

Regional Transit Plan East-West Corridor Study

Project Briefing

Summer 2022



Connecting Our Future
A Regional Transit Plan for Central Maryland

Today's Agenda

- Regional Transit Plan Background
- Other Projects in the Corridor
- What We've Heard so Far
- Introducing the Alternatives
- Alternatives Performance
- Next Steps

Regional Transit Plan Background

Central Maryland Regional Transit Plan

- Completed October 2020. Will be updated every five years.
- Provides 25-year plan for improving public transportation in Central Maryland.
- Addresses traditional transit (bus, rail) as well as new mobility options and technology (automated vehicles, shared mobility).
- 11-member commission guided the plan development.
- Complies with requirements of 2018 Maryland Metro/Transit Funding Act.



Regional Transit Plan & Identified Corridors



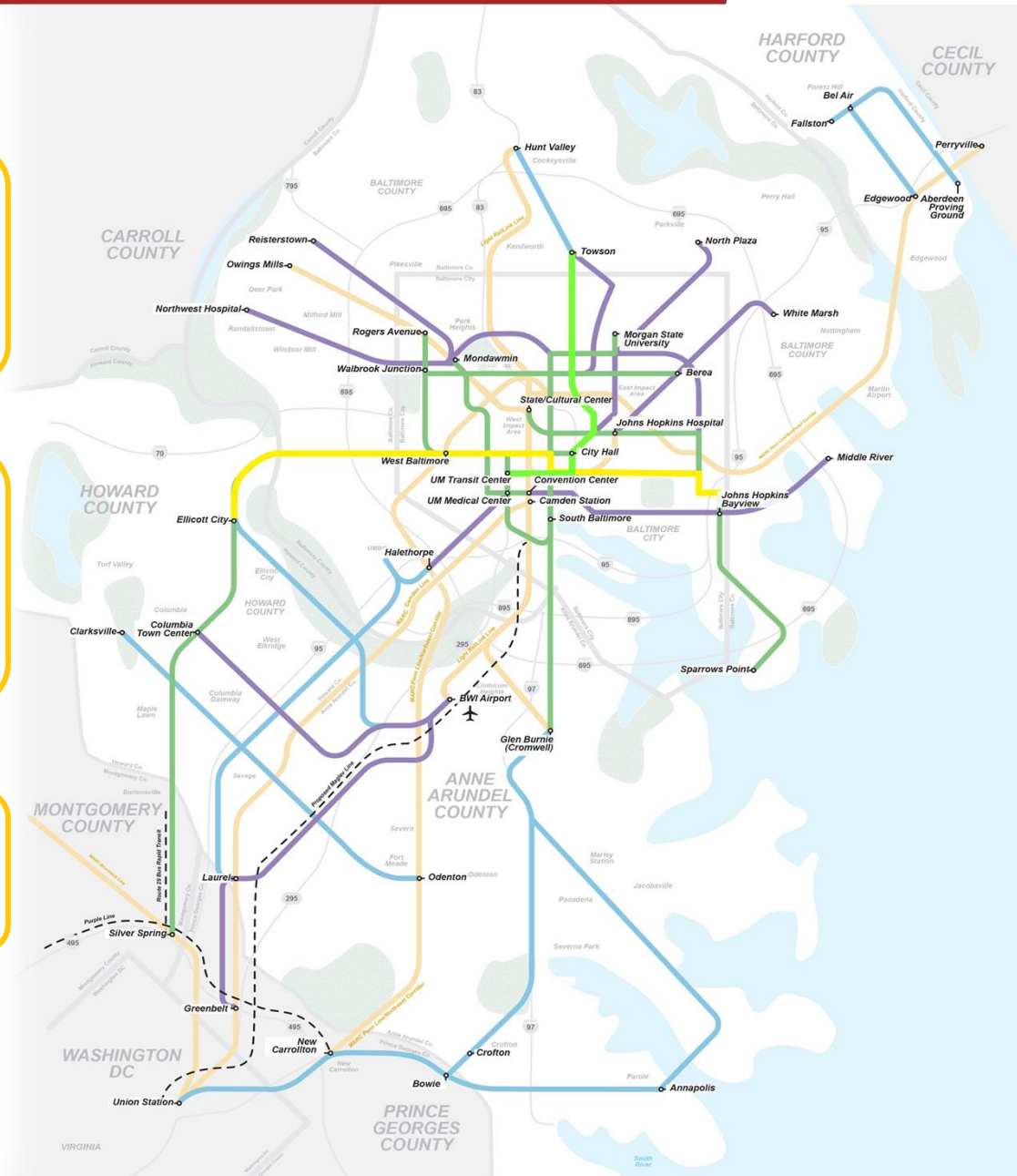
Connect residents across multiple counties to the most important regional destinations: jobs, schools, health services



Existing all-day demand for service 7 days a week (at peak, service every 15 minutes or better / off-peak, 20+ minutes)



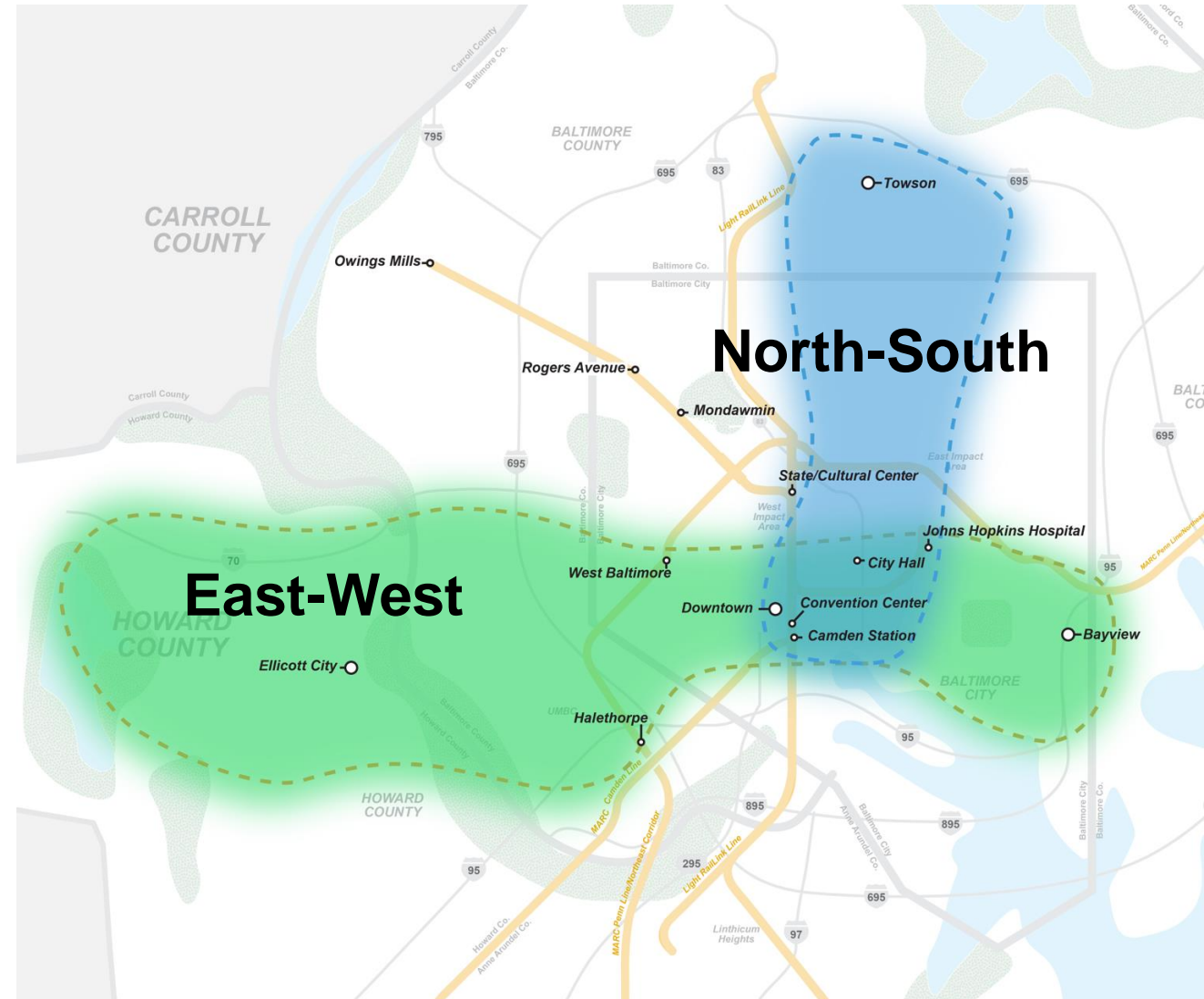
Require infrastructure improvements and investments



Regional Transit Plan Corridors Background

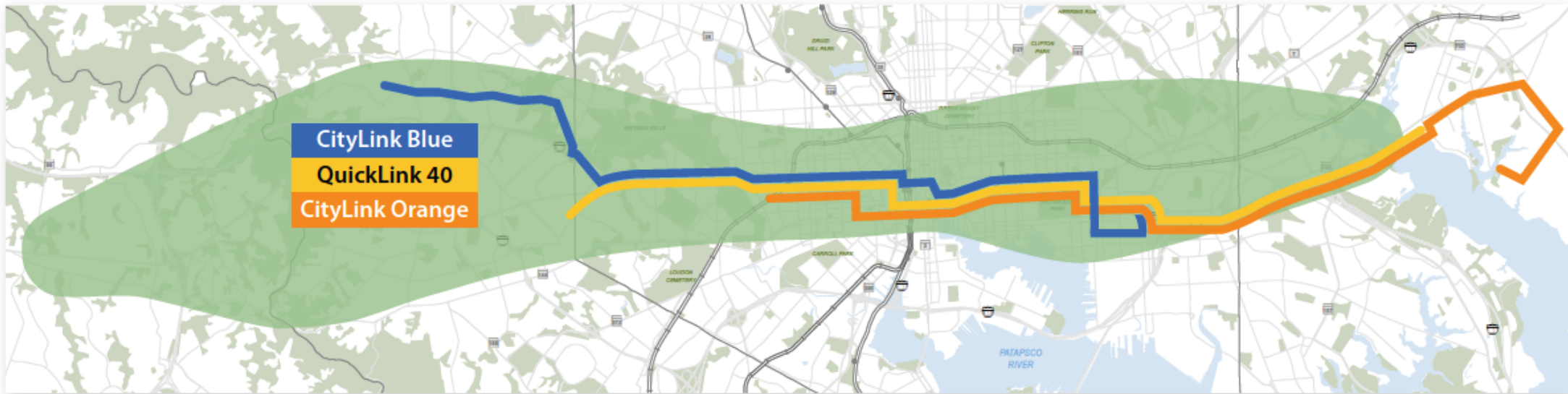
Transit Corridor Studies

- begin with no pre-determined routes or modes in mind;
- build upon previous plans; and
- incorporate new complete streets legislation, new development projects, and equity policies



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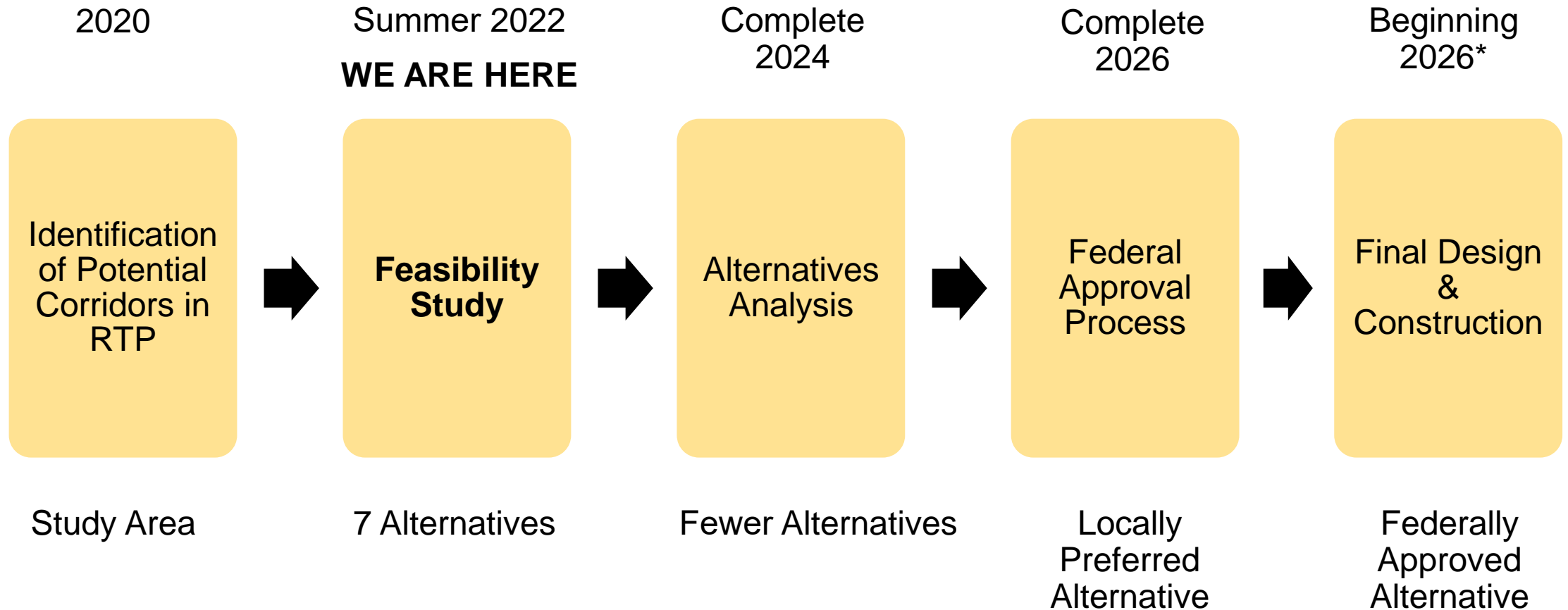
East-West Corridor Efforts



Proposed Fall 2022 Service	Planned Limited-Stop Service Pilot 	 MARYLAND TRANSIT ADMINISTRATION	QuickLink 40, a proposed limited-stop route from Westgate to Essex.
Mid Term (3-5 Years)	CityLink Blue   CityLink Orange	 TRANSIT PRIORITY PROJECT>>>	\$50M investment to increase bus speeds and reliability and improve pedestrian and bike connections along the CityLink Blue and Orange.
Long Term (5-10 Years)		 A Transit Plan for Central Maryland EAST-WEST CORRIDOR STUDY	Seven potential Alternatives for future rapid transit service between Essex, Bayview, CMS, and Ellicott City.

Why are we here?

We are in the beginning of a multi-step process for a major transit investment.



*Local Funding Plan Needed



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Project Goals



1. Improve the **connectivity and operations** of the existing transit network



2. Expand the **reach and connectivity** of the regional transit network



3. Prioritize the needs of existing transit riders and **transit-critical populations**



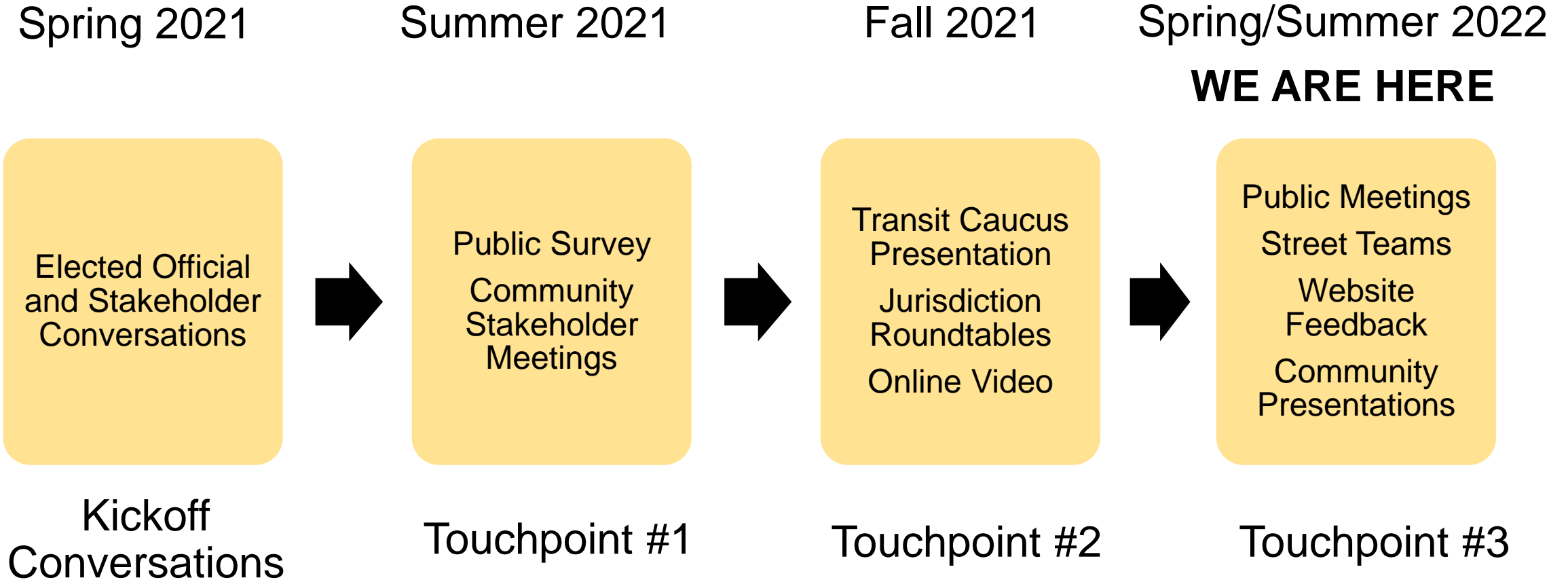
4. Maximize the **economic and environmental benefit** of a major transit investment

Study Purpose and Testing

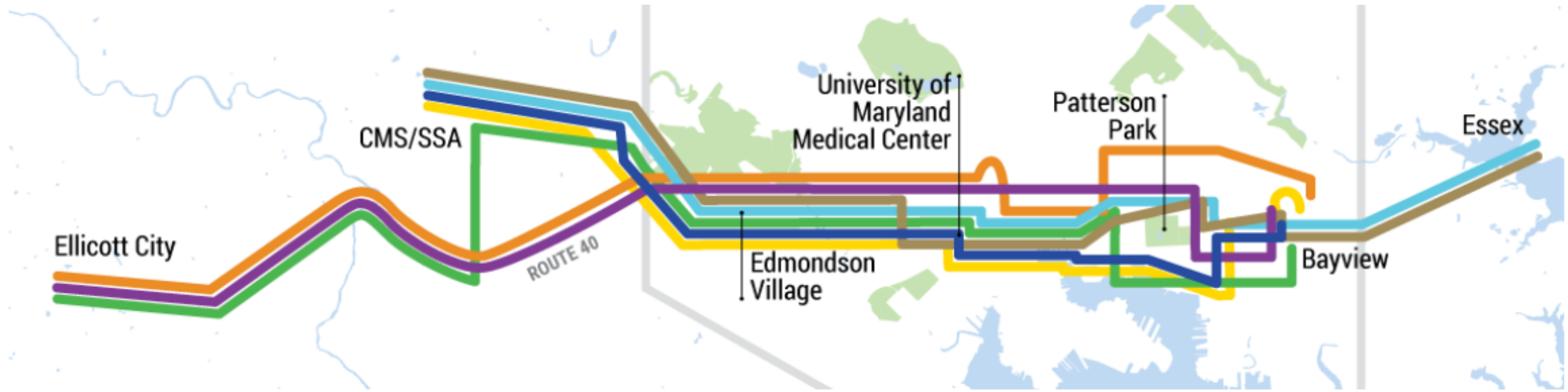
Seven alternatives were developed based on a **market analysis** and the project **goals and objectives**. Alternatives were developed to **test** different **modes and station spacing, treatments, and areas served**.

- Bus Rapid Transit (BRT), Light Rail Transit (LRT), Heavy Rail Transit (HRT)
- Transit Streets, Dedicated Guideways, Tunnels
- Areas Tradeoffs:
 - CMS/SSA vs. Ellicott City
 - Bayview vs. Essex
 - Inner Harbor vs. Bypassing Central Business District
 - Harbor East vs. Johns Hopkins Hospital
 - North vs. south of Patterson Park

Engagement Activities Conducted



East-West Corridor Preliminary Alternatives



Alternative 1

Bus Rapid Transit from Bayview to Ellicott City via Johns Hopkins Hospital and CMS/SSA.

Alternative 2

Bus Rapid Transit from Bayview to Ellicott City via Johns Hopkins Hospital and US 40.

Alternative 3

Heavy Rail Transit (Metro) from Bayview to Edmondson Village, Bus Rapid Transit from Edmondson Village to Ellicott City.

Alternative 4

Light Rail Transit from Essex to CMS/SSA via Bayview and Johns Hopkins Hospital.

Alternative 5

Bus Rapid Transit from Essex to CMS/SSA via Bayview and Johns Hopkins Hospital.

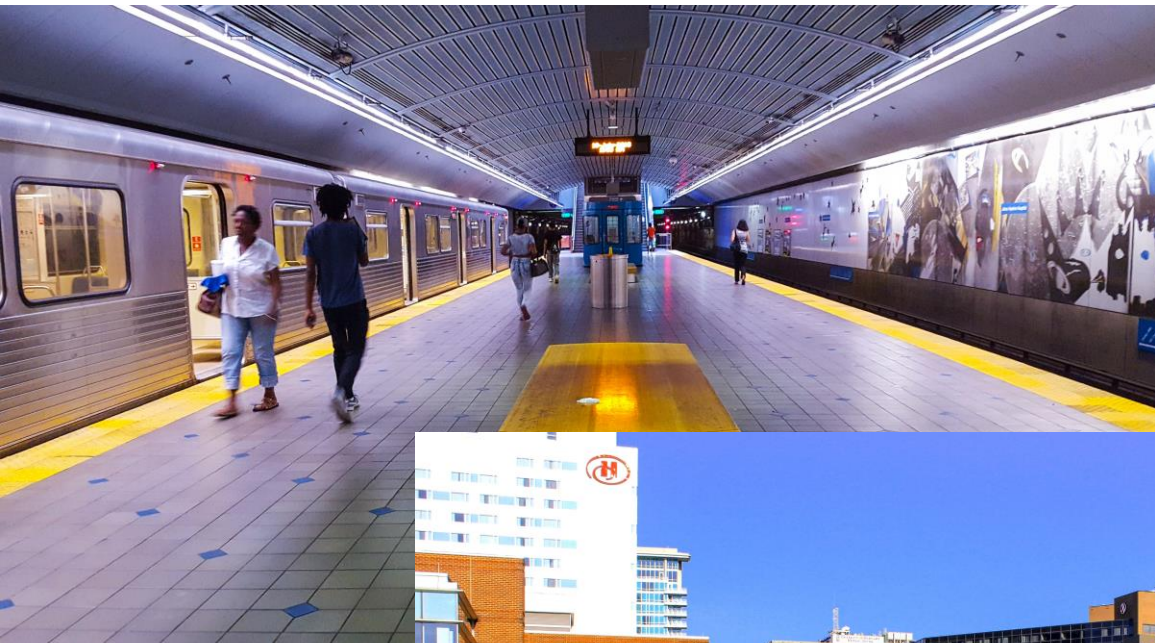
Alternative 6

Light Rail Transit from Bayview to CMS/SSA via the Waterfront.

Alternative 7

Bus Rapid Transit from Bayview to CMS/SSA via the Waterfront.

East-West Corridor Study Modes



Measures of Effectiveness

What are the relative strengths and weakness of each preliminary alternative?

Goal	Theme	Measures
Improve the existing network	Reliability	Percent of Dedicated Guideway
		Fixed or Flexible Guideway
	System Travel Savings	Average travel time savings for transit riders living in the corridor
	Travel Time	Transit travel time between West Baltimore and Hopkins Bayview
Expand the regional network	Ridership	Total Daily Ridership in 2045 per mile
	Connections	Connections to rail stations, frequent bus service & LOTS
	Access	Households within ½ mile of a station per mile
		Students within ½ mile of a station per mile
		Future jobs within ½ mile of a station per mile

Goal	Theme	Measures
Prioritize the need of existing transit riders and transit-critical populations	Equity	Low-income population within ½ mile of a station per mile
		Minority population within ½ mile of a station per mile
		Zero-car households within ½ mile of a station per mile
		Limited English Proficiency population within ½ mile of a station per mile
		Adult population over age 65 within ½ mile of a station per mile
		Population with disabilities within ½ mile of a station per mile
Maximize the economic and environmental benefit	Sustainability	Trips shifted to transit
	Cost	Operations & capital costs
	Implementation	Estimated implementation time
	Tunneling Complexity	Not applicable, medium or high

Summary of Analysis Takeaways

- All alternatives attract more than enough ridership to **support frequent transit service** throughout the day.
- All alternatives improve travel times & reliability for transit riders through **extensive new dedicated guideway**. Rail has better travel time performance than Bus Rapid Transit.
- All alternatives improve access for **transit-critical populations**. Alignment, station spacing and travel time impact access improvements.
- Costs to build and operate **rail alternatives are three to four times higher than Bus Rapid Transit**. Cost is driven by **mode and length of tunneling**.

Measure of Effectiveness Results Summary

Goal	Alternative	1	2	3	4	5	6	7
	Mode	BRT	BRT	BRT+HRT	LRT	BRT	LRT	BRT
	Endpoints	Ellicott City - Bayview			CMS-Essex		CMS-Bayview	
	Length (miles)	22.7	18.4	19.1	16.4	17.1	14.1	14.2
	Number of Stations	39	36	25	28	33	19	31
	Average Station Spacing (miles)	0.6	0.5	0.8	0.6	0.5	0.7	0.5
	Performance Area							
1 Improve the connectivity and operations of the existing transit network	Reliability - % of Dedicated Guideway	GOOD	BETTER	BETTER	BETTER	BETTER	BEST	BETTER
	Reliability - Fixed or Flexible Guideway	FLEXIBLE	FLEXIBLE	FLEXIBLE/FIXED	FIXED	FLEXIBLE	FIXED	FLEXIBLE
	System Travel Time Savings	GOOD	GOOD	GOOD	BEST	BETTER	BEST	GOOD
	Travel Time	GOOD	GOOD	BEST	BETTER	GOOD	BEST	GOOD
2 Expand the reach and connectivity of the regional transit network	Ridership	GOOD	GOOD	BETTER	BETTER	BETTER	BEST	BETTER
	Transit Connections	BEST	GOOD	BETTER	BETTER	BETTER	BETTER	BETTER
	Access to Households	BETTER	BEST	GOOD	BETTER	BETTER	BEST	BEST
	Access to Students	GOOD	BEST	BETTER	BETTER	BETTER	GOOD	BETTER
	Access to Jobs	GOOD	GOOD	GOOD	BETTER	BETTER	BEST	BEST
3 Prioritize the needs of existing transit riders and transit-critical populations	Equity	GOOD	BEST	GOOD	BETTER	BETTER	GOOD	BETTER
4 Maximize the economic and environmental benefit of a major transit investment	Sustainability	BEST	BEST	GOOD	GOOD	BETTER	BETTER	BETTER
	Cost	\$	\$	\$\$\$\$	\$\$\$	\$	\$\$\$	\$
	Implementation time	SHORTEST	SHORTEST	LONGEST	MIDDLE	SHORTEST	MIDDLE	SHORTEST
	Tunneling Complexity	N/A	N/A	HIGH	MEDIUM	N/A	HIGH	N/A

Next Steps – Public Outreach

- 60-day public comment period open through August 1, 2022.
- Street teams are conducting on-the-ground outreach along the corridor. Check website for dates/times and locations.
- Provide comments on the website.
www.rtpcorridors.com



Overview

The Regional Transit Plan (RTP) identifies 30 transit corridors that together would create a strong transit network in Central Maryland. The transit corridors are places that show a strong demand for transit and connect people across the region. Transit corridors are not just lines on a map showing where current transit goes—they are opportunities to explore new ways to make it easier to travel without a car, including new transportation modes, schedules, routes, and infrastructure.

Watch the video below to learn more about the corridor study process:



Call the Project Team
(443) 475-0687



Email the Project Team
rtp@mta.maryland.gov

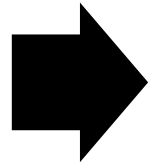
**INVITE US TO
YOUR
COMMUNITY
MEETINGS!**

Next Steps - Study

Summer/Fall 2022

Identify Alternatives
for Further Study

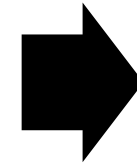
MDOT and local jurisdictions will select a reduced set of alternatives for further study after public feedback is gathered.



2022 – 2024

Identify Locally
Preferred Alternative

The reduced set of alternatives will receive additional engineering and environmental analysis and public input to narrow down to a single option.



2024 – 2026

Federal Approval &
Apply for Funding

MDOT and its partners will develop a local funding plan and apply for funding to support design and construction once a preferred option has been confirmed.