

# CENTRAL CORRIDOR ADVISORY GROUP

## MEETING #8

January 17, 2014 1:30 pm – 3:30 pm

Austin City Hall, Council Chambers



### 1

## Agenda

- 1) Welcome & Introductions
- 2) Work Plan & Schedule
- 3) Project Purpose
- 4) Phase 2 Process
- 5) Preliminary Alternatives
- 6) Next Steps
- 7) Next Meeting – February 21, 2014



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## 1

## CCAG Charge

The CCAG will:

- Ensure open and transparent public process
- Advise Mayor and project team in prioritizing and defining a preferred alignment for the next high-capacity transit investment for the Central Corridor
- Assist project team in a meaningful dialogue with the community

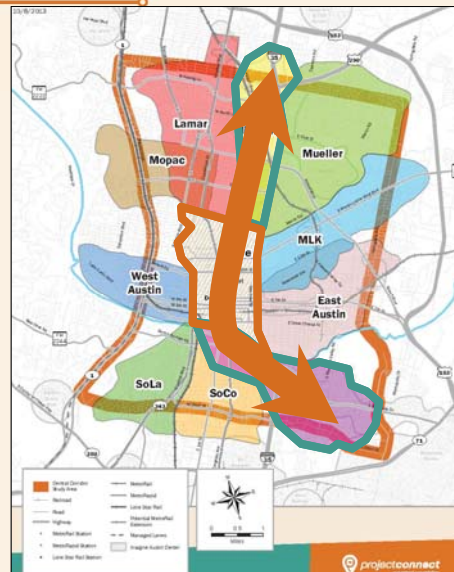


## 1

## Project Team Recommendation

### East Riverside & Highland

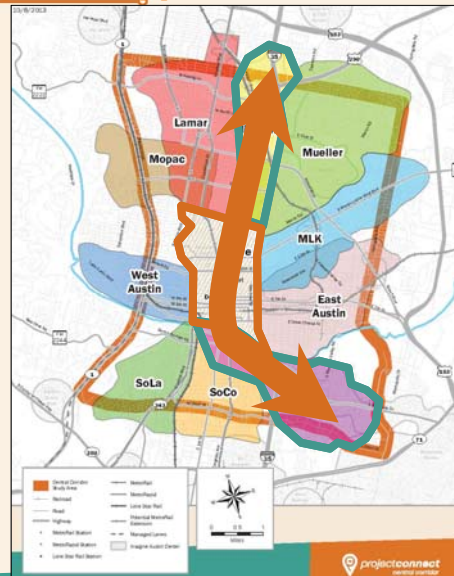
- East Riverside (ERC) and Highland are consistently in the top two
- Advance both into Phase 2
  - Develop best project
- Balanced recommendation
  - System Development
  - Shaping Characteristics
  - Serving Characteristics



## 1

## East Riverside &amp; Highland Opportunities

- Link East Riverside and Central Austin residential densities to:
  - Downtown employment destinations
  - New Dell Medical School and Innovation District
  - New 'heart' of UT Austin campus
  - New ACC Highland flagship campus and 80 acre TOD with UT co-enrollment program and workforce training
- Provide alternative to IH-35 congestion thru Central Austin
- Provide additional capacity across Lady Bird Lake
- Build HCT system, linking Red Line, MetroRapid, Express Bus, North Corridor Connectors, LSTAR, etc.



## 1

## Austin City Council Action

- Action on December 12, 2013
  - Endorsed (7-0) project team recommendation for East Riverside and Highland sub-corridors
  - Identify funding needs and sources to continue Central Corridor project definition and development activities in the next tier of sub-corridors
  - Continue cultivating a relationship with FTA to prepare for any future high-capacity transit investments in the Lamar sub-corridor

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## Phase 1 'Wrap-up'

**CCAG Meetings**

- November 1
  - Present Data (2 of 2)
  - Evaluation Process
  - *Public Comment*
- November 15
  - Evaluation Results
  - Project Team Recommendations
  - Public Comment
- December 6
  - *Public Comment*
  - CCAG Discussion and Selection

**Boards & Council**

- November 13
  - Capital Metro Board
- November 21
  - Austin City Council
- December 11
  - Capital Metro Board Briefing
- December 12
  - Austin City Council Briefing & Action
- January 29, 2014
  - Capital Metro Board Briefing & Action
- February 7, 2014
  - Lone Star Board Executive Committee Briefing & Action

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## Work Plan & Schedule

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## 2

## Phase 2 Work Plan &amp; Schedule

## Decision-Making Process

- Phase 2: Select Locally Preferred Alternative (LPA)

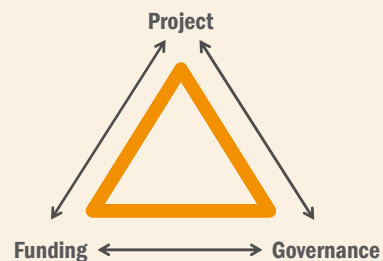
Current Progress

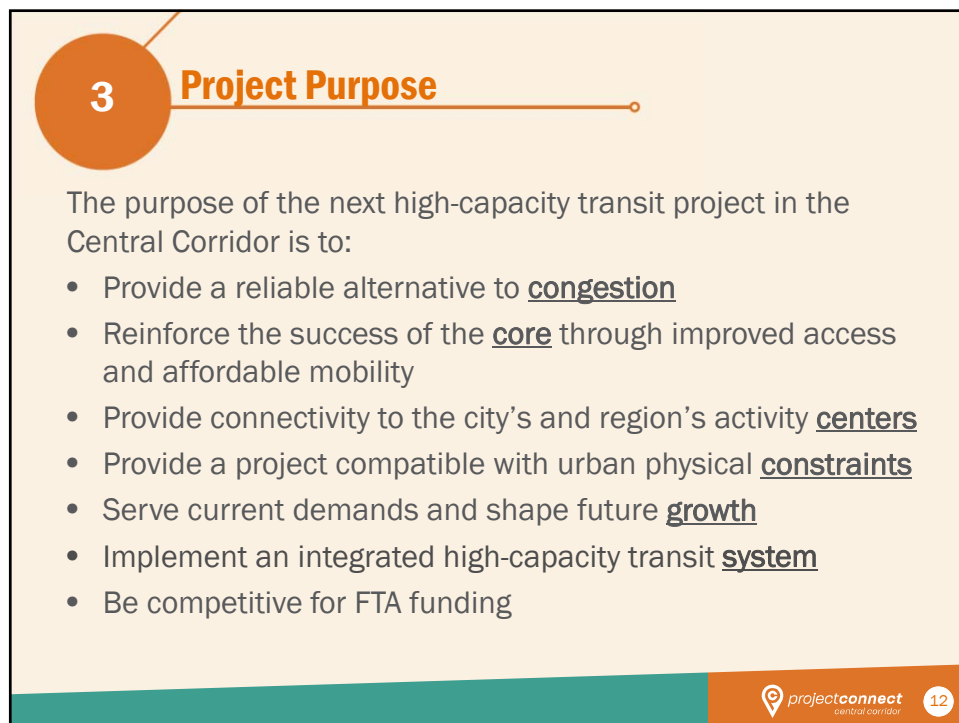
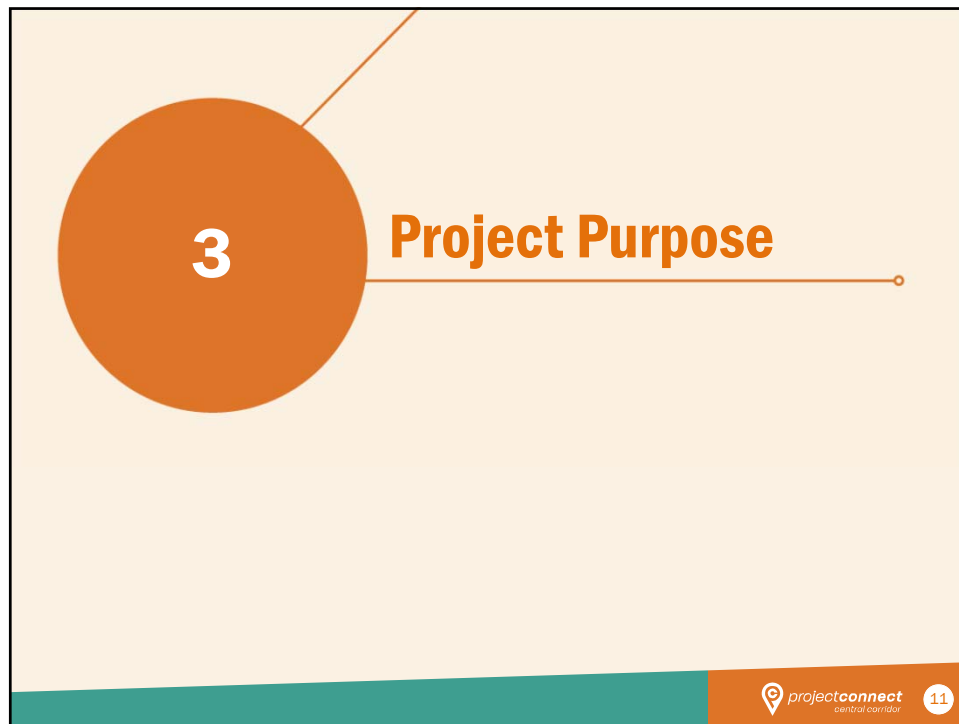
Central Corridor High-Capacity Transit Study Work Plan				2013							2014				
				6	7	8	9	10	11	12					
				Dec	Jan	Feb	Mar	Apr	May	Jun					
Phase 2 Select Draft Locally Preferred Alternative (LPA)	Step 4: Identify Preliminary Alternatives	Task 9	Project Purpose												
		Task 10	Process – Methodology & Criteria												
		Task 11	Identify & Screen Preliminary Alternatives – Service, Mode & Alignment												
	Step 5: Define Final Alternatives	Task 12	Define Final Alternatives – Mode & Alignment												
		Task 13	Evaluate Final Alternatives												
	Step 6: Evaluate Alternatives	Task 14	Select Draft Locally Preferred Alternative (LPA)												
		Decision													*

## 2


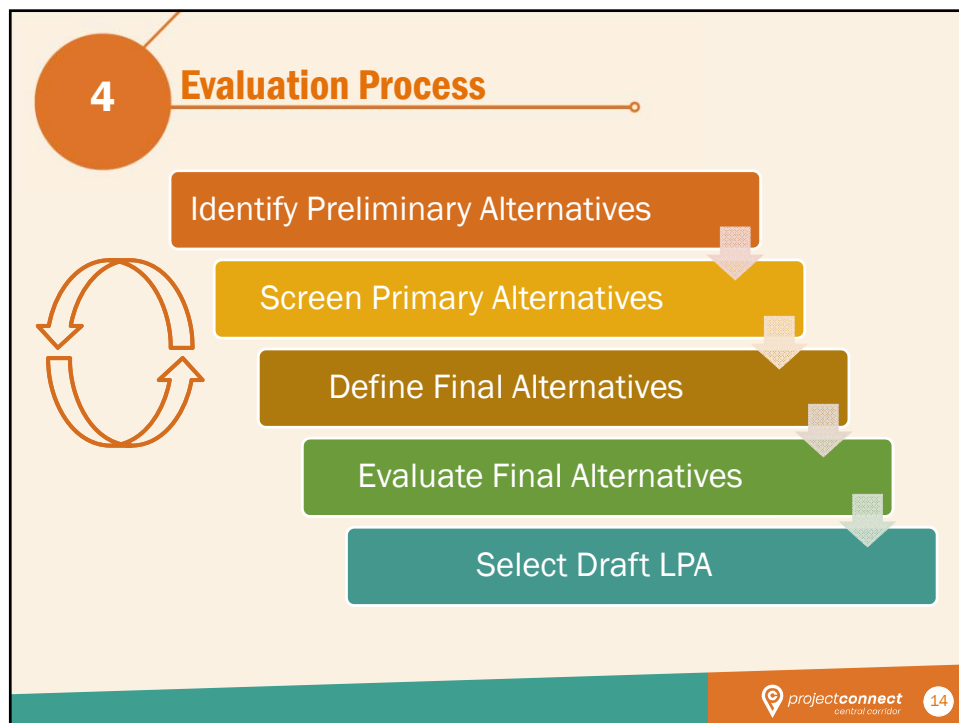
## Phase 2 Objectives

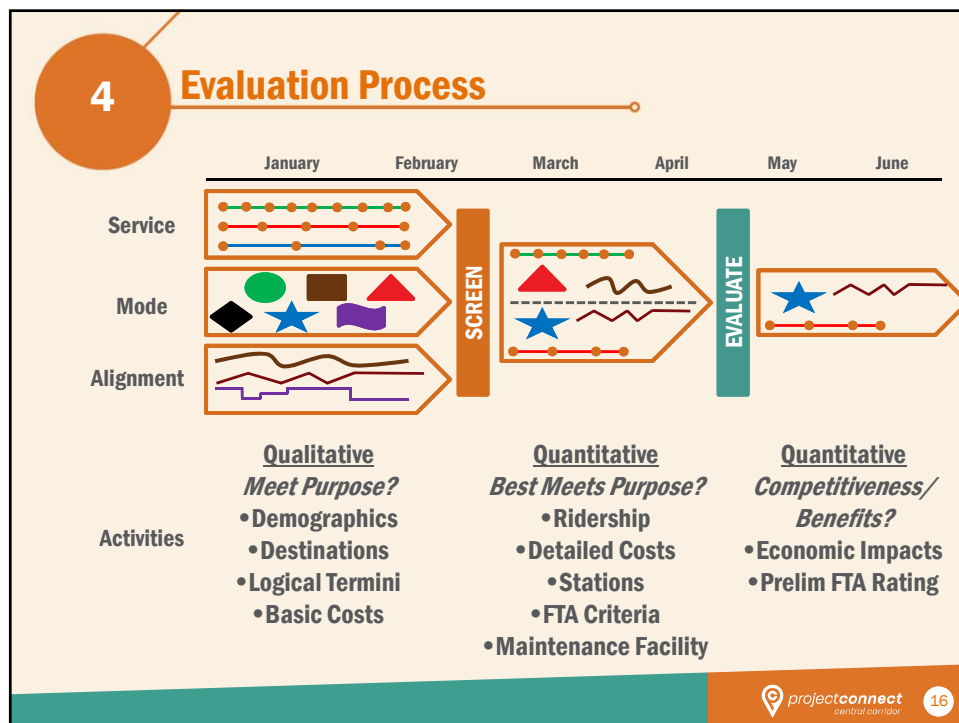
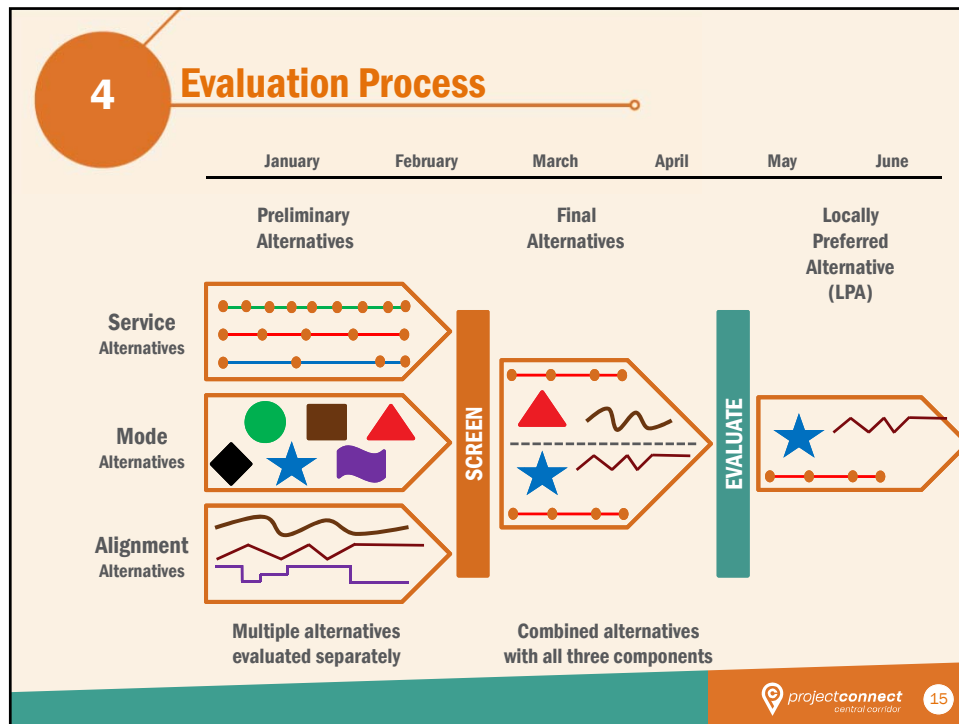
- Project Definition
  - Service, mode, alignment, stops
- Funding Plan
  - Capital and O&M costs, funding sources
  - *Within* overall Project Connect Plan
- Governance Structure (TWG)





# 4 Phase 2 Process





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## Preliminary Alternatives


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## Multi-step Evaluation Process

- Service Characteristics
- Mode Characteristics
- Alignment Characteristics



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## 5

## Service Characteristics

- Four service characteristics to consider
  - Reliability
  - Frequency
  - Stop Spacing
  - Speed

## 5

## Service Characteristics: Reliability

- Does the service arrive according to its timetable and is it affected by congestion?

*Will the transit service arrive on time?*

*Does it run on time during rush hour as well as during other times?*



## 5

**Service Characteristics: Frequency**

- What is the frequency of the transit service? Is the service frequent enough to allow for multiple connections when trips require transfers?

*How long do I have to wait before the next vehicle comes around?*

*Can I transfer quickly and easily?*

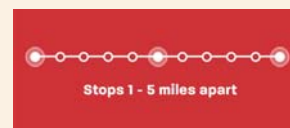
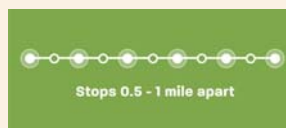


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**Service Characteristics: Stop Spacing**

- How far apart are the stations? What is the connectivity between multiple transit routes?

*How far will I have to walk from the station to my destination?*

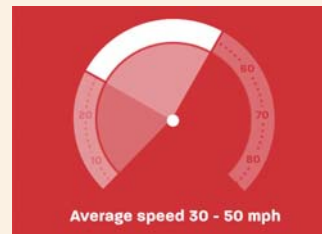


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## Service Characteristics: Speed

- What is the operating speed between stations? Is total trip travel competitive with a vehicle and what does that comparison look like for future year?

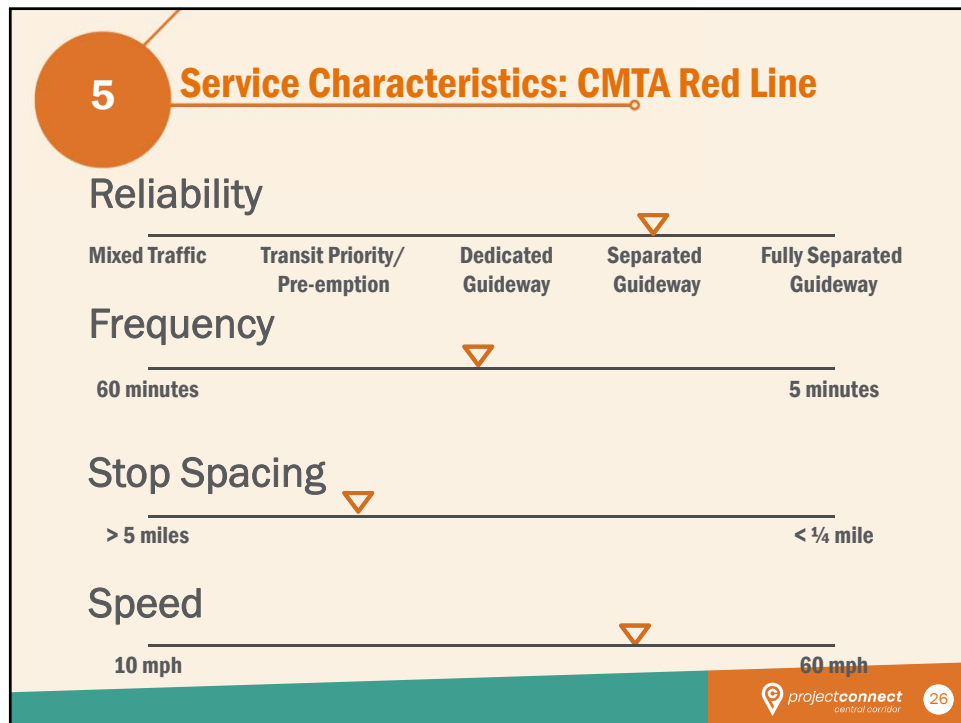
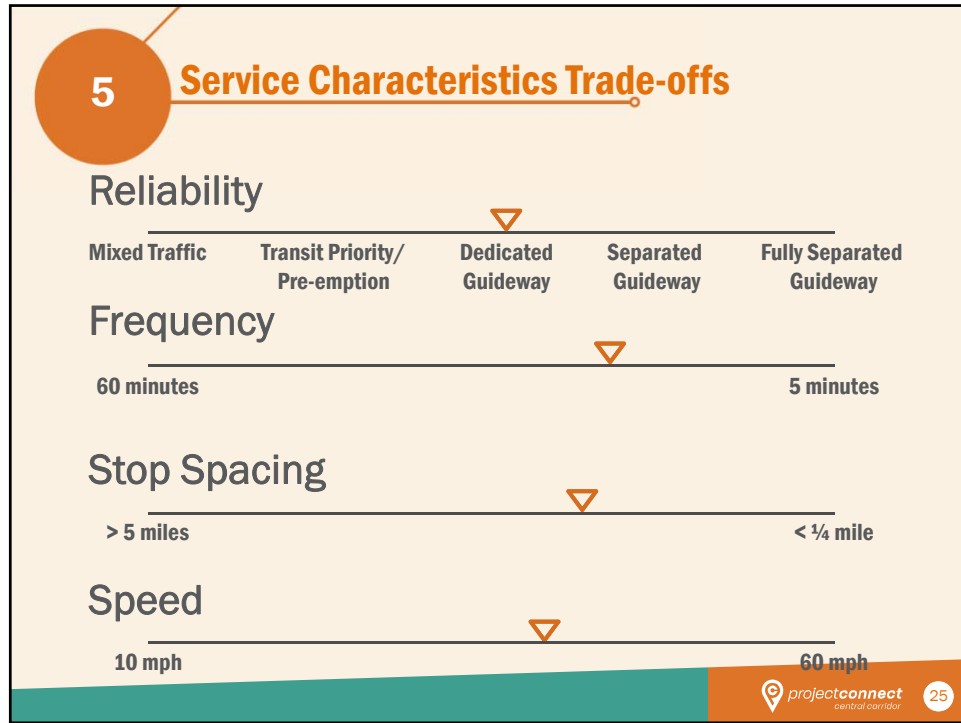
*Will my total trip take about as long as taking my car?*

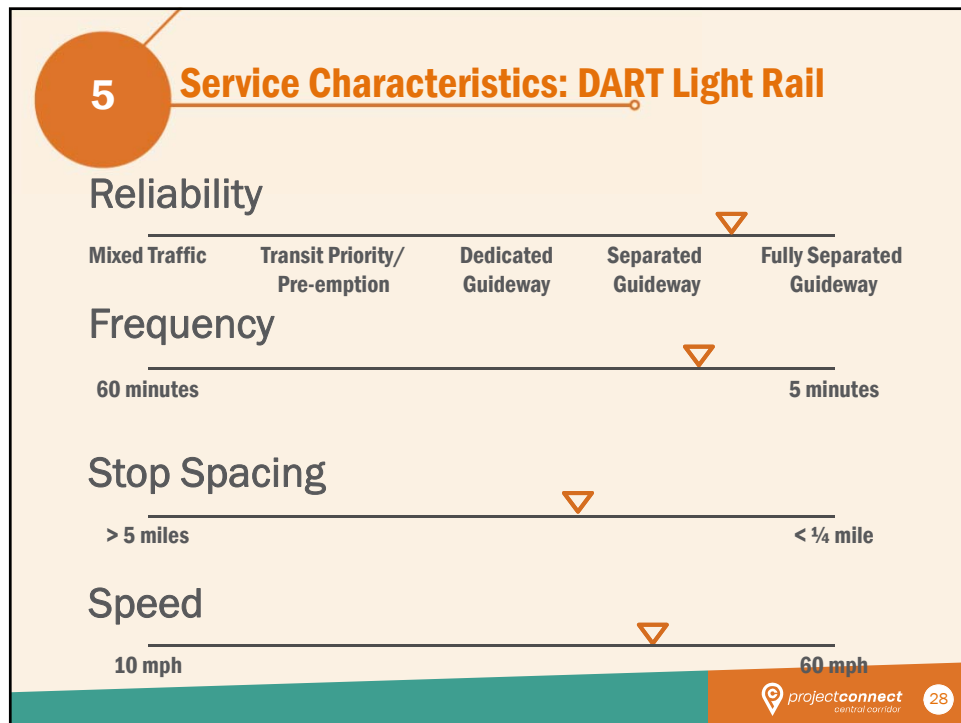
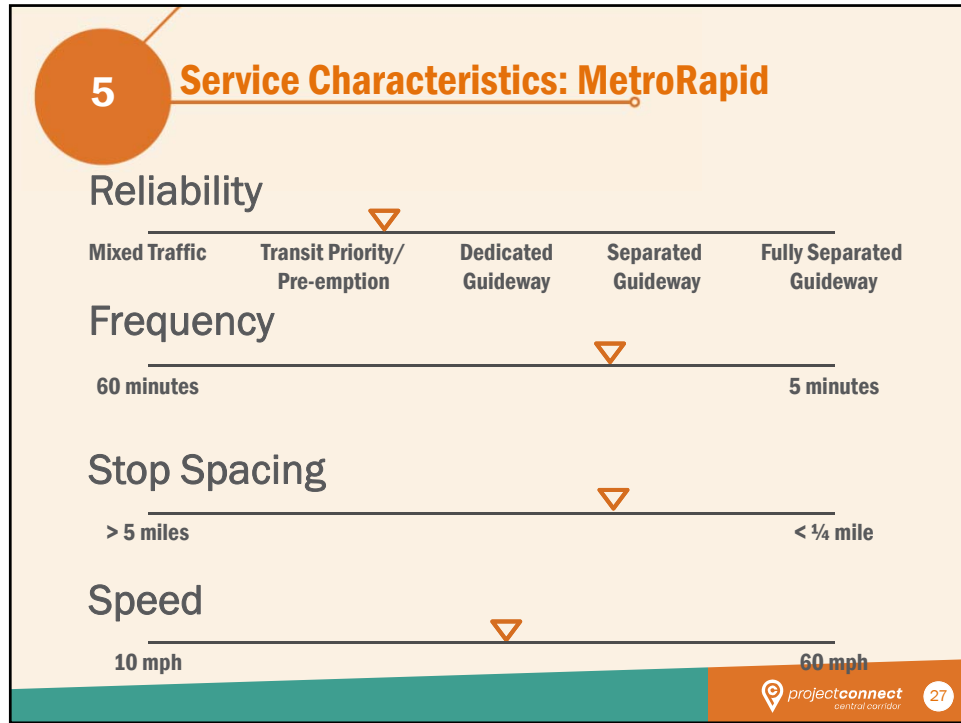


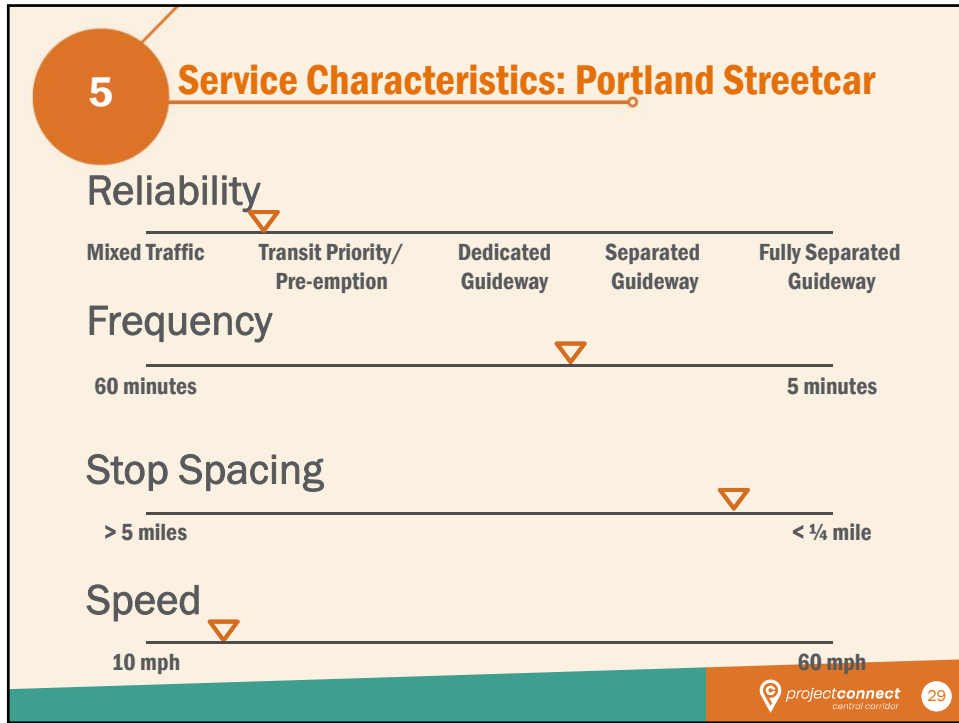
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## Service Characteristics and Considerations

Service Characteristic	Considerations	
	High	Low
<b>Reliability</b>	High percentage use of dedicated guideway	Low percentage use of dedicated guideway
The bottom line	<b>Higher reliability, higher capital cost</b>	<b>Lower reliability, lower capital cost</b>
<b>Frequency</b>	High frequency of service	Low frequency of service
The bottom line	<b>Higher operating cost, more attractive service (no need to check timetable)</b>	<b>Lower operating cost, less attractive service</b>
<b>Stop Spacing</b>	More frequent stops	Less frequent stops
The bottom line	<b>Better access to stations, lower operating speed</b>	<b>Less direct access to stations, higher operating speed</b>
<b>Speed</b>	Higher speed	Lower speed
The bottom line	<b>Less frequent stops, less walkable access to stations, more commuter-type service</b>	<b>More frequent stops, better walkable access to stations, more local-type service</b>







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**Mode Characteristics**

- Five mode characteristics to consider
  - Demand
  - Technology
  - Guideway
  - Energy Source
  - Compatibility

## 5

**Mode Characteristics: Demand**

- Does the mode match demand?



Carries 600 - 2,400 passengers  
during rush hour



Carries 700 - 2,000 passengers  
during rush hour



Carries 700 - 1,300 passengers  
during rush hour



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**Mode Characteristics: Technology**

- Is the technology widely used and proven in the U.S.?
- Does it meet “Buy-America” FTA requirements?

**BRT****Maglev****Light Rail****Streetcar**

## 5

**Mode Characteristics: Guideway**

- Does the mode (and service) require a particular guideway?

**Bus**  
lane dedicated to transit**Rail**  
lane dedicated to transit**Rail**  
shared lanes

## 5

**Mode Characteristics: Energy Source**

- Which mode will meet current and future City of Austin energy goals, enhance livability in the Central Corridor, and reflect Austin residents' preference for sustainability?

**BRT (diesel)****Light Rail (electric)**

## 5

**Mode Characteristics: Compatibility**

- What type of technology is compatible with an urban setting?



## 5

## Mode Characteristics: Compatibility



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## Mode Characteristics and Considerations

Mode Characteristic	Range of Considerations	
<b>Demand</b>	Higher demand requires larger, additional vehicles	Lower demand requires smaller, fewer vehicles
The bottom line	Higher capital costs; lower O&M cost per passenger	Lower capital costs; higher O&M cost per passenger
<b>Technology</b>	Proven technology used in numerous urban settings nationwide.	Newer technology that does not have proven application.
The bottom line	Ability to draw on others' experiences, potentially lower cost	Unproven technologies have unforeseen costs
<b>Guideway</b>	Dedicated guideway completely separate from auto, bicycle and pedestrian flow.	No dedicated guideway, and no separation from auto, bicycle and pedestrian flow.
The bottom line	Higher cost, more reliability, "insulated" from congestion	Lower cost, less reliability, shares lanes with automobiles and susceptible to congestion
<b>Energy Source</b>	Electric vehicles do not pollute along the route, can use renewable sources for generation, and is quieter.	Diesel or gas-powered vehicle pollutes along the route, use a non-renewable source of energy, and is louder, yet can be more flexible.
The bottom line	Less pollution along the route, quieter, requires more infrastructure along the route	More pollution along the route, louder, requires less intensive infrastructure along the route
<b>Compatibility</b>	Highly compatible	Less compatible
The bottom line	Has frequent stops in urban settings and slightly higher speeds in less urban settings; potentially higher cost	Has less flexibility and potentially lower cost

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## Preliminary Mode Alternatives

High-Speed Rail (rendering)



MagLev



Heavy Rail



Commuter Rail



LRT



Streetcar



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## Preliminary Mode Alternatives

Gondola (Aerial Cable Propelled)



Automated Guideway



Monorail



BRT – dedicated ROW



BRT – limited ROW



Local Bus





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## Preliminary Mode Alternatives

Urban Rail



Transit on Express Lanes



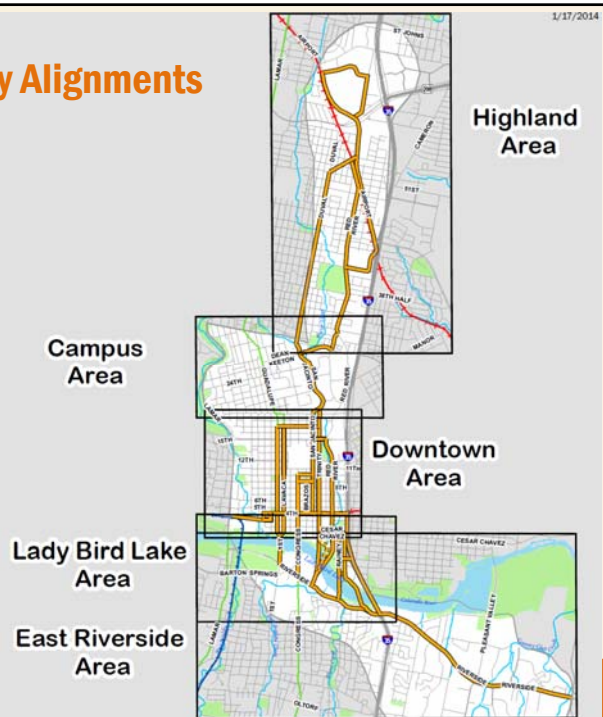
## Mode Discussion

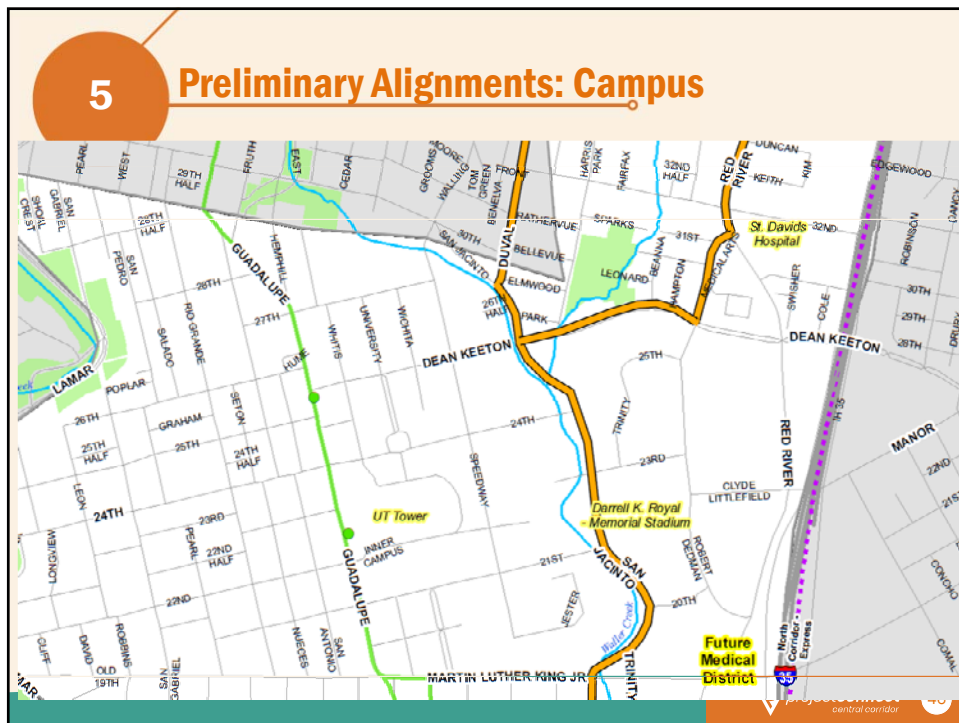
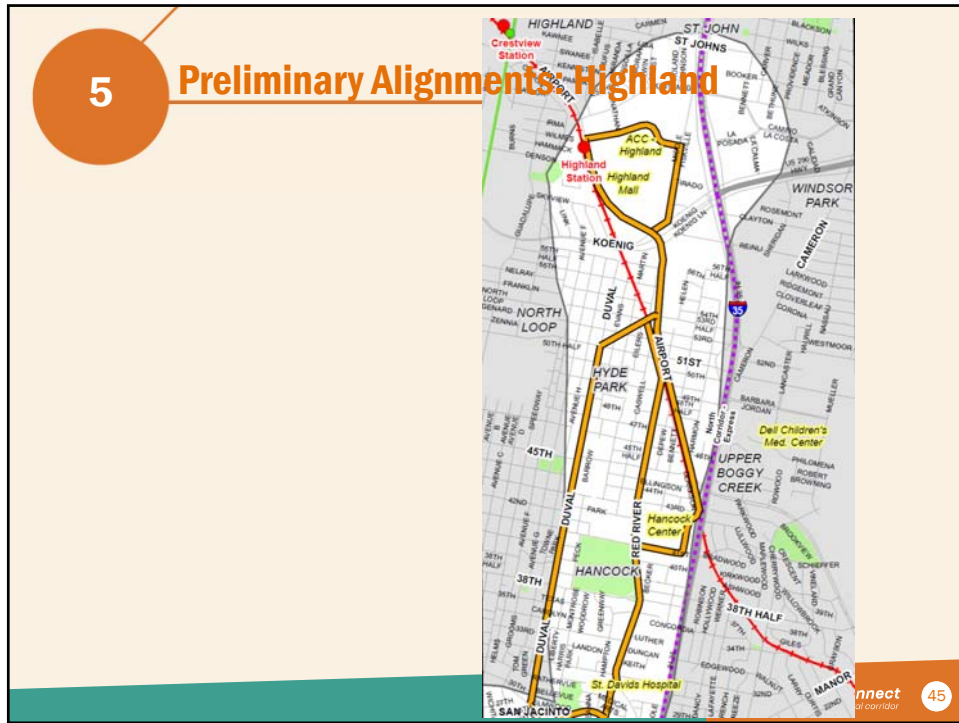
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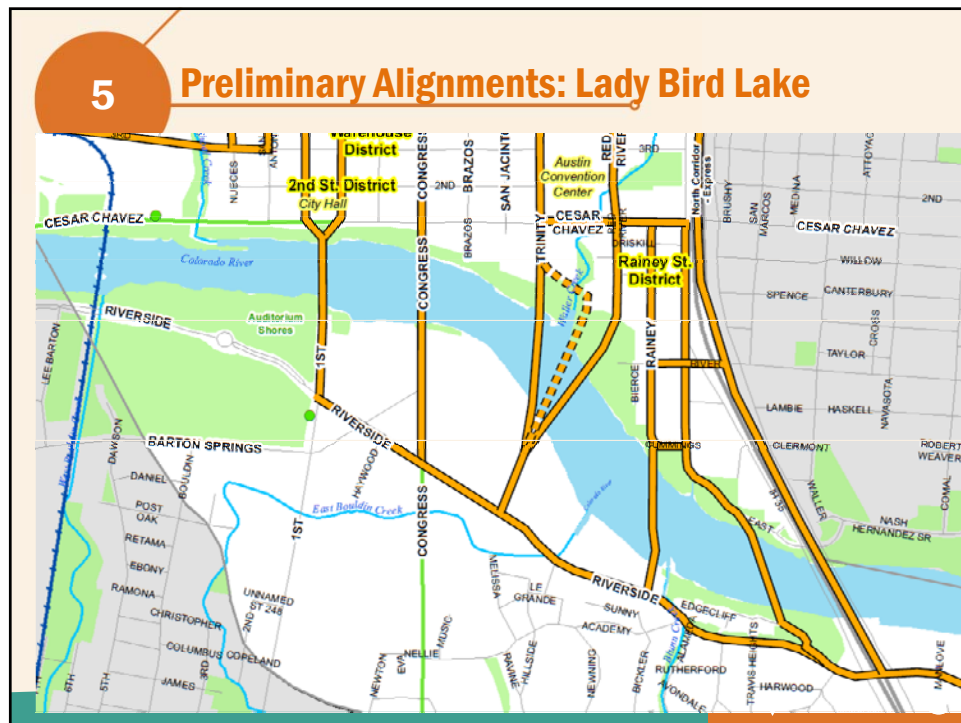
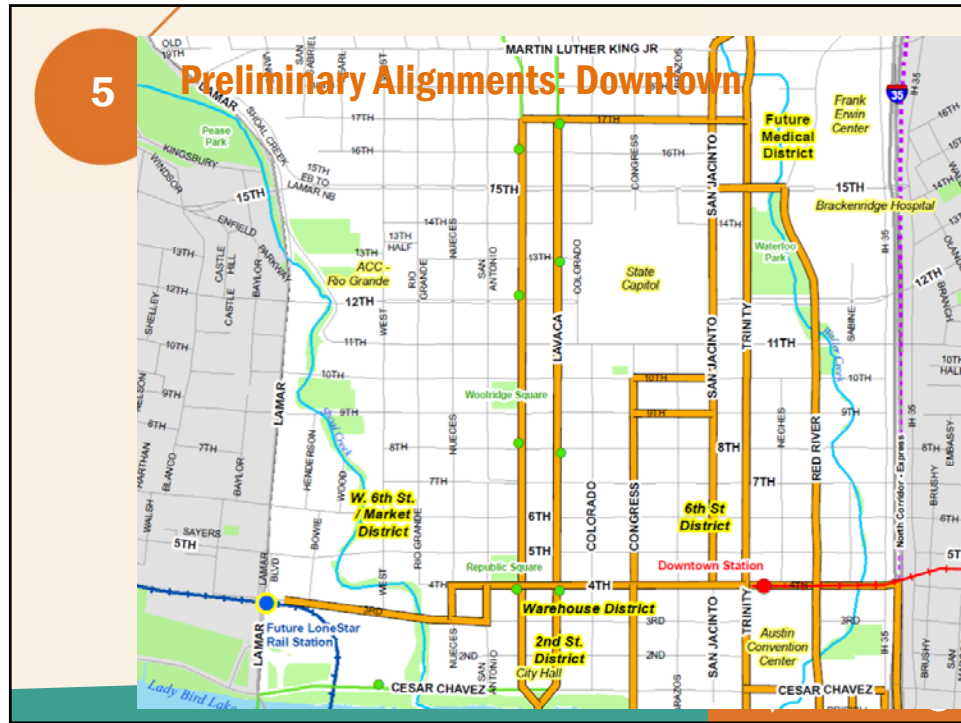
**Alignment Characteristics**

- Right-of-Way
- Grade
- Block lengths
- Street geometry
- Pedestrian/traffic interface
- Access (driveways)
- Duplicate transit service

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**Preliminary Alignments**

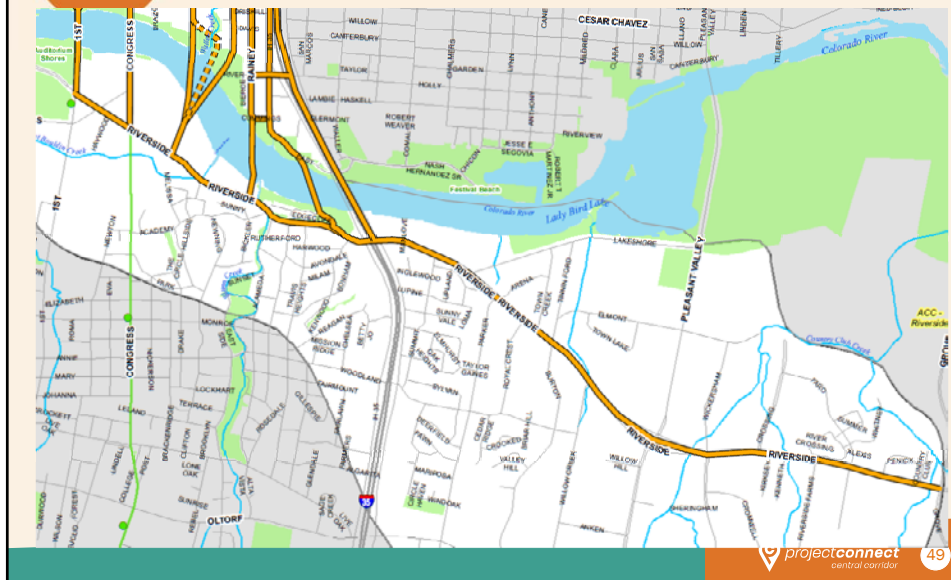






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## Preliminary Alignments: East Riverside



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## Next Steps



## 6

**Next Steps**

- Identify a service profile
- Develop screening criteria
- Collect input on preliminary modes and alignments
- Screen preliminary alternatives
- Public workshop – Saturday, February 8<sup>th</sup>
- Launch online input tool
- CCAG “Dig” – Thursday, February 13<sup>th</sup>



## 7

**Next Meeting  
February 21<sup>st</sup>**

# THANK YOU

**More Information:**

**Project Connect &  
Central Corridor HCT Study**  
[projectconnect.com](http://projectconnect.com)

