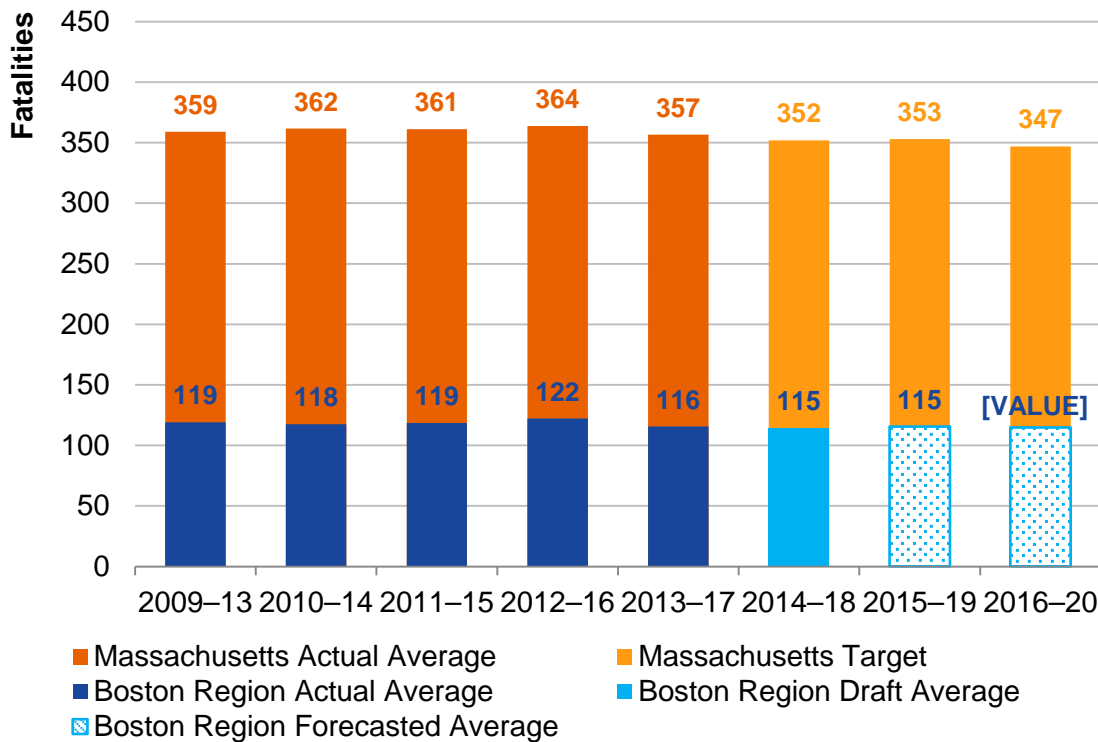


## APPENDIX B: ROADWAY SAFETY PERFORMANCE TREND AND TARGET CHARTS

The five charts in this section illustrate roadway safety performance trends in Massachusetts, expressed in five-year rolling annual averages, along with the Commonwealth’s calendar year 2018, 2019, and 2020 targets. For context, Boston Region Metropolitan Planning Organization (MPO) staff has included historic five-year rolling annual averages for the Boston region for these performance measures. MPO staff has also included draft 2014–18 and projected 2015–19 and 2016–20 rolling annual averages for the Boston region for these performance measures. MPO staff used linear trend lines, historic data from 2009 to 2017, and draft estimates for 2018 to develop the Boston region projected averages shown in the charts below. More information is included in the notes below each figure.

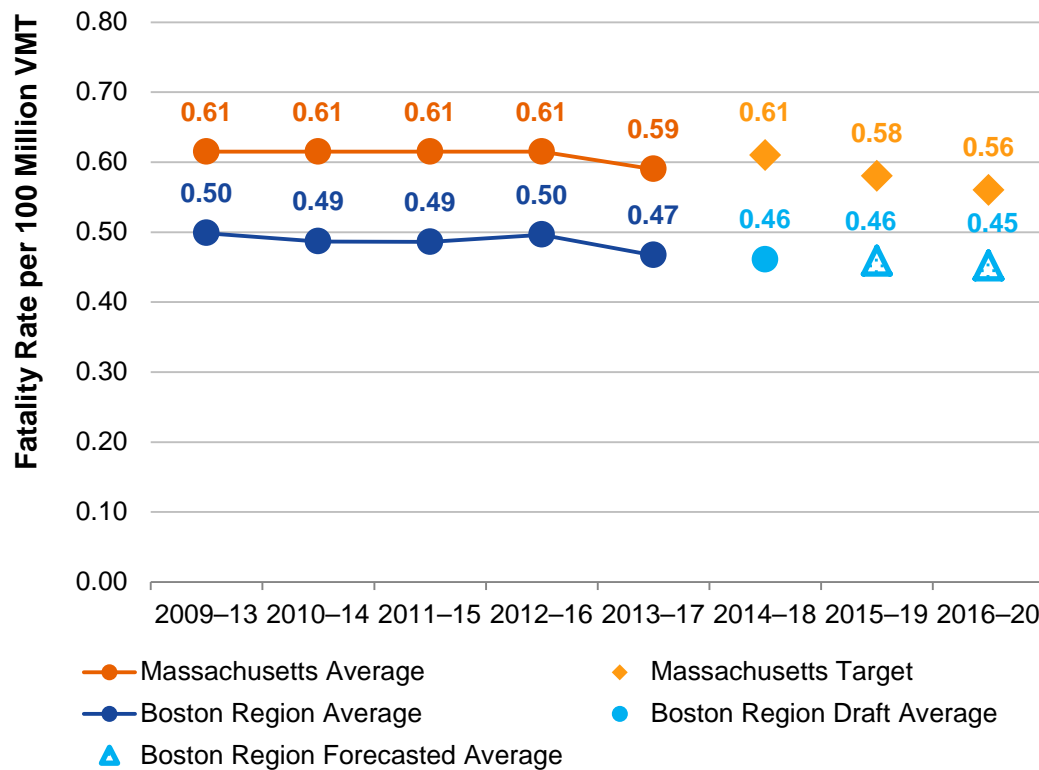
**Figure B-1  
Number of Fatalities**



Notes: Values reflect five-year rolling annual averages and have been rounded to the nearest integer. MPO staff developed projections for the Boston region using a linear trend line based on actual fatality values for CYs 2009 through 2017 and a draft estimate of 98 fatalities for CY 2018. The draft 2014–18 and the forecasted 2015–19 and 2016–20 average numbers of fatalities in the Boston region are smaller than the historic averages shown in the chart; however, some of these differences do not appear at the integer level. CY = Calendar Year. MPO = Metropolitan Planning Organization.

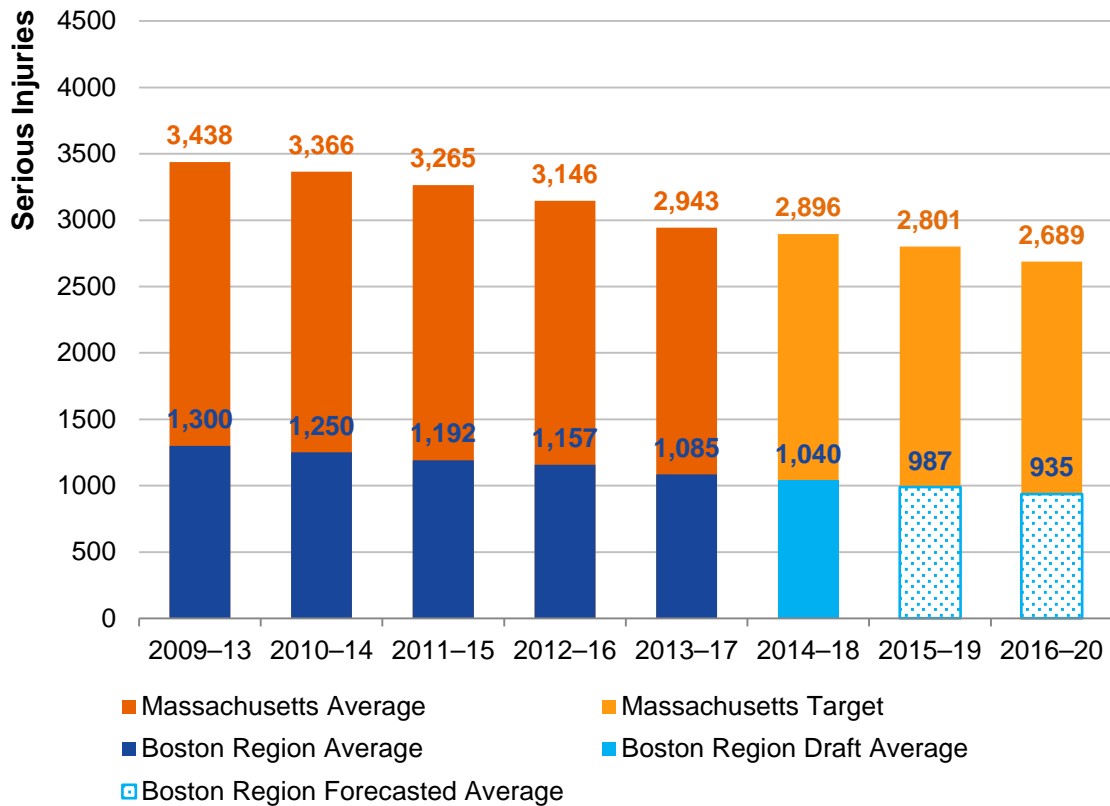
Sources: National Highway Traffic Safety Administration Fatality Analysis and Reporting System, Massachusetts Department of Transportation, Boston Region MPO staff.

**Figure B-2**  
**Fatality Rate per 100 Million VMT**



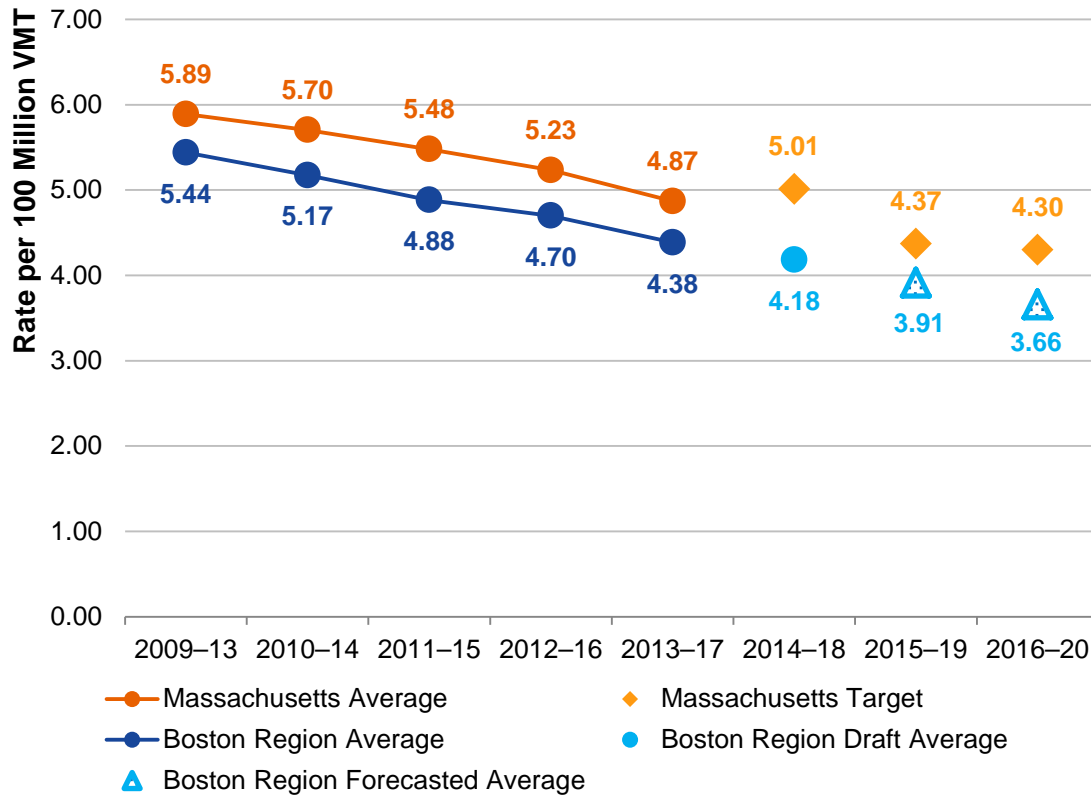
Notes: Values reflect five-year rolling annual averages and have been rounded to the hundredths decimal place. MPO staff developed projections for the Boston region using a linear trend line based on actual fatality values and VMT values for CYs 2009 through 2017, a draft estimate of 98 fatalities for CY 2018, and an estimate of CY 2018 VMT from MassDOT (approximately 24.9 billion VMT).  
 CY = Calendar Year. MassDOT = Massachusetts Department of Transportation. MPO = Metropolitan Planning Organization. VMT = Vehicle-Miles Traveled.  
 Sources: National Highway Traffic Safety Administration Fatality Analysis and Reporting System, Massachusetts Department of Transportation, Boston Region MPO staff.

**Figure B-3  
Number of Serious Injuries**



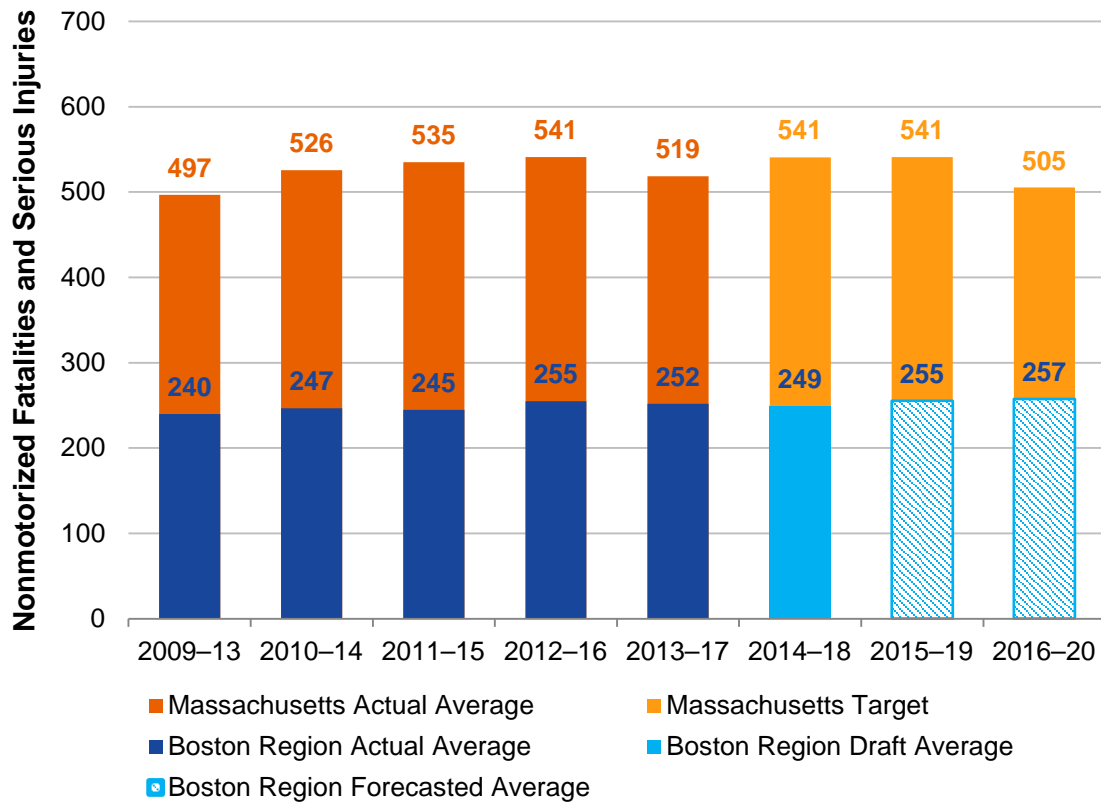
Notes: Values reflect five-year rolling annual averages and have been rounded to the nearest integer. MPO staff developed projections for the Boston region using a linear trend line based on actual serious injury values for CYs 2009 through 2017 and a draft estimate of 938 serious injuries for CY 2018. CY = Calendar Year. MPO = Metropolitan Planning Organization.  
Sources: Massachusetts Crash Data System, Massachusetts Department of Transportation, Boston Region MPO staff.

**Figure B-4**  
**Serious Injury Rate per 100 Million VMT**



Notes: Values reflect five-year rolling annual averages and have been rounded to the hundredths decimal place. MPO staff developed projections for the Boston region using a linear trend line based on actual serious injury values and VMT values for CYs 2009 through 2017, a draft estimate of 938 serious injuries for CY 2018, and an estimate of CY 2018 VMT from MassDOT (approximately 24.9 billion VMT).  
 CY = Calendar Year. MassDOT = Massachusetts Department of Transportation. MPO = Metropolitan Planning Organization. VMT = Vehicle-Miles Traveled.  
 Sources: Massachusetts Crash Data System, Massachusetts Department of Transportation, Boston Region MPO staff.

**Figure B-5  
Number of Nonmotorized Fatalities and Serious Injuries**



Notes: Values reflect five-year rolling annual averages and have been rounded to the nearest integer. MPO staff developed projections for the Boston region using a linear trend line based on actual nonmotorized fatality and serious injury values for CYs 2009 through 2017, and draft estimates of 38 nonmotorized fatalities and 191 nonmotorized serious injuries for CY 2018.  
 CY = Calendar Year. MPO = Metropolitan Planning Organization.  
 Sources: National Highway Traffic Safety Administration Fatality Analysis and Reporting System, Massachusetts Crash Data System, Massachusetts Department of Transportation, Boston Region MPO staff.