

# Charting a New Course for FDOT

Taking Multi-Modal Planning to New Levels

**John P. Moore**

Florida Dept. of Transportation  
District 5

**Pamela Richmond**

Lake~Sumter MPO

**Karl Passetti**

Kittelson & Associates, Inc.



Are you involved in  
**land use planning?**

Are you involved in  
**transportation planning?**

# TUPPERWARE

*THE NICEST THING THAT COULD  
HAPPEN TO YOUR KITCHEN*



“We make  
bowls and  
perfumes...”

Source: <http://my2.tupperware.com>

# Osceola Corporate Center

## 2008 DRI Development Order

Proposed floor-area ratios and traffic-area ratios of this plan are as follows:

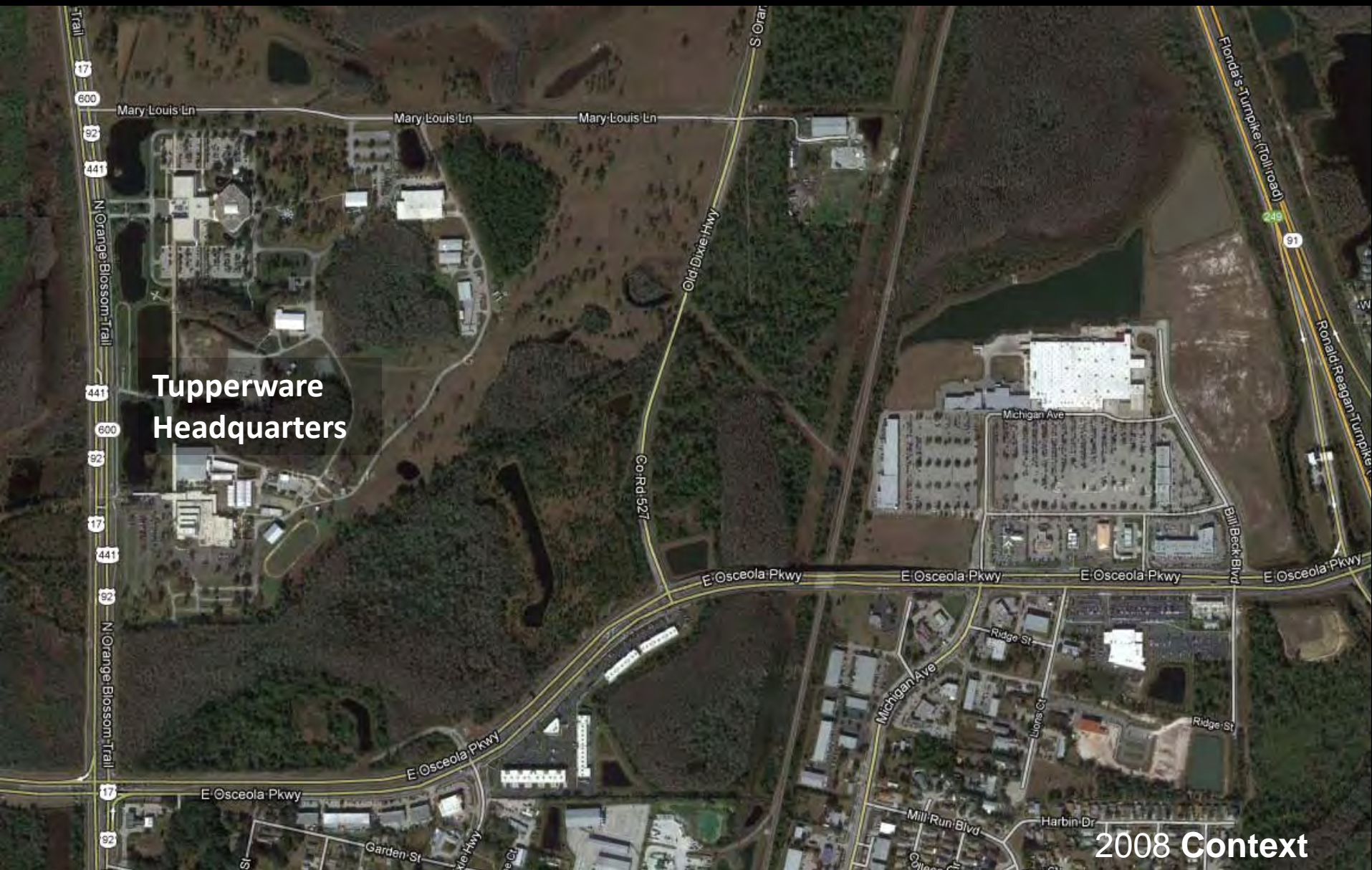
Use	Acres	Square Ft.	Floor/Area	Av Daily Trips	ADT/Acre
Office	161.99	1,402,616	.20	15,928	98.33/ac
Office/ Warehouse	99.28	887,163	.35	20,975	211.27/ac
Retail	166.16	1,874,658	.21	68,402	391.81/ac
Hotel*	20.49	662 units		6,247	277.01/ac

\*Through the use of an equivalency ratio, multi-family units are permitted at a density of 18 units per acre.

Industrial land uses responding to freight rail nearby.

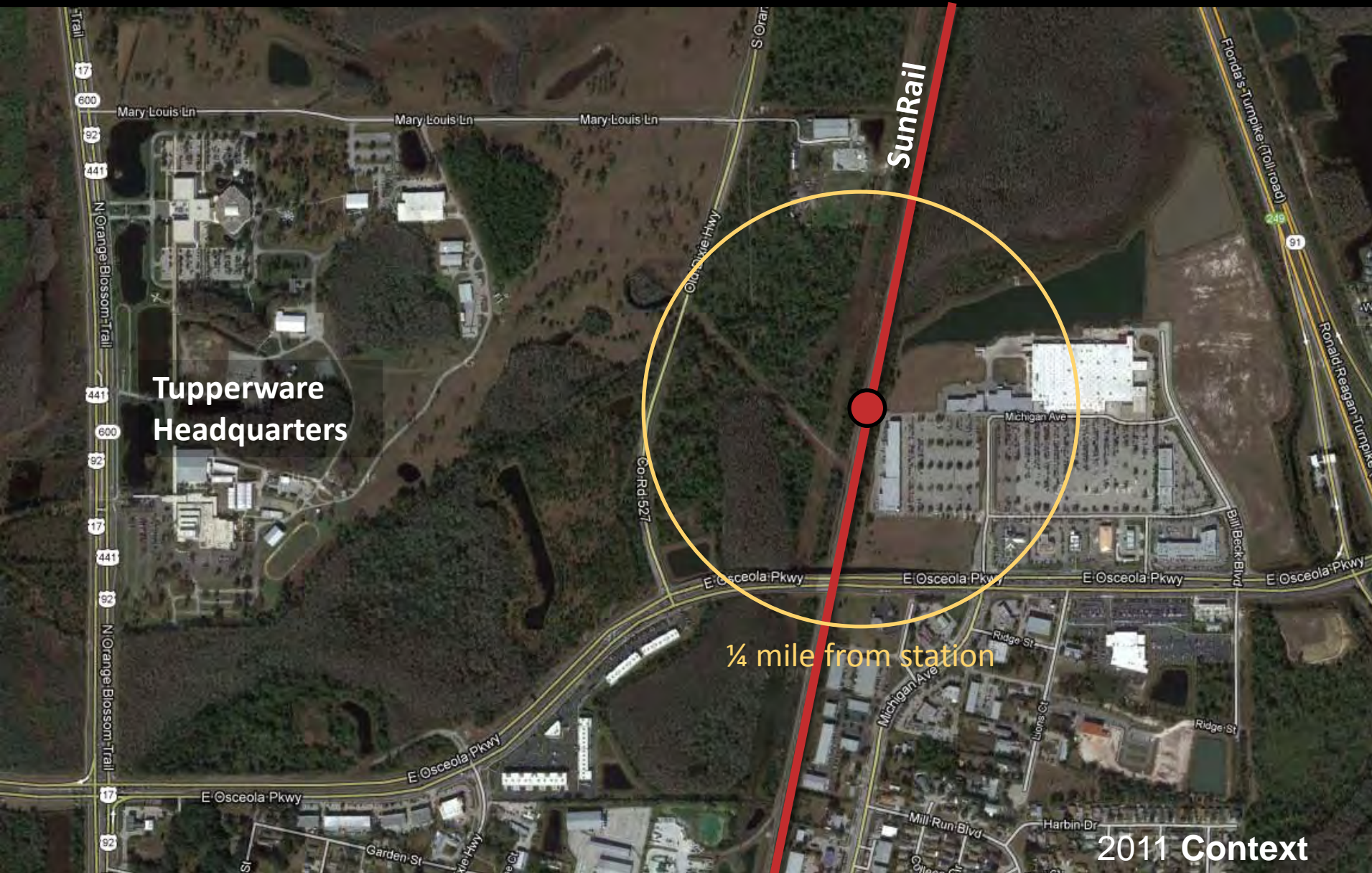


# What makes sense to developers?





# What makes sense to Developers?



# Change in Proposed Development

- 100 acre-TOD
- Mix of uses
- Multi-family residential

Orlando Business Journal,  
September 16, 2011

Tupperware Brands Corp. wants to change the planned uses for its 100-acre site next to the planned Osceola Parkway SunRail station as follows:



Type of use	Already approved	New proposal
Office	1.4 million SF	1.9 million SF
Office/warehouse	887,163 SF	80,000 SF
Retail	1.9 million SF	1.8 million SF
Multifamily	N/A	2,350 units
Hotel	662 rooms	500 rooms

Source: Osceola County

Osceola County, in collaboration with the landowner, shall support the efforts of the State of Florida and other local governments to implement the SunRail commuter rail system in east central Florida by crafting a regulatory framework that encourages implementation of Transit Oriented Development (TOD). The TOD shall be located on parcels 18, 20, 21, 22 and 23 as identified on Map H attached hereto. The development program for these parcels shall be as follows:

The densities for the TOD parcels shall be as follows.

USE	F.A.R. (Min)	RESIDENTIAL (Min)
Residential		20 du/acre
Office	0.45	
Retail	0.30	
Hotel		
Office/Warehouse	0.40	N/A



# It makes sense to **developers**

“Tupperware, which has about **300 employees**, is planning apartments, shops and offices on property surrounding (the SunRail station).

(Development will consider a) **bike stand to encourage workers to ride the three-quarters of a mile** from the depot to the office.”

Orlando Sentinel, July 5, 2011



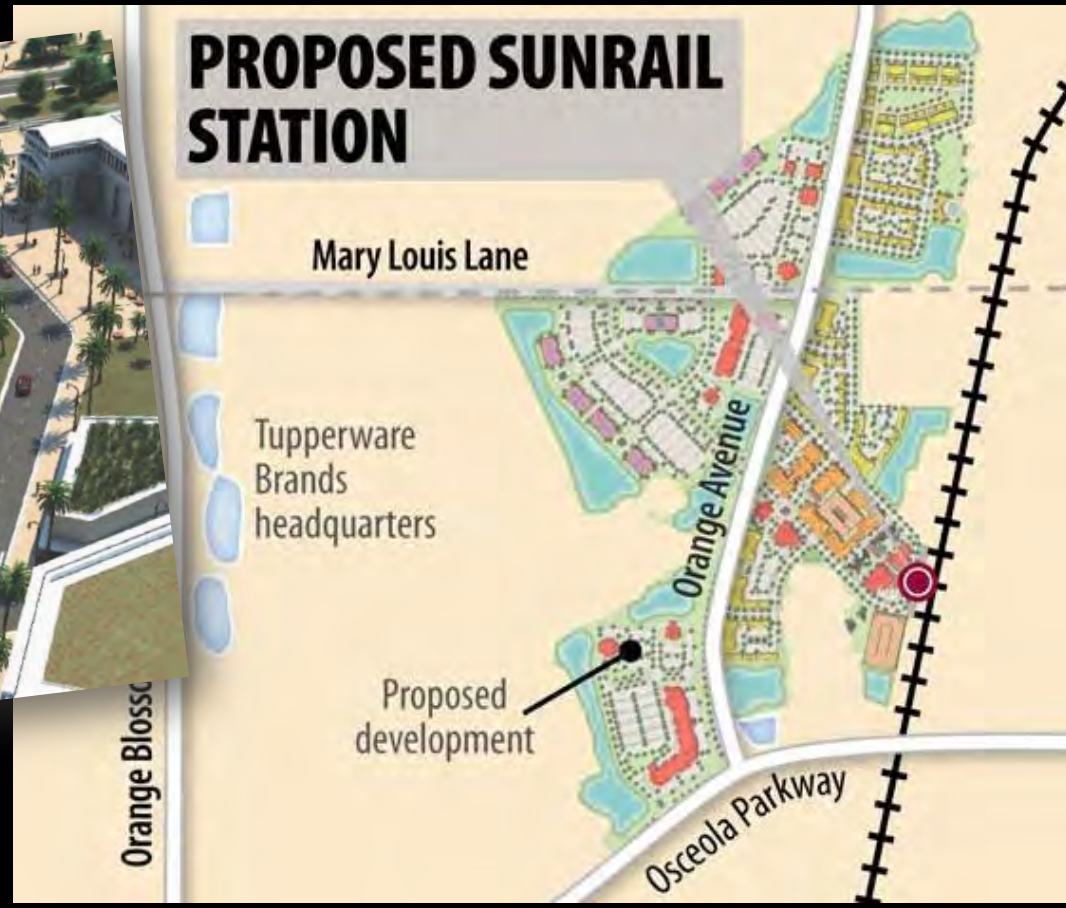
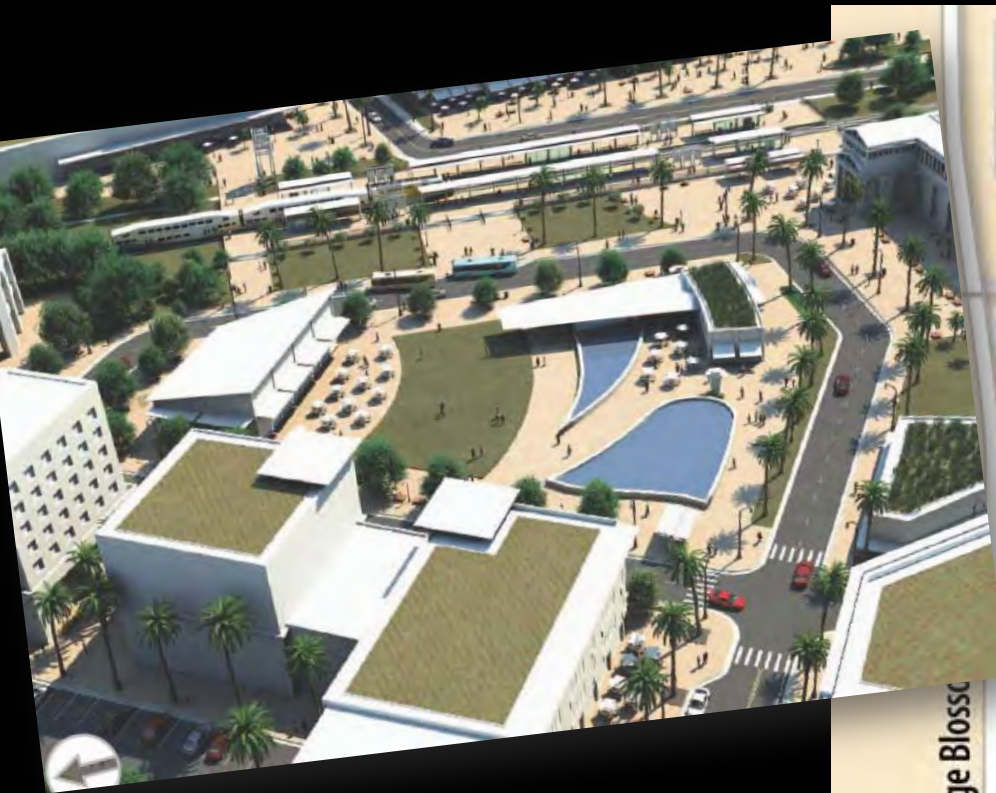


# Partnership towards **Multi-Modal Mobility**

**FDOT:** Commitment to build SunRail

**Osceola County:** TOD Overlay Zoning

**Developer:** Commitment to build TOD;  
9 acres donated for station

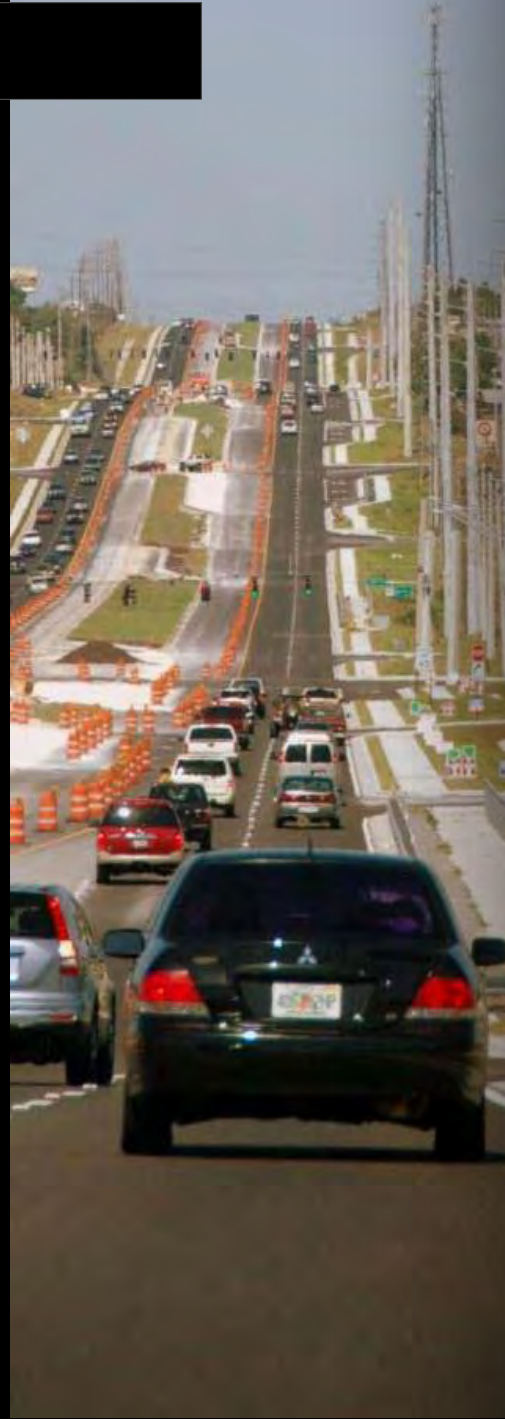


# Evolving DOT Role



# True Partnership

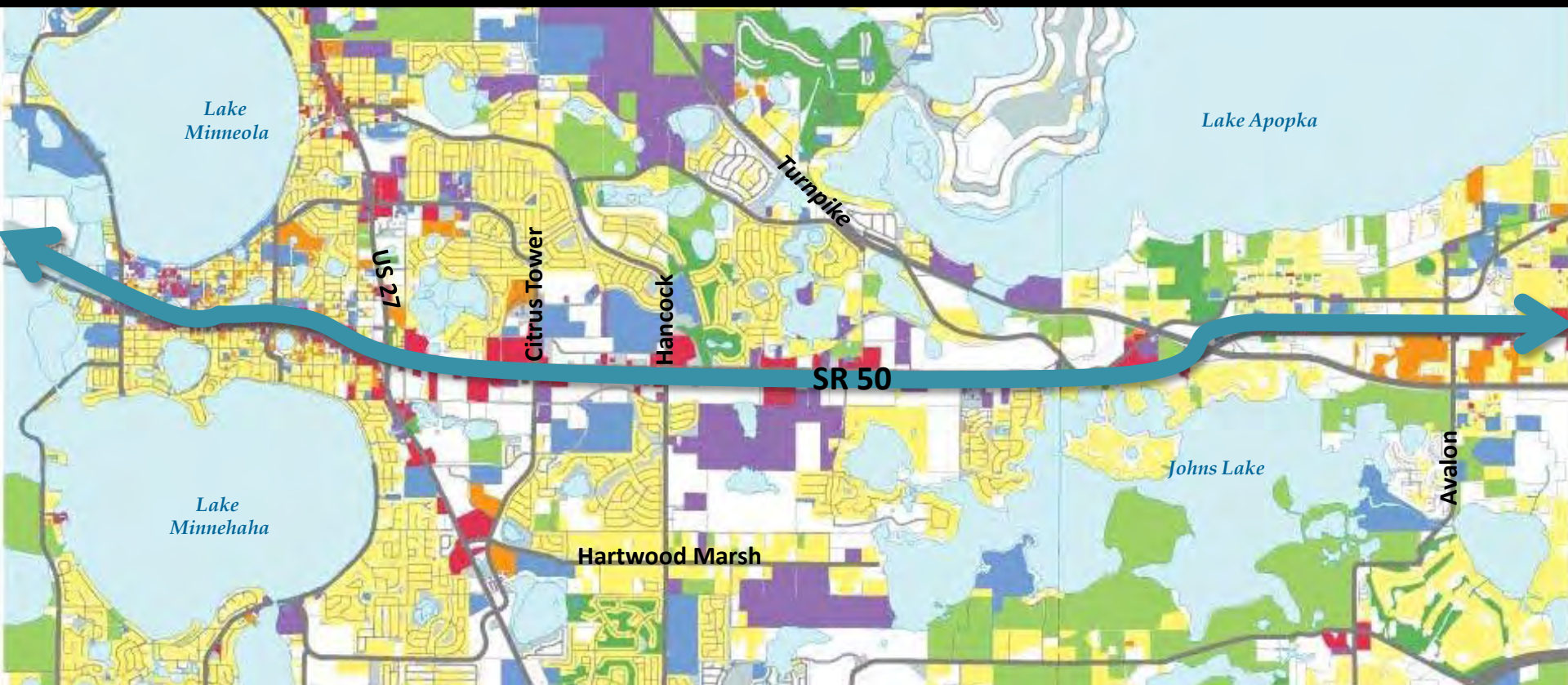
- **Florida DOT- District 5 Multi-Modal Corridor Planning Initiative**
- **Lake~Sumter MPO- Implementation of Transportation 2035**





# the challenge

- 4-lane major arterial, recently widened to 6 lanes
- Future travel demand far exceeds future capacity
- Limited alternative parallel network
- Roadway being used for BOTH local and regional trips
- Designated a multi-modal corridor in TRANSPORTATION 2035
- Multi-modal solutions viable only with land use strategies





# Land Use & Transportation Goals

- Focus on Corridors and Centers and consider
  - Designation of Multimodal Transportation Districts
  - Multimodal or Transit Oriented Development Overlays
- Prioritize creation of policies that support 'walkable' places:
  - Moderate density and mixture of land uses
  - Complete Streets design guidelines
  - Direct future growth within these centers



# Multimodal Corridors



**SR 50  
Corridor**



# What is multi-modal mobility?





Ingredients to multi-modal mobility

# TRANSPORTATION

Place to comfortably and safely walk,  
bicycle, take transit, or drive on



# LAND USE

Places to conveniently walk to,  
bicycle to, reach by transit, or drive to



# SR 50 planning process



1974



The Turnpike - now completed - provides a new and faster connection to N & S Florida

Residential development continues S & E of downtown

Commercial Development starts along SR 50 near US 27

Small subdivisions become a more common as a development type





1999



Rapid residential development occurs

Citrus Tower Blvd becomes a major connection to SR-50





2010



Some development on previously approved master planned communities continues

Few sections of local network added

Development of large commercial parcels becomes common

Most of undeveloped land is located along the south side of SR 50 and East of US 27



# US 27- 2002



2/29/1999

US 27

Lost Lake



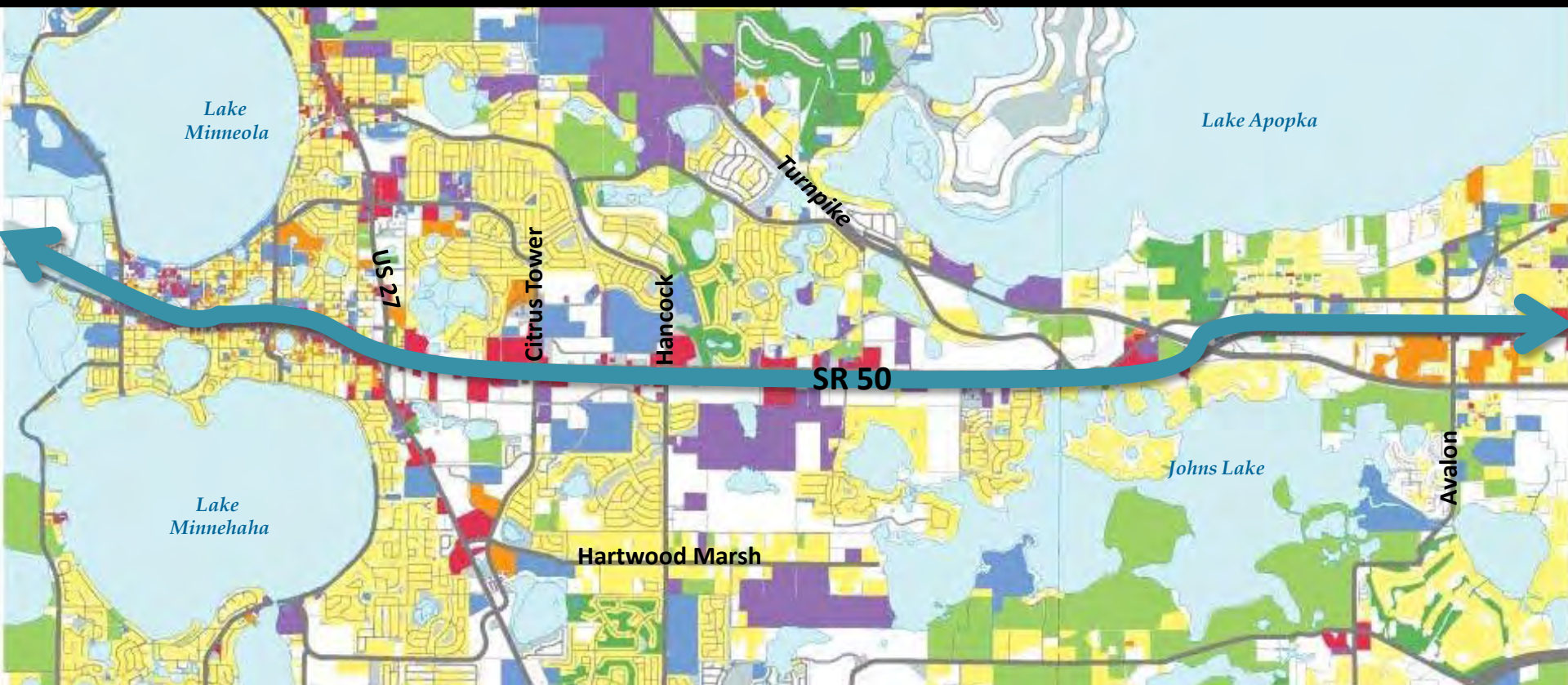
# US 27- 2008





# the challenge



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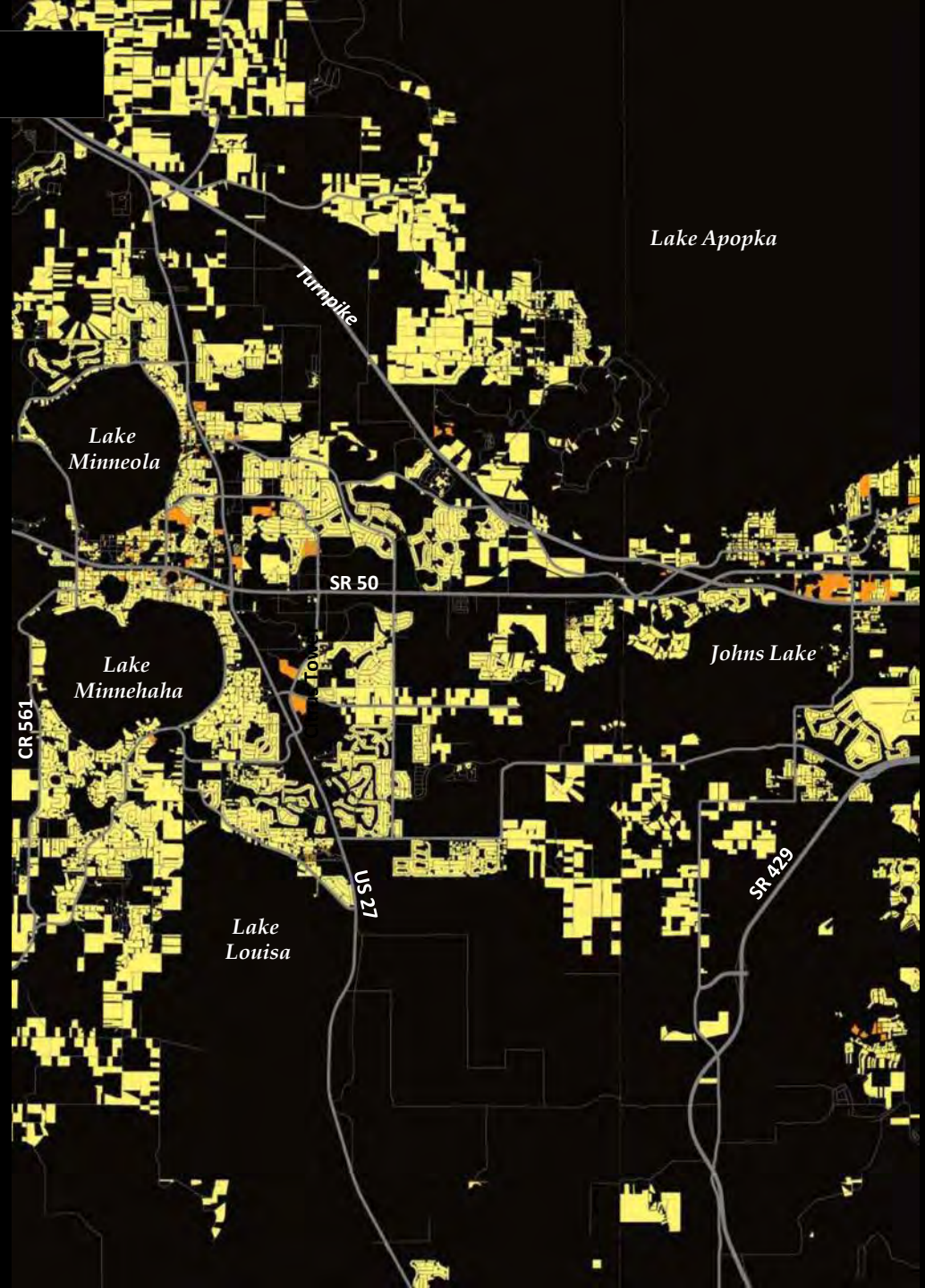




# residential land use






-  Multi-Family Residential
-  Single Family Residential

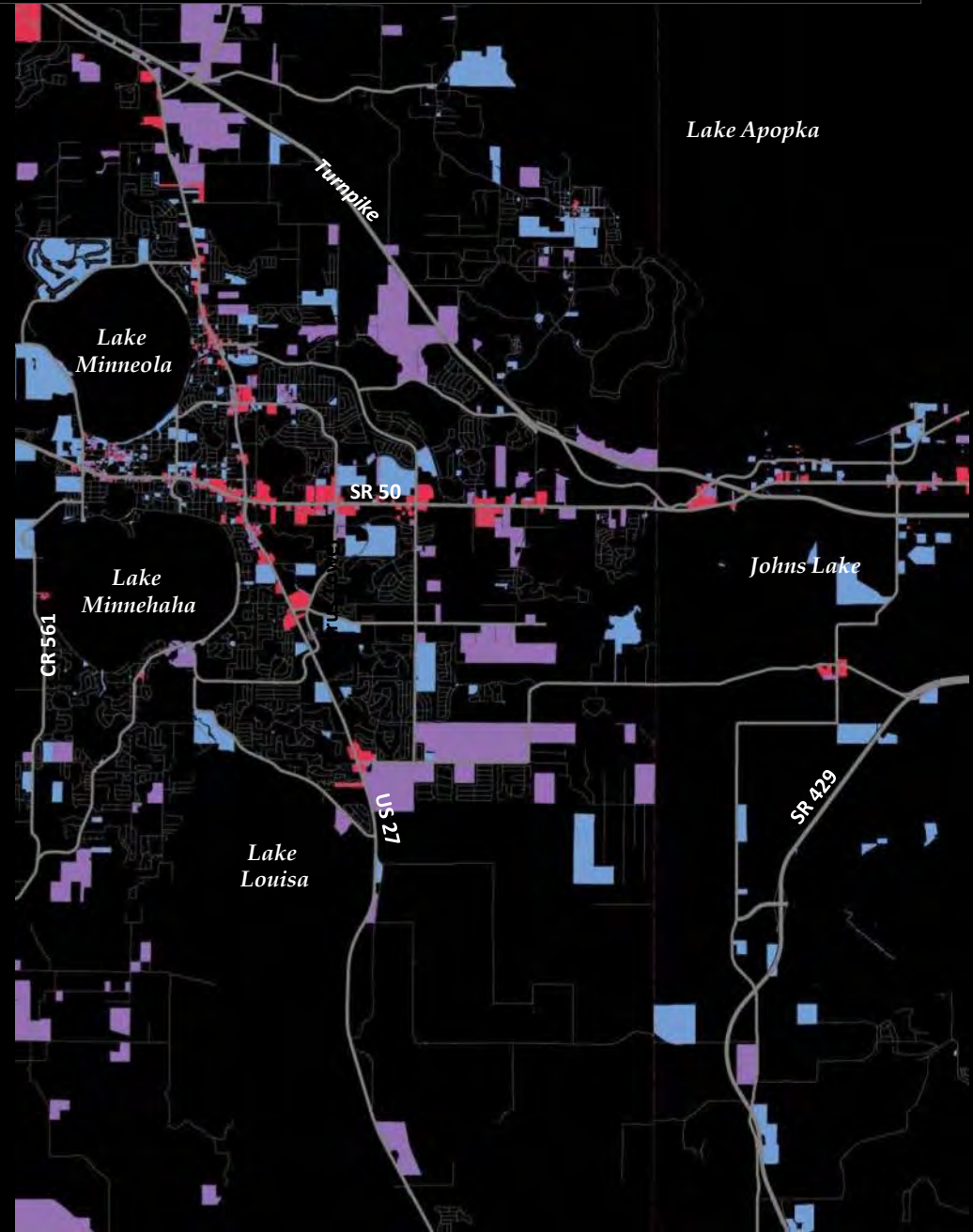




# commercial/office/institutional land use



-  Commercial
-  Industrial and Office
-  Institutional





# open space/conservation



-  Agricultural
-  Recreational, Conservation, and Open Space



# understanding travel patterns

- 24-hour tube counts
- Peak-hour turning movement counts
- Bluetooth™ MAC address matching
- CFRPM Select Link Analysis
- Census LEHD Data





# Corridor used for local traffic

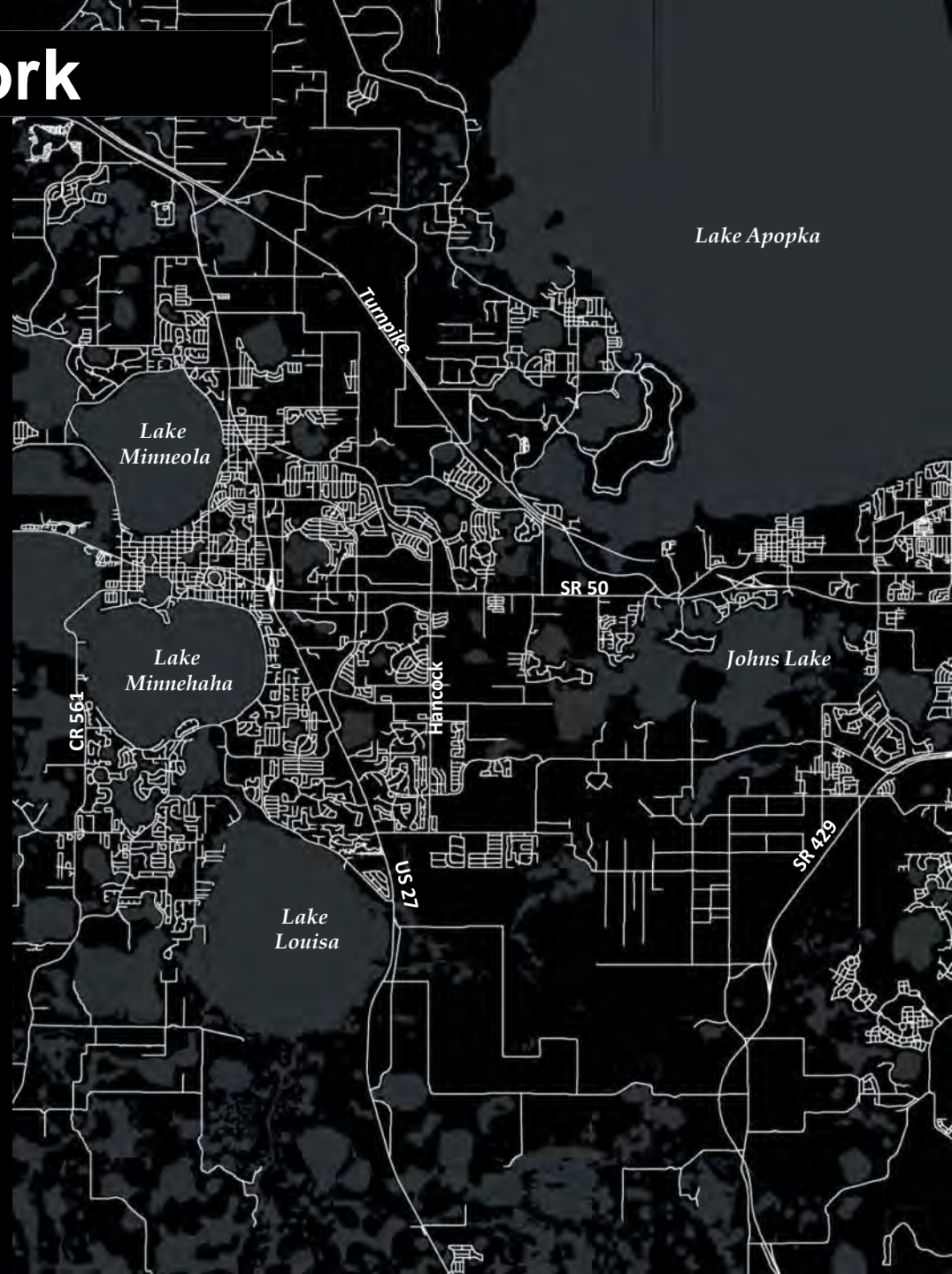


Weekday AM  
Peak East  
Bound Traffic



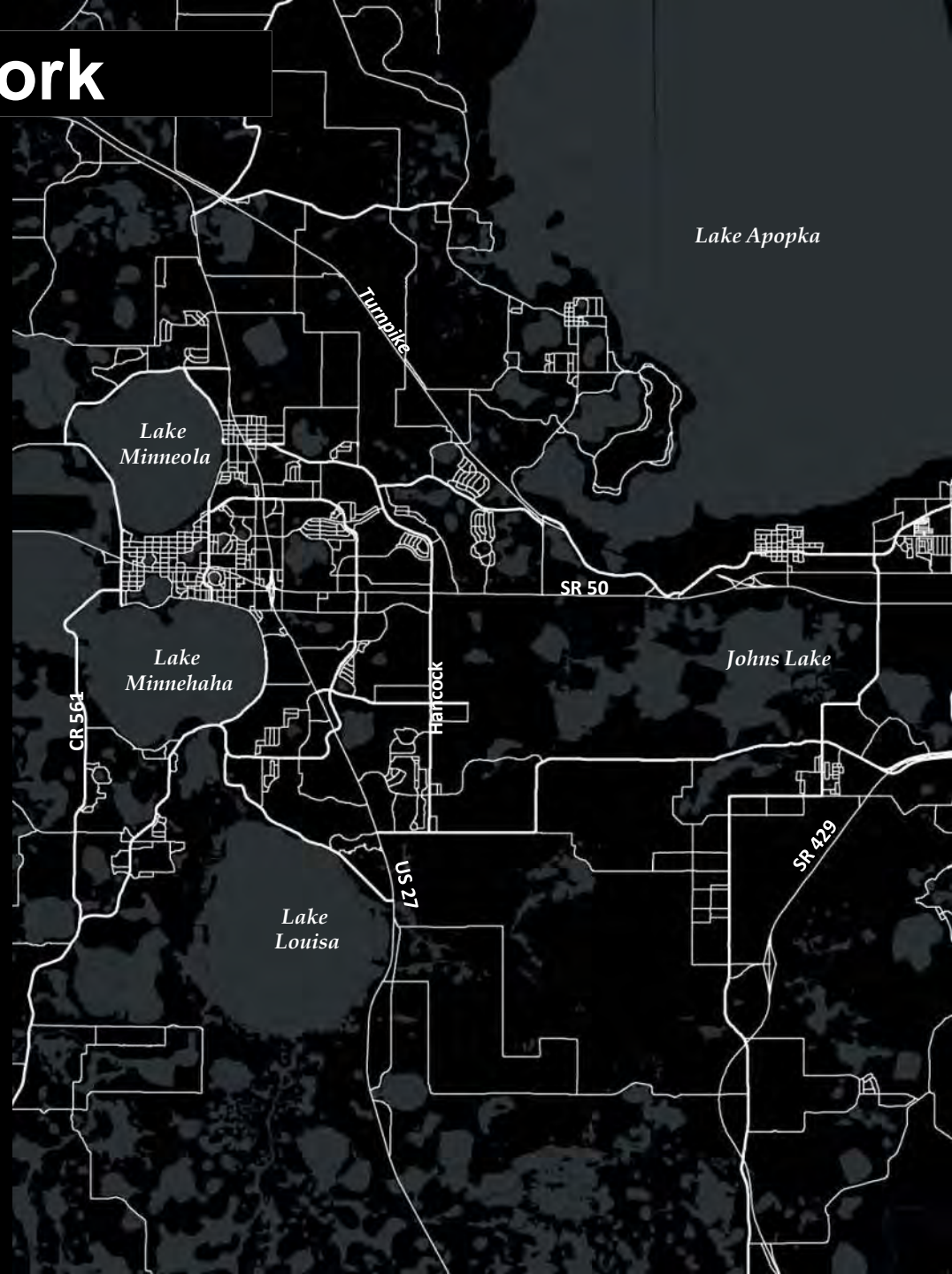
Weekday  
PM Peak  
West Bound  
Traffic

# existing street network





# effective street network



Network **does not support** effective  
**multi-modal** local traffic



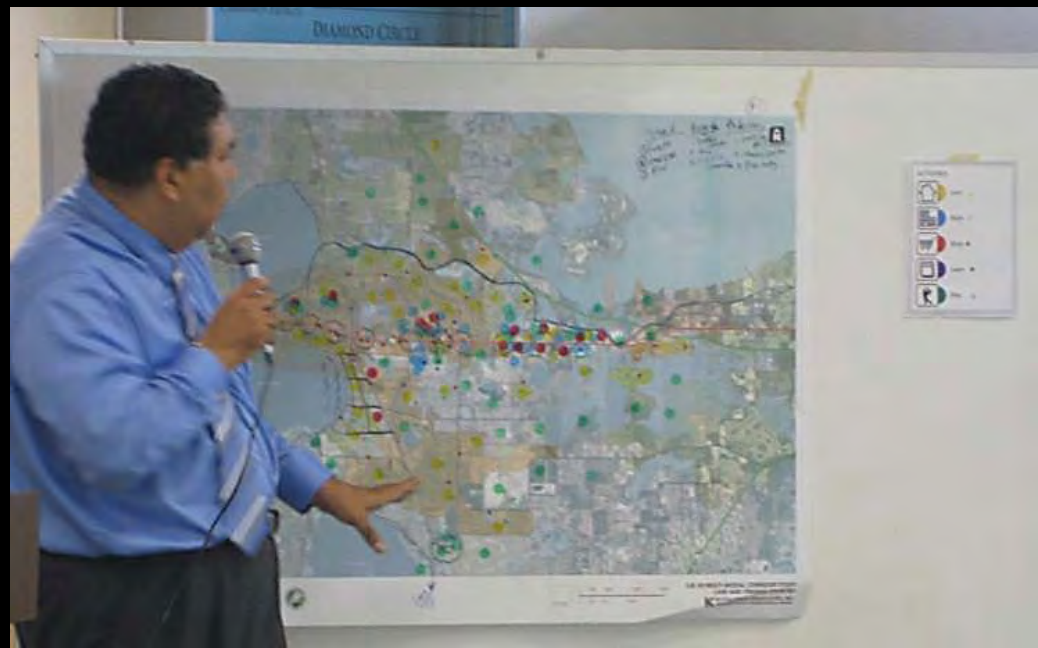
**Historic Clermont  
Street Network**



**Newer Development  
East of Clermont**



# hands-on interactive sessions



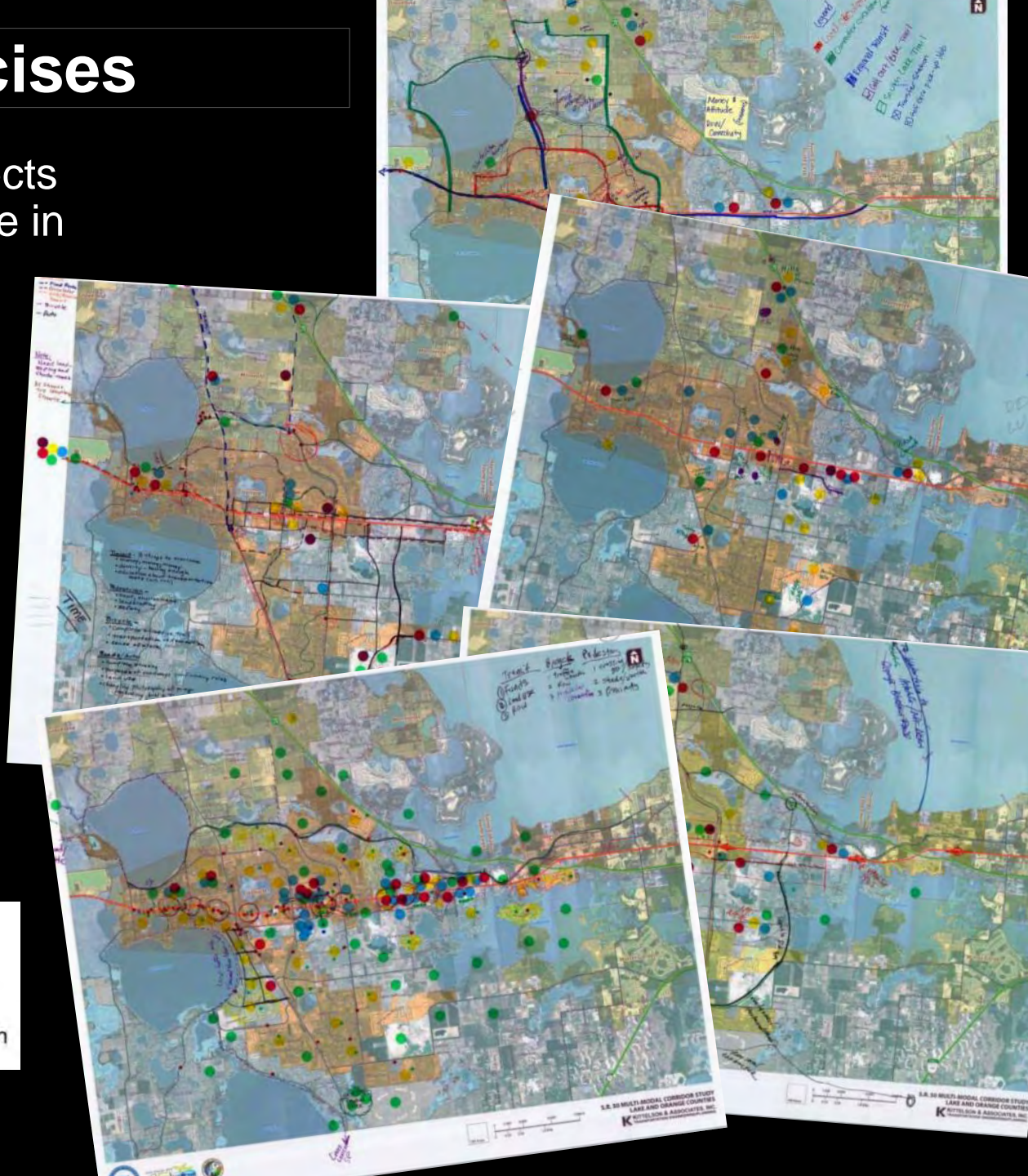


# Break-out exercises

- Develop a map that reflects activities you'd like to see in the area. Where do you want to:



- How can you link these activity areas through multiple modes?





# community values & guiding principles



1

Preserve &  
Celebrate Our  
Landscape



2

Preserve Historic  
Character &  
Sense of Place



3

More Play



4

Enhance Local  
Connectivity &  
Walkability



5

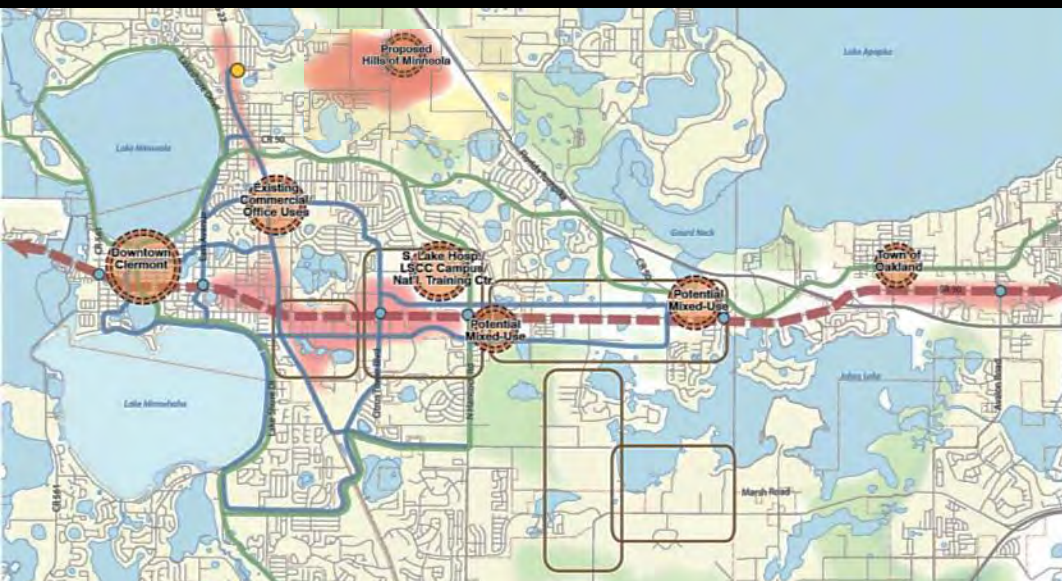
“Turn the Car  
Around”

# Corridor-wide Scenarios



## SCENARIO A

- Reflects existing trends and approved plans
- Commercial development along SR 50 intensifies
- Programmed roadway widening and extensions
- Limited transit improvements

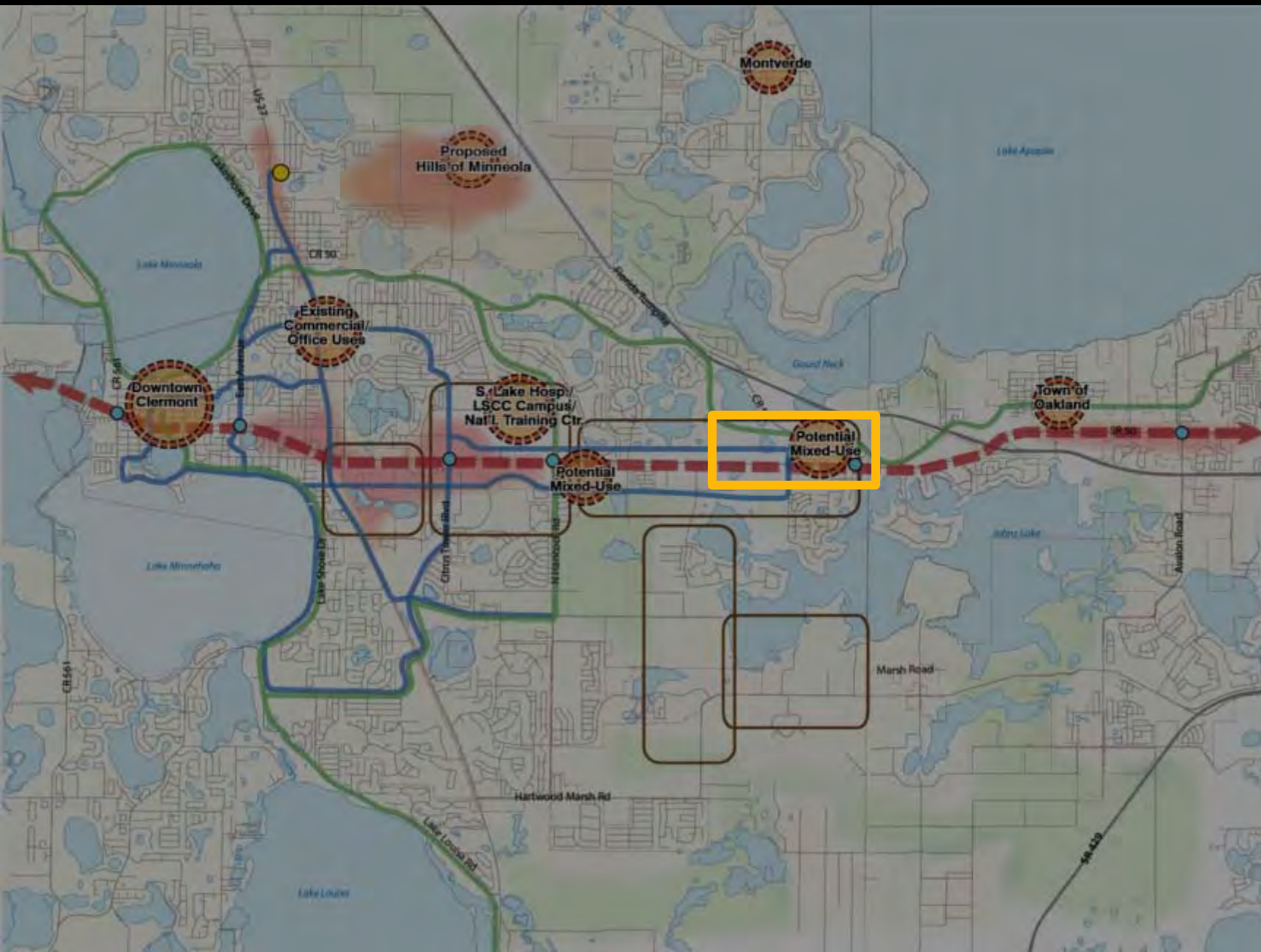


## SCENARIO B

- Growth directed to concentrated areas of mixed-use nodes
- Substantial undeveloped land remain
- Nodes supported by network of streets and local transit
- Potential for future premium transit service along SR 50 is enhanced



# Demonstration Site





# Demonstration Site Scenario A



- 1. Large-format retail building
- 2. Potential home improvement store
- 3. "Junior boxes" (65K sqft)
- 4. Multi-tenant retail buildings (12K to 30K sqft)
- 5. Outparcel buildings

- 6. Single-family residential
- 7. Driveway provides service function
- 8. Storm water retention ponds
- 9. A large portion of the site is dedicated to parking
- 10. Existing wetland and some tree canopies



# Demonstration Site Scenario B

66 Single-family Lots  
214 Apartment Units  
62 Townhomes  
66 Residential Condominiums  
615,000 sqft of Commercial/Office

## LAND USE LEGEND



Single-family residential



Mixed-use building



Office building



Multi-family townhomes



Community park



Parking garage with retail uses



Local street



Surface parking and drive aisles



1. Mixed-use buildings
2. Shared-use parking garage
3. Two-story townhomes
4. Single-family residential homes
5. Commercial buildings
6. Class A four-story office-buildings
7. Multi-family apartments frame parking garage
8. Four-story residential apartment buildings
9. Two to three story live-work buildings

10. Single-family residential uses
11. "Out-parcel" commercial uses
12. West Orange Trail and linear park
13. Community park/plaza
14. Parks accessible from public streets
15. Shared storm water ponds are part of park space
16. Two or three-lane public streets
17. Multi-use trails connect to the W. Orange Trail
18. Alleys provide additional access



## Scenario A



## Scenario B



● Potential Bus Stop

Existing Roadway

Proposed Roadway

Existing Multi-use Trail

Proposed Multi-use Trail

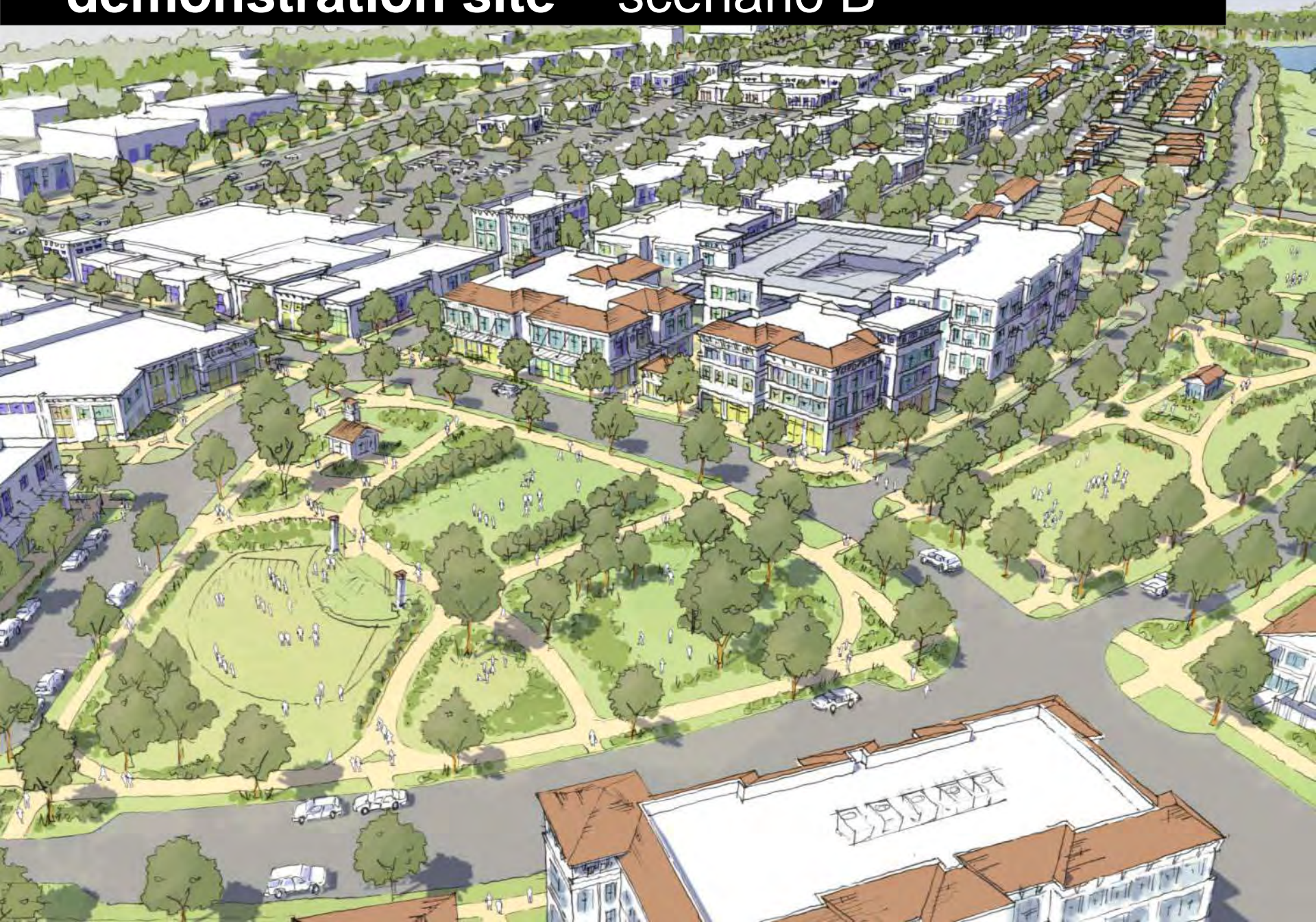


# comparing the scenarios

Goal	Objectives	Metric	Scenario	
			A	B
Multi-Modal Mobility	Increase mobility through alternative modes	<b>Streets with pedestrian/ bicycling facilities (feet)</b>	<b>5,750</b>	<b>29,590</b>
		Linear feet of pedestrian-friendly streets (feet)	4,120	19,840
		Housing density (du/acre)	6.2	22.0
	Increase transit ridership and capture choice riders	<b>Number of employees</b>	<b>1,490</b>	<b>1,570</b>
		<b>Number of housing units</b>	<b>77</b>	<b>408</b>
		Flexibility of transit routing	Low	High
		Proximity of potential transit stop to land uses served	Low	High
	Reduce external traffic impacts	<b>Vehicular trips generated (PM Peak Period) (vph)</b>	<b>4,510</b>	<b>2,840</b>
		<b>Trips captured internally (PM Peak Period)</b>	<b>4%</b>	<b>12%</b>
Multi-Modal Access to Corridor Destinations	Provide efficient internal vehicular mobility	Number of public street links between state and local roads in the east-west direction	0	2
		Number of public street links between state and local roads in the north-south direction	1	4
		Overall street connectivity (inters. connect. index)	0.76	1.86
	Access to community parks and open spaces	<b>Area of publicly-accessible parks (acres)</b>	<b>26</b>	<b>147</b>
		Direct street or trail access to community parks (feet)	3,240	16,040
		Fronting uses along multi-use trails (feet)	1,120	7,920
Development of Complete Places	Provide a mix of land uses	Diversity of land use types per building	1	2
		Diversity of housing types	1	5
	Accommodate incremental changes over time	Average block size (acres)	33.2	2.9
		Ability to allow land use change	Low	High
	Preserve existing natural features	Area of disturbed hills	13.5	3.4



# demonstration site – scenario B





# demonstration site – scenario B



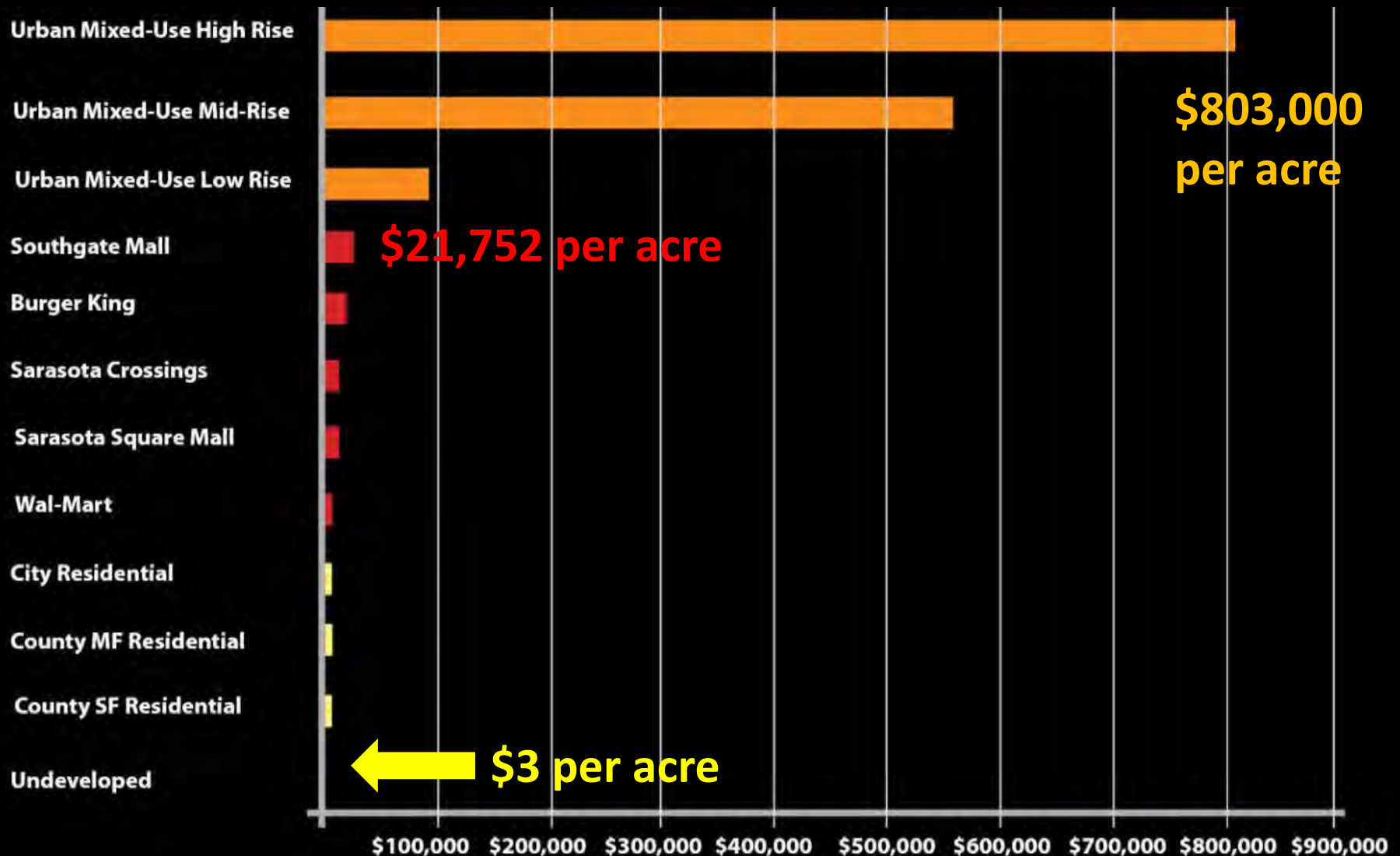


# a system of complete streets





# tax yield and development types (\$ per acre)



Source: Sarasota County, Peter Katz (fmr Smart Growth Director),  
Presentation to the Sarasota County Board of County Commissioners, September 2009

# what this means

## 1 Acre

moderate mixed-use high-rise



## 21 Acres

 Super Walmart

=

+

## 34 Acres

 Southgate Mall

Source: Sarasota County, Peter Katz (fmr. Smart Growth Director),  
Presentation to the Sarasota County Board of County Commissioners, September 2009



# our vision

Mt. Dora



HERITAGE HILLS





# our vision





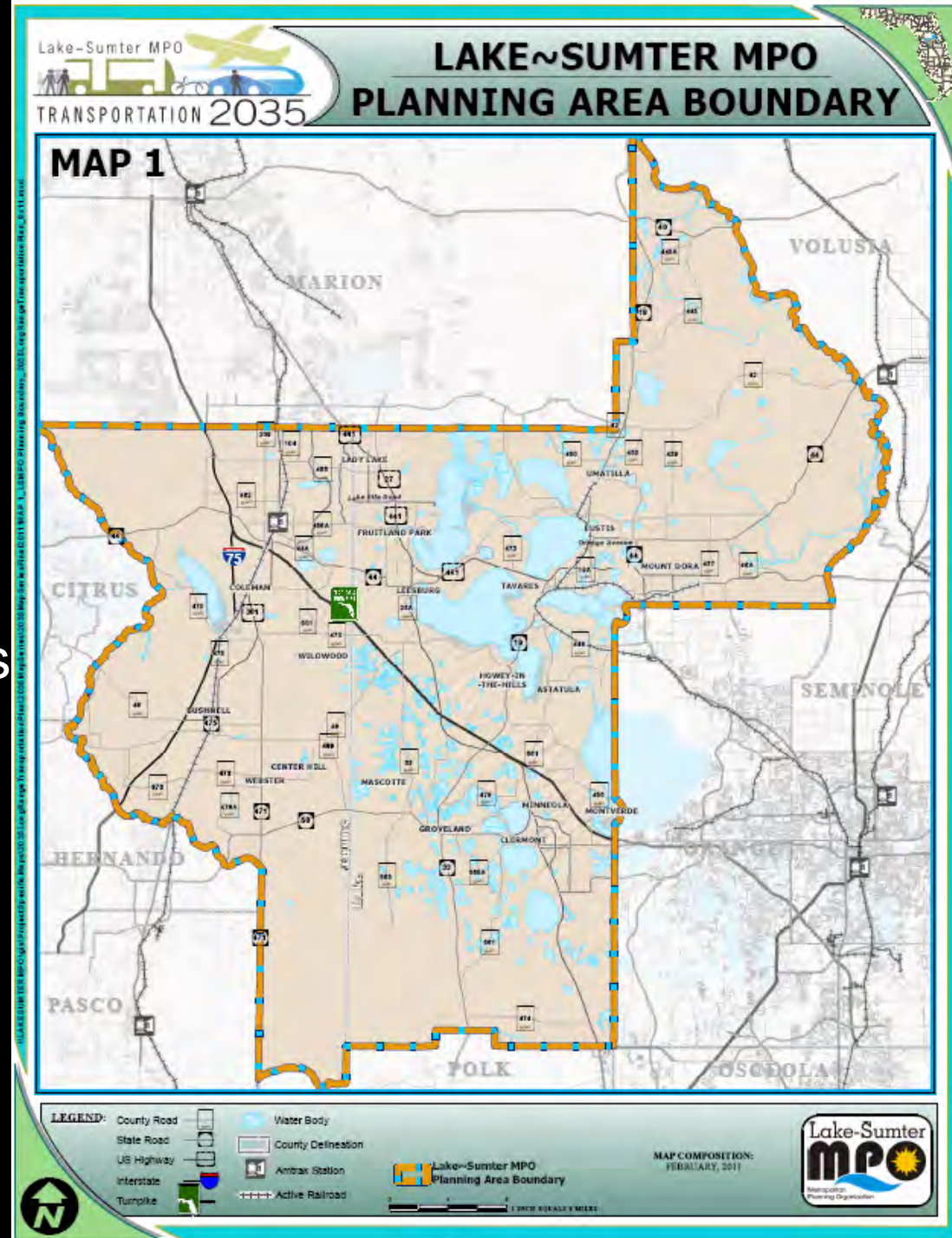
# PLAN IMPLEMENTATION

Lake~Sumter MPO



# TRANSPORTATION 2035

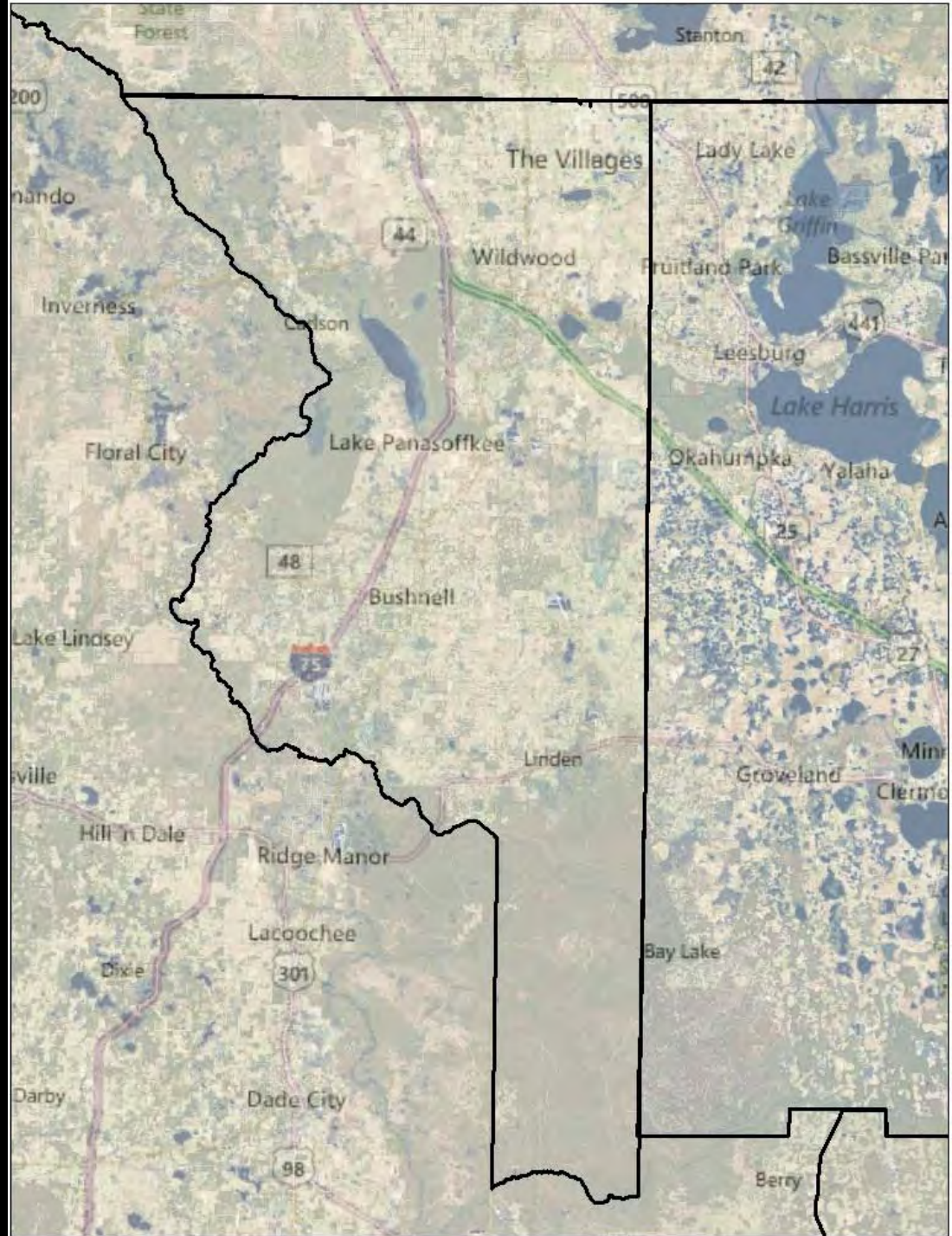
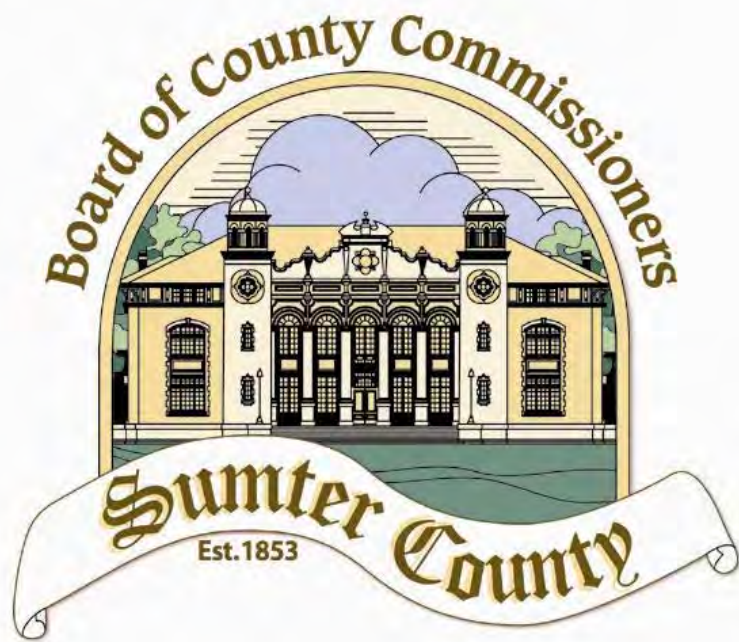
- ❑ Designated in 2004
- ❑ Reapportioned and Redesignated in 2010
- ❑ Two Counties and 19 Municipalities
- ❑ Encompasses one complete urbanized area and part of two other urbanized areas
- ❑ 16 Voting Board Members
- ❑ 3 Non-voting Ex-officio Board Members



**Lake-Sumter**  
**mpo**

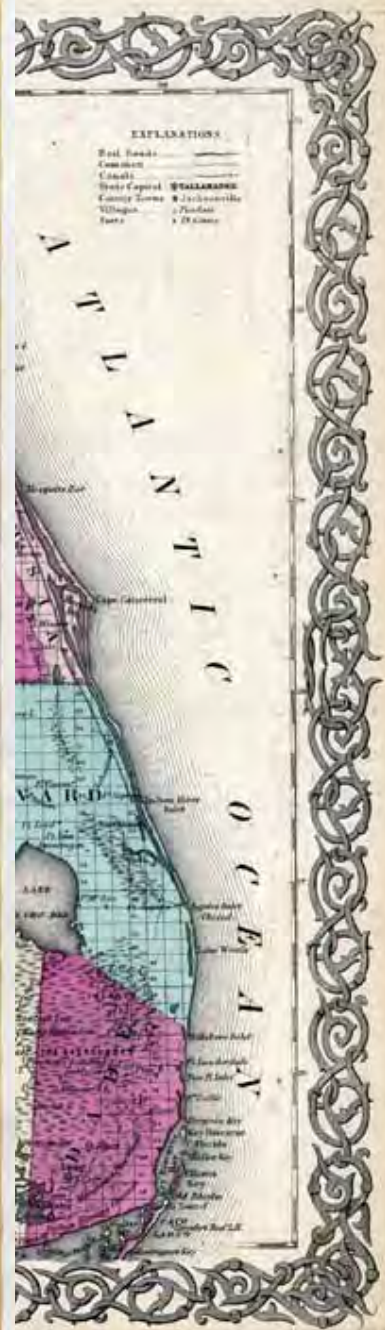
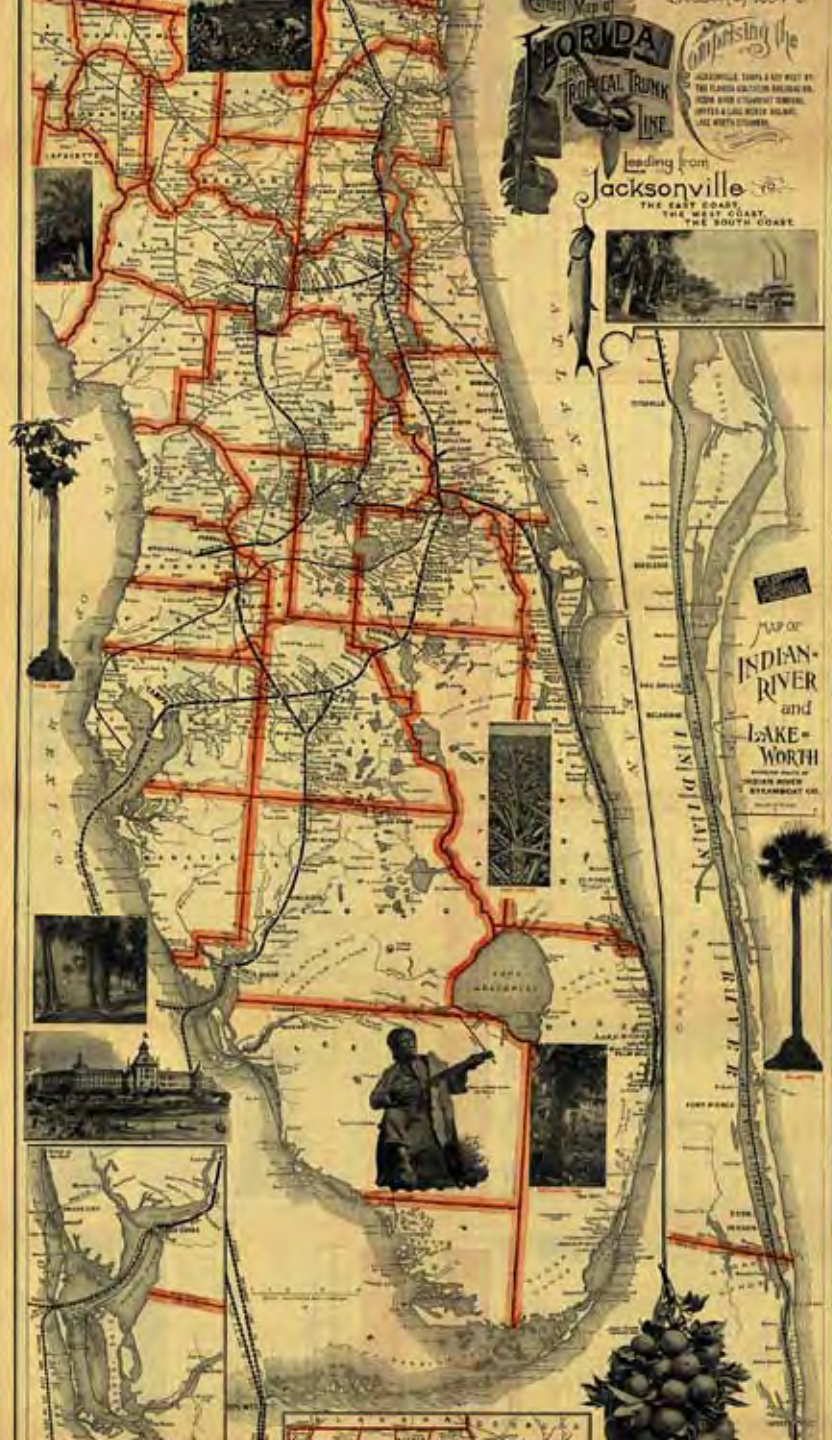
Metropolitan  
Planning Organization





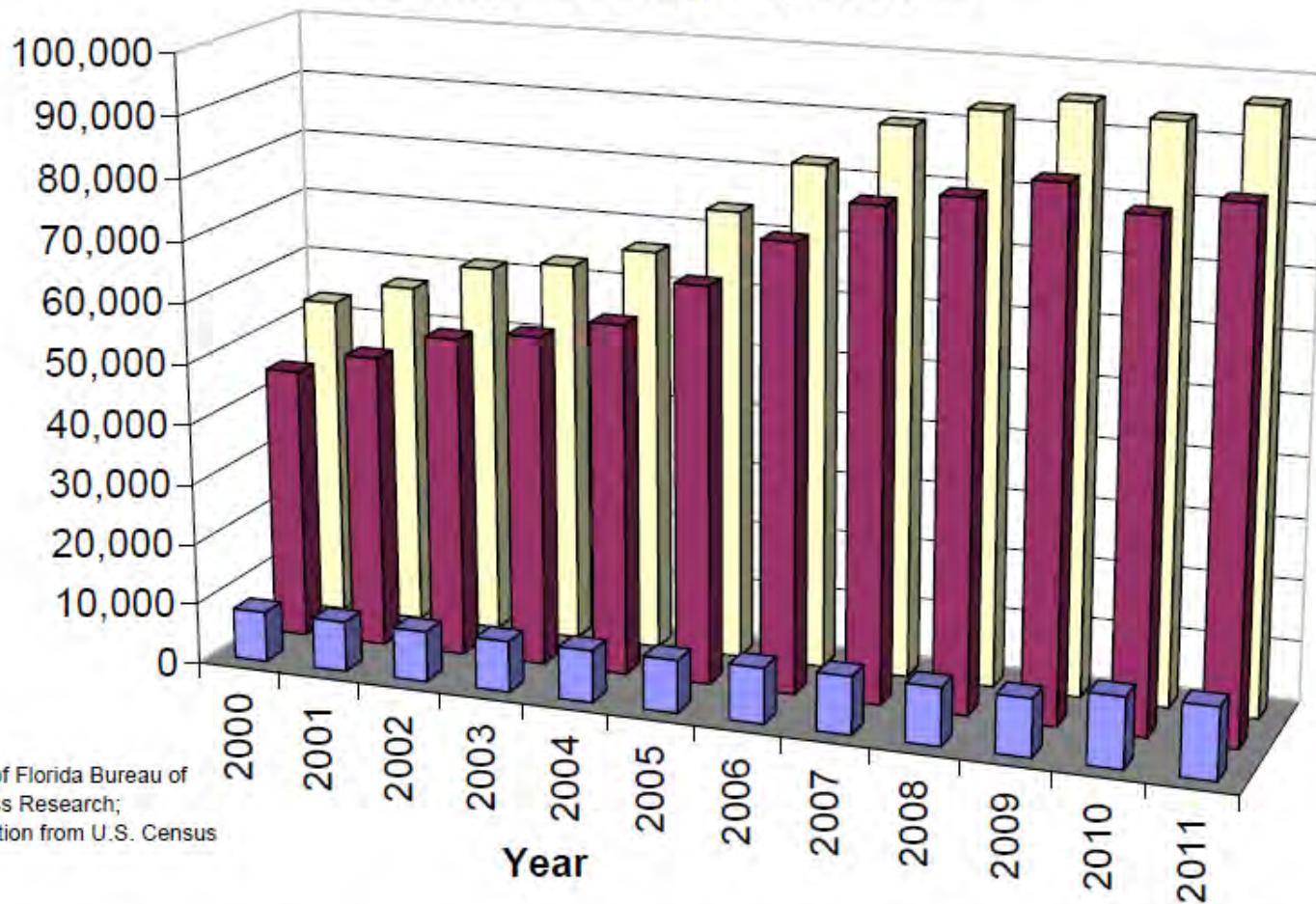
- ❑ Population – 97,000
- ❑ Area – 580 square miles
- ❑ Coleman Federal Corrections Complex
- ❑ National Cemetery







## Sumter County Population



Source: University of Florida Bureau of  
Economic & Business Research;  
2000 & 2010 Population from U.S. Census

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
■ Incorporated	8,336	8,357	8,383	8,441	8,605	8,746	9,206	9,569	9,579	9,538	11,603	11,800
■ Unincorporated	45,009	48,575	52,965	54,560	57,811	65,306	73,393	80,202	82,445	85,788	81,817	84,815
□ Total County	53,345	56,932	61,348	63,001	66,416	74,052	82,599	89,771	93,024	95,326	93,420	96,615



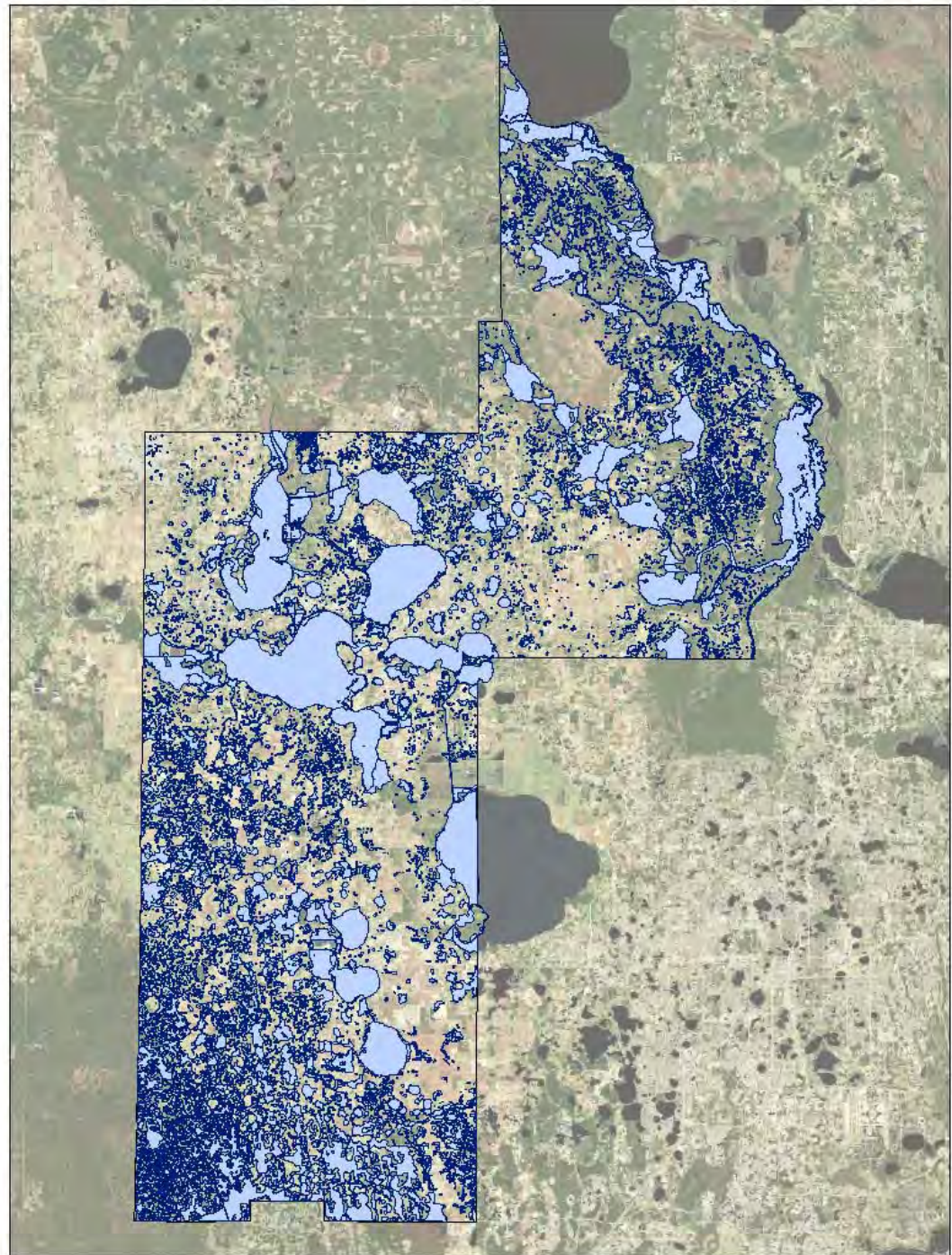
© 2009 L & L Photography



- ❑ Population – 297,052 (2010 Census)
- ❑ Area – 1,156 square miles
- ❑ Leesburg International Airport
- ❑ America's Seaplane City - Tavares



**LAKE COUNTY**  
FLORIDA



# TRANSPORTATION 2035

- Plan adopted in December 2010
- Role of MPO in implementation....
  - Advancing new MPO goals, objectives and policies
  - Advancing project priorities
  - Coordinate with member governments to update local land use plans in support of multimodal transportation and economic development objectives



# Land Use & Multi-modal Transportation

- Focus on Corridors and Centers
- Where do the designated Multimodal Corridors from TRANSPORTATION 2035 intersect with new or existing Centers?
- At these intersects, need to consider:
  - Designation of Multimodal Transportation Districts
  - Multimodal or Transit Oriented Development Overlays

# Land Use & Multi-modal Transportation

- Prioritize creation of policies that support ‘walkable’ places characterized by:
  - Moderate density and mixture of land uses
  - Complete Streets design guidelines in designated ‘centers’
  - Targeted ‘centers’ of one-quarter to one-half mile around future transit stations/intermodal hubs
  - Concentrate future growth within these centers/this form



# Multimodal Corridors



## Existing Center – Lake Square Mall

- Bus Rapid Transit (BRT) on 441 Multimodal Corridor
- Multimodal transportation district or TOD Overlay
- Redevelopment of Mall property with infill of outparcels in first 10 years
- Vertical construction, mix of uses and walkable streetscapes
- Redevelopment of entire site in 20 years
- Mall site as the new location of a major 'Center' and transit hub along the 441 Corridor



# Lake Square Mall – today



# Lake Square Mall – tomorrow





# Lake Square Mall – at build-out



# Lake Square Mall – today

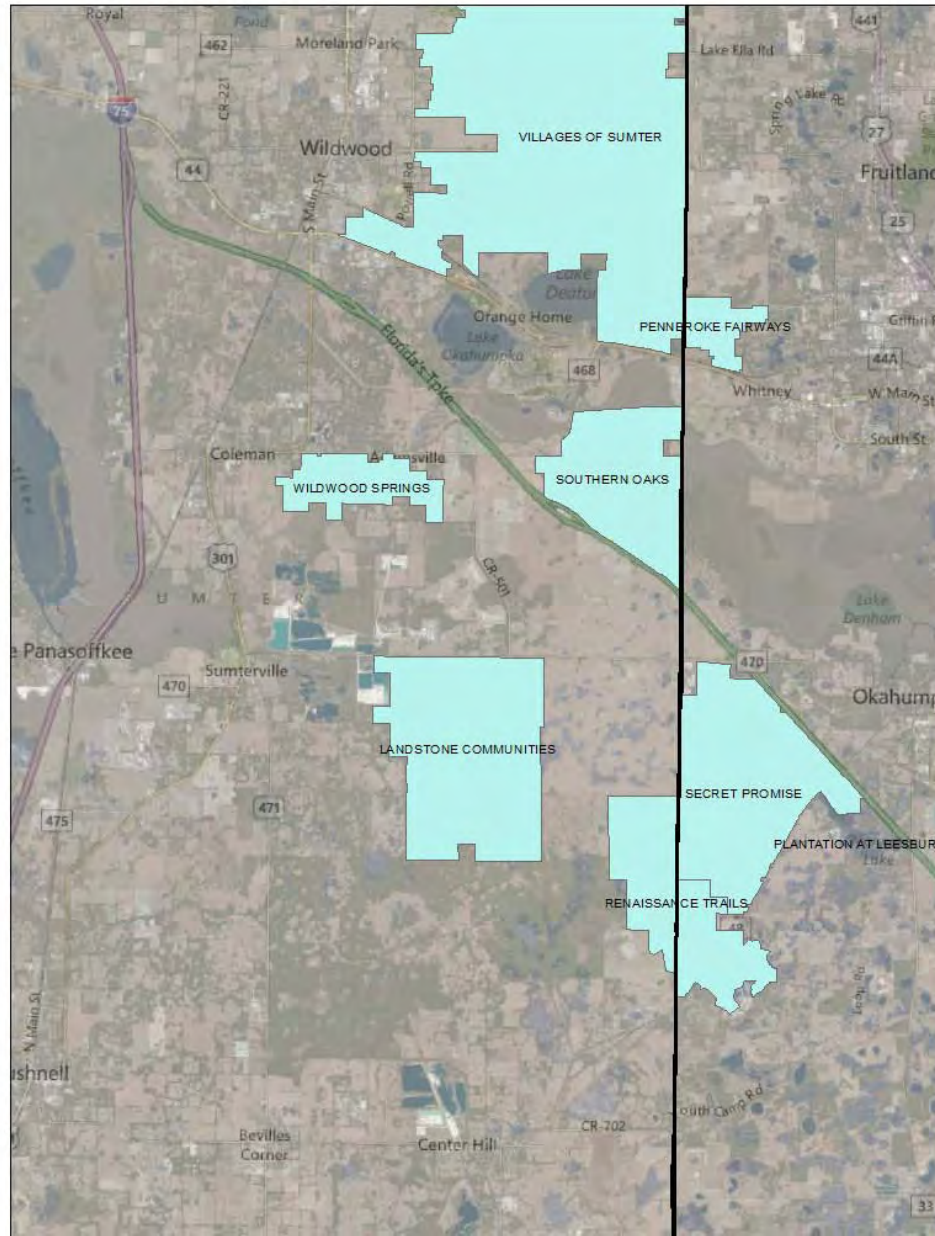




# Lake Square Mall – tomorrow



# CR 470 Corridor – Sumter County



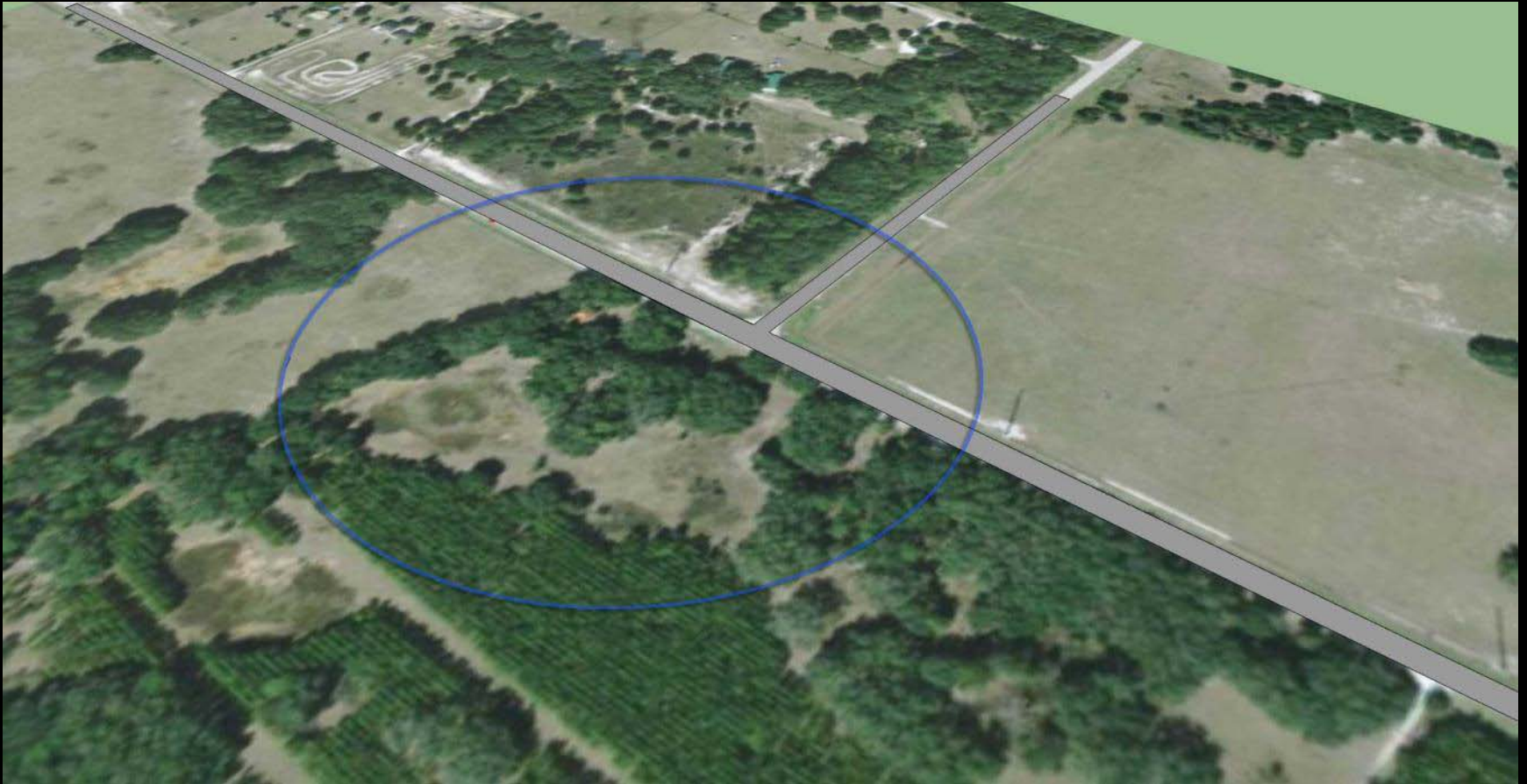


## CR 470 Corridor – Sumter County

- Express Bus Route on CR 470 connecting new DRI-level community with new Industrial Jobs Village to the west
- CR 470 remains as major ‘mobility’ corridor – walkability occurs just ‘off the corridor’ within new centers of development
- Multimodal transportation district or TOD Overlay
- Mixed use village center, with single family, townhomes and condo/apartment residential
- Transit stop/park and ride within Village Center

# CR 470 Corridor – Existing Site

*(Development entitled)*





# CR 470 Corridor – New Village Center



# CR 470 Corridor – Existing Site

*(Development entitled)*





# CR 470 Corridor – New Village Center



## Existing Center – Downtown Tavares

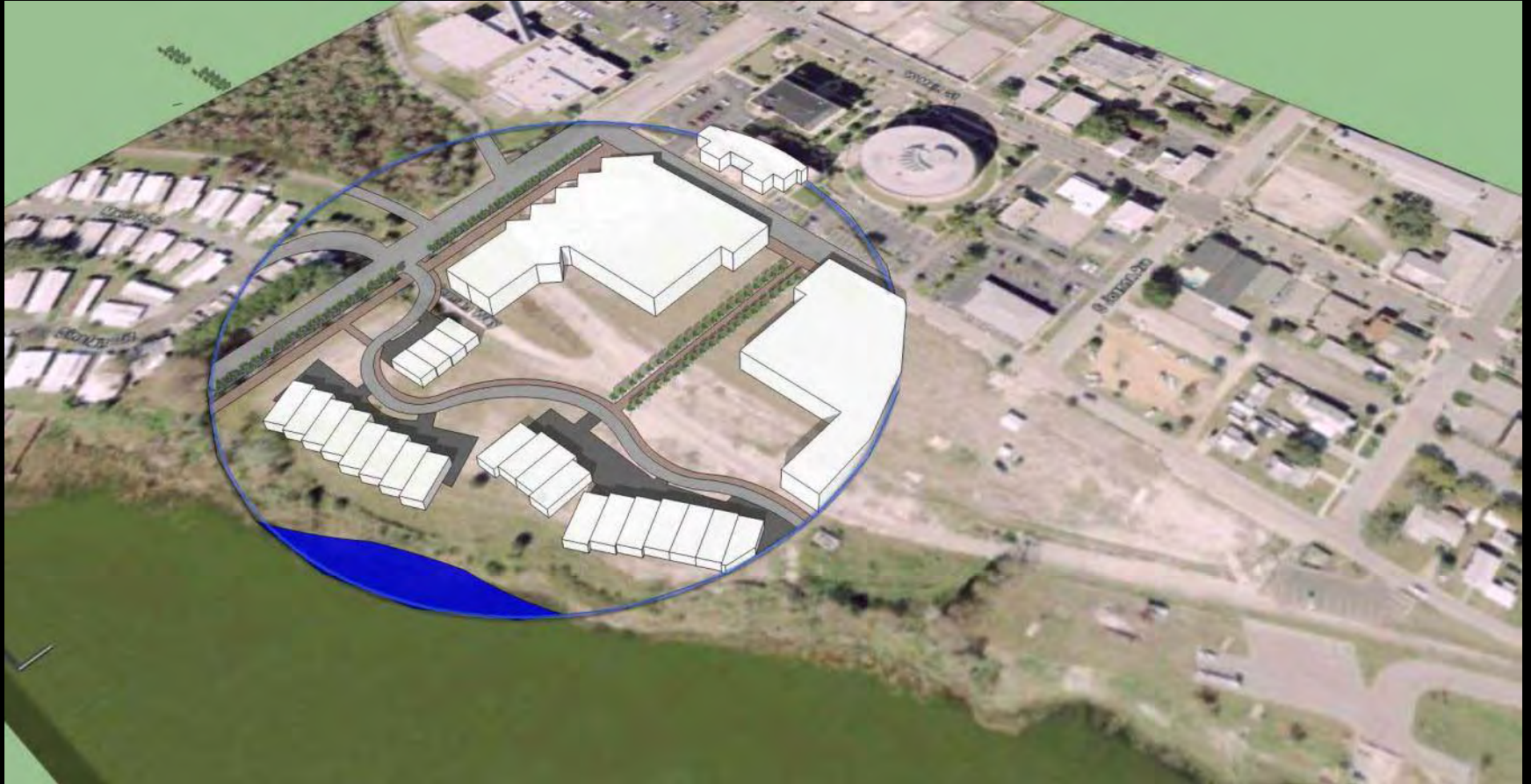
- Orange Blossom Express commuter rail station and local bus hub
- Downtown Tavares designed for ‘walkability’
- Vision plan guiding local policies to allow for a concentration of mixed use, moderate density
- Potential for intermodal hub with SeaPlanes



# Downtown Tavares – today



# Downtown Tavares – today





# Downtown Tavares



# Downtown Tavares





# PROMOTING REGIONAL TRANSPORTATION PARTNERSHIPS



**1616 South 14<sup>th</sup> Street  
Leesburg, FL 34748  
(352) 315-0170  
[www.lakesumtermpo.com](http://www.lakesumtermpo.com)**

# thank you!



John Moore

[john.moore@dot.state.fl.us](mailto:john.moore@dot.state.fl.us)

Pamela Richmond

[prichmond@lakesumtermppo.com](mailto:prichmond@lakesumtermppo.com)

Jane Lim-Yap

[jlim-yap@kittelson.com](mailto:jlim-yap@kittelson.com)

Karl Passetti

[kpassetti@kittelson.com](mailto:kpassetti@kittelson.com)



Are you a  
**land use professional?**

Are you a  
**transportation professional?**

How else can FDOT & MPOs help  
you implement  
**multi-modal mobility?**



What is your organization doing to  
advance multi-modal mobility?