



# maximize2040

A PERFORMANCE-BASED TRANSPORTATION PLAN

for a *greater* Baltimore Region



## Draft Baltimore Regional Transportation Plan

*Public Outreach – 2015*

# What is the BRTB?



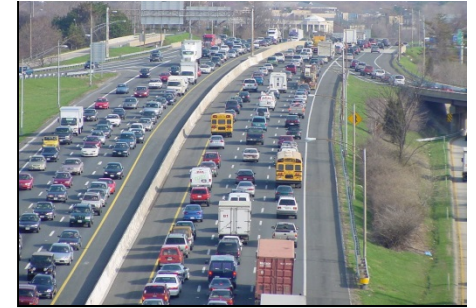
- Baltimore Regional Transportation Board
- Federally designated Metropolitan Planning Organization (MPO)
- 11-member policy board
- Makes decisions about how to invest federal and state funds in roadway and transit projects and programs

# BRTB Members

- Voting
  - County executives of Anne Arundel, Baltimore, Harford, and Howard counties
  - Carroll County Commissioner
  - Mayors of Baltimore City and City of Annapolis
  - Secretary of Maryland Dept. of Transportation
  - Administrator of Maryland Transit Administration (on behalf of eligible public transit providers)
- Non-Voting
  - Secretary of Maryland Dept. of the Environment
  - Secretary of Maryland Dept. of Planning



# What is *Maximize2040*?

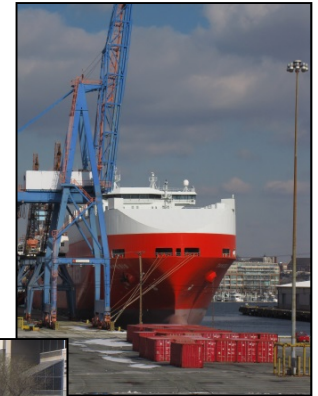


- Long-range transportation plan (2020-2040) for the Baltimore region
- Plan updated every 4 years (last plan: 2011)
- Major highway and transit projects
- Funding set aside for:
  - Transportation Emissions Reduction Measures
  - Complete Streets / Bicycle-Pedestrian
  - Ladders of Opportunity
  - Transportation System Management & Operations



# Issues – How Will We Grow?

- Demographics:
  - Population getting older, more diverse
- Ladders of Opportunity:
  - Access to jobs
- Economic Growth:
  - Goods movement
  - Development/redevelopment
- Land Use:
  - Pressures to develop outside of PFAs



# Issues – Health of Region



- Air Quality:
  - Nonattainment (ozone)
  - Maintenance (PM2.5, carbon monoxide)
- Greenhouse gases
- Chesapeake Bay





# Elements of *Maximize2040*

- Where do we want to go as a region?
  - Regional transportation goals
  - Example: “**Improve System Safety**”
- How can we get there?
  - Implementation strategies
  - Example: “**Eliminate hazardous conditions in high-crash locations**”



# Maximize2040 Goals

- Improve System Safety
- Improve and Maintain the Existing Infrastructure
- Improve Accessibility
- Increase Mobility
- Conserve and Enhance the Environment



# *Maximize2040* Goals

- Improve System Security
- Promote Prosperity and Economic Opportunity
- Foster Participation and Cooperation Among Stakeholders
- Promote Informed Decision Making



# Elements of *Maximize2040*



- How will we evaluate our progress?
- Emphasis on performance-based planning and programming
  - Performance measures to monitor system conditions and performance
  - Performance targets
  - Example: “Decrease number of highway fatalities to zero by 2040”

↑  
Performance Target

↖  
Performance Measure

# System Performance



- See display board for details on measures and targets
- *Maximize2040* includes “state of the system” report showing recent conditions and trends for each measure
- BMC staff will present annual “report card” to BRTB on regional progress relative to performance measures and targets



# Elements of *Maximize2040*

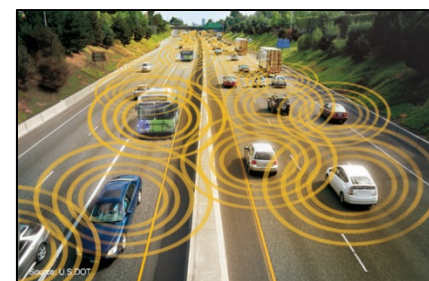
- What might the future bring?
- Where will people live and work?
  - 2040 population and employment forecasts
- How much funding will we have?
  - 2020-2040 revenue forecasts





# Elements of *Maximize2040*

- What might the future bring?
- What if the worst (or best) happens?
- Explored three extreme scenarios:
  - Growth spillover from Washington, DC
  - Climate change
  - “Driverless” vehicles
- What can we do now to prepare?
  - Which strategies make the most sense for all scenarios?





# Elements of *Maximize2040*

- Which projects will help region make progress toward goals?
- Candidate projects from jurisdictions and state
  - Evaluate projects using goal-based criteria
  - Example: Projects with Complete Streets features get more points
- Public project ideas (>1,140 ideas)
  - Submitted to Technical Committee, BRTB, and operating agencies for consideration



# Elements of *Maximize2040*

- What can we pay for?
  - Fiscal constraint: estimated costs (year of expenditure) vs. forecasted revenues
- Select best mix of projects
  - **Balance: effectiveness + fiscal constraint**
- Test selected projects:
  - Air quality conformity
  - Travel demand
  - Environmental Justice





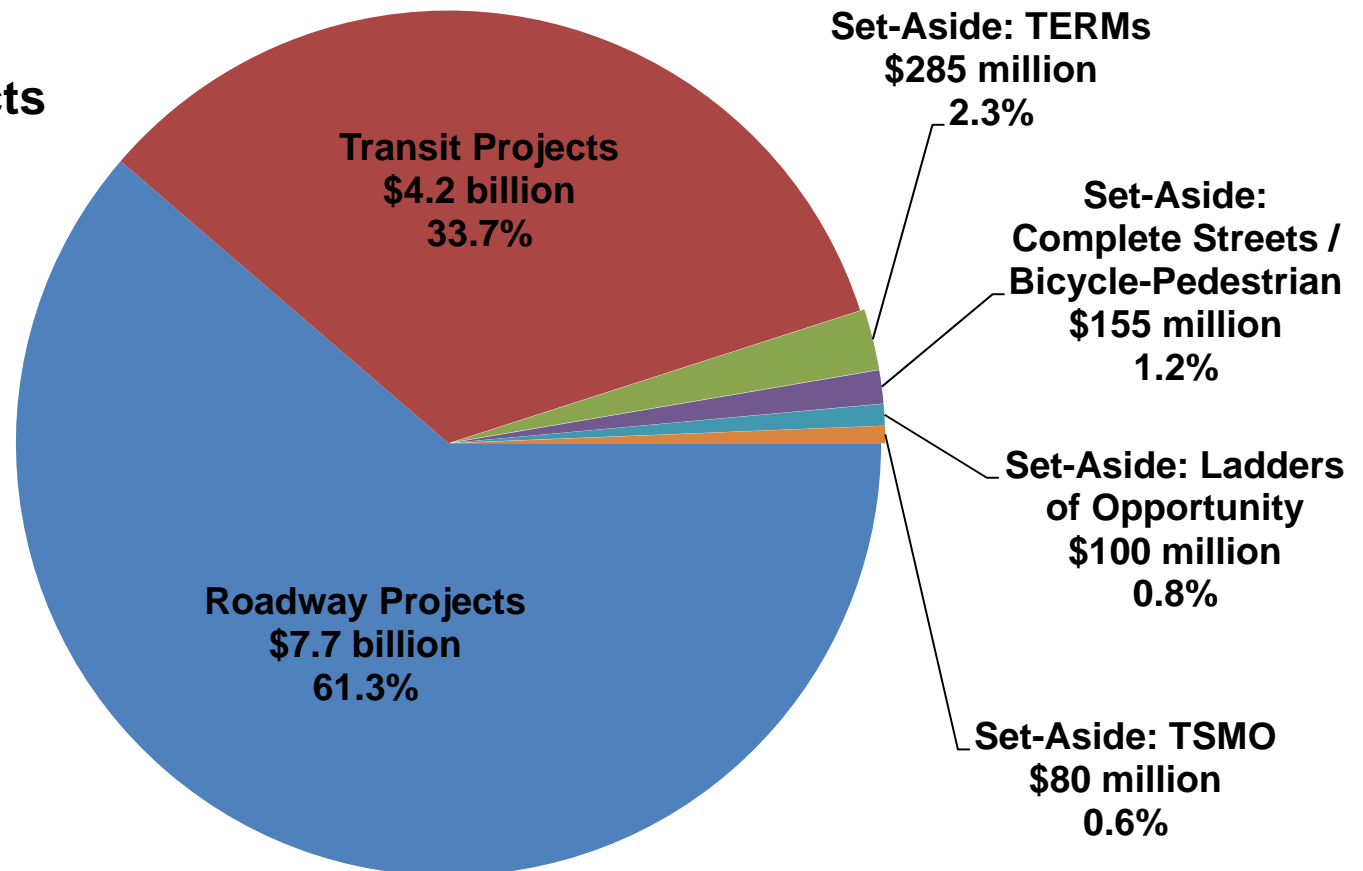
# Total Costs: \$54.5 B

- System operations (55%) – \$30 billion
- System preservation (22%) – \$12 billion
  - Highways: \$7.5 billion
  - Transit: \$4.6 billion
- System expansion (23%) – \$12.5 billion
  - Highways: \$7.7 billion
  - Transit: \$4.2 billion
- Total (YOE Estimate) – \$54.5 billion



# System Expansion: \$12.5 B

Estimated YOE  
Costs for Major  
Expansion Projects  
and Set-Aside



# Air Quality Conformity Analysis



- Process:
  - State Implementation Plan (SIP) developed by MDE determines how the region will reach national air quality standards. SIP includes motor vehicle emission “budgets.”
  - Region must show that its transportation plans and programs **conform to air quality goals** in the SIP and do not exceed emission budgets.
- Conclusion:
  - Projected mobile source emissions resulting from *Maximize2040* projects are **below established SIP emissions “budgets”** for 2017, 2025, 2035, and 2040.

# Travel Demand Analysis



- Process:
  - Apply 2040 population / employment growth forecasts.
  - Simulate travel on region’s transportation network under various scenarios (2010, “no-build,” *Maximize2040*).
- Conclusions: Highways
  - 2010 (observed): 28% of total VMT is congested
  - 2040 “no-build”: 41% of total VMT will be congested
  - *Maximize2040*: 38% of total VMT will be congested
- Conclusions: Transit
  - 2040 transit ridership: increase by 6% over 2010 levels
  - 2040 transit mode share: decrease from 4.7% to 4.3%

# Environmental Justice Analysis



- Process:
  - Determine whether there are any EJ populations potentially affected by the activity.
  - If one or more EJ populations are present, consider the potential effects of projects on the EJ populations.
- Conclusions:
  - Analysis shows **virtually no change or a slight improvement in accessibility** were *Maximize2040* projects to be implemented.
  - *Maximize2040* projects **will not disadvantage high-minority and low-income communities.**

# Next Steps



- Public meetings: Sept. 1 through Oct. 15
- Public comment period ends Oct. 15
- BRTB meeting Oct. 27 (elected officials)
- Preparation of final documents
- BRTB approval of final documents: Nov. 24
- FHWA / FTA document review
- U.S. EPA acceptance of air quality conformity determination