

FRANCIS SCOTT KEY BRIDGE IMPACT ANALYSIS

TPB Freight Subcommittee

May 2025



WHO WE ARE

The Baltimore Metropolitan Council (BMC) is a nonprofit organization that works collaboratively with the chief elected officials in the region to create initiatives to improve the quality of life and economic vitality.

Serve as a forum for local officials and their representatives to identify and address problems in the region.

Provide a central source of information and coordination for fashioning responses to needs in the region.

Assist local jurisdictions in developing regional policies, prioritizing regional infrastructure needs, and developing regional strategies.

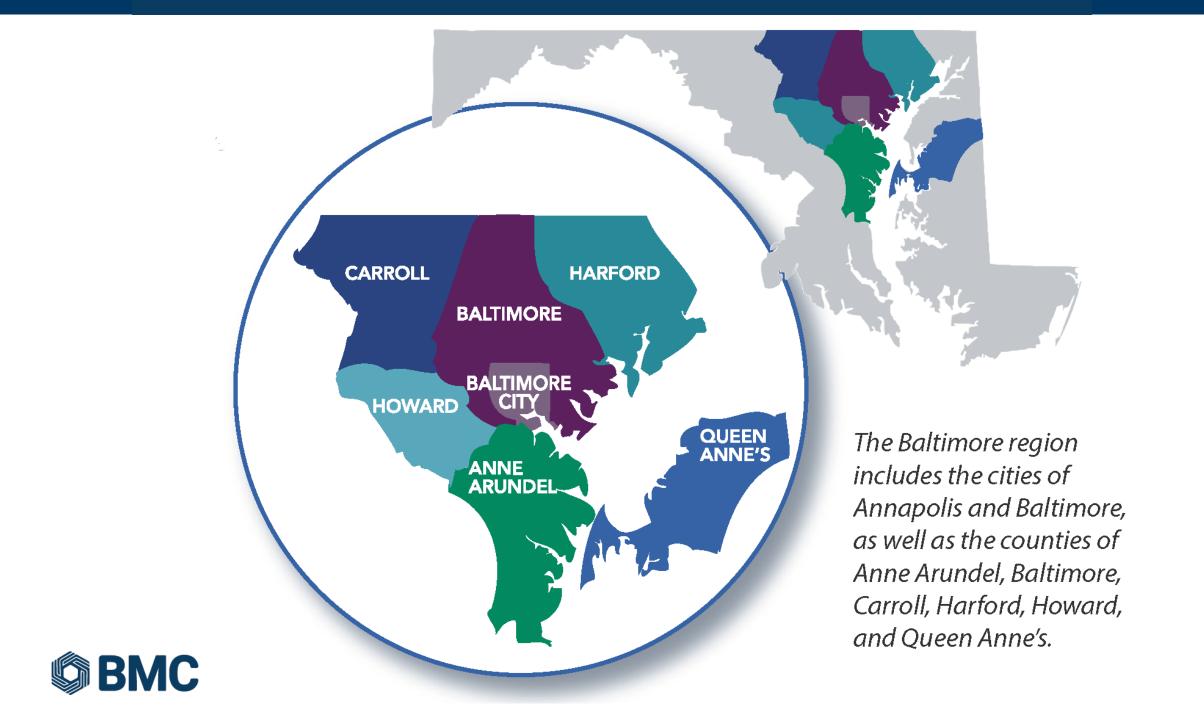
MD Code, Economic Development §13-302













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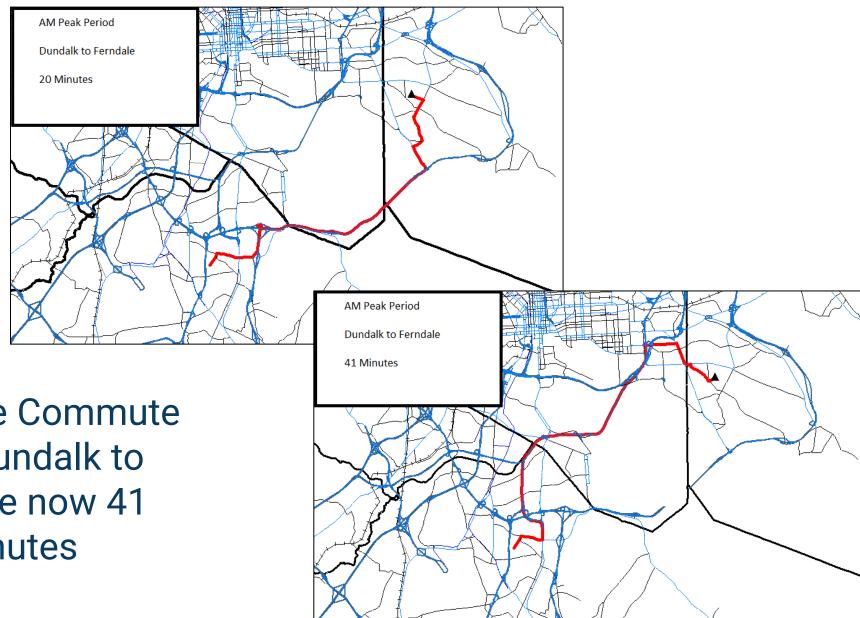


TRAFFIC AND TRANSPORTATION

- FSK Averaged 34,000 crossings per day (4,000 commercial)
 - 39,000 weekday
 - 20,400 weekend
- Harbor Tunnel and Fort McHenry Tunnel average 198,000 crossings combined
 - Harbor Tunnel: 81,000 weekday, 71,300 weekend
 - FMT: 128,300 weekday, 99,600 weekend
- HAZ-MATS must find a new route (+/- 1,200 trucks daily)
- What will be the impact on the region?
- What are the long term solutions?



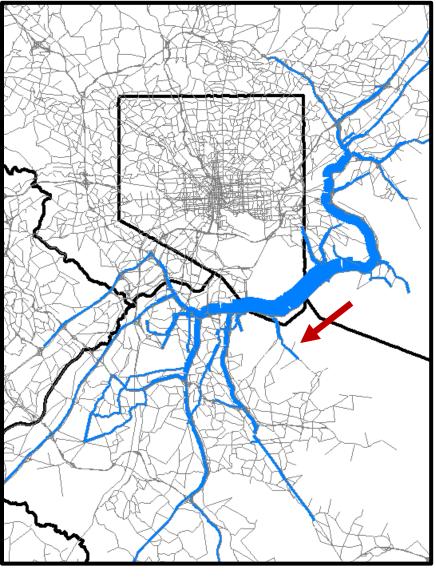
COMMUTER **IMPACT**



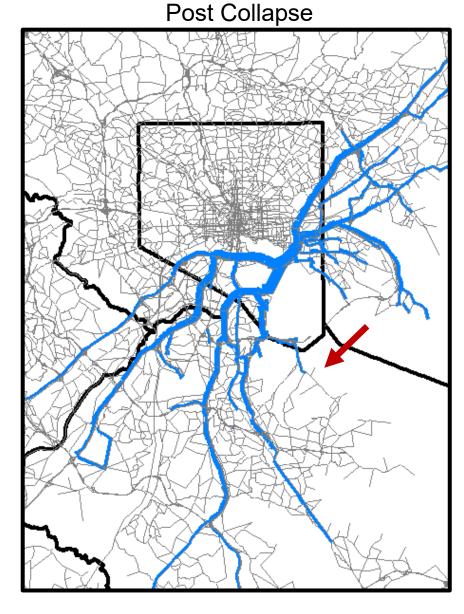
20 Minute Commute from Dundalk to Ferndale now 41 minutes



Morning
Peak
Rerouting of
Traffic
Flows Inner Loop
of Beltway

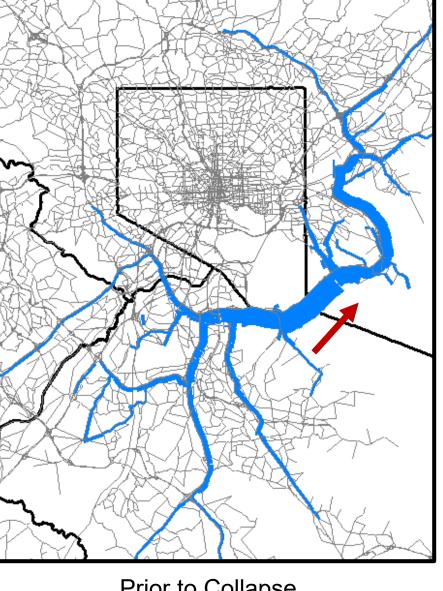


Prior to Collapse

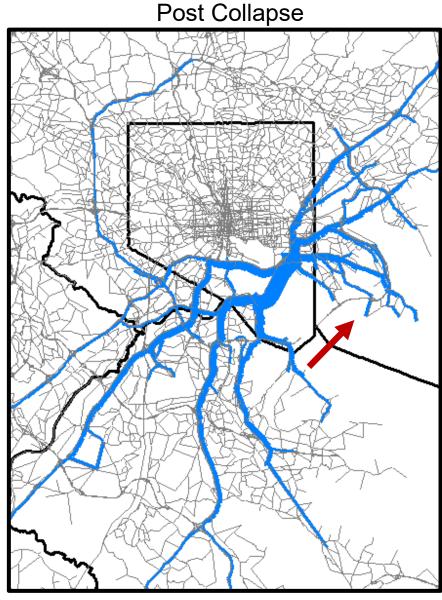




Afternoon Peak **Rerouting of Traffic** Flows -**Outer Loop** of Beltway

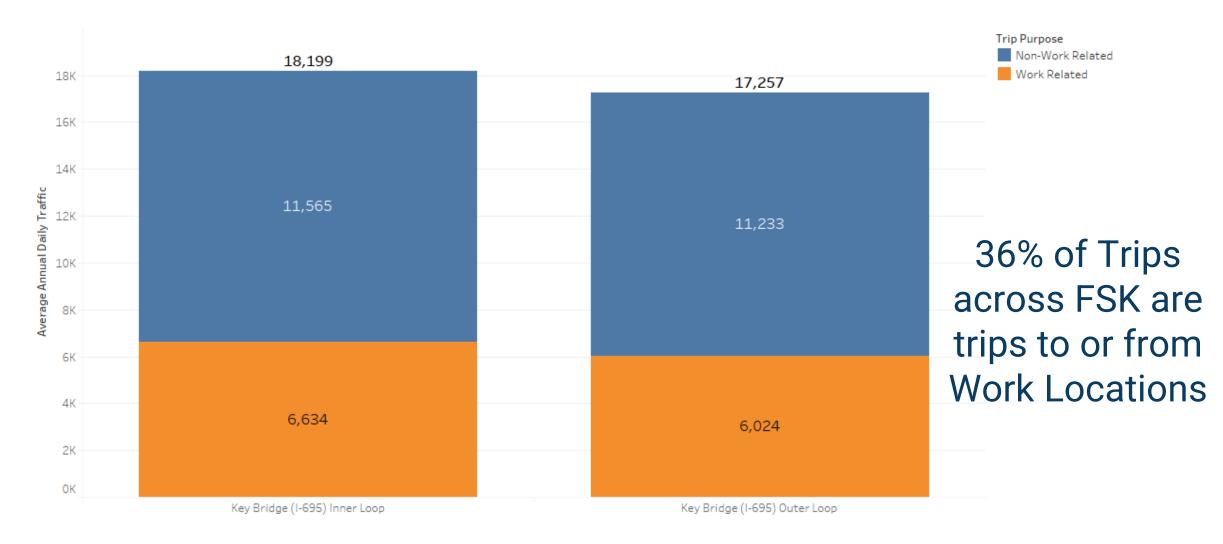


Prior to Collapse



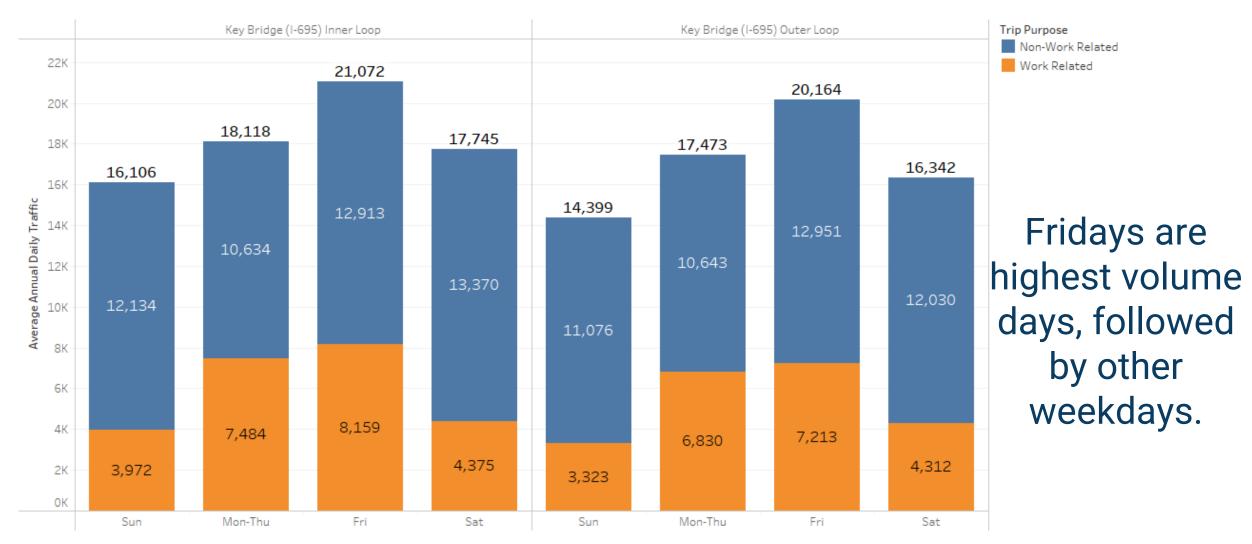


Work versus Non-Work Trips 2022 Daily Trips



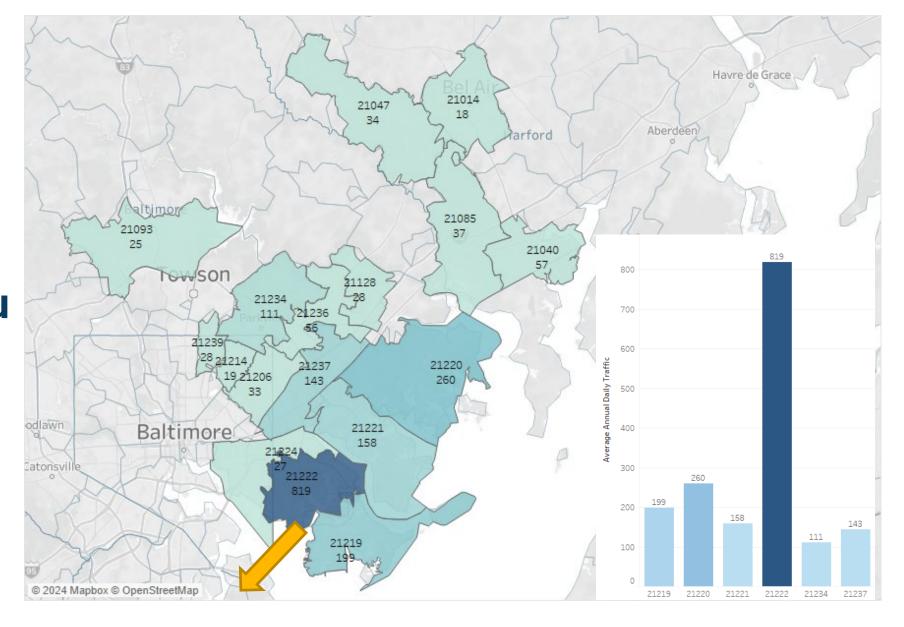


Day of Week Breakdown 2022 Daily Trips



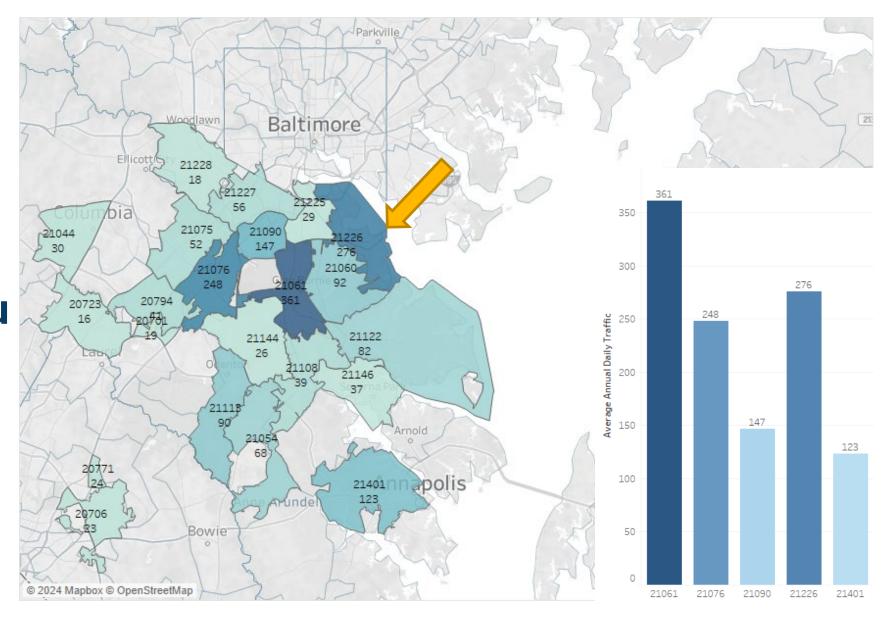


2022 Key Bridge Inner Loop Mon-Thu **Home to Work Origins**



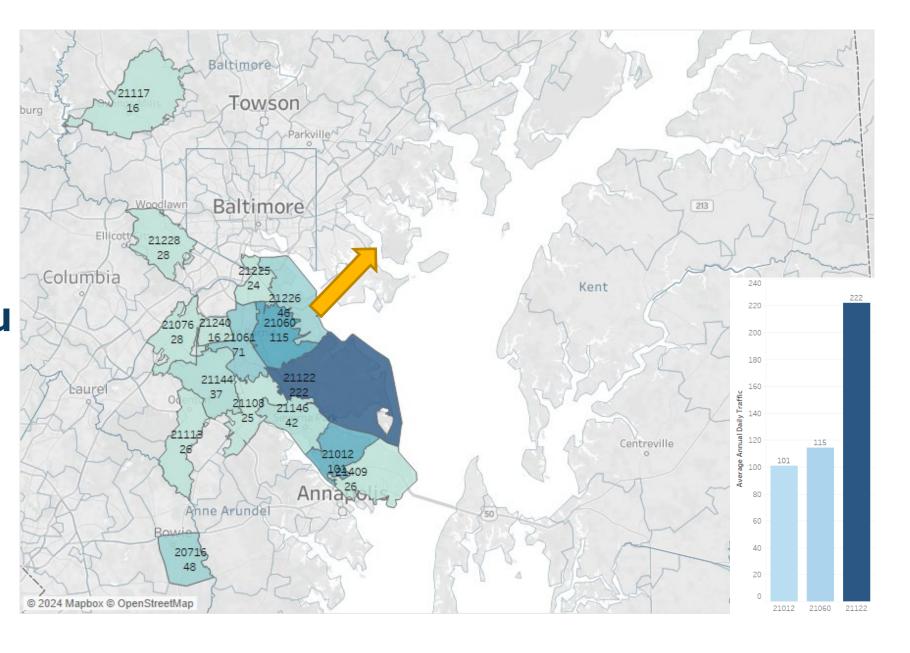


2022 Key Bridge Inner Loop Mon-Thu **Home to Work Destinations**



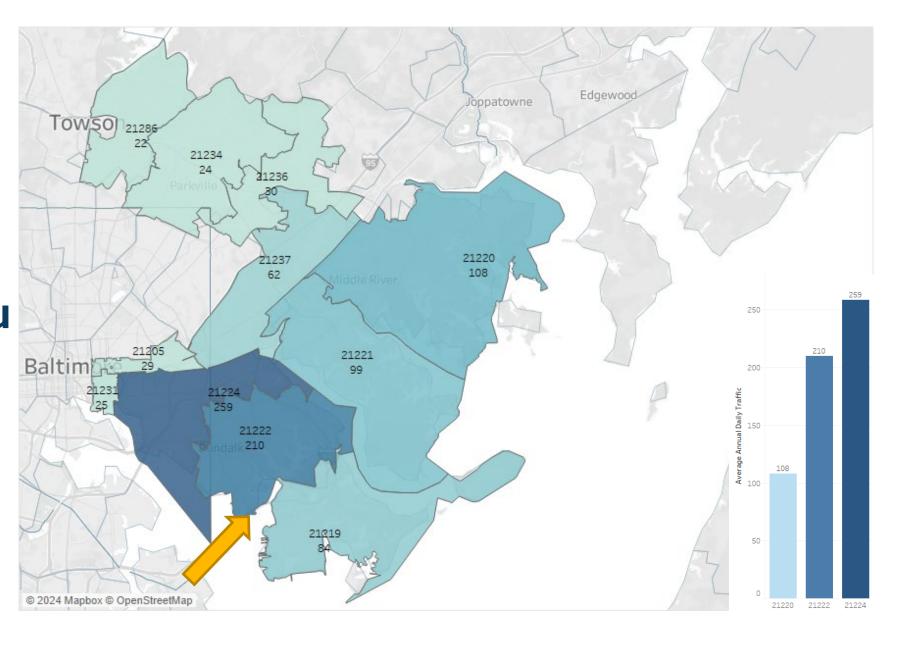


2022 Key Bridge Outer Loop Mon-Thu **Home to Work Origins**





2022 Key Bridge Outer Loop Mon-Thu **Home to Work Destinations**





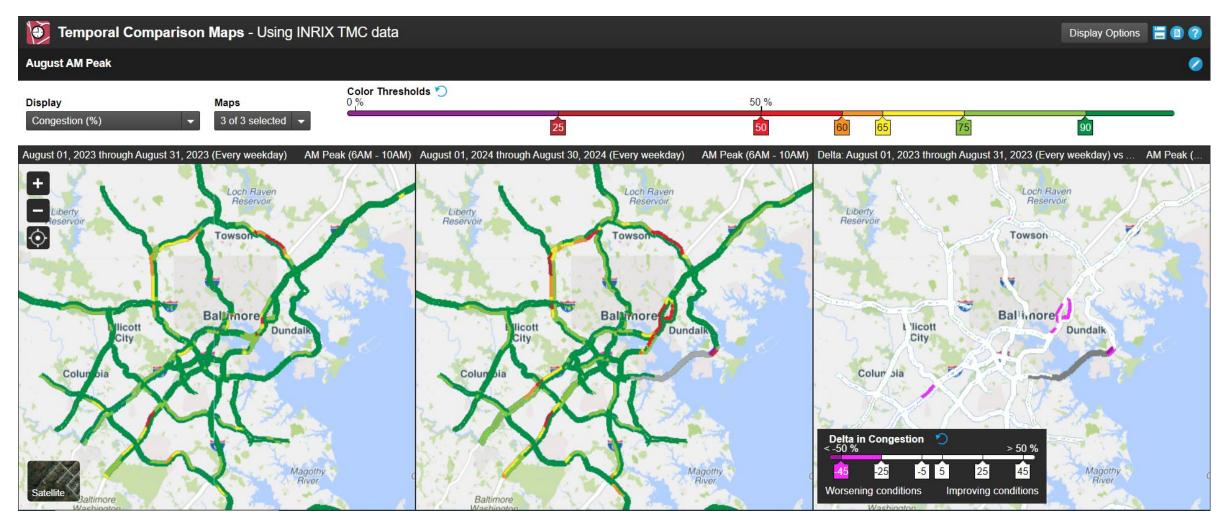
2050 Modeling With and Without FSK (Daily Trips)

2050 InSITE Travel Demand Model With and Without FSK										
Year	Year	I-695 Key Bridge	I-895 I-95 Fort Harbor McHenry Tunnel Tunnel			Total Harbor Crossings				
Without Bridge	2050	0	117,715	180,147		297,862				
With Bridge	2050	51,034	99,909	153,941		304,884				
	2023	33,693	79,113	121,481		234,287				
	2022	33,195	77,033	118,287		228,515				
	2021	33,215	68,861	119,887						
	2020	32,244	39,533	112,510						
	2019*	40,365	47,480	140,185						
	2018*	30,982	75,488	125,930		232,400				
	2017	32,343	77,814	124,391						
	2016	31,242	77,235	122,820						
	2015	30,707	77,248	115,615						
	2014	29,598	71,315	71,315 114,386						
Note: 2019 the Harbor Tunnel was reduced to one lane in each direction for construction.										



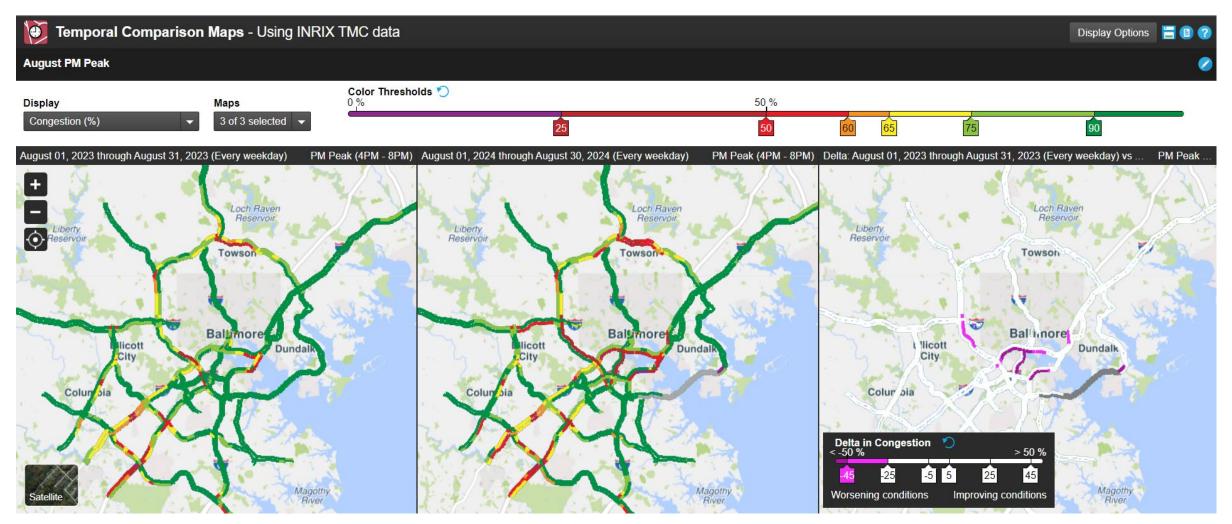
Source: BMC InSITE Travel Demand Model.

Increased Congestion Segments AM Peak (Aug 2024)





Increased Congestion Segments PM Peak (Aug 2024)

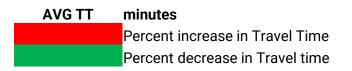




August 2023/2024 Average Travel Time Comparisons Weekdays

FSK Bridge Travel Times Before and After Collapse

		AM PM	Length in	Avg TT	Avg TT	% Change	% Change
Route	Segments	Peak	Miles	Aug-23	Aug-24	Aug 2023 to 2024	July 2024 to Aug 2024
KB1	I-895 NB from MD-295 to Harbor Tunnel Toll Plaza	PM (4-7 PM)	4.35	4.63	13.44	190%	1%
KB2	I-895 Spur NB from MD-2/Ritchie Hwy to I-895 Merge	PM (4-7 PM)	2.74	2.98	3.79	27 %	13%
KB3	I-95 NB from I-895/Exit 46 to Fort McHenry Tunnel	PM (4-7 PM)	10.00	13.16	23.67	80%	5%
KB4	I-895 SB from I-95/Exit 62 to Harbor Tunnel Toll Plaza	AM (6-9 AM)	6.87	10.13	15.05	49%	9%
KB5	I-95 SB from I-895 split to Fort McHenry Tunnel	AM (6-9 AM)	8.43	10.45	14.21	36%	4%
KB6	MD-295 NB from Patapsco Ave to Bayard St	PM (4-7 PM)	1.75	3.17	6.43	103%	10%
KB7	I-695 IL from Park Heights Ave to Greenspring Ave	PM (4-7 PM)	2.19	2.45	3.10	27 %	5%
KB8	MD-150/Eastern Blvd WB from MD-151/North Pont Blvd to Kane St	AM (6-9 AM)	1.10	2.96	3.16	7%	3%
KB9	MD-2/Ritchie Hwy NB from MD-710 to MD-171	PM (4-7 PM)	1.69	3.96	4.87	23%	7%
KB10	I-695 OL from Reisterstown Rd to I-795	AM (6-9 AM)	2.16	2.77	3.78	36 %	13%
KB11	Hanover Street NB (I-895 to Cromwell)	PM (4-7 PM)	1.47	3.04	3.42	13%	3%
KB12	US-40/Pulaski Hwy WB from City Line to N Haven St	AM (6-9 AM)	1.97	4.00	4.31	8 %	4%
KB13	I-895 SB from I-95/Exit 62 to Harbor Tunnel Toll Plaza	PM (4-7 PM)	6.87	9.36	12.83	37%	4%
KB14	I-395 SB to I-95 NB (East Pratt to I-95)	PM (4-7 PM)	1.62	3.21	3.80	18%	4%
KB15	MLK Blvd SB from W Baltimore St to I-395	PM (4-7 PM)	0.83	1.98	2.33	18%	2%
KB16	I-395 SB to I-95 SB (East Pratt to I-95)	PM (4-7 PM)	1.50	2.85	2.92	2 %	4%



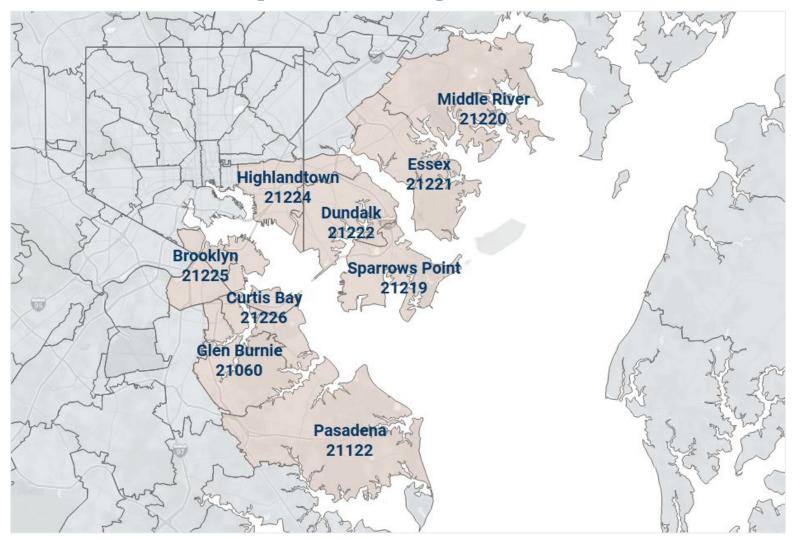


TRAFFIC MONITORING AND UPGRADES

- Weekly Traffic Coordination Meetings
 - MDOT/SHA/MdTA/MTA/Port/Unified Command/FHWA/BCDOT/BCDPWT/AADPW/BMC
- Weekly Traffic/Crash Monitoring of Major Diversion Routes
 - FMT (12-13% Increase), BHT (5-6% Increase), I-695 West Leg, I-70, I-83
 - All Vehicles and Trucks Comparison Current vs. 2022-2023 Historic
 - Crashes up 18-20% I-95/I-895 (June-Sept, 2024 to 2023), Increase in Injury vs. No Injury Crashes
- Traffic Counts on Major Diversion Routes
- Potential Enhancement to FSK Detour Routes
 - Signal Upgrades/Adaptive Traffic Response/CCTV/DMS
- Review of Truck Routes (GPS Routing Software)
- Updates to Signing
- Major Event/Construction Coordination

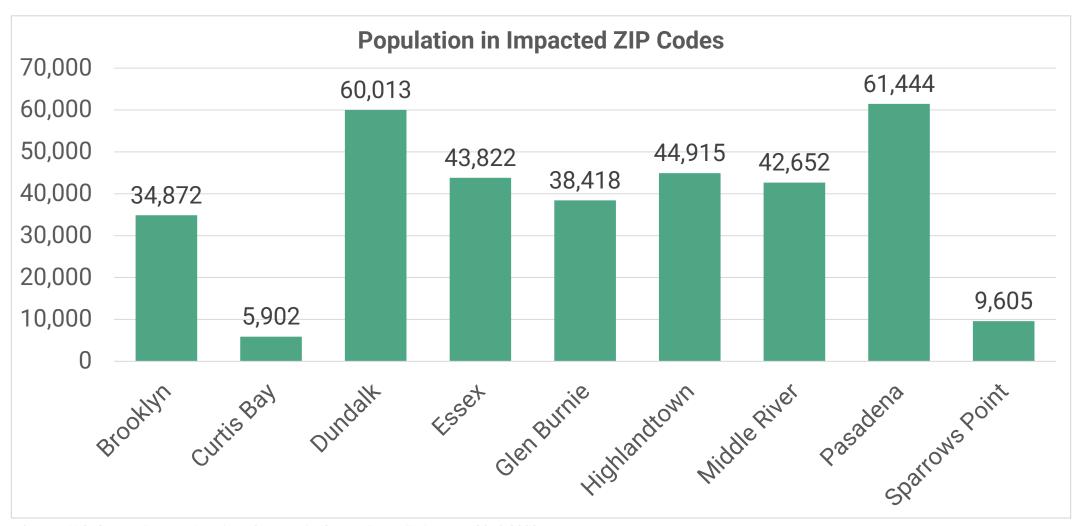


Impacted Zip Codes





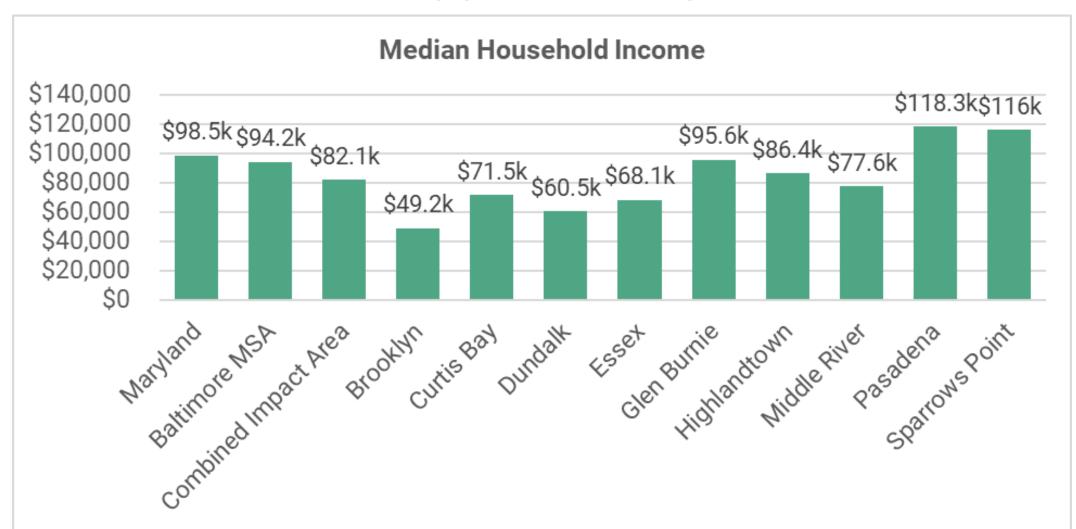
POPULATION



Source: U.S. Census Bureau, American Community Survey 5-year Estimates - 2018-2022.



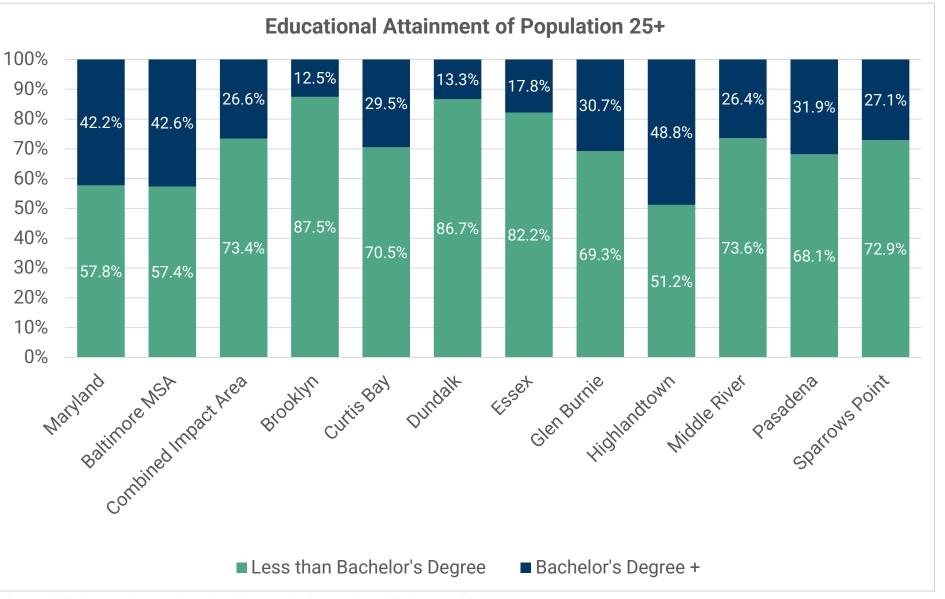
INCOME LEVELS







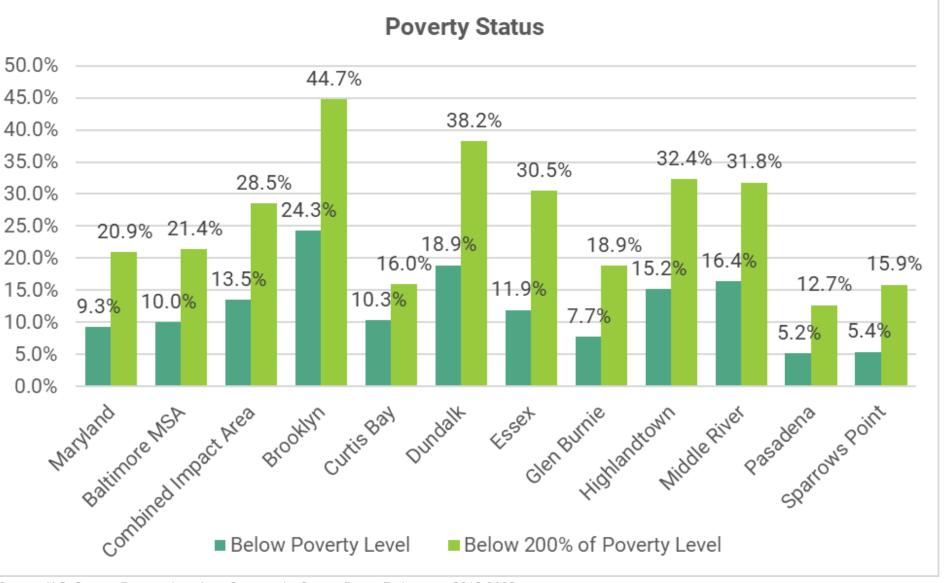
Educational Attainment





Source: U.S. Census Bureau, American Community Survey 5-year Estimates - 2018-2022.

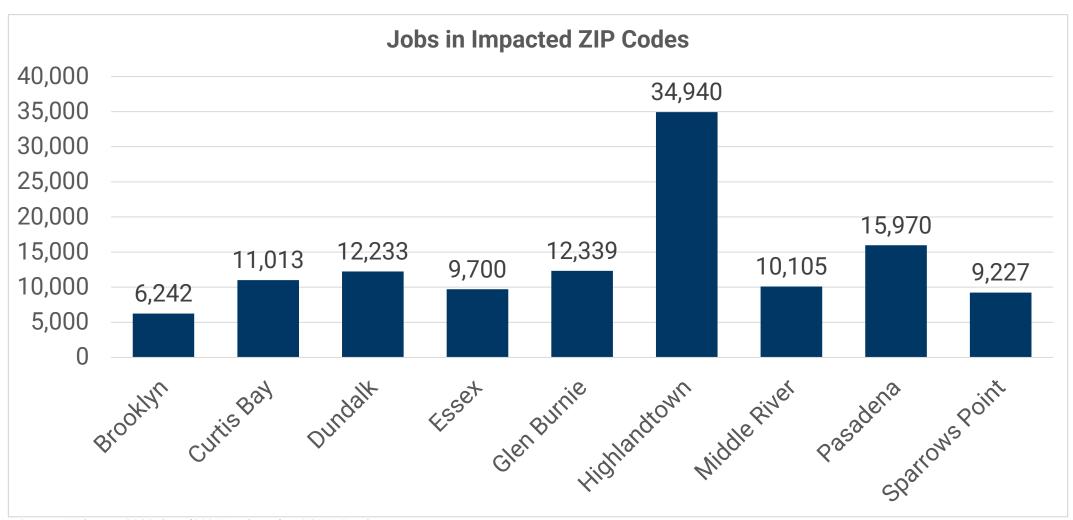
POVERTY STATUS







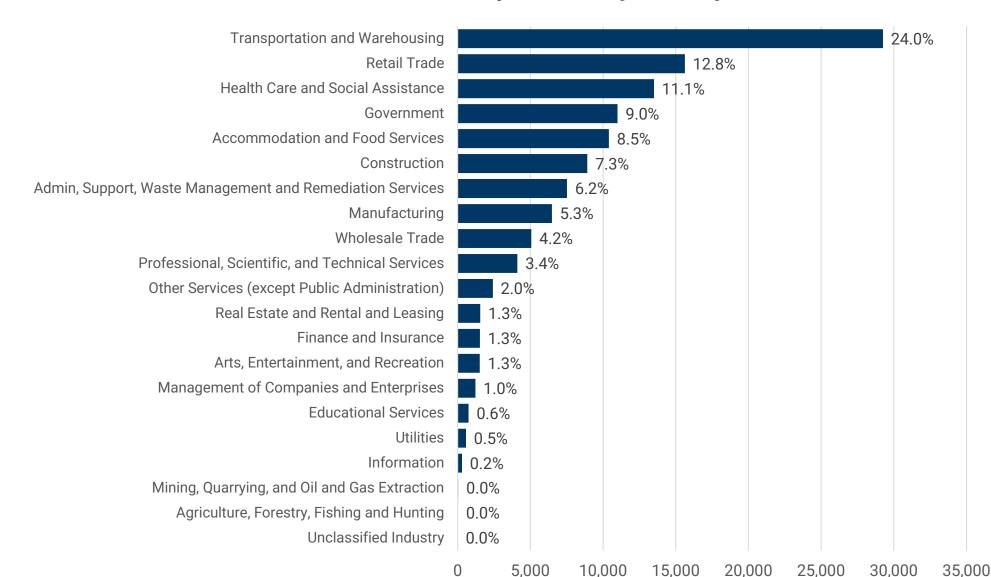
JOBS







Jobs in Combined Impact Area by Industry

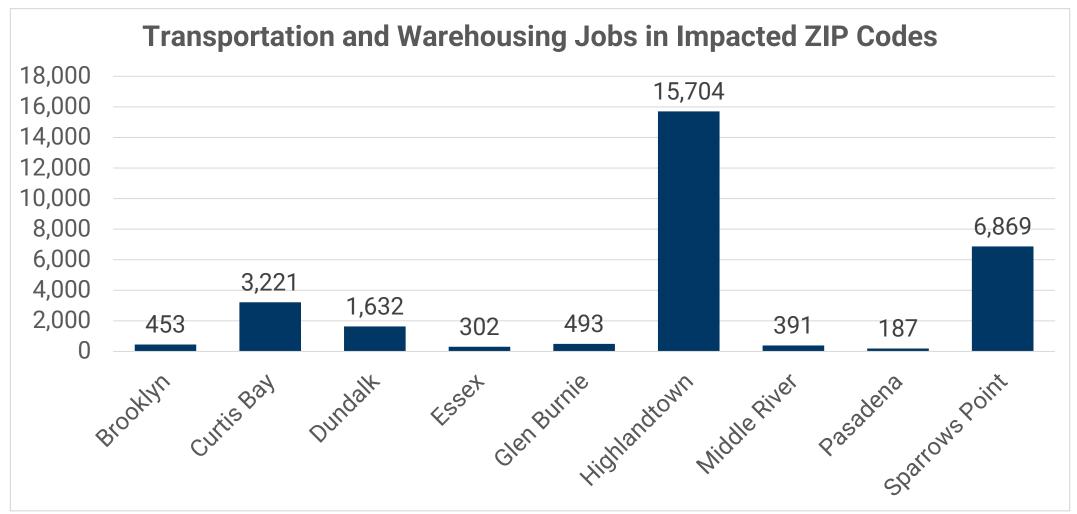




JOBS BY

INDUSTRY

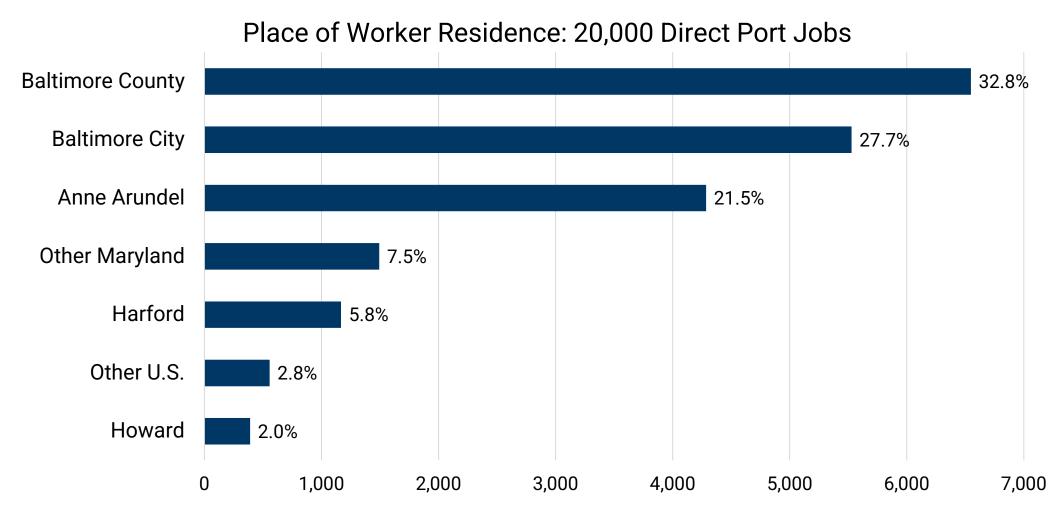
TRANSPORTATION AND WAREHOUSING JOBS







Distribution of Direct Port Jobs by Place of Residence



Source: The 2023 Economic Impact of the Port of Baltimore in Maryland (Prepared by Martin Associates for the Maryland Port Administration).



Key Bridge Rebuild

- https://www.keybridgerebuild.com
- On February 4, 2025, Maryland Governor Wes Moore unveiled the new design concept for the Francis Scott Key Bridge Rebuild. The governor stated that the new design honors the architectural tradition of the original bridge. The new bridge will be Maryland's first highway cable-stayed bridge, constructed according to the most advanced industry standards and best infrastructure design practices.



Key Bridge Rebuild

Bridge Features

- Two 12-foot lanes in each direction / 10-foot-wide outside shoulders and 4-foot-wide inside shoulders per direction of travel
- Total Bridge length more than 2 miles
- 230-foot minimum clearance from water to bridge deck above the federal channel
- Two bridge towers more than 600 feet tall
- Distance between main span pylons exceeding 1,600 feet
- Total length of cable-stayed main span exceeding 3,300 feet
- Expected life span of 100 years



BALTIMORE REGIONAL TRANSPORTATION BOARD (BRTB) FREIGHT MOVEMENT TASK FORCE

Overview

- The Freight Movement Task Force (FMTF) is an Advisory Committee to the BRTB
- The committee meets quarterly. The FMTF welcomes the public to observe meetings and provide comment.

Purpose and Mission

- To provide the freight/goods movement community a voice in the regional transportation planning process.
- To serve as a forum for Baltimore region freight stakeholders to share information and discuss motor truck, rail, air, and waterway concerns.

Membership

 The FMTF represents a mix of freight experts from across the modes, including: railroad operators; port operators; trucking firms; airport operators; freight shippers and receivers; economic development organizations; and academics. In addition, staff from the Maryland Department of Transportation and local government representatives also participate.

https://baltometro.org/transportation/committees/freight-movement-task-force



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