

REGIONAL SAFETY STUDY

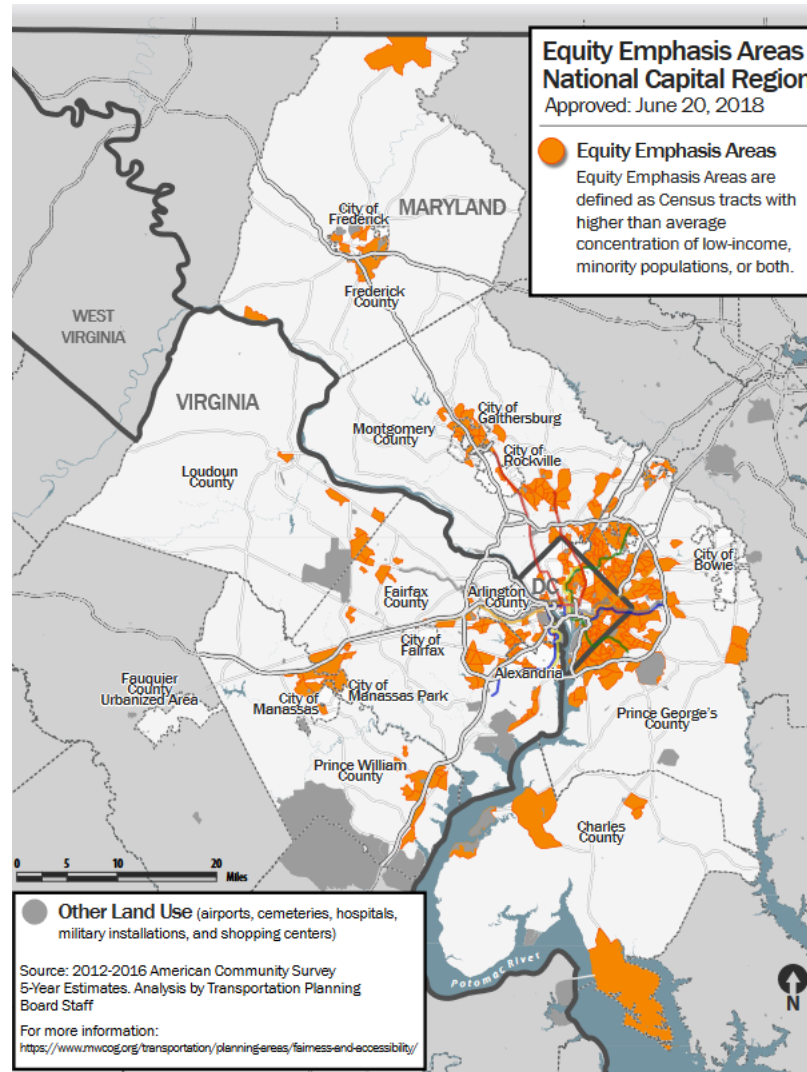
Equity Emphasis Area Analysis

Cory Hopwood
Cambridge Systematics

Transportation Safety Subcommittee
April 13, 2021



Equity Emphasis Areas



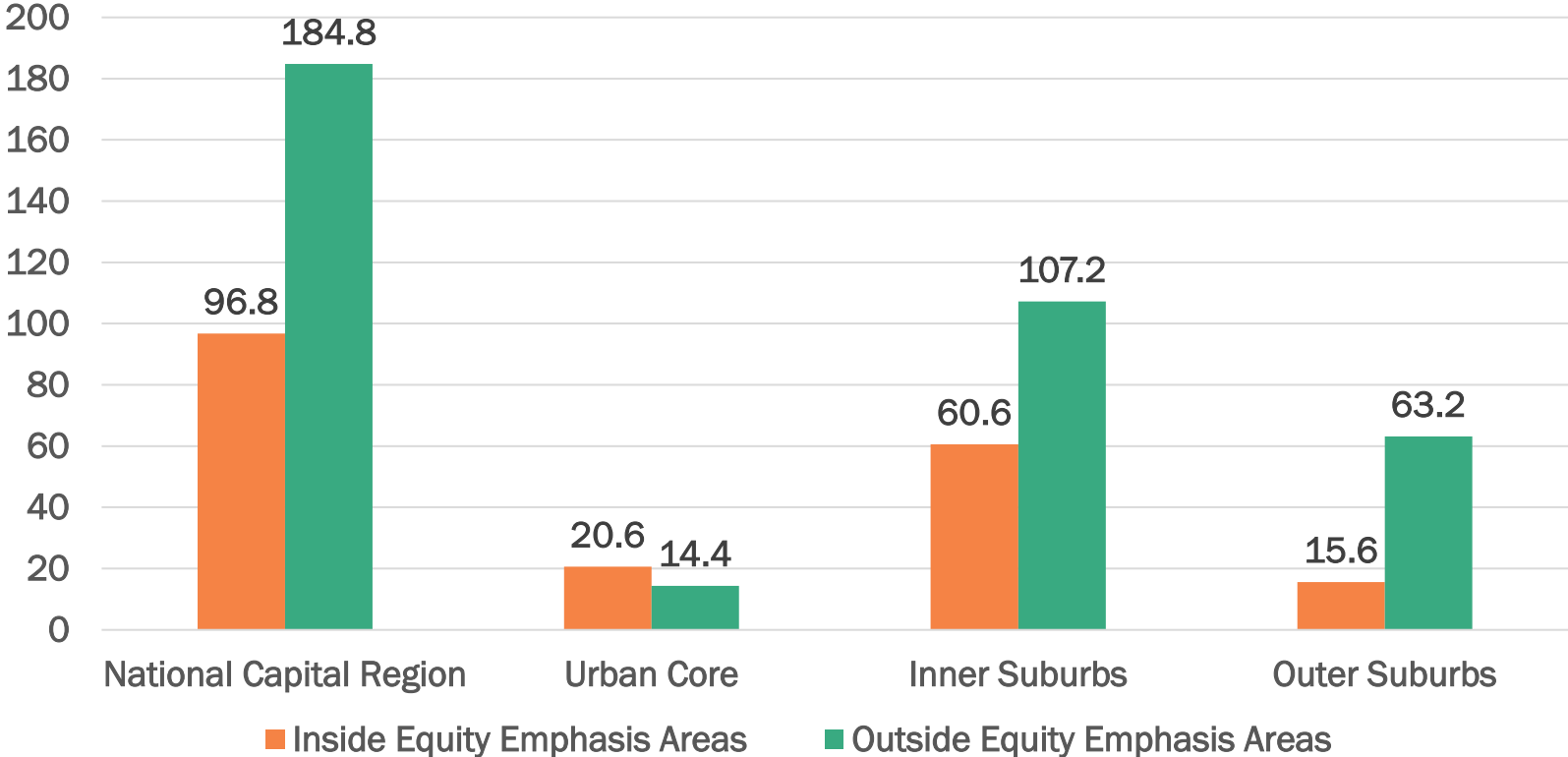
Equity Emphasis Area Analysis

- Equity Emphasis Areas:
 - Geographic areas with significant concentrations of low-income, minority populations, or both
 - Approved by the Board in 2017, updated to most recent U.S. Census data June 2018
- Equity Emphasis Area Safety Analysis
 - How do Equity Emphasis Areas compare to the region when it comes to roadway fatalities and serious injuries?

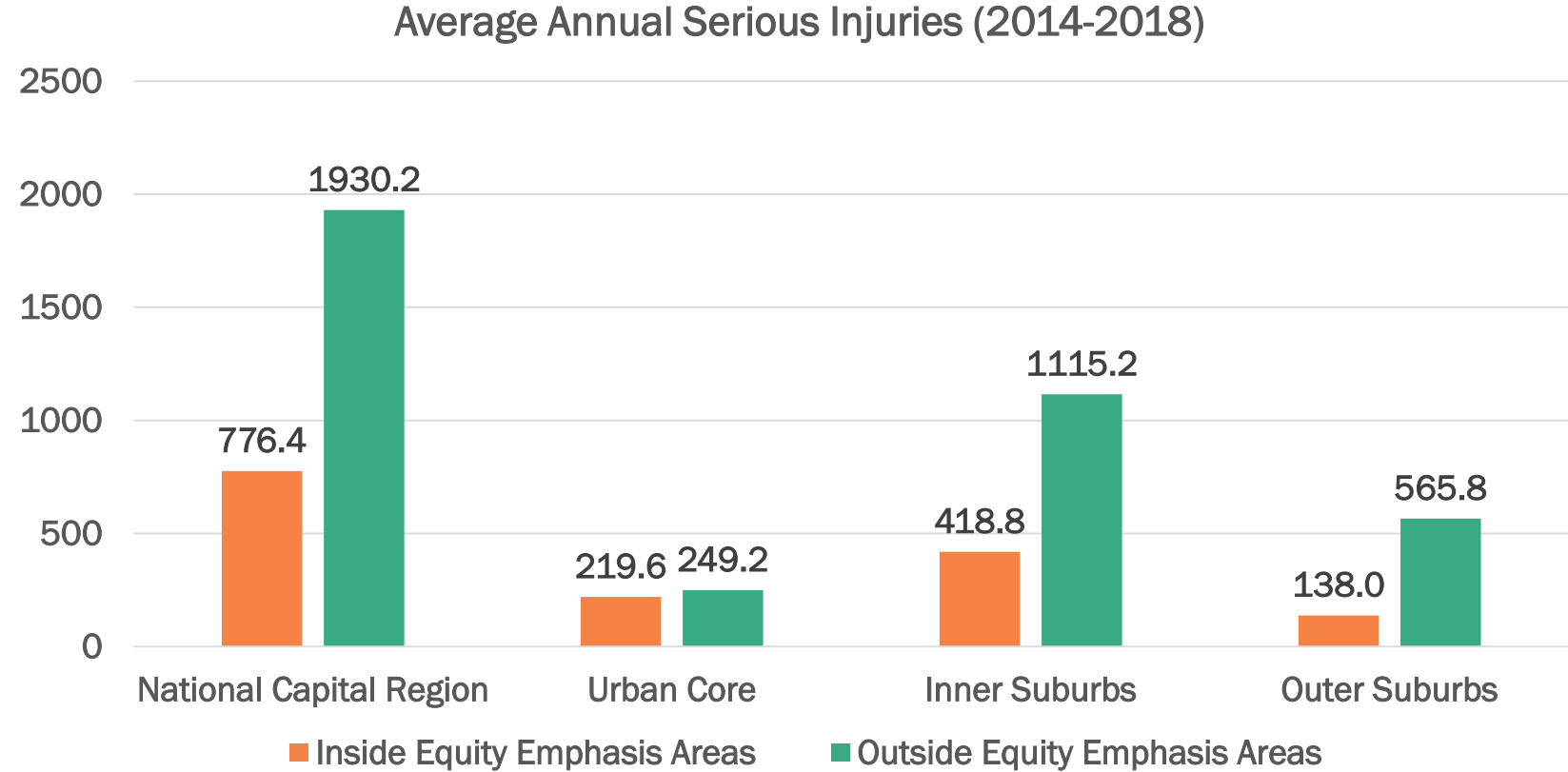


Average Annual Fatalities (2014-2018)

Average Annual Fatalities (2014-2018)



Average Annual Serious Injuries (2014-2018)



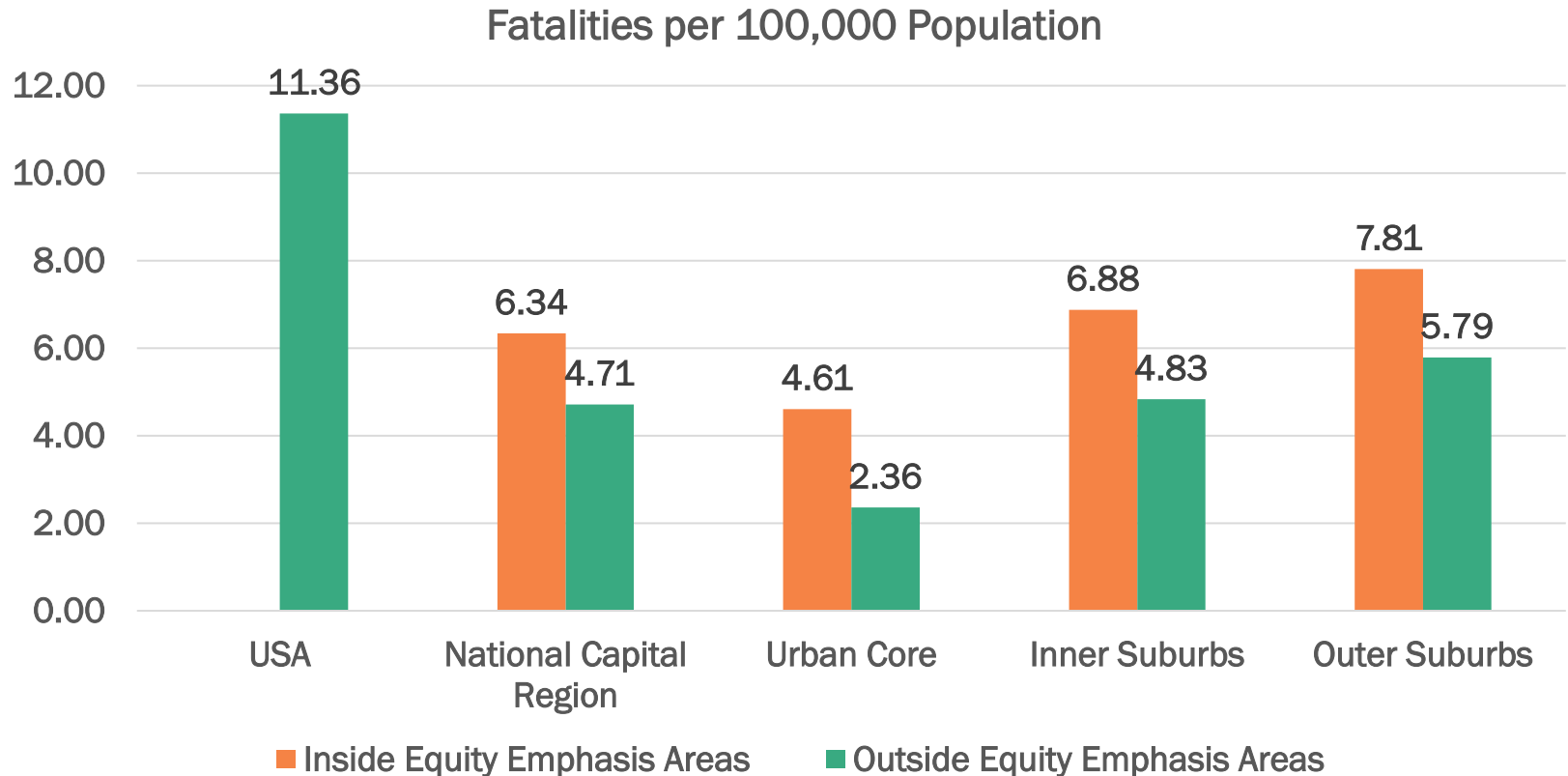
Equity Emphasis Areas Population

Population				
Jurisdiction	Average Population	Percentage of Population in EEAs	Percentage of Fatalities in EEAs	Percentage of Serious Injuries in EEAs
District of Columbia	355,176	55.0%	65.9%	54.4%
Charles County	18,058	11.7%	13.9%	21.7%
Frederick County	39,929	16.4%	21.4%	24.2%
Montgomery County	254,559	24.8%	44.0%	28.9%
Prince George's County	412,062	45.9%	41.0%	39.2%
Arlington County	46,778	20.7%	14.3%	16.4%
Fairfax County	214,326	18.9%	16.2%	18.0%
Loudoun County	25,837	7.1%	11.9%	8.7%
Prince William County	101,648	22.9%	30.0%	29.7%
City of Alexandria	45,072	29.8%	57.9%	25.6%
Manassas	7,556	18.4%	16.7%	11.0%
Manassas Park	6,765	42.7%	0.0%	42.9%
National Capital Region	1,527,766	28.0%	34.4%	28.7%
Urban Core	447,026	42.3%	58.9%	46.8%
Inner Suburbs	880,947	28.4%	36.1%	27.3%
Outer Suburbs	199,793	15.5%	19.8%	19.6%

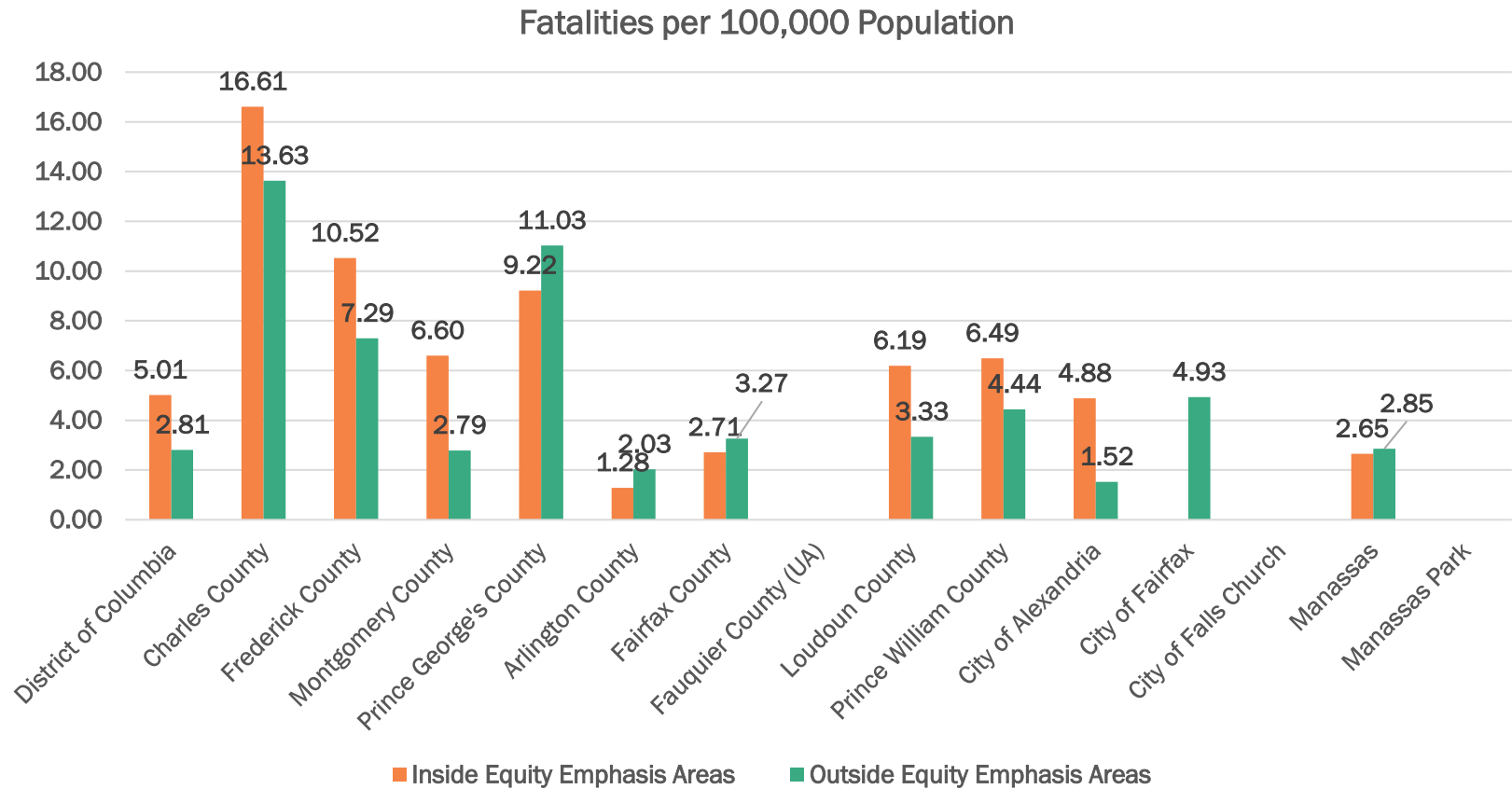
*Source data for EEA Populations: TPB analysis of U.S. Census 2012-2016 ACS 5-year estimates



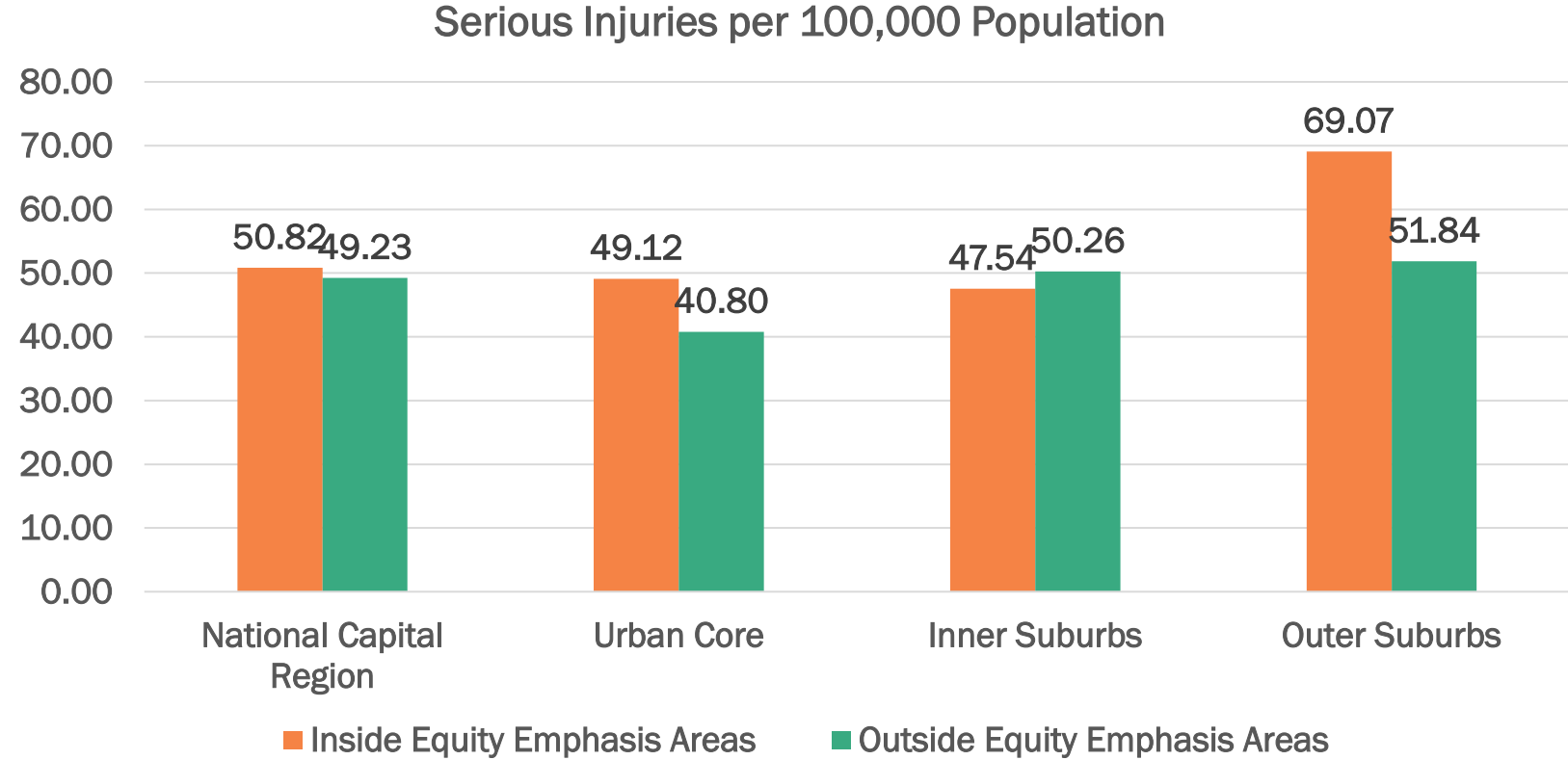
Fatalities per 100,000 Population (2014-2018)



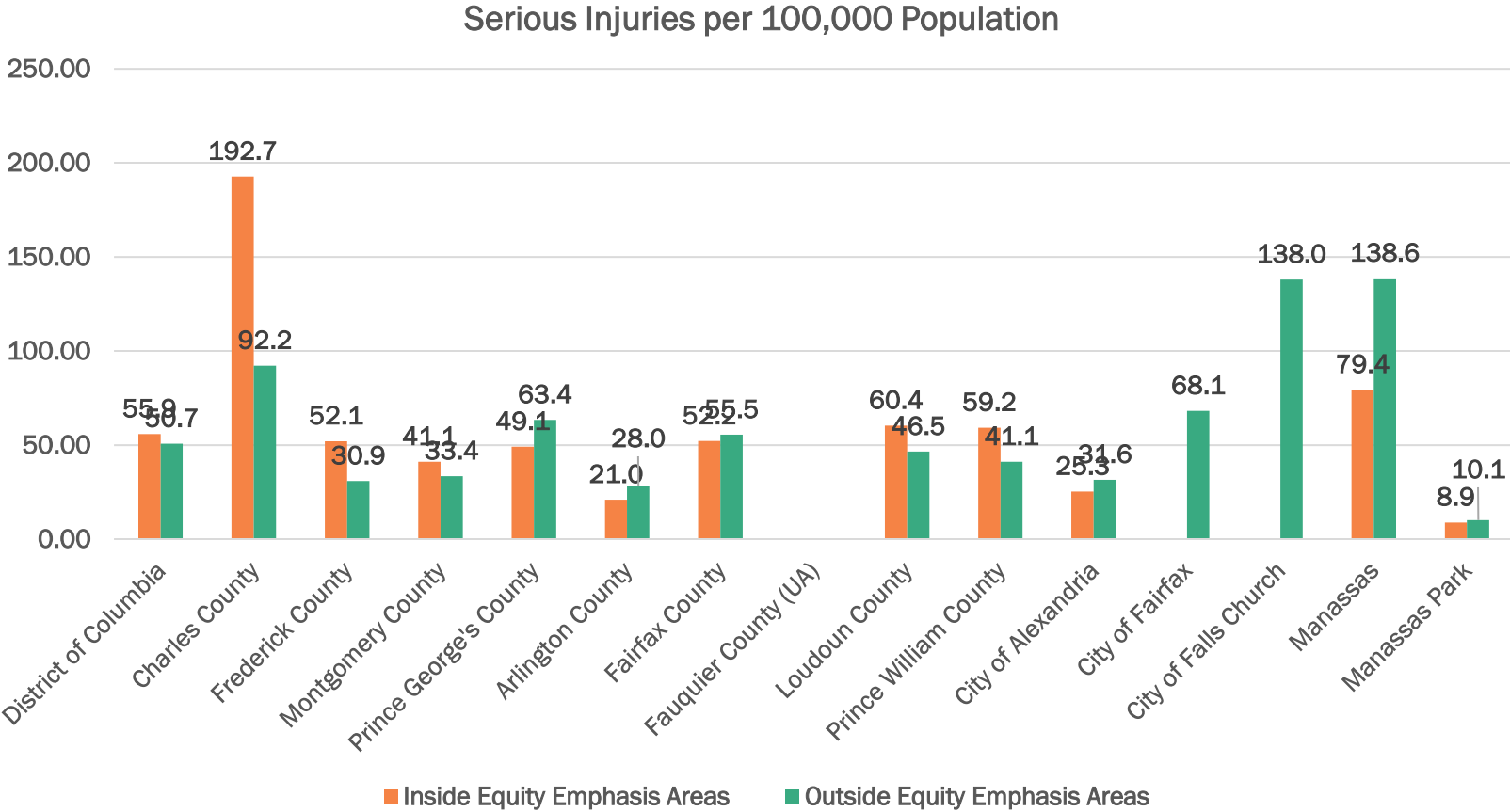
Fatalities per 100,000 Population (2014-2018)



Serious Injuries per 100,000 Population (2014-2018)

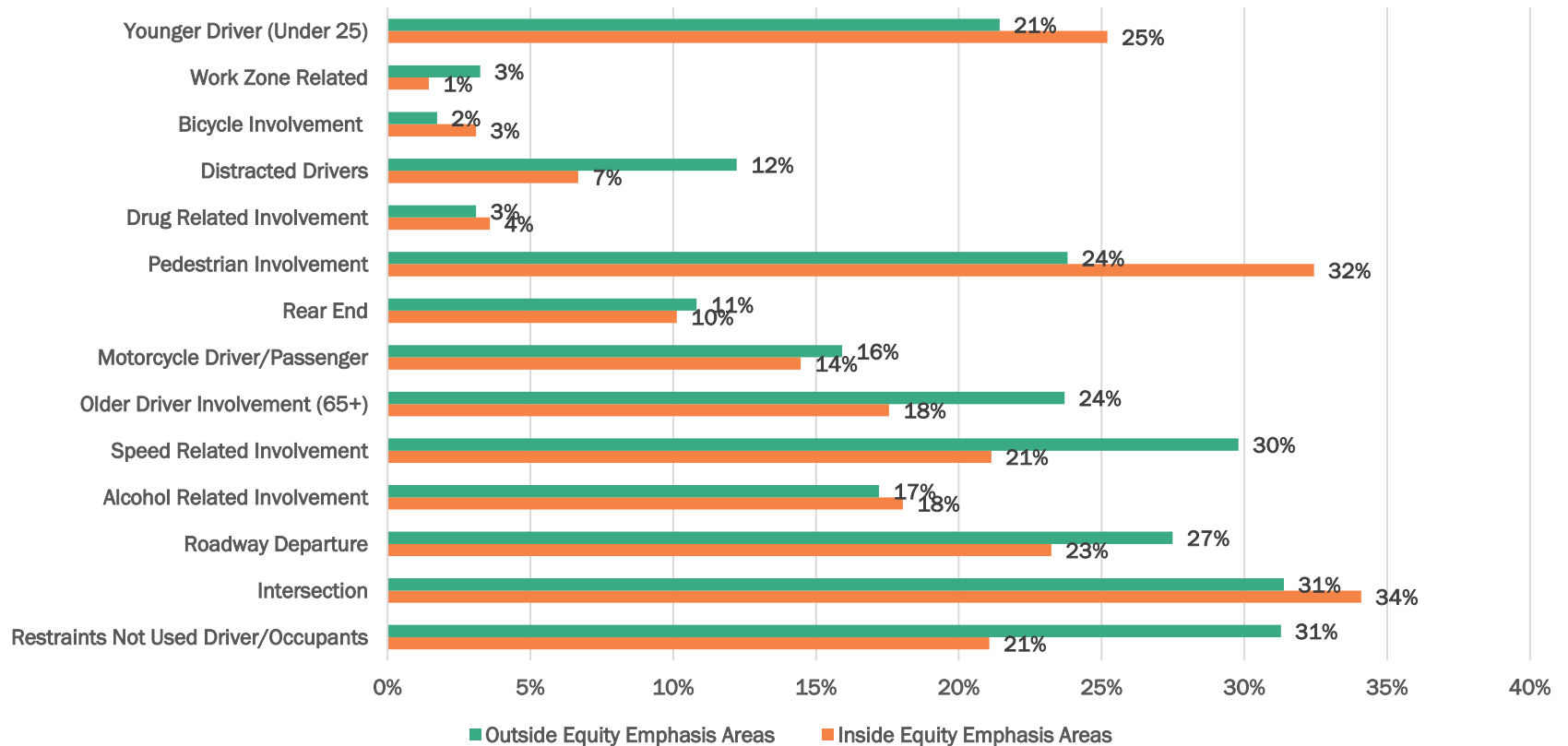


Serious Injuries per 100,000 Population (2014-2018)



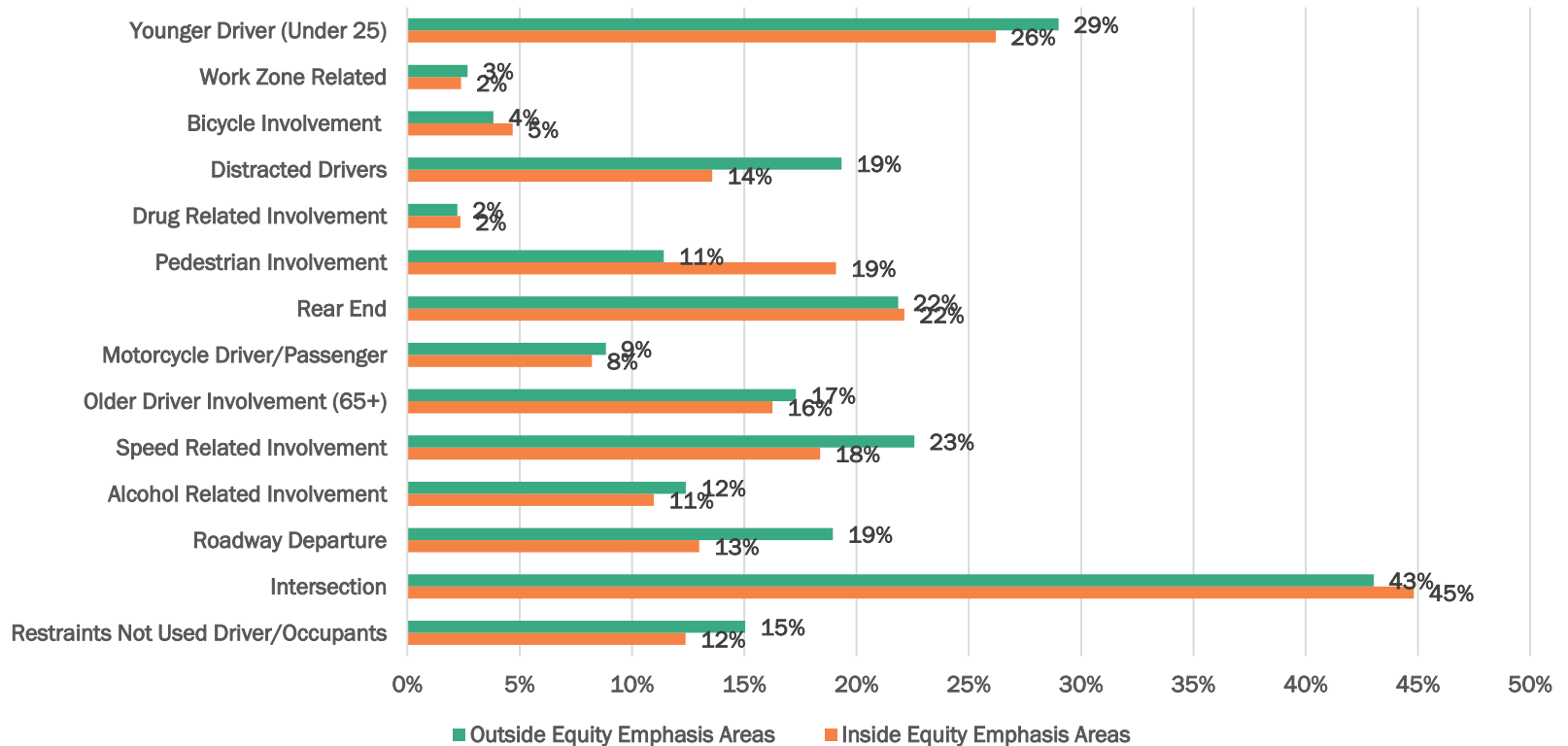
Contributing Circumstances - Fatality Percentage (2014-2018)

Percentage of Total Fatalities by Contributing Circumstance



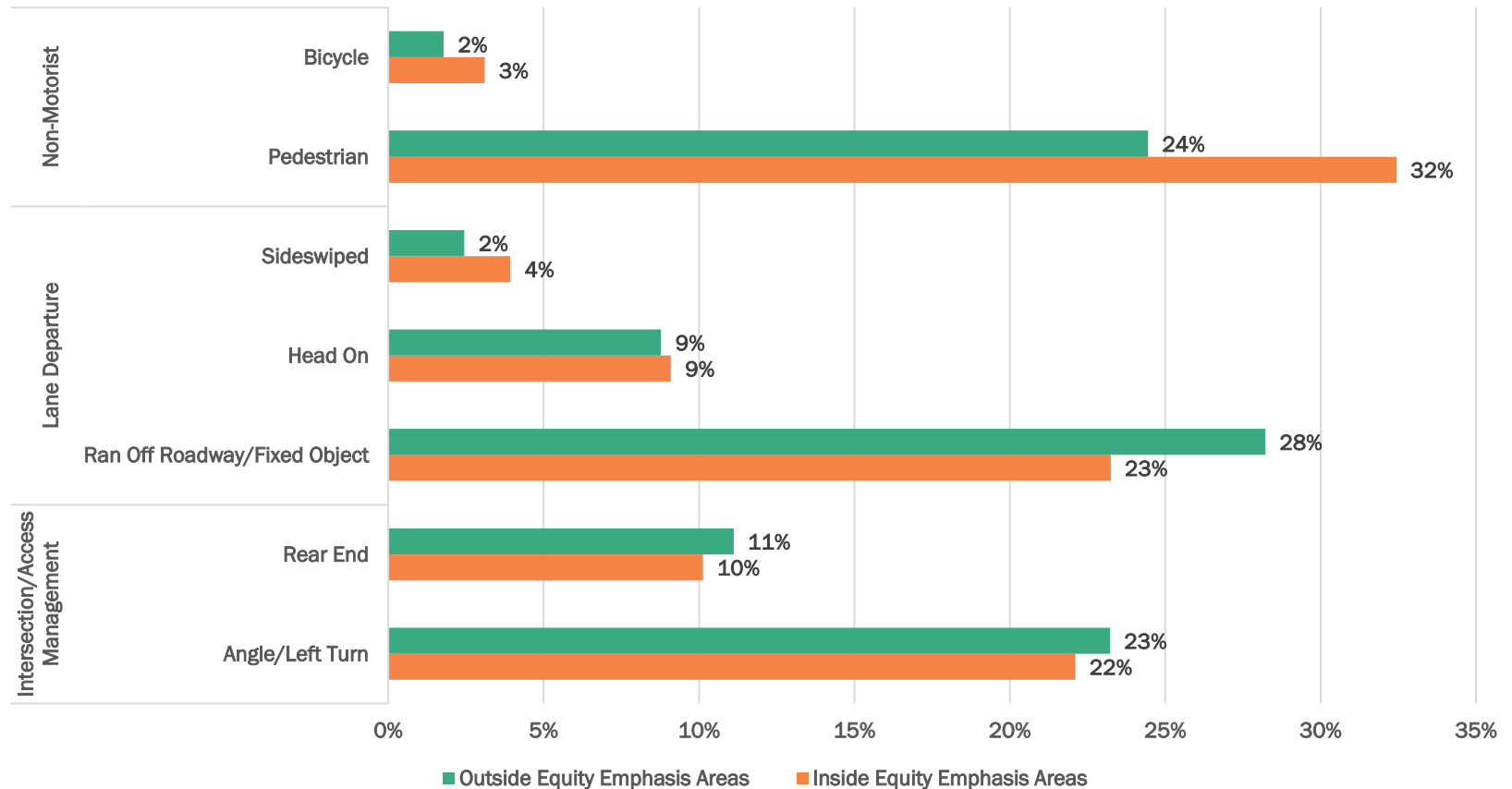
Contributing Circumstances – Serious Injury Percentage (2014-2018)

Percentage of Total Serious Injuries by Contributing Circumstance



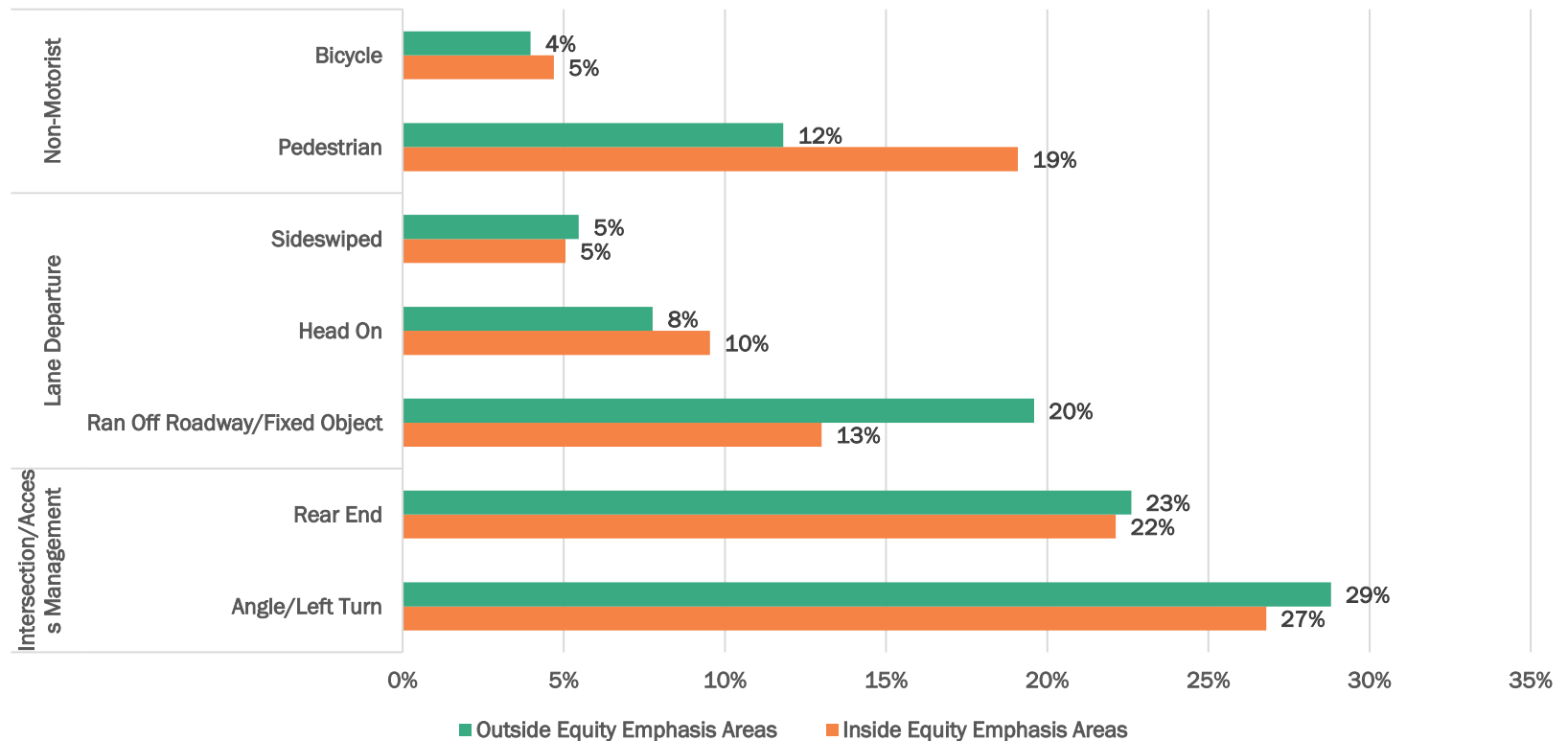
Crash Types - Fatality Percentage (2014-2018)

Percentage of Total Fatalities by Contributing Circumstance



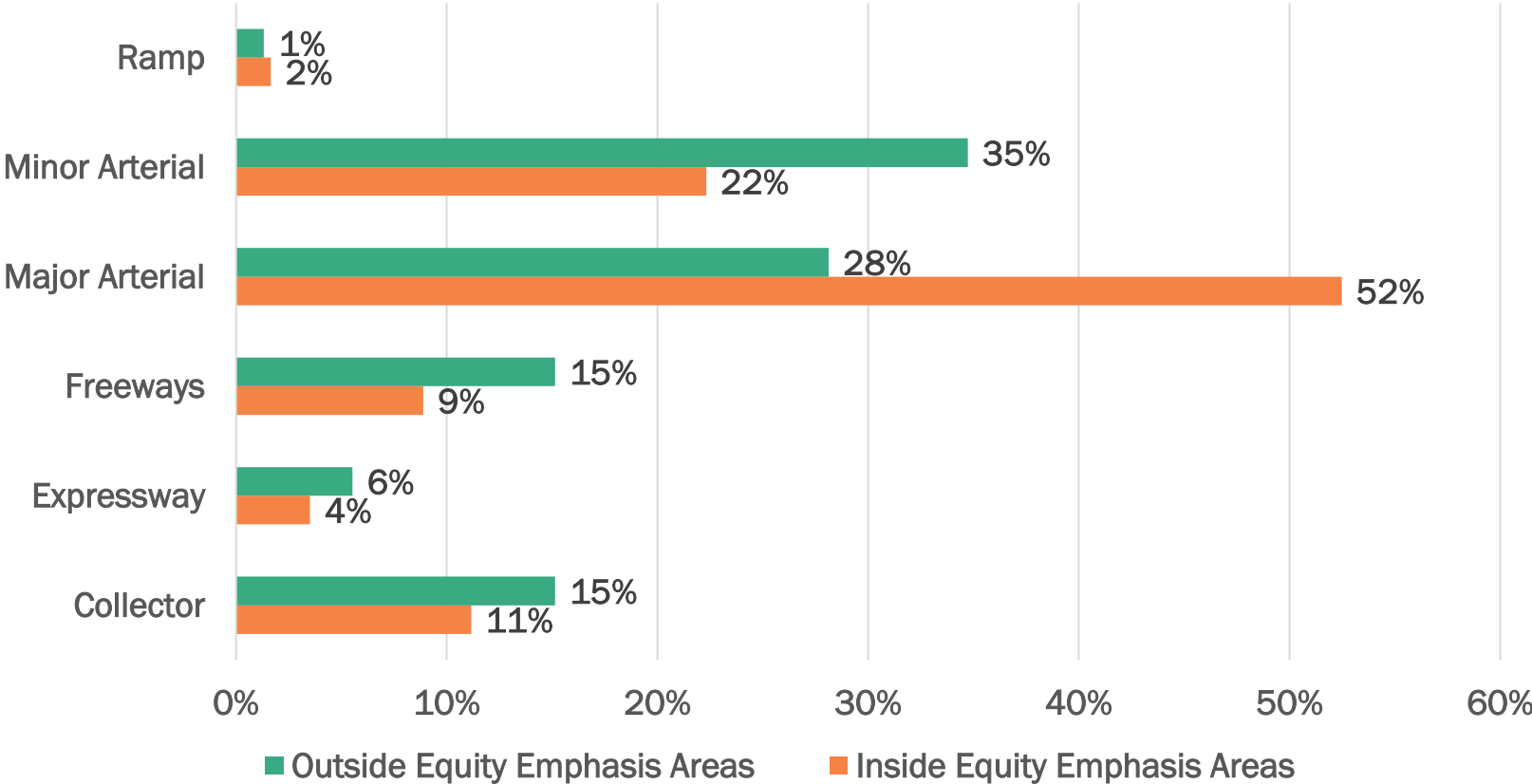
Crash Types – Serious Injury Percentage (2014-2018)

Percentage of Total Serious Injuries by Contributing Circumstance



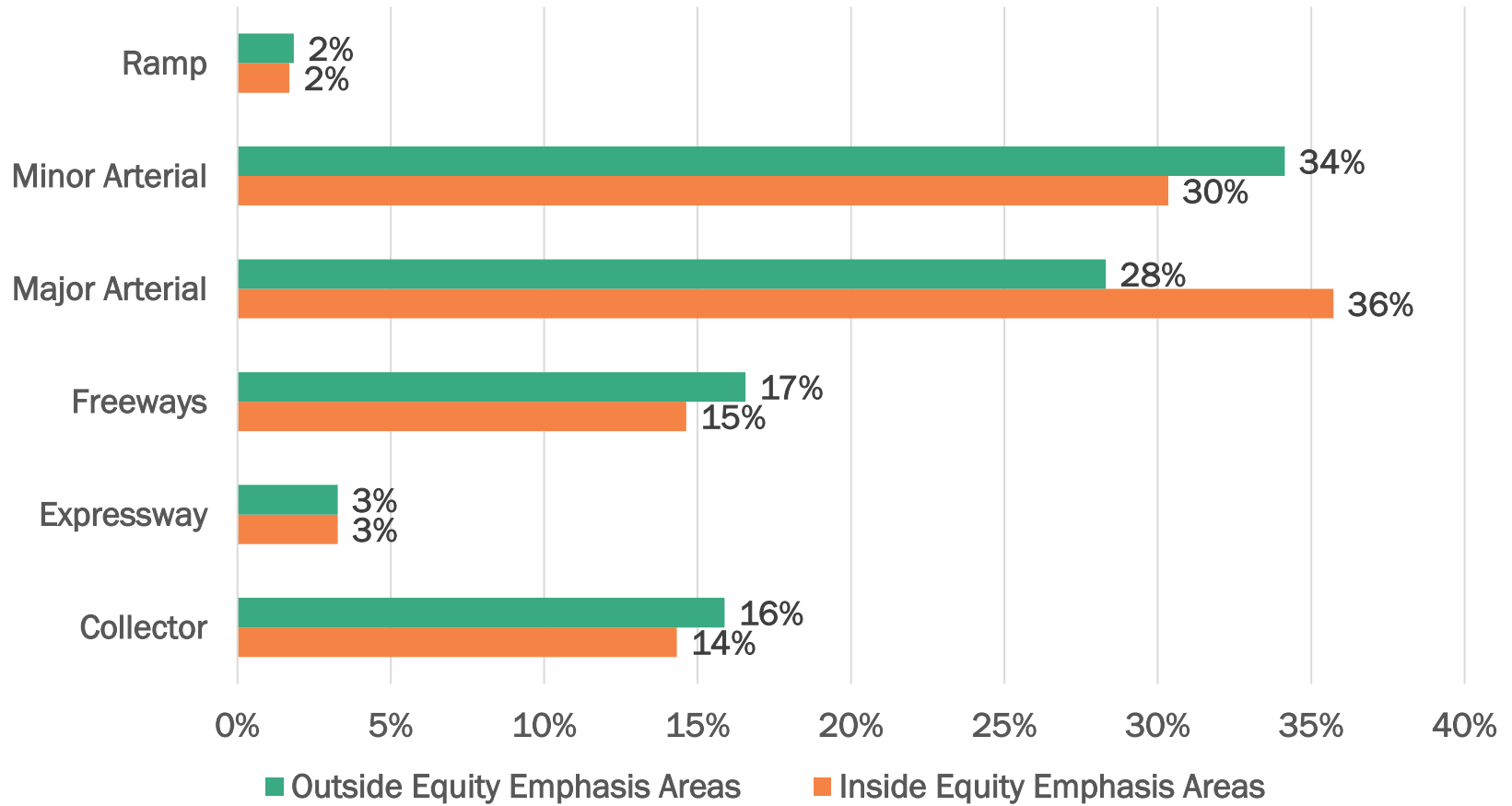
Fatalities by Functional Class (2014-2018)

Fatalities by Functional Class



Serious Injuries by Functional Class (2014-2018)

Serious Injuries by Functional Class



Key Takeaways

- Equity Emphasis Areas:
 - Contain 29 percent of the region's population yet they account for 34 percent of the region's fatalities
 - Have higher percentages of fatalities involving young drivers, pedestrians, crashes at intersections, and crashes on major arterials
 - Have lower percentages of fatalities involving older drivers, excessive speed, fixed objects, and minor arterials



Key Takeaways

- Equity Emphasis Areas:
 - Contain 42 percent of the Urban Core's population yet they account for 59 percent of the Urban Core's fatalities
 - Contain 16 percent of the Outer Suburb's population yet they account for 20 percent of the Outer Suburb's serious injuries
 - Have higher fatality and serious injury rates per population in the District of Columbia, Charles County, Frederick County, Montgomery County, Loudon County, and Prince William County



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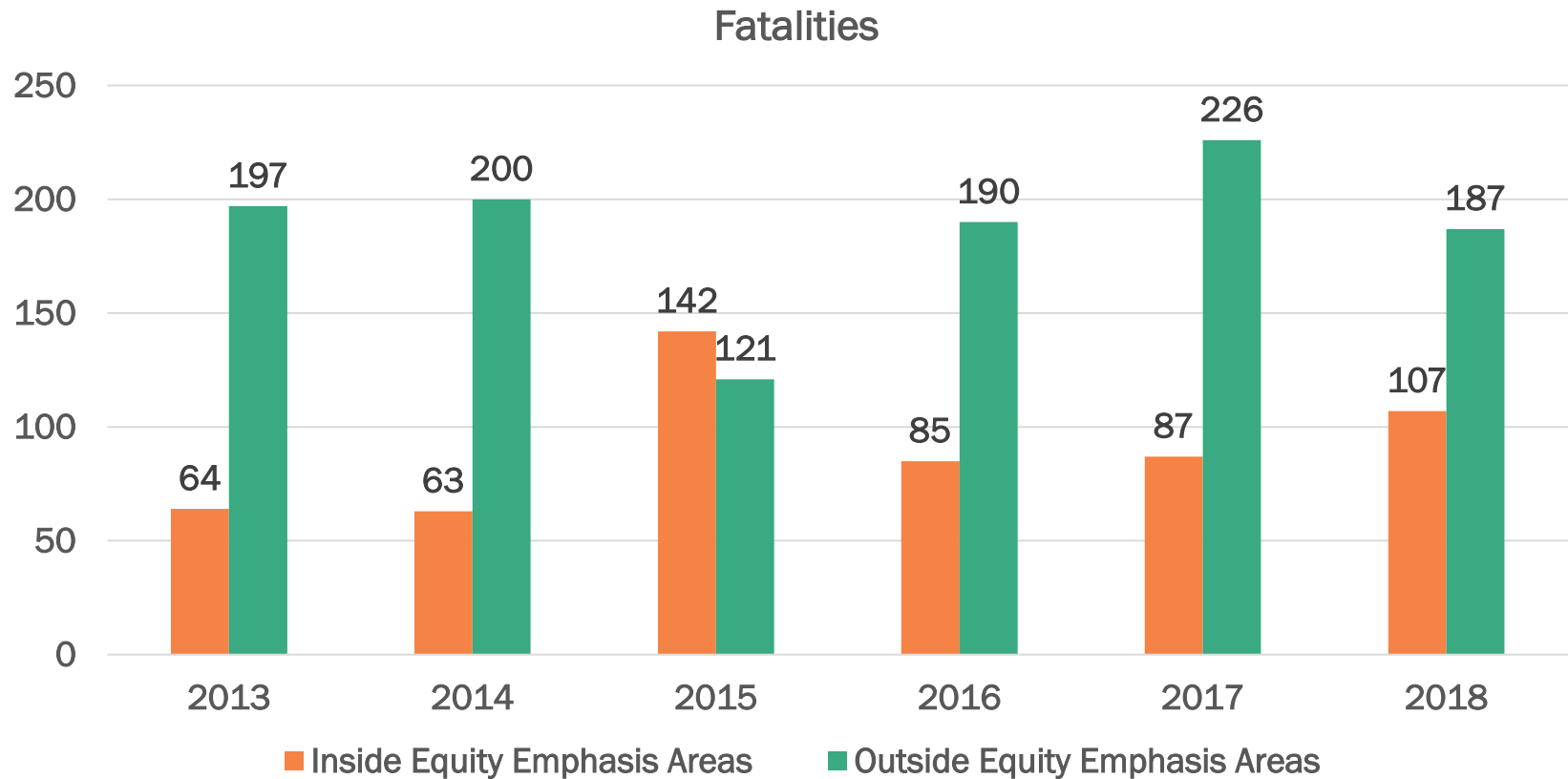
777 North Capitol Street NE, Suite 300

Washington, DC 20002



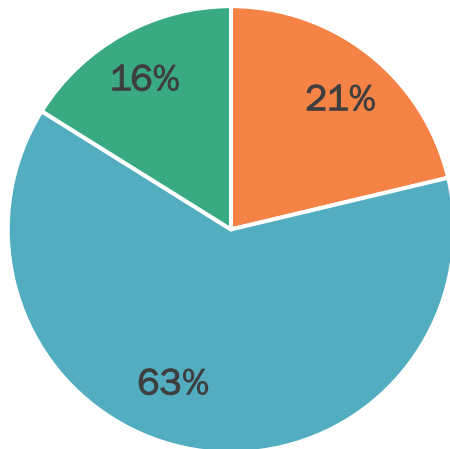
National Capital Region
Transportation Planning Board

Fatalities (2014-2018)



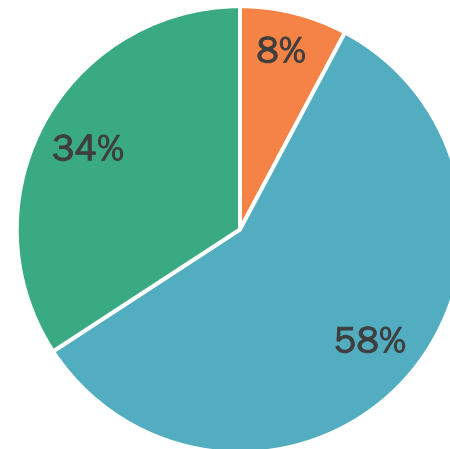
Fatalities by Area (2014-2018)

Fatalities (Inside Equity Emphasis Areas)



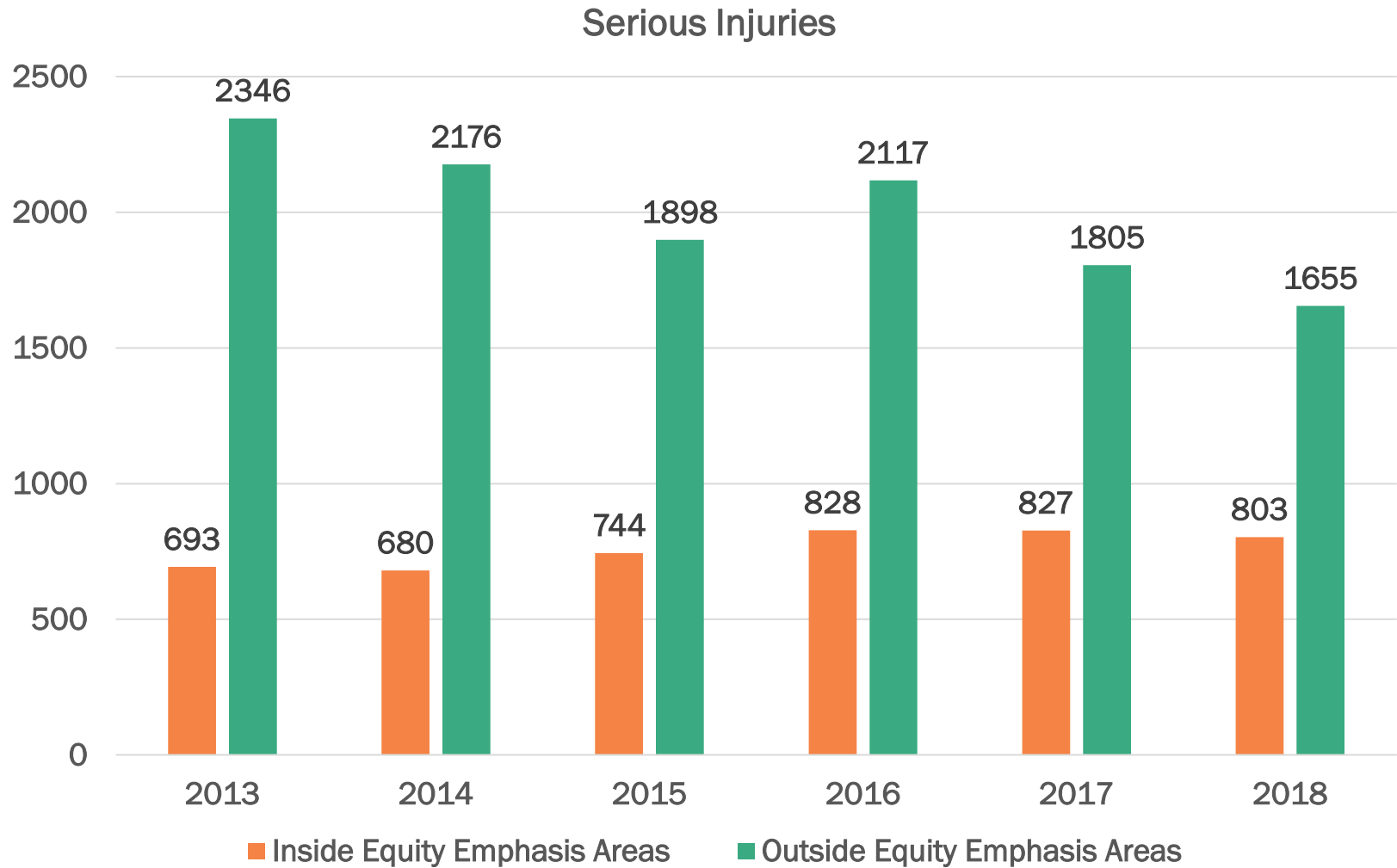
Urban Core Inner Suburbs Outer Suburbs

Fatalities (Outside Equity Emphasis Areas)



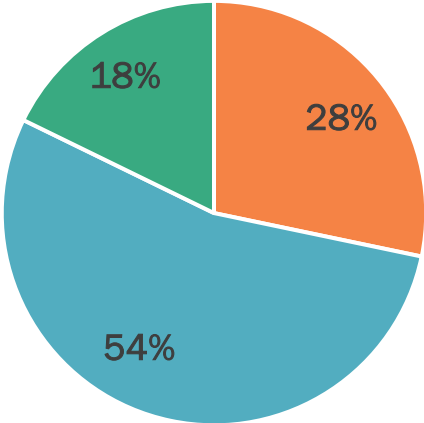
Urban Core Inner Suburbs Outer Suburbs

Serious Injuries (2014-2018)



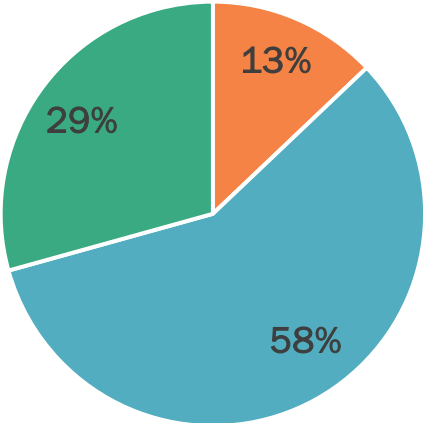
Serious Injuries by Area (2014-2018)

Serious Injuries (Inside Equity Emphasis Areas)



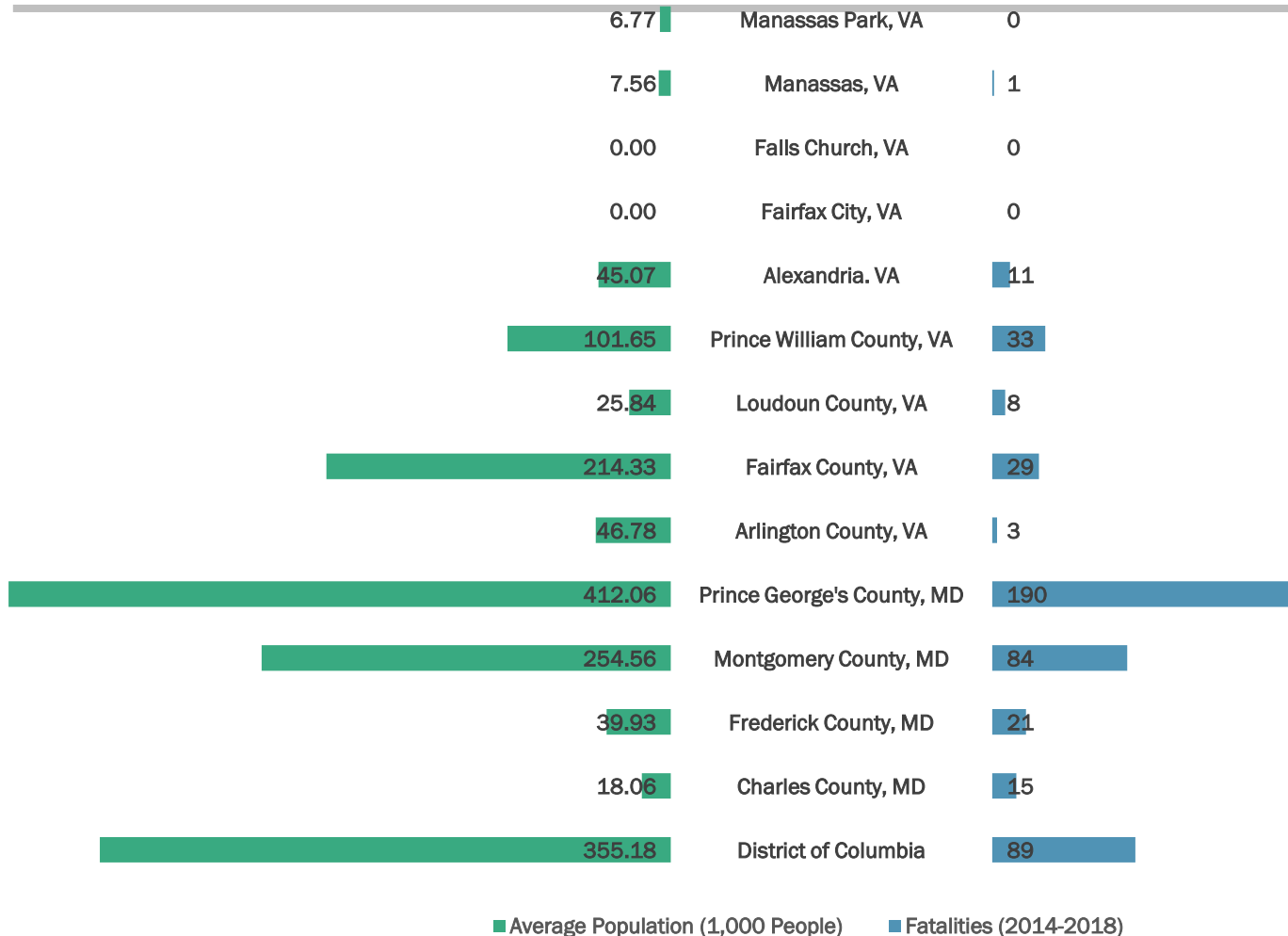
Urban Core Inner Suburbs Outer Suburbs

Serious Injuries (Outside Equity Emphasis Areas)

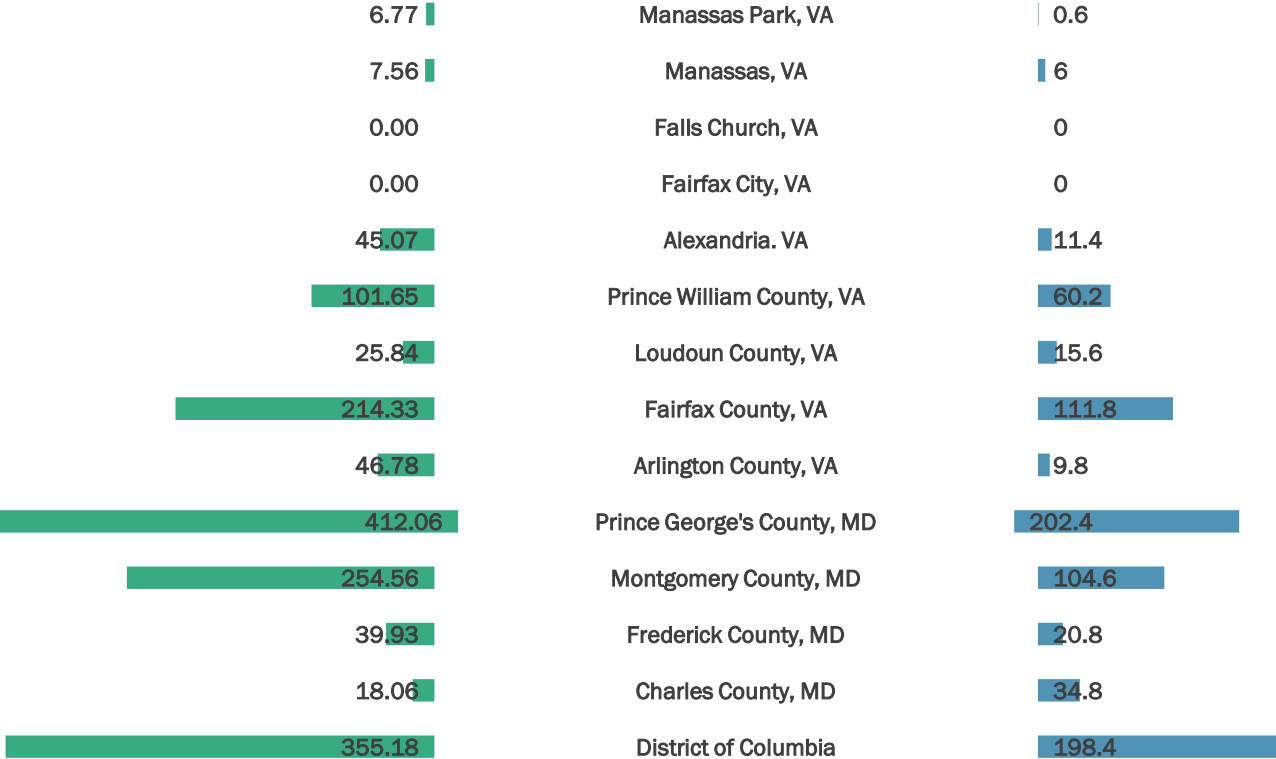


Urban Core Inner Suburbs Outer Suburbs

Fatalities per 1,000 Population (Equity Emphasis Areas)



Serious Injuries per 1,000 Population (Equity Emphasis Areas)

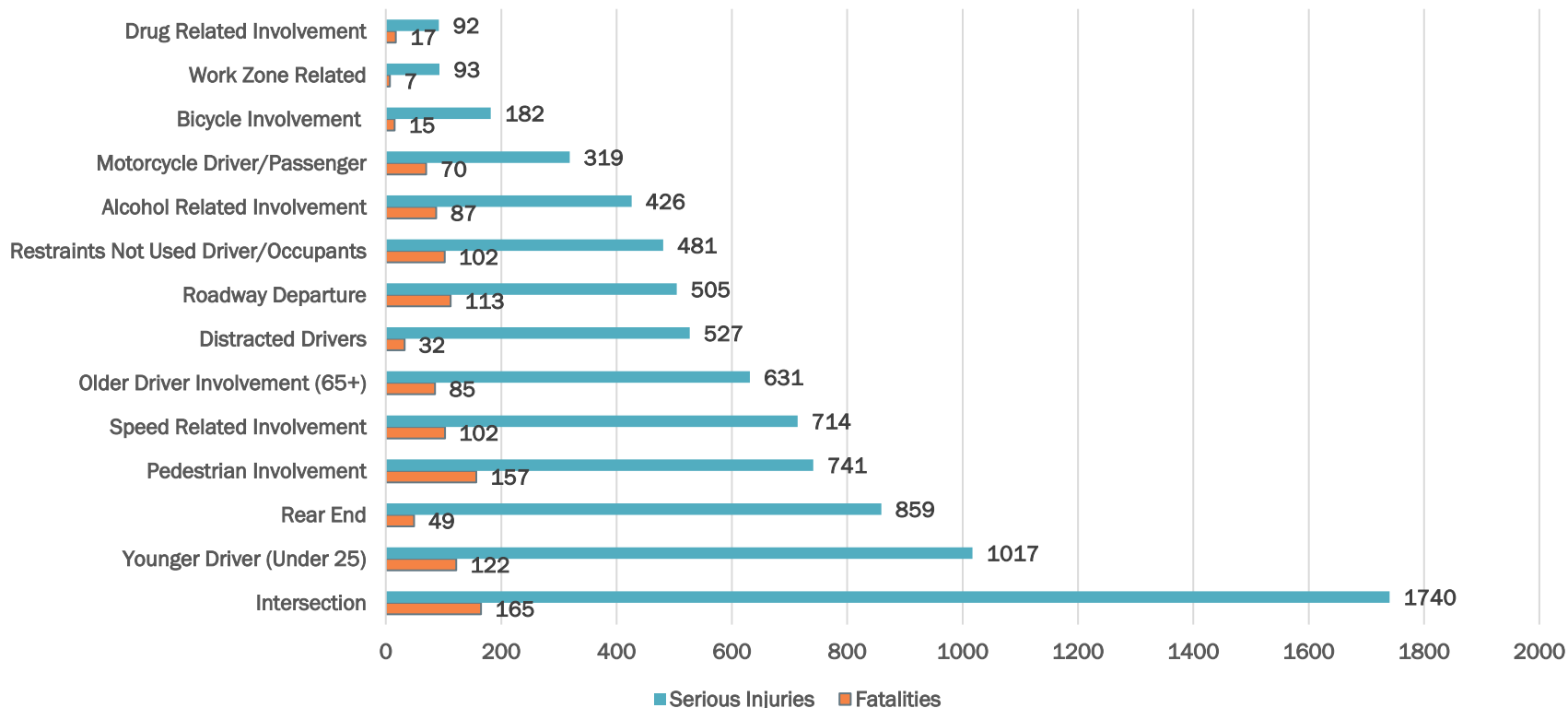


■ Average Population (1,000 People) ■ Serious Injuries



Contributing Circumstances (Equity Emphasis Areas 2014-2018)

Injury Severity by Contributing Circumstance



Fatalities by Functional Class (2014-2018)

Road Type	Inside Equity Emphasis Areas		Outside Equity Emphasis Areas	
	Local %	State %	Local %	State %
Collector	34%	11%	32%	12%
Expressway	5%	5%	1%	7%
Freeways	0%	14%	2%	19%
Major Arterial	21%	40%	25%	30%
Minor Arterial	38%	28%	38%	31%
Ramp	2%	2%	2%	1%



Serious Injuries by Functional Class (2014-2018)

Road Type	Inside Equity Emphasis Areas		Outside Equity Emphasis Areas	
	Local %	State %	Local %	State %
Collector	31%	10%	26%	13%
Expressway	2%	4%	1%	4%
Freeways	4%	18%	2%	21%
Major Arterial	25%	37%	30%	28%
Minor Arterial	37%	29%	40%	33%
Ramp	1%	2%	1%	2%

