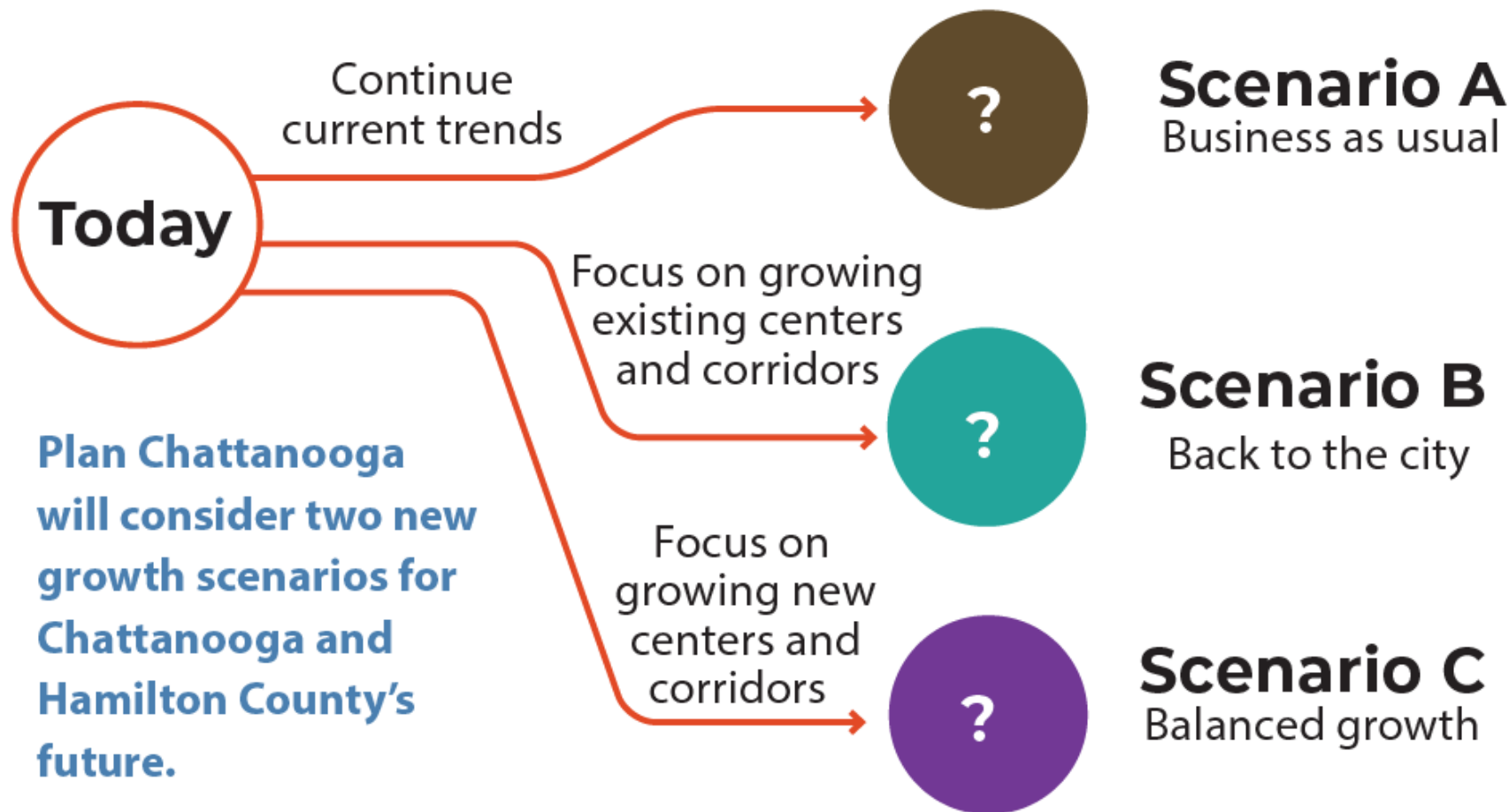


Scenario Planning and Modeling Process



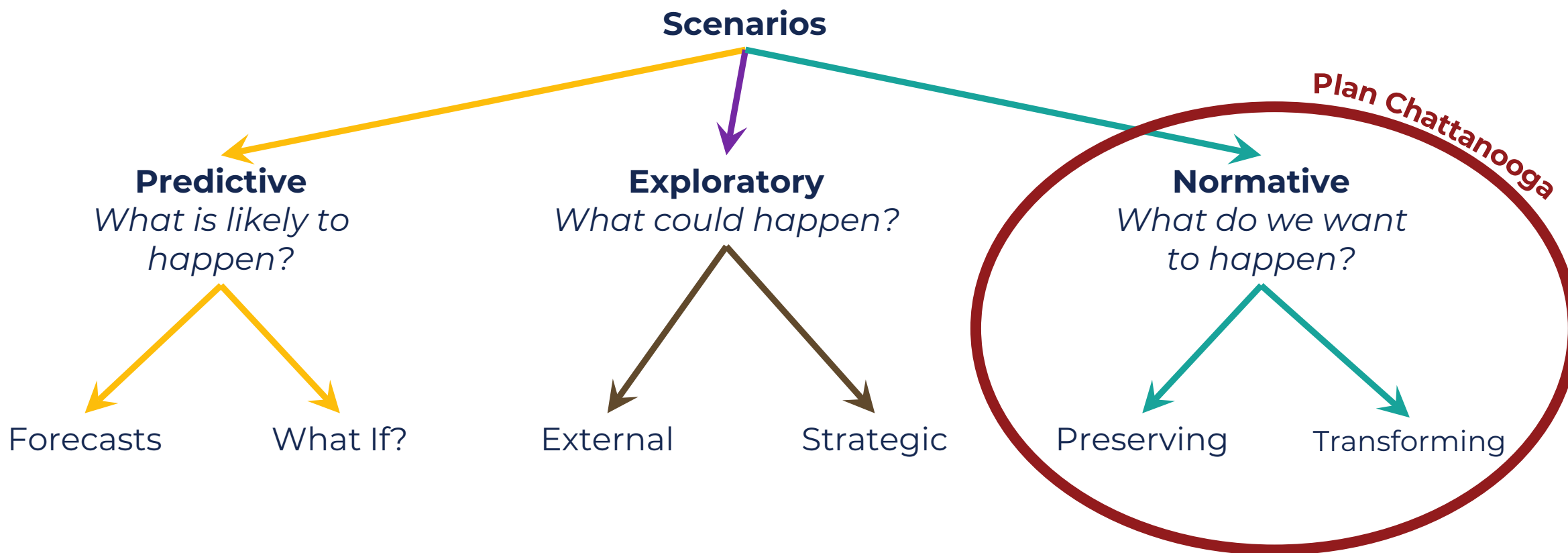


Scenario Planning is about Choices



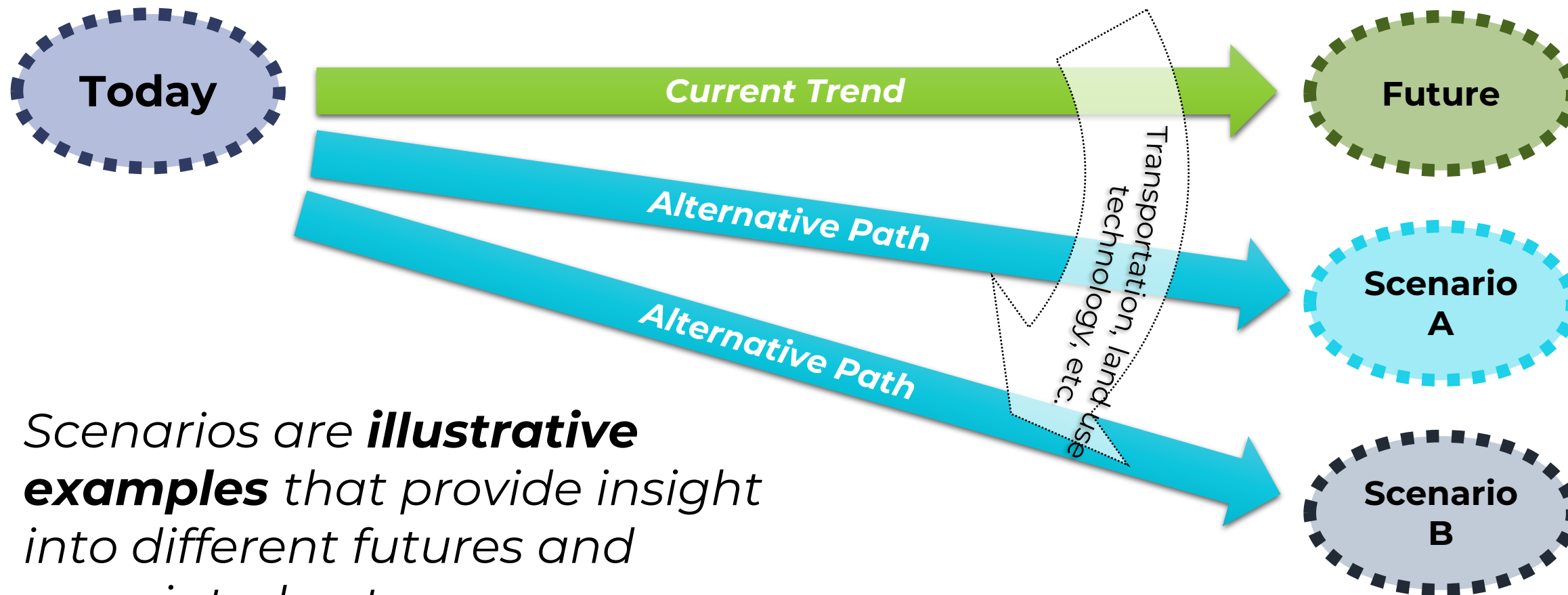


Types of Scenario Planning





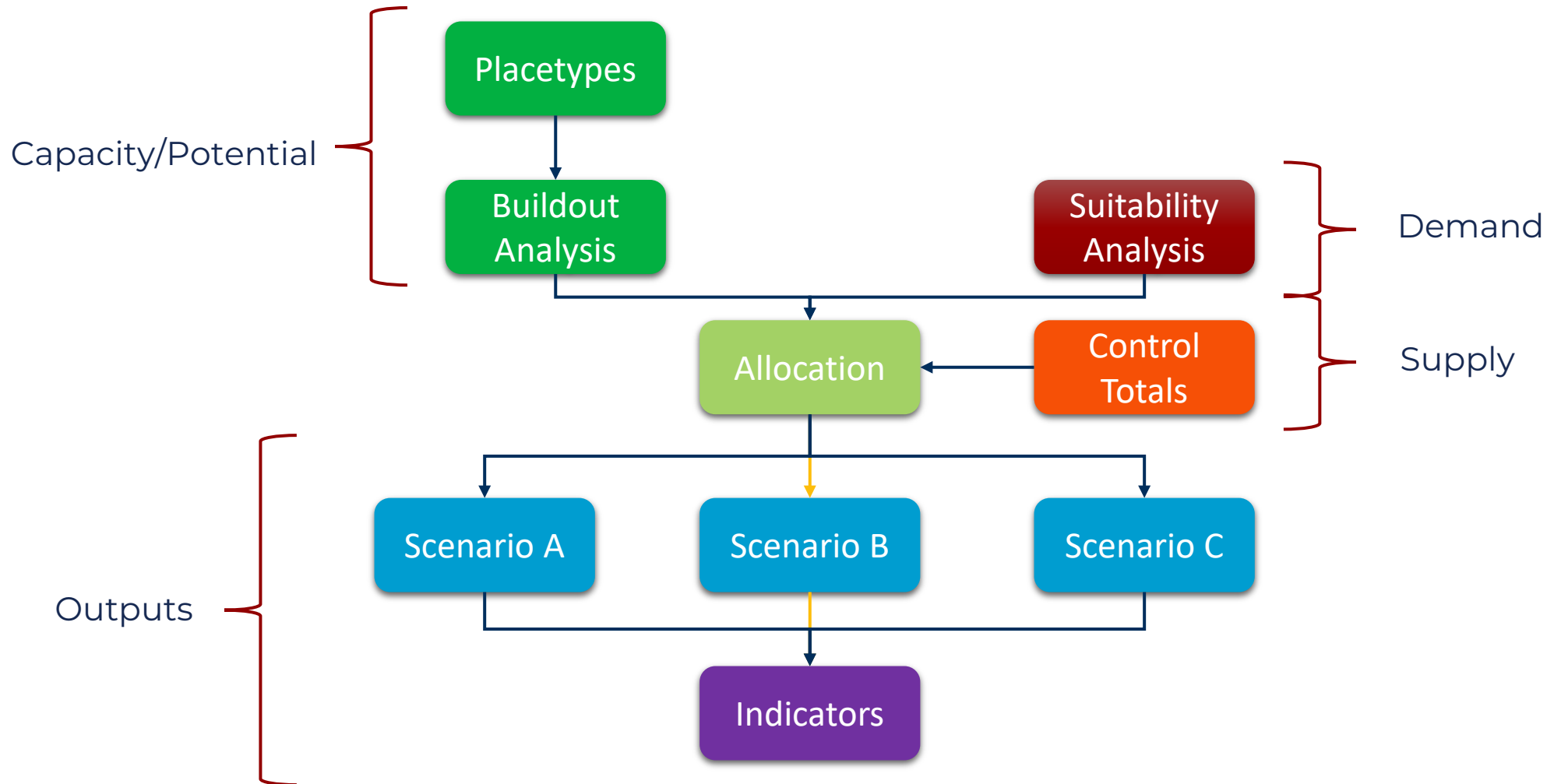
Normative Scenario Planning: Informed decision-making



Scenarios are **illustrative examples** that provide insight into different futures and associated outcomes.



Scenario planning process





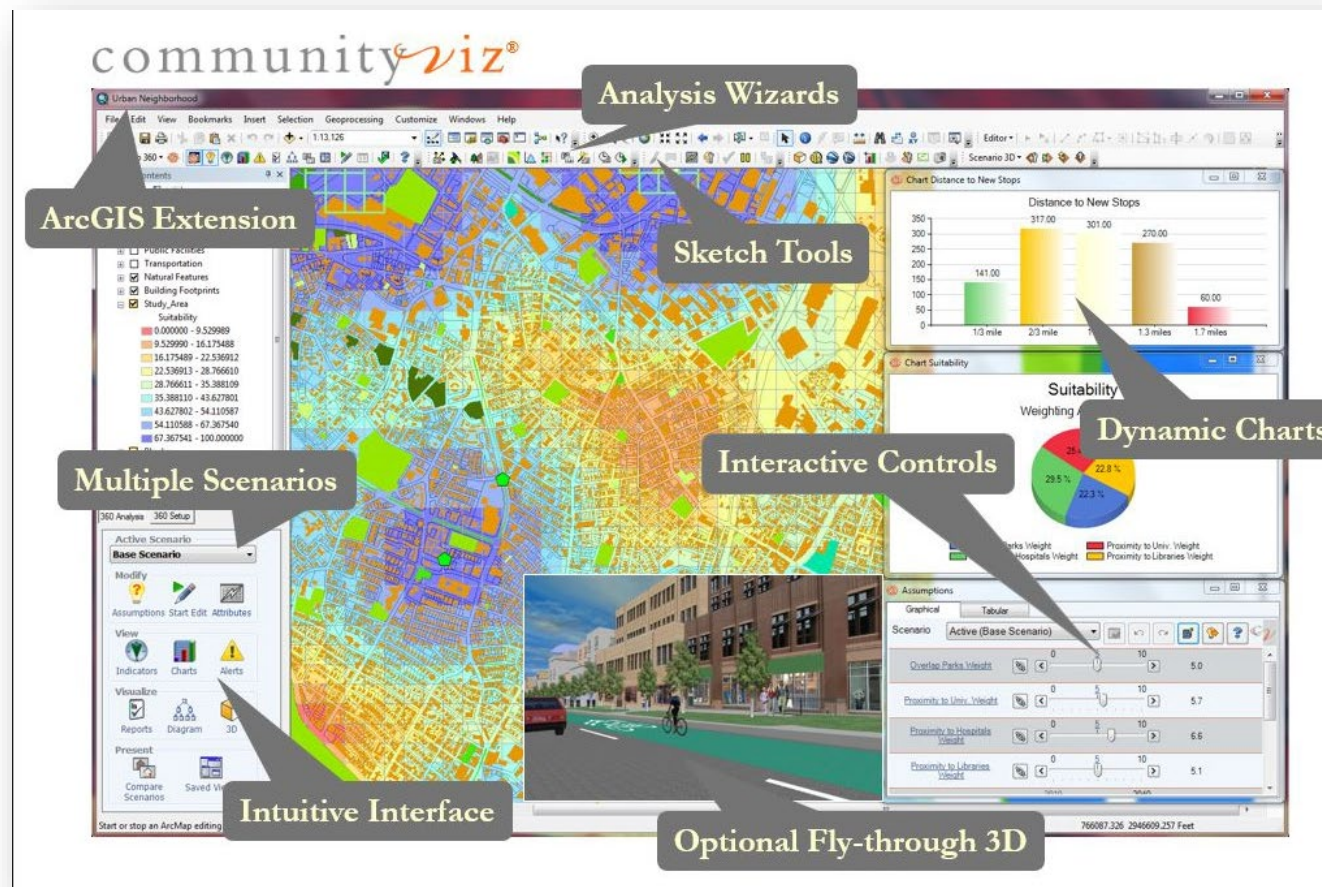
Scenario Planning Tools



CommunityViz

- ArcGIS-based
- Built-in modules
- Highly customizable

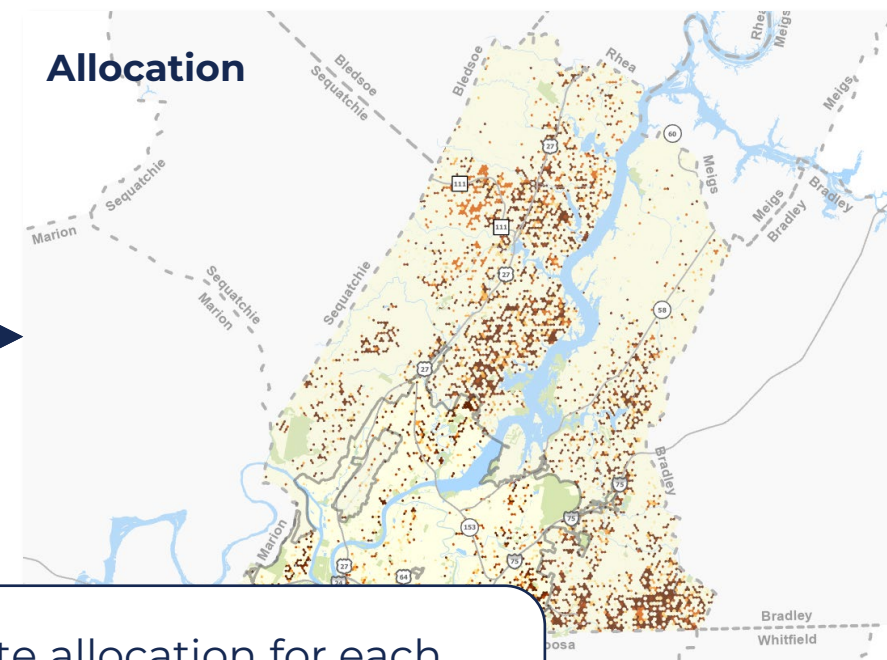
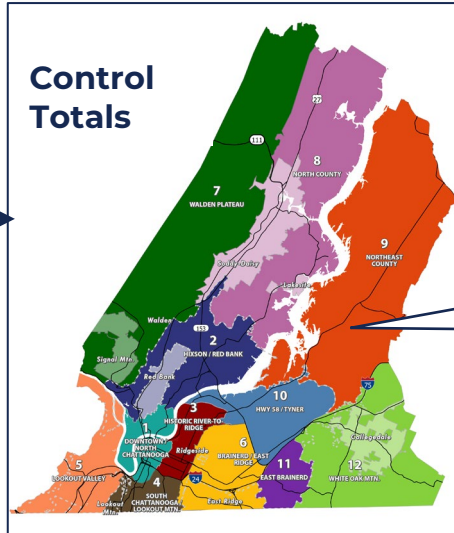
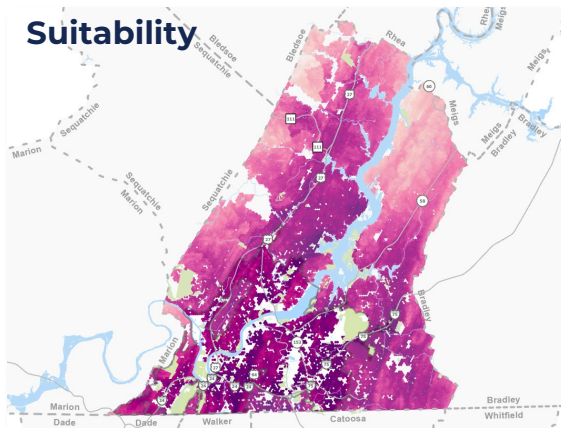
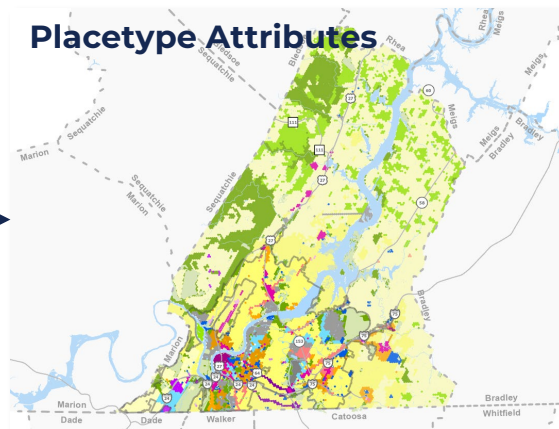
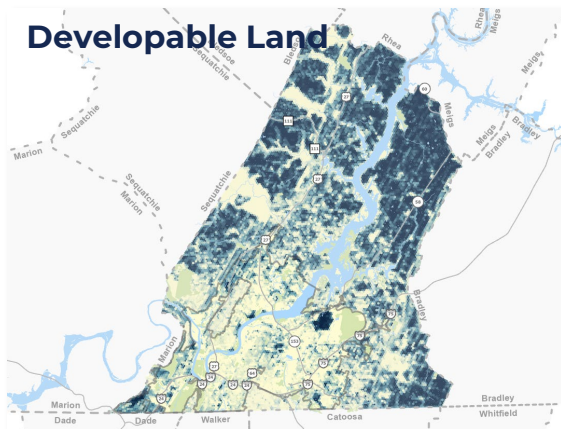
RPA's current land use model is based on CommunityViz



Allocation Process, Control Totals and Indicators



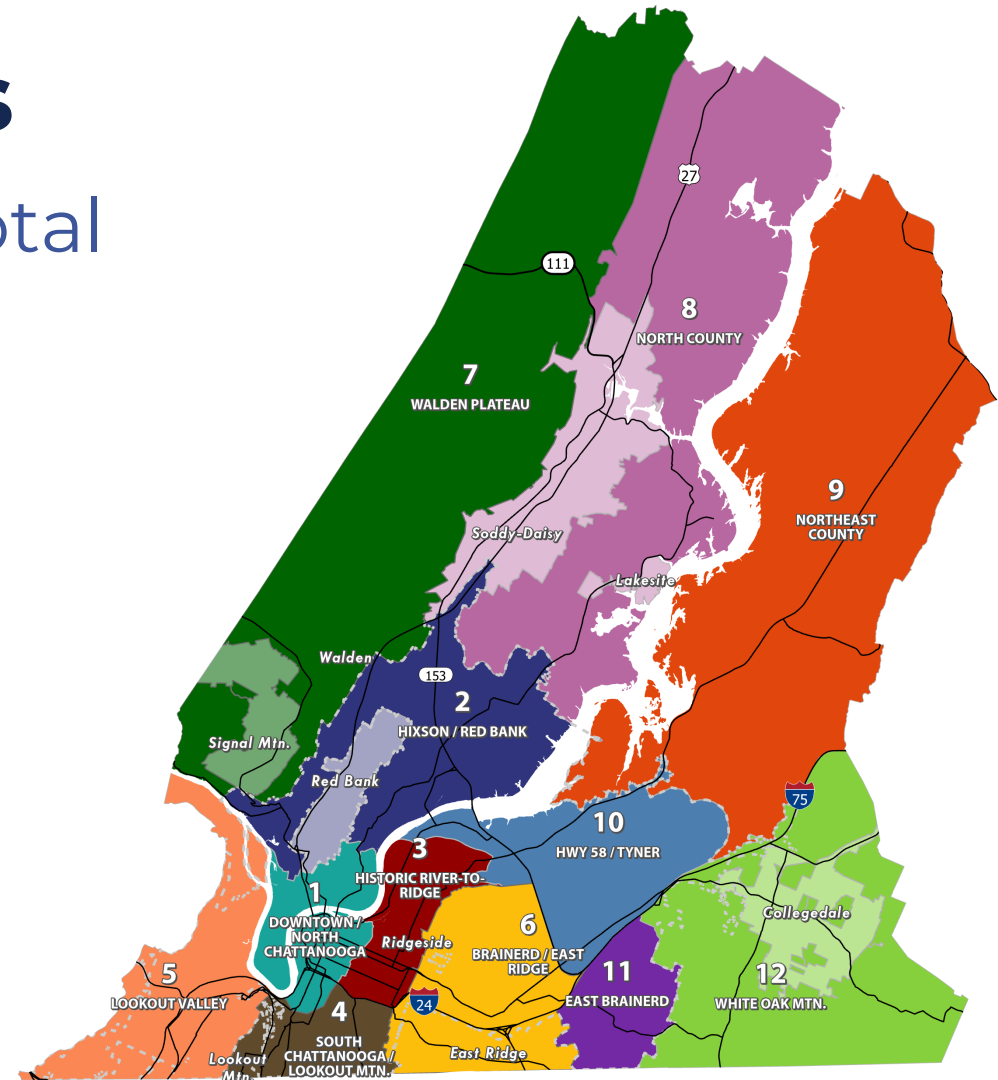
Allocation Process



Separate allocation for each Area using its own control total.

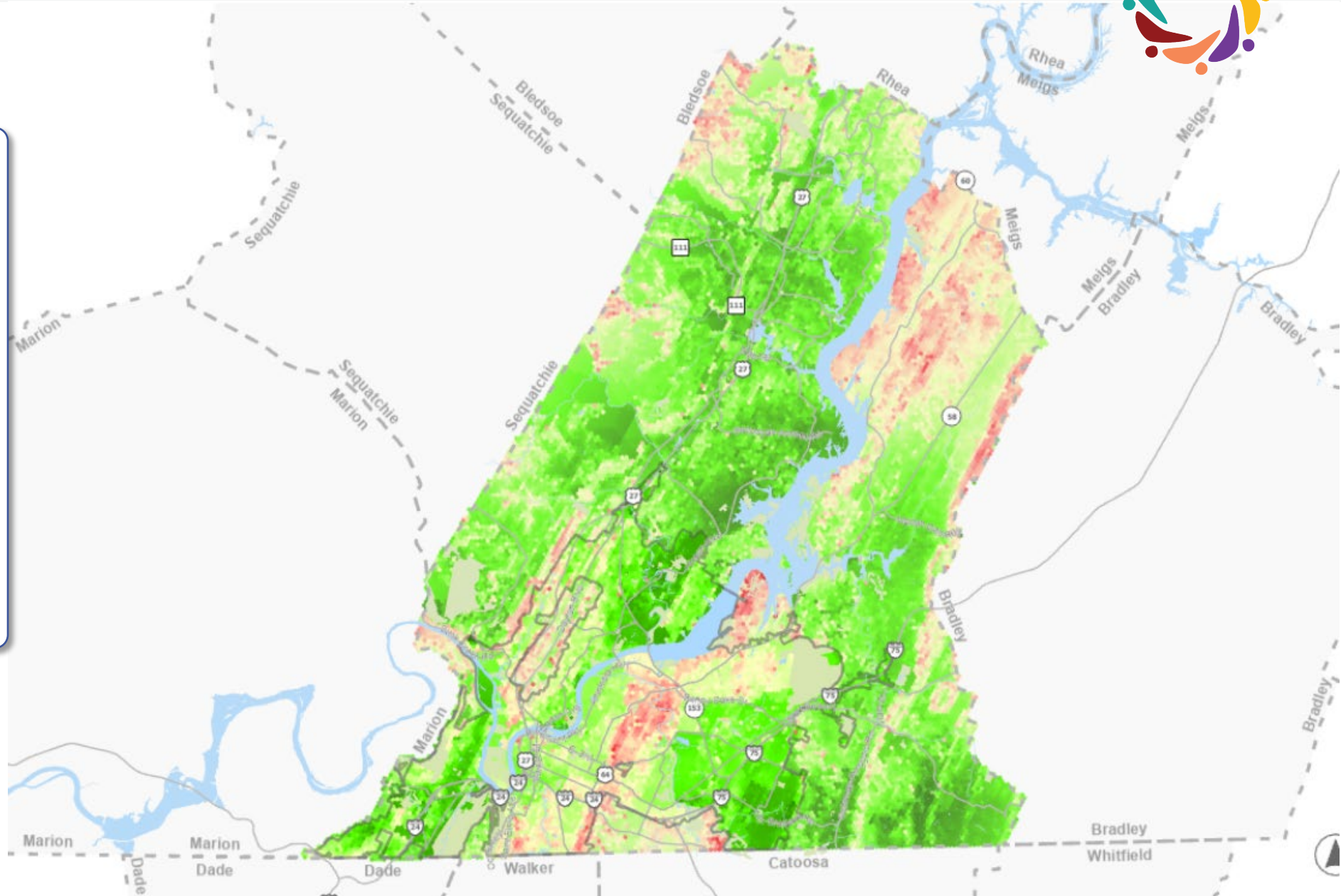
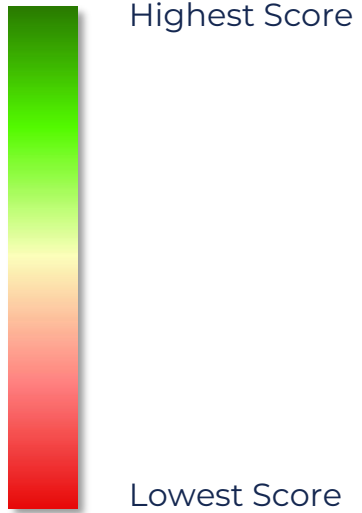
Subregion Control Totals

- Each Area has its own control total
- Dwelling units
- Floor area



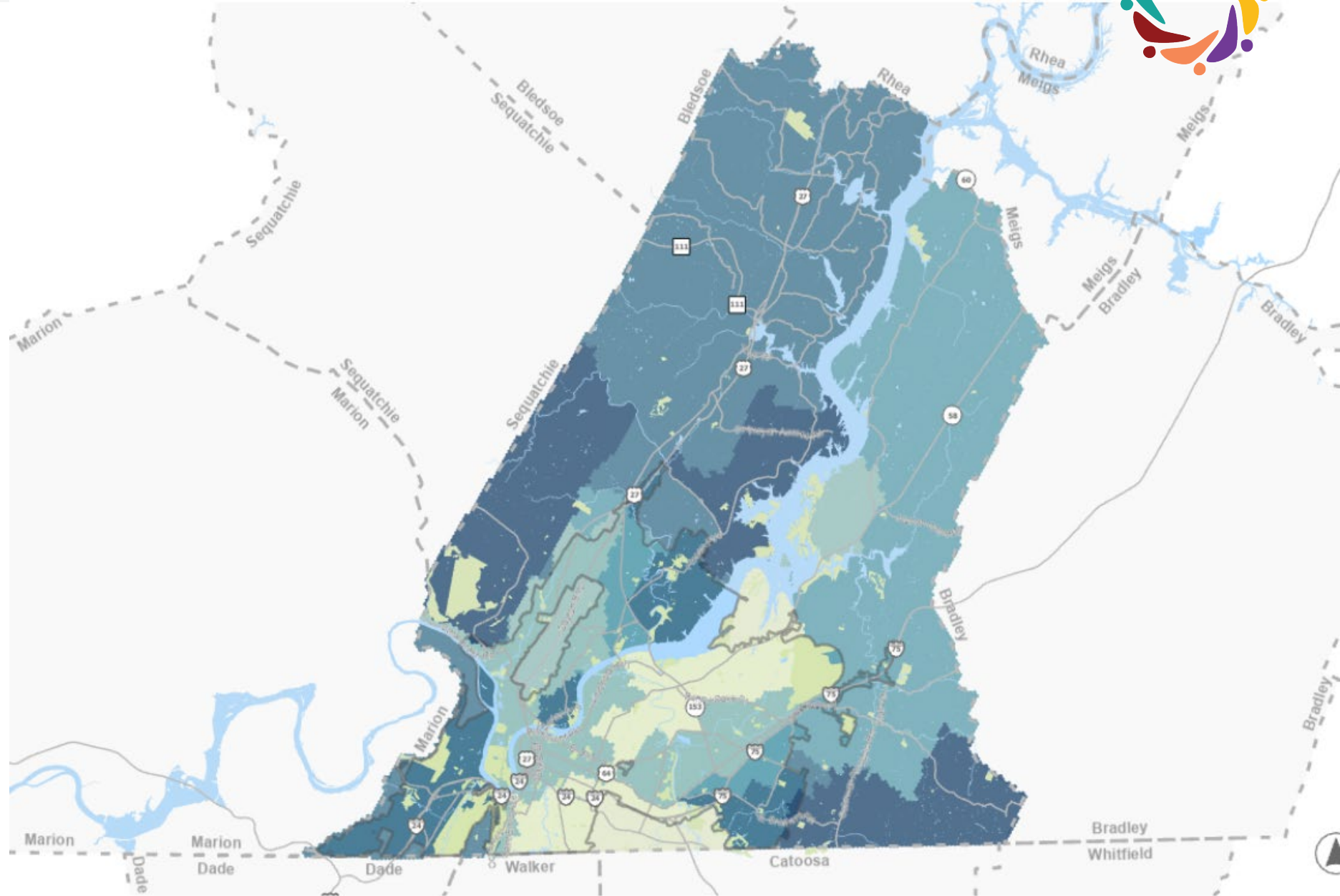
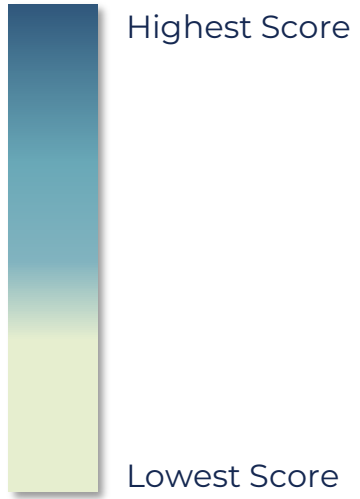


Residential Suitability Analysis



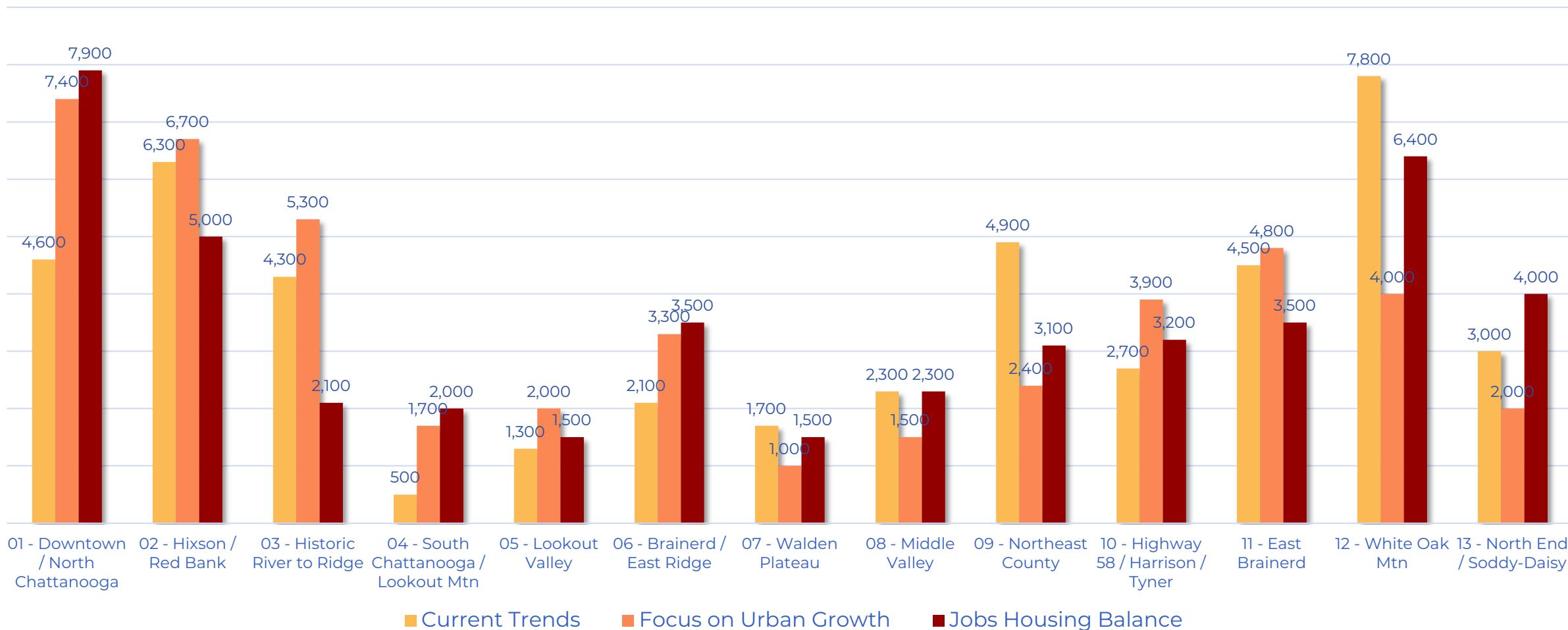


School Quality





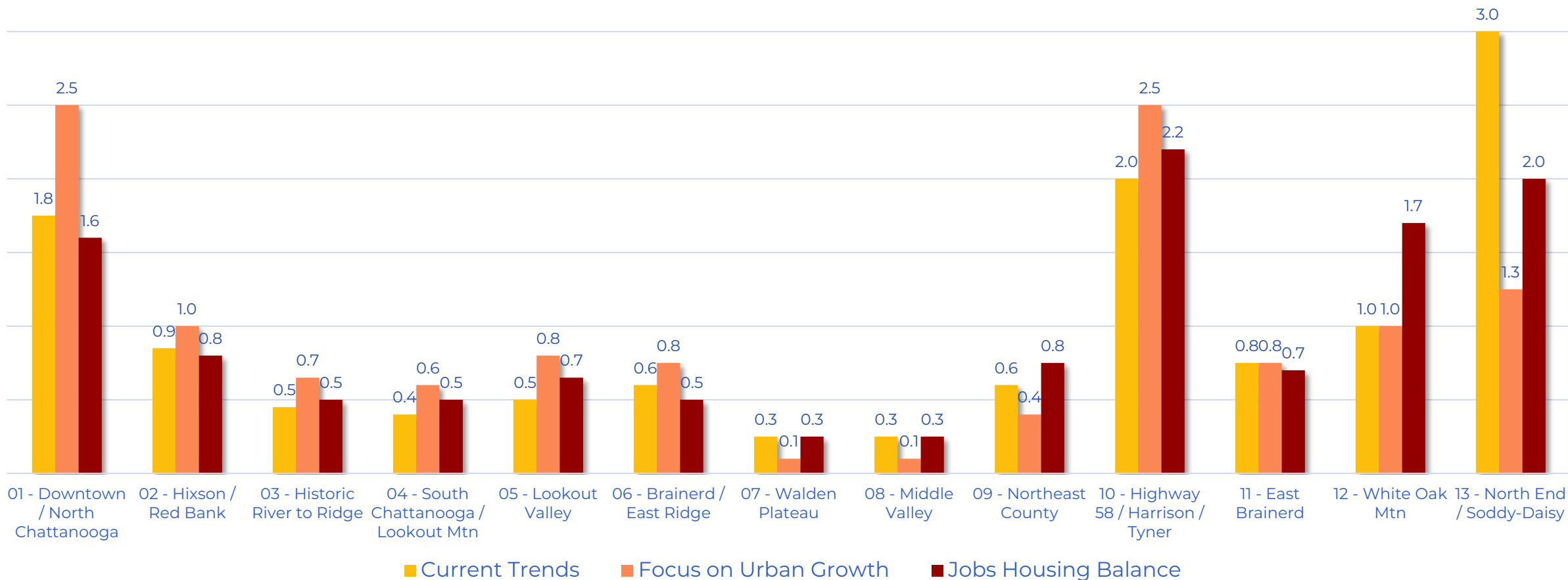
Area Control Totals: Units*



*Based on proposed 46,000-unit countywide control total.



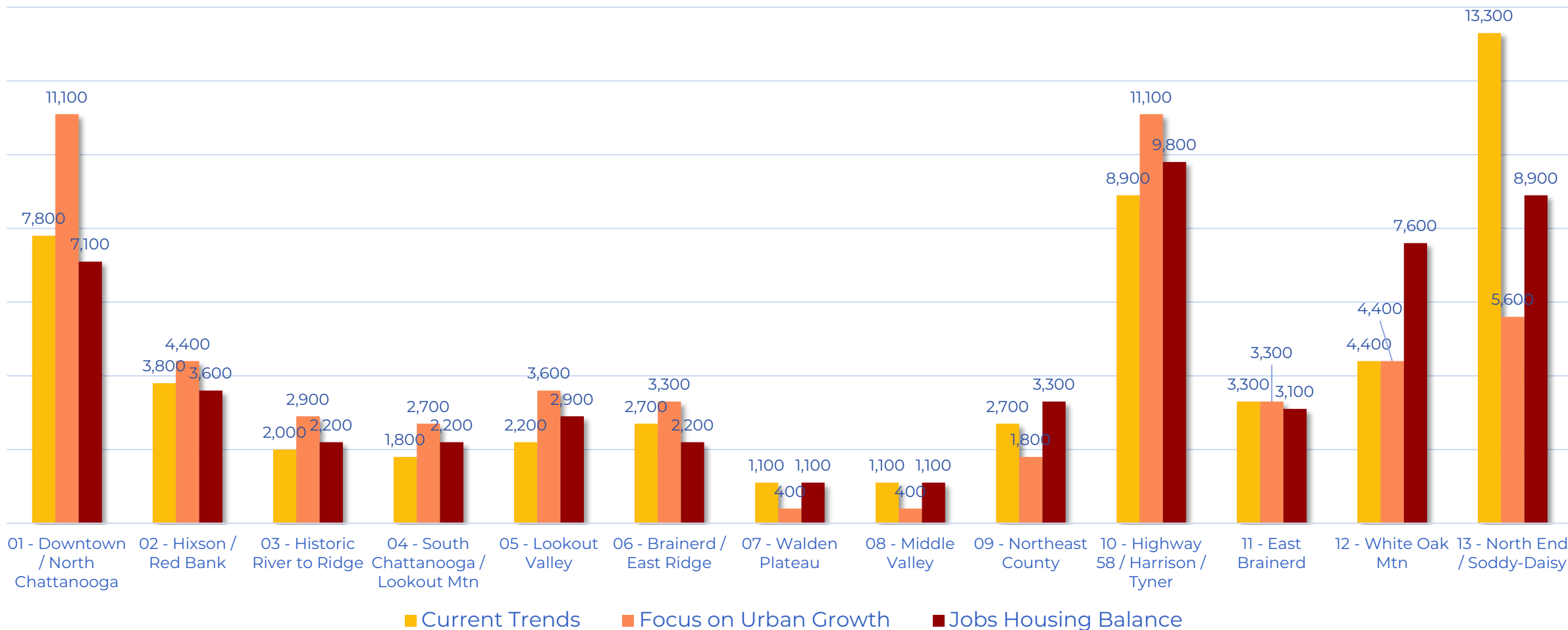
Area Control Totals: Floor Area*



*Assumes 12.4 million square feet countywide total.



Area Control Totals: Jobs*

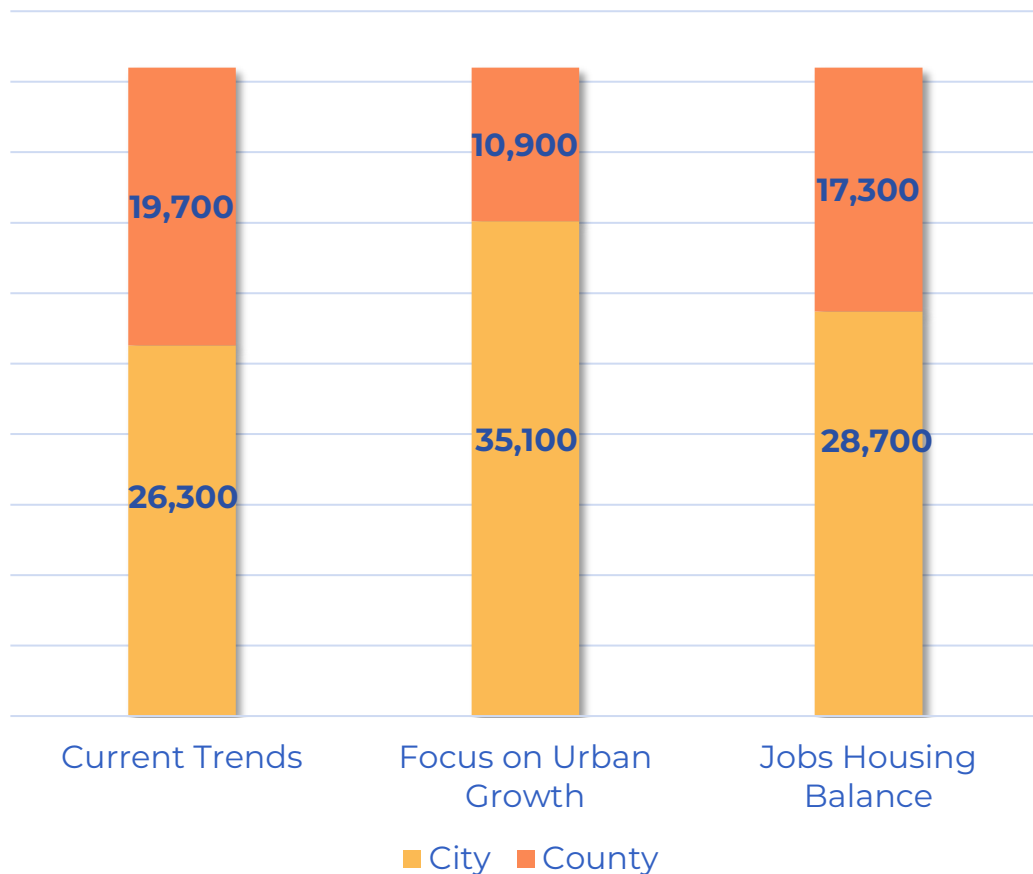


*Assumes 225 average square feet per job. Actual job allocation may vary based on placetype.

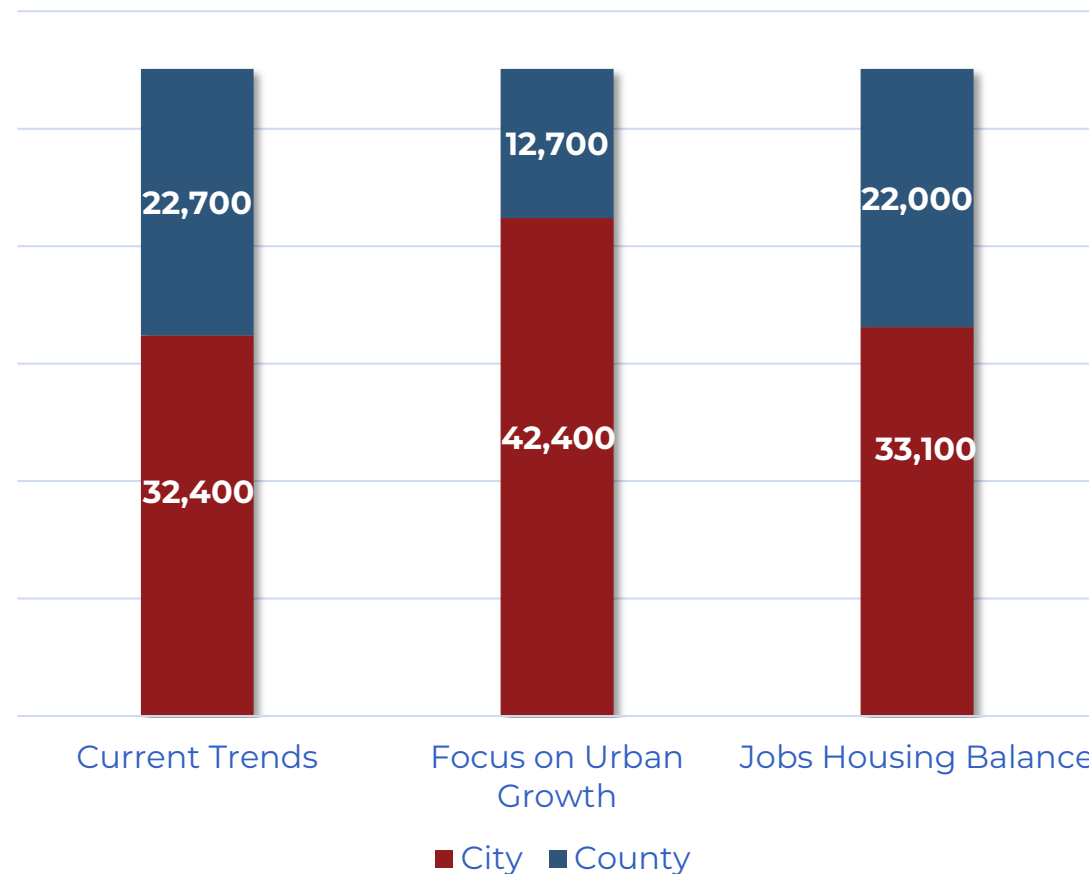


Control Totals

Residential Units



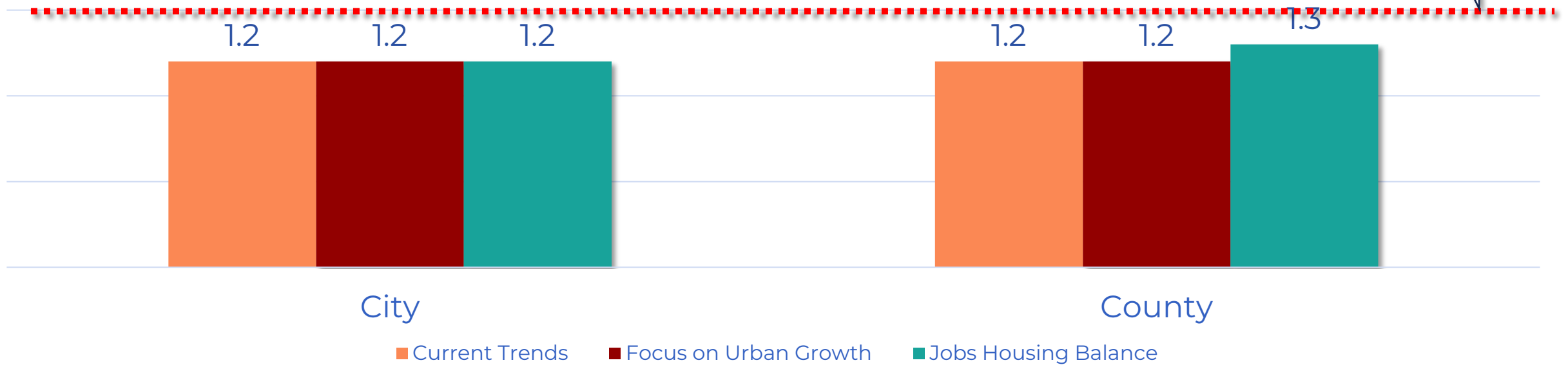
Jobs





Jobs Housing Balance

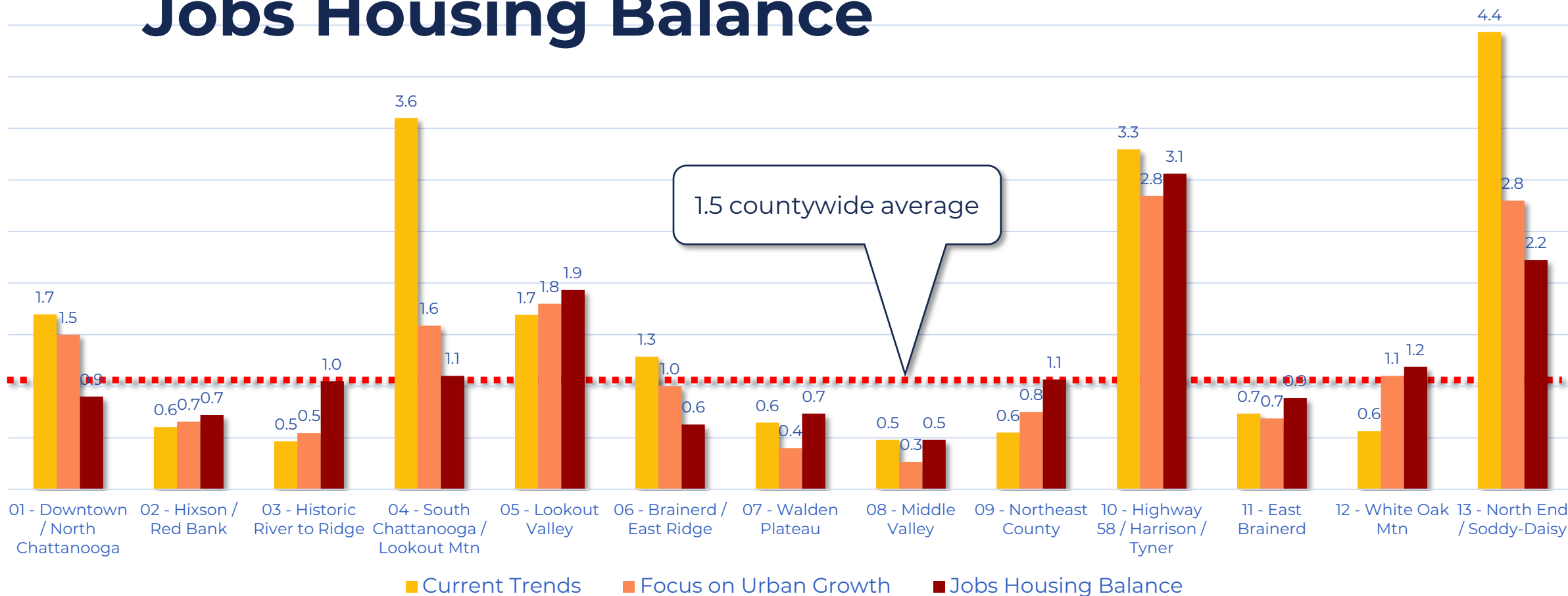
1.5 countywide average



Assumes 225 sf per job



Jobs Housing Balance



Assumes 225 sf per job



Indicators

- Economy
- Equity
- Health
- Housing
- Land Use
- Natural Resources
- Parks and Greenways
- Transportation

Modeling Results











Allocation Results



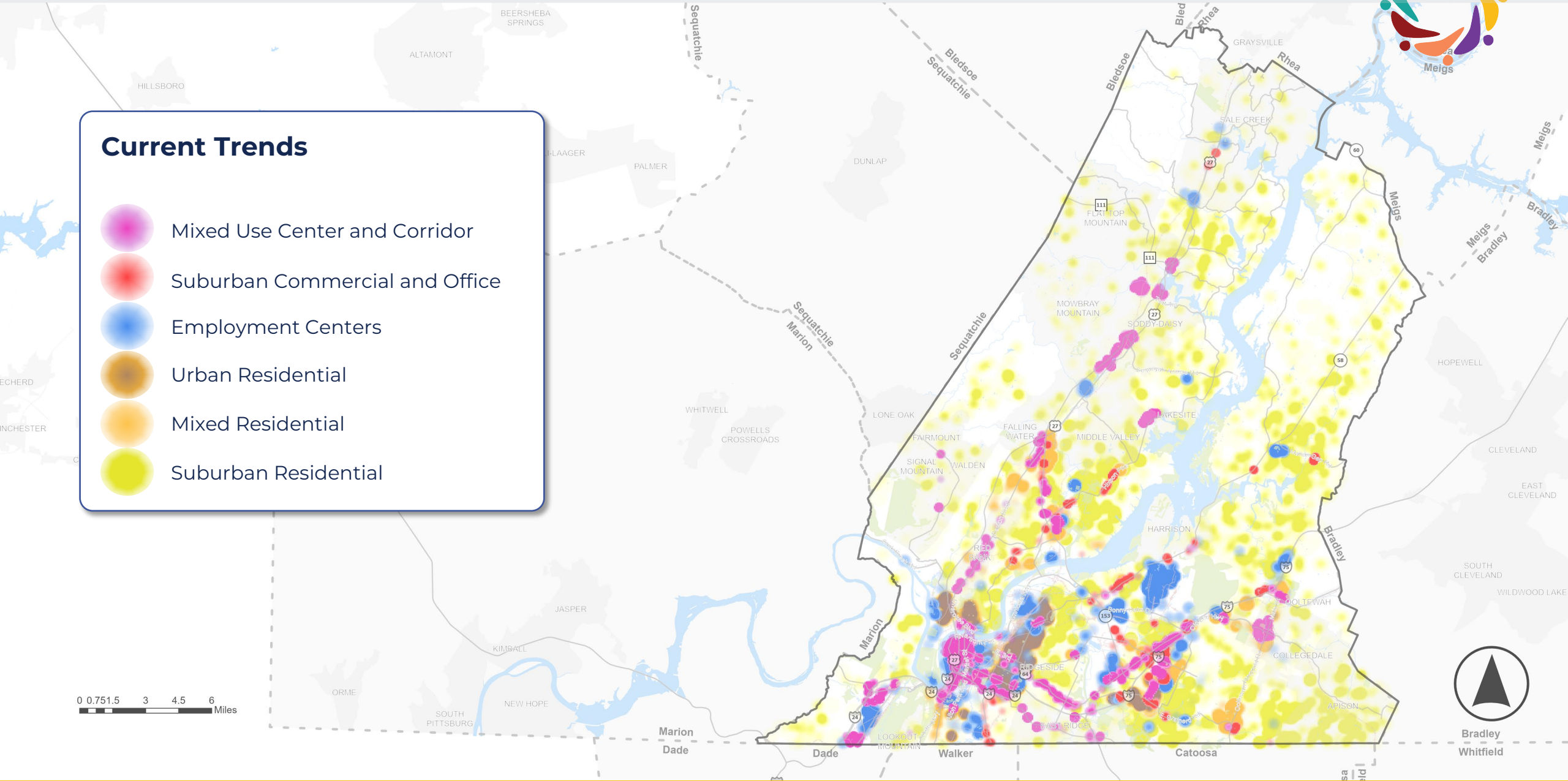
Current Trends

-  Mixed Use Center and Corridor
-  Suburban Commercial and Office
-  Employment Centers
-  Urban Residential
-  Mixed Residential
-  Suburban Residential

0 0.75 1.5 3 4.5 6 Miles









Bradley
Whitfield



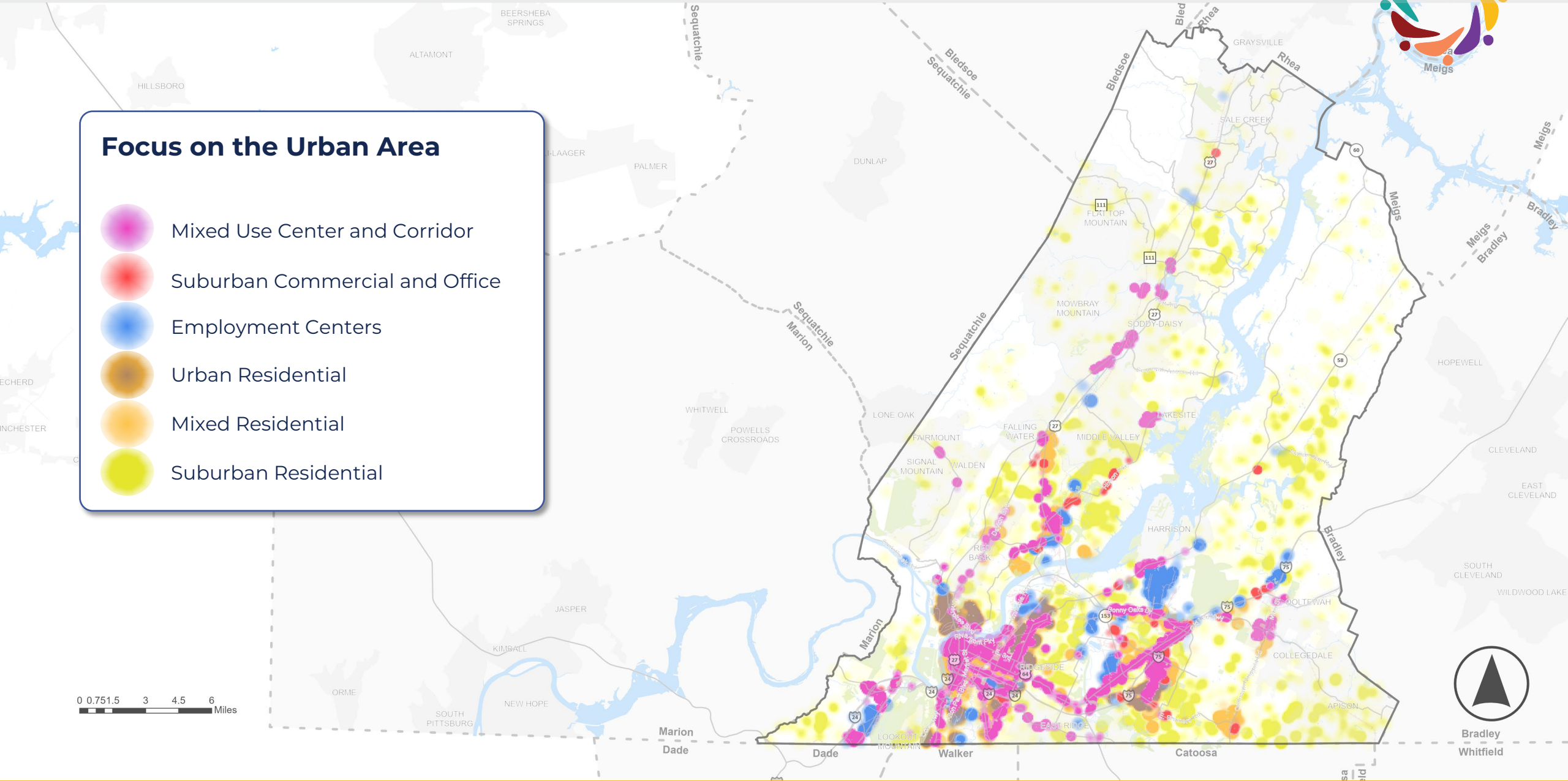


Focus on the Urban Area

-  Mixed Use Center and Corridor
-  Suburban Commercial and Office
-  Employment Centers
-  Urban Residential
-  Mixed Residential
-  Suburban Residential









Bradley
Whitfield





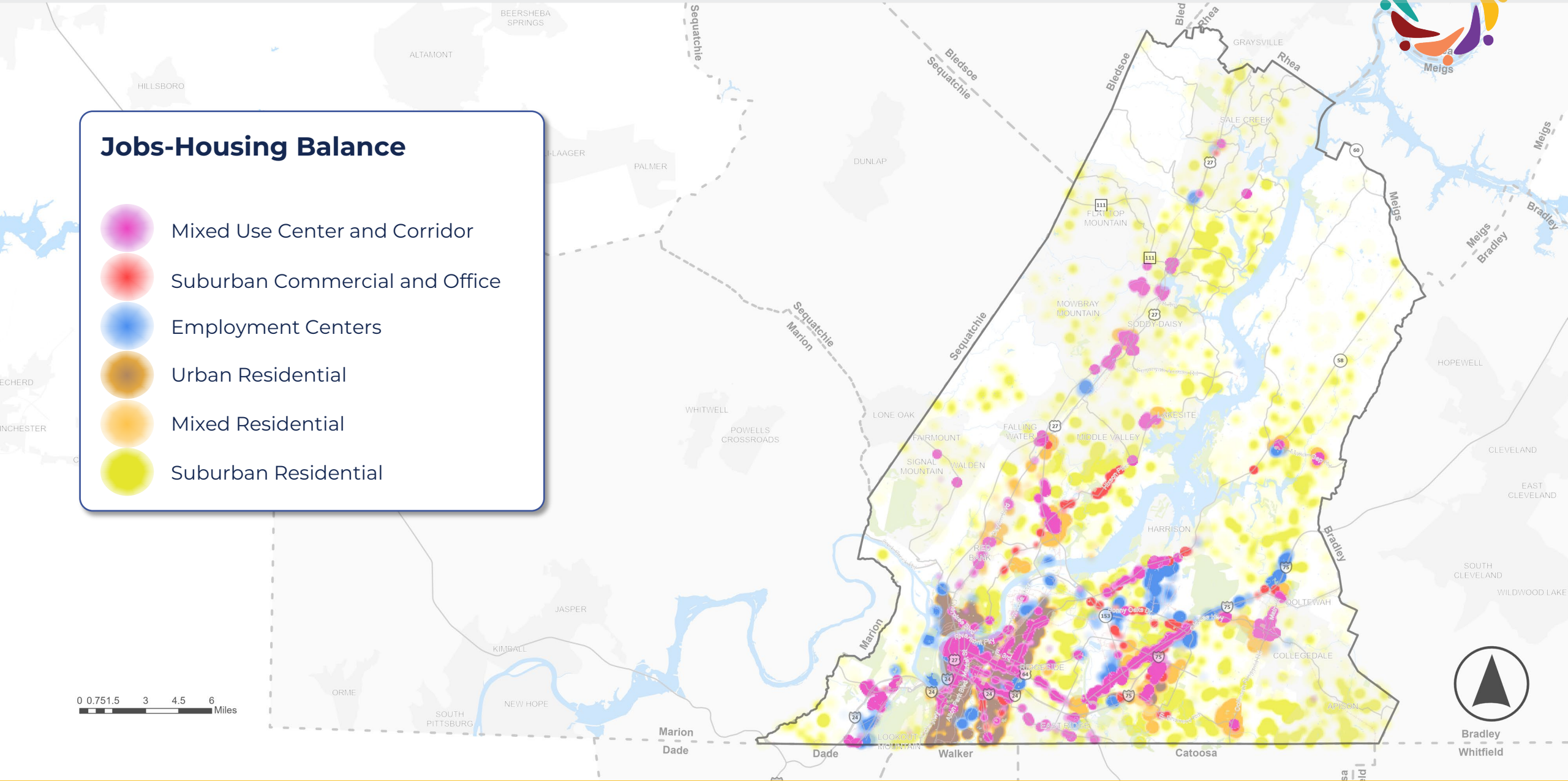
Jobs-Housing Balance

-  Mixed Use Center and Corridor
-  Suburban Commercial and Office
-  Employment Centers
-  Urban Residential
-  Mixed Residential
-  Suburban Residential

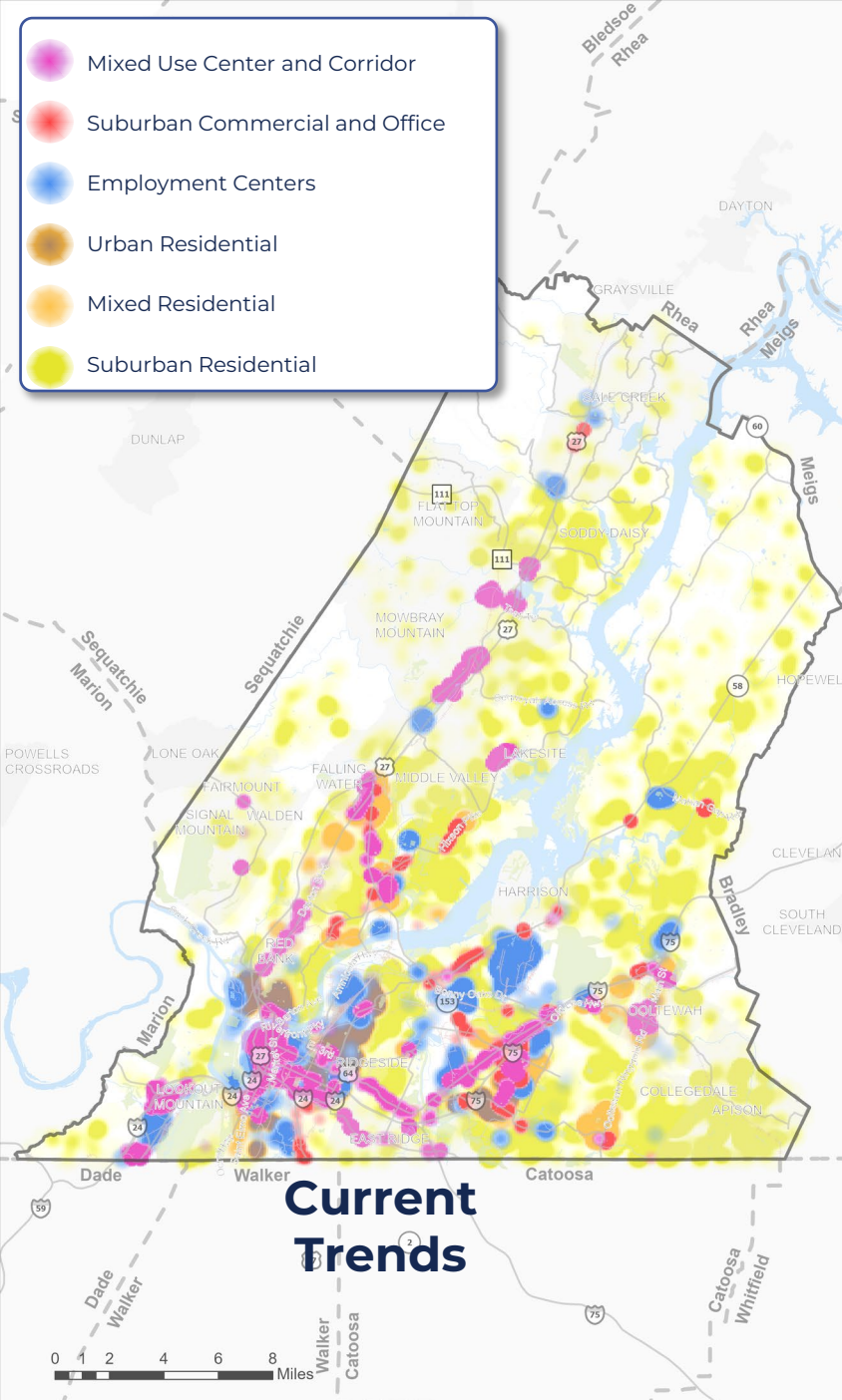
0 0.75 1.5 3 4.5 6 Miles



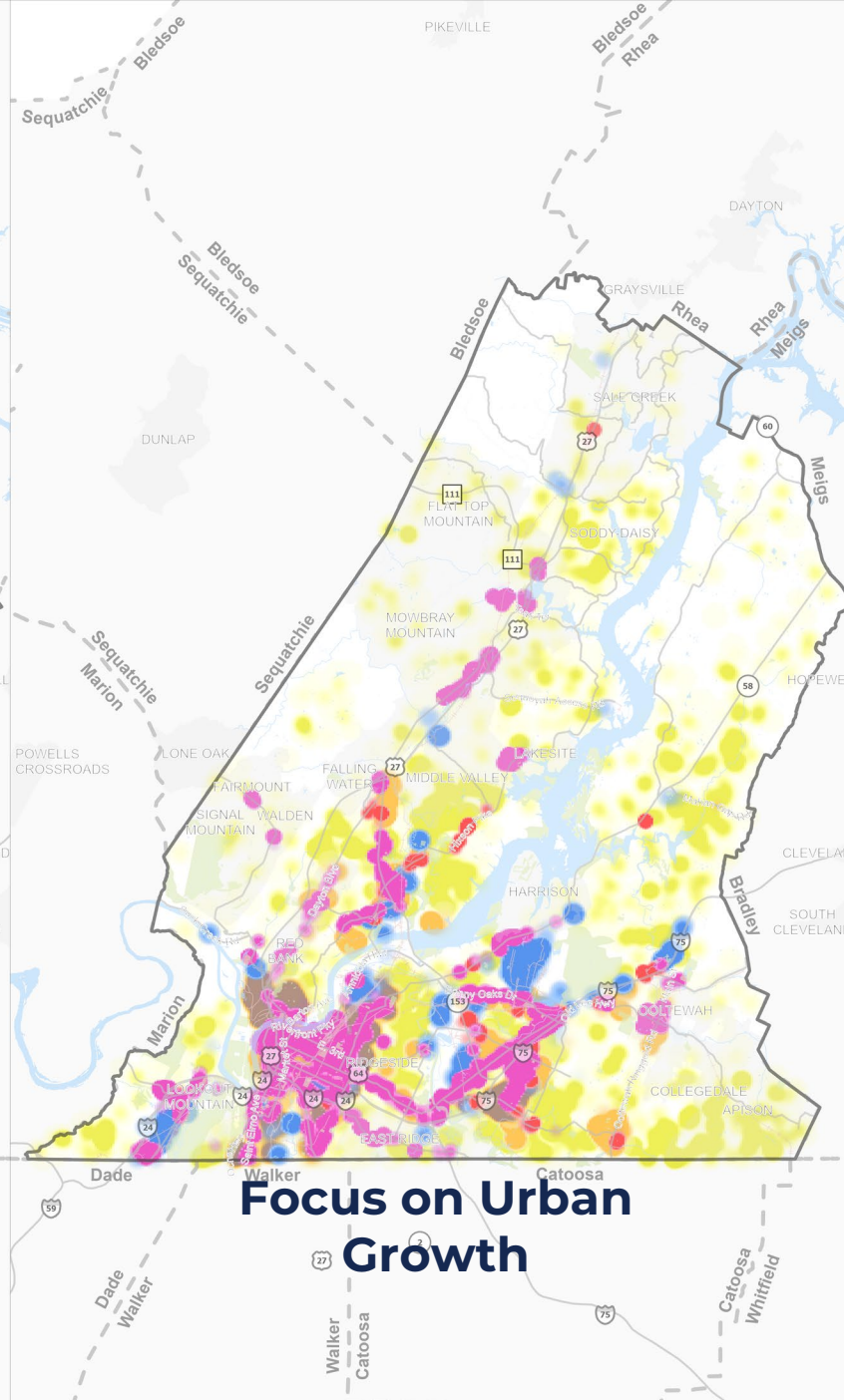
Bradley
Whitfield



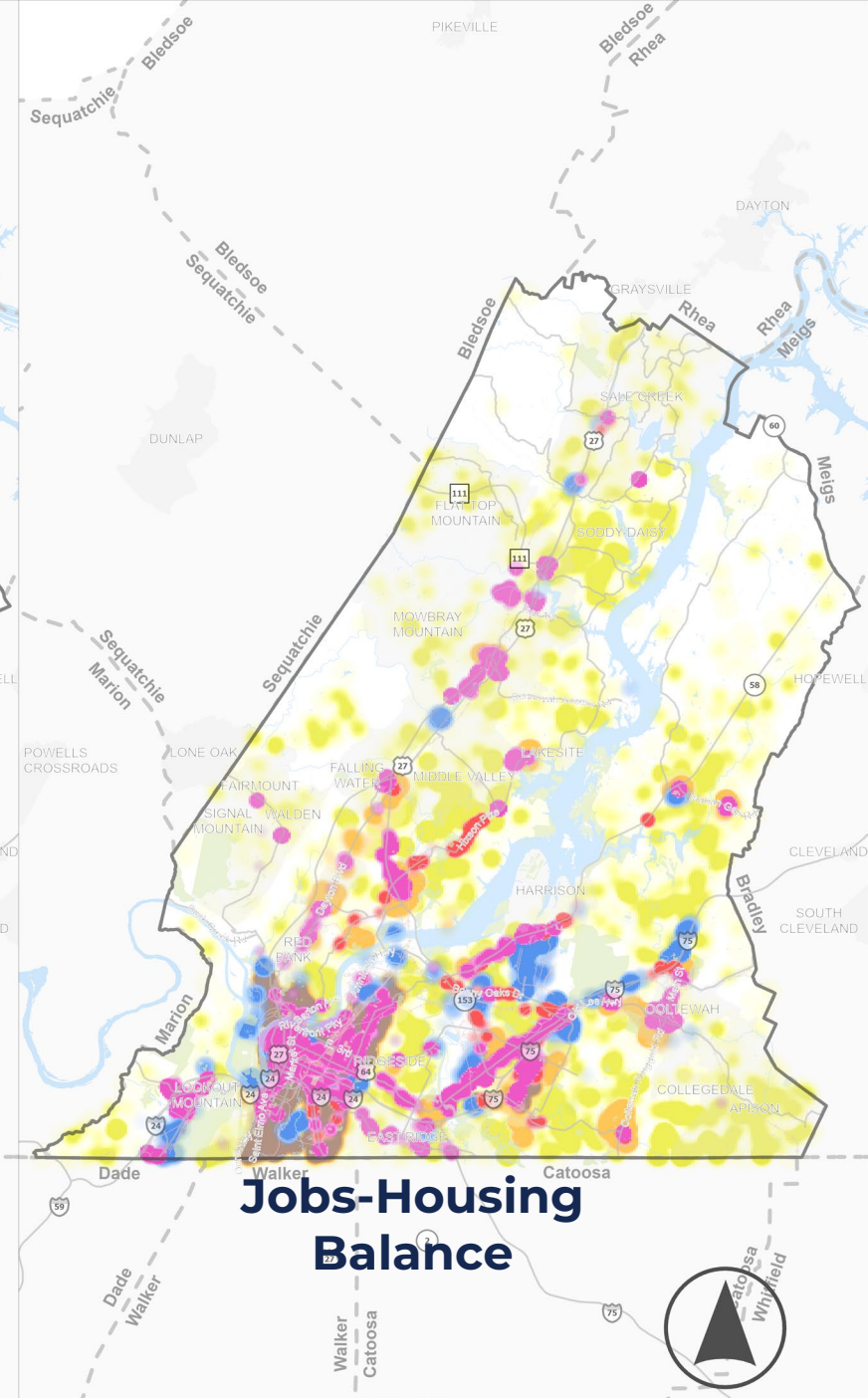
- Mixed Use Center and Corridor
- Suburban Commercial and Office
- Employment Centers
- Urban Residential
- Mixed Residential
- Suburban Residential



Current Trends



Focus on Urban Growth



Jobs-Housing Balance

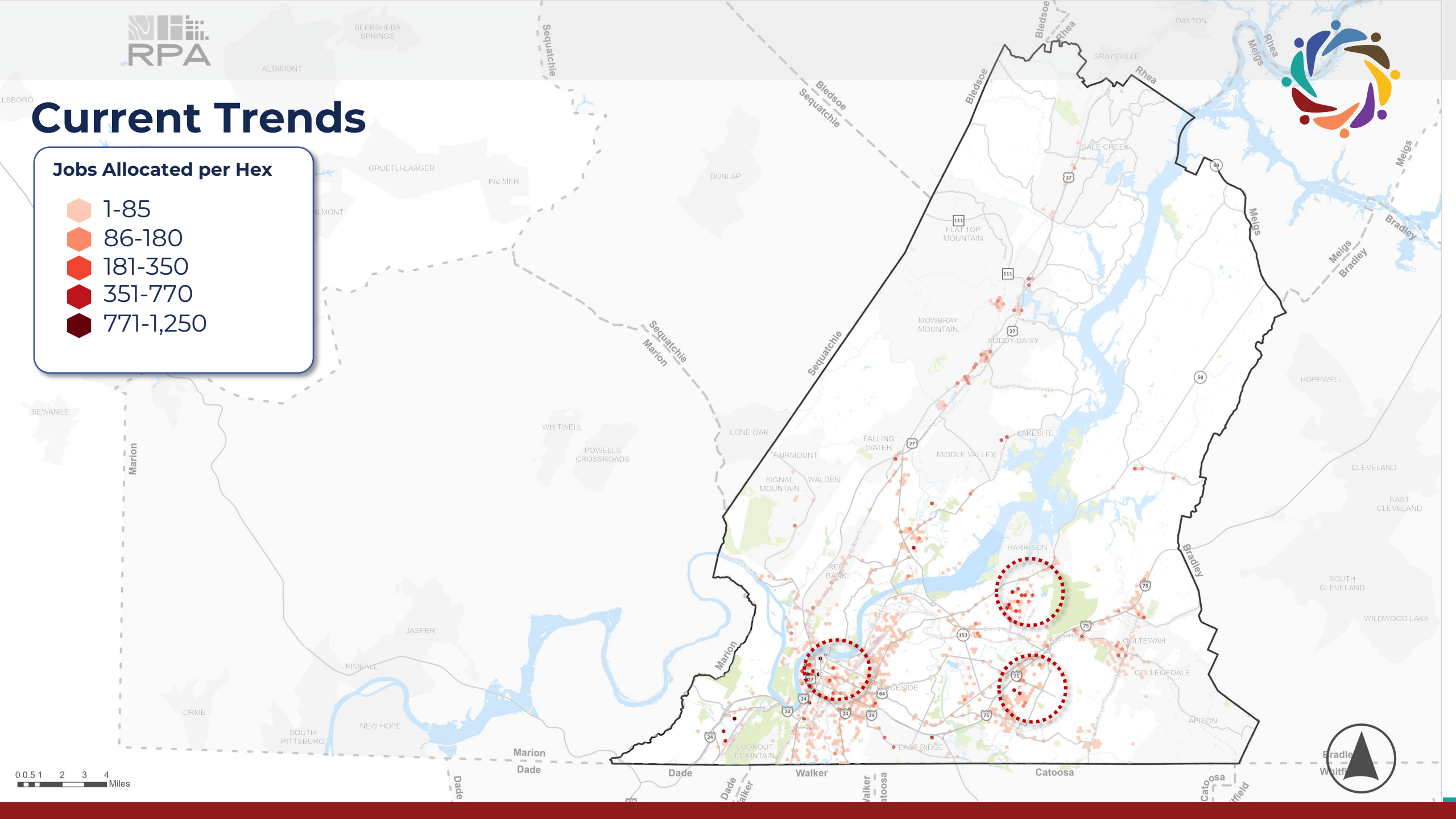


Current Trends

Jobs Allocated per Hex

- 1-85
- 86-180
- 181-350
- 351-770
- 771-1,250

0 0.5 1 2 3 4 Miles



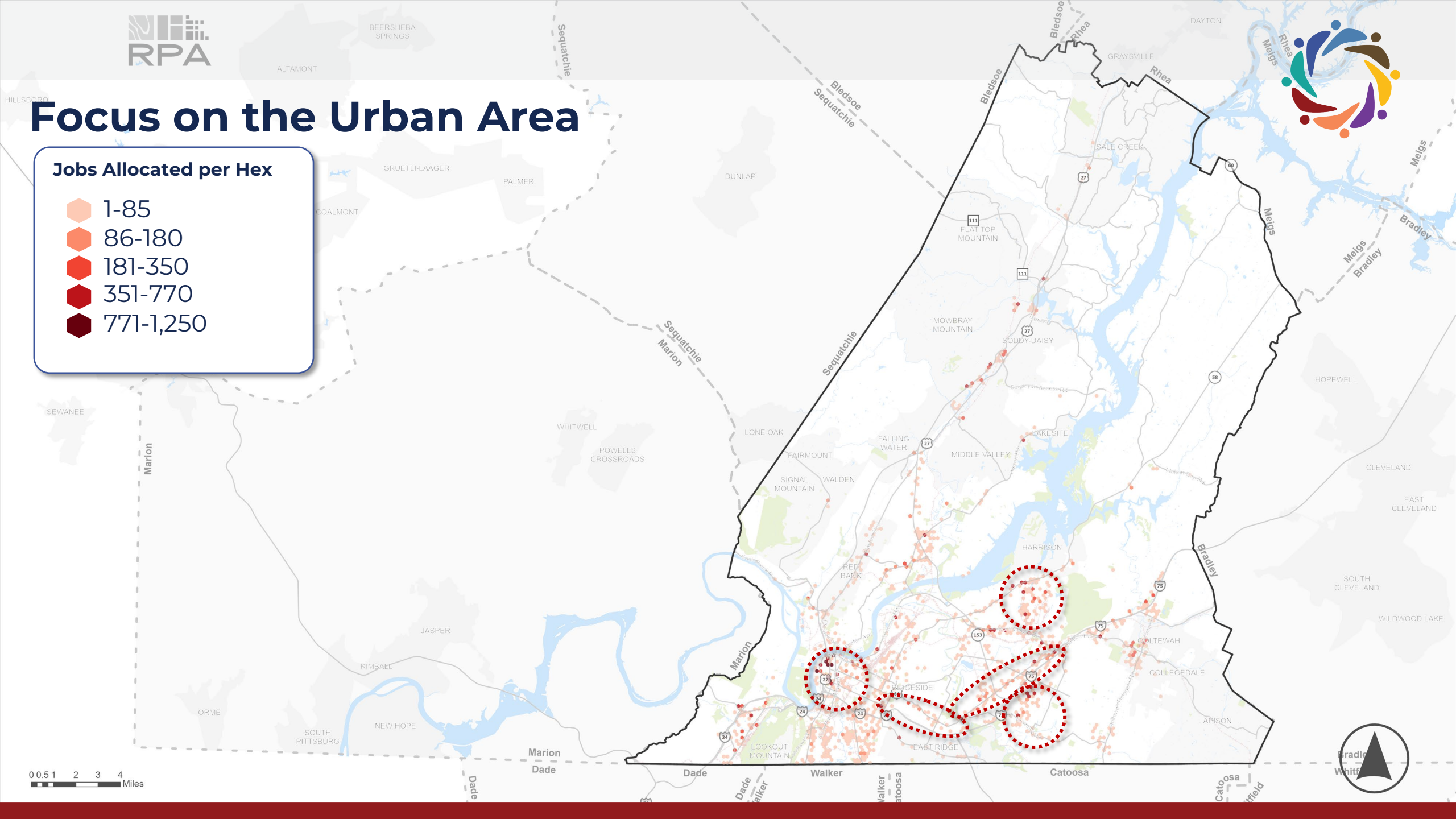


Focus on the Urban Area

Jobs Allocated per Hex

- 1-85
- 86-180
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0 0.5 1 2 3 4 Miles



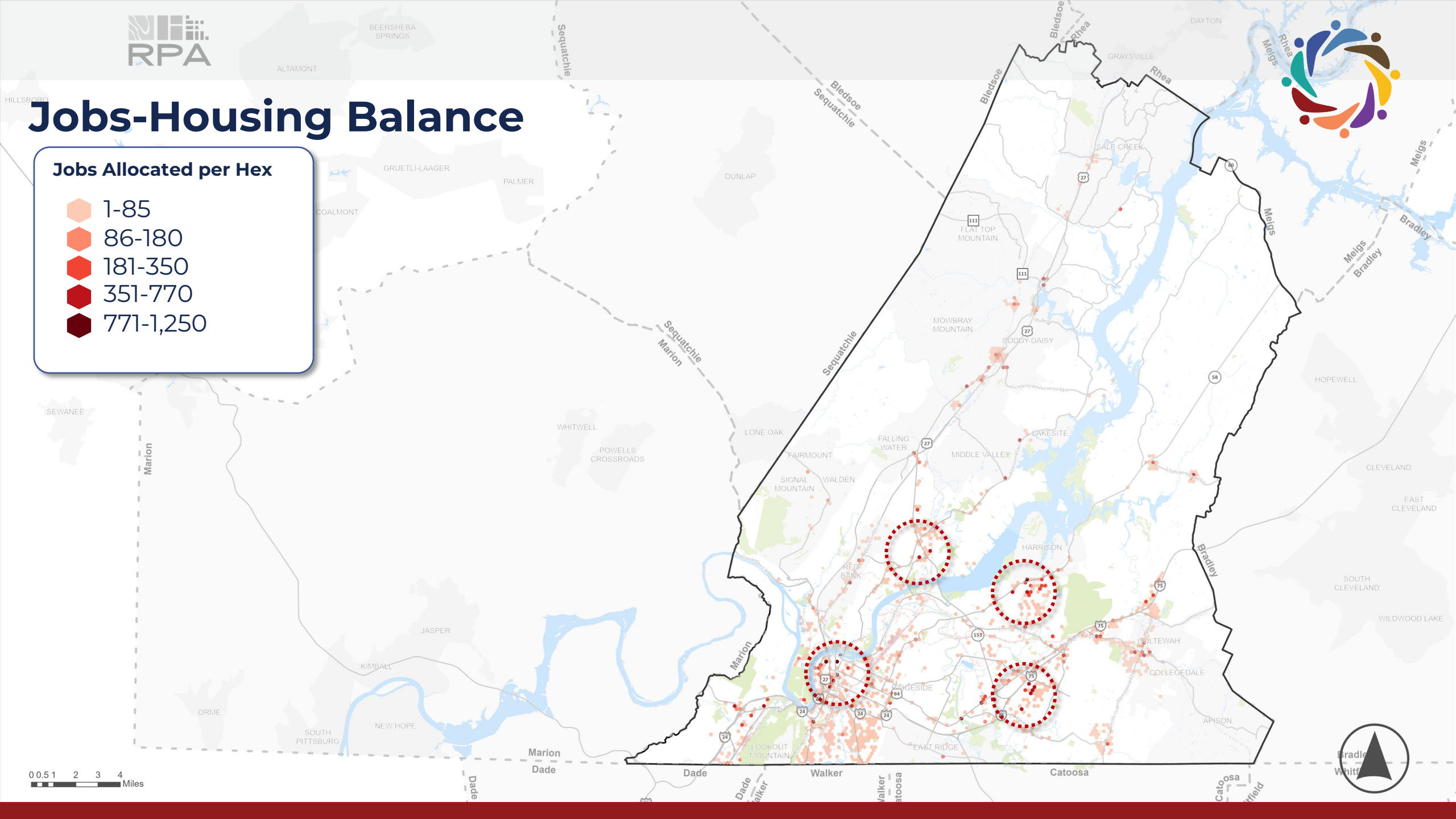


Jobs-Housing Balance

Jobs Allocated per Hex

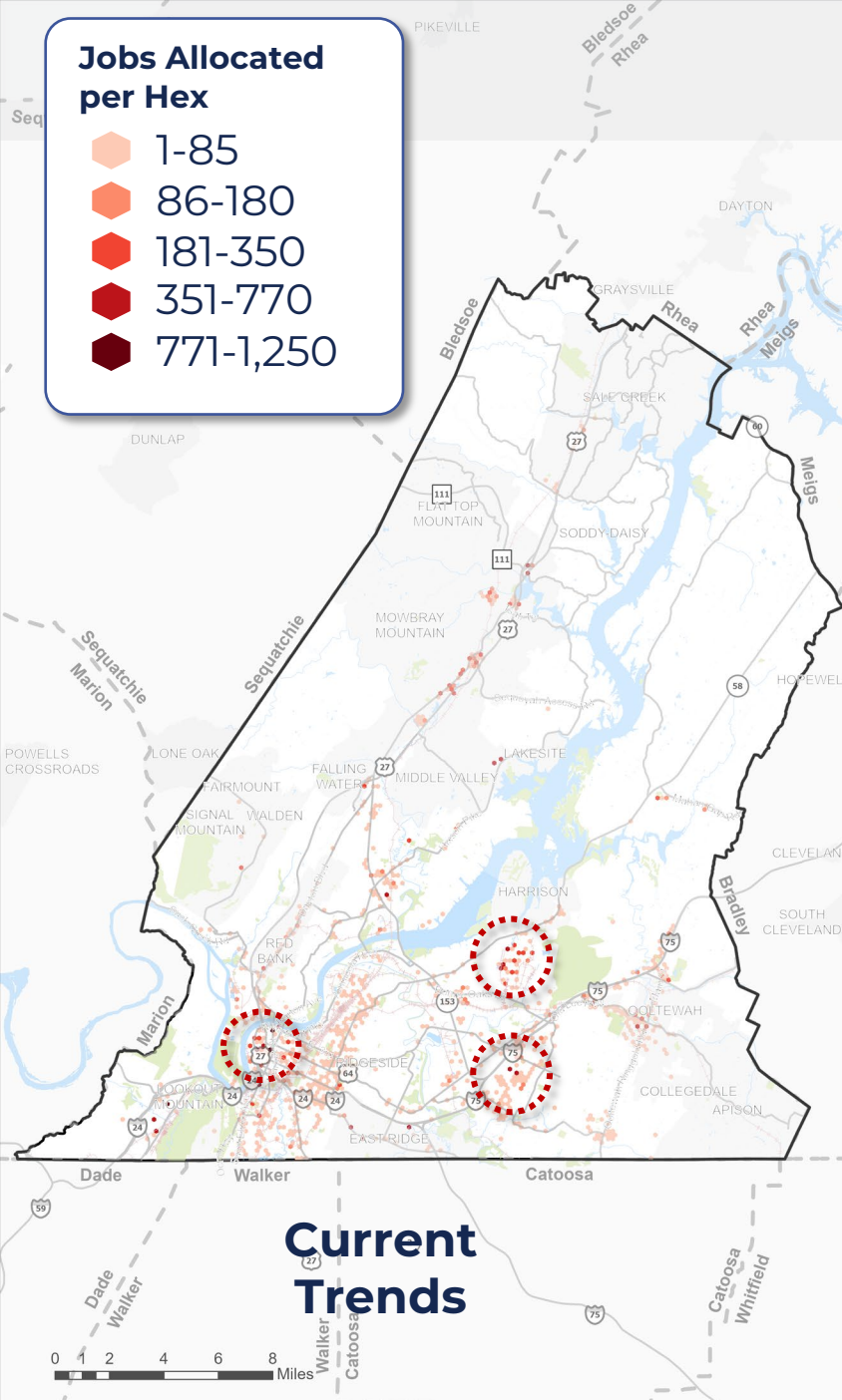
- 1-85
- 86-180
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- 771-1,250

0 0.5 1 2 3 4 Miles

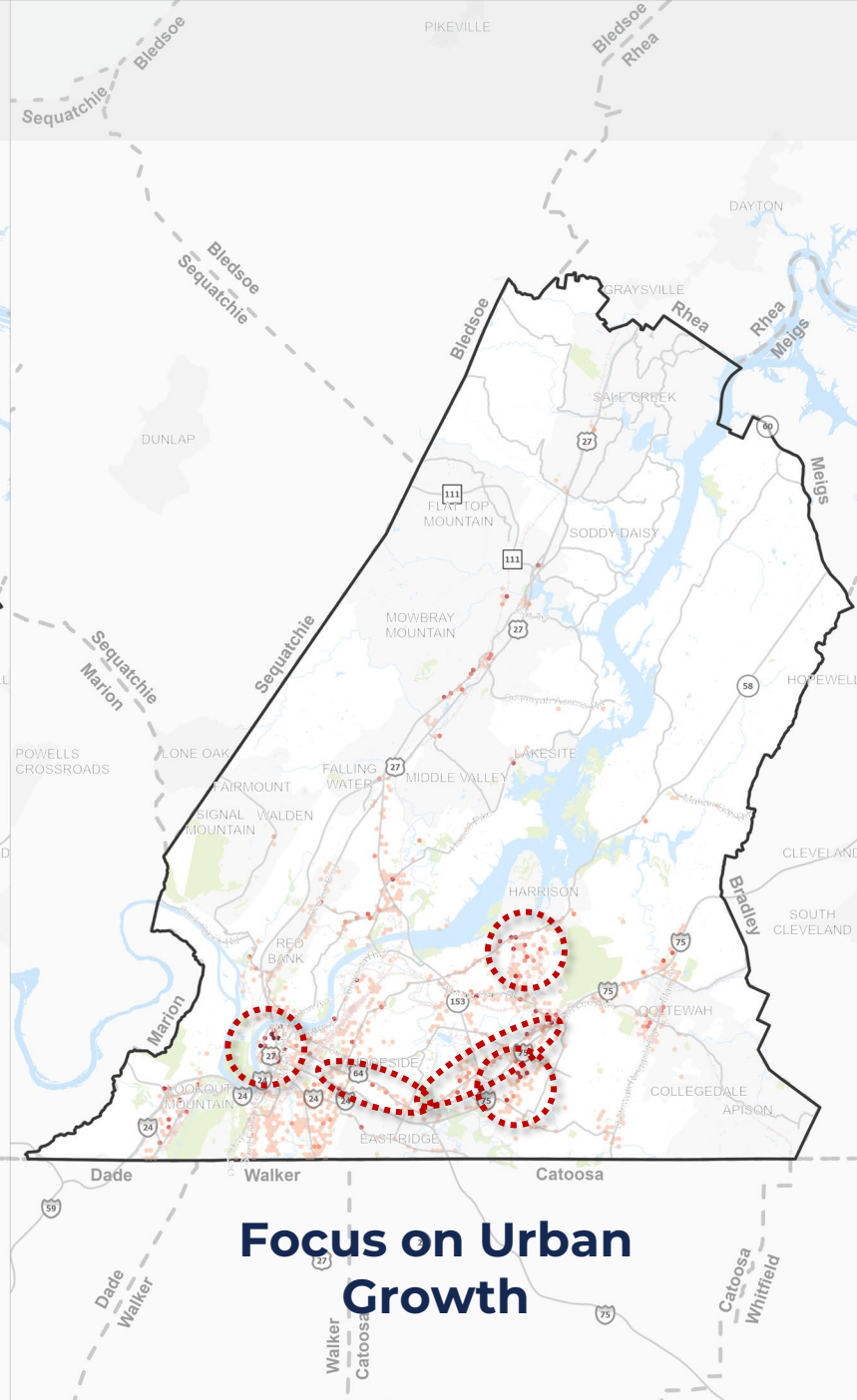


Jobs Allocated per Hex

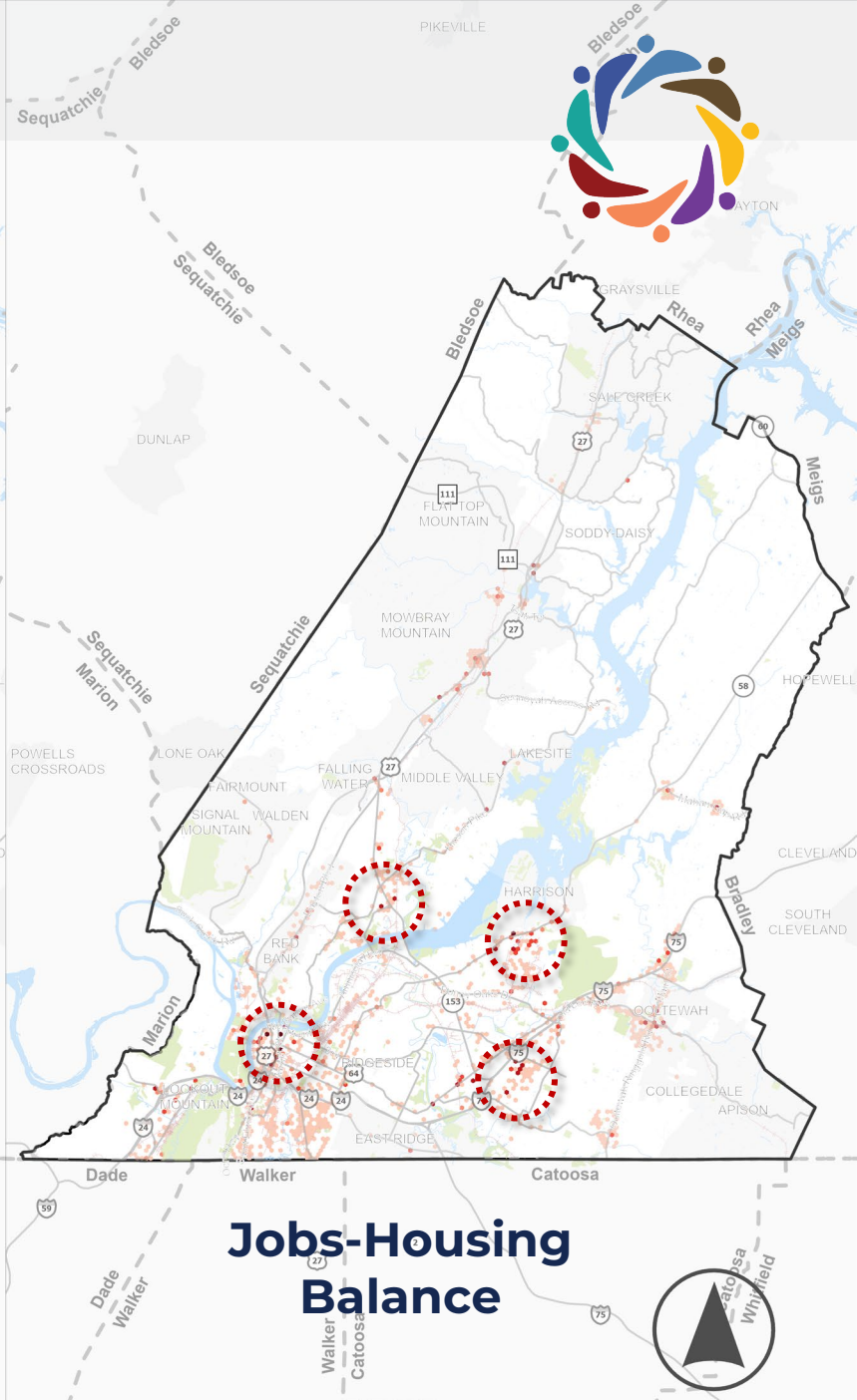
- 1-85
- 86-180
- 181-350
- 351-770
- 771-1,250



Current Trends



Focus on Urban Growth



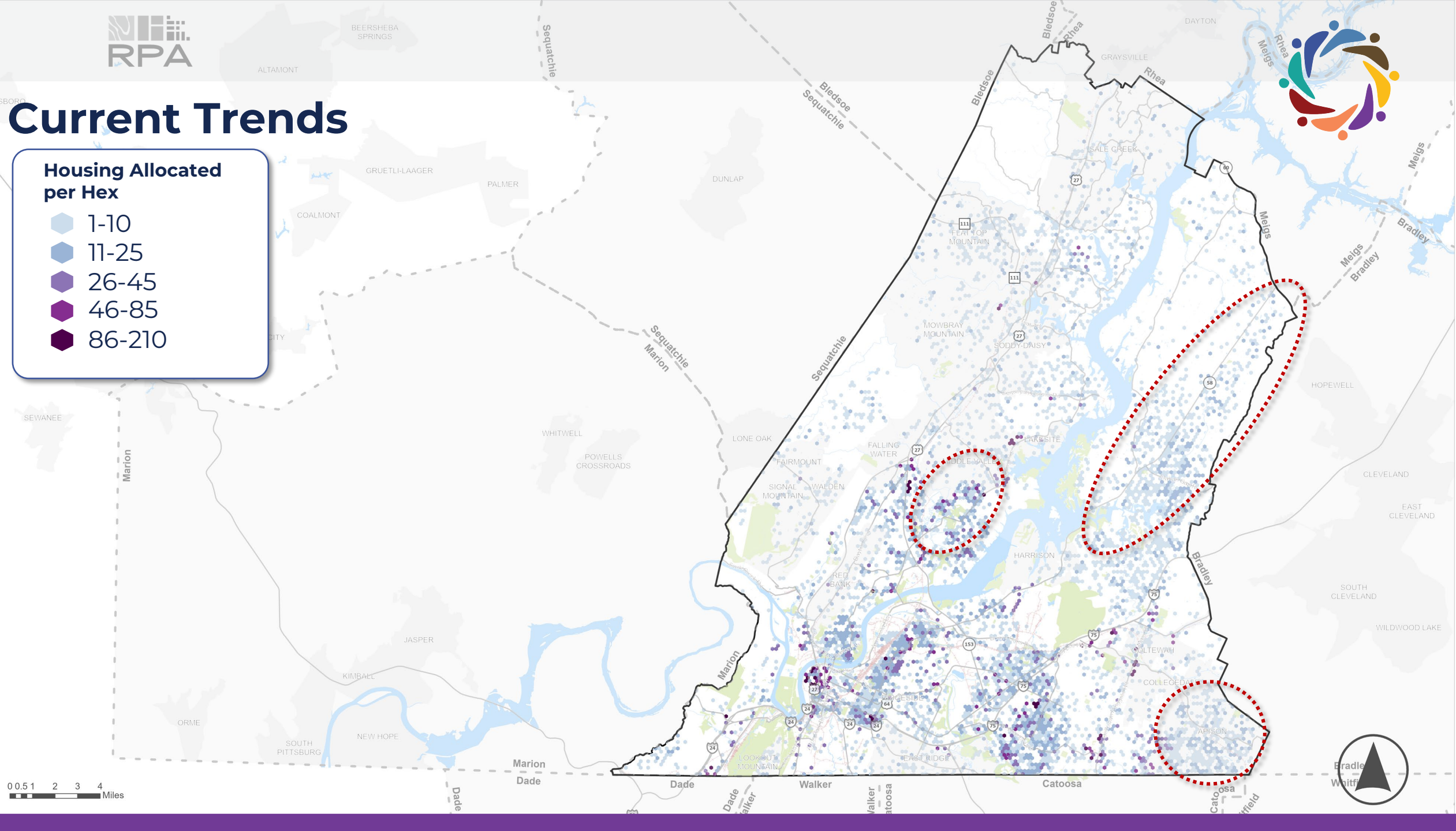
Jobs-Housing Balance



Current Trends

Housing Allocated per Hex

- 1-10
- 11-25
- 26-45
- 46-85
- 86-210



0 0.5 1 2 3 4 Miles



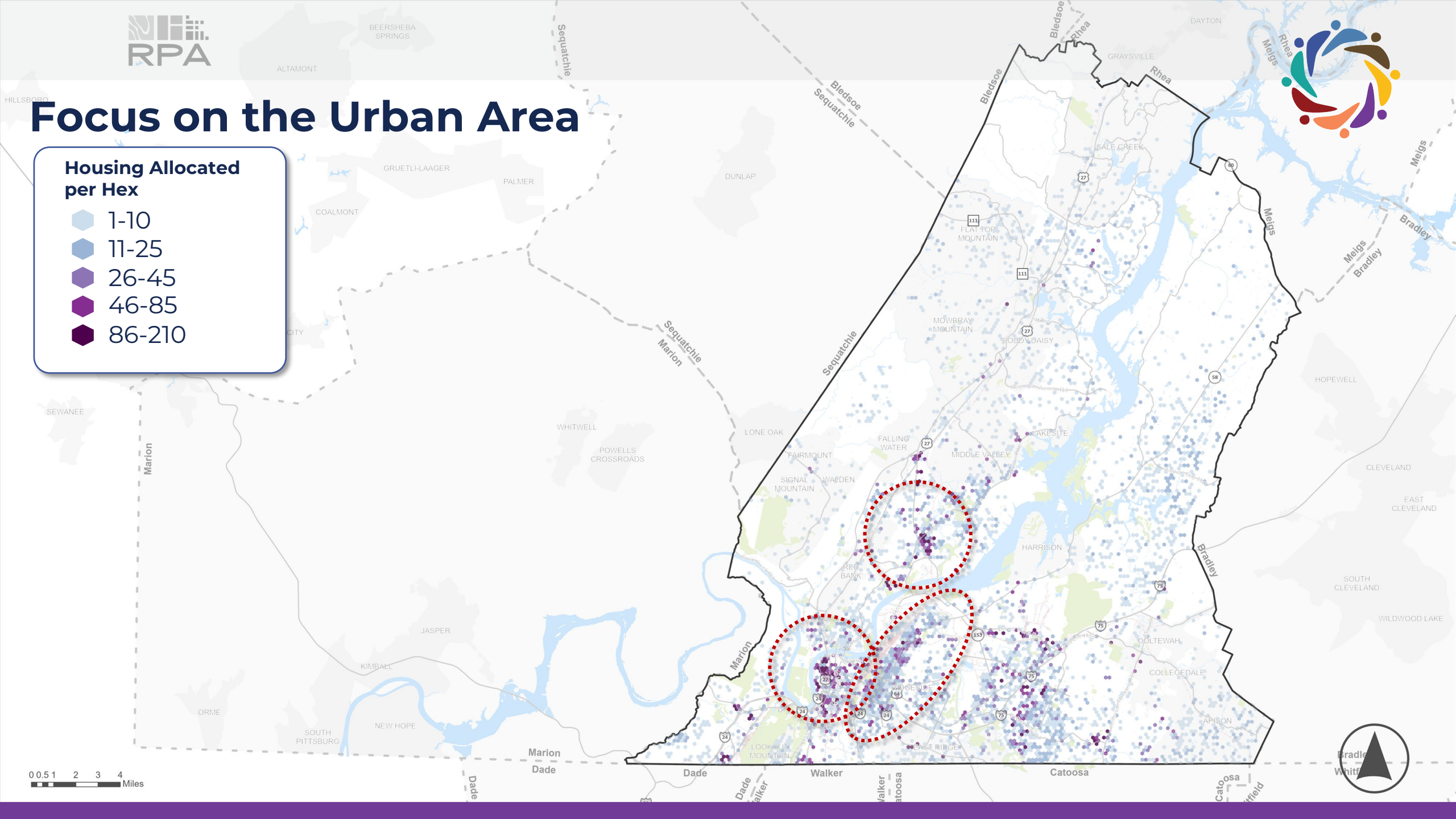


Focus on the Urban Area

Housing Allocated per Hex

- 1-10
- 11-25
- 26-45
- 46-85
- 86-210

0 0.5 1 2 3 4 Miles



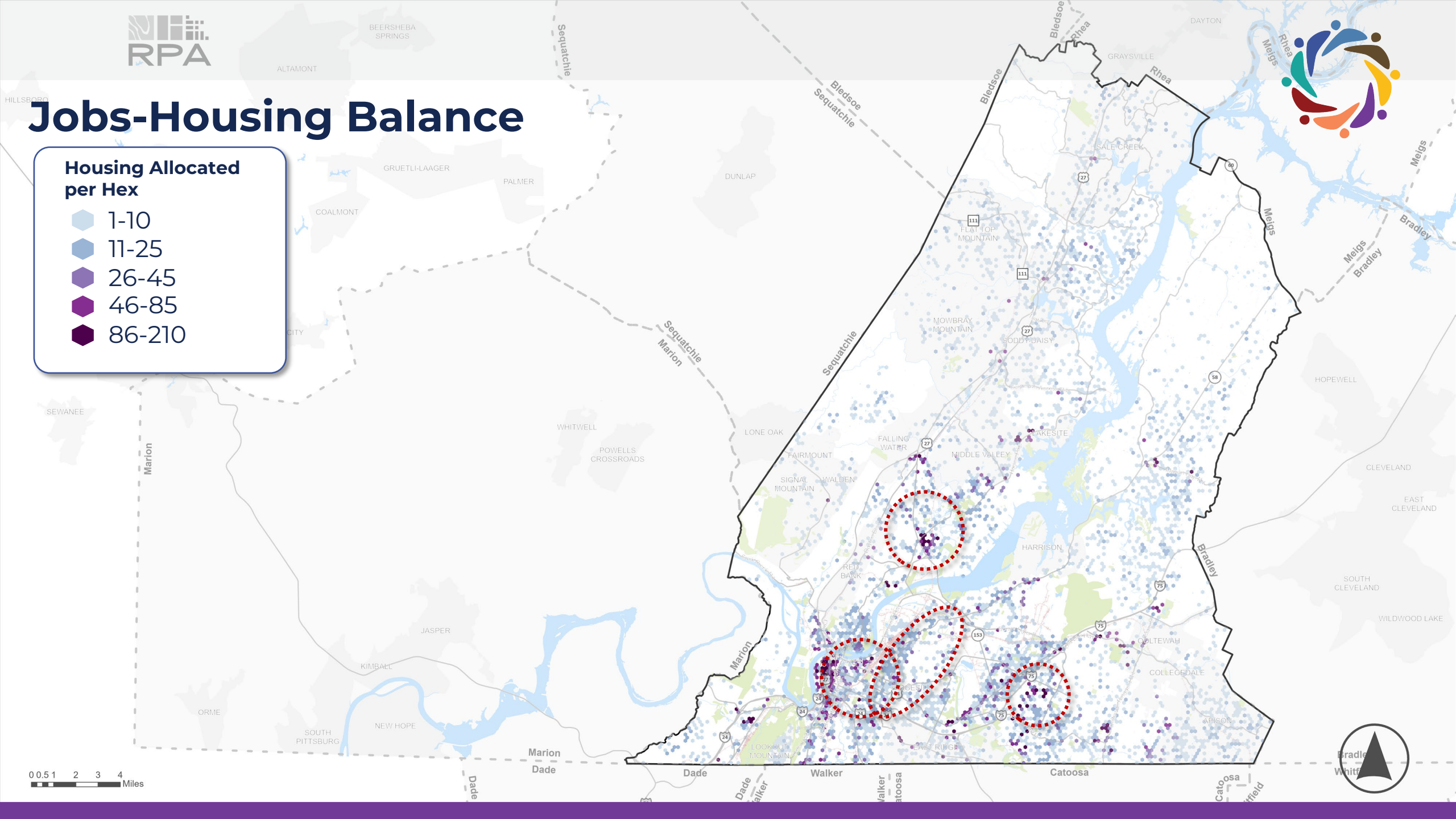


Jobs-Housing Balance

Housing Allocated per Hex

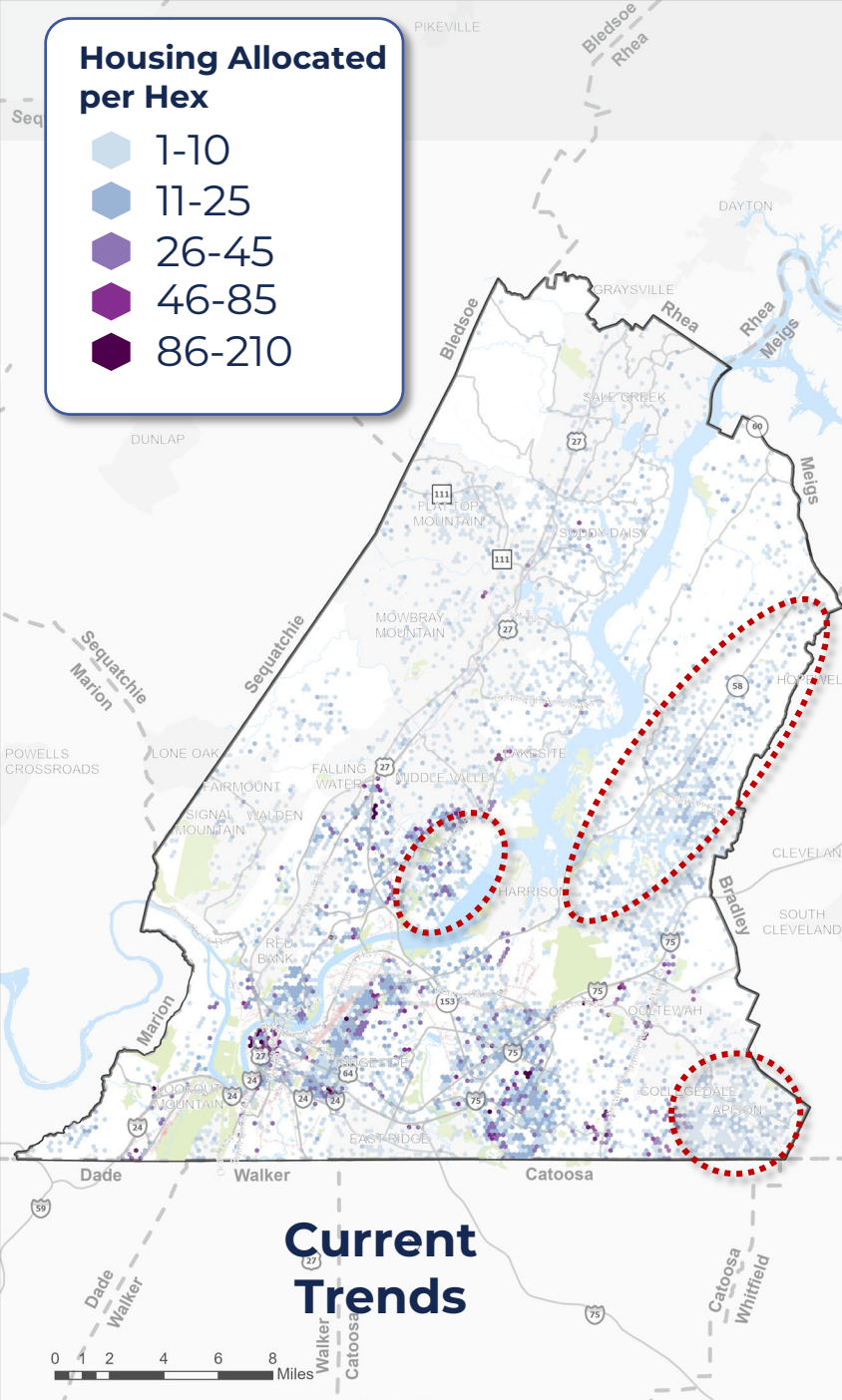
- 1-10
- 11-25
- 26-45
- 46-85
- 86-210

0 0.5 1 2 3 4 Miles

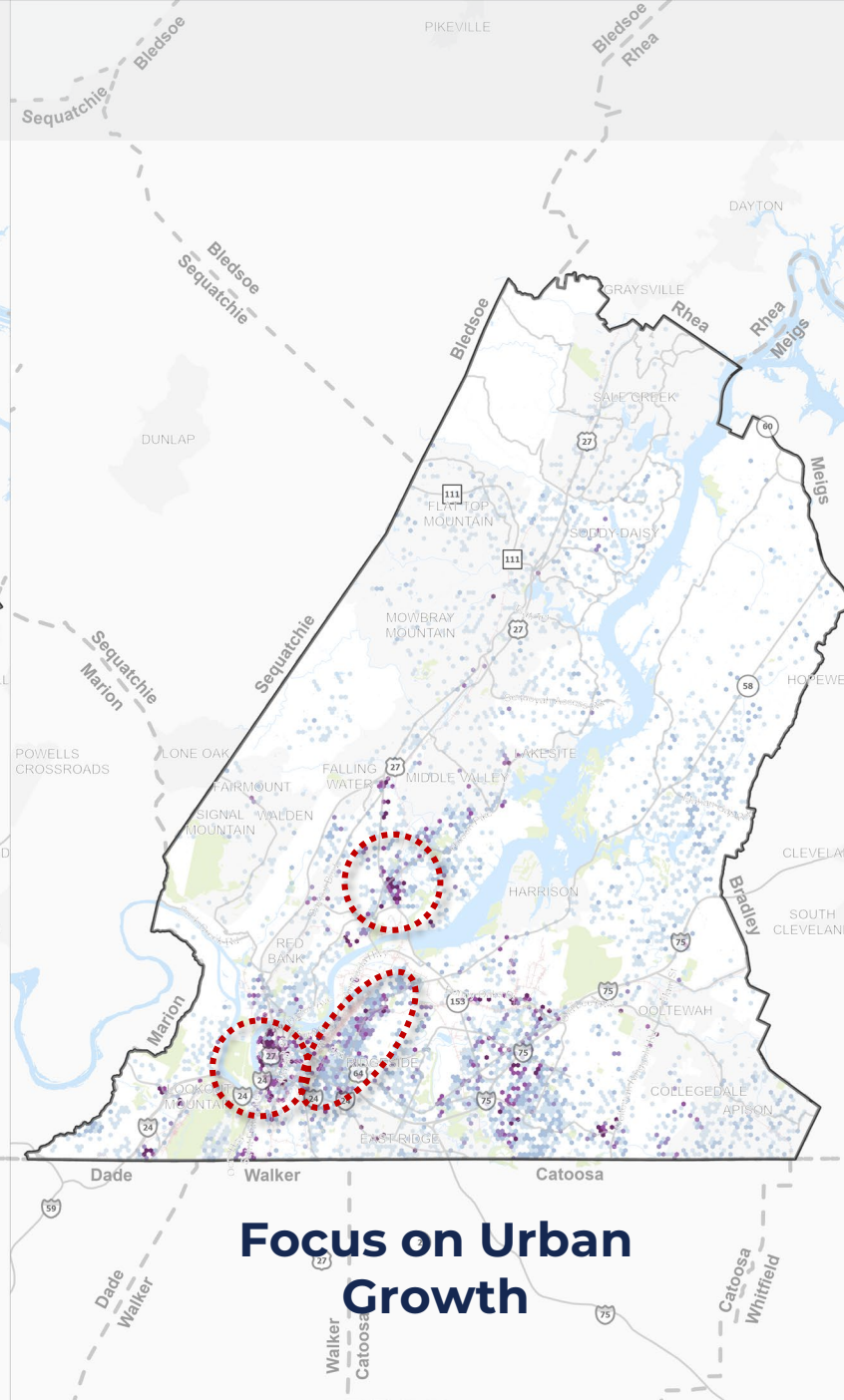


Housing Allocated per Hex

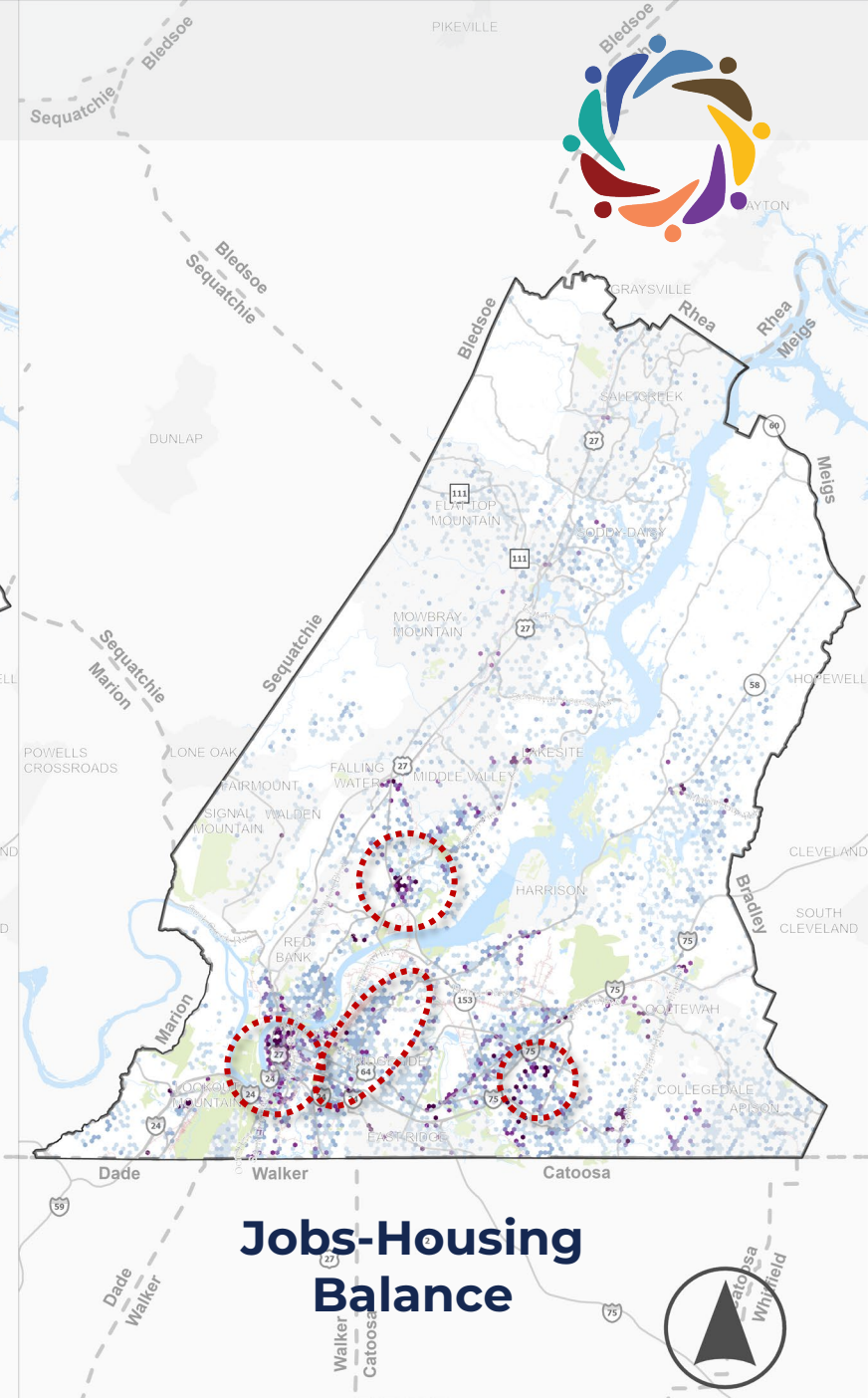
- 1-10
- 11-25
- 26-45
- 46-85
- 86-210



Current Trends



Focus on Urban Growth



Jobs-Housing Balance





Indicators

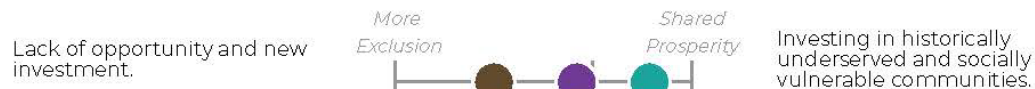


Indicator Performance Report Card

Economy



Equity



Health



Housing



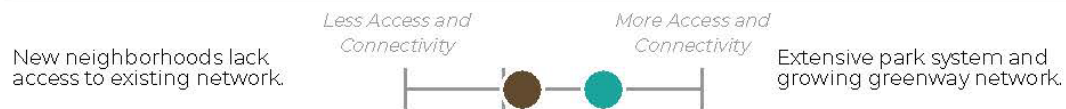
Land Use



Natural Resources



Parks and Greenways



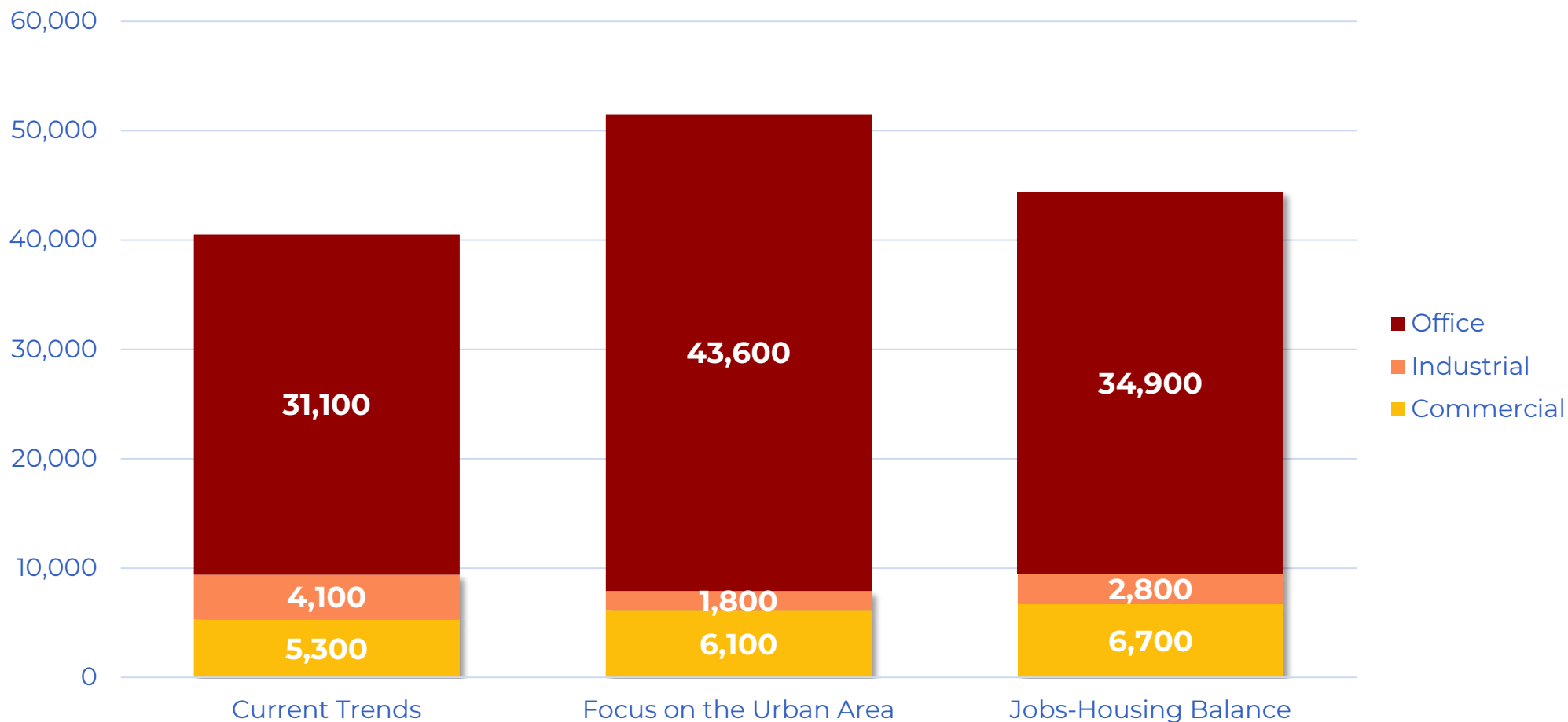
Transportation





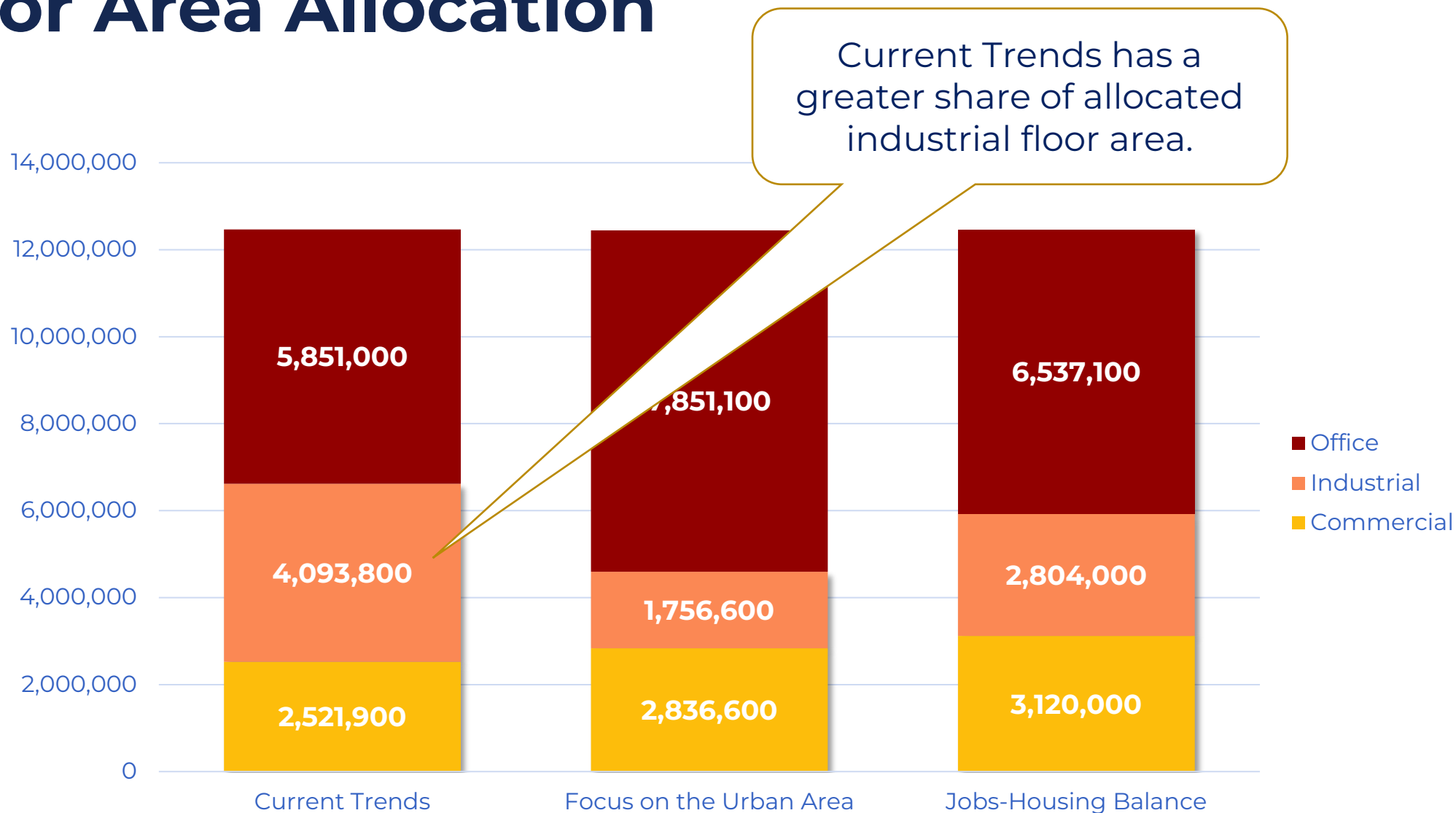
Goal: Economy

Indicator: Job Diversity



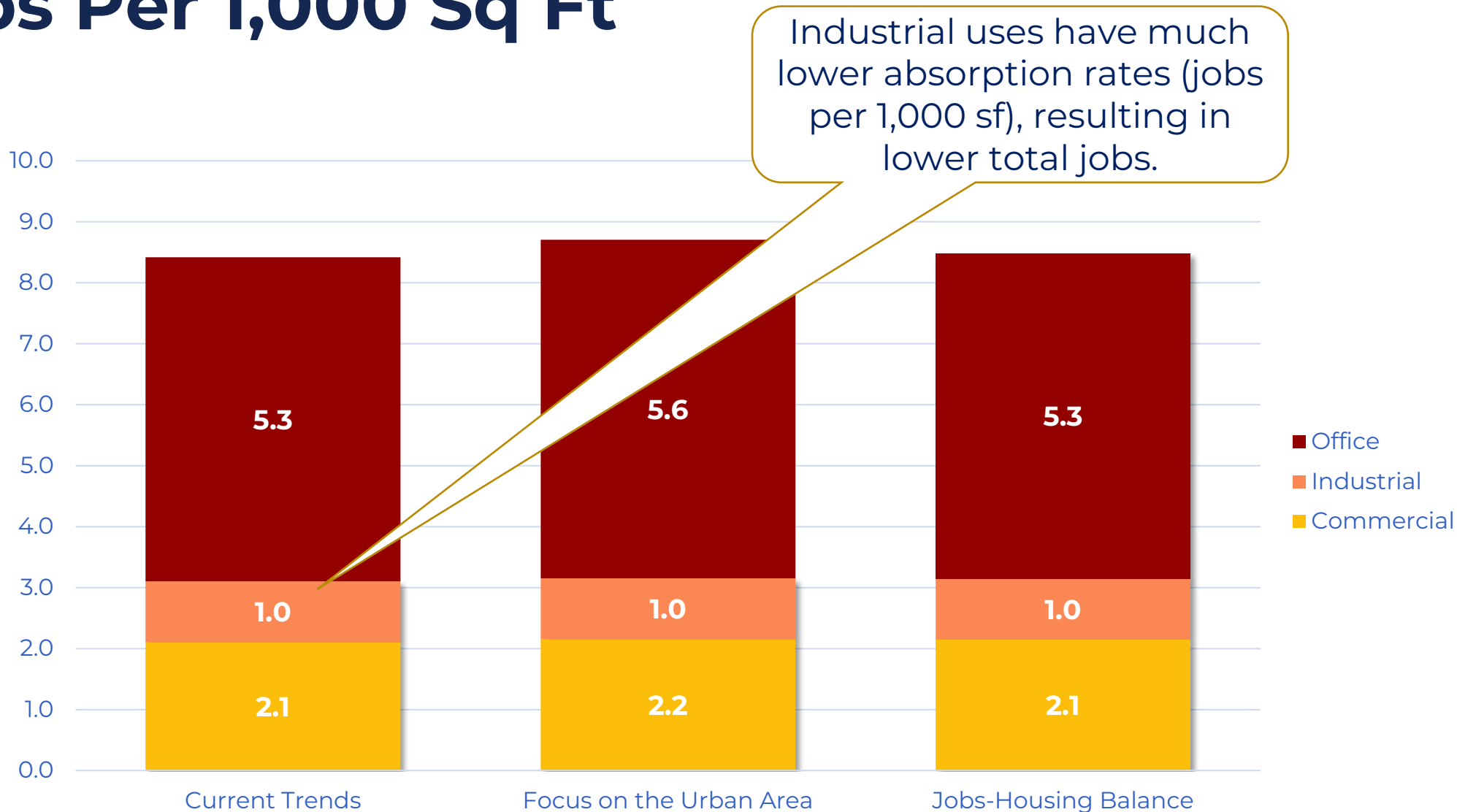


Floor Area Allocation





Jobs Per 1,000 Sq Ft



**Employment Centers:
Total Jobs**

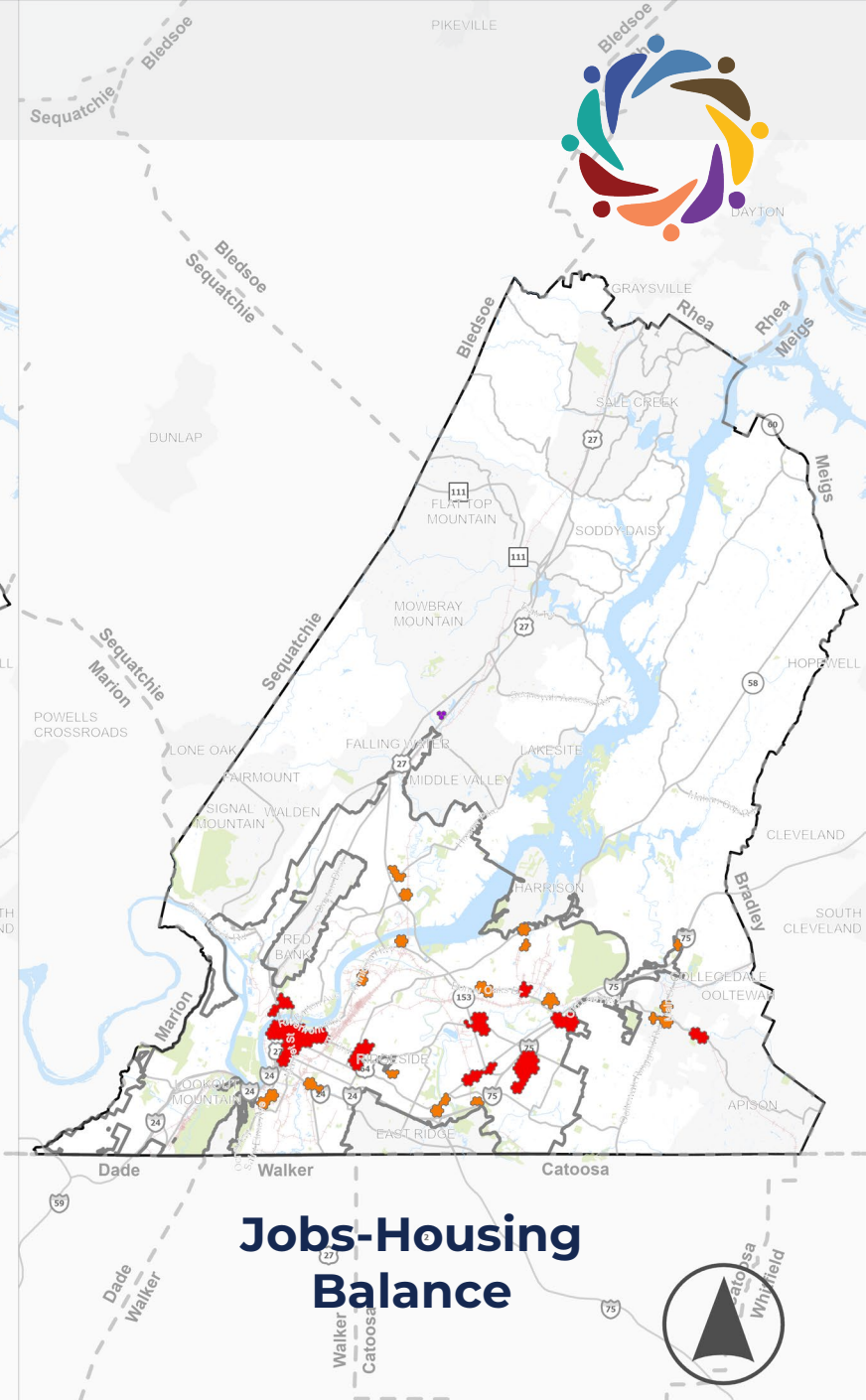
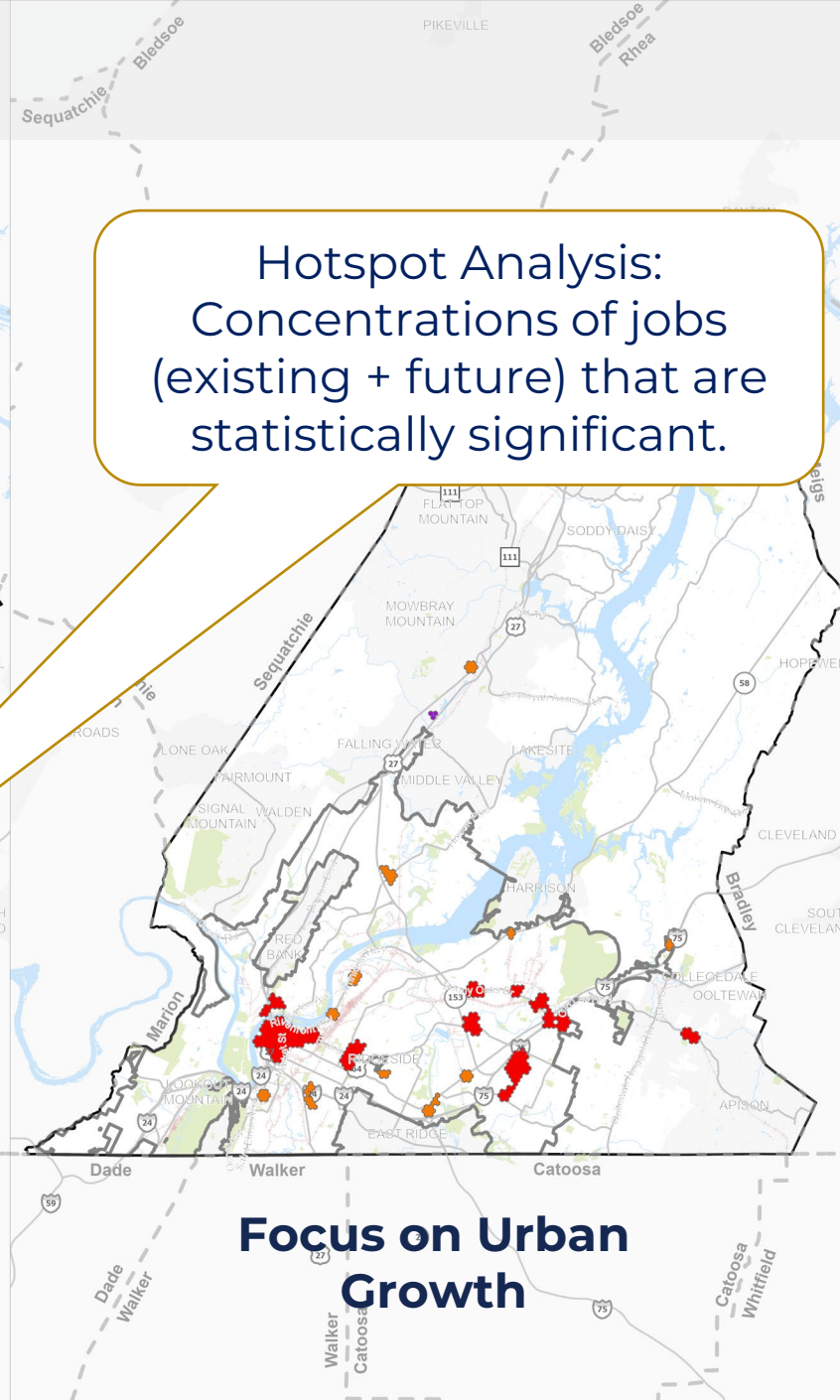
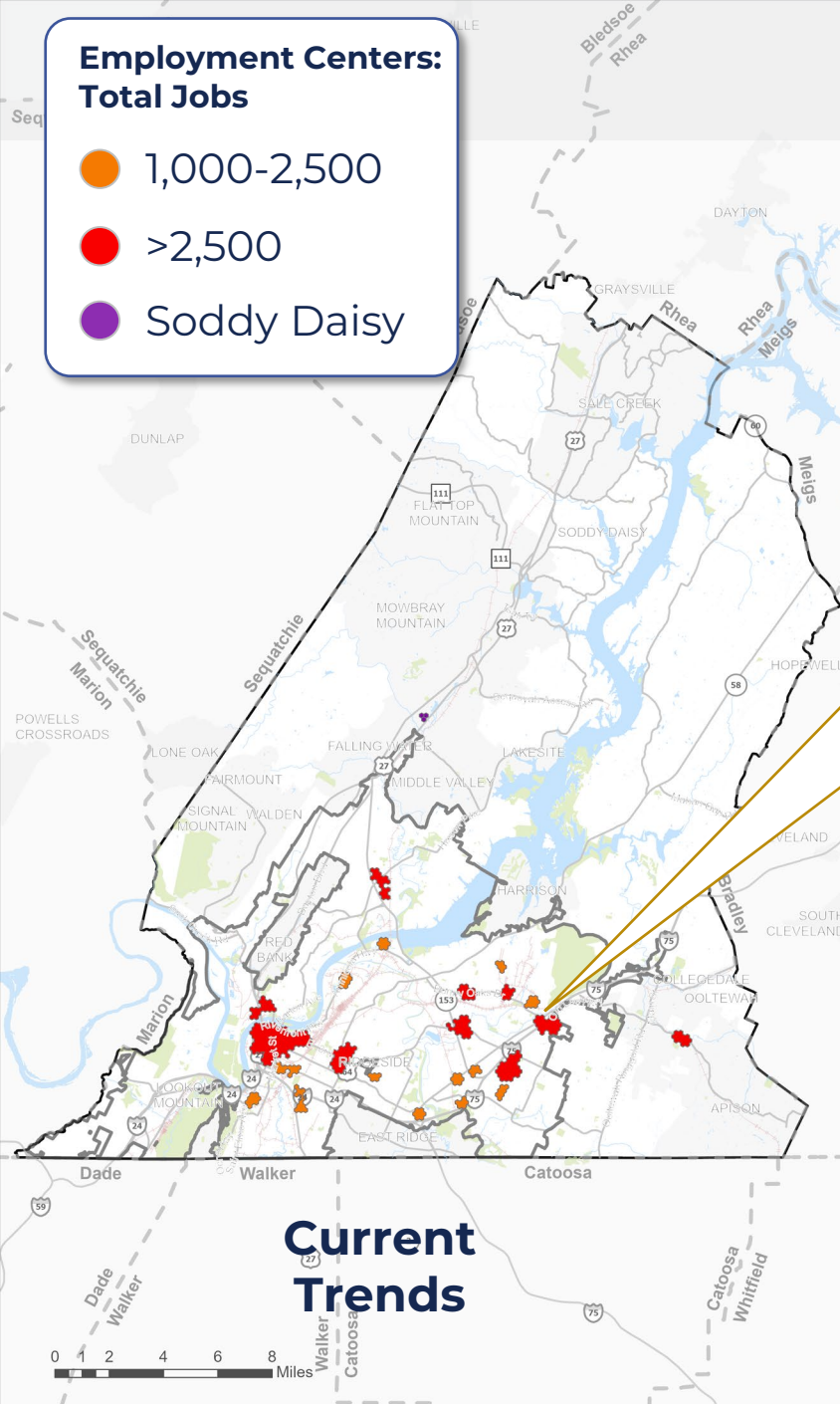
● 1,000-2,500

● >2,500

● Soddy Daisy



**Hotspot Analysis:
Concentrations of jobs
(existing + future) that are
statistically significant.**

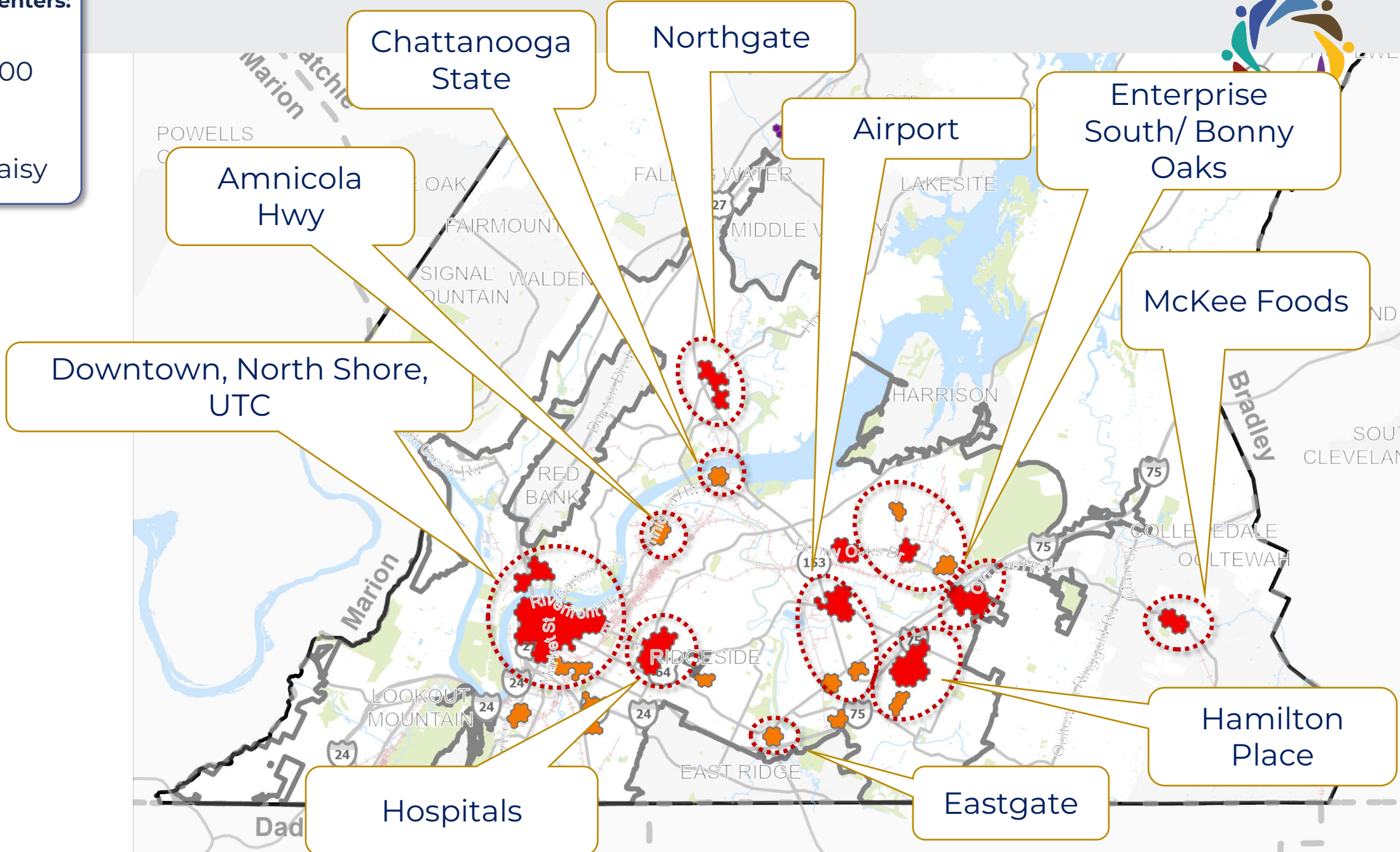


**Employment Centers:
Total Jobs**

● 1,000-2,500

● >2,500

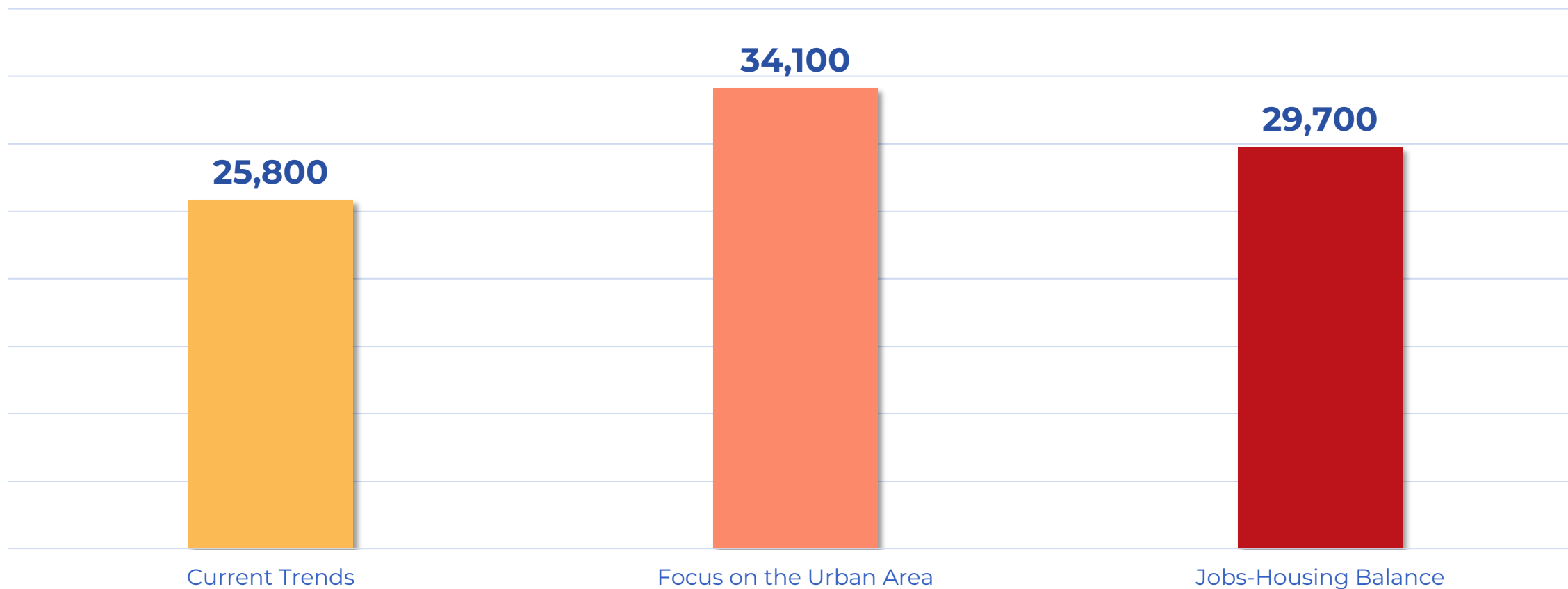
● Soddy Daisy





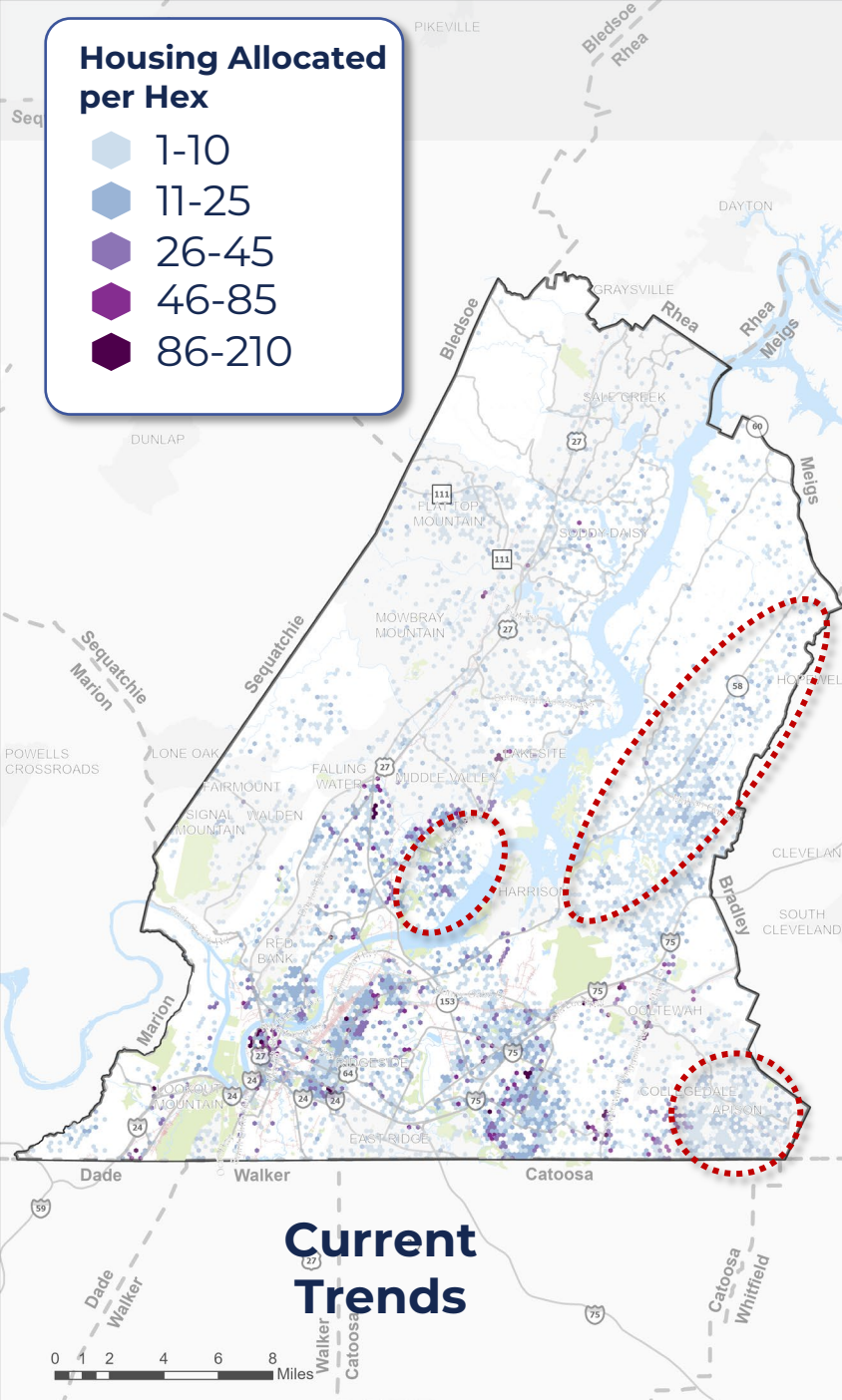
Goal: Economy

Indicator: New Homes within 2 Miles of an Employment Center

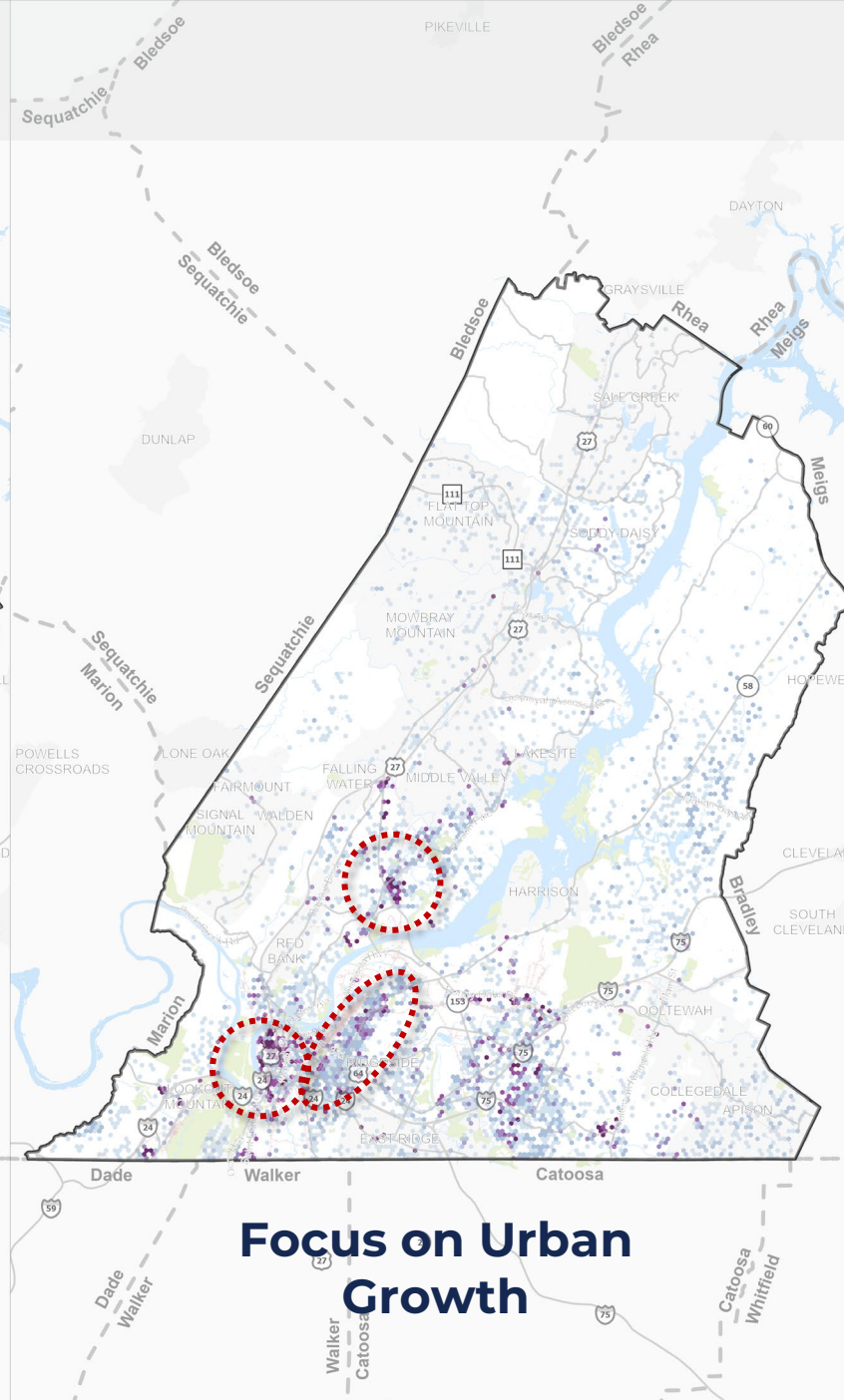


Housing Allocated per Hex

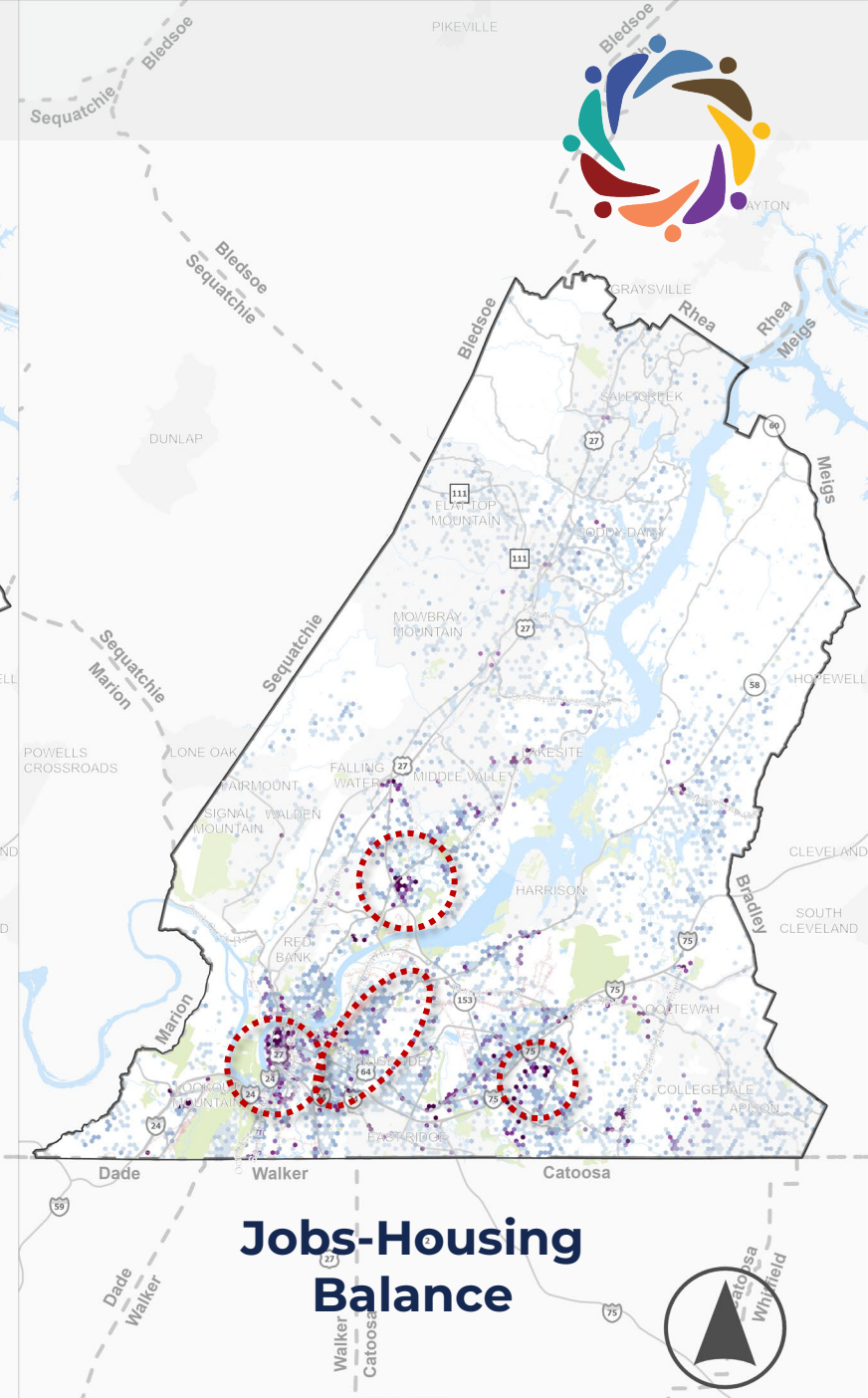
- 1-10
- 11-25
- 26-45
- 46-85
- 86-210



Current Trends



Focus on Urban Growth



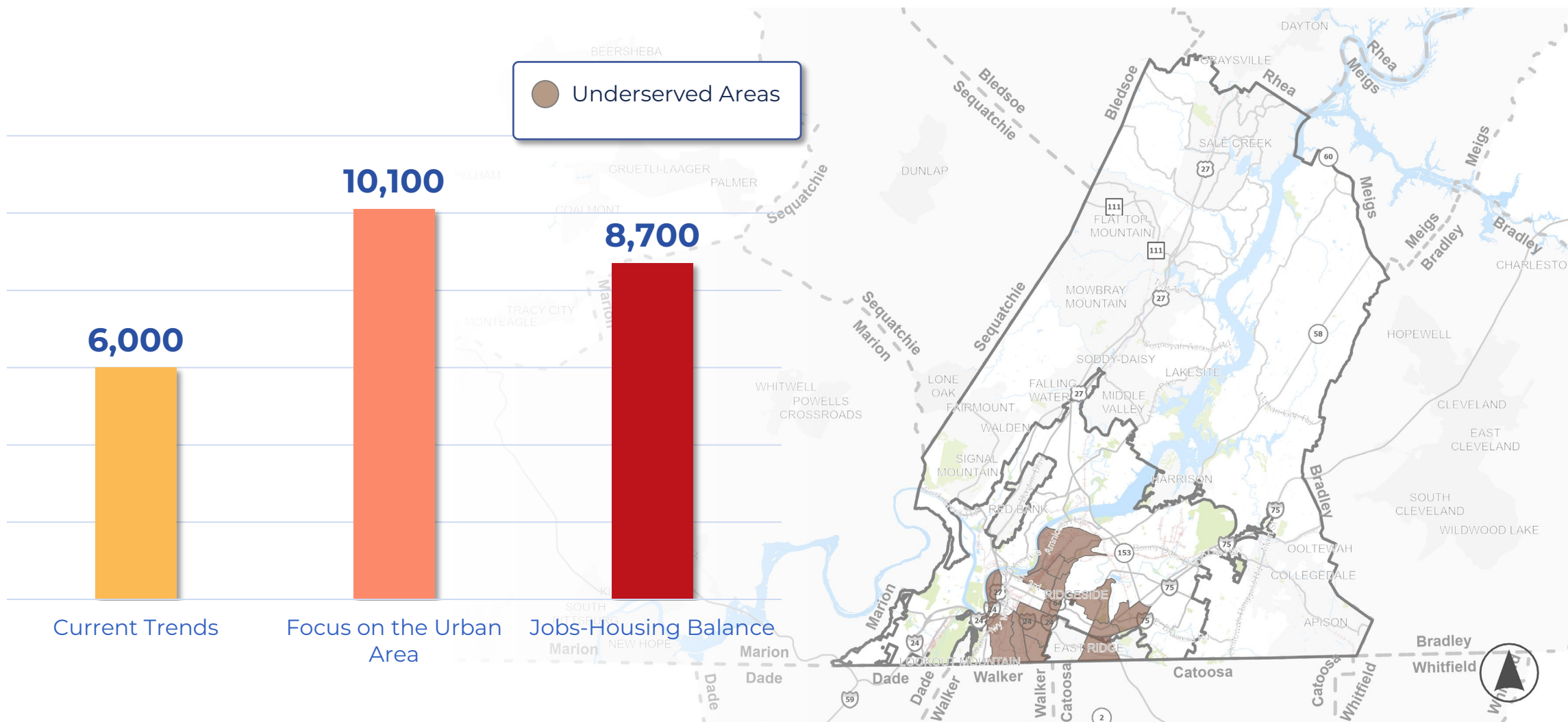
Jobs-Housing Balance





Goal: Equity

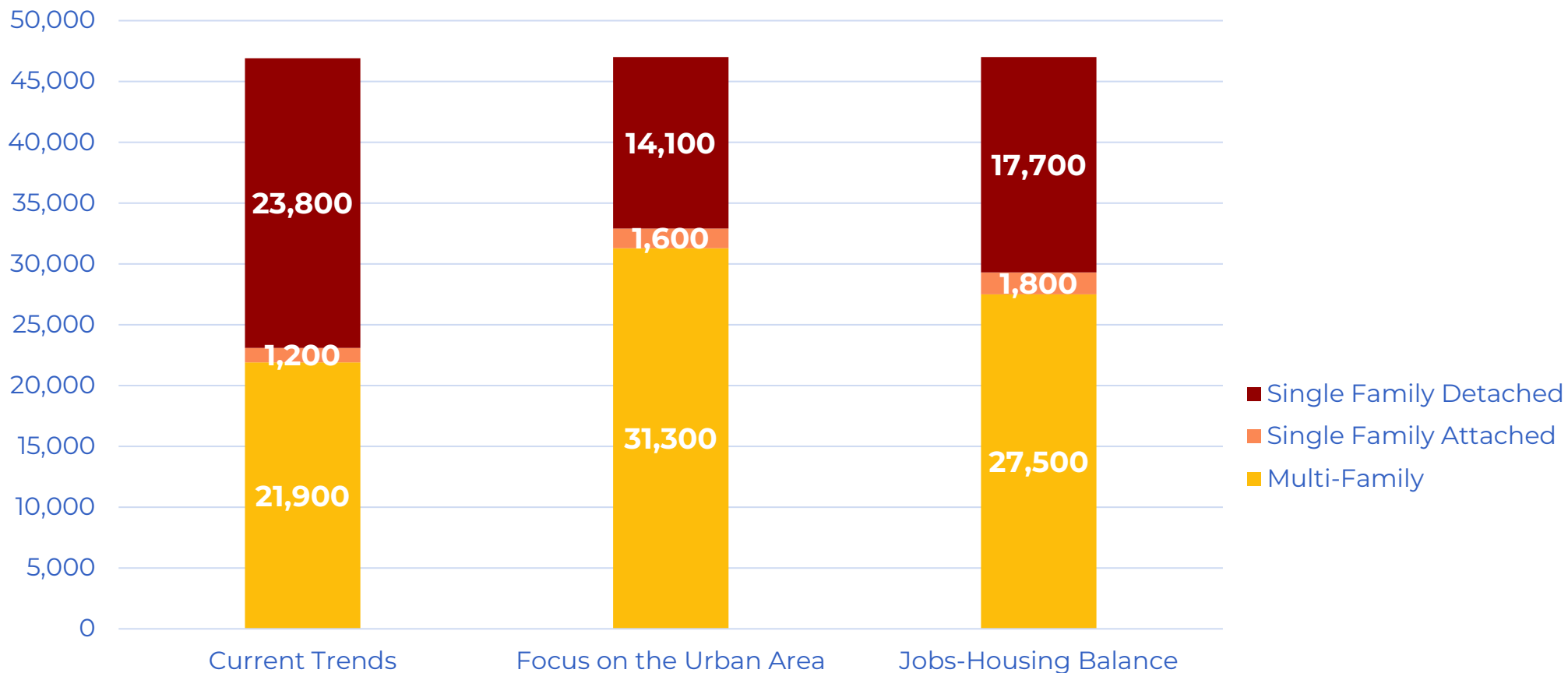
Indicator: New Homes within Historically Underserved Areas





Goal: Housing Diversity

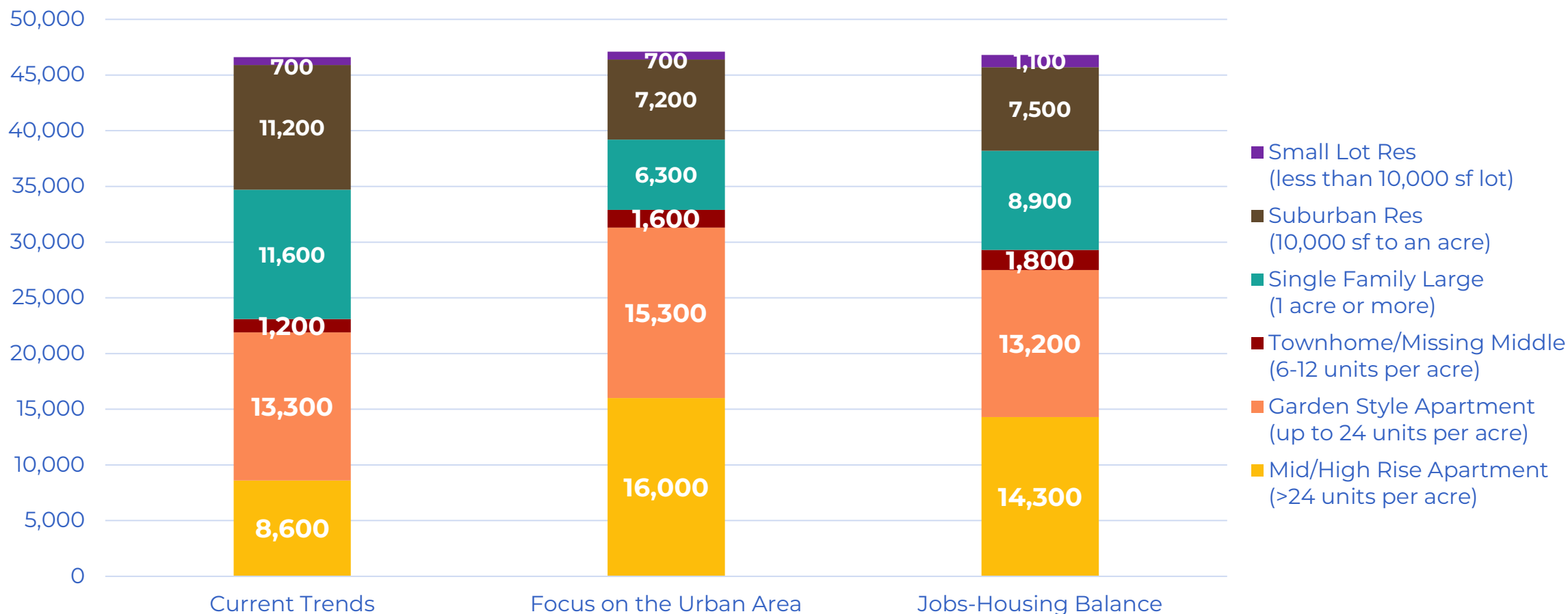
Indicator: New Homes by Type





Goal: Housing Diversity

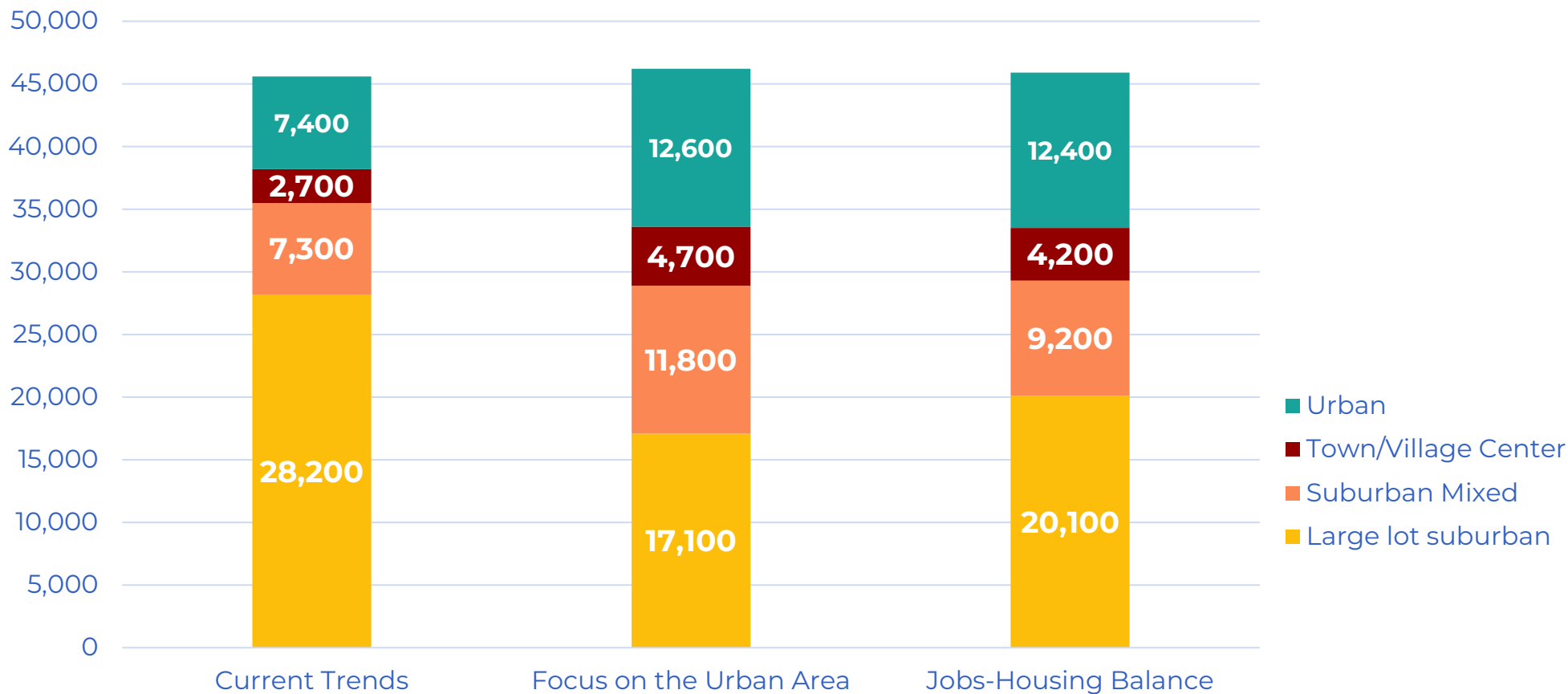
Indicator: New Homes by Lot Size





Goal: Housing Diversity

Indicator: New Homes by Character

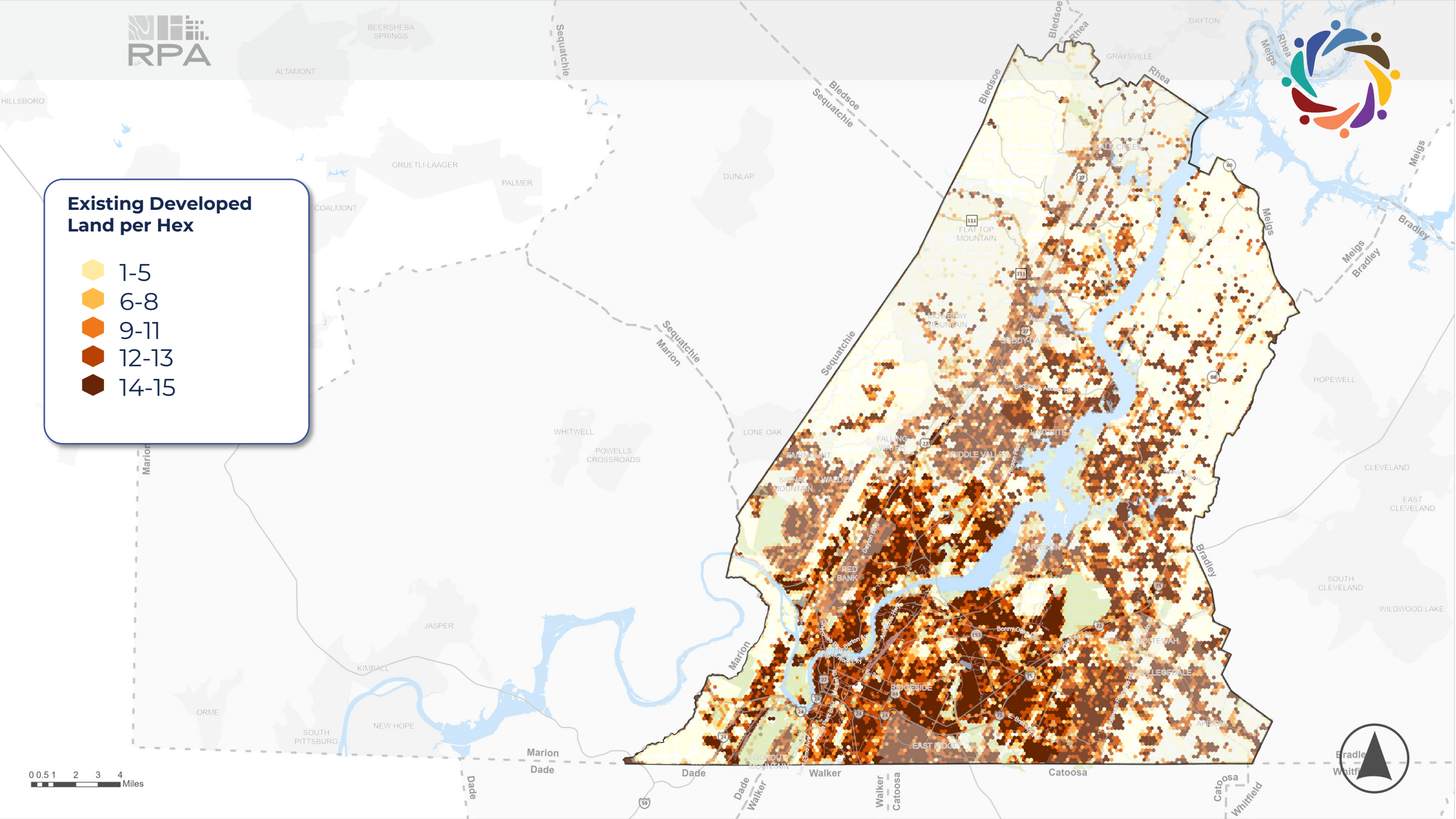




Existing Developed Land per Hex

- 1-5
- 6-8
- 9-11
- 12-13
- 14-15

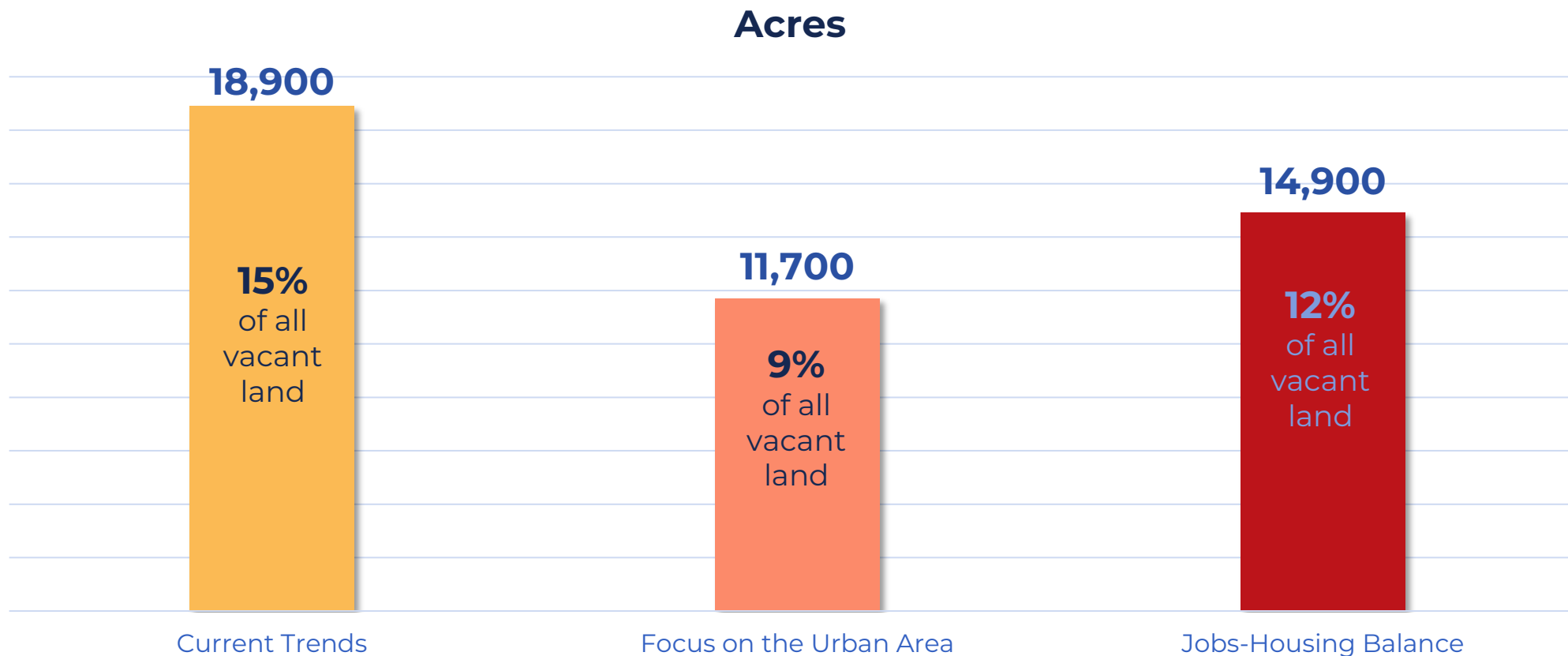
0.5 1 2 3 4 Miles





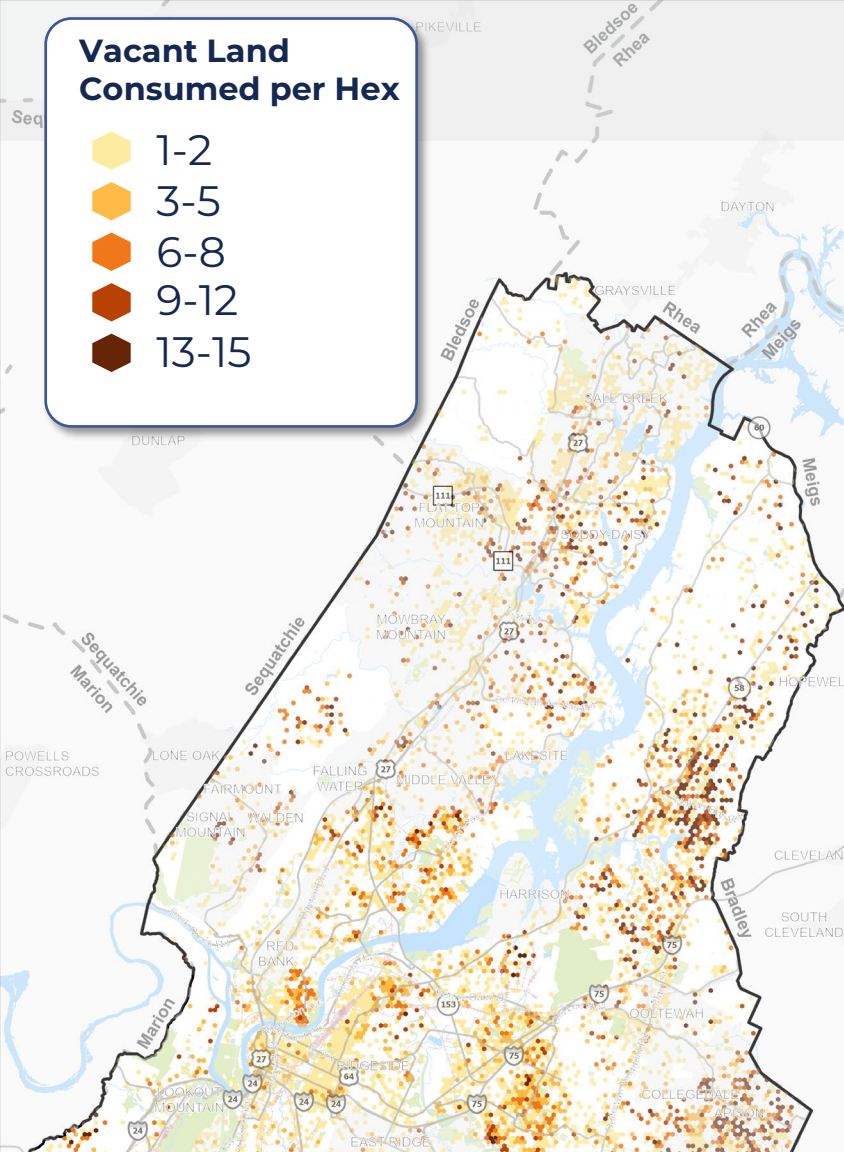
Goal: Land Use, Design and Development

Indicator: Vacant Land Consumed

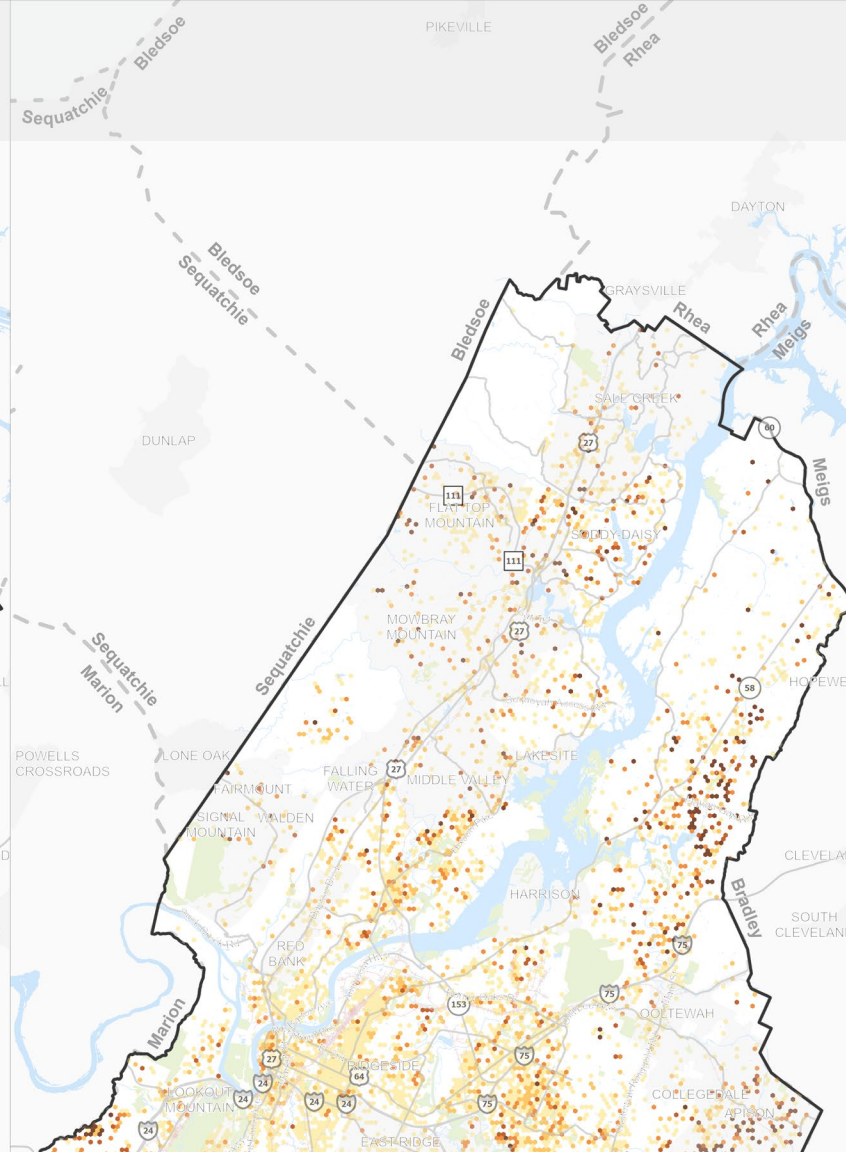


Vacant Land Consumed per Hex

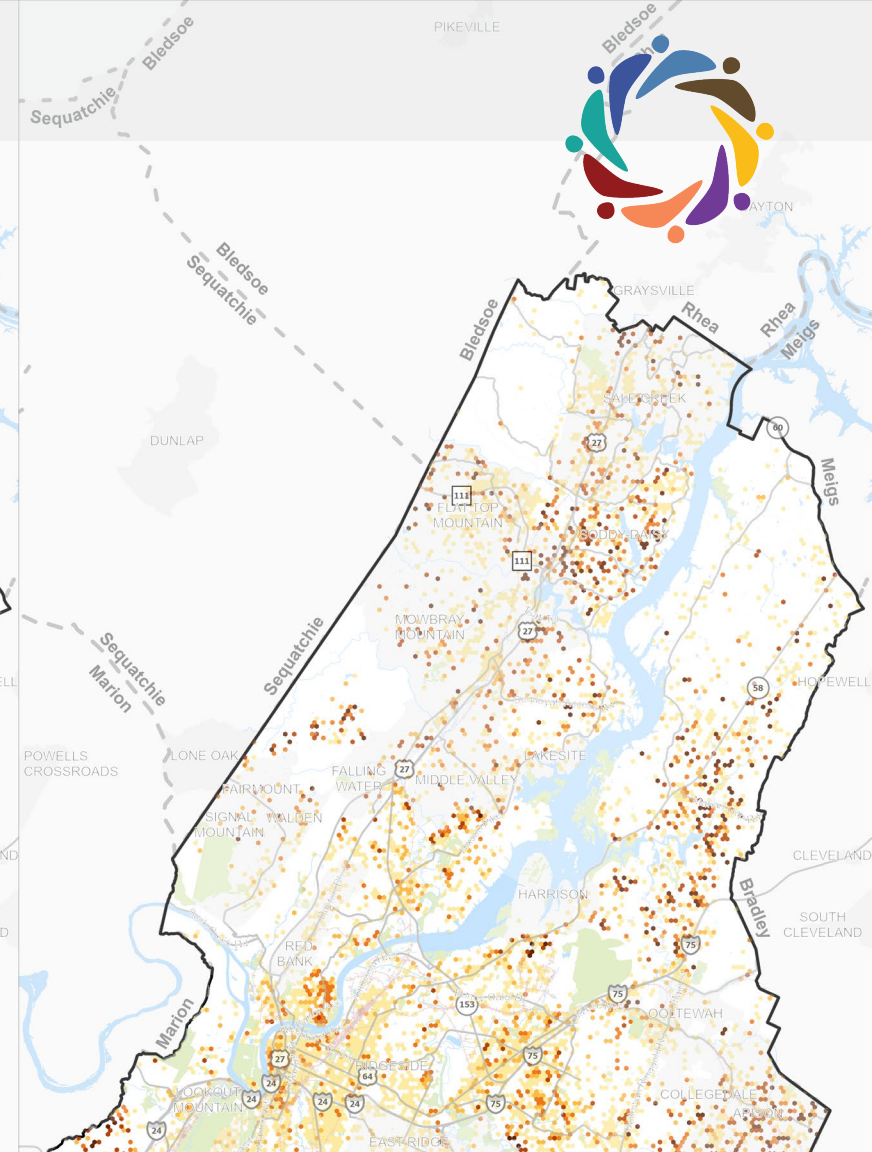
- 1-2
- 3-5
- 6-8
- 9-12
- 13-15



Current Trends



Focus on Urban Growth

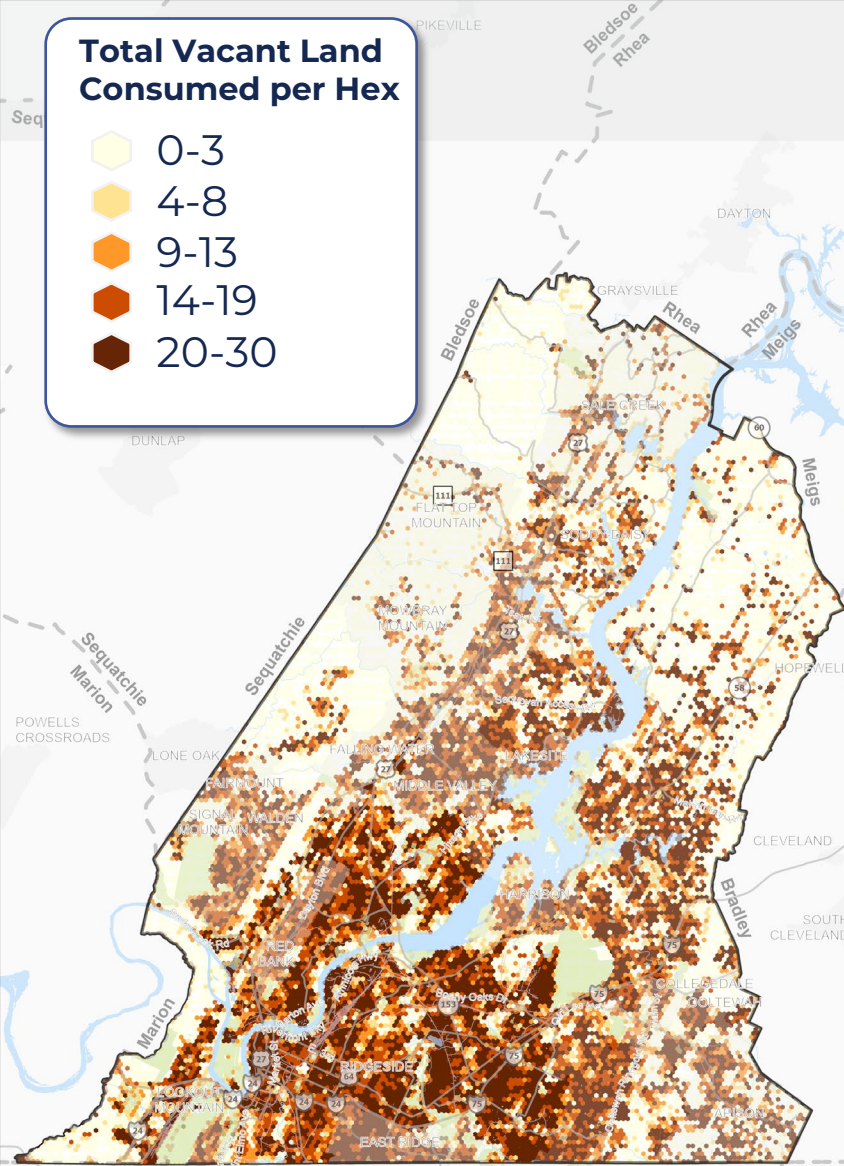


Jobs-Housing Balance

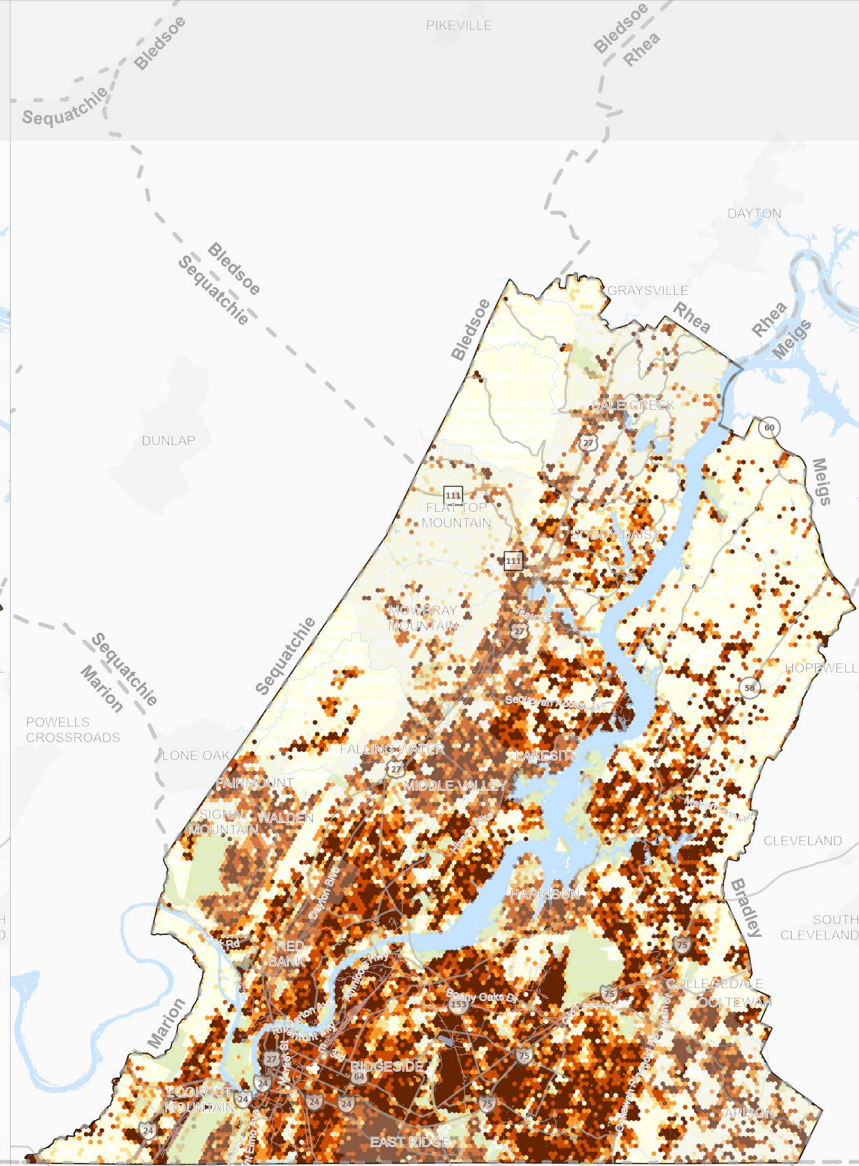


Total Vacant Land Consumed per Hex

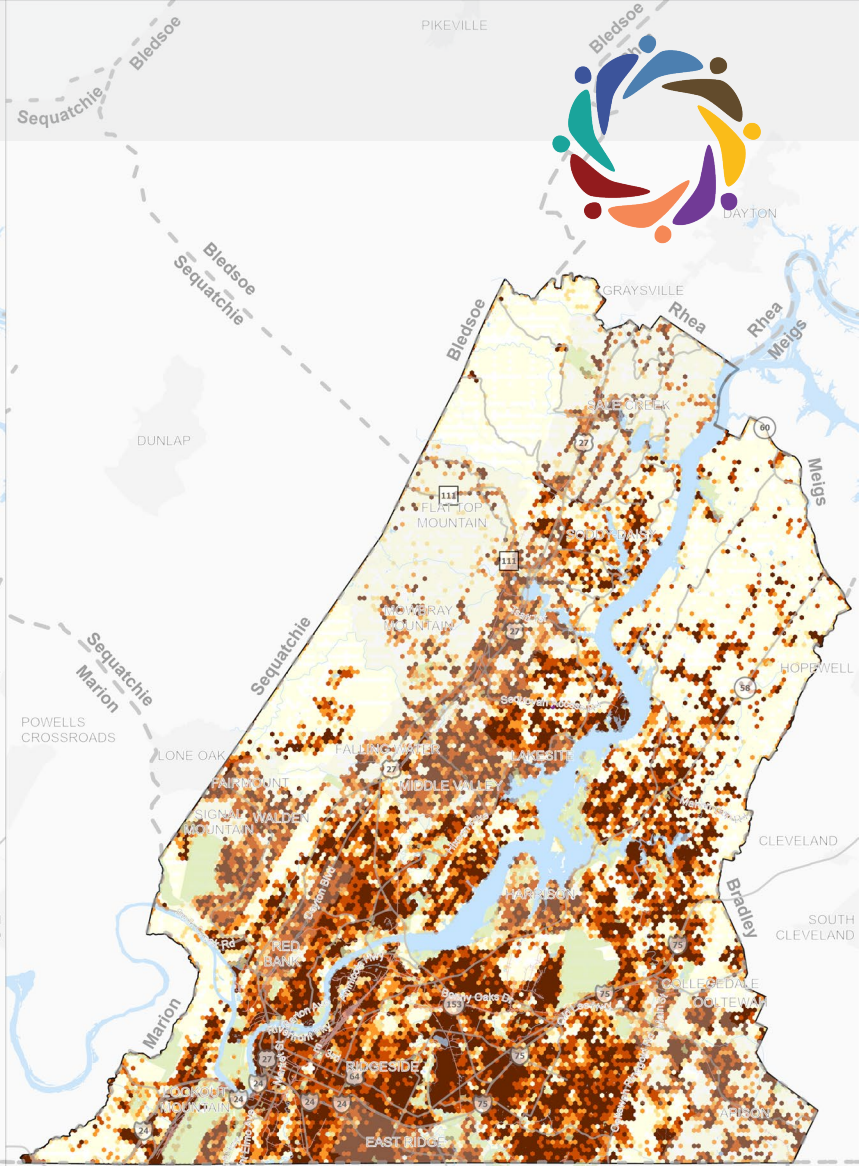
- 0-3
- 4-8
- 9-13
- 14-19
- 20-30



Current Trends



Focus on Urban Growth



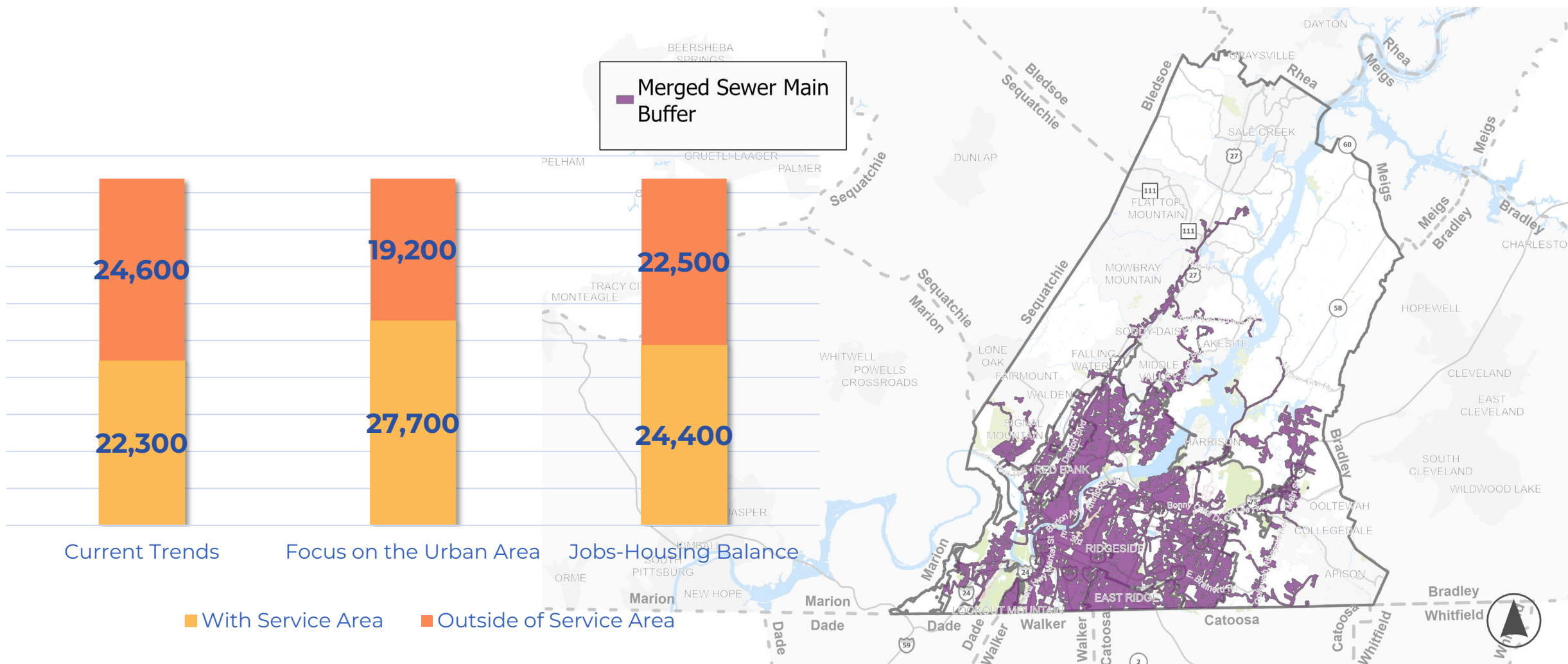
Jobs-Housing Balance





Goal: Land Use, Design and Development

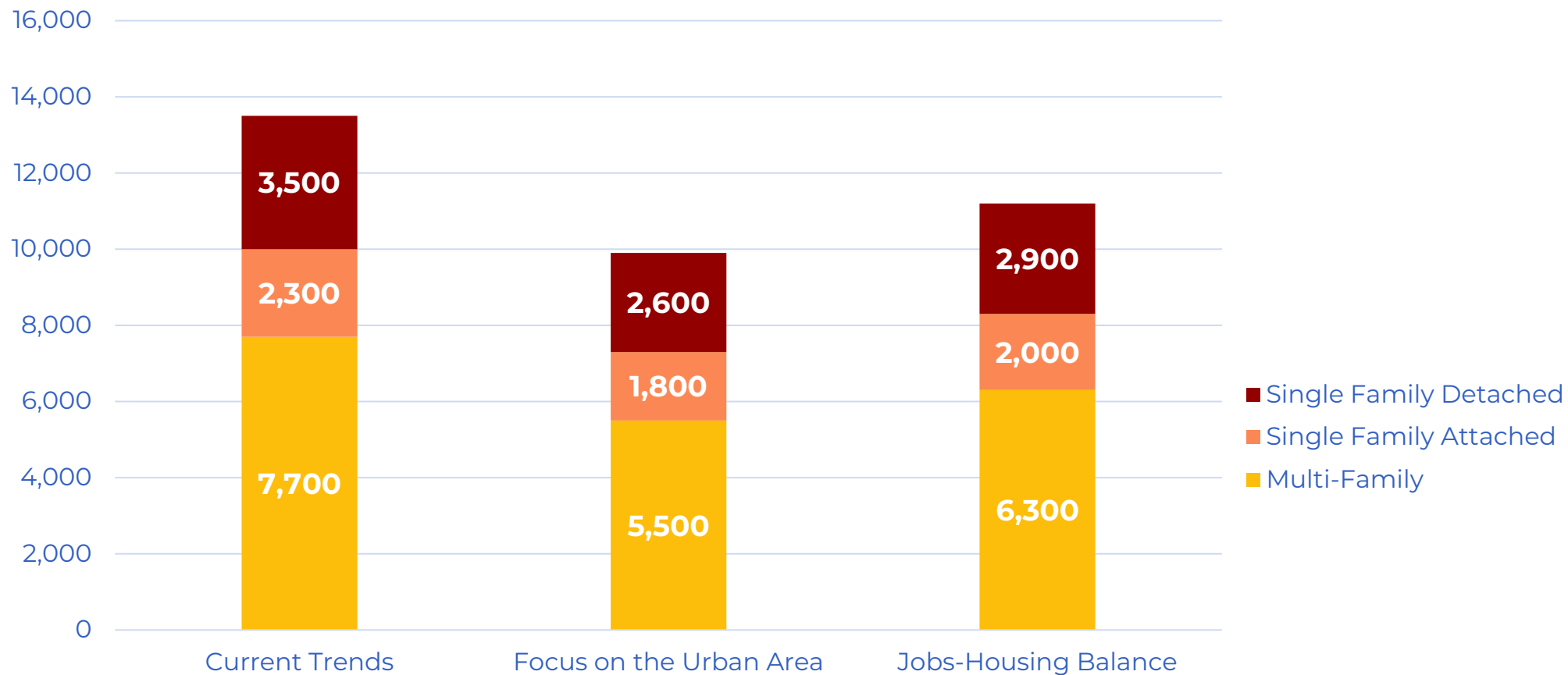
Indicator: New Housing Units within Existing Sewer Service Areas





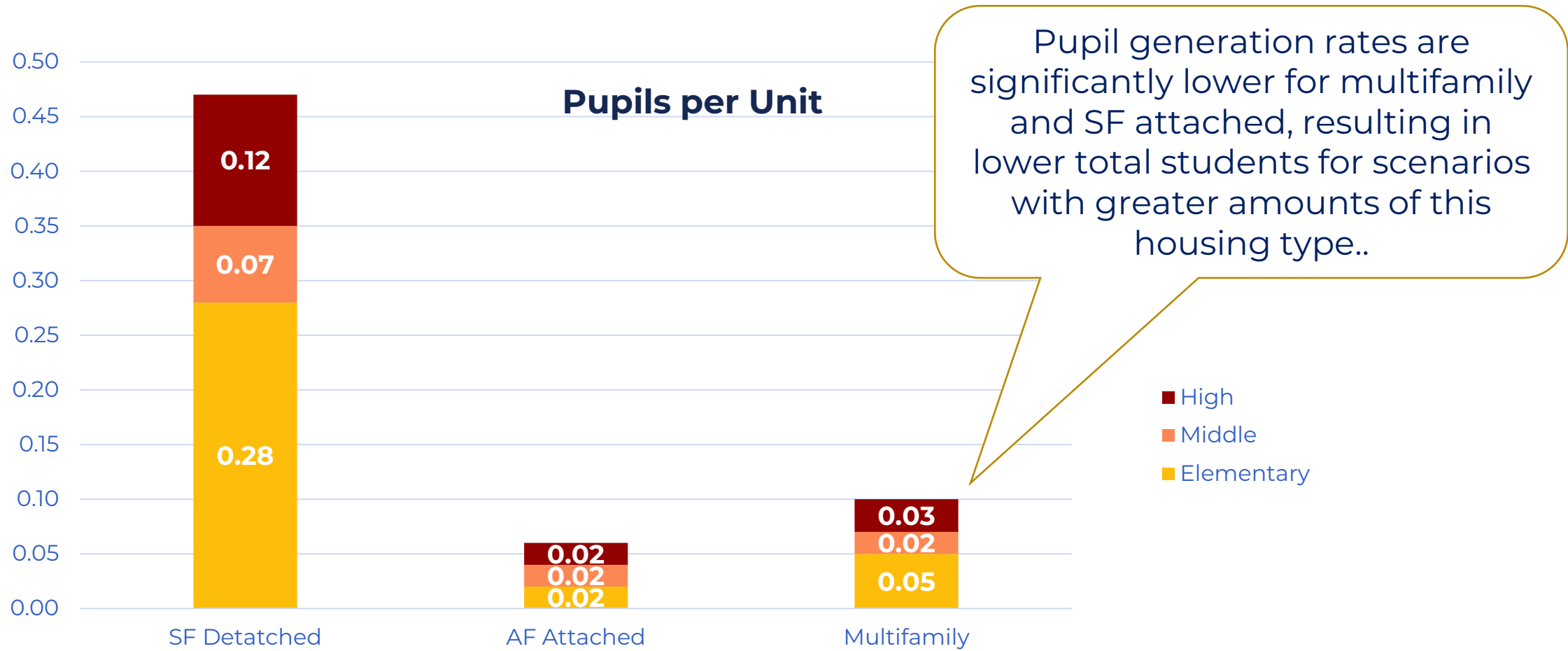
Goal: Land Use, Design and Development

Indicator: New Student Demand





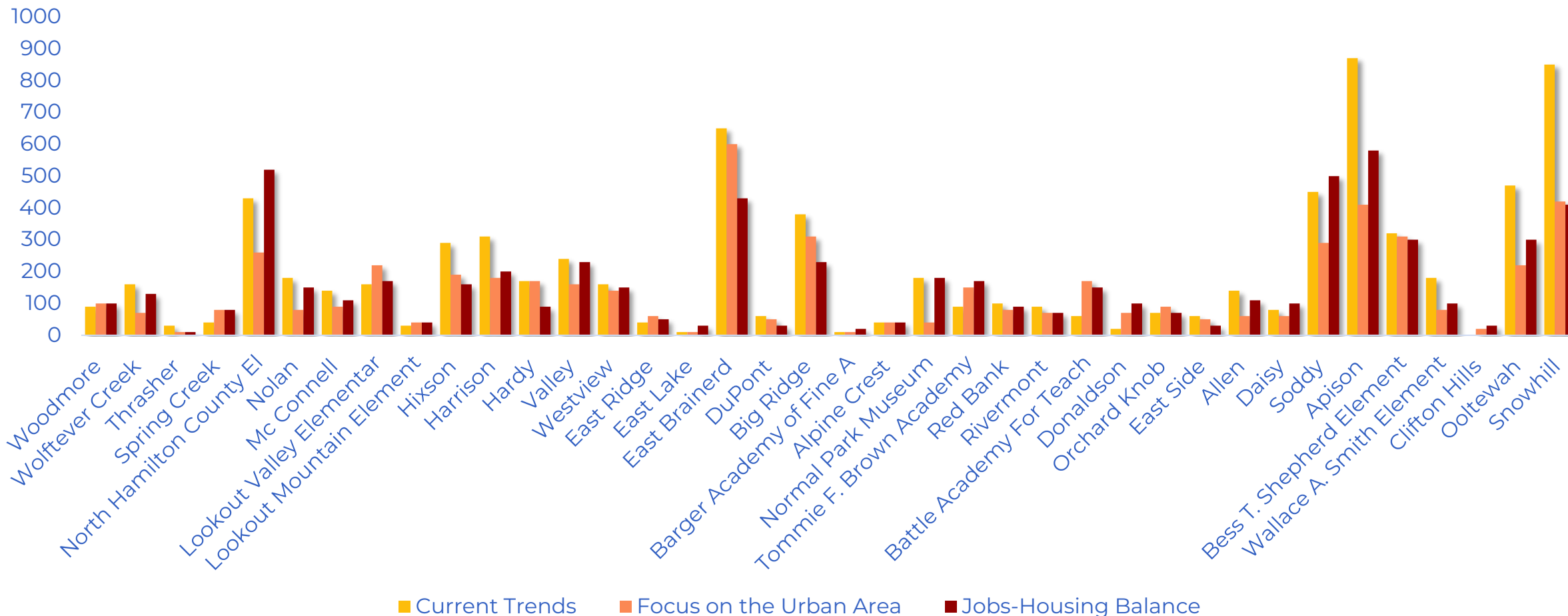
Pupil Generation Rates





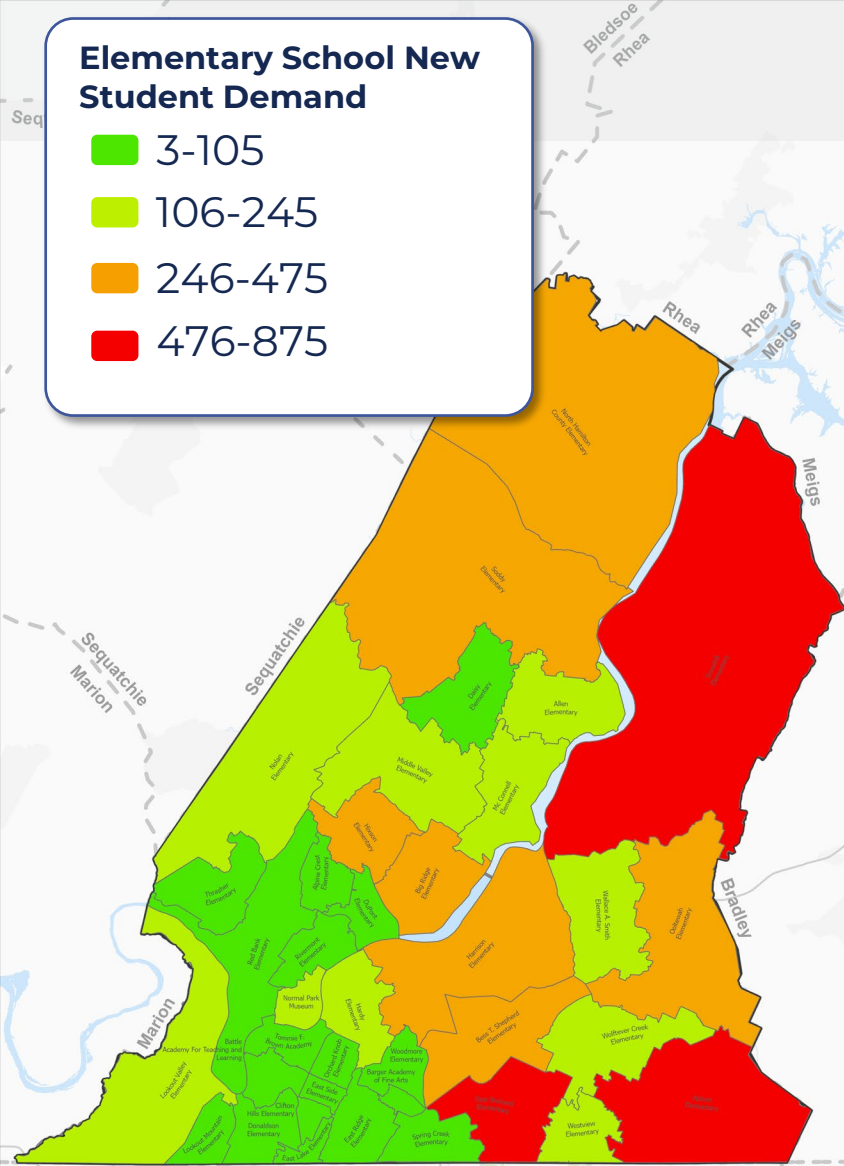
Goal: Land Use, Design and Development

Indicator: New Student Demand (Elementary)

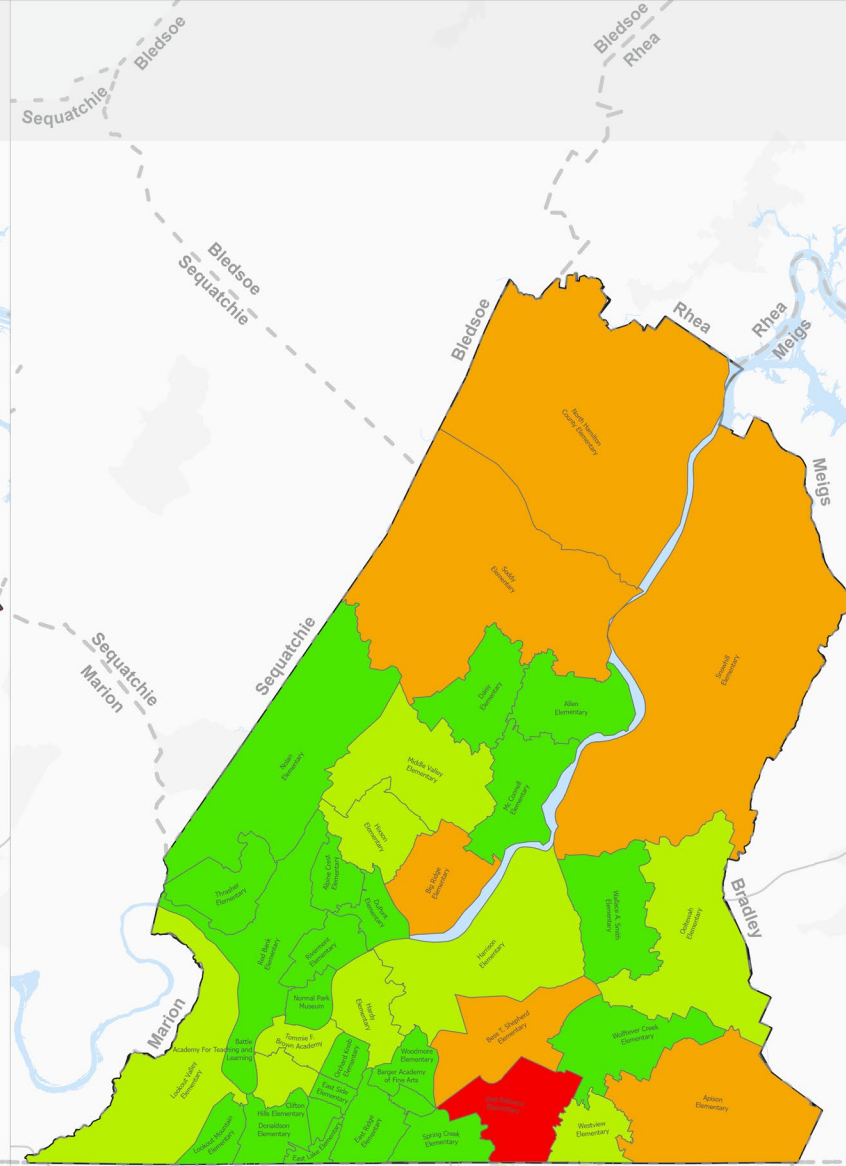


Elementary School New Student Demand

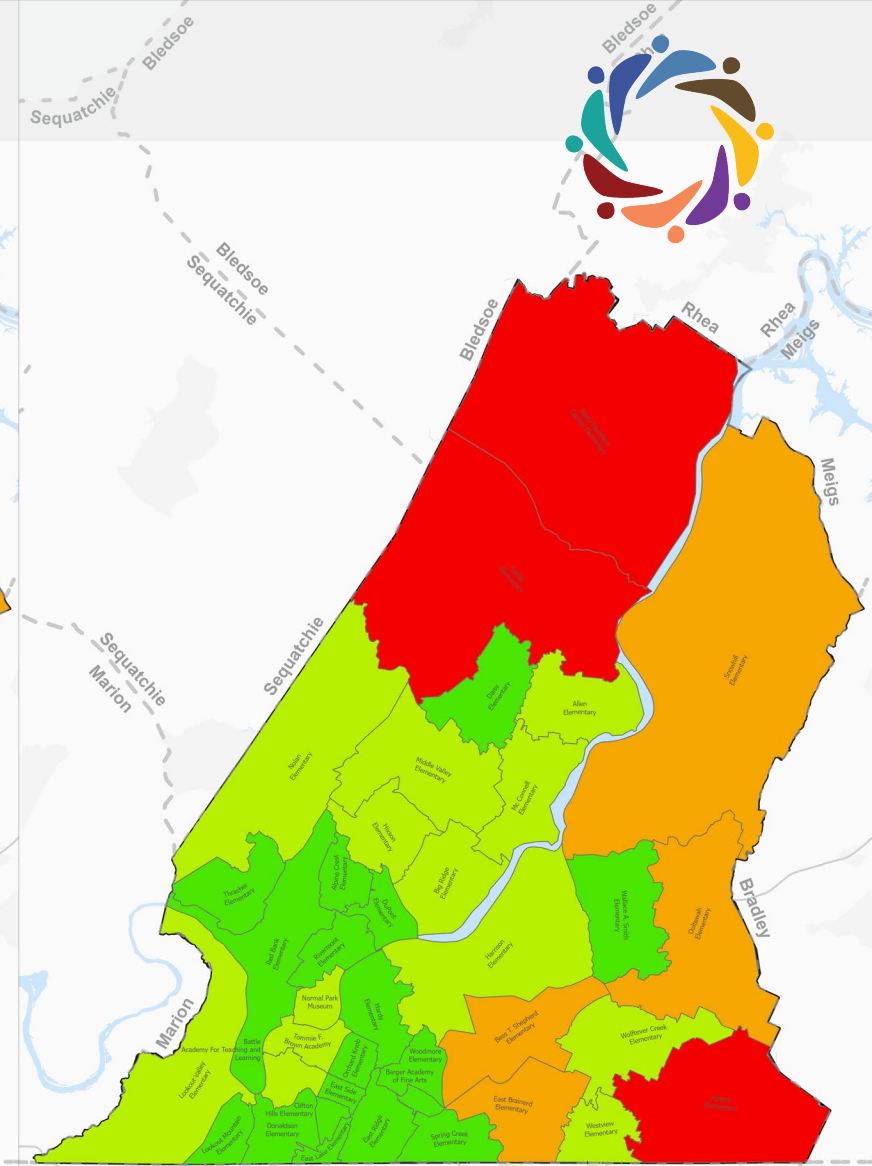
- 3-105
- 106-245
- 246-475
- 476-875



Current Trends



Focus on Urban Growth



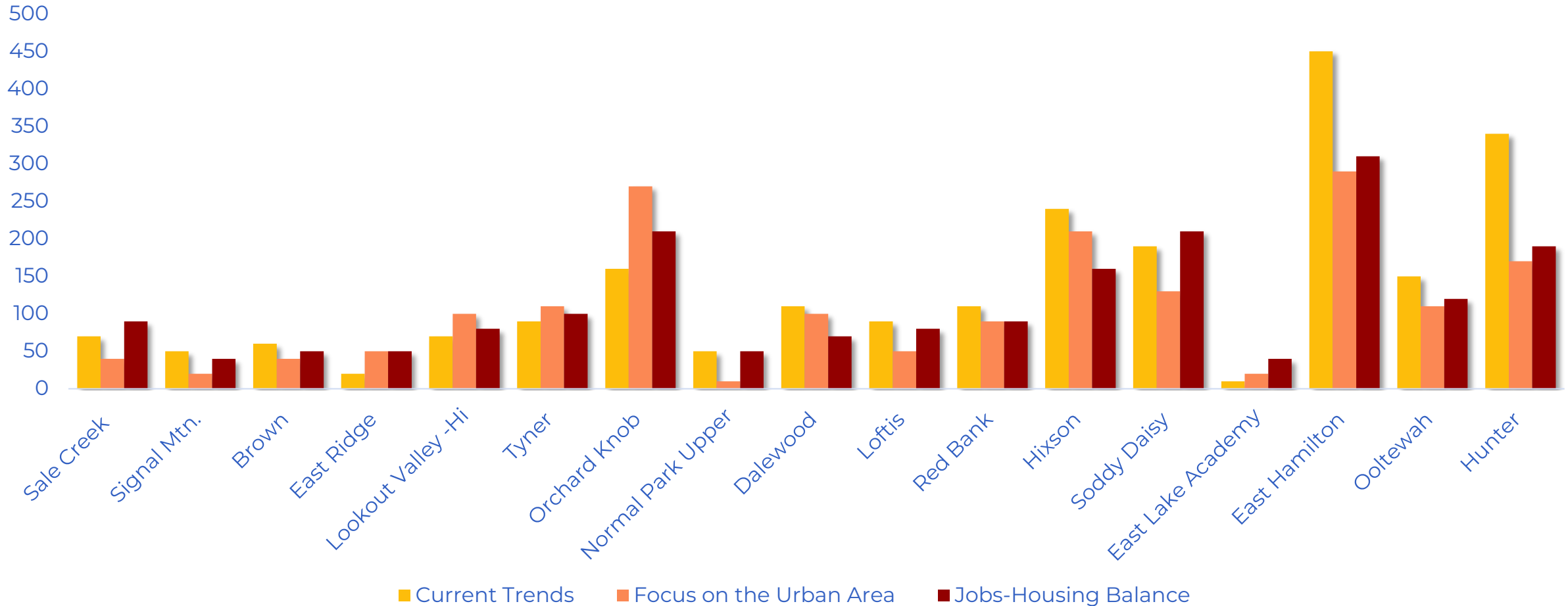
Jobs-Housing Balance





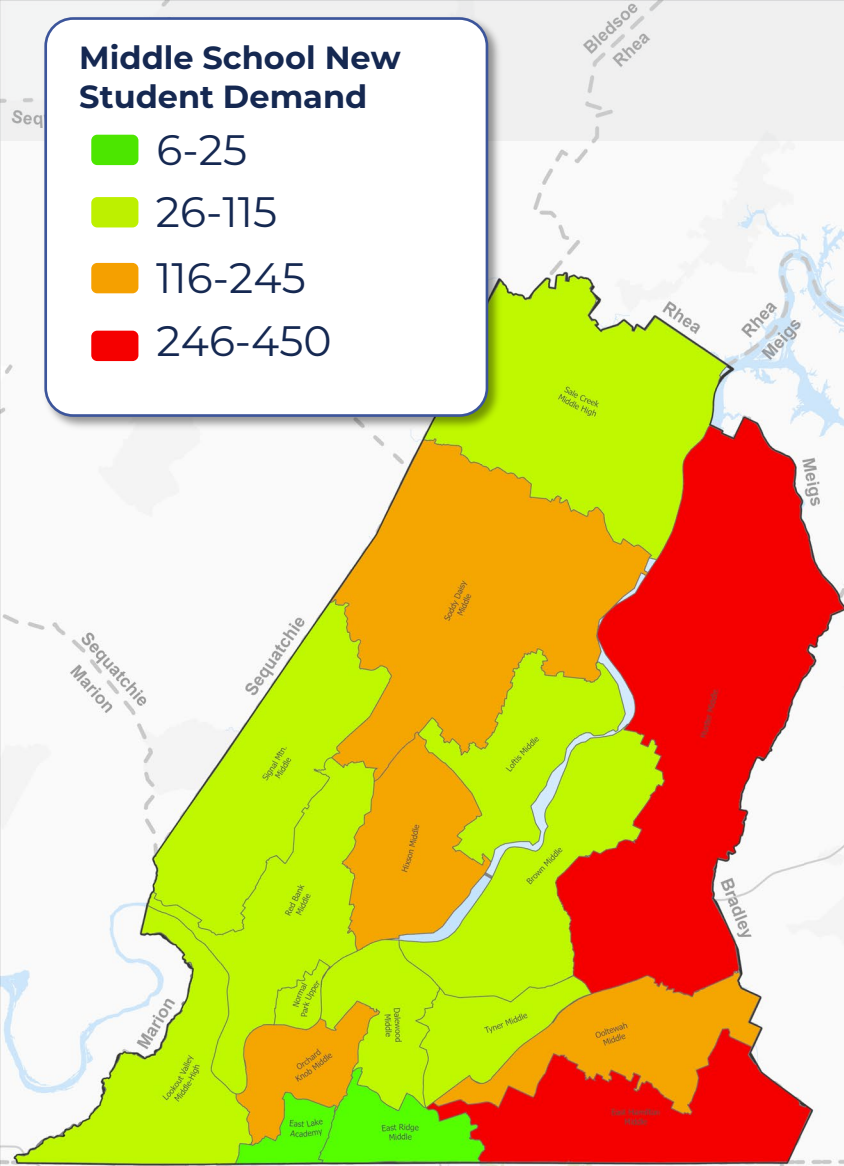
Goal: Land Use, Design and Development

Indicator: New Student Demand (Middle)

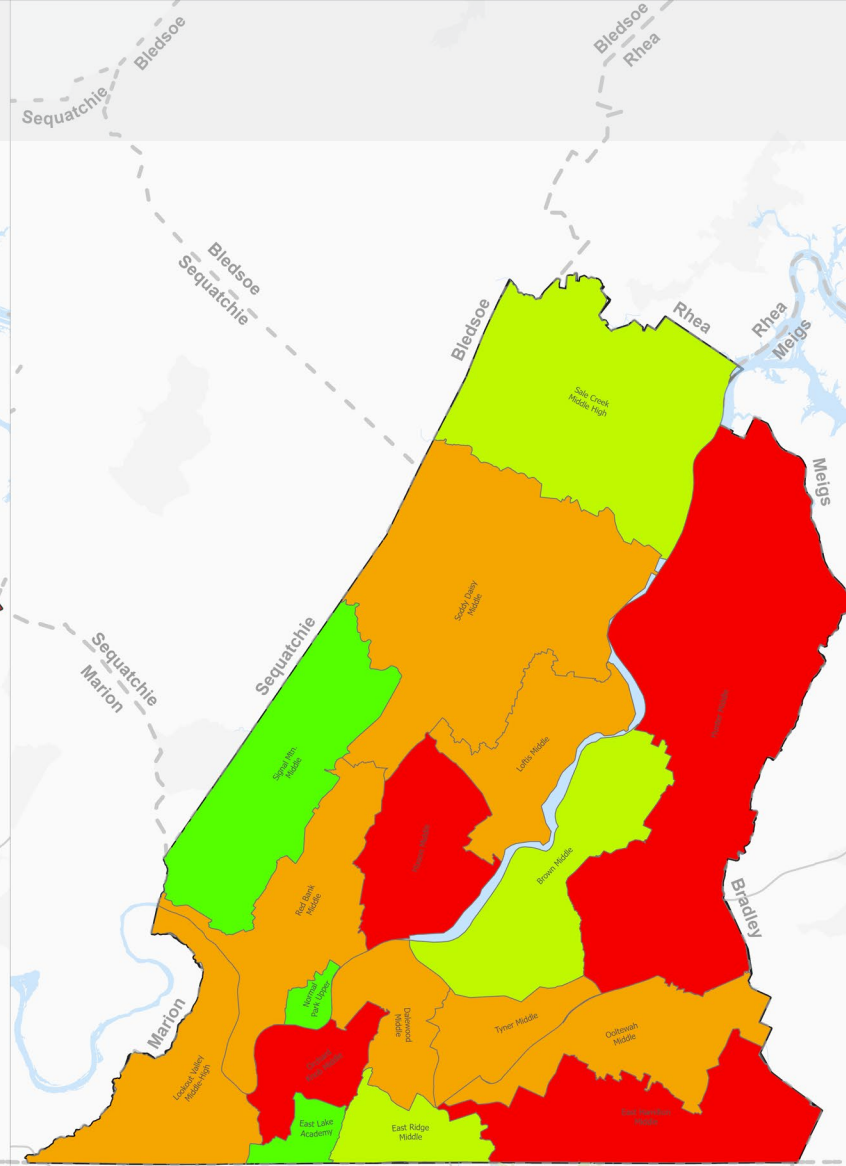


Middle School New Student Demand

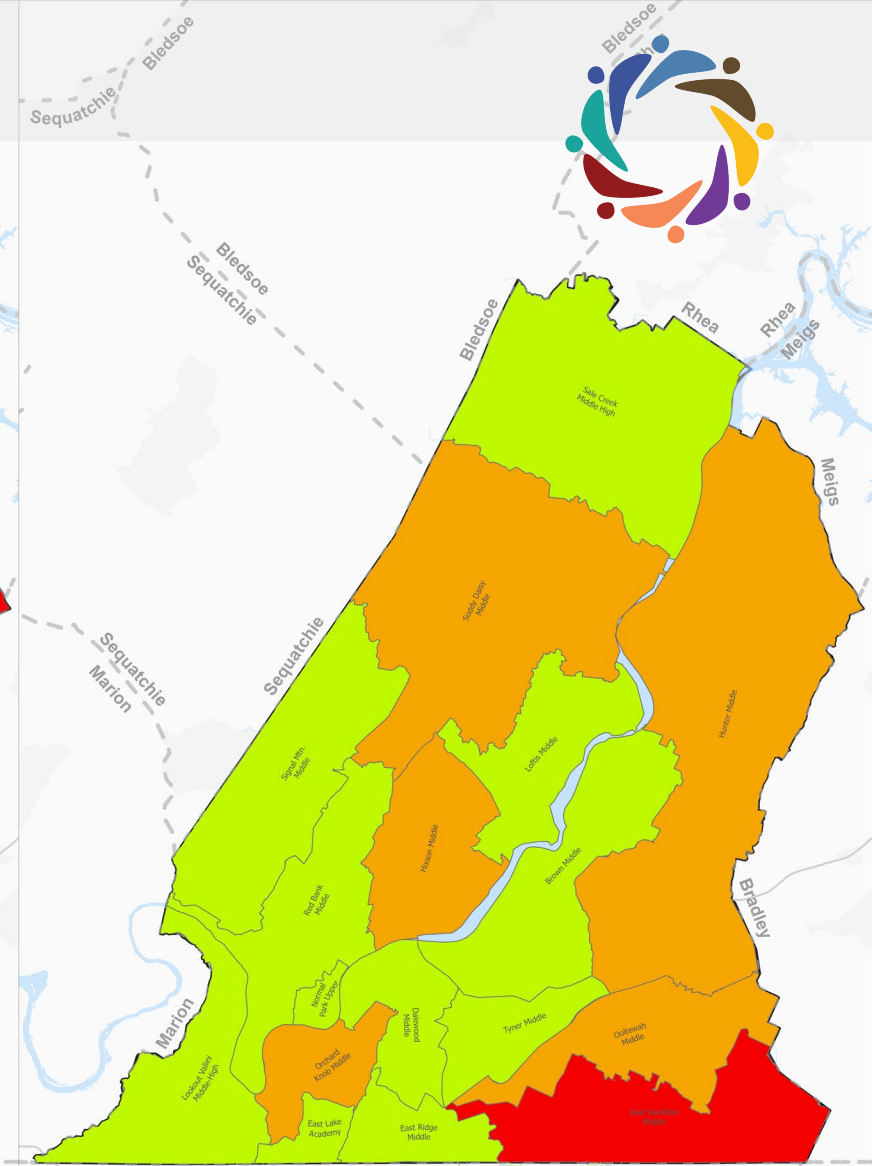
- 6-25
- 26-115
- 116-245
- 246-450



Current Trends



Focus on Urban Growth



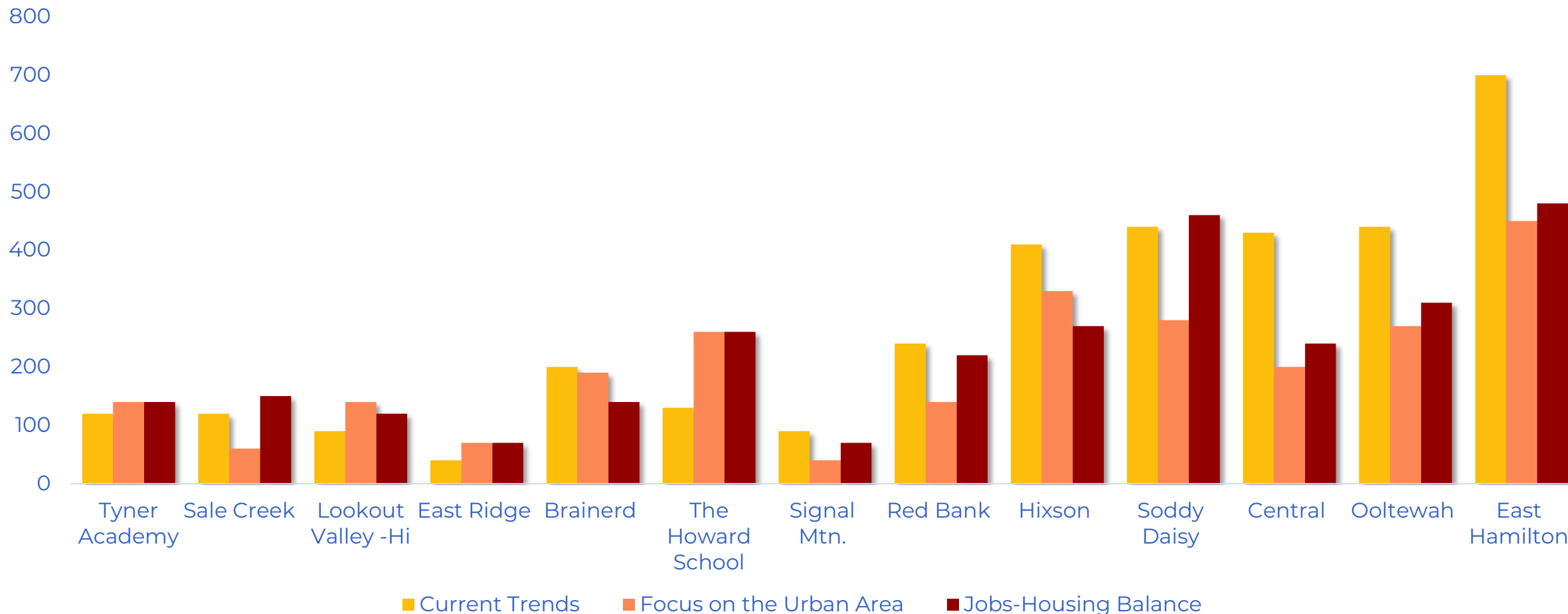
Jobs-Housing Balance





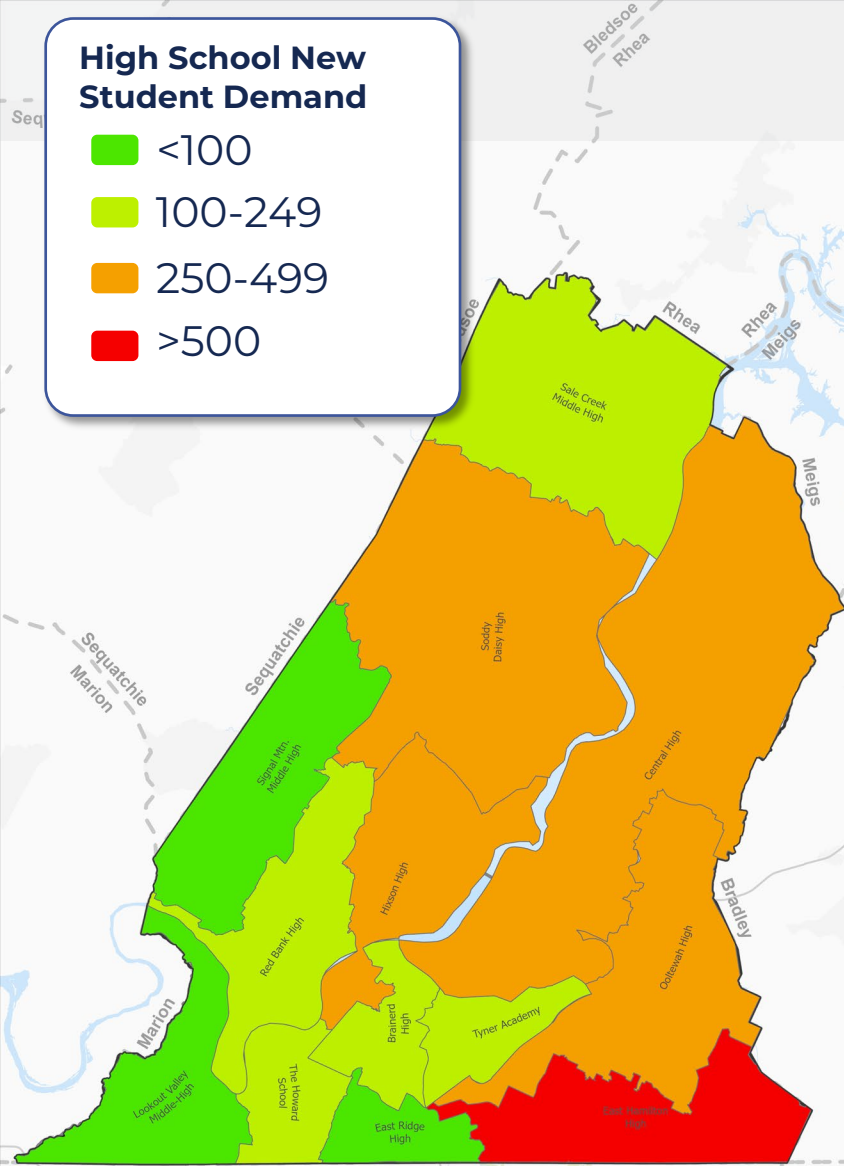
Goal: Land Use, Design and Development

Indicator: New Student Demand (High)

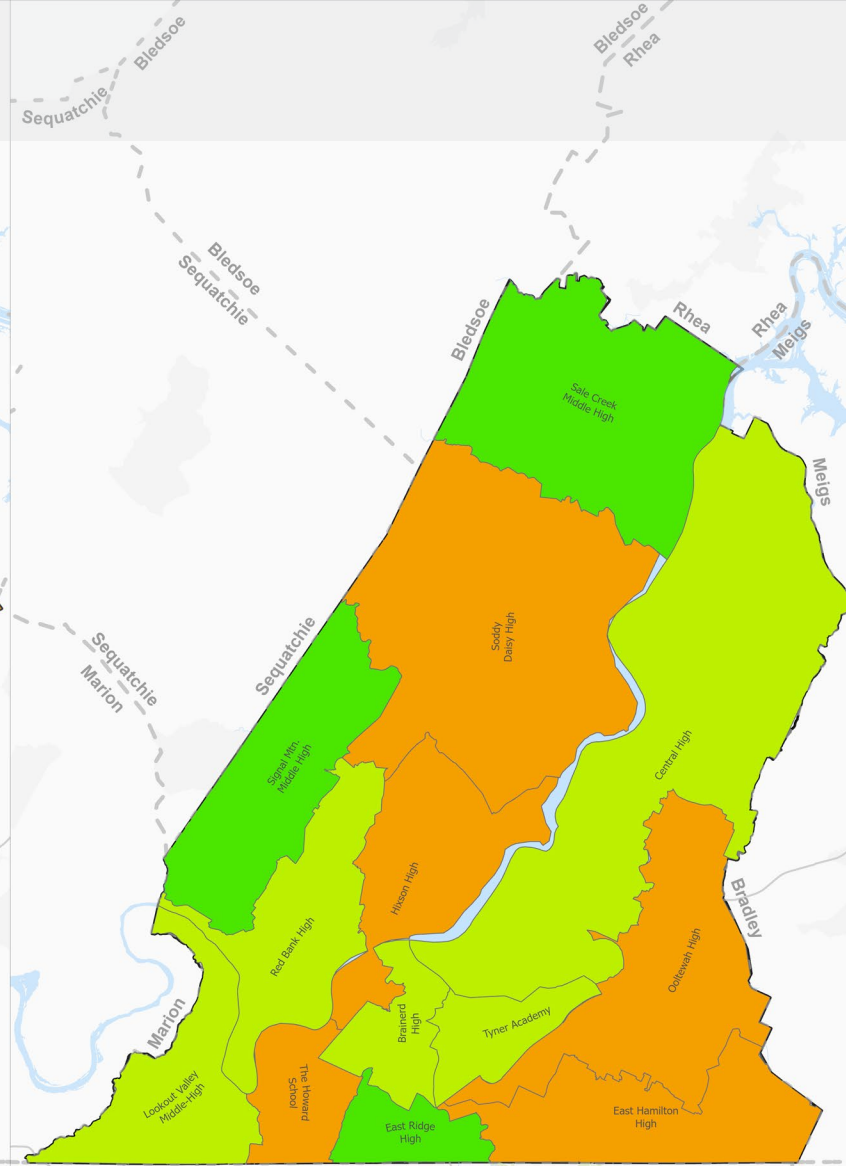


High School New Student Demand

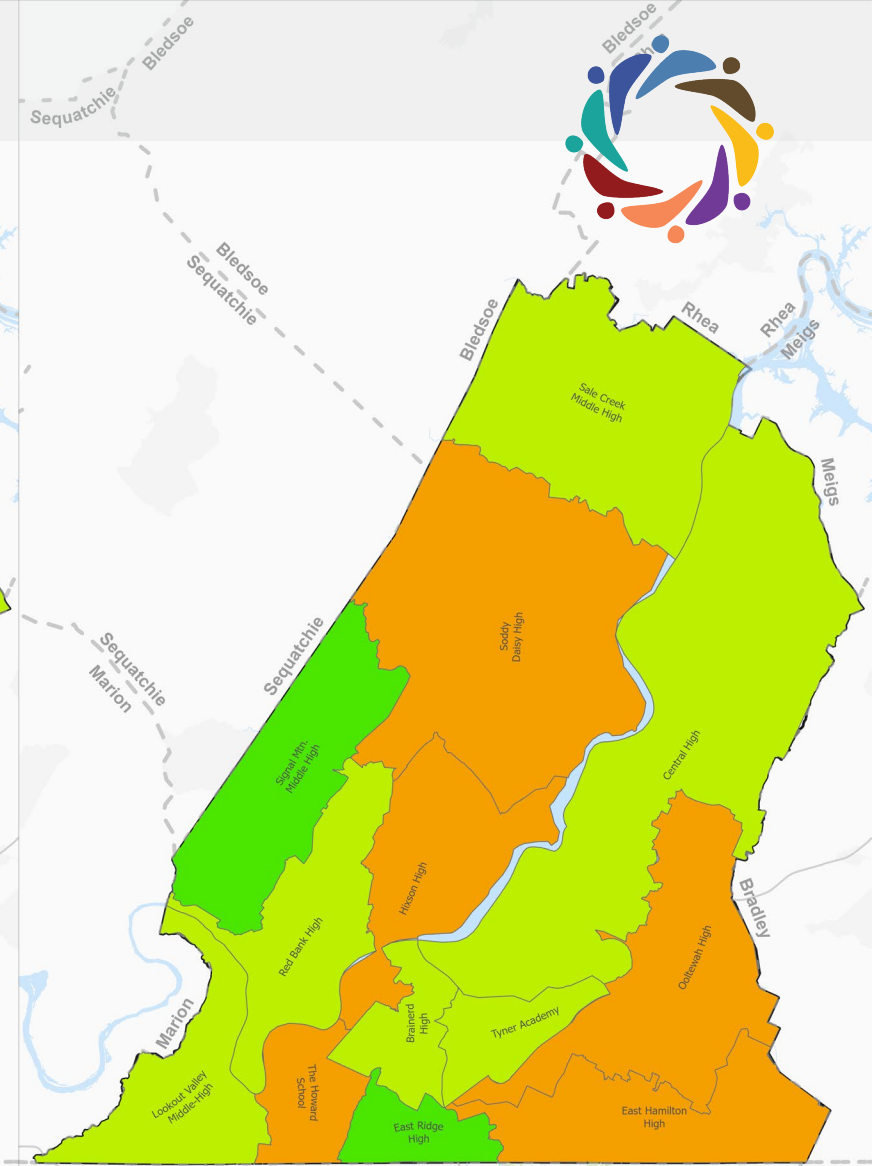
- <100
- 100-249
- 250-499
- >500



Current Trends



Focus on Urban Growth



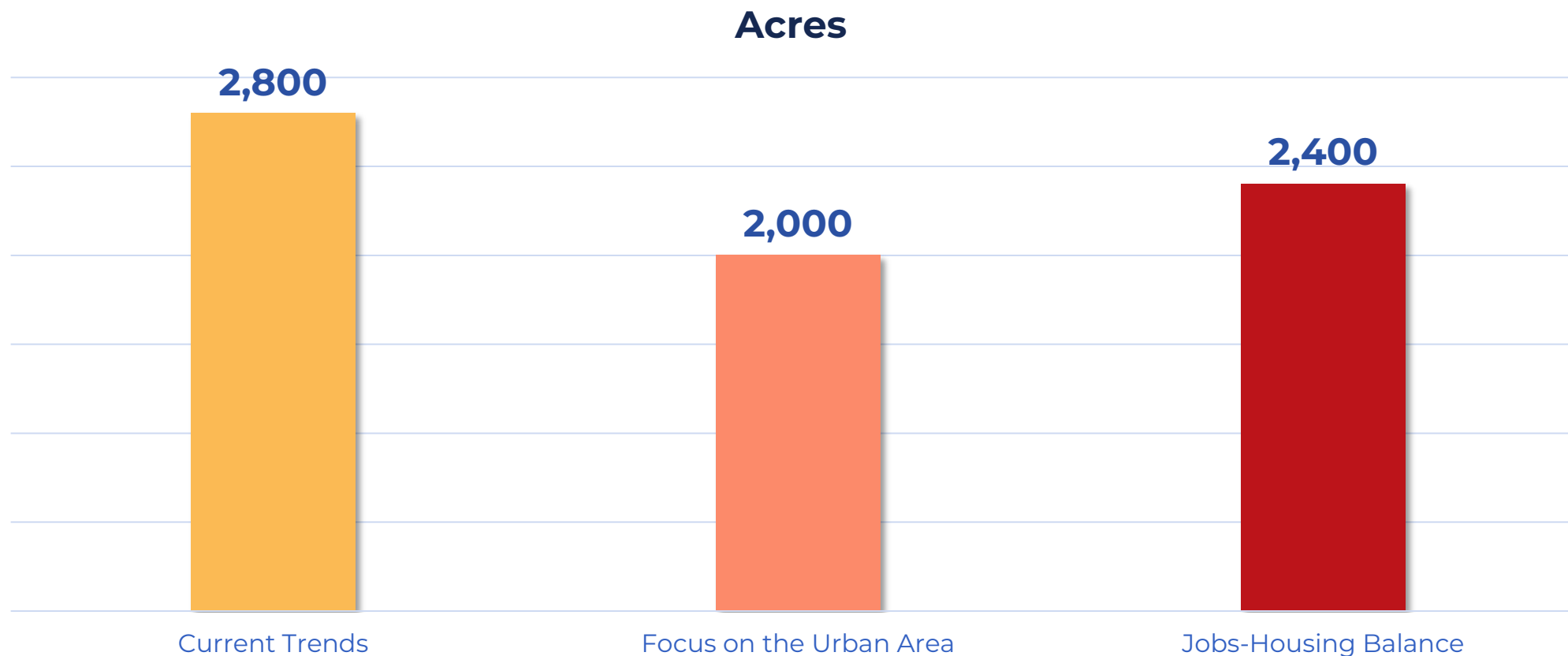
Jobs-Housing Balance





Goal: Natural Resources

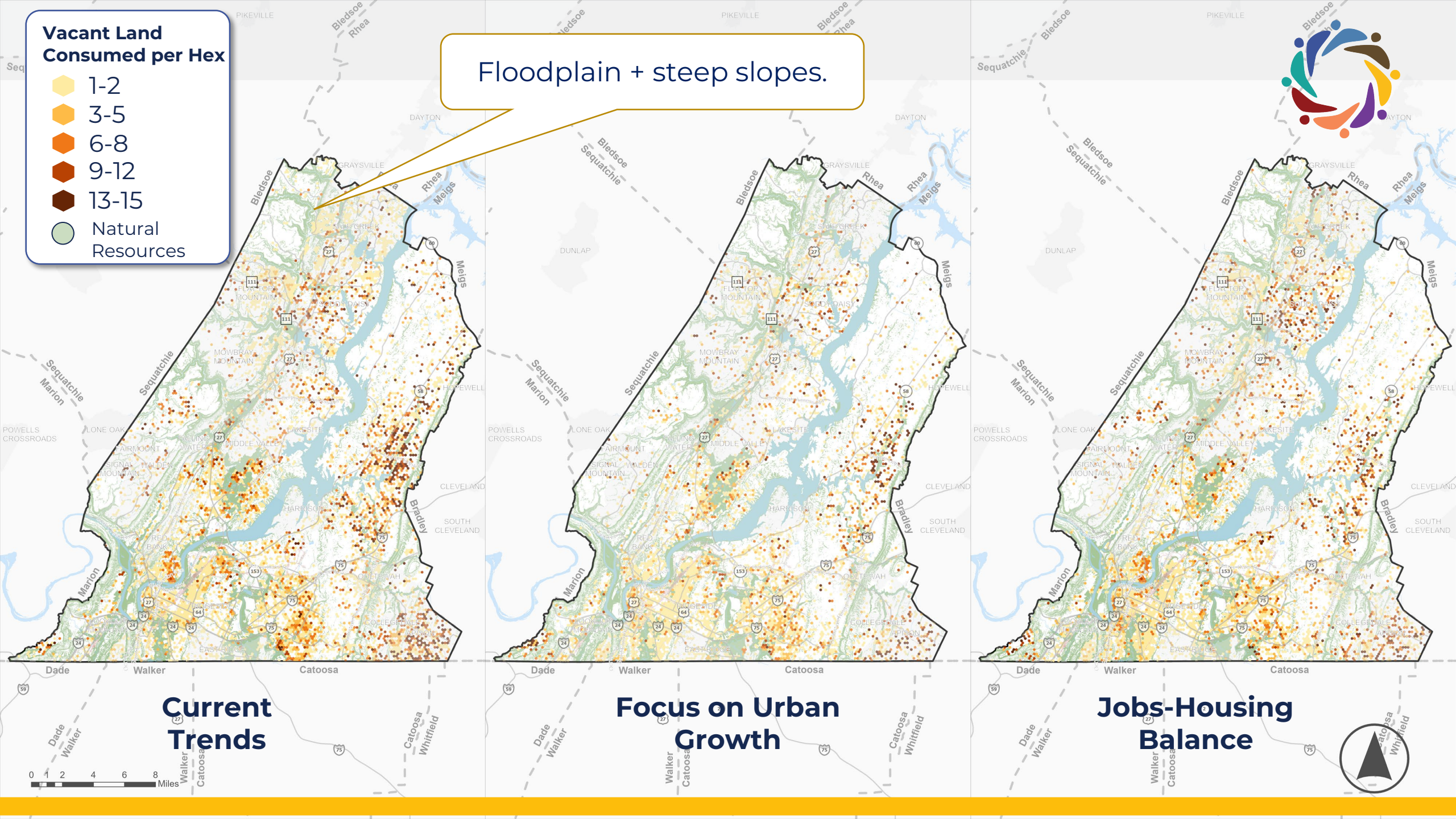
Indicator: Natural Resources Consumed



Vacant Land Consumed per Hex

- 1-2
- 3-5
- 6-8
- 9-12
- 13-15
- Natural Resources

Floodplain + steep slopes.



Current Trends

Focus on Urban Growth

Jobs-Housing Balance

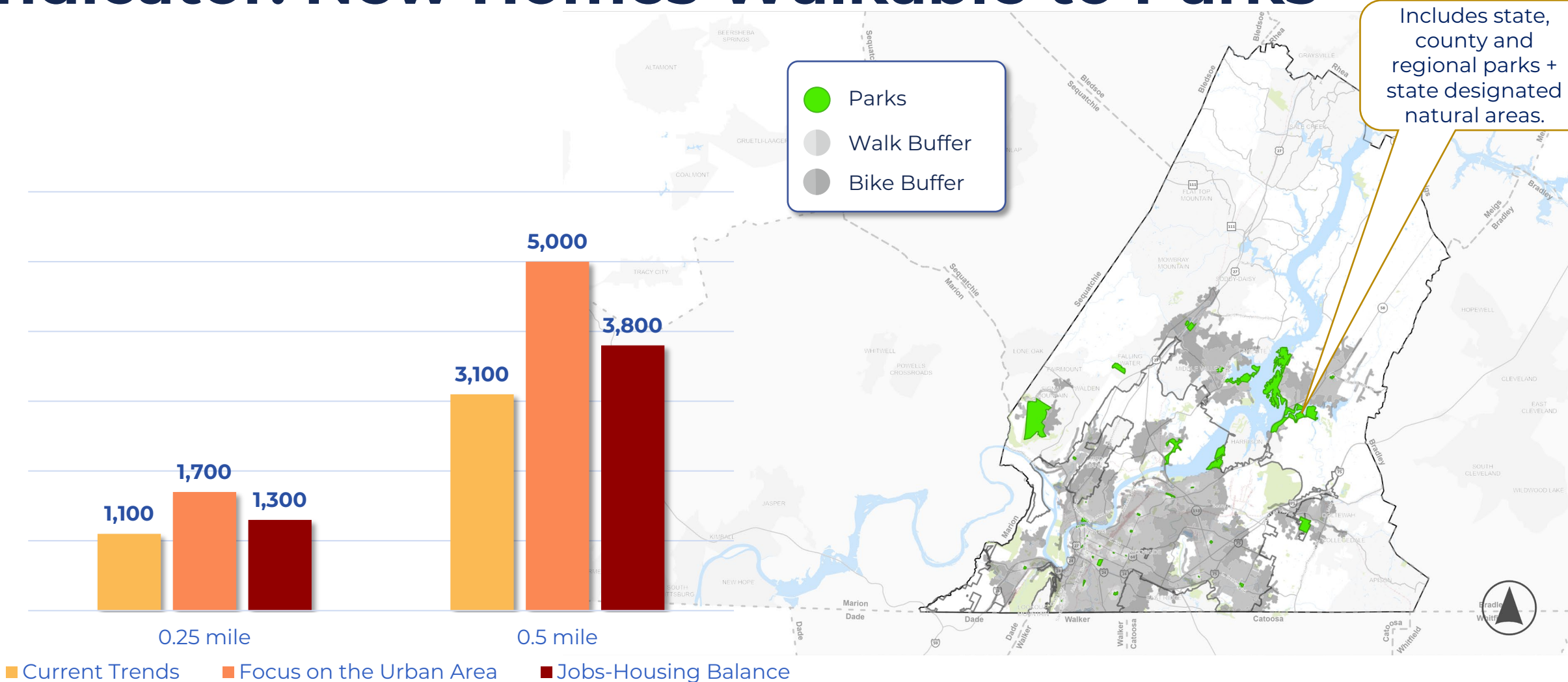
0 1 2 4 6 8 Miles





Goal: Parks and Greenways

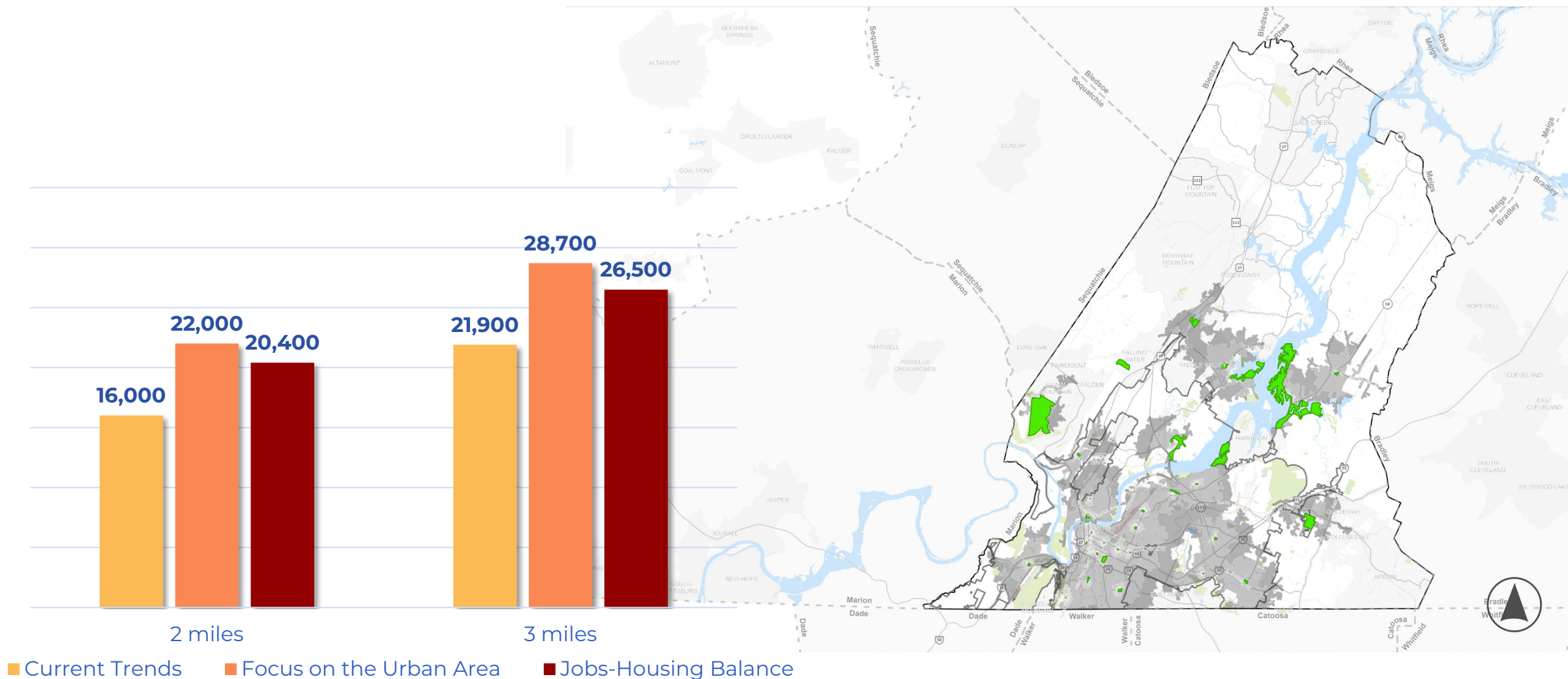
Indicator: New Homes Walkable to Parks





Goal: Parks and Greenways

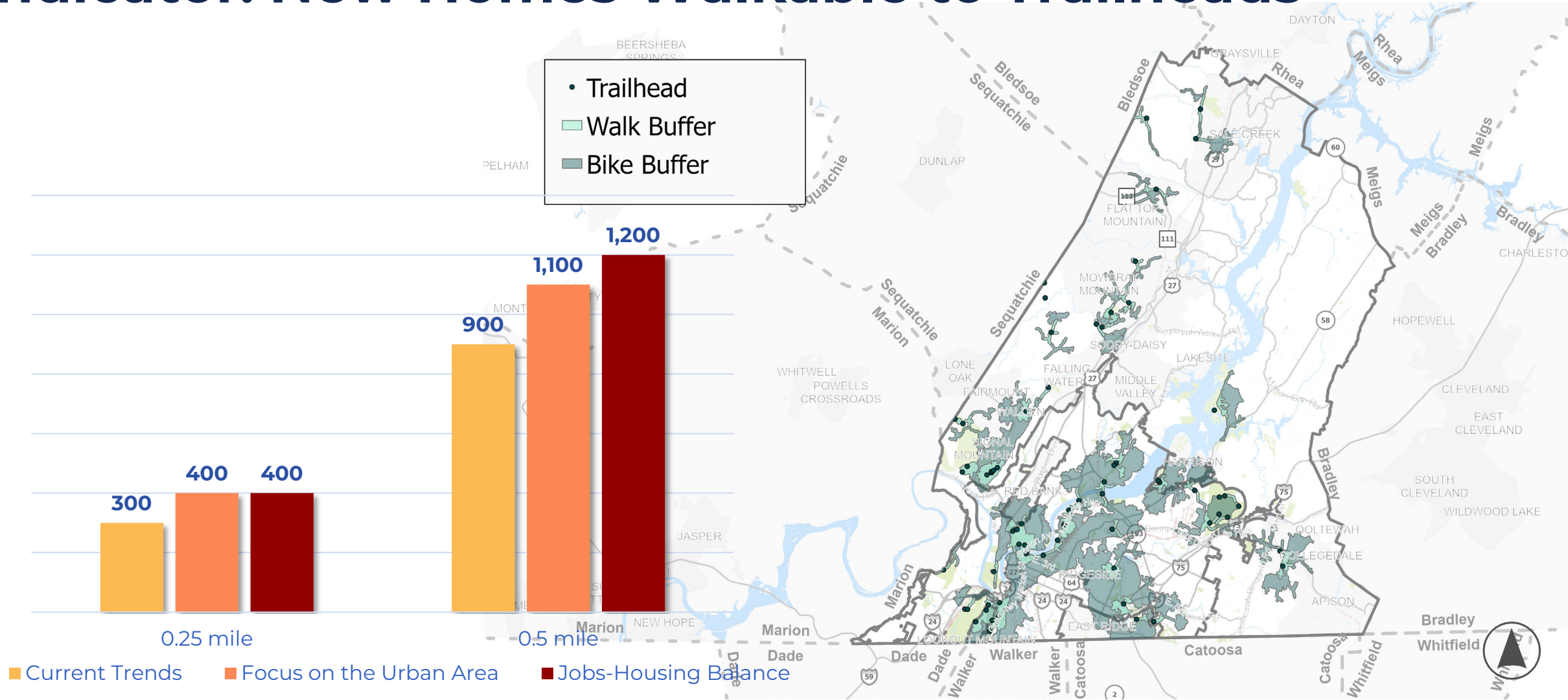
Indicator: New Homes Bikeable to Parks





Goal: Parks and Greenways

Indicator: New Homes Walkable to Trailheads

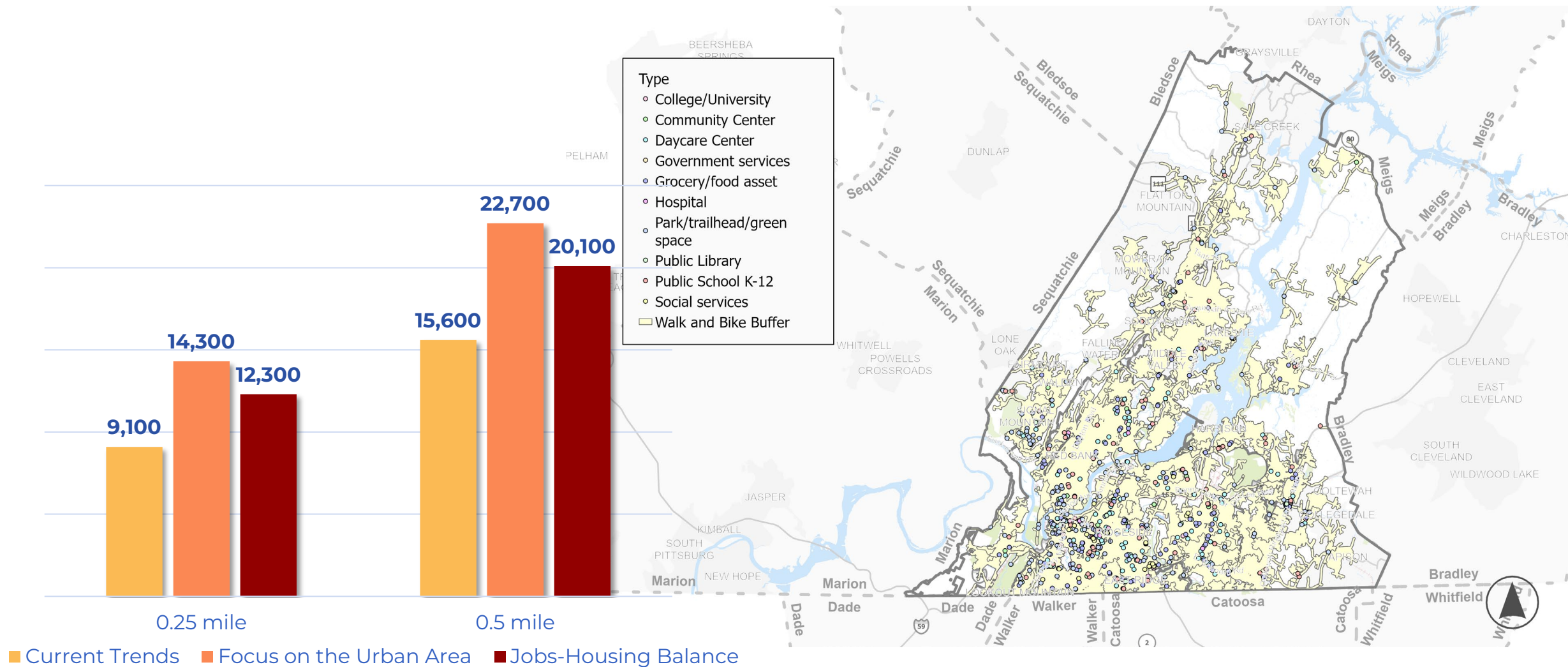


■ Current Trends ■ Focus on the Urban Area ■ Jobs-Housing Balance



Goal: Transportation

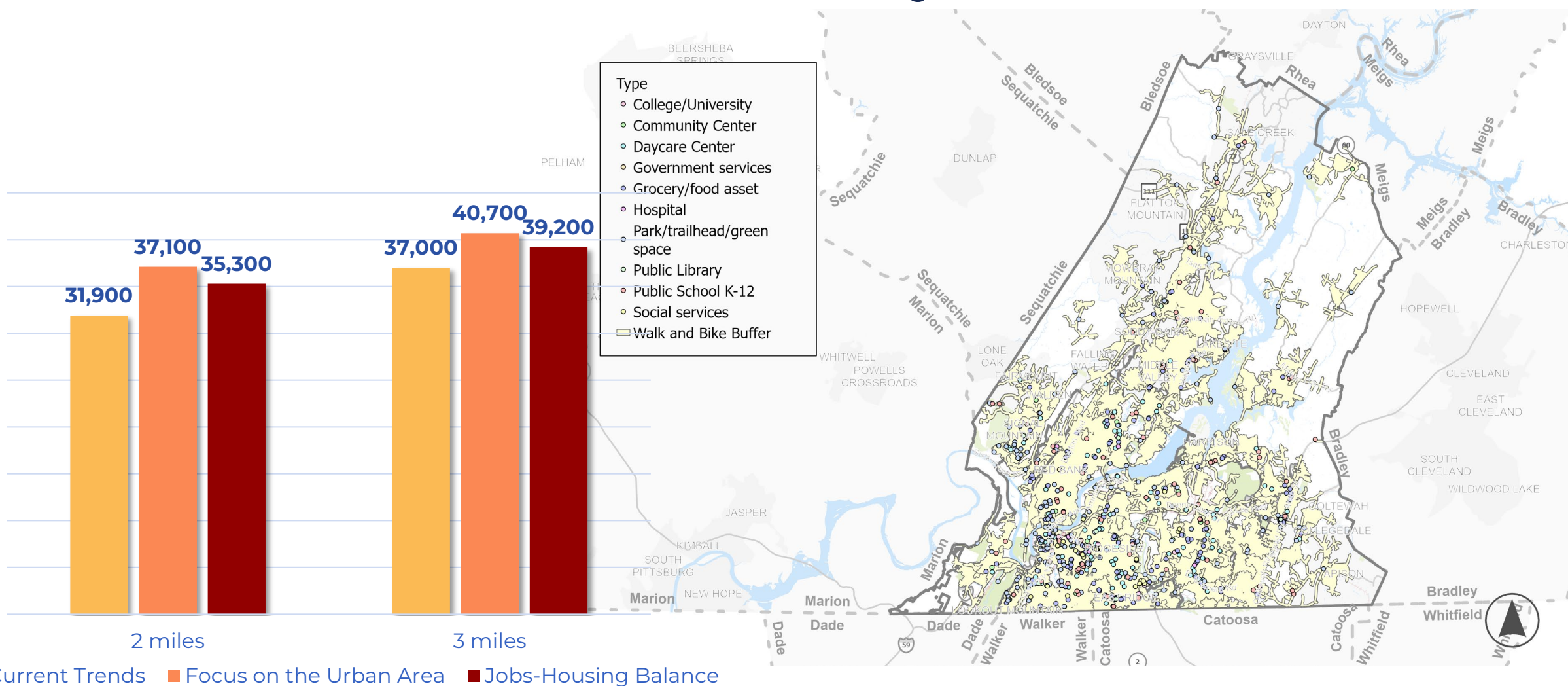
Indicator: New Homes Walkable to Key Destinations





Goal: Transportation

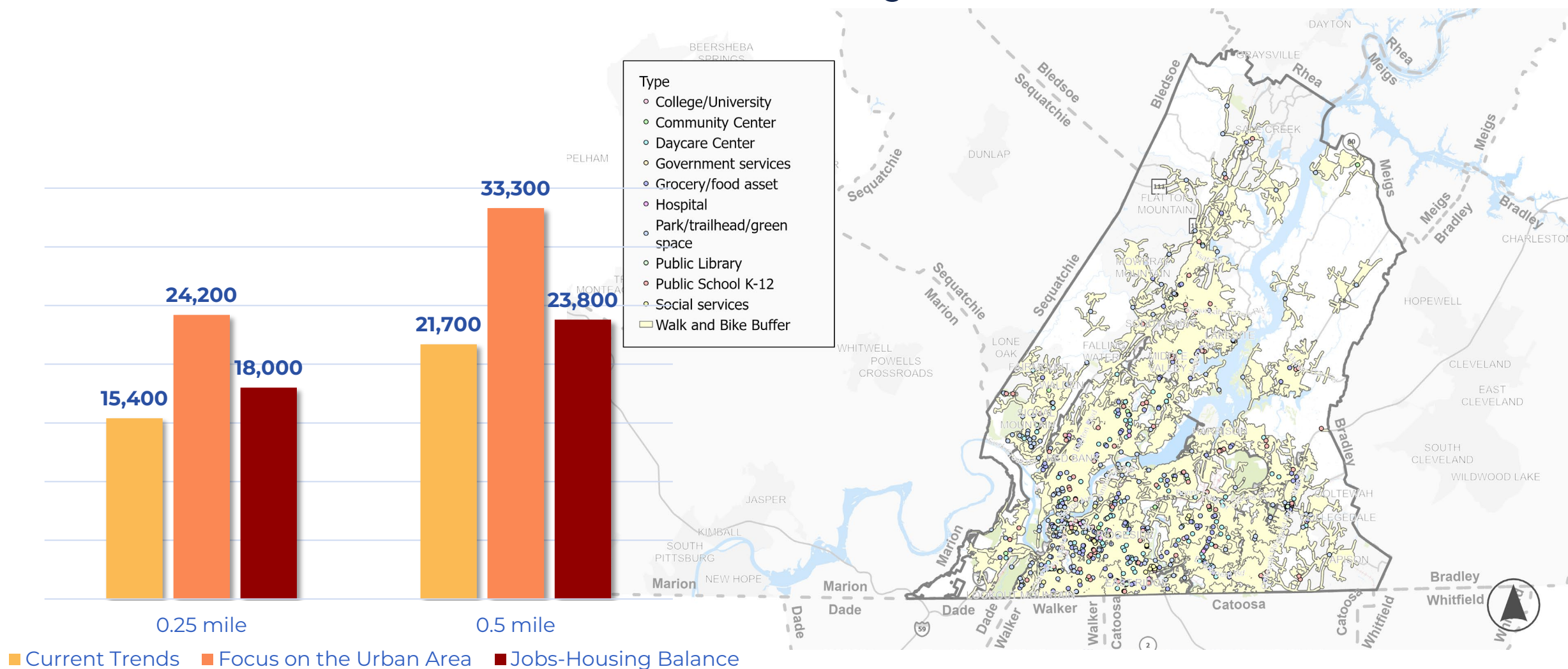
Indicator: New Homes Bikeable to Key Destinations





Goal: Transportation

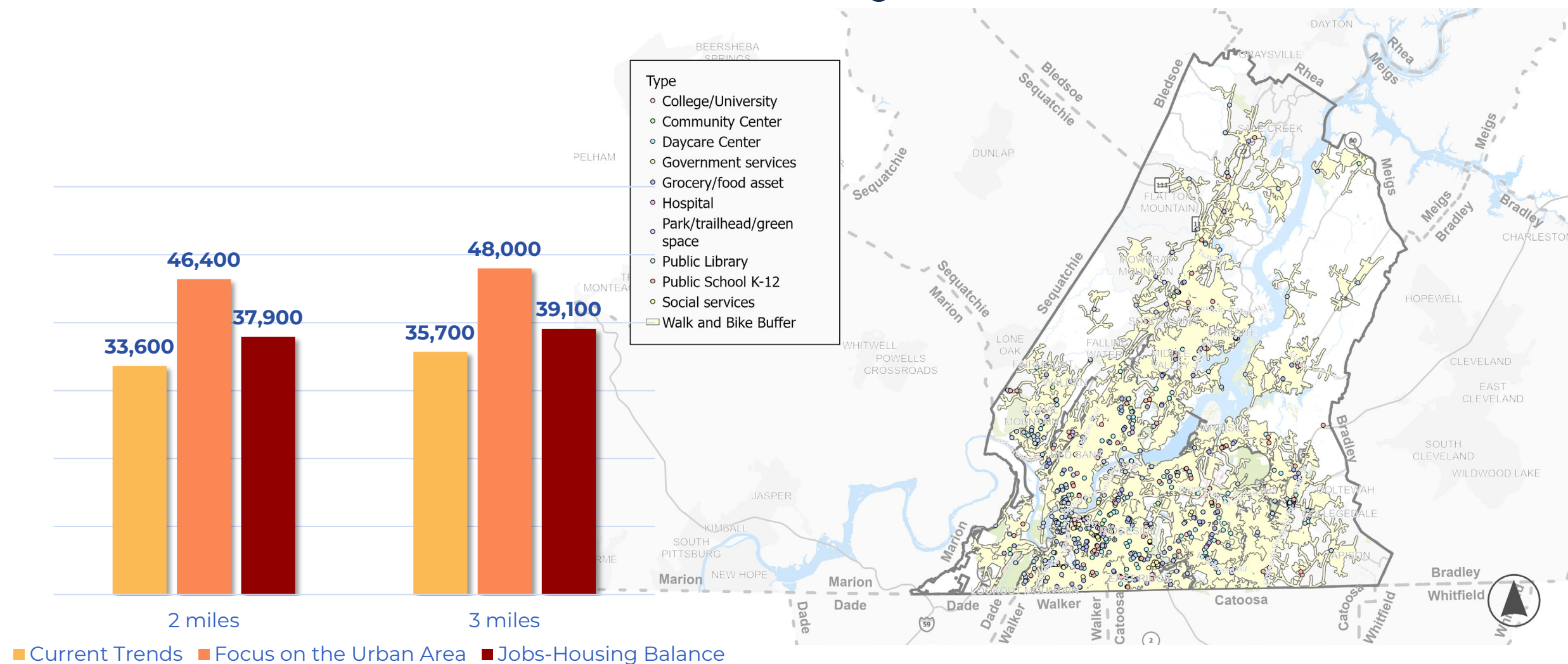
Indicator: New Jobs Walkable to Key Destinations





Goal: Transportation

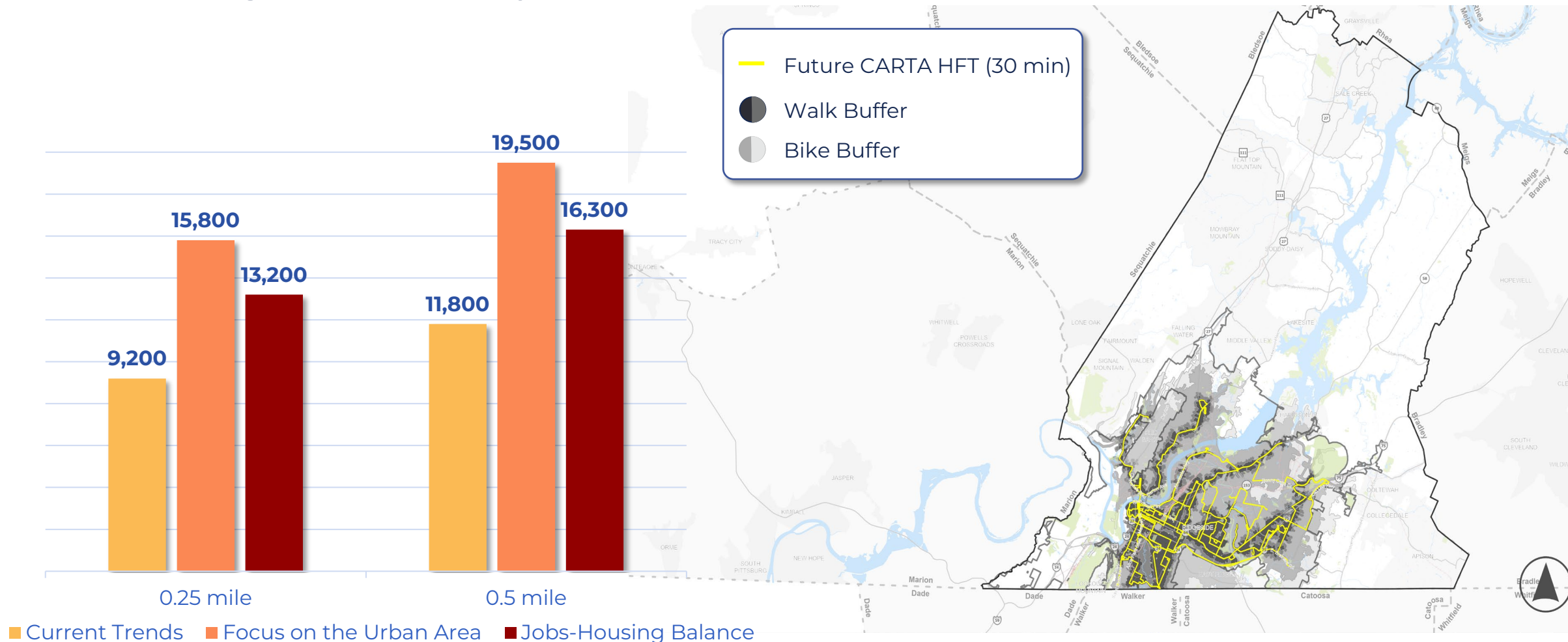
Indicator: New Jobs Bikeable to Key Destinations





Goal: Transportation

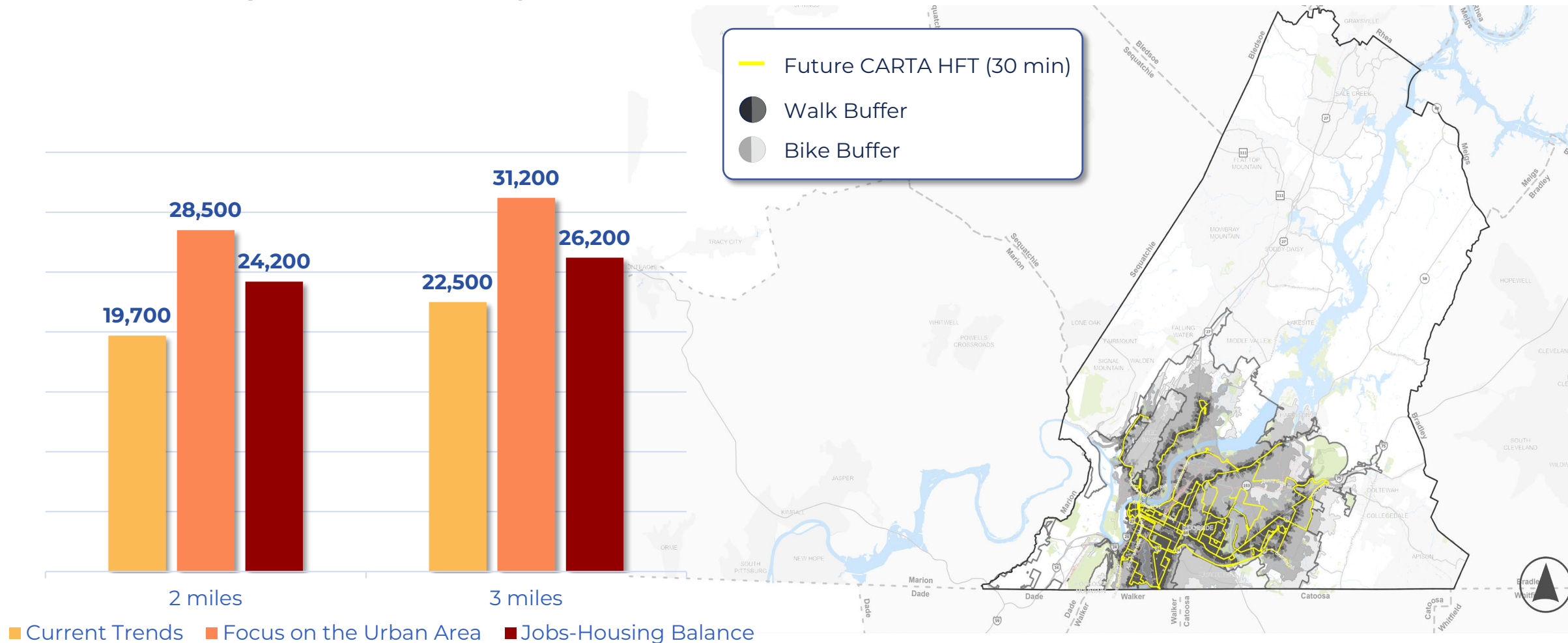
Indicator: New Homes Walkable to Planned High Frequency Transit (30 min)





Goal: Transportation

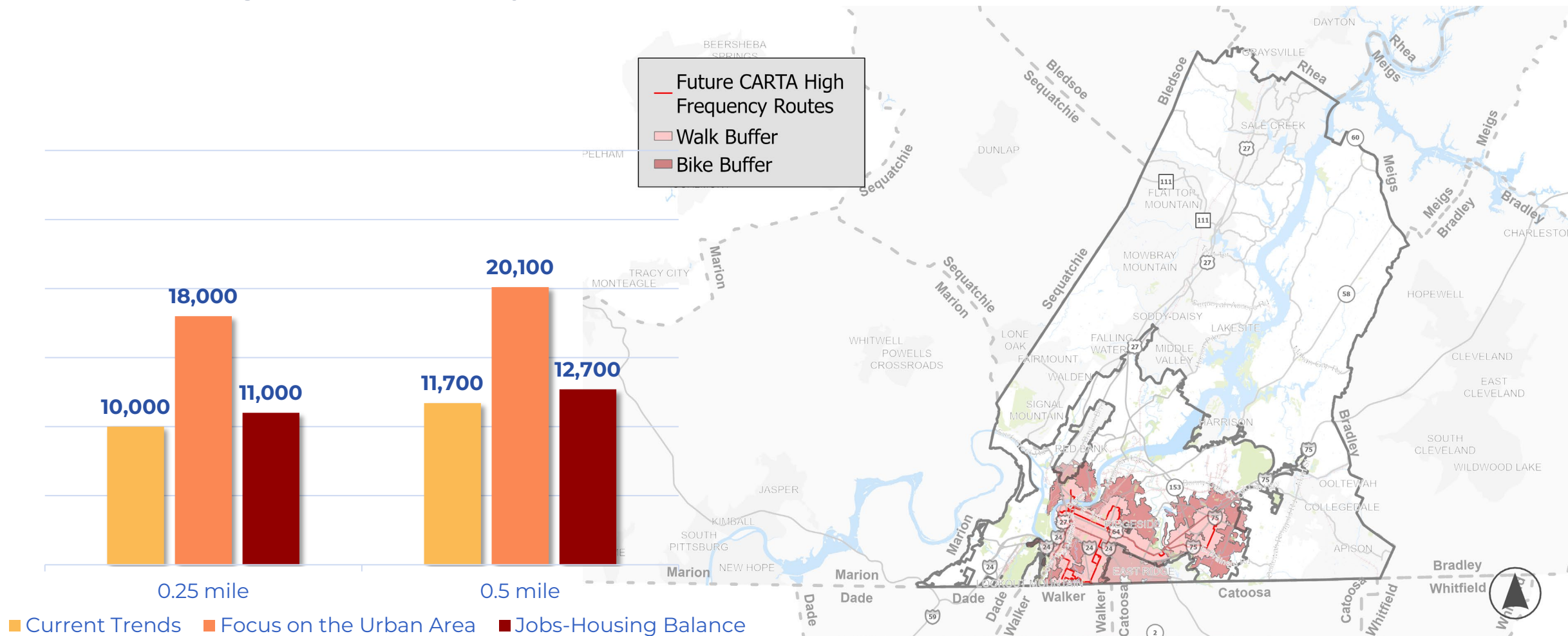
Indicator: New Homes Bikeable to Planned High Frequency Transit (30 min)





Goal: Transportation

Indicator: New Jobs Walkable to Planned High Frequency Transit (15 min)

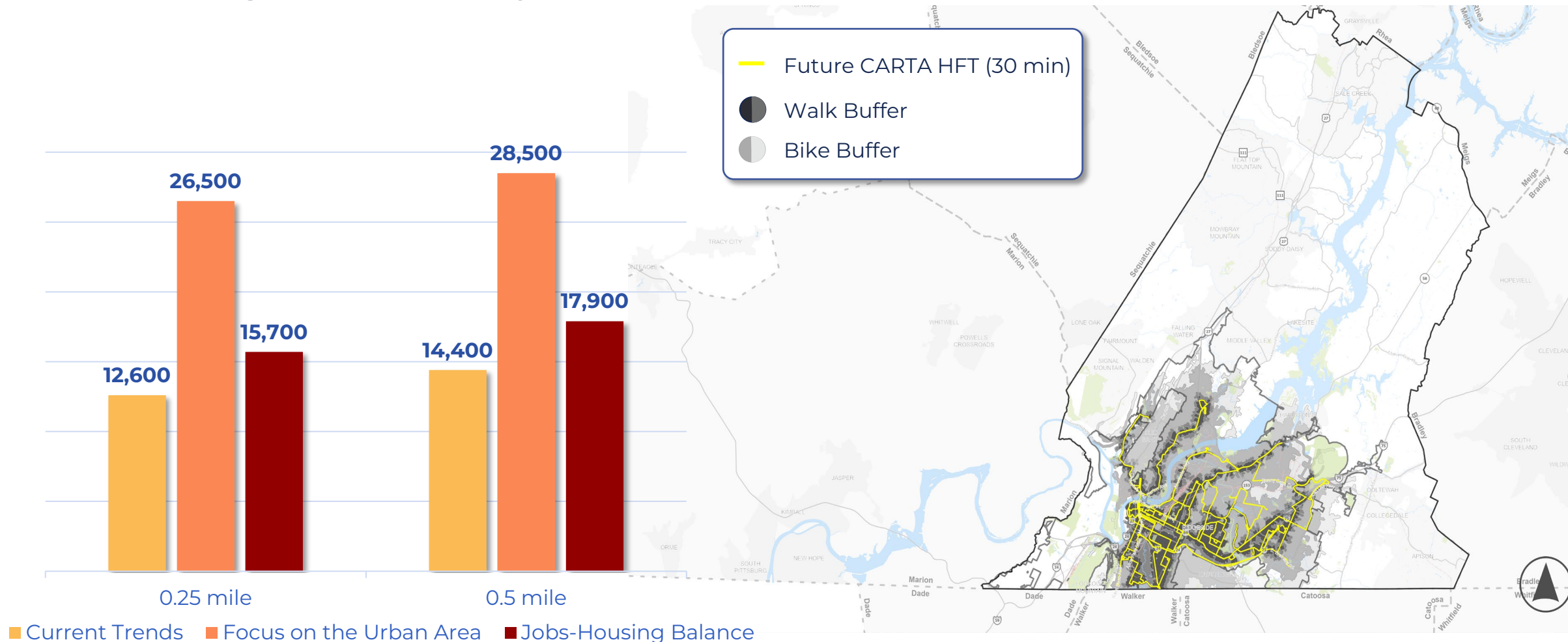


■ Current Trends
 ■ Focus on the Urban Area
 ■ Jobs-Housing Balance



Goal: Transportation

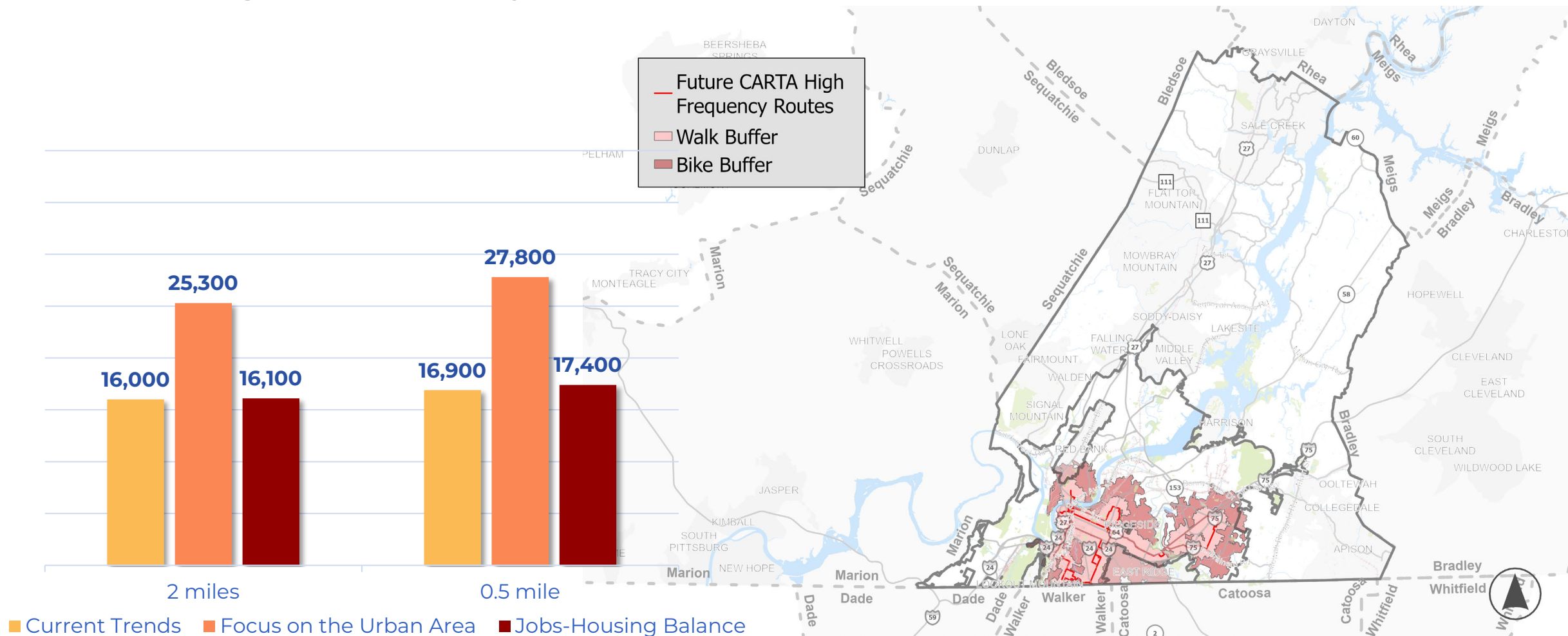
Indicator: New Jobs Walkable to Planned High Frequency Transit (30 min)





Goal: Transportation

Indicator: New Jobs Bikeable to Planned High Frequency Transit (15 min)

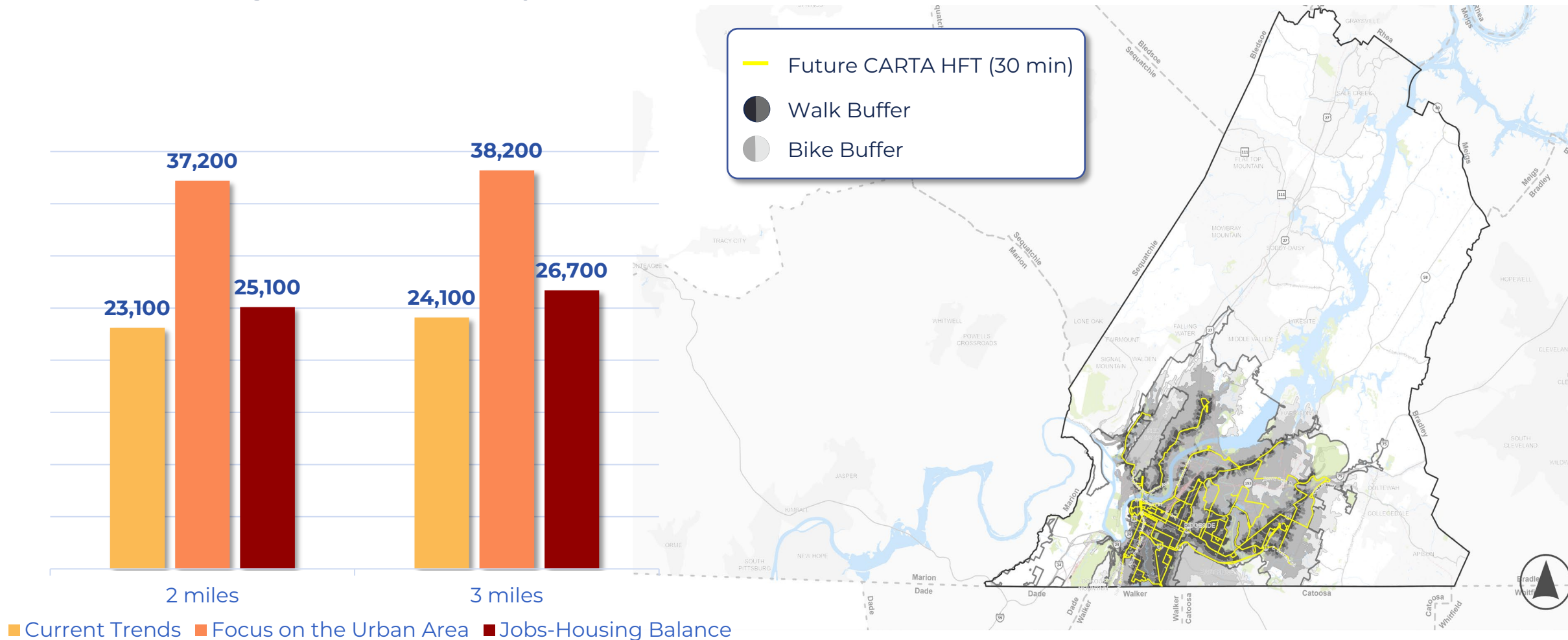


■ Current Trends
 ■ Focus on the Urban Area
 ■ Jobs-Housing Balance



Goal: Transportation

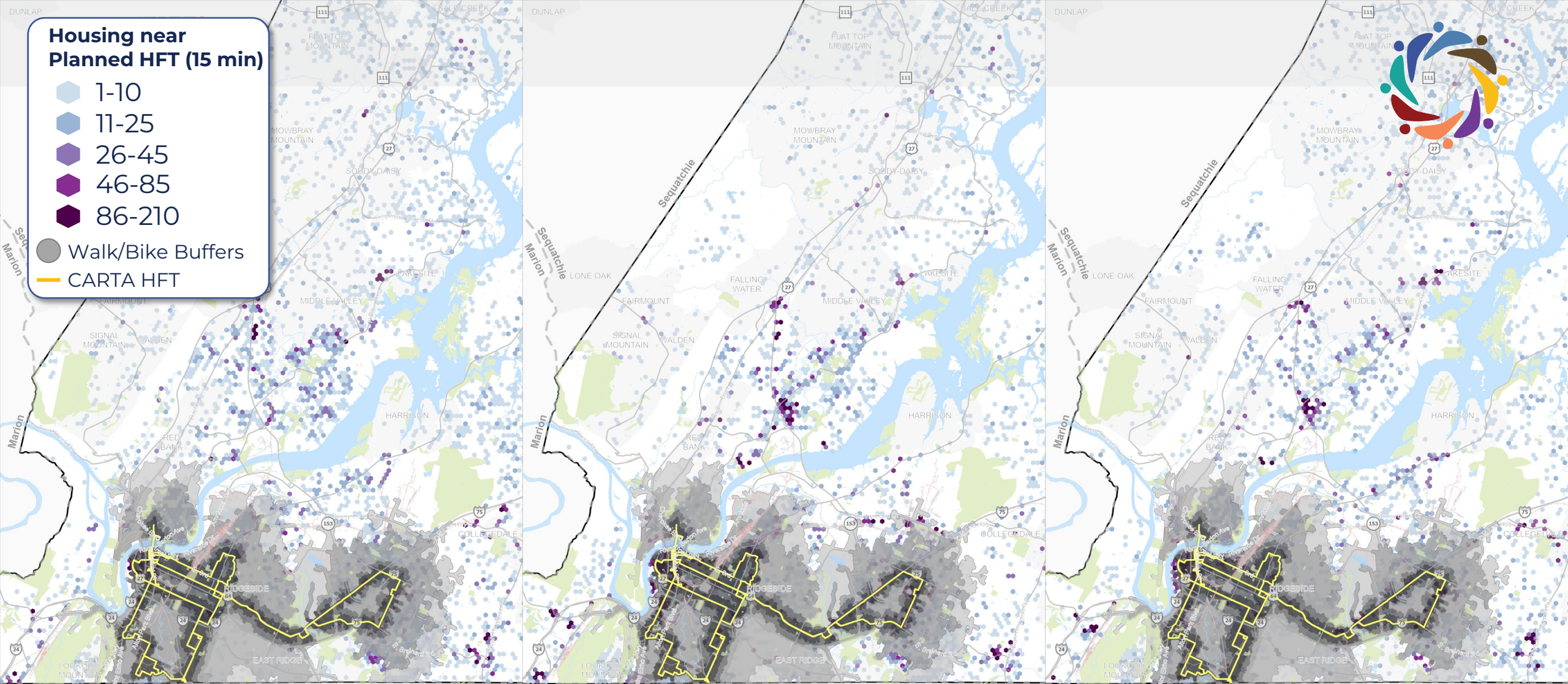
Indicator: New Jobs Bikeable to Planned High Frequency Transit (30 min)



Housing near Planned HFT (15 min)

- 1-10
- 11-25
- 26-45
- 46-85
- 86-210

- Walk/Bike Buffers
- CARTA HFT



Current Trends

Focus on Urban Growth

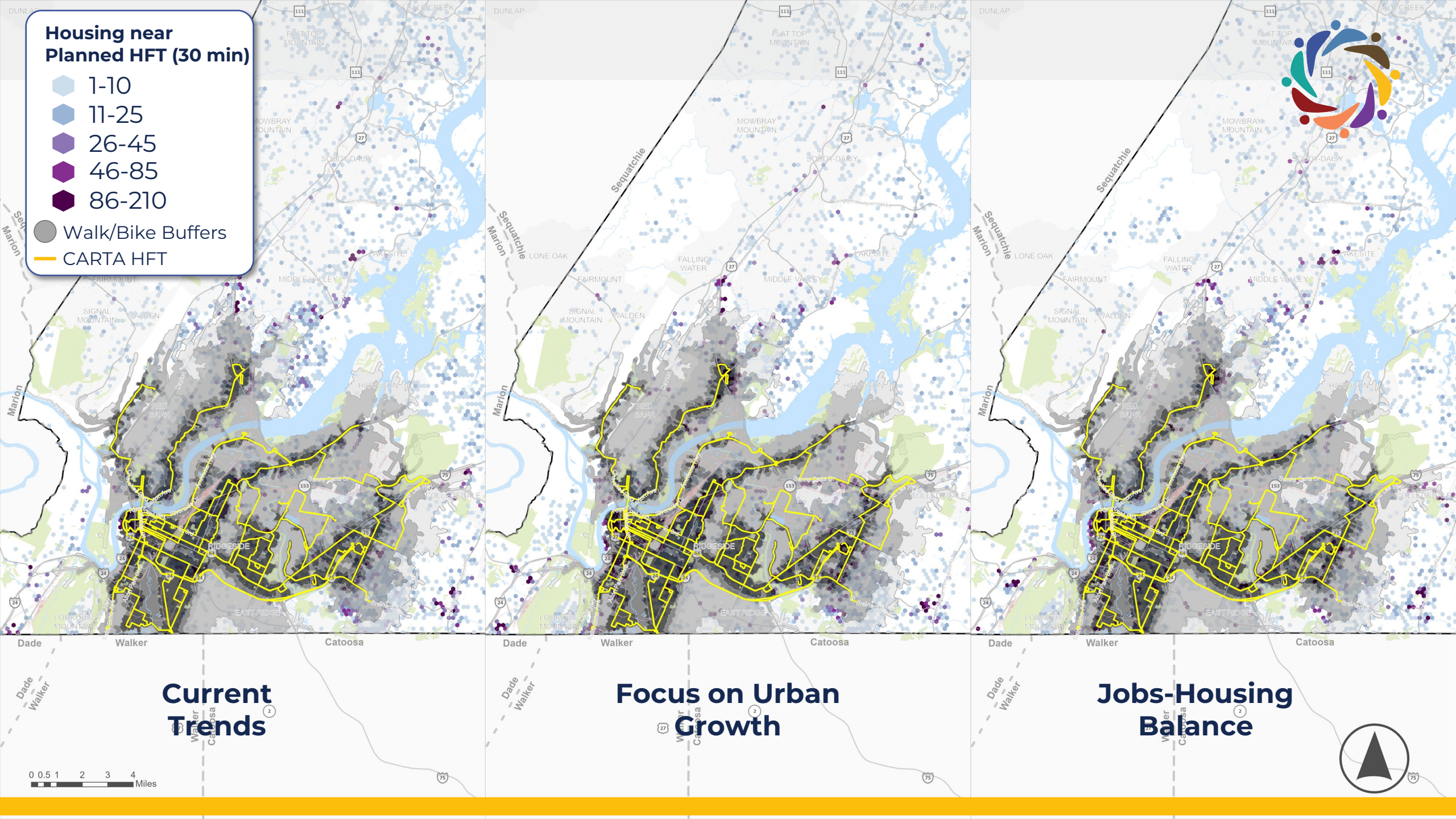
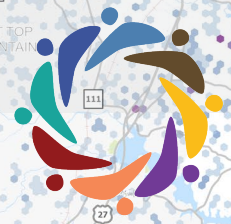
Jobs-Housing Balance



Housing near Planned HFT (30 min)

- 1-10
- 11-25
- 26-45
- 46-85
- 86-210

- Walk/Bike Buffers
- CARTA HFT



Current Trends

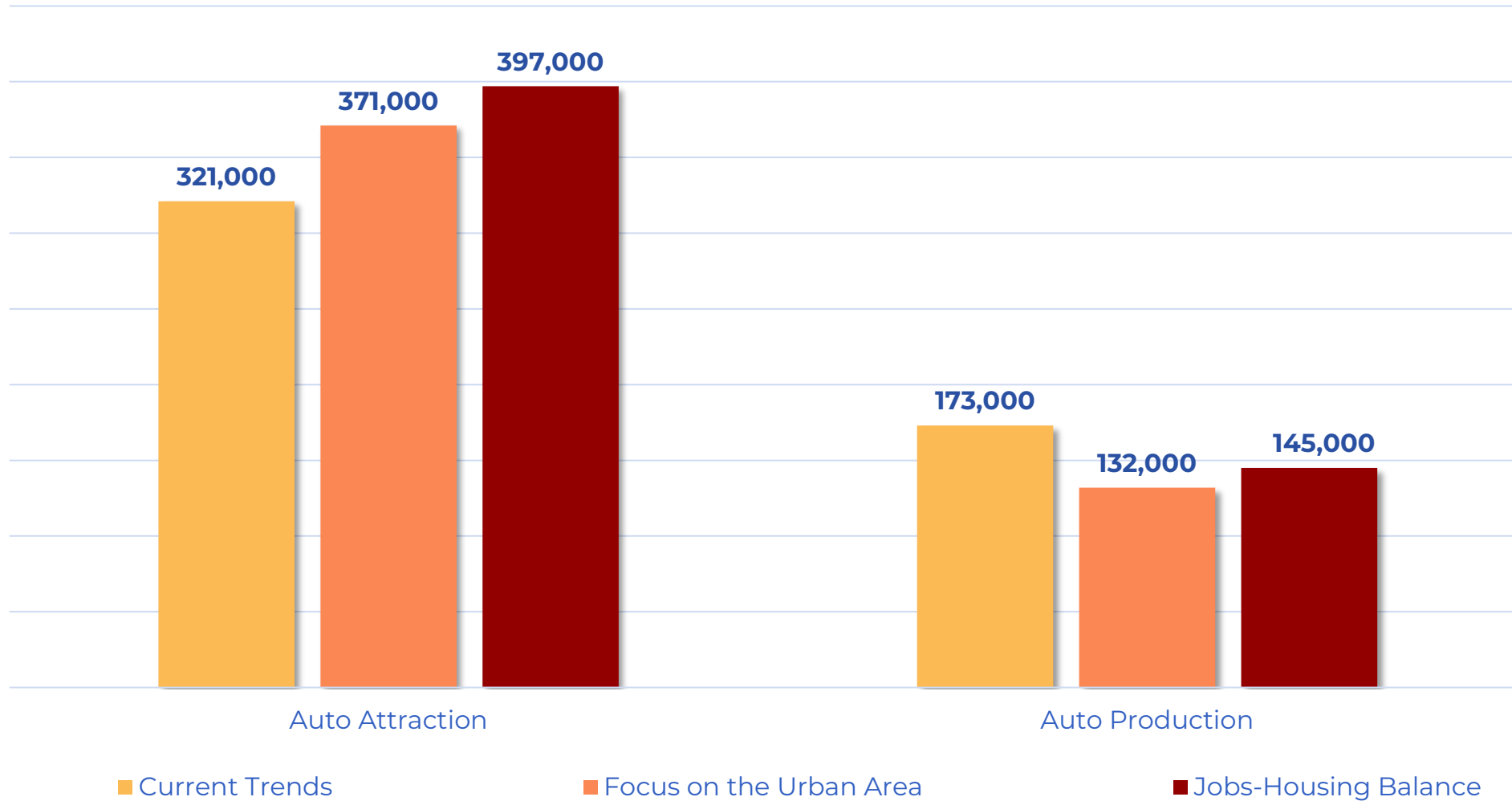
Focus on Urban Growth

Jobs-Housing Balance



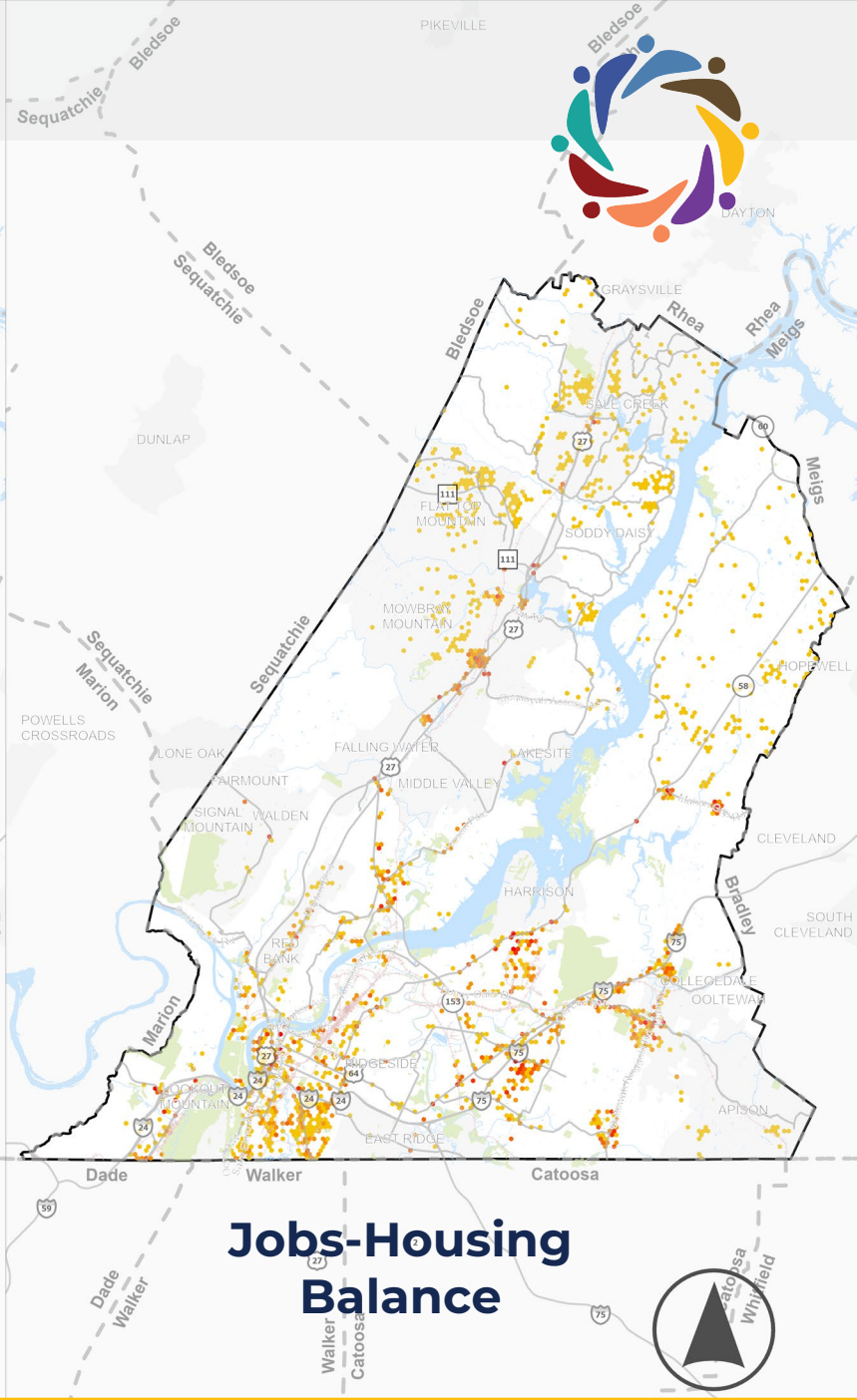
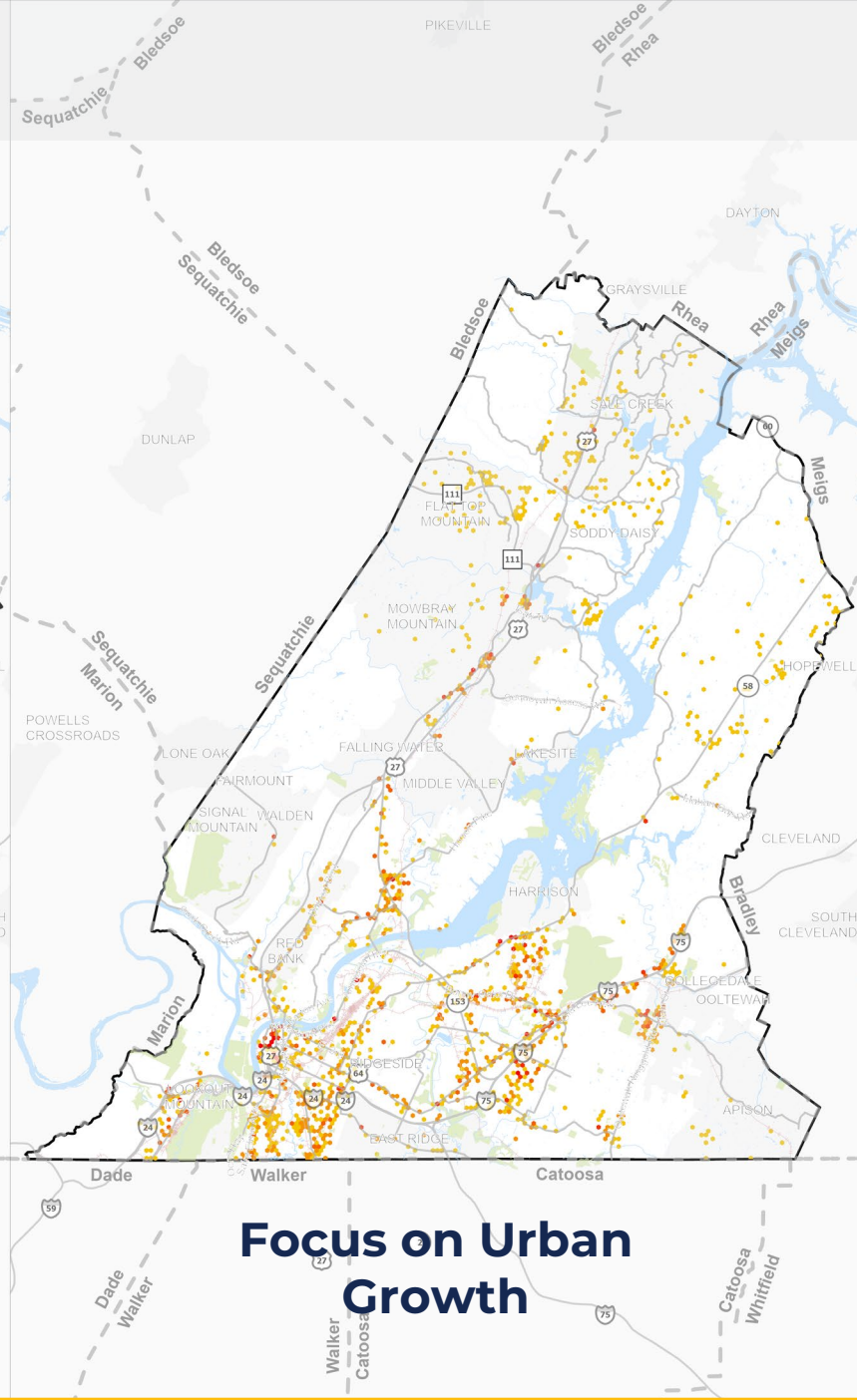
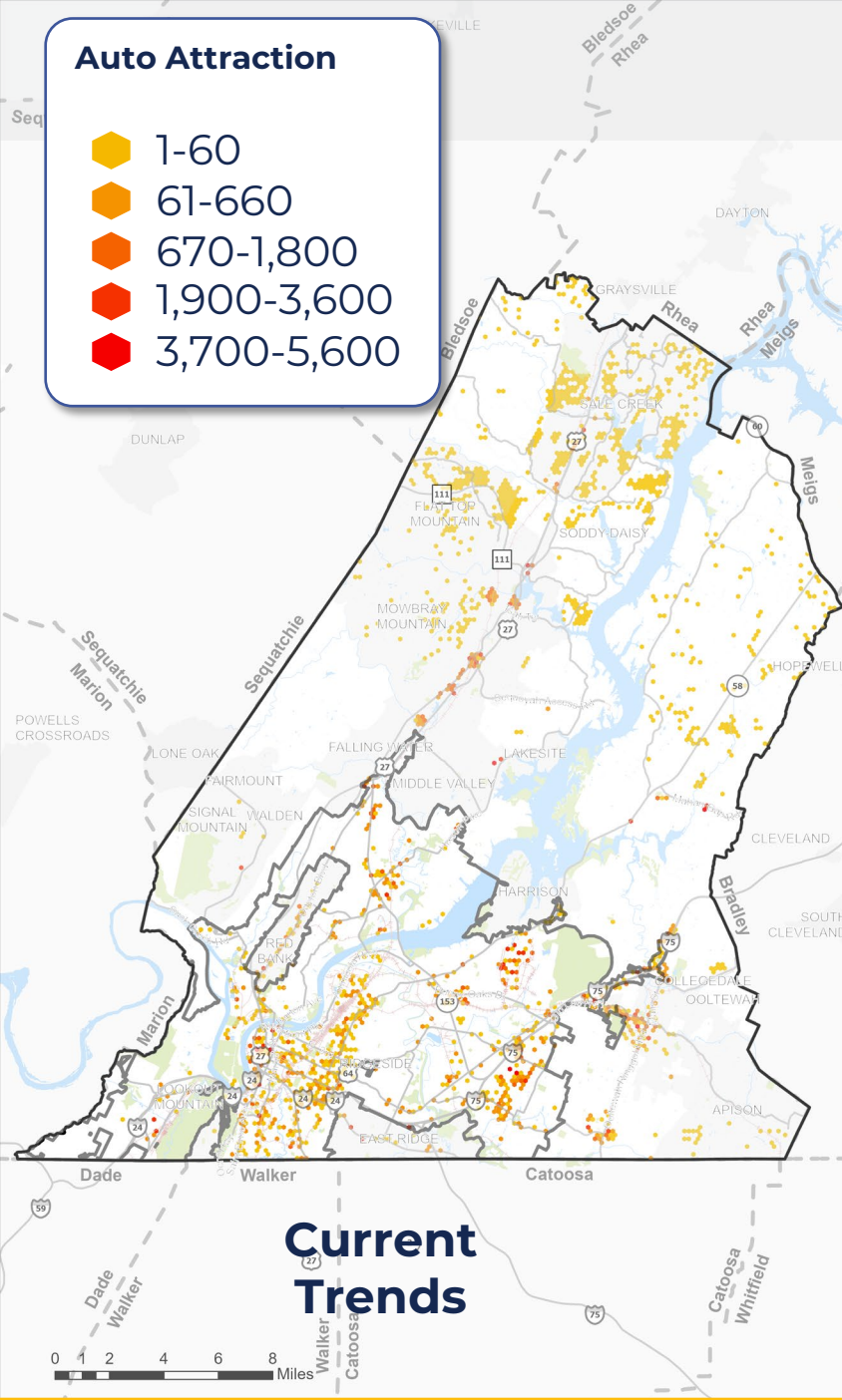


Trip Generation



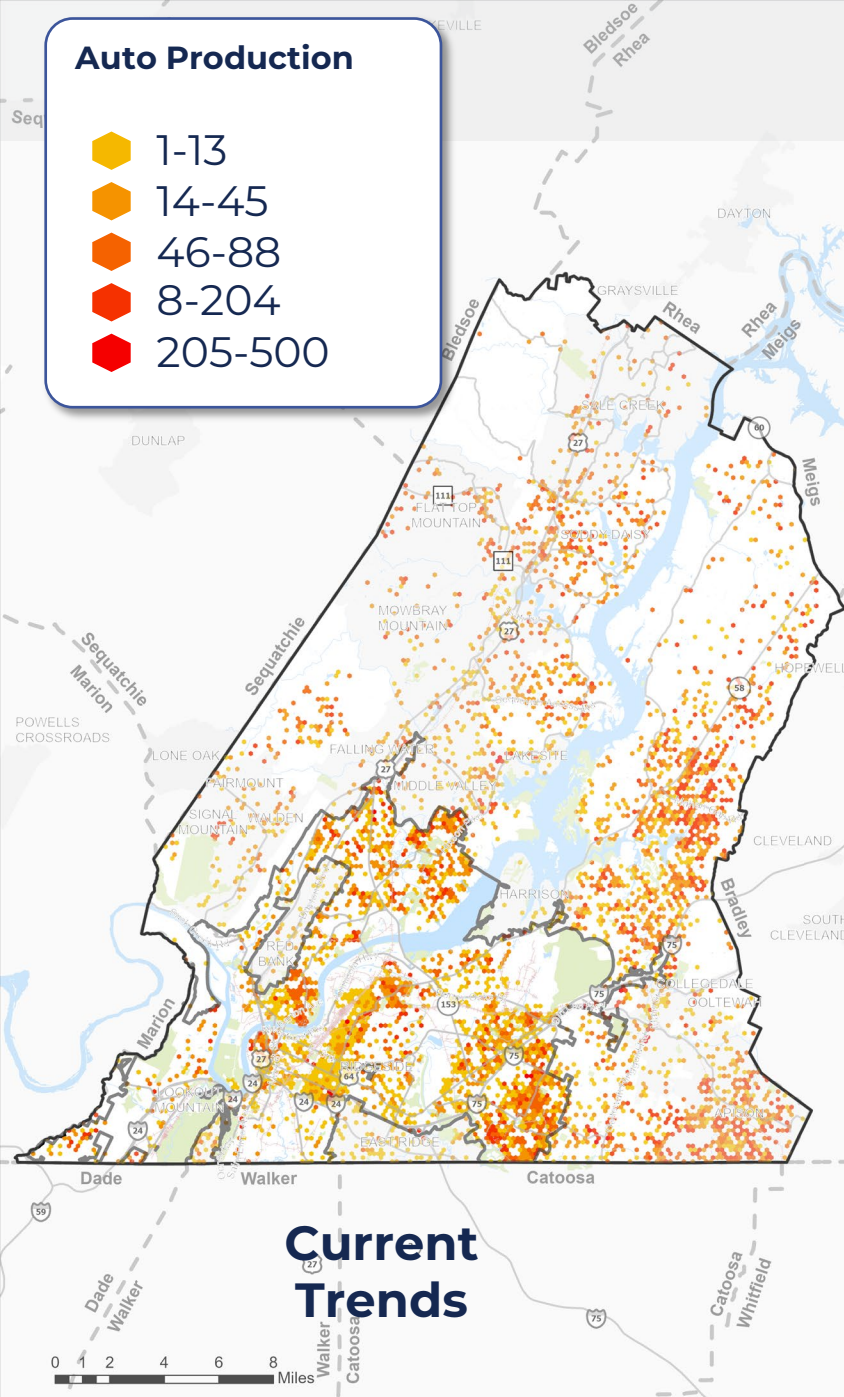
Auto Attraction

- 1-60
- 61-660
- 670-1,800
- 1,900-3,600
- 3,700-5,600

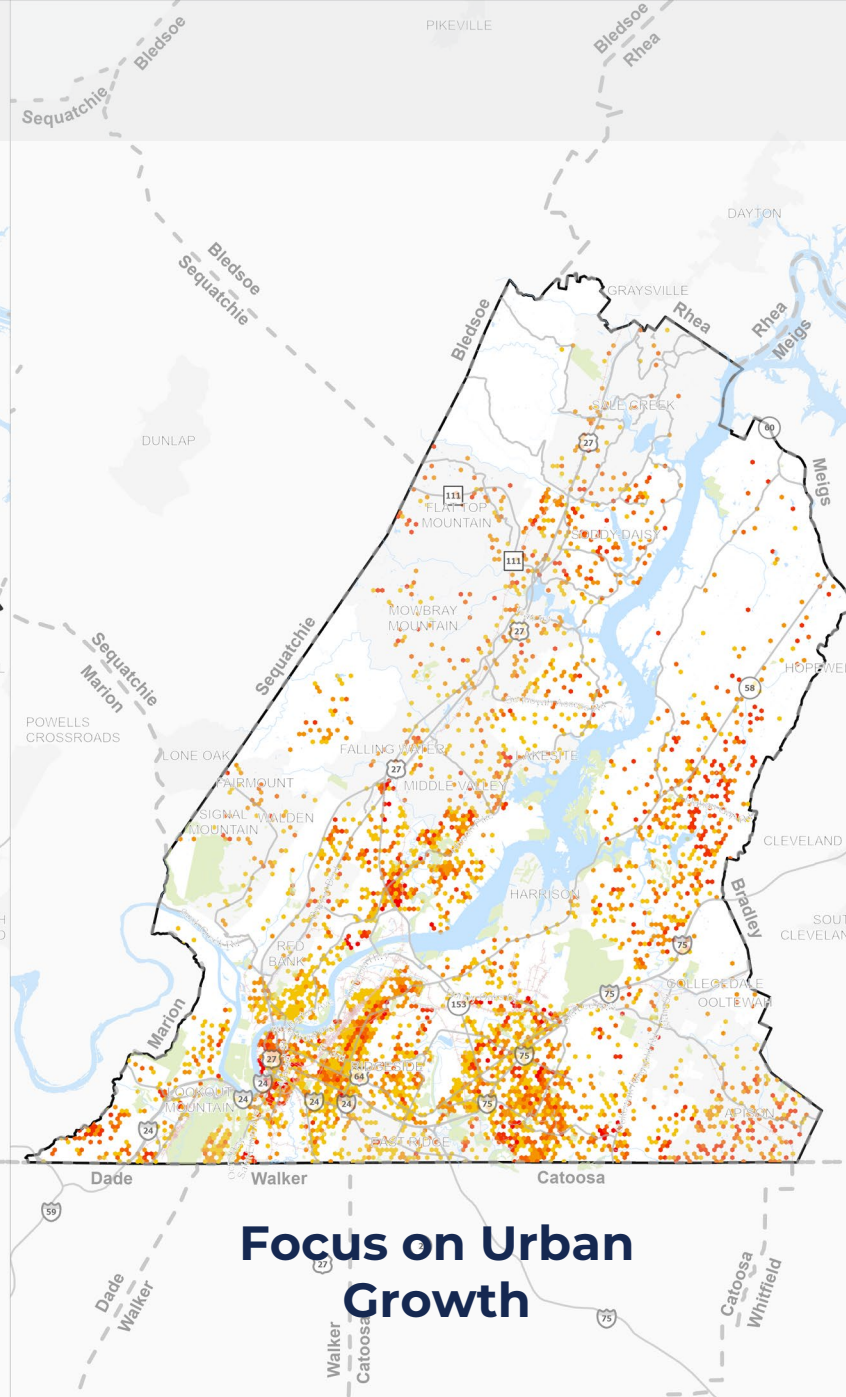


Auto Production

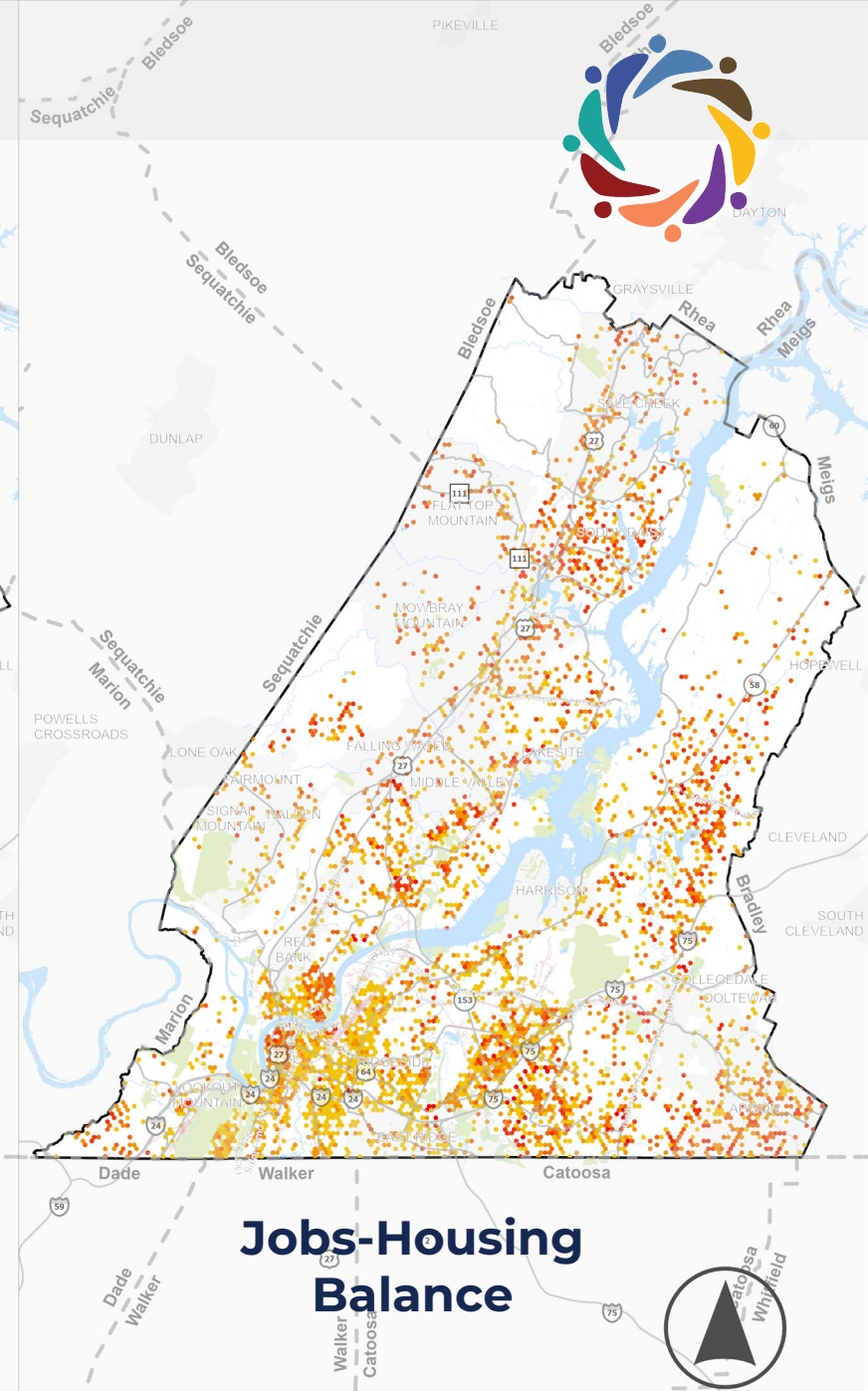
- 1-13
- 14-45
- 46-88
- 8-204
- 205-500



Current Trends



Focus on Urban Growth



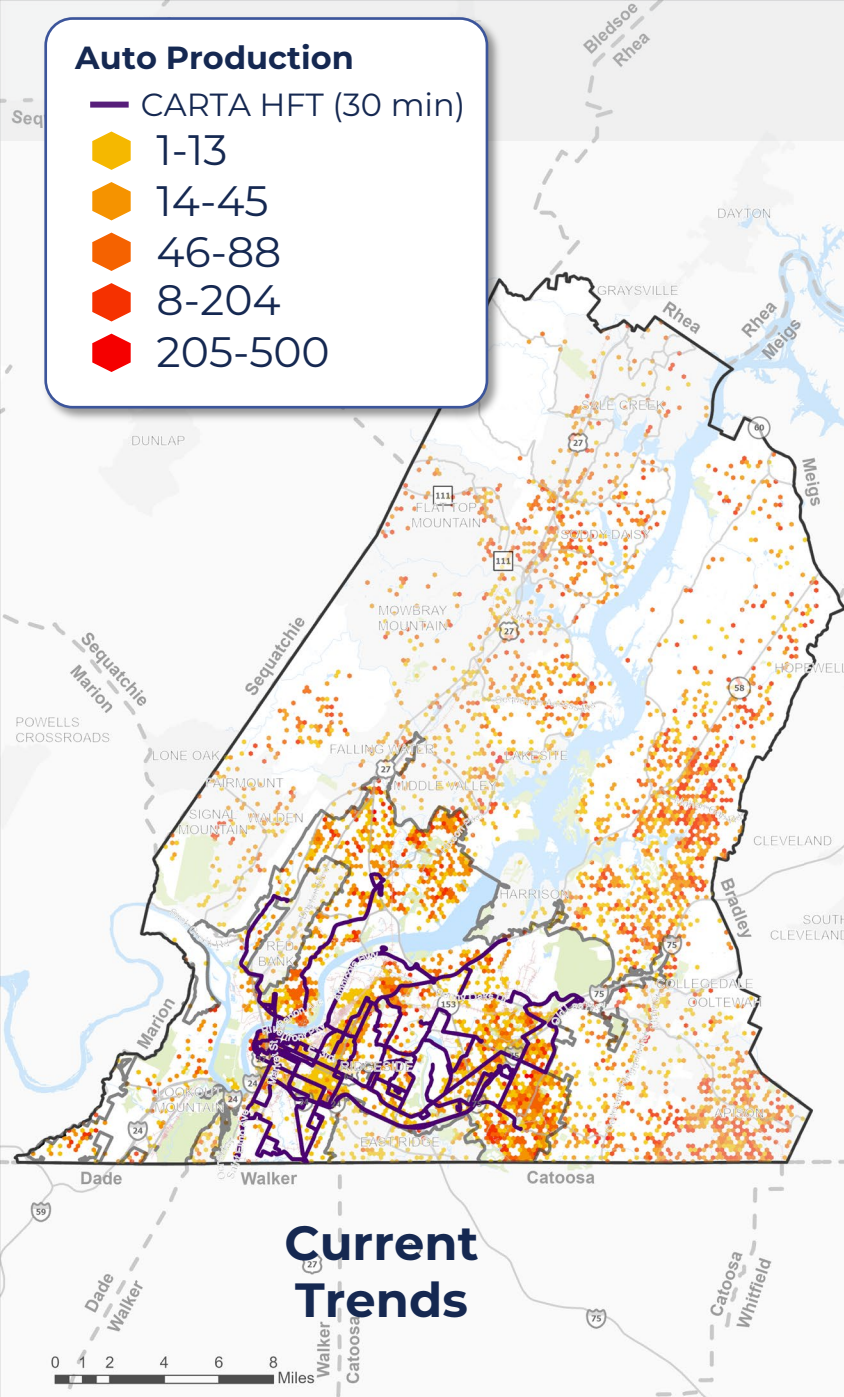
Jobs-Housing Balance



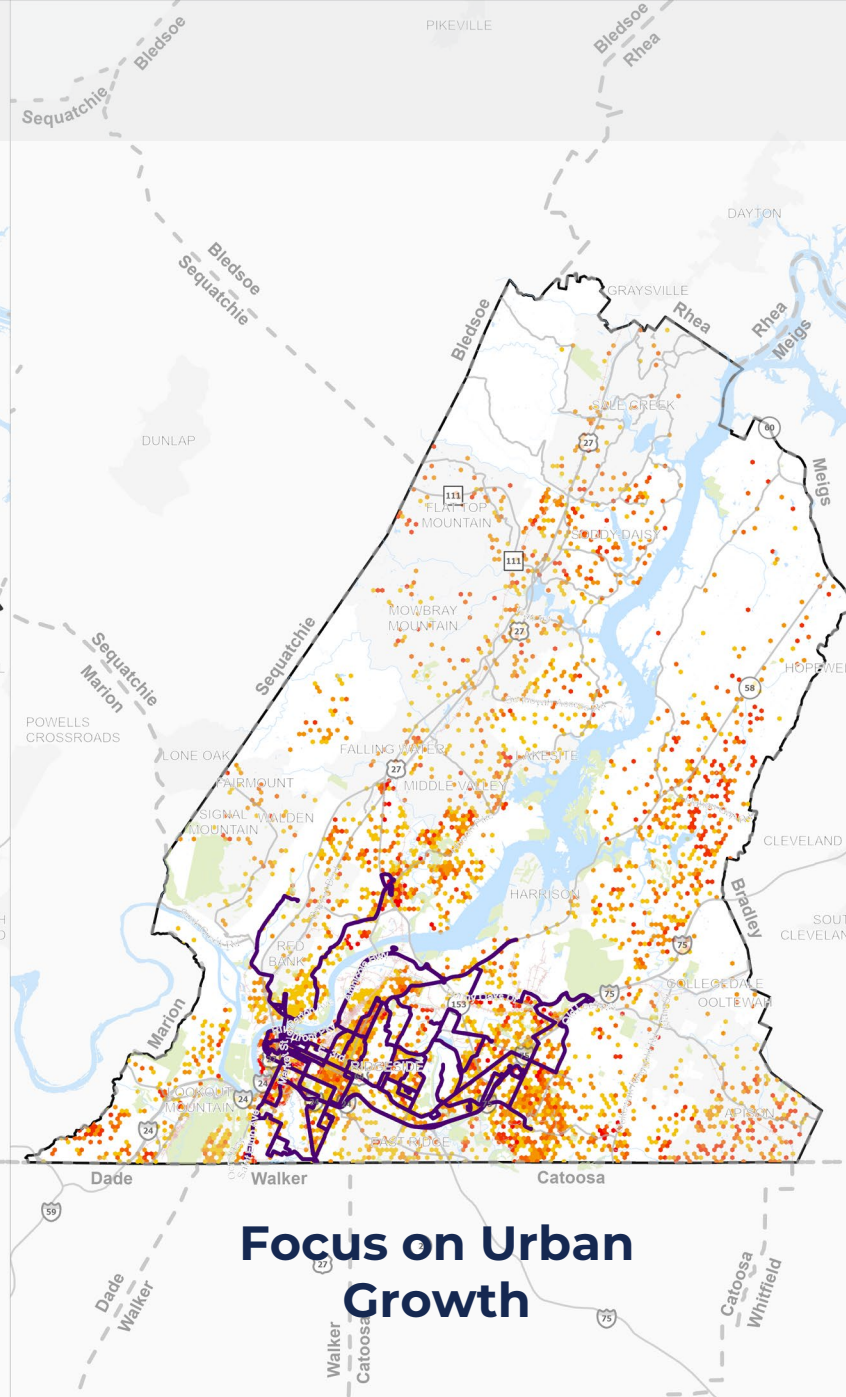
Auto Production

— CARTA HFT (30 min)

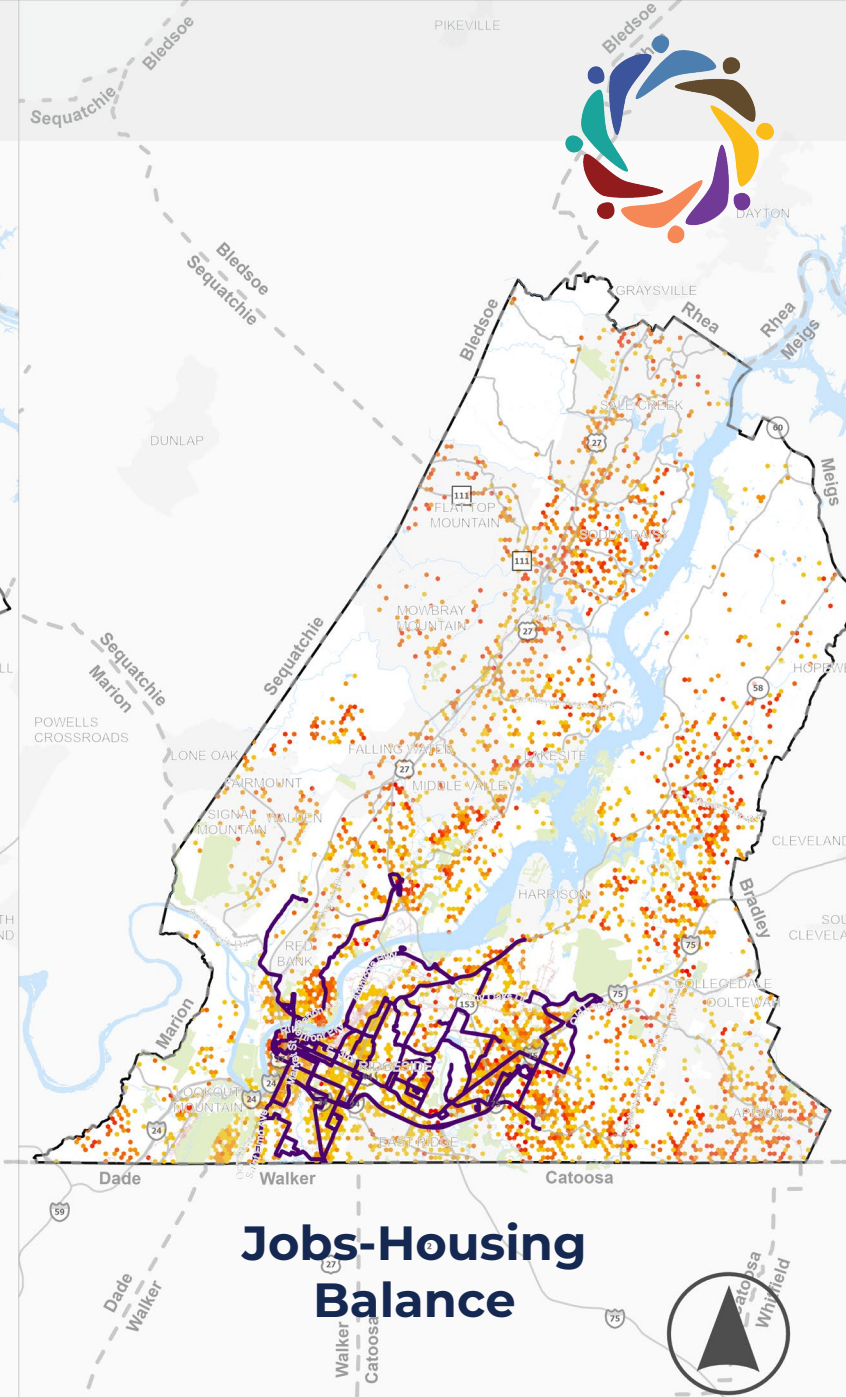
- 1-13
- 14-45
- 46-88
- 8-204
- 205-500



Current Trends



Focus on Urban Growth

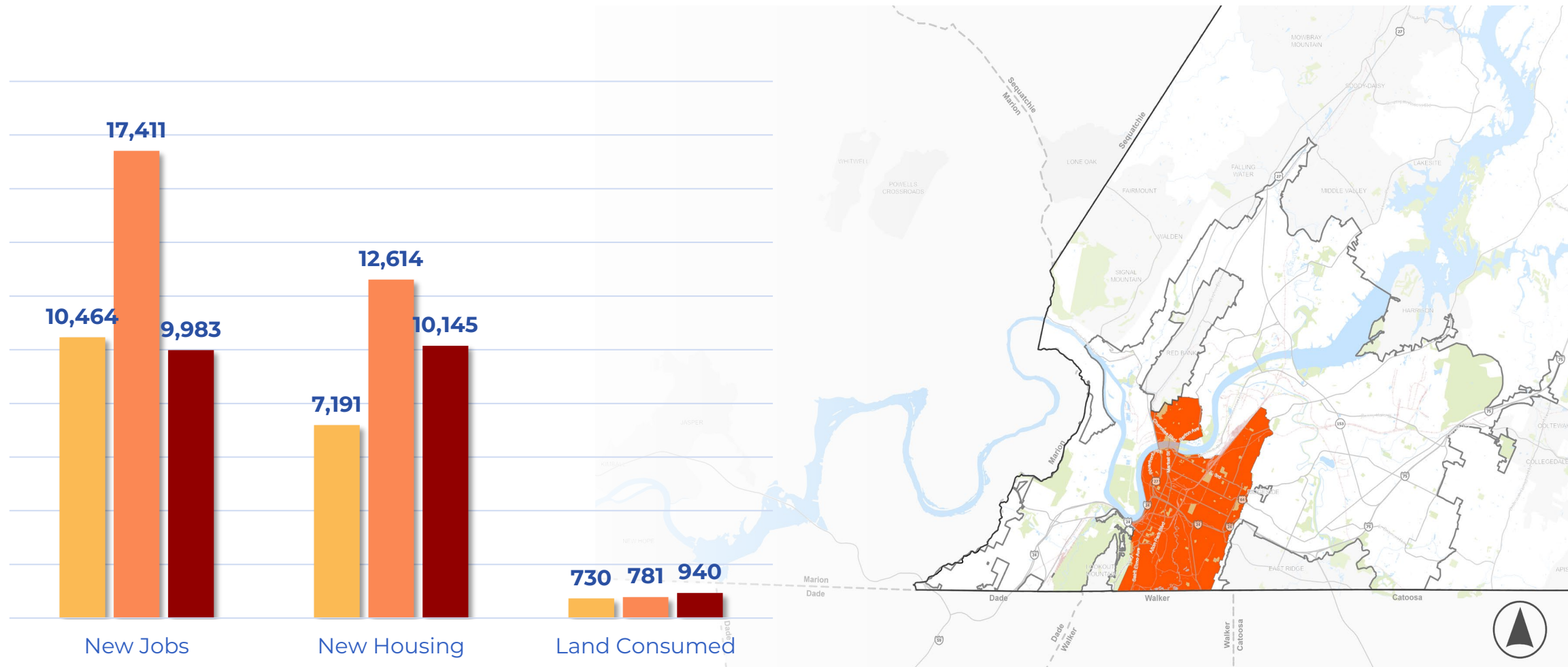


Jobs-Housing Balance





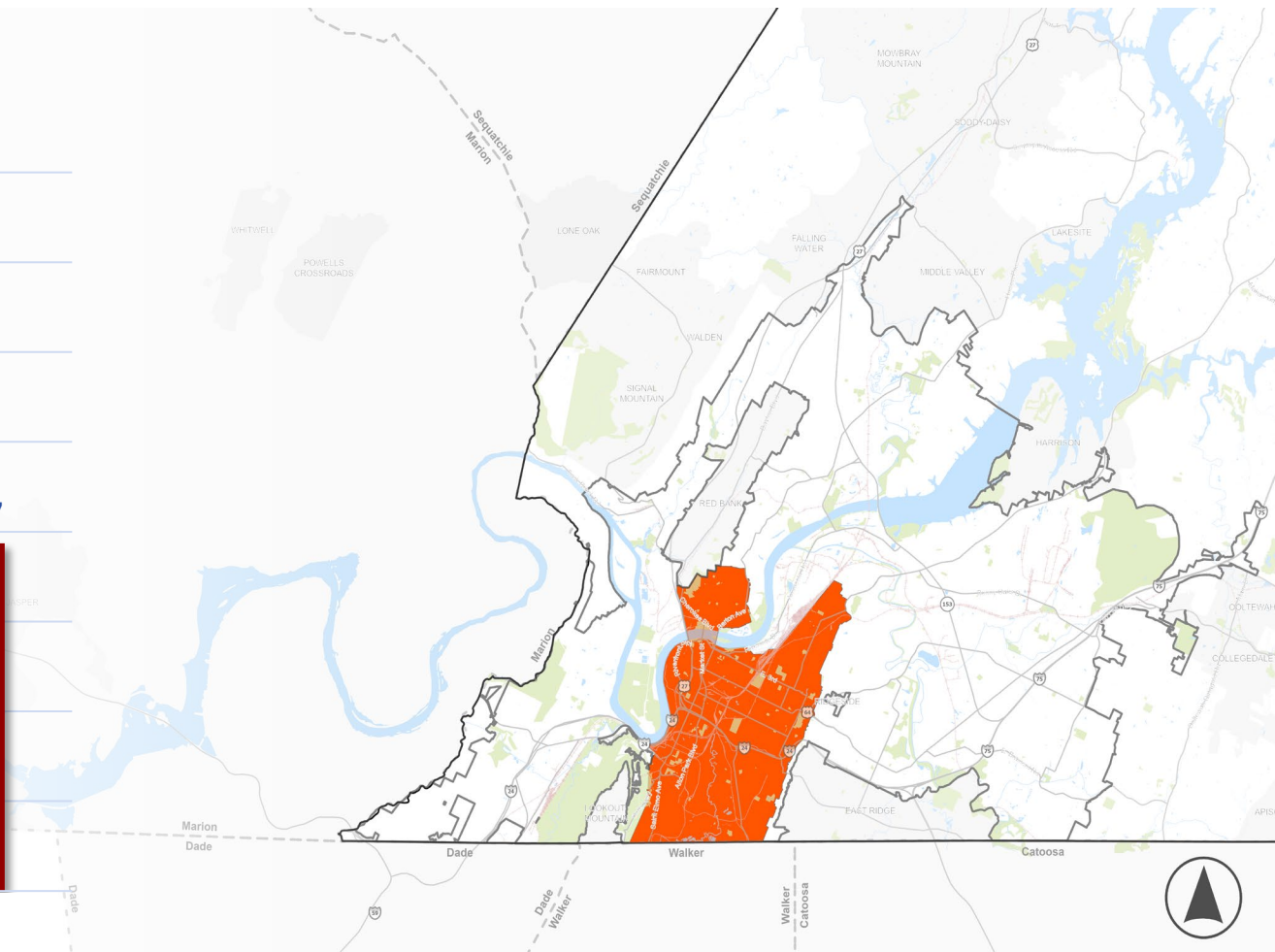
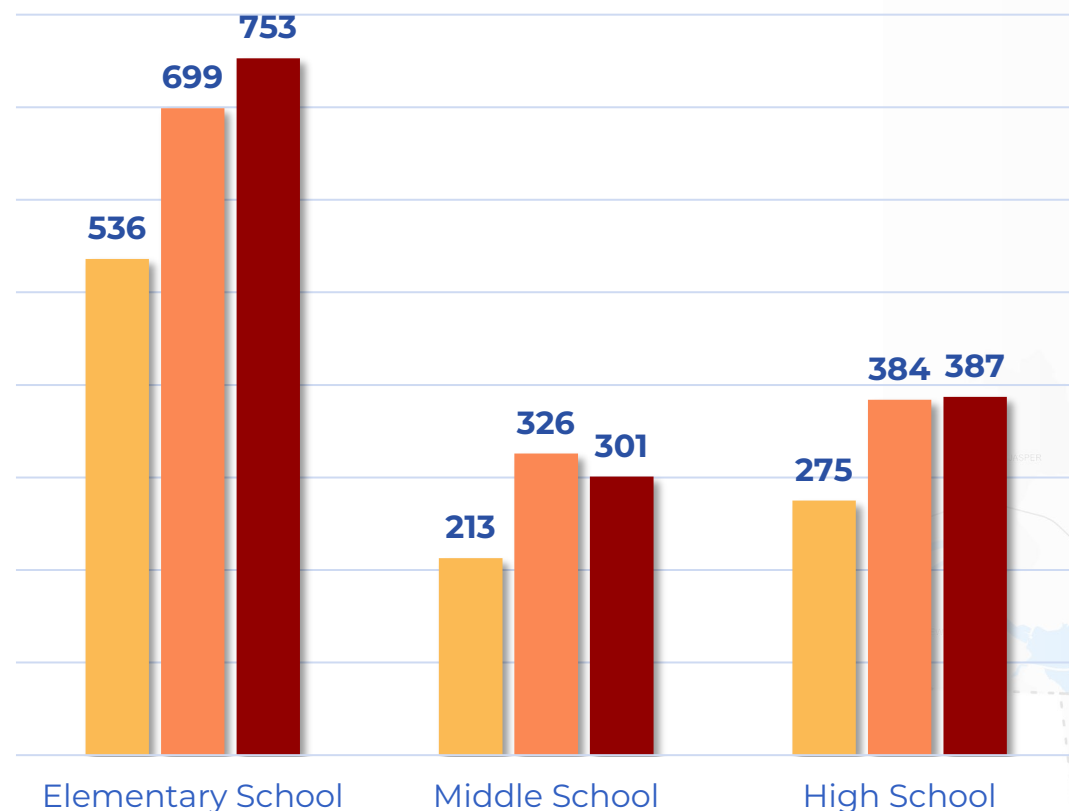
Urban Overlay Zone



■ Current Trends
 ■ Focus on the Urban Area
 ■ Jobs-Housing Balance



Urban Overlay Zone: Student Enrollment



■ Current Trends
 ■ Focus on the Urban Area
 ■ Jobs-Housing Balance