



## **Department of Transportation Overview**

FY2023-FY2028 Capital Improvement Program

Steve Sharkey, Director January 13, 2022



### **DOT Mission**

The Baltimore City Department of Transportation's mission is to maintain and improve the transportation infrastructure to produce a safe, reliable, accessible and efficient system for everyone that provides for multiple and sustainable modes of transportation for residents, businesses and visitors — thereby promoting livable and vibrant communities across Baltimore City.

DOT is responsible for all right-of-way infrastructure, from sidewalks to curbs to roadways, conduits, bridges, and medians.

### **DOT Responsibilities**

- 2,000 miles of roadways
  (4,750 total lane miles)
- 7 miles of interstate highway
- 298 bridges & culverts
- o 4,500 miles of sidewalk
- o 38,000 ADA ramps

- o 450 miles of alleys
- 179 miles of bike lanes (incl. shared)
- o 76,000 streetlights
- 1,400 signalized intersections
- $\circ$  250,000 traffic/information signs
- 50 Million linear feet of conduit



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## **DOT Community Engagement in Determining Projects**

Community members have multiple ways to share their concerns and/or ideas related to capital improvement projects. These include:

#### **DOT Community Liaisons:**

DOT has five Community Liaisons who regularly engage with community members and stakeholders on agency services, project specific public meetings and issues with 311 service requests. The Liaison Team maintains constant communication with community stakeholders on all capital improvement projects, keeping them informed and engaged from concept to construction. Each liaison is assigned to specific council districts, allowing them the opportunity to build solid relationships with council representatives, residents and other stakeholders.

#### **Communications:**

The DOT's communications section provides information about capital projects via social media, the DOT website, and through forums such as NextDoor and GovDelivery.

#### 311:

Residents can submit requests for most DOT services through the 311 system. This is often is the first point of engagement for Baltimore City residents with the DOT.



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## Key Challenges

- Aging Infrastructure / Deferred Maintenance
- Limited Funding Sources (restrictive and time-intensive)
- Rising Costs to Improve Infrastructure
- Adapting Existing Infrastructure to Meet Current Design Standards and Best Meet the Current Public Needs
- Staffing capacity to take on new projects and under-staffing in many of our key roles.
- DOT is constantly seeking additional funding opportunities and partnerships to leverage available funds. With the many and varying needs of Baltimore City, often Transportation generated dollars are reallocated to other unrelated issues.



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Detailing the Key Challenge of Funding

- \$30 Million Annually in Federal Funds
  - FHWA oversight, administered through Maryland State Highway, in accordance with Title 23 U.S.C.; 23 CFR 635.105
  - Baltimore City functions as the Local Public Agency
  - Typically requires 20% Local Match (\$7.5M)
- \$15 Million Annually in County Transportation Bond Revenue (MDOT Issued)
  - Generally required to be used within 3 years of issuance
- Local Funding:
  - General Obligation Bonds & General Funds
    - FY23 Target: \$16M (Project Budget)
  - Highway User Revenue
    - Most Recently No HUR Funding Dedicated to Capital

\*Note: Conduit Program utilizes Enterprise Funds (Other)

Capital ....

CTR

Baltimore

City DOT

Fed

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#### Detailing the Key Challenge of Funding

# Local Funding - Highway User Revenue (HUR)

Components of HUR:

- Motor Fuel Tax
- Corporate Income Tax
- Sales and Use Tax (a portion of short-term vehicle rentals)
- Motor Vehicle Titling Fee
- Motor Vehicle Registration Fee

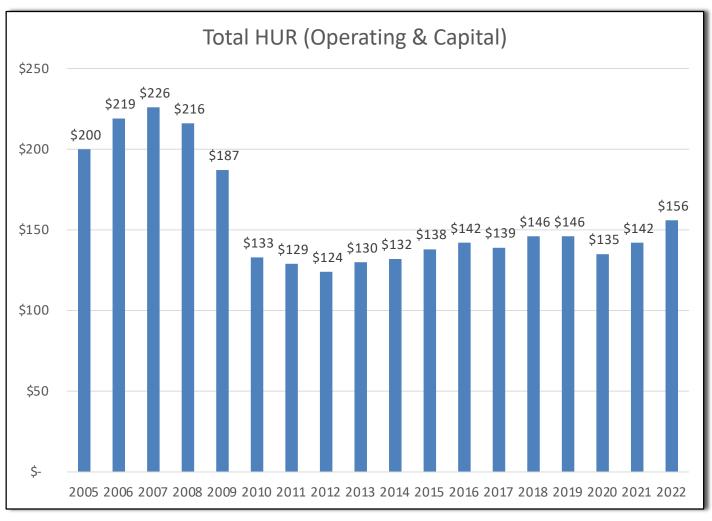
**Prior to 1998**: 15% of total State HUR was distributed to the City - larger percentage due to the City maintaining State Routes and Interstate

<u>1998-2009</u>: Baltimore City received the minimum of 11.5% of total State HUR or \$157.5M, plus 30% of the HUR minus the greater of the \$157.5M or 11.5% of HUR exceeding 1998's calculation

**2010**: State changed the formula to allocate revenues to the State's General Fund. This permanently reduced the allocation to the City which dropped to 8.6% in Fiscal 2010 and 7.9% in 2011

**Post-2012**: City allocation has ranged from 7.5% to the current 8.3% total State HUR. The 8.3% allocation is legislated to remain until FY2025, when its scheduled to be reduced to 7.7%.

**<u>2013</u>**: The State stopped allocating HUR to their General Fund, but did not reinstate the allocation to the City





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#### Detailing the Key Challenge of Funding

**Capital Allocations** 

## Local Funding in the Capital Program

General Funds / HUR - Capital Allocation Transp Revenue Bonds 80 \$73 \$66 70 \$61 60 Millions \$47 \$45 50 \$41 \$37 40 \$29 \$28 \$27 \$26 \$25 \$25 \$24 30 \$21 20 ζ2 \$5 10 Ş Ş 0 2016 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2017 2018 2019 2020 2021 2022

The reduction in HUR funding, as allocated by the State of Maryland, has severely affected BCDOT's capital funding. The majority, if not all, of HUR funding has been dedicated to operating costs. To offset a portion of the loss within the capital program, in 2014 the City began utilizing County Transportation Revenue Bonds (\$15 million per year) to supplement funding, and general funds. The total local funding, however, has continued to be significantly less.

BCDOT's Annual Capital Funding now amounts to approximately 35% of the peak as received in 2007, a difference of over <u>\$45 million a year</u>





## **Program Priorities**

- State of Good Repair: Baltimore City DOT maintains and restores critical infrastructure such as bridges, roadways, ADA / sidewalks, lighting, bicycle, and transit infrastructure.
- **Complete Streets:** Complete Streets projects prioritize the safety, comfort, and convenience of people walking, biking, or using transit and are prioritized through an equity lens.
- **Traffic Safety**: DOT prioritizes traffic safety throughout the transportation network, with the goal of becoming a Vision Zero city and eliminating all traffic fatalities and severe injuries.
- Sustainable Transportation Alternatives: DOT plays a critical role in fostering sustainable, multimodal transportation alternatives which provide all citizens the option to safely travel in ways other than by single occupancy vehicles. DOT manages the following programs:
  - Charm City Circulator
    Shared Mobility (Scooters/E Bikes)
  - Harbor Connector

- Bike Facilities
- Plan Implementation: Implementing existing plans and developing plans to guide the DOT's work. These include the Bike Master Plan, the Transit Equity Gap Analysis, and DHCD's Framework for Community Development.



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## **Complete Streets Prioritization Process**

To evaluate potential CIP projects (major infrastructure, resurfacing and sidewalks), DOT will:

- Emphasize Equity
- Prioritize Safety
- Evaluate Asset Condition
- Reduce Geographic Boundary Influence
  Driven Work



COMPLETE



CIP Factor	Description	Weighting
Equity	Equity assessment of geographic area	2
Infrastructure Condition	Condition of the current infrastructure	1
Economic Development Potential	Potential economic development resultant from infrastructure investment	1
Safety	How well projects/roadways in the area align with the TowardZERO Baltimore Initiative and have the potential to address safety issues	1
Existing or Planned Work by Other Departments	Potential to leverage/ combine resources from projects being planned or constructed by other departments	1
Transit Dependency and Commute Times	Transit dependency of the population in the geographic area. Consider average commute times and the potential for projects in this area to improve commute times.	1

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# **NEW for FY23: Programs vs Projects**

## <u>PROGRAM</u>

DEFINITION: Programs are items of an ongoing nature that are funded each year. Recipients of funds are determined through an open, public application process or through a separate prioritization process within the agency

- Amount is set for 6-year program
- Not competitive



## PROJECT

DEFINITION: Projects are defined as physical betterments with a well-defined geography, scope, and construction timeframe.

- Competitive for most agencies
- Scored based on updated evaluation criteria

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## **Programs – As Set By Department of Planning**

(Program Budget: \$15 Million)

CIP No.	Project Title	Fed	СТВ	Gen	Other	Total
504-100	Sidewalk Reconstruction		\$2,260		\$1,000	\$3,260
504-200	Alley Reconstruction		\$500		\$200	\$700
506-754	Annual Urgent Needs Bridge Repairs		\$1,000			\$1,000
508-151	Neighborhood Traffic Calming			\$750		\$750
508-019	Citywide Bike & Pedestrian Improvements			\$500	\$2,000	\$2,500
508-465	Curb Repair-Slab Repair-ADA Ramps Upgrades		\$2,100			\$2,100
512-015	Towards Zero – Traffic Safety Improvements			\$1,000		\$1,000
512-077	Traffic Signal Reconstruction	\$249		\$590		\$839
514-002	Resurfacing JOC – Urgent Needs		\$1,500			\$1,500
514-214	Resurfacing – Northwest		\$1,200			\$1,200
514-215	Resurfacing – Southwest		\$1,200			\$1,200
514-216	Resurfacing – Southeast		\$1,200			\$1,200
514-846	Resurfacing - Northeast		\$1,200			\$1,200
	PROGRAM SUBTOTAL:	-	\$12,160	\$2,840	-	<u>\$15,000</u>

\*Note: \$15M Cap does not include Federal or Other Funding \$19.4 Total Approved in FY22, \$20.351M Total Approved in FY21

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## **DOT Long Term Capital Needs**

The capital needed to correct the deferred maintenance is approximately \$1.3 Billion. If DOT were to receive the funding to correct the deferred maintenance, the estimated projected annual funding for replacement of existing assets is \$158.35 Million. Correcting deferred maintenance would provide an acceptable level/condition for the infrastructure assets.

Asset Category	ESTIMATED CAPITAL NEEDED FOR DEFERRED MAINTENANCE TO BRING TO A STATE OF GOOD REPAIR	ESTIMATED ANNUAL CAPITAL FUNDING NEEDED FOR CAPITAL REPLACEMENT PER YEAR FOR THE NEXT 20 YEARS	AVERAGE PER YEAR APPROPRIATION IN THE CAPITAL BUDGET (OVER THE LAST THREE FISCAL YEARS)
Sidewalks / ADA Access	\$657M	\$37.85M	\$5.8M
Bridges	\$435M	\$31.75M	\$21.5M
Roadways	\$316M	\$64.8M	\$29.5M
DOT Facilities	\$79M	\$18.95M	-
Traffic Signalization	\$67M	\$5.35M	\$3.3M
Transit Infrastructure	\$50M	\$7.5M	\$3.3M
Alleys	\$44M	\$4.2M	\$1.5M
Lighting	\$33M	\$3.65M	-
Bicycle Facilities	\$7M	\$1.85M	\$1.1M
TOTAL	\$1.3B	\$158.35M	



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# Baltimore City DOT Recent Accomplishments









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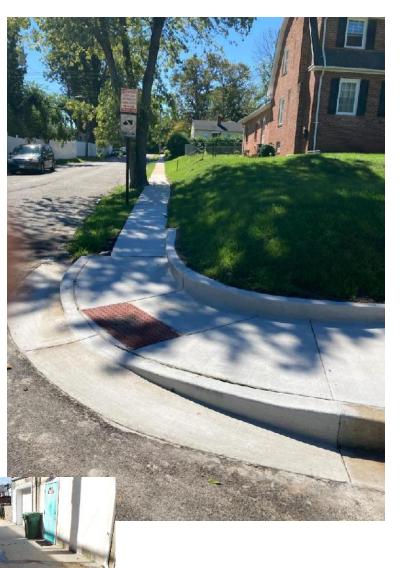
## **DOT Recent CIP Accomplishments (Alleys & Footways)**

### Calendar Year 2021:

- 2,225 Sidewalk Locations
- 330,520 SF of Sidewalk Reconstructed
- 5 School Locations through INSPIRE
- 25 Alley Locations
- 159,000 SF of Alleys

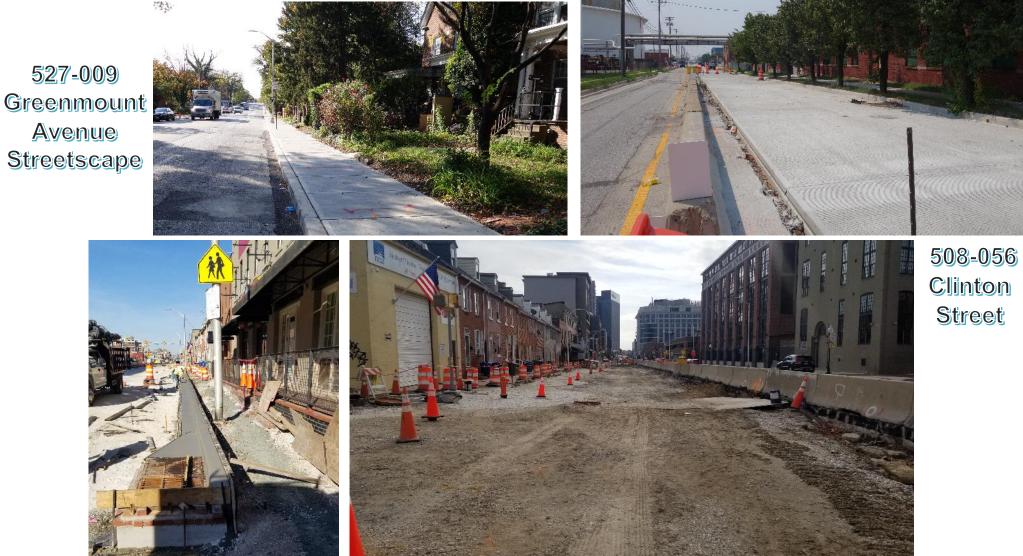






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#### **DOT Ongoing & Recent CIP Accomplishments (Reconstruction & Streetscape)**





508-021 Central Avenue

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## **DOT Recent CIP Accomplishments (Resurfacing)**

Fiscal Year 2021:

• Approximate Lane Miles Completed: 43 Lane Miles







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## **DOT Recent CIP Accomplishments (Bikes):**

#### New Bike Infrastructure:



Primary Street	From	То	Lane Miles	Туре
Washington Boulevard	Bush Street	MLK Jr Blvd	1.6	Bike Boulevard
Ostend Street	Washington Blvd	Ridgely Street	1.0	Bike Boulevard
Lawrence Street	Key Highway	Fort Avenue	0.2	Separated Bike Lanes
Melrose Avenue	Roland Avenue	Bellona Avenue	1.8	Separated Bike Lanes
33 <sup>rd</sup> Street and Hillen Road	Lakeside & 33 <sup>rd</sup>	33 <sup>rd</sup> & 32 <sup>nd</sup>	0.2	Separated Bike Lanes
Baker Street	Popular Grove St	Druid Hill Ave	3.2	Bike Boulevard
20 <sup>th</sup> Street	Howard Street	Aisquith Street	1.8	Separated Bike Lanes / Bike Boulevard







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## **DOT Bridge Construction Projects**

## **TOTAL CONSTRUCTION VALUE:** Approx. \$126 Million

- o 506-315 Edmondson Avenue Bridge
- o 508-882 Waterview, Annapolis, & Maisel St Bridges Over MD 295
- 509-087 Harford Road Bridge Over Herring Run
- o 509-004 Broening Highway Bridge Over Colgate Creek
- o 506-700 Edison Highway Over Amtrak









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## **DOT Conduit – Recent & Ongoing Work**

- Greenmount Corridor (29<sup>th</sup> to 43<sup>rd</sup>) Ductbank Construction
- Reconstruction of Ductbanks Prior to BGE 4KV Feeder Conversion
- Service Requests Spot Locations

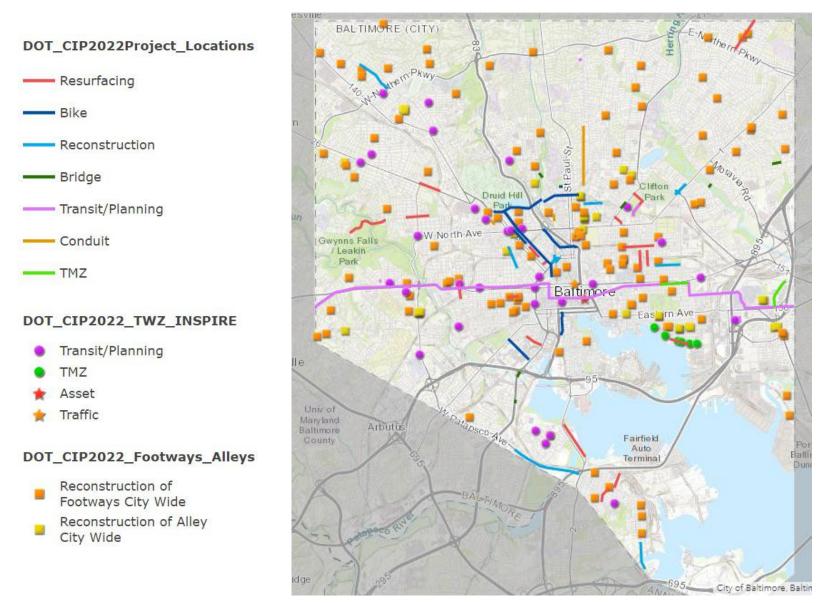






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## Map of How Bulk Funds are Spent



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# Baltimore City DOT FY2023-FY2028 CIP Request



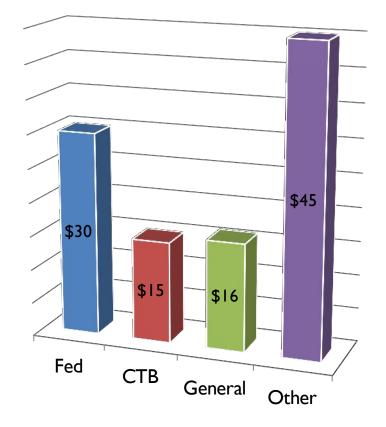
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## DOT FY 23 Request Breakdown

#### Key Highlights of Request

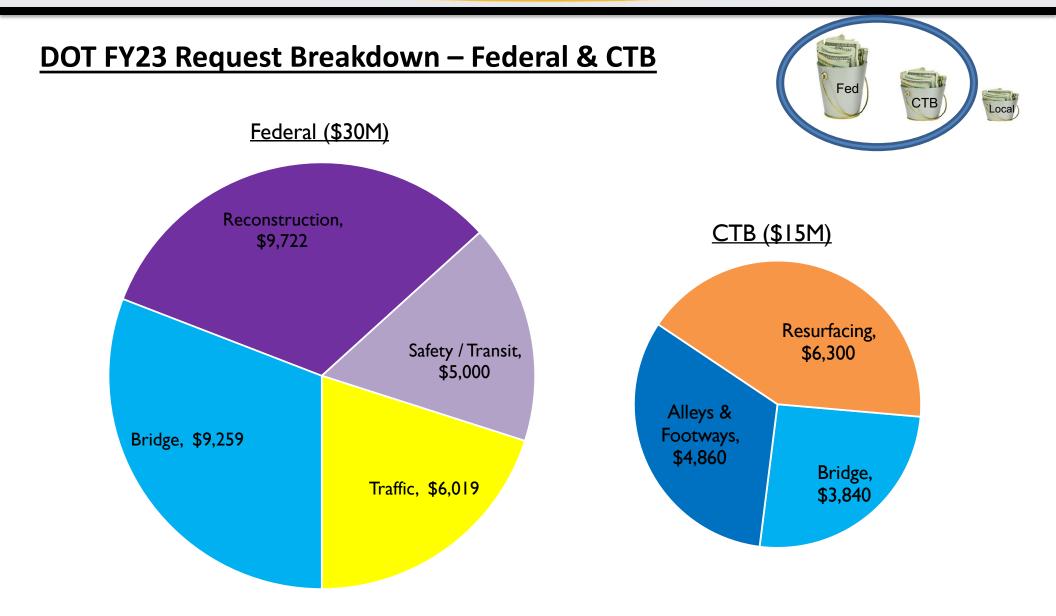
- Alleys & Footways \$9.060M
- Resurfacing \$6.3M
- Bridges \$17.009M
- Reconstruction \$12.534M
- Traffic Signals \$8.552M
- Toward Zero / Traffic Calming \$1.75M
- Bike \$3.845
- Transit \$5M
- Conduits \$45M Enterprise Funds





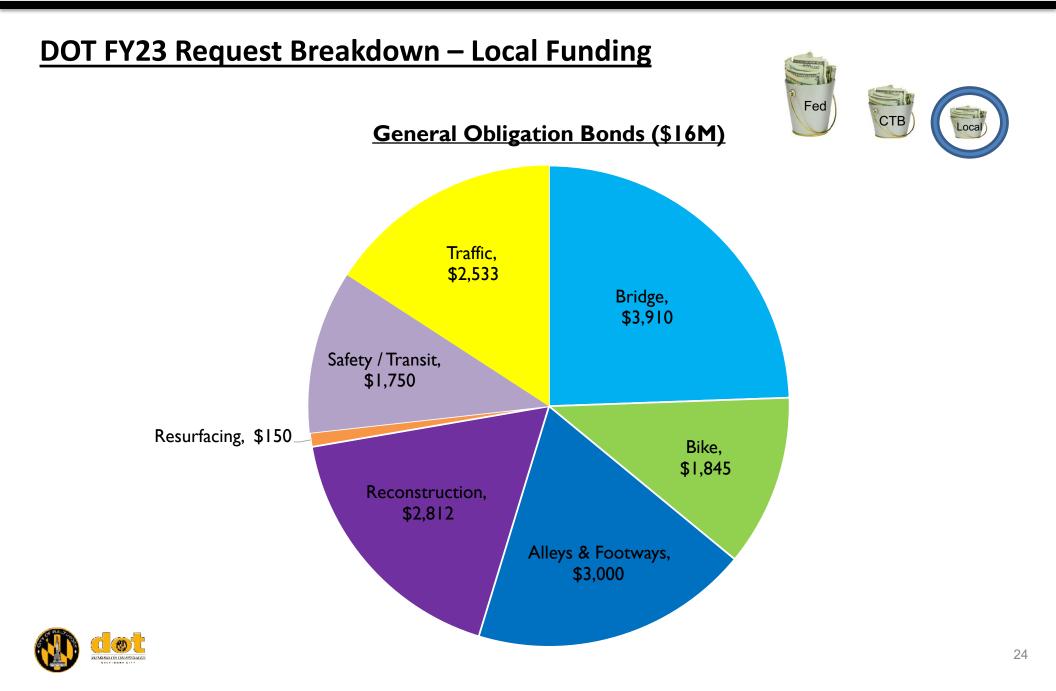


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## DOT FY 23-28 Requests

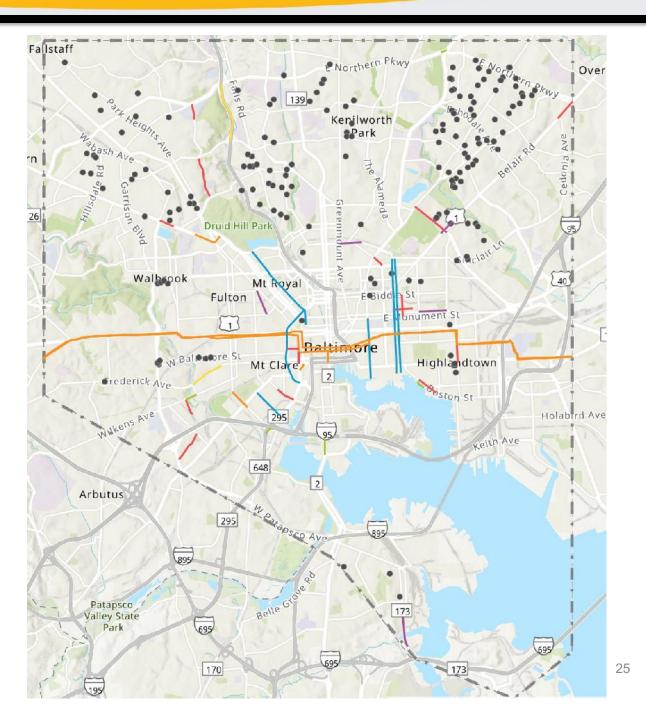


#### DOT\_CIP2023\_Footways\_Alleys

Baltimore Boundary

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# FY23 Request: Complete Streets Accessibility, Safety, & Multi-Modal



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## **DOT FY 2023 Requests – Alleys & Footways**

CIP No	Description	Federal	СТВ	General	Other	TOTAL
504-100	Sidewalk Reconstruction		2,260		1,000	3,260
504-200	Alley Reconstruction			500	200	700
508-465	Curb Repair / Slab Repair / ADA Ramp Upgrades			2,100		2,100
504-400	ADA Infrastructure Upgrades			3,000		3,000

\*Additional Funding: INSPIRE Program Expected to Contribute Funds to Continue Primary Walking Route Work for Additional School Locations







# TOTAL: \$9.060 Million





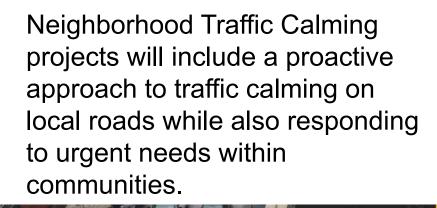


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## **DOT FY 2023 Requests – Traffic Safety**

CIP No	Description	Federal	СТВ	General	Other	TOTAL
512-015	Towards Zero – Traffic Safety Improvements			1,000		1,000
508-151	Neighborhood Traffic Calming			750		750

The Toward Zero projects are quick-build traffic safety solutions at high-crash intersections and corridors.



OOK UP. LOOK OUT







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## DOT FY 2023 Requests – Bikes:

CIP No	Description	Federal	СТВ	General	Other	TOTAL
508-019	Citywide Bike and Pedestrian Improvements / Bike Master Plan			500	2,000	2,500
508-102	Bike Master Plan – Eutaw Place			230		230
508-131	Bush Street Cycle Track			315		315
508-122	Martin Luther King Jr Boulevard – Sidepath from Russel to Eutaw			200		200
508-131	Wolfe and/or Washington Corridor Study			200		200
508-158	Central Avenue Bike Facility			400		400



# BIKE TOTAL: Baltimore \$3.845 Million



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## **DOT FY 2023 Requests – Transit Related**

CIP No	Description	Federal	СТВ	General	Other	TOTAL
508-137	Improvements Along MTA Priority Bus Routes	5,000				5,000

Improvements along various MTA priority bus routes, to include but not limited to:

- pavement and lane marking improvements
- street lighting upgrades
- sidewalk / ADA enhancements

- bus pads,
- marking improvements storm drain improvements
  - hardscape / landscape upgrades









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# FY23 Request: State of Good Repair, Maintaining Existing Infrastructure



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## DOT FY 2023 Requests – Bridges

CIP No	Description	Federal	СТВ	General	Other	TOTAL
506-012	Rehabilitation of the Promenade Bulkhead near Harris Creek			1,186		1,186
506-019	Hanover Street Bridge Over CSX Railroad	1,920		480		2,400
506-760	Perring Parkway Ramp Bridge Over Herring Run	4,240	1,160			5,400
507-003	Russell Street Bridge and Monroe Street Ramp Over CSX	3,099	1,170	2,244		6,513
506-754	Annual Urgent Needs Bridge Repair		1,000			1,000
509-326	Wilkens Avenue Bridge Over Gwynns Falls		510			510





TOTAL:

\$17.009 Million

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## **DOT FY 2023 Requests – Resurfacing**

CIP No	Description	Federal	СТВ	General	Other	TOTAL
514-002	Resurfacing Urgent Needs		1,500			1,500
514-214	Resurfacing Northwest		1,200			1,200
514-215	Resurfacing Southwest		1,200			1,200
514-216	Resurfacing Southeast		1,200			1,200
514-846	Resurfacing Northeast		1,200			1,200

\*External Resurfacing Locations to Feature Complete Streets Elements; Reduction from FY22 with the introduction of the Program Budget – Previously \$2M for Urgent Needs & \$2.25M per Sector









OTAL:

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### **DOT FY 2023 Requests – Reconstruction & Streetscape**

CIP No	Description	Federal	СТВ	General	Other	TOTAL
508-044	Rehabilitation of 25 <sup>th</sup> Street Greenmount to Kirk	1,000				1,000
508-051	Fremont Avenue Rehabilitation Lafayette to Presstman	2,036		652		2,688
508-053	Madison Street Rehabilitation N. Milton to Edison Highway	1,937		796		2,733
508-056	Pennington Avenue Rehabilitation Birch St to E. Ordnance Ave	1,569		806		2,375
527-008	Belair Road Improvements Key Nodes	1,500		138		1,638
508-156	Falls Road at Northern Parkway Cold Spring Lane to Northern Parkway	1,280		320		1,600
508-157	Frederick Avenue ADA Upgrades Brunswick to S. Pulaski	400		100		500





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## **DOT FY 2023 Requests – Traffic Signals**

CIP No	Description	Federal	СТВ	General	Other	TOTAL
512-005	TMC Upgrade	770		193		963
512-009	Communications Upgrade – Hardwire	5,000		1,250		6,250
512-080	Traffic Safety Improvements			500		500
512-077	Traffic Signal Reconstruction	249		590		839





## TOTAL: \$8.552 Million









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## DOT FY 2023 Requests – Conduit

CIP No	Description	Federal	СТВ	General	Other	TOTAL
562-003	Conduit System New Construction				15,000	15,000
563-001	Conduit Corridor Capital Maintenance				22,000	22,000
562-001	Reconstruct Deteriorated Manholes at Various Locations				8,000	8,000





# TOTAL: \$45 Million (Enterprise Funds)



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## DOT FY 2024-2028 Requests – Major Programs

Program	Federal	СТВ	General	Other	TOTAL
Bridge	\$91M	\$5M	\$13M		\$103M
Reconstruction	\$26M		\$10M		\$61M
Traffic	\$31M		\$9M		\$40M
Bike	\$1.6M		\$4.5M		\$6.1M
Resurfacing		\$35.5M			\$35.5M



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## **Equity in Project Prioritization**

Following the development of the Complete Streets Manual, the Project Prioritization Process outlined in the manual was used in determining future capital projects to focus on.

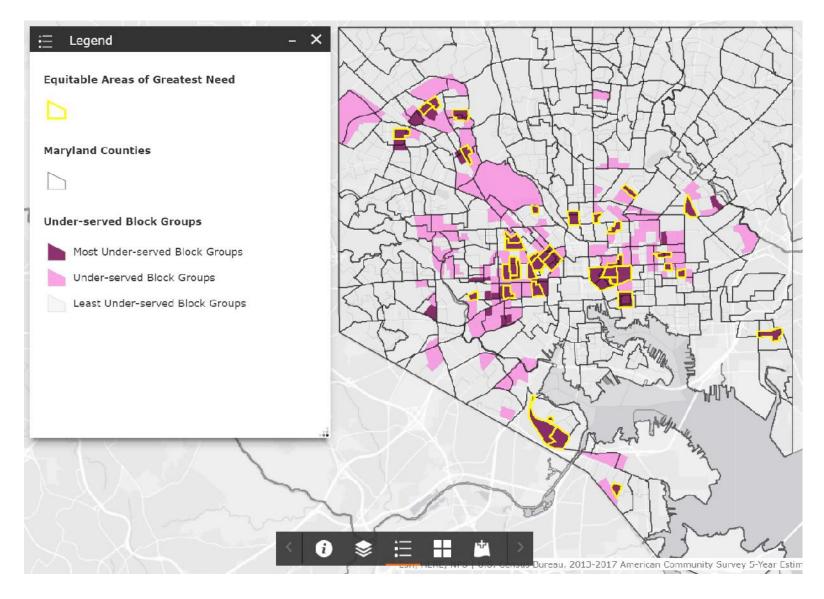
Relative to previous years, **equity** was emphasized as a leading factor followed by **asset condition and safety**, with a reduced focus on complaint driven projects and the equal spreading of projects based on geographic/council boundaries.

DOT determined the areas of focus for equity through the Transit Equity Gap Analysis. This study resulted in a map of high-need census tracks in Baltimore City. The factors that were considered in the map are public transit usage, household vehicle access, household income, race, and median age of residents. Projects were overlaid on this map to determine the distribution of projects in high-need areas.



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## **Equity Map**







## **INSPIRE Plan Support**

The Department of Transportation continues to partner with the INSPIRE Program.

DOT has completed repairs to damaged sidewalk along Primary Walking Routes for approximately 20 schools thus far, with ongoing coordination through the Baltimore City Department of Planning to continue this effort.

In FY22, DOT has dedicated \$500,000 in General Funds to complete ADA upgrades on previously completed Primary Walking Routes. In addition to Primary Walking Route locations, within the \$500,000, DOT also plans to supplement funds previously committed by the Department of Planning to finalize several minor safety projects associated with INSPIRE School locations and move to implementation / construction.



Investing in Neighborhoods and Schools to Promote Improvement, Revitalization, and Excellence



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# **Questions?**

