



# Route 1 Multimodal Alternatives Analysis

## Executive Steering Committee Meeting

November 14, 2013

Route 1  
Multimodal Alternatives Analysis



# Agenda

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## 1. Project updates

## 2. Alternatives screening and development

- Purpose and Need
- Public and stakeholder input
- Screening and initial alternatives

## 3. Project funding and finance

- Federal, state, and local funding
- Process requirements
- Finance tools
- Discussion: project examples and applications



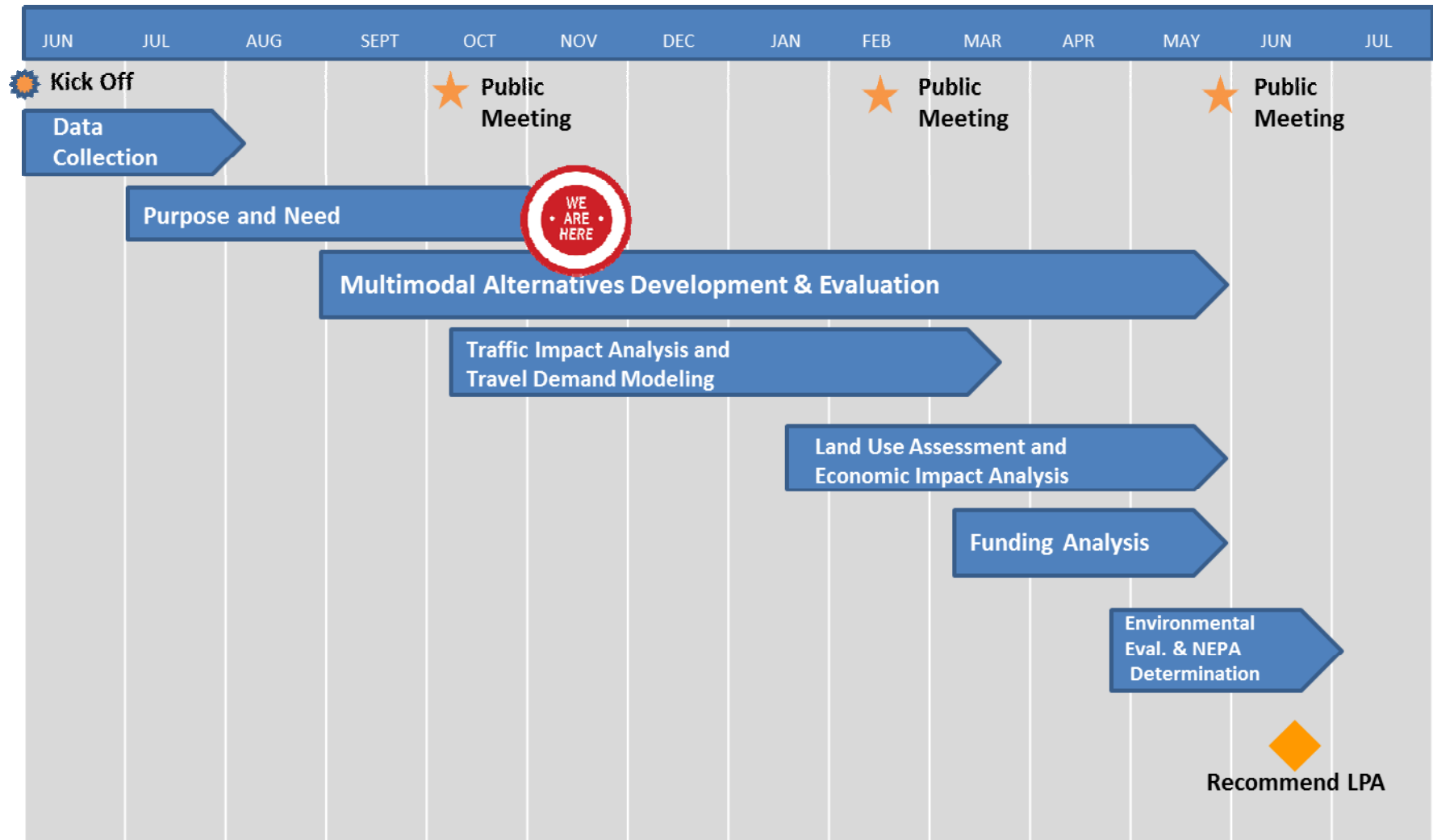
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# Project Updates





# What is the project schedule?



# Project Update (since previous ESC meeting)

## Technical work completed

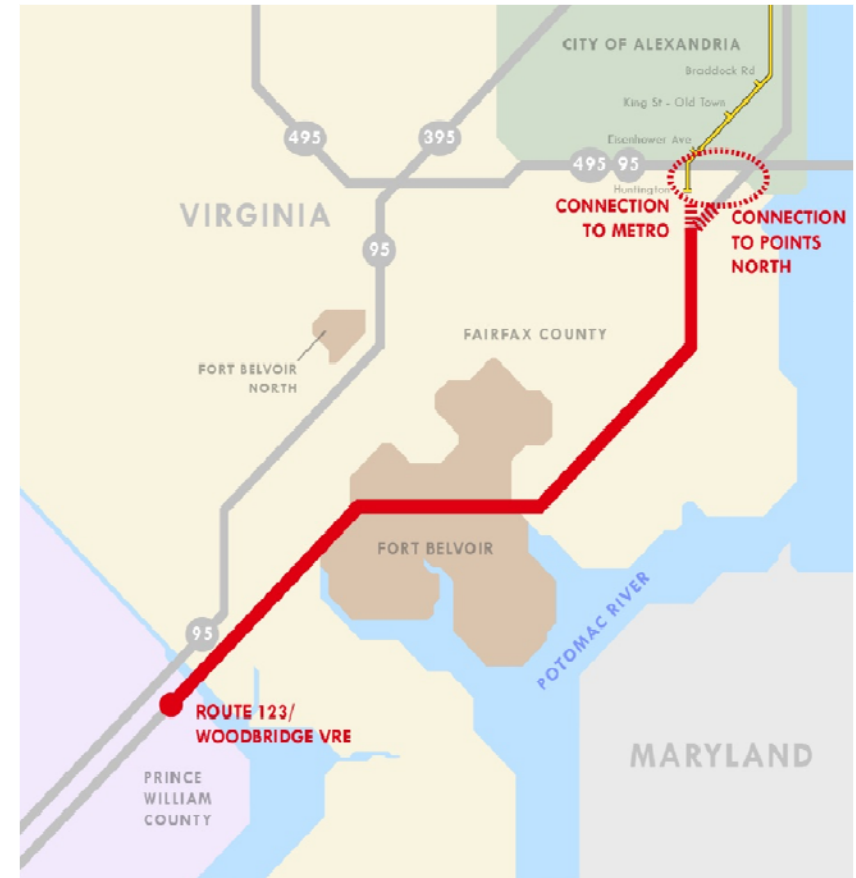
- Purpose & Need
- Evaluation of Alternatives Methodology
- Land Use Methodology
- Ridership Forecasting Methodology
- Initial Alternatives Development

## Stakeholder meetings conducted

- Community Involvement Committee (9/25)
- Technical Advisory Committee (9/30)
- Public Meeting (10/9)
- Executive Steering Committee member briefings

## Community outreach activities

- Back to School Nights
- Farmers Markets
- Huntington Metro Station
- Business Community Presentations
- On-Line Feedback Strategies



# Public meeting debrief – October 9



## Format:

- Brief open house
- Presentation
- Q&A
- Facilitated stations/ open house

- Over 80 attendees
- 5 post-meeting articles in online blogs, local media



# Public meeting: selected participant comments

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## Key Themes:

- Create destinations on Route 1, not a throughway.
- Understand how the Route 1 transit service connects to the region, not just destinations on the corridor.
- Ensure that Fort Belvoir is a key participant as we look to the future. The travel impacts from Ft. Belvoir are very significant.
- Create safe pedestrian and bicycle conditions, also ADA compliance.
- Factor in stream protection and environmental quality.

## Questions

- How will the project progress once the study is complete? What is the timeline? (Federal, State, and local responsibilities/roles)
- How will the project be funded?
- How will the corridor connect at its north end into Alexandria?



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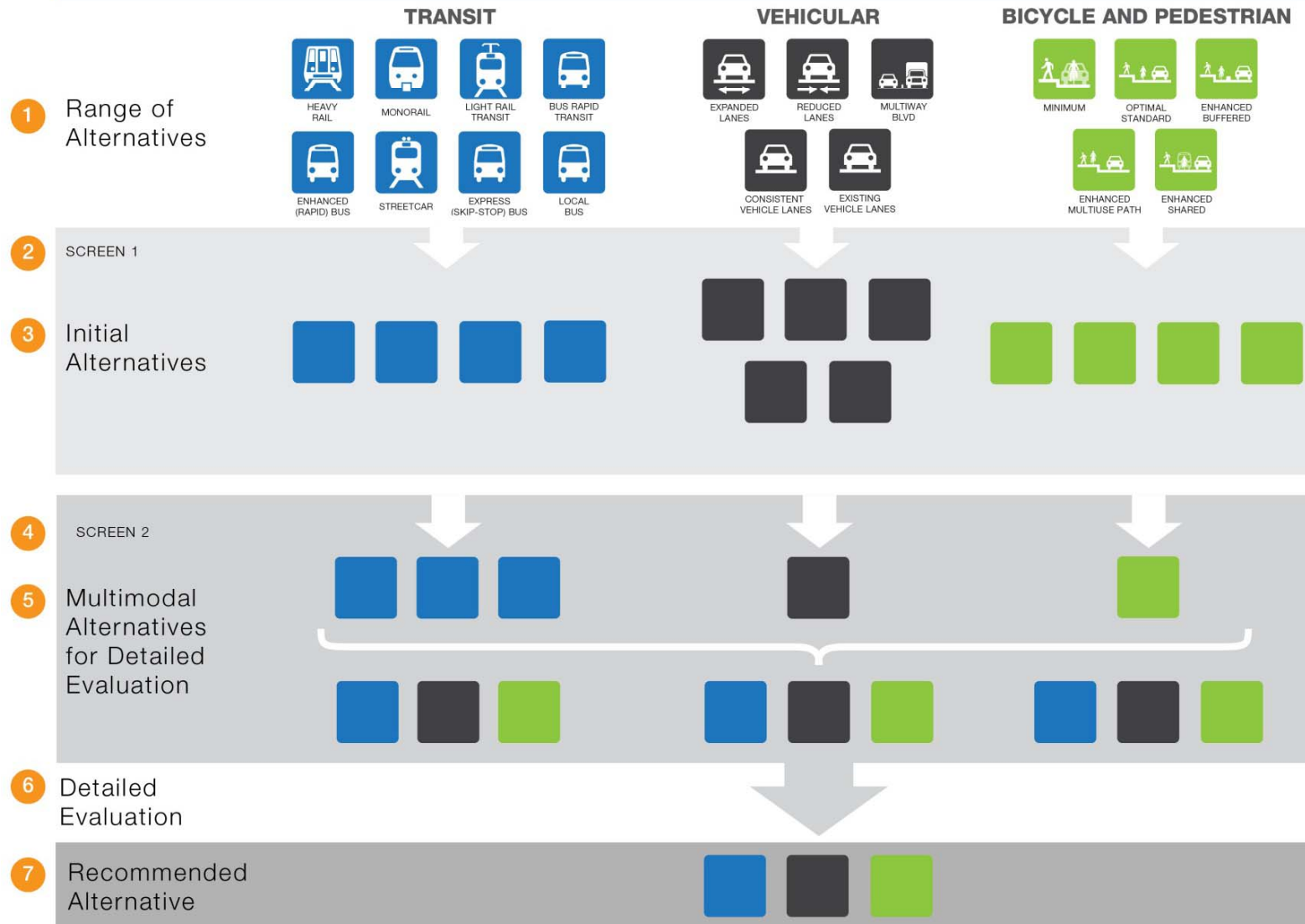
# Alternatives Screening and Development





# Alternatives Screening and Definition

## Multimodal Alternatives Process

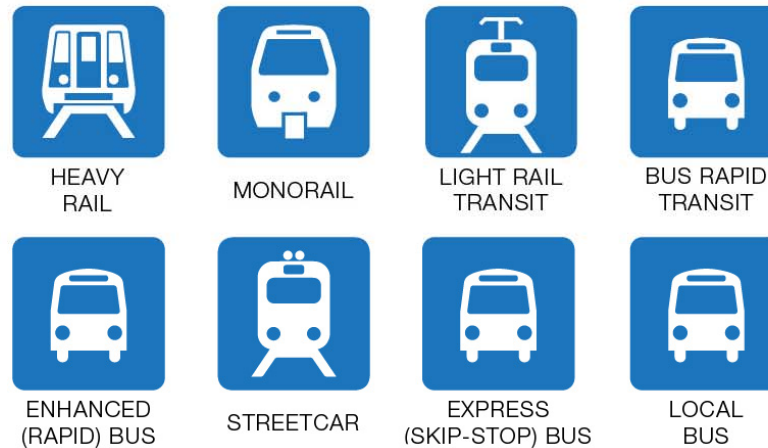




# Alternatives Screening: Transit

## TRANSIT

1 Range of Alternatives

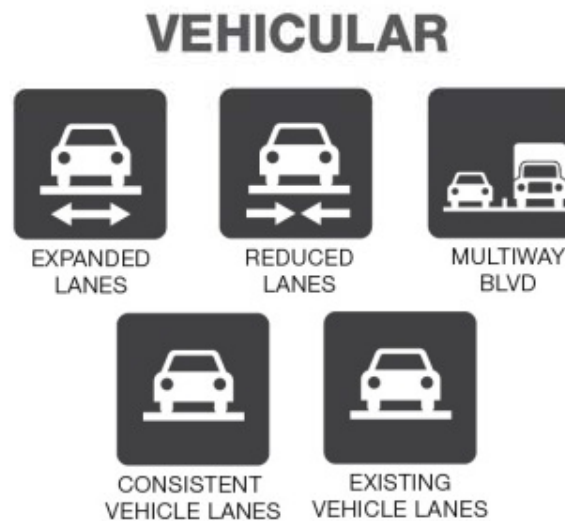


2 SCREEN 1



# Alternatives Screening: Vehicular

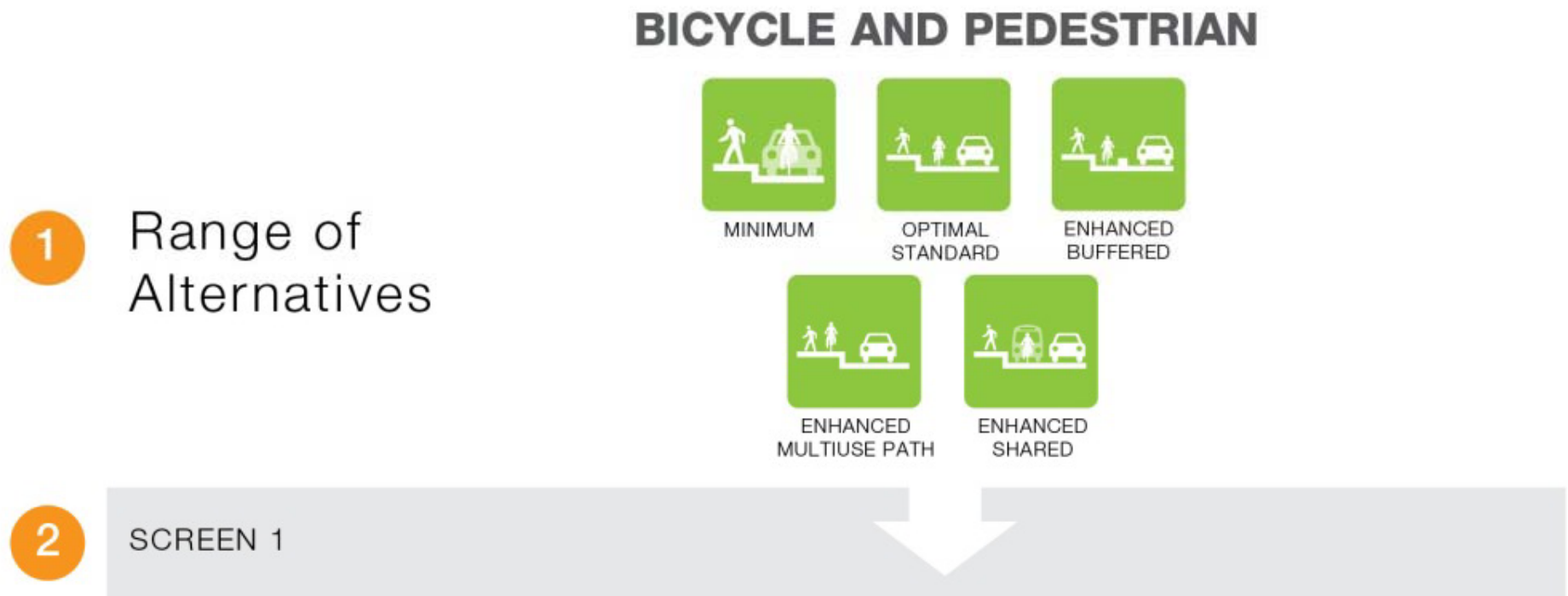
## 1 Range of Alternatives



## 2 SCREEN 1



# Alternatives Screening: Pedestrian/Bicycle



# Project Needs

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1. Competitive transit
2. Safe and accessible pedestrian and bicycle connections
3. Reduced demand/necessity for automobile travel (leading to congestion)
4. Support for/accommodation of more robust land development
5. Preservation of community (e.g. affordable housing and economic diversity) and cultural/natural resources





# Project Goals

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**Goal 1: Improve attractive multimodal travel options**

**Goal 2: Improve safety; Increase accessibility**

**Goal 3: Increase the economic viability and vitality of the corridor**

**Goal 4: Promote community health and the environment**

# Screen 1: General Criteria for Transit Alternatives

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## ***In order to satisfy the project purpose, alternatives must:***

- Improve attractive multimodal travel by improving transit travel time (over the existing) or providing attractive bicycle and pedestrian accommodation.
- Increase the economic viability and vitality of the corridor by supporting and advancing local land use objectives.
- Increase public and investor confidence in delivery and sustainability of new transit investments.
- Support competitive transit options by integrating with existing or planned regional transit systems.



# Screen 1: Transit Alternatives

Range of  
Alternatives



SCREEN 1

Initial  
Alternatives

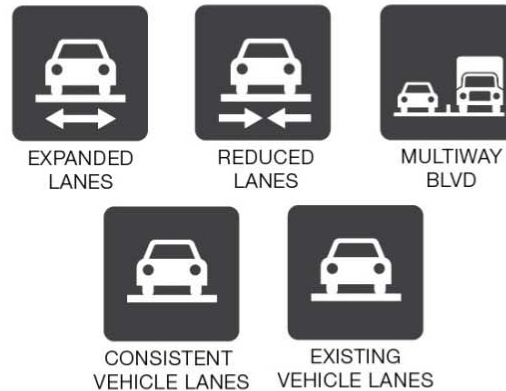


- Improve non-auto travel time
- Support local land use objectives
- Integrate with existing or planned regional transit systems
- Delivery and sustainability of transit investments

# Screen 1: Vehicular Alternatives

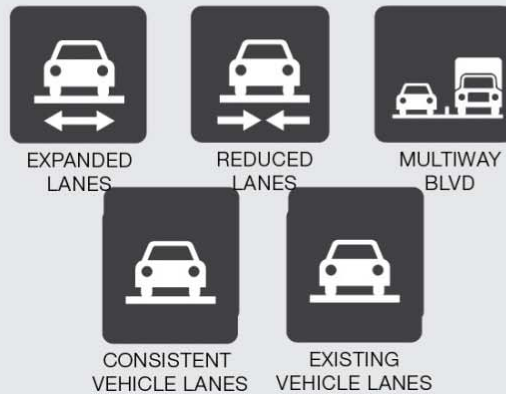
Range of  
Alternatives

## VEHICULAR



SCREEN 1

Initial  
Alternatives



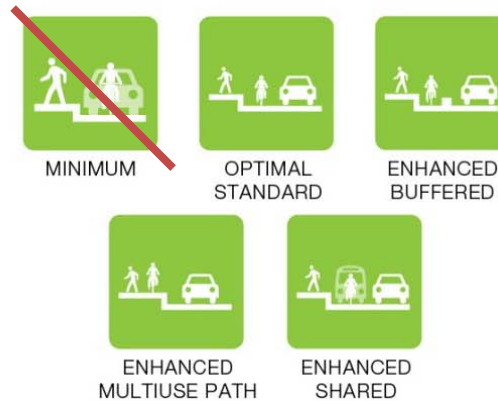
All alternatives  
carried forward  
for further  
evaluation



# Screen 1: Pedestrian/Bicycle Alternatives

Range of  
Alternatives

## BICYCLE AND PEDESTRIAN



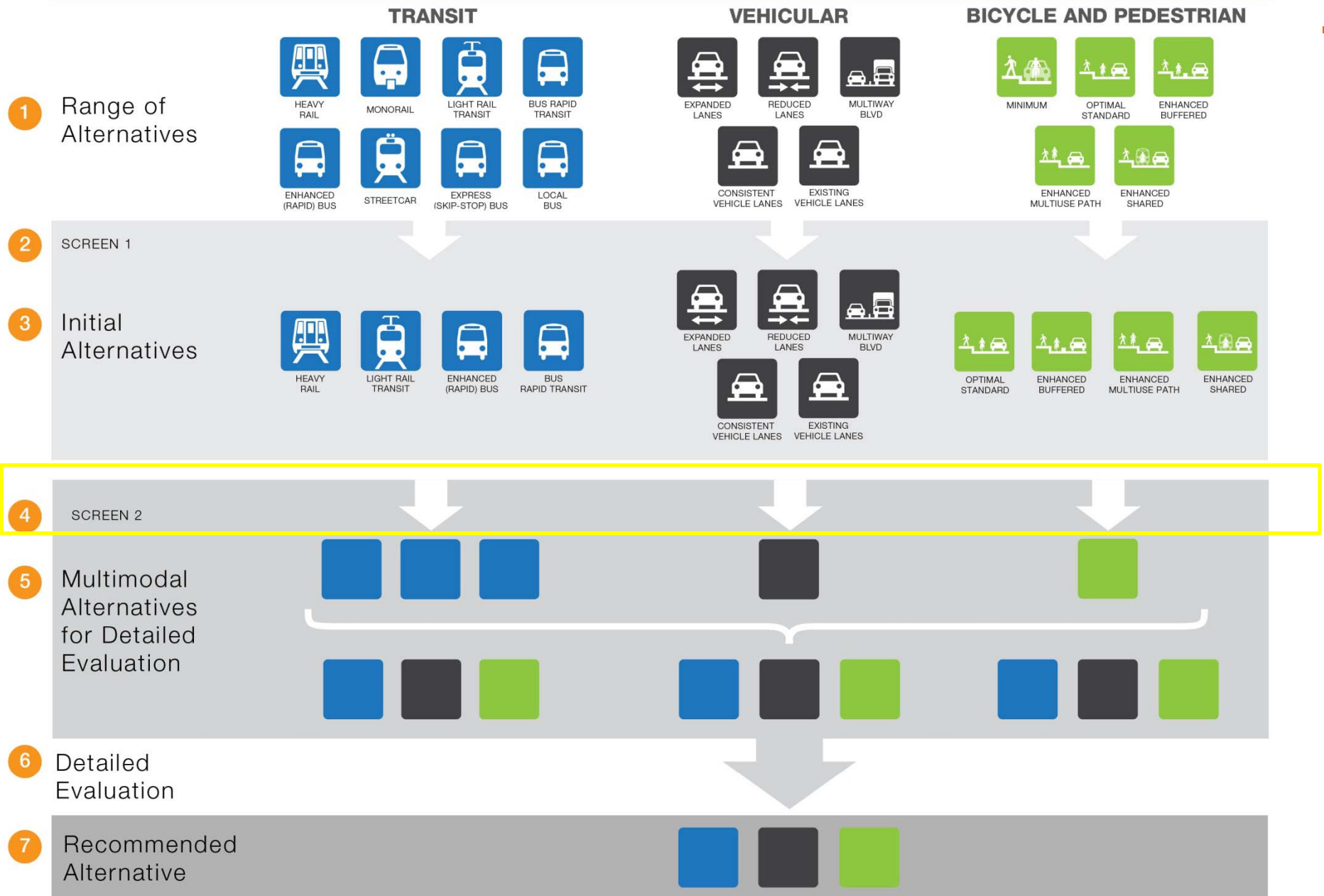
SCREEN 1

Initial  
Alternatives



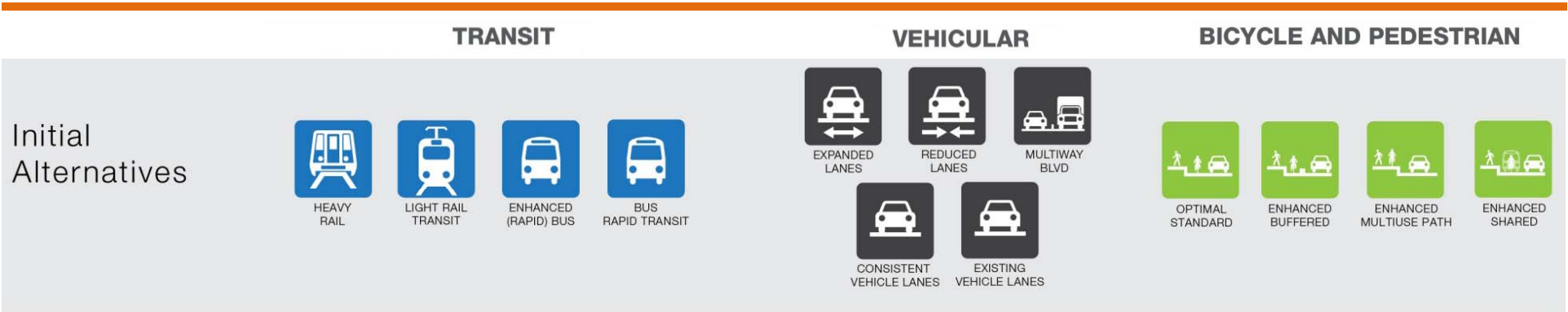
- Improve attractive multimodal travel options
- Support and advance local land use objectives

# Multimodal Alternatives Process





# Screen 2: Measures of Effectiveness





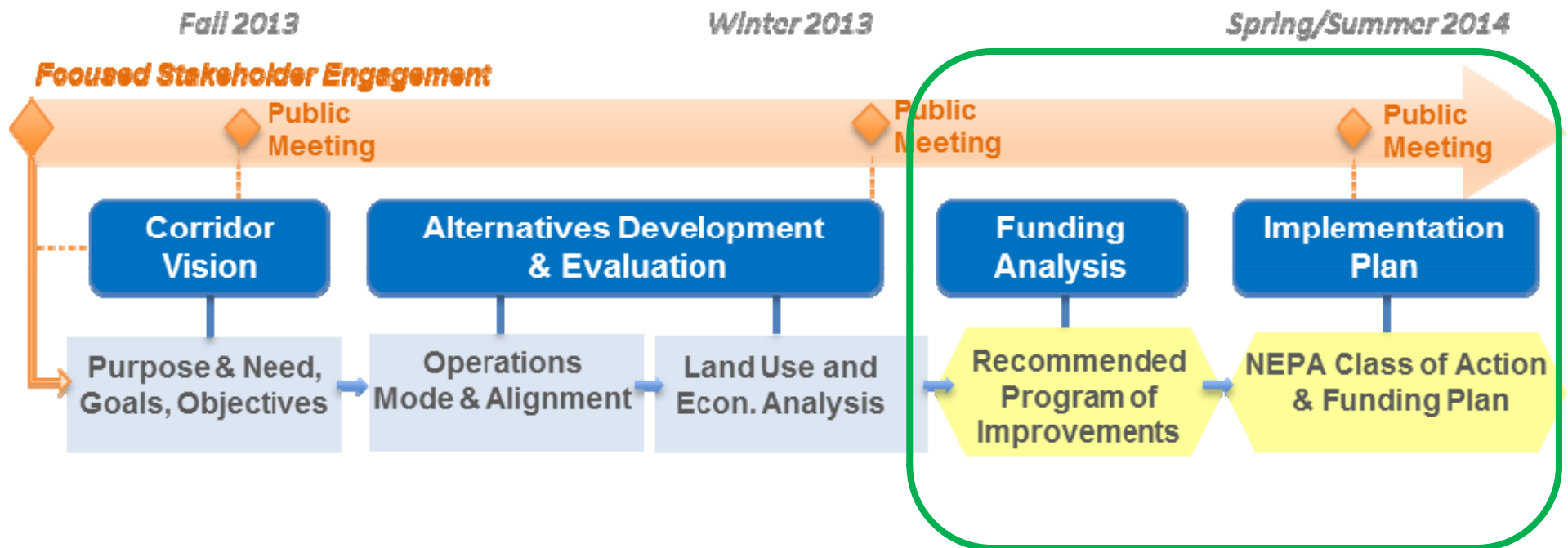
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# Project Funding and Finance





# Funding analysis in context of study process



Anticipate need to recommend project funding approach and sources

# Future Project Funding Decisions

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1. Will federal funds be used for the project?
2. What are the risks and schedule implications for applying for these funds?
3. Where will the local match come from?
4. What financing may be required?

# Project Funding and Finance: Lessons Learned

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## General guidance

- Project funding should be an early consideration
- Consider capital and long-term operating expenses
- Project will likely be implemented with a mix of several sources
- Federal Transit Administration grants are becoming more competitive; greater focus on local funding commitment



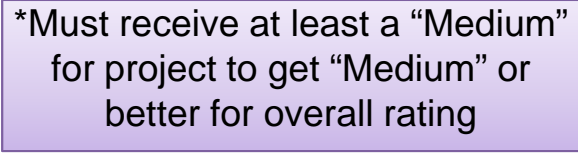
# Project Funding: Overview of Sources

Funding Source	Type	Notes
<b>Federal</b>	<b>FTA New Starts/Small Starts</b>	Limited funding for highly competitive nation-wide program
	<b>FHWA Surface Transportation Program, CMAQ</b>	Formula grants applied according to state and metropolitan priorities
<b>Regional</b>	<b>NVTA funding</b>	Dedicated funding for northern Virginia priorities
<b>State</b>	<b>VDOT highway</b>	Grants applied to statewide priorities
	<b>DRPT matching grants</b>	Match on local investment for all capital projects
<b>Local</b>	<b>County managed funds</b>	General fund, bond allocations, etc.
	<b>Value capture (TIF or SAD)</b>	Corridor-specific tools

# Project Funding: Grants

**Projects are required to be included in the CLRP, TIP, and STIP**  
**Some process requirements vary depending upon funding source:**

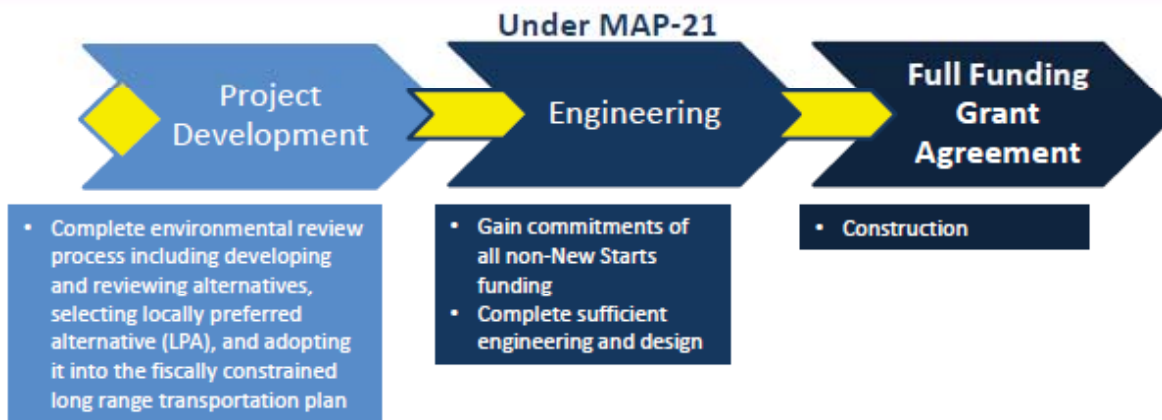
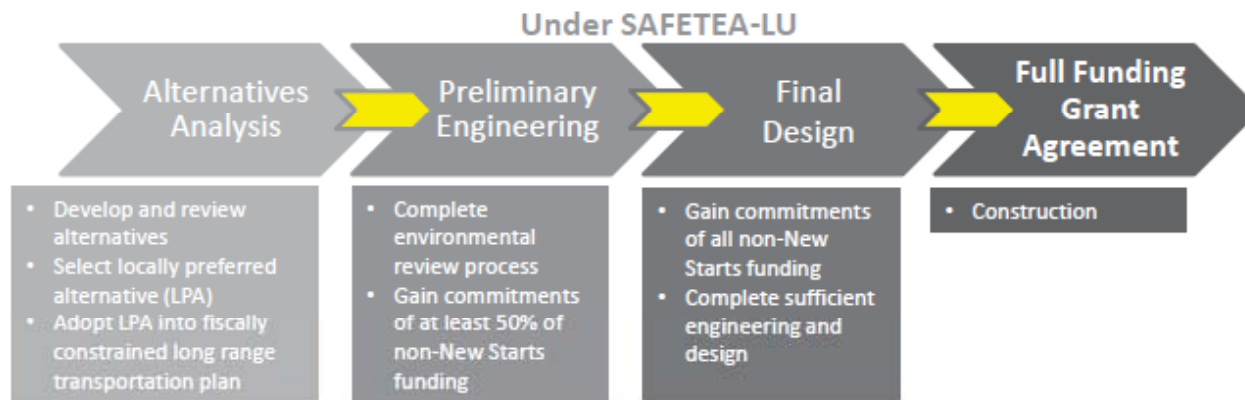
Funding Type	Unique Process Requirements
<b>FTA New Starts/Small Starts</b>	Focus on local project sponsorship and financial sustainability
	Environmental clearance and project justification criteria
<b>FHWA Surface Transportation Program</b>	Formula grants based on state and regional plans
	Potential to streamline environmental clearance
<b>Regional (NVTAs) Programs</b>	Selection criteria emphasize regional functionality
	Address access and congestion mitigation
<b>State Programs</b>	Match on local investment
	Administered based on statewide priorities





# Federal Funding: FTA New Starts

## New Starts Project Development Process



### Legend



= FTA approval



= FTA evaluation, rating, and approval

**Under MAP-21,  
criteria are applied  
later in the process**

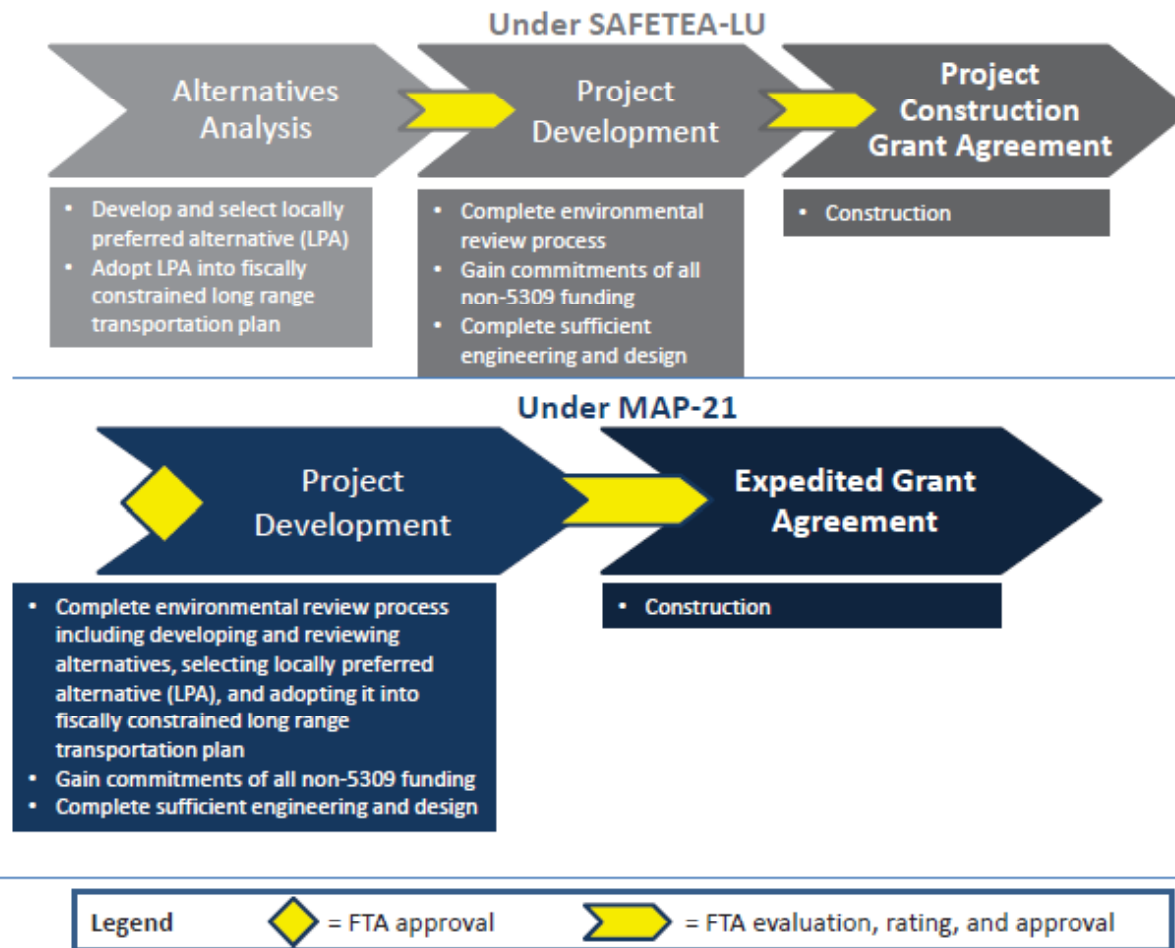
**High level of  
preparation at entry  
to Project  
Development**

Source: FTA website



# Federal Funding: FTA Small Starts

## Small Starts Project Development Process



Source: FTA website

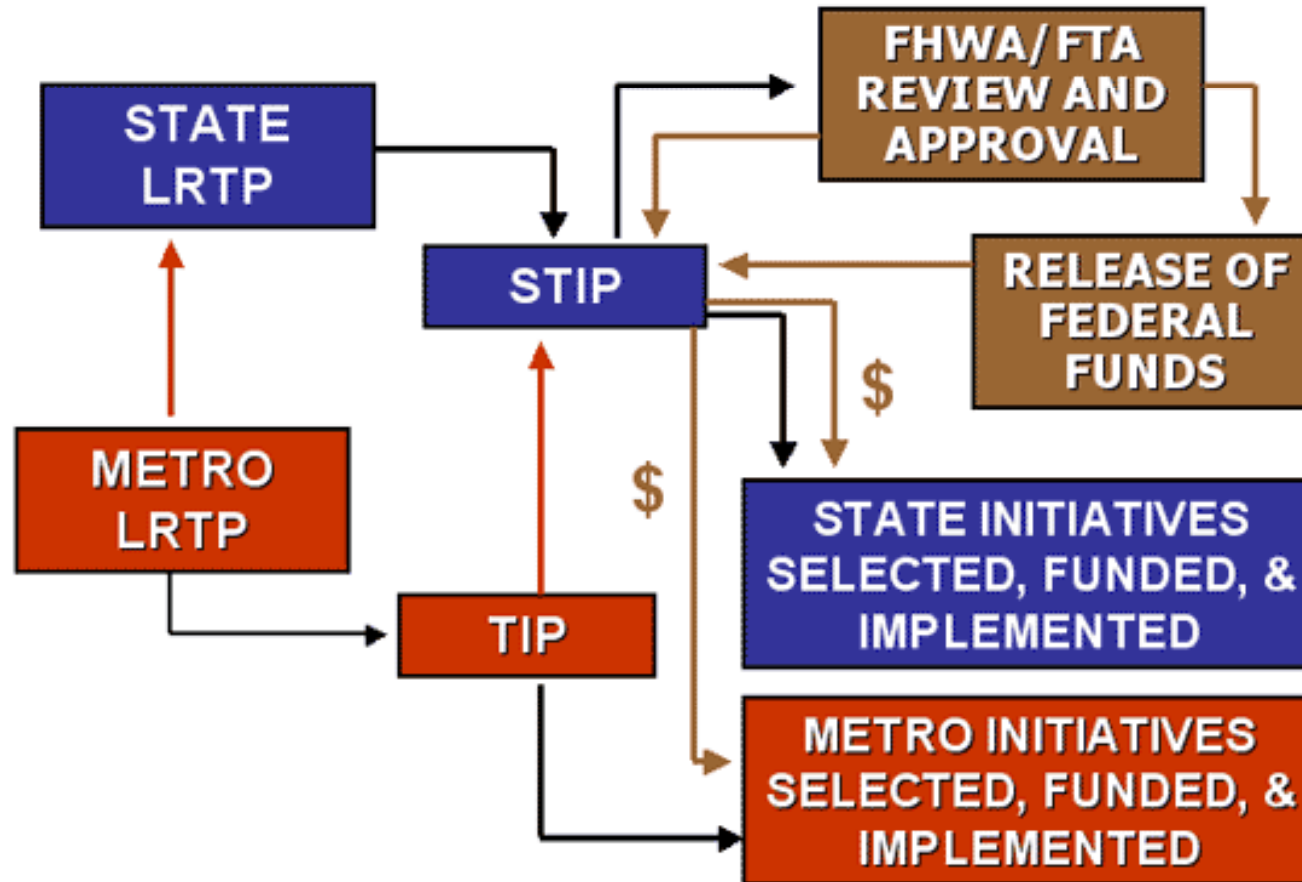
Route 1

Multimodal Alternatives Analysis



# Federal Funding: FHWA Surface Transportation Program

## Working With the State



Source: FHWA website



# State and Regional Funding: VDOT Priorities



## Study Priorities - VTrans 2035 Study

Source: VDOT, Evaluation of Transportation Projects in Northern Virginia Transportation District

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1. Preserve and Enhance Statewide Mobility
  2. Increase Coordinated Safety and Security Planning
  3. Improve Safe Operations and Services
  4. Achieve State of Good Repair
  5. Improve the Interconnectivity of Regional and Activity Centers
  6. Reduce the Cost of Congestion to Virginia's Residents and Businesses
  7. Preserve and Optimize System Efficiency through Proactive Planning
  8. Promote Sustainable Methods of Planning, Design, Operations and Construction That are Sensitive to Environmental, Cultural and Community Resources
  9. Increase Travel Choices to Improve Quality of Life for Virginians
  10. Increase System Performance by Making Operational Improvements
  11. Advance Key Economic Drivers by Making Strategic Infrastructure Investments
  12. Expand Opportunities to Develop and Leverage funds
  13. Improve Cost-Effectiveness of Providing programs and Services

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Direct applicability for the Study



# Project Finance: Borrowing

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- Municipal debt: often least expensive, though competing priorities
- TIFIA: federal loans for near-term flexibility
- Private financing
  - Project delivery - accelerated implementation and risk sharing
  - Equity partnership - more expensive than municipal debt

# Discussion: Project Funding and Finance

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- **Recent project funding successes/case studies**

- Dulles Corridor Metrorail
- Route 1 improvements at Fort Belvoir
- Route 28

- **Other regional examples**

- Richmond Broad Street BRT
- Crystal City/Potomac Yard Transitway
- Purple Line
- Metrorail Blue Line Extension (Largo)
- Rockville Pike

- **National examples**

- Eugene, OR
- Cleveland, OH

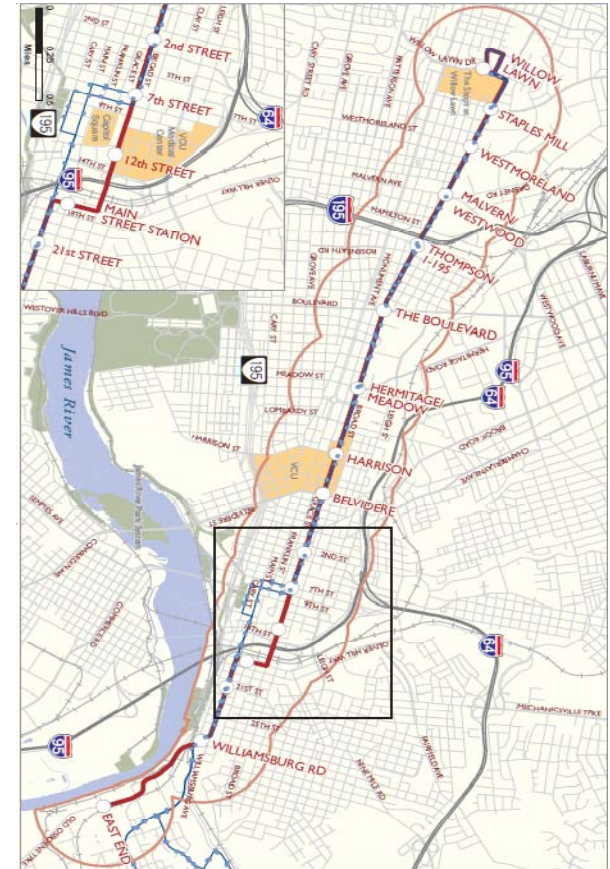


# Project Funding Examples: Richmond Broad Street BRT

7-mile BRT line along an exclusive right-of-way  
Construction expected to begin 2014 or 2015  
\$68 million

Funding Source	Type	Share (YOE)
Federal	FTA Small Start	\$34 million*
Regional	n/a	
State	State of Virginia	\$17 million*
Local	City of Richmond	\$17 million*
<i>Total Cost</i>		<i>\$68 million</i>

\*Initial assumed funding levels. State share to be updated through tiering program.



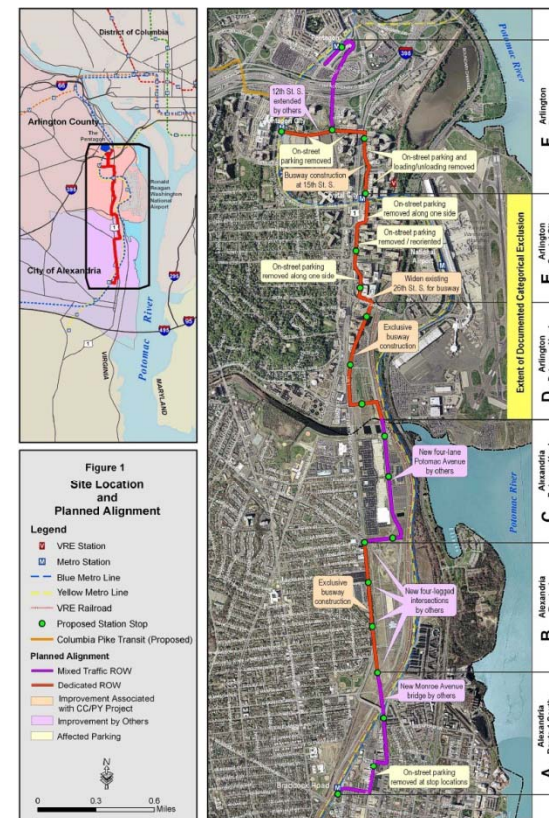
# Project Funding Examples: Crystal City/Potomac Yard Transitway

5-mile BRT line along an exclusive right-of-way

Operation expected to begin 2014

\$33 million (Arlington + Alexandria portion)

Funding Source	Type	Share (YOE)
Federal	TIGER Grant Other	\$8.5 million \$5.5 million
Regional	n/a	
State	DRPT Capital Assistance	\$11 million
Local	Arlington County and City of Alexandria budgets	\$8 million
<i>Total Cost</i>		<i>\$33 million</i>

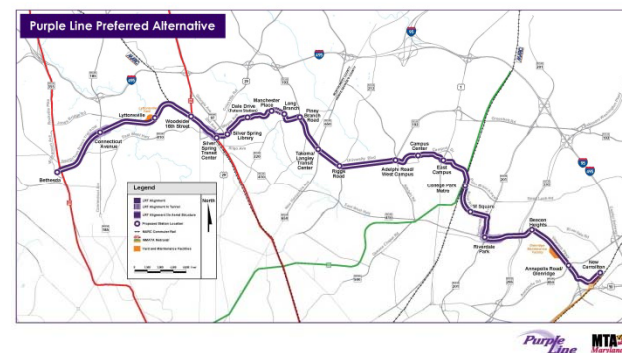


# Project Funding Examples:

## MDOT Purple Line

**16-mile LRT line along exclusive and shared ROW**  
**Operation expected to begin 2020**  
**\$2.2 billion**

Funding Source	Type	Share (YOE)
Federal	New Starts	\$1.1 Billion
Regional	n/a	
State	Maryland Transportation Trust Fund (TTF)	\$1.1 Billion
Local	n/a	
<i>Total Cost</i>		<i>\$2.2 Billion</i>



# Project Funding Examples:

## Metrorail Blue Line Extension (Largo)

**3-mile Metrorail extension along exclusive ROW**  
**Operation began in 2004**  
**\$456 million**

Funding Source	Type	Share (YOE)
Federal	New Starts	\$316 million
Regional	n/a	
State	Transportation Trust Fund	\$ 81 million
Local	n/a	
<i>Total Cost</i>		<i>\$456 million</i>



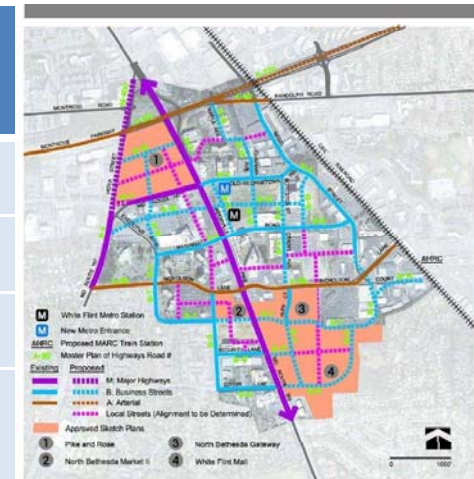


# Project Funding Examples:

## White Flint Redevelopment, Montgomery County

**A mix of transportation investments in a 430 acre corridor along Rockville Pike**

Funding Source	Type	Share (YOE)
Federal	n/a	
Regional	n/a	
State	n/a	
Local	Special Taxing District – ad valorem property tax to fund pre-approved list of transportation projects, tax levied against all properties in the District, bonds to be issued and serviced by tax proceeds	<i>\$182 million</i>
<i>Total Cost</i>		<i>\$182 million</i>



# Project Funding Examples:

## West Eugene EmX Extension, Oregon

**9-mile extension of the existing BRT line along a suburban arterial roadway**  
**Operations on first line initiated in 2007**  
**\$96 million for extension (two legs of system)**

Funding Source	Type	Share (YOE)
Federal	Small Starts	\$75 million
Regional	n/a	
State	State of Oregon Lottery Funds	\$21 million
Local	n/a	
<i>Total Cost</i>		<i>\$96 million</i>

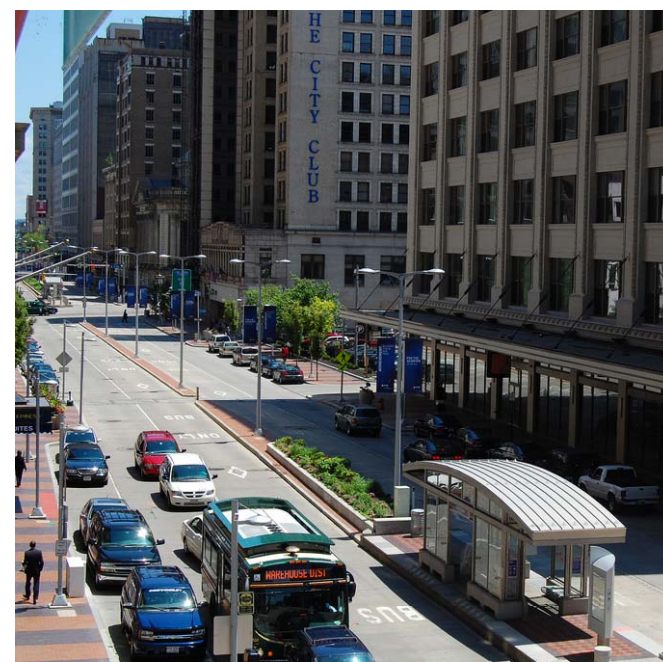


# Project Funding Examples:

## Euclid Corridor BRT Cleveland, Ohio

**7-mile BRT line along an exclusive right-of-way**  
**Operation began in 2008**

Funding Source	Type	Share (2004 Dollars)
Federal	New Starts	\$82 million
Regional	GCRTA	\$18 million
	MPO (CMAQ)	\$10 million
State	State of Ohio	\$50 million
Local	City of Cleveland	\$8 million
<i>Total Cost</i>		<i>\$168 million</i>





# Discussion: Towards a Route 1 Funding Strategy

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## Route 1 project implementation

- Short-term vs. long-term improvements
- Most likely funding sources
- Potential project funding working group with ESC participants

## Key Questions

- Will federal funds be used for the project?
- What are the risks and schedule implications for applying for these funds?
- Where will the local match come from?
- What financing may be required?

# Next Steps and Study Outcomes

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## Next Steps:

- Alternatives development and evaluation
- Stakeholder coordination activities
- Develop funding strategy under state and local policy frameworks

## Study Outcomes:

- Land Use Assessment Report and Economic Impact Analysis
- Recommended Locally Preferred Alternative
- Environmental class of action for recommended alternative

# Upcoming Meetings

## February 2014, dates to be confirmed

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- Technical Advisory Committee
- Executive Steering Committee
- Community Involvement Committee
- Public Meeting #2

