MEETING AGENDA

1. Project Schedule
2. Project Progress
3. Build Alternative Refinement and Concept Design
4. Update on Preliminary Evaluation of Alternatives
5. Discussion and Next Steps
1
PROJECT SCHEDULE
## Technical Schedule

### 2014

<table>
<thead>
<tr>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
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**Alternatives Development**
- Purpose and Need

**Environmental Documentation**
- Existing Conditions
- Design Options (Screen 1)
- Detailed Alternatives (Screen 2)
- Environmental Screening

**Conceptual Engineering**
- Surveying and Mapping
- Conceptual Engineering 1

**Fta Coordination**

**Section 106 Process**
- Site Visit
- Evaluation of Effects – 1 Meeting

**Meetings**

- Public Meetings: 1
- Project Advisory Group: 1
- ITAC: 1
- Transportation Commission: 1
- Planning Commission: 1
- Environmental Policy Commission: 1
- City Council: 1
- Budget and Fiscal Affairs: 1

**2015**

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<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
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**Alternatives Development**
- AA Report

**Environmental Documentation**
- Administrative Draft EA
- Circulation Draft EA

**Conceptual Engineering**
- Conceptual Engineering FINAL

**Fta Coordination**

**Section 106 Process**
- Request to Enter Project Development

**Optional Letter of Commitment/MOA/PA**

- Optional Letter of Commitment/MOA/PA

- FTA Approved EA
- Draft FONSI
- FONSI
**AA and EA | Timeline**

**PLANNING PROCESS**

- **Project Kick-Off**
  - Winter 2014

- **Existing Conditions**
  - Spring 2014
  - Purpose and Need
  - Definition of Alternatives

- **Definition of Alternatives**
  - Fall 2014
  - Preliminary Screening of Alternatives
  - Definition of Evaluation Measures

- **Evaluation of Alternatives**
  - Spring 2015
  - Results of Evaluation

- **Environmental Assessment**
  - Summer 2015
  - Preferred Alternative
  - Final Environmental Assessment

**PUBLIC PROCESS**

- **Purpose and Need**
  - May 22 4:00 – 8:00 PM
  - Public Kick-off Meeting
  - Landmark Mall

- **Existing Conditions**
  - October 22 6:30 – 8:30 PM
  - Transitway Options
  - Pavillion at Mark Center

- **Definition of Alternatives**
  - Public Meeting to Comment on Study
  - Recommendations

- **Environmental Assessment**
  - Public Meeting to Review
  - Environmental Document

**18 - 24 Months**

**WE ARE HERE**
Build Alternative Runningway
PROJECT PROGRESS
PROJECT NEED

Corridor Issues

- Land Use and Economic Development
- Traffic Congestion
- Transit Service

Project Need
AA and EA | PROJECT OUTCOMES

• Policy Decision
  o Locally Preferred Alternative selected by City Council
    • Transit Technology
    • Alignment
    • Configuration
    • Project Cost Estimate

• Project Finance Strategy

• Approved Environmental Document
  o Finding by FTA after review by federal and state agencies
FTA Comments on Environmental Scan

• Noise and Vibration: Conduct typical analysis per FTA 2006 Noise and Vibration Guidance

• Air Quality: The Build Alternative would not rise to the level of a “project of air quality concern”

• Topics for EA focus:
  o Threatened and endangered species: consultation with USFWS for the two ESA species near the Pentagon
  o Section 106 (Cultural Resources): coordination with VDHR
  o Section 4(f): no designated properties in the area
  o Environmental Justice: document benefits to corridor residents
BUILD ALTERNATIVE REFINEMENT AND CONCEPT DESIGN
Policy Precedent

- Comprehensive Transportation Master Plan (Amended Jan 2013)
- Landmark/Van Dorn Corridor Plan
- City Council Strategic Plan
- Complete Streets Policy
- Beauford Small Area Plan
- Transitway Corridors Feasibility Study
Feedback Received

• Improve transit travel time with all-day, frequent service
• Provide bike accommodation that serves people of all ages and abilities
• Minimize ROW impacts to homes and businesses
• Minimize parking impacts
• Concerns about impacts to car traffic
• Concerns about City’s ability to spend on this transit project
Refinements to Build | Key Considerations

- Short-term phased implementation
- Reasonable cost and property impacts
- Support the long-term vision
PRIORITIES DRIVING DESIGN DECISIONS
South Van Dorn Street

1. Establish the permanent transit runningway
2. Maintain general purpose traffic lanes
3. Maintain continuous sidewalk
4. Minimize property and parking impacts
5. Where roadway reconstruction occurs:
   a. Construct a multi-use path
   b. Provide at least one landscape median
   c. Construct streetscape improvements where right-of-way is available
South Van Dorn Street – Cross Section

Long Term Vision

Build Alternative
South Van Dorn Street
Build Alternative Concept

Legend
- Transitway Station
- Dedicated Transit Lane
- Median
- Multi-use Path

railroad

transitway
South Van Dorn Street
Preliminary Property Impacts: Build Alternative Concept
South Van Dorn Build Alternative Implementation

- Permanent Transitway Alignment
- Permanent Station Location
- Multiuse Path
- Permanent Median and Through Travel Lane Location(s)
South Van Dorn Street – Build to Long-Term Schematic

Set Permanent Intersection Layouts

Set Permanent Mid-Block Sections (where possible)

Connect Permanent Sections as Redevelopment Occurs

Short- to Long-Term Implementation Example
Transition – Build Alternative to Long Term Vision

Permanent Transitway Alignment
Extend Median
Realign Travel Lanes
Complete Streetscape
Permanent Median and Through Travel Lane Location(s)
Priorities Driving Design Decisions

1. Provide a northbound dedicated transit lane - Only the northbound direction needs dedicated transit based on observed traffic pattern and analysis
2. Minimize parking impacts
3. Maintain continuous sidewalk
4. Maintain general purpose through lanes
5. Construct a multi-use path
## Van Dorn Street at Sanger Ave
### Design Options

<table>
<thead>
<tr>
<th>Element</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transit accommodation</strong></td>
<td>• Northbound dedicated lane</td>
<td>• Southbound bike lane or multiuse path</td>
</tr>
<tr>
<td></td>
<td>• Southbound in mixed flow</td>
<td>• Northbound sharrow in access road</td>
</tr>
<tr>
<td><strong>Bicycle accommodation</strong></td>
<td>• Southbound bike lane</td>
<td>• Southbound bike lane or multiuse path</td>
</tr>
<tr>
<td></td>
<td>• Northbound bike lane</td>
<td>• Northbound sharrow in access road</td>
</tr>
<tr>
<td><strong>Pedestrian accommodation</strong></td>
<td>• Sidewalk on both sides</td>
<td>• Sidewalk on one or both sides and multiuse path</td>
</tr>
<tr>
<td><strong>Level of roadway reconstruction required</strong></td>
<td>• Significant, reconstruct access road and parking and road widening</td>
<td>• Minimal, widening toward I-395 mostly</td>
</tr>
<tr>
<td><strong>Property impacts</strong></td>
<td>• Considerable effect on parking/circulation on apartment property</td>
<td>• Minimal, minor changes required at Sanger Avenue</td>
</tr>
<tr>
<td><strong>Parking impacts</strong></td>
<td>• Major impact, 50% space loss (30 spaces)</td>
<td>• Minor impact, 3 to 4 space loss</td>
</tr>
</tbody>
</table>

*Option 1 image* and *Option 2 image*
VAN DORN STREET AT SANGER AVENUE
Project Recommended Design Concept

Legend
- Transitway Station
- Dedicated Transit Lane
- Median/Landscape Strip

Proposed Station Location

3 Parallel Parking Spaces Impacted

Sharrow

All Angled Parking Spaces & Parallel Spaces Maintained

Multi-use Path

Dedicated Transit Lane

N. Van Dorn St.
UPDATE ON PRELIMINARY EVALUATION OF ALTERNATIVES
Evaluation of Alternatives

Corridor Issues:
- Land Use and Economic Development
- Traffic Congestion
- Transit Service

Project Need

Development of Alternatives:
- Evaluation of Alternatives
  - Transit Service
  - Other Transportation
  - Land Use and Economic Development

Recommended Alternative

[Diagram highlights the flow from Corridor Issues to Project Need, then to Development of Alternatives, finally leading to the Recommended Alternative.]
## PRELIMINARY TRANSIT PERFORMANCE

<table>
<thead>
<tr>
<th>Measure</th>
<th>2015</th>
<th>2035</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No Build</td>
<td>TSM</td>
</tr>
<tr>
<td>DASH + Metrobus</td>
<td>26,400</td>
<td>20,200</td>
</tr>
<tr>
<td>West End Transitway</td>
<td>--</td>
<td>9,700</td>
</tr>
<tr>
<td>Total Corridor</td>
<td><strong>26,400</strong></td>
<td><strong>29,900</strong></td>
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</table>

### Transit Operations

<table>
<thead>
<tr>
<th>Measure</th>
<th><strong>Average Weekday Travel Time – Van Dorn to Pentagon</strong></th>
<th><strong>Reliability</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>51 minutes</strong> (1 transfer)</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td><strong>22 minutes</strong> (no transfers)</td>
<td>Improved</td>
</tr>
<tr>
<td></td>
<td><strong>19 minutes</strong> (no transfers)</td>
<td>High</td>
</tr>
<tr>
<td>TSM</td>
<td><strong>54 minutes</strong> (1 transfer)</td>
<td>Low</td>
</tr>
<tr>
<td>Build</td>
<td><strong>24 minutes</strong> (no transfers)</td>
<td>Improved</td>
</tr>
<tr>
<td></td>
<td><strong>19 minutes</strong> (no transfers)</td>
<td>High</td>
</tr>
</tbody>
</table>

*AM Average of All WET Routes for TSM and Build; 2015 and 2035 No Build times based on bus travel times between Van Dorn Metro Station and Pentagon*
PRELIMINARY TRANSIT PERFORMANCE

2015 and 2035 Ridership

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Build</strong></td>
<td>26,400</td>
<td>39,550</td>
</tr>
<tr>
<td><strong>TSM</strong></td>
<td>11,200</td>
<td>13,150</td>
</tr>
<tr>
<td><strong>Build</strong></td>
<td>20,200</td>
<td>15,200</td>
</tr>
<tr>
<td><strong>DASH + Metrobus</strong></td>
<td>31,400</td>
<td>32,450</td>
</tr>
<tr>
<td><strong>West End Transitway</strong></td>
<td>12,350</td>
<td>31,900</td>
</tr>
</tbody>
</table>

2015: 19% more than No Build
2035: 24% more than No Build
2035: 30% more than No Build
## PRELIMINARY TRANSIT PERFORMANCE

### 2015 and 2035 Transit Travel Time

<table>
<thead>
<tr>
<th>Measure</th>
<th>2015</th>
<th>2035</th>
</tr>
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<tr>
<td></td>
<td>No Build</td>
<td>TSM</td>
</tr>
<tr>
<td></td>
<td>No Build</td>
<td>TSM</td>
</tr>
<tr>
<td>Average Weekday Travel Time – Van Dorn to Pentagon*</td>
<td>51 minutes (1 transfer)</td>
<td>22 minutes (no transfers)</td>
</tr>
<tr>
<td></td>
<td>54 minutes (1 transfer)</td>
<td>24 minutes (no transfers)</td>
</tr>
</tbody>
</table>

*AM Average of All WET Routes for TSM and Build; 2015 and 2035 No Build times based on bus travel times between Van Dorn Metro Station and Pentagon*
## PRELIMINARY TRANSPORTATION PERFORMANCE (OTHER MODES)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure</th>
<th>2015</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No Build</td>
<td>TSM</td>
</tr>
<tr>
<td><strong>Traffic Operations</strong></td>
<td><strong>Average Vehicular Travel Time</strong>*</td>
<td>16 minutes</td>
<td>16 minutes</td>
</tr>
<tr>
<td>New/Improved Sidewalks</td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>New/Improved Bicycle Facilities</td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>**Corridor person throughput **</td>
<td>2,350 persons per peak hour</td>
<td>2,610 persons per peak hour</td>
</tr>
</tbody>
</table>

* AM peak hour northbound Van Dorn to Shirlington  
** On Beauregard between Sanger and Mark Center
PRELIMINARY TRANSPORTATION PERFORMANCE
Build Alternative Pedestrian and Bicycle Improvements
PRELIMINARY TRANSPORTATION PERFORMANCE
Build Alternative Pedestrian and Bicycle Improvements

Legend
- Transitway Station
- Sidewalk
- Multi-use Path
## PRELIMINARY LAND USE AND ECONOMIC DEVELOPMENT CONSIDERATIONS

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<tr>
<td></td>
<td>No Build</td>
<td>TSM</td>
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<tr>
<td><strong>Land Use</strong></td>
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<tr>
<td>Supports planned development</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ratio of Jobs to Dwelling Units *</td>
<td>0.72</td>
<td>0.72</td>
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<tr>
<td><strong>Economic Benefit</strong></td>
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<tr>
<td>Level of new development permitted</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Potential to increase pace of retail development**</td>
<td>--</td>
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Note: Based on assumptions of the Development Potential Memo
*A ratio of 1.0 indicates a balanced development pattern
**Value of additional retail development projected.
## PRELIMINARY PHYSICAL ENVIRONMENT EVALUATION

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
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<th>TSM</th>
<th>Build</th>
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<tr>
<td><strong>Property Impacts</strong></td>
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<tr>
<td>Additional Right-of-way</td>
<td>None</td>
<td></td>
<td>Minimal</td>
<td>2.7 acres</td>
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<td>Required</td>
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<tr>
<td>Potential Property</td>
<td>None</td>
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<td>None</td>
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<tr>
<td>Acquisition</td>
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<tr>
<td><strong>Parking Consideration</strong></td>
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</tr>
<tr>
<td>Commercial Parking</td>
<td>None</td>
<td></td>
<td>None</td>
<td>72 spaces</td>
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<tr>
<td>Spaces Impacted</td>
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<tr>
<td>Residential Parking Spaces</td>
<td>None</td>
<td></td>
<td>None</td>
<td></td>
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<tr>
<td>Impacted</td>
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<td></td>
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</tr>
<tr>
<td>On-street Parking Spaces</td>
<td>None</td>
<td></td>
<td>None</td>
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<tr>
<td>Impacted</td>
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5 DISCUSSION AND NEXT STEPS
DISCUSSION AND NEXT STEPS

- Winter 2014/15
  - Alternatives Analysis Report
  - Request to Enter FTA Project Development

- Spring/Summer 2015
  - Environmental Documentation
  - Conceptual Engineering
  - Refined Cost Estimation
  - Financial Planning

www.alexandriava.gov/WestEndTransitway
Happy Holidays!
## Project Implementation Schedule

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