

Resolution #23-13: Financial Forecast for *Resilience 2050: Adapting to the Challenges of Tomorrow* January 3, 2023



### **Financial Forecast**

- Metropolitan Transportation Plan rule under MAP-21 requires that "all necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified" (23 CFR § 450.324 (11) (ii))
- Federal, State and Local Forecasts from 2028-2050 for operations, system preservation, and expansion
  - State and Federal: Use forecast and methodology from MDOT
  - Local: Use forecasting tool developed in FY 2022 with Kimley-Horn





#### **MDOT State and Federal Financial Forecast**

| Year                 | Operating | System Preservation | Operating and<br>System Preservation | Expansion | Statewide Total |
|----------------------|-----------|---------------------|--------------------------------------|-----------|-----------------|
| 2028                 | \$2,734   | \$1,637             | \$4,371                              | \$701     | \$5,072         |
| 2029                 | \$2,849   | \$1,715             | \$4,564                              | \$735     | \$5,299         |
| 2030                 | \$2,968   | \$1,799             | \$4,767                              | \$771     | \$5,538         |
| 2031                 | \$3,091   | \$1,890             | \$4,981                              | \$810     | \$5,791         |
| 2032                 | \$3,217   | \$1,985             | \$5,202                              | \$851     | \$6,053         |
| 2033                 | \$3,350   | \$2,084             | \$5,434                              | \$893     | \$6,327         |
| 2034                 | \$3,488   | \$2,188             | \$5,676                              | \$938     | \$6,614         |
| 2035                 | \$3,633   | \$2,297             | \$5,930                              | \$985     | \$6,915         |
| 2036                 | \$3,787   | \$2,357             | \$6,144                              | \$1,087   | \$7,231         |
| 2037                 | \$3,946   | \$2,416             | \$6,362                              | \$1,200   | \$7,562         |
| 2038                 | \$4,112   | \$2,476             | \$6,588                              | \$1,320   | \$7,908         |
| 2039                 | \$4,286   | \$2,538             | \$6,824                              | \$1,446   | \$8,270         |
| 2040                 | \$4,467   | \$2,601             | \$7,068                              | \$1,581   | \$8,649         |
| 2041                 | \$4,656   | \$2,666             | \$7,322                              | \$1,725   | \$9,047         |
| 2042                 | \$4,853   | \$2,733             | \$7,586                              | \$1,877   | \$9,463         |
| 2043                 | \$5,060   | \$2,801             | \$7,861                              | \$2,039   | \$9,900         |
| 2044                 | \$5,275   | \$2,871             | \$8,146                              | \$2,212   | \$10,358        |
| 2045                 | \$5,500   | \$2,943             | \$8,443                              | \$2,392   | \$10,835        |
| 2046                 | \$5,735   | \$3,017             | \$8,752                              | \$2,585   | \$11,337        |
| 2047                 | \$5,981   | \$3,092             | \$9,073                              | \$2,789   | \$11,862        |
| 2048                 | \$6,238   | \$3,169             | \$9,407                              | \$3,006   | \$12,413        |
| 2049                 | \$6,504   | \$3,249             | \$9,753                              | \$3,237   | \$12,990        |
| 2050                 | \$6,783   | \$3,330             | \$10,113                             | \$3,483   | \$13,596        |
| Total<br>2028 – 2050 | \$102,513 | \$57,854            | \$160,367                            | \$38,663  | \$199,030       |

#### **MDOT State and Federal Financial Forecast**

Surface % of Statewide Expansion, 1981 – 2021: 84.9% Baltimore % of Total Statewide Surface Expansion Funds, 1981-2021: 36.1%

| Year            | Statewide Expansion<br>Funds | Statewide Surface<br>Percentage (84.9%) | Statewide Private<br>Funds | Total Statewide Surface<br>Expansion Funds | Baltimore Region<br>Expansion Funds (36.1%) |
|-----------------|------------------------------|-----------------------------------------|----------------------------|--------------------------------------------|---------------------------------------------|
| 2028            | \$701                        | \$595                                   | \$24                       | \$619                                      | \$224                                       |
| 2029            | \$735                        | \$624                                   | \$24                       | \$648                                      | \$234                                       |
| 2030            | \$771                        | \$655                                   | \$24                       | \$679                                      | \$245                                       |
| 2031            | \$810                        | \$688                                   | \$25                       | \$713                                      | \$257                                       |
| 2032            | \$851                        | \$722                                   | \$25                       | \$747                                      | \$270                                       |
| 2033            | \$893                        | \$758                                   | \$25                       | \$783                                      | \$283                                       |
| 2034            | \$938                        | \$796                                   | \$25                       | \$821                                      | \$297                                       |
| 2035            | \$985                        | \$836                                   | \$25                       | \$861                                      | \$311                                       |
| 2036            | \$1,087                      | \$923                                   | \$25                       | \$948                                      | \$342                                       |
| 2037            | \$1,200                      | \$1,019                                 | \$25                       | \$1,044                                    | \$377                                       |
| 2038            | \$1,320                      | \$1,121                                 | \$25                       | \$1,146                                    | \$414                                       |
| 2039            | \$1,446                      | \$1,228                                 | \$25                       | \$1,253                                    | \$452                                       |
| 2040            | \$1,581                      | \$1,342                                 | \$25                       | \$1,367                                    | \$494                                       |
| 2041            | \$1,725                      | \$1,464                                 | \$25                       | \$1,489                                    | \$538                                       |
| 2042            | \$1,877                      | \$1,593                                 | \$25                       | \$1,618                                    | \$585                                       |
| 2043            | \$2,039                      | \$1,731                                 | \$25                       | \$1,756                                    | \$634                                       |
| 2044            | \$2,212                      | \$1,878                                 | \$25                       | \$1,903                                    | \$687                                       |
| 2045            | \$2,392                      | \$2,031                                 | \$25                       | \$2,056                                    | \$742                                       |
| 2046            | \$2,585                      | \$2,194                                 | \$25                       | \$2,219                                    | \$802                                       |
| 2047            | \$2,789                      | \$2,368                                 | \$25                       | \$2,393                                    | \$864                                       |
| 2048            | \$3,006                      | \$2,552                                 | \$25                       | \$2,577                                    | \$931                                       |
| 2049            | \$3,237                      | \$2,748                                 | \$25                       | \$2,773                                    | \$1,002                                     |
| 2050            | \$3,483                      | \$2,957                                 | \$25                       | \$2,982                                    | \$1,077                                     |
| Total 2028-2050 | \$38,663                     | \$32,823                                | \$572                      | \$33,395                                   | \$12,062                                    |

#### MDOT State and Federal Financial Forecast

| Year               | Operating | System Preservation | Expansion | Cumulative<br>Expansion | Totals   |
|--------------------|-----------|---------------------|-----------|-------------------------|----------|
| 2028               | \$987     | \$591               | \$224     | \$224                   | \$1,802  |
| 2029               | \$1,028   | \$619               | \$234     | \$458                   | \$1,881  |
| 2030               | \$1,071   | \$649               | \$245     | \$703                   | \$1,965  |
| 2031               | \$1,116   | \$682               | \$257     | \$960                   | \$2,055  |
| 2032               | \$1,161   | \$717               | \$270     | \$1,230                 | \$2,148  |
| 2033               | \$1,209   | \$752               | \$283     | \$1,513                 | \$2,244  |
| 2034               | \$1,259   | \$790               | \$297     | \$1,810                 | \$2,346  |
| 2035               | \$1,312   | \$829               | \$311     | \$2,121                 | \$2,452  |
| 2036               | \$1,367   | \$851               | \$342     | \$2,463                 | \$2,560  |
| 2037               | \$1,425   | \$872               | \$377     | \$2,840                 | \$2,674  |
| 2038               | \$1,484   | \$894               | \$414     | \$3,254                 | \$2,792  |
| 2039               | \$1,547   | \$916               | \$452     | \$3,706                 | \$2,915  |
| 2040               | \$1,613   | \$939               | \$494     | \$4,200                 | \$3,046  |
| 2041               | \$1,681   | \$962               | \$538     | \$4,738                 | \$3,181  |
| 2042               | \$1,752   | \$987               | \$585     | \$5,323                 | \$3,324  |
| 2043               | \$1,827   | \$1,011             | \$634     | \$5,957                 | \$3,472  |
| 2044               | \$1,904   | \$1,036             | \$687     | \$6,644                 | \$3,627  |
| 2045               | \$1,986   | \$1,062             | \$742     | \$7,386                 | \$3,790  |
| 2046               | \$2,070   | \$1,089             | \$802     | \$8,188                 | \$3,961  |
| 2047               | \$2,159   | \$1,116             | \$864     | \$9,052                 | \$4,139  |
| 2048               | \$2,252   | \$1,144             | \$931     | \$9,983                 | \$4,327  |
| 2049               | \$2,348   | \$1,173             | \$1,002   | \$10,985                | \$4,523  |
| 2050               | \$2,449   | \$1,202             | \$1,077   | \$12,062                | \$4,728  |
| Total<br>2028-2050 | \$37,007  | \$20,883            | \$12,062  |                         | \$69,952 |

#### **Financial Forecast Comparison**

LRTP Financial Forecast Comparison: Funds by Category







# Methodology Notes

- Major Capital vs Expansion
  - Change in methodology from MDOT as to how they categorize projects
  - Prior LRTP project submittals were "major capital" projects which could include large scale projects that didn't expand roadway or transit capacity
    - Examples: Overhaul transit vehicles/infrastructure or roadway reconstruction without adding lanes
  - Major capital is now exclusively expansion
  - What this means:
    - System preservation funds in the financial forecast increase
    - Some projects submitted for the LRTP will be listed under the system preservation pot of funding
- Queen Anne's County





# Local Financial Forecast: Purpose

- Purpose: Understand local funding used by local jurisdictions to support transportation projects, and the breakdown of funding between:
  - System Preservation
  - Expansion
  - Operations
- Develop a local funding projection tool to help better understand how funding supports the future of transportation in the region through 2050
  - Include flexibility to update for future LRTP documents





# Local Financial Forecast: Methods

- Document reviews: Reviewed relevant local funding documents for BMC jurisdictions including:
  - Capital budgets
  - Operating budgets
  - Capital improvement plans (CIPs)
- Jurisdictional interviews: Interviewed relevant staff members from jurisdictions to determine/confirm:
  - Breakdown of local funding available for transportation (capital and operating)
  - Methods for projecting local funding growth





## Local Financial Forecast: Methods

- Determine baseline values of FY 2022 by funding source
  - HUR
  - General Funds
  - Bonds
  - Other
- Determine funding split and projected moving forward
- Compiled information into an excel-based tool that can be updated as needed





#### Local Financial Forecast

|                     | Local CAPITAL Funding for Transportation |                                   |             |                             |    |           |    |                                |    |            |     |                           |                          |            |      |                                   |       |                             |
|---------------------|------------------------------------------|-----------------------------------|-------------|-----------------------------|----|-----------|----|--------------------------------|----|------------|-----|---------------------------|--------------------------|------------|------|-----------------------------------|-------|-----------------------------|
|                     |                                          | Local Fundin                      | g Base (Y/N | )                           | \$ |           |    |                                |    |            |     |                           | Growth Rate (User Input) |            |      | :)                                |       |                             |
| County/Jurisdiction | HUR                                      | General<br>Funds (e.g.,<br>Taxes) | Bonds       | Other (e.g.,<br>Usage Fees) |    | HUR       |    | ieneral Funds<br>(e.g., Taxes) |    | Bonds      | Oth | ner (e.g., Usage<br>Fees) |                          | Subtotal   | HUR  | General<br>Funds (e.g.,<br>Taxes) | Bonds | Other (e.g.,<br>Usage Fees) |
| Anne Arundel County | x                                        | x                                 | x           | x                           | \$ | -         | \$ | 5,500,000                      | \$ | 35,380,000 | \$  | 5,558,900                 | \$                       | 46,438,900 | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |
| Baltimore City      | x                                        | x                                 | x           | x                           | \$ | 4,500,000 | \$ | 9,505,000                      | \$ | 23,650,000 | \$  | -                         | \$                       | 37,655,000 | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |
| Baltimore County    | x                                        | x                                 | x           | x                           | \$ | -         | \$ | 6,400,000                      | \$ | 47,640,000 | \$  | 1,100,000                 | \$                       | 55,140,000 | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |
| Carroll County      | x                                        | x                                 | x           | x                           | \$ | 2,422,195 | \$ | -                              | \$ | 15,017,700 | \$  | 4,746,000                 | \$                       | 22,185,895 | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |
| Harford County      | x                                        | x                                 | x           | x                           | \$ | -         | \$ | 11,021,179                     | \$ | 4,270,000  | \$  | -                         | \$                       | 15,291,179 | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |
| Howard County       | x                                        | x                                 | x           | x                           | \$ | 3,571,000 | \$ | 12,072,000                     | \$ | 7,915,000  | \$  | 2,400,000                 | \$                       | 25,958,000 | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |
| Queen Anne's County | x                                        | x                                 | x           | x                           | \$ | -         | \$ | 110,000                        | \$ | 428,000    | \$  | 720,000                   | \$                       | 1,258,000  | 1.2% | 3.5%                              | 0.0%  | 3.5%                        |

| KEY |                        |  |  |  |  |  |  |
|-----|------------------------|--|--|--|--|--|--|
| HUR | = Highway User Revenue |  |  |  |  |  |  |
|     | = User Input Field     |  |  |  |  |  |  |
|     | = Capital Budget       |  |  |  |  |  |  |
|     | = Operating Budget     |  |  |  |  |  |  |

|                | Local OPERATING Funding for Transportation |       |                             |                |      |                                   |        |                             | Division of Funding    |                   |            |                        |                     |  |
|----------------|--------------------------------------------|-------|-----------------------------|----------------|------|-----------------------------------|--------|-----------------------------|------------------------|-------------------|------------|------------------------|---------------------|--|
|                | :                                          | \$    |                             |                |      | Growth                            | n Rate |                             | 9                      | % Total Breakdown |            |                        | Capital % Breakdown |  |
| HUR            | General Funds<br>(e.g., Taxes)             | Bonds | Other (e.g., Usage<br>Fees) | Subtotal       | HUR  | General<br>Funds (e.g.,<br>Taxes) | Bonds  | Other (e.g.,<br>Usage Fees) | System<br>Preservation | Expansion         | Operations | System<br>Preservation | Expansion           |  |
| \$ 6,520,727   | \$ 33,889,400                              | \$-   | \$-                         | \$ 40,410,127  | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 35%                    | 18%               | 47%        | 65%                    | 35%                 |  |
| \$ 151,800,000 | \$-                                        |       | \$ 40,401,000               | \$ 192,201,000 | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 16%                    | 0%                | 84%        | 100%                   | 0%                  |  |
| \$ 8,868,000   | \$ 41,666,595                              | \$-   | \$-                         | \$ 50,534,595  | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 47%                    | 5%                | 48%        | 90%                    | 10%                 |  |
| \$-            | \$ 12,208,324                              | \$-   | \$-                         | \$ 12,208,324  | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 65%                    | 0%                | 35%        | 100%                   | 0%                  |  |
| \$ 3,028,222   | \$ 38,008,000                              | \$-   | \$ 15,892,000               | \$ 56,928,222  | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 20%                    | 1%                | 79%        | 95%                    | 5%                  |  |
| \$-            | \$ 41,433,000                              | \$-   | \$ 1,423,000                | \$ 42,856,000  | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 25%                    | 13%               | 62%        | 66%                    | 34%                 |  |
| \$ 1,147,669   | \$ 4,100,496                               | \$-   | \$-                         | \$ 5,248,165   | 1.2% | 3.5%                              | 0.0%   | 3.5%                        | 19%                    | 0%                | 81%        | 100%                   | 0%                  |  |

## Local Financial Forecast

| Time Period         | Operating<br>(millions) | System<br>Preservation<br>(millions) | Expansion<br>(millions) | Total<br>(millions) |
|---------------------|-------------------------|--------------------------------------|-------------------------|---------------------|
| 2028-2032           | \$2,829                 | \$1,223                              | \$185                   | \$4,237             |
| 2033-2037           | \$3,193                 | \$1,304                              | \$199                   | \$4,696             |
| 2038-2042           | \$3,614                 | \$1,397                              | \$215                   | \$5,226             |
| 2043-2047           | \$4,104                 | \$1,506                              | \$233                   | \$5,843             |
| 2048-2050           | \$2,731                 | \$963                                | \$150                   | \$3,844             |
| Total 2028-<br>2050 | \$16,471                | \$6,393                              | \$982                   | \$23,846            |



