

5.29.2012



FIRST INVESTMENT
EVALUATION AND
RECOMMENDATION
AUSTIN CITY COUNCIL



Urban Rail is a part of

 **AUSTIN MOBILITY**

Making mobility better, together.



CENTRAL TEXAS HAS A PROBLEM...

The continued vitality and economic health of our city and our region are at risk due to a lack of mobility

- The mobility systems serving our business and cultural core **are inadequate to meet existing demand/future growth**
- Healthy region needs a healthy core
- We need a multi-modal transportation approach... roadways, express lanes, high capacity transit, bicycle and pedestrian investments to meet this challenge



New transportation investments, providing viable travel options, are needed to increase mobility





CITY SUCCESS WILL CONTINUE

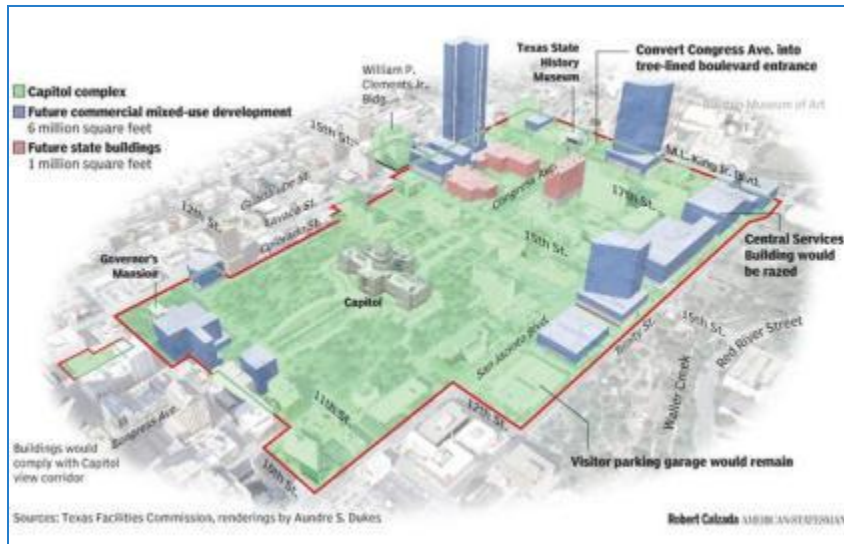
Austin Named Forbes Fastest Growing City for Second Consecutive Year





DEVELOPMENT PIPELINE IN CORE

Economic Growth Potential



Near-Term Pipeline Development (Potential 5,000 to 8,000 new employees)

- Federal Courthouse (5th & San Antonio)
- UT School of Engineering (Red River & Dean Keaton)
- Cirrus Logic Office (6th & West)
- Hyatt Place (3rd & San Jacinto)
- Vermont Multifamily Highrise (8th & Nueces)
- Mixed Use Highrise (5th & Congress)
- 416 Congress Hotel (4th & Congress)
- Capitol Terrace Highrise (Lavaca & 14th)
- Block 51 Residential (5th & Nueces)
- Block 52 Mixed Use Tower (Guadalupe & 5th)
- Green Water Development Site (2nd & West)
- Seaholm Development (Caesar Chavez & Lamar)
- Stubbs Venue Expansion (8th & Red River)
- Episcopal Church National Archives (7th and Trinity)
- East Block/Shoal Creek Walk (5th & Bowie)
- SevenRio (7th & Rio Grande)
- Convention Center Hotel (2nd & Congress)
- Travis County Complex (4th and Guadalupe)

Source: *Economic Growth & Redevelopment Services*

Capitol Complex Master Plan (Potential 5,000 to 7,000 new employees)

Medical Center Research Initiative (Potential 5,000+ new employees)



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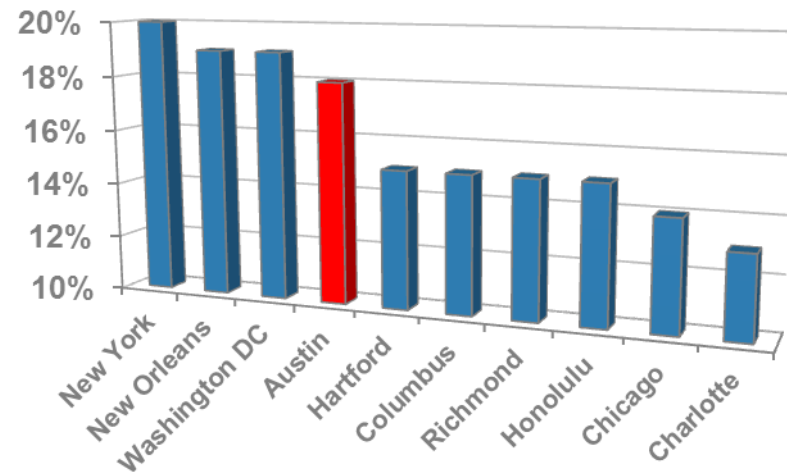




ACTIVITY CONCENTRATION IN CORE

- 30% of all jobs in the 5-county region were located in core (78701, 78703, 78704, 78705)*
- 21% of all regional jobs in downtown and UT (78701, 78705)*
- 51,000 students at UT (80% live off campus) and about 9,000 at ACC's Rio Grande campus
- 4th highest CBD concentration in the nation!

CBD Share of Total Urban Area Employment



University students not counted as part of employment density

*U.S. Census Bureau. 2012. OnTheMap Data. Longitudinal-Employer Household Dynamics Program. <http://lehd.ces.census.gov/led/onthemap/>





MOBILITY CONSTRAINTS

“Cannot build our way out of congestion”

TxDOT, Feb. 24, 12 TWG Meeting

- Roadway capacity improvements: **14-17K** persons/peak period
- Demand from planned economic development: **15-20K persons/peak period***

** ATD/EGRSO/TFC estimates June 2011*

Constrained Gateways Surround Central Austin





COMMUNITY CONSTRAINTS



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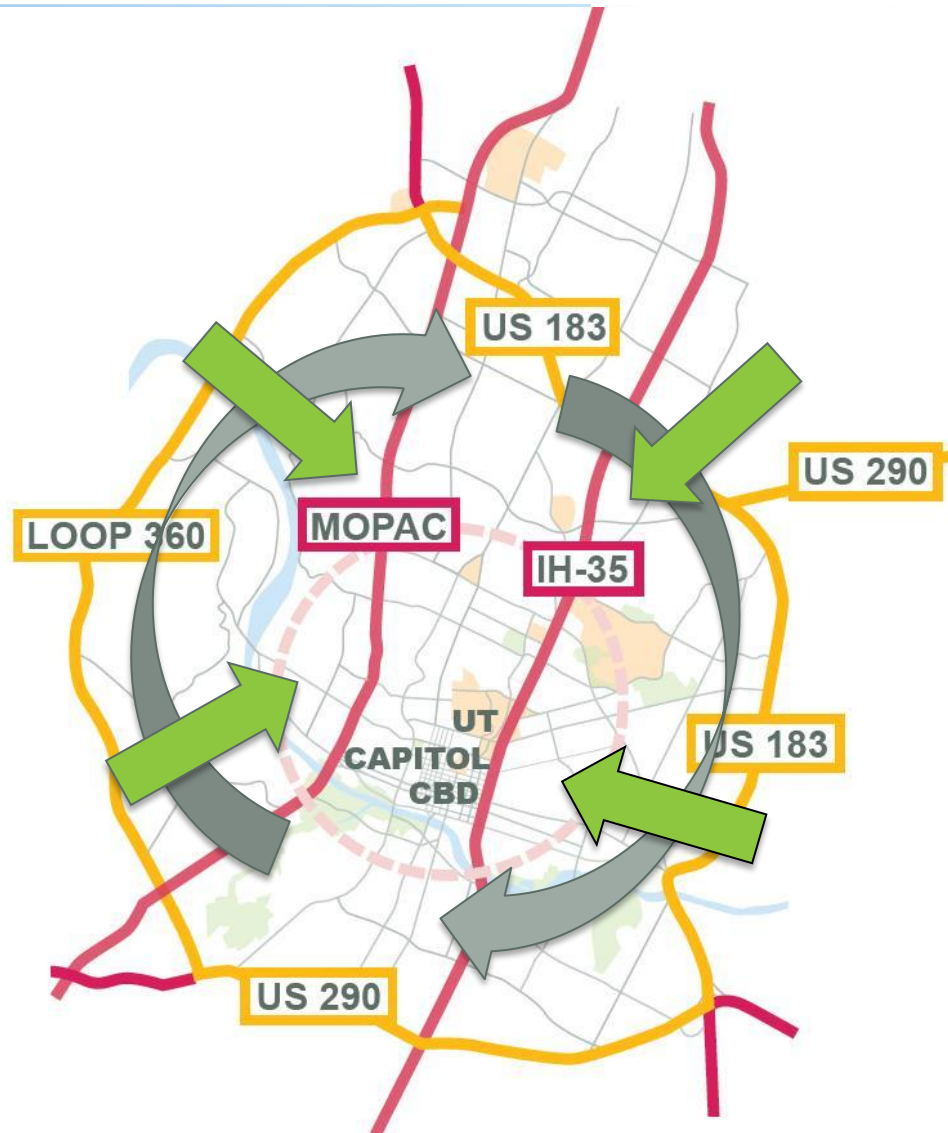




AUSTIN STRATEGIC MOBILITY APPROACH

Austin's Strategic Mobility Plan is to simultaneously invest in projects that enhance **vehicle** moving capacity around the region's central core, allowing through-trips and not destined for the city center to bypass the core

Invest in projects and policies that increase **people** moving capacity into the central core, primarily, focused on commuter trips





- **Commuter Rail**
- **Regional Rail**
- **Urban Light Rail**

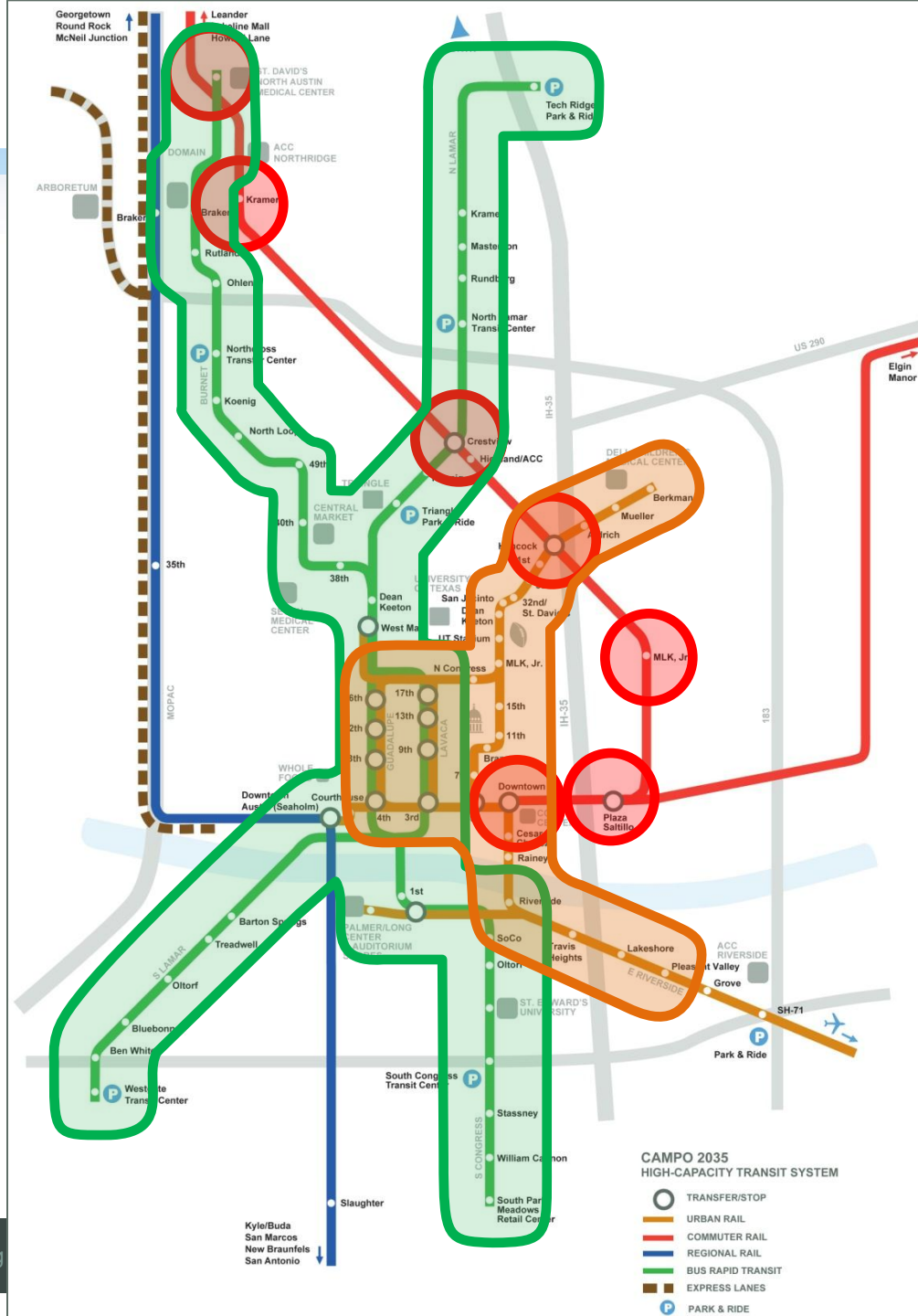
- **Arterial Rapid Bus**
- **Express Lane Bus**



ENHANCING HIGH CAPACITY TRANSIT

Urban Rail represents
third regional investment

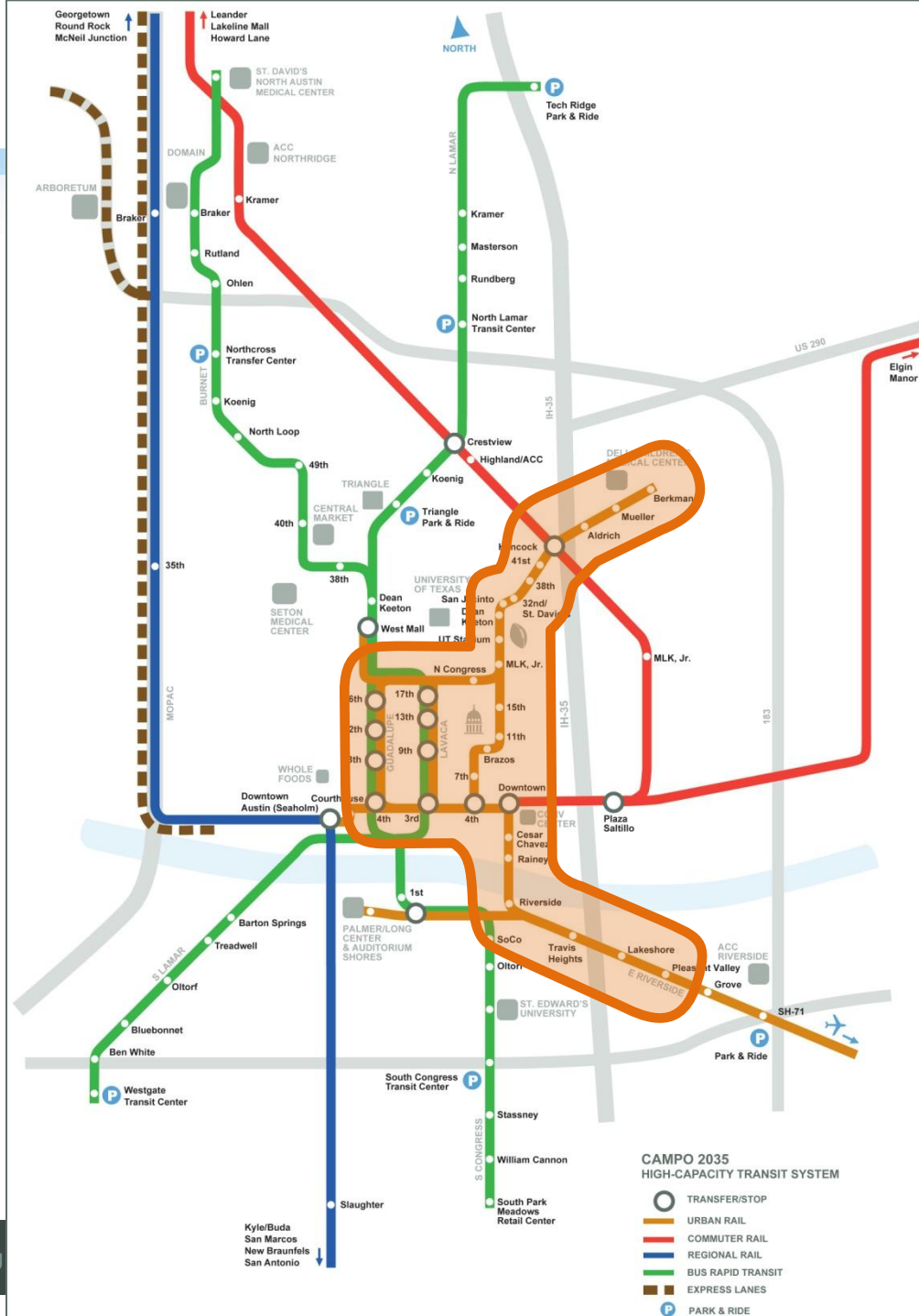
- **Commuter Rail (2004)**
- **Arterial Rapid Bus (2012)**
- **Urban Light Rail**



ENHANCING HIGH CAPACITY TRANSIT

Urban Rail represents
third regional investment

- Commuter Rail (2004)
- Arterial Rapid Bus (2012)
- Urban Light Rail
 - Mode
 - Phasing





MODES EVALUATED

- Conventional Bus
- Better Bus (MetroRapid or similar)
- Bus Rapid Transit (BRT)
- Streetcar
- Urban Rail
- Commuter Rail (MetroRail)
- Light Rail
- Heavy Rail
- Regional Rail
- Monorail
- People Mover/PRT



Source: *Central Austin Transit Study*, July 2010, City of Austin, www.austinstrategicmobility.com



AUSTIN MOBILITY














Making mobility better, together.

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TRANSIT MODE COMPARISON















Goal	Better Bus	Urban Rail
1. Improve Place Connectivity		
2. Improve Transit Connectivity		
3. Improve Mobility		
4. Maximize Community Benefits		
5. Maximize Environmental Benefits		
6. Maximize Economic Benefits		
OVERALL RATING		





TRANSIT MODE COMPARISON

Place Connectivity

Goal	Better Bus	Urban Rail
1. Improve Place Connectivity		
2. Improve Transit Connectivity		
3. Improve Mobility		
4. Maximize Community Benefits		
5. Maximize Environmental Benefits		
6. Maximize Economic Benefits		
OVERALL RATING		

UR provides a stronger connection between key destination (places) as evidenced by ridership projections (UR: 27,600 daily trips vs Bus: 9,000 daily trips)*

UR provides a greater degree of permanence and will generate stronger private mixed use development response

*Ridership projections based on 2030 full system





TRANSIT MODE COMPARISON

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1. Improve Place Connectivity		
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6. Maximize Economic Benefits		
OVERALL RATING		

Transit Connectivity















Similar level of transit connectivity can be achieved with better bus as with rail (assuming buses can be added to achieve similar capacity). However, bus operations will cost more than rail over long-term to achieve same capacity.

UR responds to public's preference for fixed guideway (rail) as demonstrated in other Texas Cities





TRANSIT MODE COMPARISON

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1. Improve Place Connectivity		
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5. Maximize Environmental Benefits		
6. Maximize Economic Benefits		
OVERALL RATING		

Overall Rating

As a mode, electric urban rail scored most favorably for further consideration

Full Alternatives Analysis to be completed





Investment Objectives

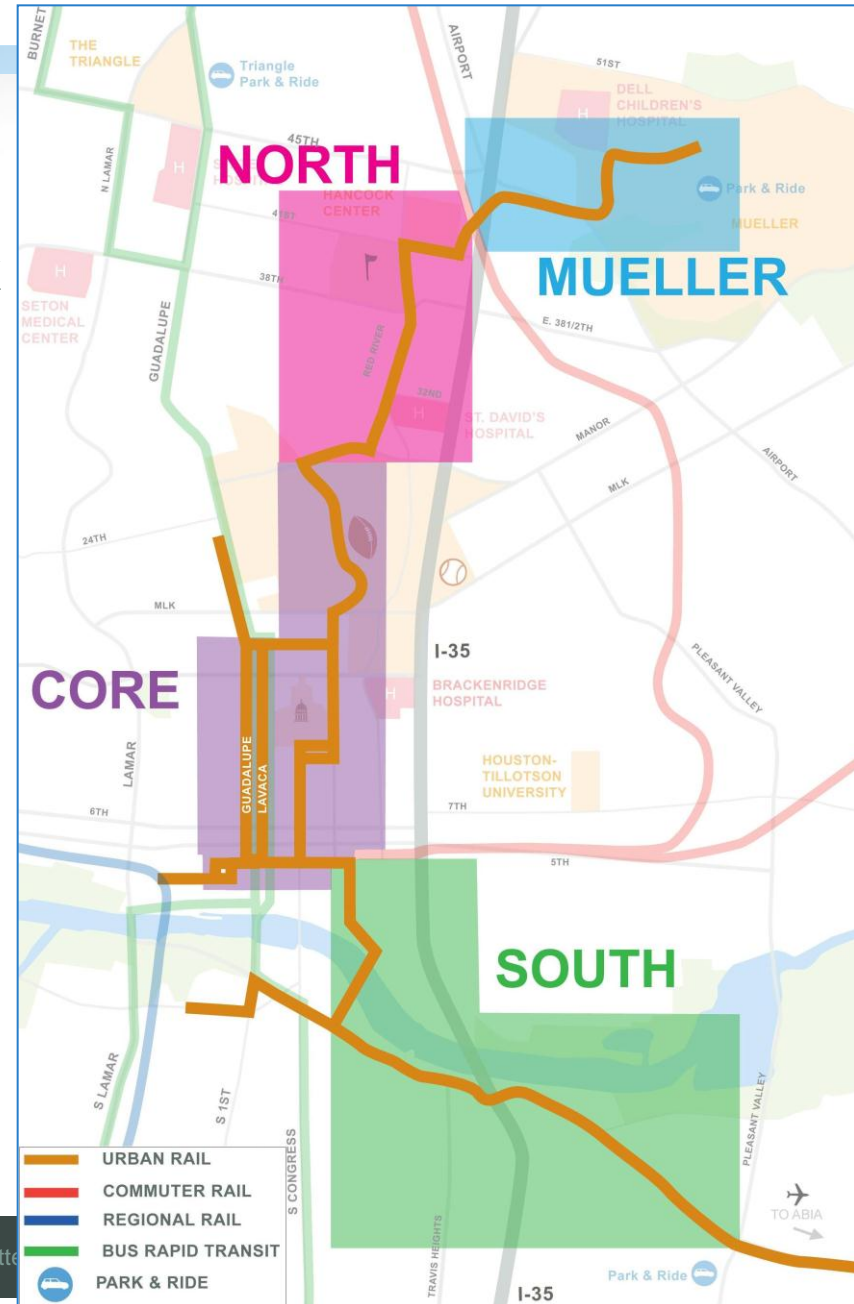
1. Provide greater mobility options
2. Improve person-moving capacity
3. Improve access to and linkages between major activity centers
4. Improve access to and linkages between regional high-capacity transit modes
5. Support the City's environmental, public health, and planning goals
6. Encourage investment and economic development





FIRST INVESTMENT OPTIONS

- Four system building blocks – Core, North, South, and Mueller – six rational investment options
- All options include the Core as the system backbone connecting UT, Capitol Complex, and Downtown
 - Core
 - Core + North
 - Core + North + Mueller
 - Core + South
 - Core + North + South
 - Core + North + South + Mueller





INVESTMENT CRITERIA RANKING

Objective	Core	Core + North	Core + North + M	Core + South	Core + North + South	Core + North + South + M
1.0 MOBILITY						
Normalized Score	6	31	63	44		
2.0 ACTIVITY HUBS						
Normalized Score	0	50	75	25		
3.0 REGIONAL HIGH-CAPACITY TRANSIT						
Normalized Score	44	50	56	63		
4.0 CAPACITY						
Normalized Score	0	50	75	50		
5.0 CITY GOALS						
Normalized Score	25	50	75	75	75	
6.0 ECONOMIC INVESTMENT AND DEVELOPMENT						
Normalized Score	10	30	75	30	60	
7.0 PRACTICAL CONSIDERATIONS						
Normalized Score	69	63	88	25	25	
OVERALL - RAW SCORE	154	324	506	311	485	1
OVERALL - GRAPHICAL SCORE						
Normalized Score	22	46	72	44	69	84

Longest option considered (C+N+S+M) generally offers greatest number of benefits, based on criteria





INVESTMENT CRITERIA RANKING

Objective	Core	Core + North	Core + North + M	Core + South	Core + North + South	Core + North + South + M
1.0 MOBILITY						
Normalized Score	6	31	63	44		
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3.0 REGIONAL HIGH-CAPACITY TRANSIT						
Normalized Score	44	50	56	63		
4.0 CAPACITY						
Normalized Score	0	50	75	50		
5.0 CITY GOALS						
Normalized Score	25	50	75	75		
6.0 ECONOMIC INVESTMENT AND DEVELOPMENT						
Normalized Score	10	30	75	30	10	50
7.0 PRACTICAL CONSIDERATIONS						
Normalized Score	69	63	88	25	31	69
OVERALL - RAW SCORE	154	324	506	311	485	591
OVERALL - GRAPHICAL SCORE						
Normalized Score	22	46	72	44	69	84

Longest option considered (C+N+S+M) generally offers greatest number of benefits, based on criteria

Mueller extension generally equivalent to Riverside (South extension)

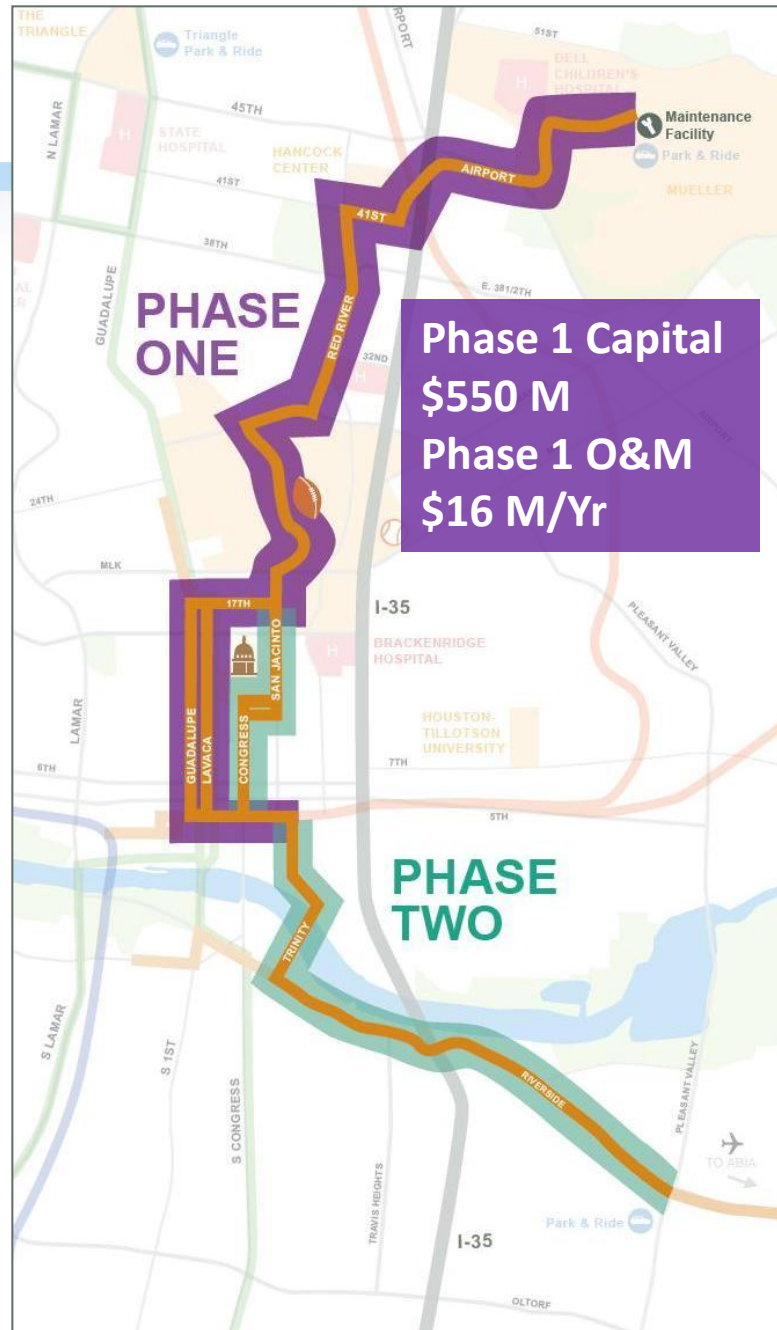
South extension requires up to 6 substantial bridges to be affected at greater potential cost and risk



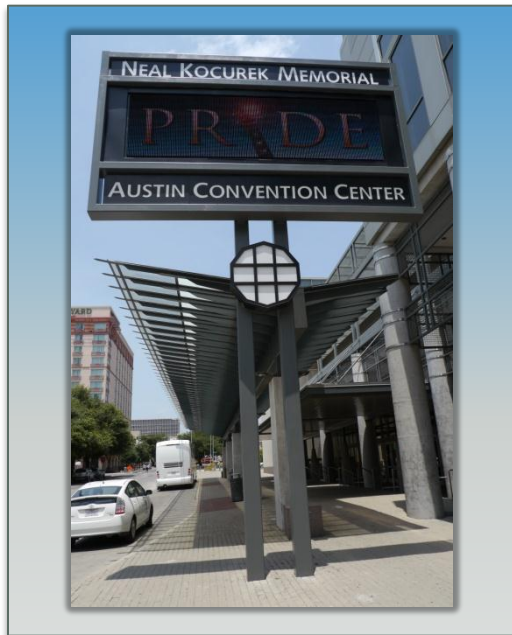


RECOMMENDED PRIORITY (PHASE 1 & 2)

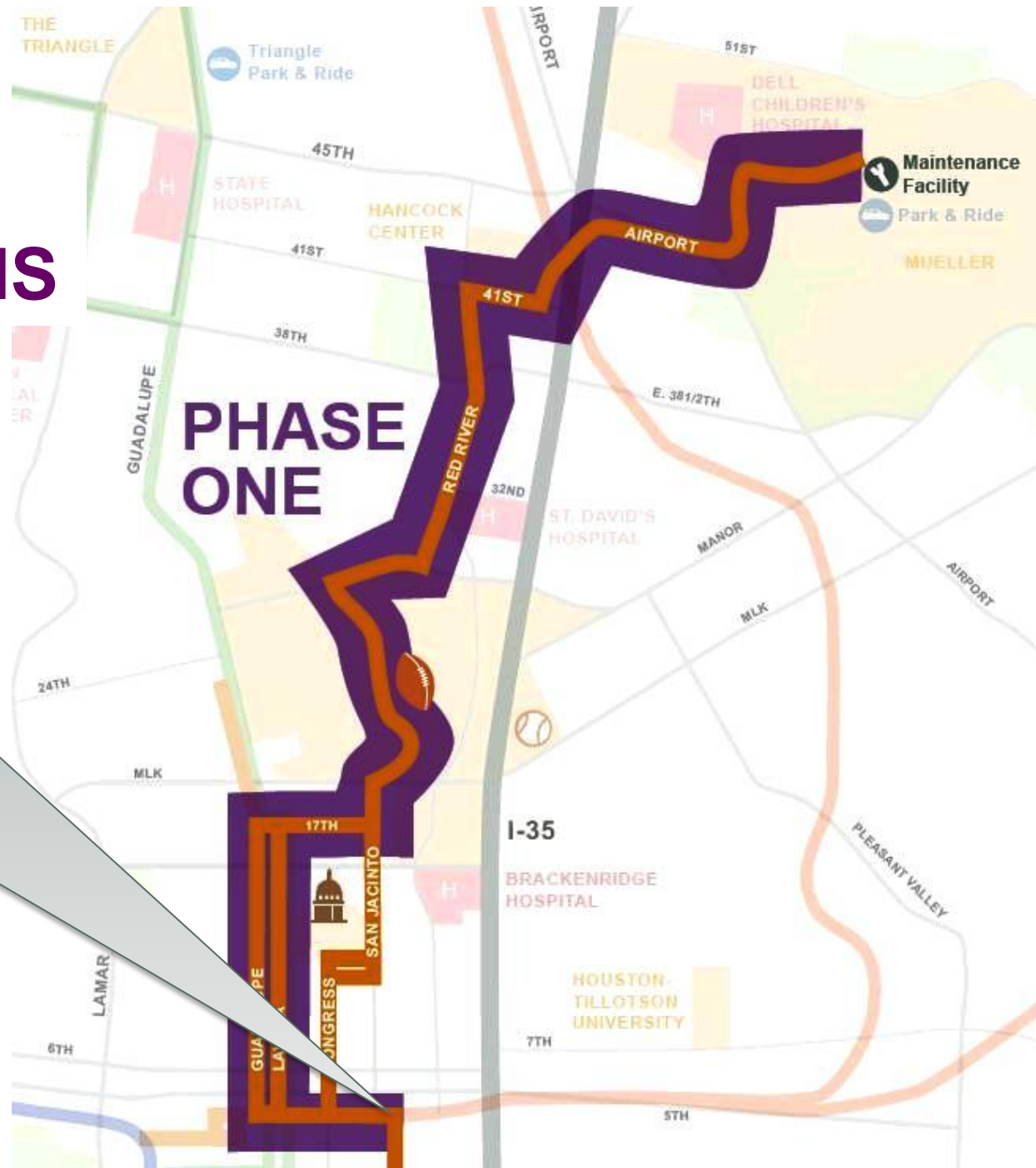
- Highest ridership potential (based on ridership index)
- Serves greatest concentration of employment in region
- Nexus for high-capacity transit in region's core
- Double-tracked route
- Strong development potential
- Implements City plans
- Flexible system downtown
- Expandable routes



PHASE ONE DESTINATIONS



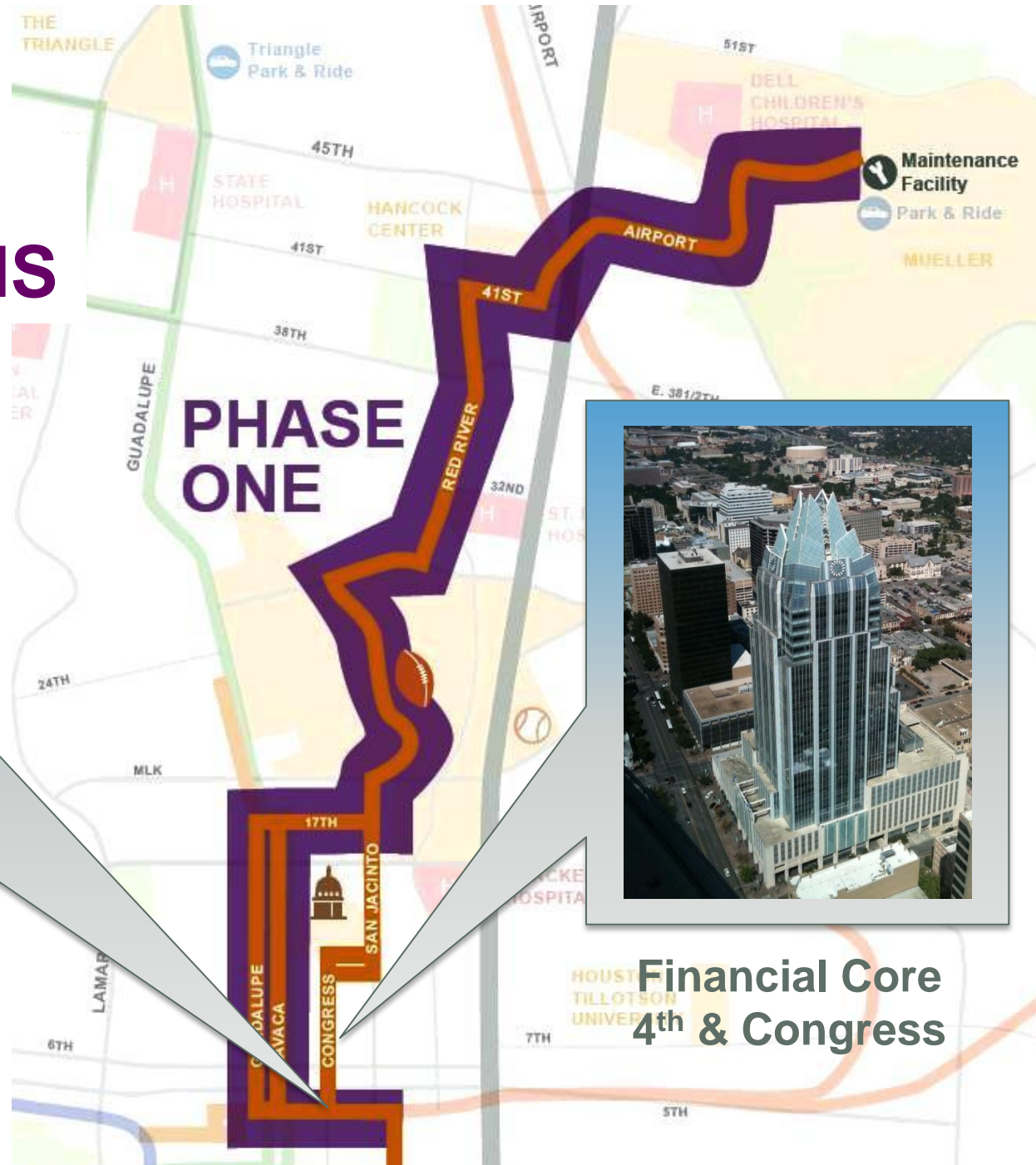
Convention Center
4th & Trinity



PHASE ONE DESTINATIONS



Austinian
4th & Congress

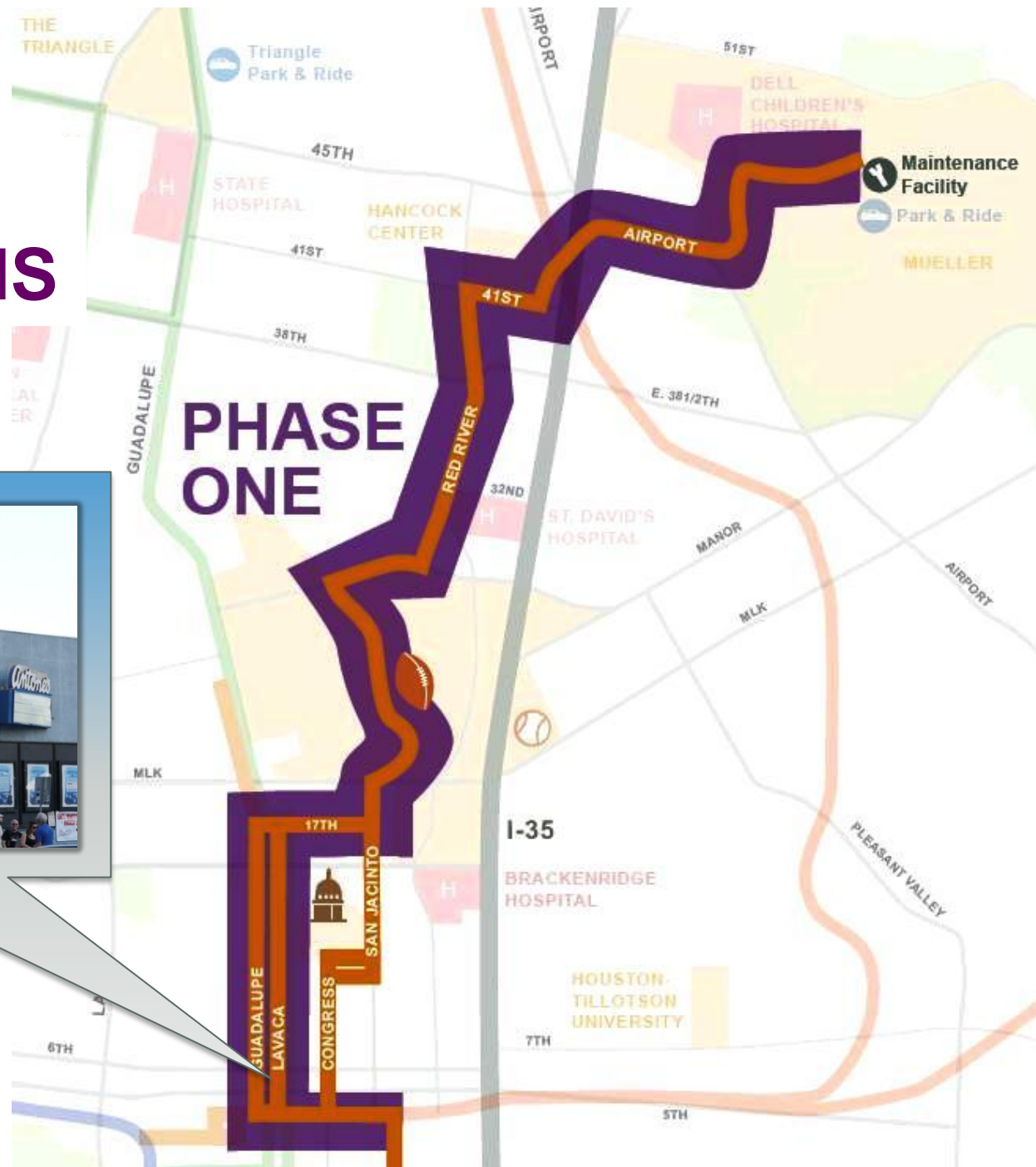


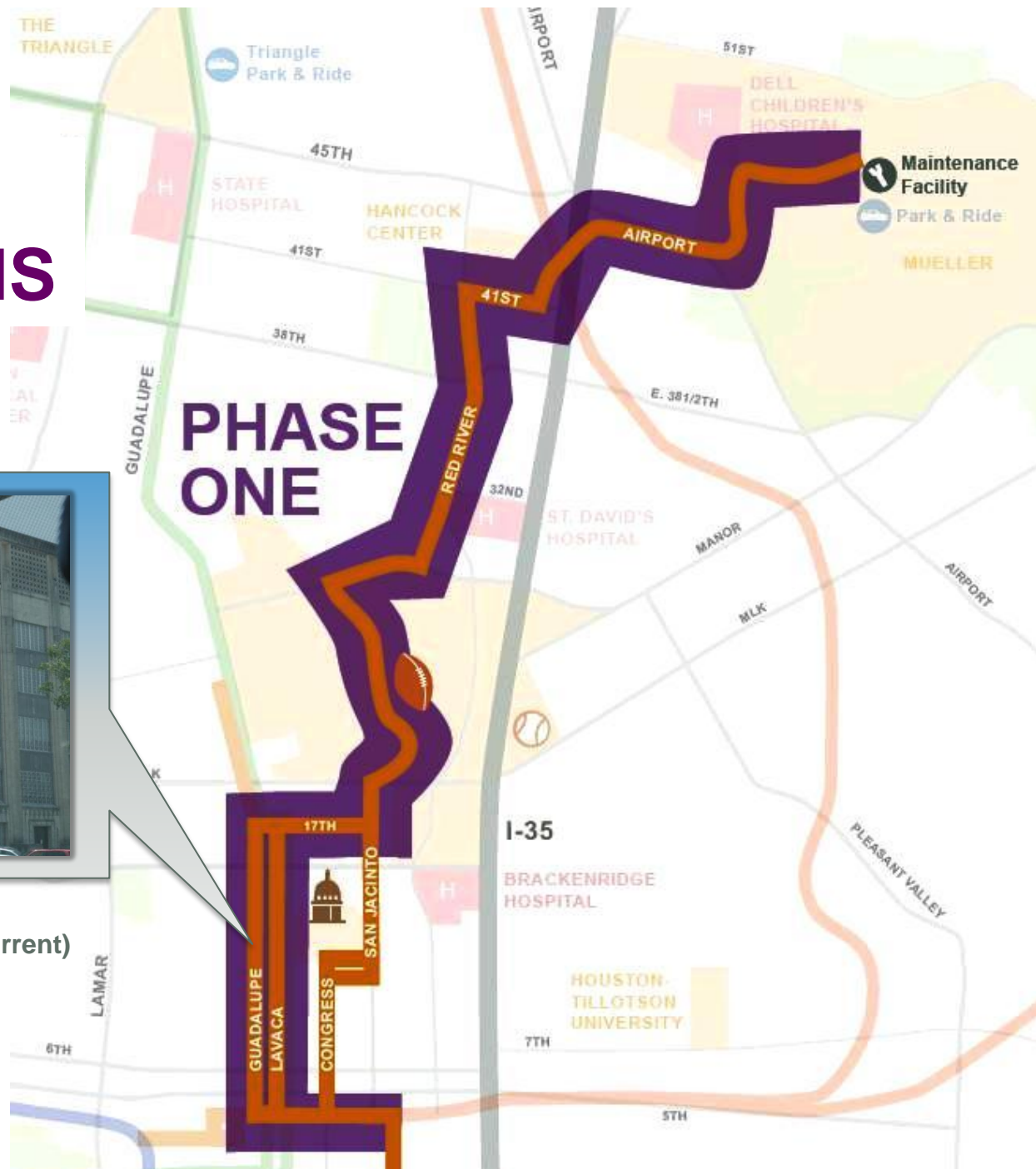
Financial Core
4th & Congress

PHASE ONE DESTINATIONS



Antone's
5th & Lavaca

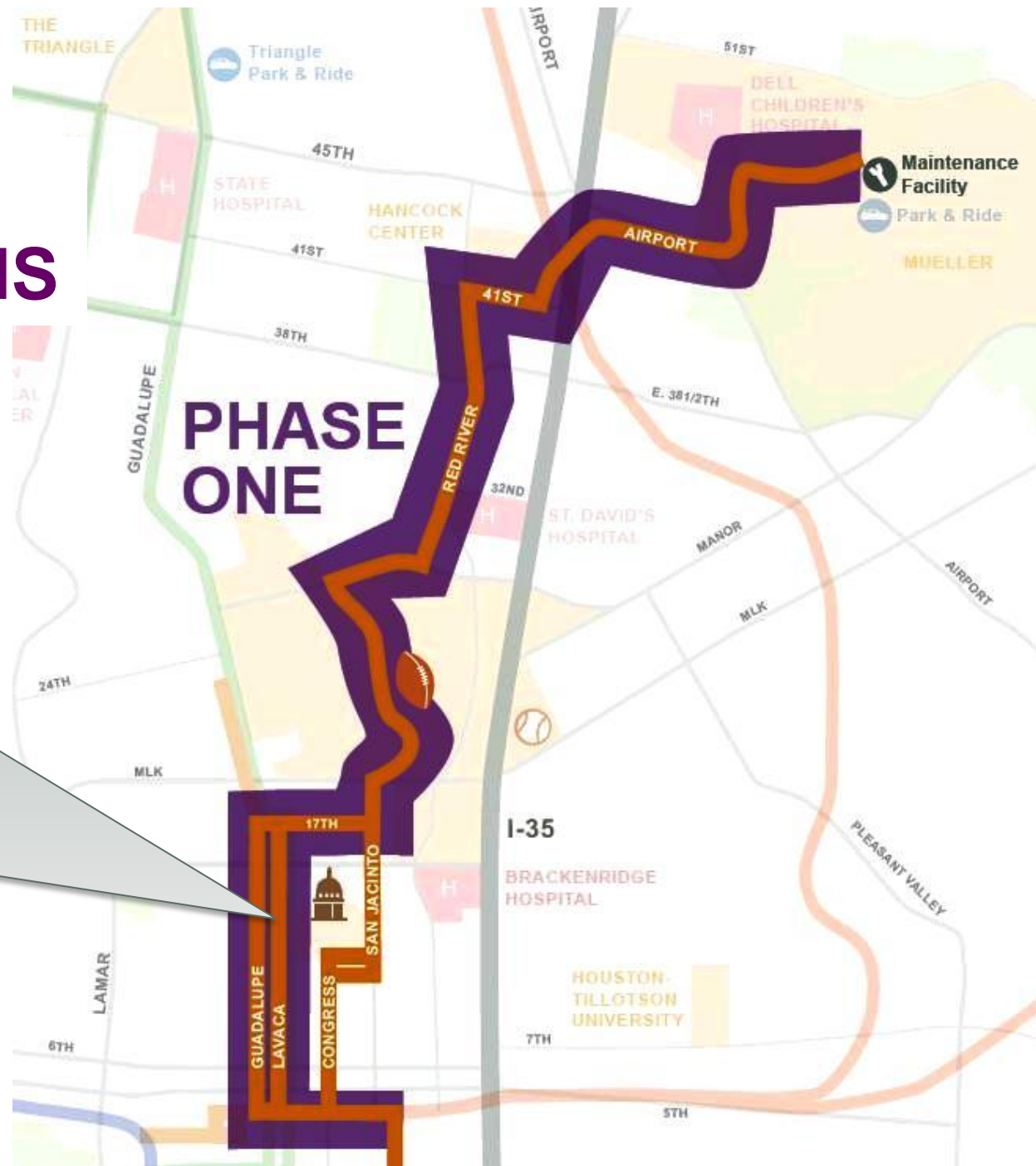




PHASE ONE DESTINATIONS



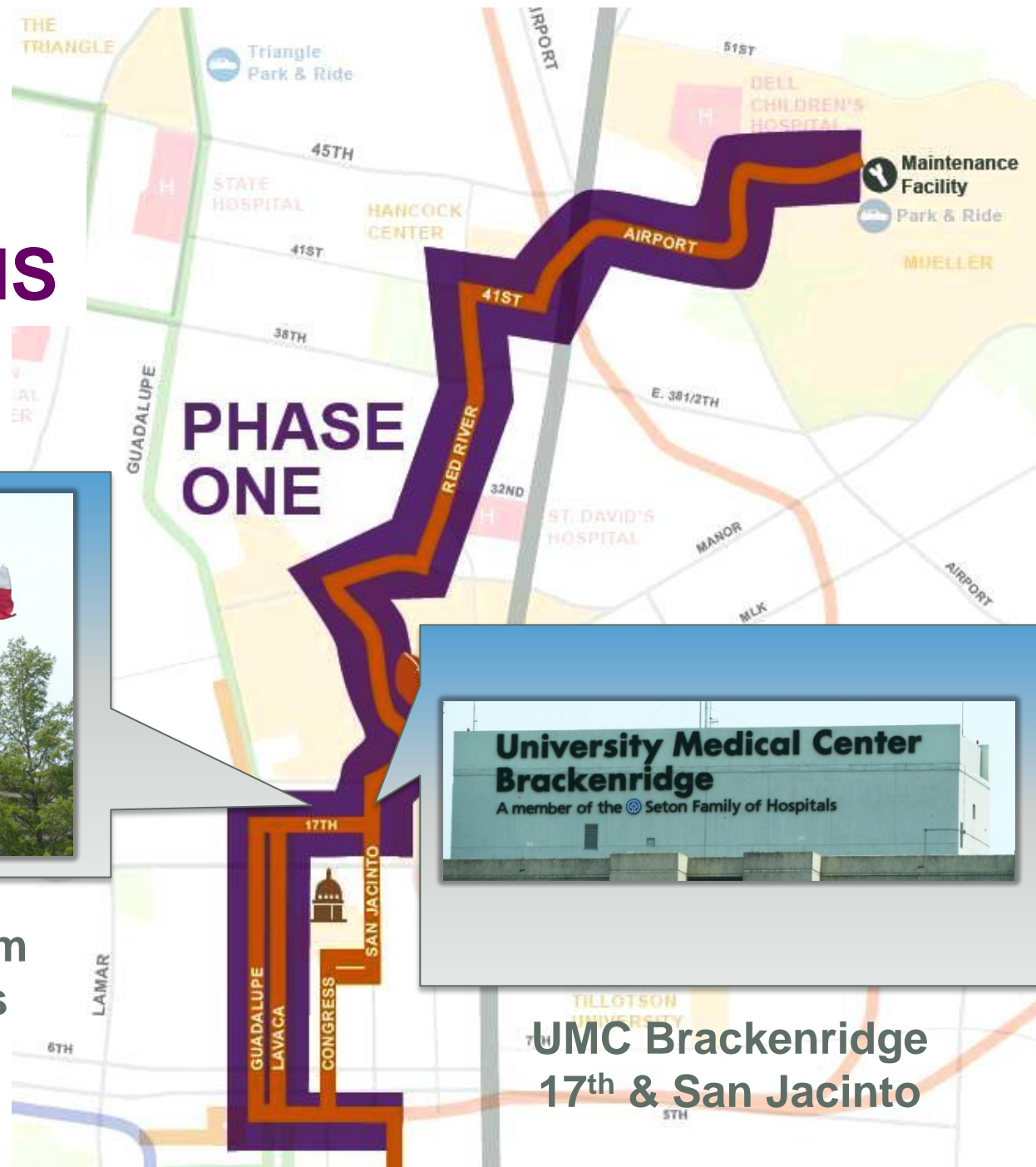
Capitol & State
Offices
12th & Lavaca



PHASE ONE DESTINATIONS

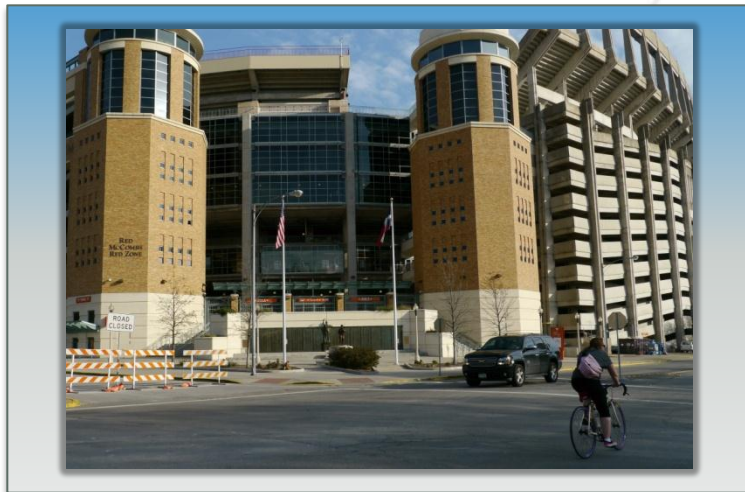


**Bob Bullock Museum
MLK Jr & Congress**

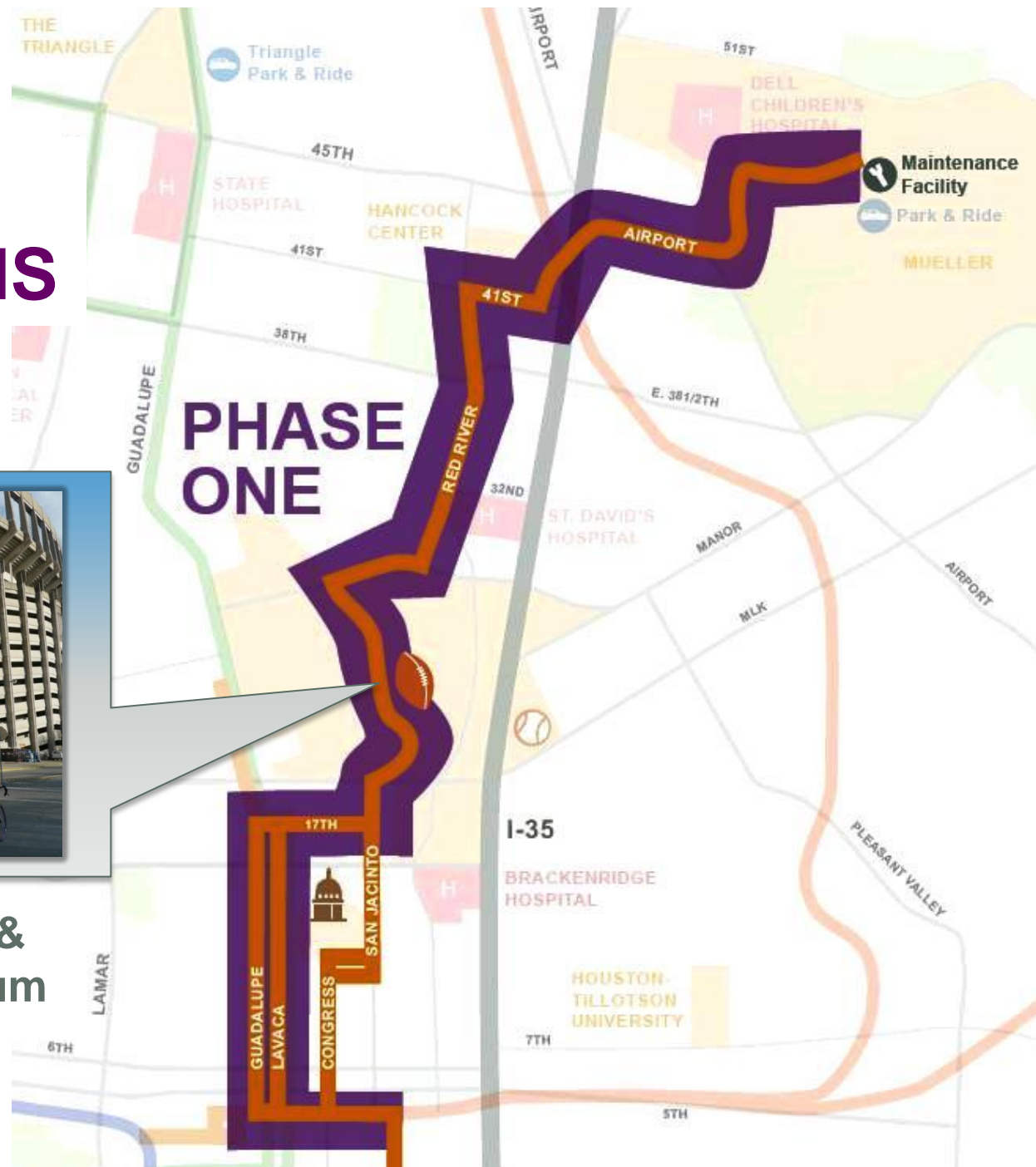


**UMC Brackenridge
17th & San Jacinto**

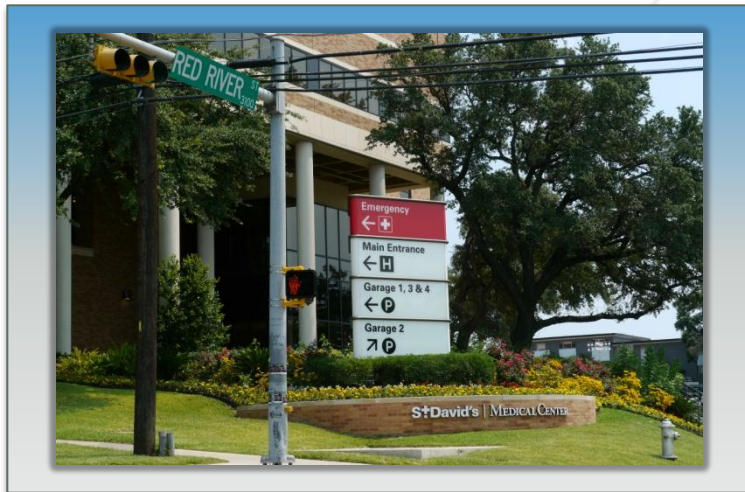
PHASE ONE DESTINATIONS



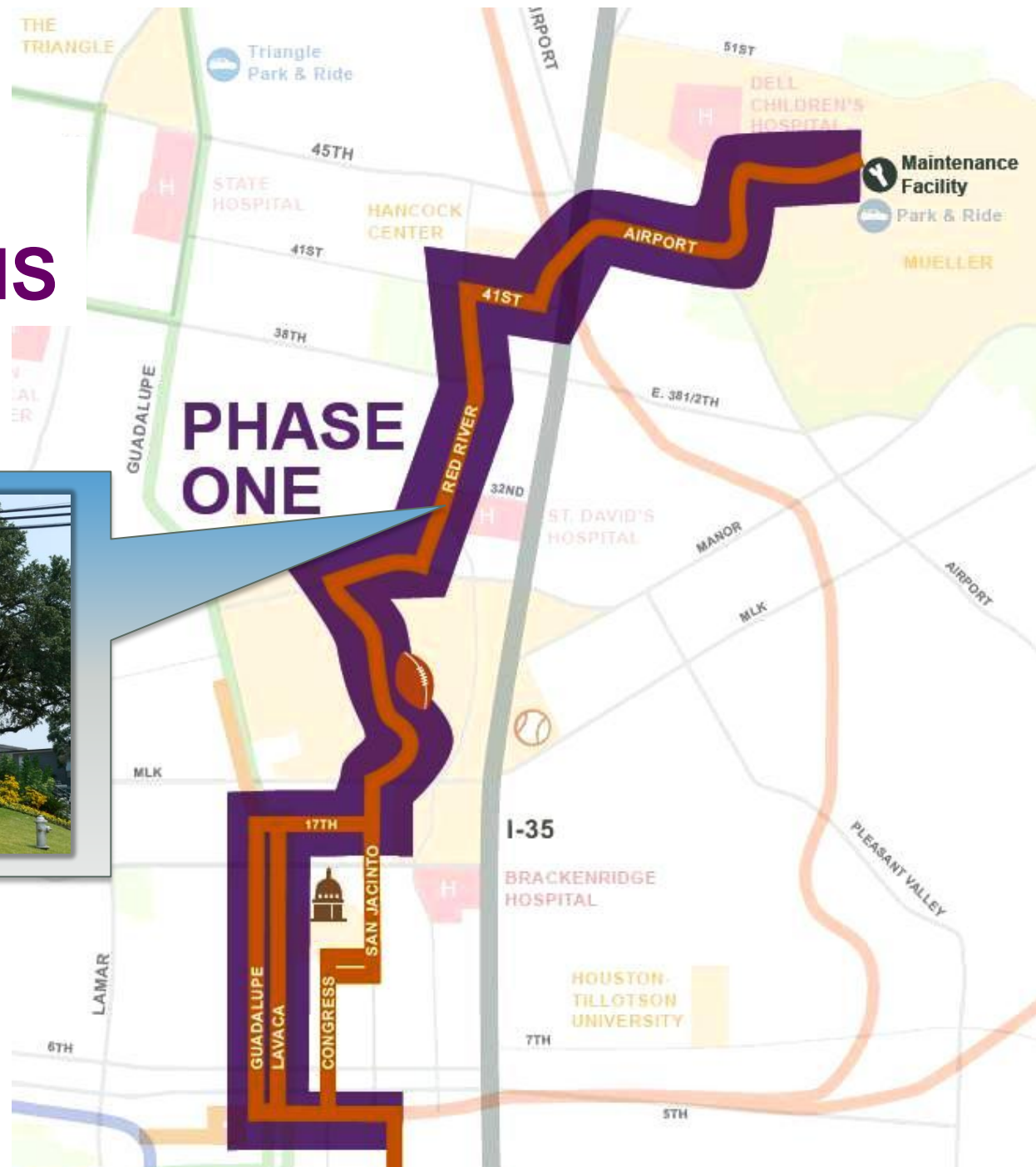
University of Texas &
DKR Memorial Stadium
23rd & San Jacinto



PHASE ONE DESTINATIONS



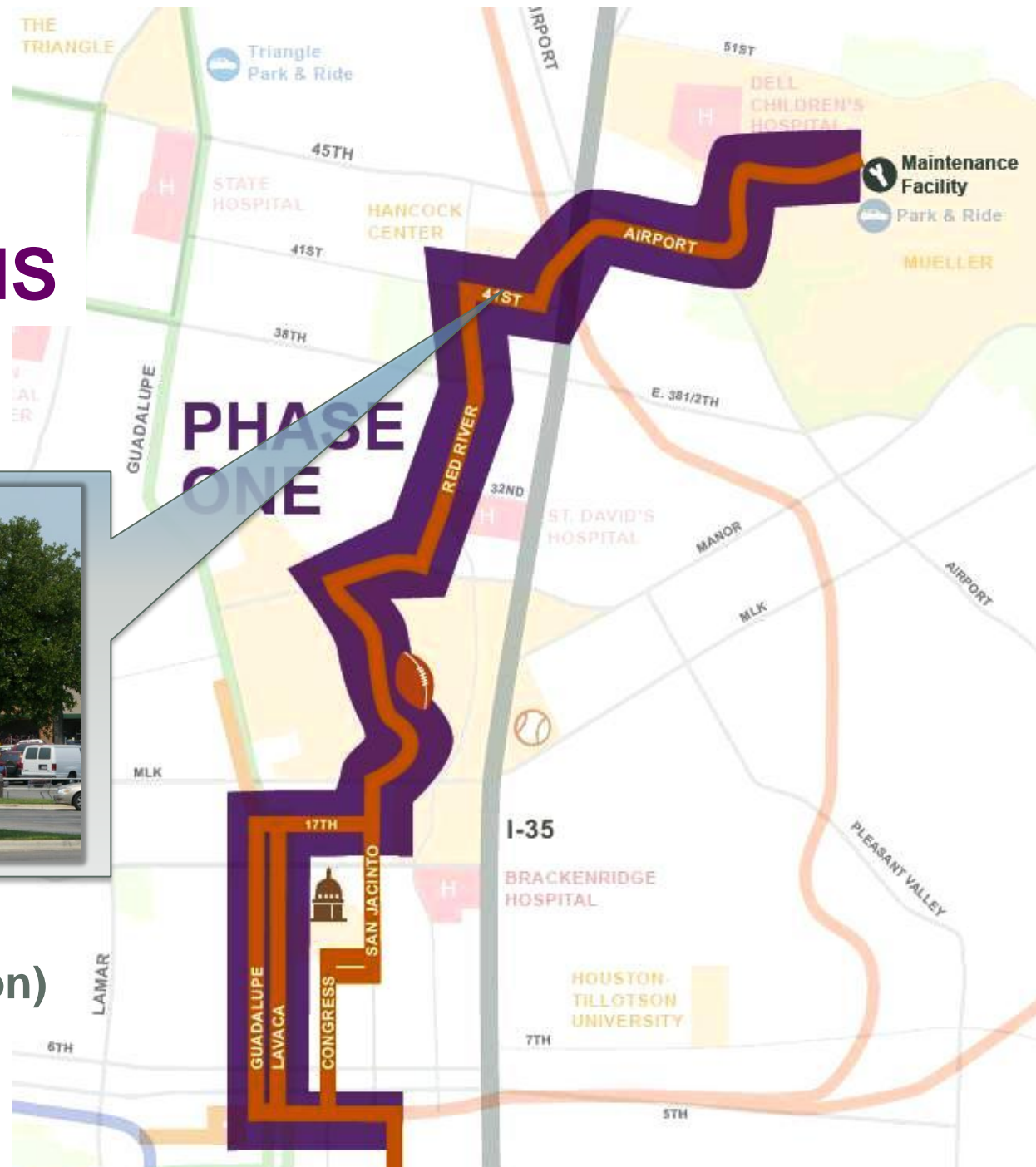
St. David's
31st & Red River



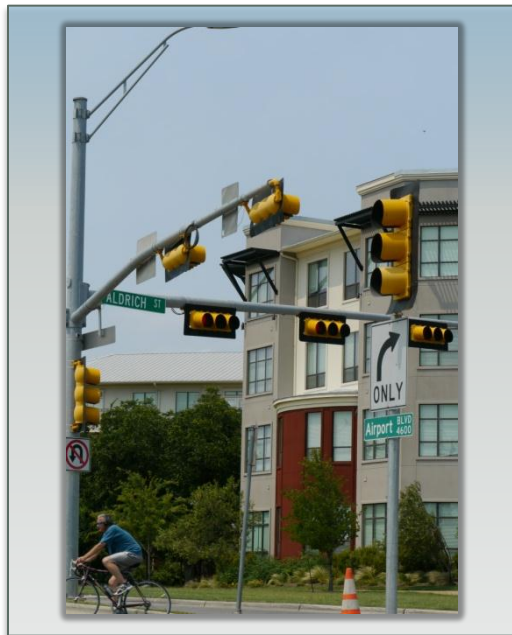
PHASE ONE DESTINATIONS



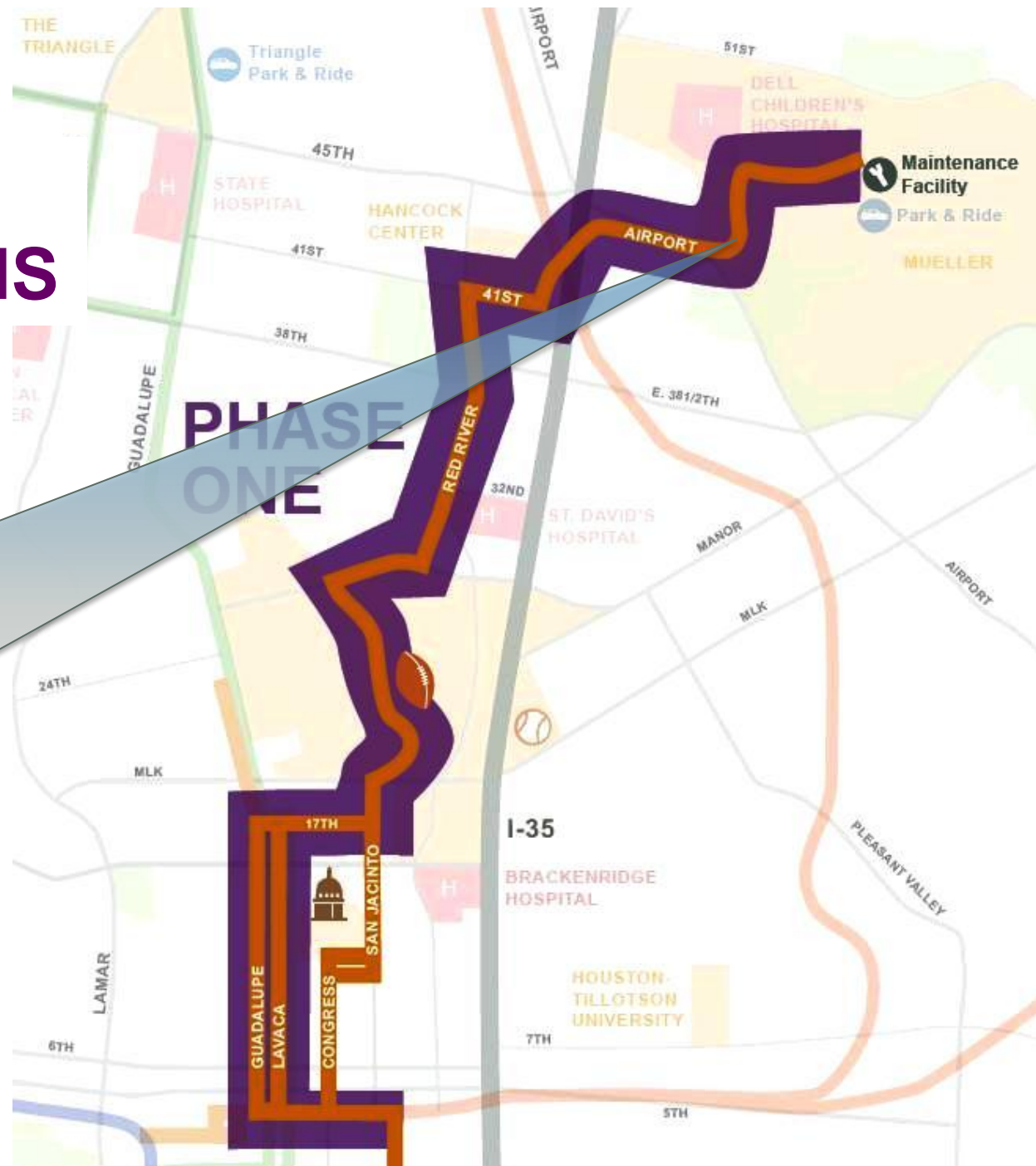
Hancock Center
(busiest HEB in region)
41st & Red River



PHASE ONE DESTINATIONS



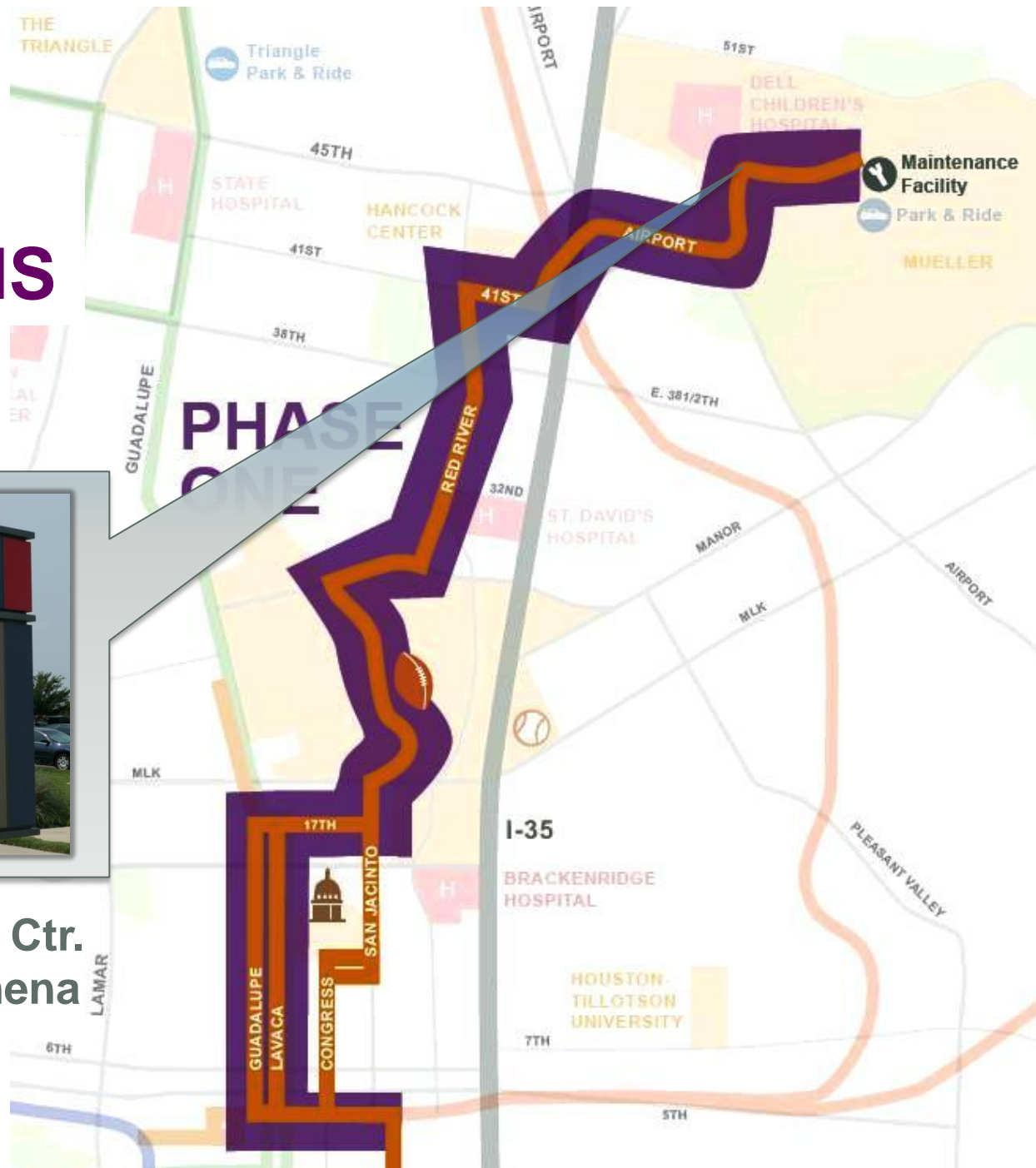
**Mueller Central
Airport & Aldrich**



PHASE ONE DESTINATIONS



**Dell Children's Medical Ctr.
Robt. Mueller & Philomena**





FIRST INVESTMENT RIDERSHIP

Ridership Projections:

- *9,000 -11,000 est. one-way trips for First Investment (Core+North+Mueller) in opening year, 2021*
 - *Order of magnitude projections based upon prior estimates (2006 Central Austin Circulator , 2010 Central Austin Transit Study)*
 - *Additional ridership potential from “network” effect not included (e.g., connections to MetroRail, MetroRapid, and Lone Star Rail not factored into ridership projection)*
- Updated regional forecast model is currently under development

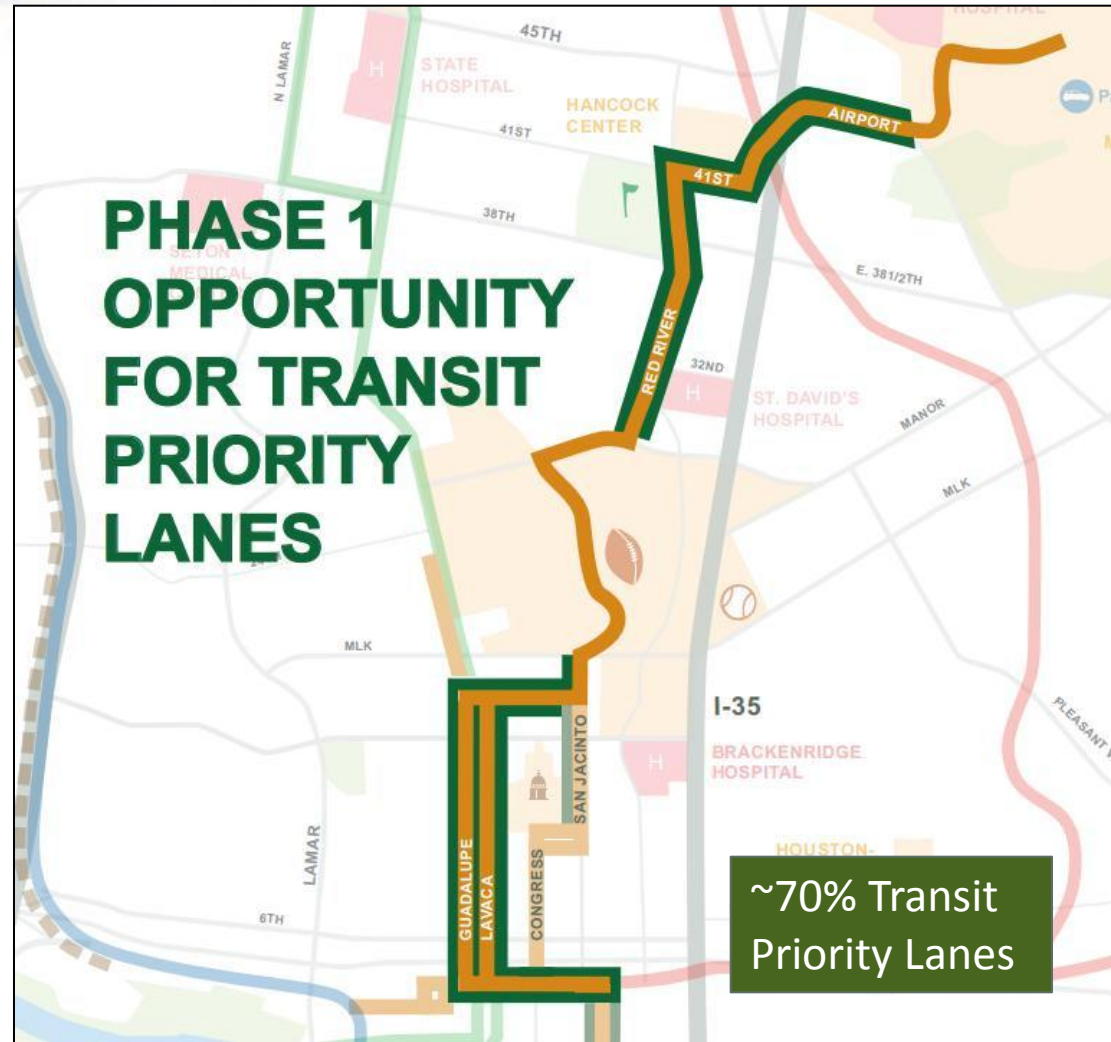




TRANSIT PRIORITY LANES – PHASE ONE

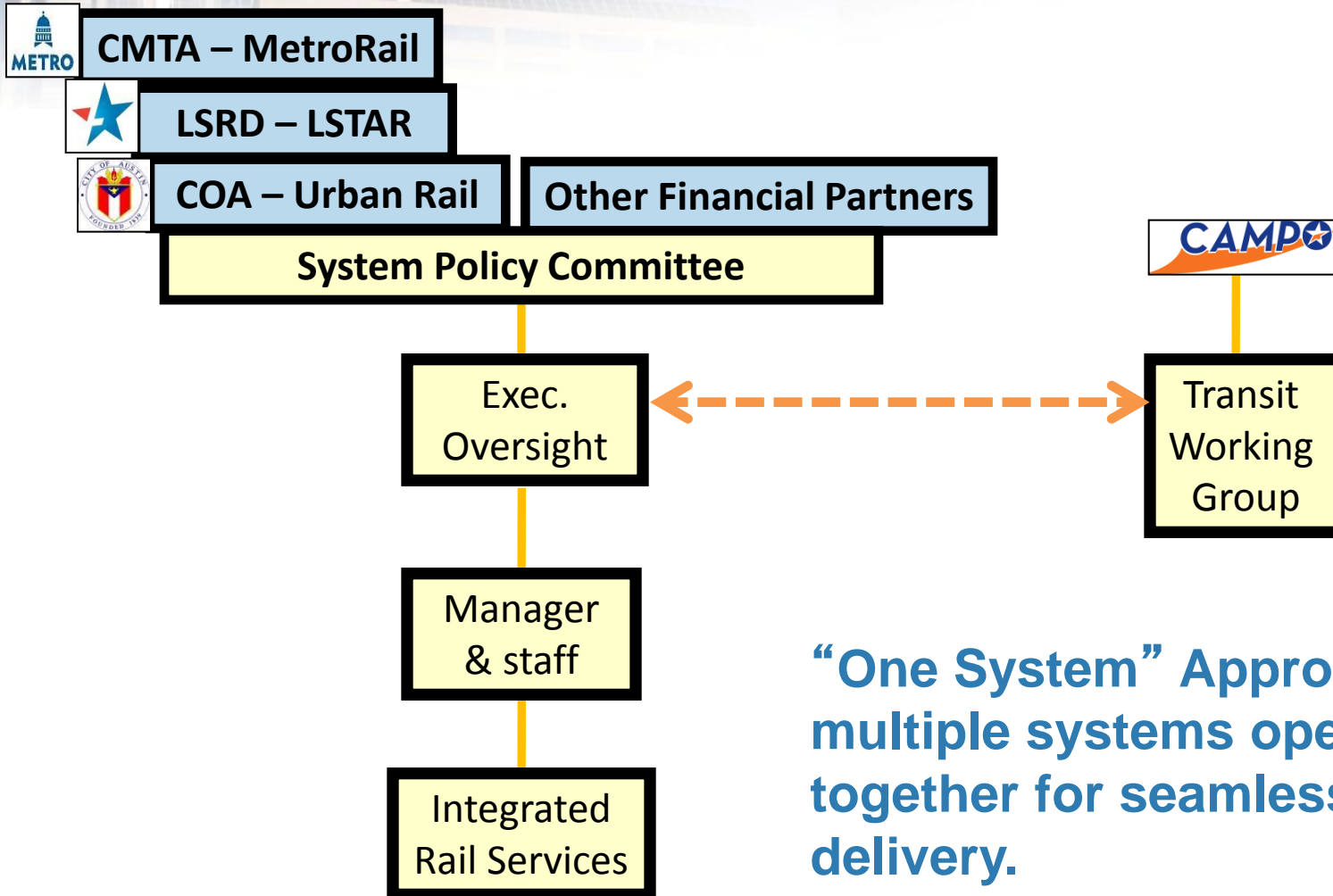
Transit Prioritization

- Objective is to provide reliability and competitive travel time
- Assure the greatest capacity possible
- Transit-only lane could allow for right turning vehicles
- Bus can operate with Urban Rail





PROJECT CONNECT: INTEGRATED RAIL OPERATIONS



**“One System” Approach –
multiple systems operating
together for seamless service
delivery.**





MORE THAN MOBILITY/ECONOMIC DEVELOPMENT

Rail and Economic Development:

- Investment in transit make regions more competitive to recruit new -- and retain -- current employers.
- Transit use by employees benefits everyone.
- \$7B total economic impact of transit investment, Salt Lake City
- \$7B private sector investment from \$1.4B rail spending, Phoenix
- [See 3 min Rail in other cities videos](#) at AustinUrbanRail.com

*“Every great globally competitive city has rail
anchoring urban development.”
Scott Polikov, Austin Business Journal 5-4-12*



- **Austin: most successful economy (Forbes)**
- **Keeping our core vibrant is essential to our entire region**
- **Rail is one part of an overall transportation/mobility plan**
- **High-capacity transit offers commuters option to avoid congestion, residents to get to downtown/UT without a car**
- **Urban Rail offers more capacity than bus, provides greater economic stimulus, implements City plans, with fewer environmental impacts.**
- **More Urban Rail delivers more mobility, transit connections, increased capacity and development opportunity.**
- **Phased approach – start North, manage South water crossing risks**
- **Rail is expandable as community desires**