The Evolution of a Bus Lane to a Complete Corridor via the Planning Process -- *The process can work!*

Rail~Volution 2019
About RTD

• The **Regional Transportation District (RTD)** is a public agency, created in 1969 by the Colorado General Assembly.

• RTD operates bus and rail transportation in all or parts of eight counties.

• Governed by 15 board members.

• 2004: Voters approved FasTracks, RTD’s transit expansion program:
  - 140 miles of new light rail, commuter rail and bus rapid transit
  - Redevelopment of Union Station
Background

- Northwest Rail from Denver to Boulder/Longmont part of 2004 voter-approved FasTracks plan
- However, RTD unable to fund rail beyond Westminster Station due to:
  - Cost escalation
  - Declining revenues from Great Recession
  - Unable to reach agreement with the BNSF (the owner of the freight corridor)
Background

• Given RTD’s inability to complete the rail in the near term, RTD initiated the Northwest Area Mobility Study in 2013
• Purpose was to develop consensus with stakeholders on cost-effective mobility improvements
• Study recommended establishment of BRT network in the Northwest area. SH 119 Corridor from Longmont to Boulder top priority
• RTD initiated SH 119 NEPA process in 2017
Setting

- SH 119 – mostly rural corridor connecting Boulder to Longmont
- Virtually no off-peak congestion
- Very high peak-period congestion
- Boulder major employment center with high jobs/housing imbalance
RTD’s intent due to limited budget

- Establish Bus-on-Shoulder application on SH 119
- Focus only on transit elements
- Focus on capital improvements *between* Boulder and Longmont cities on the highway
Project Partners
Planning Process

Working with Stakeholders:

• Developed rigorous evaluation criteria for alternatives
• Developed potential bus routing options
• Developed potential capital improvements
• Then worked to integrate the best routing with the best capital investments
• Through the process the following became apparent:
  • Stakeholders concerned not only with transit improvements, but also with *person through-put* for all modes in the corridor
  • Stakeholders concerned with improvements not just between the cities but *in* the cities as well – including full, multi-modal solutions.
Alternatives Evaluated
Evaluation Process

Scoring Criteria
- BRT travel time savings
- Total person trip throughput
- BRT travel time reliability
- BRT ridership
- BRT boardings per hour
- O&M cost per boarding

Informational Criteria
- Travel time comparison
- BRT service hours / Local transit service hours
- Local transit ridership / Total transit ridership
- BRT O&M cost
- Funding availability
- Capital cost
- Opportunity for future mobility options, e.g., AV

3 BRT Route / Service Alternatives
3 Physical Configuration Alternatives
Locally Preferred Alternative with Environmental Clearance

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Evaluation Key Findings

• **2-route BRT pattern provides:**
  - Excellent service coverage in both cities
  - More direct, one-seat rides than single route
  - Increase in service hours and O&M cost will be phased over time as warranted and as funding becomes available

• **BRT/Managed Lanes provide:**
  - Highest travel time savings
  - Best transit service reliability
  - Higher transit ridership
  - Greatest number of travel options and benefits for all users: vehicles, transit, carpool, express tolls, and bicyclists while reducing congestion
  - *Improvements can be phased over time as funding becomes available*

• **Bikeway**
  - Opens the corridor to more users
SH 119 Final Recommendations

Routing

Two Route Pattern

Configuration

BRT/Managed Lanes
SH 119 Final Recommendations
Complete Street Elements

- Corridor Bikeway – generally in median
Complete Street Elements

• Coffman Street Busway in Longmont
Complete Street Elements

• Bus Access/Turn (BAT) Lanes with mid-block stations, 28th St., Boulder
SH 119 Package of Improvements

- 2 BRT pattern, limited stop BRT service with:
  - Improved transit travel time
  - Frequent service (15-min. / 30-min. all day)
- BRT/Managed lanes along SH 119 median
- Refinements to local network service
- 22 enhanced, safe and comfortable stations with BRT branding, real time passenger information plus 5 park-n-ride facilities
- Longmont and Boulder improvements with Transit Signal Priority (TSP)
- New bikeway along SH 119
Funded Transit Elements

- Approximately $53 Million to be available for corridor through RTD, Denver Regional Council of Governments (DRCOG), CDOT and Local Jurisdictions for transit elements, including:
  - Initiation of BRT Service / Branding
  - Park-n-Ride / Station Enhancements
  - Coffman Street busway, Longmont
  - BAT Lanes in Boulder
  - Bus Queue Jumps at SH 52

- Funding for other multi-modal elements such as BRT / Managed Lanes and bikeway, would come from other sources
Lessons Learned

• Be careful of predetermined notions
• Listen to stakeholders
• Recognize ability to apply “complete street” ideas to a variety of settings
• Be willing to work with project partners – they can often help with funding
Questions

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