

# NATIONAL CAPITAL REGION HIGHWAY SAFETY TARGETS

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Citizen's Advisory Committee  
December 13, 2018



# Presentation Items

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- 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 <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 <sup>3</sup>
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

<sup>3</sup> 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

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## 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

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## 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

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## 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

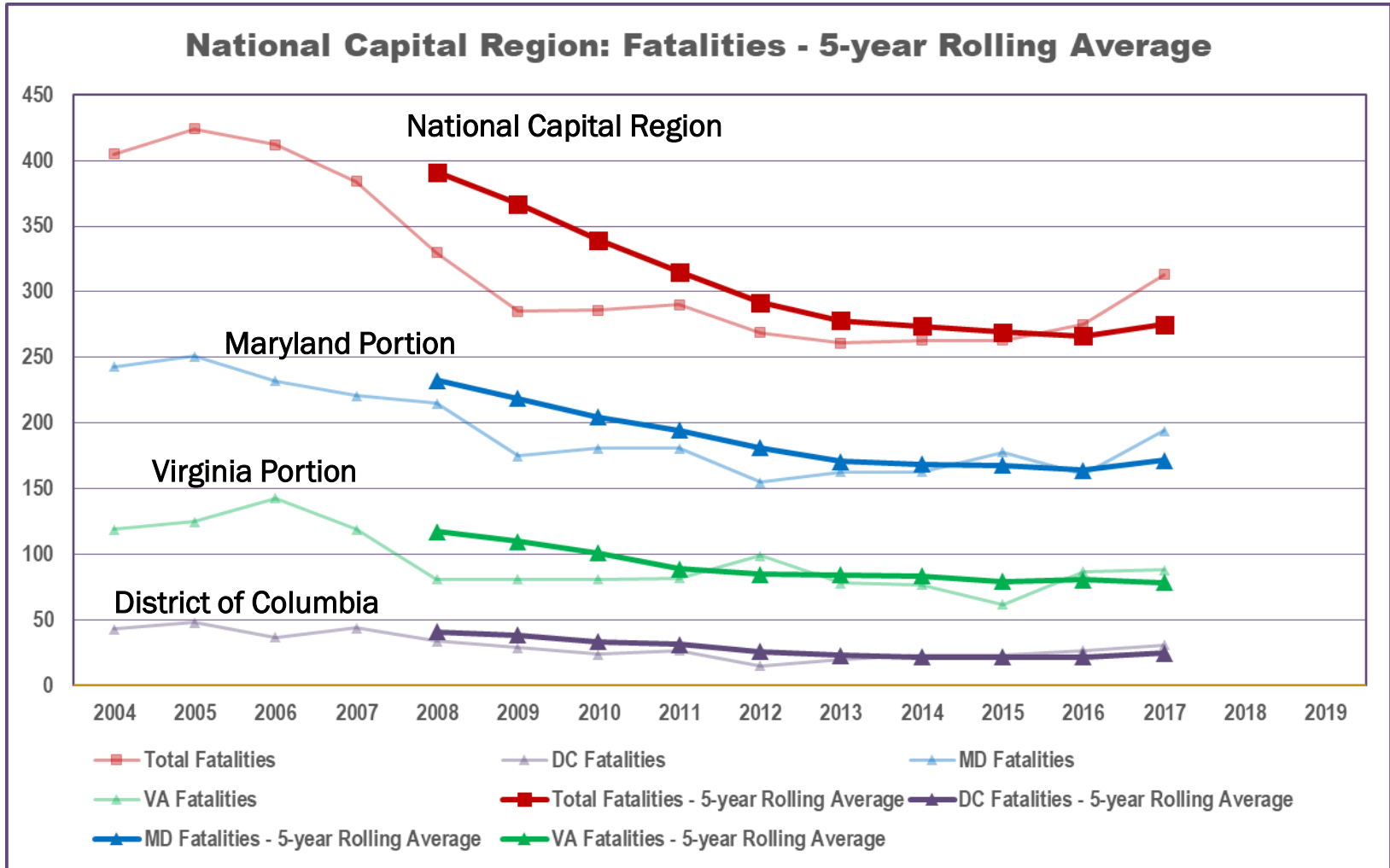


# NCR Safety – With Final 2017<sup>1</sup> Annual Data

Safety Data (Annual)	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 %

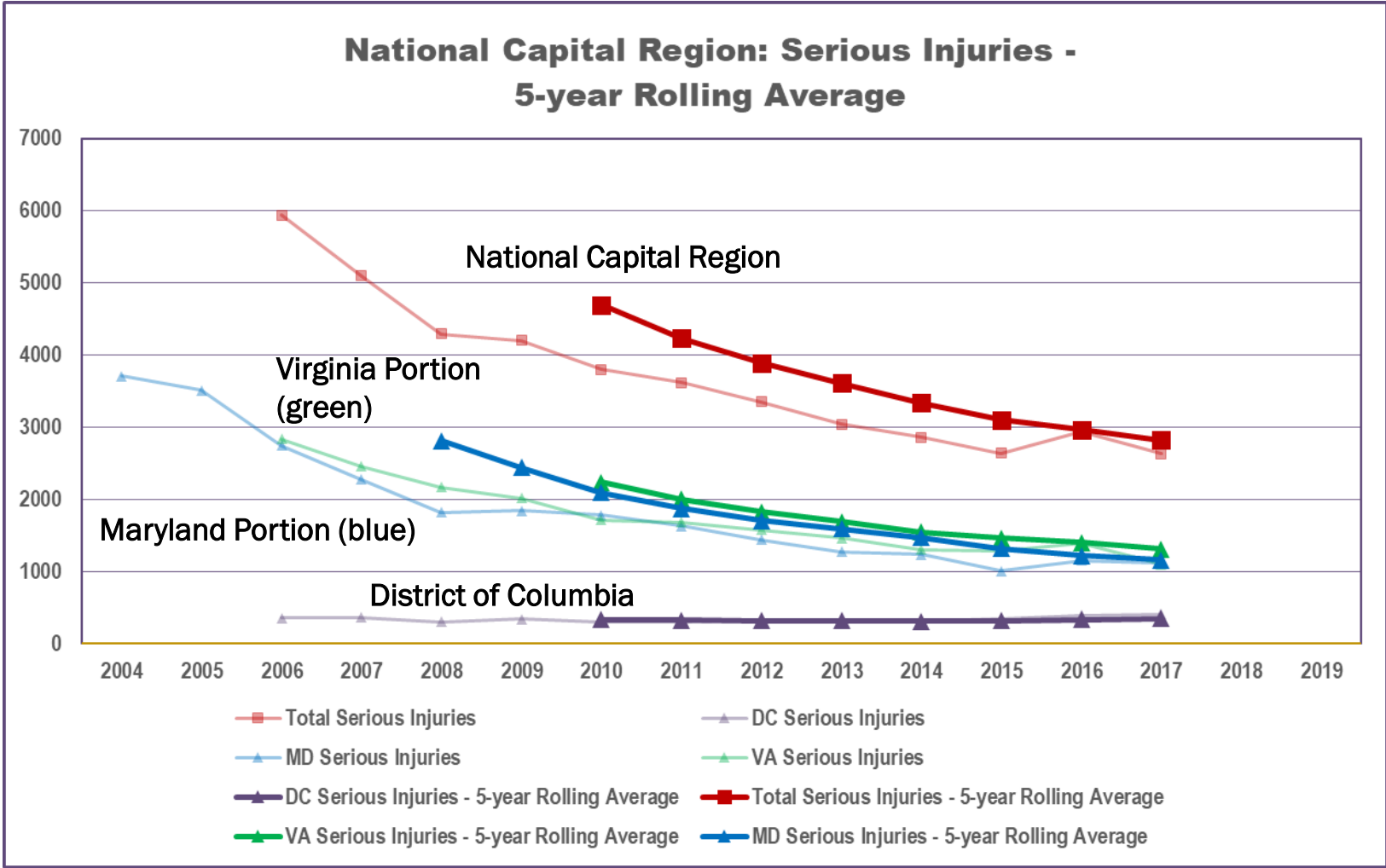
Note <sup>1</sup>: 2017 FARS data was published in October 2018

# Annual and 5-yr Average Fatalities

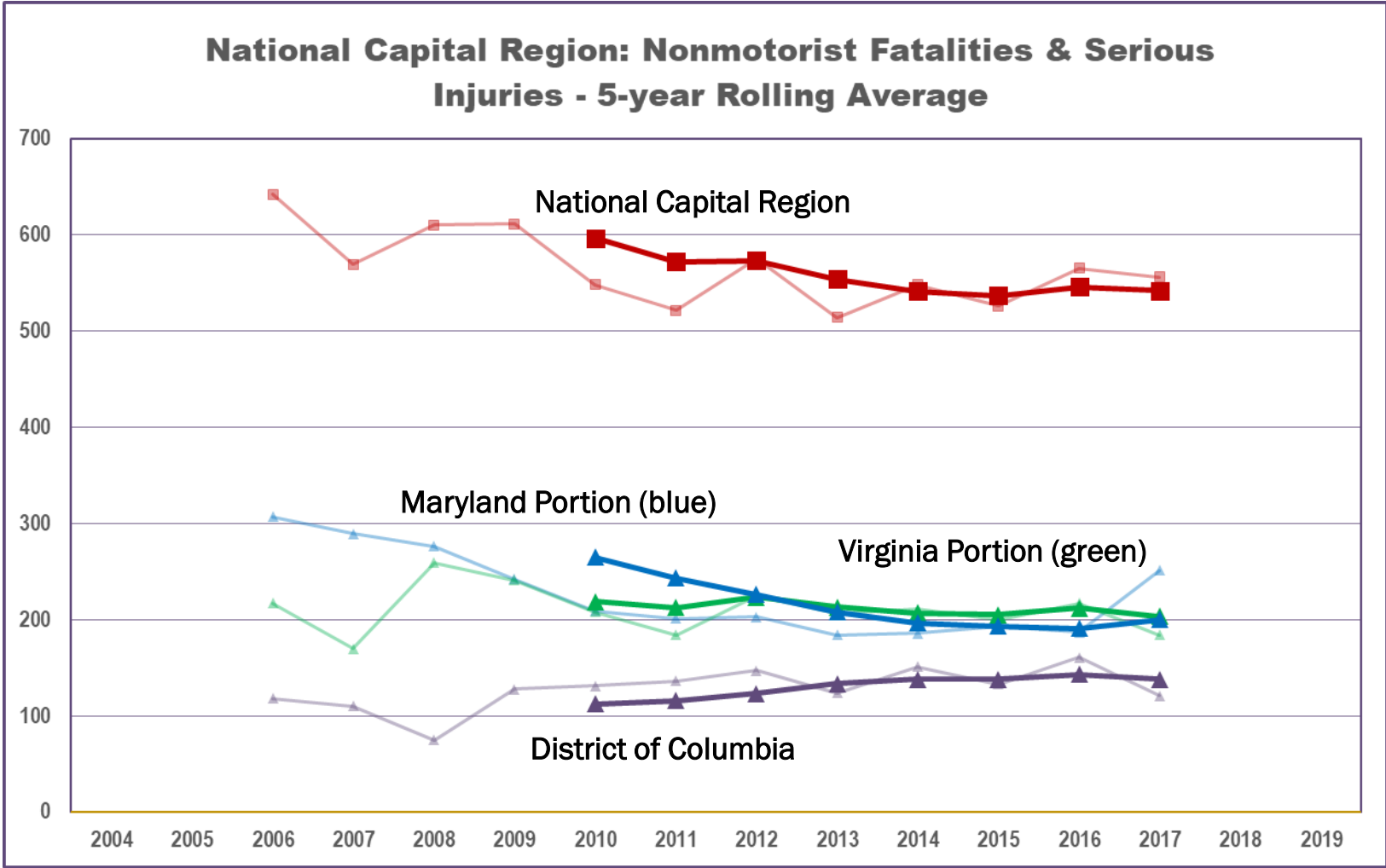




# Annual and 5-yr Average Serious Injuries



# Annual & 5-yr Average Nonmotorist Fatalities + Serious Injuries

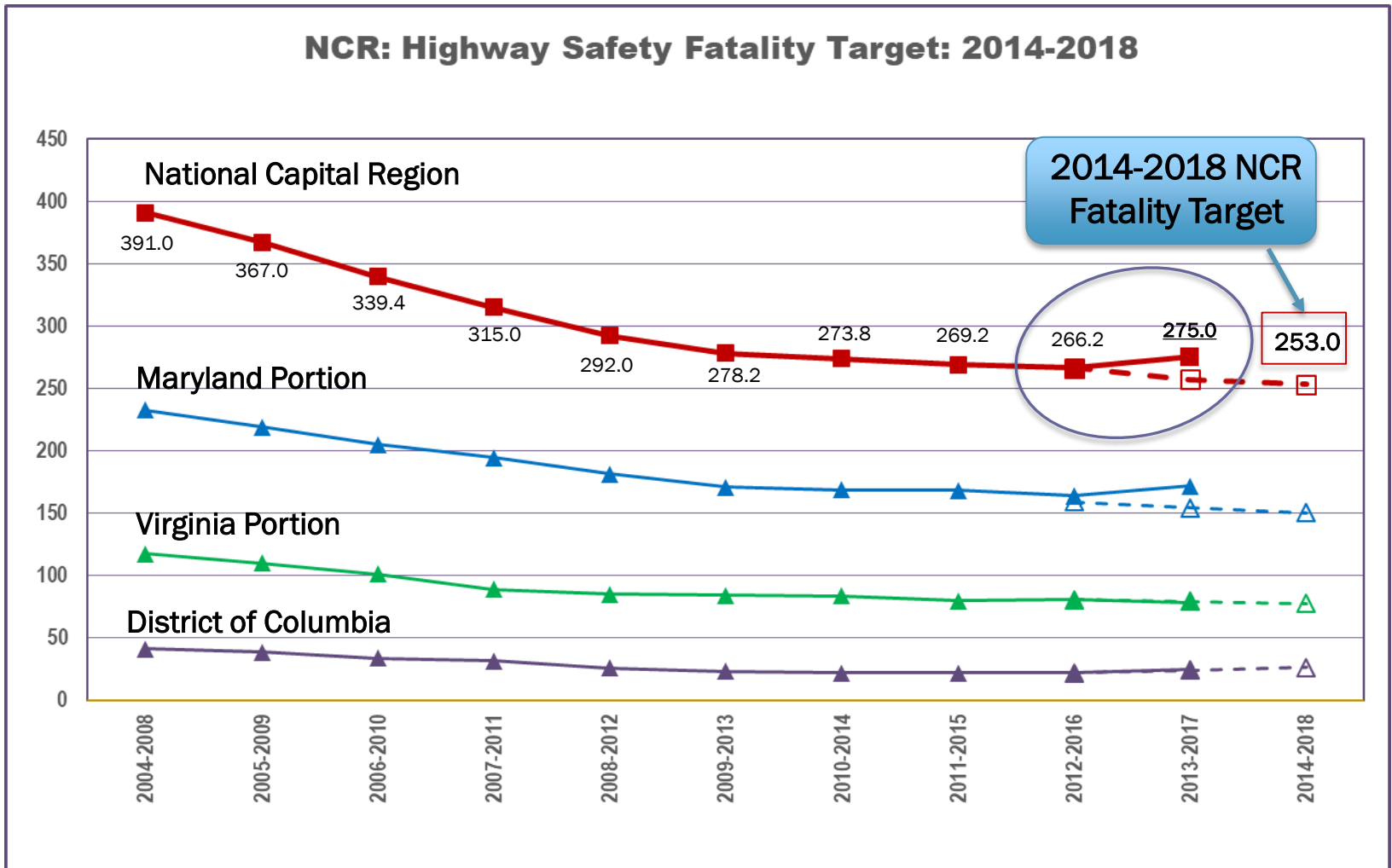


# Comparison of NCR 2017 Data with 2014-2018 Targets

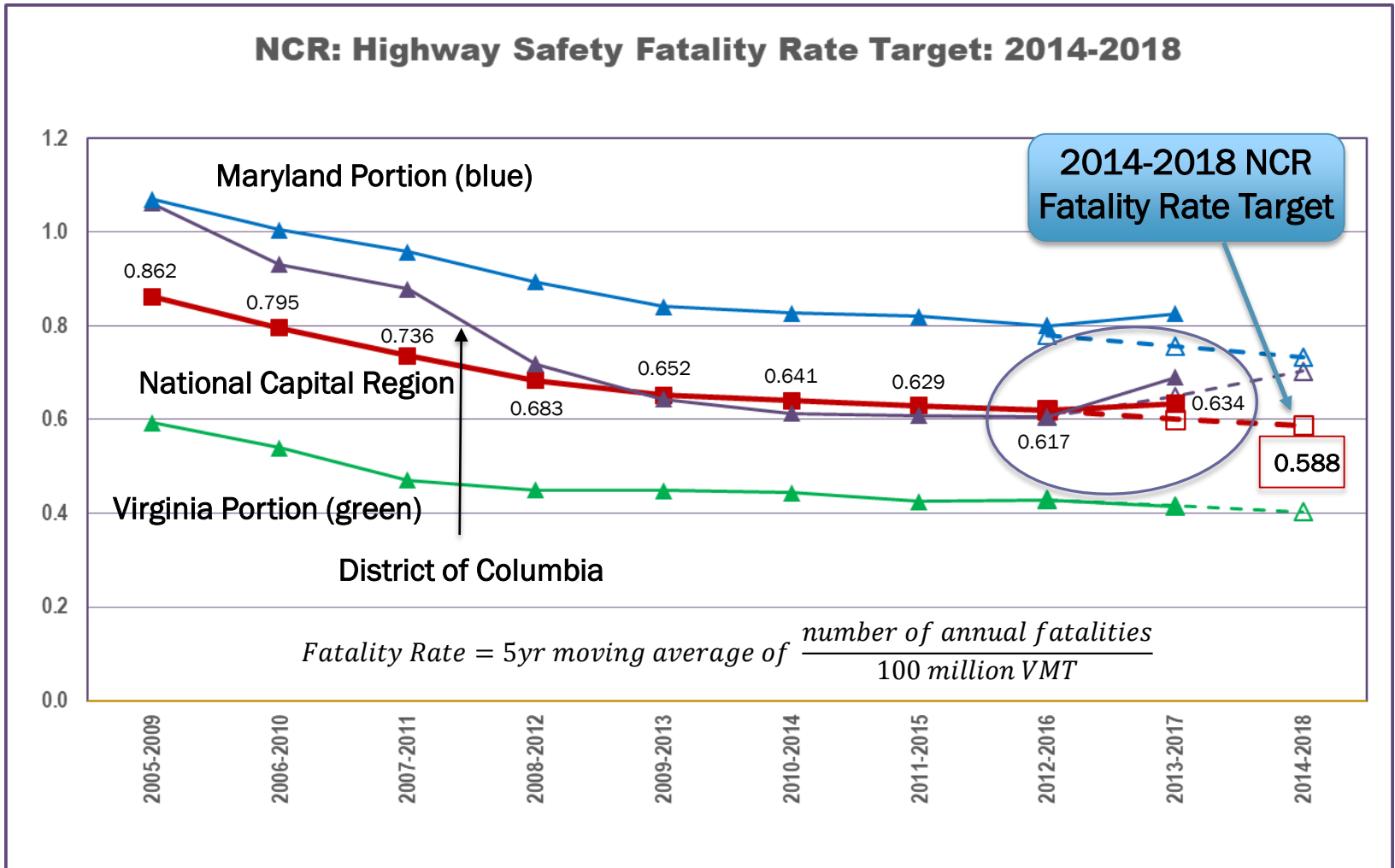
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- Following six slides cover where we stand today with respect to the targets set last year
- Targets set last year were for the 5 year average of 2014 through 2018 data
- 5-year rolling averages! (not annual data)

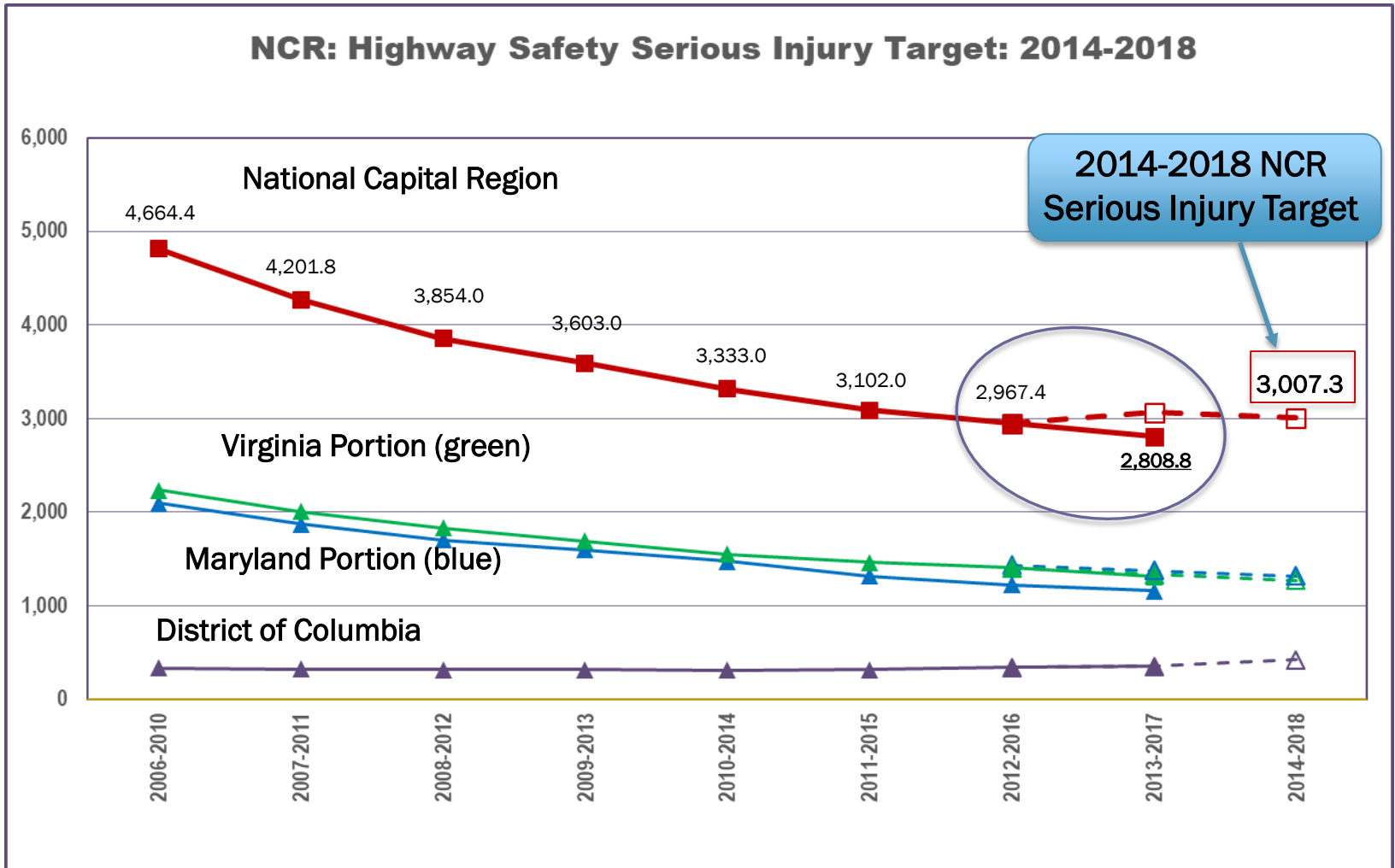
# 5-yr Average with “New” 2017 Fatality Data Included



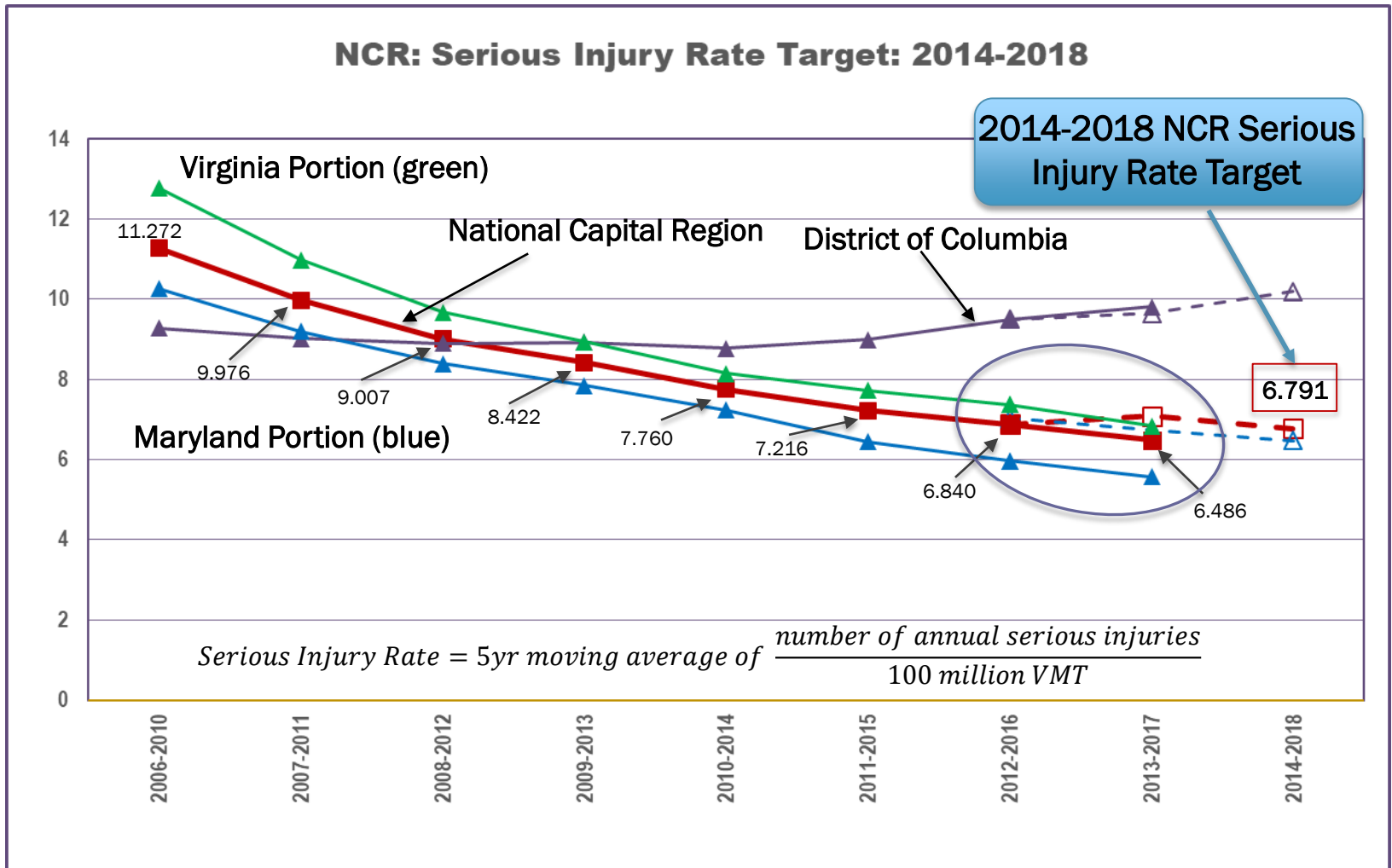
# 5-yr Average with “New” 2017 Fatality Rate Data Included



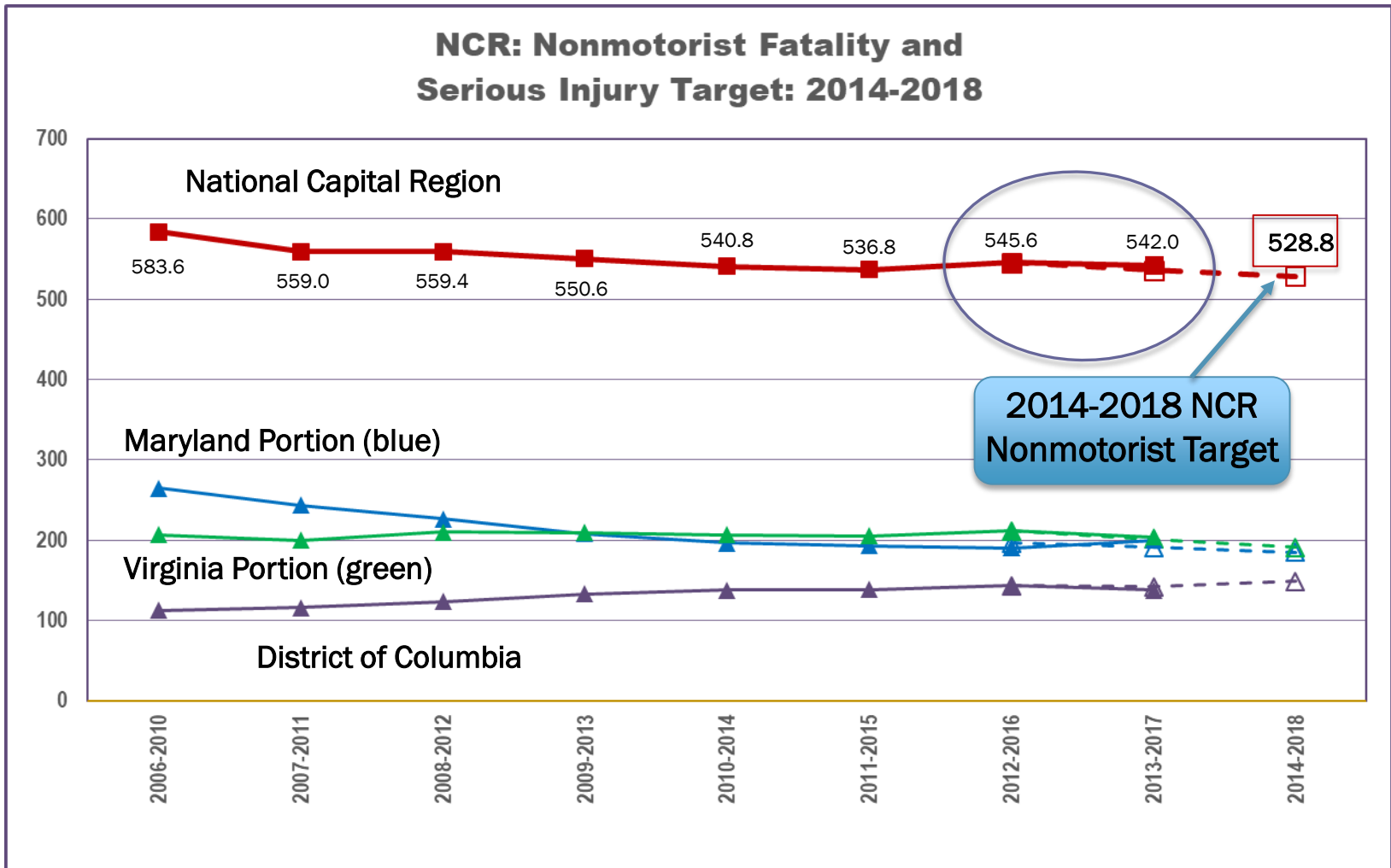
# 5-yr Average with “New” 2017 Serious Injury Data Included



# 5-yr Average with "New" 2017 Serious Injury Rate Data Included



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





# Comparison of 2013-2017 Data with 2014-2018 Targets

Performance Measure (5-yr rolling average)	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



# NCR Target Setting Methodology - Options

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- 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 (Selected by Technical Committee)

- 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	<b>31.0</b>
Fatality Rate (per 100 MVMT)	0.703	<b>0.850</b>
# of Serious Injuries	420.0	<b>417.0</b>
Serious Injury Rate (per 100 MVMT)	10.200	<b>11.477</b>
# Nonmotorist Fatalities & Serious Injuries	148.5	<b>125.0</b>

# 2015-2019 Regional Target Setting Options A & B

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- The following slides show the results obtained from applying each target setting methodology



# 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%



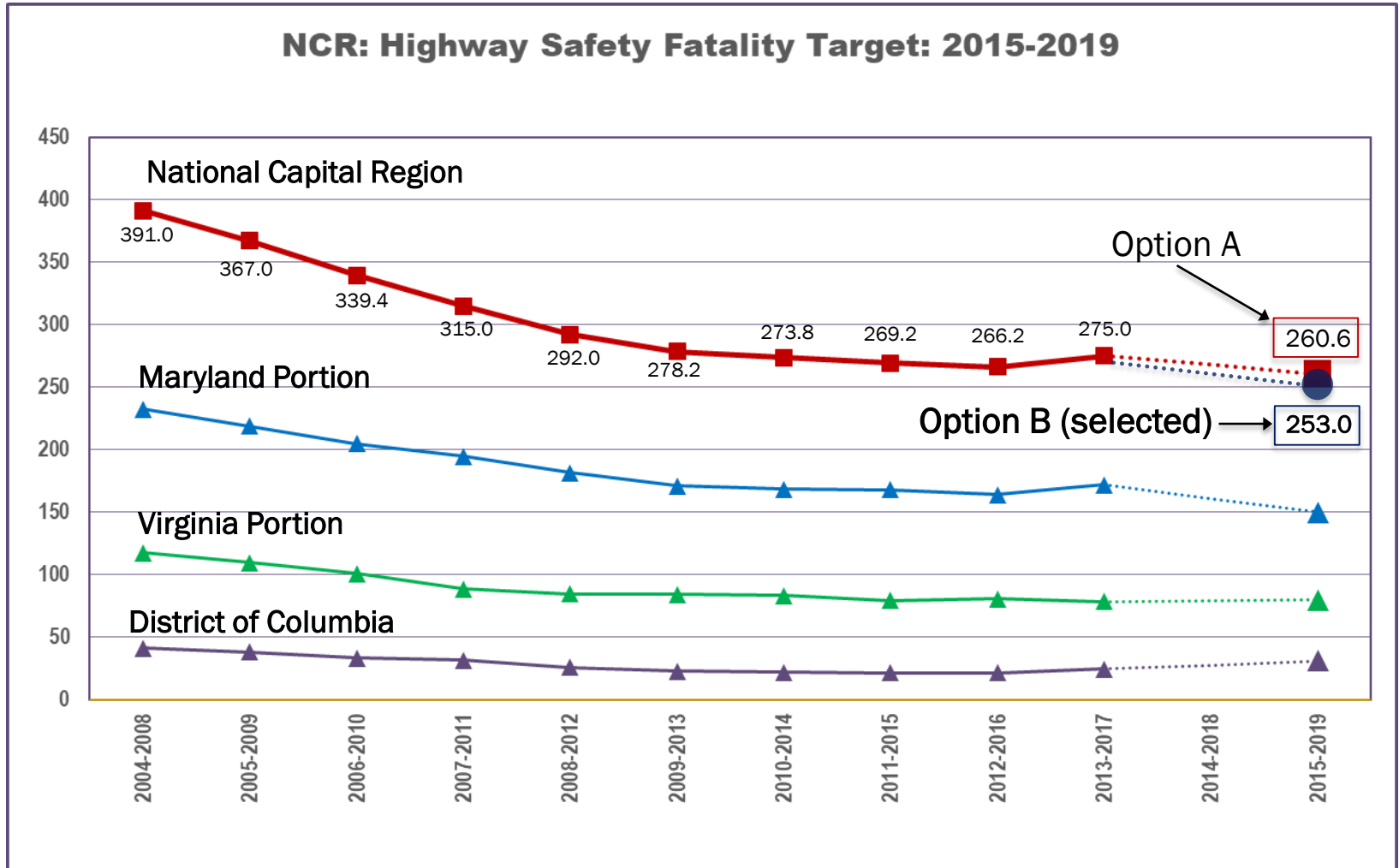
# Summary: NCR Highway Safety Targets – Option B

	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%

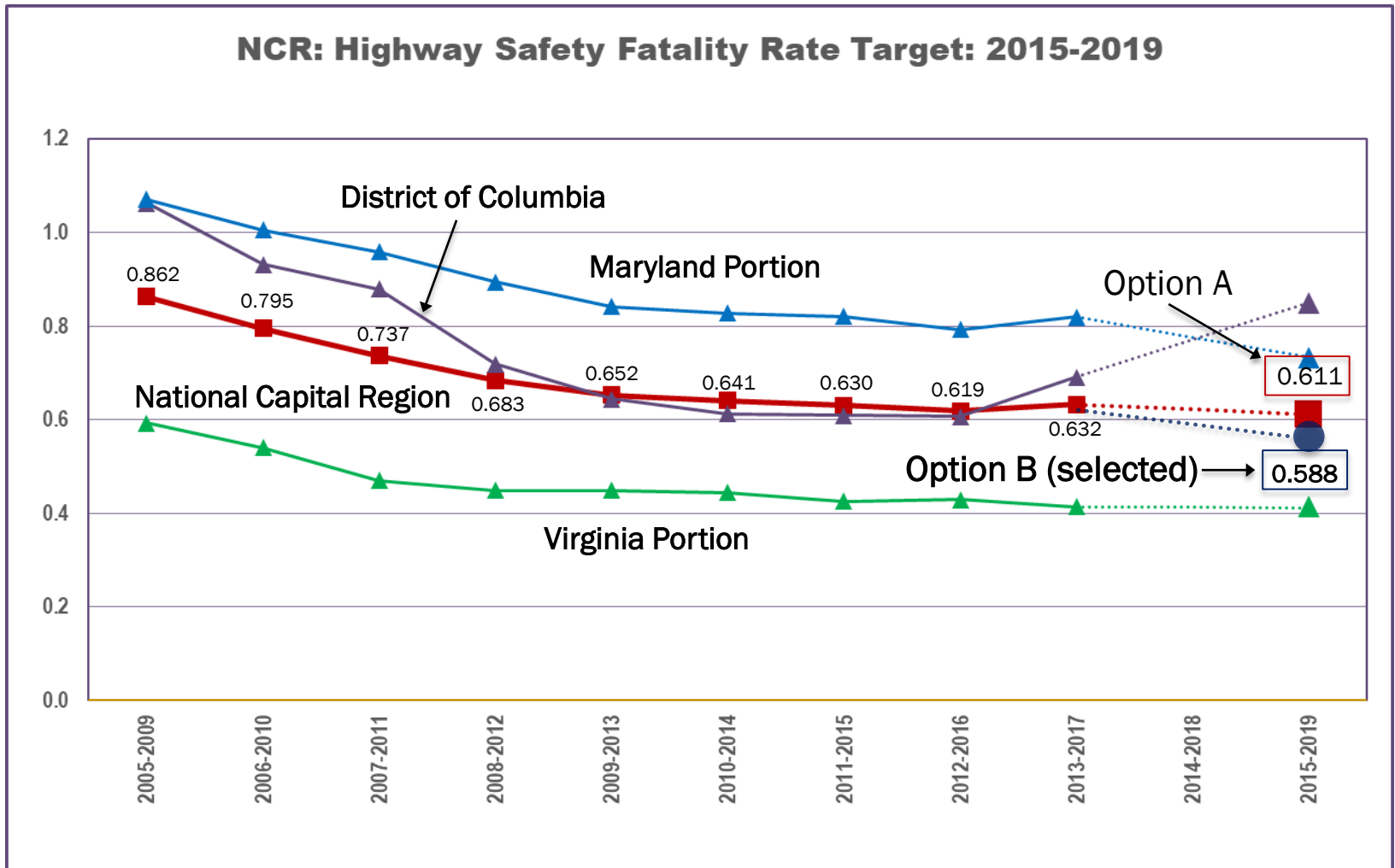




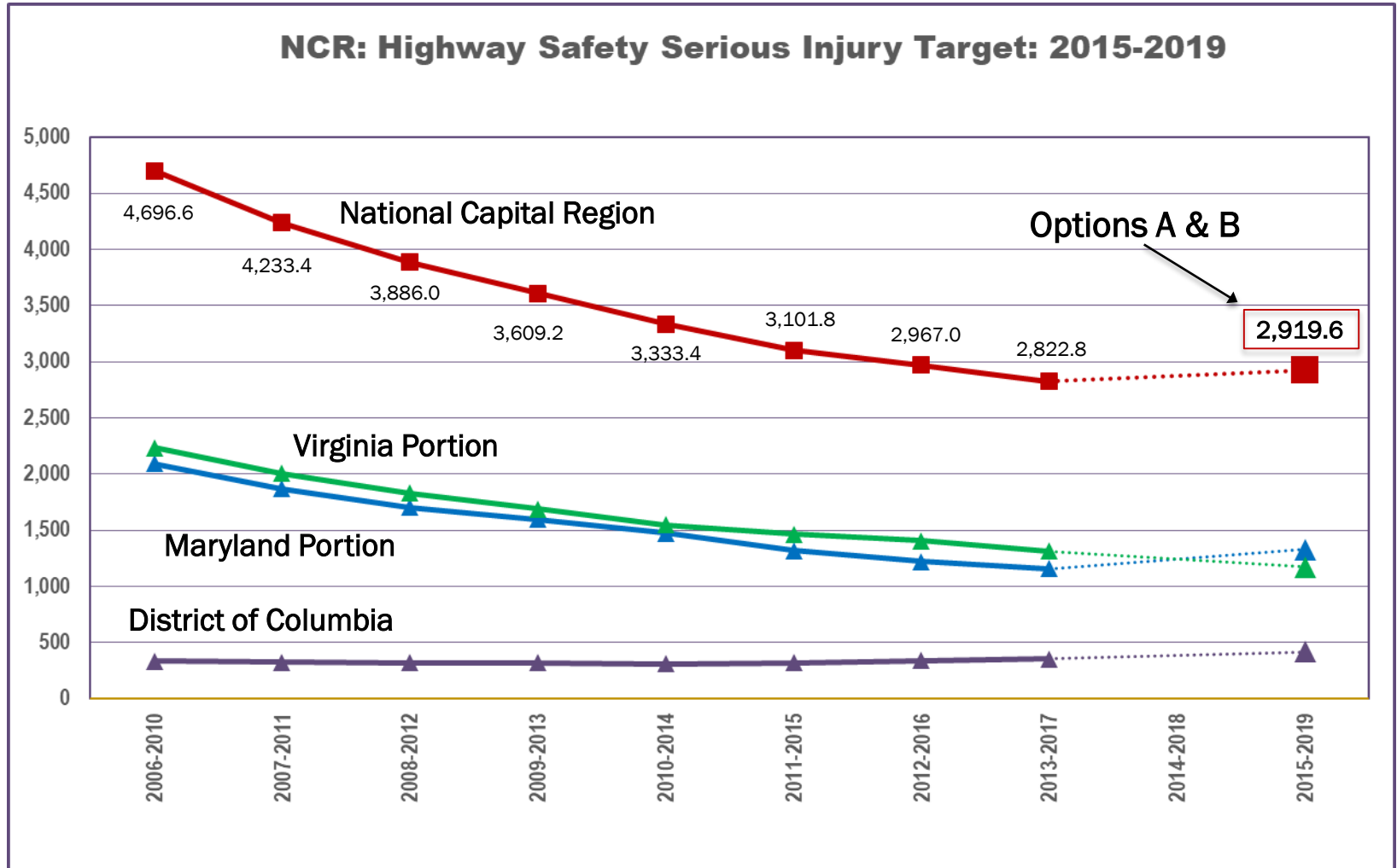
# Draft 2015-2019 Fatality Target: 253.0



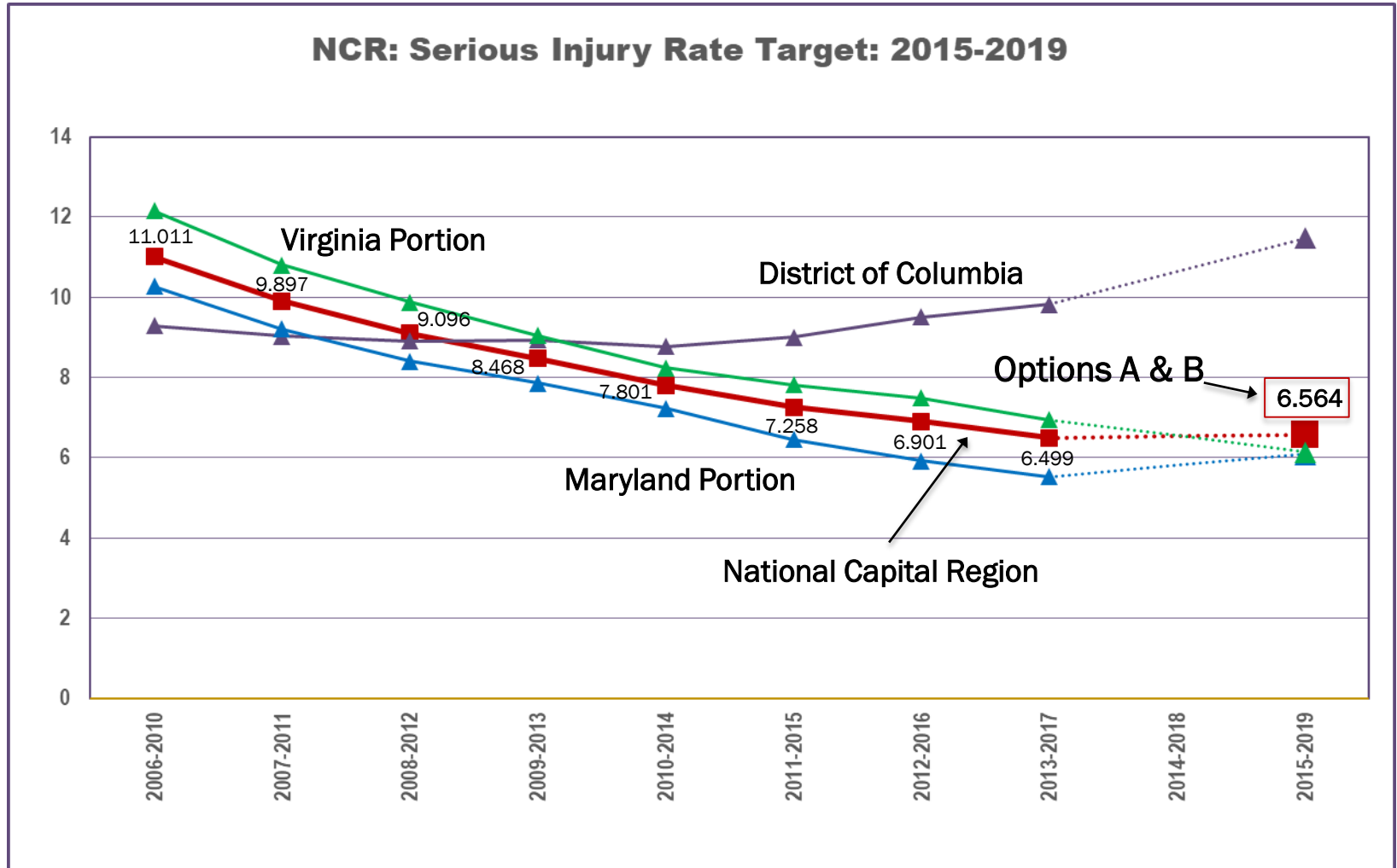
# Draft 2015-2019 Fatality Rate Target: 0.588



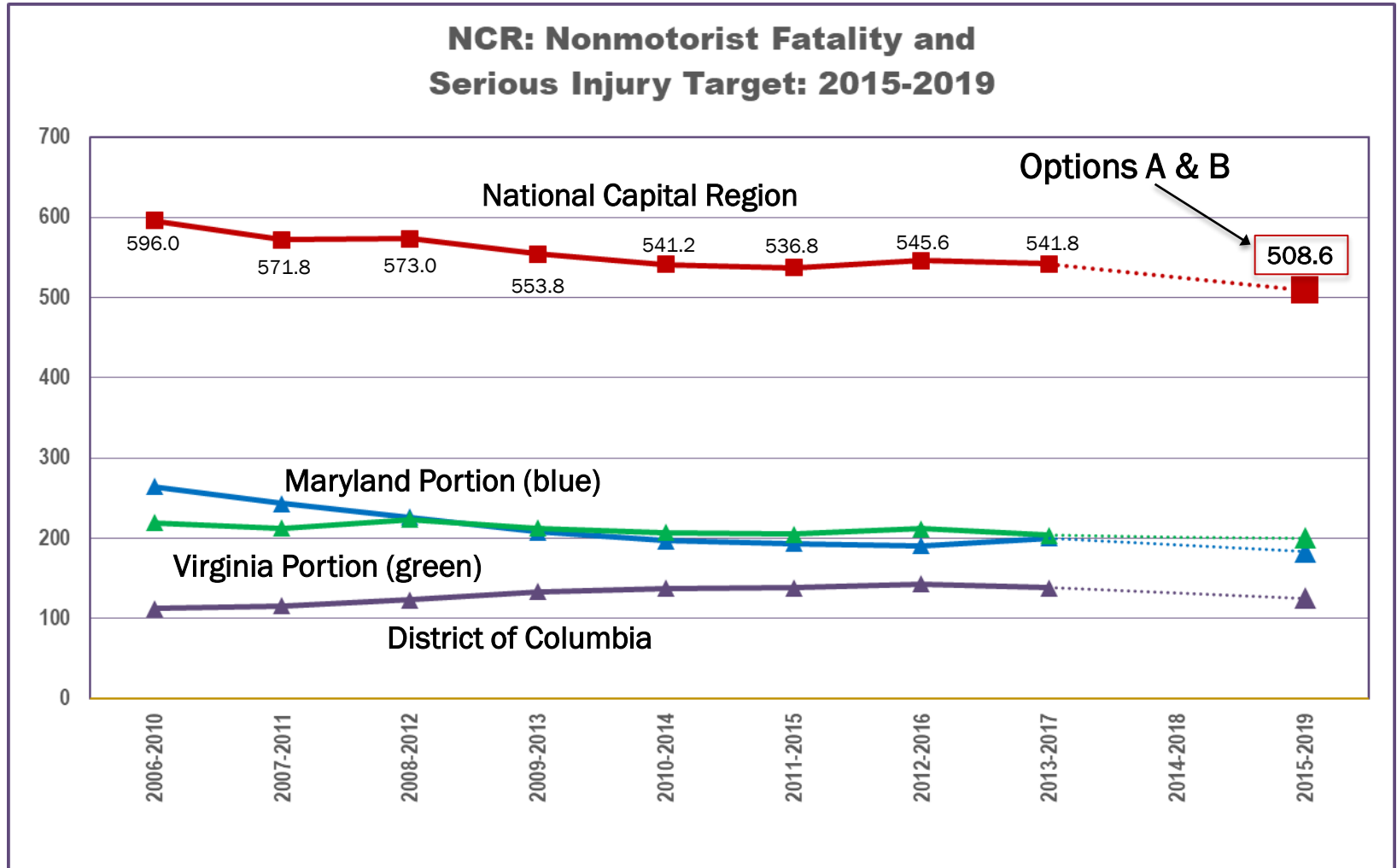
# Draft 2015-2019 Serious Injury Target: 253.0



# Draft 2015-2019 Serious Injury Rate Target: 6.564



# Draft 2015-2019 Nonmotorist Target: 508.6



# Next Steps

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- 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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