# Slide 1:

# Presentation Title: Safety

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Access for All Advisory Committee

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Logos: National Capital Region Transportation Planning Board

Slide 2: Discussion Topics

* Roadway Fatalities in the Region
* Review of Recent TPB Roadway Safety Actions
* Regional Safety Study Findings
* Proposed Recommendations
* Next Steps

Slide 3: Regional Roadway Fatalities (2004-2018)

Line Graph of National Capital Region Fatalities showing:

* Total Fatalities
* DC Fatalities (lowest with high of about 50)
* MD Fatalities (highest with high of about 250)
* VA Fatalities (middle with high of almost 150)

Slide 4: Recent TPB Safety Actions (01/18 – 05/20)

* TPB declares the current roadway safety outcomes in the region unacceptable
* TPB collaborates with state transportation agencies to understand what they are doing to address roadway safety in the region
* TPB conducts a high-level assessment of the region’s safety data (regional safety study)
* Assessment reveals several underlying behavioral factors contributing to the unacceptable outcomes
* Assessment also reveals that three types of crashes account for a disproportionate share of fatalities and serious injuries
* Pedestrians, intersections, major arterials
* TPB examines actions to take to significantly improve safety for the region’s roadway users

Slide 5: Study Overview

Objectives

* to understand the factors contributing to fatal and serious injury crashes in the National Capital Region (NCR);
* to determine where crashes on the roadway transportation network are over-represented;
* to identify and recommend proven effective solutions (policy, programmatic, project);
* to provide the TPB and member jurisdictions specific suggestions to improve safety; and
* to inform future Transportation Safety Subcommittee and Street Smart efforts.

Progress to Date

* Kickoff meeting – June 26, 2019
* Benchmark Peer Evaluation - complete
* Collection and Processing of Safety Data – complete
* Analysis of Safety Data – complete
* Recommendations – in process

Project Timeline

* Original contract through February 2020 – extended through November 2020

Slide 6: Crashes by Jurisdiction (2013-2017)

Chart showing crash severity (fatalities, serious injuries, total crashes) by jurisdiction:

District of Columbia – 124 Fatalities, 1,765 Serious Injuries, 118,166 Total Crashes

Charles County, MD – 103 Fatalities, 955 Serious Injuries, 13,391 Total Crashes

Frederick County, MD – 101 Fatalities, 475 Serious Injuries, 16,207 Total Crashes

Montgomery County, MD – 200 Fatalities, 1,998 Serious Injuries, 64,598 Total Crashes

Prince George’s County, MD – 455 Fatalities, 2,363 Serious Injuries, 76,381 Total Crashes

Arlington County, VA – 21 Fatalities, 303 Serious Injuries, 12,592 Total Crashes

Fairfax County, VA - 172 Fatalities, 3,423 Serious Injuries, 68,645 Total Crashes

Fauquier County, VA (urbanized area) – 3 Fatalities, 78 Serious Injuries, 1,706 Total Crashes

Loudoun County, VA – 69 Fatalities, 899 Serious Injuries, 23,195 Total Crashes

Prince William County, VA 104 Fatalities, 1,117 Serious Injuries, 28,306 Total Crashes

Alexandria, VA– 15 Fatalities, 220 Serious Injuries, 8,701 Total Crashes

Fairfax City, VA – 6 Fatalities, 108 Serious Injuries, 2,967 Total Crashes

Falls Church, VA – 0 Fatalities, 79 Serious Injuries, 681 Total Crashes

Manassas, VA – 2 Fatalities, 324 Serious Injuries, 2,933 Total Crashes

Manassas Park, VA – 0 Fatalities, 7 Serious Injuries, 382 Total Crashes

Urban Core – 160 Fatalities, 2,288 Serious Injuries, 139,459 Total Crashes

Inner Suburbs – 833 Fatalities, 7,971 Serious Injuries, 213,272 Total Crashes

Outer Suburbs – 382 Fatalities, 3,855 Serious Injuries, 86,120 Total Crashes

Total – 1,375 Fatalities, 14,114 Serious Injuries, 438,851 Total Crashes

Slide 7: Fatality Rate by Jurisdiction (per 100 million vehicle miles traveled)

Bar Graph showing 2013-2017 average fatality rate by jurisdiction, per 100 million vehicle miles travelled

* Charles County 1.59
* Prince George’s County 1.01
* Frederick County .65
* Montgomery County .53
* City of Fairfax .69
* Prince William County .60
* Loudoun County .52
* City of Alexandria .41
* Fairfax County .35
* Fauquier County (urbanized area) .30
* Arlington County .27
* Manassas .24
* City of Falls Church 0.00
* Manassas Park 0.00
* District of Columbia .69

Slide 8: Fatality Rate by Jurisdiction (per 100,000 people)

Bar Graph showing 2013-2017 average fatality rate per 100,000 people

* Charles County 13.42
* Prince George’s County 10.09
* Frederick County 8.15
* Montgomery County 3.95
* City of Fairfax 4.99
* Prince William County 4.69
* Loudoun County 3.73
* City of Alexandria 3.06
* Fairfax County 2.02
* Arlington County 1.90
* Manassas .93
* City of Falls Church 0.00
* Manassas Park 0.00
* District of Columbia 3.69

Note no data for Fauquier County (urbanized area)

Slide 9: Crash Types (2013-2017)

Bar graph showing crash types with further breakdown of how many were serious injuries and fatalities

Non-Motorist

* Bicycle - 568 Serious Injuries, 29 Fatalities
* Pedestrian – 1,622 Serious Injuries, 342 Fatalities

Lane Departure

* Sideswiped - 741 Serious Injuries, 42 Fatalities
* Head On – 1,138 Serious Injuries, 133 Fatalities
* Ran off Roadway/Fixed Object – 2,072 Serious Injuries, 312 Fatalities

Intersection/Access Management

* Left Turn/Angle – 3,957 Serious Injuries, 303 Fatalities
* Rear End – 3,197 Serious Injuries, 132 Fatalities

Slide 10: Crash Contributing Factors (2013-2017)

Bar graph showing factors contributing to crashes, with further breakdown of how many were serious injuries and fatalities

* Restraints Not Used - 14 Serious Injuries, 27 Fatalities
* Pedestrian Involvement - 13 Serious Injuries, 25 Fatalities
* Intersection - 40 Serious Injuries, 23 Fatalities
* Roadway Departure - 15 Serious Injuries, 23 Fatalities
* Speed Related Involvement - 17 Serious Injuries, 22 Fatalities
* Older Driver Involvement (65+) - 15 Serious Injuries, 21 Fatalities
* Younger Driver Involvement (under 25) - 27 Serious Injuries, 20 Fatalities
* Alcohol Related Involvement - 11 Serious Injuries, 18 Fatalities
* Motorcycle Driver/Passenger - 9 Serious Injuries, 15 Fatalities
* Distracted Drivers - 3,957 Serious Injuries, 303 Fatalities
* Rear End - 17 Serious Injuries, 11 Fatalities
* Bicycle Involvement - 4 Serious Injuries, 6 Fatalities
* Work Zone Related – 3 Serious Injuries, 3 Fatalities
* Drug Related Involvement - 2 Serious Injuries, 3 Fatalities

Slide 11: Functional Class (2013-2017)

Bar Graph showing class of roadway where accident occurred, further broken down by total miles of roadway class, Fatalities, Serious Injuries

* Minor Arterial – 4,518 total miles, 411 Fatalities, 4,690 Serious Injuries
* Collector – 4,067 total miles, 176 Fatalities, 2,057 Serious Injuries
* Major Arterial – 2,250 total miles, 467 Fatalities, 4,339 Serious Injuries
* Freeways – 2,210 total miles, 170 Fatalities, 2,166 Serious Injuries
* Expressway – 351 total miles, 45 Fatalities, 343 Serious Injuries
* Ramp – 233 total miles, 19 Fatalities, 237 Serious Injuries

Slide 12: Deeper Dives

* Pedestrians
* Intersections
* Arterials

Slide 13: Pedestrians

Slide 14: Pedestrian Crash Severity By Jurisdiction

District of Columbia – 50 Fatalities, 399 Serious Injuries, 5,431 Total Crashes

Charles County, MD – 16 Fatalities, 49 Serious Injuries, 208 Total Crashes

Frederick County, MD – 7 Fatalities, 36 Serious Injuries, 284 Total Crashes

Montgomery County, MD – 56 Fatalities, 318 Serious Injuries, 2,297 Total Crashes

Prince George’s County, MD – 108 Fatalities, 269 Serious Injuries, 2,156 Total Crashes

Arlington County, VA – 6 Fatalities, 74 Serious Injuries, 693 Total Crashes

Fairfax County, VA – 55 Fatalities, 331 Serious Injuries, 1,024 Total Crashes

Fauquier County, VA (urbanized area) – 1 Fatalities, 7 Serious Injuries, 24 Total Crashes

Loudoun County, VA – 14 Fatalities, 57 Serious Injuries, 235 Total Crashes

Prince William County, VA 20 Fatalities, 96 Serious Injuries, 299 Total Crashes

Alexandria, VA– 7 Fatalities, 58 Serious Injuries, 338 Total Crashes

Fairfax City, VA – 1 Fatalities, 21 Serious Injuries, 54 Total Crashes

Falls Church, VA – 0 Fatalities, 13 Serious Injuries, 30 Total Crashes

Manassas, VA – 1 Fatalities, 39 Serious Injuries, 74 Total Crashes

Manassas Park, VA – 0 Fatalities, 0 Serious Injuries, 7 Total Crashes

Urban Core – 63 Fatalities, 531 Serious Injuries, 6,462 Total Crashes

Inner Suburbs – 220 Fatalities, 952 Serious Injuries, 5,561 Total Crashes

Outer Suburbs – 59 Fatalities, 284 Serious Injuries, 1,131 Total Crashes

National Capital Region Total – 342 Fatalities, 1,767 Serious Injuries, 13,154 Total Crashes

Slide 15: Pedestrian Fatality Rate by Population

Bar Graph showing fatalities per 100,000 people by jurisdiction with Fatalities highest in Prince George’s County at 108, Serious Injuries highest in Fairfax County at 331, Total Crashes highest in Montgomery County.

Slide 16: Pedestrian Crash Severity by Time of Day

Bar graph showing Pedestrian Injury Severity by Time of Day, showing highest fatalities, serious injuries, and crashes in the 5pm -10pm range

Slide 17: Pedestrian Crash Severity by Month

Bar graph showing pedestrian injury severity by month with October having the highest fatalities, serious injuries, and total crashes.

Slide 18: Pedestrian Crash Severity by Location

Bar graph showing injury severity by Pedestrian Location

Unknown – 65 Fatalities, 414 Serious Injuries, 4,270 Total Crashes

Unmarked Crosswalk - 6 Fatalities, 54 Serious Injuries, 386 Total Crashes

Marked Crosswalk – 61 Fatalities, 536 Serious Injuries, 3,927 Total Crashes

Sidewalk – 7 Fatalities, 33 Serious Injuries, 252 Total Crashes

In Roadway/Unmarked Midblock/Not at Intersection – 197 Fatalities, 675 Serious Injuries, 3,770 Total Crashes

Median/Island – 2 Fatalities, 4 Serious Injuries, 28 Total Crashes

Outside Roadway – 15 Fatalities, 114 Serious Injuries, 521 Total Crashes

Slide 19: Driver Age in Pedestrian Crashes

Chart of Driver Age in Pedestrian Crashes broken down by Fatal Pedestrian Crashes, Serious Injury Pedestrian Crashes, Total Drivers in Pedestrian Crashes showing drivers over age 84 with highest fatality rate, drivers age 30-34 with highest Serious Injury, and drivers age 25-29 with highest pedestrian crashes.

Slide 20: Intersections and Major Arterials

Slide 21: Intersection Collision Types by Contribution

Bar graph showing Angle/Left Turn with highest percent of total crashes and highest percentage of fatality and serious injury rate

Slide 22: Major Arterial Collision Types by Contribution

Bar graph showing Rear End with highest percent of total crashes and Angle /Left Turn with highest percentage of fatality and serious injury rate

Slide 23: Proposed Recommendations

Slide 24: Proposed TPB Resolution – Part 1

General (systemic) recommendations that address behavior and affect all types of crashes

Action - Urges its members to:

Description:

* Reaffirm road user safety as a top priority and prioritize the implementation of projects, programs, and policies, that strive to ensure equitable impacts and will:
  + Increase Seat Belt Use
  + Reduce Speeding
  + Reduce Impaired Driving
  + Reduce Distracted Driving

Slide 25: Proposed TPB Resolution – Part 2

Specific set of recommendations that address the region’s predominant types of fatal and serious injury crashes

Action - Urges its members to:

Description:

* Commit to working individually and/or collectively to implement all of the applicable safety measures (attached) to address the types of fatal and serious injury crashes disproportionately observed in this region and strive to ensure their equitable impacts

Slide 26: Proposed TPB Resolution – Part 3

Recommendation to establish a regional safety program to help improve road user safety

Action - Establish a Regional Roadway Safety Program

Description

* Which, through enhanced safety planning capabilities, can assist its member jurisdictions and the region implement projects, programs or policies to equitably improve safety outcomes for all roadway users.
* Modeled loosely on its Transportation Land-use Connection program with assistance from the three DOTs
* ~$250k annual budget

Slide 27: Proposed TPB Resolution – Part 4

Action:

Calls upon its member jurisdictions and agencies to:

* adopt equitable Vision Zero policies, and
* develop local roadway safety plans and ensure their equitable impacts on all roadway users

Calls upon its member states\* to:

* adopt primary seat belt legislation, and
* increase the use of ignition interlock devices for impaired driving offenders

\* Note: Currently several jurisdictions have Vision Zero policies and/or roadway safety plans; DC and MD have primary seat belt laws; all member states have ignition interlock device requirements but apply them to varying degrees

Slide 28: Illustrative Projects – TPB Regional Safety Program

TPB Regional Safety Program – Types of Projects

* Assist jurisdictions with crash data analysis
* Provide consultant services to facilitate local road safety audits
* Support additional “Street Smart-like” activities with street teams and Virtual Reality car for member jurisdictions
* Conduct analyses of equity impacts of roadway safety measures
* Support or sponsor a regional “safest driver” contest (along the lines of what San Antonio did in 2018)
* Support jurisdictional level roadway safety plans
* Facilitate/conduct regional safety peer exchanges and/or training programs
* Facilitate educational outreach on safety

Slide 29: Next Steps

* Finalize proposed resolution based on Transportation Planning Board feedback
* Request adoption of resolution at the July TPB meeting
* Continue the work…

Slide 30:

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