

# Interstate 66 Tier 1 Environmental Impact Statement

## Cooperating and Participating Agencies Meeting March 19, 2012

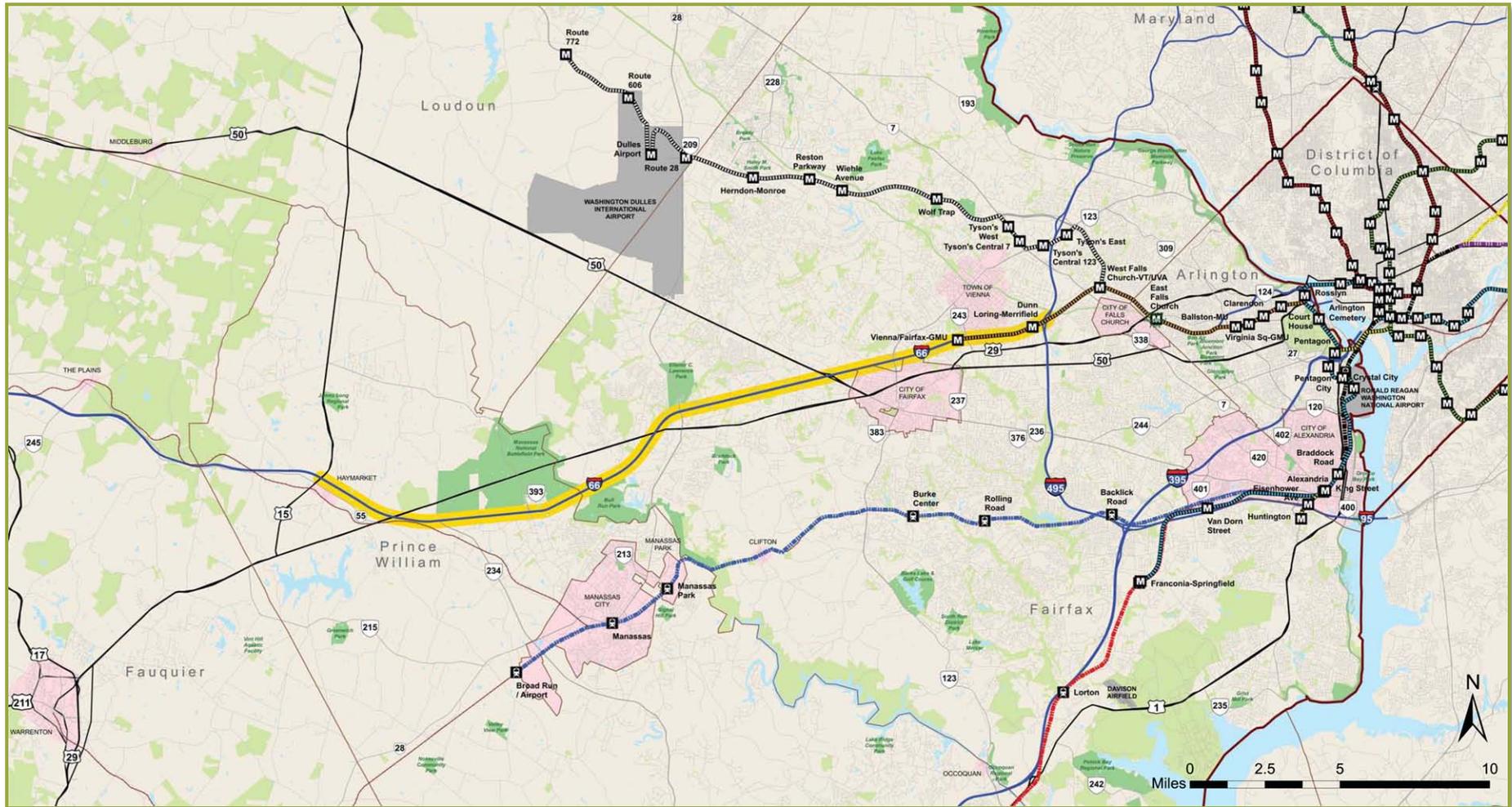
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# Meeting Agenda

- Update of Public Outreach
- Review of Tiering Approach
- Concept Development Process
- Evaluation and Screening of Concepts
- Schedule and Next Steps

# Project Corridor



# Citizen Information Meetings

January 31 – Manassas

February 2 – Fairfax

## PURPOSE

- Provide study overview and update to area residents and commuters
- Solicit input from area residents and commuters to further define the transportation problems in the corridor
- Refine the Purpose and Need statement



# Public Comments

- Comments received provided an indication of public sentiment from the **114 people who submitted written comments.**



# Public Comments

- 48 comment sheets were collected from attendees at the two meetings and received via mail and/or e-mail
- 57 general comments were received via e-mail/mail
- Nine oral comments were transcribed by verbatim reporter during the Citizen Information Meetings

**COMMENT FORM**

VDOT, FHWA and DRPT are undertaking a Tier I Environmental Impact Statement to identify and evaluate transportation needs within the 25-mile corridor of I-66 from US Route 15 in Prince William County to the Capital Beltway (I-495) in Fairfax County. Your input is valuable to this study. Please answer the following questions to assist us in conducting this important study.

- The main reason for my traveling the I-66 corridor is:
  - Daily commute to/from work
  - Business  Recreation
  - Shopping/Errands  School
  - Other \_\_\_\_\_
- The section of the I-66 corridor that I travel most often is (check all that apply):
  - Route 15 to Route 234
  - Route 234 to Route 29
  - Route 29 to Route 50
  - Route 50 to I-495 (Capital Beltway)
- I travel the I-66 corridor \_\_\_\_\_ days a week.
- I normally travel in the I-66 corridor during (check all that apply):
  - 4:00 AM – 9:00 AM  3:00 PM – 6:00 PM
  - 9:00 AM – Noon  6:00 PM – 9:00 PM
  - Noon – 3:00 PM  9:00 PM – Midnight
- During my travel on I-66, I normally experience:
  - No traffic congestion. Other traffic never slows me down.
  - Minor traffic congestion. There is traffic on the road but it does not slow me down significantly.
  - Moderate congestion. I sometimes have to slow down due to congestion. Any accidents, even minor accidents, typically cause traffic to slow down even more.
  - Heavy congestion. I routinely must slow down well below the posted speed limit, or even come to a full stop.
- I experience the heaviest traffic congestion during (check all that apply):
  - 4:00 AM – 9:00 AM  6:00 PM – 9:00 PM
  - 9:00 AM – Noon  9:00 PM – Midnight
  - Noon – 3:00 PM  Weekdays
  - 3:00 PM – 6:00 PM  Weekends
- When you travel I-66, how many people are typically in your car?
  - 1  2  3 or more
- Would you use a Park & Ride lot to carpool if one was located close to you?
  - Yes  No
- Do you use public transit when traveling in the I-66 corridor?
  - Yes – bus  Yes – Metro Rail  No
- If there were expanded transit opportunities in your area (more bus routes, more frequent bus service, expanded Metro Rail service), would you consider using transit for some of your trips?
  - Yes  No
- I feel improvements are needed in the I-66 corridor to address the following factors. Rank those factors you believe are important with "1" being the highest importance.
  - \_\_\_ Congestion / Travel Delays  Safety
  - \_\_\_ Roadway Deficiencies  Park & Ride Lots
  - \_\_\_ Economic Development  Other
  - \_\_\_ More Public Transit Options (See Questions 12 and 13)

preliminary purpose and need as transportation challenges we will address

choices in a cost effective the I-66 corridor.

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# Comment Findings

- The comments confirmed the I-66 corridor is primarily used for commuting. Sixty-one percent of respondents ***use I-66 more than five times a week*** during morning and late afternoon/evening commute times and 70 percent of respondents said they drive solo on I-66.
- Over 70 percent of respondents indicated that ***on I-66 they normally experience*** heavy congestion. Most of that is felt during the morning and late afternoon/evening commute times.

# Comment Findings

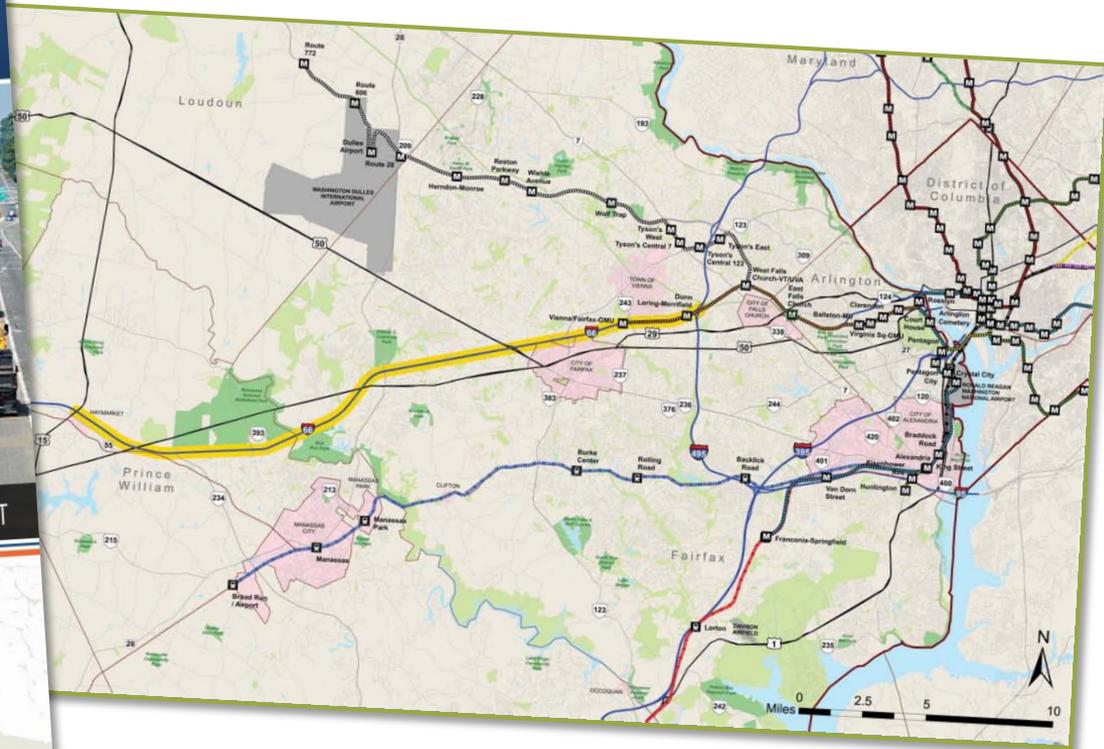
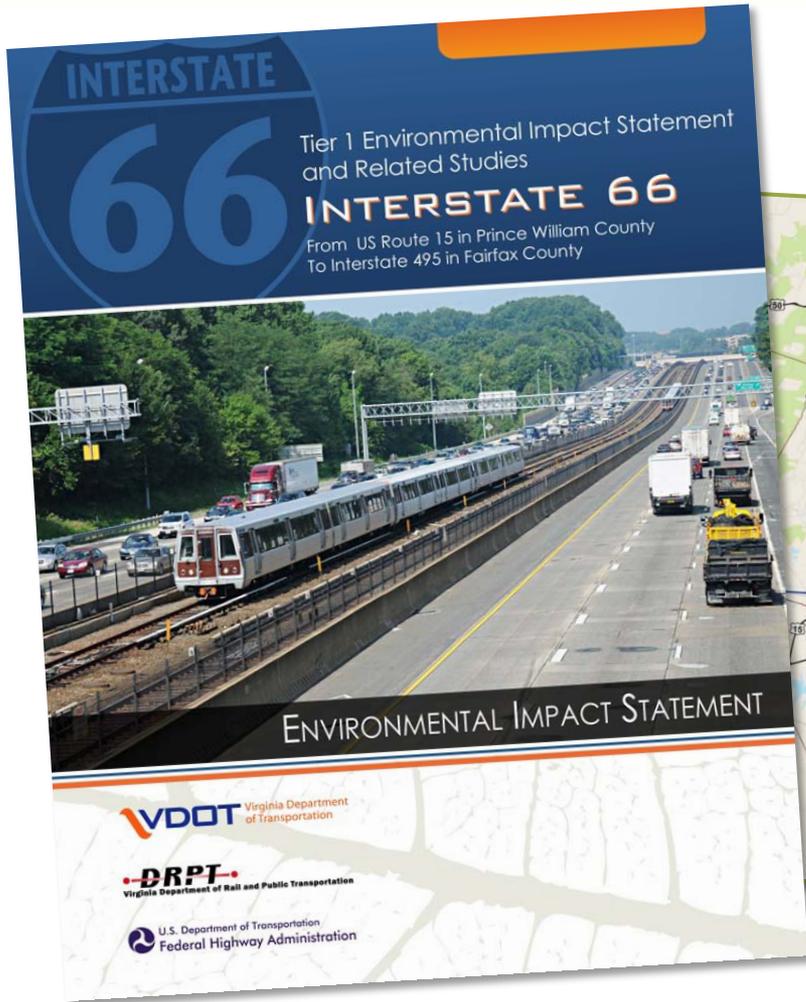
- The most traveled section of the I-66 corridor is the ***Route 50 to I-495 stretch***.
- While many are looking for ***expanded transit opportunities***, 77 percent indicated they would ***not use a Park and Ride lot to carpool*** if there was one close by. Additionally, only ***40 percent are currently using public transit*** but 32 of 43 respondents noted they would use transit if expanded opportunities existed.

# Comment Summary

- ***The most common requests*** noted throughout all comment forms and e-mails include:
  - More public transit options
  - Metro extension
  - Noise improvements/abatement
  - Improved bus service and access
  - Improve Route 28 and I-66 Interchange
  - Increased law enforcement along the I-66 corridor
  - Improved pedestrian and bicycle access

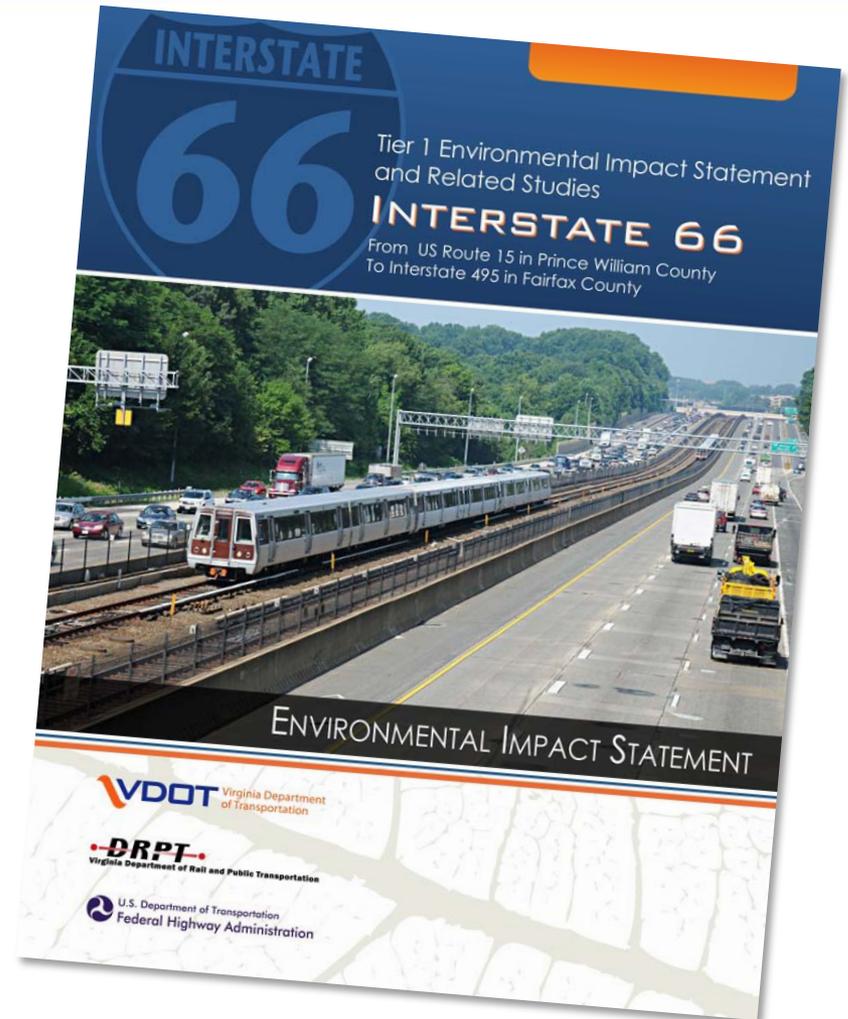


# Study Process / Tiering Approach



# Study Process / Tiering Approach

- Tier 1 EIS will focus on broad issues
  - Purpose and need
  - General location of proposed improvements
  - Mode / Technology choice
- Tier 2 analysis will focus on site-specific details
  - Impacts
  - Costs
  - Mitigation



# Study Process / Tiering Approach

- Decisions at completion of Tier 1
  - Concepts to be advanced including transit, TDM and/or roadway improvements
  - General location for studying future highway and transit improvements in the Tier 2 NEPA document(s)
  - Identification of projects with independent utility to be evaluated in Tier 2 NEPA document(s) and evaluated pursuant to other environmental laws
  - Advancing tolling for subsequent study in Tier 2 NEPA document(s)

# Concept Development Process



# Concept Development Process

- Developing Concepts that Meet Purpose and Need
  - Look at the universe of possibilities
  - Develop concepts that would meet demands at various levels
  - High-level assessment and sizing of improvements by modes and combinations of modes

# Concept Development Process

- Building Blocks and Terminology
  - Elements: Physical and/or operational changes
  - Cross-sections: Combinations of elements that apply to a particular stretch of the corridor
  - Concept: Set of cross-sections that together define a complete improvement

# Concept Development Process

- Elements that Apply to All
  - Bicycle and pedestrian facilities per local plans
  - Geometric improvements
  - ITS/Operations/Active traffic management
  - Travel demand management
  - Safety improvements

# Concept Development Process

- Off-Corridor Improvements
  - VRE enhancements
  - Route 50 priority bus (as defined by I-66 Inside the Beltway study)

# Concept Development Process

- Elements (Mix and Match)
  - General purpose, managed, and bus-only lanes (concurrent and reversible)
  - BRT/Priority Bus/Transit
  - LRT
  - Metrorail extension

# Concept Development Process

- Establishing Demand
  - High-level assessment of demand
  - Person trip tables derived from MWCOG model
  - Multiple model runs
    - With/without VRE enhancements
    - With/without Route 50 Priority Bus

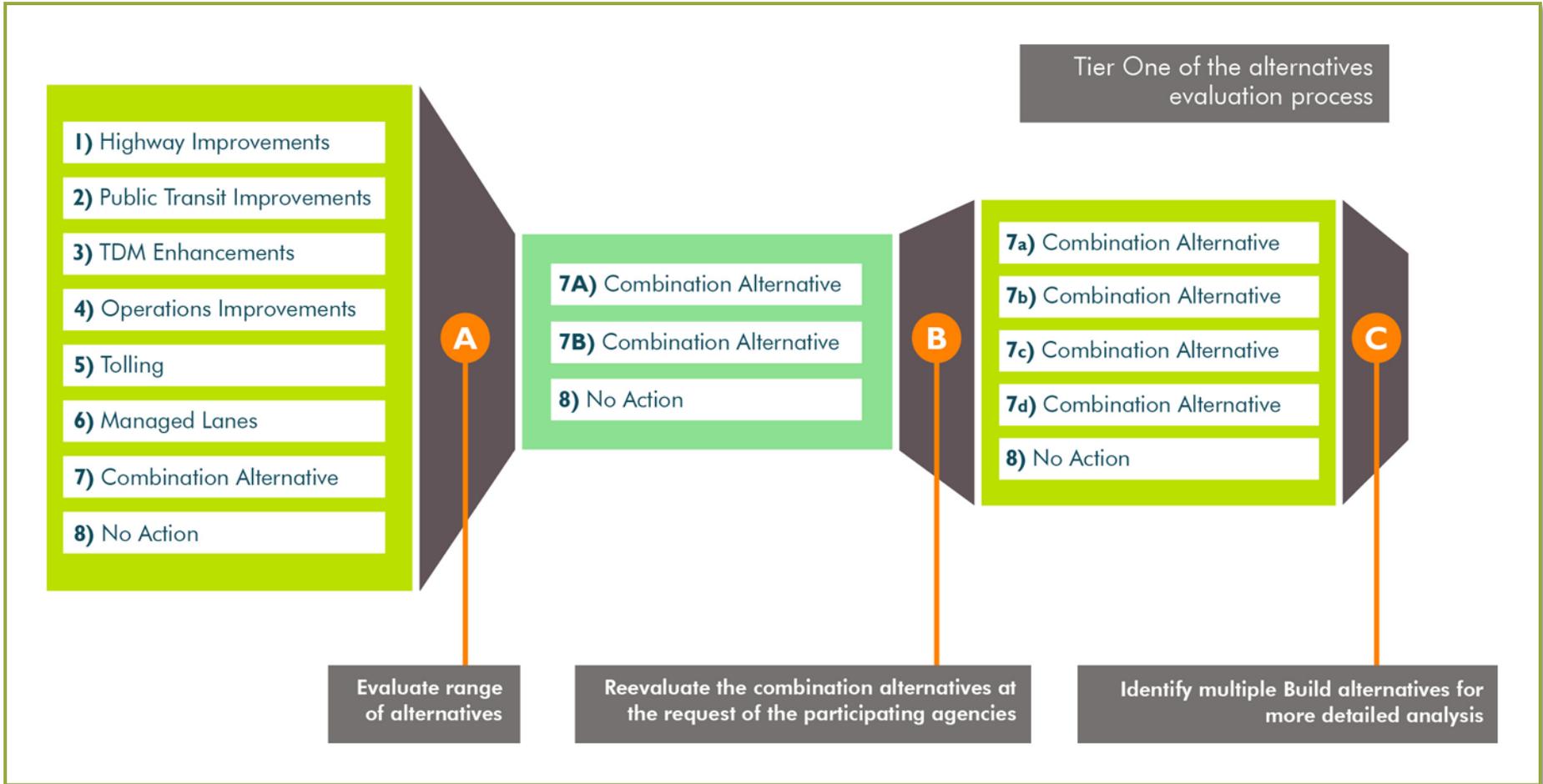
# Concept Development Process

- Sizing the Improvements
  - General assessment of the level of person-trip demand that each modal element will serve
  - Serve demand based on the following priority:
    - Transit
    - Managed lanes
    - General purpose lanes

# Concept Development Process

- Transit and Managed Lanes
  - Set “reach” targets of mode shares for transit and managed lanes on various segments of the corridor
  - Allow for multiple service levels within each transit category to allow for generalized estimates of service versus costs

# Evaluation and Screening of Concepts



# Purpose and Need

## Project Purpose

*Improve multimodal mobility along the I-66 corridor by providing diverse travel choices in a cost-effective manner. Enhance transportation safety and travel reliability for the public along the I-66 corridor.*

# Purpose and Need

## Project Needs

- Travel time reliability
- Travel time reductions
- Improved safety
- Increased number of mode choices
- Increased access (transit, pedestrian, and bicycle)
- Reduced number of choke points
- Predictability
- System linkage
- Consistency
- Traveler information
- Coordination across modes

# Goals, Objectives and Criteria

## GOALS AND OBJECTIVES

| Goal   | Measures of Effectiveness   |
|--|---|
| <b>Transportation</b><br>Improve local and regional mobility and safety            | <ul style="list-style-type: none"> <li>Reduce travel time</li> <li>Increase travel reliability</li> <li>Increase transportation corridor</li> <li>Provide improved transit service</li> <li>Minimize negative impacts on corridor</li> </ul>  |
| Improve transit ridership  | <ul style="list-style-type: none"> <li>Improve transit service</li> <li>Improve multi-modal transit</li> <li>Improve access to transit</li> <li>Provide more frequent service</li> <li>Improve service reliability</li> <li>Provide integrated transit centers and to regional transit</li> </ul> |
| <b>Economic</b><br>Support economic development and jobs along the corridor        | <ul style="list-style-type: none"> <li>Improve access to transit</li> <li>Create connections to residences, shops, and services</li> <li>Provide improved transit development (TOD)</li> </ul>  |
| Optimize return on public investment   | <ul style="list-style-type: none"> <li>Capitalize on unused capacity of the system</li> <li>Develop improved transit capacity of the system</li> <li>Optimize cost effectiveness</li> <li>Minimize project risk</li> </ul>  |
| <b>Social/Cultural</b><br>Promote livable communities and improved quality of life | <ul style="list-style-type: none"> <li>Provide high quality transit choices</li> <li>Create opportunities for transit</li> <li>Encourage transit to reverse peak demand</li> <li>Integrate transit with automobile travel</li> <li>Create opportunities for connections to transit</li> </ul>     |
| <b>Environmental</b><br>Enhance environmental quality                              | <ul style="list-style-type: none"> <li>Minimize and avoid environmental impacts</li> <li>Balance benefits and costs</li> <li>Support state and local environmental goals</li> <li>Contribute to environmental quality</li> </ul>  |

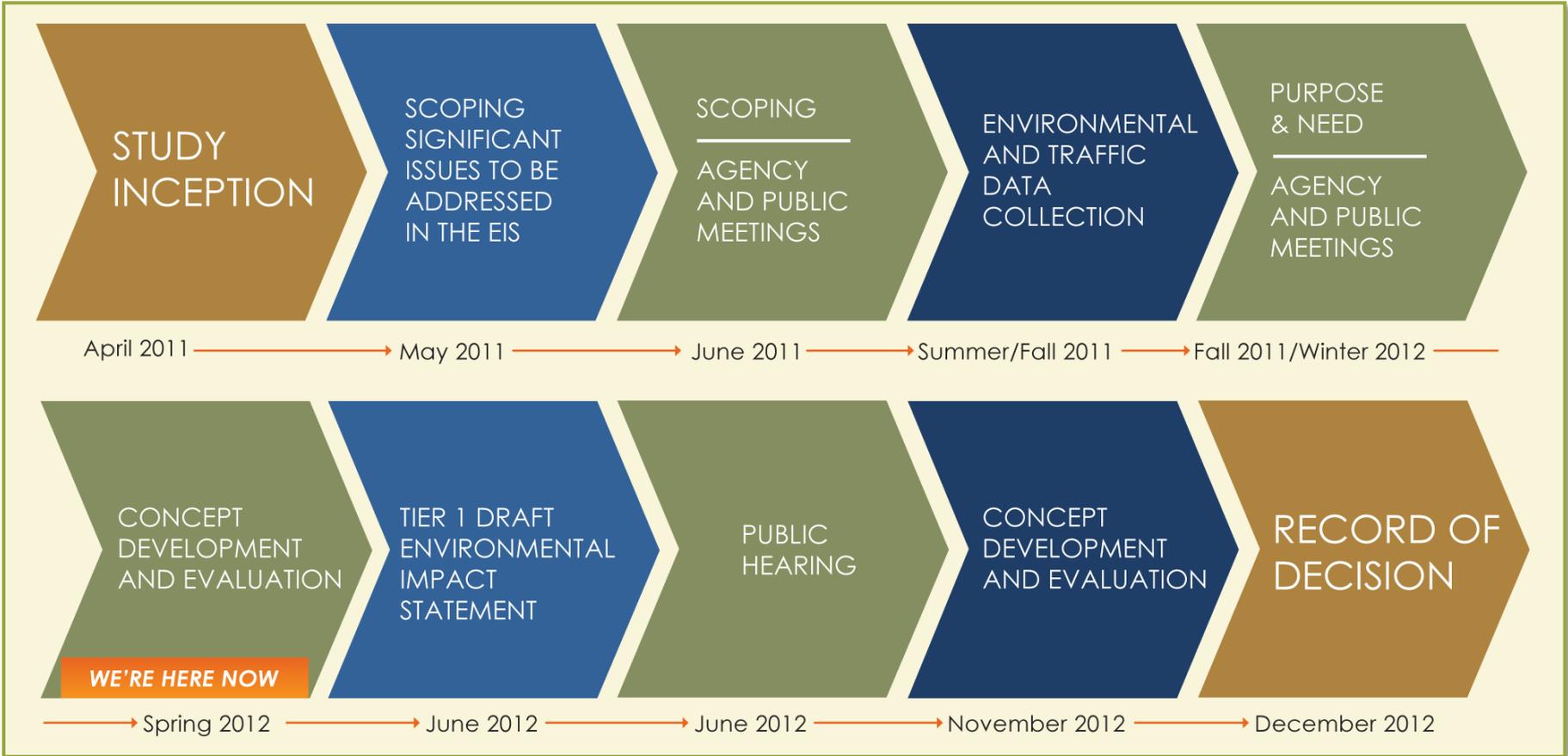
## SCREENING CRITERIA

| Evaluation Criteria                       | Measures of Effectiveness  |
|---|--|
| <b>Transportation Evaluation Criteria</b> |  |
| Highway System                            | <ul style="list-style-type: none"> <li>Ability to improve lane balance and lane continuity</li> <li>Ability to provide demand to capacity ratio (d/c) lower than 1.0</li> <li>Ability to provide level of service (LOS) better than F at design volumes</li> <li>Potential impacts to intersections adjacent to I-66 interchanges</li> <li>Potential impacts due to diversion of traffic to parallel routes</li> </ul>   |
| Transit System                            | <ul style="list-style-type: none"> <li>Potential to increase number of new transit trips</li> <li>Number of new transit trips</li> <li>Total transit system ridership</li> <li>Potential to alleviate capacity issues on current transit system</li> <li>Ability to provide seamless connections / minimize transfers</li> <li>Number of transit trips to inside Capital Beltway (inner core market)</li> <li>Number of transit trips to I-66 corridor destinations in the study area</li> </ul> |
| Mobility                                  | <ul style="list-style-type: none"> <li>Ability to improve highway travel times</li> <li>Ability to improve transit travel times</li> <li>Person Throughput (daily person trips)</li> <li>Adequate capacity and number of park and ride lots</li> <li>Adequate access to park and ride lots</li> </ul>  |
| Accessibility                             | <ul style="list-style-type: none"> <li>Potential for intermodal connectivity</li> <li>Provision of direct connections for transit</li> <li>Population, households and jobs within mile of transit station areas</li> </ul>   |
| Compatibility and Operational Efficiency  | <ul style="list-style-type: none"> <li>Compatibility of concept with existing highway system</li> <li>Compatibility with existing transit system</li> <li>Ability to improve freight movement</li> <li>Ability to increase core system and haul capacity</li> <li>Potential for system-wide impacts</li> </ul>   |

| Evaluation Criteria                        | Measures of Effectiveness   |
|--|---|
| <b>Economic Evaluation Criteria</b>        |   |
| Project Costs                              | <ul style="list-style-type: none"> <li>Order of magnitude capital costs</li> <li>Order of magnitude annual operating and maintenance costs</li> <li>Cost per new rider</li> <li>Ability to fund improvements within the near to medium-term</li> </ul>  |
| Economic Development                       | <ul style="list-style-type: none"> <li>Consistency with planned developments</li> <li>Support for transit oriented development (TOD)</li> <li>Potential to change property values</li> <li>Business community comments</li> </ul>   |
| Regional Economic Effects                  | <ul style="list-style-type: none"> <li>New economic activity</li> <li>Jobs created per million \$ investment</li> <li>Travel time savings</li> </ul>  |
| <b>Social/Cultural Evaluation Criteria</b> |   |
| Land Use                                   | <ul style="list-style-type: none"> <li>Consistency with existing land use</li> <li>Consistency with locally adopted future land use plans</li> <li>Compatibility with community character</li> <li>Potential to preclude other planned improvements</li> <li>Secondary effects</li> <li>Public and agency comments</li> </ul>   |
| Neighborhoods                              | <ul style="list-style-type: none"> <li>Effects on community cohesion</li> <li>Neighborhoods served</li> <li>Potential neighborhoods impacted</li> <li>Potential for change in access to neighborhoods</li> <li>Community facilities served</li> <li>Potential community facilities impacted</li> <li>Business community served</li> <li>Potential for visual/aesthetic effects</li> </ul> |

| Evaluation Criteria                      | Measures of Effectiveness  | Alternatives Report |                   | Draft Tier 1 EIS    | Final Tier 1 EIS |
|--|--|---------------------|-------------------|---------------------|------------------|
|  |  | Concept Development | Initial Screening | Detailed Evaluation | Final Evaluation |
| <b>Environmental Evaluation Criteria</b> |  |                     |                   |                     |                  |
| Cultural Resources                       | <ul style="list-style-type: none"> <li>Potential impacts to national register of historic places (NRHP) resources</li> <li>Buildings listed or eligible for listing on NRHP</li> <li>Districts listed or eligible for listing on NRHP impacted</li> <li>Potential impacts to areas with known archaeological resource or areas with high potential</li> <li>Public and agency comments</li> </ul>  | X                   | X                 | X                   | X                |
| Parklands and Recreation Areas           | <ul style="list-style-type: none"> <li>Potential for effects to parklands and recreation areas</li> <li>Potential for effects to open space and historic preservation easements</li> <li>Number of parklands affected</li> <li>Number of recreation areas affected</li> <li>Public and agency comments</li> <li>Low income/minority neighborhoods served</li> <li>Low income/minority neighborhoods affected</li> <li>Potential for property acquisition in areas of low income or minority populations</li> <li>Public and agency comments</li> </ul> | X                   | X                 | X                   | X                |
| Air Quality and Energy                   | <ul style="list-style-type: none"> <li>Consistency with regional air quality plans</li> <li>Change in vehicle miles traveled</li> <li>Change in greenhouse gas emissions</li> </ul>  | X                   | X                 | X                   | X                |
| Energy                                   | <ul style="list-style-type: none"> <li>Regional energy consumption/savings</li> </ul>  |                     |                   | X                   | X                |
| Natural Resources                        | <ul style="list-style-type: none"> <li>Potential for impacts to Waters of the U.S.</li> <li>Estimated wetlands affected (numbers/ acres)</li> <li>Estimated streams affected (numbers/linear feet)</li> <li>Estimated 100-year floodplain encroachments (numbers/ acres)</li> <li>Encroachment on resource protection and/or critical areas (numbers/ acres)</li> <li>Encroachment on habitats of protected species (numbers/ acres)</li> </ul>  |                     | X                 | X                   | X                |
| Hazardous Materials                      | <ul style="list-style-type: none"> <li>Sites of potential concern (number)</li> </ul>  | X                   | X                 | X                   | X                |

# Schedule / Next Steps



# Comments or Questions

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