

Highlights

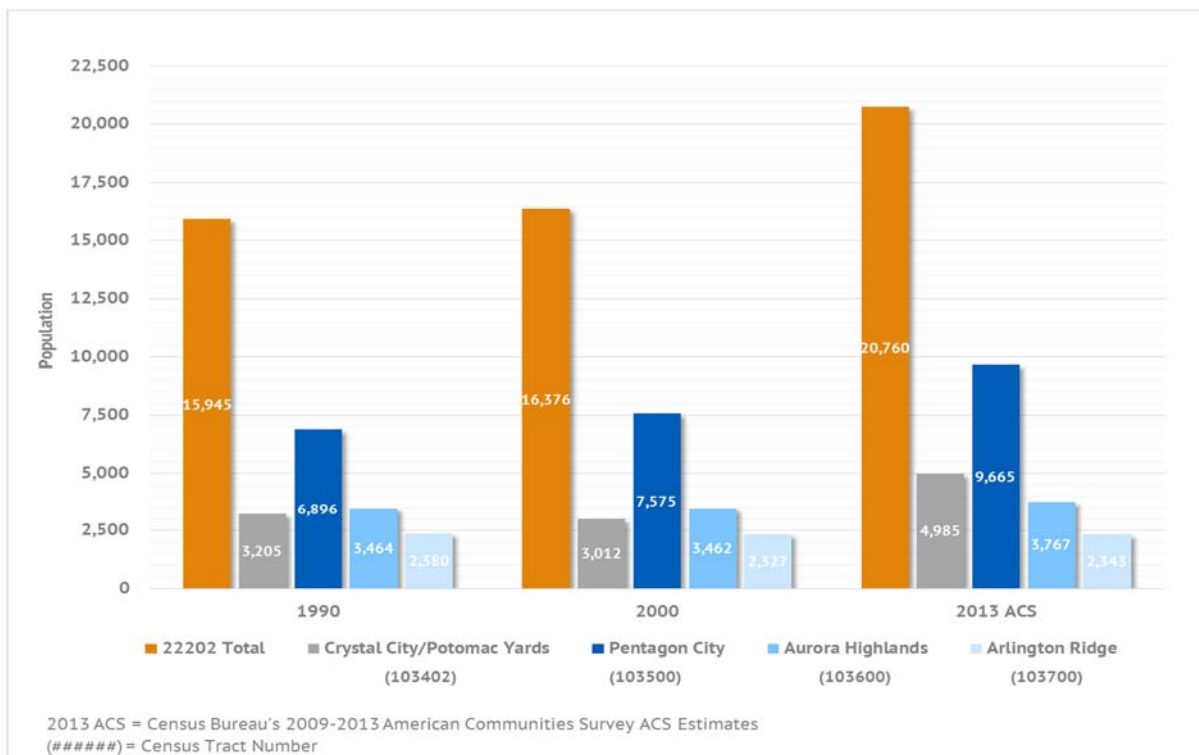
The population in the 22202 zip code area has increased by 26 percent to 20,760 people since the year 2000. Most of the growth has occurred in the Pentagon City, Crystal City and Potomac Yard neighborhoods.

Vehicle ownership and journey to work census data shows that residents in the single family neighborhoods of the 22202 zip code area have substantially different transportation preferences and trends than residents in the transit-oriented mixed-use neighborhoods.

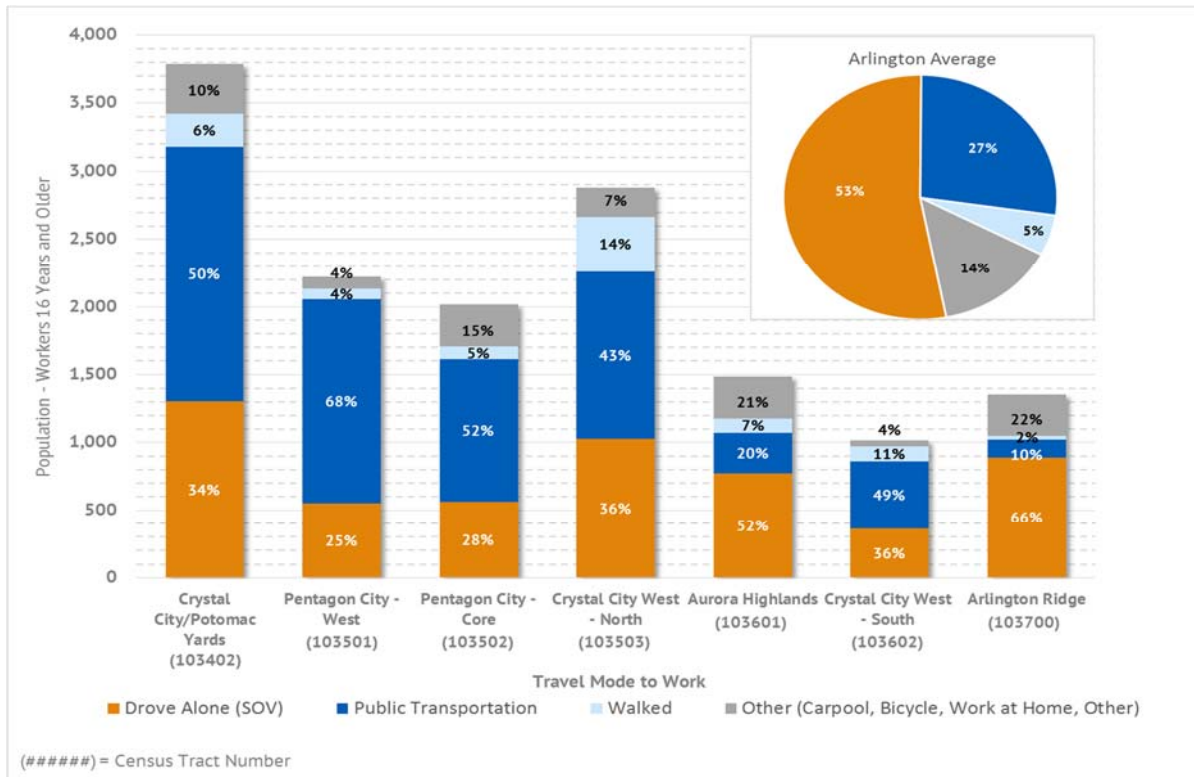
Description

This data provides transportation demographic information for the 22202 zip code area. For this reporting effort, data was pulled from the 1990 Census, 2000 Census and the 2009 to 2013 American Communities Survey (2013 ACS) estimates. In addition to population data, household vehicle ownership and journey to work data were compiled at the census tract level for the 22202 zip code area. The journey to work data includes all workers (employed) age 16 and over that live in the area, provides the mode they travel to work (i.e. drive alone, use public transit, walk) and the average travel time to work. The number of workers that report a travel time greater than one hour is also provided at the census tract level.

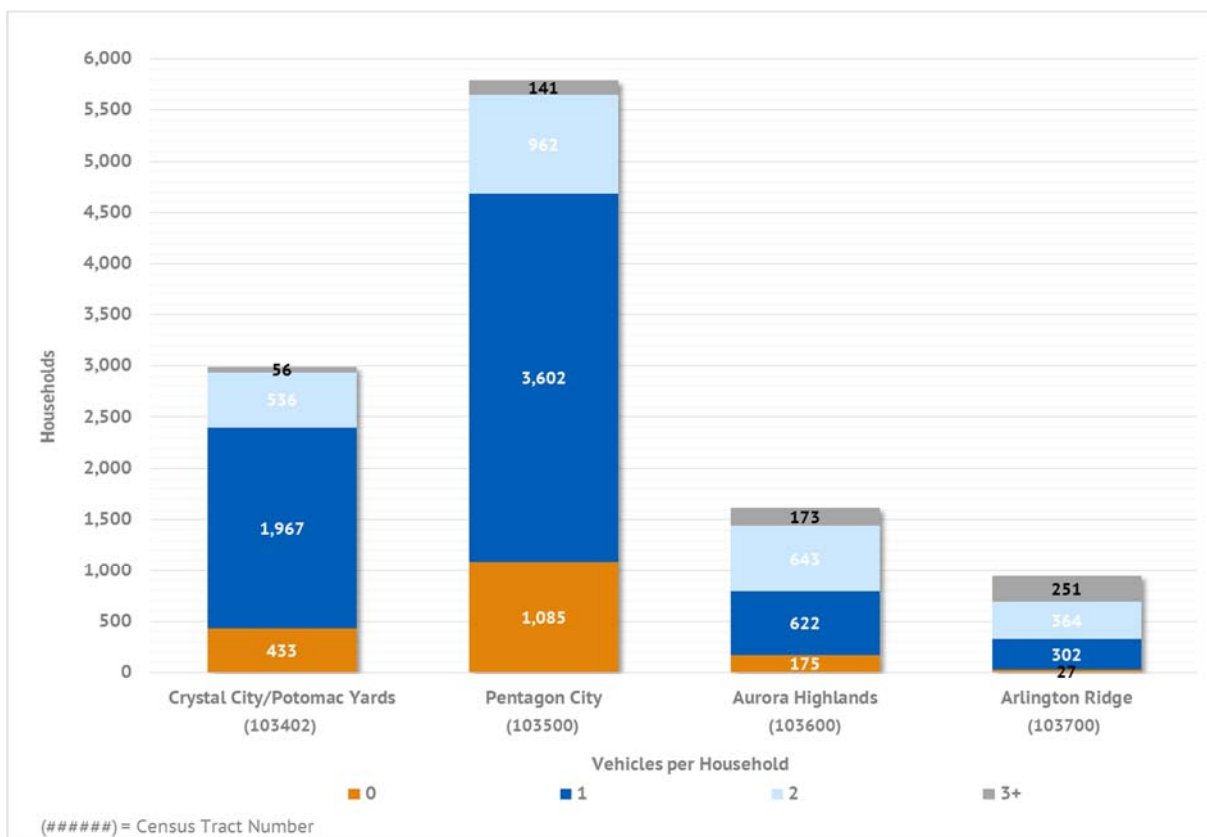
Population by Census Tract (1990, 2000, & 2013 ACS)



Journey to Work Mode Split by Census Tract (2009 – 2013 ACS Estimates)

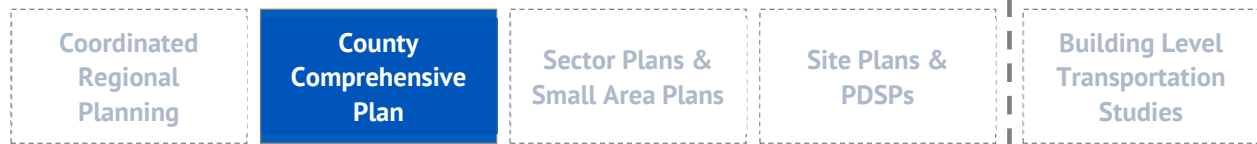


Household Vehicle Ownership by Census Tract (2009 – 2013 ACS Estimates)



Context in Planning Spectrum

Where is this data used in the planning spectrum?



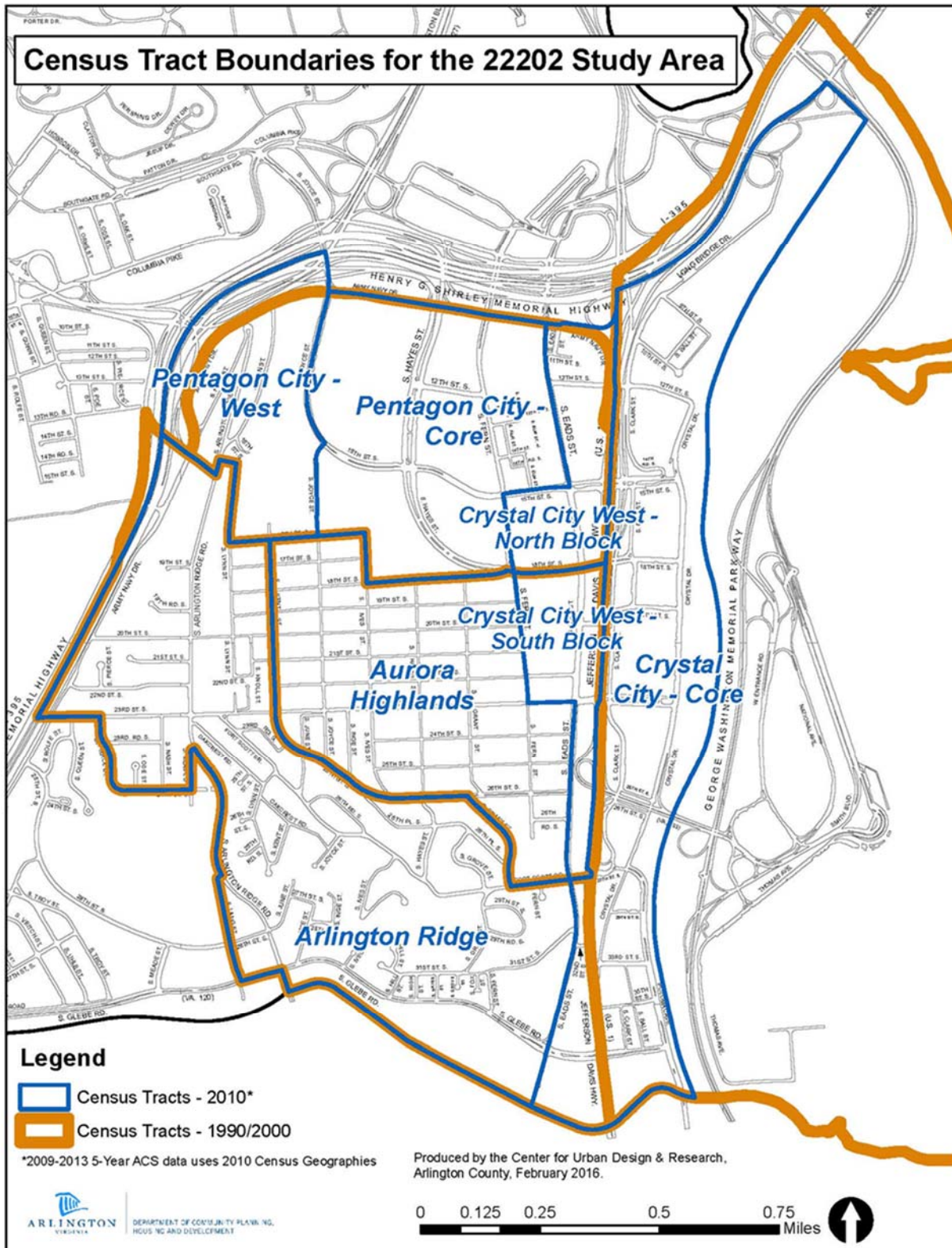
Background

Using a long-form questionnaire, the U.S. Census Bureau collects information related to travel patterns and vehicle ownership in addition to population counts as part of the decennial Census. Prior to the 2010 Census, for previous decennial censuses, most households received a short-form questionnaire, while one household in six received a long form that contained additional questions to obtain more detailed socioeconomic information about the population. With the 2010 Census, households only received the short form. More detailed socioeconomic information once collected via the long-form questionnaire is now collected by the American Community Survey. This makes the data from the 2009-2013 ACS estimates comparable to the 1990 and 2000 Census. Since this information is collected from a smaller sample of the population, data is reported at the census tract geography level rather than the smaller block or block group levels.

The 22202 zip code study area is broken down into four census tract areas in the 1990 and 2000 census. Two of these tracts were further subdivided with the 2010 Census, with the same tracts used in the 2013 ACS. The map below shows the census tracts reported here. For this reporting, each tract has been named to distinguish between the tracts. The names are all based on the neighborhood or Metrorail station area that best represents the tract.

The current census tract boundaries tend to match the Pentagon City and Crystal City Metrorail station areas very well. They also tend to follow development patterns well, generally separating single family areas from higher density mixed use areas within the 22202 zip code area. The data provide the opportunity to observe how land use patterns may influence transportation related demographics and trends.

Census Tract Boundaries for 22202 Zip Code Area



Findings/Conclusions

- The population in 22202 has increased by just over 26 percent since 2000. Most of the population growth has occurred in Pentagon City, Crystal City and Potomac Yard.
- The data shows that residents in the lower density, more single family residential neighborhood census tracts have far different transportation patterns than those in the higher density census tracts, which demonstrate more transit-oriented patterns.
- The journey to work mode split data shows that, in the Metrorail station areas around the Pentagon City and Crystal City stations, residents only use a single occupancy vehicle to get to work between 25 percent and 35 percent of the time. Compared to an Arlington average of about 53 percent, the transit-oriented residential development in 22202 generates, on average, far fewer vehicle trips than residents in other parts of the County. The majority of the work-related trips for these transit-oriented residents are made using public transit.
- At 66 percent single occupancy vehicle usage, the residents in Arlington Ridge report driving more frequently to work than the Arlington County average.
- Overall, there are more households in Pentagon City that live without a vehicle than there are households in all of Arlington Ridge, 1085 vs 944 respectively.
- In the 1990 census, a very high proportion of residents walked to work in Crystal City (27.3%), Pentagon City (16.9%), and Aurora Highlands (18.6%). Since then, these rates have fallen dramatically to 6.4 percent, 8.1 percent and 8.6 percent respectively. The shift from walking looks to have split between driving alone and using public transit.
- With the exception of the Pentagon City census tract, all other census tracts in the 22202 zip code study area have seen increases in drive alone journey to work rates since the 1990 census.
- Shown in the attached data spreadsheet, the average commute time for all of the Census tracts in the 22202 zip code area has increased from around 22 to 23 minutes in 1990 to around 28 minutes in 2013. These increases do not seem to correlate to household vehicle ownership or mode choice.

Data Source

This data was generated from a variety of United States Census Bureau data sources. The primary source for this reporting is the [Census Explorer Commuting Edition website](#). This website provides both data and maps from the 1990 and 2000 decennial census and the 2009-2013 American Communities Survey (ACS) estimates.

Data Tables

Population by Census Tract (1990, 2000, & 2013 ACS)

	<u>Tract</u>	<u>1990 Census</u>	<u>2000 Census</u>	<u>2013 ACS</u>
Crystal City/Potomac Yards	103402	3,205	3,012	4,985
Pentagon City	103500	6,896	7,575	9,665
<i>Pentagon City - West</i>	103501			2,958
<i>Pentagon City - Core</i>	103502			3,246
<i>Crystal City West - North</i>	103503			3,461
Aurora Highlands	103600	3,464	3,462	3,767
<i>Aurora Highlands</i>	103601			2,460
<i>Crystal City West - South</i>	103602			1,307
<u>Arlington Ridge</u>	<u>103700</u>	<u>2,380</u>	<u>2,327</u>	<u>2,343</u>
22202 Study Area		15,945	16,376	20,760

Journey to Work Mode Split by Census Tract (2009 – 2013 ACS Estimates)

	<u>Tract</u>	<u>Drove Alone (SOV)</u>	<u>Public Transportation</u>	<u>Walked</u>	<u>Other</u>
Crystal City/Potomac Yards	103402	1,303	1,878	242	366
Pentagon City	103500	2,135	3,790	578	616
<i>Pentagon City - West</i>	103501	549	1,504	78	91
<i>Pentagon City - Core</i>	103502	562	1,049	95	310
<i>Crystal City West - North</i>	103503	1,024	1,237	405	215
Aurora Highlands	103600	1,138	797	214	350
<i>Aurora Highlands</i>	103601	774	298	105	308
<i>Crystal City West - South</i>	103602	364	499	109	42
<u>Arlington Ridge</u>	<u>103700</u>	<u>887</u>	<u>134</u>	<u>30</u>	<u>300</u>
Arlington County		53%	27%	5%	14%

Household Vehicle Ownership by Census Tract (2009 – 2013 ACS Estimates)

	<u>Tract</u>	<u>0 Vehicles</u>	<u>1 Vehicle</u>	<u>2 Vehicles</u>	<u>3+ Vehicles</u>
Crystal City/Potomac Yards	103402	433	1,967	536	56
Pentagon City	103500	1,085	3,602	962	141
<i>Pentagon City - West</i>	103501	439	1,174	313	18
<i>Pentagon City - Core</i>	103502	417	1,166	174	72
<i>Crystal City West - North</i>	103503	229	1,262	475	51
Aurora Highlands	103600	175	622	643	173
<i>Aurora Highlands</i>	103601	76	247	497	123
<i>Crystal City West - South</i>	103602	99	375	146	50
Arlington Ridge	103700	27	302	364	251

Transportation Related Demographic Data for 22202 (1990 Census, 2000 Census and 2009-2013 American Communities Survey)
Commute Mode to Work, Average Commute Time, and Number of Workers with 60 Minute or More Commute.

Census Tact	Name	Year	Land Area (Acres)	Population	Workers 16 Years and Older	Commute Mode to Work							Commute Mode to Work by %						Avg. Commute Time	# Workers with 60 or More Minute Commute	
						Drove Alone (SOV)	Public Transportation	Carpooled	Walked	Bicycle	Worked at Home	Total Non-SOV	Drove Alone (SOV)	Public Transportation	Carpooled	Walked	Bicycle	Worked at Home			Total Non-SOV
51013	Arlington County	1990	16,690.56	170,936	108,855	54,769	27,082	14,906	6,836	661	3,115	54,086	50.3%	24.9%	13.7%	6.3%	0.6%	2.9%	49.7%	24	3,923
51013	Arlington County	2000	16,690.56	189,453	116,046	63,726	26,600	13,339	6,475	803	3,888	52,320	54.9%	22.9%	11.5%	5.6%	0.7%	3.4%	45.1%	27	5,872
51013	Arlington County	2013 ACS	16,690.56	214,861	138,161	73,470	37,575	8,817	7,455	1,733	7,358	64,691	53.2%	27.2%	6.4%	5.4%	1.3%	5.3%	46.8%	27	6,247
51013103402	Crystal City/Potomac Yards	1990	1,241.24	3,205	2,338	559	934	105	638	0	58	1,779	23.9%	39.9%	4.5%	27.3%	0.0%	2.5%	76.1%	21	44
51013103402	Crystal City/Potomac Yards	2000	1,241.24	3,012	2,156	663	889	88	402	0	81	1,493	30.8%	41.2%	4.1%	18.6%	0.0%	3.8%	69.2%	25	60
51013103402	Crystal City/Potomac Yards	2013 ACS	1,241.24	4,985	3,789	1,303	1,878	101	242	70	172	2,486	34.4%	49.6%	2.7%	6.4%	1.8%	4.5%	65.6%	26	69
51013103500	Pentagon City	1990	280.27	6,896	4,743	1,648	1,803	356	803	12	83	3,095	34.7%	38.0%	7.5%	16.9%	0.3%	1.7%	65.3%	22	97
51013103500	Pentagon City	2000	280.27	7,575	4,945	1,812	2,166	222	515	0	124	3,133	36.6%	43.8%	4.5%	10.4%	0.0%	2.5%	63.4%	27	117
51013103500	Pentagon City	2013 ACS	280.27	9,665	7,119	2,135	3,790	204	578	36	256	4,984	30.0%	53.2%	2.9%	8.1%	0.5%	3.6%	70.0%	28	249
51013103501	Pentagon City - West	2013 ACS		2,958	2,222	549	1,504	68	78	10	0	1,673	24.7%	67.7%	3.1%	3.5%	0.5%	0.0%	75.3%	30	139
51013103502	Pentagon City - Core	2013 ACS		3,246	2,016	562	1,049	35	95	26	192	1,454	27.9%	52.0%	1.7%	4.7%	1.3%	9.5%	72.1%	27	16
51013103503	Crystal City West - North	2013 ACS		3,461	2,881	1,024	1,237	101	405	0	64	1,857	35.5%	42.9%	3.5%	14.1%	0.0%	2.2%	64.5%	28	94
51013103600	Aurora Highlands	1990	228.30	3,464	2,403	778	755	340	446	8	60	1,625	32.4%	31.4%	14.1%	18.6%	0.3%	2.5%	67.6%	23	73
51013103600	Aurora Highlands	2000	228.30	3,462	2,409	1,016	722	181	372	21	70	1,393	42.2%	30.0%	7.5%	15.4%	0.9%	2.9%	57.8%	25	95
51013103600	Aurora Highlands	2013 ACS	228.30	3,767	2,499	1,138	797	112	214	75	128	1,361	45.5%	31.9%	4.5%	8.6%	3.0%	5.1%	54.5%	28	145
51013103601	Aurora Highlands	2013 ACS		2,460	1,485	774	298	108	105	75	113	711	52.1%	20.1%	7.3%	7.1%	5.1%	7.6%	47.9%	28	88
51013103602	Crystal City West - South	2013 ACS		1,307	1,014	364	499	4	109	0	15	650	35.9%	49.2%	0.4%	10.7%	0.0%	1.5%	64.1%	27	57
51013103700	Arlington Ridge	1990	394.58	2,380	1,247	719	179	194	86	6	57	528	57.7%	14.4%	15.6%	6.9%	0.5%	4.6%	42.3%	22	38
51013103700	Arlington Ridge	2000	394.58	2,327	1,438	923	174	152	86	7	87	515	64.2%	12.1%	10.6%	6.0%	0.5%	6.1%	35.8%	25	79
51013103700	Arlington Ridge	2013 ACS	394.58	2,343	1,351	887	134	122	30	42	112	464	65.7%	9.9%	9.0%	2.2%	3.1%	8.3%	34.3%	30	99
	22202 Study Area	1990	2,144.39	15,945	10,731	3,704	3,671	995	1,973	26	258	7,027	34.5%	34.2%	9.3%	18.4%	0.2%	2.4%	65.5%		252
	22202 Study Area	2000	2,144.39	16,376	10,948	4,414	3,951	643	1,375	28	362	6,359	40.3%	36.1%	5.9%	12.6%	0.3%	3.3%	58.1%		351
	22202 Study Area	2013 ACS	2,144.39	20,760	14,758	5,463	6,599	539	1,064	223	668	8,627	37.0%	44.7%	3.7%	7.2%	1.5%	4.5%	58.5%		562

Transportation Related Demographic Data for 22202 (1990 Census, 2000 Census and 2009-2013 American Communities Survey)

Household Vehicle Ownership

Census Tact	Name	Year	Land Area (Acres)	Households	Households Vehicle Ownership				Households Vehicle Ownership by %			
					0	1	2	3+	0	1	2	3+
51013	Arlington County	1990	16,690.56	78,520	9,605	37,761	22,833	8,321	12.2%	48.1%	29.1%	10.6%
51013	Arlington County	2000	16,690.56	86,352	10,688	41,800	25,526	8,338	12.4%	48.4%	29.6%	9.7%
51013	Arlington County	2013 ACS	16,690.56	94,454	11,261	45,398	28,528	9,267	11.9%	48.1%	30.2%	9.8%
51013103402	Crystal City/Potomac Yards	1990	1,241.24	2,037	396	1,324	282	35	19.4%	65.0%	13.8%	1.7%
51013103402	Crystal City/Potomac Yards	2000	1,241.24	1,983	360	1,263	303	59	18.2%	63.7%	15.3%	3.0%
51013103402	Crystal City/Potomac Yards	2013 ACS	1,241.24	3,019	433	1,967	536	56	14.3%	65.2%	17.8%	1.9%
51013103500	Pentagon City	1990	280.27	4,509	817	2,877	720	95	18.1%	63.8%	16.0%	2.1%
51013103500	Pentagon City	2000	280.27	4,889	1,062	2,956	721	132	21.7%	60.5%	14.7%	2.7%
51013103500	Pentagon City	2013 ACS	280.27	5,790	1,085	3,602	962	141	18.7%	62.2%	16.6%	2.4%
51013103501	Pentagon City - West	2013 ACS		1,944	439	1,174	313	18	22.6%	60.4%	16.1%	0.9%
51013103502	Pentagon City - Core	2013 ACS		1,829	417	1,166	174	72	22.8%	63.8%	9.5%	3.9%
51013103503	Crystal City West - North	2013 ACS		2,017	229	1,262	475	51	11.4%	62.6%	23.5%	2.5%
51013103600	Aurora Highlands	1990	228.30	1,758	317	794	499	148	18.0%	45.2%	28.4%	8.4%
51013103600	Aurora Highlands	2000	228.30	1,776	249	882	480	165	14.0%	49.7%	27.0%	9.3%
51013103600	Aurora Highlands	2013 ACS	228.30	1,613	175	622	643	173	10.8%	38.6%	39.9%	10.7%
51013103601	Aurora Highlands	2013 ACS		943	76	247	497	123	8.1%	26.2%	52.7%	13.0%
51013103602	Crystal City West - South	2013 ACS		670	99	375	146	50	14.8%	56.0%	21.8%	7.5%
51013103700	Arlington Ridge	1990	394.58	1,003	36	299	412	206	3.6%	29.8%	41.1%	20.5%
51013103700	Arlington Ridge	2000	394.58	994	32	340	431	209	3.2%	34.2%	43.4%	21.0%
51013103700	Arlington Ridge	2013 ACS	394.58	944	27	302	364	251	2.9%	32.0%	38.6%	26.6%
	22202 Study Area	1990	2,144.39	9,307	1,566	5,294	1,913	484	16.8%	56.9%	20.6%	5.2%
	22202 Study Area	2000	2,144.39	9,642	1,703	5,441	1,935	565	17.7%	56.4%	20.1%	5.9%
	22202 Study Area	2013 ACS	2,144.39	11,366	1,720	6,493	2,505	621	15.1%	57.1%	22.0%	5.5%