

DRAFT ANNUAL REGIONAL TRANSIT AND HIGHWAY SAFETY TARGETS

Performance Based Planning and Programming (PBPP)

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National Capital Region
Transportation Planning Board

Presentation Items

- Part I: Transit Safety Process and Draft Targets
- Part II: Highway Safety Process and Draft Targets
- Part III: Next Steps

PBPP is a strategic data-driven approach that uses system information to make investment and policy decisions to achieve performance goals.

Two options for setting targets: adopting regional targets or supporting statewide targets

- *Due to the size and structure of the NCR, the TPB has consistently developed and adopted regional targets in coordination with DOTs and transit agencies*



Transit Safety Targets



Part I – Transit Safety Presentation Items

- Transit Agency Safety Requirements
- Transit Safety Performance Measures
- Applicability and Methodology
- Adopted 2022 Regional Targets
- 2022 Safety Performance
- Draft 2023 Regional Targets



Federal Requirement – Transit Agency Safety Plans

- Federal Performance Based Planning and Programming (PBPP) regulations requires applicable providers of public transportation to develop and certify an agency safety plan
 - "The Public Transportation Agency Safety Plan must include annual safety performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. Safety performance targets for the safety risk reduction program are only required for large urbanized area providers."
- 49 CFR 673.11(a)(3)
- Effective May 13, 2024, applicable transit providers are required to annually set targets for fourteen (14) Transit Safety performance measures, including seven new measures (see slide 6 for full list). See 89 FR 25694.
- MPOs set annual regional targets for the metropolitan planning area following state/agency adoption of its Transit Safety targets



Transit Safety Performance Measures

Note: Measures listed below in **BOLD** are the new required performance measures

General Safety Performance Measures	
1a: Major Events	2.1: Transit Worker Fatality Rate (NEW)
1b: Major Event Rate	3a: Injuries
1.1: Collision Rate (NEW)	3b: Injury Rate
1.1.1: Pedestrian Collision Rate (NEW)	3.1: Transit Worker Injury Rate (NEW)
1.1.1: Vehicular Collision Rate (NEW)	4a: Assaults on Transit Workers (NEW)
2a: Fatalities	4b: Rate of Assaults on Transit Workers (NEW)
2b: Fatality Rate	5: System Reliability

Source: FTA PTASP National Safety Plan Webinar (August 2024)



Applicable Regional Agencies

- Transit safety target requirements apply to providers of public transportation that are recipients and sub-recipients of federal Chapter 53 funding, except 5310 and 5311 funding recipients
 - (has been interpreted as applying to 5307 funding recipients, including those listed below):
 - **WMATA:** Metrorail, Metrobus, MetroAccess
 - **DDOT:** DC Circulator, DC Streetcar
 - **MDOT-MTA:** MTA Commuter Bus
 - **PRTC:** Bus and paratransit
 - and local systems in Suburban Maryland:
 - VanGo** (Charles Co.)
 - Ride On** (Montgomery Co.)
 - Transit** (Frederick Co.)
 - The Bus** (Prince George's Co.)



2023 Regional Transit Safety Targets

- Final targets for the region adopted by the TPB on December 20, 2023

	Fatalities		Injuries		Safety Events		Reliability
	Number	Rate	Number	Rate	Number	Rate	MDBF
Heavy Rail (HR)	0	0	146	18.30	41	5.20	25,000
Streetcar Rail (SR)	0	0	0	0.00	4	0.27	1,000
Urban Bus (MB)	0	0	351	0.58	356	0.59	11,378
Commuter Bus (CB)	0	0	1	0.01	0	0	33,401
Demand Response (DR)	0	0	49	0.24	59	0.29	0
Vanpools (VP)	0	0	0	0	0	0.00	0

Rate - Per 100,000 Vehicle Revenue Miles (VRM), except HR which is per 10 million VRM

MDBF = Mean Distance Between Failures



2023 Regional Transit Safety Data – V.1

- From the FTA NTD Safety & Security time-series data – Not including MDBF measure and Data Comparison for Applicable Agencies Only
- Rate - Per 100,000 Vehicle Revenue Miles (VRM), except HR which is per 10 million VRM
- * = Fatality count does not include those occurring due to trespass or suicide

2023									
	Fatalities*		Injuries		Safety Events		2023 vs. 2022		
	Number	Rate	Number	Rate	Number	Rate	F	I	E
Heavy Rail (HR)	7	0.76	94	10.26	34	3.71	↑	↑	↑
Streetcar Rail (SR)	0	0	1	0.81	6	4.84	↔	↔	↓
Urban Bus (MB)	1	0.001	318	0.41	742	0.96	↓	↑	↑
Commuter Bus (CB)	0	0	0	0	4	0.05	↔	↔	↑
Demand Response (DR)	0	0	16	0.08	26	0.12	↓	↓	↓
Vanpools (VP)	0	0	0	0	0	0	↔	↔	↔



2023 Regional Transit Safety Data – V.2

- The table below shows the previous PM categories (except MDBF), PLUS available 2023 data for the 7 new PMs - *Data Comparison for Applicable Agencies Only*

2023											
	Fatalities	Injuries	Safety Events	Assaults on Transit Workers		Collisions					
	<i>See slide 9 for data</i>			Number	Rate	Rate	Pedestrian Collision Rate	Vehicular Collision Rate			
Heavy Rail (HR)				<i>See slide 9 for data</i>			26	2.84	1.20	n/a	n/a
Streetcar Rail (SR)							0	0	4.84	n/a	n/a
Urban Bus (MB)							13	0.02	0.34	n/a	n/a
Commuter Bus (CB)							0	0	0.05	n/a	n/a
Demand Response (DR)							0	0	0.12	n/a	n/a
Vanpools (VP)							0	0	0	n/a	n/a



Transit Safety – Performance vs Target Observations

- In 2023 actual performance generally met regional safety targets across transit modes. Exceptions included:
 - There were significantly more safety events on fixed-route buses than the target set (742 vs 356)
 - Fatalities are targeted at 0; however, there were 8 total fatalities involving transit vehicles or facilities
 - Commuter bus and streetcar services also experienced higher than targeted injury and safety event incidents
- Actual injuries and safety events on Demand Response services were significantly less than the set targets
- In some cases, meeting the regional target did not mean that performance improved year-to-year



2024 Regional Transit Safety Target - Process

- Targets Under Development
 - Pending outstanding information from agencies/jurisdictions, including for the seven new performance measures for which many did not have standing data.
- ***Draft targets will be presented at November TPB***



Highway Safety Targets



Part II – Highway Safety Presentation Items

- Highway Safety Requirements
- Highway Safety Measures
- Highway Safety Target-Setting Methodology
- Highway Safety Trends 2019 through 2023
- 2019-2023 Highway Safety Targets and Performance



Federal Requirements – Highway Safety Plans

- Federal PBPP regulations require State DOTs and MPOs to:
 - Adopt annual safety performance targets for five (5) safety performance measures
 - Measure and report progress towards those targets each year
 - State DOTs are required to report their safety targets annually through their HSIP report by August 31, and MPOs are required to report their safety targets within 180 days thereafter
- Requirement supports implementation of the Highway Safety Improvement Program (HSIP), which requires States to improve highway safety on public roads using a data-drive, strategic approach



Highway Safety Performance Measures

Performance Measure	Description
Number of Fatalities (5 year rolling average)	Total number of fatalities during a calendar year
Rate of Fatalities per 100 million VMT (5 year rolling average)	Ratio of total fatalities to VMT
Number of Serious Injuries (5 year rolling average)	Total number of serious injuries during a calendar year
Rate of Serious Injuries per 100 million VMT (5 year rolling average)	Ratio of total serious injuries to VMT
Number of Non-Motorized Fatalities and Serious Injuries (5 year rolling average)	Total number of fatalities and serious injuries during a calendar year



Highway Safety – Target Setting Methodology

- TPB targets for each performance measure is a composite of sub-targets developed for each State
- Combine the three sub-targets into a regional target for the NCR
 - *If a calculated target is higher than the previous target, set the target equal to the previous target, i.e., target is “capped”*



Highway Safety – Target Setting Methodology

- Adjustments to the methodology this year
 - Data for Maryland jurisdictions is sourced from Maryland Department of State Police (MDSP) instead of MDOT Highway Safety Office
 - MDSP includes “non-traffic” fatal crashes (i.e., fatal crash due to a medical event)
 - Data for urbanized area of Fauquier County is no longer included



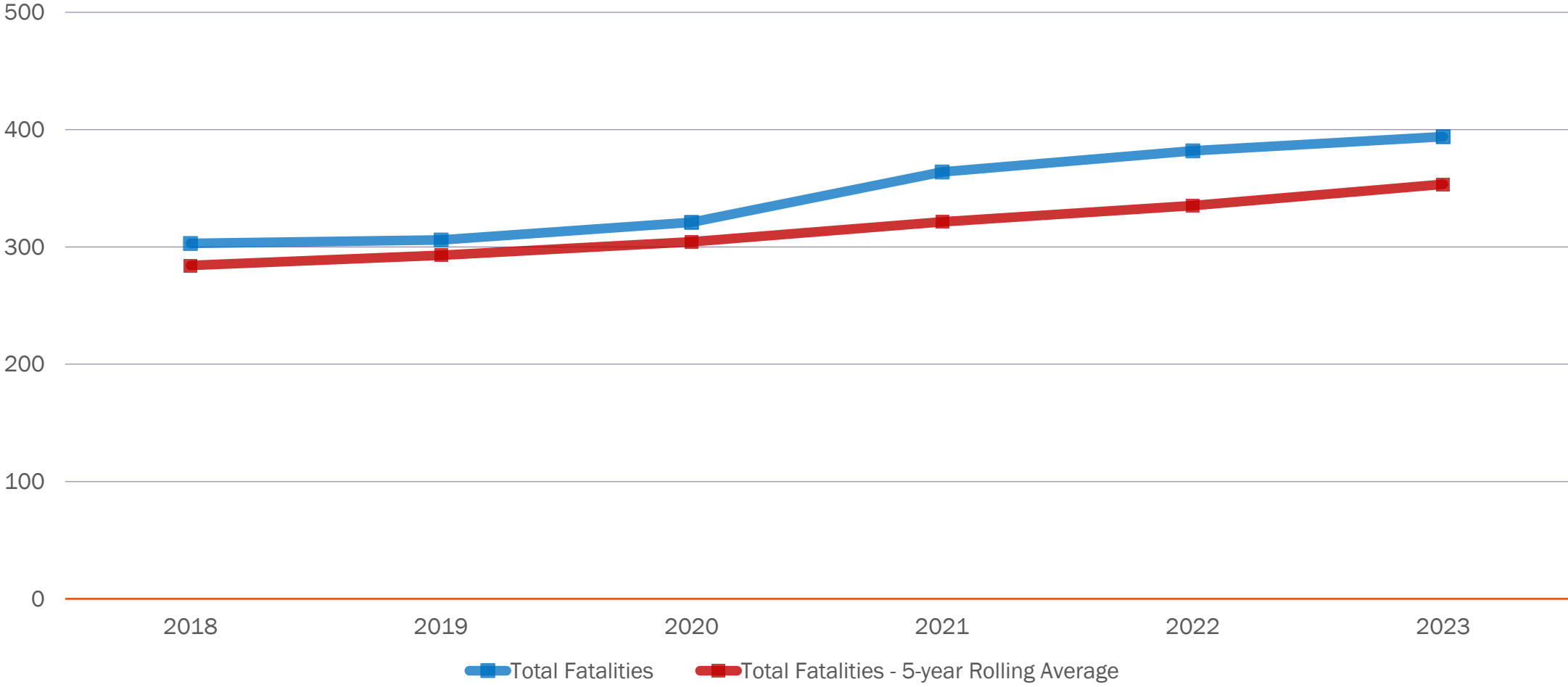
NCR Annual Highway Safety Data: 2019 through 2023

	2019	2020	2021	2022	2023	Change from 2021-2022
# of Fatalities	306	321	364	382	394 ¹	↑ 3.14%
Fatality Rate (per 100 MVMT)	0.673	0.876	0.896	0.940	0.849 ¹	↓ 9.62%
# of Serious Injuries	2,371	1,839	2,221	2,178	2,295	↑ 5.37 %
Serious Injury Rate (per 100 MVMT)	5.211	5.016	5.464	5.358	4.948	↓ 7.66 %
# Nonmotorist Fatalities & Serious Injuries	593	443	520	637	586	↓ 8.01 %
Annual Vehicle Miles Traveled (100 M)	454.97	366.60	406.47	431.91	463.86	↑ 7.4 %

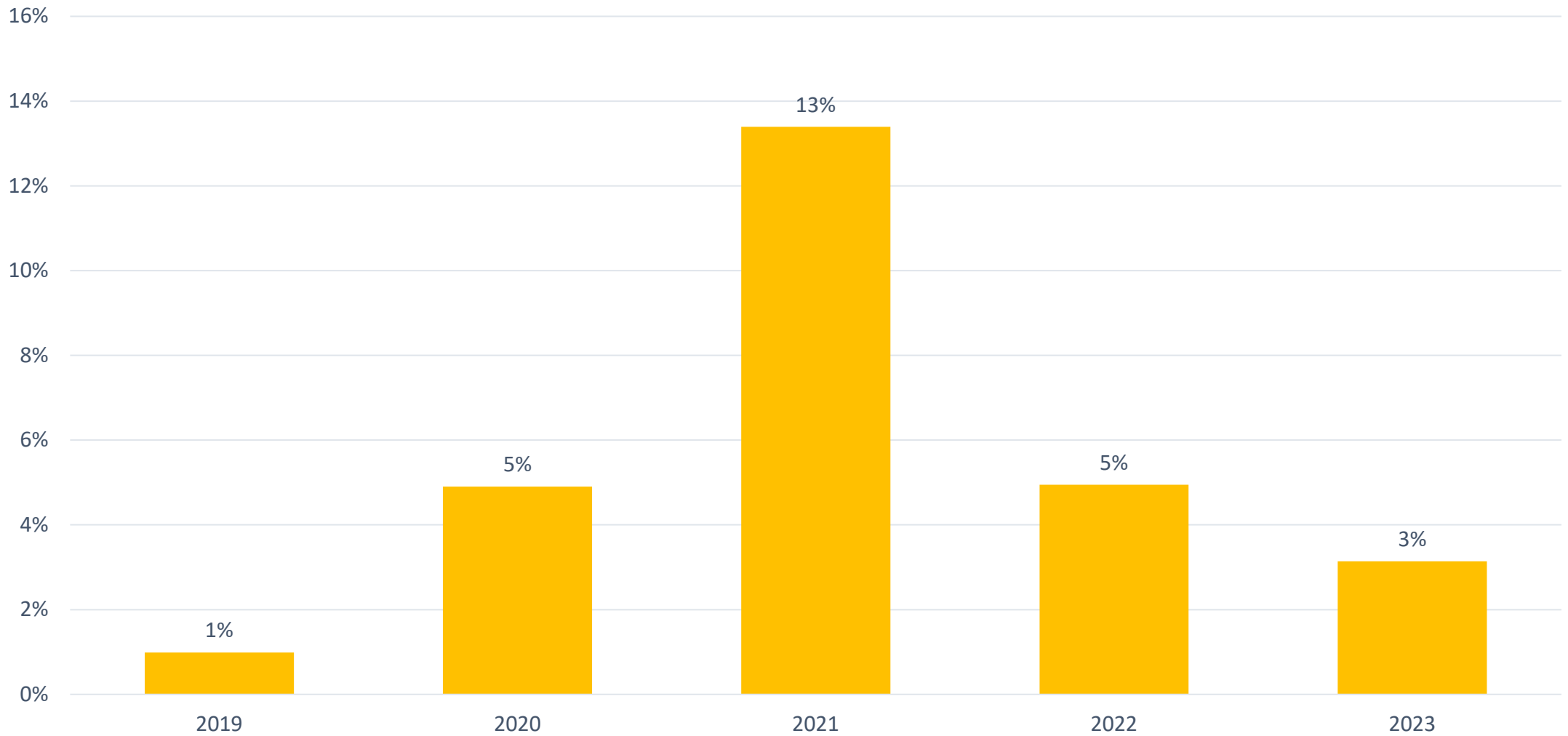
Note¹: Figures listed are from preliminary state fatality data; 2023 FARS data not yet published.



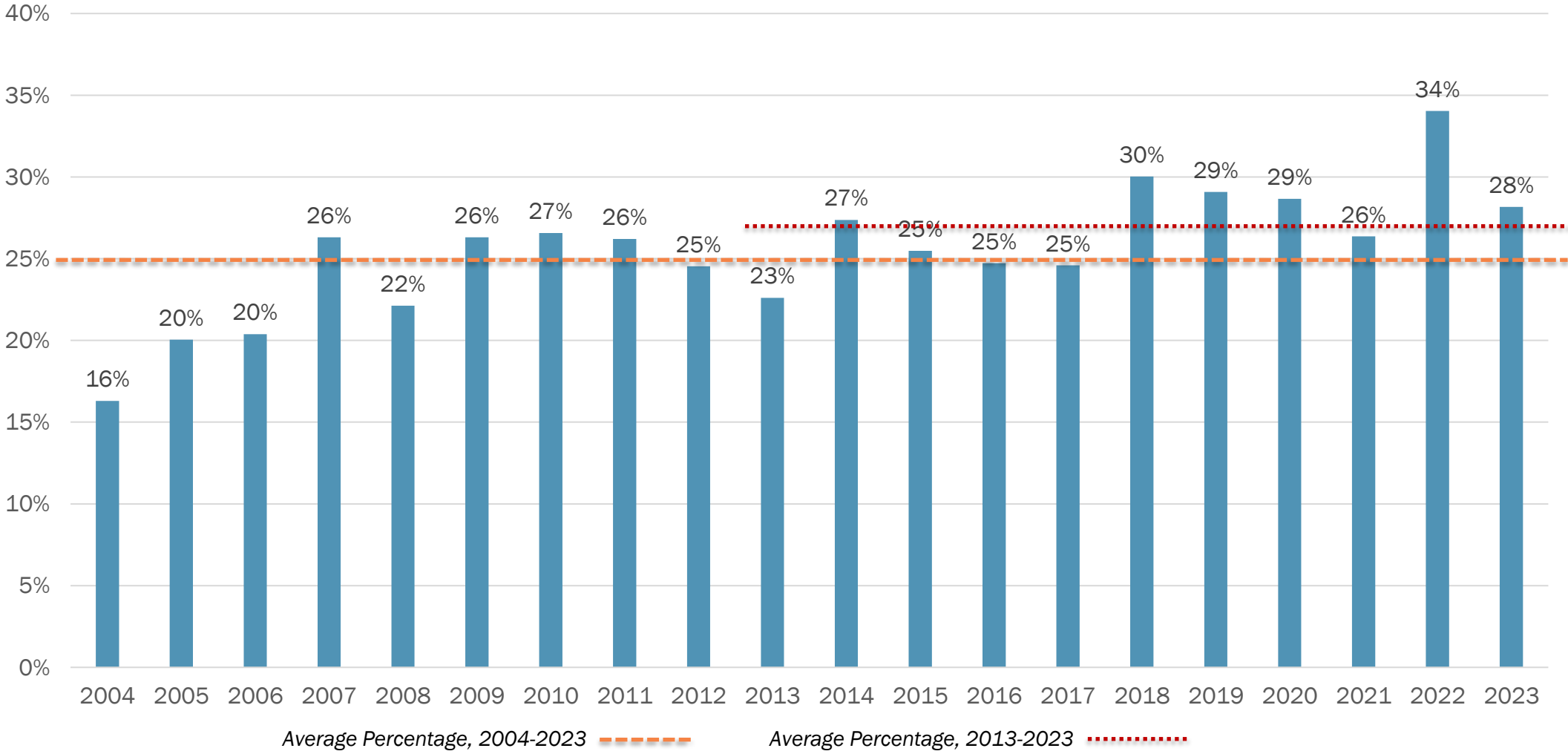
National Capital Region Roadway Fatalities



National Capital Region Fatalities: Annual Percent Change



Pedestrian Fatalities as a Proportion of Total Roadway Fatalities



Highway Safety – Staff Observations

- Roadway fatalities continue to increase but at a slower rate compared to 2020-2022
 - Suggests that traffic fatalities may be starting to level-off
- Non-motorist fatalities and serious injuries declined compared to 2022
 - Driven by decreases in both modes
 - Pedestrian fatalities remain proportionately high
- NCR safety performance continues to be better than national average



2019-2023 NCR Actual Performance vs. Targets

Performance Measure (5-year rolling average)	Adopted 2019- 2023 Targets (Dec 2022)	Actual 2019-2023 Performance	Status
# of Fatalities	253.0	353.4 ¹	Not met
Fatality Rate (per 100 MVMT)	0.588	0.842 ¹	Not met
# of Serious Injuries	1,757.4	2,153.0	Not met
Serious Injury Rate (per 100 MVMT)	3.733	5.200	Not met
# Nonmotorist Fatalities & Serious Injuries	486.9	564.2	Not met



Note¹: Figures listed are from preliminary state fatality data; 2023 FARS data not yet published.
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Part III – Next Steps

- November 20: Present draft regional transit and highway safety targets to the TPB
 - Recap federal requirements, process, and recent safety performance
- Finalize targets based on any final information and board feedback
- December 18: Request board approval of final regional targets



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