

CENTRAL CORRIDOR ADVISORY GROUP

MEETING #11

April 11, 2014 1:30 pm – 3:30 pm

Austin City Hall, Council Chambers



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Agenda

- 1) Welcome & Introductions
- 2) Public Involvement Update
- 3) Evaluation of Final Alternatives
- 4) Project Timeline/FTA Process
- 5) Next Steps
- 6) Citizen Communication
- 7) Next Meeting – May 2, 2014



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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



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Phase 2 Work Plan & Schedule

Decision-Making Process

- Phase 2: Select Locally Preferred Alternative (LPA)

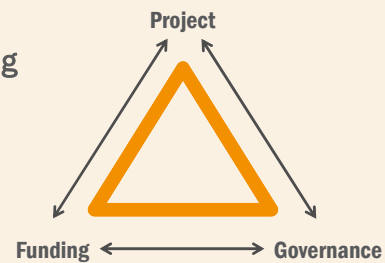
Current
Progress

Central Corridor High-Capacity Transit Study Work Plan				2013							
				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								
	Step 6: Evaluate Alternatives	Task 13	Evaluate Final Alternatives								
	Step 7: Select LPA	Task 14	Select Draft Locally Preferred Alternative (LPA)								
			Decision								*

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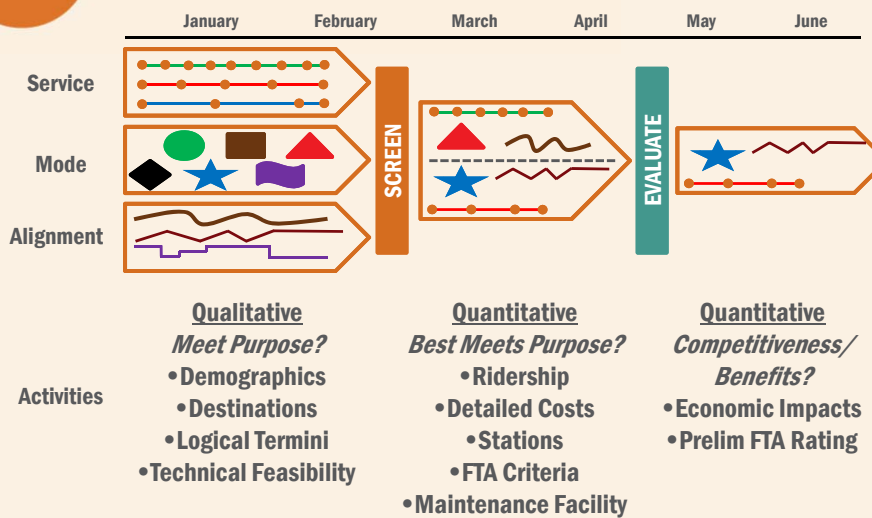
Phase 2 Objectives

- Project Definition
 - Service, mode, alignment, stops
- Funding Plan
 - Capital and O&M costs, funding sources
 - *Within* overall Project Connect Plan
- Governance Structure
- Programs and Policies
 - *Housing/Transit/Jobs Action Team*



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Evaluation Process



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Public Involvement Update

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CAMPO “Kerfuffle”

- Much ado about nothing...
- CAMPO 2040 Comprehensive Project List
 - “scenario development to inform the 2040 Plan”
 - “allow a [modeling] comparison of overall system performance”
- Project Connect phasing assumptions developed 2012-13 (prior to Central Corridor Study)
 - Assumptions/guesses have to be made in order to model
- Urban Rail from ‘airport to airport’ already in 2035 Plan, but we’re re-evaluating with Central Corridor Study



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Recent Public Involvement Activities

- 3/23 Unitarian Universalist Fellowship of Austin
- 3/25 Walnut Creek Neighborhood Association
- 3/26 CTRMA Board
- 3/26 Center for Transportation Research
- 3/27 UT LAMP
- 3/28 Austin Youth Council
- 3/31 CAMPO Open House
- 4/1 Rotary Club of East Austin
- 4/2 Alliance for Public Transportation
- 4/2 State Transportation Planning Committee
- 4/2 Access Advisory Committee
- 4/3 Austin Chamber Transportation Committee
- 4/4 HousingWorks New Starts Forum & Workshop
- 4/7 West Austin Neighborhood Group
- 4/8 RECA Ideas Forum
- 4/8 Planning Commission
- 4/8 Urban Transportation Commission
- 4/9 Capital Metro Customer Satisfaction Advisory Committee



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Upcoming Activities

- 4/12 Step 5 Public Workshop at Midway Fieldhouse
- 4/16 Greater Austin Contractors & Engineers Association (ACEA) Symposium
- 4/17 Urban Land Institute Austin Marketplace
- 4/19 Mueller Neighborhood Association
- 4/21 Congress for the New Urbanism Central Texas Chapter
- 4/26 Austin Earth Day Festival
- 4/29 Austin Fashion Week
- 4/29 MoPac South Open House



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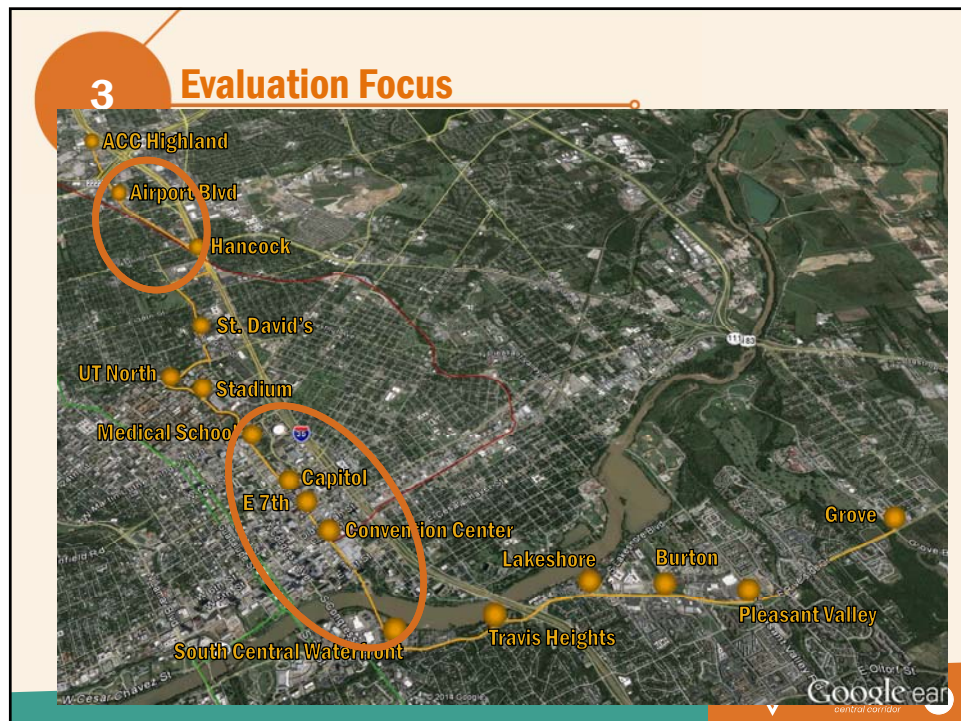
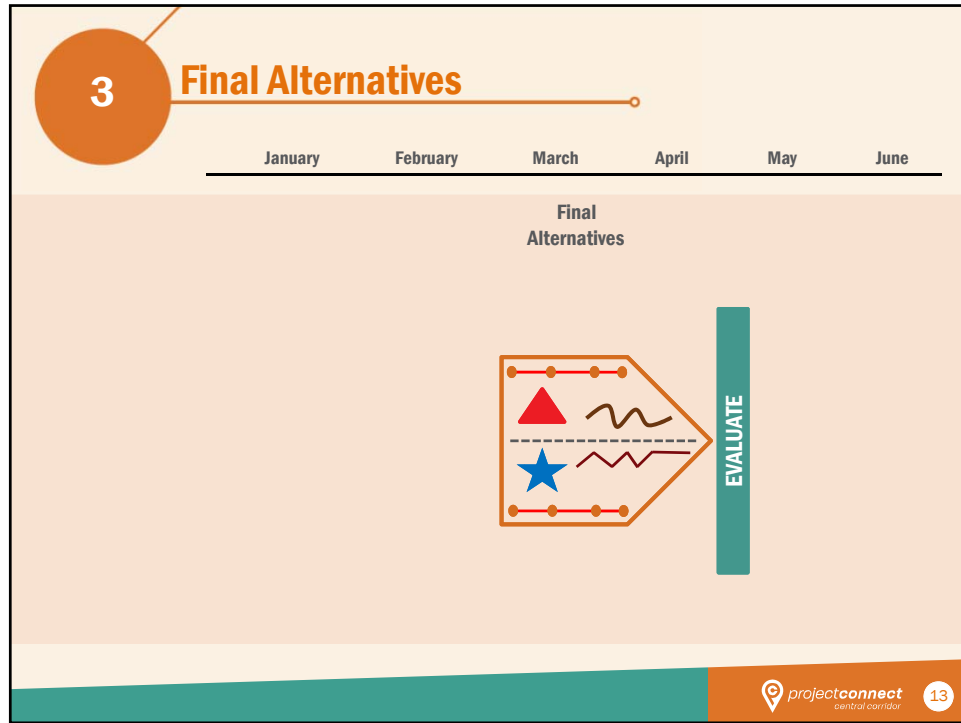
Upcoming Activities

- Multiple SpeakUpAustin discussions planned
 - Reliability and Guideway
 - Mode discussion
 - Station locations and amenities
- Webinar on Evaluation Process
- Presence at various community events and festivals

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Evaluation of Final Alternatives

Evaluation Approach



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Evaluation of Final Alternatives

- Operations plan
- Evaluation approach
- Key project considerations

Operations Plan

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Final Service Profile

Reliability

Mostly Dedicated

Mixed Traffic

Transit Priority/
Pre-emptionDedicated
GuidewaySeparated
GuidewayFully Separated
Guideway

Frequency

10 - 15

5 minutes

60 minutes

Stop Spacing

 $\frac{1}{2}$ - 1 mile< $\frac{1}{4}$ mile

> 5 miles

Speed

20-30 avg.

10 mph

55 mph maximum (including stops)

60 mph

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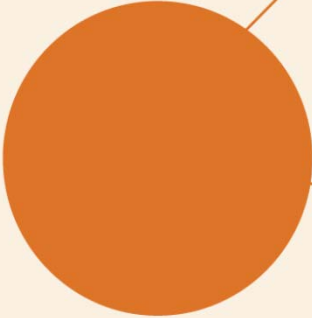
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Initial Operating Plan

- Days of operation: 7 days
- Hours of operation: 6 am – 11 pm weekdays; 6 am – 2 am weekends
- Peak hours: 3 hours in the morning, 3 hours in the evening
- Peak frequency: 10 minutes
- Off-peak frequency: 15 minutes

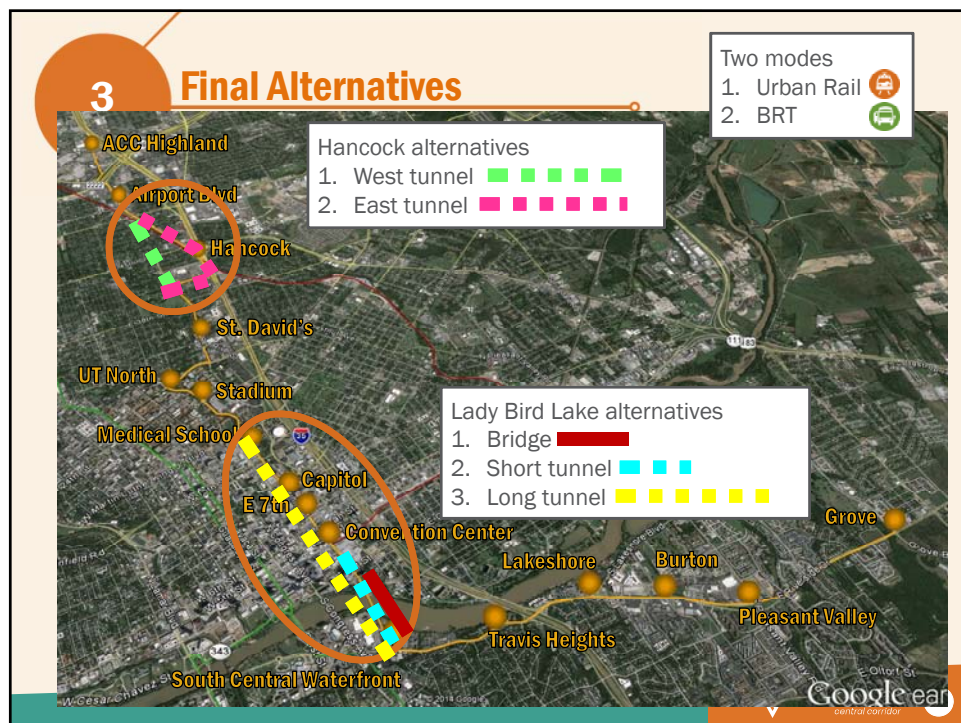
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Evaluation Approach


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Evaluation Factors

- Ridership
 - Projected annual ridership*
 - Projected annual transit-dependent ridership*
 - Effect on system ridership
- Travel time
- Cost
 - Rough order-of-magnitude total capital cost*
 - Rough order-of-magnitude annual O&M cost*
 - Annualized lifecycle cost (capital, O&M, capital & fleet replacement)

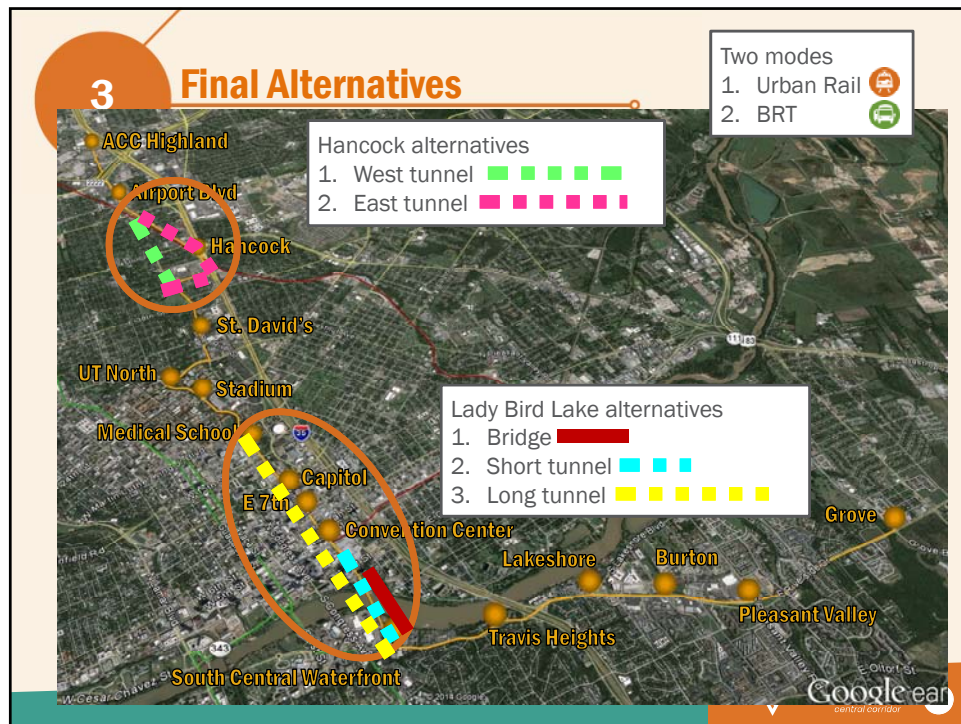
* FTA criteria

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Evaluation Factors

- Cost effectiveness
 - FTA cost effectiveness* (annualized capital + O&M/annual trips)
- Economic development effects
- Potential impacts (auto & pedestrian traffic, right-of-way, etc.)
- System effects (future capacity, connectivity, etc.)
- FTA competitiveness (index of FTA criteria)

* FTA criteria



Key Project Decisions

For Discussion

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Key Project Decisions

- Mode
- Lady Bird Lake thru Downtown
- Hancock Alignments

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Final Mode Alternatives

Urban Rail

Powered by offsite-generated electricity



+/- \$4M per vehicle
195 seated and standing
\$65M-\$80M/mile to build

Bus Rapid Transit (BRT)

Powered by internal combustion (clean diesel, natural gas)



\$800K - \$900K per vehicle
100 seated and standing
\$40M-\$50M/mile to build

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Mode Discussion – Urban Rail



Benefits

- Permanence
 - Attracts and catalyzes economic development
- Vehicles quieter, cleaner, more comfortable
- Higher capacity
- Scalable for special events (add cars)
- Better acceleration/deceleration

Issues

- Higher capital cost
- Cost to modify or extend service greater than BRT
- New vehicle maintenance facility required



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Mode Discussion – Bus Rapid Transit



Benefits

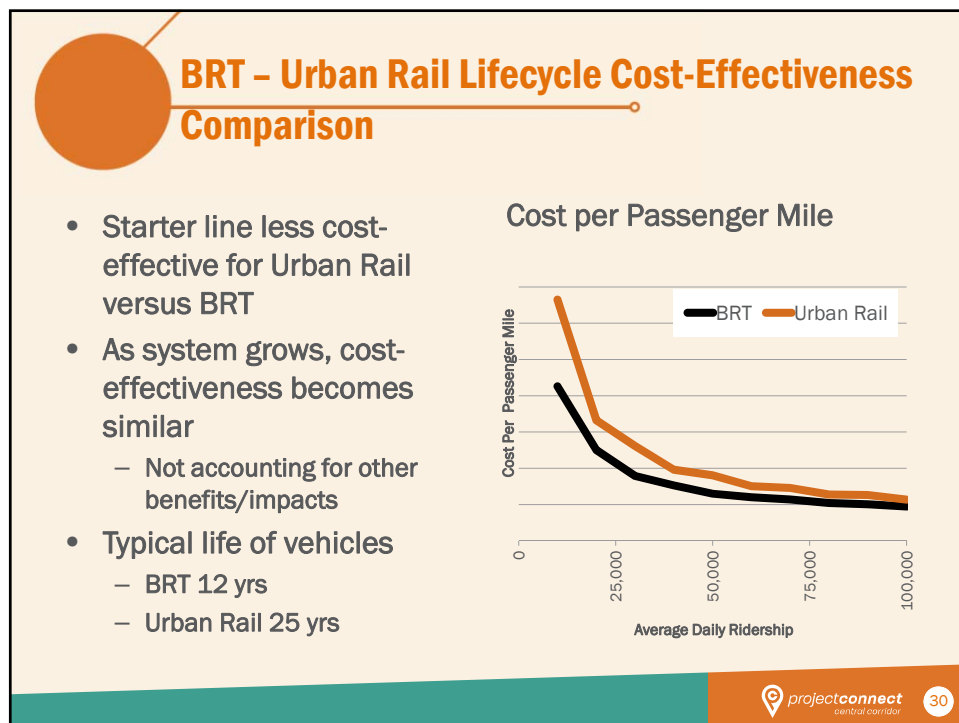
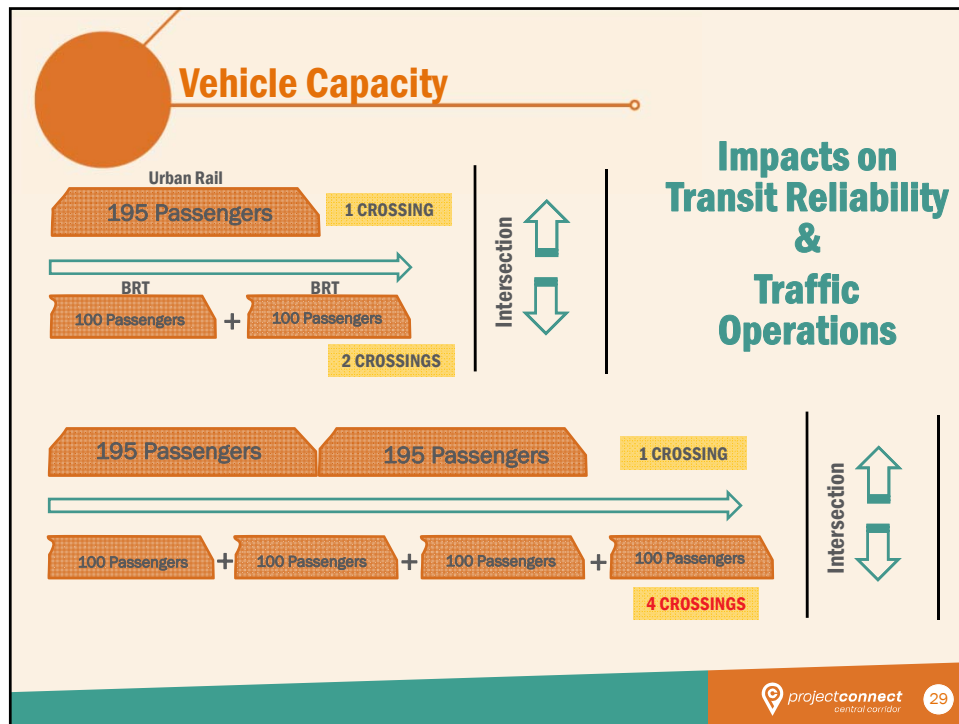
- Lower capital cost, utility impacts
- Can use existing (expanded) maintenance facility
- Familiarity with mode
- Tighter turning radius

Issues

- Service often perceived as less predictable, permanent, or desirable
- More vehicles required to meet same capacity as Urban Rail vehicles
- Noise and emissions



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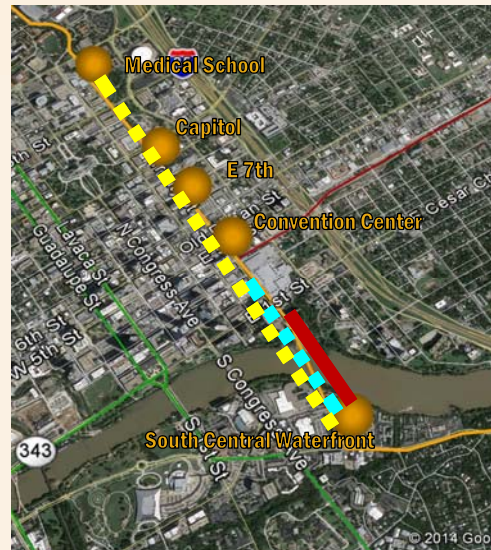


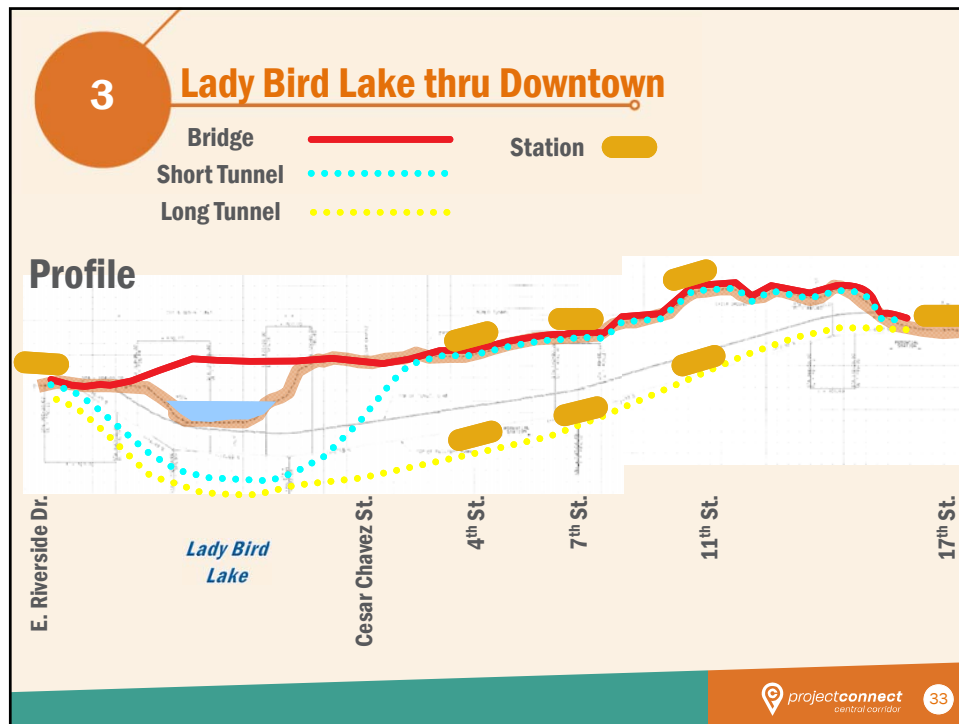
CCAG Discussion

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Lady Bird Lake thru Downtown

- Alternatives
 - Bridge ■
 - Short tunnel ■ ■ ■
 - Long tunnel ■ ■ ■ ■





3 Bridge Alternative

Benefits	Issues
<ul style="list-style-type: none"> • Opportunity for signature structure/city icon • Could be multimodal with bicycle, pedestrian access • Lower capital cost -> allows greater overall project length 	<ul style="list-style-type: none"> • Conflict with boathouse • Reduced auto capacity, left turns, parking on Trinity • Utilities • 6th Street during street closures



Approximate cost: \$175M

Portland-Milwaukie Light Rail Bridge across Willamette River

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Short Tunnel Alternative ■ ■ ■

Benefits

- Avoids conflict with boathouse
- Future connectivity to SoCo, SoLa
- Future capacity/system expansion



Issues

- Convention Center operations (north portal)
- Reduced auto capacity, left turns, parking on Trinity
- Utilities
- 6th Street during street closures
- FTA cost-effectiveness

Approximate cost: \$240M

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Long Tunnel Alternative ■ ■ ■ ■ ■ ■ ■ ■

Benefits

- Greater reliability, capacity through Downtown
- Can accommodate higher speeds and higher frequencies (higher ridership?)
- Maintains auto capacity, left turns, parking on Trinity
- Avoids issues with 6th Street during street closures, boathouse

Approximate cost: \$475M

Issues

- Cost, including underground stations
- Less visible service downtown/reduced placemaking
- Portal and vents
- FTA cost-effectiveness

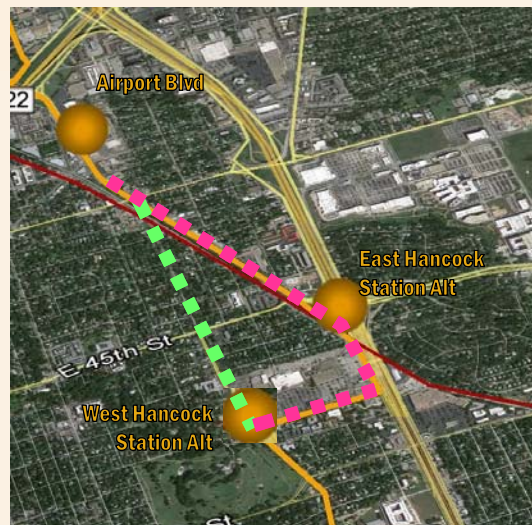


CCAG Discussion

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Hancock Alternatives

- Alignments
 - West tunnel ■ ■
 - East tunnel ■ ■



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Hancock Alternatives: West Tunnel**Benefits**

- Shorter travel time due to length and geometry
- At-grade station at 41st and Red River is less costly, more visible
- Consistent with Airport Blvd. Plan

Approximate cost: \$230M

Issues

- No Red Line transfer at Hancock
- New Red Line station at Airport Blvd /53 ½ St. close to Highland station



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Hancock Alternatives: East Tunnel**Benefits**

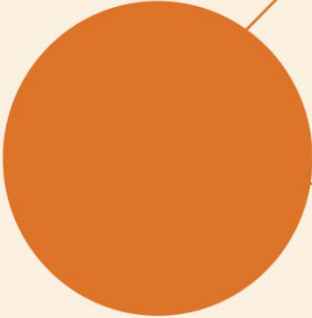
- Preferred potential Red Line transfer station at Hancock – favors bus transfers
- Future connectivity to Mueller

Approximate cost: \$290M

Issues

- Below-grade station cost
- Requires acquisition/displacement of property and businesses along I-35 frontage
- *Appearance* of duplication






CCAG Discussion

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4 Project Timeline/FTA Process

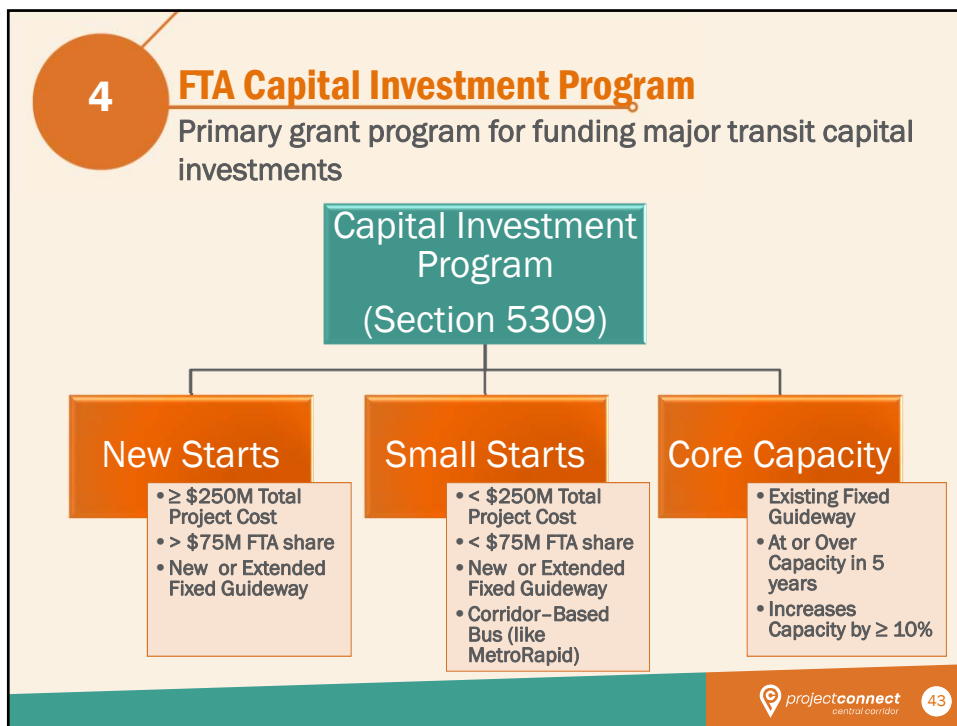
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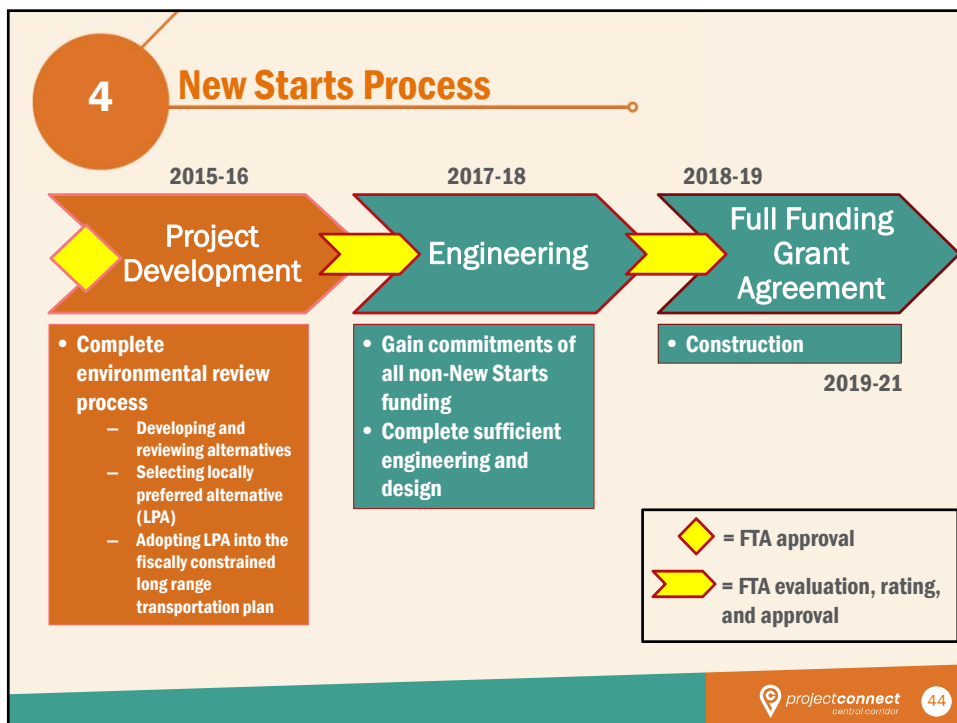
FTA Capital Investment Program

Primary grant program for funding major transit capital investments



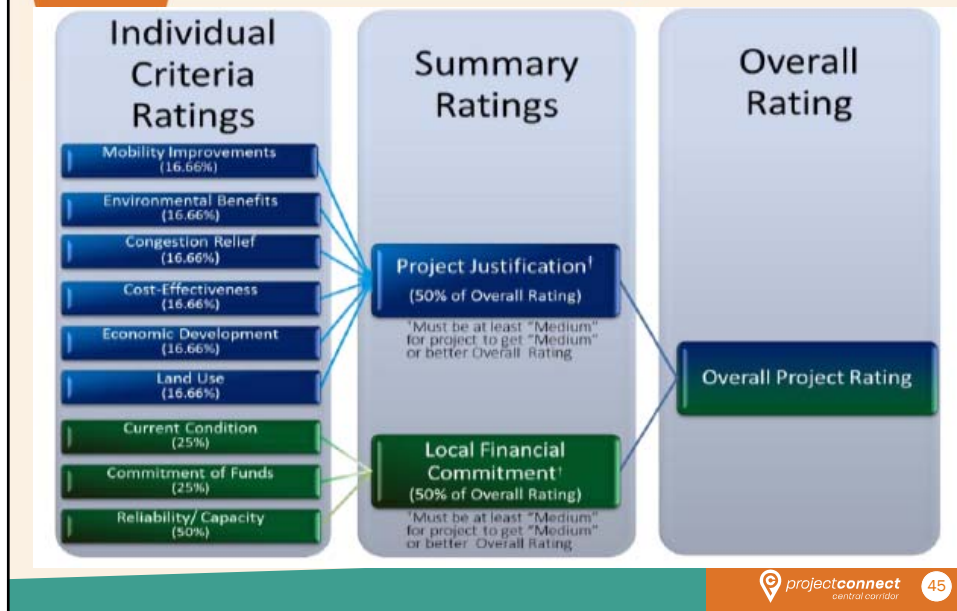
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New Starts Process



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FTA New and Small Starts Evaluation



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Next Steps



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Road to the LPA***Central Corridor Study Topics***

- CCAG #11, April 11th
 - Operations plan
 - Evaluation approach
 - FTA process
 - Project development timeline
- CCAG #12, May 2nd
 - Project team recommendation for LPA (*end-to-end*)
 - System connectivity
 - Rough order-of-magnitude (ROM) cost estimates
 - Ridership estimates
 - Funding and governance
- CCAG #13, May 16th
 - Phasing options (*the project*)
 - System connectivity
 - Scope and fee for additional system planning and project definition
- CCAG #14, June 13th
 - Action on recommended LPA and 1st Phase (*the project*)

**Council
Schedule**

- March 27th
 - Briefing
- May 22nd
 - Briefing
- June (tbd)
 - Special Session
- June 26th
 - Action

6

**Citizen
Communication**

7

Next Meeting May 2nd

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THANK YOU

More Information:

**Project Connect &
Central Corridor HCT Study**

projectconnect.com