

# Chapter 3: Financial Plan



Each metropolitan transportation plan must include a financial plan. In this financial plan, the region demonstrates consistency between (1) reasonably available and projected sources of revenues and (2) the estimated costs of implementing proposed transportation system improvements. This consistency is referred to as “fiscal constraint.”

## Fiscal Constraint

MAP-21 requires regional transportation plans to be fiscally constrained. That is, the total estimated costs of projects and programs cannot exceed forecasted revenue levels.

For *Maximize2040*, the BRTB, in consultation with the Maryland Department of Transportation, has forecasted the amount of revenues from federal, state, local, and private sources the region reasonably anticipates will be available for the 21-year period from 2020-2040.

## Available/Anticipated Revenues

Shown below are revenues (from federal, state, local, and private sources) expected to be available for the 2020-2040 period, broken down by type of investment:

- System operations: \$29.954 billion
- System preservation: \$12.102 billion
- Major expansion projects: \$15.590 billion
- **Total revenues: \$57.646 billion**

The development of *Maximize2040* was an 18-month process. One of the early components was the financial forecast. The forecast included an increased state share of funding to cover the cost of a New Starts project (Red Line light rail project) that was in the last regional transportation plan. Late in the process of developing *Maximize2040*, the new administration decided to withdraw the project from the New Starts Program. The state funding set aside for this project will be reallocated to other projects within the state of Maryland but not necessarily within the BRTB’s region. The state as a member of the BRTB will continue to work and coordinate with the other BRTB members to address additional monies available to the Baltimore region.

## Definitions – Roadway Projects

*System operations* (roadways) – Covers the salaries and wages of personnel who maintain and operate highway systems and vehicles.

*System preservation* (roadways) – Covers capital costs for routine asset management and maintenance activities. These activities include: repaving roadways; repairing bridges; clearing snow and ice; and maintaining roadside lighting, guardrails, and signs.

### Definitions – Transit Projects

*System operations* (transit) – Covers routine maintenance, employee wages, spare parts, and consumables. Note that while routine maintenance is considered a function of system operations, maintenance activities may be paid for with federal capital funds.

*System preservation* (transit) – Covers planning, design, acquisition/construction, and major asset rehabilitation activities necessary to keep the existing transit system in a State of Good Repair.

### System Expansion Funding

The remaining \$15.59 billion will be available to fund *major expansion projects*. Examples of such projects include major new or widened roads, major roadway and bridge rehabilitations, and major new or expanded transit service.

### Forecasted Revenues by Year: 2020-2040

The table below shows forecasted revenues by year for system operations, system preservation, and major expansion projects in the region. Consistent with MDOT assumptions, the BRTB has assumed that 41.6% of statewide revenues (federal + state + private funds) will be available for the Baltimore region for the 2020-2040 period.

In addition to revenues expected from federal, state, and private funding sources, the table shows \$150 million from a local source. Anne Arundel County has indicated it will be able to commit this amount toward its major expansion projects. With this local commitment, total projected revenues for major expansion projects are \$15.59 billion.

#### Maximize2040: Regional Revenue Forecasts – System Operations, System Preservation, and Major Expansion Projects

MDOT Statewide Revenue Projections			Baltimore Region Revenue Projections (41.6% of Statewide Totals for Operations and Preservation)					Totals
	Operations	Preservation	Operations	Preservation	Major Expansion	Cumulative Expansion		
2020	\$2,217,000,000	\$1,105,000,000	\$922,000,000	\$460,000,000	\$538,000,000	\$538,000,000		
2021	\$2,307,000,000	\$1,129,000,000	\$960,000,000	\$470,000,000	\$559,000,000	\$1,097,000,000		
2022	\$2,441,000,000	\$1,154,000,000	\$1,015,000,000	\$480,000,000	\$565,000,000	\$1,662,000,000		
2023	\$2,539,000,000	\$1,179,000,000	\$1,056,000,000	\$490,000,000	\$585,000,000	\$2,247,000,000		
2024	\$2,641,000,000	\$1,205,000,000	\$1,099,000,000	\$501,000,000	\$537,000,000	\$2,784,000,000		
2025	\$2,745,000,000	\$1,232,000,000	\$1,142,000,000	\$513,000,000	\$561,000,000	\$3,345,000,000		
2026	\$2,855,000,000	\$1,259,000,000	\$1,188,000,000	\$524,000,000	\$587,000,000	\$3,932,000,000		
2027	\$2,968,000,000	\$1,287,000,000	\$1,235,000,000	\$535,000,000	\$613,000,000	\$4,545,000,000		
2028	\$3,086,000,000	\$1,315,000,000	\$1,284,000,000	\$547,000,000	\$640,000,000	\$5,185,000,000		
2029	\$3,207,000,000	\$1,344,000,000	\$1,334,000,000	\$559,000,000	\$670,000,000	\$5,855,000,000		
2030	\$3,334,000,000	\$1,373,000,000	\$1,387,000,000	\$571,000,000	\$699,000,000	\$6,554,000,000		
2031	\$3,465,000,000	\$1,404,000,000	\$1,441,000,000	\$584,000,000	\$731,000,000	\$7,285,000,000		
2032	\$3,604,000,000	\$1,434,000,000	\$1,499,000,000	\$597,000,000	\$763,000,000	\$8,048,000,000		
2033	\$3,748,000,000	\$1,466,000,000	\$1,559,000,000	\$610,000,000	\$796,000,000	\$8,844,000,000		
2034	\$3,897,000,000	\$1,498,000,000	\$1,621,000,000	\$623,000,000	\$831,000,000	\$9,675,000,000		
2035	\$4,061,000,000	\$1,531,000,000	\$1,689,000,000	\$637,000,000	\$864,000,000	\$10,539,000,000		
2036	\$4,224,000,000	\$1,565,000,000	\$1,757,000,000	\$651,000,000	\$901,000,000	\$11,440,000,000		
2037	\$4,394,000,000	\$1,599,000,000	\$1,828,000,000	\$665,000,000	\$936,000,000	\$12,376,000,000		
2038	\$4,571,000,000	\$1,635,000,000	\$1,902,000,000	\$680,000,000	\$979,000,000	\$13,355,000,000		
2039	\$4,755,000,000	\$1,670,000,000	\$1,978,000,000	\$695,000,000	\$1,021,000,000	\$14,376,000,000		
2040	\$4,947,000,000	\$1,707,000,000	\$2,058,000,000	\$710,000,000	\$1,064,000,000	\$15,440,000,000		
	<b>\$72,006,000,000</b>	<b>\$29,091,000,000</b>	Revenues (Fed+State)	<b>\$29,954,000,000</b>	<b>\$12,102,000,000</b>	<b>\$15,440,000,000</b>		<b>\$57,496,000,000</b>
			Revenues (Local)			\$150,000,000		<b>\$150,000,000</b>
			Total Revenues	<b>\$29,954,000,000</b>	<b>\$12,102,000,000</b>	<b>\$15,590,000,000</b>		<b>\$57,646,000,000</b>

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## System Preservation Costs by Project Type

For this plan update, the federal agencies have requested that the BRTB show a breakdown of the funding projected for system preservation by project type. To comply with this request, SHA and MTA have provided the tables shown on the next page with the funding allocated for system preservation needs by project type.

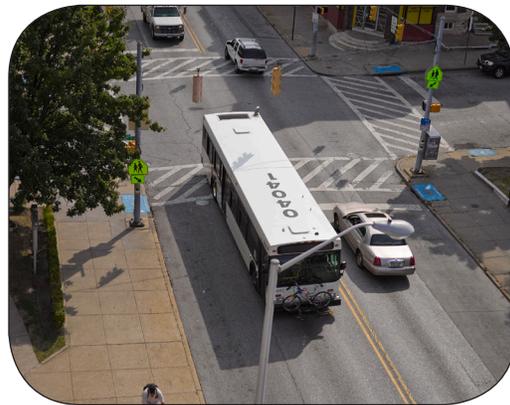
## Fiscal Constraint: Forecasted Revenues vs. System Expansion Costs

Here is a breakdown of forecasted revenues versus total estimated costs for major expansion projects for the 2020-2029 and 2030-2040 periods. This breakdown demonstrates that the region expects to have sufficient funds to pay for the projects in *Maximize2040* in the time periods in which the region expects these projects to be implemented.

- Forecasted Revenues, 2020-2029: \$6,005,000,000
- Estimated Costs, 2020-2029: \$2,906,000,000  
\$3,075,000,000
  
- Forecasted Revenues, 2030-2040: \$9,585,000,000
- Estimated Costs, 2030-2040: \$9,578,000,000  
\$ 7,000,000

Appendix E contains copies of the materials used to determine the funding anticipated to be available for implementing the programs and projects in *Maximize2040*:

- “Financially Constrained Long Range Plan, Year 2010 to 2040 Update for the Baltimore Metropolitan Area,” prepared by the Maryland Department of Transportation
- Letter of commitment of funding from Anne Arundel County



Maximize2040: SHA Regional System Preservation Breakdown						
SHA System Preservation	2020	2021-2025	2026-2030	2031-2035	2036-2040	Totals
Pavement: Resurfacing / Rehabilitation	\$91,000,000	\$485,000,000	\$540,000,000	\$602,000,000	\$672,000,000	\$2,390,000,000
Congestion Management	\$11,000,000	\$57,000,000	\$64,000,000	\$71,000,000	\$79,000,000	\$282,000,000
Environmental	\$32,000,000	\$171,000,000	\$191,000,000	\$213,000,000	\$237,000,000	\$844,000,000
Safety and Spot Improvements	\$75,000,000	\$399,000,000	\$445,000,000	\$496,000,000	\$553,000,000	\$1,968,000,000
Urban Reconstruction	\$11,000,000	\$57,000,000	\$64,000,000	\$71,000,000	\$79,000,000	\$282,000,000
Bridges: Replacement/ Rehabilitation	\$59,000,000	\$314,000,000	\$350,000,000	\$390,000,000	\$435,000,000	\$1,548,000,000
Enhancements / Alternative	\$5,000,000	\$29,000,000	\$32,000,000	\$35,000,000	\$40,000,000	\$141,000,000
Transportation	\$284,000,000	\$1,512,000,000	\$1,686,000,000	\$1,878,000,000	\$2,095,000,000	\$7,455,000,000

Maximize2040: MTA Regional System Preservation Breakdown								
Base Category	System Preservation Sub-Category	Sum of Percent of Total	2020	2021-2025	2026-2030	2031-2035	2036-2040	Total
Admin/Maint Facilities	Agencywide Admin/Maint Facilities	1.18%	\$ 2,076,800	\$ 11,127,400	\$ 12,413,600	\$ 13,806,000	\$ 15,410,800	\$ 54,834,600
	Bus Admin/Maint Facilities	7.95%	\$ 13,992,000	\$ 74,968,500	\$ 83,634,000	\$ 93,015,500	\$ 103,827,000	\$ 369,436,500
	Light Rail Admin/Maint Facilities	0.11%	\$ 193,600	\$ 1,037,300	\$ 1,157,200	\$ 1,287,000	\$ 1,436,600	\$ 5,111,700
	MARC Admin/Maint Facilities	0.85%	\$ 1,496,000	\$ 8,015,500	\$ 8,942,000	\$ 9,945,000	\$ 11,101,000	\$ 39,499,500
	Mobility Admin/Maint Facilities	0.44%	\$ 774,400	\$ 4,149,200	\$ 4,628,800	\$ 5,148,000	\$ 5,746,400	\$ 20,446,800
<b>Admin/Maint Facilities Total</b>			<b>\$ 18,532,800</b>	<b>\$ 99,297,900</b>	<b>\$ 110,775,600</b>	<b>\$ 123,201,000</b>	<b>\$ 137,521,800</b>	<b>\$ 489,329,100</b>
Environmental	Agencywide Environmental	2.40%	\$ 4,224,000	\$ 22,632,000	\$ 25,248,000	\$ 28,080,000	\$ 31,344,000	\$ 111,528,000
Infrastructure	Agencywide Infrastructure	11.30%	\$ 19,888,000	\$ 106,559,000	\$ 118,876,000	\$ 132,210,000	\$ 147,578,000	\$ 525,111,000
	Light Rail Infrastructure	4.21%	\$ 7,409,600	\$ 39,700,300	\$ 44,289,200	\$ 49,257,000	\$ 54,982,600	\$ 195,638,700
	MARC Infrastructure	10.56%	\$ 18,585,600	\$ 99,580,800	\$ 111,091,200	\$ 123,552,000	\$ 137,913,600	\$ 490,723,200
	Metro Infrastructure	8.28%	\$ 14,572,800	\$ 78,080,400	\$ 87,105,600	\$ 96,876,000	\$ 106,136,800	\$ 384,771,600
<b>Infrastructure Total</b>			<b>\$ 60,456,000</b>	<b>\$ 323,920,500</b>	<b>\$ 361,362,000</b>	<b>\$ 401,895,000</b>	<b>\$ 448,611,000</b>	<b>\$ 1,596,244,500</b>
IT Systems	Agencywide IT Systems	2.19%	\$ 3,854,400	\$ 20,651,700	\$ 23,038,800	\$ 25,623,300	\$ 28,661,400	\$ 101,769,300
	ITP IT Systems	0.63%	\$ 1,108,800	\$ 5,940,900	\$ 6,627,600	\$ 7,371,000	\$ 8,227,800	\$ 29,276,100
<b>IT Systems Total</b>			<b>\$ 4,963,200</b>	<b>\$ 26,592,600</b>	<b>\$ 29,666,400</b>	<b>\$ 32,994,300</b>	<b>\$ 36,889,200</b>	<b>\$ 131,045,400</b>
Passenger Amenities	Agencywide Passenger Amenities	3.84%	\$ 6,758,400	\$ 36,211,200	\$ 40,396,800	\$ 44,928,000	\$ 50,150,400	\$ 178,444,800
	MARC Passenger Amenities	2.17%	\$ 3,819,200	\$ 20,463,100	\$ 22,828,400	\$ 25,389,000	\$ 28,340,200	\$ 100,839,900
	Metro Passenger Amenities	0.23%	\$ 404,800	\$ 2,168,900	\$ 2,419,600	\$ 2,691,000	\$ 3,003,800	\$ 10,688,100
<b>Passenger Amenities Total</b>			<b>\$ 10,982,400</b>	<b>\$ 58,843,200</b>	<b>\$ 65,644,800</b>	<b>\$ 73,008,000</b>	<b>\$ 81,494,400</b>	<b>\$ 289,972,800</b>
Rolling Stock	Agencywide Rolling Stock	0.32%	\$ 563,200	\$ 3,017,600	\$ 3,365,400	\$ 3,744,000	\$ 4,179,200	\$ 14,870,400
	Bus Rolling Stock	15.63%	\$ 27,598,800	\$ 147,590,900	\$ 164,427,600	\$ 182,871,000	\$ 204,127,800	\$ 728,526,100
	Light Rail Rolling Stock	8.17%	\$ 14,379,200	\$ 77,043,100	\$ 85,948,400	\$ 95,589,000	\$ 106,700,200	\$ 379,659,900
	MARC Rolling Stock	7.25%	\$ 12,760,000	\$ 68,367,500	\$ 76,270,000	\$ 84,825,500	\$ 94,685,000	\$ 336,907,500
	Metro Rolling Stock	10.52%	\$ 18,515,200	\$ 99,203,600	\$ 110,670,400	\$ 123,084,000	\$ 137,391,200	\$ 488,864,400
	Mobility Rolling Stock	1.78%	\$ 3,132,800	\$ 16,785,400	\$ 18,725,600	\$ 20,826,000	\$ 23,246,800	\$ 82,716,600
<b>Rolling Stock Total</b>			<b>\$ 76,859,200</b>	<b>\$ 411,808,100</b>	<b>\$ 459,408,400</b>	<b>\$ 510,939,000</b>	<b>\$ 570,330,200</b>	<b>\$ 2,029,344,900</b>
<b>Total</b>		<b>100.00%</b>	<b>\$ 176,000,000</b>	<b>\$ 943,000,000</b>	<b>\$ 1,052,000,000</b>	<b>\$ 1,170,000,000</b>	<b>\$ 1,306,000,000</b>	<b>\$ 4,647,000,000</b>

