MD 355 - North Corridor Advisory Committee Meeting # 6

Executive Office Building
Rockville, Maryland
March 3, 2016
6:30 pm to 9:00 pm
Welcome

Agenda:

- Montgomery County MD 355 BRT Update ........................................ 20 min
- Draft Preliminary Purpose and Need Follow Up ...................... 10 min
- Preview of Public Open House .................................................. 10 min
- Conceptual Alternatives Development
  - Preliminary Station Locations .................................................. 30 min
  - Preliminary Service Plan ......................................................... 30 min
- Tabletop Discussion ................................................................. 40 min
- Additional Q&A .................................................................. 10 min

Note: Each topic will be followed by a question and answer session. Please hold questions and comments until the section presentation is complete.
Draft Preliminary Purpose and Need Follow Up

- Submitted for review on December 21, 2015
- CAC Open House on Draft Preliminary Purpose and Need held on February 2, 2016
  - 15 members attended
  - Open discussion with subject matter experts on the contents of the Draft Preliminary Purpose and Need Document to assist in the development of comments
Draft Preliminary Purpose and Need Comments Received

• Eight CAC members submitted a total of 81 comments through February 12, 2016

• Responses to these comments to be completed prior to the Public Open House

• Major themes of the comments included:
  • Build alternatives
  • Model projections
  • Type of trip

• Comments received after February 12th will be responded with general public comments
Questions?

✓ Draft Preliminary Purpose and Need – Follow up

✓ Q&A

• Preview of Public Open House

• Conceptual Alternatives Development
  • Preliminary Station Locations
  • Preliminary Service Plan

• Tabletop Discussion

• Additional Q&A
Preview of Public Open House

• Two proposed meetings in late April / early May
• Both meetings will be held in an open house format from 6:30 to 8:30 PM
• Identical information on the entire corridor will be presented at both meetings
Preview of Public Open House

• Purpose of the Public Open House
  • Educate public on BRT
  • Introduce public to corridor study
  • Present information on Draft Preliminary Purpose and Need
  • Review of Existing Conditions
  • Obtain public feedback
Questions?

 ✓ Draft Preliminary Purpose and Need – Follow up
 ✓ Preview of Public Open House
   ✓ Q&A
     • Conceptual Alternatives Development
       • Preliminary Station Locations
       • Preliminary Service Plan
     • Tabletop Discussion
     • Additional Q&A
Corridor Planning Process

- Existing Conditions and Data Collection (Ongoing)
- Corridor Goals/Objectives Draft Preliminary Purpose and Need (Ongoing)
- Conceptual Alternatives Development
- Public Open House (Spring 2016)
- Preliminary Analysis of Conceptual Alternatives
- Alternatives Public Workshop (Fall 2016)
- Alternatives Retained for Detailed Study (ARD)
Conceptual Alternatives Analysis
What Questions will the Analysis Help Answer

- Are the route patterns and terminal points best suited to meet demand and travel patterns in the study area?
- Are the station locations best suited to meet demand and travel patterns in the study area?
- What is the appropriate service frequency (buses per hour) based on passenger demand (BRT and local bus)?
- What is the demand for new BRT service between Build Alternatives? New trips vs. attracting from existing service.
- What type of trips are being made on the proposed service? Intra-corridor, long distance, feeder to Metro?
- Where are transfers occurring?
- How much will it cost to operate transit service in the study area (BRT, Local Service)? How many buses will be required to operate the service?
Conceptual Alternatives

- Service Operations: Meeting #6
- Station Locations: Meeting #6
- Running Ways: Meeting #7
Conceptual Alternatives Development
Modifications Since Functional Master Plan

In response to your comments, we are making the following changes to our station locations and service plan:

• Move the King Farm Boulevard Station into the Shady Grove Metrorail Station to provide closer access to Metrorail
• Serve the Lakeforest Transit Center
• Study an additional alignment along Observation Drive on the northern end of the corridor
• Terminate at the Clarksburg Outlets
• Service plan that work for different market areas
Conceptual Alternatives Development

Preliminary Station Locations

• Station Locations
  • Began with recommendations from Functional Master Plan
  • Making adjustments based on coordination with the Cities of Rockville and Gaithersburg, M-NCPCC, MCDOT and in response to CAC comments
## Preliminary Station Locations - Modifications

- Station locations modified since the Functional Master Plan:

<table>
<thead>
<tr>
<th>Station Location</th>
<th>Proposed Modification</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery College (Rockville)</td>
<td>Added</td>
<td>Closer connection to Montgomery College</td>
</tr>
<tr>
<td>Gude Drive</td>
<td>Moved to Indianola Drive</td>
<td>Better serve residential and commercial areas</td>
</tr>
<tr>
<td>King Farm Boulevard</td>
<td>Moved to Shady Grove Metro</td>
<td>Closer connection to Metro. Shuttle available from King Fam to Metro. Comment from CAC.</td>
</tr>
<tr>
<td>Shady Grove Road</td>
<td>Eliminated</td>
<td>Congested intersection. Low density. Comment from CAC.</td>
</tr>
<tr>
<td>Cedar Avenue / Fulks Corner Avenue</td>
<td>Added</td>
<td>Added based on City of Gaithersburg BRT Study</td>
</tr>
<tr>
<td>Brookes Avenue</td>
<td>Moved to Chestnut Street / Walker Avenue</td>
<td>Moved based on City of Gaithersburg BRT Study</td>
</tr>
</tbody>
</table>
# Preliminary Station Locations - Modifications

- Station locations modified since the Functional Master Plan:

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<th>Station Location</th>
<th>Proposed Modification</th>
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<tbody>
<tr>
<td>Odenhall Avenue</td>
<td>Moved to Lakeforest Boulevard</td>
<td>Moved based on City of Gaithersburg BRT Study</td>
</tr>
<tr>
<td>Lakeforest Transit Center</td>
<td>Added</td>
<td>Comment from CAC</td>
</tr>
<tr>
<td>MD 124 (Montgomery Village Avenue)</td>
<td>Eliminated</td>
<td>Eliminated based on City of Gaithersburg BRT Study</td>
</tr>
<tr>
<td>MD 27 Ridge Road</td>
<td>Eliminated</td>
<td>Congested intersection. Serves very similar area to Shakespeare Boulevard Station</td>
</tr>
<tr>
<td>West Old Baltimore Road</td>
<td>Eliminated</td>
<td>Low density. Lack of pedestrian access.</td>
</tr>
<tr>
<td>Shawnee Lane</td>
<td>Eliminated</td>
<td>Serves very similar area to Foreman Boulevard Station</td>
</tr>
</tbody>
</table>
## Preliminary Station Locations – Observation Drive

- Station locations proposed for Observation Drive alignment (shares same stations up to Professional Drive):

<table>
<thead>
<tr>
<th>Station Location</th>
<th>Proposed Modification</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middlebrook Road</td>
<td>Eliminated</td>
<td>Transition from dedicated to mixed traffic and intersection geometry</td>
</tr>
<tr>
<td>Holy Cross Hospital</td>
<td>Proposed</td>
<td>Serves hospital</td>
</tr>
<tr>
<td>Montgomery College (Germantown)</td>
<td>Proposed</td>
<td>Serves Montgomery College</td>
</tr>
<tr>
<td>Shakespeare Boulevard</td>
<td>Proposed</td>
<td>Serves existing and future commercial areas</td>
</tr>
<tr>
<td>Milestone Center Drive</td>
<td>Proposed</td>
<td>Serves commercial and residential areas</td>
</tr>
</tbody>
</table>
### Preliminary Station Locations – Observation Drive

Station locations proposed for Observation Drive alignment (shares same stations up to Professional Drive):

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<thead>
<tr>
<th>Station Location</th>
<th>Proposed Modification</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSAT</td>
<td>Proposed</td>
<td>Connection to Corridor Cities Transitway (CCT)</td>
</tr>
<tr>
<td>Shawnee Lane</td>
<td>Proposed</td>
<td>Consistent with CCT Master Plan</td>
</tr>
<tr>
<td>North of MD 121 (Future Clarksburg Town Center)</td>
<td>Proposed</td>
<td>Consistent with CCT Master Plan</td>
</tr>
<tr>
<td>Clarksburg Outlets</td>
<td>Proposed</td>
<td>Serves commercial and residential areas. Proposed by member of public.</td>
</tr>
</tbody>
</table>
Station Planning Process

**Step 1: Service Areas**

**Step 2: Station Area Analysis**

**Step 3: Station Layout**
Urban Analysis – Cedar Ave / Fulks Corner Ave

CEDAR AVENUE

- Residential
- Institutional
- Greenspace / Recreational
- Commercial
- Mixed Use
- Educational
- Existing Transit Facilities
- Existing Bus Stops

Uncrossable - CSX Row
Arterial Street
Crossable Street
MTA Alignment
1/4 Mile Walking Radius
Connections to Major Generators
Questions?

 ✓ Draft Preliminary Purpose and Need – Follow up
 ✓ Preview of Public Open House
 ✓ Conceptual Alternatives Development
   ✓ Preliminary Station Locations
   ✓ Q&A
     • Preliminary Service Plan
     • Tabletop Discussion
     • Additional Q&A
Conceptual Alternatives Development
Service Planning Elements

**Bus Rapid Transit**
- BRT Route Patterns
- BRT Service Frequency
- BRT Hours of Service by Day of Week

**Ride On**
- Routes in the Ride On Network
- Ride On Service Frequency by Time of Day on Each Route

**Other Services**
- Metrorail
- WMATA local buses
- MARC
- Corridor Cities Transitway (CCT) (Planned)
- Purple Line (planned)
Conceptual Alternatives Development
Service Planning Elements

- Key input into the project ridership forecasting process
  - Service plan elements help determine alternative’s attractiveness to potential riders
- Key component of the overall definition of each Build Alternative
- Based on existing data
- Changes based on feedback results
- Impacts of other elements of Build Alternative
## Conceptual Alternatives Development
### MD 355 BRT – Preliminary Service Plan

<table>
<thead>
<tr>
<th>BRT Route Pattern</th>
<th>Northern Terminal</th>
<th>Southern Terminal</th>
<th>Peak Period Frequency</th>
<th>Mid-Day Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>Clarksburg Outlets or Redgrave Place</td>
<td>Rockville Metrorail Station</td>
<td>Testing every 4 minutes (15 buses per hour)</td>
<td>Testing every 8 Minutes (7-8 buses per hour)</td>
</tr>
<tr>
<td>Blue</td>
<td>Lakeforest Transit Center</td>
<td>Rockville Metrorail Station</td>
<td>Testing every 4 minutes (15 buses per hour)</td>
<td>Testing every 8 Minutes (7-8 buses per hour)</td>
</tr>
<tr>
<td>Purple</td>
<td>Montgomery College Rockville</td>
<td>Grosvenor Metrorail or Bethesda Metrorail Station</td>
<td>Testing every 4 minutes (15 buses per hour)</td>
<td>Testing every 6 minutes (10 buses per hour)</td>
</tr>
</tbody>
</table>
## Conceptual Alternatives Development

**Local Bus Service – Preliminary Service Plan**

<table>
<thead>
<tr>
<th>Route</th>
<th>Current Peak Service Frequency</th>
<th>Peak Service Frequency Tested in Build Alternative</th>
<th>Current Off-Peak Service Frequency</th>
<th>Off-Peak Service Frequency Tested in Build Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ride On 55</td>
<td>12-20 minutes (differs by direction)</td>
<td>30 minutes</td>
<td>10 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Ride On 46</td>
<td>15-20 minutes (differs by direction)</td>
<td>30 minutes</td>
<td>15 minutes</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>
Questions?

✓ Draft Preliminary Purpose and Need – Follow up
✓ Preview of Public Open House
✓ **Conceptual Alternatives Development**
  ✓ Preliminary Station Locations
  ✓ Preliminary Service Plan
✓ Q&A
  • Tabletop Discussion
  • Additional Q&A
Tabletop Discussion

• In an open house format, CAC members will have the opportunity to:
  • Discuss the assumptions of the service plan that will be tested in more detail
  • Review and provide input on the location of the stations throughout the corridor
Additional Questions
Adjournment