

# Modeling for seven **50** counties years

*presented to*  
Transit and Rail Committee

*presented by*  
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*date*  
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## It All Starts with a VISION

*Driverless Cars - Nevada, California and Florida passed law to allow testing*


*Colonizing Space - SpaceX wants to build a colony for 80,000 people on Mars*

*'Hyperloop' Tube Transport – Very High Speed Transit - LA to NY in 21 min*

**Think Big!!!**


## SEVEN Counties – 50 Year Vision Plan

- Study funded by HUD Grant
- Regional partnership – SFRPC, FDOT, MPOs, Counties, etc.
- Comprehensive approach – multidisciplinary consultant team





- Region hosts 33% population and 40% jobs of the State
- More population than 35 states
- World class tourist destination
- Global gateway to and from the US

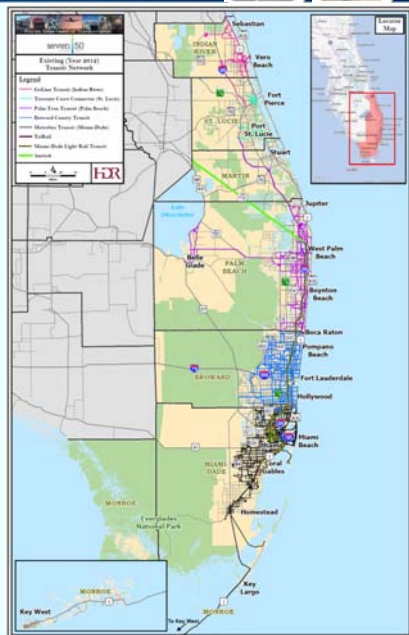


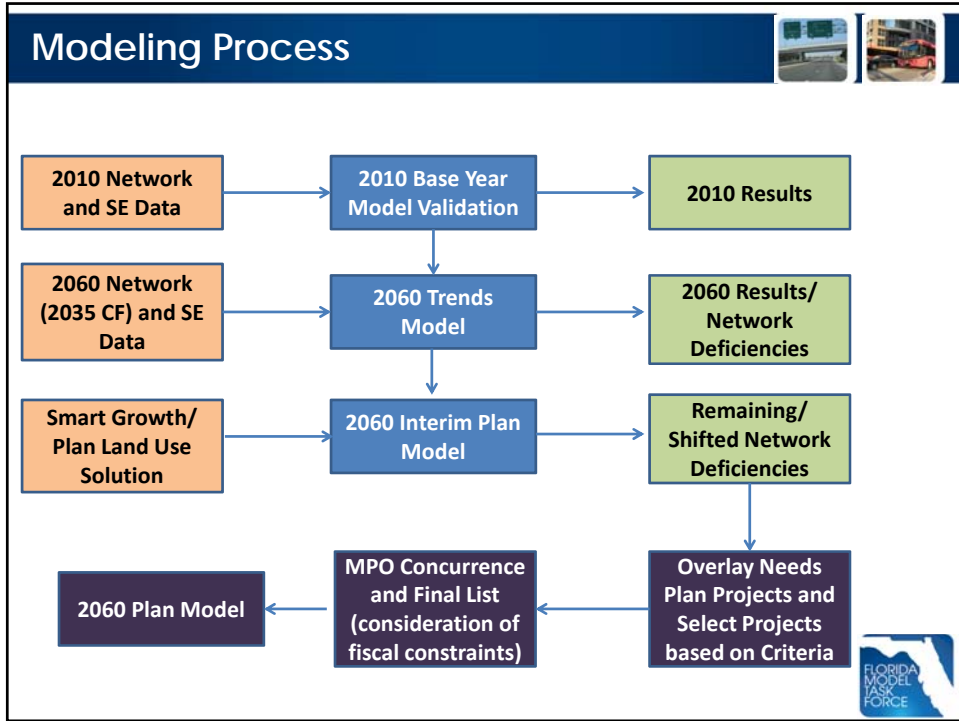



## Existing Transportation System









## Modeling Objectives and Challenges

**Objectives**

- Network performance (V/C, VMT, VHT, etc.)
- Mode shifts
- Develop the **high-level** regional solution

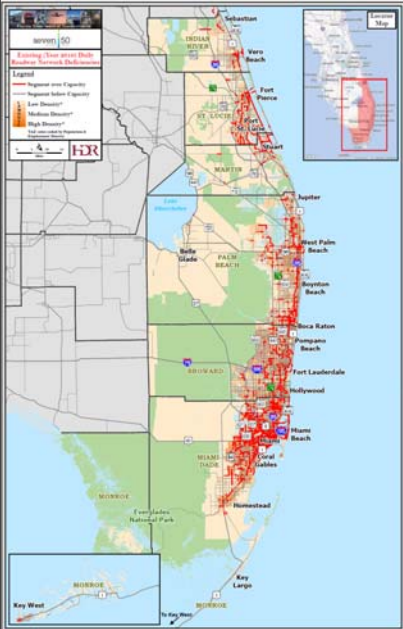
**Challenges**

- Model coverage – Monroe County added to SERPM
- Process limitations – added simplified transit module to GTCRPM, offline analysis
- Defining projects beyond 2035/2040 L RTP – **consensus** building
- Schedule – interagency coordination

**Technical Guidance**

- RTTAC

## Today's Problems




The map displays population density across Florida, with a legend indicating 'Low Population Density' (light green), 'Medium Population Density' (medium green), and 'High Population Density' (dark green). Red lines and dots indicate areas of 'Existing (Year 2000) Traffic Network Bottlenecks'. Major cities and regions labeled include Sebastian, Vero Beach, Fort Pierce, St. Lucie, Ft. Pierce, St. John's, Jupiter, West Palm Beach, Boca Raton, Pompano Beach, Broward, Fort Lauderdale, Hollywood, Miami Beach, Coral Gables, Miami Dade, Homestead, and Key Largo.

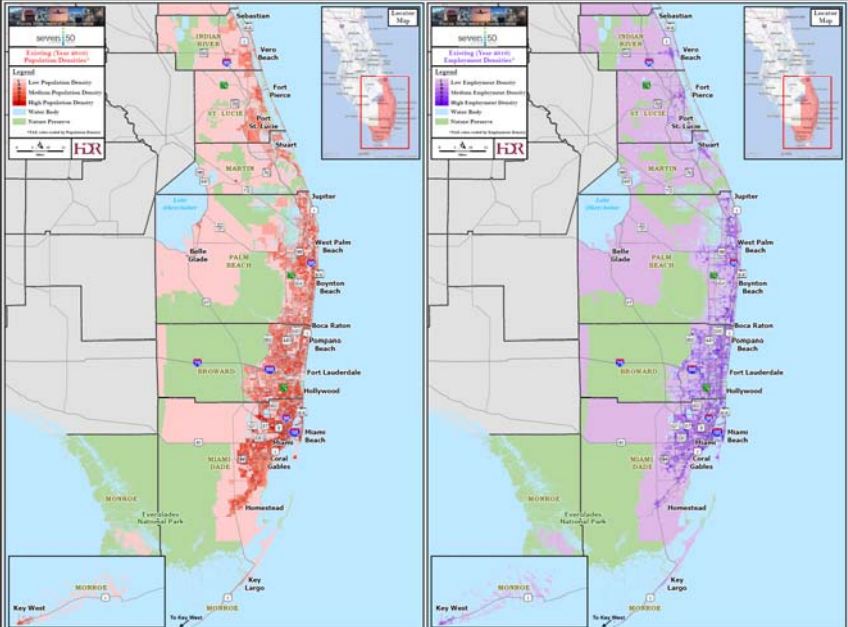
- 1 Growing congestion**  
*Longer commute times, lost productivity, increased pollution*
- 2 Aging infrastructure**  
*More maintenance needs, lost vitality*
- 3 Limited funding**  
*Do more with less, identify new funding sources*

**The problems are expected to get worse...**


- Population is projected to grow from 6.2M in 2010 to 9.1M by the year 2060
- Employment is projected to grow from 2.9M in 2010 to 5.1M by the year 2060

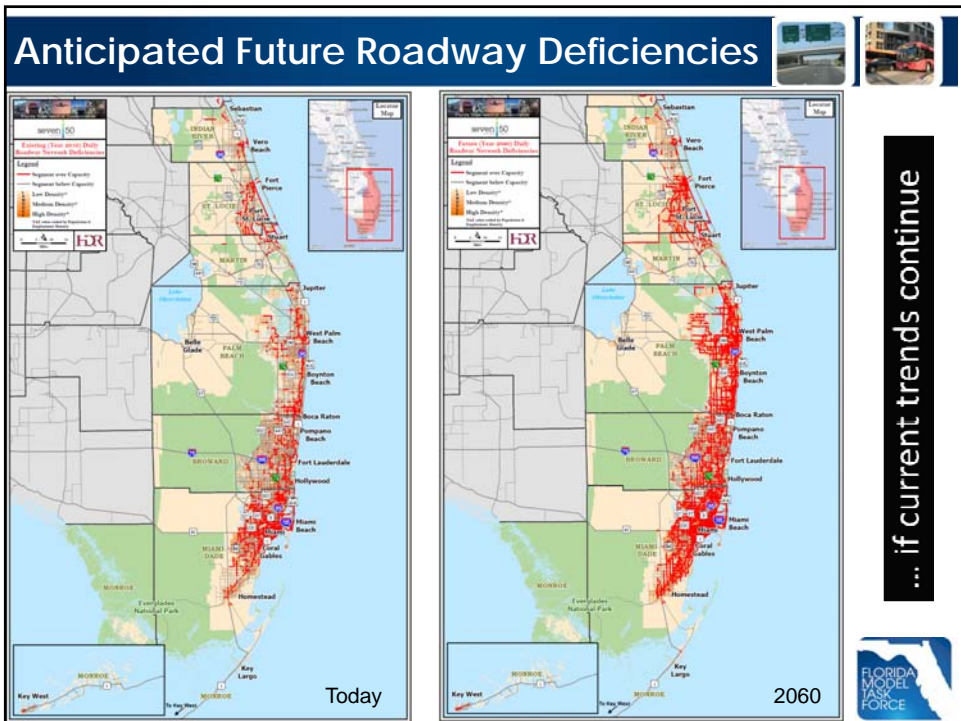
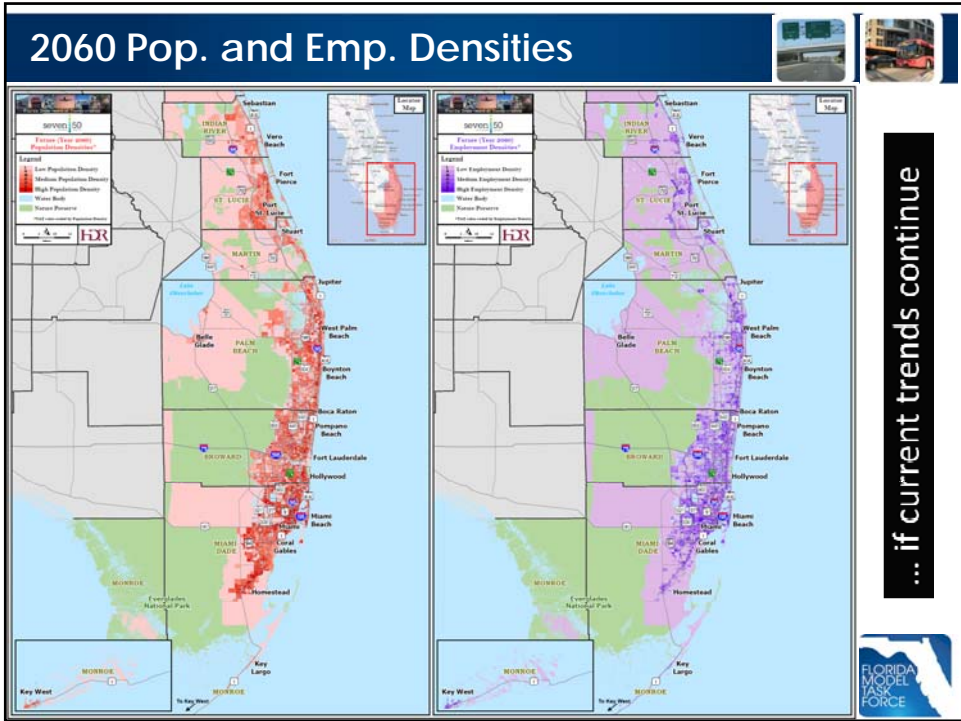


## 2010 Pop. and Emp. Densities



The left map shows '2010 Population Density' with a legend for 'Low Population Density' (light green), 'Medium Population Density' (medium green), and 'High Population Density' (dark green). The right map shows '2010 Employment Density' with a legend for 'Low Employment Density' (light purple), 'Medium Employment Density' (medium purple), and 'High Employment Density' (dark purple). Both maps use the same geographic labels as the first map, including Sebastian, Vero Beach, Fort Pierce, St. Lucie, Ft. Pierce, St. John's, Jupiter, West Palm Beach, Boca Raton, Pompano Beach, Broward, Fort Lauderdale, Hollywood, Miami Beach, Coral Gables, Miami Dade, Homestead, and Key Largo.









**Scenario Planning**

- Trend: Business as Usual
- Plan 1: Exurban Expansion
- Plan 2: Strategic Interventions
- Plan 3: Next Gen Region

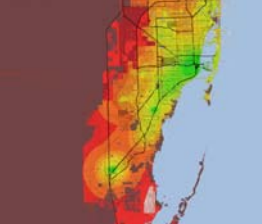
**How to give what people WANT**

## Change Agents – Examples







TOD – people expressed desire to live near transit



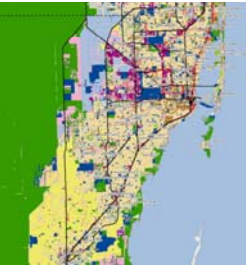
Walkability




Sea level rise –15% of Miami-Dade & 59% Monroe County inundated by 2' sea level rise



Aging population



Land use – built out areas, potential loss of agricultural lands



## Working Towards a Sustainable Solution







Project will be completed by December 2014

Upcoming Third Seven50 Summit

June 19 through June 21

Palm Beach Convention Center

Register at <http://seven50.org/>

