

# THE REGIONAL TRANSPORTATION SAFETY PICTURE

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## Deaths, Injuries, and Crashes

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Bicycle and Pedestrians Subcommittee  
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# Overview

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- Background on TPB Transportation Safety Planning Activities
- Traffic fatalities
  - Regional Totals and Trends
  - Emphasis Area Breakdowns
- Injury Trends
- Crashes – 2015 Snapshot
- Conclusions



# Regional Transportation Safety Planning

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- Transportation Safety Subcommittee
  - Information Exchange
  - Identify opportunities for coordination and collaborative planning for safety aspects of the region's transportation systems
- Safety data compilation and analysis
- Coordinate with other TPB committees on the integration of safety considerations
- Maintain Safety Element of region's long-range transportation plan
- Transportation Safety Planning is becoming a higher priority for the TPB



# Safety Element of the Long-Range Transportation Plan

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- A Federal requirement
- A regional look at transportation safety
  - Transportation Planning Board Member Jurisdictions
  - Incorporates common Safety Emphasis areas in the DC, MD, and VA Strategic Highway Safety Plans (SHSPs)
- We will update the Safety Element this year

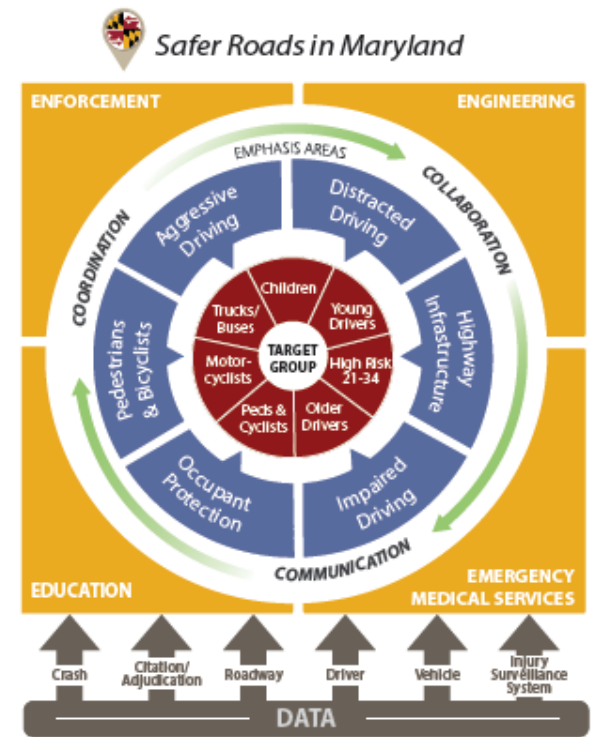


# Emphasis Areas from Most Recent State Strategic Highway Safety Plans

Emphasis Areas	DC	MD	VA
Aggressive Drivers (speed)	x	x	x
Occupant Protection (seat belts)	x	x	x
Impaired Drivers (alcohol or drugs)	x	x	x
Driver Competence	x		
Young Drivers	x		x
Senior Drivers	x		
Trucks and Buses	x		
Motorcycle Operators	x		
Pedestrian and Bicyclist Safety	x	x	
Intersection Safety	x	x	x
Roadway Departures	x	x	x
Work Zone Safety	x		
Traffic Records	x		x
Distracted Driving	x	x	
Emergency Response Systems	x		
Hazardous Locations	x	x	
Head-On Collisions	x		

# Emphasis Areas in Common

1. Impaired Driving
2. Speeding & Aggressive Driving
3. Occupant Protection (seatbelts)
4. Run off the Road
5. Intersections
6. Information and Decision Support Systems (Traffic Records)

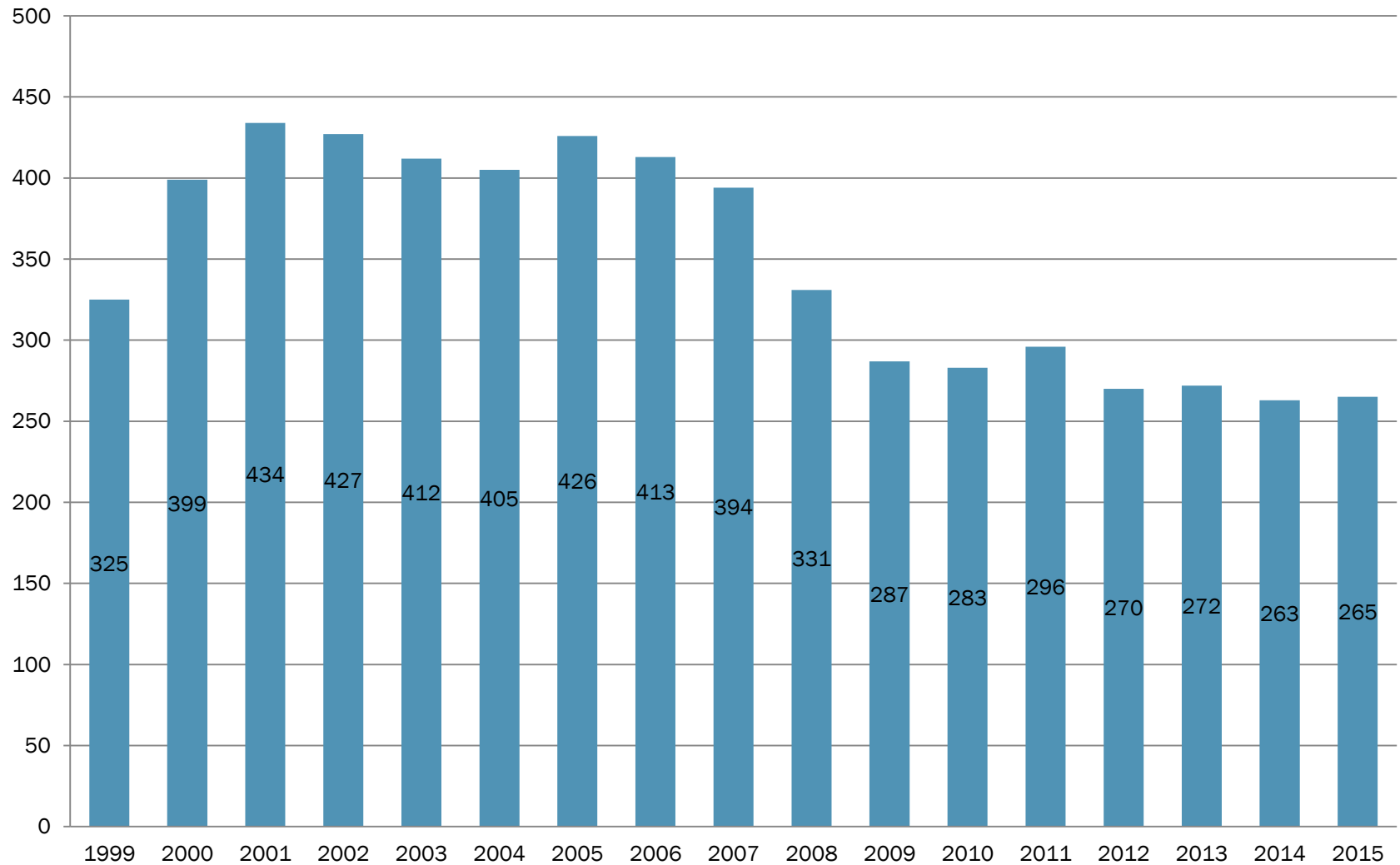


# Regional Fatalities Table

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	AVG.
District of Columbia	41	52	71	50	68	45	49	41	54	39	33	25	32	19	29	26	26	41
Charles County	26	30	21	27	20	16	40	30	23	14	15	18	22	15	16	8	15	21
Frederick County	32	27	37	18	18	28	33	33	25	21	23	24	15	16	20	18	21	24
Montgomery County	49	60	60	67	52	79	44	58	49	52	40	48	40	37	41	40	47	51
Prince George's County	79	102	128	141	122	121	134	111	126	129	98	87	105	87	87	98	95	109
Arlington County	8	14	9	12	9	6	9	3	6	8	5	5	6	4	2	5	5	7
City of Alexandria	4	5	5	6	3	3	2	1	5	3	1	3	3	4	3	-	4	3
Fairfax County	49	70	53	64	61	63	61	67	53	29	37	36	44	45	40	32	30	49
City of Fairfax	-	-	1	1	3	-	2	3	2	-	2	-	2	5	2	-	-	1
City of Falls Church	-	1	1	1	1	-	-	-	-	-	1	2	-	-	-	1	-	0
Loudoun County	11	9	15	16	24	22	20	19	21	11	13	12	11	18	13	12	11	15
City of Manassas	1	2	2	1	1	-	3	1	3	1	3	-	-	1	-	-	-	1
City of Manassas Park	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	0
Prince William County	24	27	31	23	30	22	29	46	27	24	16	23	15	19	19	23	11	24
Total Washington Region	325	399	434	427	412	405	426	413	394	331	287	283	296	270	272	263	265	347

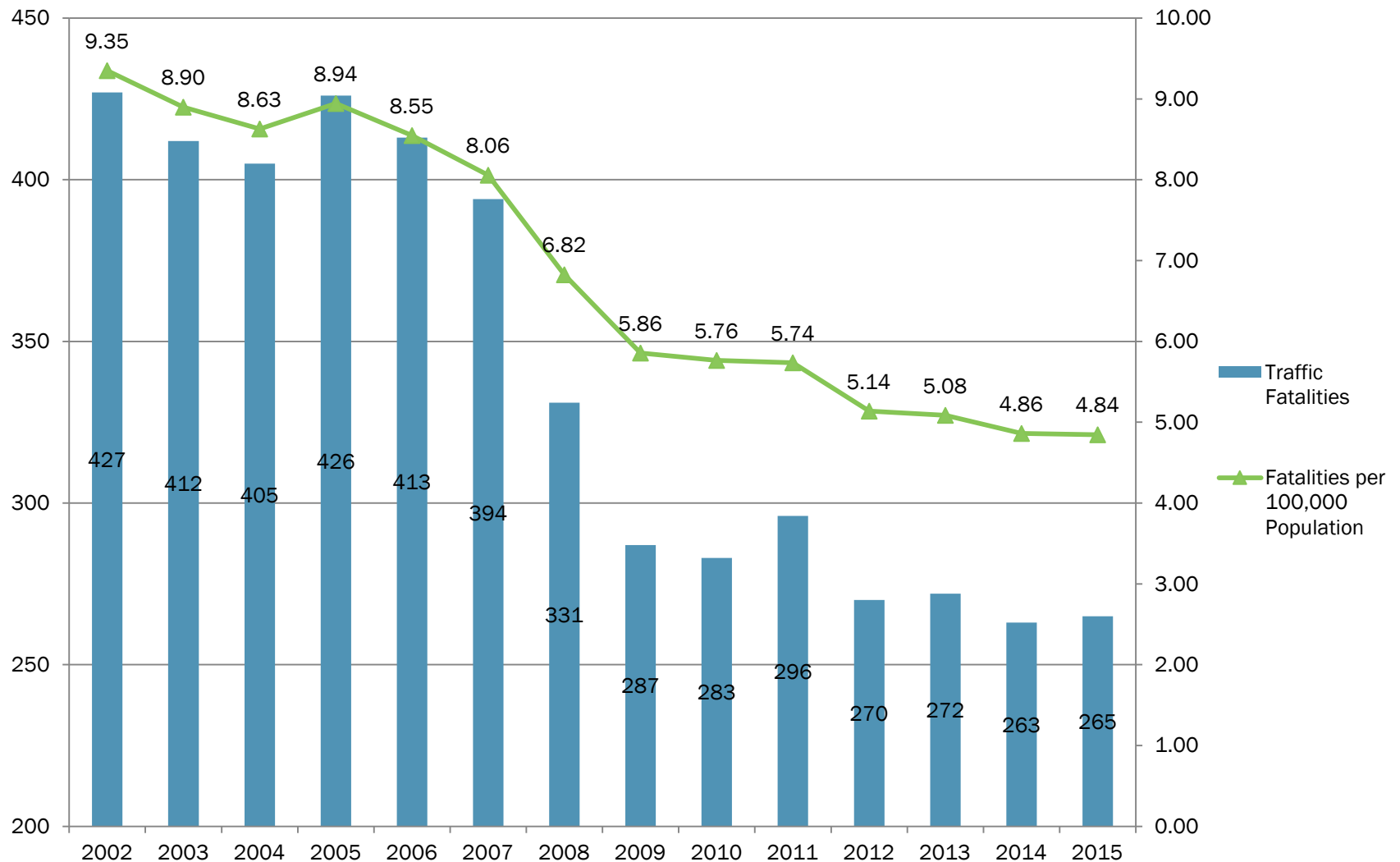


# Regional Fatalities Chart

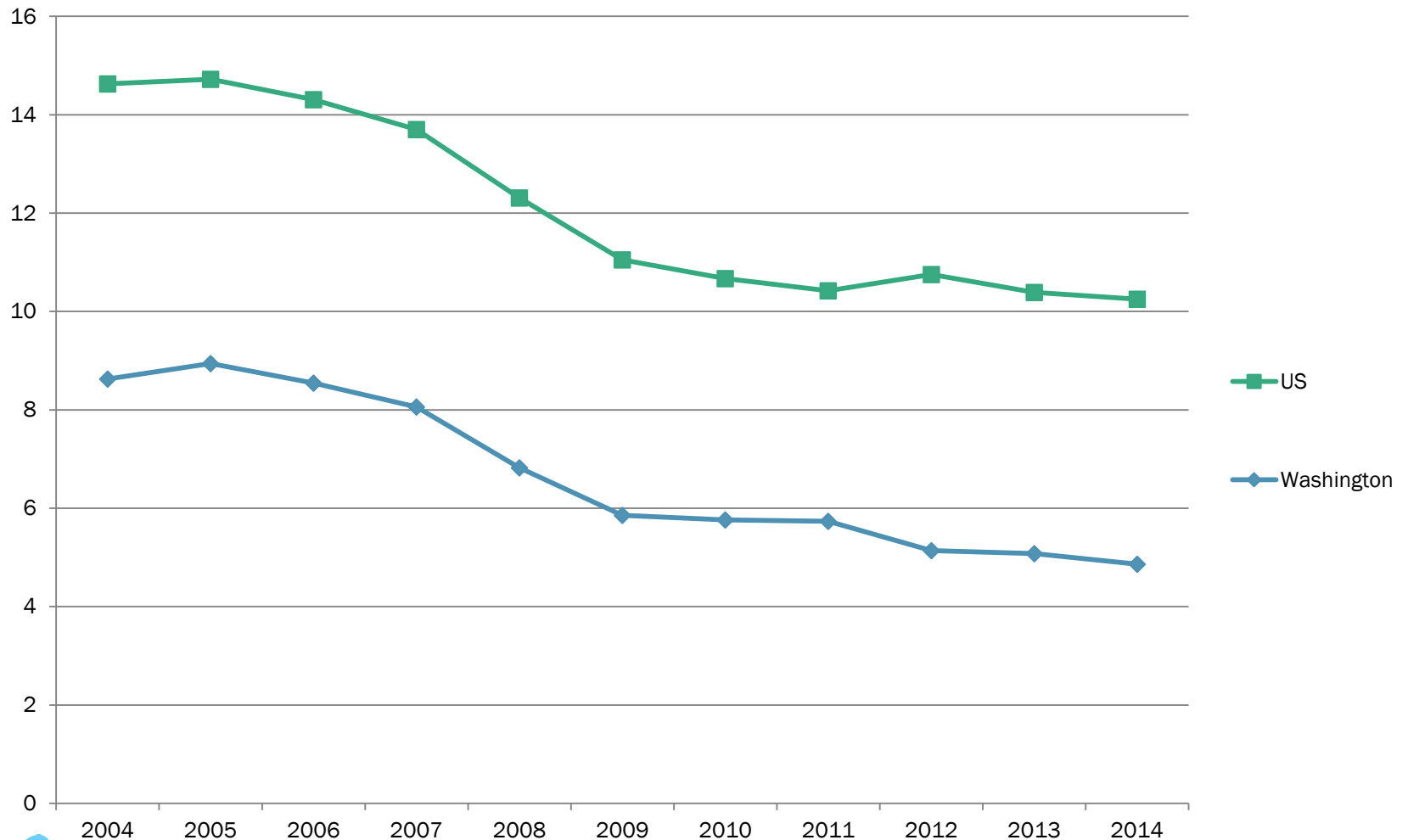




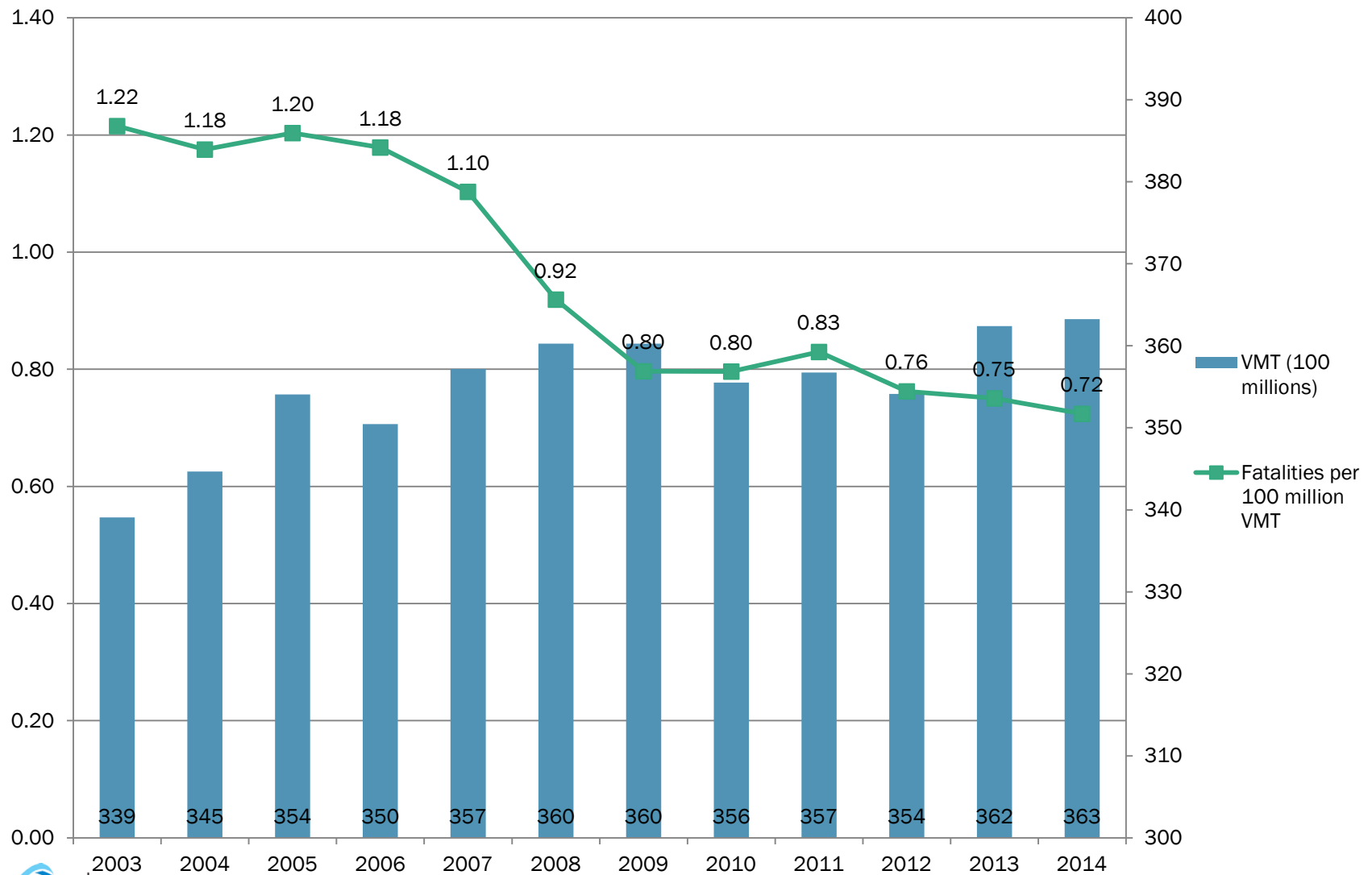
# Fatalities per 100,000 Population



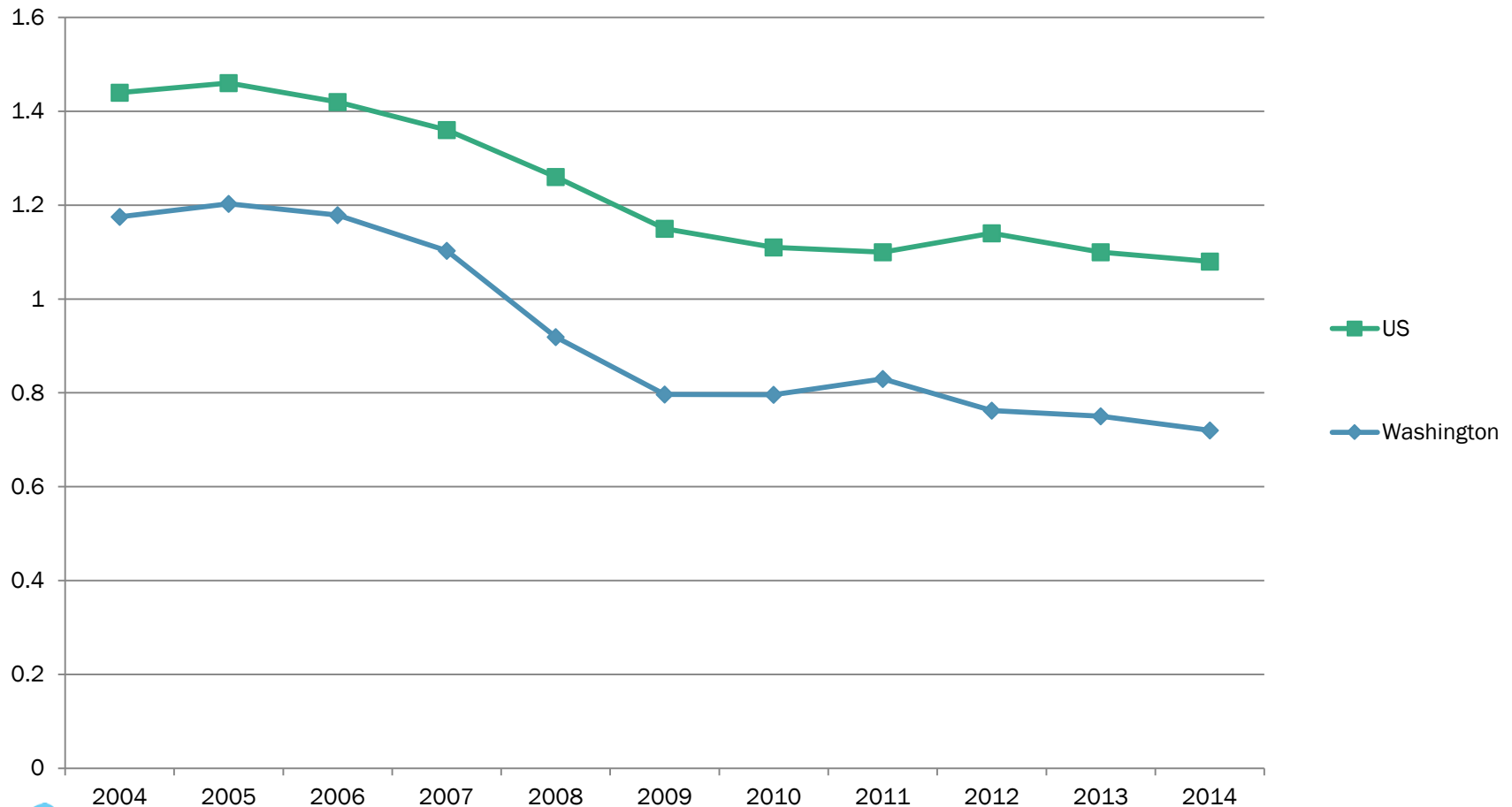
# Fatalities per 100,000 Population – Comparison to US



# Fatalities per 100 Million VMT



# Fatalities per 100 Million VMT – Comparison to US

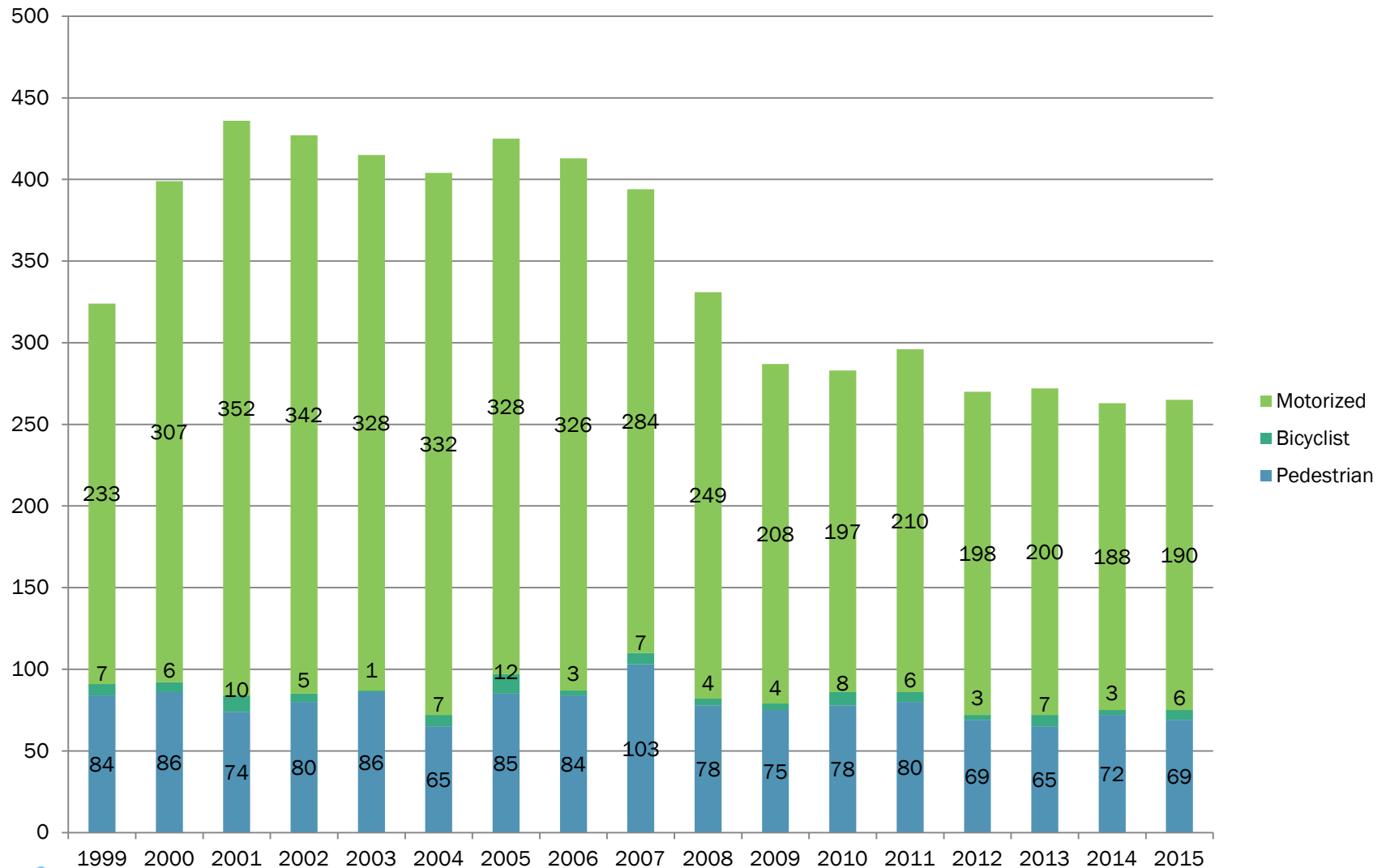


# Pedestrian and Bicyclist Fatalities

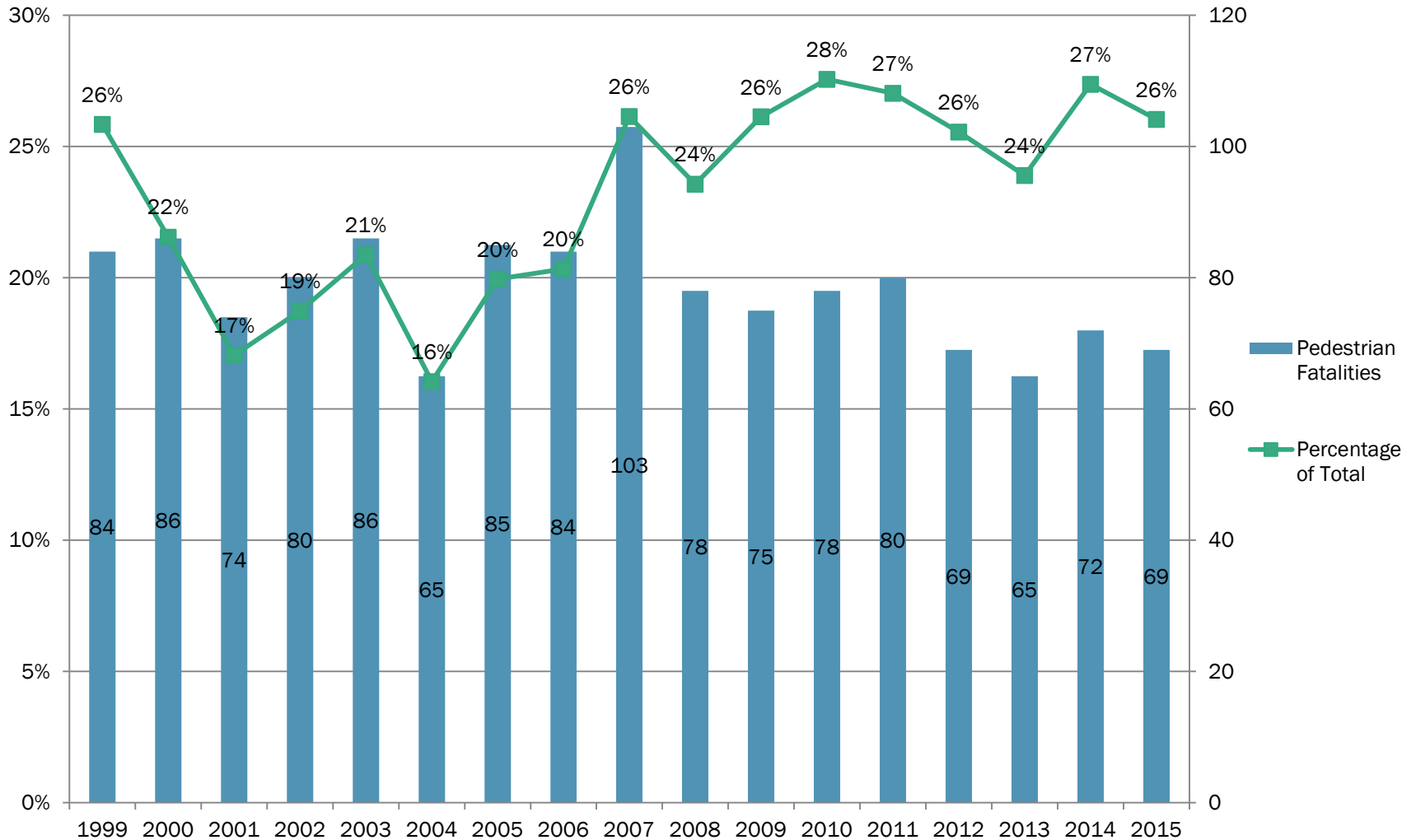
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	AVG
District of Columbia	18	20	15	9	18	14	19	17	27	15	16	16	13	8	9	11	16	15
Charles County	6	3	2	5	3	1	6	2	6	1	3	3	9	4	3	2	1	4
Frederick County	6	4	0	2	4	2	2	4	1	0	1	3	0	4	5	1	1	2
Montgomery County	20	17	11	16	12	15	11	15	17	16	12	15	10	8	13	10	16	14
Prince George's County	19	16	30	28	30	19	35	19	29	39	23	23	32	24	18	30	21	26
Arlington County	2	5	4	2	3	2	3	1	1	1	4	1	5	4	1	2	1	2
City of Alexandria	3	2	2	3	2	1	2	1	2	0	0	2	2	2	2	0	1	2
Fairfax County	13	20	18	12	7	16	11	20	17	4	11	13	10	7	8	9	14	12
City of Fairfax	0	0	0	1	1	0	1	0	1	0	2	0	1	1	0	0	0	0
City of Falls Church	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Loudoun County	1	1	1	3	3	2	3	1	3	0	1	2	3	3	1	5	2	2
City of Manassas	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
City of Manassas Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prince William County	2	3	1	3	4	0	4	7	5	6	6	6	1	7	7	5	2	4
Total Washington	91	92	84	85	87	72	97	87	110	82	79	86	86	72	67	75	75	84



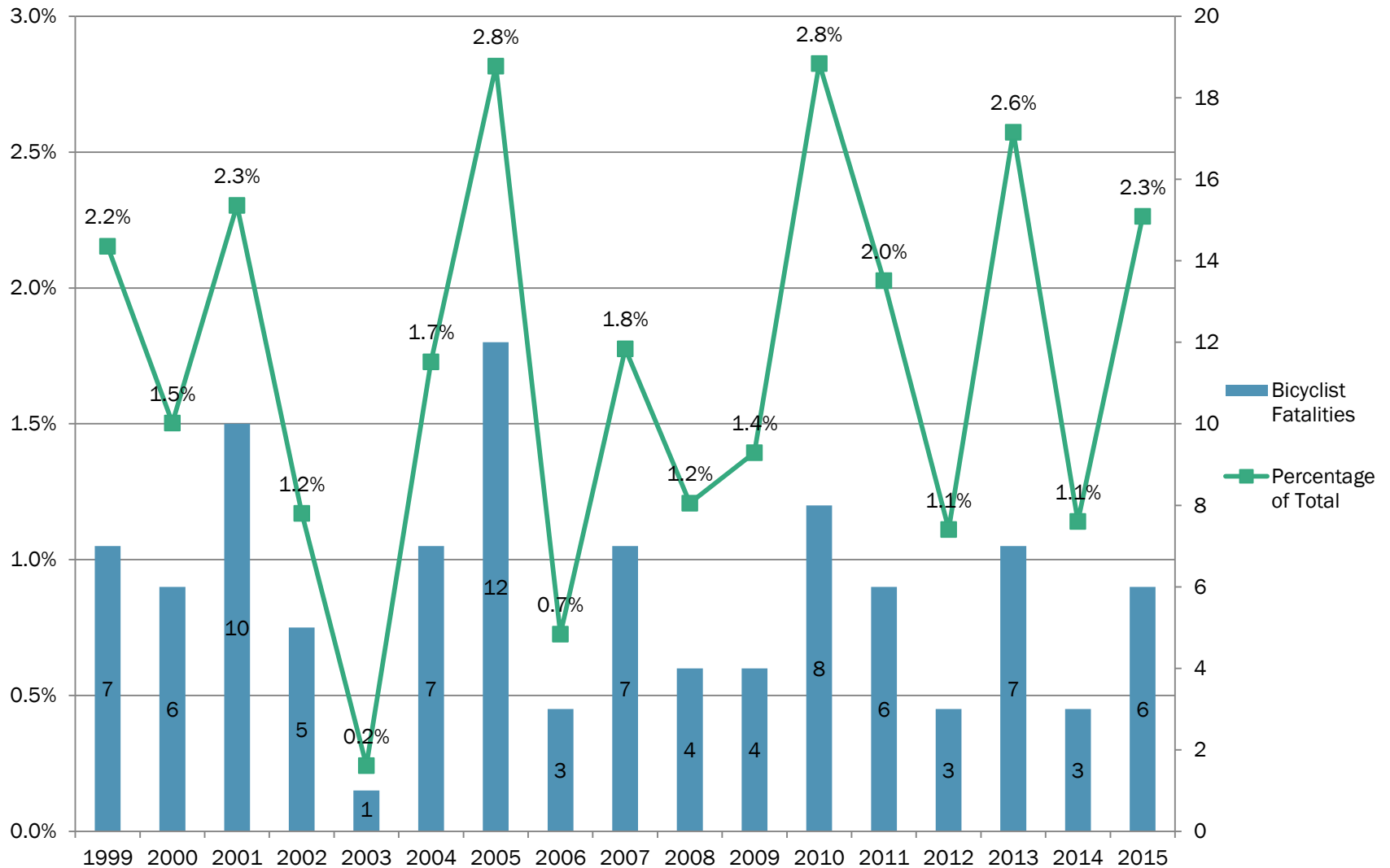
# Traffic Fatalities by Mode



# Pedestrian Fatalities

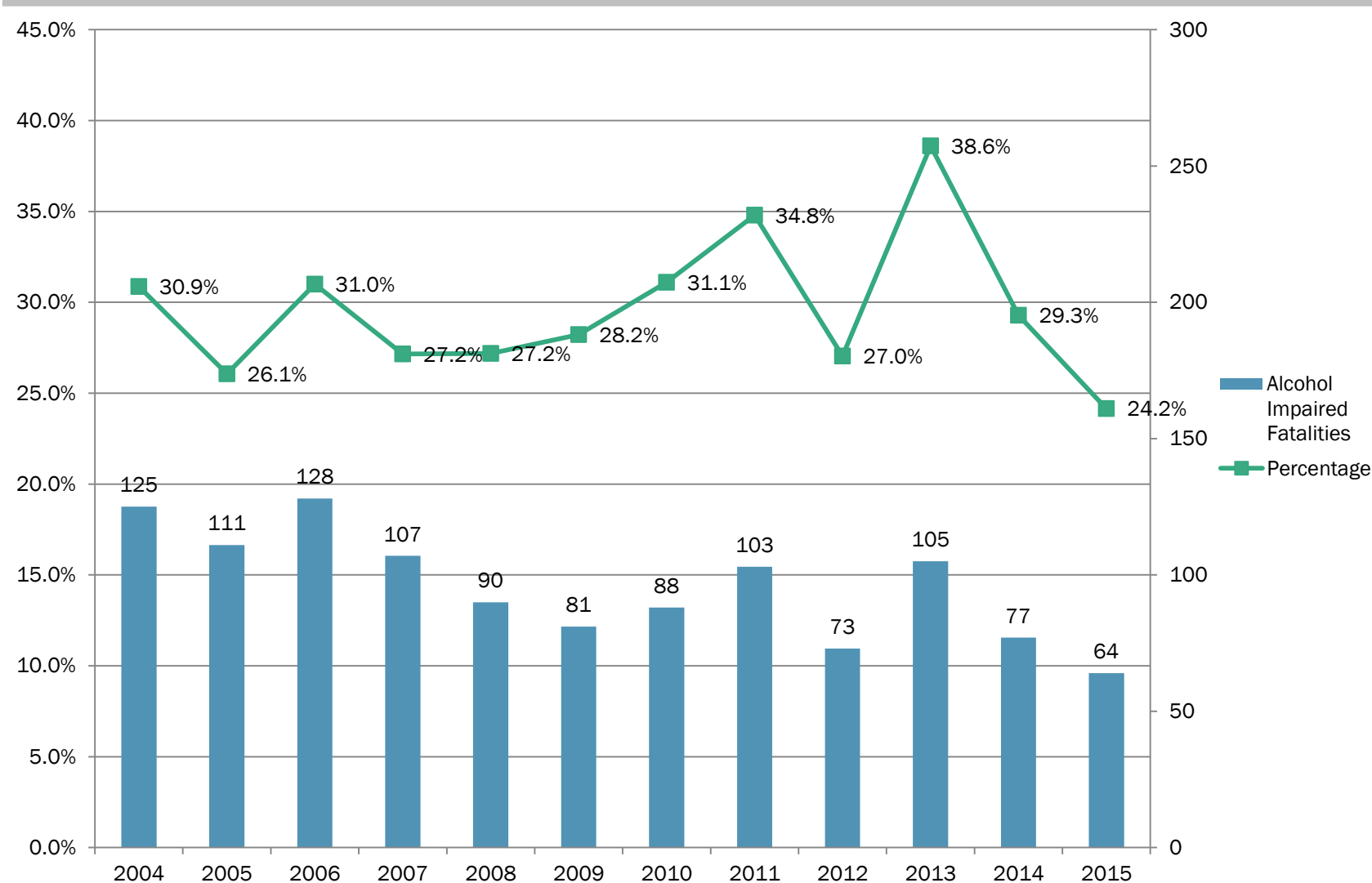


# Bicyclist Fatalities

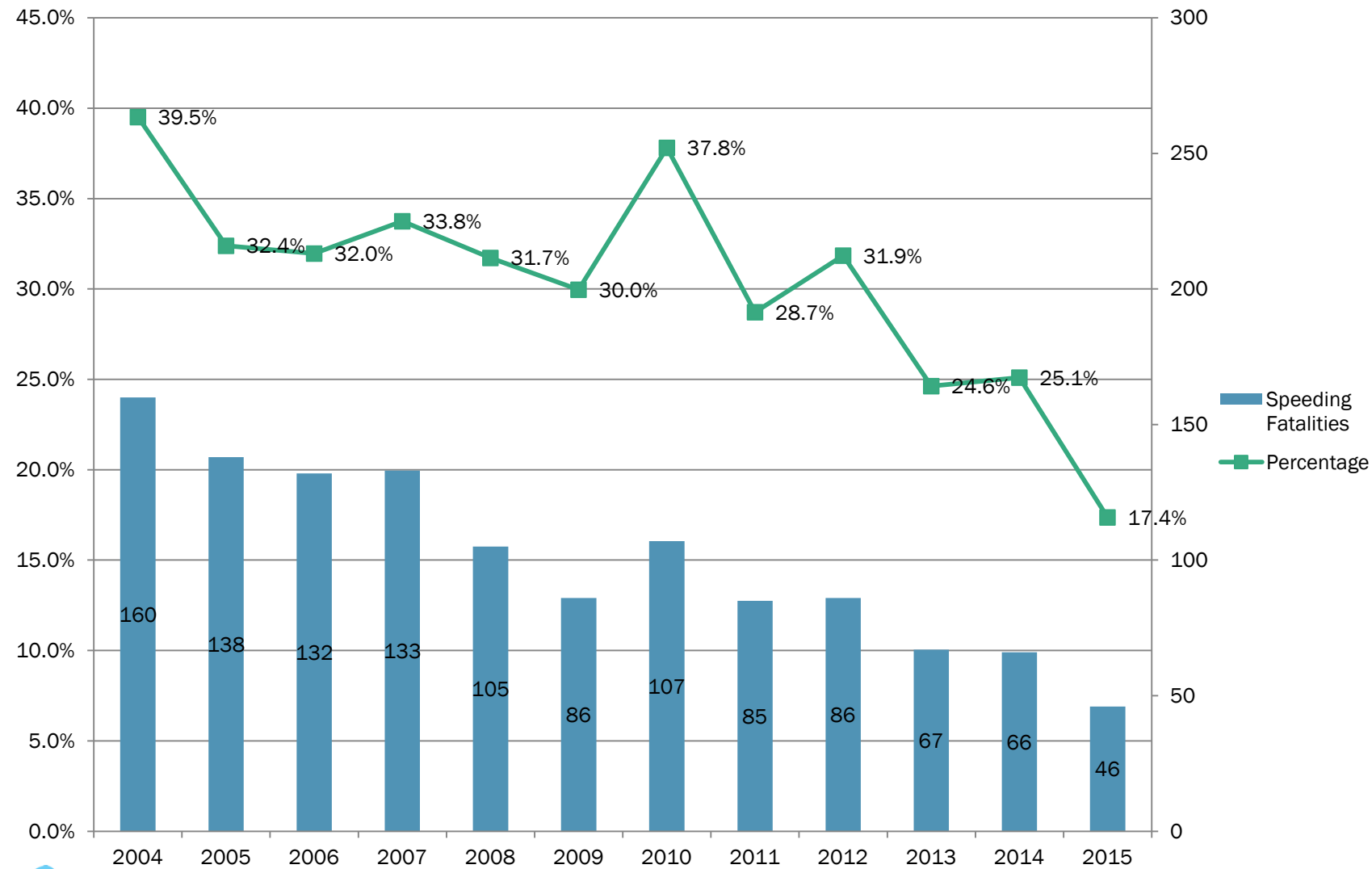




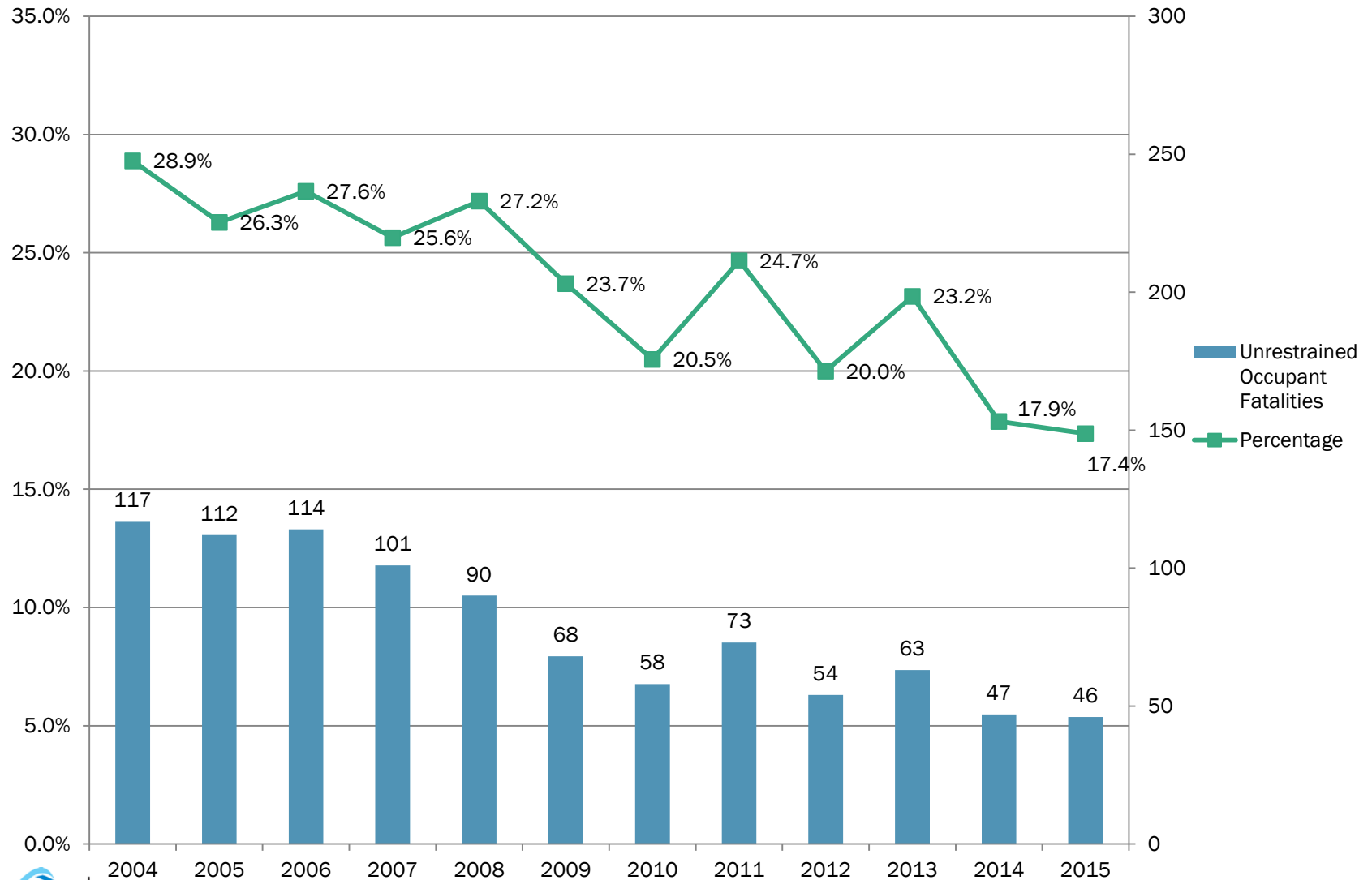
# Alcohol Impaired Fatalities



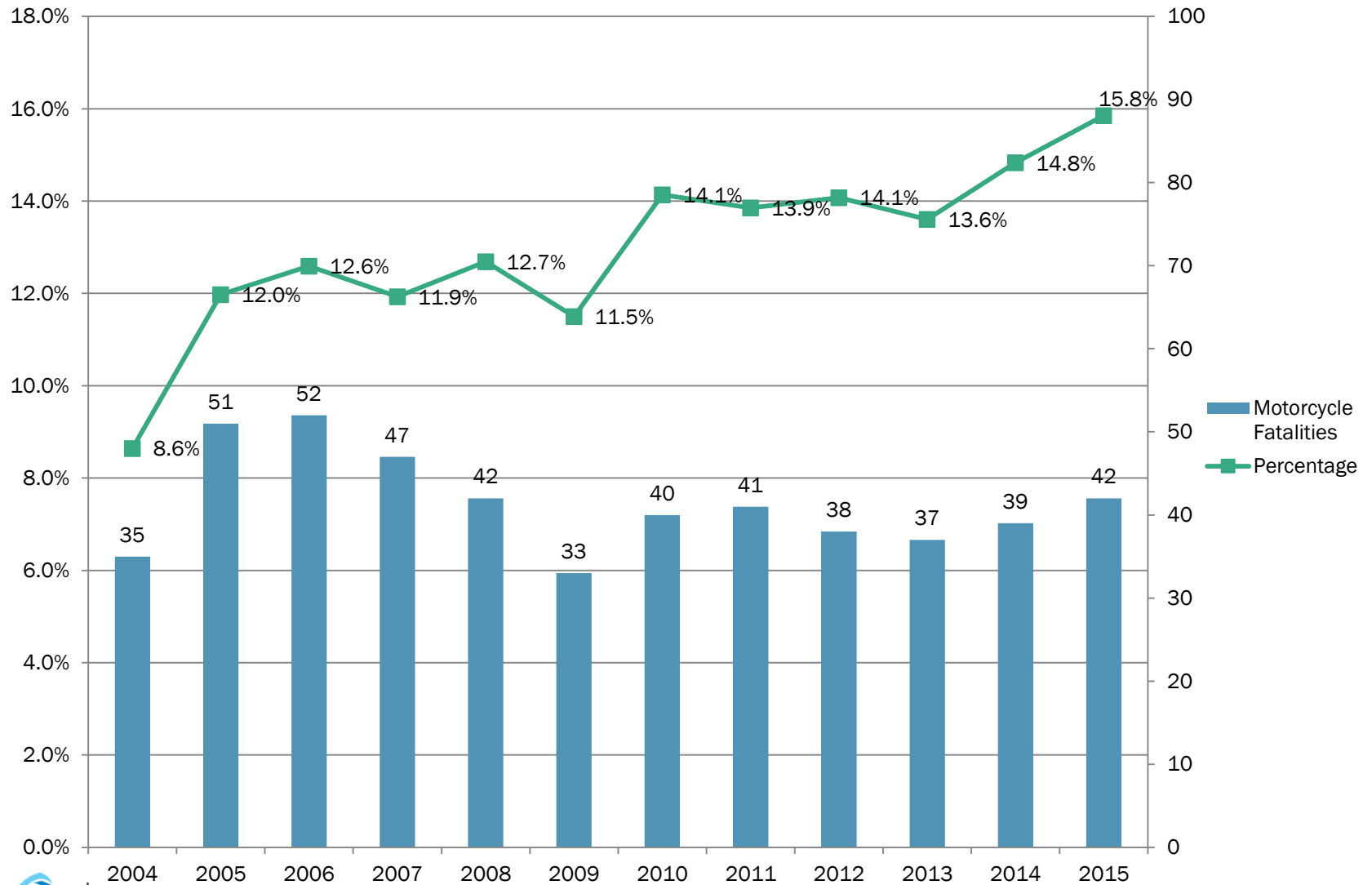
# Speeding Related Fatalities



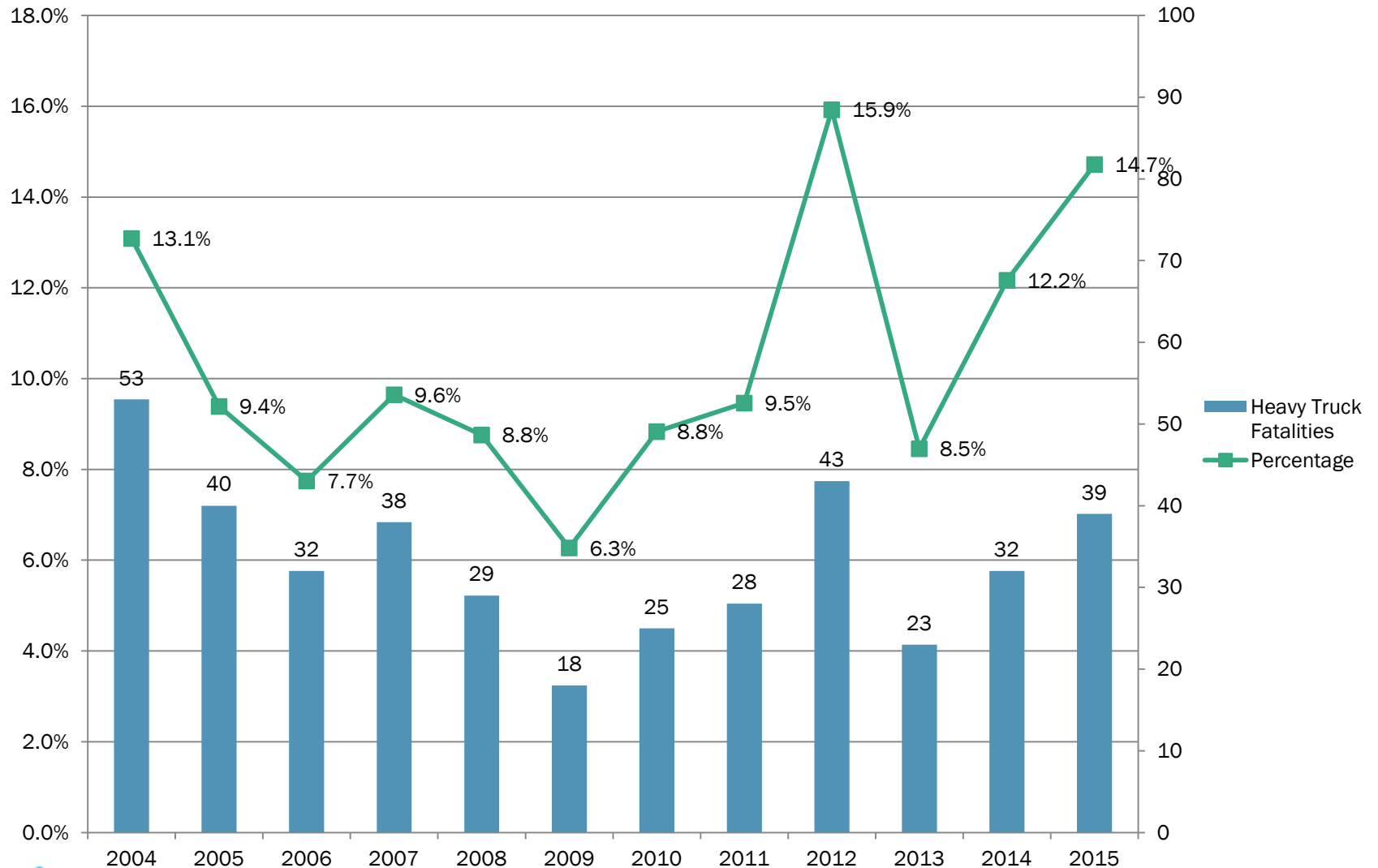
# Unrestrained Occupant Fatalities



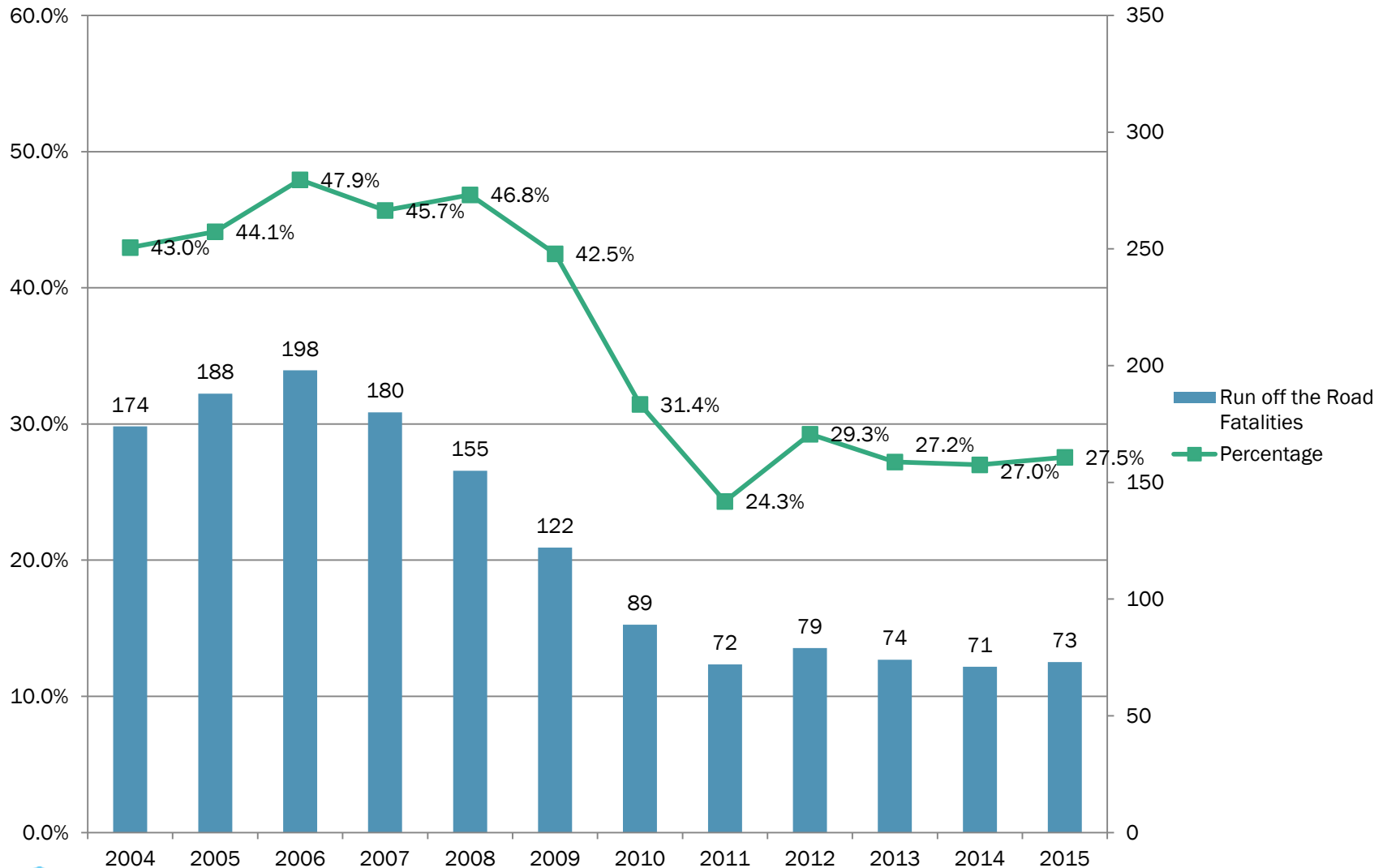
# Motorcyclist Fatalities



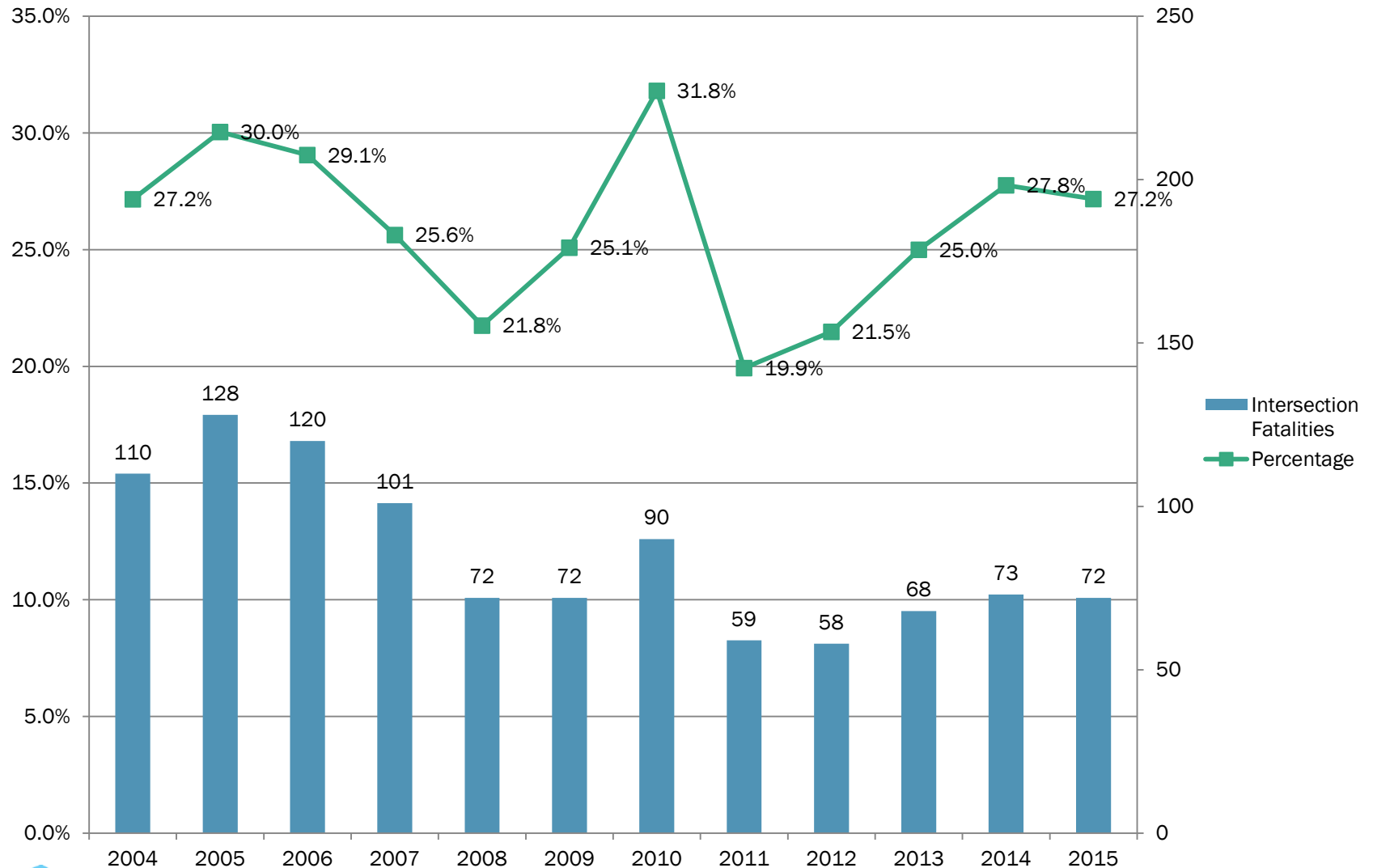
# Heavy Truck Related Fatalities



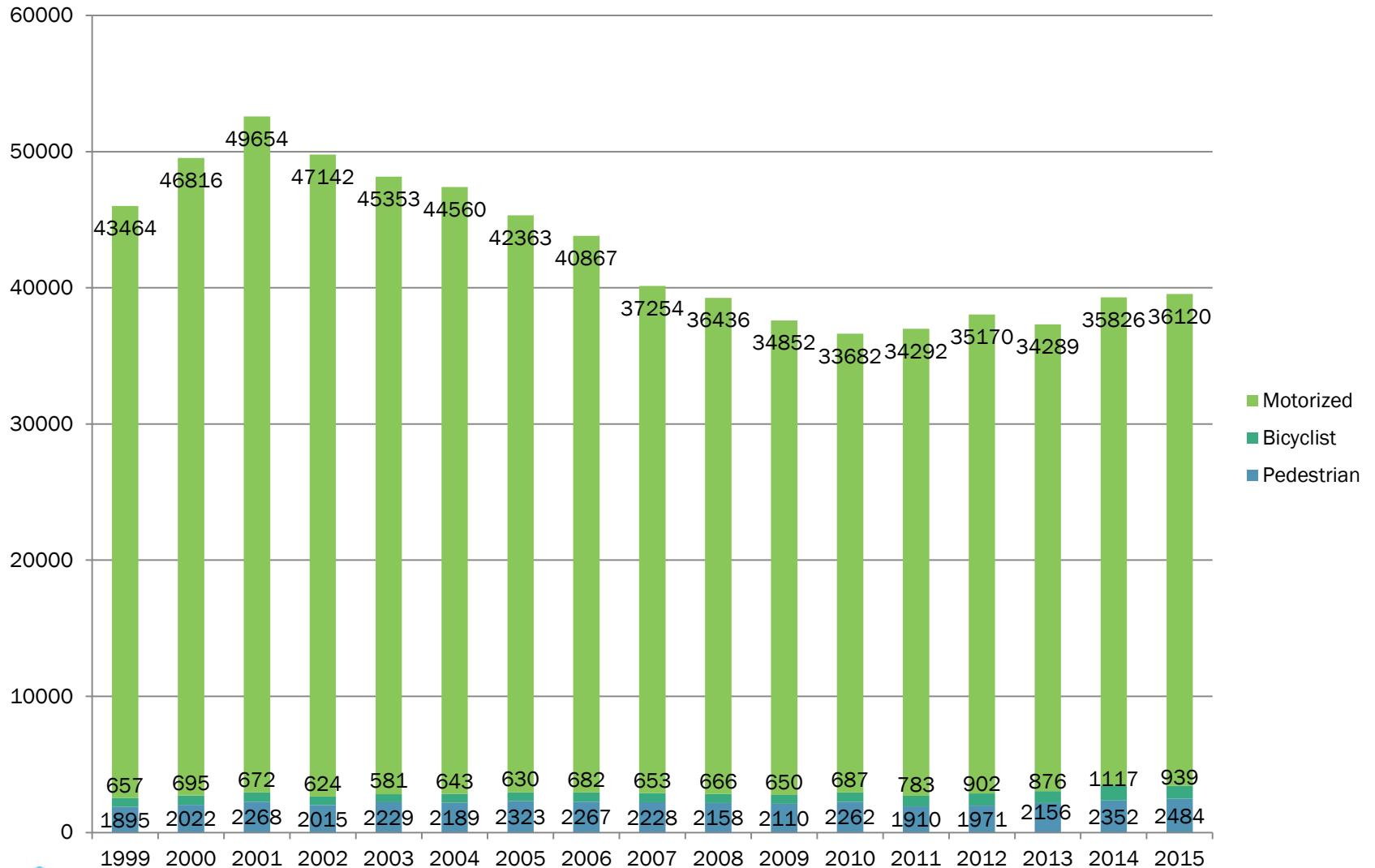
# Run off the Road Fatalities



# Fatalities at Intersections

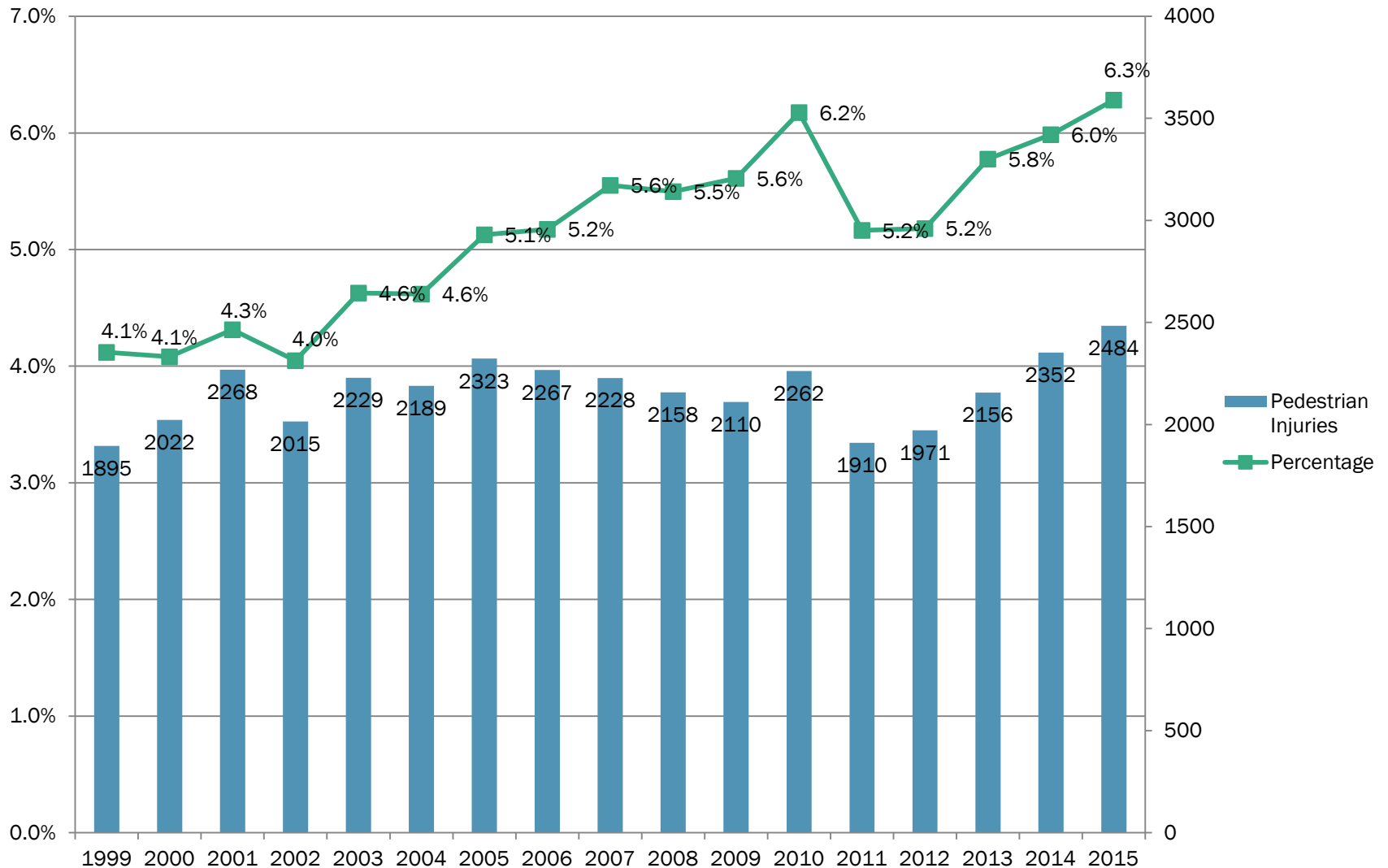


# Injury Trends

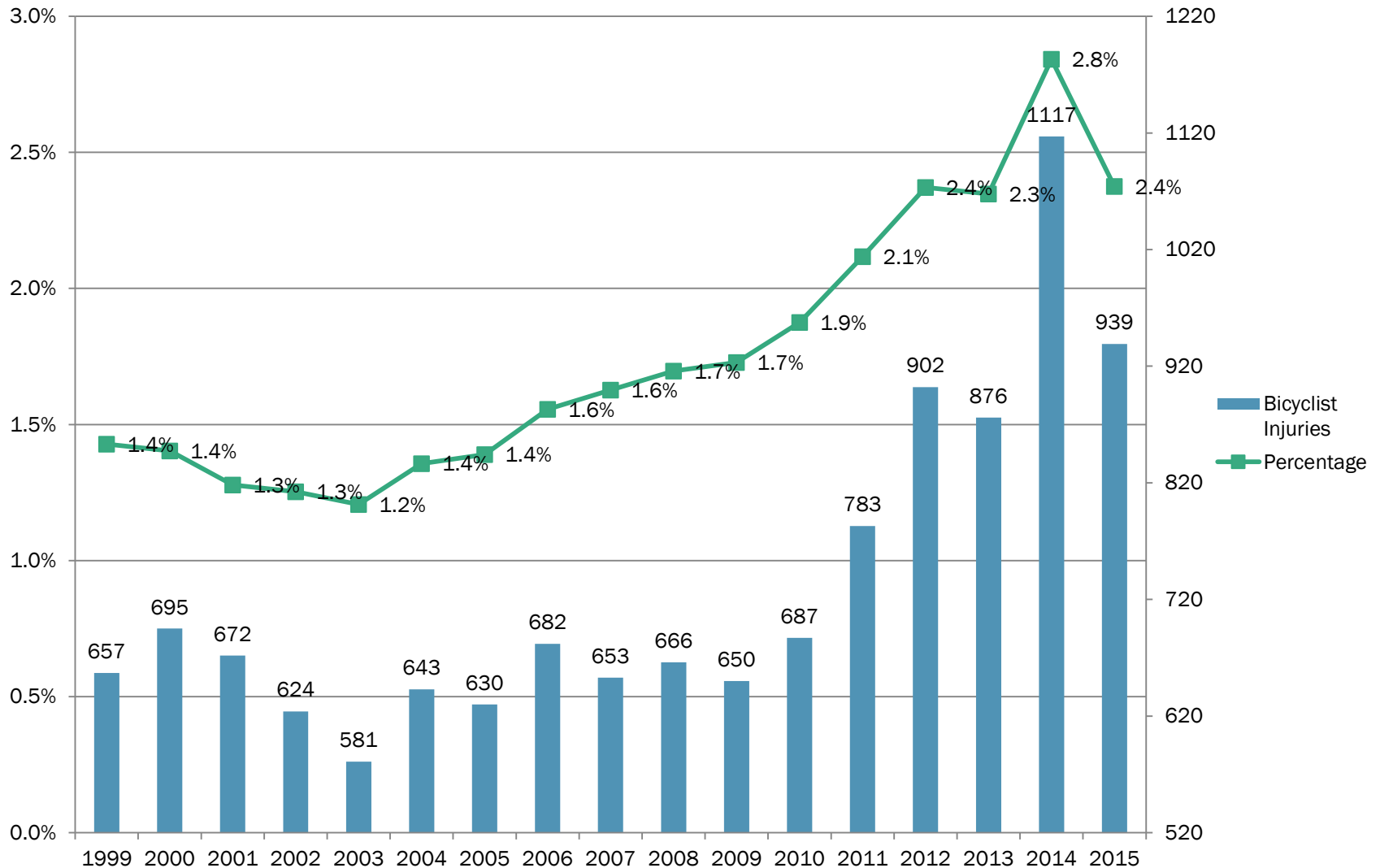




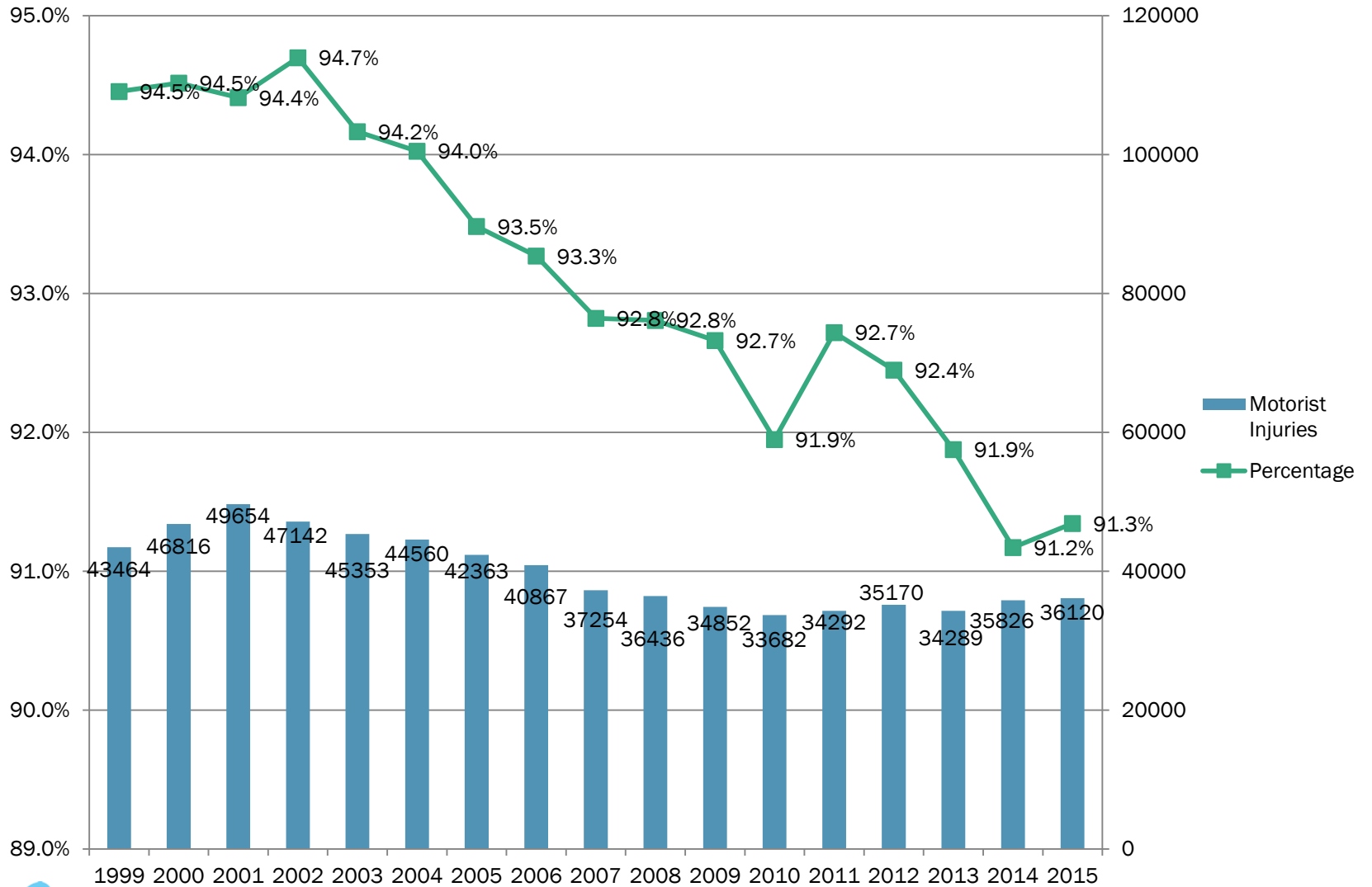
# Pedestrian Injuries



# Bicyclist Injuries



# Motorist Injuries



# Traffic Injuries in the Washington Region

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	AVG.
District of Columbia	7228	10107	10758	8775	8233	8054	7555	7061	6571	6792	6529	7068	7045	7268	7456	8030	8341	7816
Charles County	1647	1558	1694	1679	1570	1582	1483	1375	1449	1287	1249	1233	1214	1217	1223	1198	1283	1408
Frederick County	2016	2051	1967	1950	1944	1707	1938	1732	1835	1655	1577	1338	1246	1342	1407	1428	1460	1682
Montgomery County	8182	8205	8958	8787	8753	8348	7619	7695	6905	6598	6758	6510	6114	6048	5417	6196	6316	7259
Prince George's County	9261	9620	10038	10044	9414	9162	8807	8636	7771	7118	6796	6084	6439	6411	6532	6549	6645	7960
Arlington County	1946	1894	1966	1658	1484	1612	1438	1358	1195	1288	1227	1007	1005	1252	1090	1094	978	1382
City of Alexandria	1407	1309	1382	1395	1343	1419	1513	1372	1467	1492	816	615	601	609	681	757	731	1112
Fairfax County	9117	9405	9865	9657	9188	9186	8741	8519	7971	7964	7588	7566	7767	8185	7608	7649	7677	8450
City of Fairfax	332	366	415	383	377	298	317	305	238	201	169	175	205	243	227	440	388	299
City of Falls Church	146	152	97	118	247	253	244	240	131	141	264	193	183	232	132	241	160	187
Loudoun County	1347	1419	1643	1654	1740	1921	1954	1704	1678	1717	1681	1756	1869	1837	1917	2123	2143	1771
City of Manassas	323	345	439	390	398	414	400	446	291	270	327	327	447	612	560	646	626	427
City of Manassas Park	80	52	56	45	59	41	35	45	18	20	17	26	24	24	41	29	48	39
Prince William County	2984	3050	3316	3246	3413	3395	3272	3328	2615	2717	2614	2733	2826	2763	3030	2915	2747	2998
Total Washington Region	46016	49533	52594	49781	48163	47392	45316	43816	40135	39260	37612	36631	36985	38043	37321	39295	39543	42790

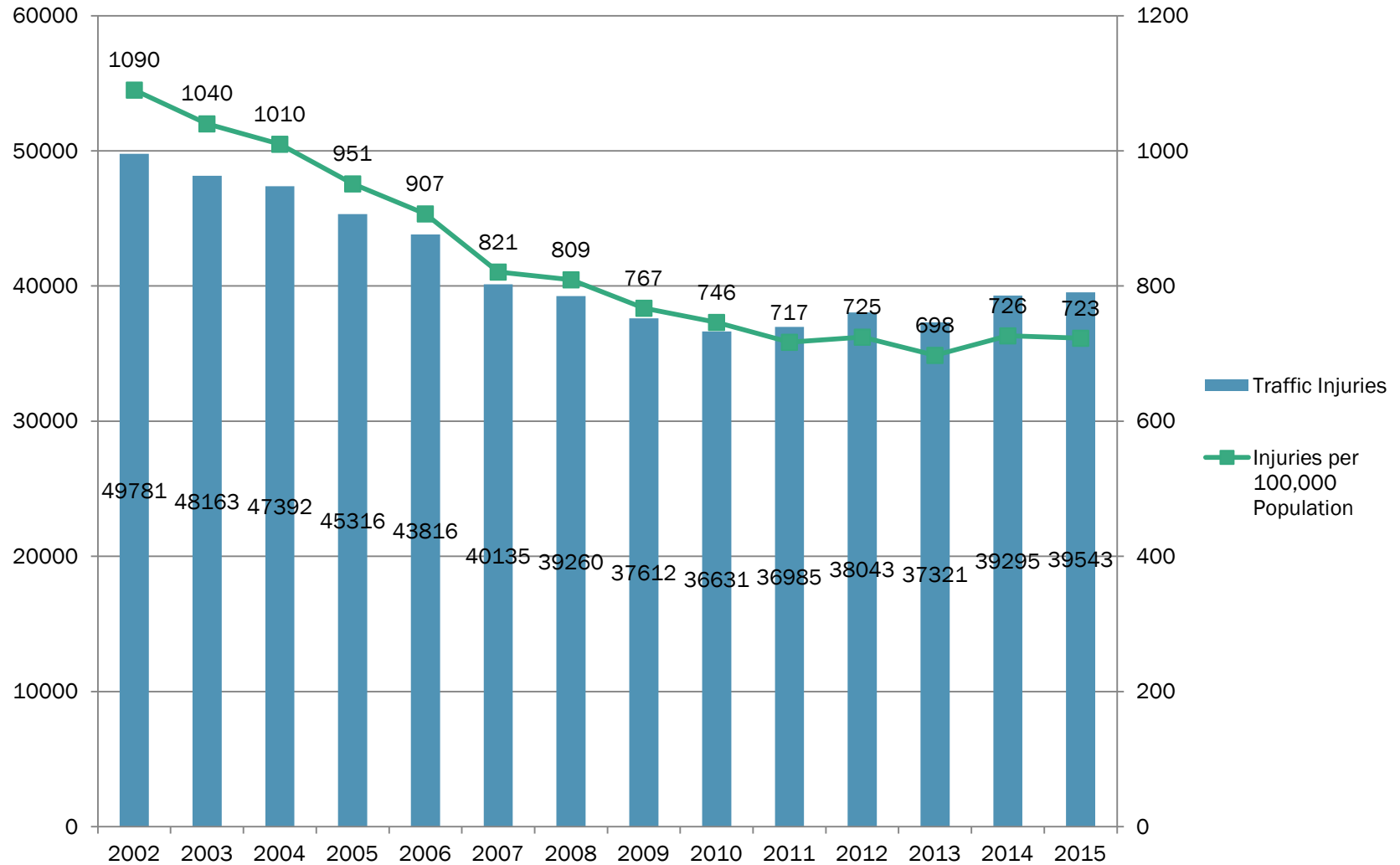


# Pedestrian and Bicyclist Injuries

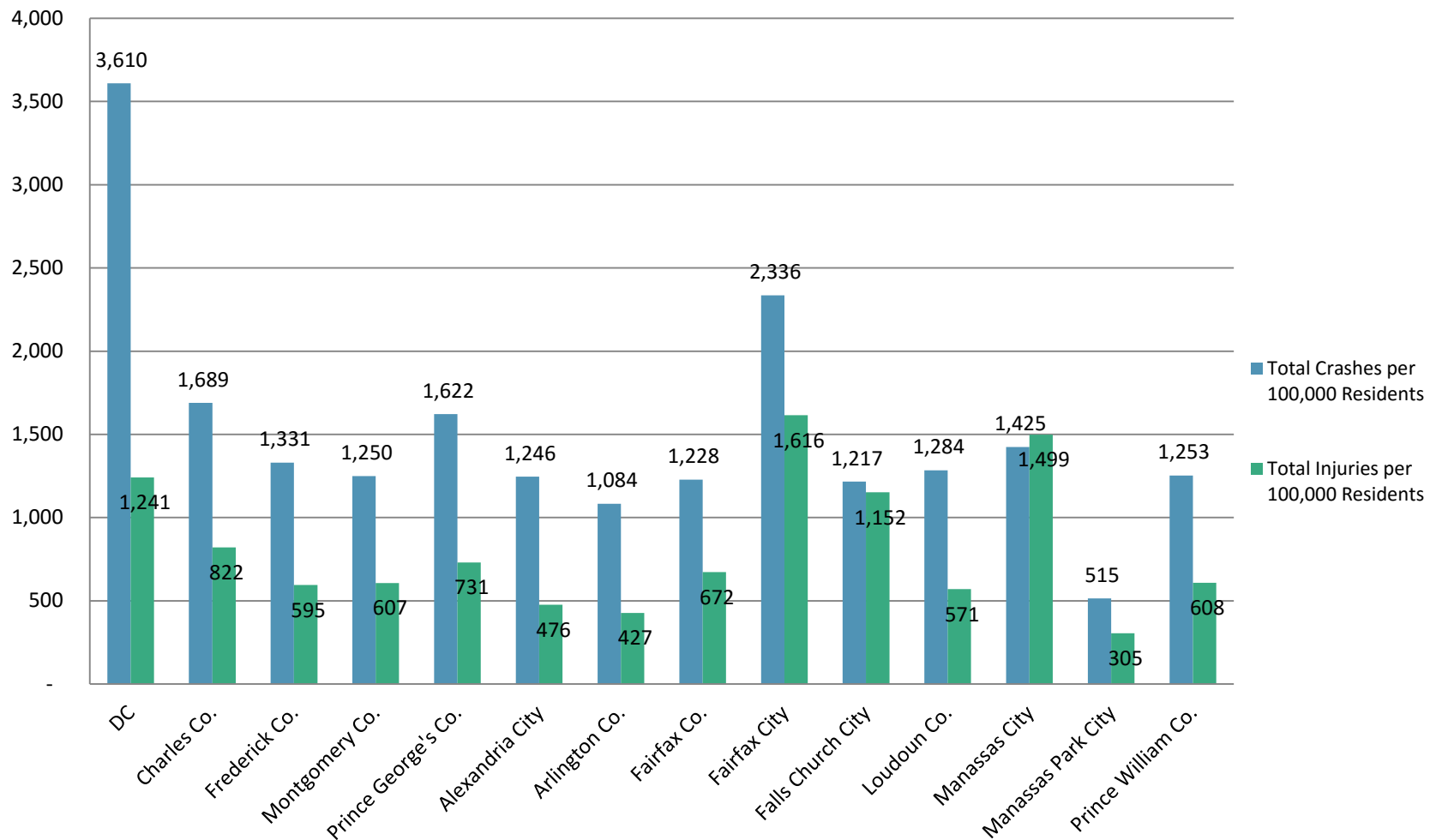
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	AVG.
District of Columbia	718	851	935	779	844	962	998	953	850	776	833	1074	1122	1283	1320	1619	1472	1023
Charles County	31	34	60	35	44	53	57	34	50	43	40	49	37	38	29	50	45	43
Frederick County	61	71	62	72	71	55	55	52	59	67	83	68	40	53	37	60	70	61
Montgomery County	482	499	514	477	539	524	532	560	641	632	618	617	401	530	455	546	573	538
Prince George's County	444	469	517	486	505	456	510	479	540	558	493	457	375	386	406	431	462	469
Arlington County	170	185	180	160	154	167	140	178	151	145	137	151	184	210	204	188	194	170
City of Alexandria	107	78	105	90	81	67	104	81	87	75	47	85	68	87	74	78	104	83
Fairfax County	376	379	372	368	388	373	374	402	361	402	341	270	270	311	313	288	312	347
City of Fairfax	21	20	22	22	30	22	16	25	18	13	15	14	20	17	12	23	18	19
City of Falls Church	11	14	13	13	6	9	9	5	4	10	8	4	5	11	3	7	12	8
Loudoun County	42	36	52	47	52	48	49	52	45	48	40	71	93	75	65	80	63	56
City of Manassas	11	13	22	15	19	21	28	20	17	9	21	22	13	27	24	17	29	19
City of Manassas Park	2	7	8	6	2	3	2	5	3	0	2	0	0	1	0	3	0	3
Prince William County	76	61	78	69	75	72	79	103	55	46	82	67	65	78	90	79	69	73
Total Washington Region	2552	2717	2940	2639	2810	2832	2953	2949	2881	2824	2760	2949	2693	3107	3032	3469	3423	2914



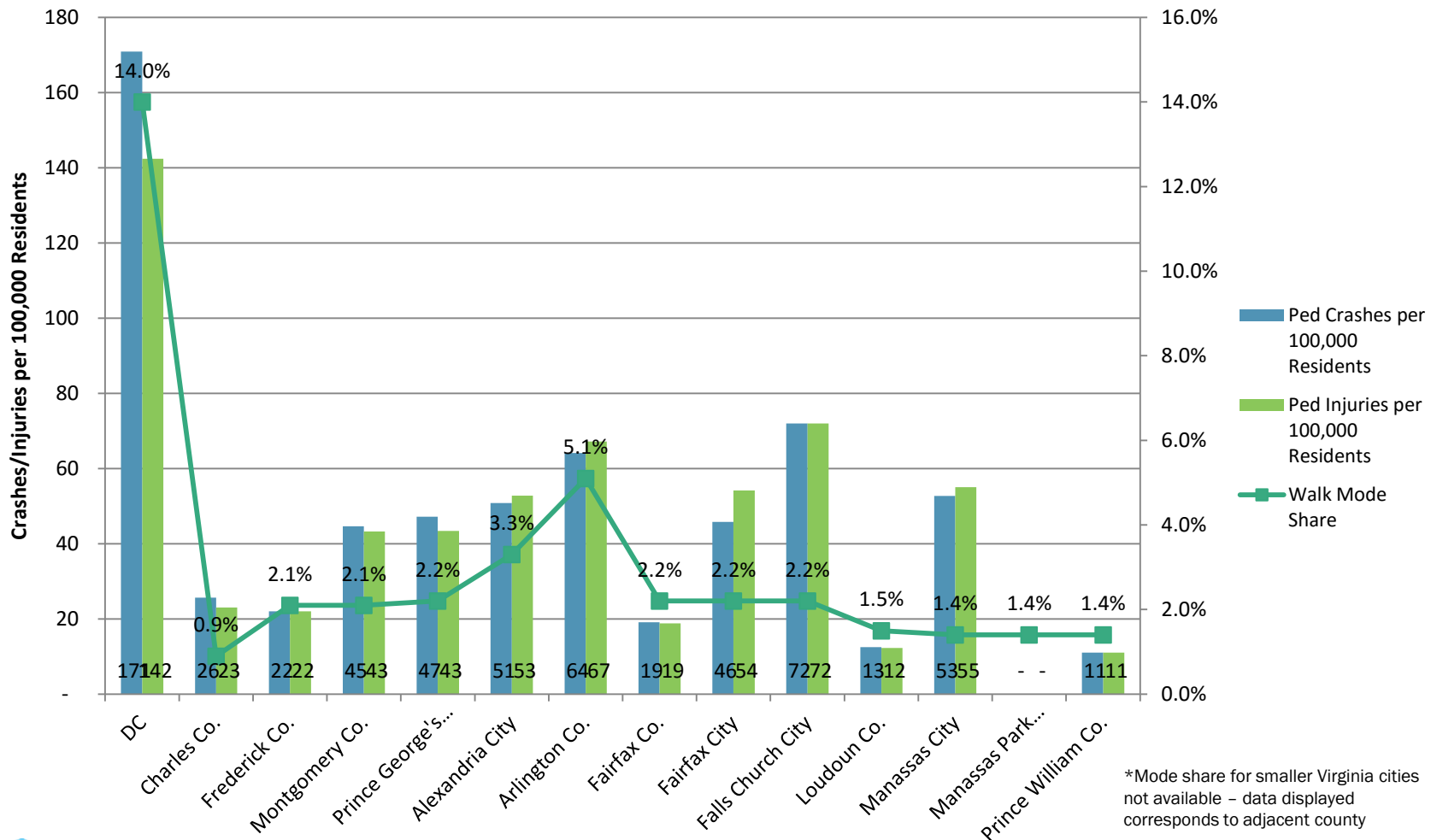
# Traffic Injuries per 100,000 Population



# 2015 Traffic Crashes and Injuries per 100,000 Population



# 2015 Pedestrian Crashes and Injuries per 100,000 Population

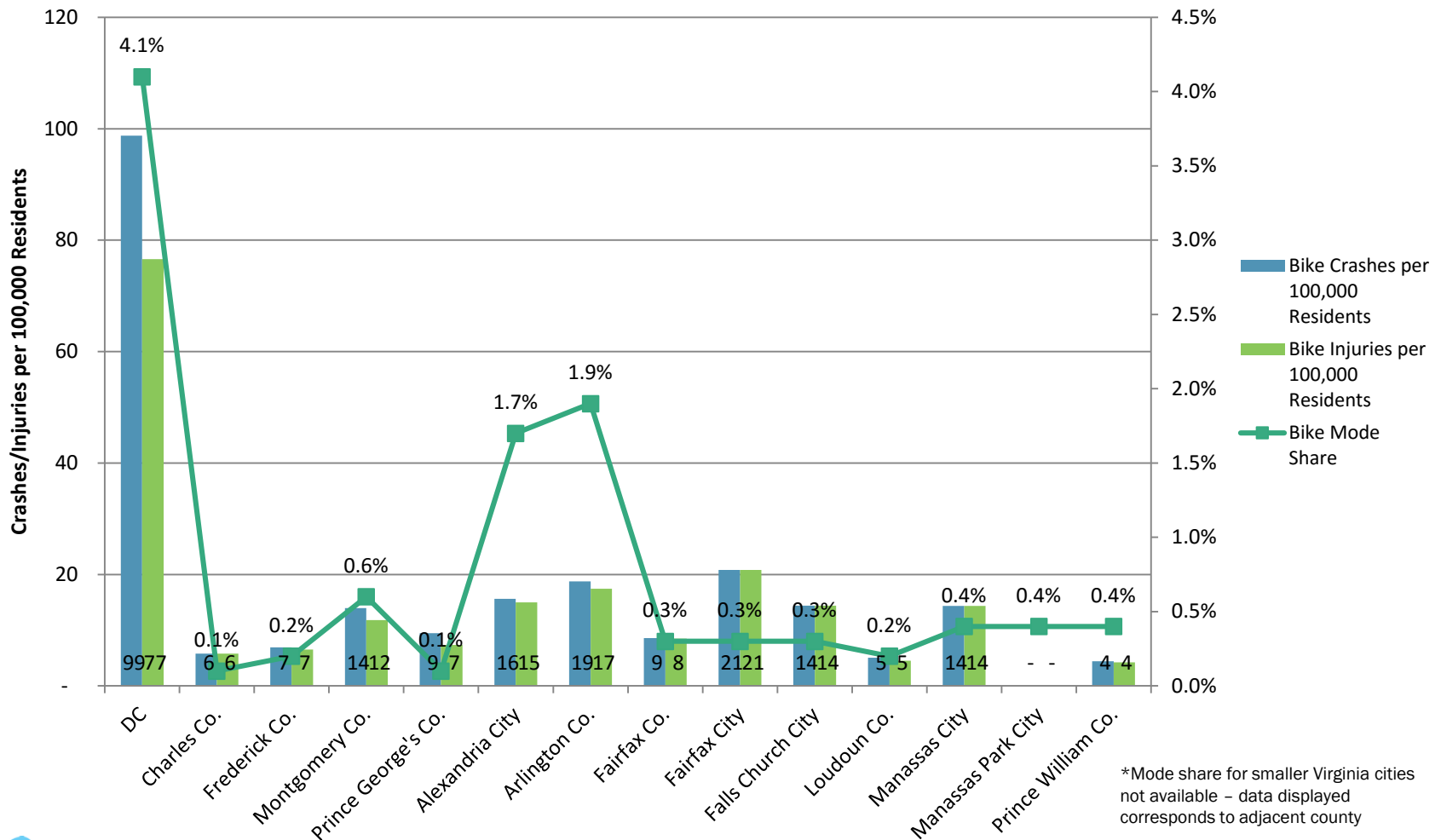


\*Mode share for smaller Virginia cities not available - data displayed corresponds to adjacent county





# 2015 Bicyclist Crashes and Injuries per 100,000 Population



\*Mode share for smaller Virginia cities not available – data displayed corresponds to adjacent county



# Conclusions From Data

- Traffic deaths have not been declining as rapidly as they were a few years ago
- Fatality rates (by 100,000 population and 100 Million VMT) are slowly declining – as they are in the US as a whole
- Pedestrian fatalities are flat and have become a higher percentage of total crashes
- Alcohol, unrestrained occupant, and speeding related fatalities have declined in both absolute and relative terms
- Motorcyclist fatalities have increased and now make up over 15% of all traffic fatalities
- Injuries have increased for all users in the last two years with sharp upward trends for bicyclists and pedestrians since 2010

	2015 Fatalities	Percentage	2010-2015 Trend Absolute	2010-2015 Trend Relative
Speeding	46	17%	↓	↓
Intersections	70	24%	↑	↑
Run off the Road	73	28%	Flat	Flat
Impaired Driving	73	27%	Flat	Flat
Pedestrian	69	26%	Flat	Flat
Occupant Protection	46	17%	↓	↓
Motorcycle	42	16%	↑	↑
Heavy Trucks	39	15%	↑	↑



# Notes

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- Sources
  - DDOT
  - MDSHA Office of Traffic & Safety
  - Virginia DMV
  - NHTSA – Fatality Analysis Reporting System
  - US Census Bureau– American Community Survey
  - FHWA – Highway Performance Monitoring System
- Caveats
  - Missing Data
  - Discrepancies between NHTSA and state data
  - Time lag for federal data



# Questions and Discussion

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National Capital Region  
Transportation Planning Board

# Regional Safety Data - Fatalities

