Meeting Agenda

- Project Review
- Project Update
- Economic Impact Analysis
- Adapting to Federal Regulatory Changes
- Next Steps
Project Review
What is the Process

Alternatives Analysis

- Scoping and Problem Definition
- Alternatives Development
- Analyze and Refine Alternatives
- Adopt a Locally Preferred Alternative

Environmental Assessment

- Scoping
- Alternatives Definition
- Impact Assessment
- Environmental Assessment and Public Review
What are the Alternatives?

- **No-Build**
  - Current bus operations with already committed improvements
  - Required by FTA to be used as a comparison to the build alternative

- **Build**
  - Bus Rapid Transit service utilizing dedicated lanes in various segments of the corridor

- **Baseline**
  - Seek to address the needs of the corridor without capital investment with regular buses, without dedicated lanes, but the same stop pattern as the Build Alternative
  - Due to changes in FTA criteria, a Baseline Alternative is no longer required
  - Since the Baseline Alternative did not fully meet the purpose and need of the project it is no longer under consideration
What is BRT?

- Bus Rapid Transit (BRT) is a high quality, high capacity rapid transit system.
- BRT invests in improvements to vehicles, stations, operations, roadways, rights-of-way, intersections and traffic signals to speed up bus transit service.
- BRT is not a uniform, turn-key transit technology.
Example BRT Improvements

- Streamlined transfers
- Low floor buses
- Sidewalk & crosswalk improvements
- Signal priority
- Off-board ticketing
- Dedicated lanes
New Service Features

- 5 Minute Peak Period Service
- New BRT Vehicles
- 14 Stations and Park & Ride
- Branding and Off-Board Fare Collection

Route Length: 7.6 Miles
Dedicated Bus Lanes: Thompson to Adams (Median) 4th to 14th (Curb, widened)
Travel Speeds: 8.0 MPH Local Bus (No Build) 13.2 MPH BRT
Local Bus Improvements: Curb Lane and Consolidated Stops Downtown
Ridership: Over 5,000 daily boardings*, Approx. 1,600 added*

*Final ridership numbers are subject to change based on additional analysis of operating plan
**West End**

- Lower volumes of bus traffic (21 buses/hr AM)
- Traffic LOS A-C
- Lower density land uses

**Solutions**

- Use general travel lanes
- Limit number of stations to improve travel times
- Consider Park and Ride

**Museum/VCU**

- Departmental areas
- Interchange
- Site

**Downtown**

- Chesterfield Street
- Monument Avenue
- Broad Street

**East End**

- Mechanicsville
- Downtown
- Midlothian

**James River**

- Rocketts Landing
- Williamsburg Avenue
- Commerce Road

**Rapid Transit**

- D Route
- J Route
- N Route
- Q Route
- S Route
- R Route
- H Route

**Conditions**

- Lower volumes of bus traffic (21 buses/hr AM)
- Traffic LOS A-C
- Lower density land uses

**Solutions**

- Use general travel lanes
- Limit number of stations to improve travel times
- Consider Park and Ride
**West End**

**Museum/VCU**

- Moderate volumes of bus traffic (20-29 buses/hr AM)
- Traffic LOS A-C
- Local buses cannot pass one another

**Downtown**

**East End**

**Solutions**

- Median lane to bypass local buses
- Split platforms to minimize ROW impacts
- Stations closer together than West End
Illustration of Median Guideway Station
### Conditions
- High volumes of bus traffic (36-48 buses/hr AM)
- Traffic LOS A-C
- Increased auto-bus conflicts
- One bus at a time boards at stations

### Solutions
- Widen shoulder bus lane to improve speeds, minimize conflicts
- Use fewer stations with longer platforms
- Spread user benefits for all routes on Broad St.
Illustration of Curb Guideway Section
**East End**

**Conditions**
- Low volumes of bus traffic (0-12 buses/hr AM)
- Traffic LOS A-C
- Constrained ROW (4 lanes)

**Solutions**
- Use general travel lanes and on-street bus stops
- Limit number of stations to improve travel times
- Consider Park and Ride
Funding and Operations

- Currently estimated costs (subject to further study)
  - Capital cost  $68.3 Million
  - Annual operating costs $4 million

- FTA grants can typically pay up to 50% of Capital Costs
  - Remaining 50% would come from
    - 25% State Match
    - 25% Local Match: $17 Million (City and County)

- Study team has been working with City and County staff to identify feasible and appropriate funding sources
Project Update
Since 2010:

- Analyzed East End access to BRT with feeder routes
- First Draft AA and EA documents submitted to FTA
- Norfolk Southern has received a state rail enhancement grant to upgrade tracks and replace the Main Street Bridge over their railroad.
- Series of meetings held with City of Richmond on potential funding strategies
- Meeting with Henrico County also held on costs and funding
- City of Richmond requested an economic impact analysis
In 2012 and early 2013:
- Economic impact analysis prepared and presented to City, County and regional stakeholders
- MAP-21 changed the FTA project development process
- FTA modified their project evaluation criteria
Economic Impact Analysis (EIA)
EIA Scope of Work

- Case Study Review
- Investment Spending Impacts
- Corridor Property Value Impacts
Cleveland, OH - HealthLine
(Euclid Corridor)

Source: Cuyahoga County Assessment Database and GIS
Euclid Corridor Impacts

Economic Development

- Economic impact: $4.3 billion in investment
- Notable investments: technology firms, residential townhomes, senior housing
- Contributing factors:
  - Transit-oriented zoning
  - Streetscape improvements
  - Tax abatements, credits and incentives
  - Housing Assistance
Lessons Learned

- BRT and policy initiatives can help influence the nature and pace of development
  - Cleveland State University, Cleveland Clinic
  - Cleveland’s Health Tech Corridor
- BRT can help attract those seeking a less auto-dependent environment
- BRT’s “perceived permanence” is critical to establishing faith in the system (and in the surrounding real estate market)
Examined economic impacts of construction activity, ongoing operational activity and value of time savings.
Examined property tax data from Euclid Corridor and Cuyahoga County to establish BRT effect.
Highlights of Findings

- **Broad Street Corridor**
  - Economic impact of construction and annual operation modest
  - Projected property tax impacts based on corridor “premium” show an annual benefit to tax revenues

- **More of a catalyst than a rainmaker**
  - Existing development plans are a good backdrop to capture benefits of BRT
    - More dramatic in the city where density and retail activity could be boosted
    - Enhanced value in existing and planned developments in Henrico
Adapting to Policy Changes
Only one round of FTA evaluation and rating.

LPA, EA and Conceptual Design precede any FTA rating.
FTA Evaluation Criteria

**Project Justification Criteria**
- Environmental Benefits: Improvements to air quality, energy use, greenhouse gas emissions and safety
- Mobility Benefits: Annual Trips on the BRT with added weight for trips by Transit Dependent Persons
- Economic Development: Transit Supportiveness of Local Plans and Regulations Assessment of Transit Impact on Corridor*
- Cost Effectiveness: Total federal cost of the project (converted to annual cost over the life of the project); Annual trips on the BRT
- Land Use: Transit Supportiveness of Existing Land Use and Affordable Housing Availability
- Congestion Relief: Until FTA completes new rules and guidance for this criterion all projects are rated Medium at this time.

**Local Financial Criteria**
- Operating Cost: Projects that require less than 5% increase in overall operating expenses.
- Local Funding: Reasonable plan for local share of capital costs
- Financial Condition: Local transit agency can prove stable financial status

**Type of Measure**
- Qualitative Measure
- Quantitative Measure
- Varies by Circumstance

**Overall Project Rating**
*Must be Medium or Better to Qualify for Federal Funding*

**Local Financial Commitment Rating**
*Must be Medium or Better to Qualify for Federal Funding*
“In evaluating proposed Small Starts projects under these criteria: As a candidate project proceeds through project development, a greater level of commitment will be expected with respect to transit-supportive land use plans and policies and the project sponsor’s technical capacity to implement the project.”
What does this mean for Broad Street?

Process – Modest Change, Later Application

Locally Preferred Alternative
Environmental Documentation  Conceptual Design

Expedited Grant Agreement
Construction

FTA Approval of Project Concept
FTA Evaluation, Rating and Approval

Evaluation Criteria – Opportunities and Challenges

Project Justification Criteria

Environmental Benefits
Improvements to air quality, energy use, greenhouse gas emissions and safety

Economic Development
Transit Supportiveness of Local Plans and Regulations, Assessment of Transit Impact on Corridor

Land Use
Transit Supportiveness of Existing Land Use and Affordable Housing Availability

Mobility Benefits
Annual Trips on the BRT with added weight for trips by Transit Dependent Persons

Cost Effectiveness
Total federal cost of the project (converted to annual cost over the life of the project), Annual trips on the BRT

Congestion Relief
Until FTA has completes new rules and guidance for this criterion all projects are rated Medium at this time.

Local Financial Criteria

Operating Cost
Projects that require less than 5% increase in overall operating expenses.

Local Funding
Reasonable plan for local share of capital costs

Financial Condition
Local transit agency can prove stable financial status
Next Steps

- Completing Operational Analysis Summer, 2013
- Preparing Updated and Combined AA/EA Fall, 2013
  - FTA Review, Agency and Public Review Follow
  - Public Meeting Early 2014
- Official LPA Selection and Completed EA Anticipated March, 2014
QUESTIONS

Thank you for attending!