



Baltimore Regional Transportation Board

2022-2025 TIP Amendment: Central Avenue Bicycle Facility

Baltimore Regional Transportation Board

January 21, 2022



Baltimore City FY 2022-2025 TIP

Amendment Overview

- This amendment **adds a new project** to the FY 2022-2025 TIP.
 - The project was originally listed in the FY 2016-2019 TIP.
- Baltimore City desires to modify the striping plan on the Central Avenue Phase II project to provide better bicycle facilities and increased pedestrian safety/comfort by lowering vehicular speeds.
- Inclusion of this project in the TIP is necessary to prepare and finalize NEPA documents. Funding for this project includes \$750,000 for construction (\$600,000 federal/\$150,000 match) in FY 2022. The total estimated cost of the project is \$53.451 million.

Central Avenue Bicycle Facility Overview

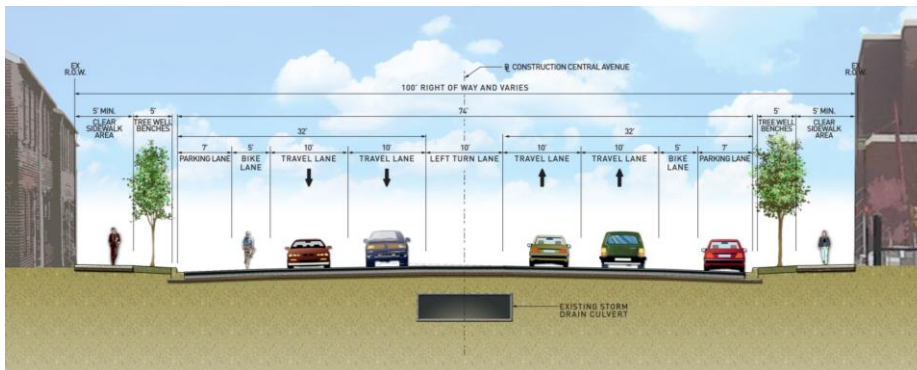


- **Central Avenue Phase I Streetscape between Baltimore Street and Madison Street started in 2012 and was completed in 2015. Included street reconstruction, ADA upgrades, and new traffic signals.**
- **Central Avenue Phase II Streetscape between Dock Street and Baltimore Street started in 2016 will be completed in 2022. Includes street reconstruction, ADA upgrades, utility work, traffic signals, and a new bridge between Harbor Point and Harbor East.**
- **This project proposes to add additional funds to improve the design of the Central Avenue Phase II Streetscape project for bicycle and pedestrian safety and accessibility.**

ORIGINAL PROJECT



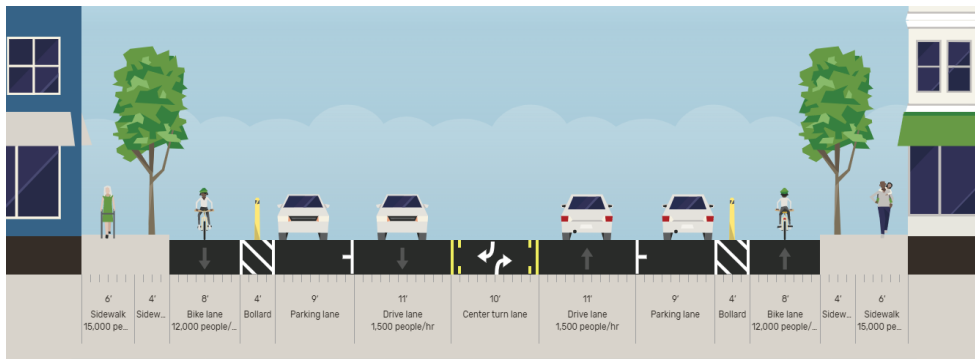
- Central Avenue Phase I Streetscape between Baltimore Street and Madison Street started in 2012 and was completed in 2015.
- Central Avenue Phase II Streetscape between Dock Street and Baltimore Street started in 2016 will be completed in 2022. Currently at 90% construction completed.
- 4/5 travel lanes, two 5' bikes lanes



Proposed TIP Amendment

- Project includes modifying original Central Avenue design to include protected bicycle facilities between Baltimore Street and Fleet Street through revised striping/signing plan
- 2/3 travel lanes, two parking protected bike lanes

Proposed Protected Bicycle Facility



Justification for Project



- Reducing the number of travel lanes from 5 to 3 follows FHWA's guidance on best practices for road diets while adequately serving existing and future traffic demand.
- Providing protected bicycle lanes follows the Bikeway Selection Guide from FHWA's *Separated Bike Lane Planning and Design Guide* and improves safety for all travel modes on Central Avenue.
- Providing protected bicycle lanes complies with the City's Bicycle Master Plan, improving multi-modal transportation options throughout the City.

TIP Amendment Funding and YOP



- Request to add \$600,000 Federal funding with a \$150,000 local match totaling \$750,000 for the Construction Phase in FY 2022 of the FY2022-2025 TIP. Proposed funding source from Surface Transportation Block Grant Program.
- No Engineering Funds are being requested.
- Previous Total Estimated Cost of the Central Avenue Phase II Project was \$51,000,000. Current project expenditures are \$52,701,191. Total Project Cost including TIP Amendment is \$53,451,191.
- The projected date of operation is October 2022.

Graham Young, PE, PTOE | Complete Streets Manager

A decorative graphic at the bottom of the page consisting of a cluster of colorful hexagons in shades of green, orange, and grey. Some hexagons contain white icons representing various themes: a truck, a person walking, a book, a lightbulb, a handshake, a car, a speech bubble, a compass, a person at a desk, a house, a bicycle, and a person in a wheelchair. The hexagons are arranged in a way that they appear to be floating or rising from the bottom left towards the top right.



2022-2025 TIP Amendment: I-95/I-695 Interchange Bridge Deck Replacement

BRTB

January 21, 2022



I-95/I-695 Interchange Bridge Deck Replacement



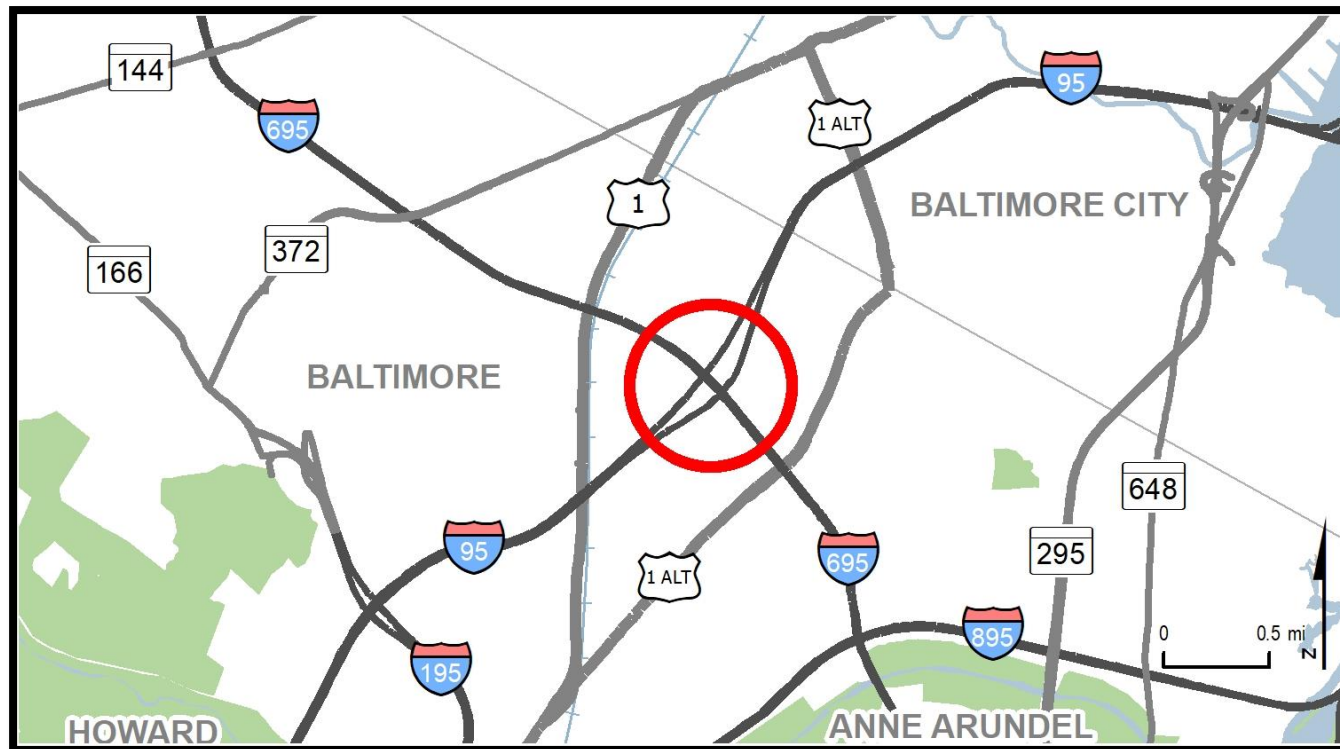
AMENDMENT PURPOSE

- **Add a new project to the FY 2022-2025 TIP**
 - New major project in the 2022-2027 CTP
 - Needed to accommodate anticipated February 2022 advertisement date

I-95/I-695 Interchange Bridge Deck Replacement



LOCATION



I-95/I-695 Interchange Bridge Deck Replacement



PROJECT DESCRIPTION

- Replace bridge decks with latex modified concrete deck overlays on 10 bridges before they reach a deteriorated state
- Upgrade bridge parapets to meet current safety standards

I-95/I-695 Interchange Bridge Deck Replacement



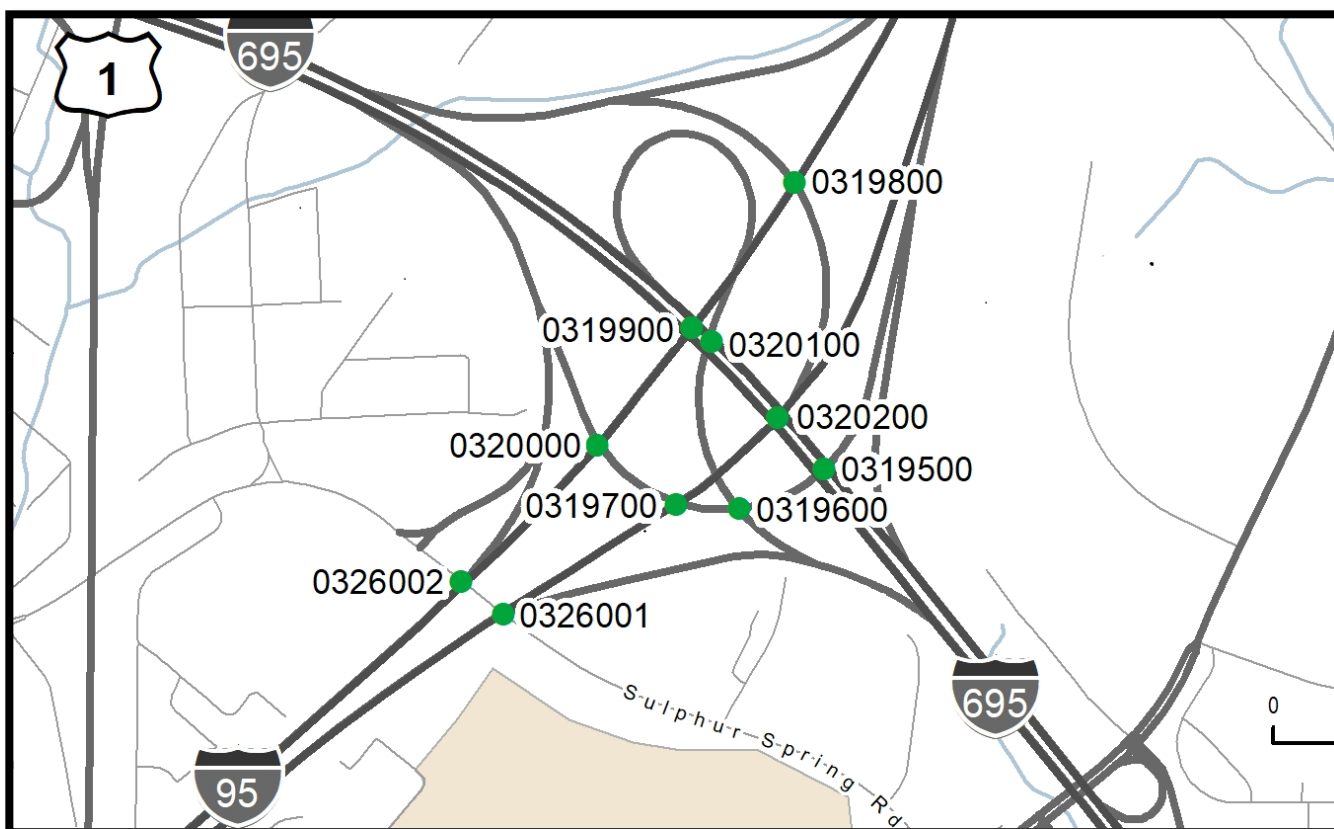
INTERCHANGE BRIDGES

- 0319800 – Southbound I-95 over I-95 Ramp I
- 0319900 – Southbound I-95 over I-695
- 0320100 – I-95 Ramp G over I-695
- 0320200 – Northbound I-95 over I-695
- 0319500 – I-95 Ramp C over I-695
- 0320000 – Southbound I-95 over I-695 Ramp C
- 0319700 – Northbound I-95 over I-695 Ramps C & G
- 0319600 – I-695 Ramp C over I-95 Ramp G
- 0326002 – Southbound I-95 & Ramp D over Sulphur Spring Road
- 0326001 – Northbound I-96 & Ramp H over Sulphur Spring Road

I-95/I-695 Interchange Bridge Deck Replacement



INTERCHANGE BRIDGES



I-95/I-695 Interchange Bridge Deck Replacement



SCHEDULE

- **Advertisement: February 22, 2022**
- **Notice to Proceed: June 6, 2022**
- **Open to Traffic: Summer 2024**

I-95/I-695 Interchange Bridge Deck Replacement



TOTAL COST

Design	\$2,200,000
<u>Construction</u>	<u>\$25,000,000</u>
Total	\$27,200,000

Federal Aid: \$25,804,000

MDOT SHA is using toll credits to increase the share of federal funding to approximately 95%

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Safety Performance Target Setting

Baltimore Regional Transportation Board

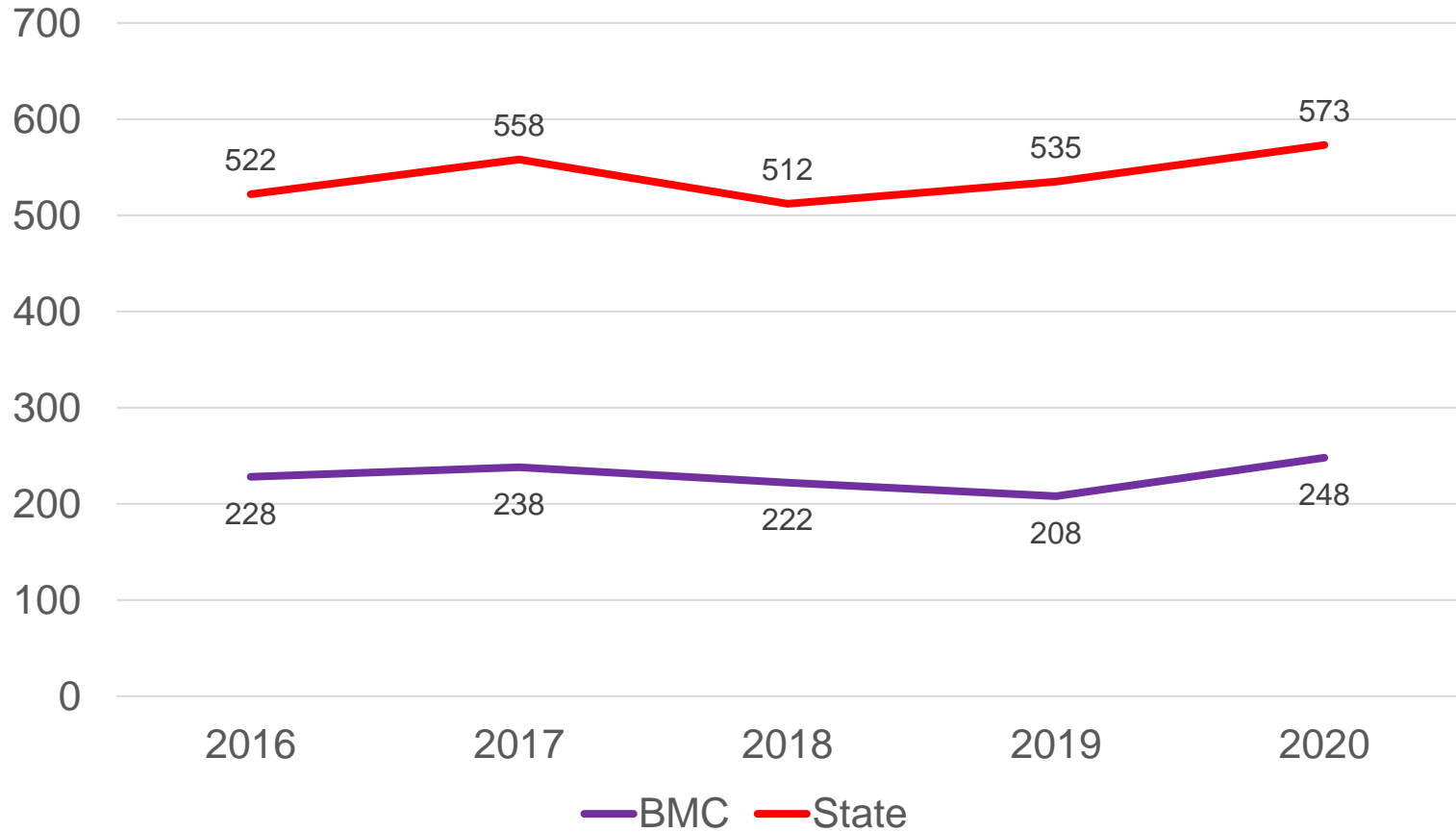
January 21, 2022



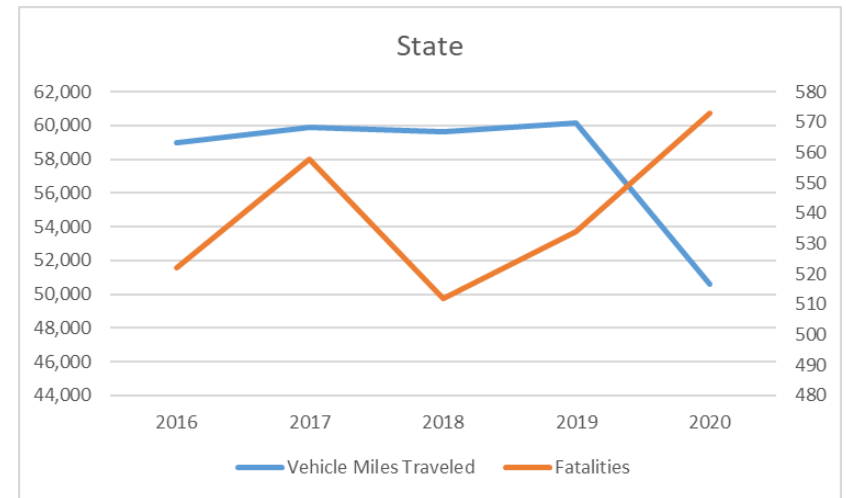
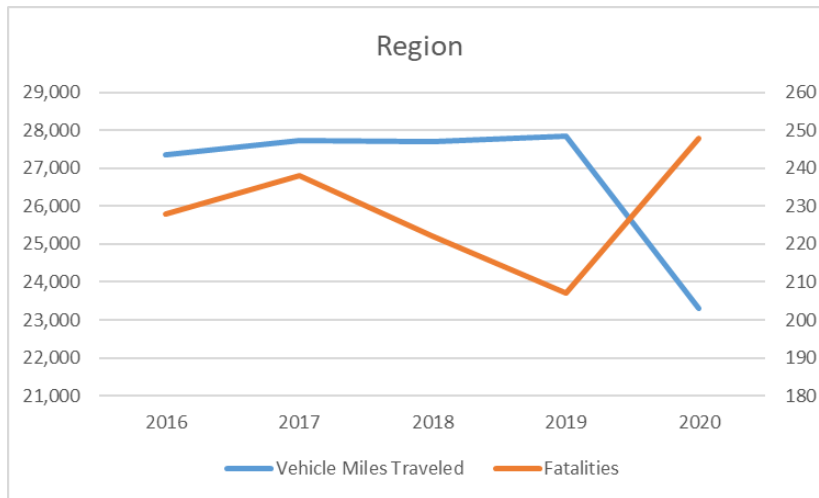
Safety in the Baltimore Region

<u>BMC</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Fatalities	228	238	222	208	248
Serious Injuries	1,432	1,684	1,575	1,509	1,409
Total Injuries	25,824	26,374	26,022	25,292	19,591
Vehicle Miles Traveled (millions)	27,358	27,731	27,688	27,844	23,318
<u>State</u>					
Fatalities	522	558	512	535	573
Serious Injuries	3,167	3,347	3,233	3,122	2,718
Total Injuries	50,921	51,391	50,011	48,663	36,754
Vehicle Miles Traveled (millions)	58,974	59,892	59,629	60,136	50,592

Fatalities



Vehicle Miles Traveled



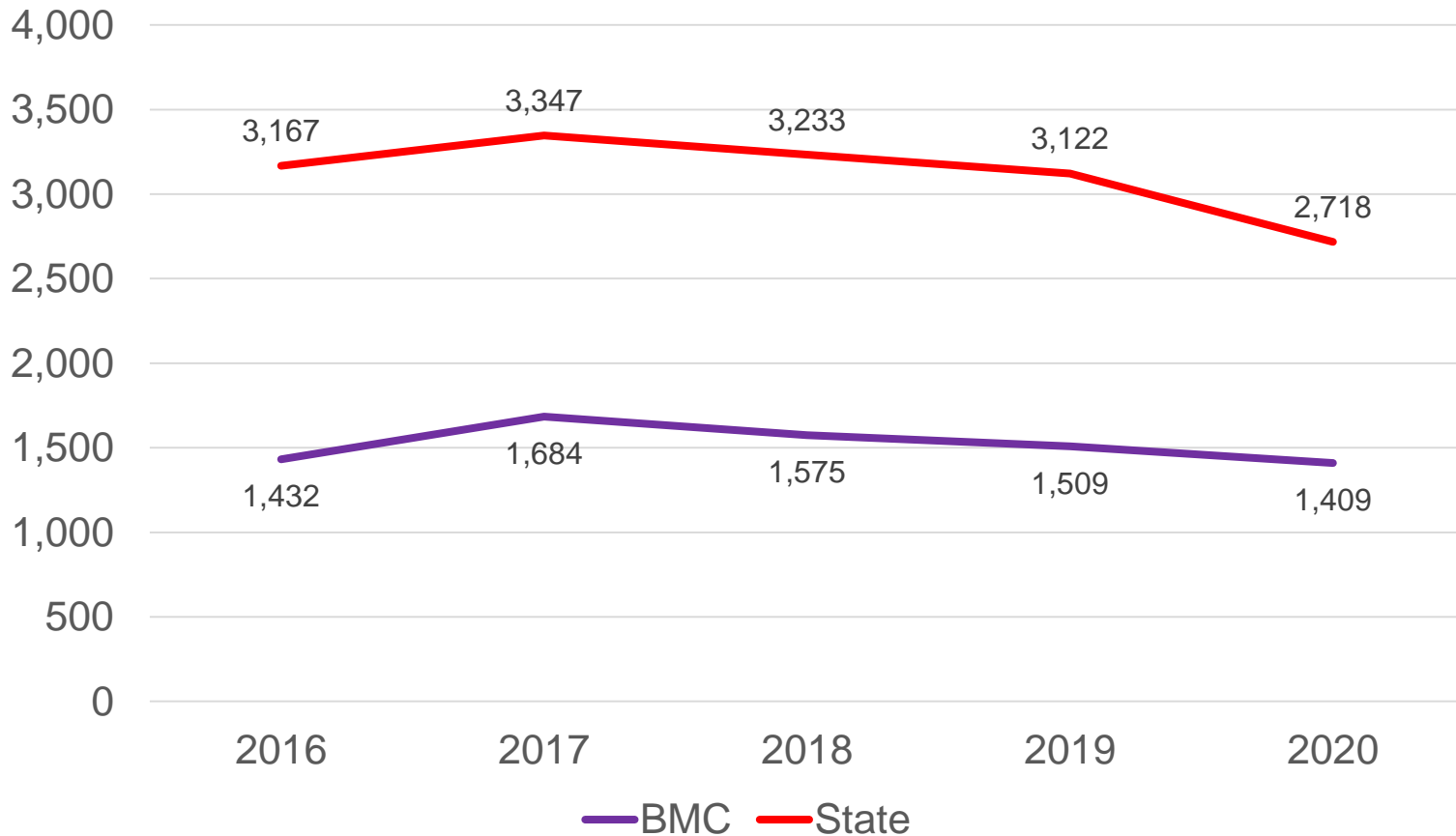
-16.3% Vehicle Miles Traveled change 2019-2020

19.8% Crash fatalities change 2019-2020

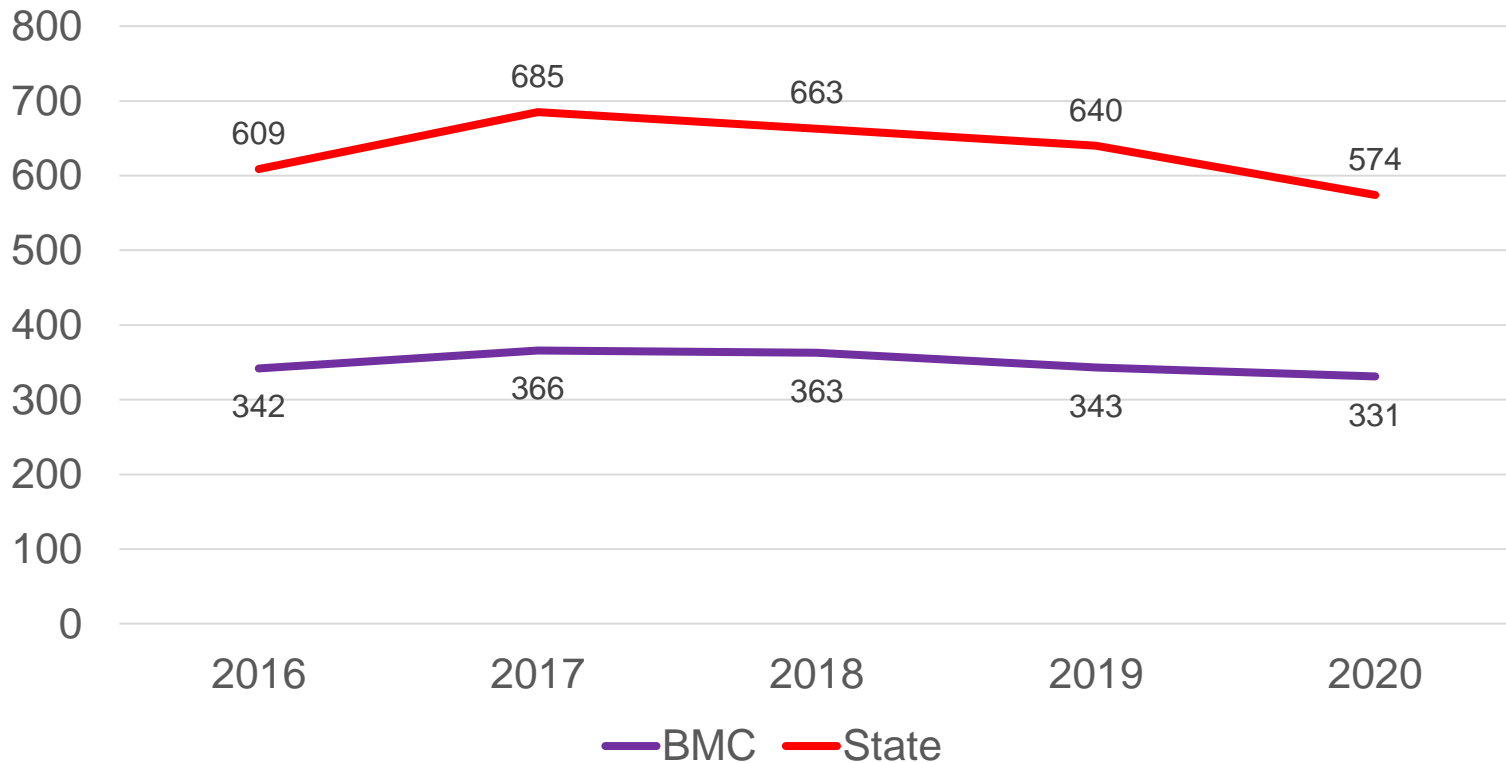
-15.9% Vehicle Miles Traveled change 2019-2020

7.3% Crash fatalities change 2019-2020

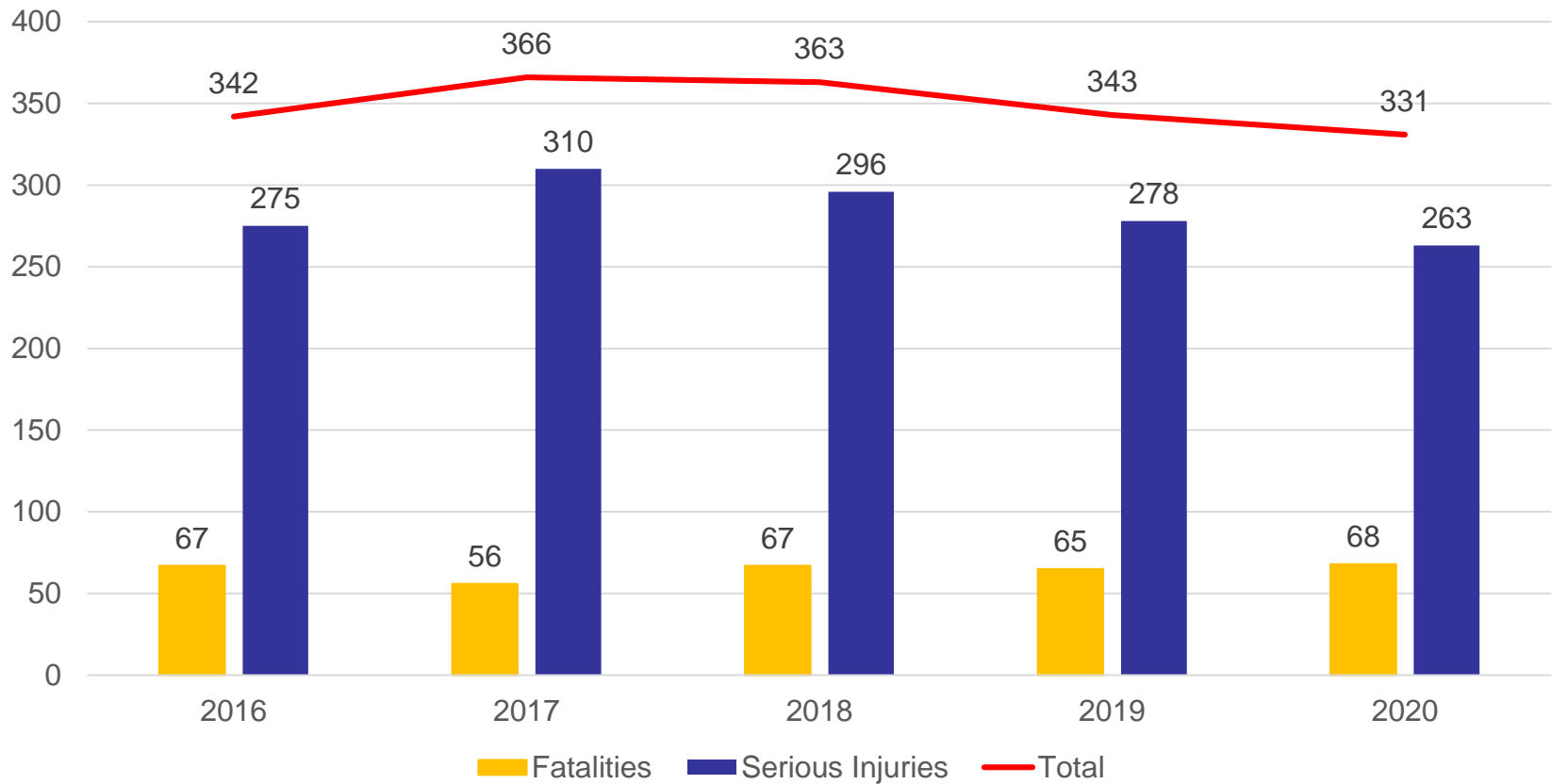
Serious Injuries



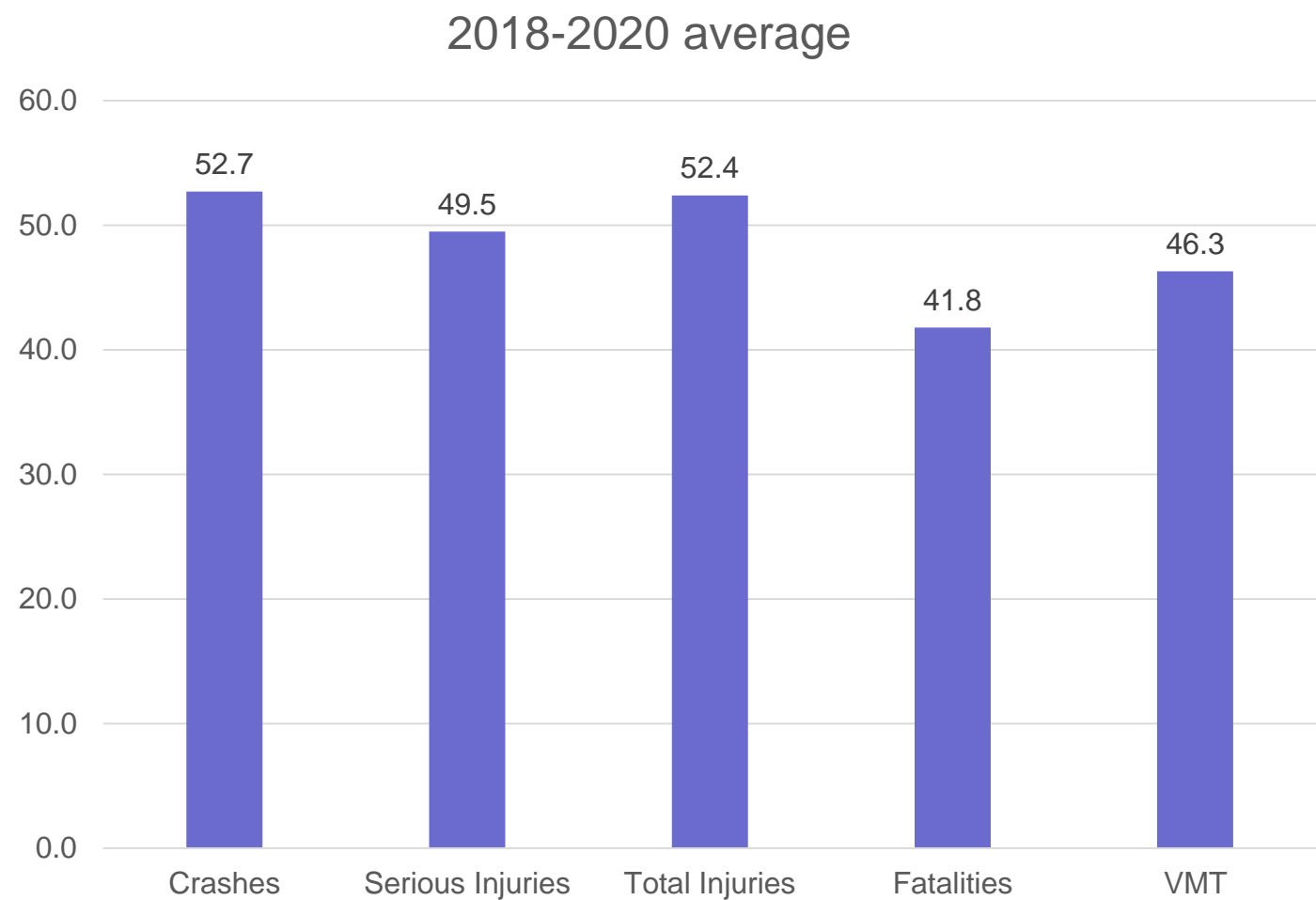
Non-motorist Fatalities and Serious Injuries



Non-motorized Serious Injuries and Fatalities (BRTB region)



BRTB Percent of State



Safety Performance Targets

- Federal regulations state that MPOs must set safety performance targets 180 days after the State HSIP Report is submitted.
- Initial BRTB safety targets were set in January 2018 and updated each January since then.

BRTB Target-Setting Process



- **Follow new Maryland methodology**
 - Exponential forecast from 2005-2009 average
 - Annual 2% reduction in cases of increasing trends
 - Single year target is midpoint of five-year average (e.g. 2020 target = 2018-2022 average)
- **Set five targets specific to the BRTB region**
- **Updated targets to be approved no later than February 28, 2022**
 - Incorporate new year of data into five-year rolling averages






Resolution #22-10

Baltimore Region Yearly Highway Safety Targets

Performance Measure	2005-2009 Baseline	2019 Actual	2020 Actual	Change 2019-2020	2018-2022 Target	2040 Goal
Number of Fatalities	244	208	248	↑ 19.2%	208	194
Number of Serious Injuries	2,094	1,509	1,409	↓ 6.6%	1,166	882
Fatality Rate per 100 Million VMT	0.94	0.75	1.06	↑ 42.4%	0.75	0.67
Serious Injury Rate per 100 Million VMT	8.06	5.42	6.04	↑ 11.5%	4.23	3.04
*Number of Non-motorized Fatalities & Serious Injuries	290	342	331	↓ 11.7%	333	272

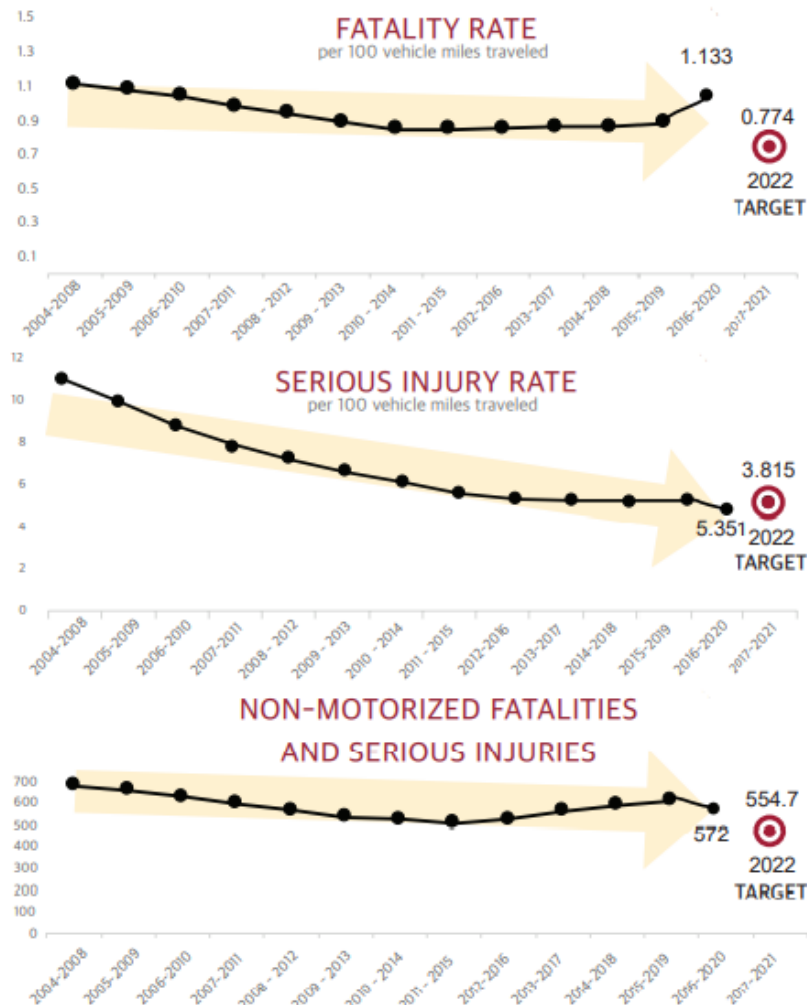
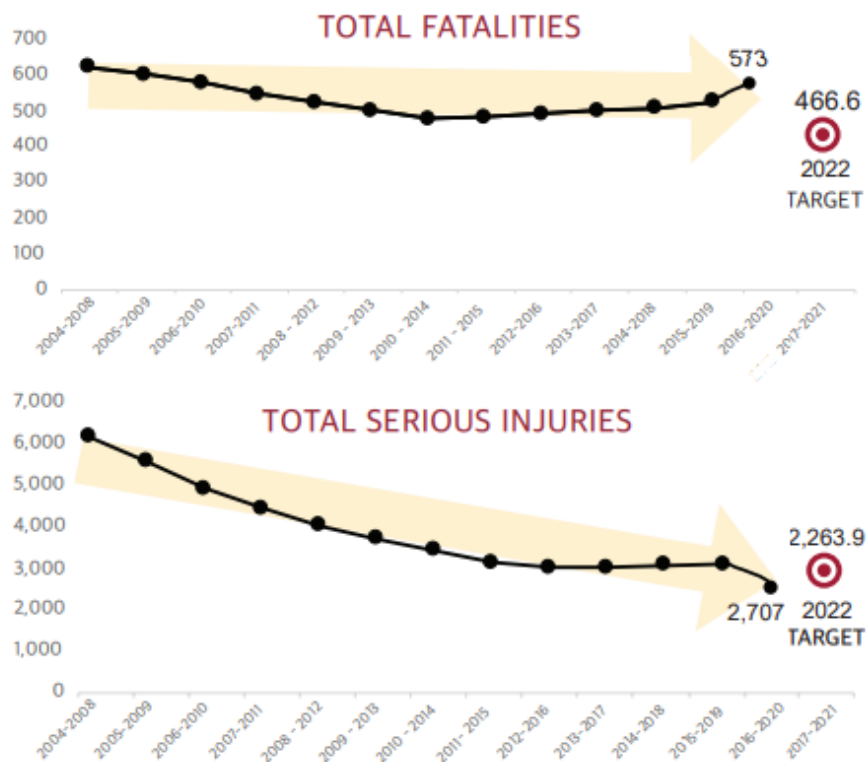
**Increasing trend, so two percent annual reduction applied.*

State Trends

Performance Measure	2019 Actual	2020 Actual	Change 2019-2020
Number of Fatalities	535	573	 7.10%
Number of Serious Injuries	3,122	2,718	 12.94%
Fatality Rate per 100 Million VMT	0.89	1.13	 26.97%
Serious Injury Rate per 100 Million VMT	5.19	5.37	 3.47%
Number of Non-motorized Fatalities & Serious Injuries	640	574	 10.31%

TPM 1: SAFETY

As part of Maryland's "Zero Deaths" approach to addressing highway safety, MDOT applies an exponential trend analysis to the five-year rolling averages to establish safety targets, as documented in the 2021-2025 Maryland Strategic Highway Safety Plan. Targets are updated annually and reported in the Highway Safety Improvement Program.



BRTB Strategies

- What have we done?
 - Incorporated measures and targets into the Transportation Improvement Program (TIP)
 - Enhanced safety in project scoring for the LRTP
 - Complete Streets Policies for MD and several Jurisdictions
 - Congestion Management Process
 - Local Strategic Highway Safety Plans
 - Four in place, three more to begin spring 2022
 - Pedestrian/Bicycle Coordinators in most Jurisdictions
 - Continuing Look Alive campaign
 - Safe System Approach
- New ideas?

For More Information

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@BALTOMETROCOUNCIL



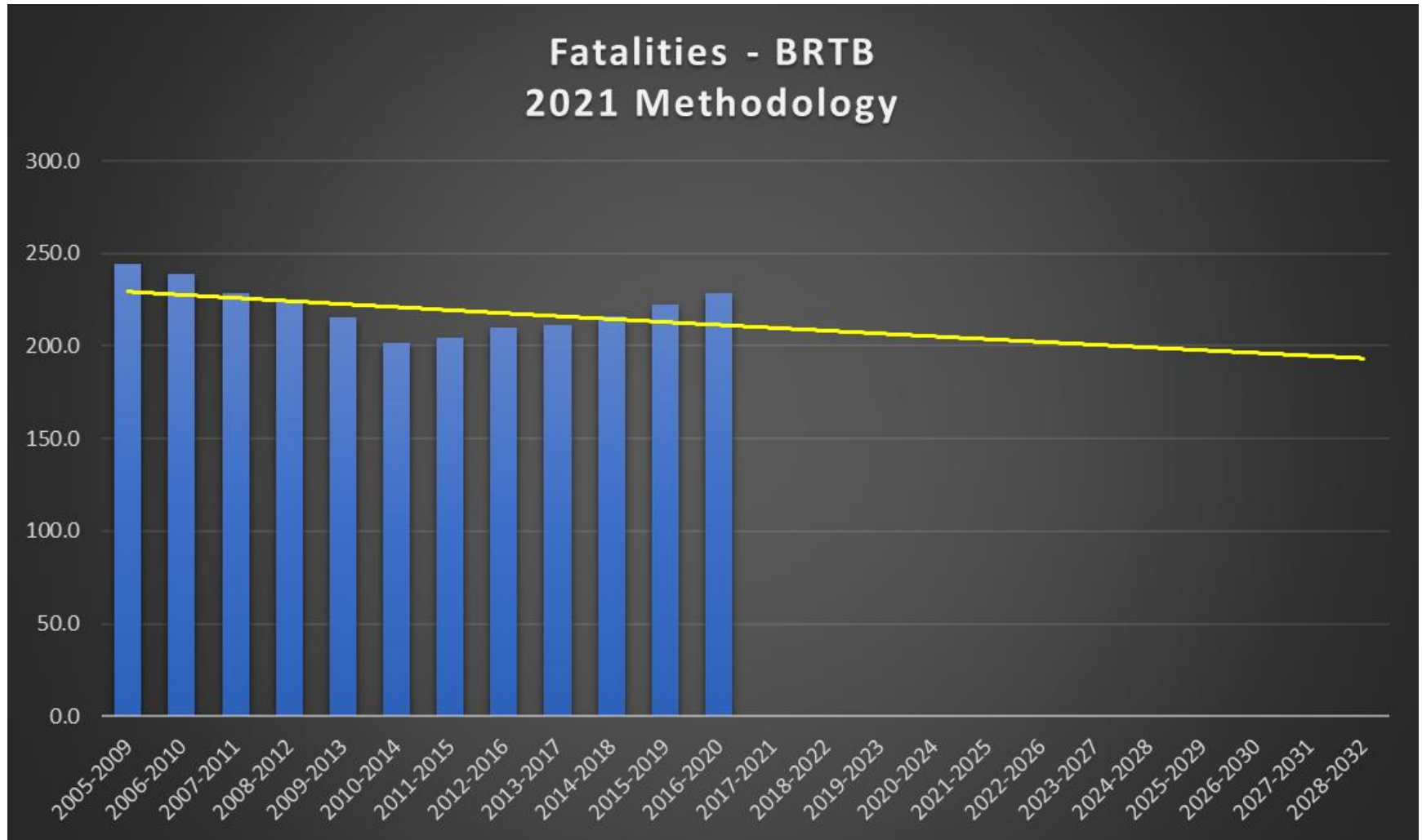
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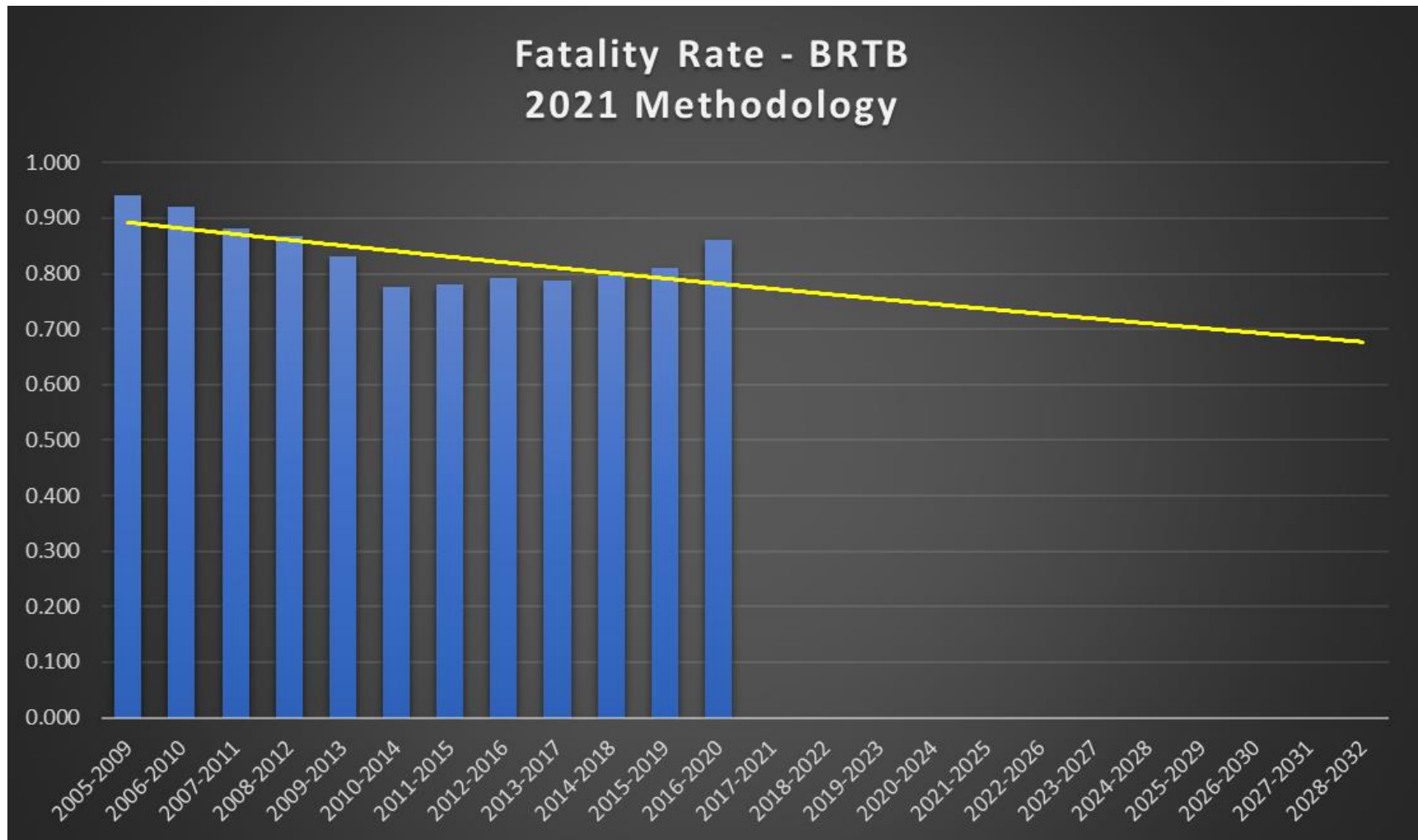
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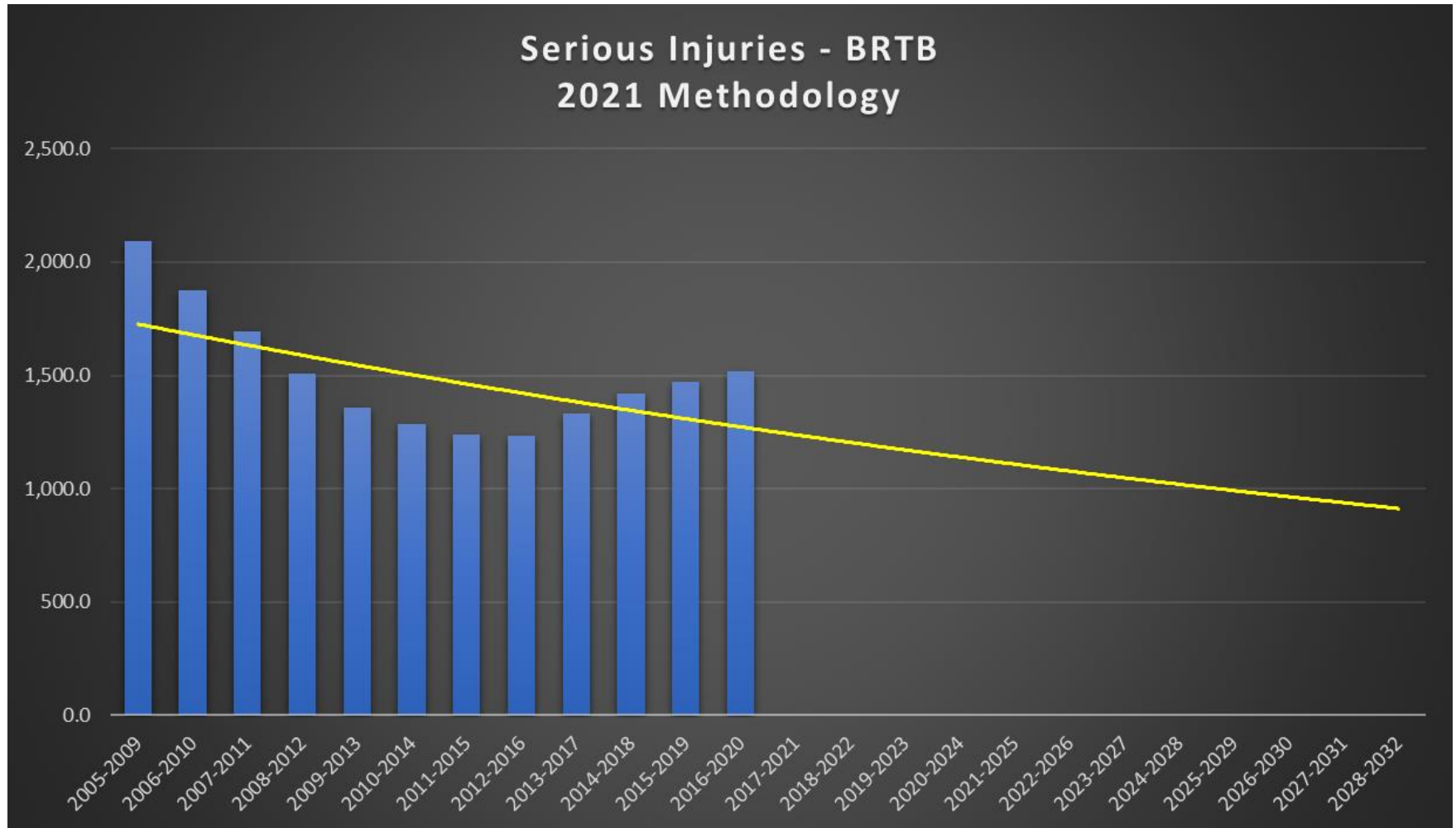
Trends and Targets



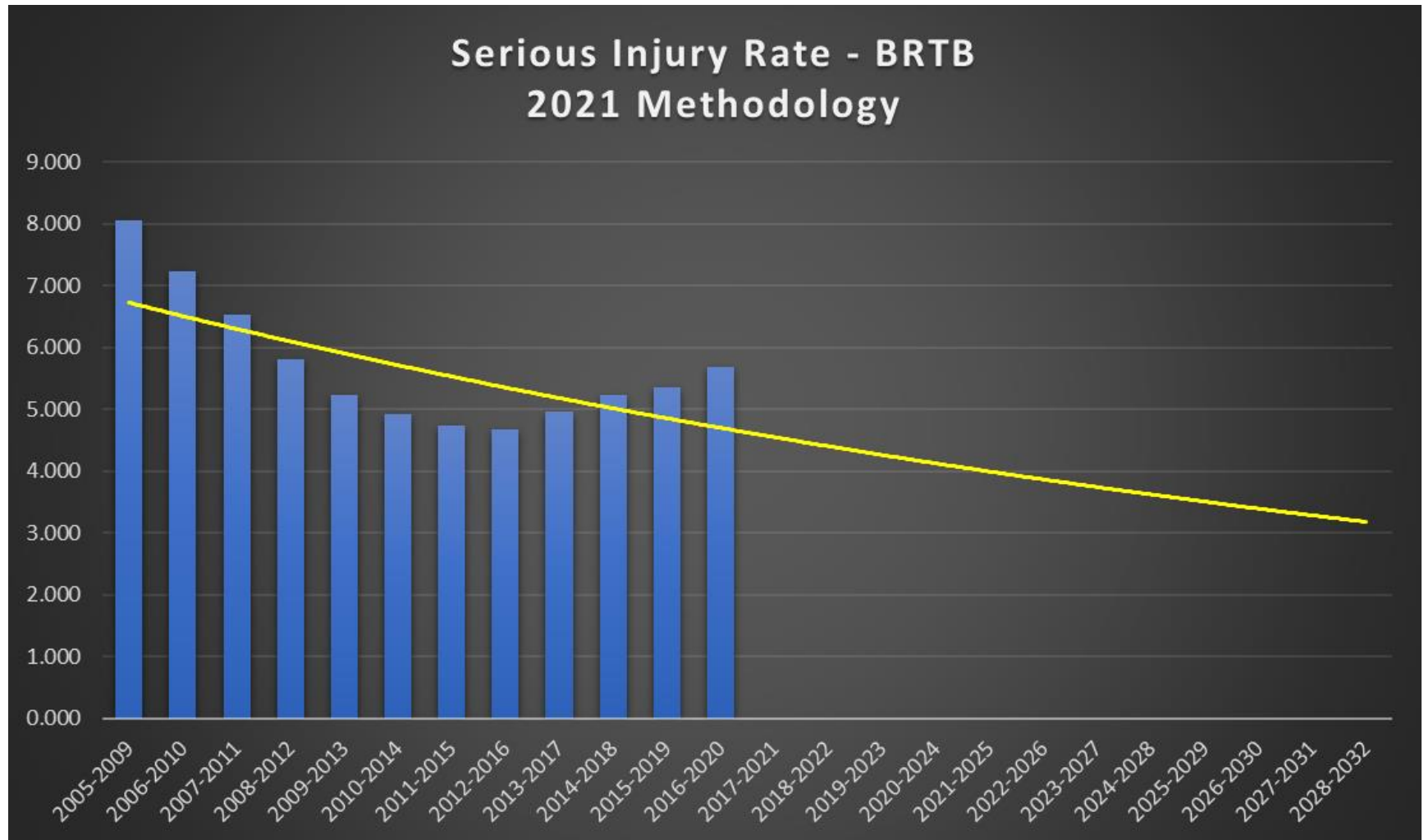
Trends and Targets



Trends and Targets



Trends and Targets



Trends and Targets

