



# **SunRail Affordable Housing Study**

**ECF Sustainable  
Communities Consortium**

**November 9, 2012**

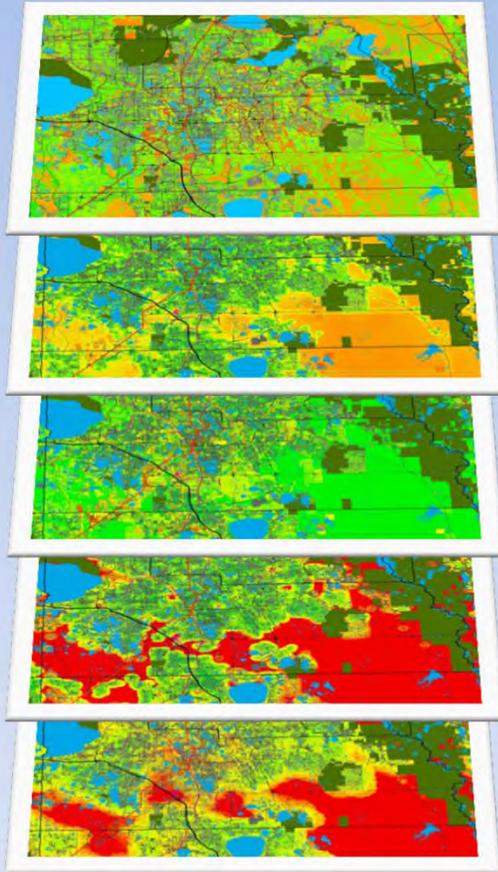


# Goals

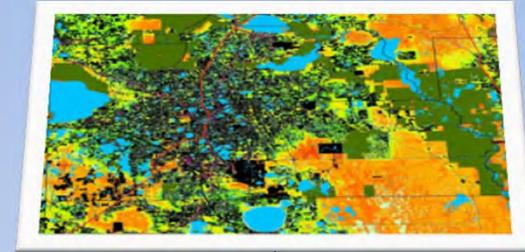
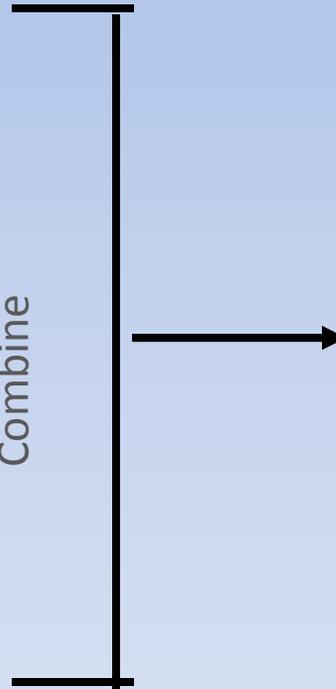
1. Examine the low and moderate wage job to affordable housing balance in and around the 12 Phase 1 SunRail stations;
2. Estimate affordable housing demand based on proximity or access to job location and intensity (density) around the 12 Phase 1 SunRail stations;
3. Estimate regional transit access and driving costs;
4. Develop a regional Affordable Housing Suitability Model.

# Overlay and Combine – to create decision opportunities

Overlay



Combine



| OBJECTID* | VALUE  | COUNT | CBG2000 | TAZ  | PID_GRID | DRI | LUC | FLU |
|-----------|--------|-------|---------|------|----------|-----|-----|-----|
| 1510069   | 151006 | 2     | 128     | 1716 | 302569   | 0   | 98  | 0   |
| 1510571   | 151057 | 1     | 128     | 1716 | 302569   | 0   | 98  | 0   |
| 1511116   | 151111 | 3     | 128     | 1716 | 302569   | 0   | 98  | 0   |
| 1511117   | 151111 | 3     | 128     | 1716 | 302569   | 0   | 98  | 0   |
| 1511859   | 151185 | 2     | 128     | 1716 | 302569   | 0   | 98  | 0   |
| 1513704   | 151370 | 2     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1513705   | 151370 | 2     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1513706   | 151370 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1513707   | 151370 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1514293   | 151429 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1514294   | 151429 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1514873   | 151487 | 4     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1514874   | 151487 | 3     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1516150   | 151615 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1518314   | 151831 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1520368   | 152036 | 8     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 1520369   | 152036 | 1     | 128     | 1716 | 241122   | 0   | 96  | 0   |
| 4384708   | 438470 | 1     | 270     | 0    | 77100    | 0   | 101 | 12  |
| 4385585   | 438558 | 1     | 270     | 61   | 77100    | 0   | 101 | 12  |
| 4422886   | 442288 | 1     | 270     | 61   | 77100    | 0   | 101 | 12  |
| 4423508   | 442350 | 3     | 270     | 0    | 77100    | 0   | 101 | 12  |
| 4424108   | 442410 | 1     | 270     | 61   | 77100    | 0   | 101 | 12  |
| 4424944   | 442494 | 1     | 270     | 0    | 77100    | 0   | 101 | 12  |
| 4425657   | 442565 | 1     | 270     | 0    | 77100    | 0   | 101 | 12  |
| 4502017   | 450201 | 1     | 215     | 56   | 77842    | 0   | 96  | 12  |

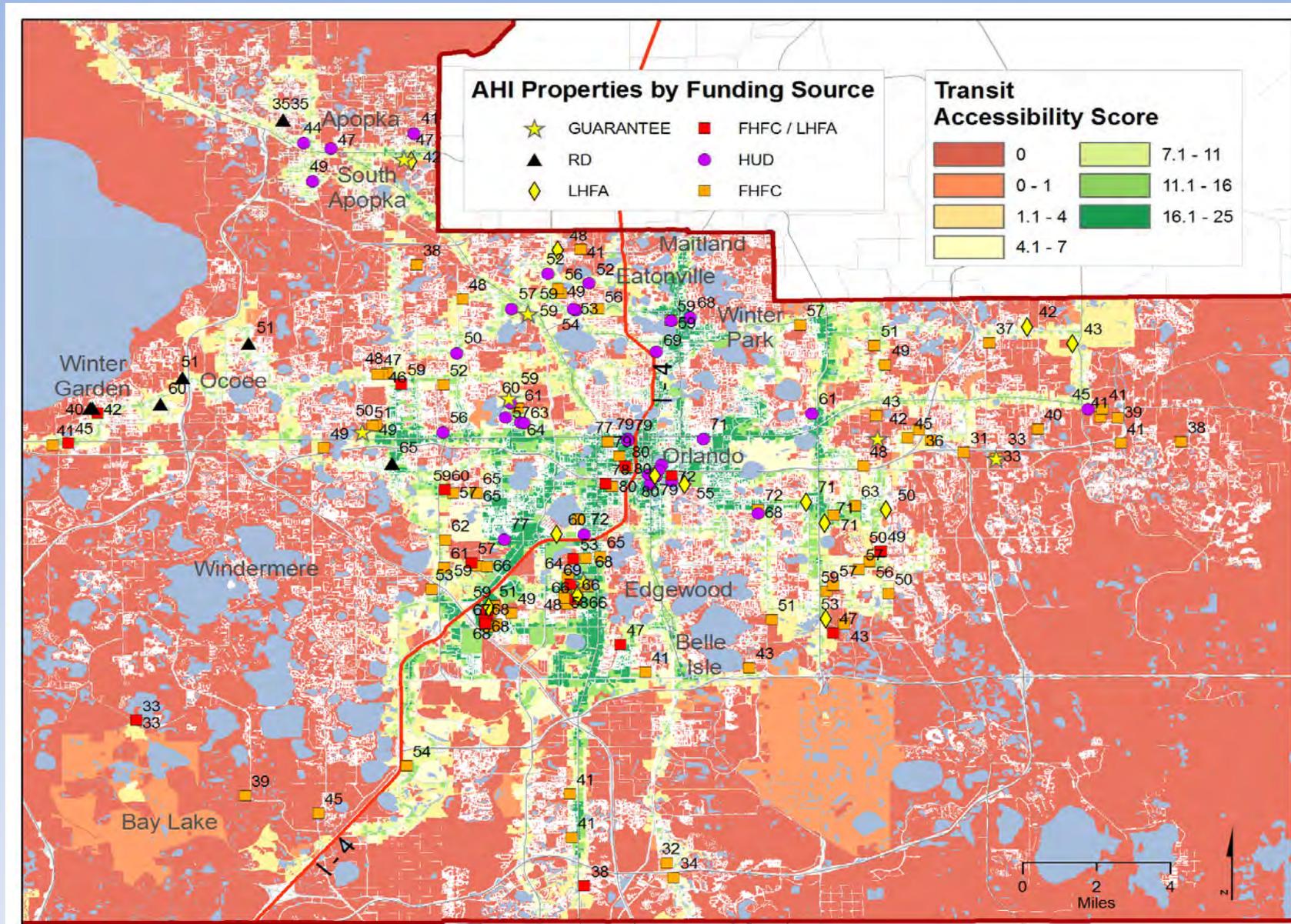
Criteria Evaluation Matrix (CEM)

# Basic Structure of the Affordable Housing Suitability Model





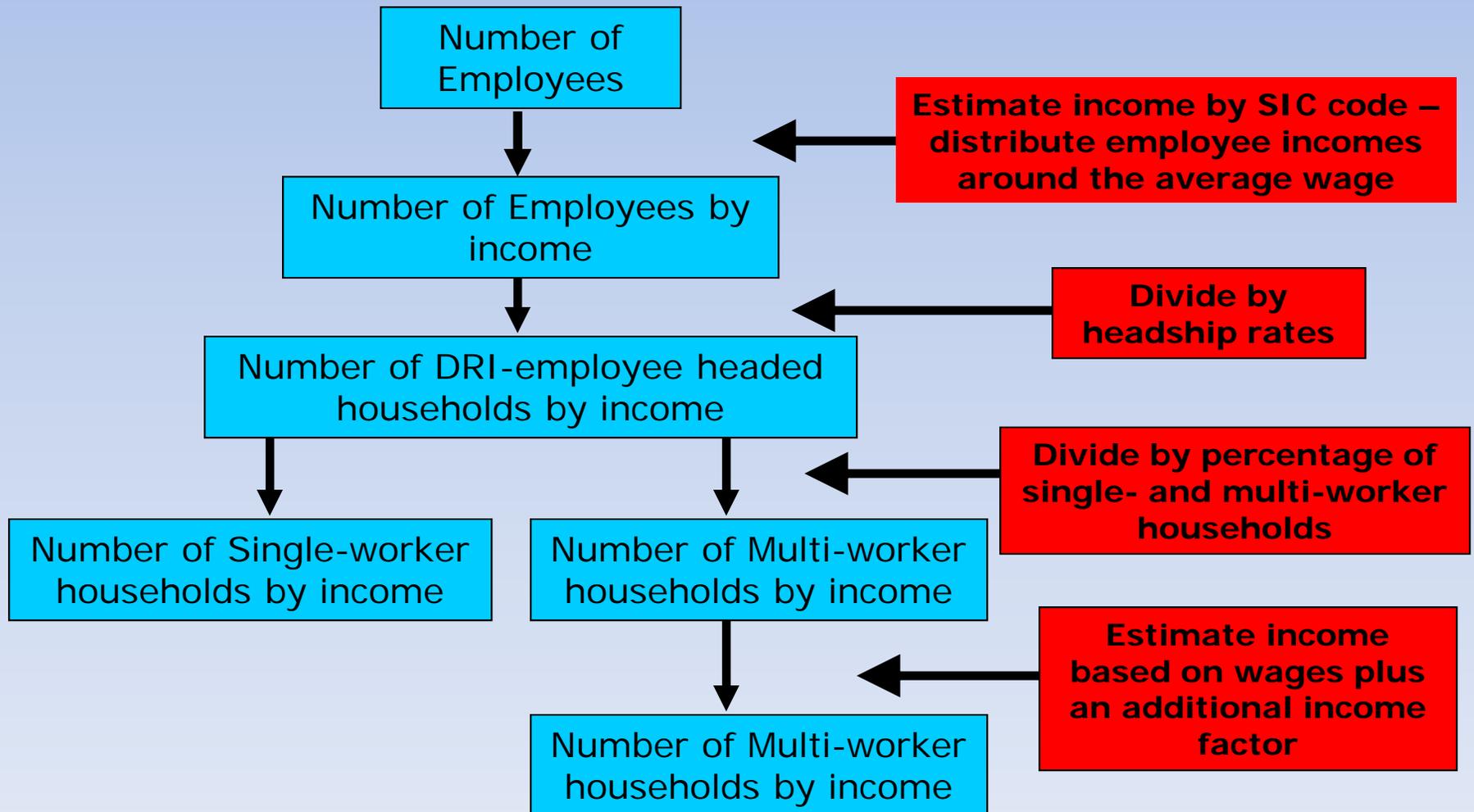
# Example: AHS in Orange County



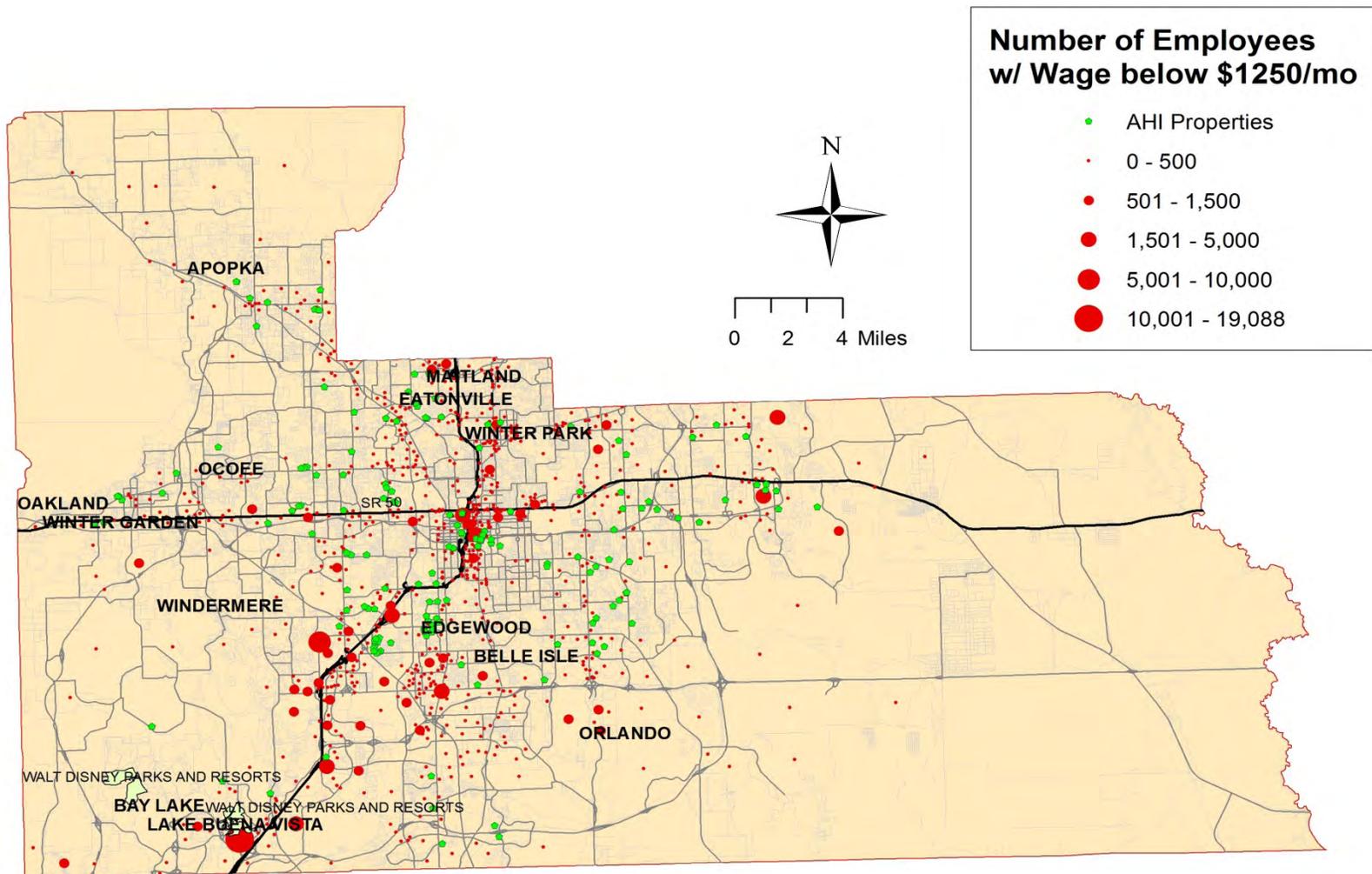
# Suitability Analysis by Decade of Property Funding

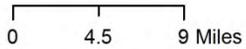
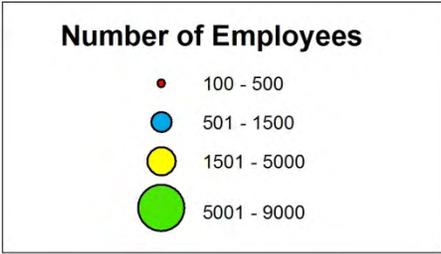
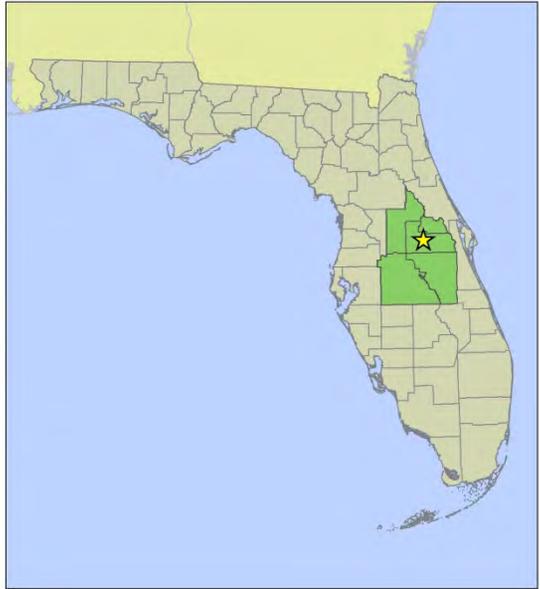
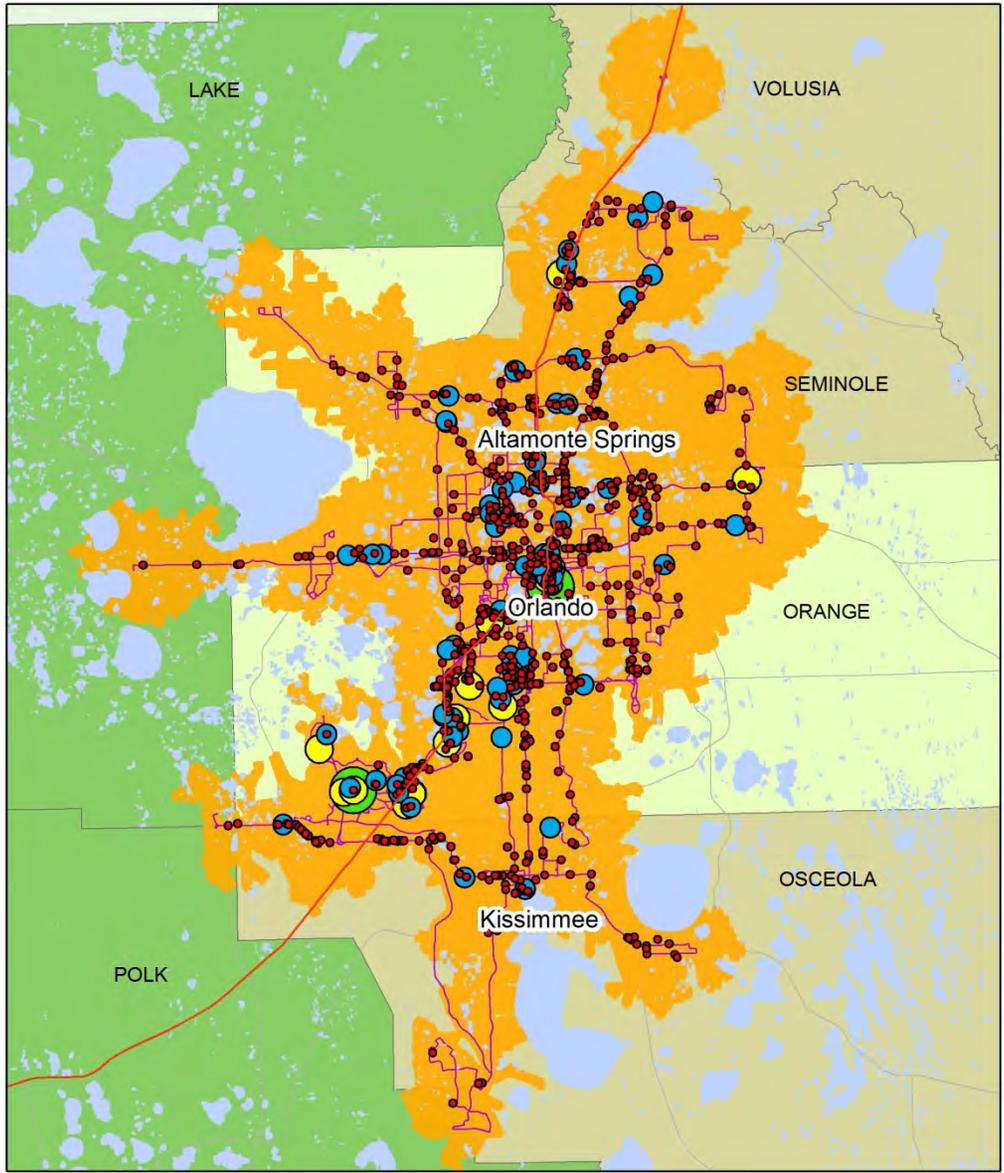
|                       | Frequency | Infrastructure + Environmental Characteristics (I) | Neighborhood Characteristics (N) | Neighborhood Accessibility (NA) | Total Residential Suitability Score (I+N+NA=R1) | Rental Cost (R2) | Driving Cost (D) | Transit Accessibility (T) | Final Score = R1+R2+D+T |
|-----------------------|-----------|--|----------------------------------|---------------------------------|---|------------------|------------------|---------------------------|-------------------------|
| <b>1960s</b>          | 7         | 7.00   | 1.86                             | 6.86                            | 16.43   | 15.71            | 21.00            | 21.29                     | 76.29                   |
| <b>1970s</b>          | 23        | 4.39   | 4.61                             | 5.78                            | 15.61   | 18.30            | 15.78            | 13.83                     | 65.13                   |
| <b>1980s</b>          | 43        | 3.65   | 5.51                             | 5.28                            | 15.35   | 16.93            | 16.37            | 9.47                      | 59.70                   |
| <b>1990s</b>          | 78        | 3.58   | 5.73                             | 4.71                            | 14.85   | 16.19            | 15.64            | 7.65                      | 55.65                   |
| <b>2000s</b>          | 51        | 3.63   | 5.90                             | 4.73                            | 15.20   | 15.69            | 16.22            | 10.00                     | 58.61                   |
| <b>% Significance</b> |           | 50.00%   | 50.00%                           | 80.00%                          | 0.00%   | 40.00%           | 40.00%           | 80.00%                    | 50.00%                  |

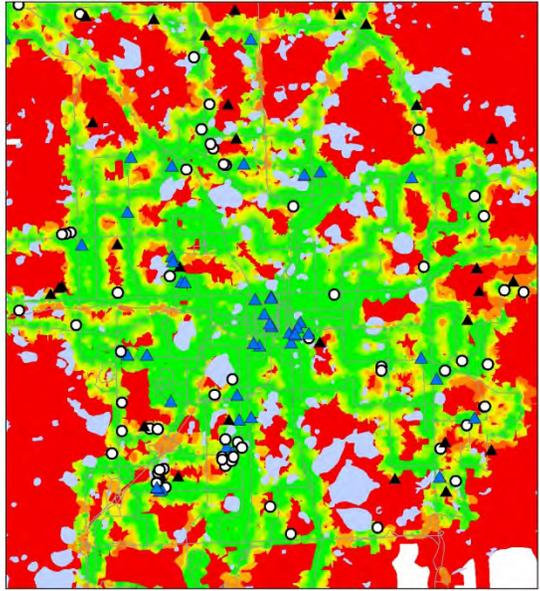
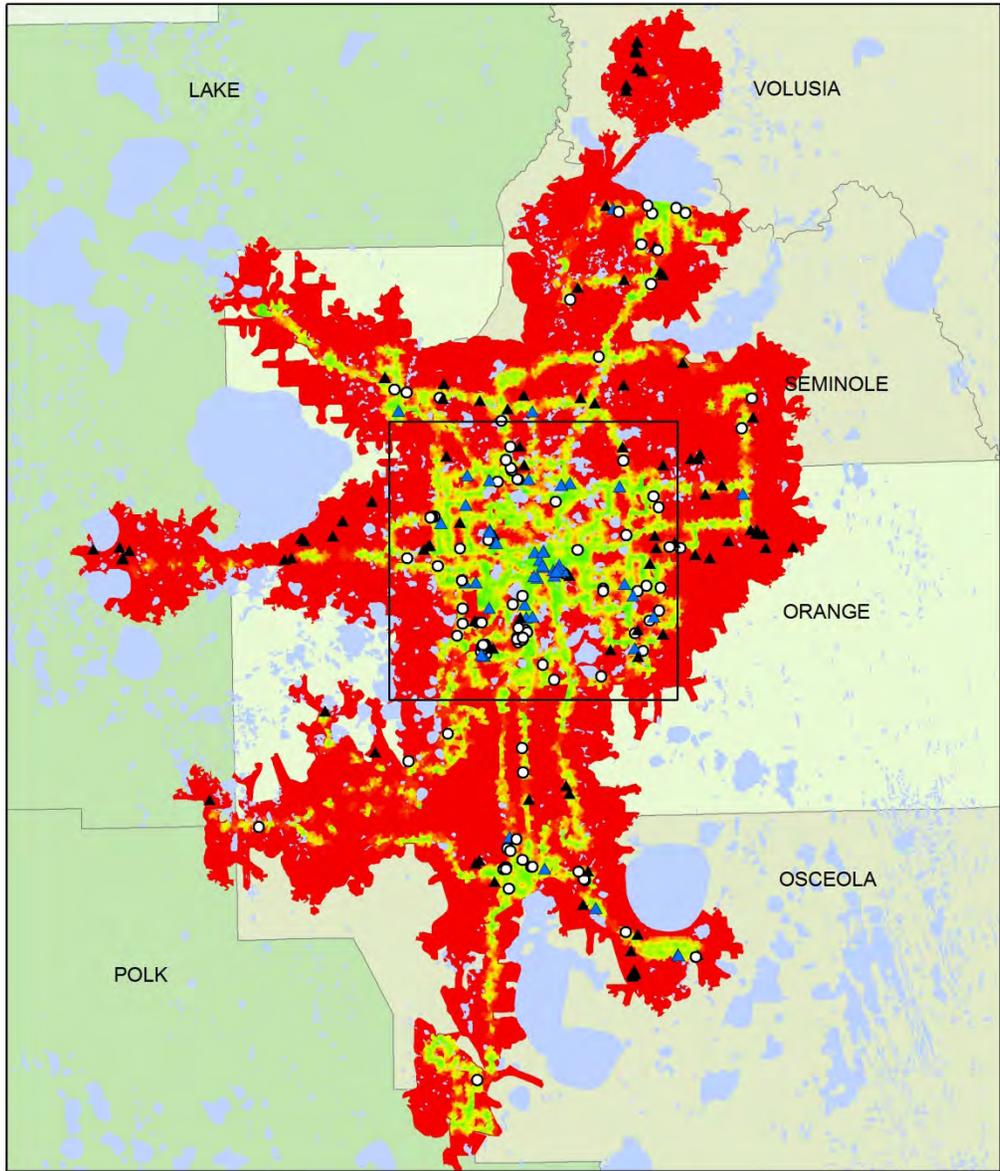
# DRI Demand Formula



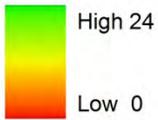
# LEHD – Employment and Wage Data





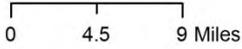


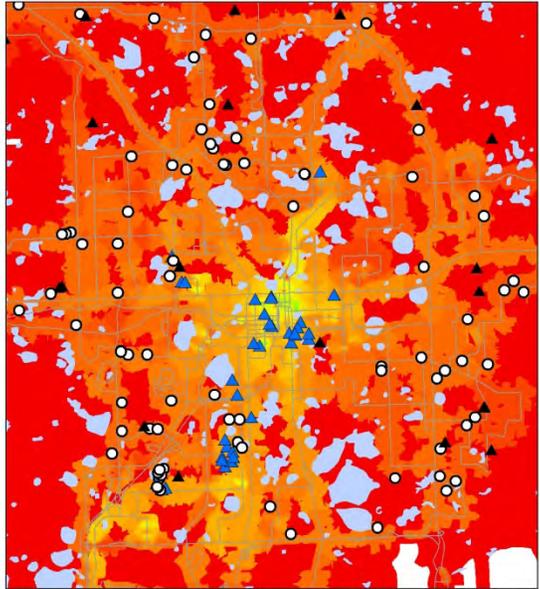
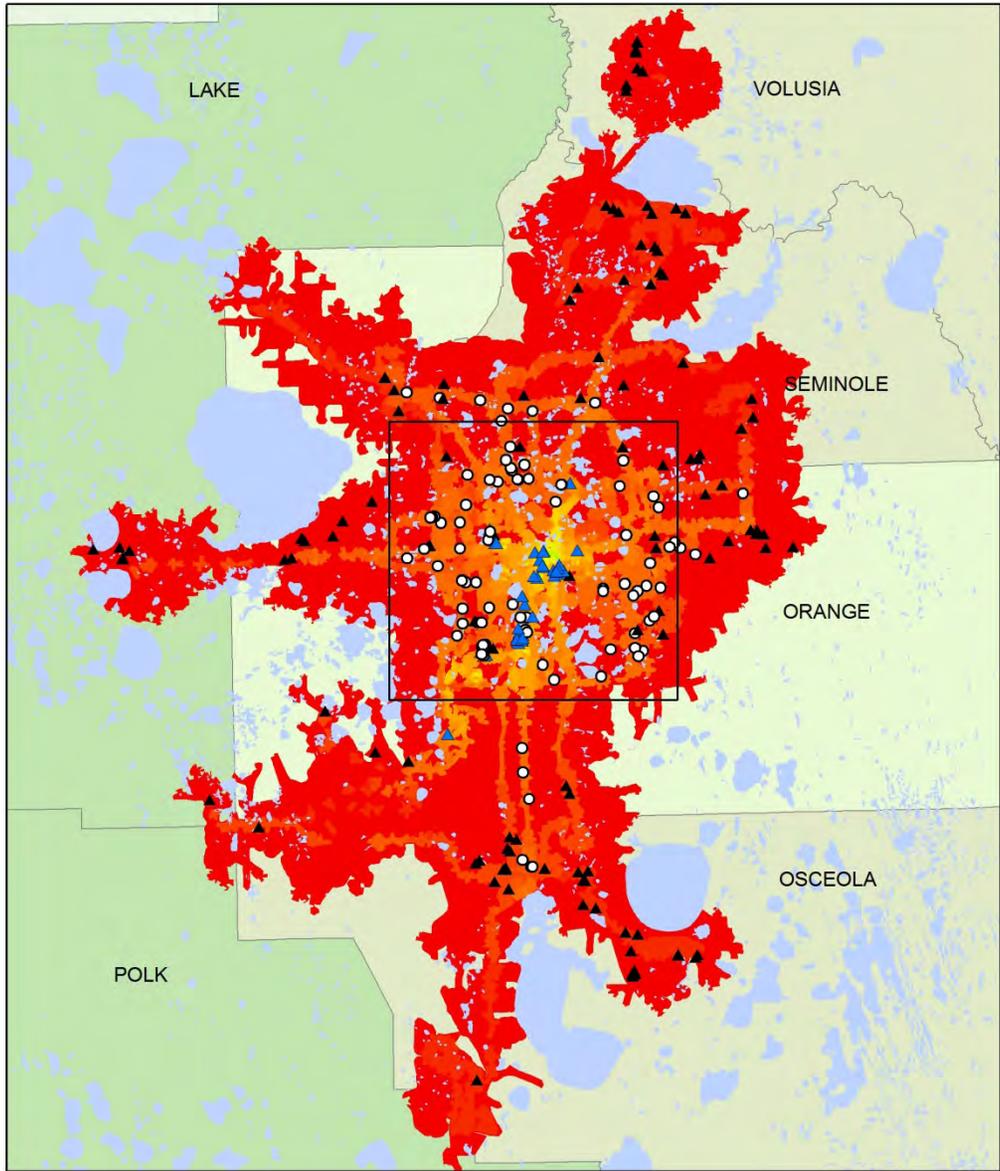
**Walk Score**



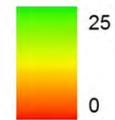
**Assisted Housing Developments**

- ▲ Highest Quartile
- Middle Quartiles
- ▲ Lowest Quartile



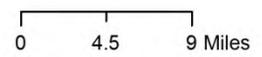


**Employment Access Score**



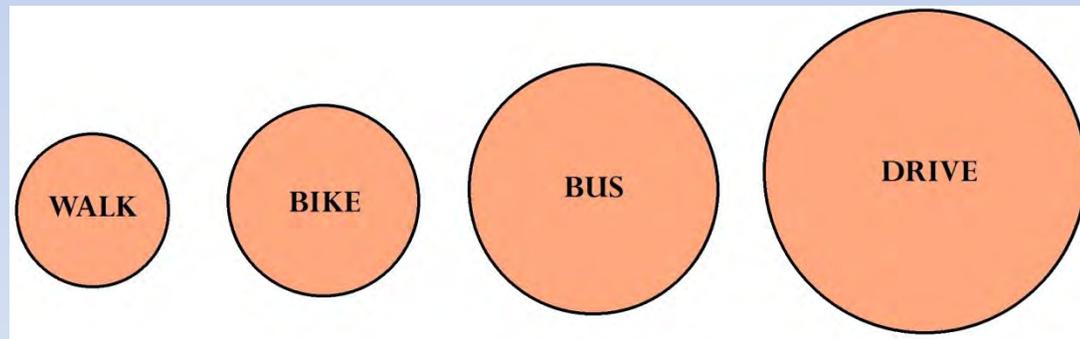
**Assisted Housing Developments**

- ▲ Highest Quartile
- Middle Quartiles
- ▲ Lowest Quartile



# Methodology

- Estimate demand for affordable housing units by low and moderate wage employment
- Estimate supply of existing assisted multi-family housing units
- Compare supply and demand to learn where and to what extent they are in balance
- Four scales of analysis relating to average distances people travel in FL using different modes of transportation

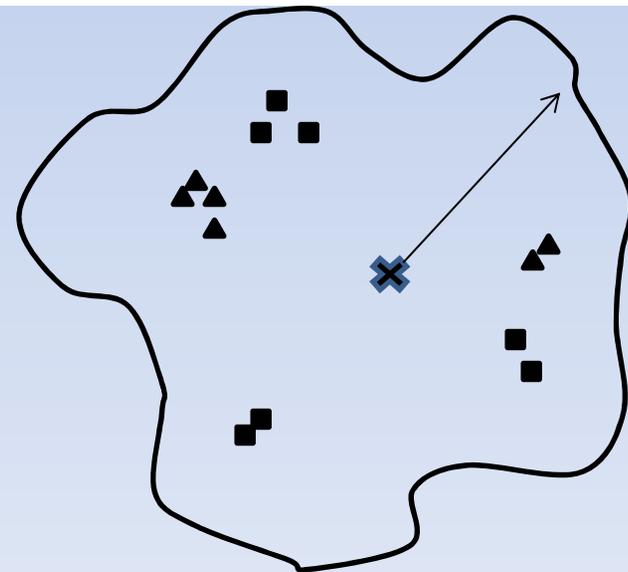
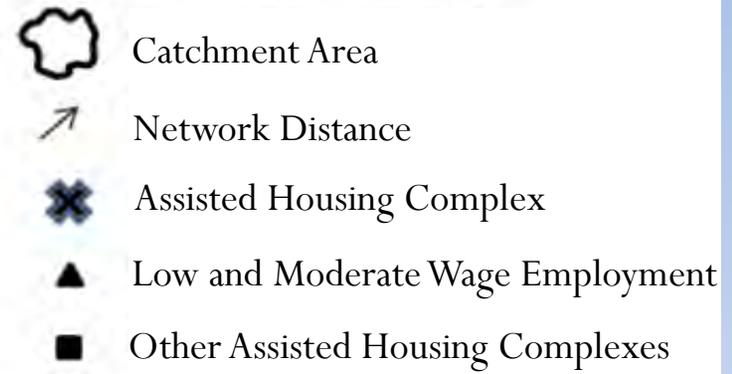


# Estimating Supply and Demand Within Catchment Areas

**Catchment areas** – areas surrounding each assisted housing complex - delineated by the average trip distance for different transportation modes (walk/bike/bus/drive) -

**Demand** – the number of low and moderate income households estimated from parcel-level employment data that are within catchment areas surrounding existing assisted housing locations

**Supply** – the number of assisted housing units within each catchment area



# Understanding the Spatial Mismatch Between Supply and Demand

|                               |                                    |                                |
|-------------------------------|------------------------------------|--------------------------------|
| Low Supply<br>High Demand     | Moderate Supply<br>High Demand     | High Supply<br>High Demand     |
| Low Supply<br>Moderate Demand | Moderate Supply<br>Moderate Demand | High Supply<br>Moderate Demand |
| Low Supply<br>Low Demand      | Moderate Supply<br>Low Demand      | High Supply<br>Low Demand      |