



I-495 American Legion Bridge Transit and Transportation Demand Management Study

Board Meeting
December 8, 2020

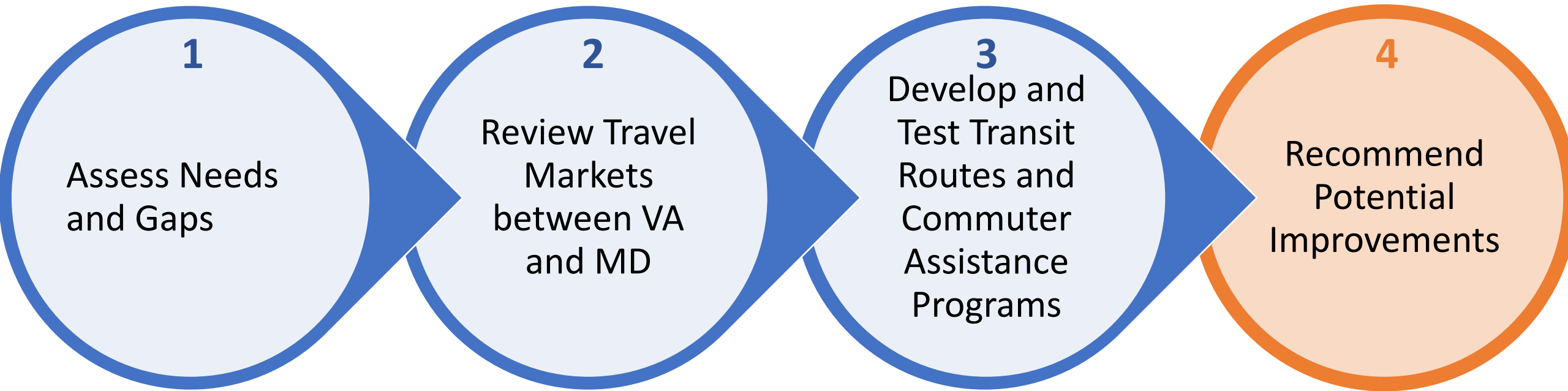
Jennifer Debruhl, Chief of Public Transportation
Ciara Williams, NOVA Transit Planning Manager
Department of Rail and Public Transportation

Study Context and Focus

- **Fall 2019:** Governors Northam and Hogan announce Capital Beltway Accord to Rebuild American Legion Bridge and Connect Interstate Highway System
- **Complements** Virginia's I-495 NEXT and Maryland's Managed Lanes Study
- Funded and managed jointly by DRPT and MDOT-MTA, and is separate from improvement projects in the corridor.
- **This study's focus:** develop and prioritize transit options and travel demand management for bistate travel across the bridge



Study Process



1

Assess Needs
and Gaps

- Why is transit needed?
- What transit is there today?
- What transit is planned in the future?

2

Review Travel
Markets
between VA
and MD

- Where are trips over the bridge coming from and going to?
- Which of those markets could be served by transit?

3

Develop and
Test Transit
Routes and
Commuter
Assistance
Programs

- Where and how often should the route stop?
- Where can transit use managed lanes?
- How can technology improve the transit experience?
- How will people get to and from the transit service?

4

Recommend
Potential
Improvements

- What is the overall forecasted affect on reducing congestion?
- How many people and jobs will be connected by new transit?
- How much will it cost to implement?

Travel Demand

- High demand
 - MD 355 Corridor and Silver Spring in MD to Tysons, Dunn Loring, and VA 7 corridor
- Moderate demand
 - Fairfax and Arlington in VA to Bethesda and Friendship Heights in MD
- Corridor segments with highest number of trips:
 - I-270/I-270 spur from I-495 to I-370 (MD)
 - I-495 from the Bridge to Dulles Corridor (VA)
 - I-495 from the I-270 spur junction to Prince George’s County line (MD)
 - I-495 from the Bridge to the I-270 spur junction (MD)



Potential Transit Connections Under Consideration

Legend

- Insufficient Travel Demand Along Corridor
- Not Competitive with Existing Transit Service
- Indirect Access to Managed Lanes
- Route Connection Advanced for Testing

Option	Virginia	↔	Maryland
1	Tysons		Bethesda ★
2			Friendship Heights
3a			Germantown ★
3b			Gaithersburg ★
4			White Flint
5a			Silver Spring ★
5b			White Oak via Silver Spring
6			Frederick ★

Option	Virginia	↔	Maryland
8a	Dunn Loring		Frederick
8b			Germantown
8c			Gaithersburg
8d			Rockville
8e			Silver Spring
8f			White Oak
8g			Bethesda ★

Option	Virginia	↔	Maryland
7a	Dulles/ Reston		Frederick
7b			Germantown
7c			Gaithersburg
7d			Rockville
7e			Silver Spring
7f			White Oak
7g			Bethesda ★

Option	Virginia	↔	Maryland
7a	Arlington		Frederick ★
7b			Germantown
7c			Gaithersburg
7d			Rockville
7e			Bethesda
7f			Silver Spring
7g			White Oak

Prioritization Methodology

- Potential routes scored relative to each other based on three categories



Productivity – Maximizing ridership for the lowest cost



Equity – Serving areas with high concentrations of low-income and minority individuals



Connectivity – Providing access to the most jobs and people

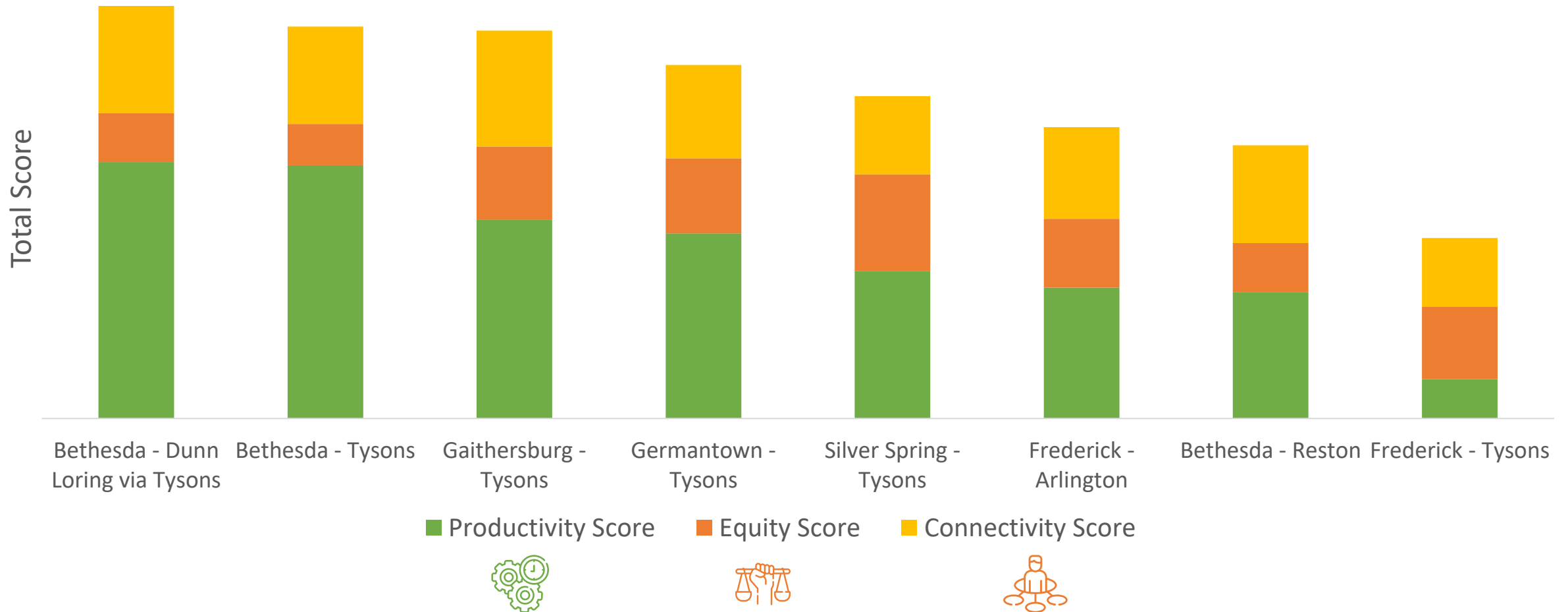
Routes Retained:

- Bethesda – Tysons
- Germantown – Tysons
- Silver Spring – Tysons
- Gaithersburg – Tysons
- Frederick – Tysons
- Bethesda – Dulles/Reston
- Bethesda – Dunn Loring
- Frederick – Arlington

SCORING KEY

- HIGH ● ● ●
MEDIUM ● ●
LOW ●

Preliminary Route Scoring



Technology and Commuter Assistance Program Options

**Commuter Parking
Information System**

**Vanpool Formation and
Expansion Program**

**Real-Time Toll and
Transit Information**

Carpool Promotion Programs

Real-Time Arrival Information

**Corridor-Specific Mobility
Options Marketing Campaign**

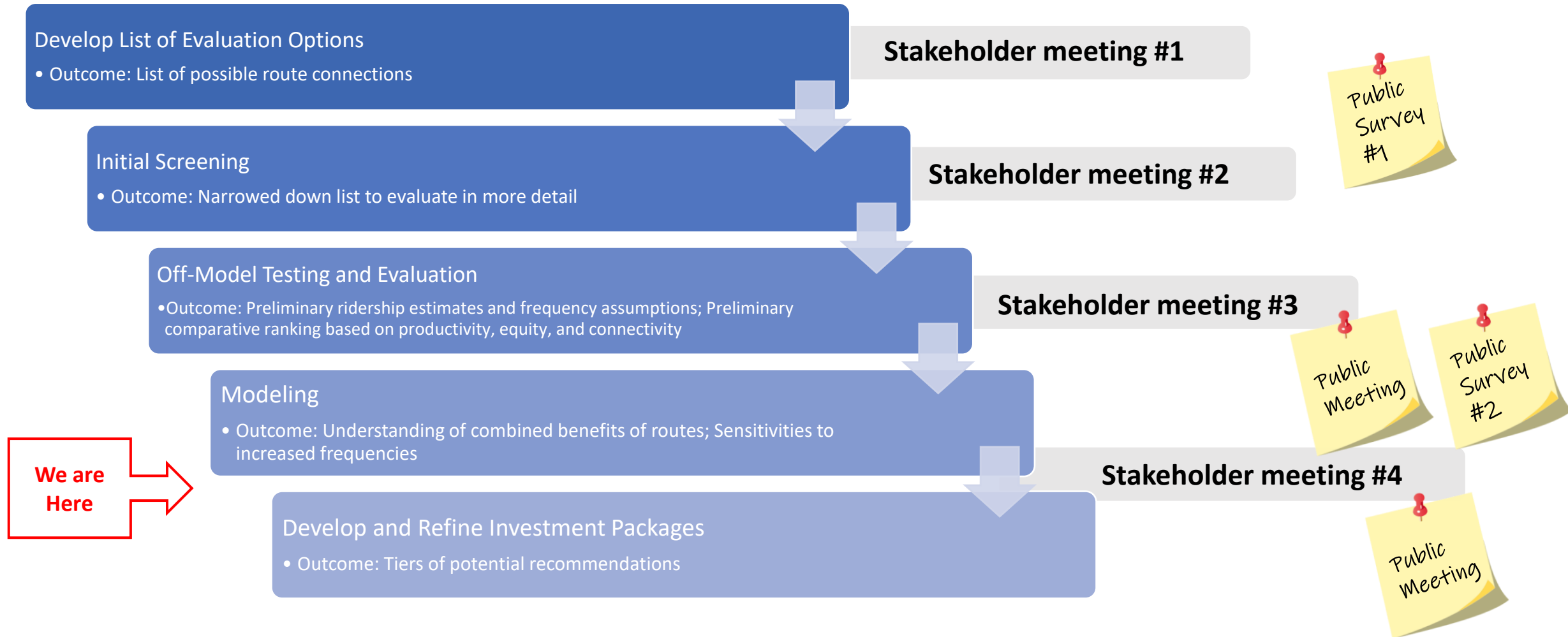
**Real-Time Passenger
Load Information**

Targeted Residential Outreach

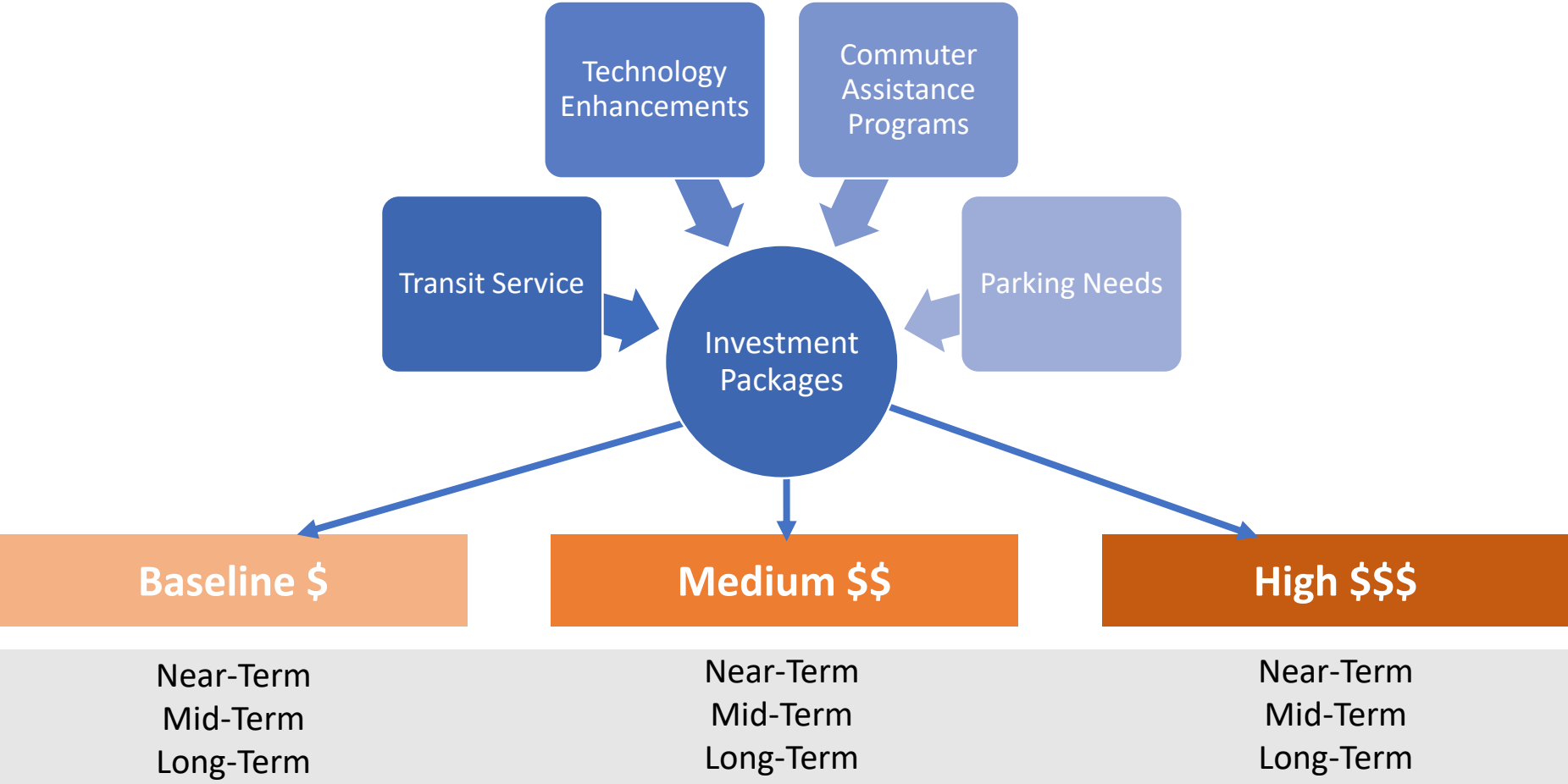
Transit Signal Priority

Targeted Employer Outreach

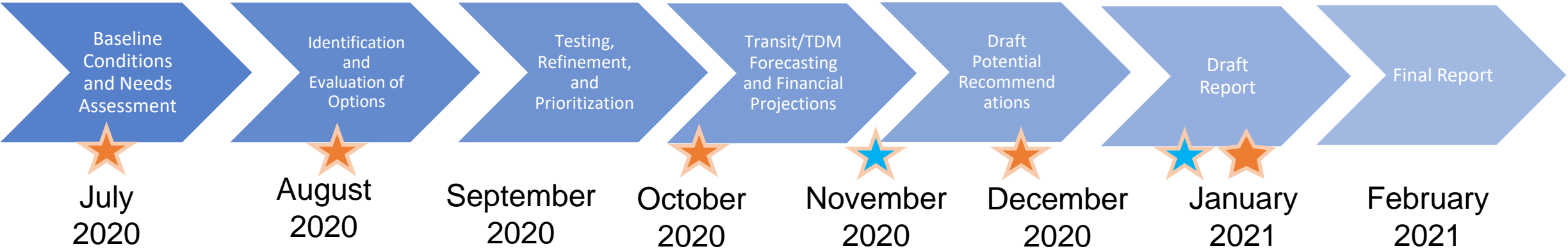
Transit Potential Recommendations Development



Next Step: Development of Investment Packages



Timeline



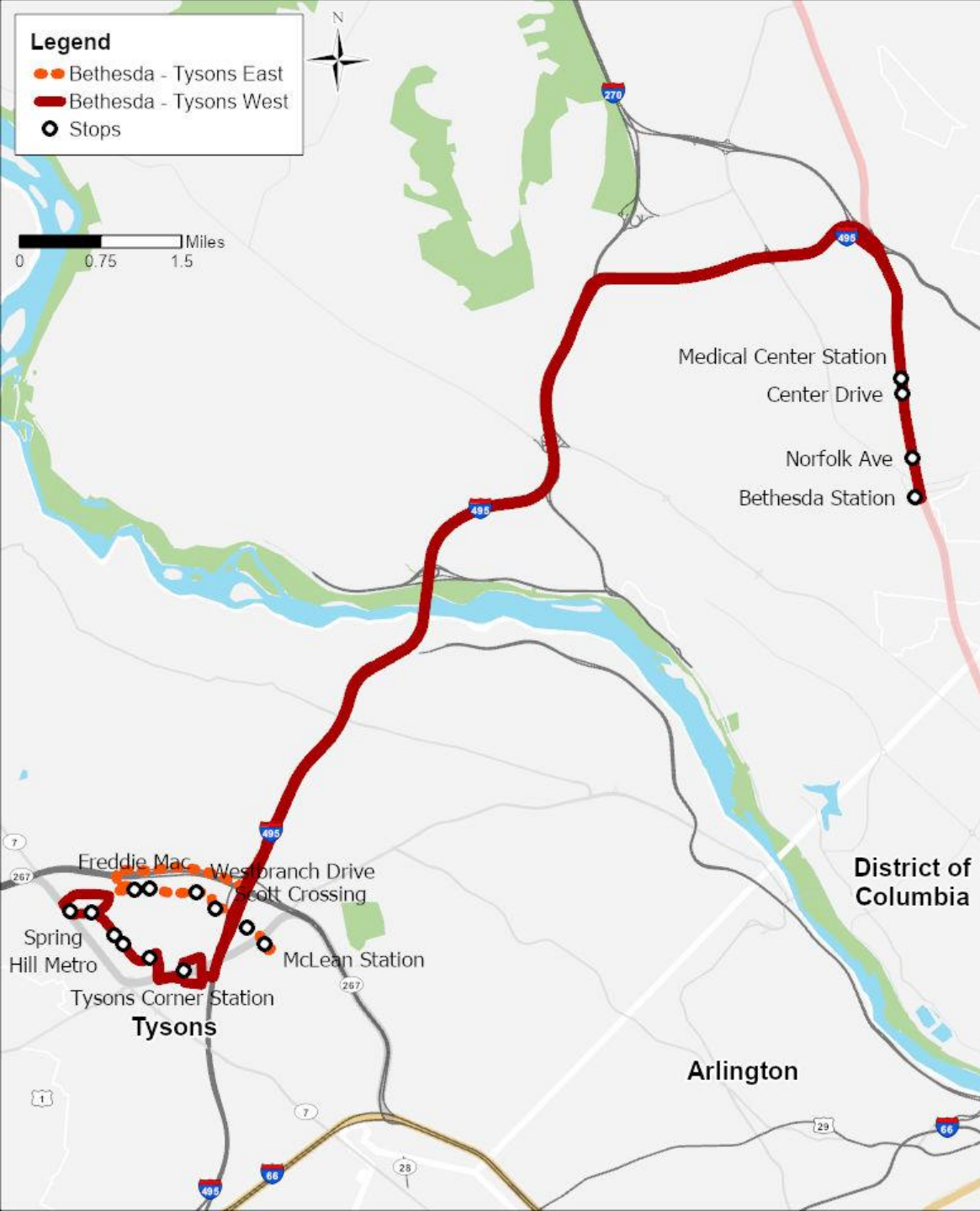
 Stakeholder Meetings  Public Meetings



Questions and Discussion



Appendix: Draft Routes



1. Bethesda – Tysons

- Service both directions during peak periods
- Transit and Rail Connections:
 - Red Line Metrorail
 - Silver Line Metrorail
 - Planned Purple Line
 - Planned Route 7 BRT
 - Planned MD 355 BRT
 - Local Bus and Regional Bus

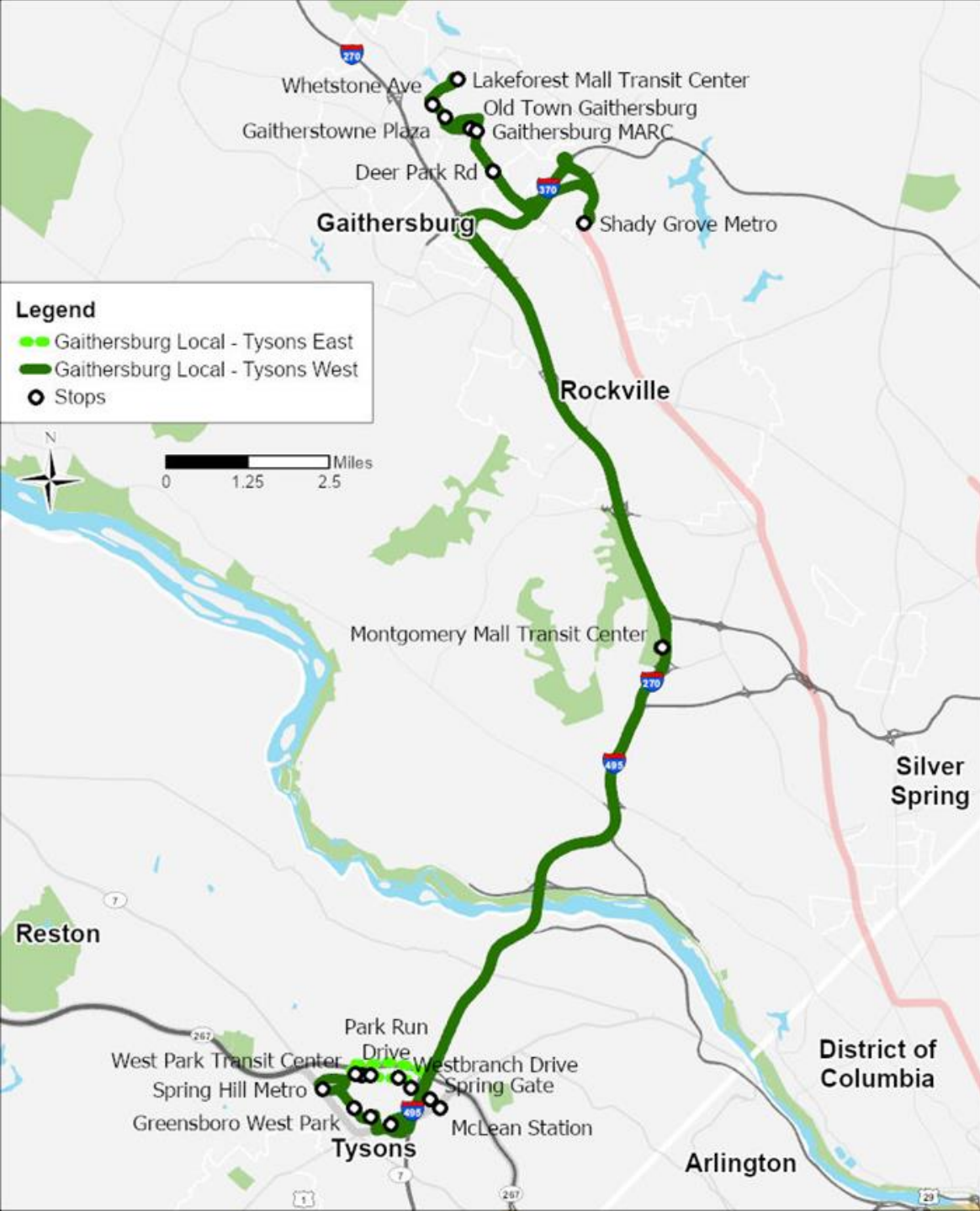
Metric	Score
Productivity	● ● ●
Equity	●
Connectivity	● ●
Rank	# 2



3a. Germantown – Tysons

- Service from Germantown to Tysons during AM peak period and Tysons to Germantown during PM peak period.
- Transit and Rail Connections:
 - Silver Line Metrorail
 - Planned Route 7 BRT
 - Planned Corridor Cities Transitway
 - Planned Randolph Road BRT
 - Local Bus and Regional Bus

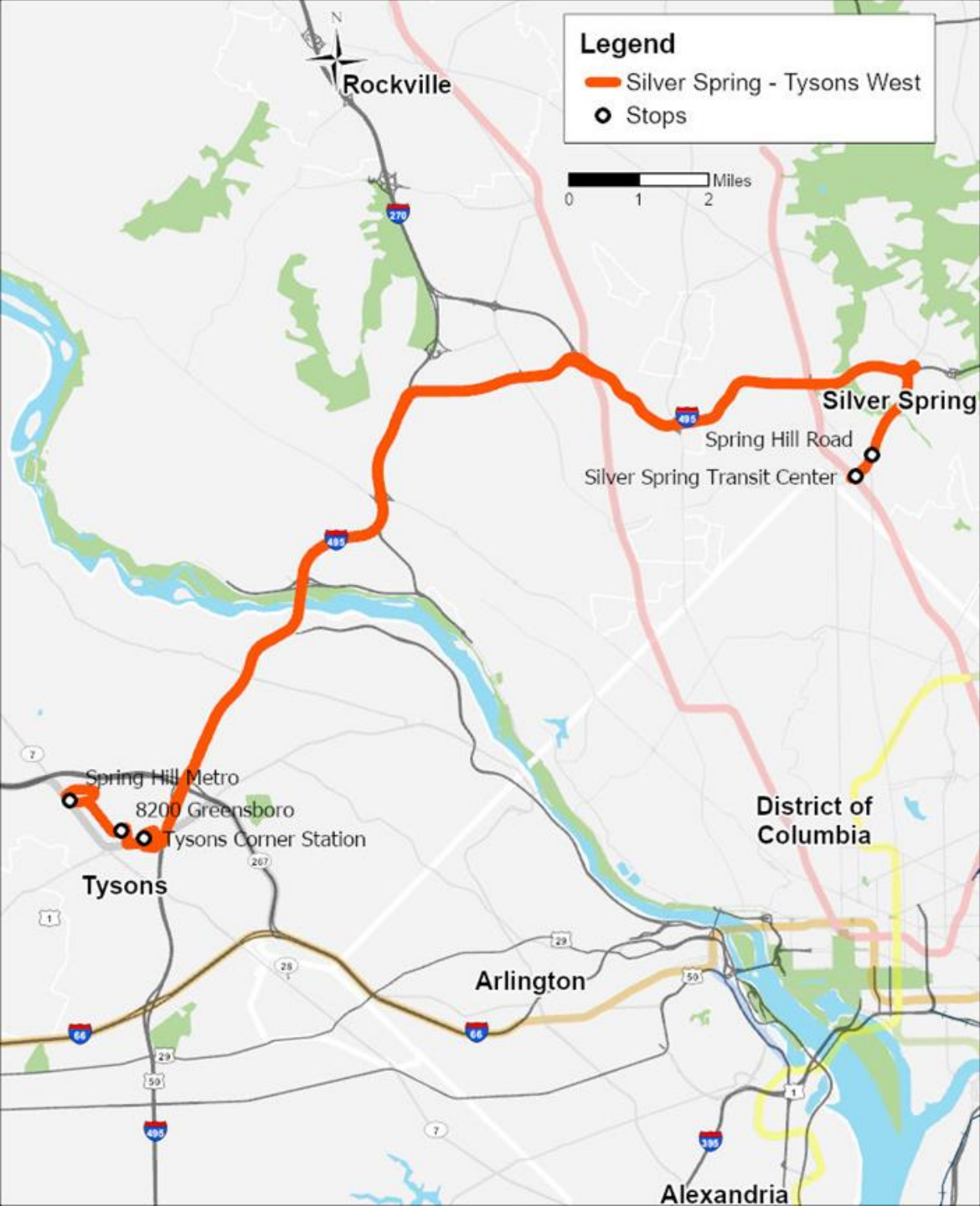
Metric	Score
Productivity	● ●
Equity	● ● ●
Connectivity	● ●
Rank	# 4



3b. Gaithersburg – Tysons

- Service from Gaithersburg to Tysons during AM peak period and Tysons to Gaithersburg during PM peak period.
- Transit and Rail Connections:
 - Red Line Metrorail
 - Silver Line Metrorail
 - Gaithersburg MARC
 - Planned Route 7 BRT
 - Planned Corridor Cities Transitway
 - Planned MD 355 BRT
 - Planned Randolph Road BRT
 - Local Bus and Regional Bus

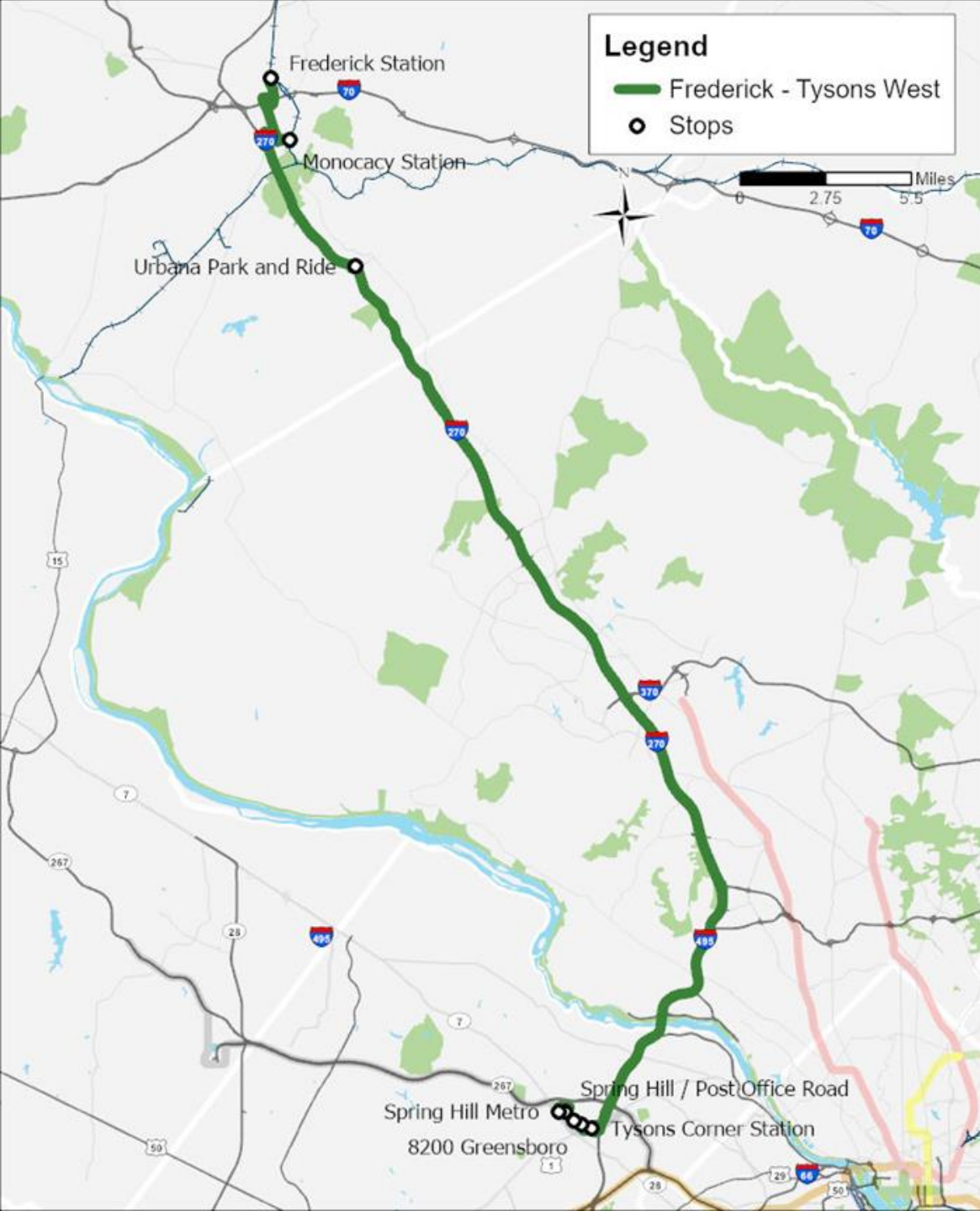
Metric	Score
Productivity	● ● ●
Equity	● ● ●
Connectivity	● ● ●
Rank	#3



5a. Silver Spring – Tysons

- Service from Silver Spring to Tysons during AM peak period and Tysons to Silver Spring during PM peak period.
- Transit and Rail Connections:
 - Red Line Metrorail
 - Silver Line Metrorail
 - Planned Purple Line LRT
 - Planned Route 7 BRT
 - US 29 FLASH BRT
 - Local Bus and Regional Bus

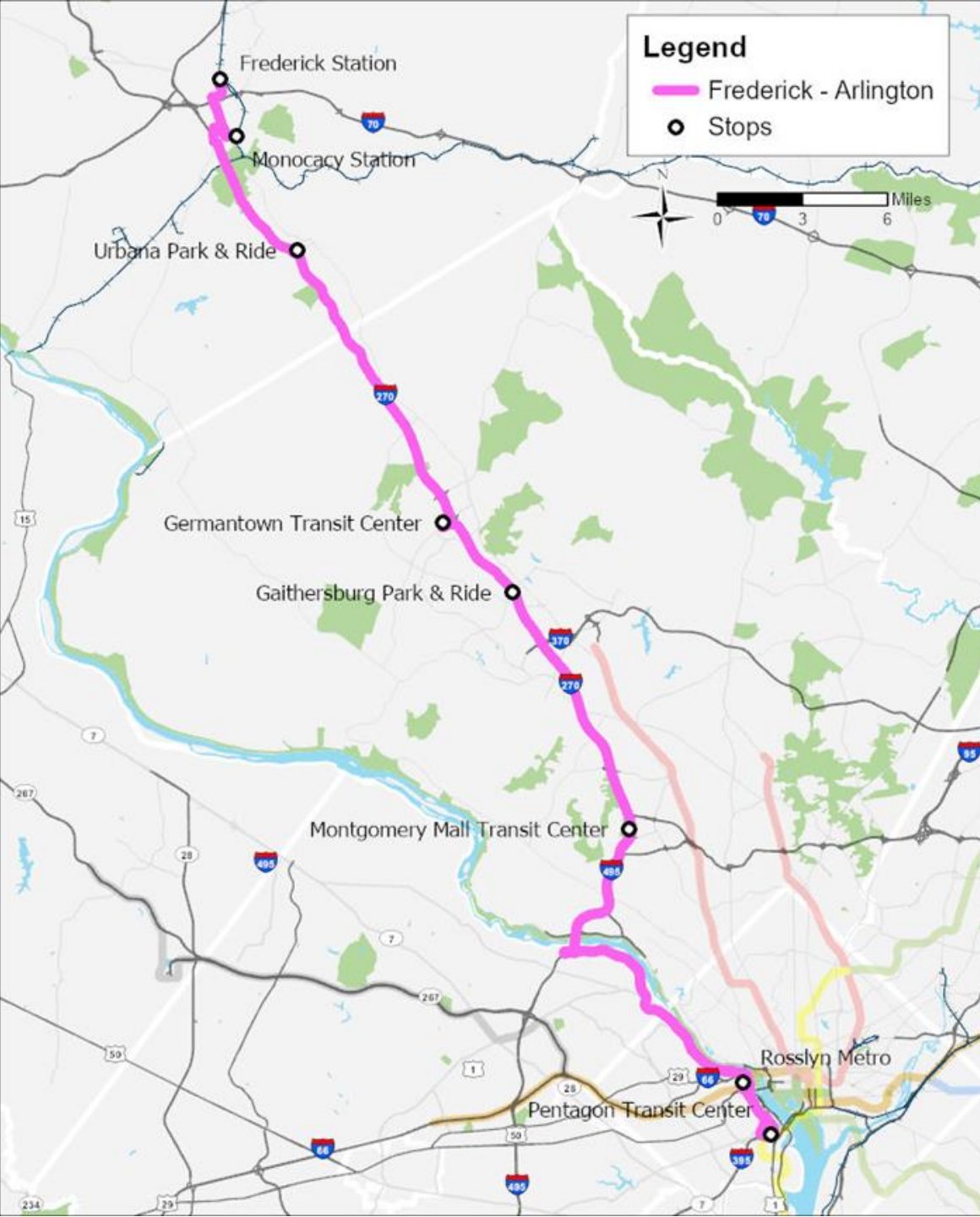
Metric	Score
Productivity	● ●
Equity	● ● ●
Connectivity	● ●
Rank	#5



6. Frederick – Tysons

- Service from Frederick to Tysons during AM peak period and Tysons to Frederick during PM peak period.
- **Transit and Rail Connections:**
 - Silver Line Metrorail
 - Planned Route 7 BRT
 - Local Bus and Regional Bus

Metric	Score
Productivity	●
Equity	● ● ●
Connectivity	● ●
Rank	#8



7a. Frederick – Arlington

- Service from Frederick to Arlington during AM peak period and Arlington to Frederick during PM peak period.
- Transit and Rail Connections:
 - Orange Line Metrorail
 - Silver Line Metrorail
 - Blue Line Metrorail
 - Yellow Line Metrorail
 - Planned Randolph Road BRT
 - Planned Corridor Cities Transitway
 - Local Bus and Regional Bus

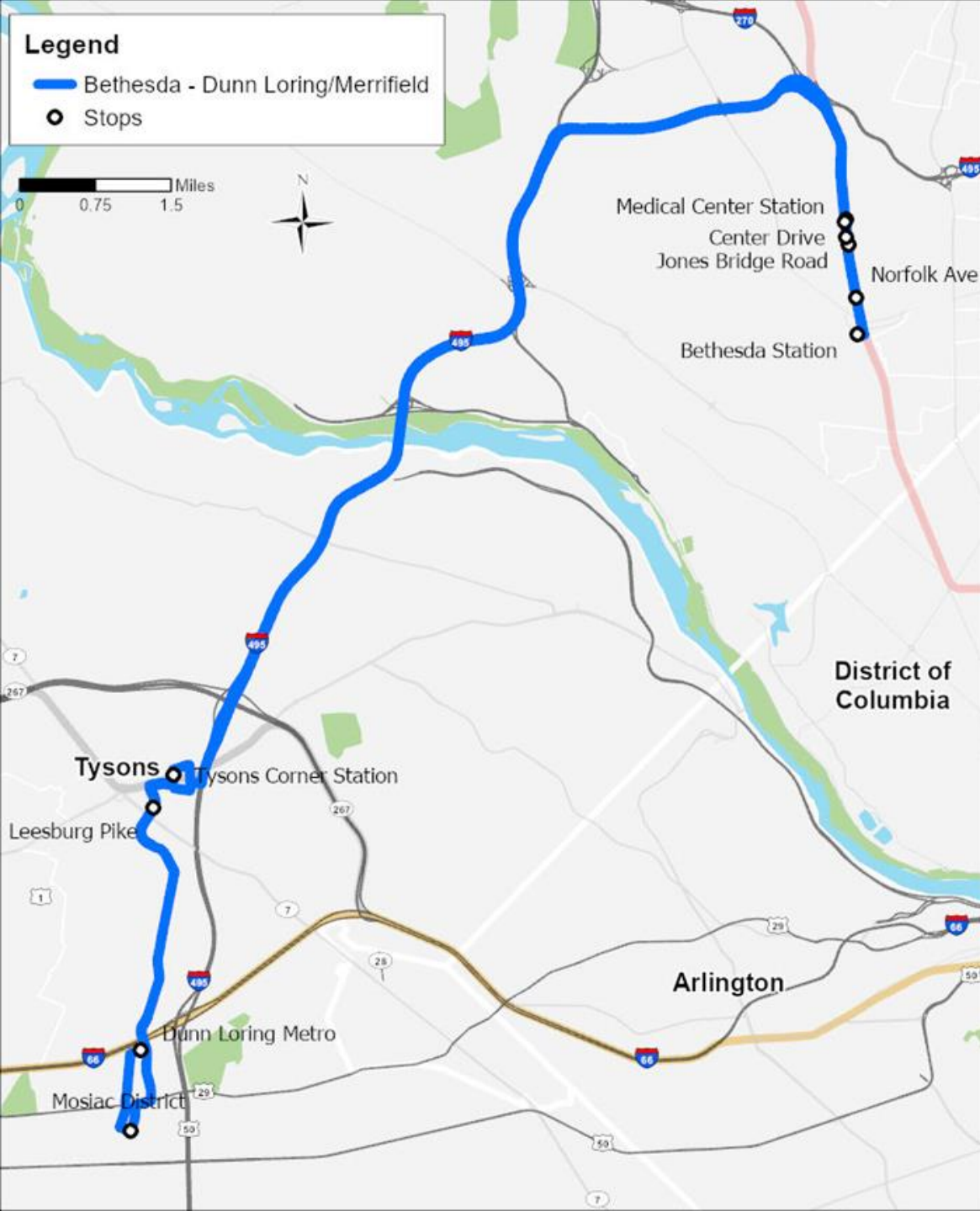
Metric	Score
Productivity	● ●
Equity	● ●
Connectivity	● ●
Rank	#6



7g. Bethesda – Reston

- Service both directions during peak periods
- Transit and Rail Connections:
 - Red Line Metrorail
 - Silver Line Metrorail
 - Planned Purple Line LRT
 - Planned MD 355 BRT
 - Local Bus and Regional Bus

Metric	Score
Productivity	● ●
Equity	● ●
Connectivity	● ● ●
Rank	#7






8g. Bethesda – Dunn Loring via Tysons

- Service both directions during peak periods
- Transit and Rail Connections:
 - Red Line Metrorail
 - Silver Line Metrorail
 - Planned Purple Line LRT
 - Planned Route 7 BRT
 - Planned MD 355 BRT
 - Local Bus and Regional Bus

Metric	Score
Productivity	● ● ●
Equity	● ●
Connectivity	● ● ●
Rank	#1

Preliminary Route Ranking Summary Table

Preliminary Rank	Options for Evaluation	Productivity Score 	Equity Score 	Connectivity Score 
1	Bethesda - Dunn Loring via Tysons	● ● ●	● ●	● ● ●
2	Bethesda - Tysons	● ● ●	●	● ● ●
3	Gaithersburg - Tysons	● ● ●	● ● ●	● ● ●
4	Germantown - Tysons	● ●	● ● ●	● ●
5	Silver Spring - Tysons	● ●	● ● ●	● ●
6	Frederck - Arlington	● ●	● ●	● ●
7	Bethesda - Reston	● ●	● ●	● ● ●
8	Frederick - Tysons	●	● ● ●	● ●