Huntsville Area
Metropolitan Planning
Organization

High Capacity Transit Study

March 2022

Huntsville Area
Metropolitan Planning Organization

Agenda

- Huntsville MPO Area Now
  - Characteristics
  - Transit Network
- The Future of Huntsville MPO Area
- Future Transit Options
  - Identifying Corridors
  - Mode Selection
- Draft Study Recommendations
- What's Next

Huntsville MPO Area Now

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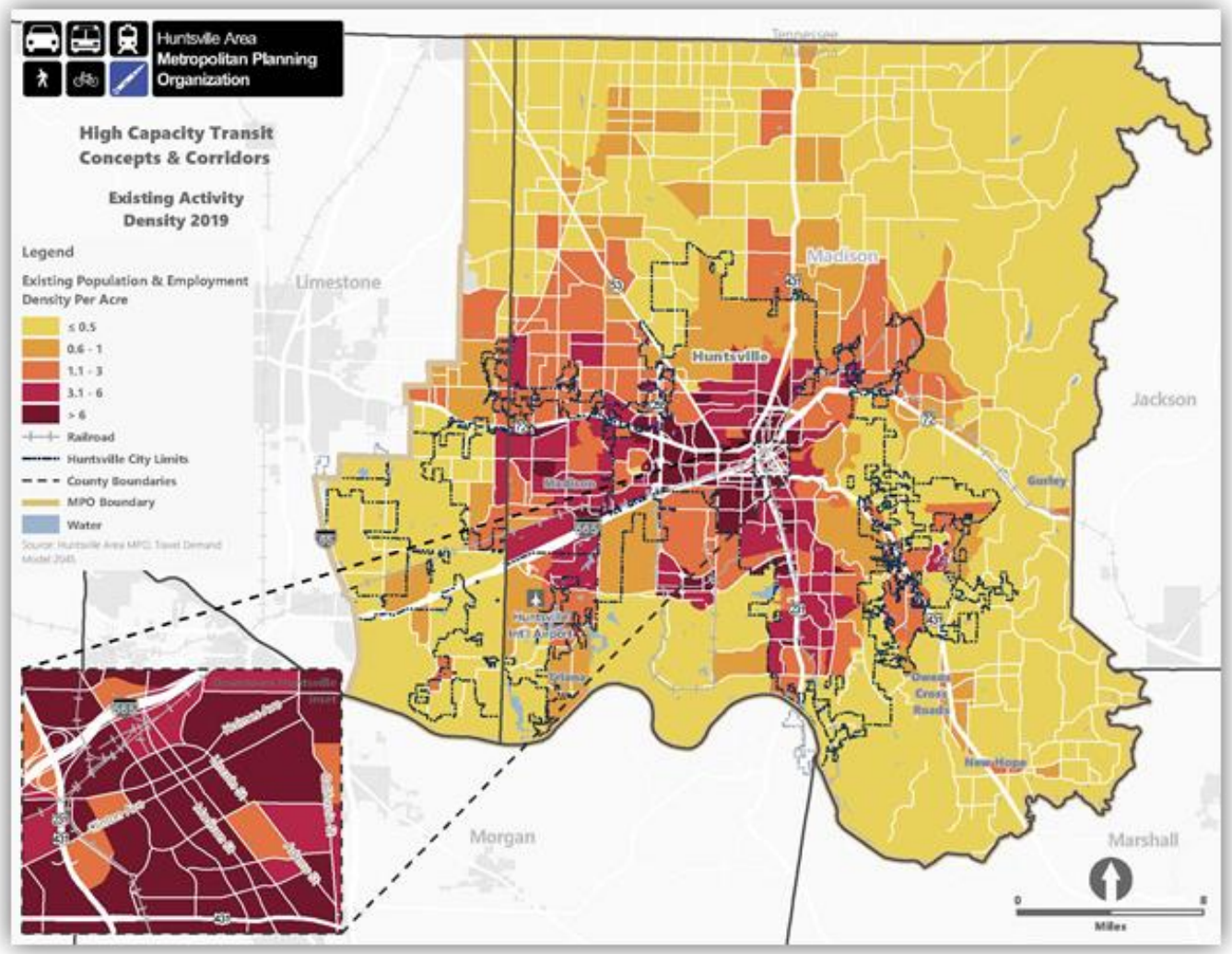
Activity Density & Major Employers

- UAH
- Redstone Arsenal
- Cummings Research Park
- Downtown Huntsville
- MidCity District
- Village of Providence
- Mazda/Toyota
- City of Madison



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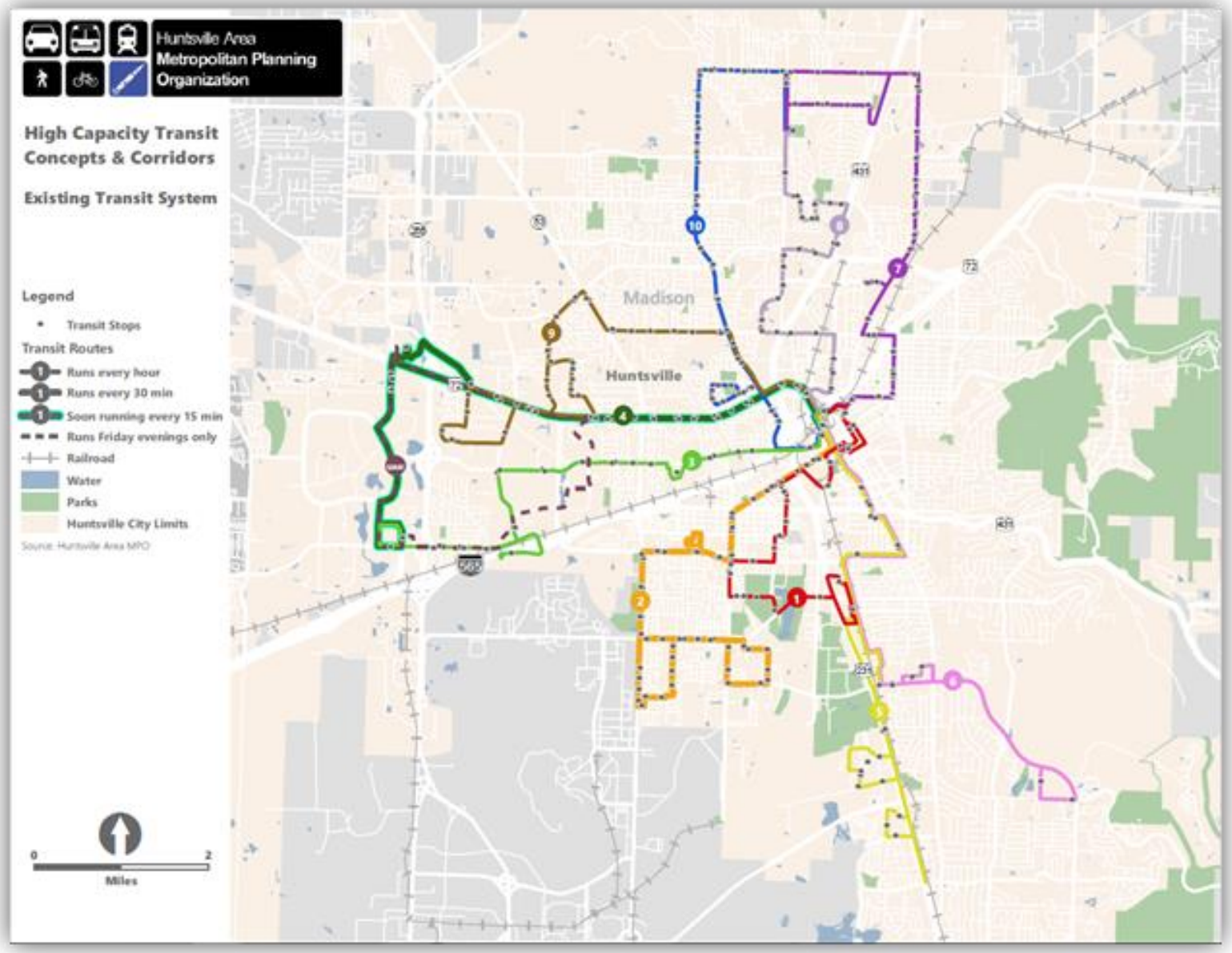
Transit Network

- 10 routes
- 1 special UAH route
- Monday – Saturday service
- 7 routes operate 60-minute service
- 3 routes operate 30-minute service
- Route 4 recommended for 15-minute service
- Paratransit/Demand Response Services including:
  - Access
  - TRAM
  - MARS



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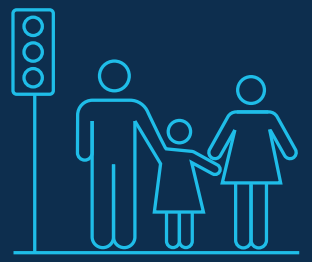
Future of Huntsville MPO Area



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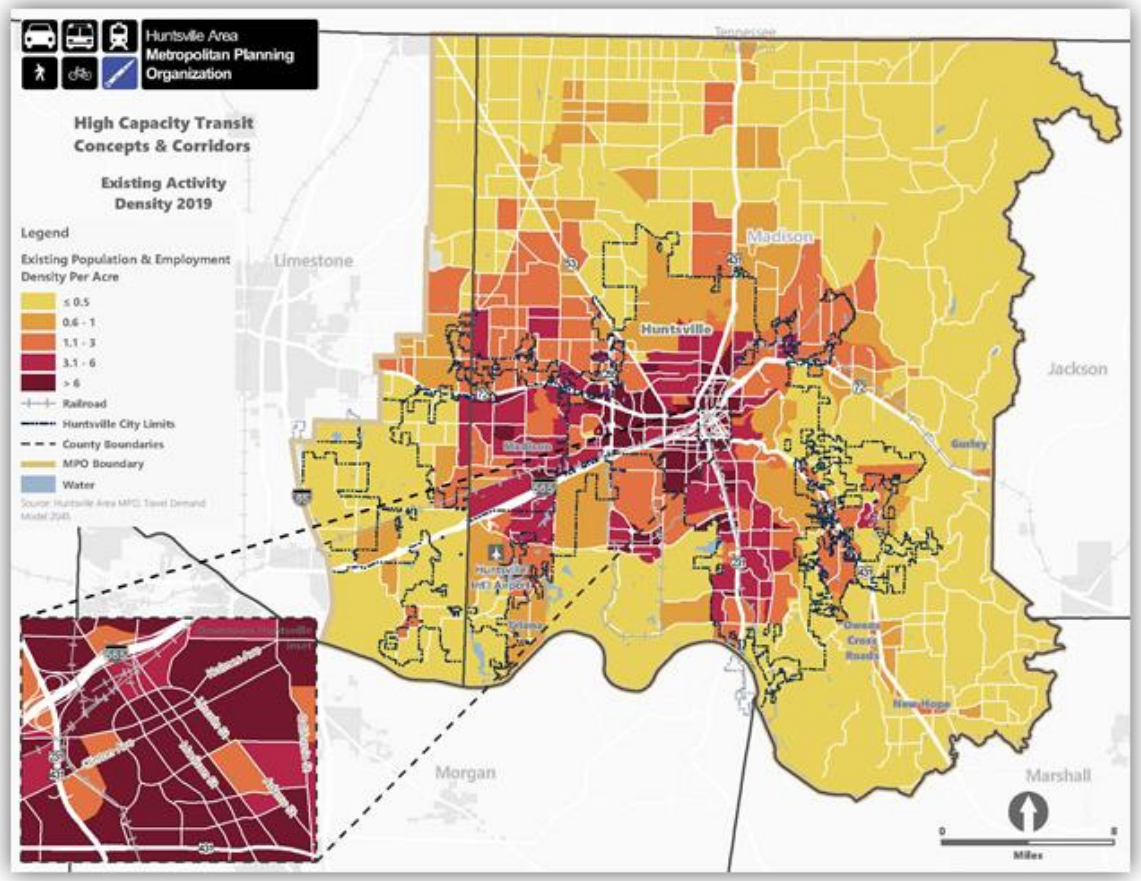
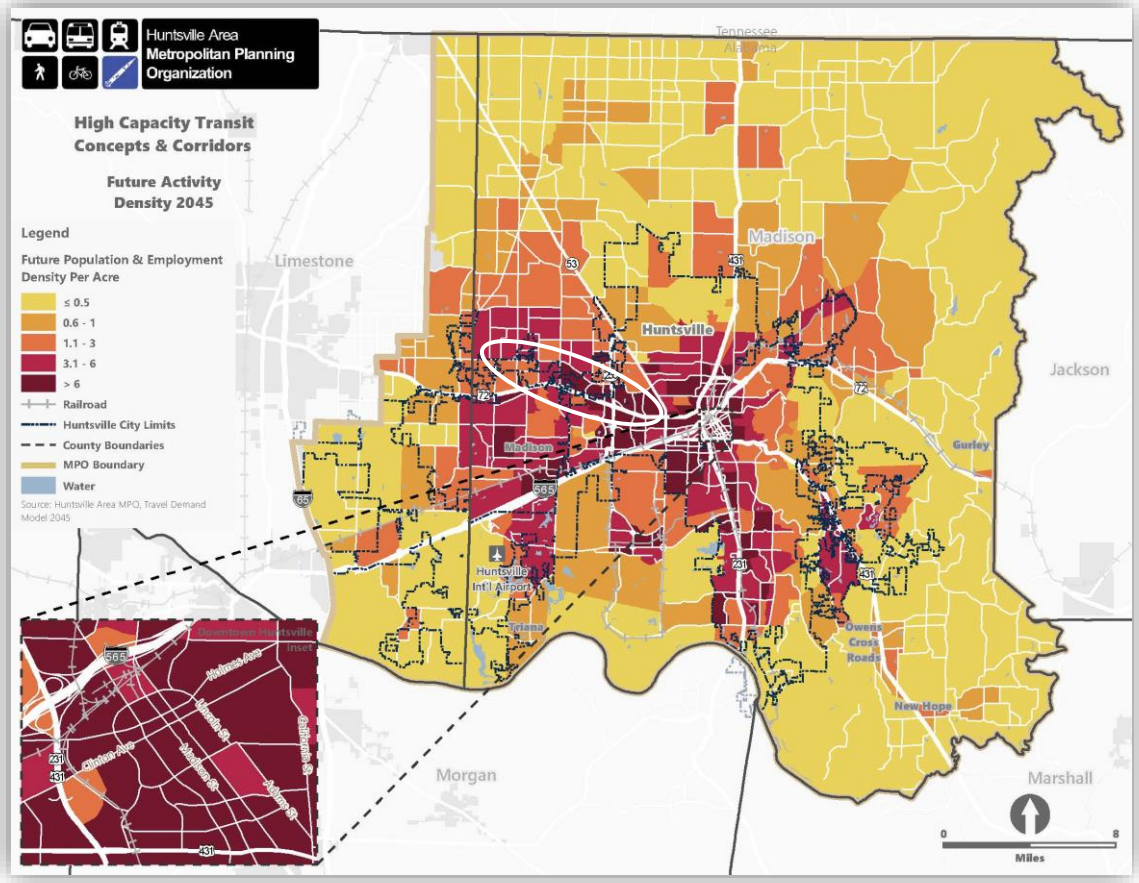
Population & Employment Density



Existing (2019)



Future (2045)

Exciting things happening: City of Madison Growth Plan, UAH Expansion Plan, Cummings Research Park Expansion Plan, Huntsville Medical District, and more!

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Future Transit Options

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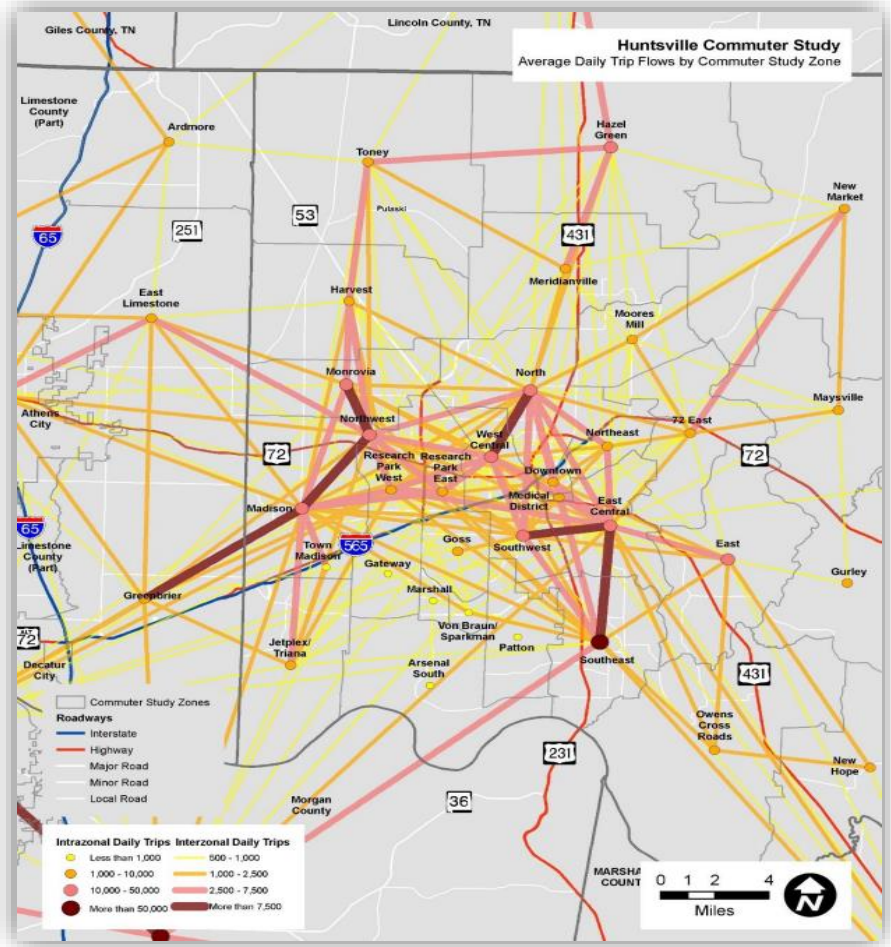
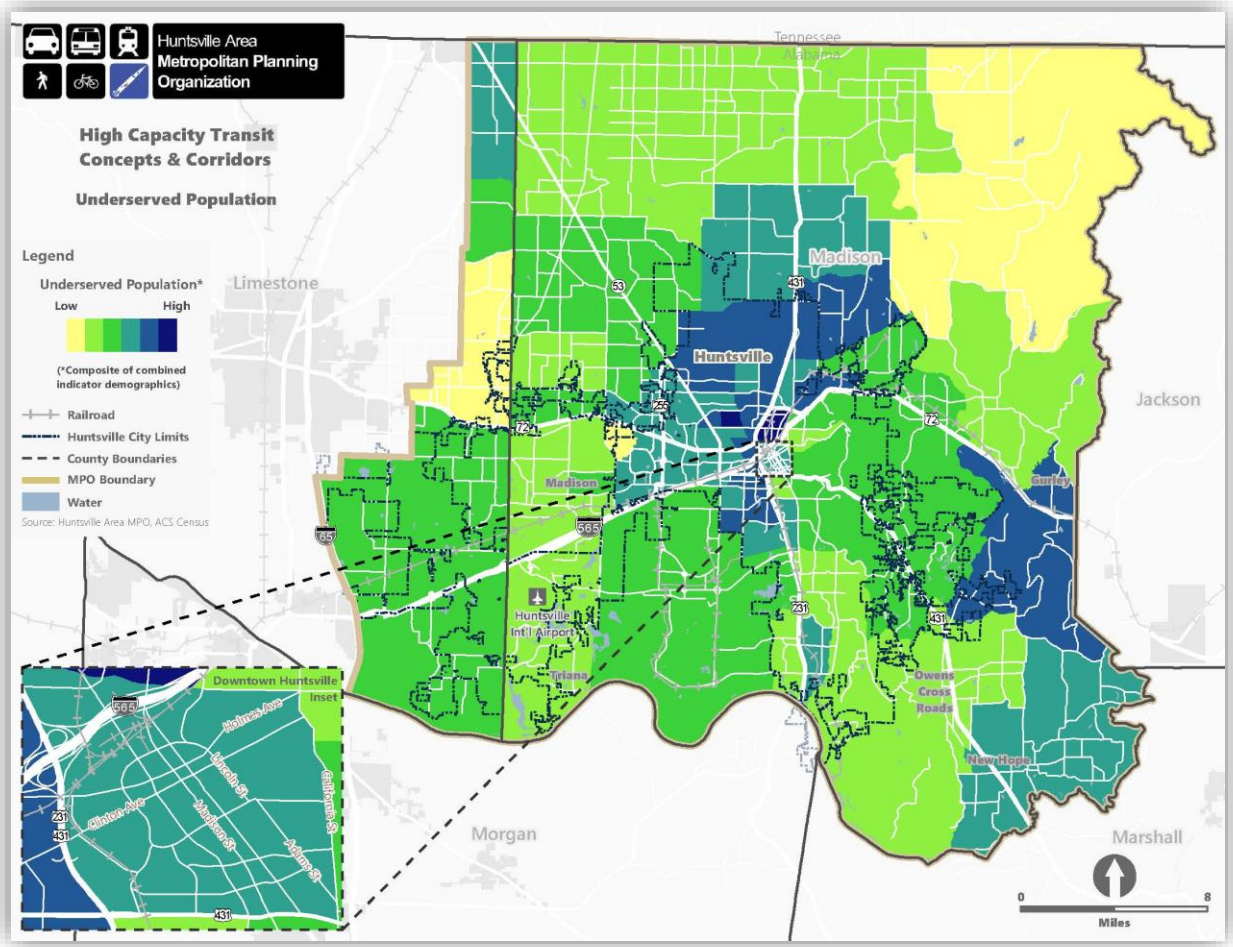
Identifying Corridors

Transit Propensity is a combination of sociodemographic characteristics that are markers for populations more like to use or depend on transit.

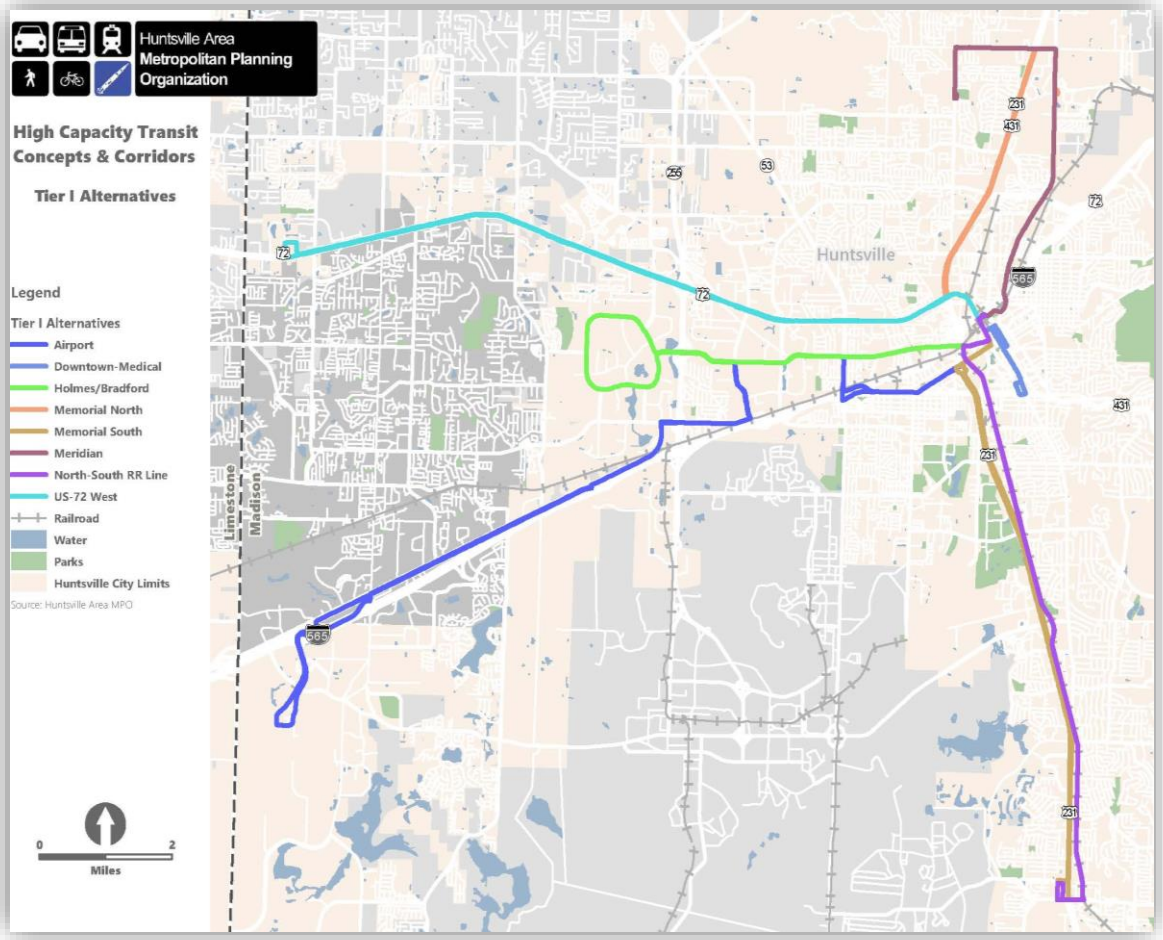


Trip Flows

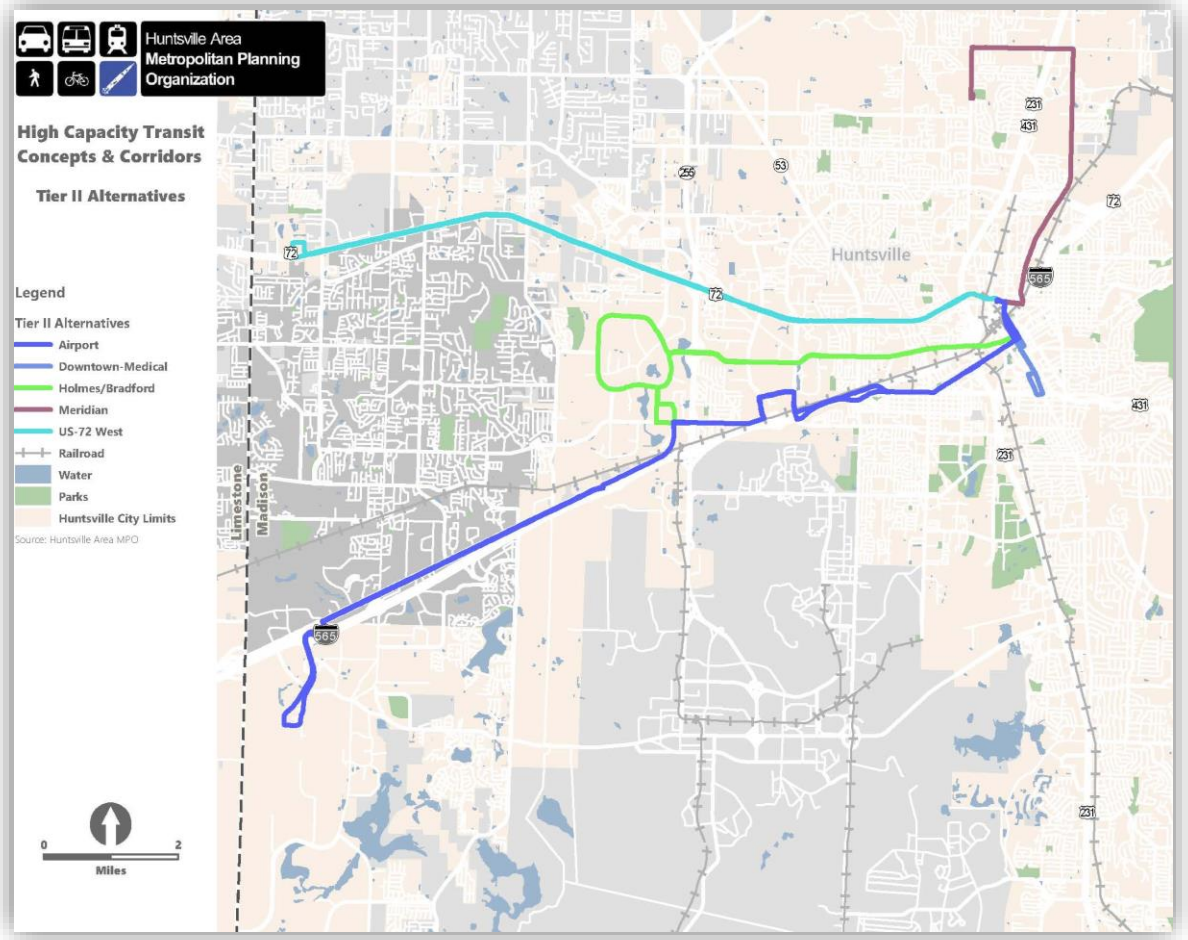


Transit Propensity

Potential Transit Corridors



Tier I Corridors



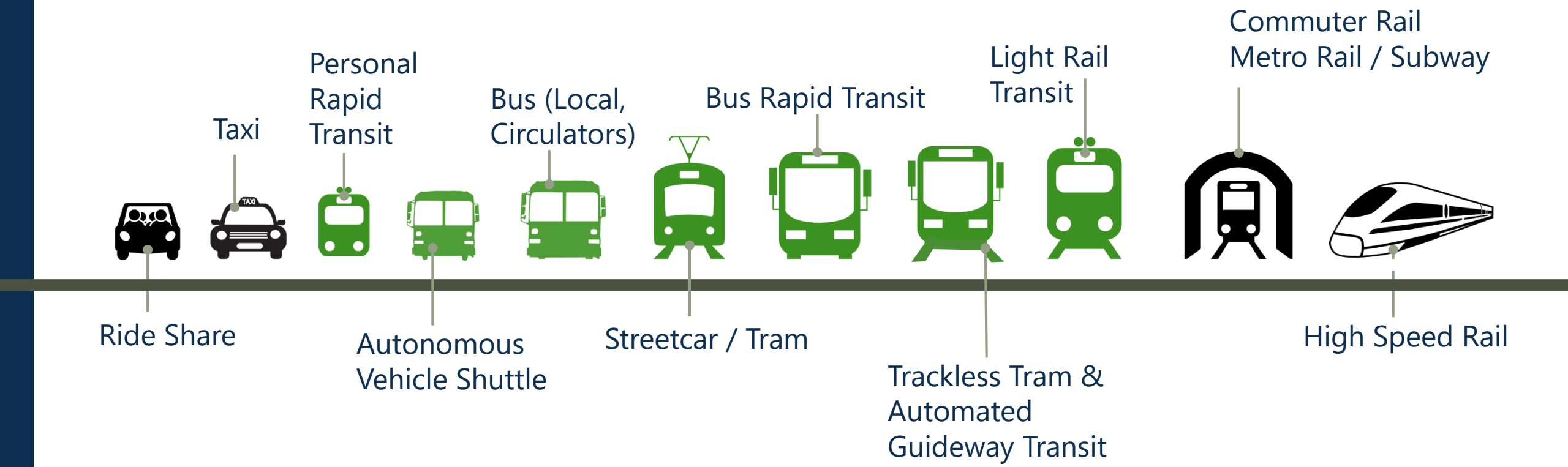
Tier II Corridors

Corridor Refinement Criteria

Criteria	Measure
Support Multimodal Activity (25%)	Regional Commuter Corridors served
	Service to planned park-n-ride facilities
	Pedestrian/Bicycle facilities within half mile
	Traffic Volumes within half mile
	Quarter-mile Walkshed
	Existing ridership within 1/2 mile
Serve Diverse Travel Market Needs (25%)	Population density within ½ mile (2019)
	Employment density with ½ mile (2019)
	Transit propensity within 1/2 mile (2019)
	Service to UAH and A&M
	Service to other colleges
Sustain Economic Competitiveness and Development (25%)	Planned development acres within 1/2 mile
	Activity centers & special generators (airport, malls, hospitals)
	Developable land
	Serving new area
Provide Speedy Service (25%)	Directness of route
	Corridor speed limit
	Available right of way

Spectrum of Transit

Different modes serve different purposes and travel markets



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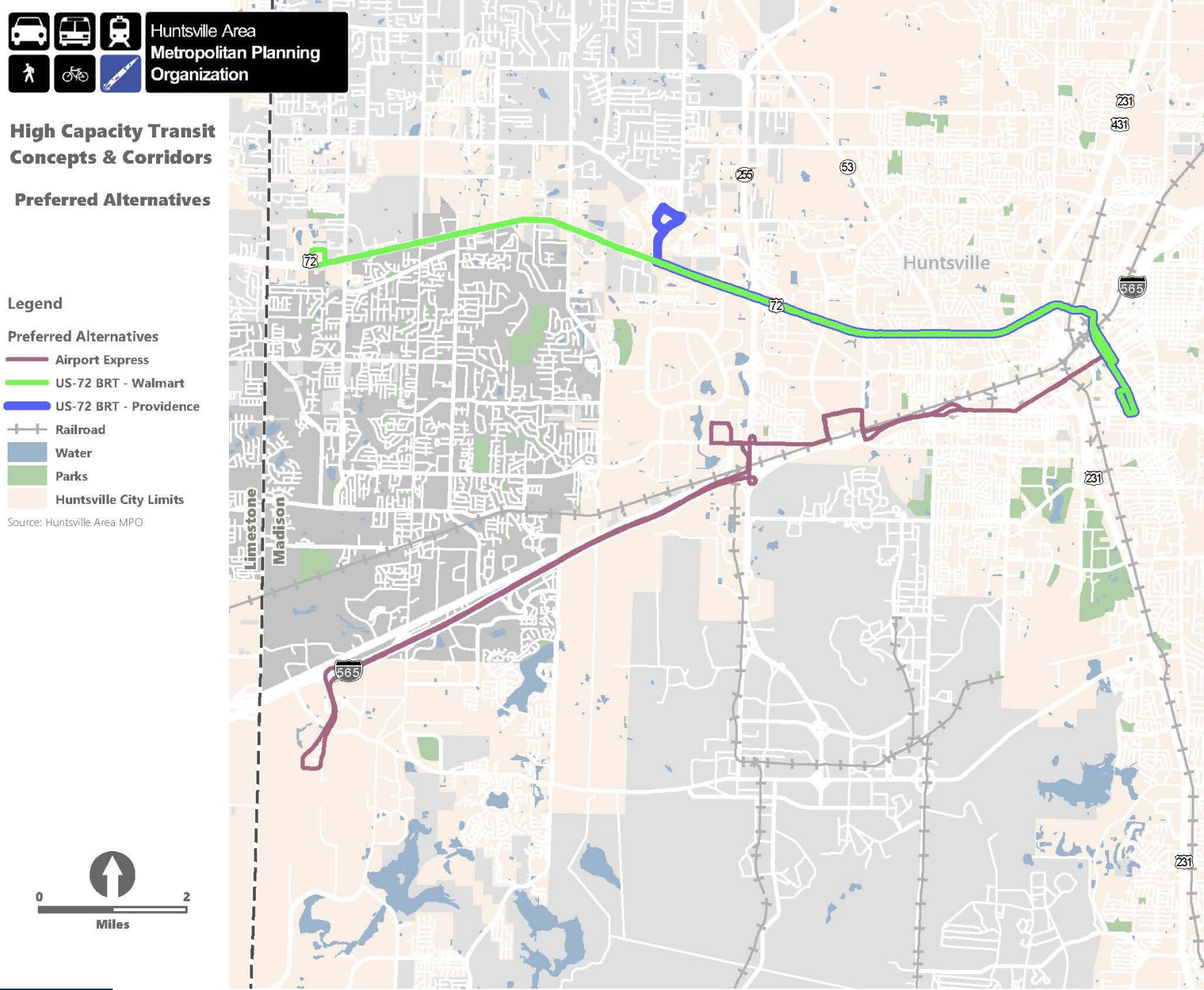
Spectrum of Transit - Costs

City	Line	Mode	Opening Year	Length	Cost	Cost per Mile
Reno, NV	Lincoln Line	BRT	2018	3.1	$52,570,000	$16,958,000
Fort Collins, CO	MAX BRT	BRT	2014	5.0	$74,200,00	$14,840,000
Jacksonville, FL	Orange Line (Southwest Corridor)	BRT	2021	12.9	$33,160,000	$2,763,000
Raleigh, NC	New Bern Ave	BRT	In design	5.0	$71,450,000	$14,290,000
Portland, OR*	SW Corridor	LRT	Project Development	12.0	~$2,600,000,000-2,800,000,000 (includes fleet)	$225,000,000
Austin, TX*	Orange Line	LRT	Project Development	12.0	$3,800,000,000 (includes tunnel)	$316,666,700
Minneapolis, MN*	Southwest	LRT	In construction (2027)	14.5	$2,003,152,549 (includes fleet)	$137,931,034
Phoenix, AZ*	South Central Extension	LRT	In construction (2024)	5.5	$1,345,088,335	$244,561,515
*New Starts						

Draft Study Recommendations

Identified Corridors

- U.S. 72 / Medical – BRT
  - Corridor Growth
  - Transit Markets
  - Connection to Madison
- Airport Express Bus
  - Critical Connection
  - Destinations Along Corridor
  - Interim Service to Build Ridership



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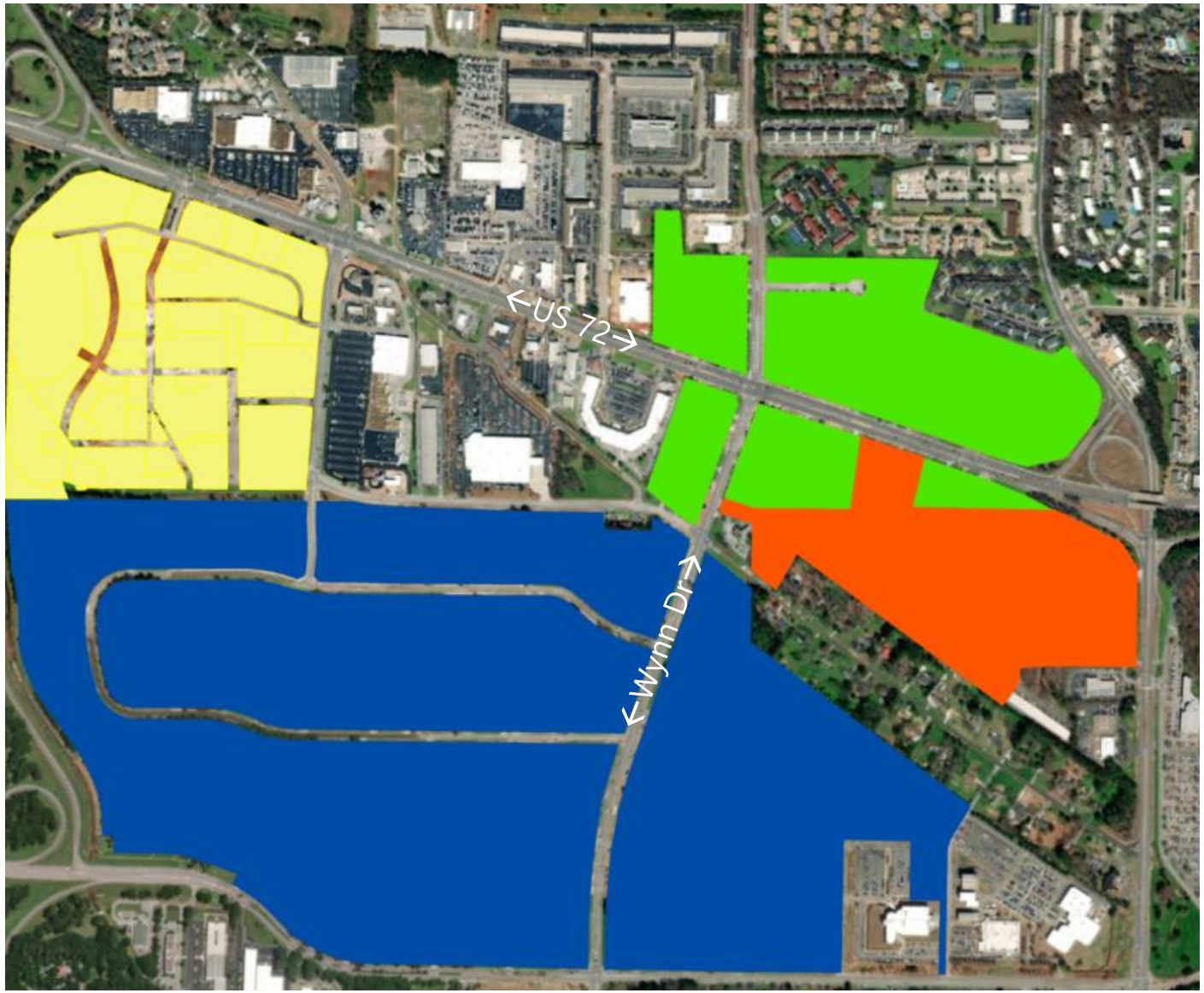
Land Use & Transportation

Development Activity

- MidCity District (yellow)
- Cummings Research Park (blue)
- UAH Expansion (orange)
- TOD concept (green)

Other

- Bike/Ped Connectivity
- Parking Policies
- Partnerships



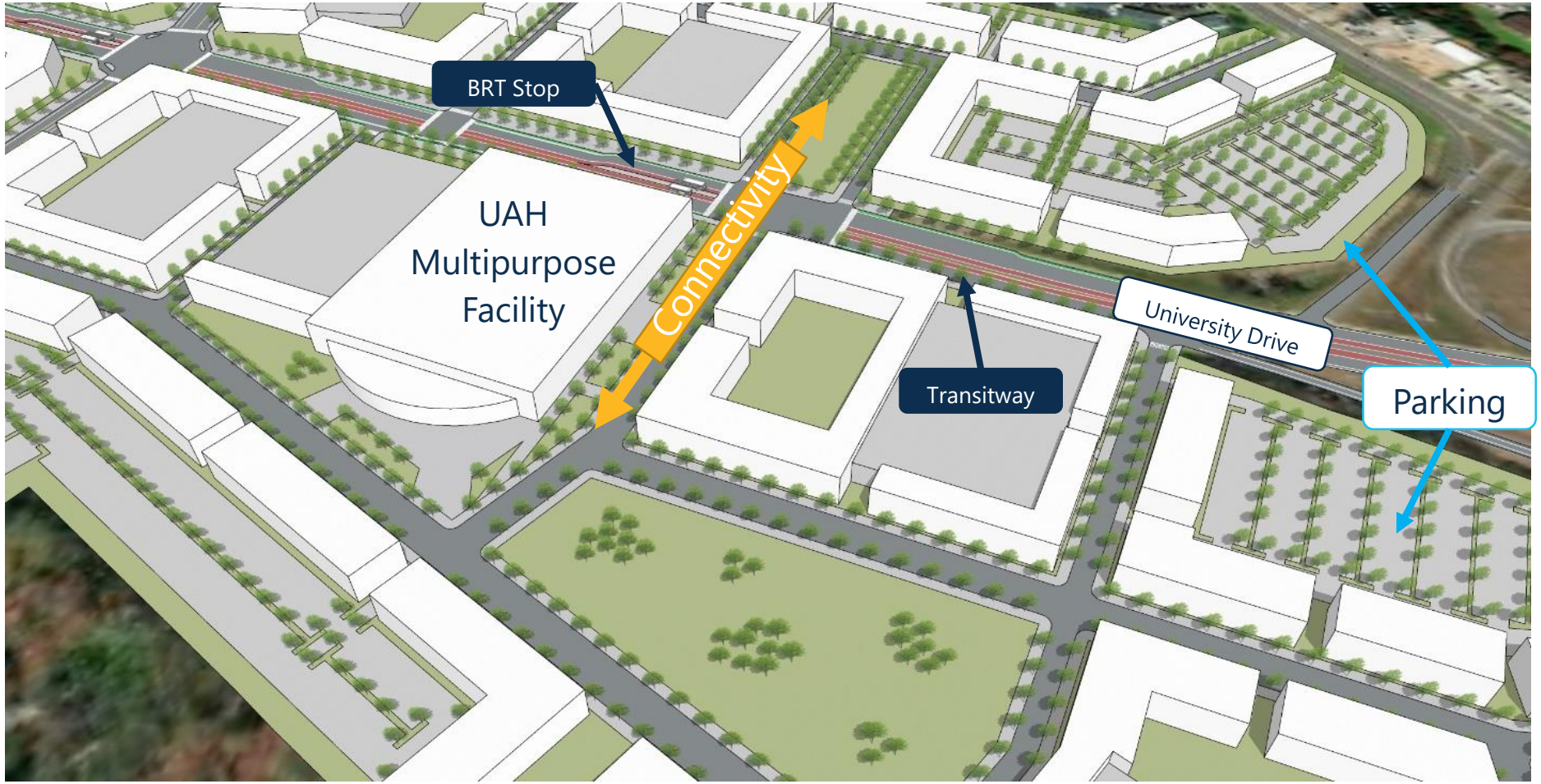
UAH Executive Office Plan

Transit-Oriented Development

Wynn to Sparkman Dr

Transit-Oriented Development

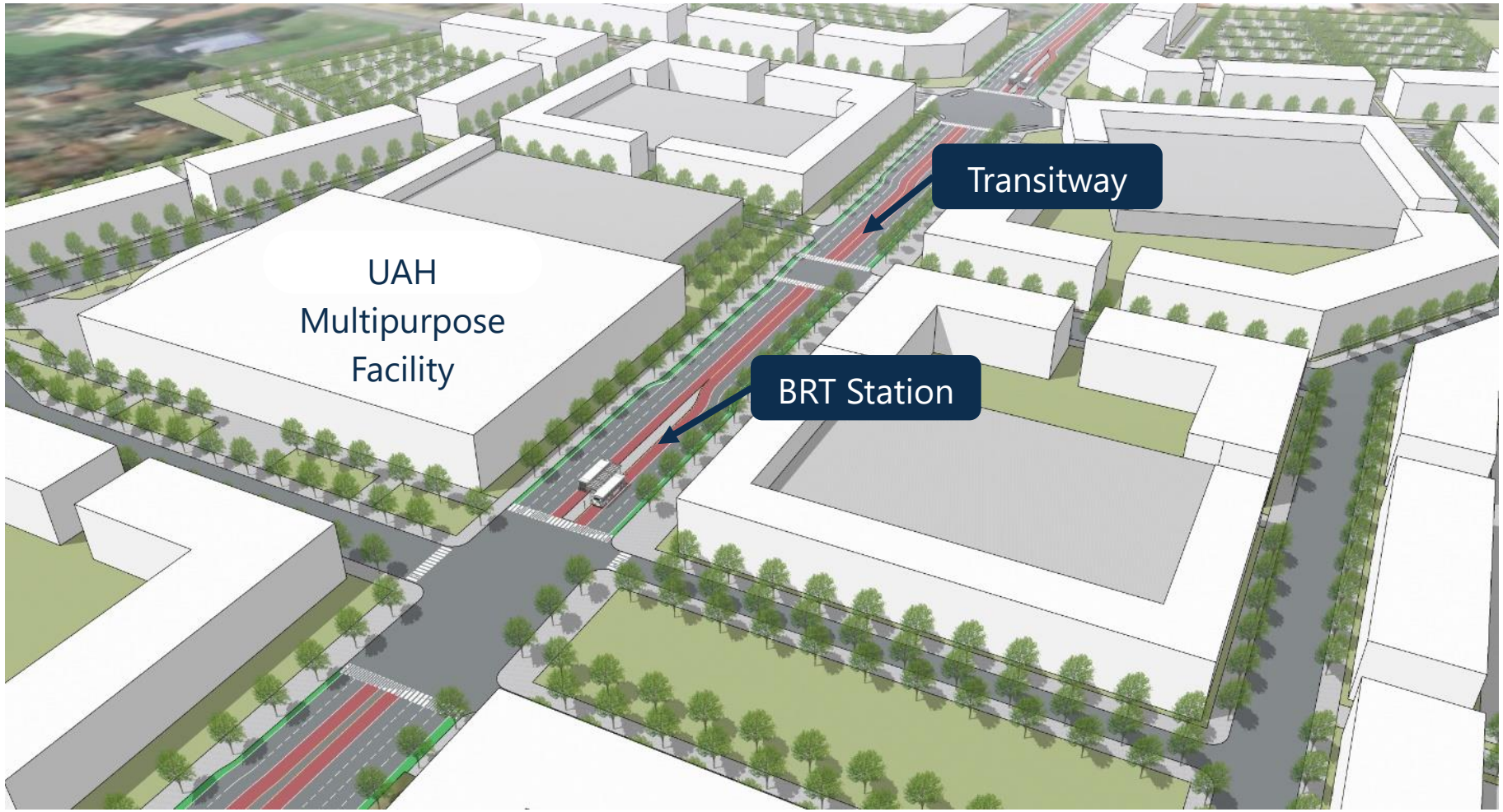
Walkable & Connected



Pedestrian Promenades & “Back Door” Parking

Transit-Oriented Development

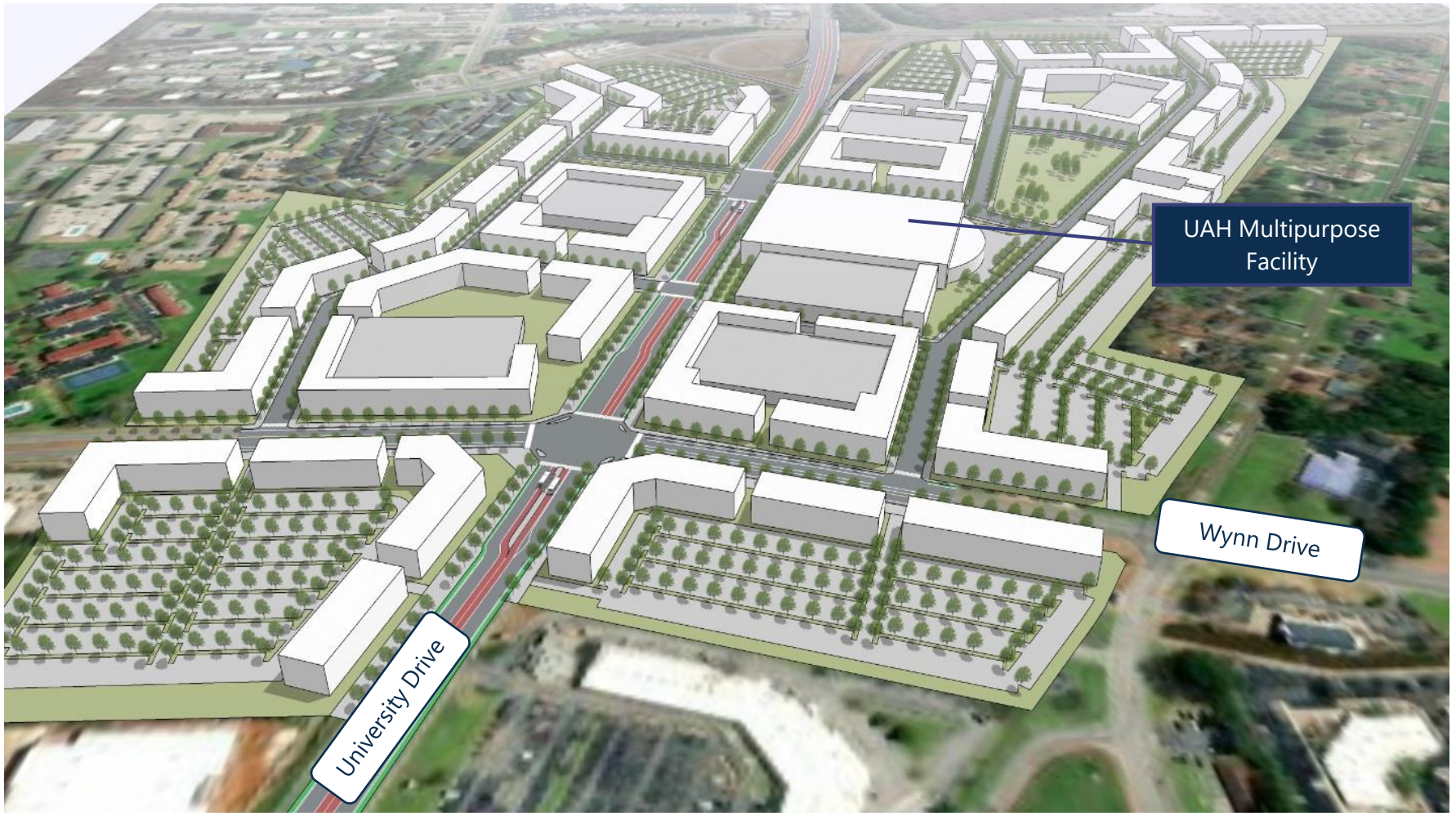
Context Sensitive



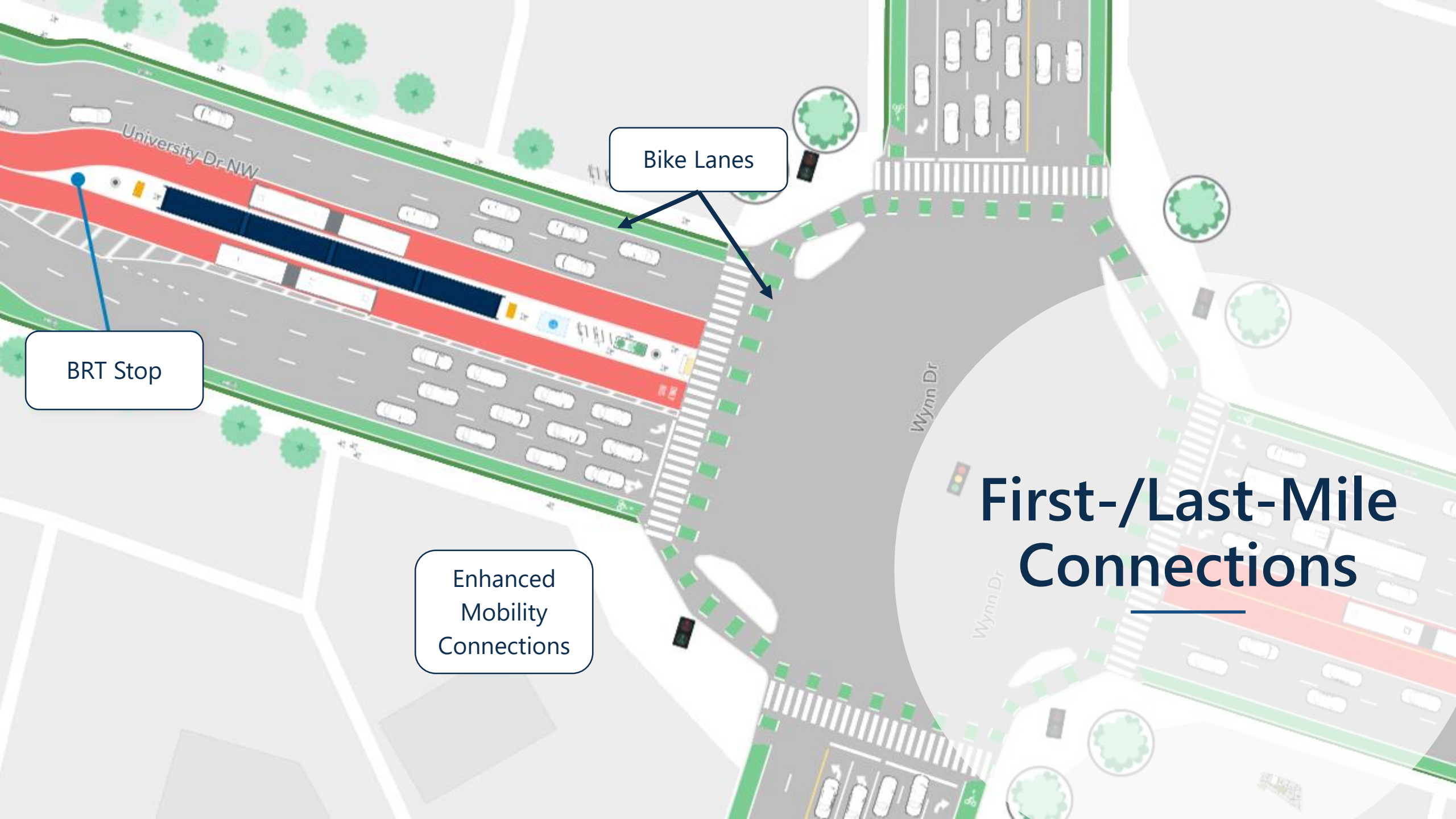
UAH Multipurpose Facility as TOD Focal Point

Transit-Oriented Development

Dense & Diverse



Large & Small Buildings – Multistory & Street-Facing



First-/Last-Mile Connections

What's Next

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What's Next

- Funding
- Building Ridership
- Public Engagement
- Corridor Configuration
- Operating Plan/Fleet

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Funding - FTA Capital Investment Grant Program

New Starts

- Fixed guideway >$400 million or seeking ≥$150 million in CIG funds

Small Starts

- Fixed guideway or corridor-based BRT <$400 million and seeking <$150 million in CIG funds

Core Capacity

- Expands capacity by ≥10% in an existing fixed guideway corridor that is at capacity today or will be in five years

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FTA Capital Investment Grant Program
Small Starts Process

Project Development

- Complete environmental review process (NEPA)
- Select locally preferred alternative & adopt into fiscally constrained long-range plan
- Local financial commitment
- FTA criteria for funding (rating package)
- Complete sufficient engineering & design

FTA Review

Small Starts Grant Agreement

- Final Design
- Fleet Acquisition
- Construction

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Funding Continued

- Local match required for FTA funding
- FTA discretionary grants (RAISE)
- Partnerships
  - Universities/colleges
  - Medical Centers
  - Chamber of Commerce
  - Large employers

U.S. 72 BRT - Building Ridership

Ridership - Average Weekday Boardings

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Activity in the U.S. 72 corridor specifically

Building Ridership

- Improve service on routes in U.S. 72-Medical corridor
  - Route 4 is primary route
  - Several others – Routes 5, 6, 9
- System-wide frequency improvements
  - Connections need to be convenient
- Integrated land use and transportation planning
  - Places that are accessible to pedestrians and bicyclists are an important piece of the puzzle
  - *Incorporate TOD principles into actively ongoing updates to City of Huntsville and City of Madison zoning codes
  - First/last mile connections

University Drive at MidCity District

Wynn Drive and University Drive

Public Engagement

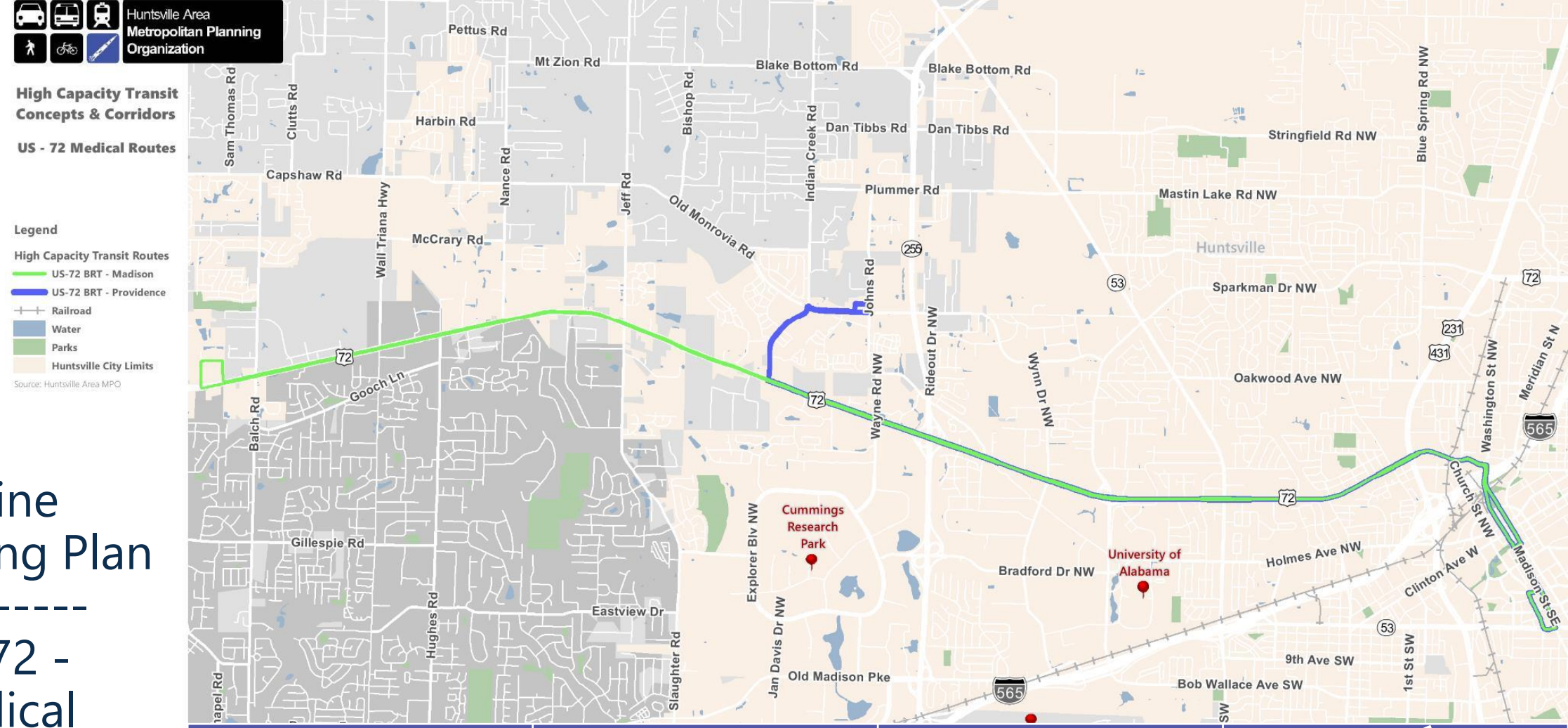
- Requirements for FTA funding
  - Stakeholder engagement
  - Determine locally preferred alternative (LPA)
  - Equity & inclusion

Define Corridor Configuration

Side running

Center running

Image sources in notes



Refine Operating Plan

US 72 - Medical

US 72 / Medical			
Scenario 1	10	6	$3,100,000
Scenario 2	12	5	$2,500,000
Scenario 3	15	4	$2,000,000

Questions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Cummings Research Park

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