



Resilience 2050

Adapting to the Challenges of Tomorrow

Introduction to the LRTP

Resilience 2050: Adapting to the Challenges of Tomorrow

June 22, 2022



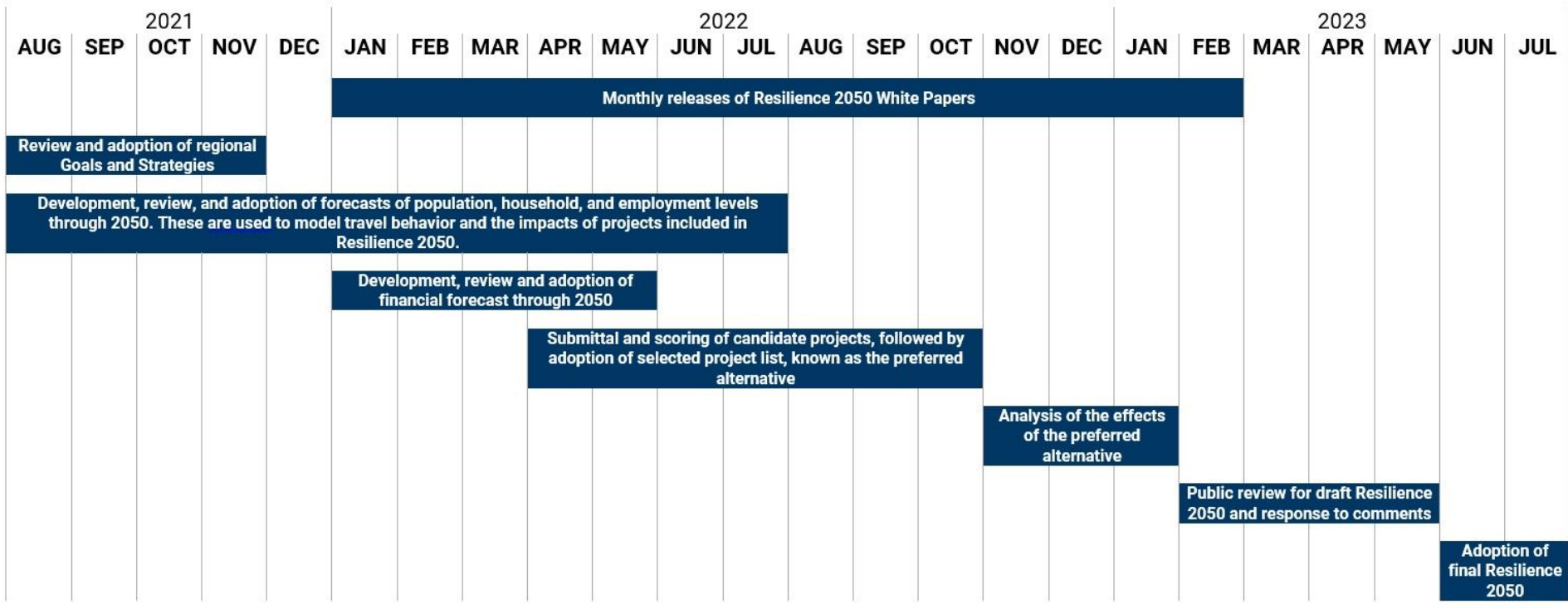
What is the LRTP?

- Addresses at least a 20-year planning horizon *beyond timeframe covered by the TIP*
- Updated every 4 years (in non-attainment areas); otherwise 5
- Financially constrained
- Core of the plan is a list of planned major federally funded capital projects, their estimated costs, and the revenues expected to be available to fund the projects
- Also:
 - Provides a transportation vision for the region through adopted goals and strategies
 - Details socioeconomic, environmental, and other factors that will affect the operation of the transportation system over the next 20-25 years

What is the TIP?

- Projects programmed for funding in any of the next four fiscal years
- Updated annually (federal requirement is at least every 4 years)
- Federally funded and regionally significant projects
 - Management & operations, system preservation, and system expansion
 - highway, transit, bicycle, and pedestrian facilities
- Translates recommendations from the long-range plan into a short-term program of improvements
 - Projects must be identified in the LRTP to be included in the TIP
 - TIP projects reviewed for consistency with regional goals
- **2023 – 2026 TIP includes \$4.2 billion in proposed federal, state, local, and toll revenue funding**
 - Timeline: Public Review July 2022, BRTB Resolution in August 2022

Plan Development Process



Regional Goals and Strategies

- Timeframe: Adopted in November 2021 via [BRTB Res #22-6](#)
- Form the transportation vision for the region
- Goals are based on:
 - Federal, state, regional, and local requirements and policies
 - Factors, trends, and technologies that could affect the region's transportation system over the next 25 years
 - A public comment period and input from BRTB advisory groups
- Each goal is accompanied by supporting implementation strategies intended to help the region implement a goal
 - Example: “Eliminate Hazardous or substandard conditions in high-crash locations and corridors (all modes) using best practices and proven countermeasures” is one strategy to help the region to “Improve System Safety”

Regional Goals

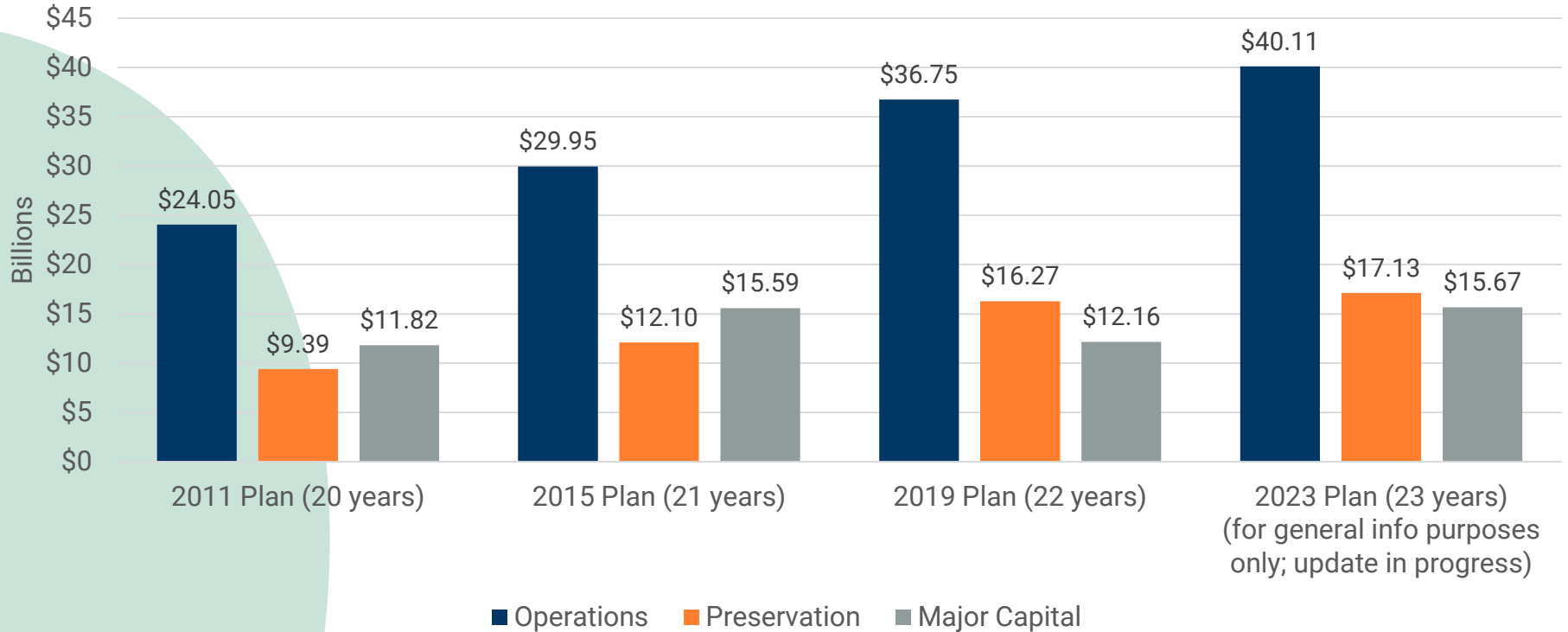
- **Goals that address the basic functions of transportation:**
 - Improve Accessibility
 - Increase Mobility
- **Goals that address the conditions or effects of transportation:**
 - Improve System Safety
 - Improve and Maintain the Existing Infrastructure
 - Implement Environmentally Responsible Transportation Solutions
 - Improve System Security
 - Promote Prosperity and Economic Opportunity
- **Goals that address the transportation decision making process:**
 - Foster Participation and Cooperation Among Stakeholders
 - Promote Informed Decision Making

Financial Forecasts

- Financial Forecast
 - Timeframe: December 2021 – BRTB adoption in July/August 2022
 - MDOT provides a forecast of anticipated federal and state revenues through 2050 for:
 - System operations
 - System preservation
 - Major Capital projects
 - Methodology estimates total revenues through 2050 and the amount anticipated to be needed for operations and preservation based on historical expenditures. Remaining funds are available for major capital projects.
 - Update from MDOT (due to BIL Passage) anticipated in June 2022
 - New for Resilience 2050: Consultant task to better understand local financing for transportation

Financial Forecasts

L RTP Comparison: Funds by Category



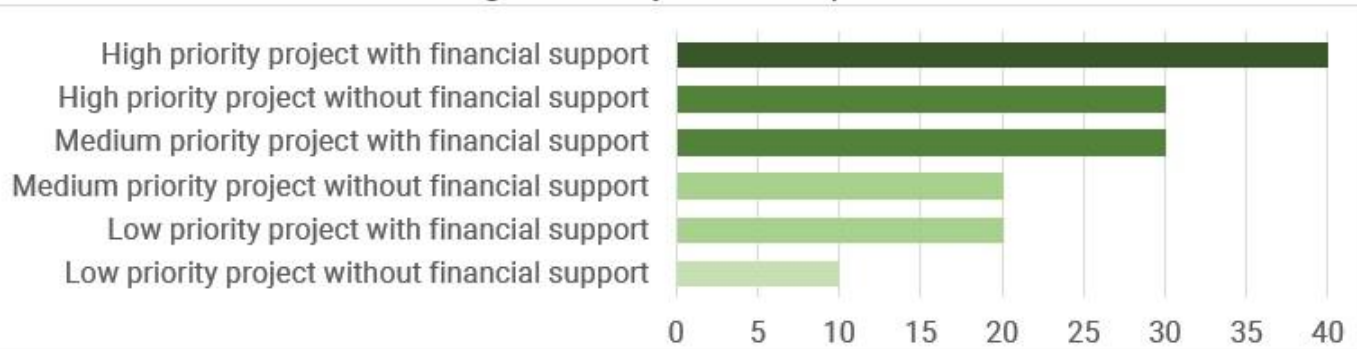
Project Submittal

- Timeline: April 1 – June 15, 2022
- The project scoring process begins with the submittal of candidate projects by the following jurisdictions and agencies* during the call for projects:
 - City of Annapolis
 - Anne Arundel County
 - Baltimore City
 - Baltimore County
 - Carroll County
 - Harford County
 - Howard County
 - Queen Anne's County
 - MDOT Maryland Transit Administration

**MDOT SHA does not directly submit projects. Local jurisdictions coordinate with MDOT SHA and submit all projects within their jurisdiction, including those on state roadways*

Project Scoring

- Updated methodology adopted Nov 2021 via [BRTB Res #22-7](#)
- Timeline: June 2022 – August 2022
- Project scoring composed of two elements:
 - Policy Score (up to 40 points)
 - Priority Score:
 - High Priority (up to 5 projects): 30 points
 - Medium Priority (up to 4 projects): 20 points
 - Low Priority (unlimited): 10 Points
 - Demonstrated Financial Support: 10 points



Project Scoring

- Project scoring composed of two elements:
 - Technical Score for transit (up to 55 points) and highway (up to 50 points):

GOAL/CRITERIA	TECHNICAL SCORING POINTS: TRANSIT PROJECTS	TECHNICAL SCORING POINTS: HIGHWAY PROJECTS
Safety*	10	10
Accessibility - Complete Streets*	5	5
Accessibility - Access to Jobs*	10	5
Mobility	10	10
Environmental - Effects on ecologically sensitive lands and culturally sensitive resources*	5	5
Environmental - Potential for Greenhouse Gas Emissions Reductions	5	5
Security*	5	5
Economic Prosperity	5	5
Total Technical Points	55	50

Project Selection and Preferred Alternative

- Timeline: August 2022 – October 2022 BRTB Resolution
- Technical and Policy scores totaled for highway and transit projects
 - Max of 40 policy + 50 technical = 90 points for highway projects
 - Max of 40 policy + 55 technical = 95 points for transit projects
 - Transit given an advantage due to public comments encouraging the BRTB to focus on transit accessibility, reliability, and frequency and reducing the focus on roadway widening and cars
- Total score used to prioritize projects for inclusion in *Resilience 2050*
- *Preferred alternative* of projects based on project scores, project costs, and major capital funding available to the region as well as committee input

Project Selection and Preferred Alternative

An (overly) simple example...

Project Name	Project Score	Project Cost	Funding Left (\$100 Total)
Project A	87	\$30	\$70
Project B	84	\$15	\$55
Project C	75	\$20	\$35
Project D	63	\$35	\$0
Project E	55	\$20	\$0
Project F	52	\$25	\$0

} Preferred Alternative

Use of Round 10 Forecasts

- Timeline: BRTB Resolution in July 2022
- Round 10 Forecasts are key inputs to BMC travel demand model
- Key uses include:
 - Project scoring: Accessibility and Mobility criteria rely on Round 10 forecasts to calculate access to jobs, anticipated congestion, and transit connectivity
 - Analysis of the potential effects of the preferred alternative:
 - Timeline: November 2022 – February 2023
 - Travel Demand Modeling:
 - Analysis of trip purposes, Vehicle Miles Traveled, Congestion, etc.
 - Analyzed for various horizon years (2030, 2040, 2050)
 - Air Quality Conformity:
 - All plans federally required to conform with air quality standards
 - Baltimore region does not attain the standard for ground level ozone.
 - Travel demand model is used to analyze projected emissions from implementing the preferred alternative
 - Projected emissions compared to emissions budgets set by MDE for various horizon years (2030, 2040, 2050)

Use of Round 10 Forecasts cont.

- Analysis of the potential effects of the preferred alternative cont.
 - Environmental Justice Analysis:
 - EJ seeks to ensure that the benefits and burdens of transportation investments are shared as equitably as possible
 - Federal USDOT order directs consideration of low-income and minority populations
 - Use Travel Demand Model to compare how travel patterns and potential impacts differ for EJ and non-EJ populations for a variety of measures (from prior LRTP):
 - Jobs accessible
 - Shopping opportunities accessible
 - Average commute time
 - Average travel time for shopping purposes
 - Average travel time to closest hospital
 - Share of the population close to key destinations (food stores, hospitals, educational institutions)

Resilience 2050 White Papers

- Monthly releases on LRTP related topics, with a focus on factors and trends that may impact the transportation system over the next 20-25 years
- <https://publicinput.com/resilience2050whitepapers>
- Topics include:
 - Project Scoring: February 2022
 - Traffic safety: March 2022
 - Freight and trucking: March 2022
 - Transit: May 2022
 - Air Quality: June 2022
 - Active Transportation: *upcoming*
 - Socioeconomic Forecasting and Demographic Trends: *upcoming*
 - Emerging Technologies such as electric vehicles, Connected and Autonomous Vehicles, and micromobility: *upcoming*

Finalizing the LRTP

- Draft of Resilience 2050 released for public review: March 2023
- Public comment period: ~April/May 2023
- Review and respond to public comments: May 2023
- BRTB Vote: July 2023 along with 2024 – 2027 TIP and associated air quality conformity determination

Sample public involvement advertisement for the last LRTP, Maximize2045

**TRANSPORTATION MATTERS;
SO DOES YOUR OPINION.**

Over 200 projects worth \$15 billion
are planned for the region.
Are we on the right track?

CHECK OUT OUR PLAN

MAXIMIZE2045.com
A PERFORMANCE-BASED TRANSPORTATION PLAN

Resources

- *BMC Website:* [Resilience2050.com](https://resilience2050.com)
- *Public Input Website:* <https://publicinput.com/resilience2050>
- *White Papers:* <https://publicinput.com/resilience2050whitepapers>

Thanks!



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