

# SAFETY STUDY UPDATE & REGIONAL SAFETY TARGET SETTING METHODOLOGY

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TPB Citizen's Advisory Committee  
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# Presentation Items

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- Part I: Review of Safety Trends
- Part II: Review of Progress Towards the 2014-2018 Safety Targets
- Part III: Review of Approach for Setting Next Round of Regional Safety Targets
- Part IV: Update on Regional Safety Study
- Part V: Next Steps



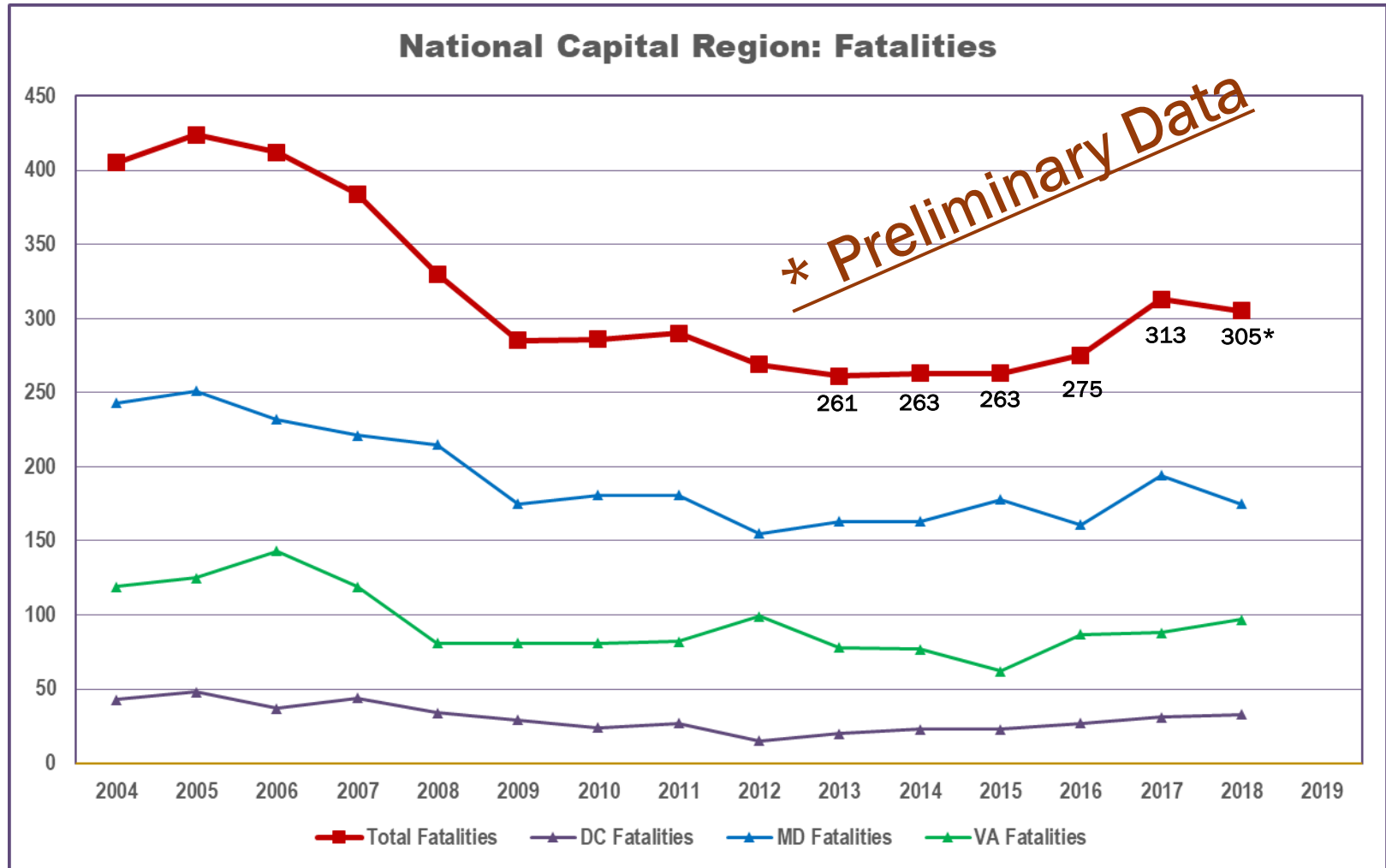
# Part I

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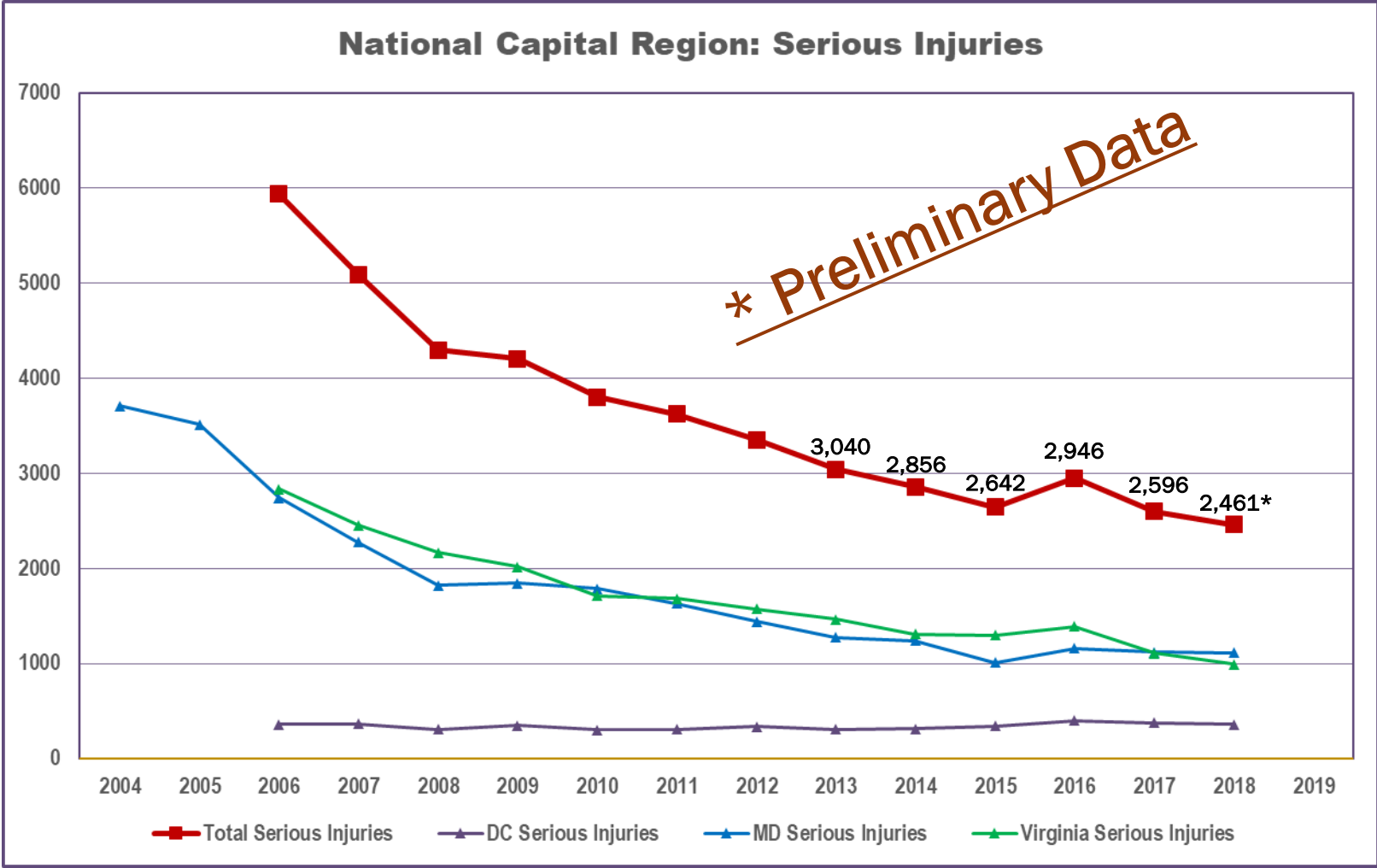
## Review of Safety Trends



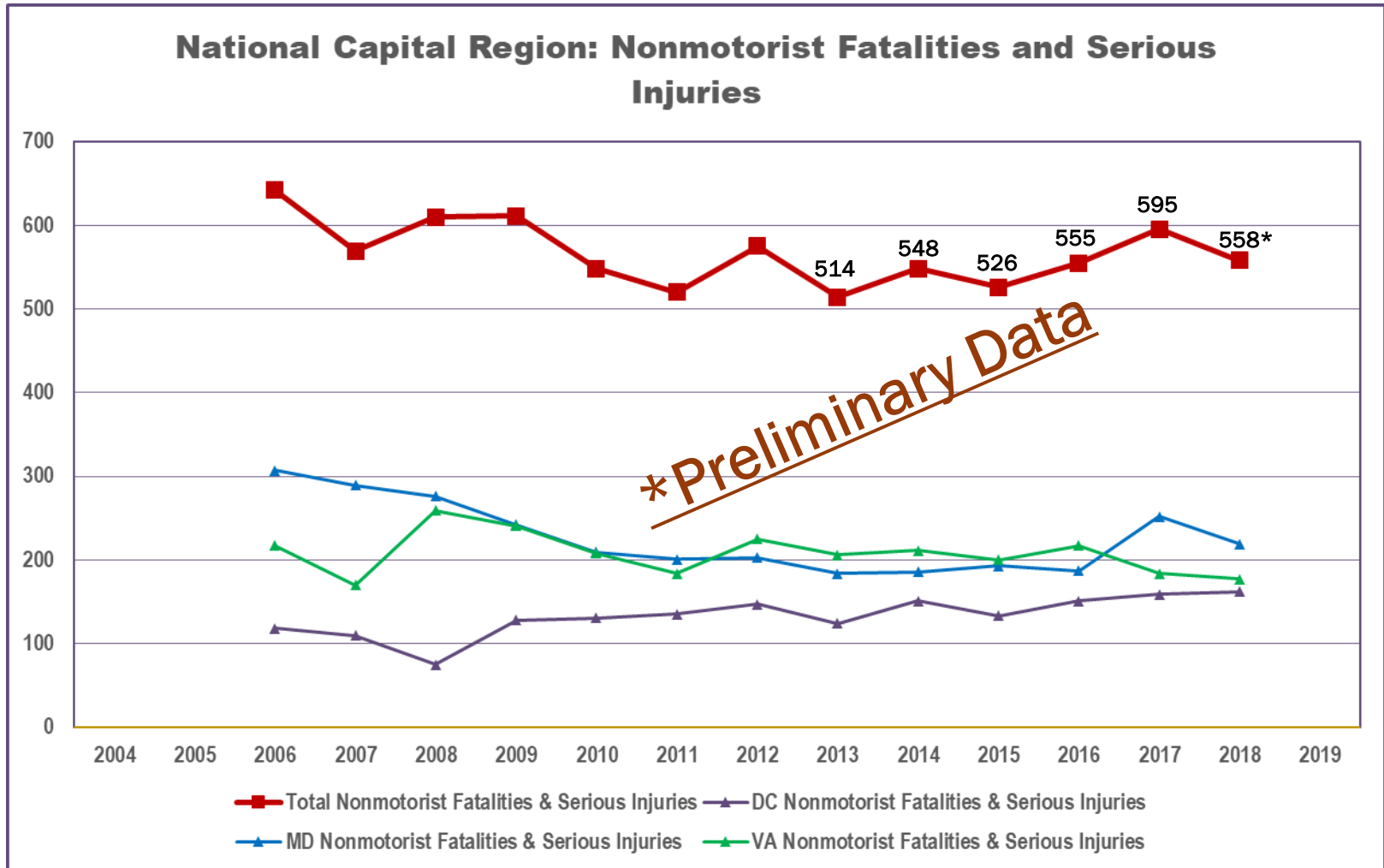
# Fatality Trend – Annual Data



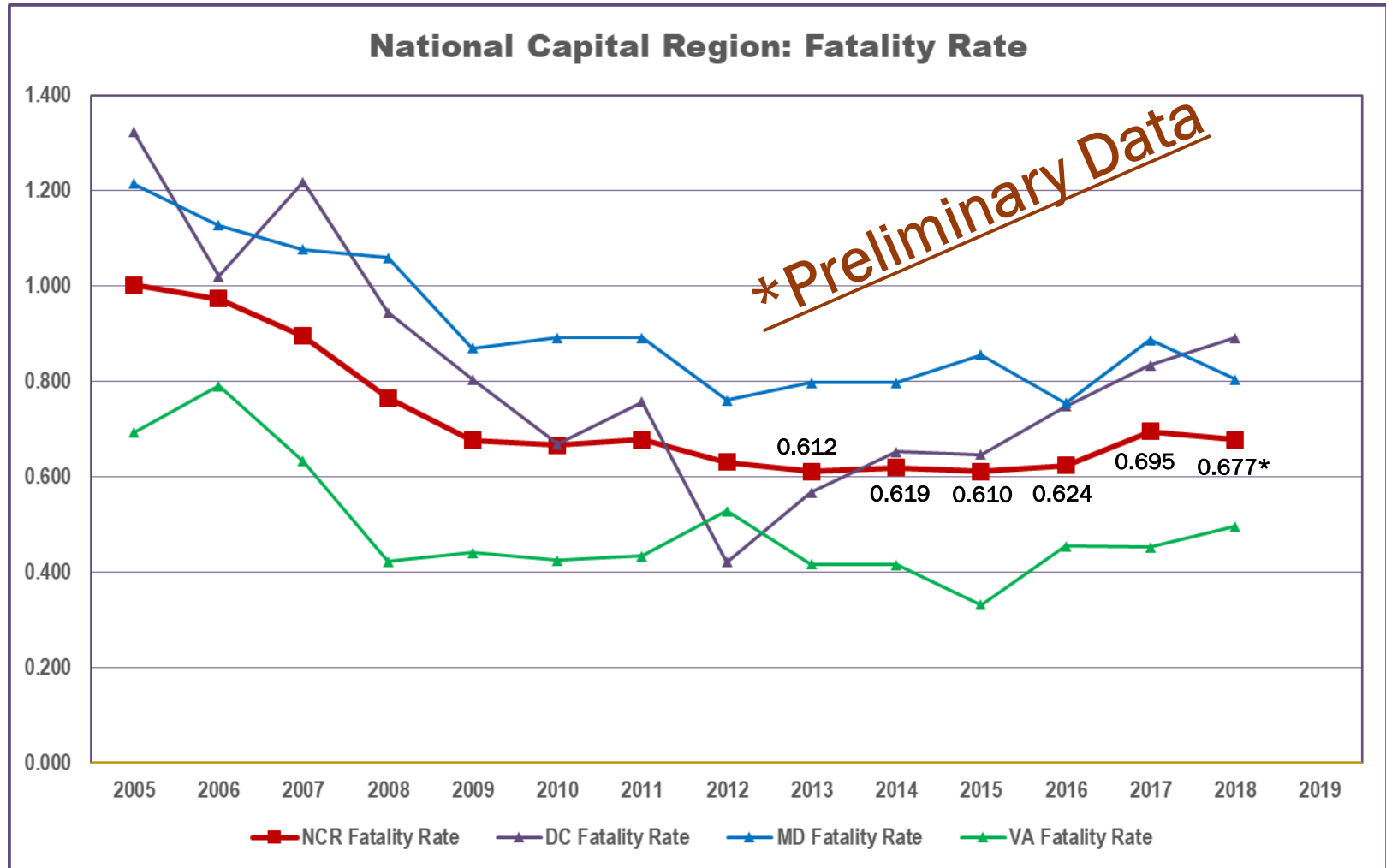
# Serious Injury Trend – Annual Data



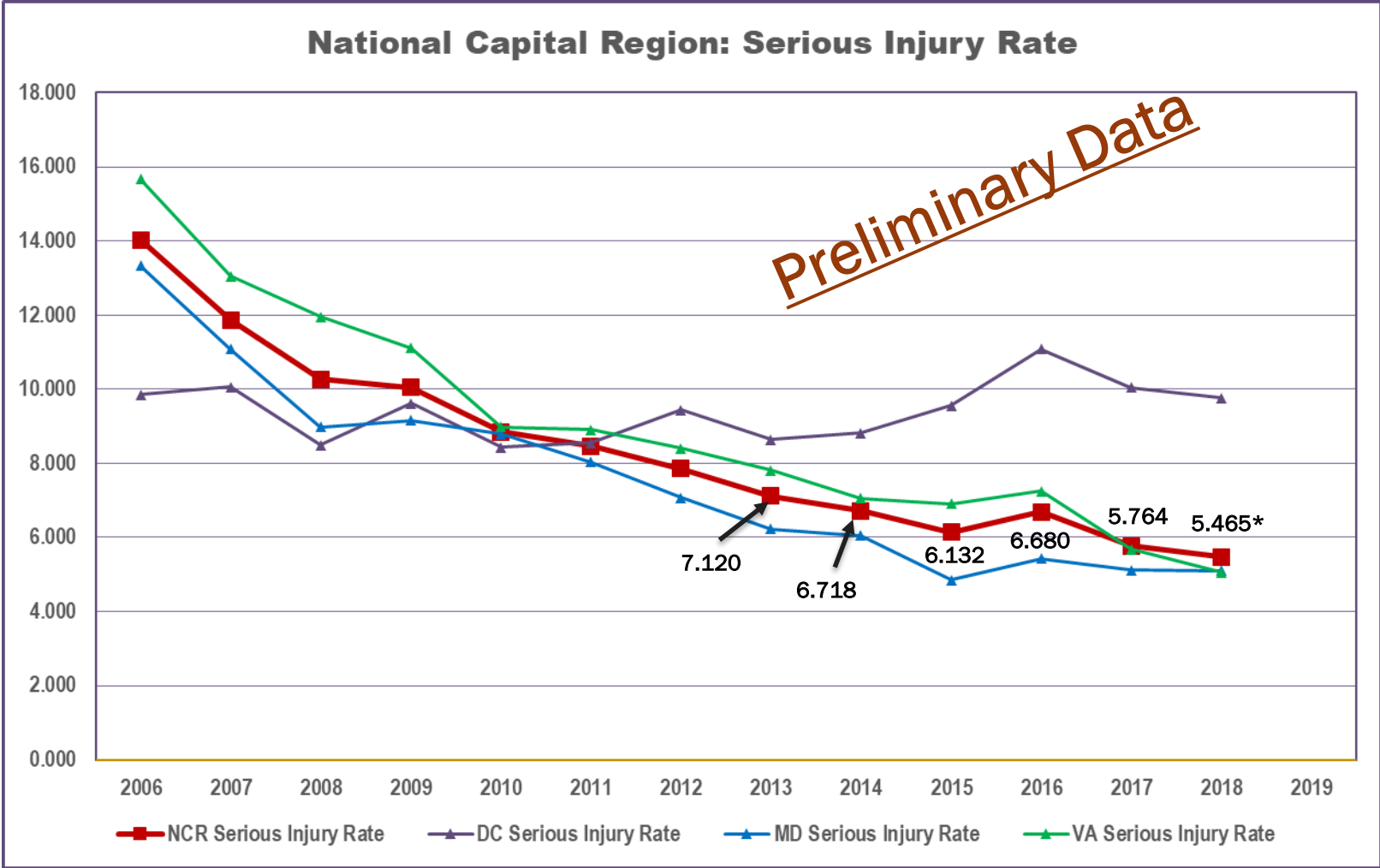
# Nonmotorist Trend – Annual Data



# Fatality Rate per 100MVMT – Annual Data



# Serious Injury Rate per 100MVMT – Annual Data





# Part II

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## Review of Progress Towards the 2014-2018 Safety Targets



# Highway Safety Performance Measures

Performance Measure	Description	Data Source
Number of Fatalities (5 year rolling average)	Total number of fatalities during a calendar year	FARS <sup>1</sup>
Rate of Fatalities per 100 million VMT (5 year rolling average)	Ratio of total fatalities to VMT	FARS and HPMS <sup>2</sup> (or MPO estimate)
Number of Serious Injuries (5 year rolling average)	Total number of serious injuries during a calendar year	State reported serious injury data
Rate of Serious Injuries per 100 million VMT (5 year rolling average)	Ratio of total serious injuries to VMT	State reported serious injury data <sup>3</sup> and HPMS
Number of Non-Motorized Fatalities and Serious Injuries (5 year rolling average)	Total number of fatalities and serious injuries during a calendar year	FARS and State serious injury data <sup>3</sup>

<sup>1</sup> FARS: Fatality Analysis Reporting System

<sup>2</sup> HPMS: Highway Performance Monitoring System



# 2014-2018 Actual vs. Targets - NCR

Performance Measure (5-year rolling average)	2014-2018 Actual*	2014-2018 Target	Status
# of Fatalities	283.8	253.0	Not met
Fatality Rate (per 100 MVMT)	0.677	0.588	Not met
# of Serious Injuries	2,700.2	3,007.3	Met
Serious Injury Rate (per 100 MVMT)	6.519	6.791	Met
# Nonmotorist Fatalities & Serious Injuries	556.4	528.8	Not met

\* Preliminary data



# 2014-2018 Actual vs. Targets - States

Performance Measure (5-year rolling average)	District of Columbia	Maryland	Virginia
# of Fatalities	Not met	TBD	TBD
Fatality Rate (per 100 MVMT)	Not met	TBD	TBD
# of Serious Injuries	Met	TBD	TBD
Serious Injury Rate (per 100 MVMT)	Met	TBD	TBD
# Nonmotorist Fatalities & Serious Injuries	Not met	TBD	TBD



# Part III

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## Review of Approach for Setting the Next Round of Regional Safety Targets



# Background (or Why, What, and How)

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- The TPB has also set regional targets in both January 2018 and January 2019 – and are scheduled to set their next round of targets in December 2019.
  - Federal requirement for State DOTs and MPOs to update highway safety targets on an annual basis
  - State DOTs approved their first set of targets in August 2017, their second set of targets in August 2018, and their third set of targets in August 2019
- Data-driven and realistic highway safety targets are to be set for 5 performance measures
- Targets are averages for a given 5-year period (ex., 2015-2019, 2016-2020, etc.)



# Proposed 2020 Target Setting Methodology

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- Apply Maryland’s approach to identify a “sub-target” for the Maryland portion of the NCR
- Apply Virginia’s approach to identify a sub-target for the Virginia portion of the NCR
- Incorporate the District of Columbia’s target as a sub-target for the DC portion of the NCR
- 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
- *We are proposing to use the same methodology for the 2016-2020 targets as was used for the 2015-2019 targets*



# Summary: NCR Highway Safety Targets

Performance Measure (5-year rolling average)	2014- 2018 Target	2015- 2019 Target	2016- 2020 Target	Difference	Percent Difference
# of Fatalities	253.0	253.0	<u>In Process</u>	TBD	TBD
Fatality Rate (per 100 MVMT)	0.588	0.588	<u>In Process</u>	TBD	TBD
# of Serious Injuries	3,007.3	2,919.6	<u>In Process</u>	TBD	TBD
Serious Injury Rate (per 100 MVMT)	6.791	6.564	<u>In Process</u>	TBD	TBD
# Nonmotorist Fatalities & Serious Injuries	528.8	508.6	<u>In Process</u>	TBD	TBD

*Note: the proposed 2020 targets will be presented at November Tech and TPB meetings*



# Part IV

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## Update on Regional Safety Study



# Regional Safety Study – Objectives

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- Understand factors contributing to crashes in the NCR
  - Behaviors, roadway characteristics, crash types, external factors
- Determine where crashes are over-represented
- Identify and recommend proven effective solutions (policy, programmatic, project)
- Provide the TPB and member jurisdictions specific suggestions to improve safety
- Inform future Transportation Safety Subcommittee and Street Smart efforts



# Safety Study – Completed Items

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- Kickoff meeting, work plan, and schedule
- Acquisition of crash and other relevant data including volume, roadway characteristics and existing safety analysis
- Three peer MPOs identified and interviewed:
  - East-West Gateway Council of Governments – St. Louis, MO, IL
  - Metropolitan Transportation Commission – San Francisco, CA
  - Delaware Valley Regional Planning Commission – Philadelphia, PA, NJ
- Draft memo highlighting the types of activities, programs, policies these MPOs are implementing to improve safety and summarizing recommendations for our consideration



# Safety Study – Current Activities

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- Internal staff review of recommendations from peer MPO interviews
- Crash data analysis is in process – initial results available mid-October
  - Regional & jurisdictional crash trends
  - Contributing factors for the region and by jurisdiction
  - Over-represented crash types for the region and by jurisdiction
  - Maps depicting results
- Network screening methodology has been proposed – under review by the Technical Advisory Panel



# Safety Study – Near Future Activities

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- Finalize recommendations based on the MPO peer interviews
- Complete crash analysis
- Provide recommendations (based on the analysis and research findings) for the TPB and/or member jurisdictions to address the region's safety challenges
- Present to the Safety Subcommittee (December 10)
- Present to the Citizen's Advisory Committee (TBD)
- Present to the Technical Committee (TBD)
- Present to the TPB (TBD)



# Part V

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## Next Steps



# Next Steps for Safety Target Setting, Safety Study

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- Develop next round of staff-proposed draft Safety Targets
  - Present draft targets to the Technical Committee in November
  - Update targets based on Committee feedback
  - Present draft targets to the TPB in November
  - Finalize draft targets based on board feedback
  - Request board approval of targets at the December TPB meeting
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- Update the Safety Subcommittee, Technical Committee, and Citizen's Advisory Committee on the Safety Study
  - Develop list of recommendations, in coordination with the consultant team and state DOT partners, for consideration by the board



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