

SAFETY STUDY UPDATE & REGIONAL SAFETY TARGET SETTING METHODOLOGY

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Presentation Items

- 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

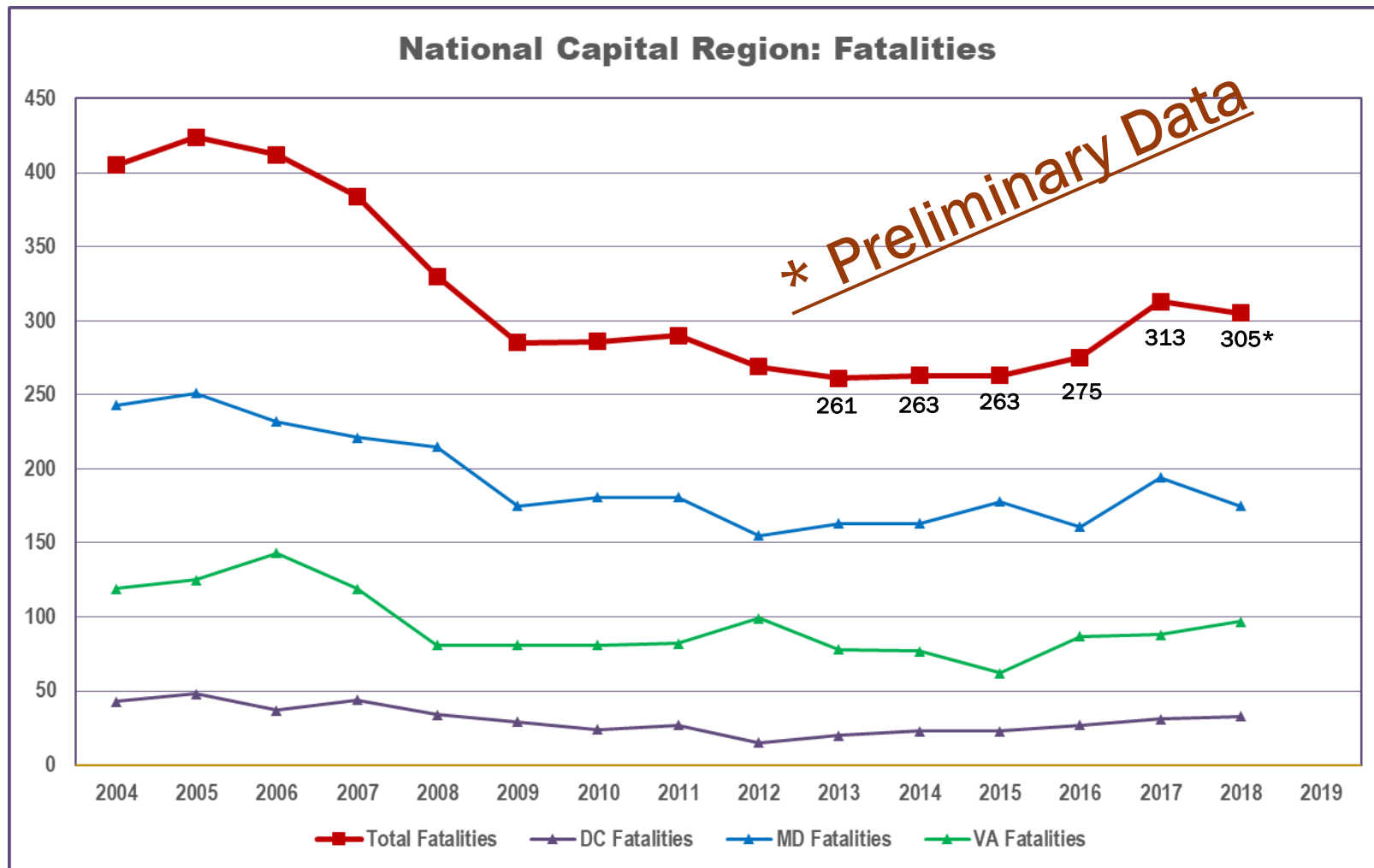


Part I

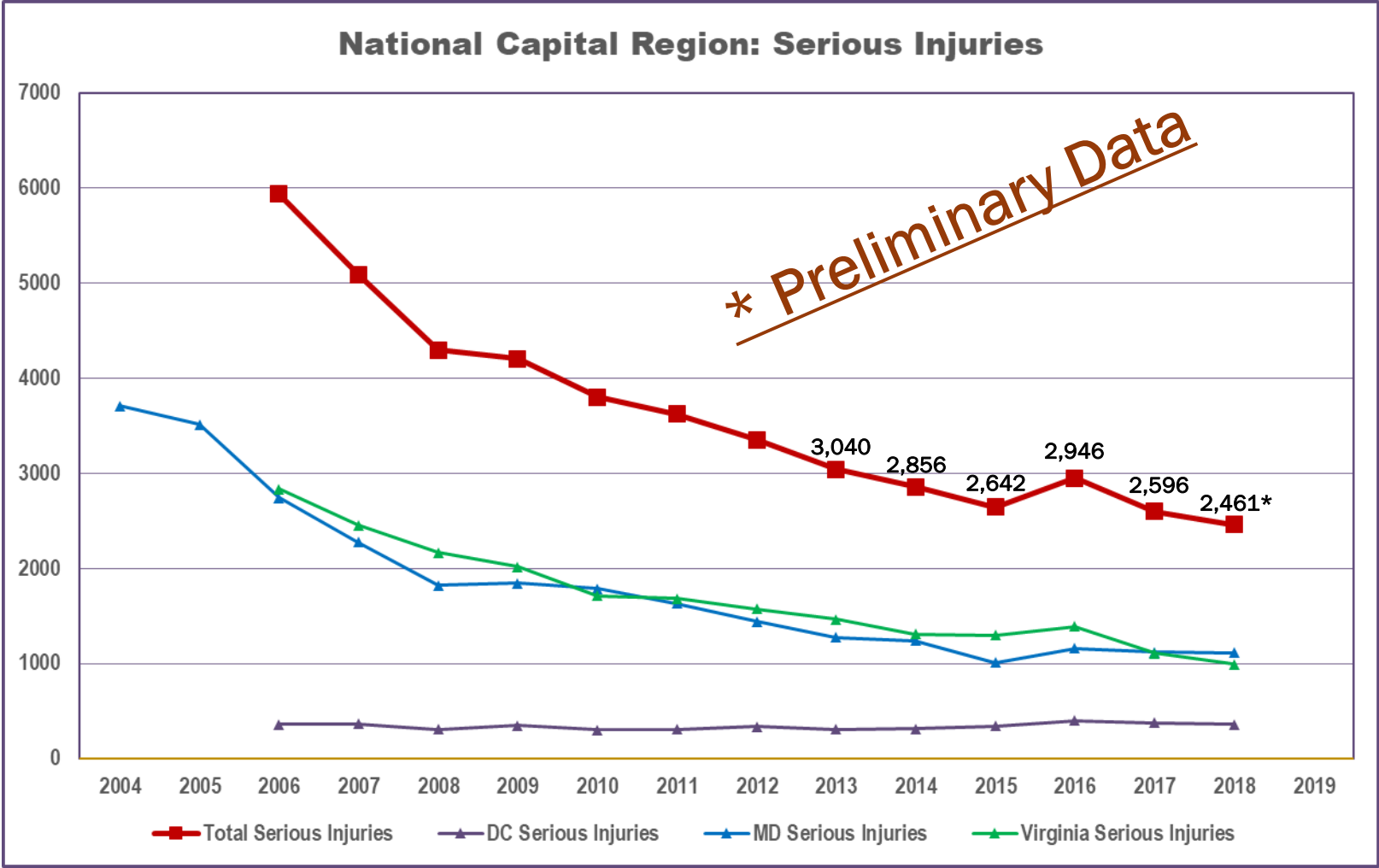
Review of Safety Trends



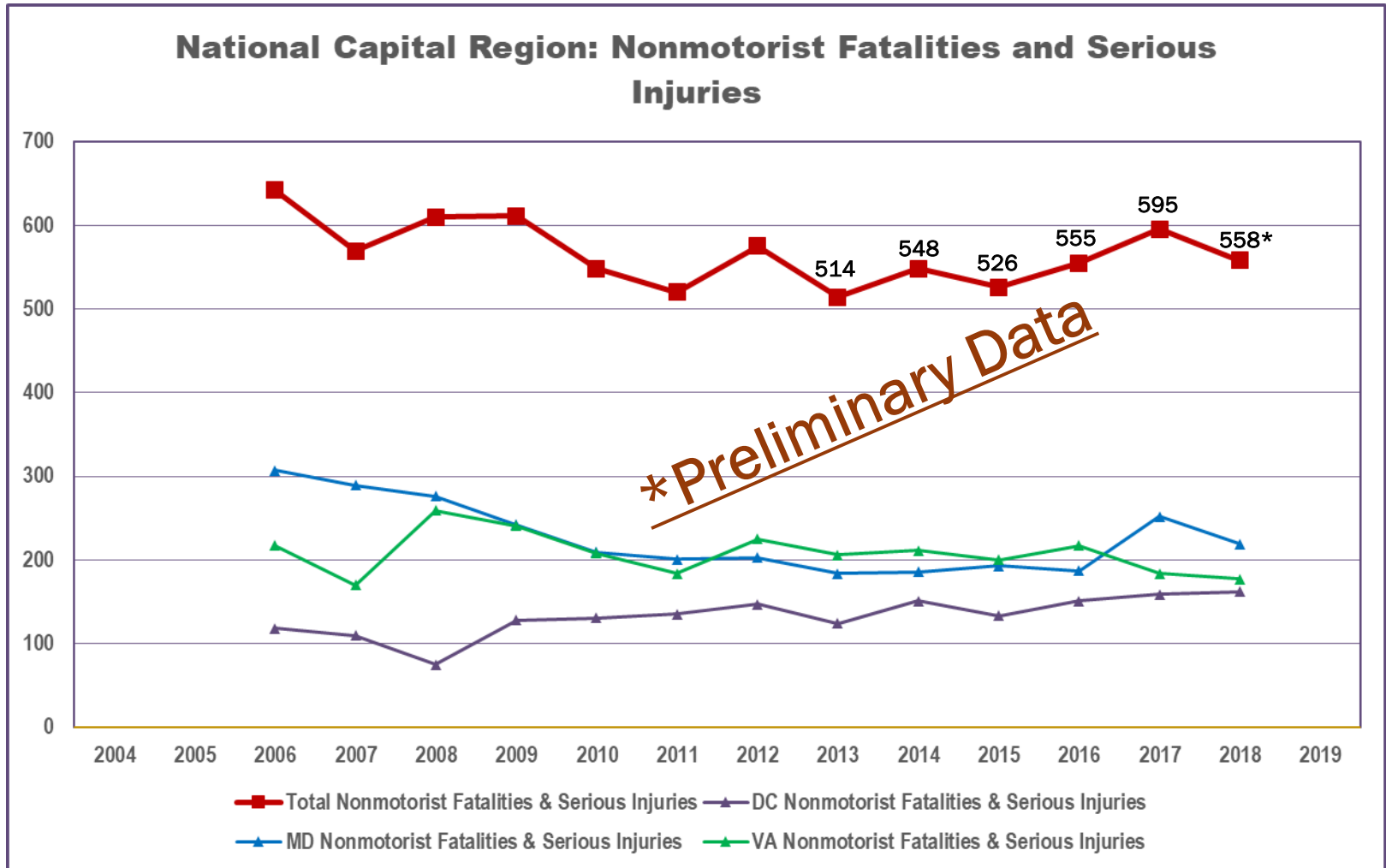
Fatality Trend – Annual Data



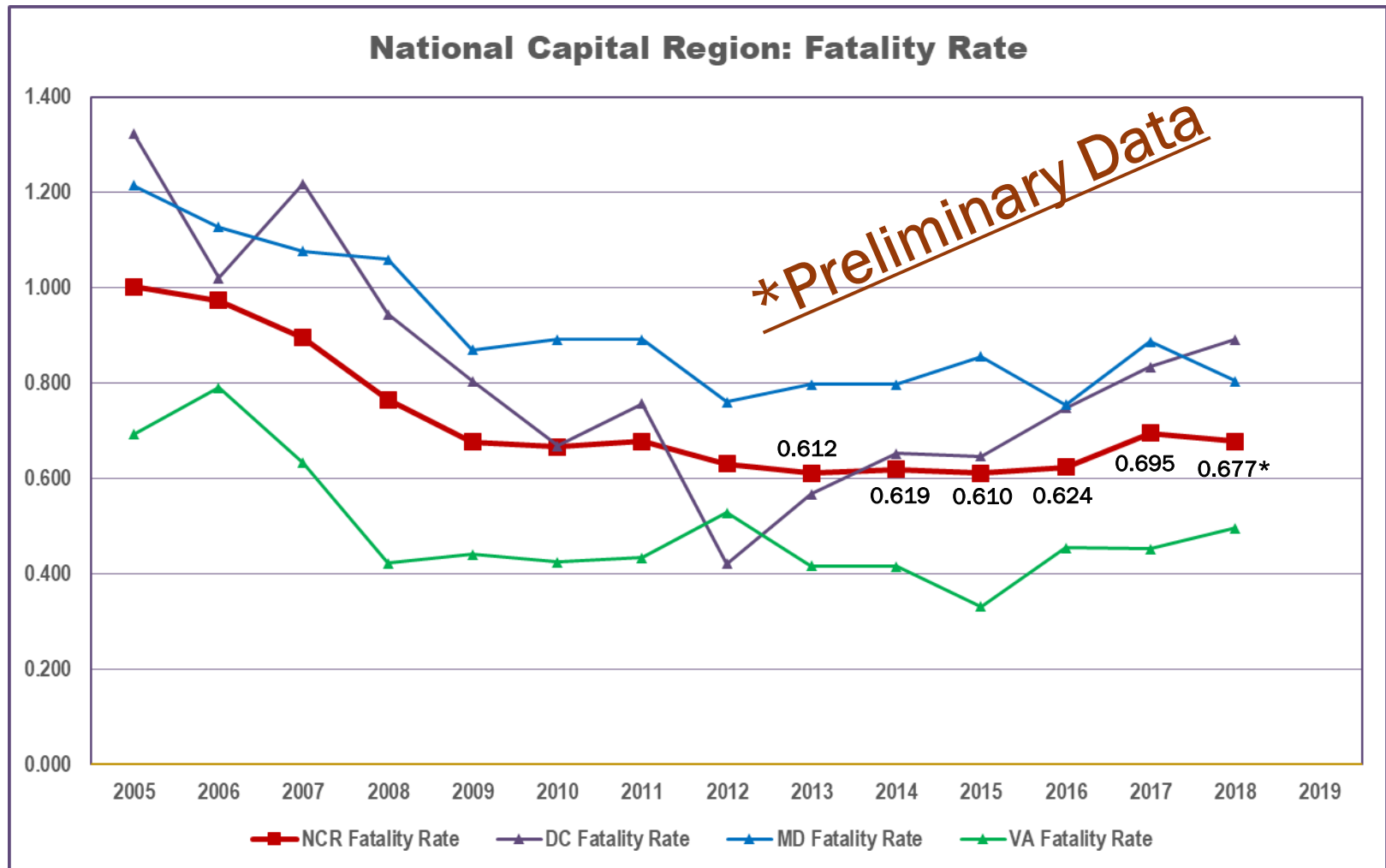
Serious Injury Trend – Annual Data



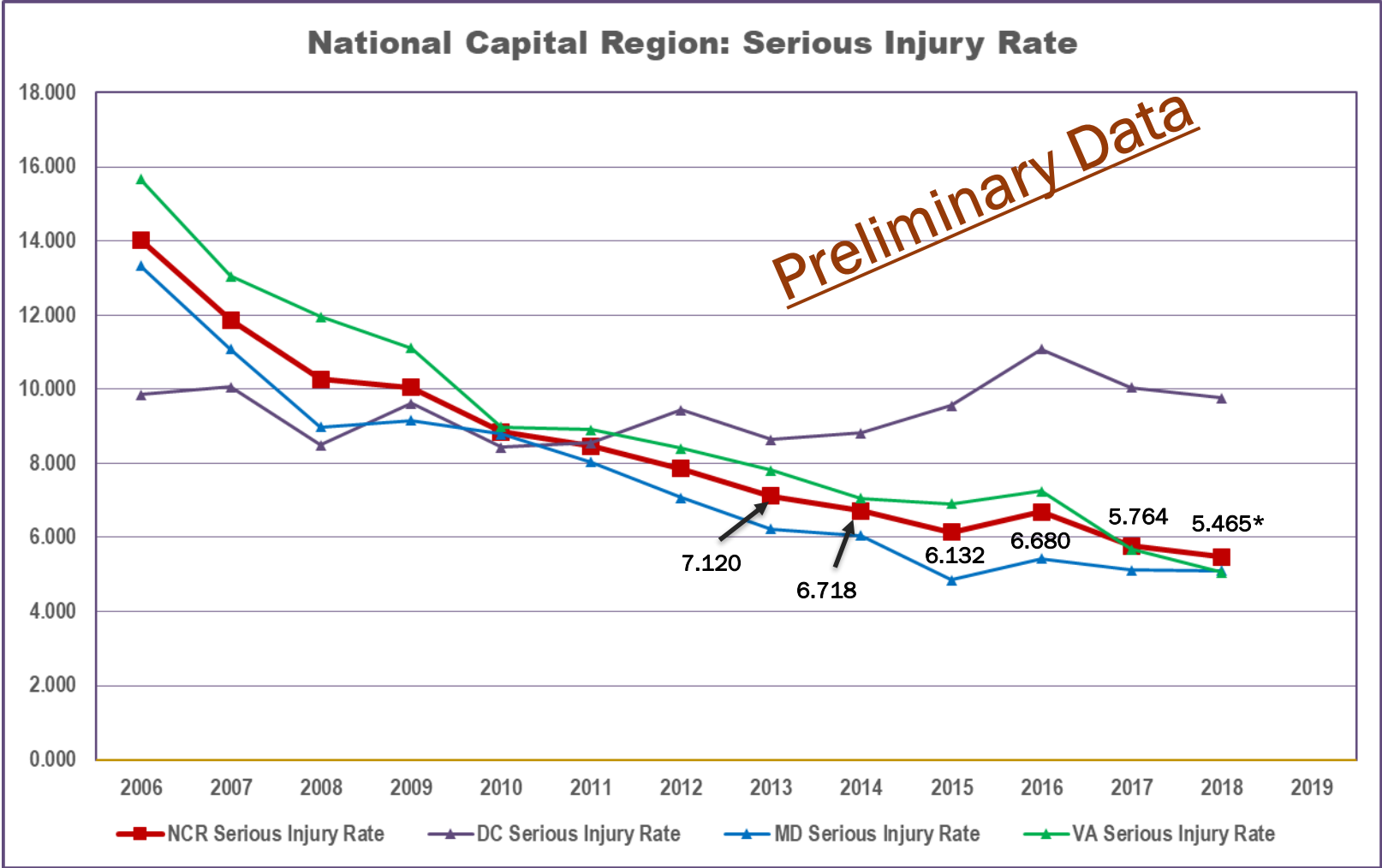
Nonmotorist Trend – Annual Data



Fatality Rate per 100MVMT – Annual Data



Serious Injury Rate per 100MVMT – Annual Data



Part II

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 ¹ |
| Rate of Fatalities per 100 million VMT (5 year rolling average) | Ratio of total fatalities to VMT | FARS and HPMS ² (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 ³ 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 ³ |

¹ FARS: Fatality Analysis Reporting System

² 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

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



Background (or Why, What, and How)

- 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

- 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

Update on Regional Safety Study



Regional Safety Study – Objectives

- 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

- 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

- 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

- 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 (October 8)
- Present to the Technical Committee (TBD)
- Present to the TPB (TBD)



Part V

Next Steps



Next Steps for Safety Target Setting, Safety Study

- 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 and the Technical Committee on the 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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