



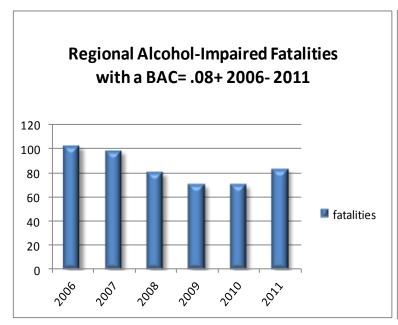
Annual Data Report on the Impact of Drunk Driving on Road Safety in the Washington D.C. Metropolitan Region

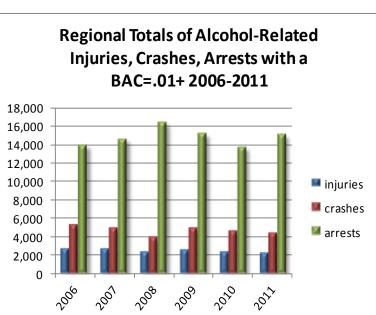
December 2012

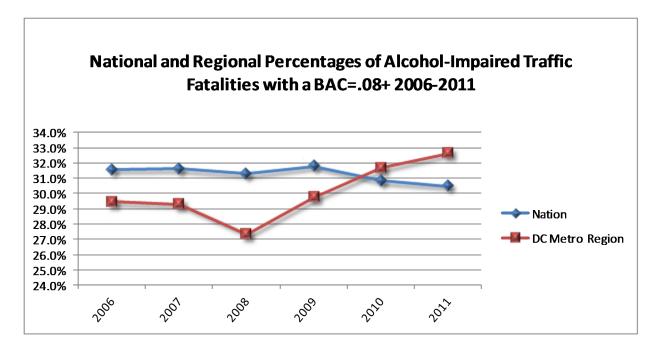




# A Look at Regional and National Figures







The Metropolitan Washington Region has experienced a decrease in the overall number of alcohol-related injuries and crashes from 2010 to 2011. The region has seen an increase in the number of alcohol-related arrests suggesting that policing efforts and prevention are taking effect.

Regional alcohol-impaired fatalities have increased to roughly one third of total crash fatalities in the region (32.7%), compared with 31.7% due to alcohol-impairment in 2010. Nationally, alcohol-impaired fatality rates stand at 30.5%, which is lower than the proportion within region, although it is not significantly different (p=.1573).



## How Safe Are Our Roads? 2011 Overview

Findings in the 2012 report include:

**FATALITIES:** Local alcohol and/or drug-impaired traffic fatalities **increased** between 2010 and 2011 by 7.79% in the region.

**INJURIES:** Regional alcohol and/or drug-related traffic injuries **decreased** by 5.56% between 2010 and 2011(from 2,373 to 2,241 such injuries).

**CRASHES:** Area traffic crashes attributed to alcohol and/or drugs **decreased** by 6.31% between 2010 and 2011 (from 4,689 to 4,393 such crashes).

**ARRESTS:** Local arrests for either driving under the influence (DUI) or driving while intoxicated (DWI) **increased** by 11.99% between 2010 and 2011 (from 14,356 to 16,078 such arrests).

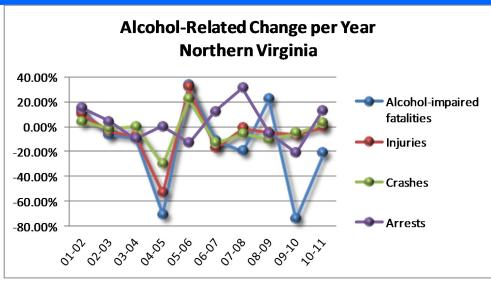
Of the Washington Metropolitan area's 254 total traffic fatalities for 2011, **83**, or roughly a third (32.7%) of these roadway deaths were due to drivers who were alcohol and or drugimpaired (BAC = .08+). National statistics (National Highway Traffic Safety Administration, NHTSA) show that 30.5% of total U.S. vehicular fatalities in 2011 were reported as alcohol / drug impaired (BAC = .08+).

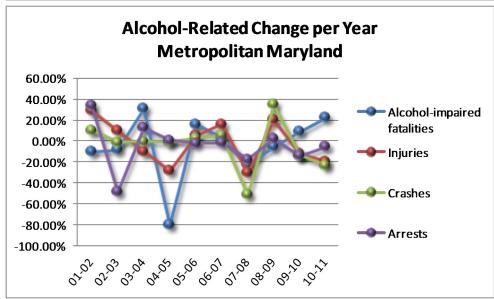
# **Background**

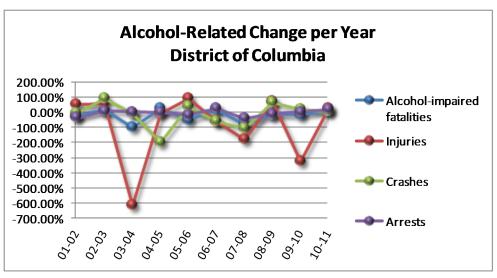
Data compiled in this report comes from national, state, and local sources including the U.S. Census Bureau, National Highway Traffic Safety Administration (NHTSA) and Virginia and Maryland Departments of Transportation. Primary data was collected from the local police departments of each jurisdiction.

It should be noted that the jurisdictional data in this report does not always include State Police data. The State Police in Maryland and Virginia are charged with enforcing traffic laws on state highways and interstate expressways; inclusion of this data would likely increase the number of incidents in all categories. It is possible that some jurisdictional data may include State Police figures because local police often respond to highway incidents when State Police are unavailable. In some jurisdictions, the data reported was provided by the state and most likely include state police data.

# **Sub Regional Trends**







<sup>\*</sup>Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC, and NHTSA \*\*2001-2005 fatality data reported as alcohol-related (BAC=.01+) and 2006-2011 data reported as alcohol-impaired (BAC= .08+)





# **Total Traffic Fatalities**

Total Traffic Fatalities 2006-2011									
Year	2006	2007	2008	2009	2010	2011	Percent Change 2010-2011		
DISTRICT OF COLUMBIA									
Washington	37	44	34	29	24	27	12.5%		
MARYLAND									
Montgomery County	58	48	51	39	47	40	-14.9%		
Prince George's County	111	125	130	98	92	105	14.1%		
MD Regional Total	169	173	181	137	139	145	4.3%		
VIRGINIA									
Arlington County	3	6	8	6	6	6	0.0%		
Fairfax County	67	54	29	37	35	45	28.6%		
Loudoun County	19	21	11	13	12	11	-8.3%		
Prince William County	46	28	25	16	23	15	-34.8%		
City of Alexandria	1	5	4	1	2	3	50.0%		
City of Fairfax	3	1	0	2	0	1	0.0%		
City of Falls Church	0	0	0	1	2	0	-100.0%		
City of Manassas	1	2	0	3	0	0	0.0%		
City of Manassas Park	0	0	0	0	0	1	N/A		
Northern Virginia Total	140	117	77	79	80	82	2.5%		
DC Metro Regional Total	346	334	292	245	243	254	4.5%		
National	42,708	41,259	37,423	33,883	32,885	32,367	-1.6%		





# **Alcohol-Impaired Traffic Fatalities**

Alcohol-Impaired Traffic Fatalities by Jurisdiction with BAC=.08+ 2006-2011									
Year	2006	2007	2008	2009	2010	2011	Percent Change		
DISTRICT OF COLUMBIA									
Washington	13	16	9	11	7	8	14.29%		
MARYLAND									
Montgomery County	21	10	13	11	13	20	53.85%		
Prince George's County	27	40	28	28	30	36	20.00%		
MD Regional total	48	50	41	39	43	56	30.23%		
VIRGINIA									
Arlington County	0	3	5	1	1	0	-100.00%		
Fairfax County	15	15	12	11	8	9	12.50%		
Loudoun County	4	6	5	4	3	4	33.33%		
Prince William County	19	6	7	5	11	3	-72.73%		
City of Alexandria	0	2	1	1	0	1	N/A		
City of Fairfax	3	0	0	0	0	1	0.00%		
City of Falls Church	0	0	0	0	0	0	N/A		
City of Manassas	0	0	0	1	0	0	0.00%		
City of Manassas Park	0	0	0	0	0	1	0.00%		
Northern Virginia Total	41	32	30	23	23	19	-17.39%		
DC Metro Region Total	102	98	80	73	73	83	13.70%		
National Parks in Region	2	0	1	1	4	0	-100.00%		
Regional Total Adjusted	104	98	81	74	77	83	7.79%		
National	13,491	13,041	11,711	10,759	10,136	9,878	-2.55%		

<sup>\*</sup>The data on this table is based on the BAC of all involved drivers and motorcycle riders (operators only) reported by the National Highway Traffic Safety Administration's new definition on their 2012 Traffic Safety Facts reports.



# **Injuries**

Total Traffic Injuries by Jurisdiction 2006-2011									
Year	2006	2007	2008	2009	2010	2011	Percent Change		
DISTRICT OF COLUMBIA									
Washington	4,256	4,070	4,578	4,676	4,473	5,812	29.94%		
MARYLAND									
Montgomery County	6,759	6,905	6,624	6,758	6,510	6,095	-6.37%		
Prince George's County	5,595	7,771	7,099	6,786	6,084	6,422	5.56%		
MD Regional total	12,354	14,676	13,723	13,544	12,594	12,517	-0.61%		
VIRGINIA									
Arlington County	1,374	1,201	1,288	1,227	1,007	1,005	-0.20%		
Fairfax County	8,537	8,019	7,964	7,590	7,600	7,767	2.20%		
Loudoun County	1,711	631	1,717	1,681	1,764	1,869	5.95%		
Prince William County	3,341	2,624	2,717	2,614	2,741	2,826	3.10%		
City of Alexandria	1,317	1,403	1,492	816	614	601	-2.12%		
City of Fairfax	315	241	201	169	178	205	15.17%		
City of Falls Church	240	40	141	264	193	183	-5.18%		
City of Manassas	448	288	270	327	328	447	36.28%		
City of Manassas Park	43	18	20	17	26	24	-7.69%		
Northern Virginia Total	17,326	14,465	15,810	14,705	14,451	14,927	3.29%		
DC Metro Region Total	33,936	33,211	34,111	32,925	31,518	33,256	5.51%		
National Parks in Region	736	675	669	731	826	555	-32.81%		
Regional Total Adjusted	34,672	33,886	34,780	33,656	32,344	33,811	4.54%		

<sup>\*</sup> Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC



# **Alcohol-Related Injuries**

Alcohol-Related Traffic Injuries by Jurisdiction with BAC=.01+ 2006-2011									
Year	2006	2007	2008	2009	2010	2011	Percent Change		
real	2006	2007	2008	2009	2010	2011	2010-2011		
DISTRICT OF COLUMBIA									
Washington	416	264	96	385	92	137	48.91%		
MARYLAND									
Montgomery County	234	484	405	497	488	379	-22.34%		
Prince George's County	826	787	572	741	617	551	-10.70%		
MD Regional total	1,060	1,271	977	1238	1105	930	-15.84%		
VIRGINIA									
Arlington County	154	127	146	94	78	71	-8.97%		
Fairfax County	705	648	573	561	610	573	-6.07%		
Loudoun County	138	27	140	142	140	149	6.43%		
Prince William County	295	288	263	260	203	216	6.40%		
City of Alexandria	91	115	89	65	48	50	4.17%		
City of Fairfax	20	22	8	13	6	15	150.00%		
City of Falls Church	8	0	2	11	3	6	100.00%		
City of Manassas	40	16	15	35	25	29	16.00%		
City of Manassas Park	11	6	1	1	1	3	200.00%		
Northern Virginia Total	1,462	1,249	1,237	1,182	1,114	1,112	-0.18%		
DC Metro Region Total	2,938	2,784	2,310	2,805	2,311	2,179	-5.71%		
National Parks in Region	50	43	42	38	62	62	0.00%		
Regional Total Adjusted	2,988	2,827	2,352	2,843	2,373	2,241	-5.56%		

<sup>\*</sup> Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC



# **Crashes**

Total Traffic Crashes By Jurisdiction 2006 - 2011										
Year	2006	2007	2008	2009	2010		Percent Change 2010-2011			
DISTRICT OF COLUMBIA										
Washington	16,478	15,100	16,147	16,841	16,739	18,002	7.55%			
MARYLAND										
Montgomery County	12,076	12,460	11,925	12,311	11536	11,093	-3.84%			
Prince George's County	15,863	15,060	14,289	13,777	13013	12,818	-1.50%			
MD Regional total	27,939	27,520	26,214	26,088	24549	23,911	-2.60%			
VIRGINIA										
Arlington County	2,984	2,649	2,596	2,205	2,192	2,494	13.78%			
Fairfax County	18,254	17,152	16,318	14,233	13,726	14,580	6.22%			
Loudoun County	4,234	5,720	3,828	3,501	3,798	4,066	7.06%			
Prince William County	7,132	5,852	5,520	5,148	4,984	5,221	4.76%			
City of Alexandria	2,019	1,947	1,868	1,395	1,594	1,631	2.32%			
City of Fairfax	926	817	616	678	655	650	-0.76%			
City of Falls Church	240	243	177	249	190	180	-5.26%			
City of Manassas	931	725	622	547	590	594	0.68%			
City of Manassas Park	111	73	65	42	40	73	82.50%			
Northern Virginia Total	36,831	35,178	31,610	27,998	27,769	29,489	6.19%			
DC Metro Region Total	81,248	77,798	73,971	70,927	69,057	71,402	3.40%			
National Parks in Region	2,945	2,669	2,568	2,874	2,762	2,811	1.77%			
Regional Total Adjusted	84,193	80,467	76,539	73,801	71,819	74,213	3.33%			

<sup>\*</sup> Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC



# **Alcohol-Related Crashes**

Alcohol-Related Traffic Crashes By Jurisdiction 2006 - 2011 with a BAC=.01+									
							Percent Change		
Year	2006	2007	2008	2009	2010	2011	2010-2011		
DISTRICT OF COLUMBIA									
Washington	416	264	132	448	594	645	8.59%		
MARYLAND									
Montgomery County	940	1,000	690	1,055	891	749	-15.94%		
Prince George's County	1,338	1,406	905	1,398	1,271	1,006	-20.85%		
MD Regional total	2,278	2,406	1,595	2,453	2,162	1,755	-18.83%		
VIRGINIA									
Arlington County	290	281	248	200	213	218	2.35%		
Fairfax County	1,213	1,051	1,029	951	919	903	-1.74%		
Loudoun County	253	194	248	211	210	230	9.52%		
Prince William County	515	484	410	379	319	344	7.84%		
City of Alexandria	116	118	104	99	102	110	7.84%		
City of Fairfax	35	48	26	36	32	38	18.75%		
City of Falls Church	11	4	7	11	6	10	66.67%		
City of Manassas	71	41	47	43	32	36	12.50%		
City of Manassas Park	22	15	6	2	8	12	50.00%		
Northern Virginia Total	2,526	2,236	2,125	1,932	1,841	1,841 <b>1,901</b>			
DC Metro Region Total	5,220	4,906	3,852	4,833	4,597	4,301	-6.44%		
National Parks in Region	101	109	94	88	92	92	0.00%		
Regional Total Adjusted	5,321	5,015	3,946	4,921	4,689	4,393	-6.31%		

<sup>\*</sup> Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC



# **Alcohol-Related Traffic Arrests**

Total Alcohol-Related Traffic Arrests by Jurisdiction 2006-2011										
Year	2006	2007	2008	2009	2010	2011	Percent Change			
rear	2000	2007	2000	2003	2010	2011	2010-2011			
DISTRICT OF COLUMBIA										
Washington	1,600	2,224	1,655	1,555	1,648	2,081	26.27%			
MARYLAND										
Montgomery County	3,714	3,487	2,689	2,903	2,647	2,247	-15.11%			
Prince George's County	1,667	1,814	1,832	1,725	1,416	1,609	13.63%			
MD Regional total	5,381	5,301	4,521	4,628	4063	3,856	-5.09%			
VIRGINIA										
Arlington County	625	647	833	693	609	789	29.56%			
Fairfax County	2,451	2,586	4,362	4,057	3,407	3,887	14.09%			
Loudoun County	519	690	1,175	1,133	939	847	-9.80%			
Prince William County	1,571	1,935	2,811	2,699	2,394	2,856	19.30%			
City of Alexandria	343	567	559	501	348	412	18.39%			
City of Fairfax	179	184	182	175	187	202	8.02%			
City of Falls Church	74	48	66	90	72	121	68.06%			
City of Manassas	276	160	110	171	N/A	N/A	N/A			
City of Manassas Park	107	178	60	124	N/A	N/A	N/A			
Northern Virginia Total	6,145	6,995	10,158	9,643	7,956	9,114	14.56%			
DC Metro Region Total	13,126	14,520	16,334	15,826	13,667	15,051	10.13%			
National Parks in Region	989	634	614	593	689	1,027	49.06%			
Regional Total Adjusted	14,115	15,154	16,948	16,419	14,356	16,078	11.99%			

 $<sup>^{*}</sup>$  Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC



# **Youth Data**

Alcohol-Related Crashes, Injuries, and Arrests for Persons Under 21 Years of Age By Region, 2011											
	Crashes	Alcohol- Related Crashes	Percentage of Al- cohol-Related Crashes	Injuries	Alcohol- Related Injuries	Percentage of Alcohol-Related Injuries	Arrests	Alcohol- Related Traffic Arrests	Percentage of Alcohol-Related Arrests		
DISTRICT OF COLUMBIA											
Washington	2,610	28	1.07%	709	5	0.71%	724	35	4.83%		
MARYLAND											
Montgomery County	749	35	4.67%	920	43	4.67%	6,401	110	1.72%		
Prince George's County	853	54	6.33%	1,135	70	6.17%	10,723	73	0.68%		
MD Regional Total	1,602	89	5.56%	2,055	113	5.50%	17,124	183	1.07%		
VIRGINIA											
Arlington County	277	18	6.50%	97	4	4.12%	2,182	23	1.05%		
Fairfax County	2,861	138	4.82%	1,068	86	8.05%	16,700	261	1.56%		
Loudoun County	935	35	3.74%	412	31	7.52%	4,330	68	1.57%		
Prince William County	1,261	66	5.23%	520	34	6.54%	7,981	194	2.43%		
City of Alexandria	198	12	6.06%	68	6	8.82%	1,177	18	1.53%		
City of Fairfax	132	3	2.27%	17	1	5.88%	1,253	18	1.44%		
City of Falls Church	41	0	0.00%	24	0	0.00%	411	8	1.95%		
City of Manassas	138	4	2.90%	55	1	1.82%	N/A	N/A	N/A		
City of Manassas Park	13	0	0.00%	3	0	0.00%	N/A	N/A	N/A		
Northern Virginia Total	5,856	276	4.71%	2,264	163	7.20%	34,034	590	1.73%		
DC Metro Regional Total	10,068	393	3.90%	5,028	281	5.59%	51,882	808	1.56%		
National Parks in Region	109	0	0.00%	21	1	4.76%	62	17	27.42%		
Regional Total Adjusted	10177	393	3.86%	5,049	282	5.59%	51,944	825	1.59%		

<sup>\*</sup> Data provided by MPD, US Park Police, VDMV, MD SHA, MD NSC



# Methodology

Following is a listing of the agencies providing local jurisdictional data:

#### **District of Columbia:**

Metropolitan Police Department U.S. Park Police

#### State of Maryland:

MD National Study Center

#### Virginia:

State of Virginia: Virginia Department of Motor Vehicles, 2011 Crash Facts Arlington County Police Department

Fairfax County Police Department

Loudoun County Sheriff's Office

Prince William County Police Department

City of Alexandria Police Department

City of Fairfax Police Department

City of Falls Church Police Department

City of Manassas Police Department

City of Manassas Park Police Department

#### **Definitions of Data-Related Terms**

NHTSA Alcohol-Impaired Driving Traffic Fatalities: any fatality that occurs in motor vehicle traffic crash that involves at least one driver or a motorcycle rider (operator) with a BAC of .08 grams per deciliter or higher; This threshold does not consider the impairment status of non-occupants involved in fatal crashes, such as pedestrians or pedal cyclist.

WRAP Alcohol-Impaired Driving Traffic Fatalities: Any person who dies as result of a traffic crash involving alcohol with a BAC level .08 or higher

WRAP Alcohol-Related Traffic Fatalities for Persons Under 21: Any person under the age of 21 year who has died as result of an alcohol-related traffic crash involving a driver with a BAC level .01 or higher. This includes drivers, passengers, bicyclists, and pedestrians.

Alcohol-Related Traffic Injuries: where any driver, passenger, bicyclist or pedestrian is listed on the police report to be injured in an alcohol-related crash where the BAC = .01 or higher

Alcohol-Related Traffic Injuries for Persons Under 21: any person under the age of 21 who receives injuries because of an alcohol-related crash where the BAC = .01 or higher; this includes drivers, passengers, bicyclists, and pedestrians.

**Alcohol-Related Traffic Crashes:** the driver, passenger, bicyclist, or pedestrian is listed on the police report as drinking before the crash with a BAC = .01 or higher. At least one driver in the crash was reported to be under the influence of alcohol and/or other drugs.

Alcohol-Related Traffic Crashes for Persons Under 21: any person under the age of 21 who was involved in a traffic crash involving a driver with a BAC = .01 or higher. This data includes drivers, passengers, bicyclists, and pedestrians.

**Drunk Driving Arrests/Citation:** a general reference to those criminal cases that are called DUI, DWI, OWI, OWI or other acronyms that generally describe three types of cases:

- -The driver is sufficiently impaired by alcohol, drugs or a combination of the two, and cannot drive safely, and has a BAC level of .01 or higher;
- -The driver is a "Drunk Driver", as defined by the driver being above that state's legal limit of BAC .08;
- -A driver under the age of 21 is under the influence of alcohol at a BAC level of .02 or higher **DWI/DUI Arrests:** a driver is listed on the police report as arrested for operating a

motor vehicle under the influence of alcohol with a BAC level of .01 or higher DW/DUI Arrests for persons under 21: any person/driver under the age of 21 listed

**DWI/DUI Arrests for persons under 21:** any person/driver under the age of 21 listed on the police report as arrested for operating a motor vehicle under the influence of alcohol with a BAC level of .01 or higher

#### **Data Analysis**

The findings in this report are based on data collected from organizations and agencies from across the Washington Metro region. Data tables provide totals within the Washington Metro region as well as individual jurisdictions. Analysis focuses on changes in motor vehicle fatalities, injuries, crashes, and arrests. Results are reported as numbers and percentage of alcohol-related incidents to total numbers across time.

#### **Data Limitations**

It is important to note limitations that affected collection and analysis of this data, as they may limit comparability across jurisdictions and influence the level of reasonable analysis. Whenever possible, limitations are noted within the tables and figures. It is important that the reader keep the follow-

ing in mind:

It should be noted that the researchers constructing this report utilized data from the National Study Center for Trauma and EMS (NSC) at the University of Maryland, for data pertaining to crashes, injuries, and arrests. Regarding the alcohol-related crash and injury data, the variable identifies a driver or pedestrian under the influence of alcohol, drugs, both, or none. Within the NSC data reported, researchers analyzed drivers reported as under the influence of alcohol or both, to capture alcohol-related crashes and injuries. This is different than the impaired definition from last year that also included the drugs attribute. That variable is created using several others on the report (such as driver condition, BAC, etc) so it does not specify only those with BAC 0.01+, and comparisons to previous year's data should be made with caution. In addition, because this report tracks just two jurisdictions in Maryland, regional totals could also be affected.

Additionally, there is no standardization for data definitions, collection, or recording within the Washington Metro region. Each agency has its own system of data collection, coding, and management. In addition, the range and type of data collected may not be consistent across jurisdictions. The data reported and analyzed in this report reflect data as reported by contact agencies. Independent verification of data to ensure accuracy is not within the scope of this report.

Information on data collection and management systems and changes within jurisdictions was not solicited. In addition, changes in laws or judicial priorities may result in increased attention to specific data (e.g. blood alcohol level in driver fatalities related to stricter server laws). In some cases, this may result in missing data or data that appears inconsistent when examined against the same values for previous years. It is beyond the scope of this report to identify data methodology or priority changes for each jurisdiction

Data on alcohol-related driver involvement in motor vehicle fatalities, injuries, crashes and arrests was requested for alcohol-related (BAC= .01+) only. Therefore, data are assumed to reflect only alcohol impairment and are reported in this way, although some cases may involve drug use.

The number of incidents, total and related to alcohol impairment, is very small for some jurisdictions. Due to the small numbers, jurisdictional analysis might easily misrepresent the problem. For example, an increase of one alcohol-related fatality would have little impact in a jurisdiction that saw 50 alcohol-related fatalities the previous year, but would appear to represent a significant change in a small jurisdiction with only one or two alcohol-related fatalities the previous year.

Data are reported and analyzed by absolute numbers only. At this time, information that would allow identification of comparable rates is unavailable. It is assumed that people involved in motor vehicle crashes and arrests may live within or outside the Washington Metro region. Collection of data on driver or passenger residence versus jurisdiction of accident is beyond the scope of this report. Calculating rates based on the Washington Metro region's population or number of licensed drivers would not accurately represent the problem since drivers may be from outside the jurisdiction.

Data on people under the age of 21 years is collected in an inconsistent manner among jurisdictions. Caution must be used in evaluation of this data due to varied definitions and missing data.

Many charts display two regional total numbers. The first, "DC Regional Total" is the total of the District of Columbia, the Maryland Region, and the Northern Virginia Region. The second regional number, "Regional Total Adjusted" includes data from the United States Park Police. Because the Park Police information has only been recently collected, it is shown separately and the two regional totals are shown so that comparisons with previous years can be done.