

# Hillsborough County MPO Transit Study

Leadership Team

August 20, 2007

Tampa International Airport





- Technology Choices
- Needs and Opportunities
- Transit Concepts
- Comparative Land Use Analysis
- Measures of Effectiveness
- System Design Issues
- Current Activities and Next Steps



TRANSIT STUDY

# Technology Choices

# Heavy Rail



**New York**



**Atlanta**



**Washington DC**



TRANSIT STUDY

# Light Rail



Charlotte



Houston



Minneapolis

# Commuter Rail



**South Florida**



**Charlotte**



**Chicago**

# DMU VS. Conventional Commuter Rail



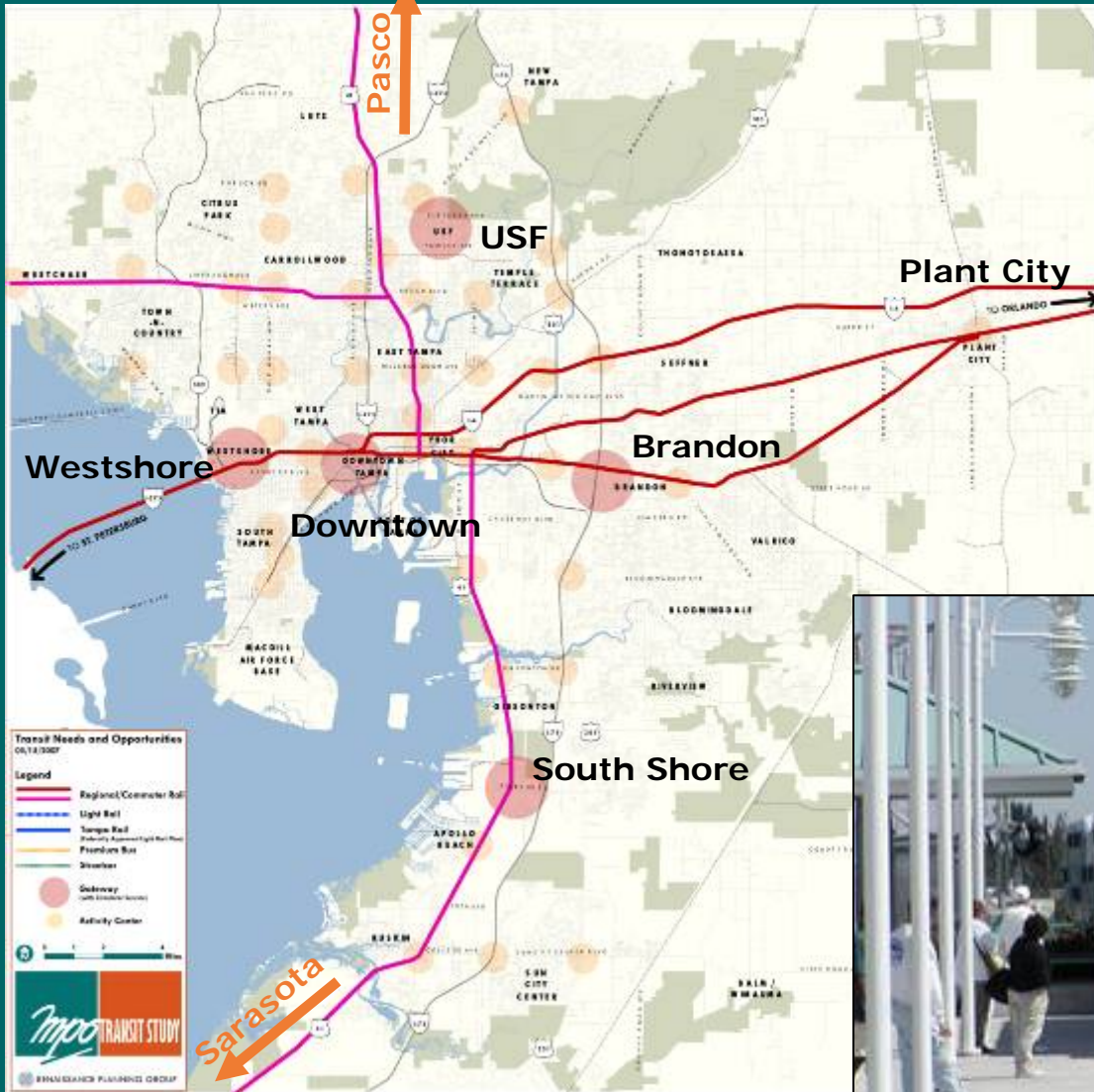


TRANSIT STUDY

# Needs and Opportunities



# Regional Rail Opportunities



Lakeland & Orlando

- Existing CSX or New Track
- Peak Travel
- Park & Ride Lots

North Pinellas

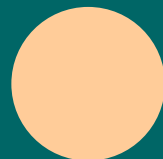
St Petersburg



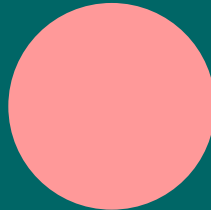
# Light Rail Opportunities



- New Track or Existing Track
- Continuous Service
- Links Major Centers



Activity Center

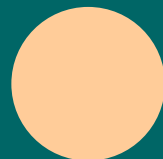


Gateway

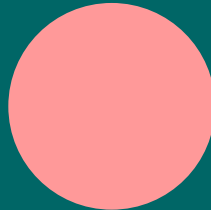
# Bus Opportunities



- **BRT - Dedicated Lane or Traffic Priority**
- **Express Service**

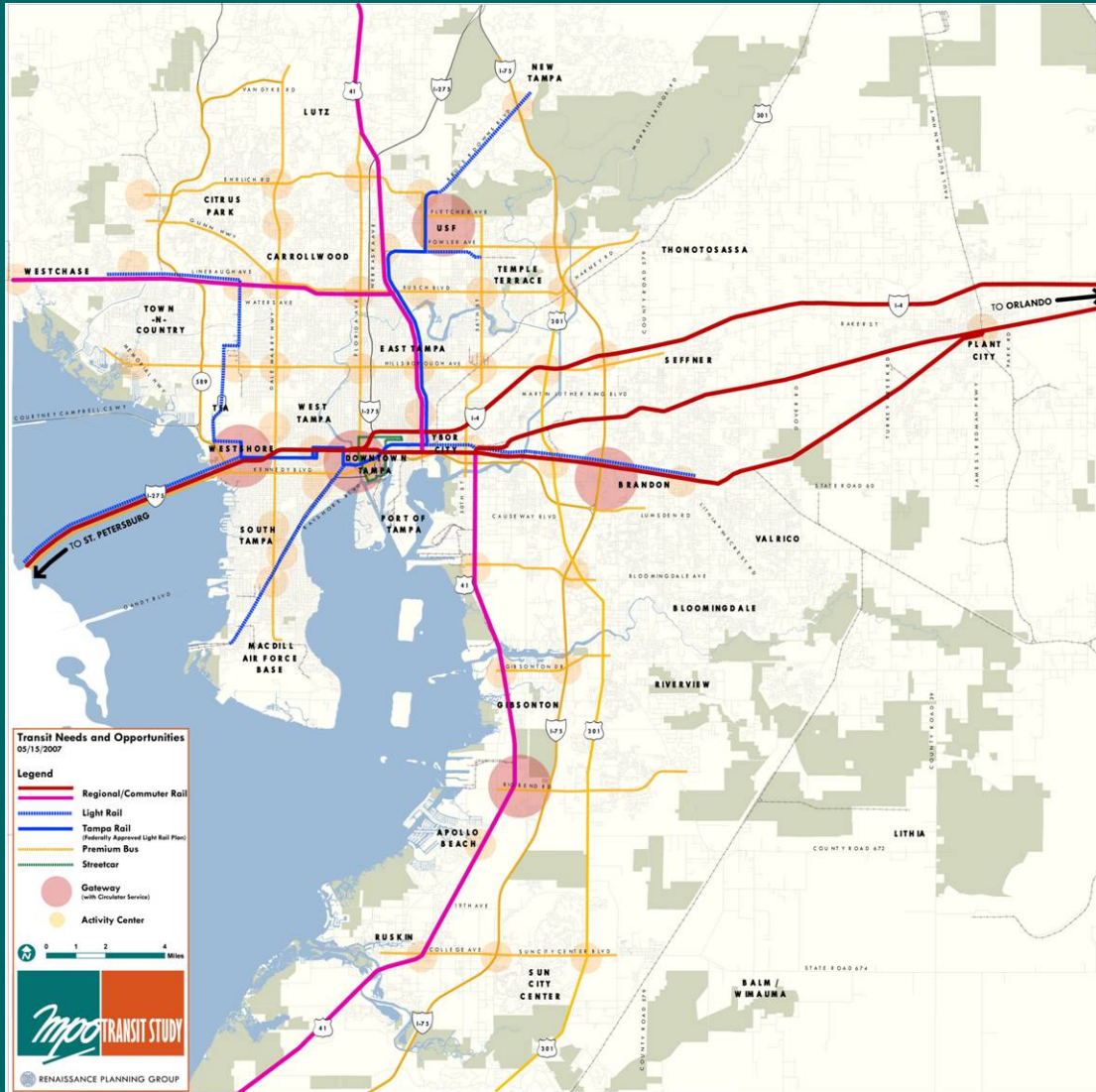


Activity Center



Gateway

# Transit Needs & Opportunities

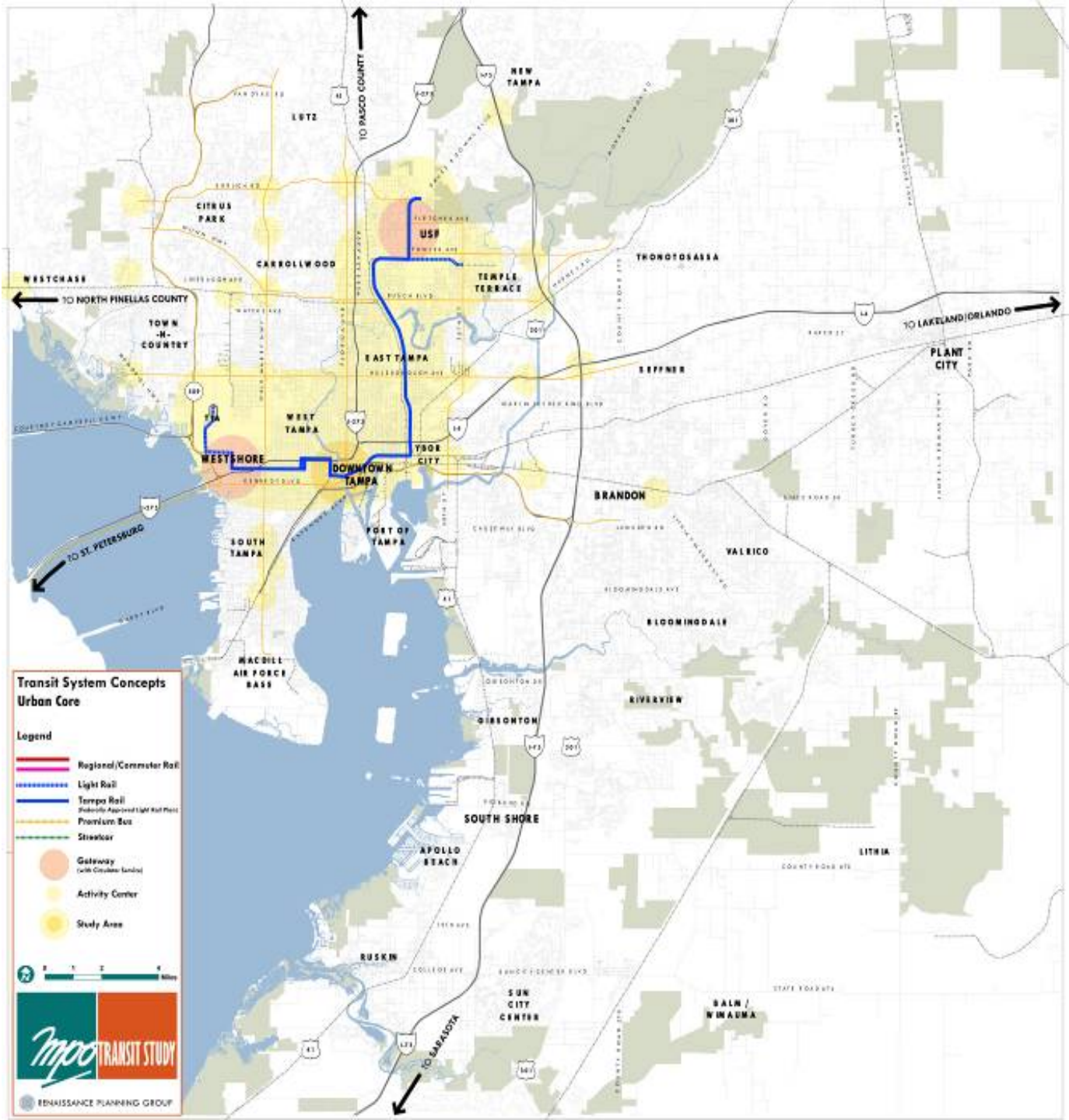




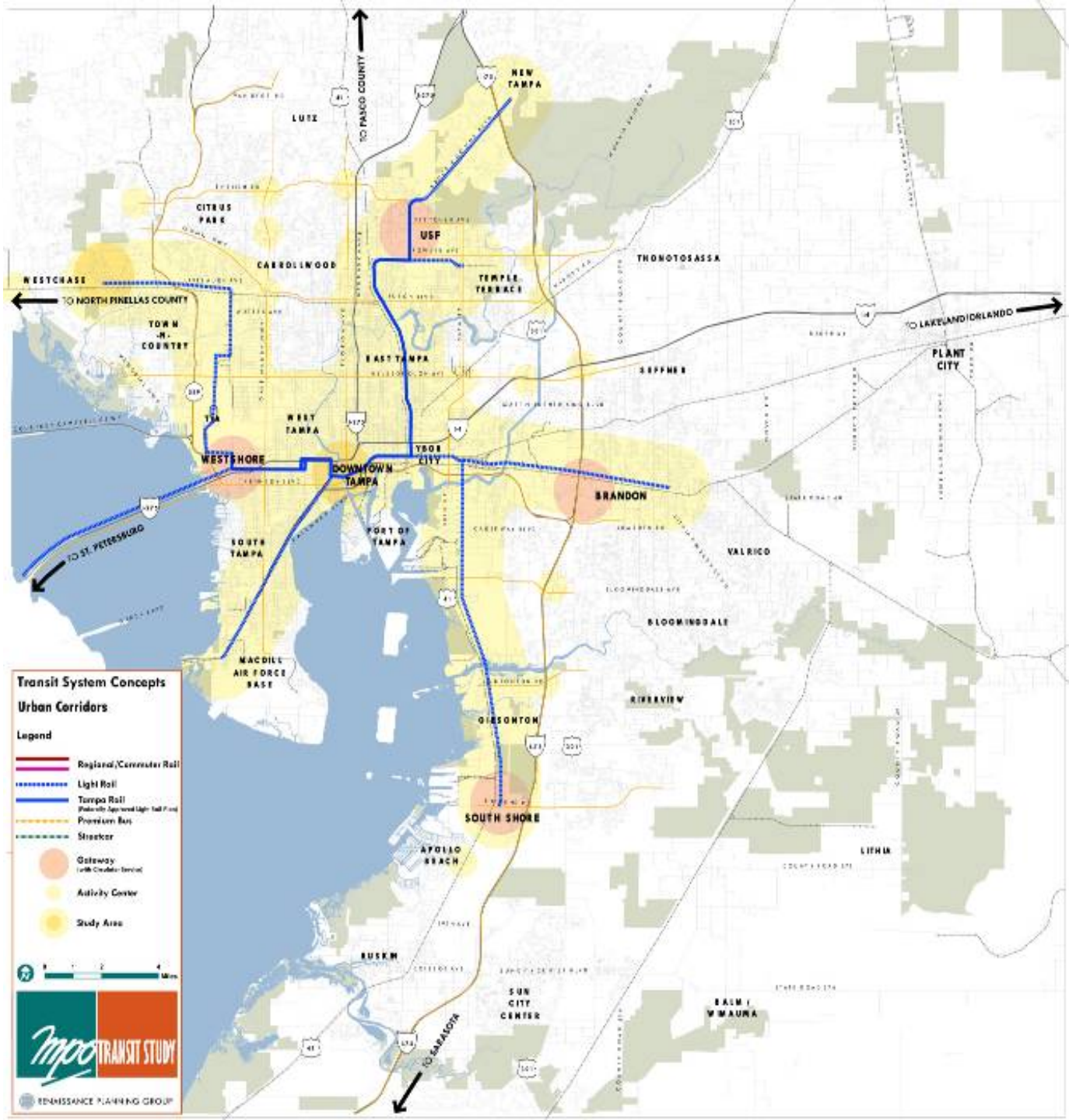
TRANSIT STUDY

# Transit Concepts

**Concept A:  
Diagram**



**Concept B:  
Diagram**



**Transit System Concepts**

**Urban Corridors**

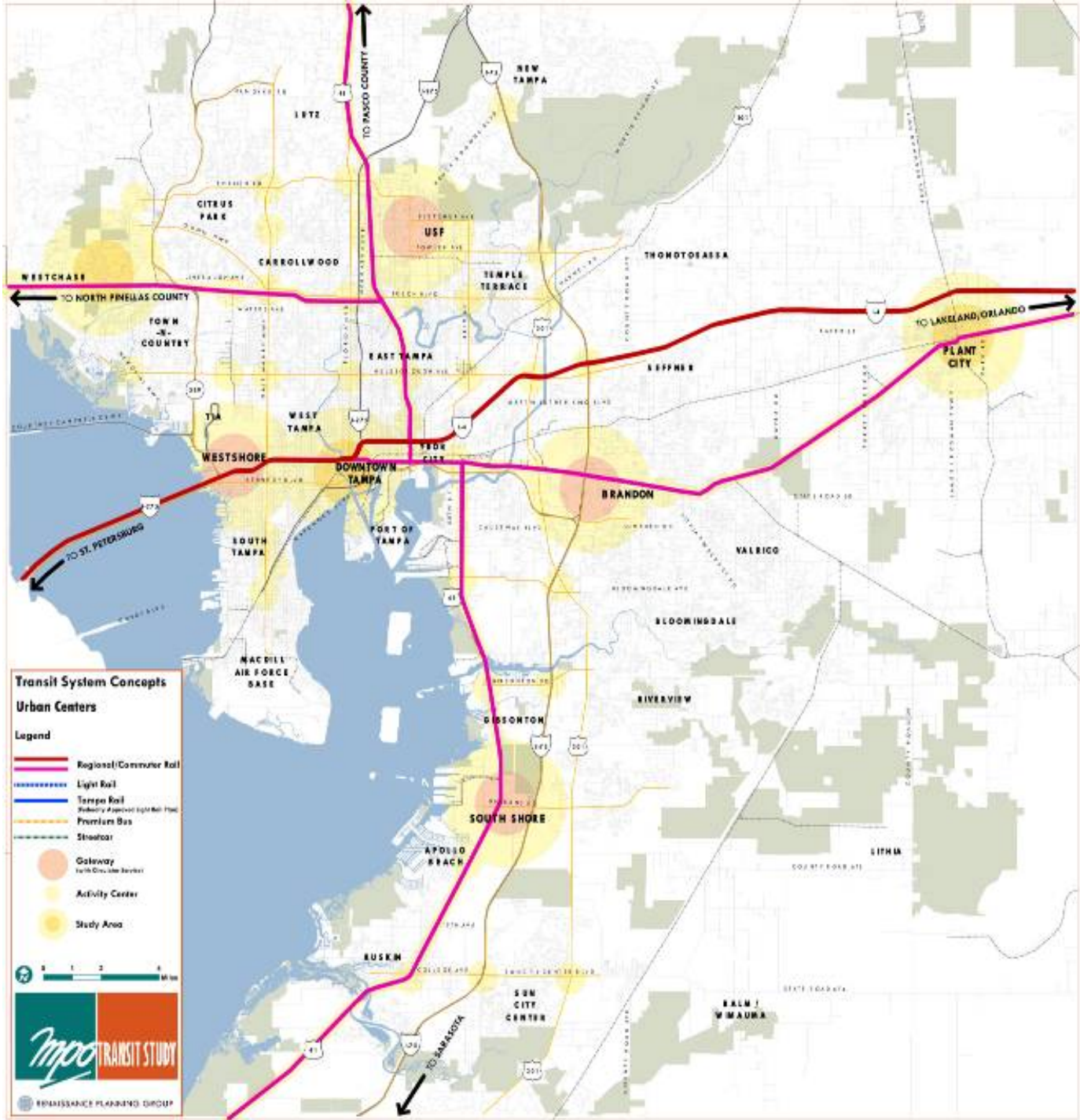
**Legend**

- Regional/Commuter Rail
- Light Rail
- Tampa Rail
- Priority Improved Light Rail/Tram
- Front-Load Bus
- Streetcar
- Gateway (with Shuttle Service)
- Activity Center
- Study Area

0 1 2 4 Miles

RENNISSANCE PLANNING GROUP

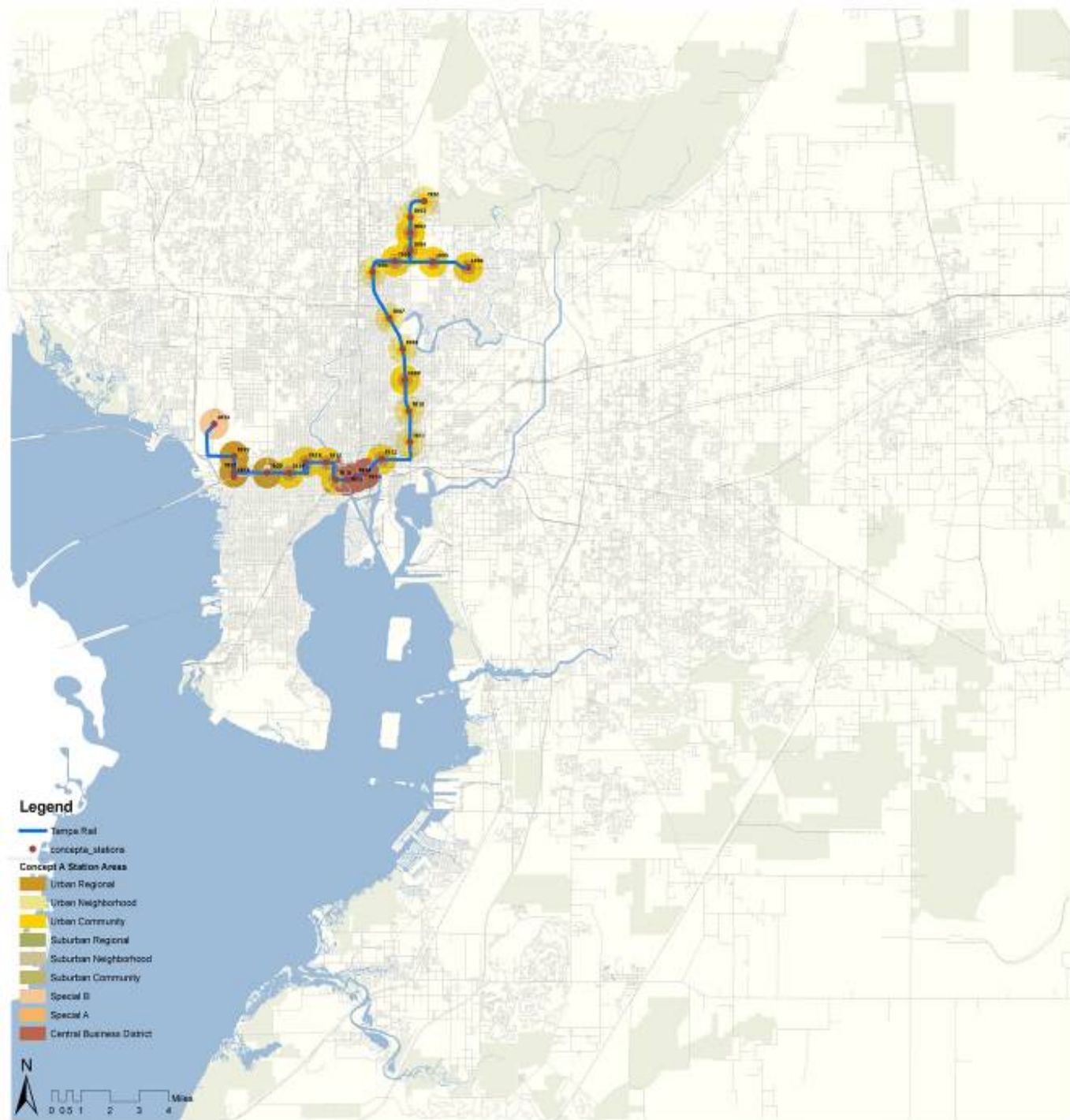
**Concept C:  
Diagram**





# Comparative Land Use Analysis for Transit Concepts

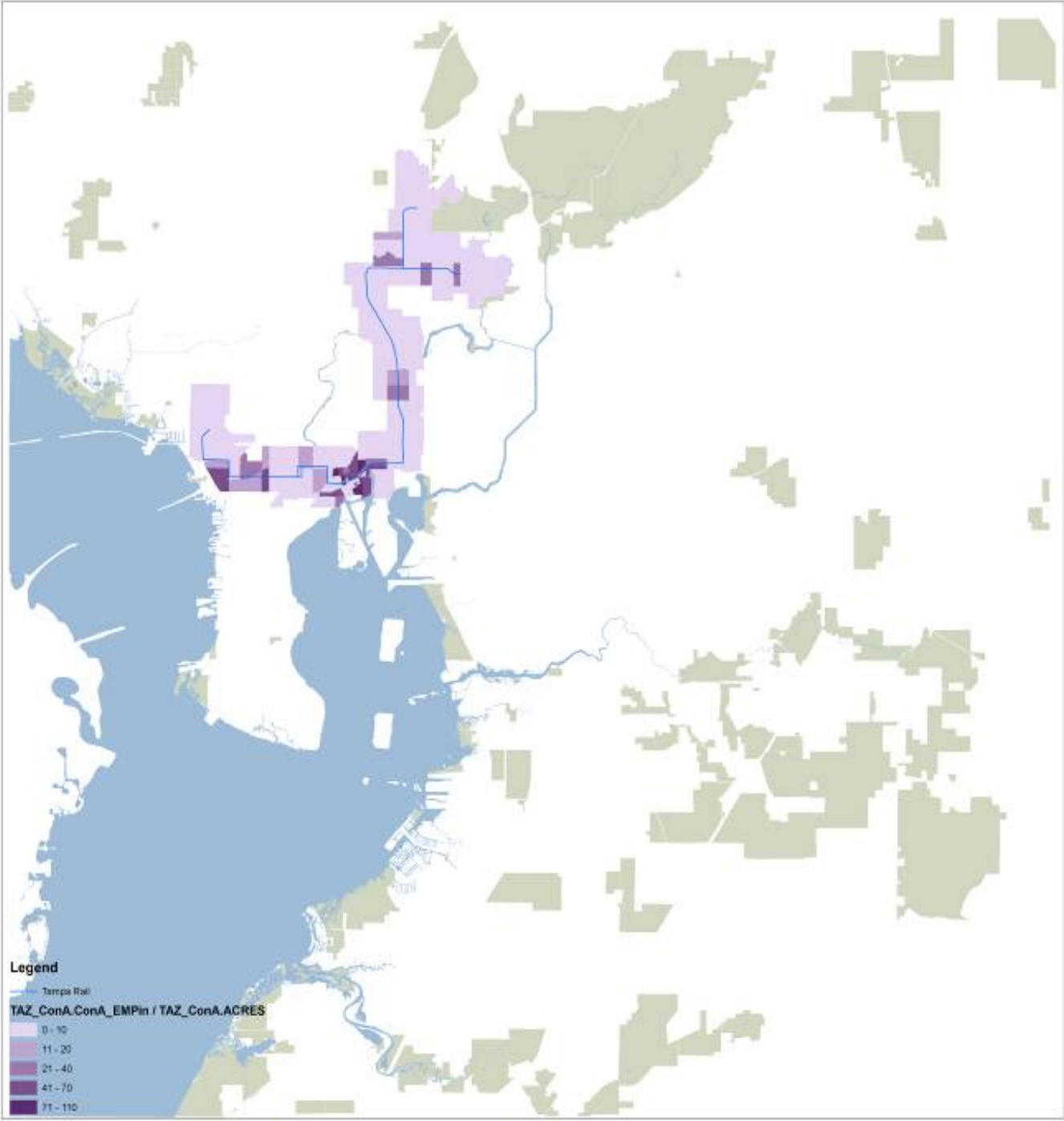
**Concept A:  
Stations**



**Concept A:  
HH Increment/  
Acre by TAZ**

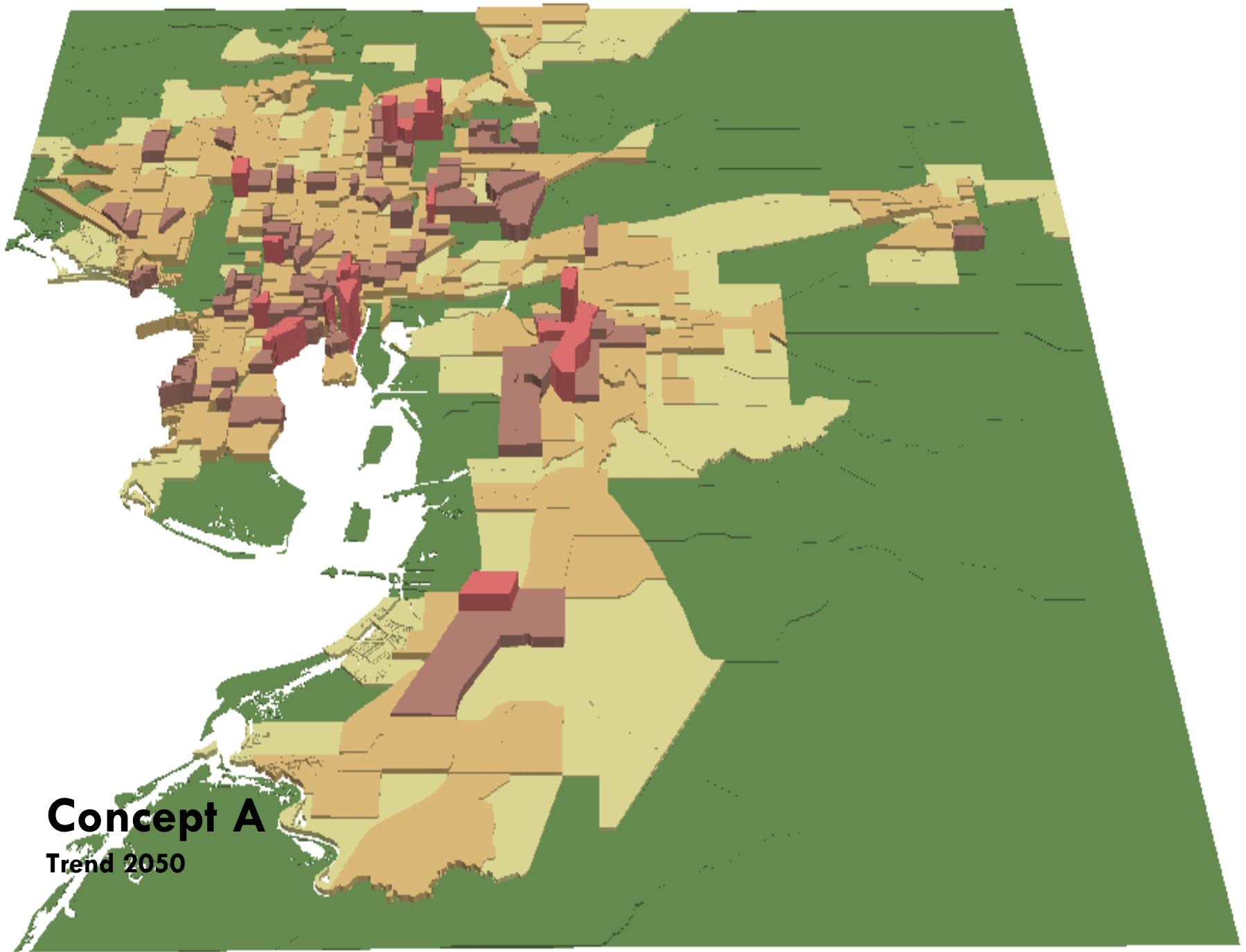


**Concept A:  
Jobs Increment/  
Acre by TAZ**



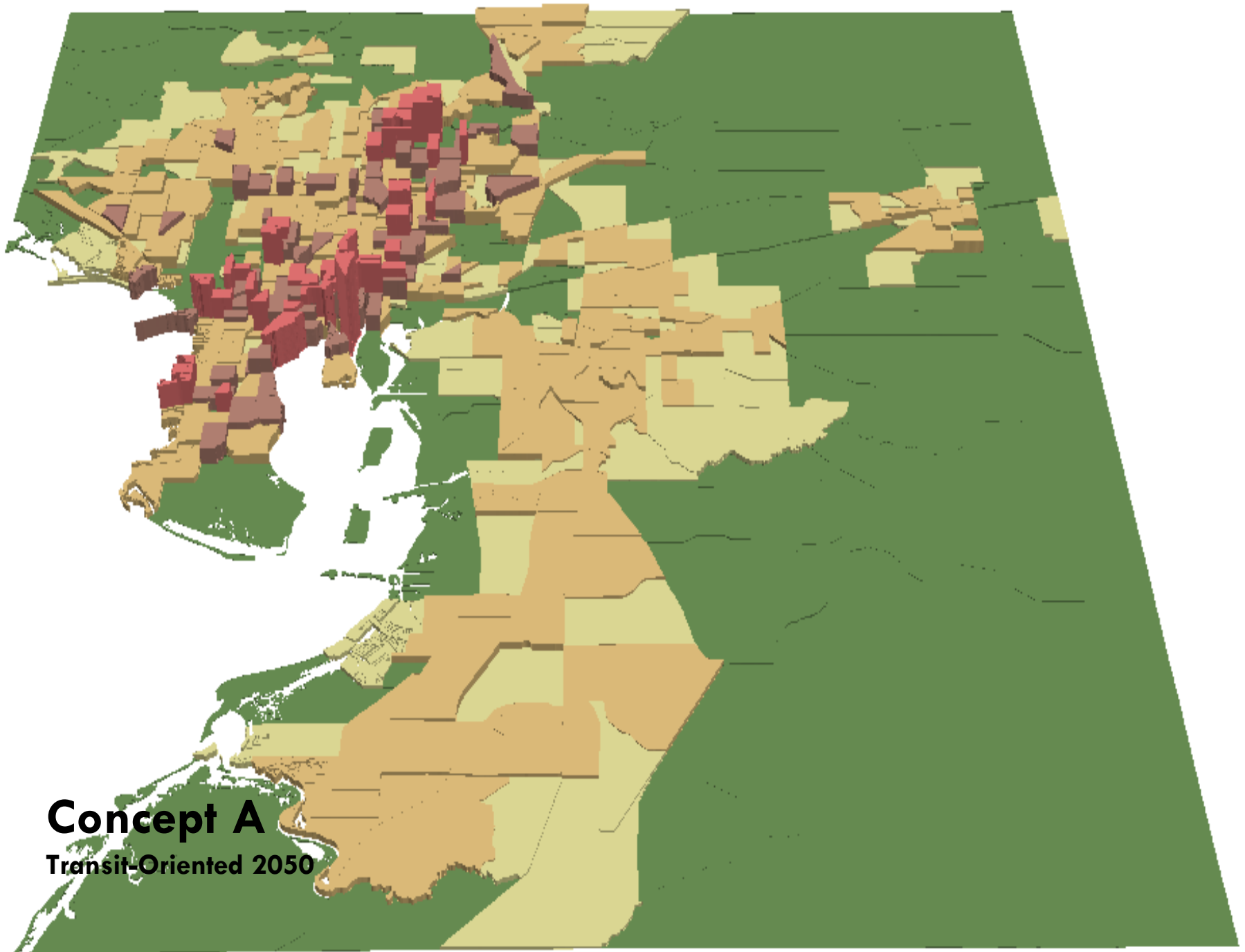


**Concept A**  
Incremental Growth in Station Areas



# Concept A

Trend 2050



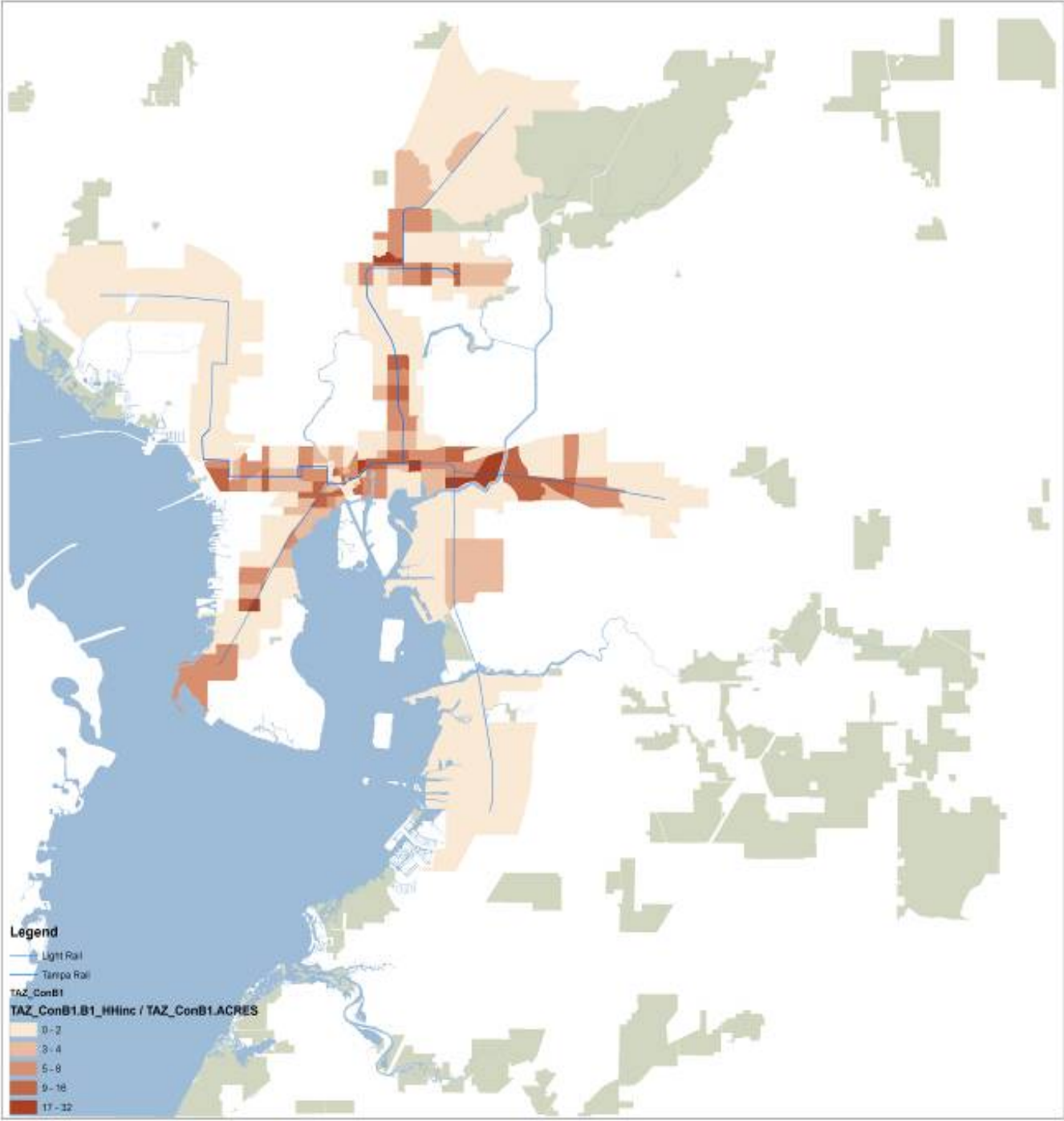
**Concept A**  
Transit-Oriented 2050

**Concept B:  
Stations**

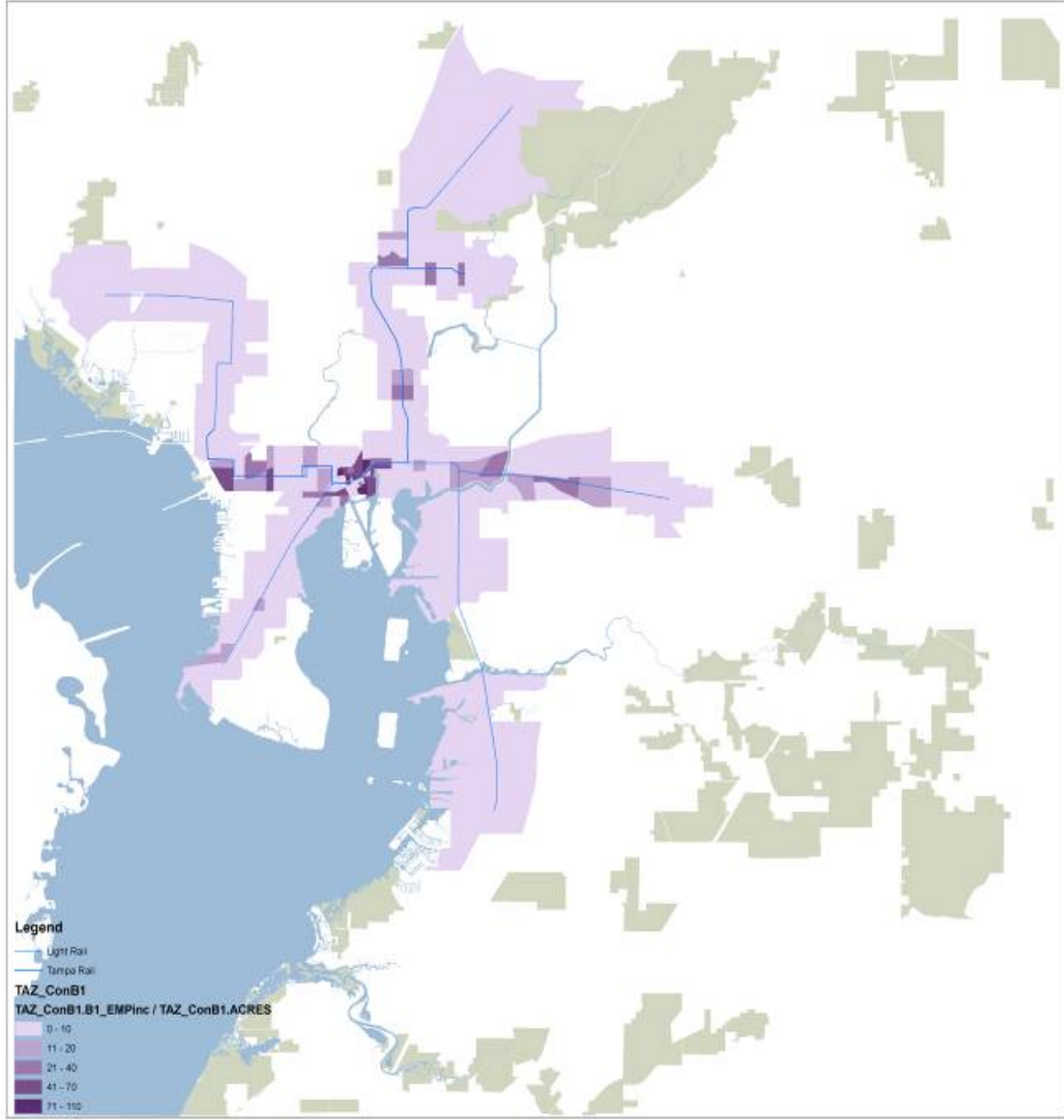


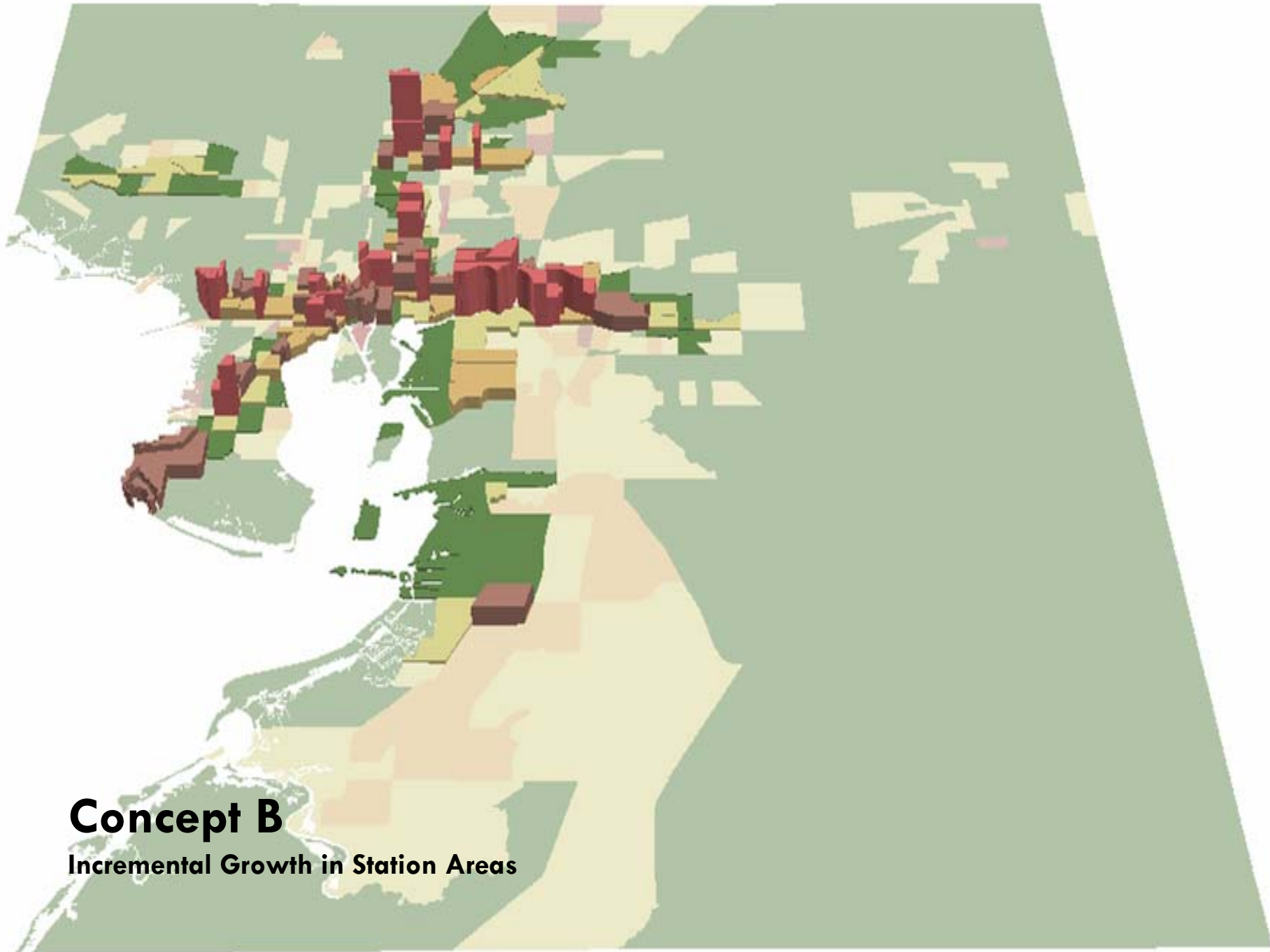


**Concept B:  
HH Increment/  
Acre by TAZ**

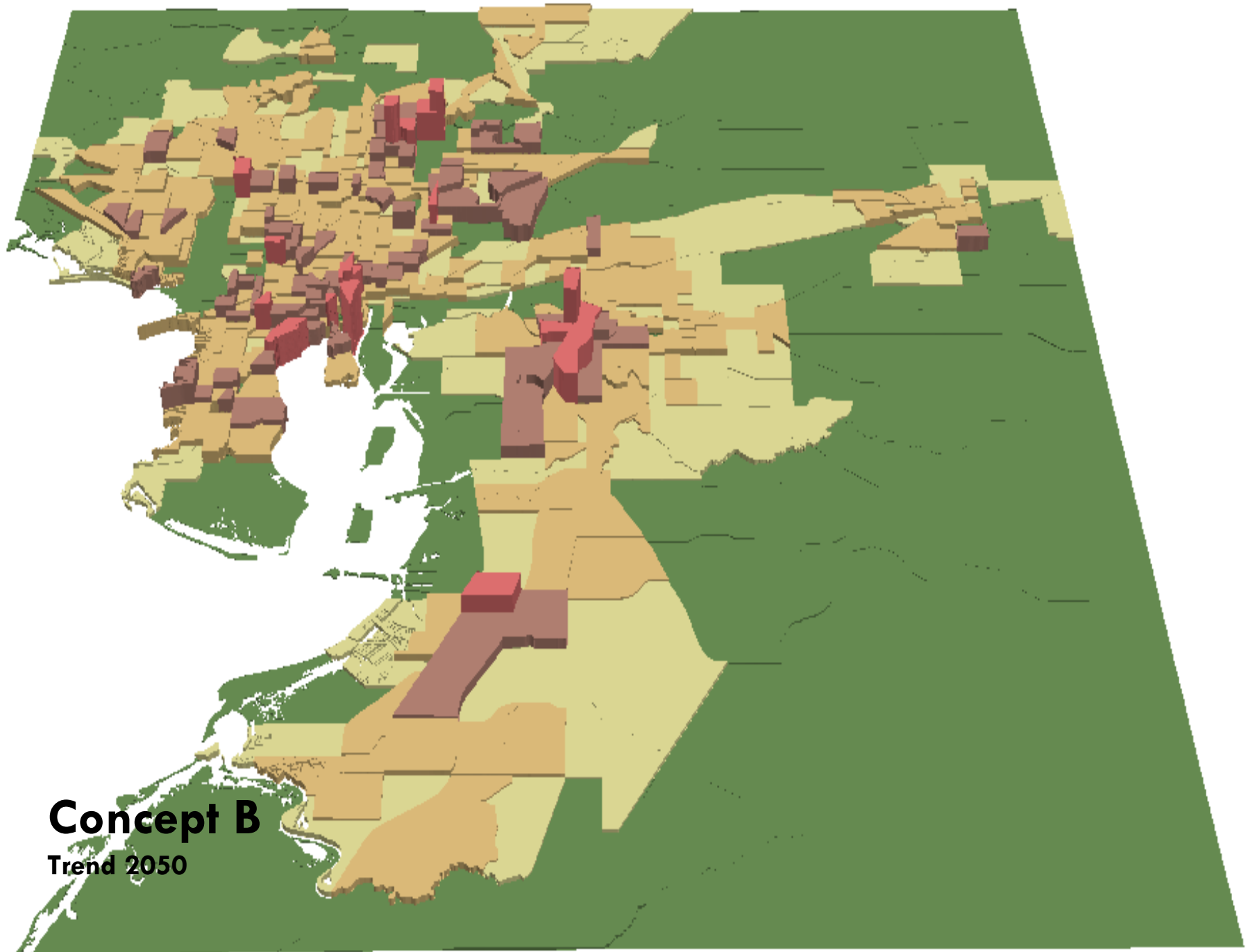


**Concept B:  
Jobs Increment/  
Acre by TAZ**



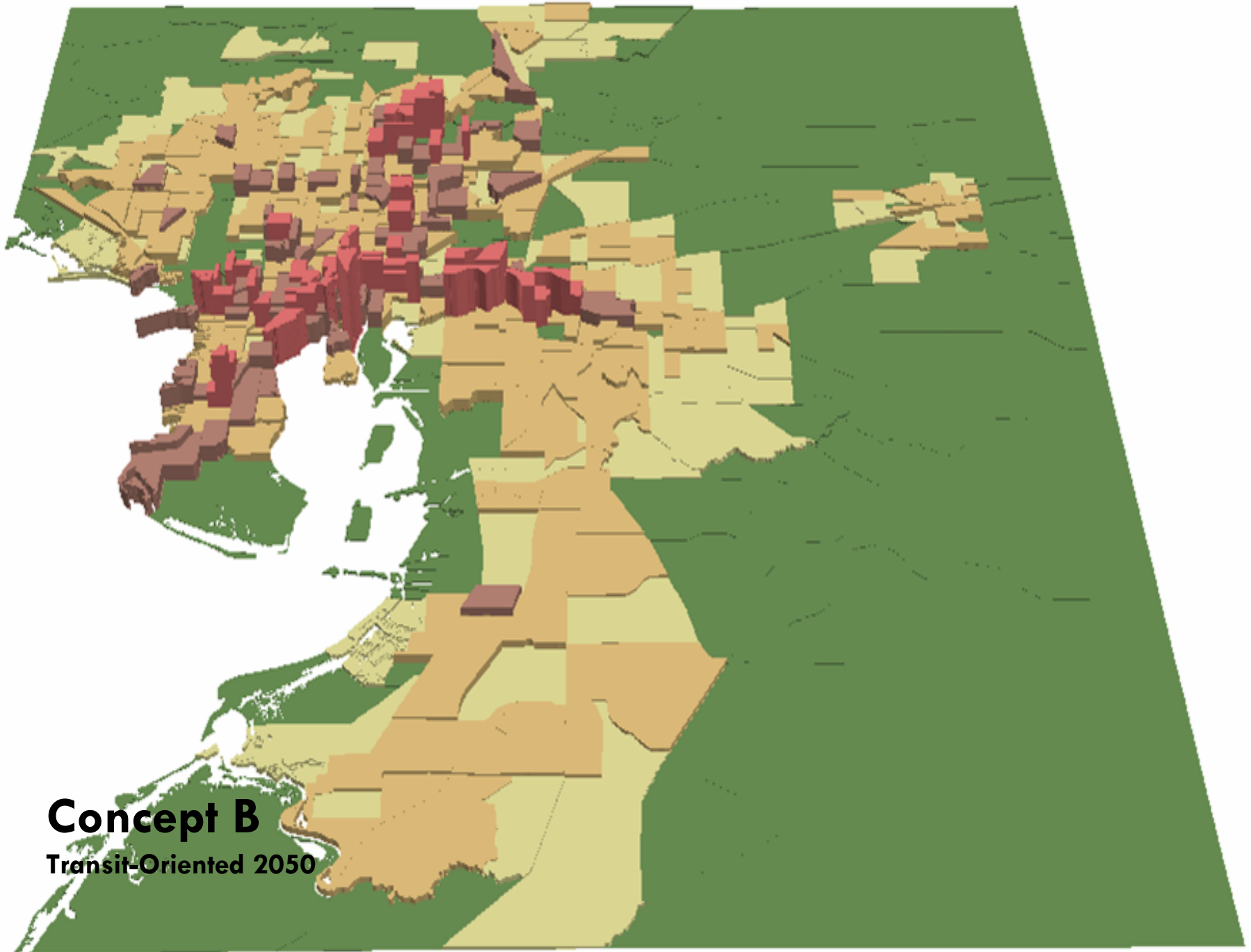


**Concept B**  
Incremental Growth in Station Areas



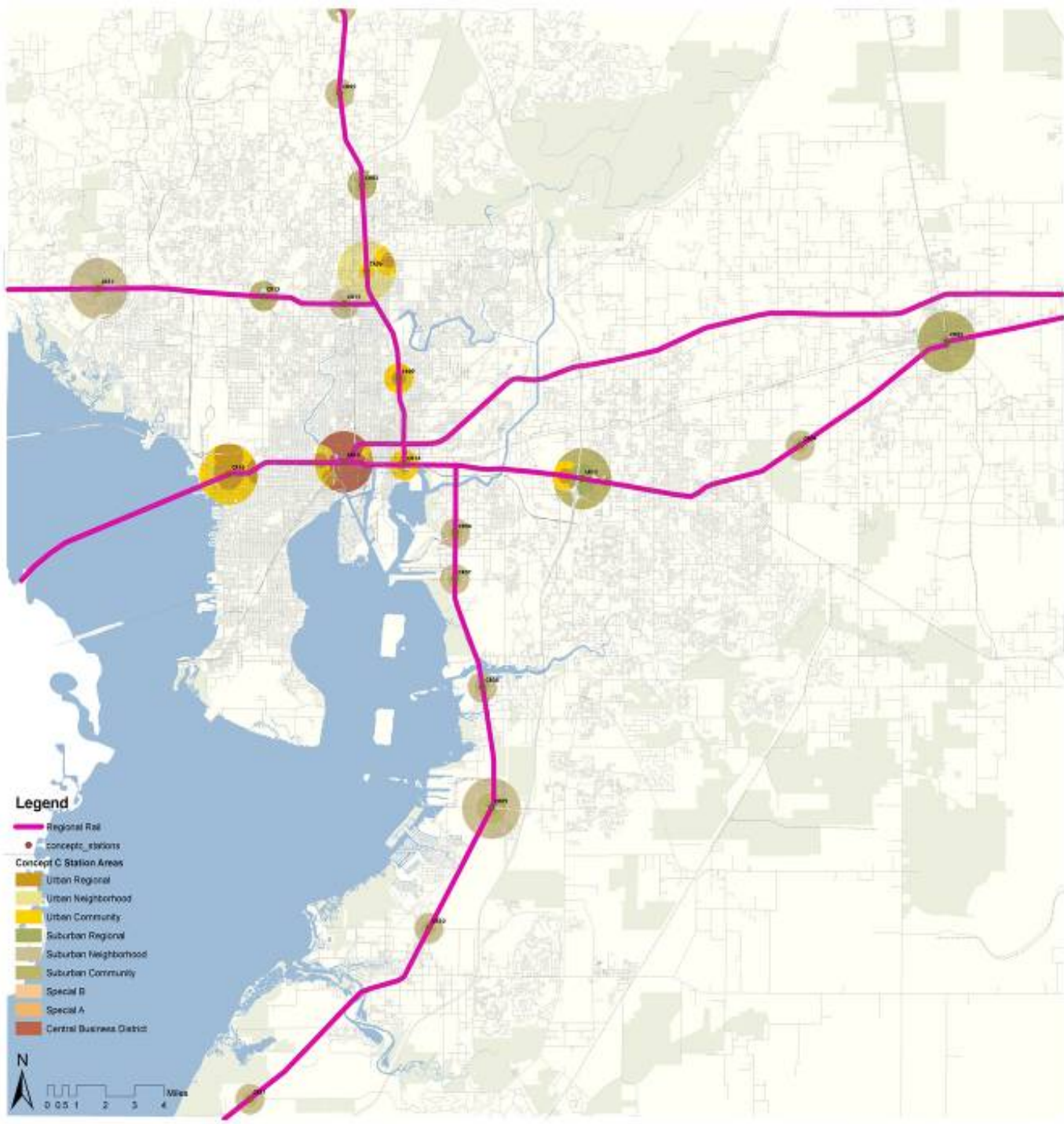
# Concept B

Trend 2050

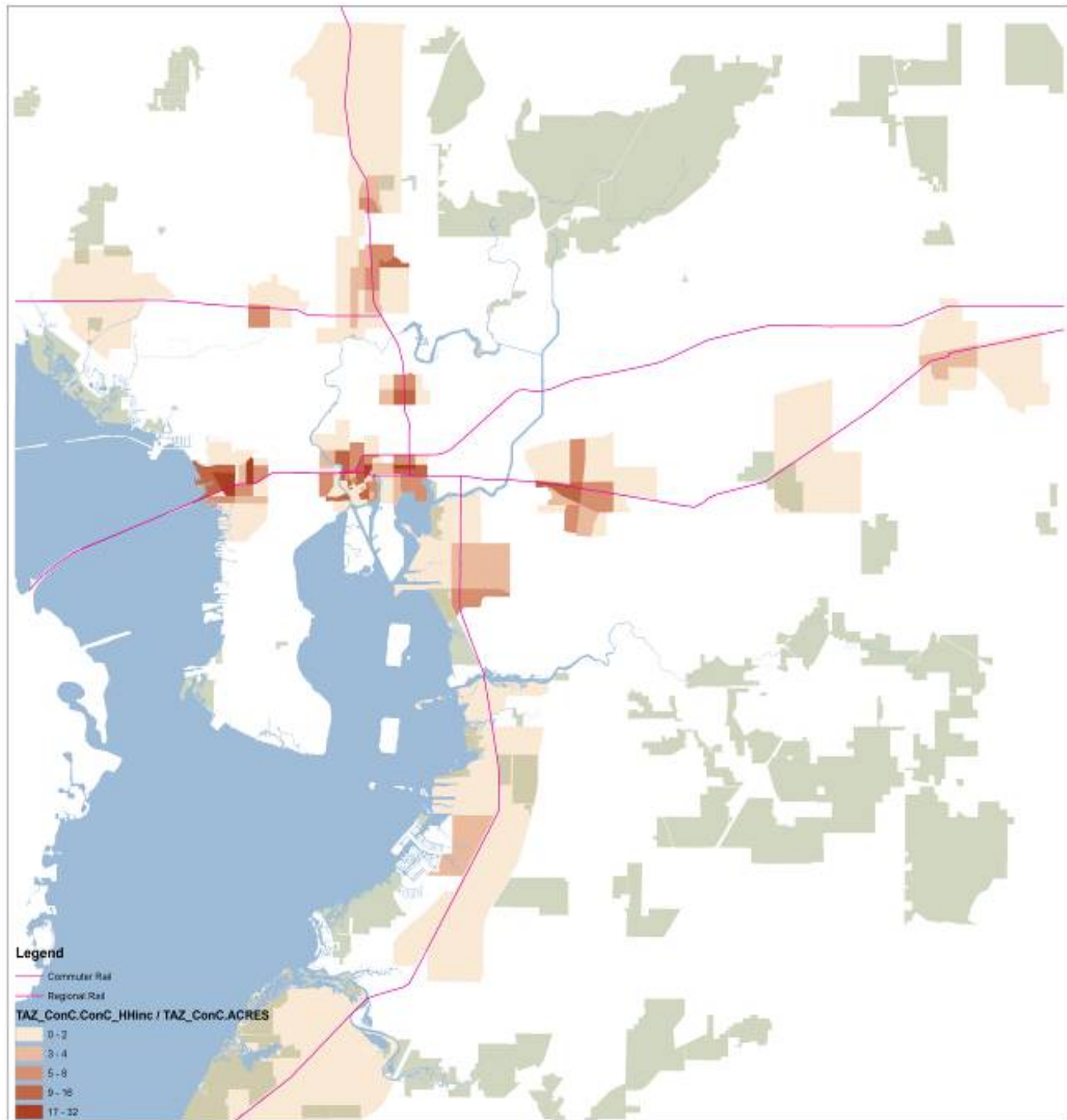


**Concept B**  
Transit-Oriented 2050

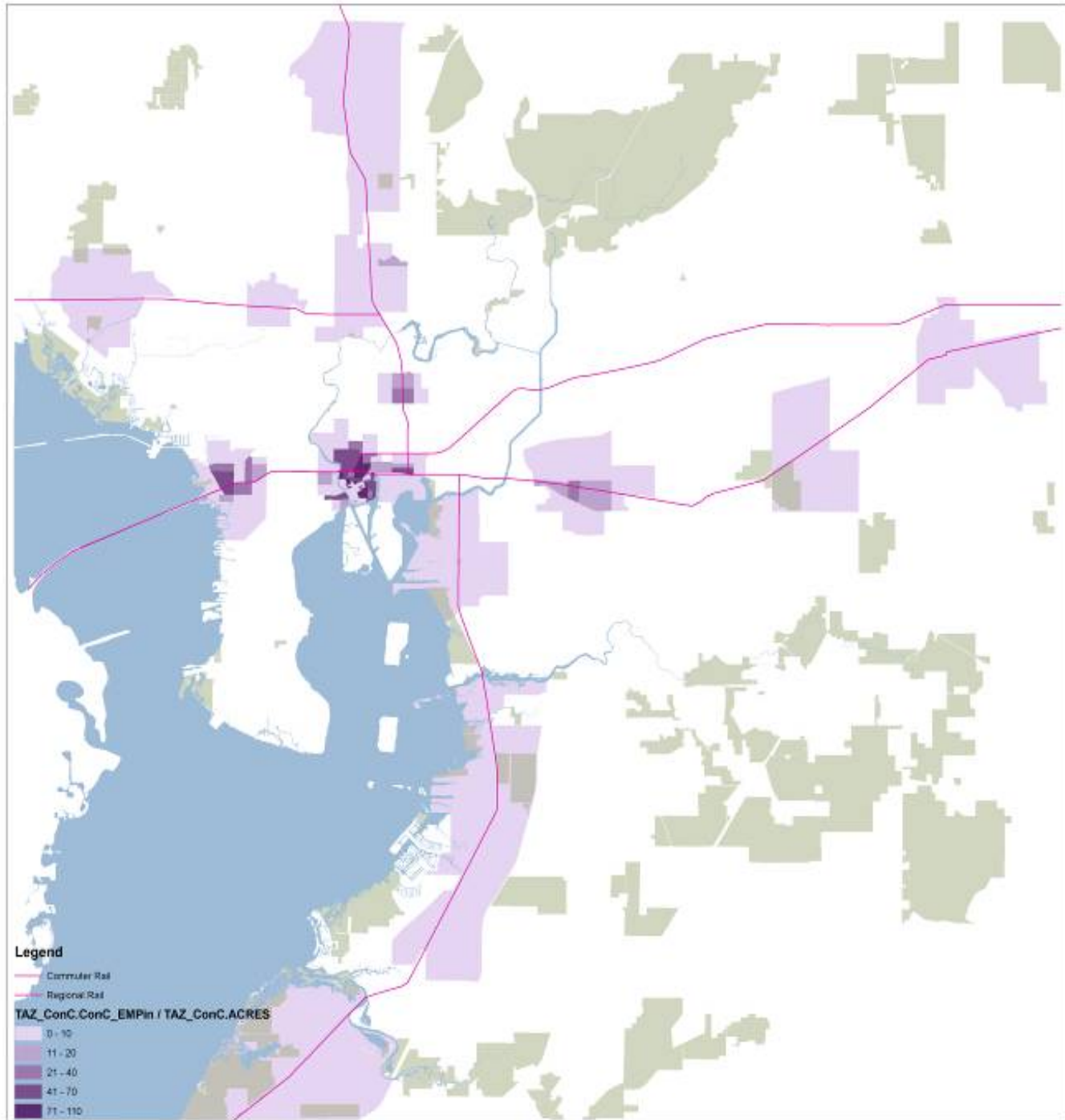
**Concept C:  
Stations**



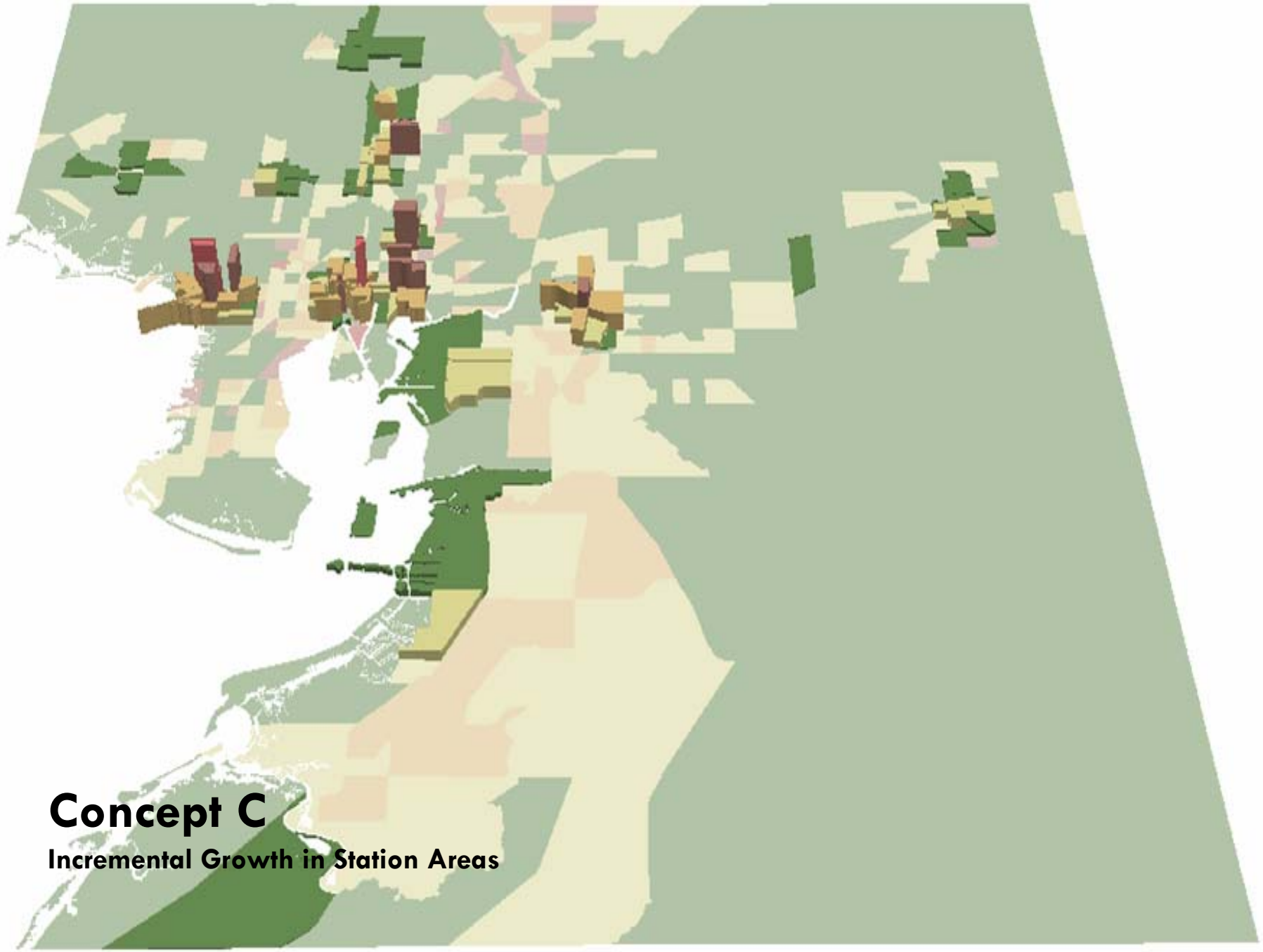
**Concept C:  
HH Increment/  
Acre by TAZ**



**Concept C:  
Jobs Increment/  
Acre by TAZ**

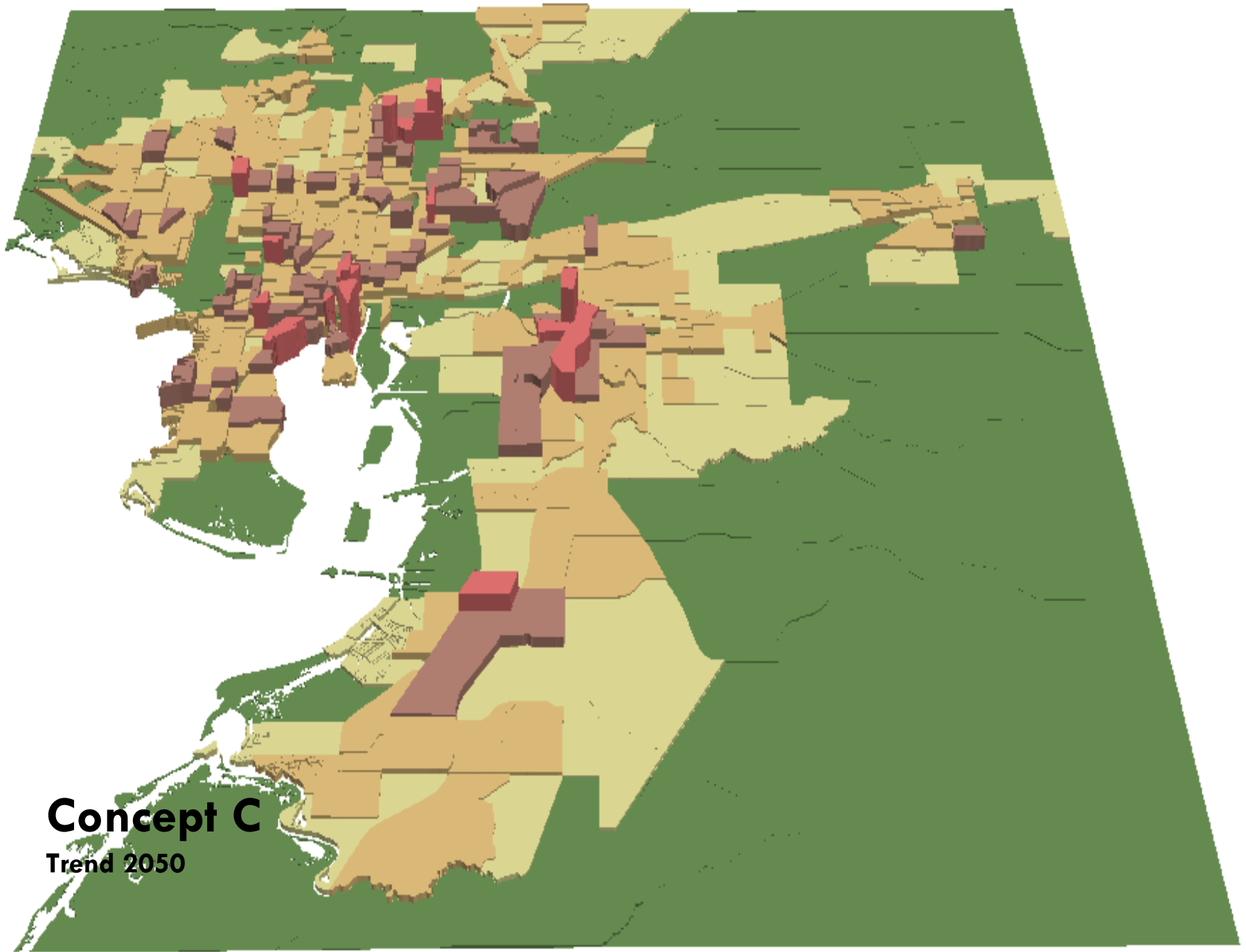






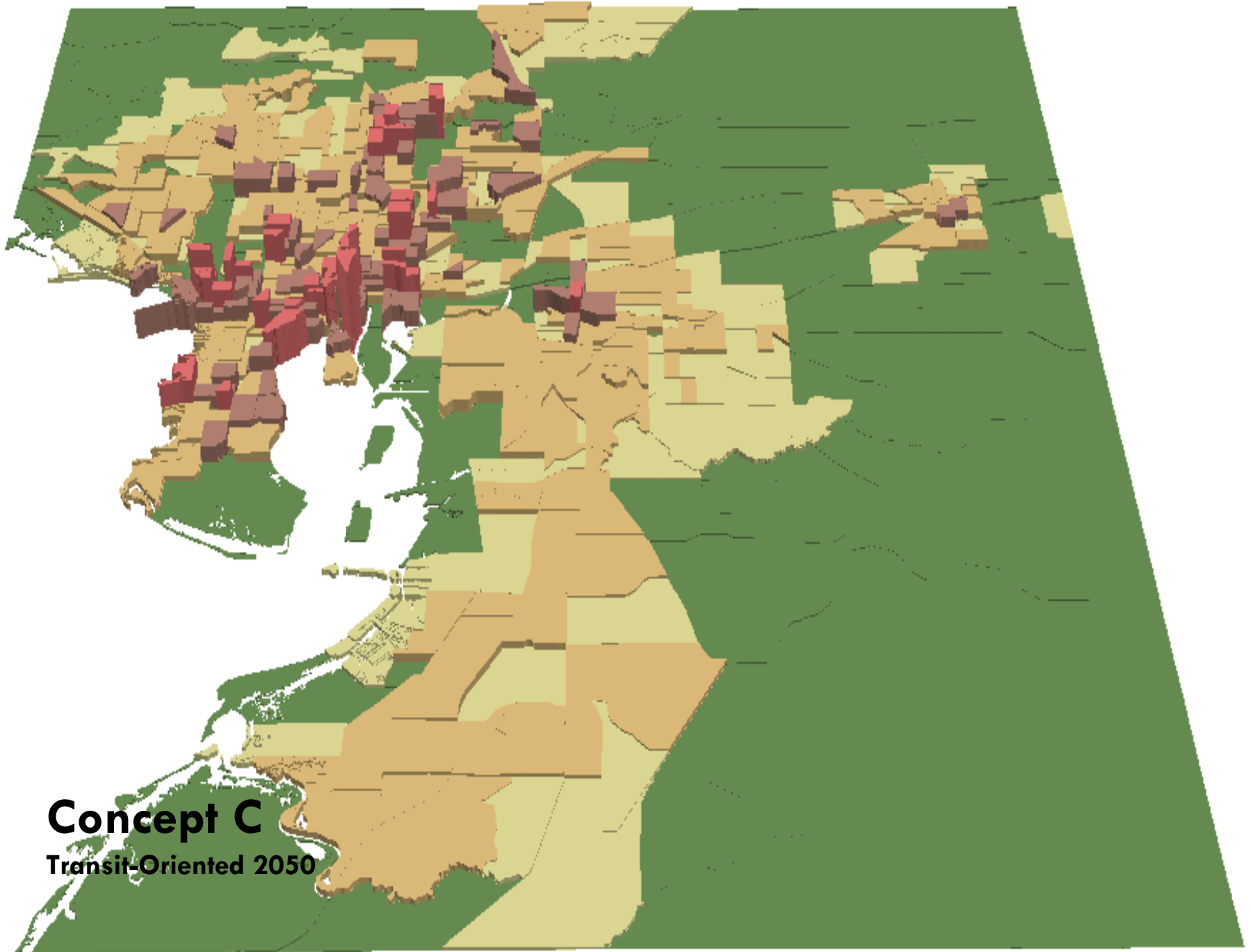
# Concept C

Incremental Growth in Station Areas



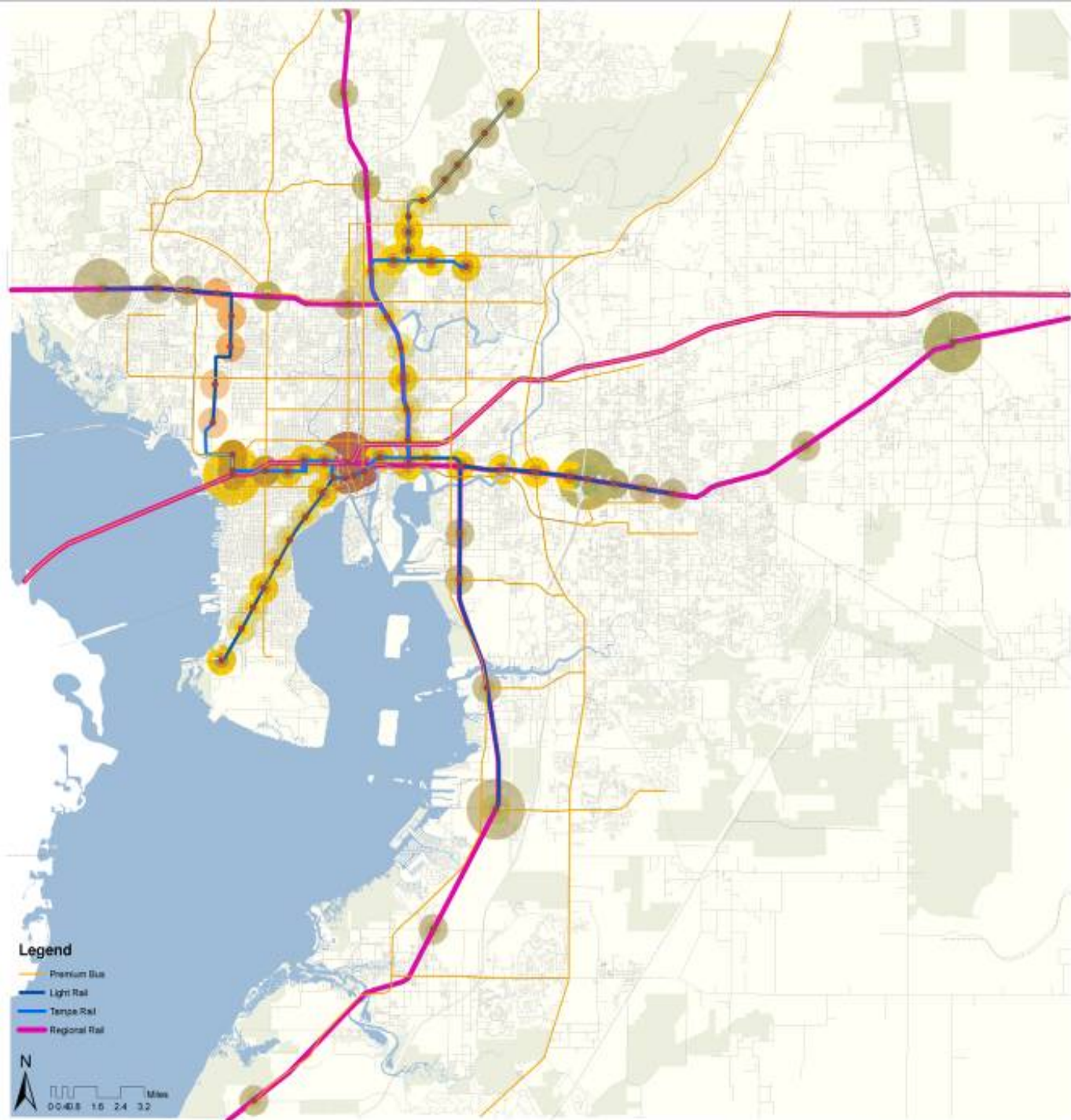
# Concept C

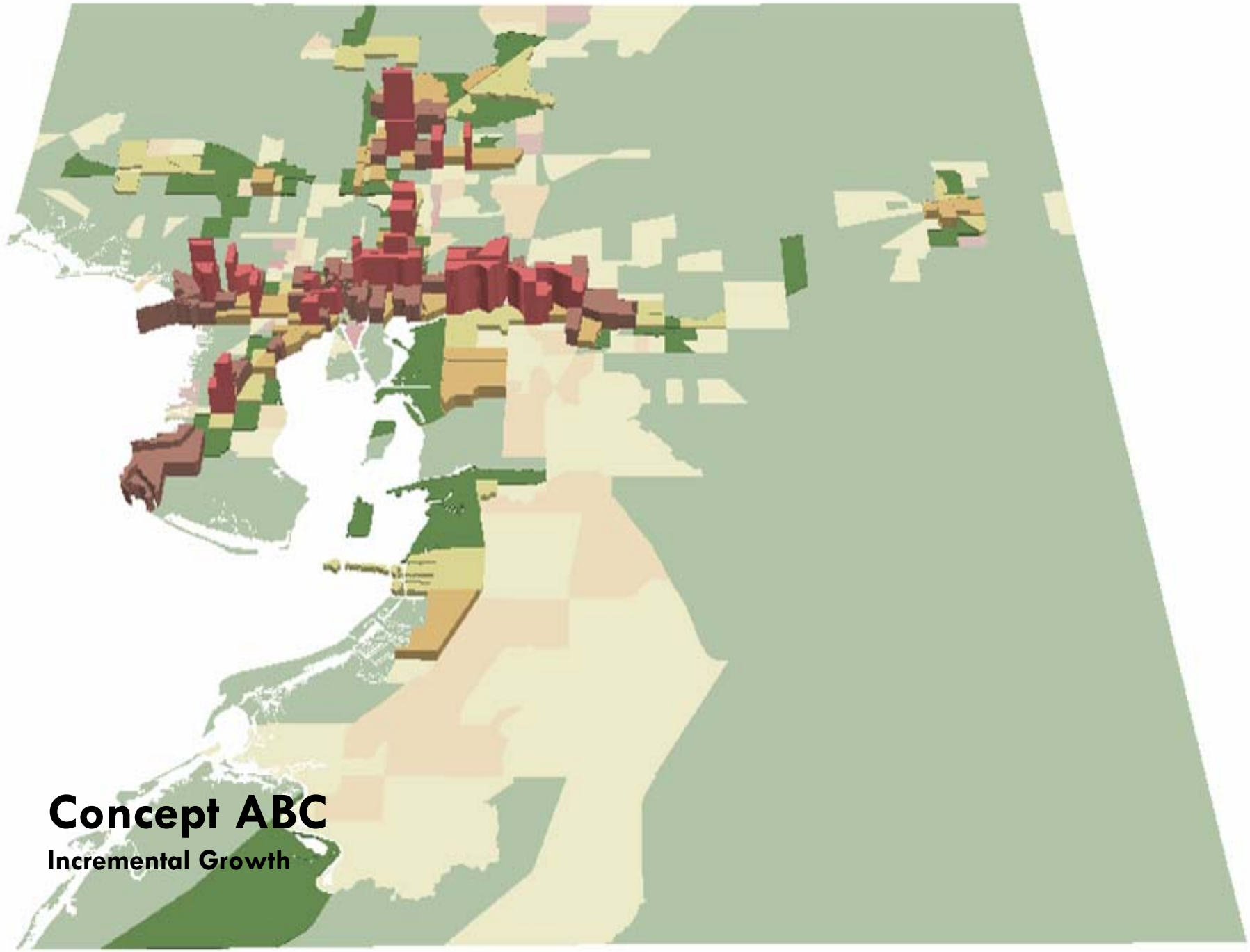
Trend 2050



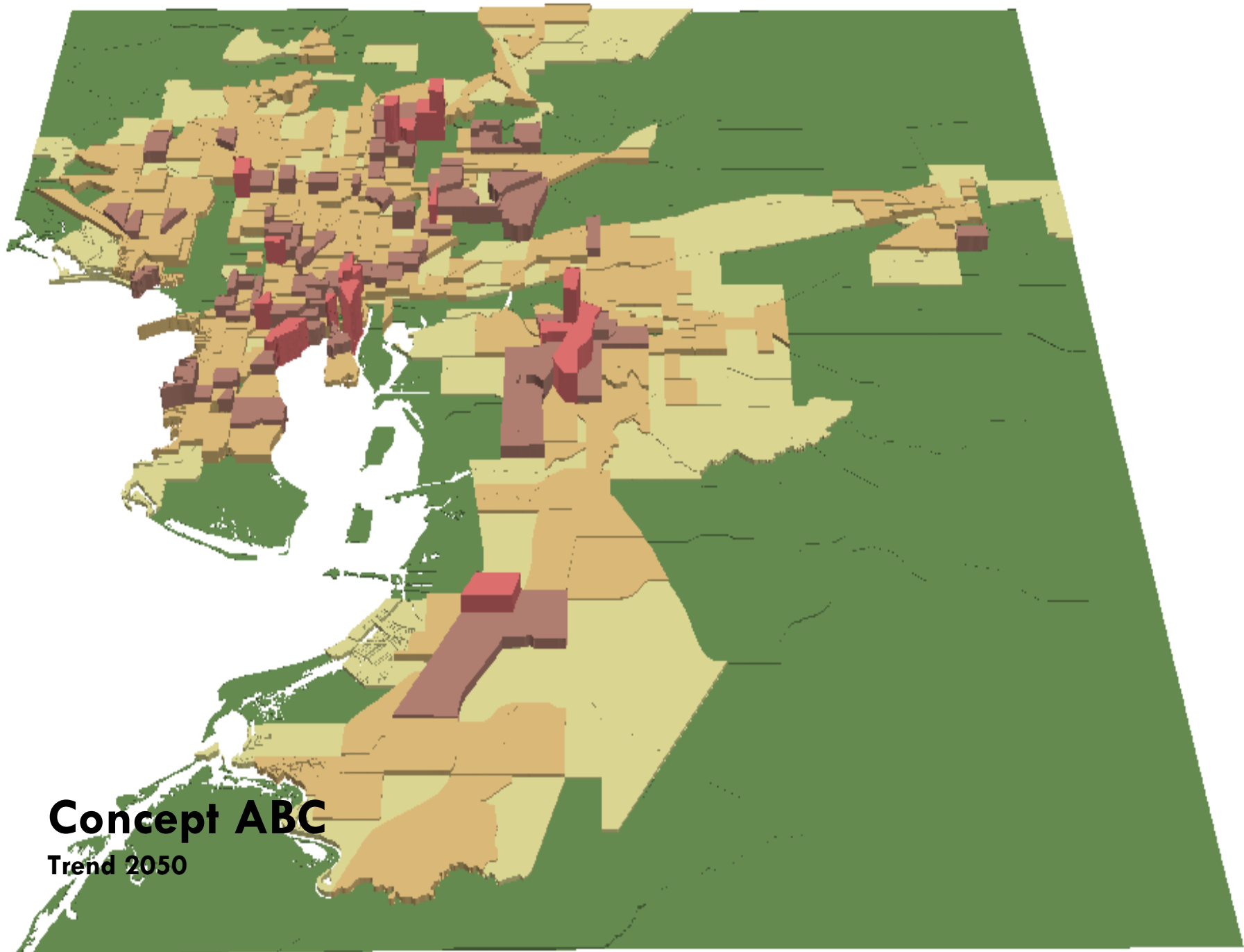
**Concept C**  
Transit-Oriented 2050

**Concept ABC:  
Stations**



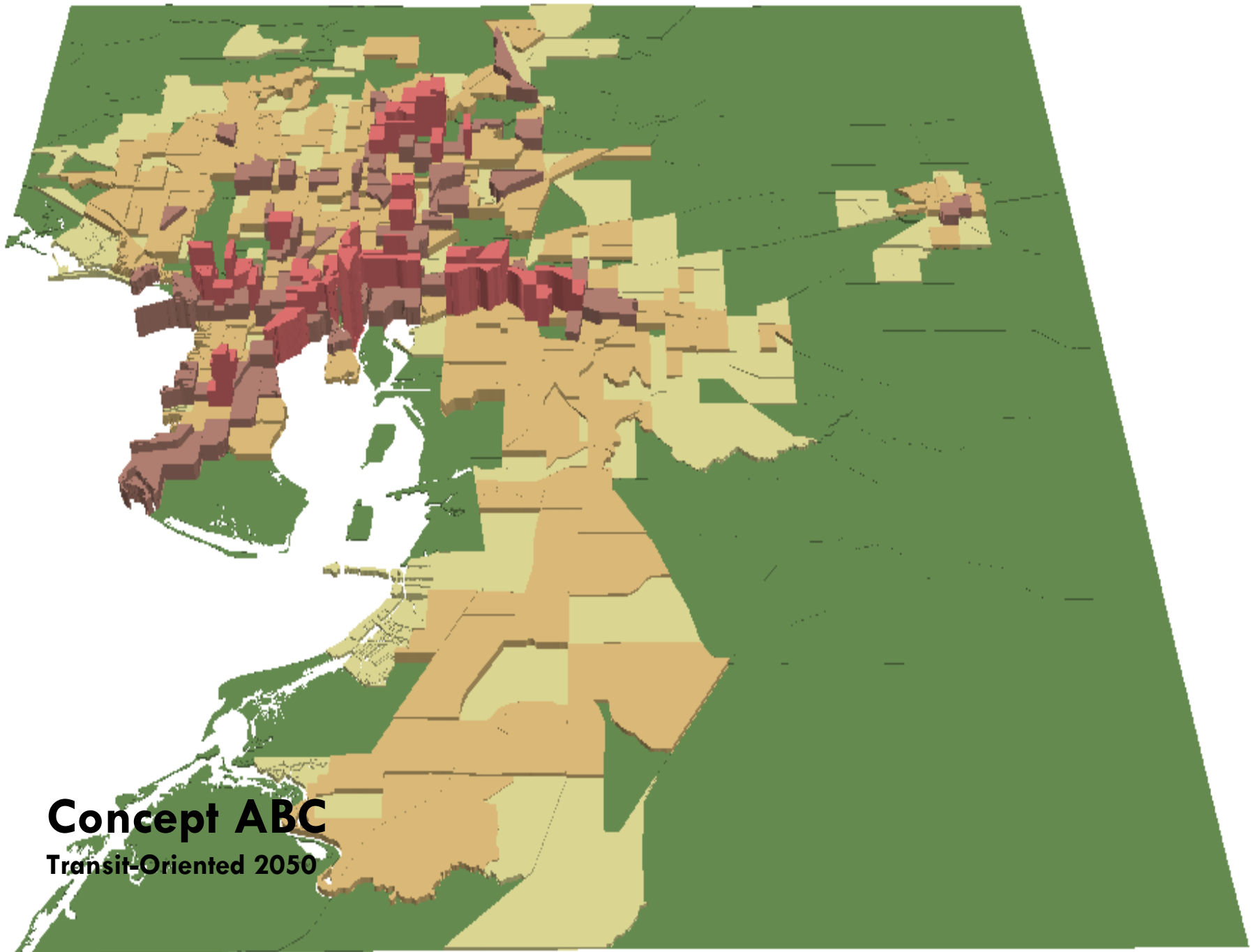


**Concept ABC**  
Incremental Growth



# Concept ABC

Trend 2050



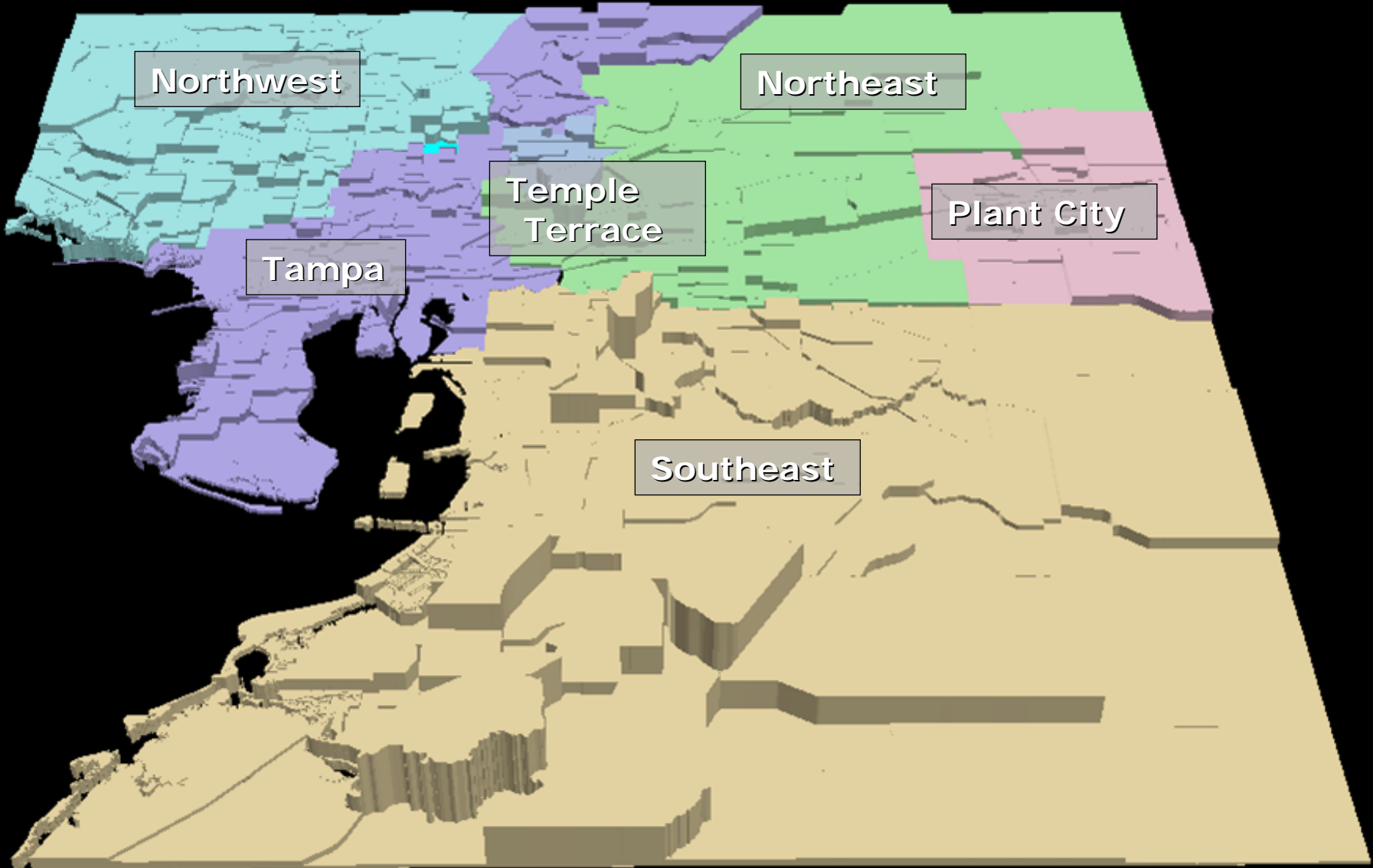
**Concept ABC**  
Transit-Oriented 2050



TRANSIT STUDY

# Sub-Regions

With TAZ Boundaries



Northwest

Northeast

Temple  
Terrace

Plant City

Tampa

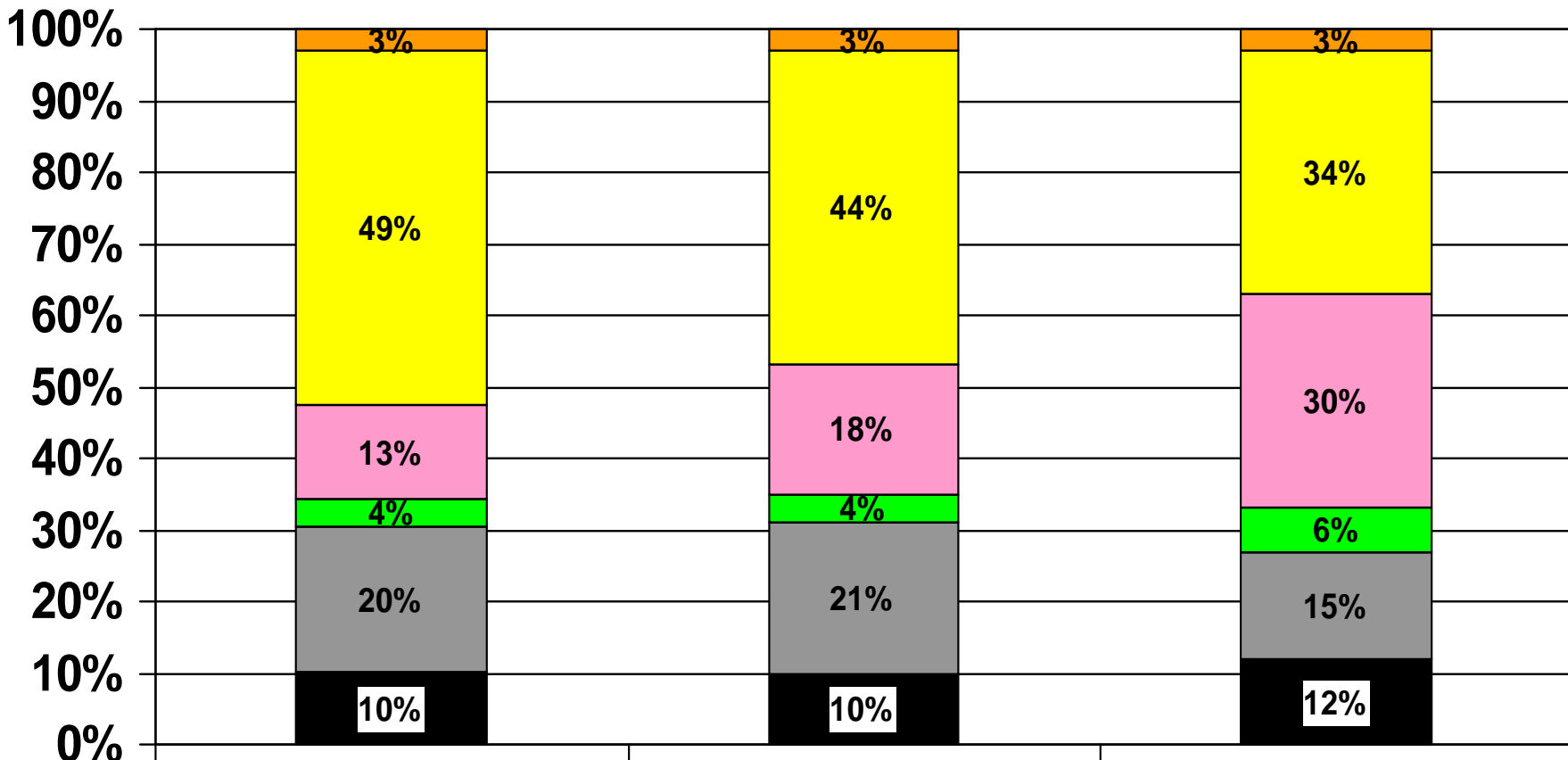
Southeast





# Employment Trend

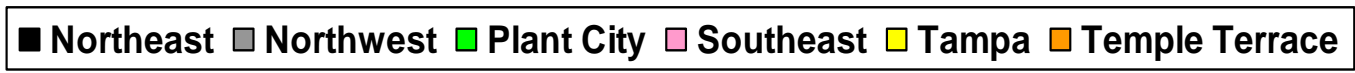
By Sub-Region



2000 Emp

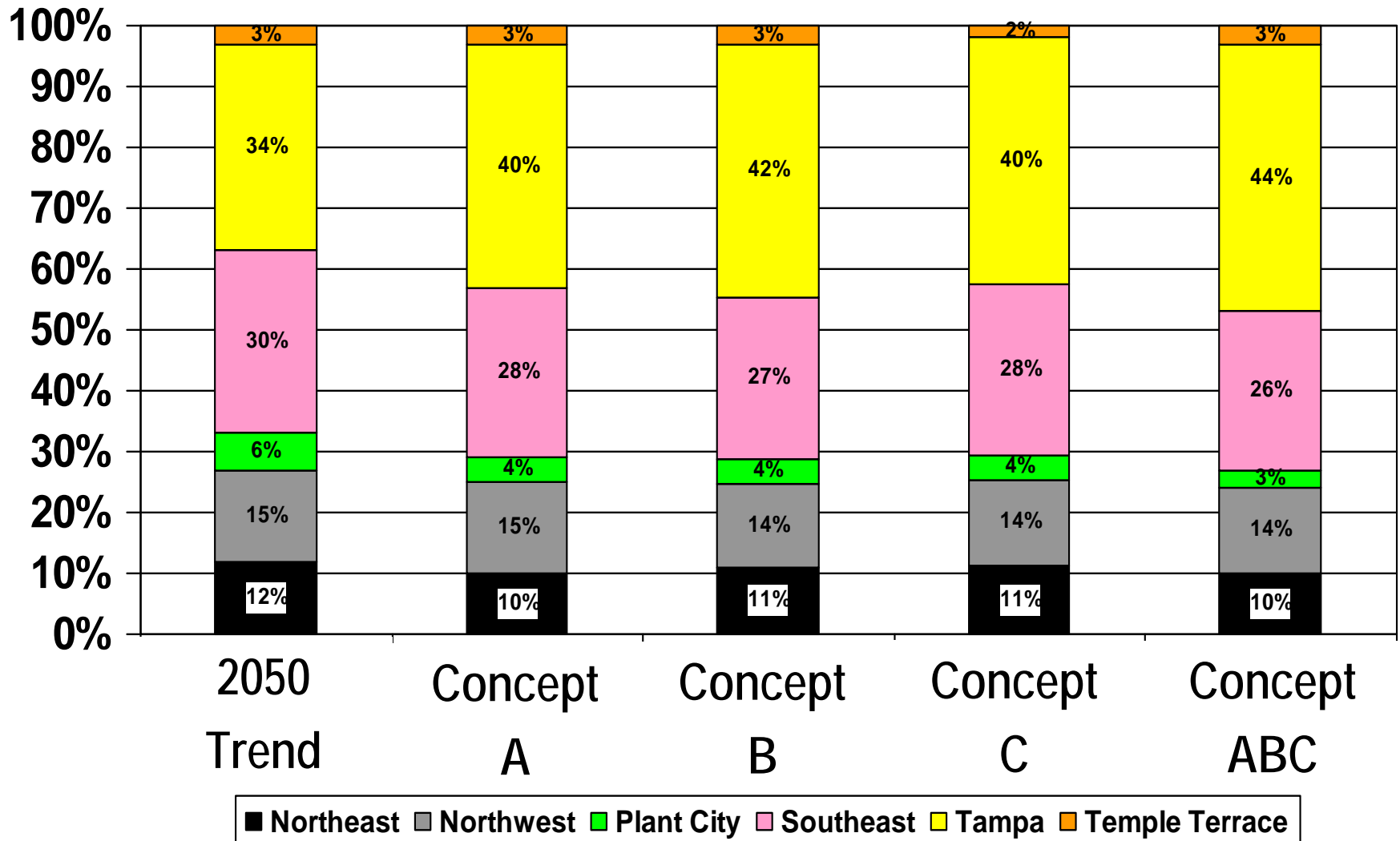
2025 Emp

2050 Trend





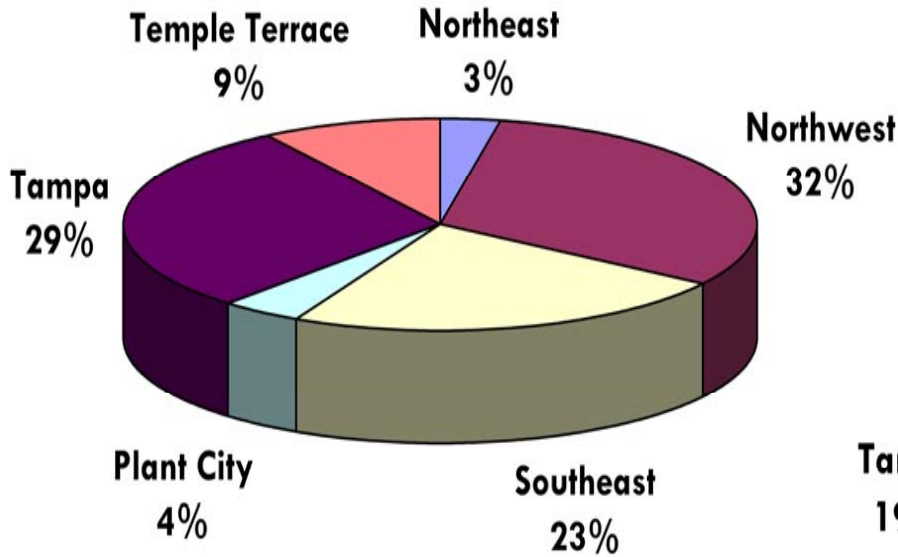
# Employment Trend by Transit Concept for Sub-Regions



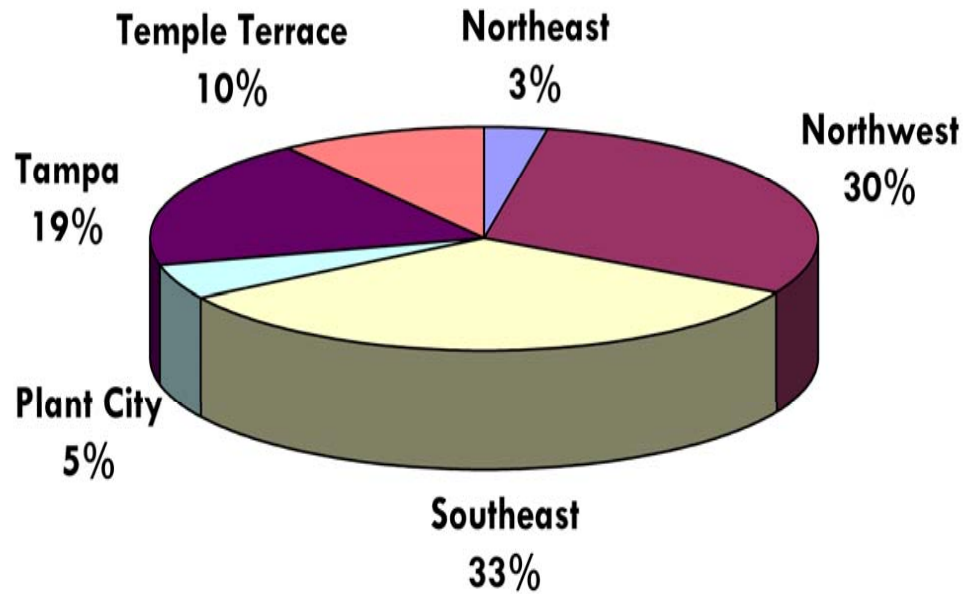
# 2050 Employment with Transit

by Concept

	Concept A	Concept B	Concept C	Concept ABC	2050 Forecast
<b>Employment</b>	170,795	290,370	216,138	367,768	1,430,199
% of 2050 Forecast	11.94%	20.30%	15.11%	25.71%	



**Share of Households  
2000**



**Share of Households  
2050**

# 2050 Population with Transit

by Concept

	Concept A	Concept B	Concept C	Concept ABC	2050 Forecast
<b>Population</b>	175,309	420,589	315,170	595,798	2,034,180
% of 2050 Forecast	8.62%	20.68%	15.49%	29.29%	



# Measures of Effectiveness

## Land Use

- Population near Stations
- Employment near Stations
- Potential TOD Acreage
- Incremental increase in Land Value

## Mobility

- Carrying capacity of Transit System
- Transit Ridership
- Miles and Hours of Travel
- Speed and Congestion





## Environment

- Air Quality
- Fuel Consumption - Energy



# Financial

- Capital Costs
- O&M Costs

## Systems

- Integration – Countywide and Regional
- Service Characteristics
- System Capacity



TRANSIT STUDY

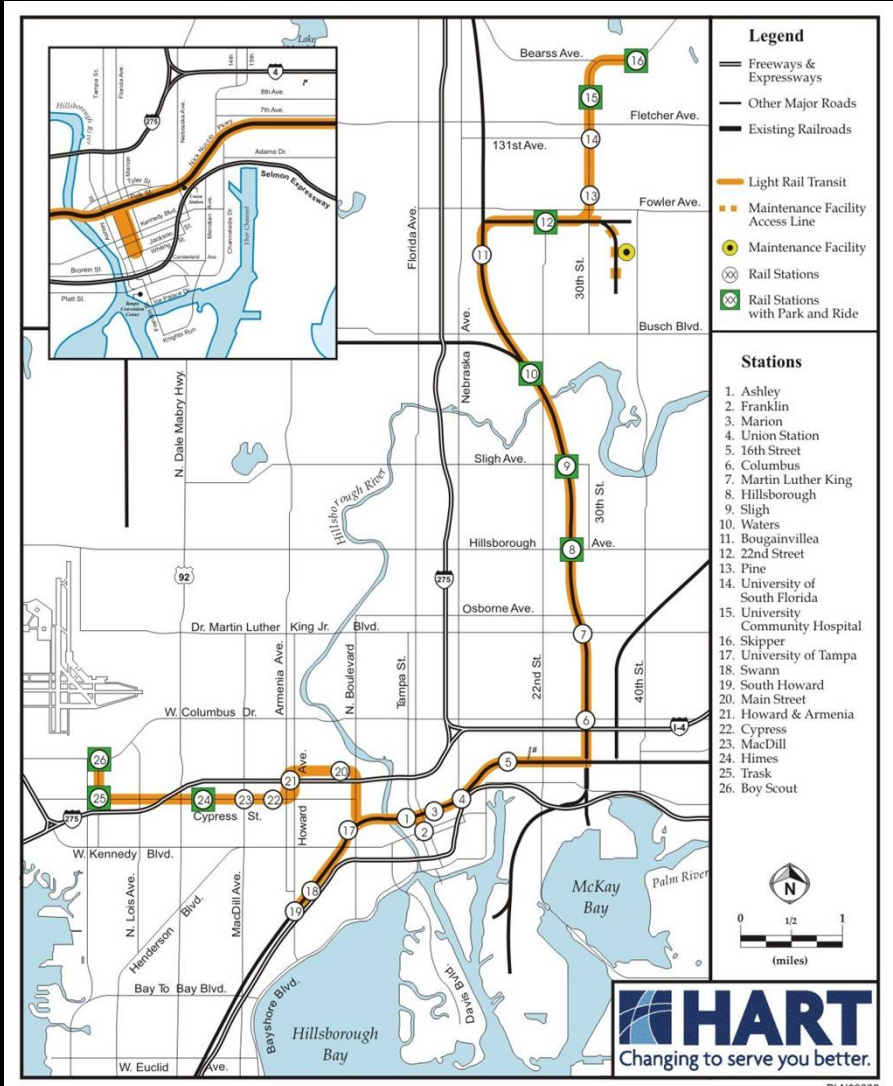
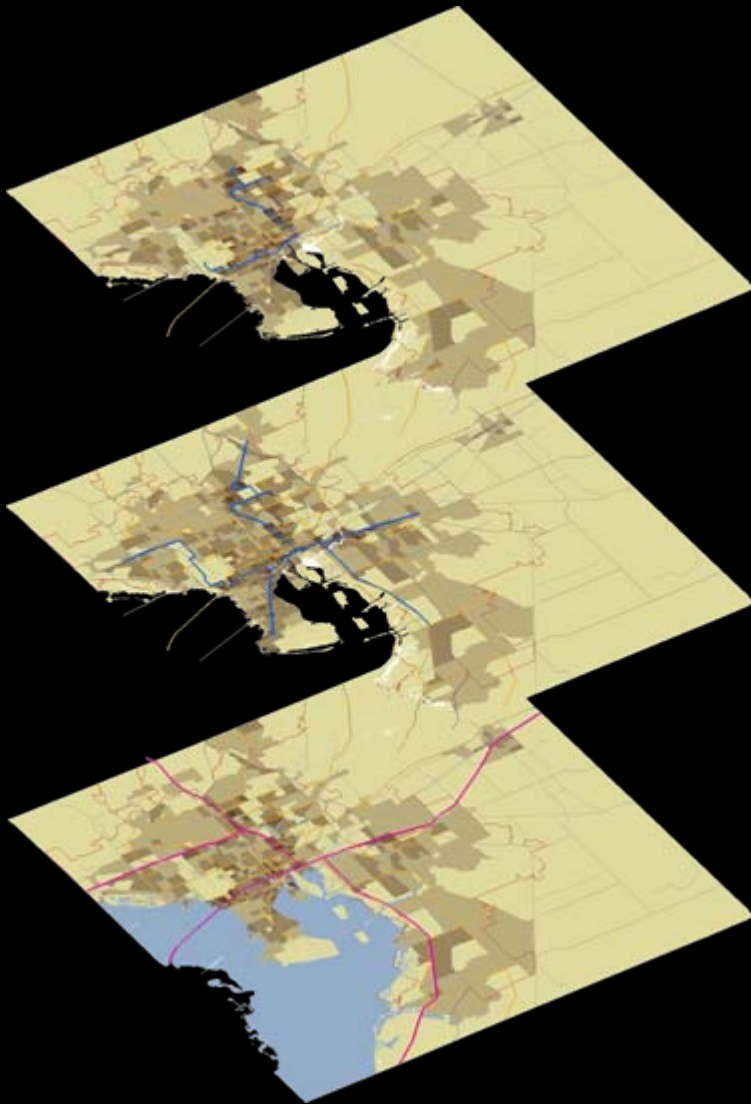
# System Design Issues

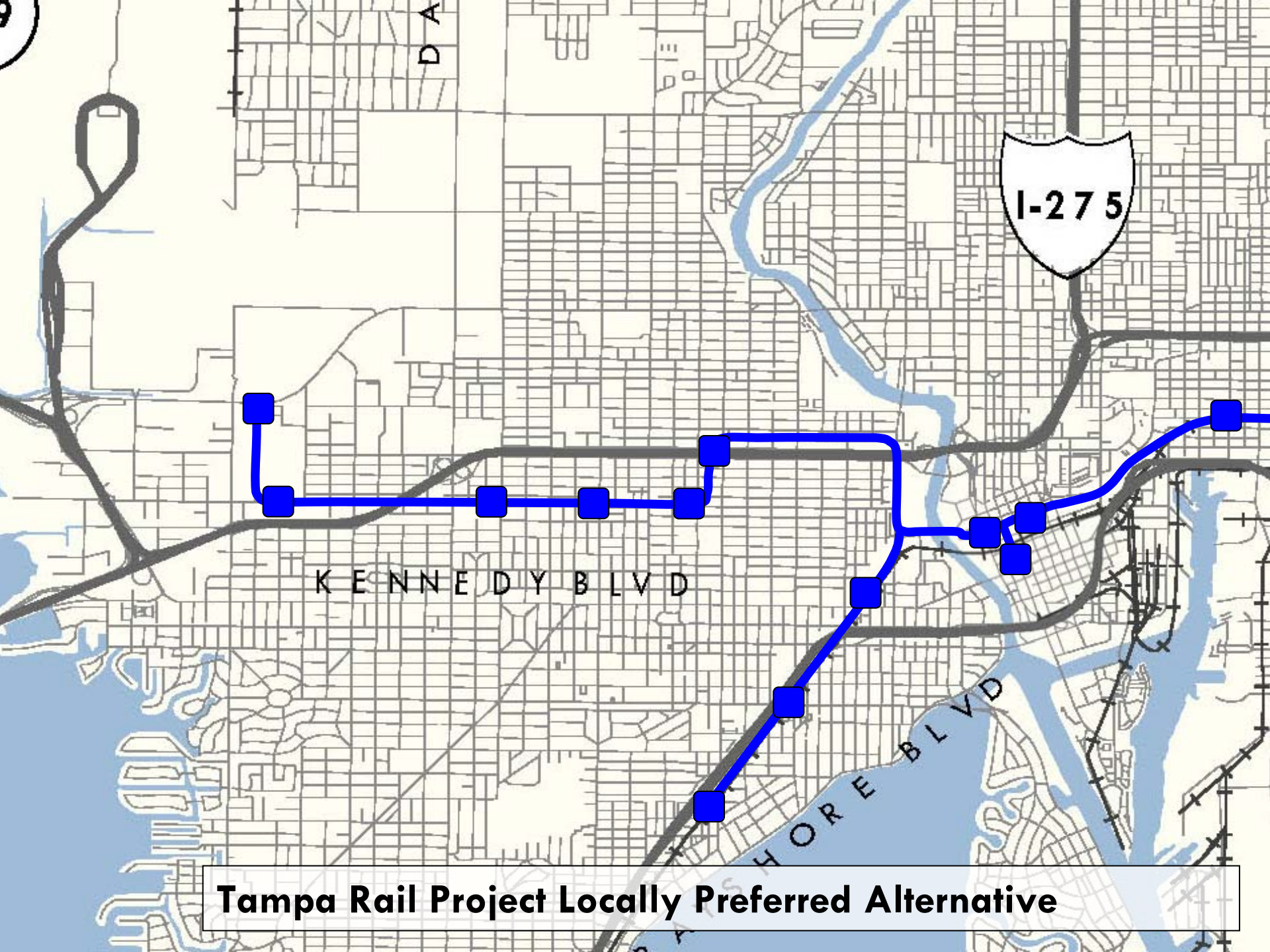


- Connecting Downtown and Westshore
- Downtown Tampa
- USF Area
- I-4 Corridor

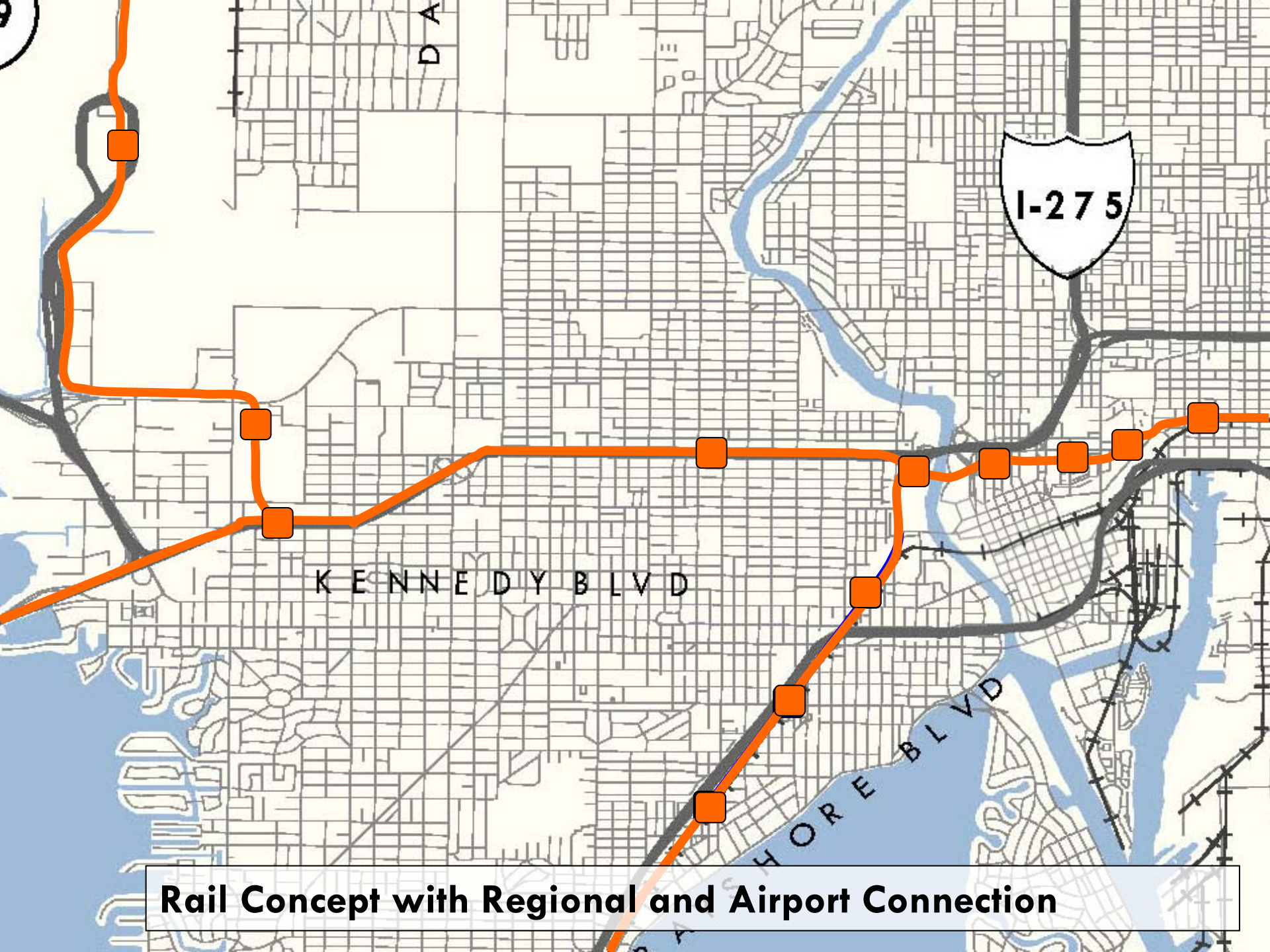
# Tampa Rail Project

## Locally Preferred Alternative



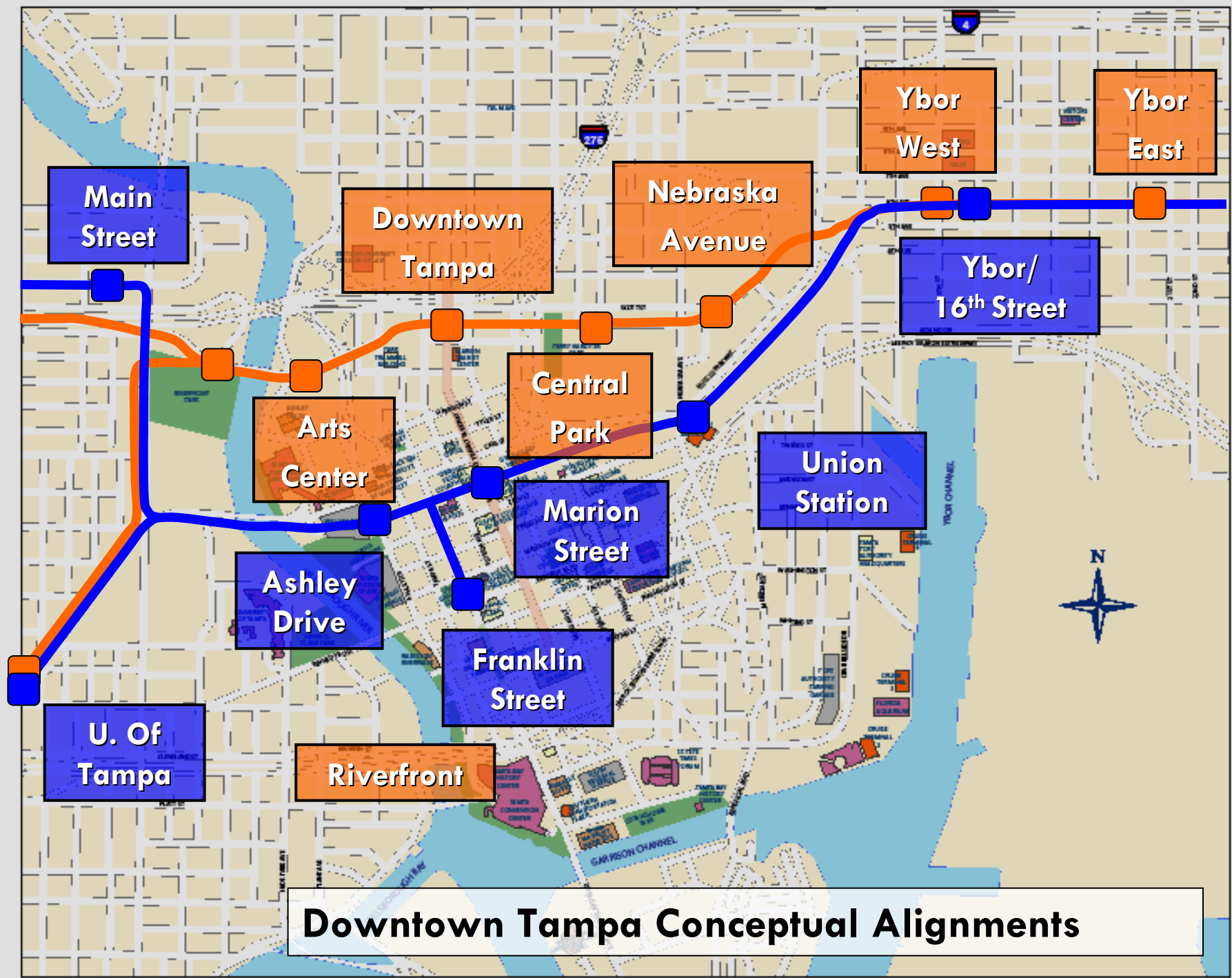


**Tampa Rail Project Locally Preferred Alternative**

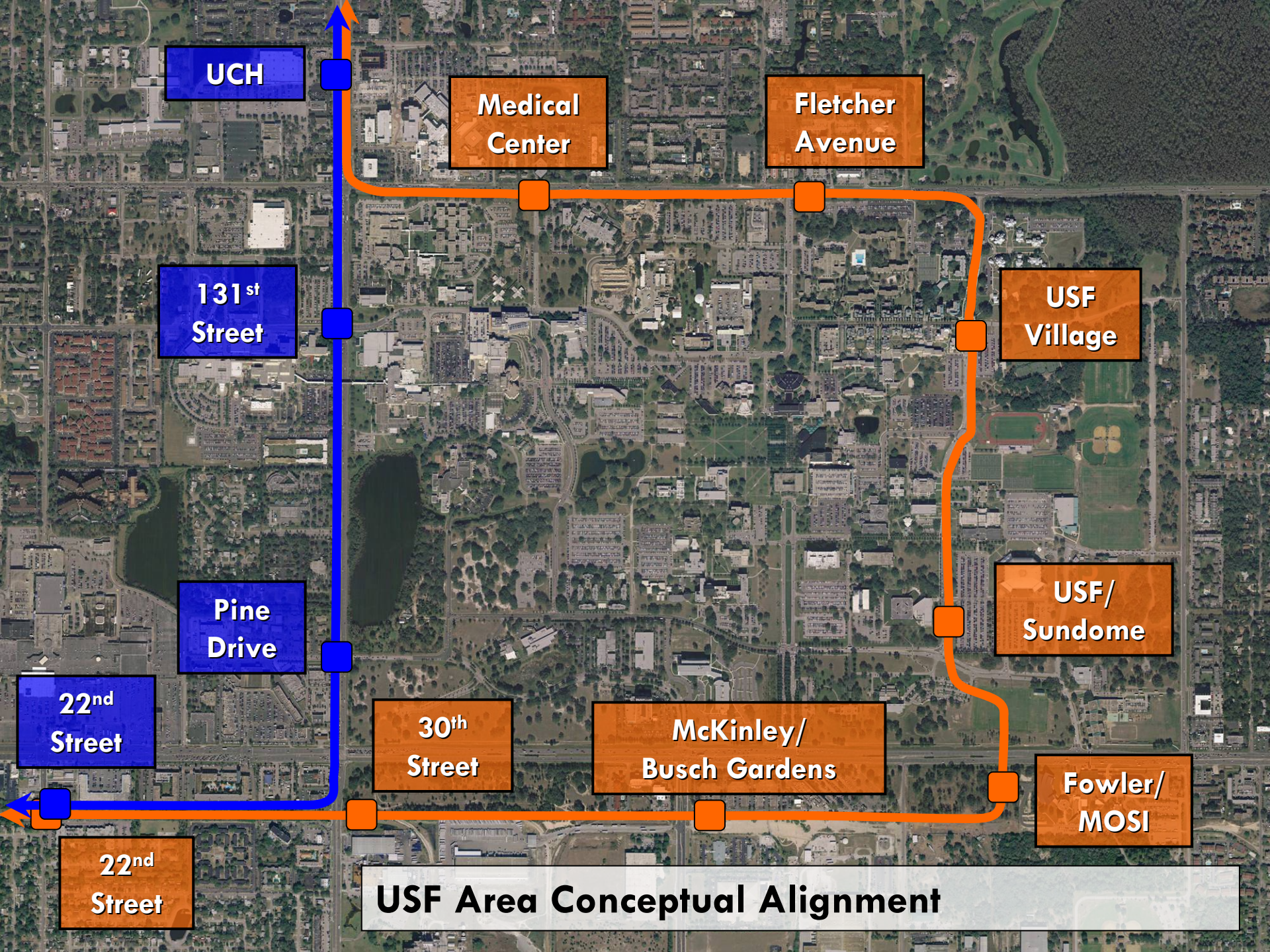


**Rail Concept with Regional and Airport Connection**





**Downtown Tampa Conceptual Alignments**



**UCH**

**Medical Center**

**Fletcher Avenue**

**131st Street**

**USF Village**

**Pine Drive**

**USF/  
Sundome**

**22nd Street**

**30th Street**

**McKinley/  
Busch Gardens**

**Fowler/  
MOSI**

**22nd Street**

**USF Area Conceptual Alignment**

# USF Conceptual Alignment

**Element 3:  
Urban Design**

**Figure 3-3  
Long-Range  
Comprehensive Campus  
Master Plan Illustrative**

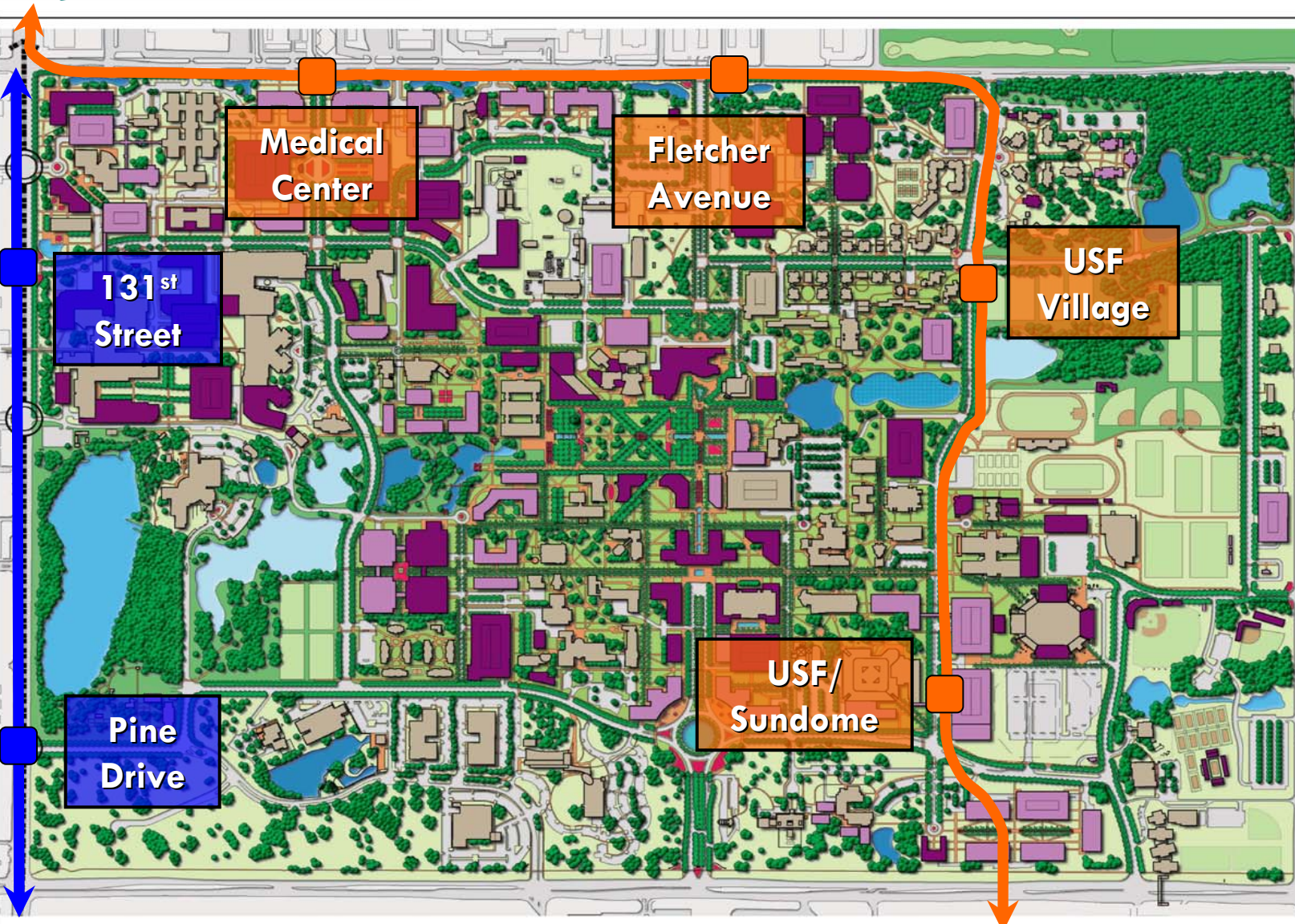
- Existing Buildings
- 10-Year Proposed Buildings
- Long-Range Proposed Buildings
- Pedestrian Circulation
- Signature Open Space
- Informal Recreation
- Signature Landscape Feature
- Existing Stormwater Facilities
- 10-year Stormwater Facilities
- 10-year Alternate Stormwater Facility
- Long-Range Stormwater Facilities
- Water Feature

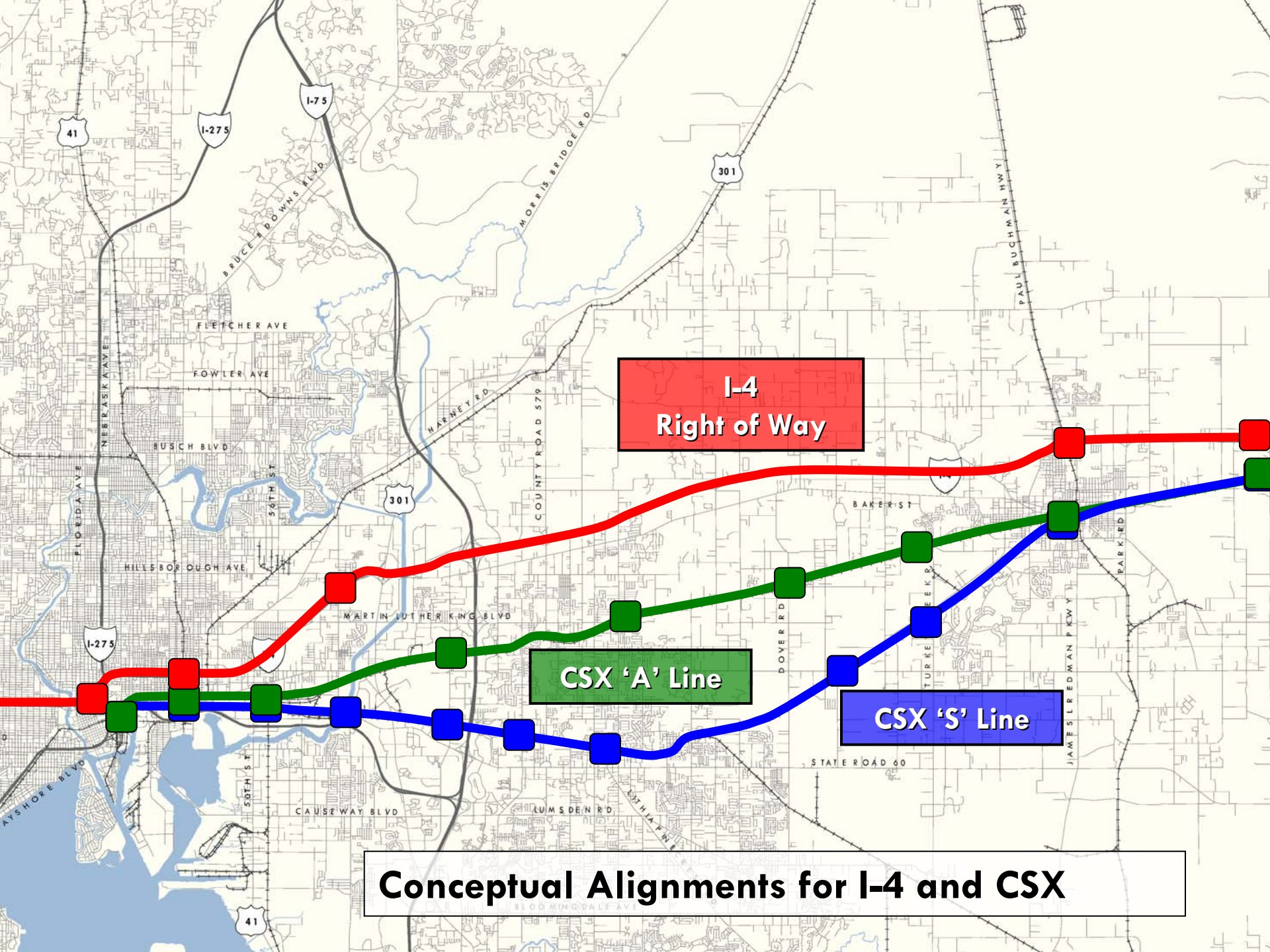
- Proposed Light Rail Alignment (Long-Range, Tampa Rail Project)
- Proposed Light Rail Station (Long-Range, Tampa Rail Project)

**2005 CAMPUS  
MASTER PLAN  
UPDATE**

**University of  
South Florida  
Tampa**

October 2006



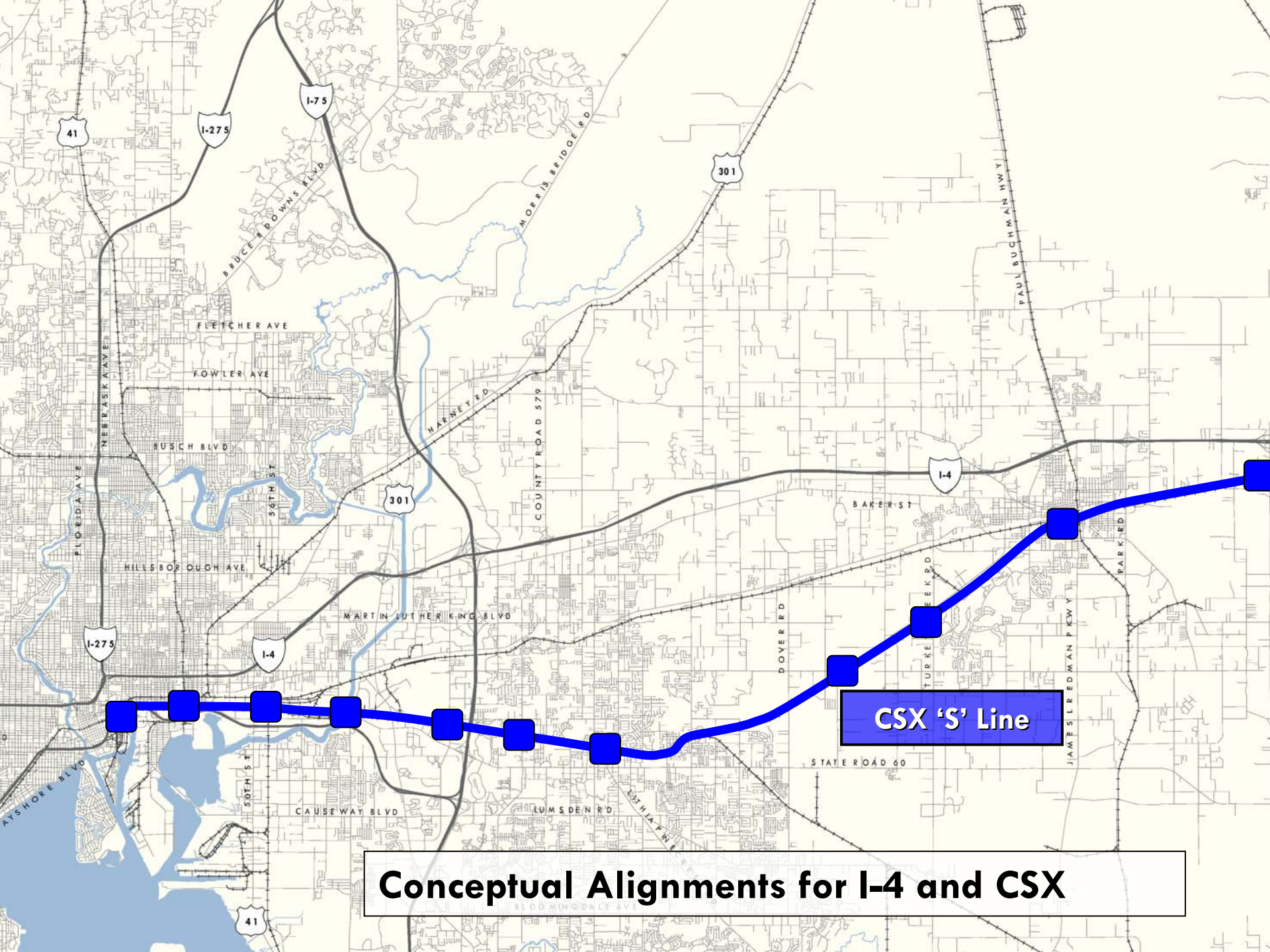


**I-4  
Right of Way**

**CSX 'A' Line**

**CSX 'S' Line**

**Conceptual Alignments for I-4 and CSX**



**CSX 'S' Line**

**Conceptual Alignments for I-4 and CSX**



TRANSIT STUDY

# Current Activities and Next Steps



- **MPO and Committees (Aug and Sep)**
- **Leadership Team (Aug 20)**
- **Technical Team (Aug 23)**
- **MOSI Open House (Aug 25)**



- Transit Needs & Opportunities (May)
- Evaluation of Scenarios (Jun-Jul)
- **Public Outreach (Aug)**
- System Concept (Sept)
- Strategies (Oct-Nov)