RAIL-VOLUTION 2019

transit & community development conference

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Hyatt Regency, Vancouver
655 Burrard Street, Vancouver, BC, V6C 2R7, Canada
Presenters

Vic Stover
Project Manager at King County Metro Transit
Seattle, Washington

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Felsburg Holt & Ullevig
Centennial, CO

Joe Clemens
Principal Planner – Long Range Planning
Capital Metro
Austin, TX

Ali Imanseparhi
Project Manager & BRT Engineering Lead
Regional Transportation District – Engineering Division
RTD Denver, CO
Question:

What were essential corridor or travel pattern characteristics your agency used in determining your selected BRT corridor(s)?
How BRT corridors were selected

- Initial corridors identified in Metro’s long range plan, Metro Connects, based on:
  - Geographic balance
  - Ridership potential
  - Network connectivity
- Used the following criteria to prioritize lines in the agency’s Capital Improvement Program (CIP)
  - Social equity
  - Ridership
  - Partnership commitments
  - Regional high capacity connectivity
  - Corridor implementation complexity
Essential Corridor Characteristics

Network Corridors

Considerations for Implementation

Transit Supportive

Land Use

ROW Available

Existing Partnerships

Coordination

Existing Transit Supportive Policies

Corridor Study/Evaluation

Compl ete

Small Starts

Ready

6th Ave
120th Ave
38th/Park Ave
Alameda Ave
Arapahoe Rd
Broadway (Boulder)
Broadway/Lincoln
Colorado Blvd
Evans Ave
Federal Blvd
Havana St
Monaco/Quebec
North E-470
North I-25
Sheridan Blvd
South Boulder Rd
South E-470
State Highway 2
State Highway 7
C-470
US 287
SH 2
SH 7
SH 42
SH 42/96
University Blvd
US 287

BRT Boardings per Revenue-Mile

Percent of Corridor that is Severely Congested in 2040

Passenger-miles Traveled (PMT) per Revenue-mile

- <10
- 10-20
- 20-23
- >23

Holly Buck
CMTA’s Project Connect process evaluated 30 corridors (studied previously over last 20 years).

Corridors divided into key travel markets: Commuter, Connector, and Circulator.

19 Connector corridors were screened; 6 high ridership and equity corridors selected for BRT Lite & 2 for dedicated BRT/LRT.
Question:

Once a BRT corridor is selected, and it is determined that there is insufficient funding for a full BRT application, what are the advantages/disadvantages of implementing “BRT lite”? 
Ø RTD grant funded project to improve 15L stops and operations

Ø Short-term opportunity to improve passenger experience on East Colfax (project budget: $11M)

Ø East Colfax bus routes 15/15L serve as many passengers per day (over 20K) as some rail corridors

Ø First major capital investment since stops were constructed 30+ years ago

15L Project Advantages/Disadvantages

Advantages

- RTD grant funded project to improve 15L stops and operations
- Short-term opportunity to improve passenger experience on East Colfax (project budget: $11M)
- East Colfax bus routes 15/15L serve as many passengers per day (over 20K) as some rail corridors
- First major capital investment since stops were constructed 30+ years ago

Disadvantages

- Major challenge to ensure that the short term (BRT Light) project transitions to the ultimate BRT project
- Throwaway pieces – minimize this
- Keeping up with changing technology

Ali Imansepahi
BRT Lite Advantages & Disadvantages

- CMTA’s MetroRapid 801 & 803 were implemented five years ago with 80% FTA VSS funding.
- 60-foot 801 carries 10,000 daily; 40-foot 803 carries 6,000 daily; 10 min. headways (7 am – 6 pm)
- Advantages: Branded, free wi-fi, all-door boarding, & digital app
- Disadvantages: No off-board fare payment, small shelter
Question:

BRT cannot be everywhere, how did you handle geographic equity when deciding where to build BRT and similarly, phasing of multiple routes?
Geographic Equity

- Initial Goal – FTA Funding
- 15 Districts – Elected Officials
- Varying levels of interest and commitment

http://www.fhueng.com/equity-analysis/
Geographic Equity & Route Phasing

- CMTA’s Project Connect has 6 high ridership and equity corridors for BRT Lite.
- Board/Council input advocated for 4 equity corridors: Dessau, Expo, MLK, & Pleasant Valley.
- Project Connect Program is studying financial capacity; approx. $25M for capital costs and $7M yearly O&M (FY2018).
Question:

➢ How did you engage the community in a meaningful manner in both gaining support, as well as managing expectation for BRT?
Stakeholder Engagement

- Engaged a regionally focused technical advisory committee
- Met with municipal representatives at key milestones
- Focused on the data-driven process
- Targeting a shift in scope to address their concerns
  - Surveyed communities
  - Eliminated phasing
  - Developed a vision for a regional BRT network
Community Engagement

- Engage stakeholders early on in the process
- Outreach efforts to the community and stakeholder involvement
- Conduct on-board survey
  - Implement findings in project
- First major capital investment since stops were constructed 30+ years ago

Stakeholders voted on bus shelter selection at public meetings

Ali Imansepahti
Question:

Some existing BRT corridors around the country are now over 10 years old. What should planners consider in regards to updating these systems as they develop new lines in other corridors?
How to update an existing BRT system as new lines open?

• Are there plans and policies in place to maintain a higher level of investment in maintenance, facilities and security?

• Consider how you will maintain the quality of operations and service levels as environment on the corridor changes.

• Evolution of the Product and Brand over time
15L Project Status as It relates to New BRT or BRT Light Implementations

- Near term improvements
  - 11 bus bulbs / curb extensions
  - Queue bypass lanes,
  - Queue jump signals
  - Transit Signal Priority
- Enhanced bus shelter design
- Public Information Displays (PIDS)
- Robust fiber network
- Future-proof as much as possible

Source: AC Transit (Oakland, CA)
Question:

What unique feature of your BRT corridor do you want to share with all of us?
Unique Features of RapidRide

- RapidRide Expansion Program Manual
- A 15-month planning effort to develop the framework for future RapidRide expansion
- Established goals, performance measures, and standards
- Identified resource needs for implementation of new lines
Unique Feature of Austin BRT Corridor

- MetroRapid 801 is being studied for fully dedicated BRT or LRT.
- Orange Line is in Early Scoping “alternatives analysis” process.
- Step 1 > Step 2 > LPA screening is vetting alignments & modes.
15L Unique Features

- All stops will include shelters with:
  - Transparent Weather Protection
  - Lighting
- Most stops will include:
  - Security cameras
- Electronic passenger information (PIDS) inside 6 station monuments as a pilot program
- Lighted outside facing map displays
- Collaboration with the City of Denver to acquire fiber