



# ***Resilience 2050***

Adapting to the Challenges of Tomorrow

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Update on  
***Resilience 2050: Adapting to the Challenges of Tomorrow***  
October 4, 2022

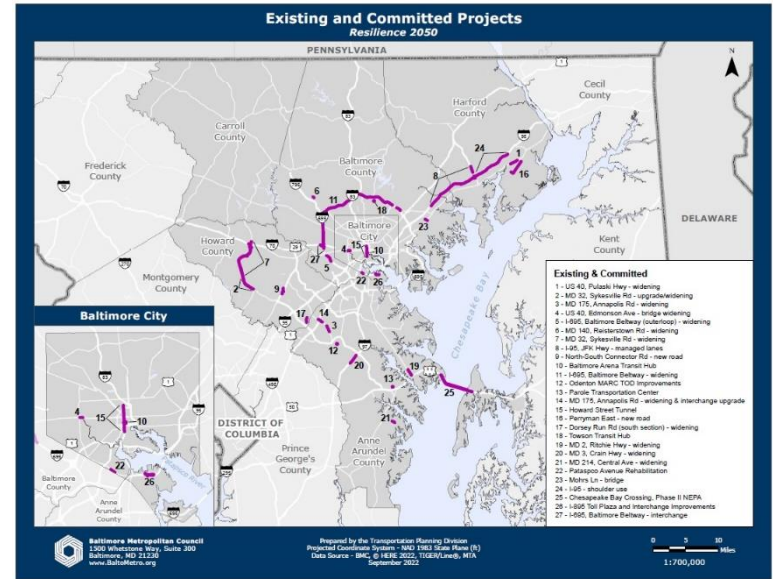


# White Papers

- <https://publicinput.com/resilience2050whitepapers>
- White paper content will be summarized and included throughout the plan
  - Factors and trends
  - Emerging technologies
- Survey Questions and Comments used to adapt *Resilience 2050* content
- Upcoming white papers
  - Active Transportation (October)
  - Round 10 Socioeconomic Forecasts of Housing, Employment, and Jobs (November)
  - Demographic Trends anticipated to impact transportation (December or January)
  - Financial Forecast (December or January)
  - Climate change and Resilience (February)

# Existing and Committed List

- Updated for each LRTP
- E&C = Complete projects or projects with funding in place to complete the project by 2027
- Why 2027?
  - *Resilience 2050* Planning Horizon = 2028-2050
  - Extends through timeframe of TIP adopted in conjunction with the LRTP (2024-2027 TIP)
- Uses:
  - Presents a more complete picture of planned transportation investments
  - Travel Demand Modeling - Baseline scenario for comparison with the preferred alternative



# ***Project Submittals and Scoring***

- Technical scoring nearly complete
- Accessibility and Mobility criteria require additional time due to travel demand modeling
  - Access to Jobs
  - Highway Mobility: Vehicle hours of delay for passenger, commercial, and truck
  - Transit Mobility: Transit options <45 minutes; Ridership; Reduction in Transfers

# Cost Estimation

- Local Transit Cost Estimates from RKK
  - Class 5 Estimates – projects with lowest level of project definition
  - Cost assumptions and information based on project submittal forms, follow up questions from RKK, and cost estimates for similarly scoped projects
    - Establish area/length/volume (lane mile of roadway)
    - Identify major items to be included in composite item (pavement, earthwork, sidewalk, etc.)
    - Apply unit costs
  - May differ significantly from Maximize2045 cost estimates due to additional information (for example, if a BRT project is no longer anticipated to include dedicated or repurposed lanes)

# Cost Estimation

- **MDOT MTA Cost Estimates**
  - Based on existing estimates from Cornerstone plans, Capital Needs Inventory, RTP, etc.
  - East-West and North-South based on average per mile costs across all alternatives for the East-West Transit Corridor
  - All transit hubs assumed to cost \$5 million unless otherwise noted as project planning has not yet begun
- **Roadway Cost Estimates completed by MDOT SHA**
  - Projects in the CTP used CTP cost estimates
  - Projects not in the CTP were estimated using the 2022 MDOT SHA Cost Estimating Manual

# Financial Forecast

- Local Financial Forecast complete
- State and Federal Forecast anticipated this week:
  - Annual forecasts through 2050
  - Operations, System Preservation, and Major Capital
- BRTB Resolution in November or December
- Project costs inflated to expected year of operation using an inflation factor consistent with MDOT expectations
  - Projects divided into two halves based on anticipated YOP (2028-2039; 2040-2050)
  - Projects inflated to midpoint
  - Inflation factor can make a BIG difference (Maximize2045 = 2%)
    - Inflating \$100 million project to 2045 at 2% = \$158 million
    - Inflating \$100 million project to 2045 at 4% = \$246 million

# *Next Steps*

- Will have a draft preferred alternative once scoring, financial forecast and cost estimates are finalized