1. Receive a detailed overview of the transit options advanced for study.
2. Confirm removal of the Purple Line Extension from the prioritization process.
3. Receive an overview of the metrics used for the evaluation.
4. Review and provide feedback/questions on preliminary findings.
5. Discuss potential combinations of the six transit options for additional evaluation.
Plan Overview

- **Council Direction**: “Analyze transit options serving communities along the I-270 Corridor between Frederick and Tysons”

- **Challenge**: Large menu of existing options, each serving different purposes and geographies:
  
  - existing master-planned options
  - existing options in the public sphere
  - new options under-development

- **Purpose**: Inventory, evaluate, and prioritize best package of options to inform future funding opportunities.

**I-270 Corridor Definition**: The string of communities and employment centers, defined by MWCOG as activity centers, positioned between Frederick and Tysons
Plan Overview

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**I-270 Corridor Definition:** The string of communities and employment centers, defined by MWCOG as activity centers, positioned between Frederick and Tysons
Corridor Forward will:

- **Inventory** and compare mode characteristics
- **Inventory** up to 15 corridor transit options
- **Pre-screen** and retain six options per Planning Board direction
- **Develop** metrics and compare options
- **Prioritize** options and option packages based on metrics
- **Develop** an implementation plan

**Pre-Screening:**
- Travel Time
- Equity
- Job Access
- Population
- Growth Potential

What’s the plan approach?

We are here.
Montgomery County Planning Department

County Functional Plan or Master Plan

- Major: Inclusion in Constrained Long-Range Plan, State/Local Transportation Improvement Program
- Minor: Inclusion in County Capital Improvement Program

Completed by Others

- Major: National Environmental Protection Act Process
- Minor: Facility Planning

Design and Engineering

Construction

Master Plan to Implementation

Corridor Forward

Completed by Others

- MCDOT
- MTA Maryland
- Metro
Retained Options Overview
Option A. Enhanced MARC Rail

- Additional mainline track, storage capacity, and two master-planned stations
- 45 miles of new mainline track
- Increased service with 15 minute peak period headways for major stations; hourly midday service
  - Included in Countywide Transit Corridors Functional Master Plan (2013)
  - Demonstrates potential of MTA MARC Rail Cornerstone (2018) investments
  - Improvements currently under study by Greater Washington Partnership
Option B. Red Line Extension

- A three-station extension of the Metrorail Red Line from Shady Grove to Germantown
- 7.8 miles of new track
- 6-minute peak period headways, consistent with existing frequencies
- Most frequently requested improvement
- Studied by WMATA’s *Connect Greater Washington* (2014 - not recommended)
- Increased emphasis on serving equity focus communities with premium transit
**Option C. Corridor Cities Transitway**

- A BRT service with 17 planned stations connecting Shady Grove Metrorail Station, the Universities at Shady Grove, Metropolitan Grove, Germantown, and COMSAT
- 17 miles of transit routes
- 5-minute peak period headways
- Included in multiple Department master plans
- 30 percent design for majority of phase one complete
- Complements travel between I-270 corridor communities and employment centers; supports vision for the Life Sciences Center
Option D. Purple Line Extension

A further western extension of the current Purple Line from the terminus of Bethesda to Tysons in Fairfax, VA

- 11.6 miles of below-grade, at-grade and elevated track
- 6-minute headways, consistent with planned frequencies for phase under construction
  - Serves travel between Bethesda and Tysons, a high demand travel pair lacking direct premium service
  - Frequently-requested

There are multiple alignment options that could be beneficial and the Purple Line merits its own study. Option removed from prioritization due to need to study multiple alignments in future effort.

While removed from prioritization, Plan recommendations are anticipated to discuss the significance of a rail connection to Tysons.
Option E. New Rail Extension to Frederick

- Frequent rapid transit service between Shady Grove Metrorail Station and Downtown Frederick
- 27.4 miles of track
- 6-minute headways, consistent with MDOT’s Monorail Feasibility Study service plan
- Studied by High Road Foundation garnering significant advocacy
- Improves transit access to Shady Grove Metro from points in Frederick with more direct route
Option F. I-270 Corridor Bus Rapid Transit

- A BRT service between Downtown Frederick and Tysons Corner, including four different Express and Local Service patterns
- Generally managed lanes, with some off-highway dedicated service and some off highway mixed-traffic service
- Service every 15-30 minutes in peak hours and 30-60 minutes in off-peak hours

• High-level study performed by Virginia’s DRPT and Maryland’s MTA
• Can be delivered in phases to provide expanded connectivity on the corridor
• Serves travel between Bethesda and Tysons, a high demand travel pair lacking direct premium service
• Improves transit access to Shady Grove Metro from points in Frederick with more direct route
There are multiple alignment options that could be beneficial and the Purple Line merits its own study. Option removed from prioritization due to need to study multiple alignments in future effort.

While removed from prioritization, Plan recommendations are anticipated to discuss the significance of a rail connection to Tysons.
Evaluation Metrics & Questionnaire
Four-dimensional evaluation framework:

1. **Strategic**
   - Strategic Connections
   - Equity
   - Environmental Resilience
   - Economic Health

2. **Socio-Economic**

3. **Financial**

4. **Implementation**

- **Strategic**
  - Does the option meet our strategic priorities for the County and region?
  - Focuses on: ridership, VMT reduction/environment, accessibility/travel time, and equity, key connections

- **Socio-Economic**
  - Monetizes benefits of strategic dimension

- **Financial**
  - Operating costs
  - Capital costs
  - Other financial indicators

- **Implementation**
  - Approval complexity
  - Funding complexity
  - Operation assumptions
  - Feasibility
  - Negative impacts
Transit Values Questionnaire & Strategic/Implementation Dimension

- Respondents choose not to take transit because:
  - **37%** - other options are more time-competitive
  - **28%** - stops are not convenient
  - **11%** - service is not reliable

- Respondents care more about transit options that provide travel times equal to or better than driving (**62%**) rather than options that relieve congestion (**31%**).

- Respondents want a balance between convenient access (**50%**) and short travel times between major stops (**43%**).

Note: results do not sum to 100 percent as “no preference” and lower performing responses are excluded.

Transit Values Question
Ranking Immediate and Future Delivery of Plan Values:

**Respondents’ Higher Priorities:**
- Realizing Near-Term Benefits
- Serving Existing Centers
- Serving Existing Equity Needs

**Respondents’ Lower Priorities:**
- Realizing Long-Term Benefits
- Serving Areas Designated for Growth
- Grappling with Potential Displacement

**Other Takeaways:**
- Balance economic, environmental, and equity benefits to the greatest extent possible.
Transit Characteristics: Trade-Offs

- Some retained options, like **Red Line Extension**, offer reliable and frequent service and generate high ridership, but are more challenging to implement due to engineering, cost, and political constraints.

- Some options are easier to implement, but may provide less frequent or reliable service, like the **I-270 Corridor Bus Rapid Transit Option**.

- Some options may prove to be both challenging to implement and only offer modest ridership gains. **These options will be de-prioritized.**
No single option can fully satisfy all preferences, as captured in the questionnaire. As such, staff proposes to prioritize a package of corridor transit options that consider the following feedback from the community:

- Advance high performing option(s) despite implementation challenges: acknowledge a long-term horizon
- Prioritize service for existing centers of demand and marginalized communities: focus less on areas slated for growth
- Balance local access with efficient travel
- Focus more on improving transit travel times and less on reducing congestion: prioritize transit that best serves transit riders rather than transit that supports automobile drivers
Strategic Dimension: Ridership and Vehicle Miles Traveled

New Daily Transit Trips

- Option A: Enhanced MARC Rail
- Option B: Red Line Extension
- Option C: Corridor Cities Transitway
- Option E: New Rail Connection to Frederick
- Option F: I-270 Corridor BRT

Annual VMT Reduction (millions)

- Option A: Enhanced MARC Rail
- Option B: Red Line Extension
- Option C: Corridor Cities Transitway
- Option E: New Rail Connection to Frederick
- Option F: I-270 Corridor BRT

Montgomery County  Region
Strategic Dimension: Understanding the Role of Land Use

Options:
- Option A: Enhanced MARC Rail
- Option B: Red Line Extension
- Option C: Corridor Cities Transitway
- Option E: New Rail Connection to Frederick
- Option F: I-270 Corridor BRT

Comparison:
- 2015 (existing land use and travel network)
- 2045 (forecasted land use and travel network)
Strategic Dimension: Accessibility

**New Households within 15-Minute Walk of Transit**

- Option A: Enhanced MARC Rail
- Option B: Red Line Extension
- Option C: Corridor Cities Transitway
- Option E: New Rail Connection to Frederick
- Option F: I-270 Corridor BRT

**Non-Equity Areas**

- 0
- 50,000
- 100,000
- 150,000
- 200,000
- 250,000

**Equity Areas**

- 0
- 50,000
- 100,000
- 150,000
- 200,000
- 250,000

**New Jobs Accessible in 45 Minutes per Traveler**

- Option A: Enhanced MARC Rail
- Option B: Red Line Extension
- Option C: Corridor Cities Transitway
- Option E: New Rail Connection to Frederick
- Option F: I-270 Corridor BRT

**Non-Equity Areas**

- 0
- 4,000
- 8,000
- 12,000
- 16,000

**Equity Areas**

- 0
- 4,000
- 8,000
- 12,000
- 16,000
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<th>Option</th>
<th>New Daily Transit Riders</th>
<th>Annual VMT Reduction (millions)</th>
<th>New Homes that Can Access Transit</th>
<th>New Jobs Accessible on by Transit in 45 Minutes</th>
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Financial Dimension: Emerging Findings

Option

- Option A: Enhanced MARC
- Option B: Metro Red Line Extension
- Option C: CCT
- Option E: Frederick Monorail/LRT
- Option F: I-270 BRT
Economic Dimension: Emerging Findings

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## Implementation Dimension: Emerging Findings

### Option Delivery Risks

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<th>Overall Assessment</th>
<th>Roles &amp; Resp.</th>
<th>Decision-Making</th>
<th>Feasibility Assessment</th>
<th>Operating Model</th>
<th>Negative Impacts</th>
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Potential Network Packages
Potential Network Packages

- Network packages **test performance of combinations of transit** for further evaluation
- Network packages will inform **preliminary recommendations**, anticipated in **Fall 2021**
- All packages address the following needs:
  - Regional connections to **Frederick and Northern Virginia**
  - Local connections within and to centers of activity, including **the Life Sciences Center (LSC)**
  - Service connections to originally envisioned **CCT Phase II Communities**
Connections to Montgomery County

- **All network packages include connections to Frederick and Northern Virginia via express and local BRT service along I-270**

- **Differences in network packages generally focus on the corridor between Clarksburg and Rockville**
Existing Service
• MARC Commuter Rail
• WMATA Metrorail Red Line

Planned Service
• MD 355 BRT
• Veirs Mill BRT
• GSSC Transit Network
A. **Red Line Extension**
Efficient access to jobs and equity benefits
Network Package #1

A. **Red Line Extension**
   Efficient access to jobs and equity benefits

B. **Corridor Cities Transit**
   Connections to the Life Sciences Center and northern corridor communities
A. **Red Line Extension**
   Efficient access to jobs and equity benefits

B. **Corridor Cities Transit**
   Connections to the Life Sciences Center and northern corridor communities

C. **I-270 BRT Express**
   Long-distance corridor transit travel needs

D. **I-270 BRT Local**
   Enhanced transit connections to larger network via dedicated bus lanes
A. Additional MD 355 BRT Leg on Observation Drive
Service to CCT Phase II communities; supports re-envisioning of CCT Phase II
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B. **Red Line Extension**
Efficient access to jobs and equity benefits, including CCT Phase II communities
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B. Red Line Extension
Efficient access to jobs and equity benefits, including CCT Phase II communities

C. Reimagined CCT
- Integrated CCT and Veirs Mill Transitway; operates as a single-service
- Cost and operational efficiency benefits
- Supports the access to LSC and points south for equity focus areas
- Service to CCT Phase II communities via Red Line and new MD 355 BRT Leg
A. **Additional MD 355 BRT Leg on Observation Drive**
   Service to CCT Phase II communities; supports re-envisioning of CCT Phase II

B. **Red Line Extension**
   Efficient access to jobs and equity benefits, including CCT Phase II communities

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D. **I-270 Corridor BRT - Express**
   Long-distance corridor transit travel needs

E. **I-270 Corridor BRT - Local**
   Enhanced transit connections to larger network via dedicated bus lanes
A. **Additional MD 355 BRT Leg on Observation Drive**
   Service to CCT Phase II communities; supports re-envisioning of CCT Phase II

B. **Veirs Mill Transitway Extension to the LSC**
   Integrates the Life Sciences Centers with Mid-County Corridor
A. **Additional MD 355 BRT Leg on Observation Drive**
   Service to CCT Phase II communities; supports re-envisioning of CCT Phase II

B. **Veirs Mill Transitway Extension to the LSC**
   Integrates the Life Sciences Centers with Mid-County Corridor

C. **Red Line Extension**
   Efficient access to jobs and equity benefits, including CCT Phase II communities
Network Package #3

A. Additional MD 355 BRT Leg on Observation Drive
   Service to CCT Phase II communities; supports re-envisioning of CCT Phase II

B. Veirs Mill Transitway Extension to the LSC
   Integrates the Life Sciences Centers with Mid-County Corridor

C. Red Line Extension
   Efficient access to jobs and equity benefits, including CCT Phase II communities

D. I-270 Corridor BRT - Express
   Integrates the Life Sciences Centers with Mid-County Corridor

E. I-270 Corridor BRT - Local
   Efficient access to jobs and equity benefits, including CCT Phase II communities
## Potential Network Packages - Summary

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<th>Network Package 2</th>
<th>Network Package 3</th>
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<td>To the North</td>
<td>I-270 Corridor BRT</td>
<td>I-270 Corridor BRT</td>
<td>I-270 Corridor BRT</td>
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<tr>
<td>Within Montgomery County</td>
<td>Red Line, CCT, Local I-270 Corridor BRT</td>
<td>Red Line, Reimagined CCT, Local I-270 Corridor BRT</td>
<td>Red Line &amp; Local I-270 Corridor BRT</td>
</tr>
<tr>
<td>To the south</td>
<td>I-270 Corridor BRT</td>
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Schedule & Next Steps
Ongoing
• Continue coordination with public & external agencies
• Draft preliminary recommendations

Fall-Winter 2021
• Preliminary Recommendations
• Working Draft
• Public Hearing

Winter-Spring 2022
• Anticipated Planning Board Draft
• County Council Review
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Schedule & Next Steps

• Share your Transit Story
• Preliminary Recommendations Meeting(s)

• Testify at Planning Board Public Hearing

• Testify at Council Public Hearing
Share your transit experience on social media using #CorridorForward

or at the following link: https://tinyurl.com/hsrst5s2

"Not everyone has the privilege of working from home. My partner does not drive for health reasons, and housing within walking distance to transit and jobs is crucial.

Questionnaire Response"

"If everyone in our county has equal access to transit, our quality of life will improve. We are in a climate emergency and must make transit a priority.

Questionnaire Response"

"I take the bus to access Metro. It saves me money and is only about 10 minutes longer than driving and parking at the Metro garage.

Questionnaire Response"

"If it's going to take you two hours to get from Gaithersburg to Northern Virginia on transit, I'm not going to do it. I'm going to drive.

Questionnaire Response"
Contact Information

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