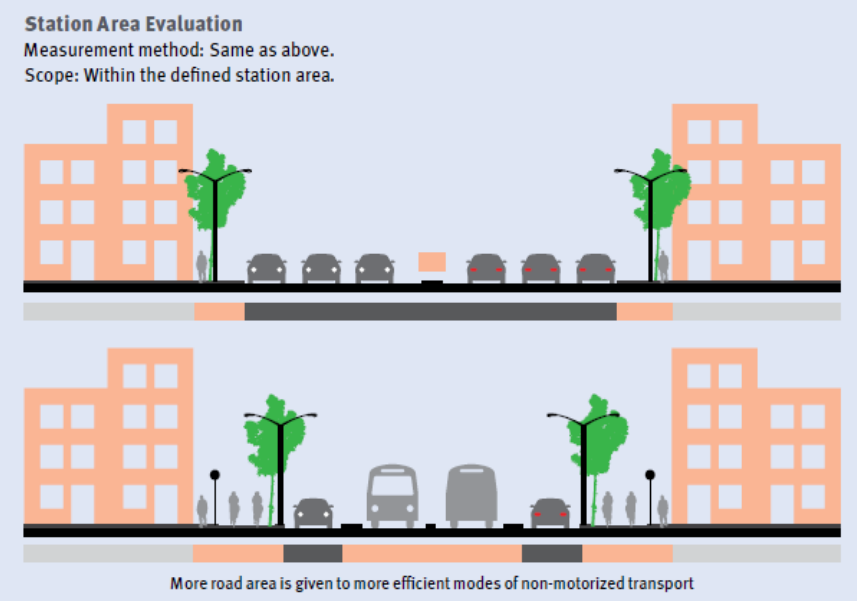
Principle 7 - Compact

- Development is in an existing urban area
- Traveling through the city is convenient

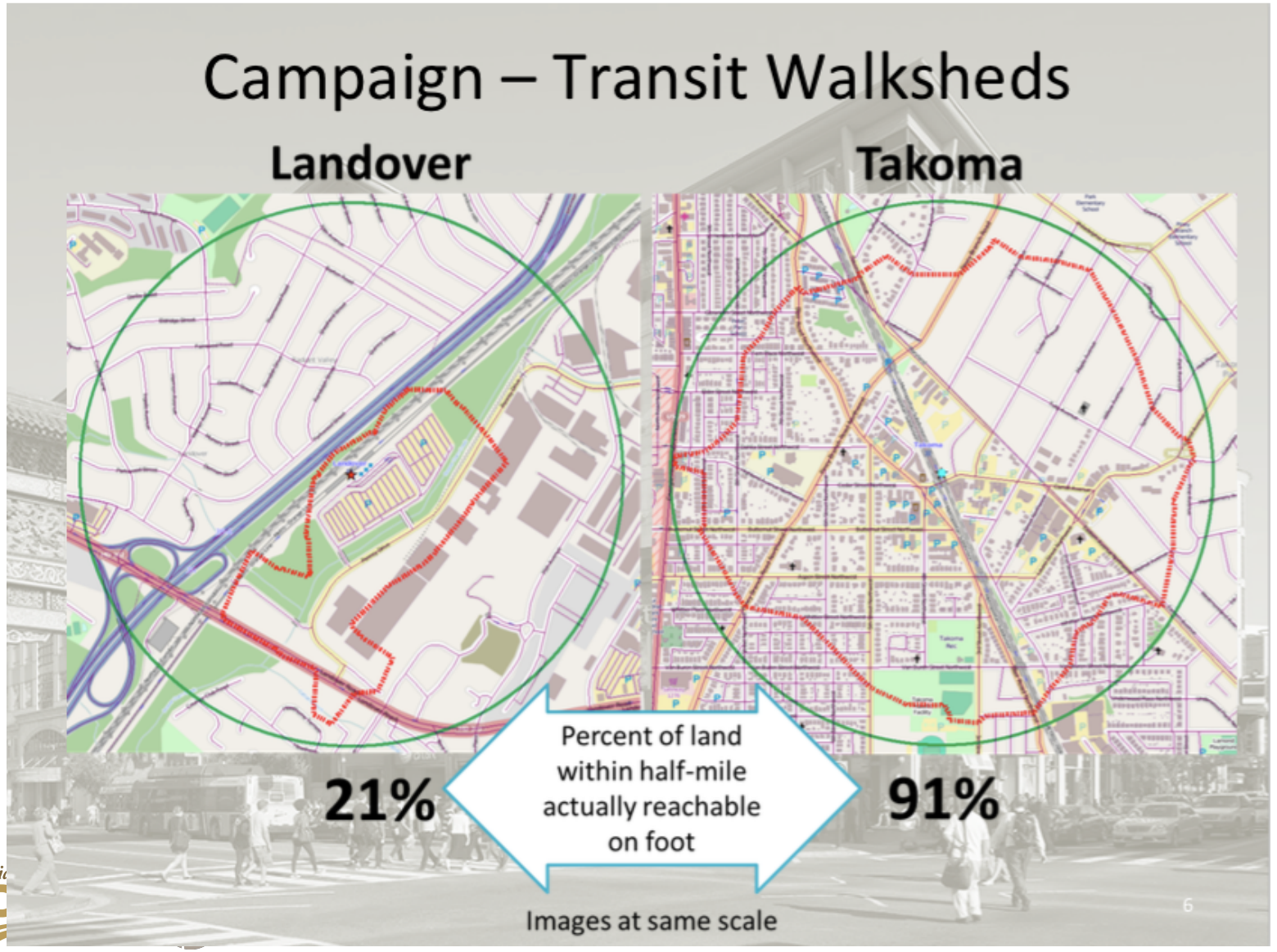
Principle 8 - Shift (Mode)

Land occupied by motor vehicles is minimized.

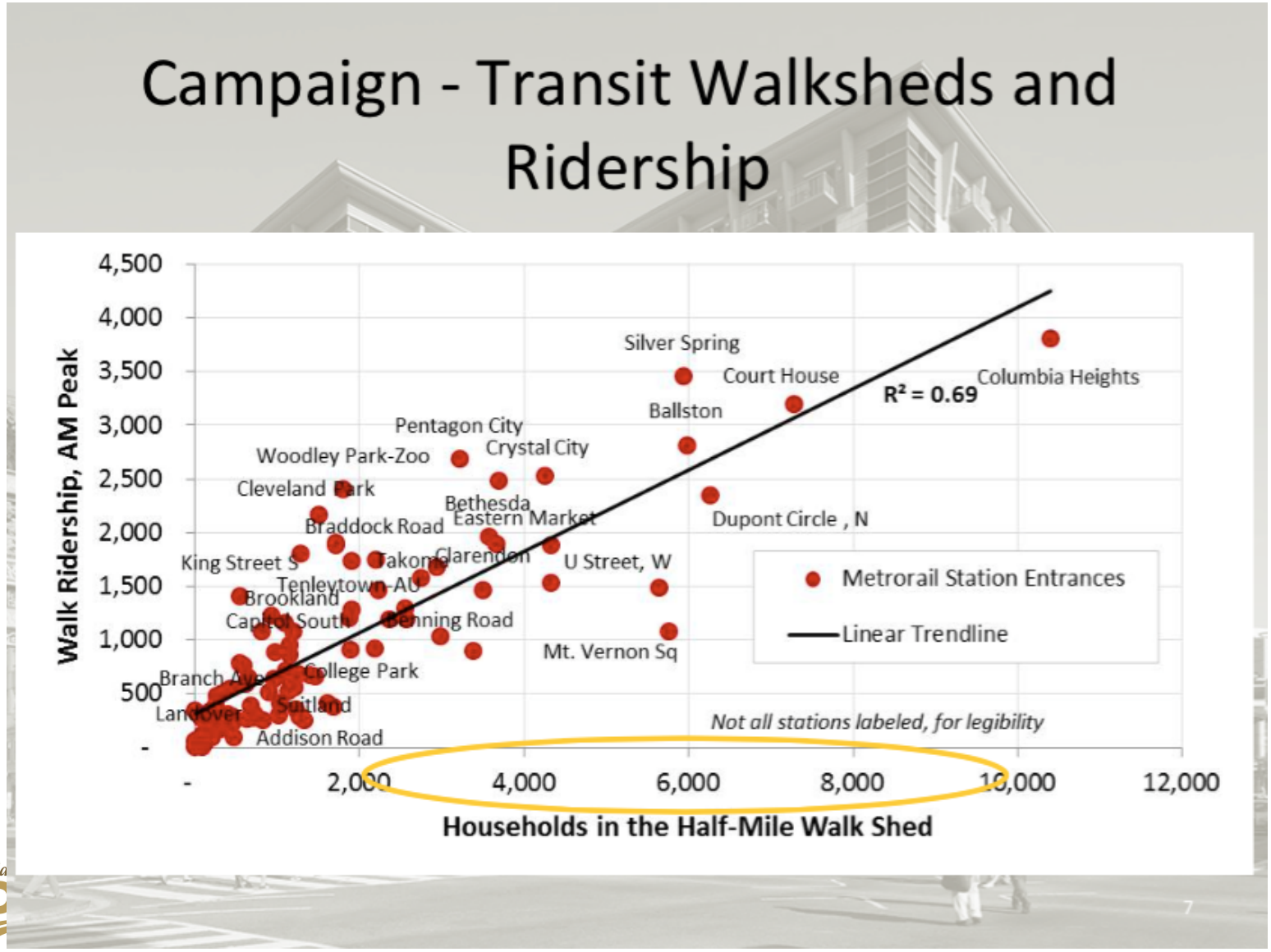
- 8.1 Off-street parking minimized
- 8.2 Driveway density minimized
- 8.3 Roadway area used for motorized vehicles and off-street parking a low percentage of total land area



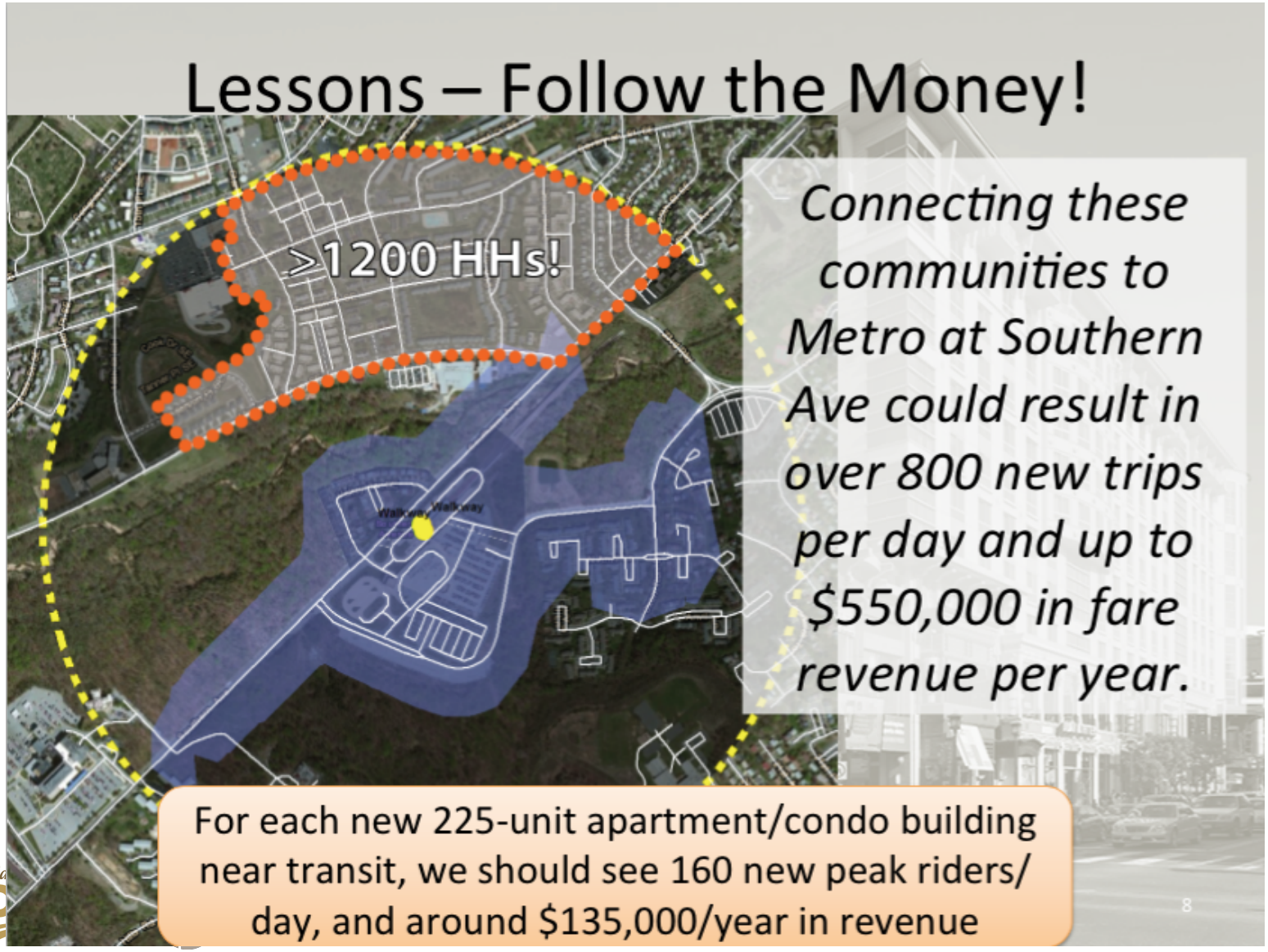
Making the case with transit performance metrics



Ridership correlated with access



Connected network = revenue



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