BRT Cost Comparison

Transportation Interim Committee





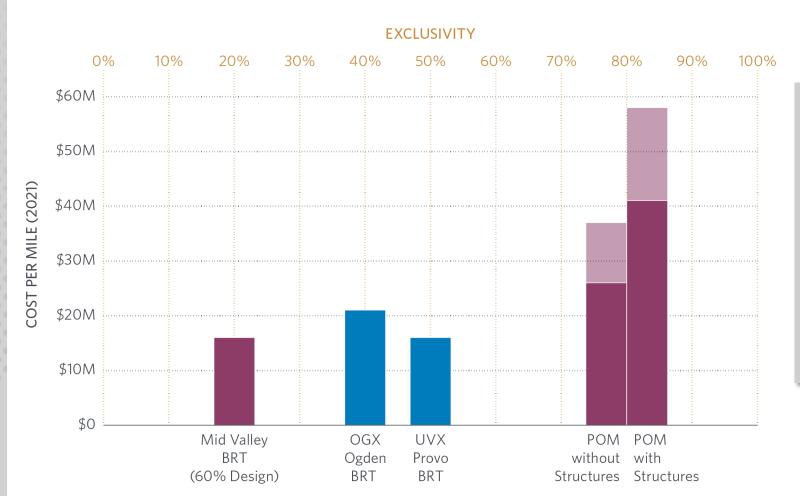
October 20, 2021







UTA BRT Projects – Total Program Cost/Mile



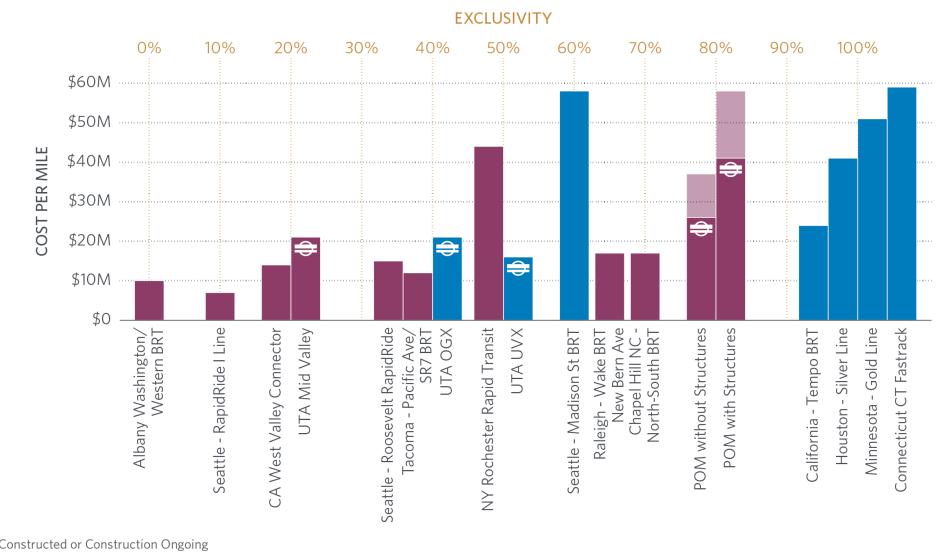
Total Program Cost includes:

- Construction cost
- Design contingency (as applicable)
- Right-of-way
- Vehicle fleet
- O&M infrastructure
- Station access improvements



^{*}All costs escalated to 2021 for comparative purposes

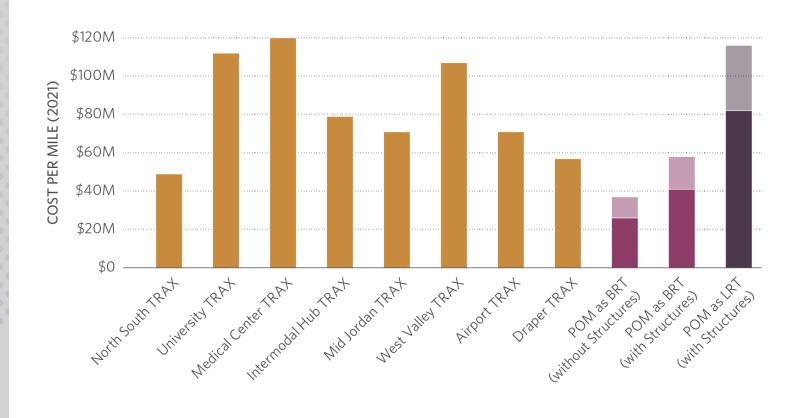
National BRT Projects – Total Program Cost/Mile





In Design or Status Unknown

UTA LRT Projects - Total Program Cost/Mile



- Right-of-way
 Total Program Cost includes:
- Construction cost
- Design contingency (as applicable)
- Vehicle fleet
- O&M infrastructure
- Station access improvements



^{**}All costs escalated to 2021 for comparative purposes

POM Cost Development



PLANNING PROPERTY FINAL DESIGN

Cost Estimate Approach

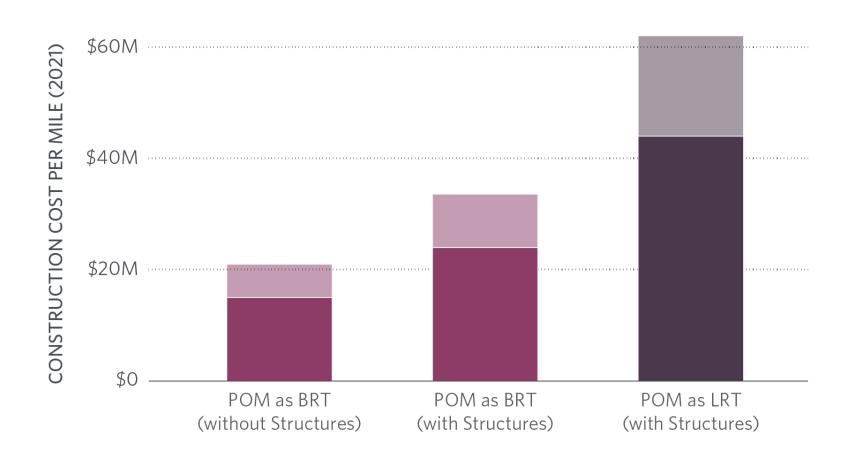
- Planning level Rough Order of Magnitude Estimates
 - In the process of refining Preferred Alternative
 - Cost as a range until design advances further

Cost elements

- Unit prices based on previous UTA BRT and LRT projects and independent cost estimation
- Costs vary by line item (operations in dedicated guideway versus mixed flow, elevated structure, etc.)
- Based on project scope (length, portion of exclusive guideway, # of stations, etc.)



POM Mode Considerations – Construction Cost/Mile





POM Mode Considerations

Why BRT?

- Implement more quickly (~up to two years faster) and at a lower cost
- Greater flexibility to serve two stations at The Point and make connection to FrontRunner Lehi
- Permanence of transit investment drives economic development, regardless of mode

LRT Limitations

- Higher cost investment with significant construction and operational complexity
 - Need an electrified rail connection for light rail vehicle maintenance at existing facility, or
 - Identify and construct a new maintenance facility for light rail vehicles adjacent to corridor
- Would only serve one station at The Point
- Significant impacts to make connection to FrontRunner Lehi



Questions?



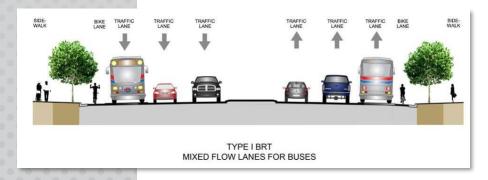
Supplemental Slides



UTA BRT Types

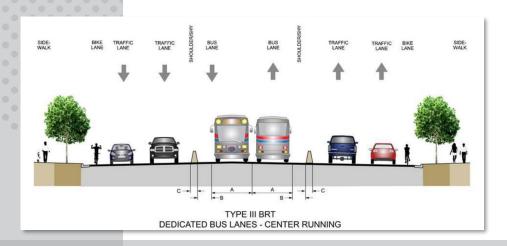
Type I BRT

Shares lanes with general automobile traffic (similar to local bus routes)



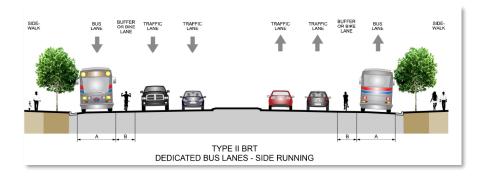
Type III BRT

Bus lanes physically separated by curb or other barrier (can be center or side running)



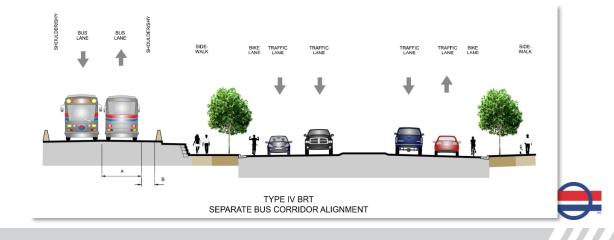
Type II BRT

Dedicated lane for bus traffic – side running, no physical barrier



Type IV BRT

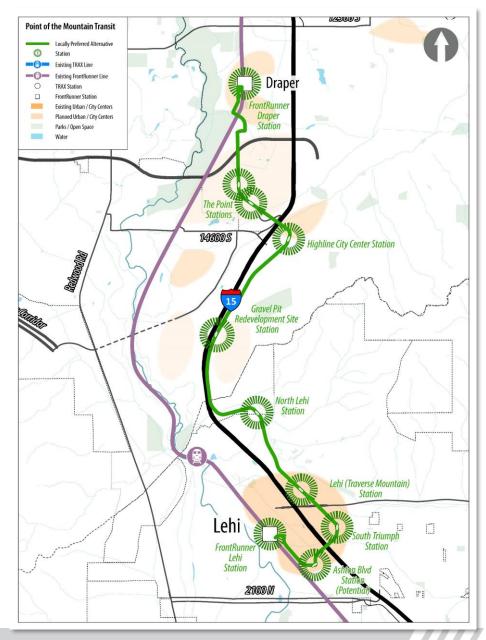
Separate roadway or guideway in its own alignment and corridor



POM - Commitment to Premium BRT

- Premium BRT similar to Type IV
- Exclusive transit backbone
- Level boarding stations
- Enhanced station amenities
- Transit signal priority
- Frequent, reliable, dedicated service from Draper to Lehi





POM Transit Study Overview

