

PBPP HIGHWAY SAFETY TARGETS: NATIONAL CAPITAL REGION

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October 30, 2018



Presentation Items

- Brief review of Highway Safety Performance Measures and Target Setting Requirements
- NCR Safety – with final 2017 *annual* data included
- Review of progress towards the safety targets established last year
- Review of Approach for Setting National Capital Region Safety Targets
- Draft 2018 National Capital Region Safety Targets
- Next Steps

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 ³ |
| 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

³ for the first 36 months – after that States must adopt the Model Minimum Uniform Crash Criteria (MMUCC) definition of serious injury



Highway Safety Performance Measures: Annual Target Setting

MPOs

- For each performance measure (PM), the MPO will either:
 - 1) Agree to plan and program projects so they contribute toward accomplishing the state DOT safety target for that PM, or
 - 2) Commit to a quantifiable target for that PM for the metropolitan planning area
 - Each target shall represent anticipated performance outcome for all public roadways in the metropolitan planning area, regardless of ownership
 - MPOs shall coordinate with the state DOT(s) to ensure consistency
- Targets to be reported no more than 180 days after state DOTs have set their targets – (in this case by February 27, 2019)



Highway Safety Performance Measures: FHWA Determination of Significant Progress

State DOTs

- FHWA will only evaluate progress on the 5 statewide performance targets – **not** on any of the additional targets states might set for urbanized and non-urbanized areas
- A state is determined to have met or made significant progress toward meeting its targets when at least 4 of the targets are either:
 - Met; or
 - The outcome of a performance measure is less than the 5 year rolling average for that performance measure for the year prior to the establishment of the state target

MPOs – not applicable



Highway Safety Performance Measures: Consequences for Failing to Meet Targets or Making Significant Progress

State DOTs

- State DOTs that have not or made significant progress toward meeting safety performance targets must:
 - 1) Use a portion of their obligation only for HSIP projects, and;
 - 2) Submit an annual implementation plan that describes actions the DOT will take to meet their targets

MPOs – Not applicable. However, FHWA will review how MPOs are incorporating and discussing safety performance measures and targets in their long-range plans and TIPs during MPO certification reviews



NCR Safety – With Final 2017¹ Annual Data

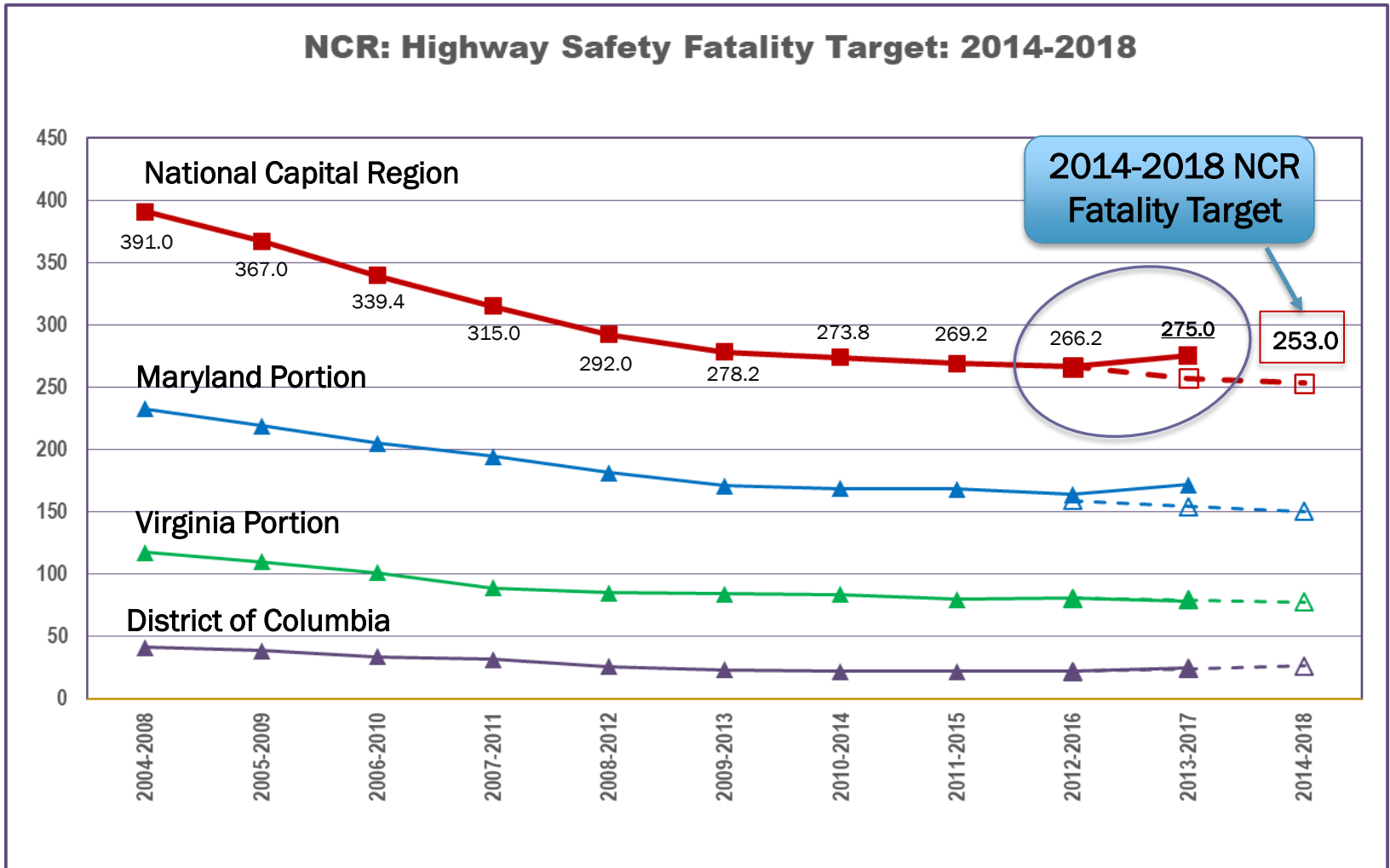
| | 2013 | 2014 | 2015 | 2016 | 2017 | Change from 2016 to 2017 |
|---|-------|-------|-------|-------|-------|--------------------------|
| # of Fatalities | 261 | 263 | 263 | 275 | 313 | ↑ 13.8 % |
| Fatality Rate (per 100 MVMT) | 0.612 | 0.618 | 0.610 | 0.635 | 0.693 | ↑ 9.2 % |
| # of Serious Injuries | 3,040 | 2,856 | 2,642 | 2,946 | 2,632 | ↓ 10.7 % |
| Serious Injury Rate (per 100 MVMT) | 7.078 | 6.666 | 6.112 | 6.749 | 5.826 | ↓ 13.7 % |
| # Nonmotorist Fatalities & Serious Injuries | 514 | 549 | 526 | 565 | 556 | ↓ 1.6 % |

Note ¹: 2017 FARS data was published in October 2018

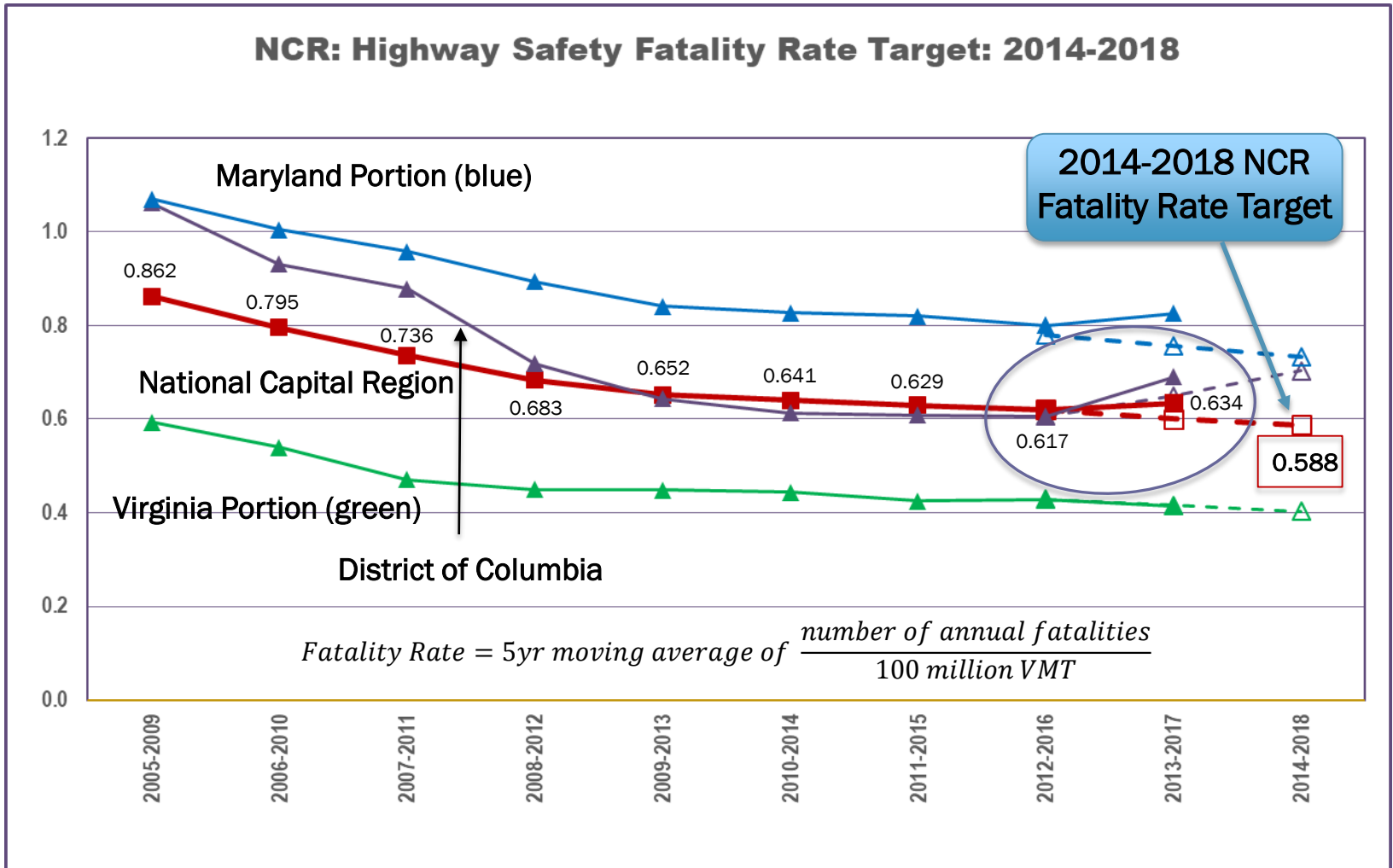
Comparison of NCR 2017 Data with 2014-2018 Targets

- Following six slides cover where we stand today with respect to the targets set last year
- Targets set last year were for the 5 year average of 2014 through 2018 data
- 5-year rolling averages! (not annual data)

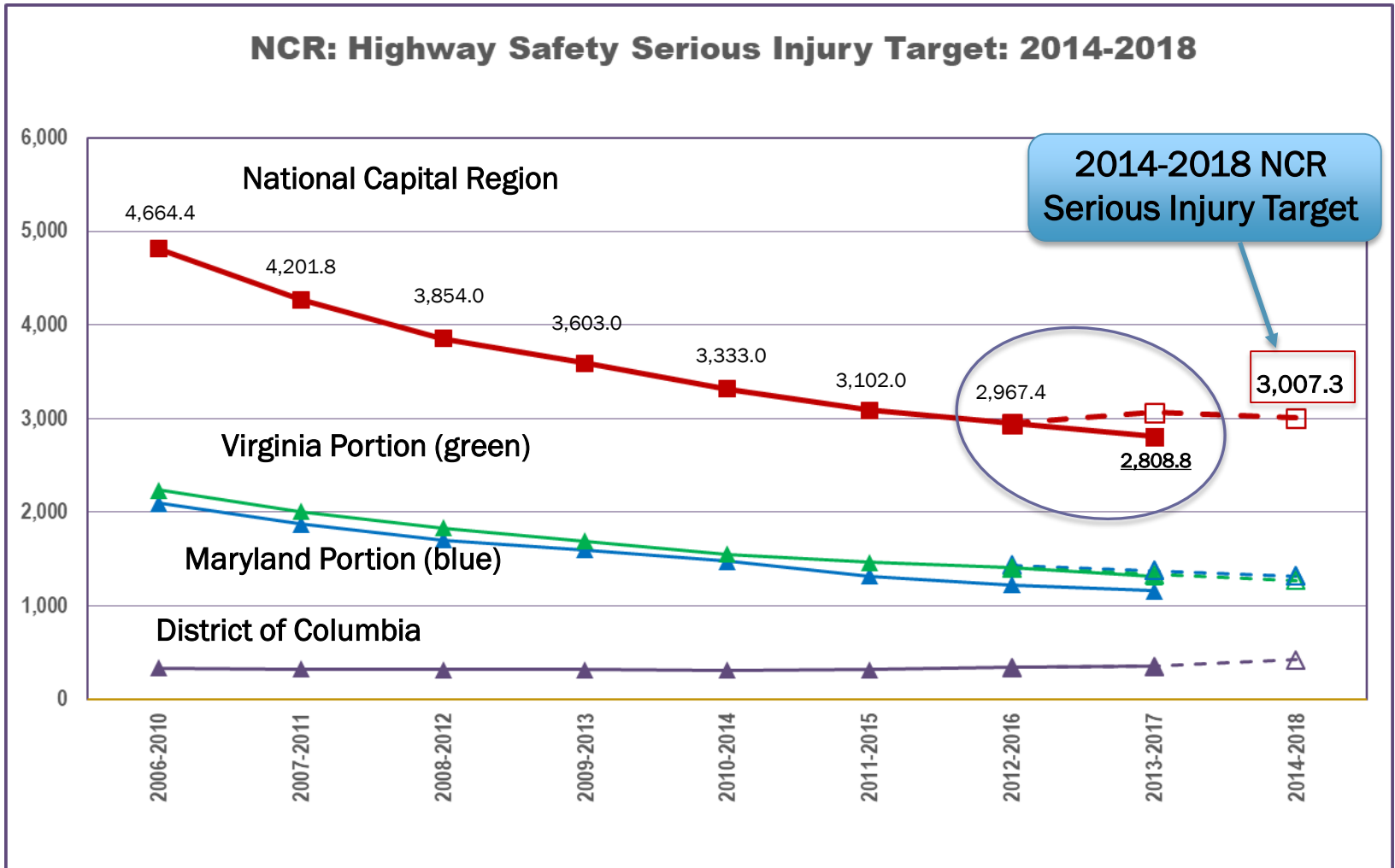
5-yr Average with “New” 2017 Fatality Data Included



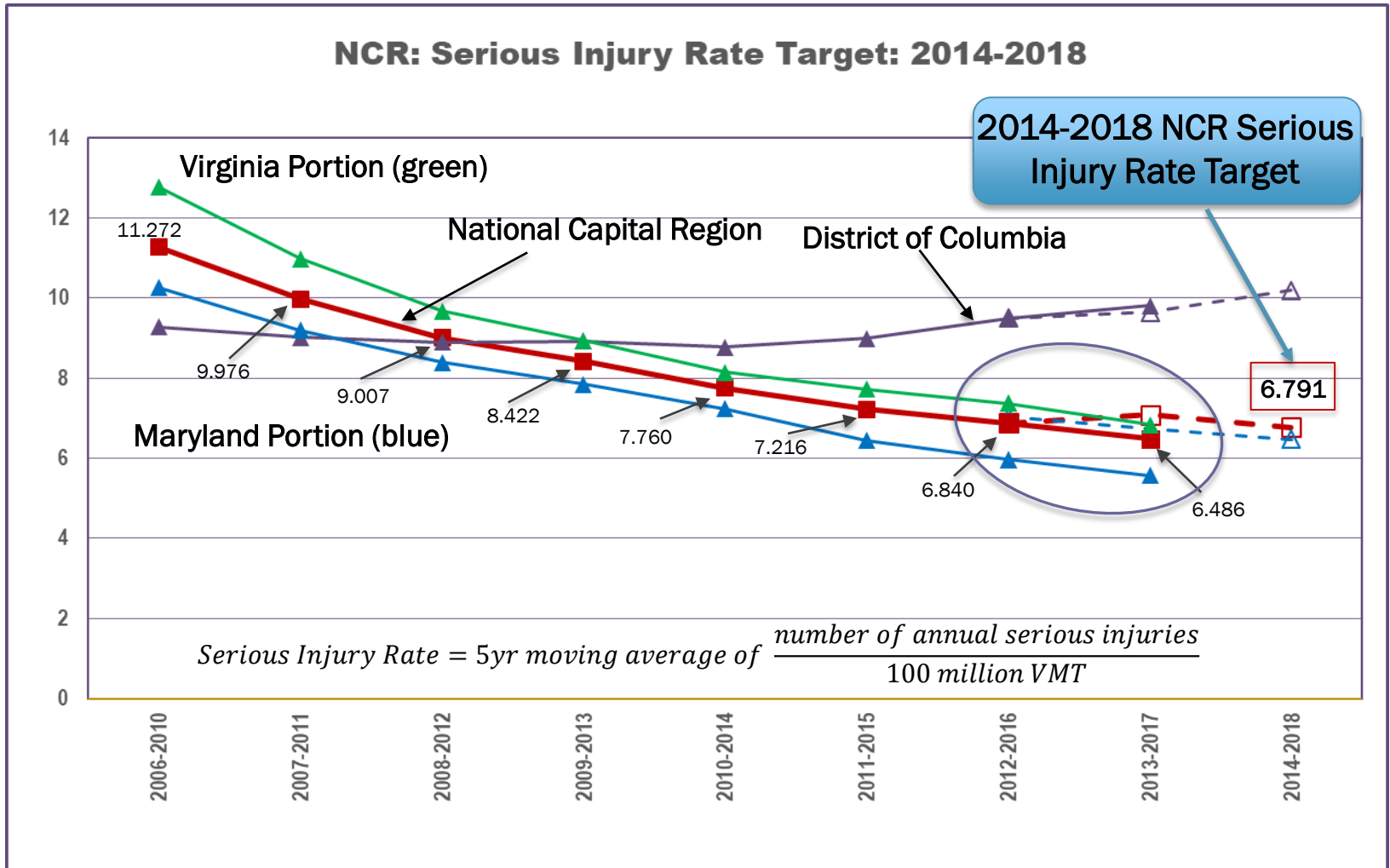
5-yr Average with “New” 2017 Fatality Rate Data Included



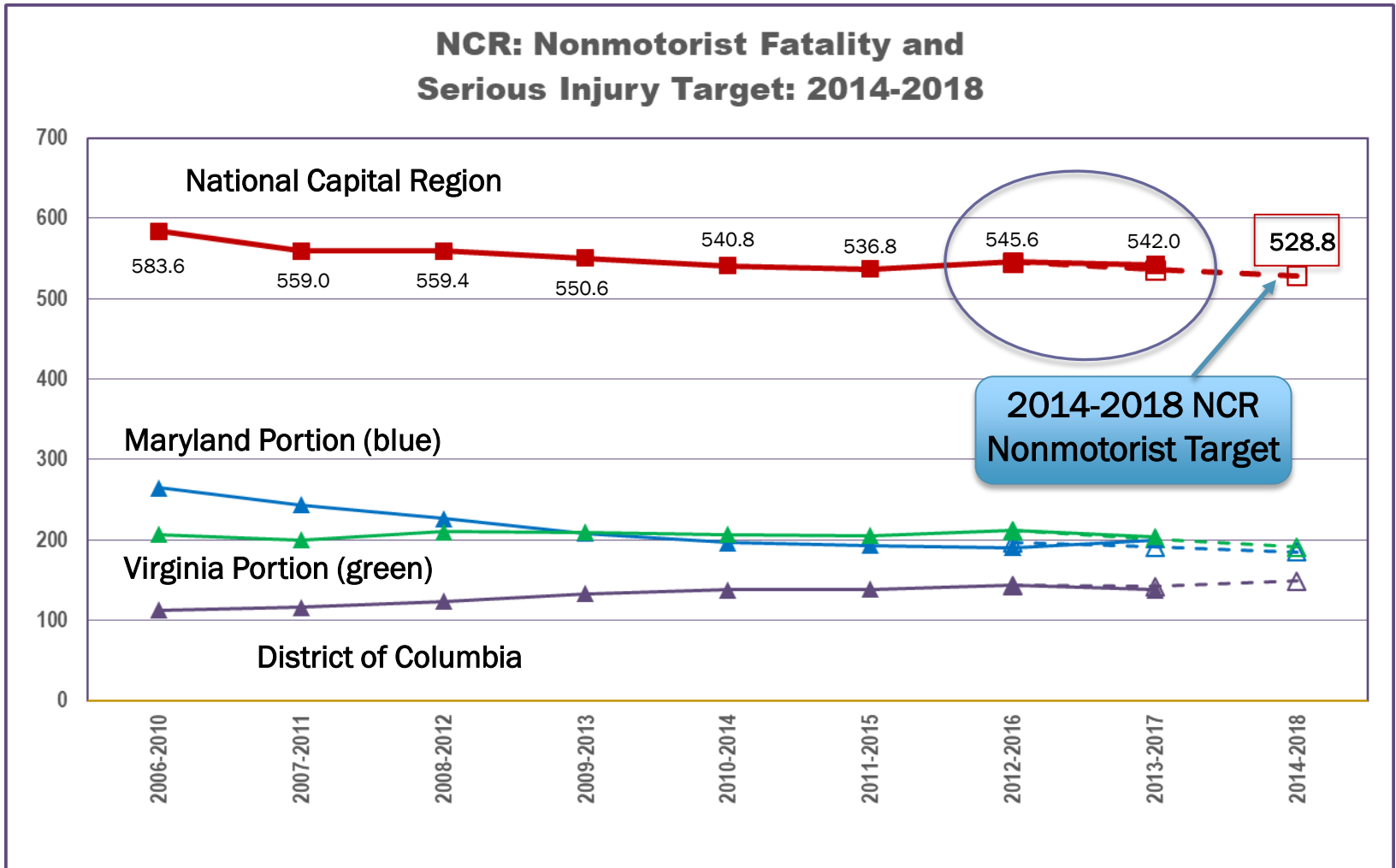
5-yr Average with “New” 2017 Serious Injury Data Included



5-yr Average with “New” 2017 Serious Injury Rate Data Included



5-yr Average with “New” 2017 Nonmotorist Data Included



Summary of NCR 2013-2017 Data with 2014-2018 Targets

| | 2013-2017 Forecast | 2013-2017 Actual | 2014-2018 Target |
|---|-----------------------|---------------------|---------------------|
| # of Fatalities | 257.0 | 275.0 | 253.0 |
| Fatality Rate (per 100 MVMT) | 0.600 | 0.632 | 0.588 |
| # of Serious Injuries | 3,064.6 | 2,822.8 | 3,007.3 |
| Serious Injury Rate (per 100 MVMT) | 7.093 | 6.499 | 6.791 |
| # Nonmotorist Fatalities & Serious Injuries | 536.1 | 541.8 | 528.8 |

Note: numbers shown are 5-year rolling averages

NCR Target Setting Methodology - Options

- Option A

- 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
- *Same methodology as used for the 2014-2018 targets*

- Option B

- Same as above, except if a calculated target is higher than the previous target, set the target equal to the previous target



2015-2019 Regional Target Setting: Virginia

- Comparison of Virginia targets – last year and this year

| Virginia | 2014-2018 Target | 2015-2019 Target |
|---|------------------|------------------|
| # of Fatalities | 709.0 | 808.0 |
| Fatality Rate (per 100 MVMT) | 0.830 | 0.944 |
| # of Serious Injuries | 7,570.0 | 7,808.0 |
| Serious Injury Rate (per 100 MVMT) | 8.720 | 9.160 |
| # Nonmotorist Fatalities & Serious Injuries | 681.0 | 720.0 |



2015-2019 Regional Target Setting: Maryland

- Comparison of Maryland targets – last year and this year

| Maryland | 2014-2018 Target | 2015-2019 Target |
|---|------------------|------------------|
| # of Fatalities | 415.6 | 435.0 |
| Fatality Rate (per 100 MVMT) | 0.680 | 0.771 |
| # of Serious Injuries | 3,171.3 | 3,211.1 |
| Serious Injury Rate (per 100 MVMT) | 5.637 | 5.702 |
| # Nonmotorist Fatalities & Serious Injuries | 459.2 | 473.9 |

2015-2019 Regional Target Setting: District of Columbia

- Comparison of District of Columbia targets – last year and this year

| District of Columbia | 2014-2018 Forecast | 2015-2019 Target |
|---|--------------------|------------------|
| # of Fatalities | 26.0 | 31.0 |
| Fatality Rate (per 100 MVMT) | 0.703 | 0.850 |
| # of Serious Injuries | 420.0 | 417.0 |
| Serious Injury Rate (per 100 MVMT) | 10.200 | 11.477 |
| # Nonmotorist Fatalities & Serious Injuries | 148.5 | 125.0 |

2015-2019 Regional Target Setting Option A

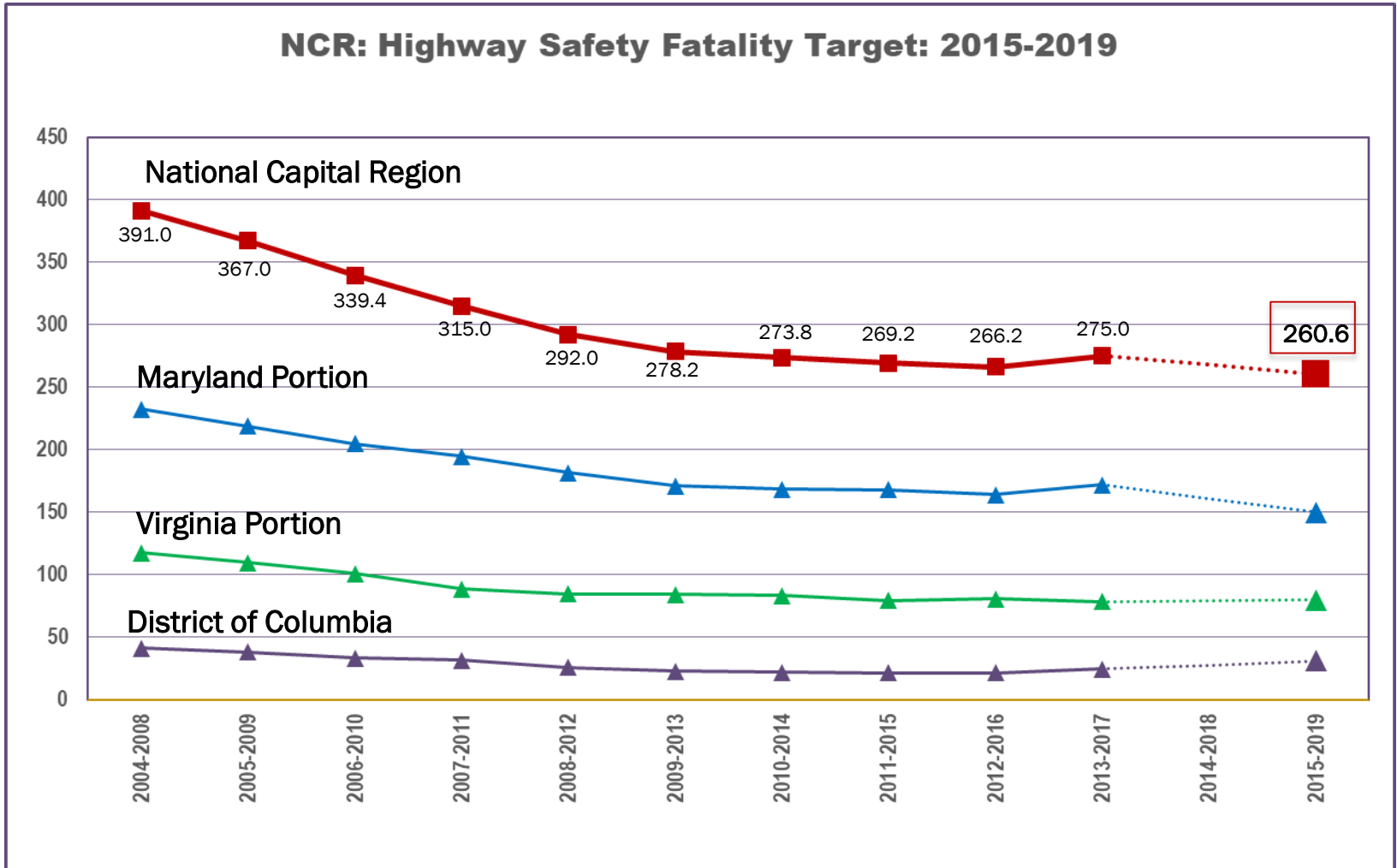
- The following slides show the results obtained from applying the target setting methodology that incorporates each State's approach (option A)



Summary: NCR Highway Safety Targets – Option A

| | 2014-2018 Target | 2015-2019 Target | Difference | Percent Difference |
|--|---------------------|---------------------|------------|-----------------------|
| # of Fatalities | 253.0 | <u>260.6</u> | 7.6 | 3.0% |
| Fatality Rate (per 100 MVMT) | 0.588 | <u>0.611</u> | 0.023 | 3.9% |
| # of Serious Injuries | 3,007.3 | <u>2,919.6</u> | -87.7 | -2.9% |
| Serious Injury Rate (per 100 MVMT) | 6.791 | <u>6.564</u> | -0.217 | -3.2% |
| # Nonmotorist Fatalities & Serious Injuries | 528.8 | <u>508.6</u> | -20.2 | -3.8% |

Option A 2015-2019 Fatality Target: 260.6



Summary: NCR Highway Safety Targets – Option B

| | 2014-2018 Target | 2015-2019 Target | Difference | Percent Difference |
|--|---------------------|---------------------|------------|-----------------------|
| # of Fatalities | 253.0 | <u>253.0</u> | 0.0 | 0.0% |
| Fatality Rate (per 100 MVMT) | 0.588 | <u>0.588</u> | 0.000 | 0.0% |
| # of Serious Injuries | 3,007.3 | <u>2,919.6</u> | -87.7 | -2.9% |
| Serious Injury Rate (per 100 MVMT) | 6.791 | <u>6.564</u> | -0.217 | -3.2% |
| # Nonmotorist Fatalities & Serious Injuries | 528.8 | <u>508.6</u> | -20.2 | -3.8% |



Next Steps

- Present to the Technical Committee on November 2, 2018
- Develop NCR 2014-2019 safety target setting approach based on feedback from the Transportation Safety Subcommittee and the Technical Committee
- Present draft targets to the Technical Committee meeting at their December meeting for further comment
- Present draft targets to the board at the December 2018 TPB meeting
- Finalize draft targets based on Board feedback
- Request Board approval of targets at the January 2019 TPB meeting

Questions / Discussion



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