MIGRATION TRENDS IN THE PITTSBURGH REGION: UPDATE THROUGH 2010

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Summary

This is a periodic report of the University Center for Social and Urban Research (UCSUR) at the University of Pittsburgh, which uses county–to-county migration data distributed by the U.S. Internal Revenue Service (IRS) to study population migration trends impacting the Pittsburgh region. IRS migration data uses the reported addresses on federal tax filings to compile measures of population migration for counties within the United States. For benchmarking against other metropolitan regions, this report compiles migration flows for the 7-county Pittsburgh Metropolitan Statistical Area (Metro SA). For the population trends impacting the broader Southwestern Pennsylvania region, county-to-county migration flows within a 10-county area are compiled here. This update focuses on the most recent annual data provided by the IRS which is for migration between 2009 and 2010.

Key findings of this report include:

- Between 2009 and 2010, 1,430 more people moved into of the Pittsburgh Metro SA than moved out. This represents the second successive year the IRS county-to-county migration data has shown positive net migration into the Pittsburgh Metro SA.

- Destinations of the largest out-migration flows from the Pittsburgh Metro SA between 2009 and 2010 included the Washington, DC (1,133 out-migrants), Philadelphia (1,065 out-migrants), and New York City (1,024 out-migrants) Metro SAs.

- Regions that were the originations of the largest migration flows into the Pittsburgh Metro SA between 2009 and 2010 were the New York City (1,050 in-migrants) , Philadelphia (956 in-migrants) and Washington DC (903 in-migrants) Metro SAs.

- Within Southwestern Pennsylvania, the largest migration flows continue to be to and from Allegheny County. The net loss of population from Allegheny County to any of the other nine counties in Southwestern Pennsylvania measured 1,599 people between 2009 and 2010.

- The largest county-to-county migration flows within Southwestern Pennsylvania were between Allegheny County and Westmoreland County. Between 2009 and 2010, 3,412 migrants moved from Allegheny County to Westmoreland County, while 2,734 moved from Westmoreland County to Allegheny County over the same period.

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Introduction and Methodology

This report uses U.S. Internal Revenue Service (IRS) county-to-county migration datasets to analyze migration flows impacting the Pittsburgh region. IRS migration data is a standard data source for studying population in the Pittsburgh region.[i] The IRS migration data uses administrative records (income tax returns) from the IRS Individual Master File to produce statistics on the movement of people between counties across the nation.[ii] The Individual Master File includes a record for every Form 1040, 1040A, and 1040EZ individual income tax return filed by citizens and resident aliens. Statistics derived from individual income tax returns are based on year over year changes in the addresses reported by tax filers. The IRS does not release any data on individual taxpayers but aggregates the total number of people who move between each pair of counties.

For each pair of counties which the IRS identifies as having a flow of migrants, the IRS reports the total number of filings along with the total number of exemptions claimed, the median Adjusted Gross Income (AGI), and the aggregate AGI for that set of filings. In order to protect confidentiality of individual filers, data is suppressed for county-to-county migration flows with less than 10 filings in a given year, or if the flow is at least 0.5 percent of all county migrant exemptions. This suppression may introduce limited errors into summary migration flows such as those compiled here. The migration data reported here reflects the total number of exemptions claimed on tax filings, which is considered to be a proxy for population migration.

For an analysis of inter-regional migration flows, data has been aggregated into gross and net migration flows between the Pittsburgh Metropolitan Statistical Area (Metro SA) and all other Core Based Statistical Areas (CBSAs) in the United States. CBSAs are geographic definitions of regions introduced by the U.S. Office of Management and Budget (OMB) in 2003.[iii] CBSAs include both Metro SAs and a new type of statistical reporting area classification called Micropolitan Statistical Areas (Micro SAs)[iv]. CBSAs are defined by concentrations of population in core counties with additional counties included in a particular CBSA based on the commuting patterns of workers between counties. Not used in this report is an additional new type of geographic area classification called Combined Statistical Area (CSA). CSAs can be formed when adjoining CBSAs, either metropolitan or micropolitan, meet certain thresholds of workforce integration defined by the commuting patterns of workers.

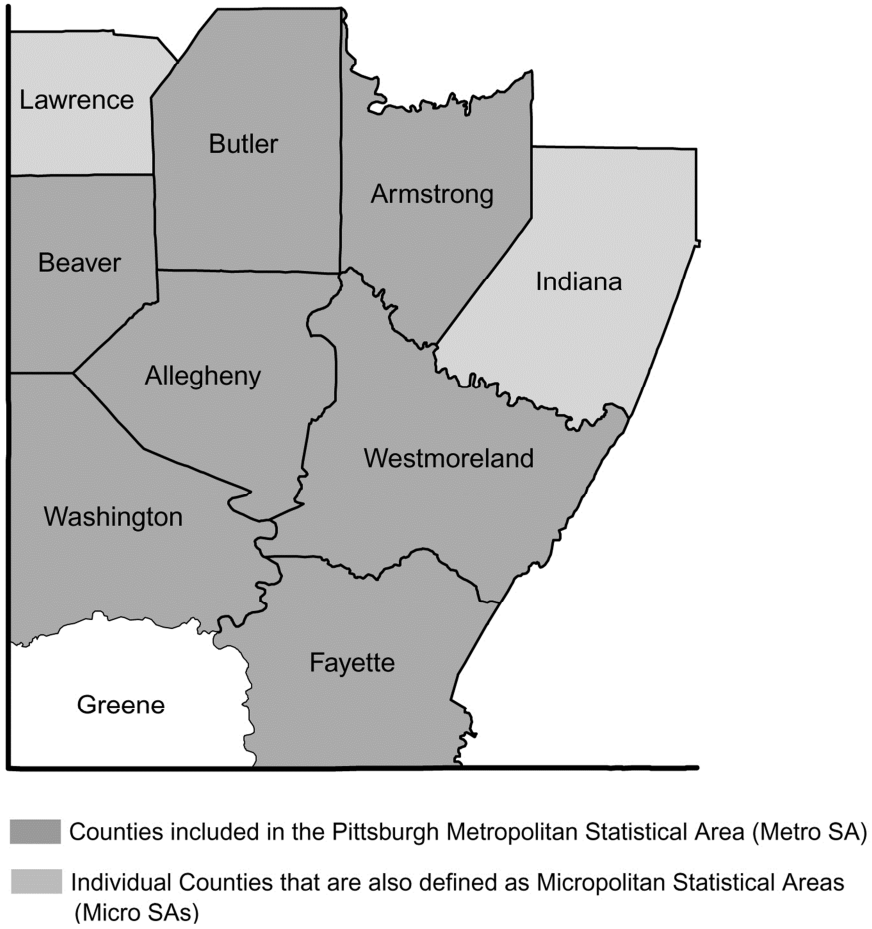
The current definition of the Pittsburgh Metro SA comprises seven counties in Southwestern Pennsylvania (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland). Two Micro SAs are defined within Southwestern Pennsylvania, including New Castle (Lawrence County) and Indiana County. In Southwestern Pennsylvania there currently exists one CSA (Pittsburgh-New Castle), which is an eight-county area formed by the combination of the Pittsburgh Metro SA and the New Castle (Lawrence County) Micro SA.

When comparing migration to other regions, this report compiles CBSA to CBSA migration flows focusing on the Pittsburgh Metro SA. This covers migration flows in and out of the seven counties as described above that currently make up the Pittsburgh Metro SA.

Historical data is also compiled to match current geographic definitions for the Pittsburgh Metro SA and other CBSAs across the nation.

For the purposes of studying *intra*-regional migration patterns, this report also compiles county level migration data for 10 individual counties in Southwestern Pennsylvania. These include the seven counties of the Pittsburgh Metro SA and also the adjoining counties of Greene, Indiana and Lawrence. Figure 1 depicts the 10 counties of Southwestern Pennsylvania. Shading depicts the seven counties of the Pittsburgh Metro SA, and the two individual Micro SAs defined within Southwestern Pennsylvania (New Castle-Lawrence County, PA and Indiana, PA).

Figure 1. Southwestern Pennsylvania Counties



IRS migration data is not a complete picture of migration flows in the United States. A significant amount of migration in the U.S. comes from international immigrants who are typically not residents who need to file IRS tax returns before entering the country. The IRS migration statistics mostly captures domestic or internal migration of population within the United States. The IRS data does not capture all domestic migration due to the fact that not everyone files a tax return annually. Students, seniors, those who have recently lost a spouse, or others with low income are some of the populations that are not fully

captured by IRS tax filings.[v] Overall, the IRS migration data is estimated to capture over 80 percent of the movement of the population domestically within the U.S.

IRS migration data is one of the primary data sources used by the Census Bureau to calculate annual estimates of population change by county. The Census Bureau uses IRS migration data to derive net domestic migration rates for the household population under age 65. In addition to the IRS data compiled here, the Census Bureau calculates net domestic migration rates for the household population age 65 and older from tabulations of Medicare enrollees in each county obtained from the Centers for Medicare and Medicaid Service. This additional data results in slightly different migration calculations between the IRS data and Census Bureau population estimates data.

While the IRS does not define a specific reference date within the year for this data, the migration flows should be interpreted as migration over an annual period ending in the middle of each calendar year. The IRS captures changes of address from the date of an individual tax filing compared to the address reported in the previous year. The actual date of filing differs for individual returns, but most tax returns are filed and processed in the spring. Thus, data labeled 2009-2010 generally captures migration over an annual period ending in the middle of 2010.

Inter-regional Migration

Inter-regional migration flows are defined here as the movement of people between Core Based Statistical Areas (CBSAs), which include both Metropolitan Statistical Areas (Metro SAs) and Micropolitan Statistical Areas (Micro SAs), across the United States.

Table 1 and Figure 2 show the annual gross migration flows in and out of the Pittsburgh Metro SA between 1995 and 2010. The migration flows for the Pittsburgh Metro SA have averaged 40,353 people moving out of the region annually between 2000 and 2010. Annual inflows of population have averaged 36,765 over the same period resulting in an average annual net loss of population due to migration of 3,589. The magnitude of out-migration from the Pittsburgh region has been declining since the 2004-2005 period, and the most recent annual period (2009-2010) was the second in which net migration for the Pittsburgh region was positive, with an estimated 1,430 more people moving into the region than moving out.

Figure 2. Annual Migration Flows from IRS Data for the Pittsburgh Metro SA: 1995-2010

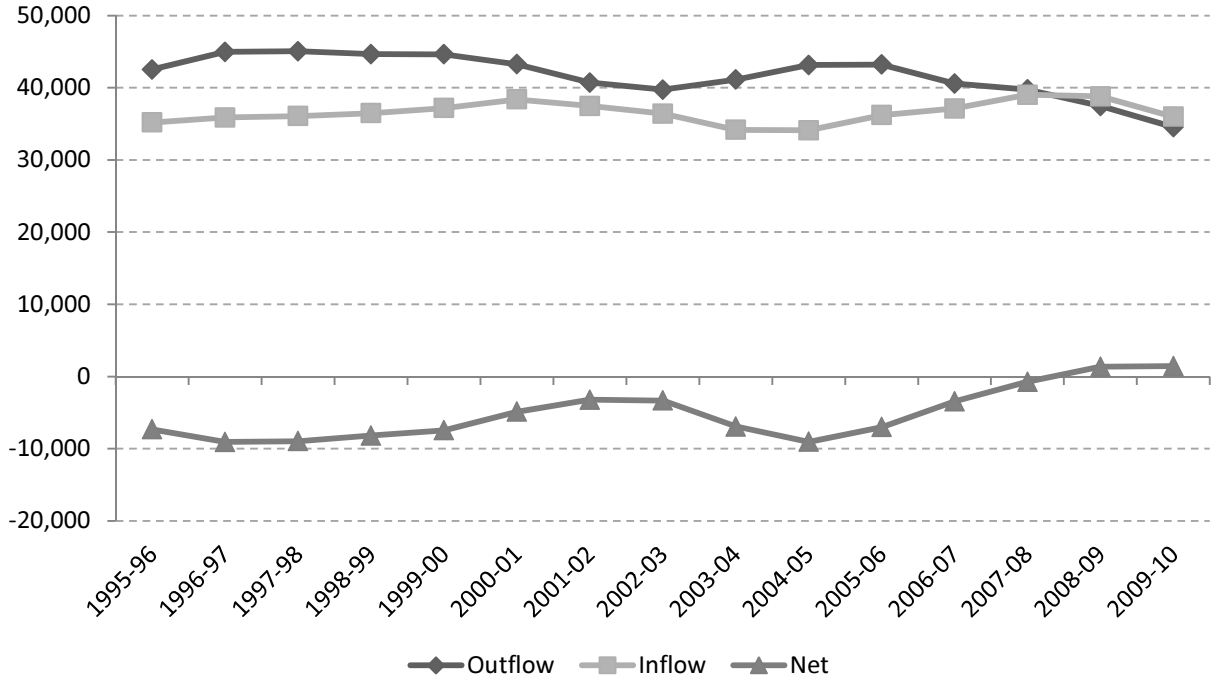


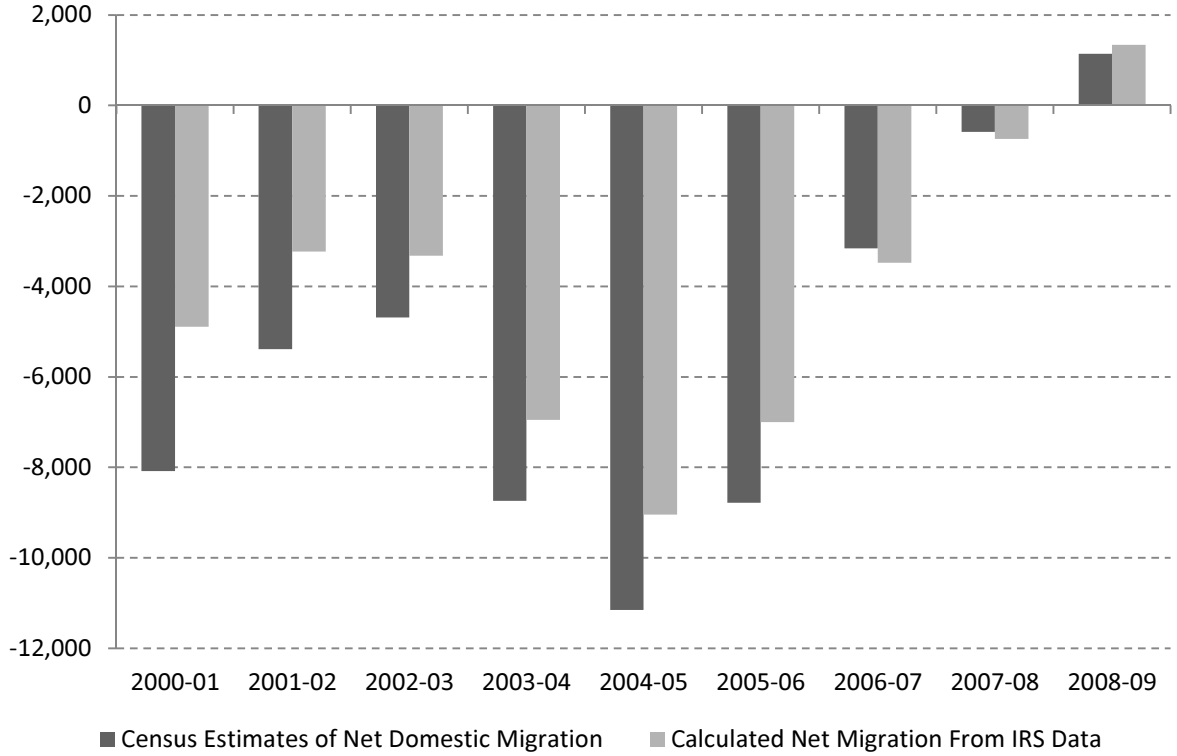
Table 1. Annual Migration Flows Affecting the Pittsburgh Metro SA 1995 - 2010

Period	Out-migrants from Pittsburgh	In-migrants into Pittsburgh	Net Migration
1995-96	42,512	35,186	-7,326
1996-97	44,956	35,876	-9,080
1997-98	45,046	36,080	-8,966
1998-99	44,656	36,462	-8,194
1999-00	44,632	37,185	-7,447
2000-01	43,261	38,370	-4,891
2001-02	40,698	37,466	-3,232
2002-03	39,736	36,415	-3,321
2003-04	41,125	34,177	-6,948
2004-05	43,148	34,101	-9,047
2005-06	43,211	36,209	-7,002
2006-07	40,581	37,106	-3,475
2007-08	39,759	39,021	-738
2008-09	37,463	38,800	+1,337
2009-10	34,551	35,981	+1,430

Table 2 lists the CBSAs across the U.S. with the largest cumulative gross migration flows to or from the Pittsburgh Metro SA. Only migration flows that include an origination or destination within a CBSA are used to compile these inter-regional migration statistics. Migration to rural counties, or any county not included in a CBSA, is excluded from these compilations. Maps of gross migration flows between Pittsburgh and all CBSAs across the continental United States are shown in Figures 3 and 4.

The net migration calculated from the IRS county-to-county migration data generally mirrors the pattern of domestic migration reported by the Census Bureau's population estimates program. Domestic migration is generally the movement population within the United States and is distinct from international immigration. As explained in the previous section, the Census Bureau's population estimates program uses the IRS data as one of its sources for the calculation of net migration at the county level. In addition to the IRS data compiled here, the Census Bureau calculates net domestic migration rates for the household population age 65 and older from tabulations of Medicare enrollees in each county obtained from the Centers for Medicare and Medicaid Service. Figure 3 compares the calculated net migration flow for the Pittsburgh Metro SA as reported by the two different sources for the period between 2000 and 2009: the Census Bureau's population estimates program and what is compiled here from the IRS county-to-county migration data files. At the time this report was compiled, the Census Bureau population estimates program had not yet released net migration data for the period 2009-2010.

Figure 3. Comparison of Migration Data for the Pittsburgh Metropolitan Area 2001-2009



The largest gross flows of migration affecting the Pittsburgh Metro SA result from exchanges of population with the Washington, DC, Philadelphia, and New York City Metro SAs. Smaller but significant migration flows are generated between Pittsburgh and nearby Micro SAs, including New Castle (Lawrence County), PA, Youngstown, OH, and Indiana, PA.

Table 2 shows the CBSAs with the largest in-migration and out-migration flows impacting the Pittsburgh Metro SA. The Philadelphia and New York Metro SAs and the Indiana, PA Micro SA, respectively, were the originations of the largest flows of migration into the Pittsburgh region between 2009 and 2010. The Washington, Philadelphia and New York Metro SAs attracted the largest outflows of migrants leaving Pittsburgh between 2009 and 2010. Figures 4 and 5 show the pattern of these migration flows for all CBSAs across the continental United States.

Overall population change is determined by net migration, the difference between in-migration and out-migration flows. Table 3 shows the CBSAs with the largest net migration flows affecting the Pittsburgh Metro SA. Figure 6 shows a complete pattern of CBSAs across the continental United States that had positive net migration from the Pittsburgh Metro SA between the period 2009 and 2010. Figure 7 shows the complete pattern of CBSAs which lost population to the Pittsburgh Metro SA due to migration between the period 2009 and 2010.

Table 2. Largest Migration Flows Affecting the Pittsburgh Metro SA 2009-2010

	Migration		
Ranked by Largest Inflows by CBSA	Into Pittsburgh	Out of Pittsburgh	Net
New York-Northern New Jersey-Long Island	1,050	1,024	26
Philadelphia-Camden-Wilmington	956	1,065	-109
Washington-Arlington-Alexandria	903	1,133	-230
Youngstown-Warren-Boardman	798	749	49
Indiana, PA*	761	603	158
New Castle, PA*	756	711	45
Erie	647	498	149
Cleveland-Elyria-Mentor	562	399	163
Chicago-Naperville-Joliet	468	332	136
Johnstown	421	324	97
Columbus	420	300	120
Los Angeles-Long Beach-Santa Ana	392	351	41
Miami-Fort Lauderdale-Pompano Beach	374	403	-29
Baltimore-Towson	363	343	20
Weirton-Steubenville	362	366	-4
Phoenix-Mesa-Scottsdale	359	455	-96
Harrisburg-Carlisle	332	280	52
Houston-Sugar Land-Baytown	318	271	47
Tampa-St. Petersburg-Clearwater	316	411	-95
Boston-Cambridge-Quincy	294	331	-37
Ranked by Largest Outflows by CBSA			
Washington-Arlington-Alexandria	903	1,133	-230
Philadelphia-Camden-Wilmington	956	1,065	-109
New York-Northern New Jersey-Long Island	1,050	1,024	26
Youngstown-Warren-Boardman	798	749	49
New Castle, PA*	756	711	45
Indiana, PA*	761	603	158
Erie	647	498	149
Phoenix-Mesa-Scottsdale	359	455	-96
Tampa-St. Petersburg-Clearwater	316	411	-95
Miami-Fort Lauderdale-Pompano Beach	374	403	-29
Cleveland-Elyria-Mentor	562	399	163
Atlanta-Sandy Springs-Marietta	288	387	-99
Weirton-Steubenville	362	366	-4
Charlotte-Gastonia-Concord	251	357	-106
Los Angeles-Long Beach-Santa Ana	392	351	41
Baltimore-Towson	363	343	20
Chicago-Naperville-Joliet	468	332	136
Boston-Cambridge-Quincy	294	331	-37
Morgantown	288	327	-39
Johnstown	421	324	97

* Micropolitan Statistical Area. All other regions are Metropolitan Statistical Areas.

Figure 4. Origination of Pittsburgh In-Migrants by CBSA Moving Between 2009-2010

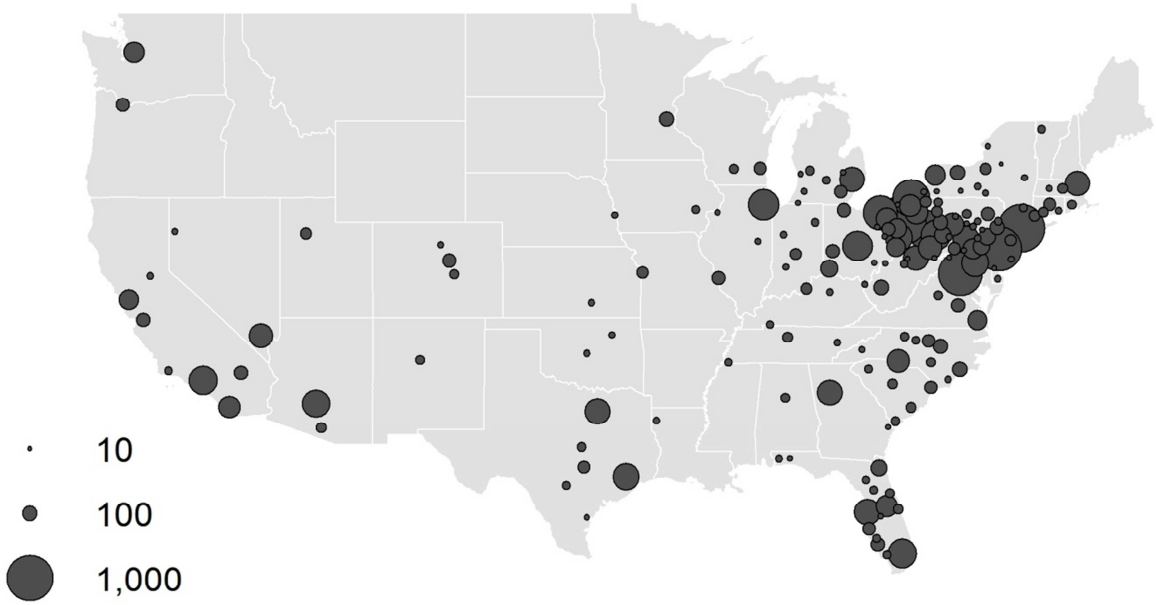


Figure 5. Destinations of Pittsburgh Out-Migrants by CBSA Moving Between 2009-2010

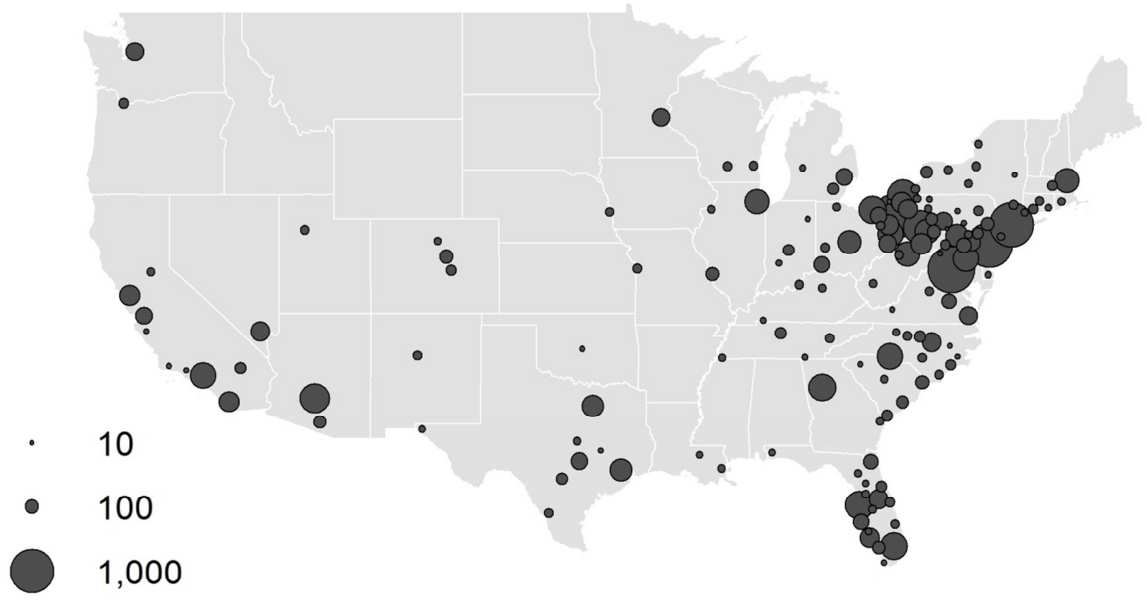


Table 3. Largest Net Migration Flows Affecting the Pittsburgh Metro SA 2009-2010

	Migration		
Largest Net In-migration Flows by CBSA	Into Pittsburgh	Out of Pittsburgh	Net
Cleveland-Elyria-Mentor	562	399	163
Indiana*	761	603	158
Erie	647	498	149
Chicago-Naperville-Joliet	468	332	136
Detroit-Warren-Livonia	291	157	134
Columbus	420	300	120
Buffalo-Niagara Falls	197	85	112
York-Hanover	211	113	98
Johnstown	421	324	97
Las Vegas-Paradise	267	183	84
Akron	230	153	77
State College	247	172	75
Charleston	103	36	67
Reading	133	67	66
Toledo	89	36	53
Harrisburg-Carlisle	332	280	52
Dallas-Fort Worth-Arlington	287	235	52
Rochester	96	45	51
Oil City, PA*	245	195	50
Youngstown-Warren-Boardman	798	749	49
Largest Net Out-migration by CBSA			
Washington-Arlington-Alexandria	903	1,133	-230
Philadelphia-Camden-Wilmington	956	1,065	-109
Charlotte-Gastonia-Concord	251	357	-106
Atlanta-Sandy Springs-Marietta	288	387	-99
Cape Coral-Fort Myers	87	186	-99
Phoenix-Mesa-Scottsdale	359	455	-96
Tampa-St. Petersburg-Clearwater	316	411	-95
Raleigh-Cary	110	197	-87
Austin-Round Rock	69	147	-78
San Jose-Sunnyvale-Santa Clara	82	151	-69
Sarasota-Bradenton-Venice	68	130	-62
Minneapolis-St. Paul-Bloomington	102	163	-61
Naples-Marco Island	25	85	-60
East Liverpool-Salem*	171	222	-51
Morgantown	288	327	-39
San Francisco-Oakland-Fremont	188	226	-38
Laredo	0	38	-38
Boston-Cambridge-Quincy	294	331	-37
San Antonio	33	70	-37
Port St. Lucie	0	37	-37

* Micropolitan Statistical Area. All other regions are Metropolitan Statistical Areas.

Figure 6. Regions with net in-migration to Pittsburgh by CBSA: 2009-2010

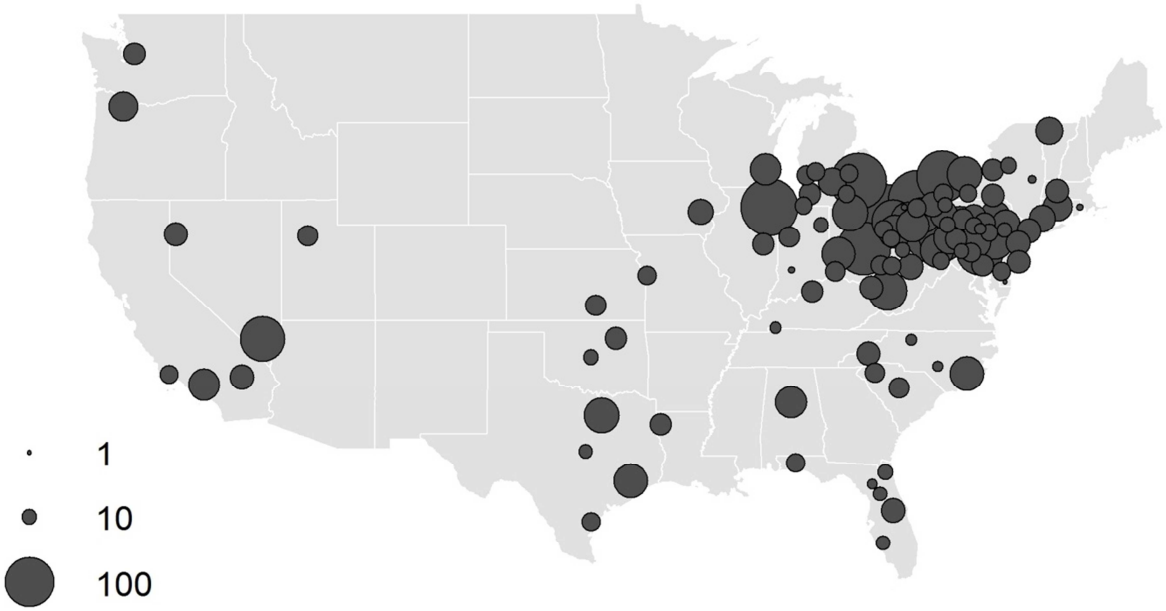
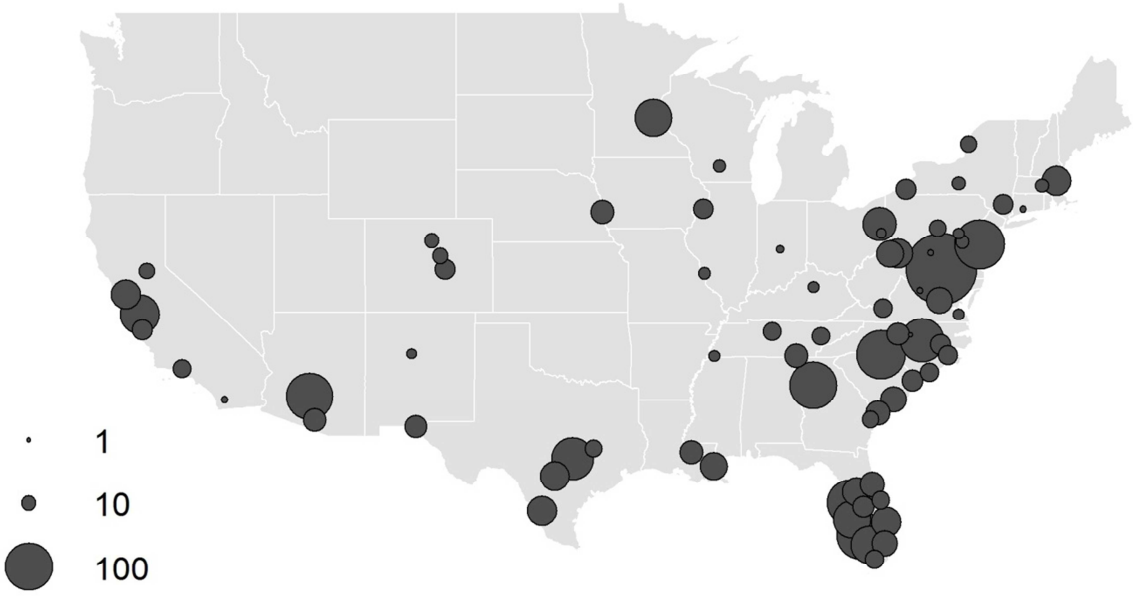


Figure 7. Regions with net out-migration from Pittsburgh by CBSA: 2009-2010



Intra-regional Migration within Southwestern Pennsylvania

This section compiles county level migration flows between the 10 counties within Southwestern Pennsylvania. These counties include the seven counties that comprise the Pittsburgh Metropolitan Statistical Area (Metro SA) and also include adjoining Greene, Indiana and Lawrence counties.

Migration flows within the region are dominated by flows to and from Allegheny County. Table 4 summarizes the migration flows between Allegheny County and the nine other counties within Southwestern Pennsylvania along with the cumulative migration flows between the nine counties other than Allegheny County. Since 2000, an average of 11,205 people have moved annually from Allegheny County to one of the other nine counties in Southwestern Pennsylvania, while an average of 8,353 have moved into Allegheny County from other counties within the region. The resulting net migration has averaged 2,734 more people from Allegheny County to the nine remaining counties of Southwestern Pennsylvania than have moved in. Figure 8 shows the annual flow of migration between Allegheny County and the nine remaining counties of the Southwestern Pennsylvania between 1995 and 2010.

Table 5 shows the most recent annual migration flows between each pair of counties within Southwestern Pennsylvania. The largest county-to-county flow of migration between 2009 and 2010 was 3,412 people who moved from Allegheny County to Westmoreland County followed by 2,850 who moved from Westmoreland County to Allegheny County. Table 6 compiles the net migration between each pair of counties within Southwestern Pennsylvania between 2009 and 2010. The largest net migration flow was between Allegheny and Westmoreland counties where 678 more people moved out of Allegheny County compared to the number that moved in from Westmoreland County in that period.

Table 4. Annual Migration within Southwestern Pennsylvania 1993-2010

	Allegheny to Suburban Counties	Suburban Counties to Allegheny	Net Migration from Allegheny County	Inter-county Migration Between Suburban Counties
1992-93	13,265	8,517	4,748	9,126
1993-94	13,380	8,425	4,955	9,201
1994-95	12,326	8,043	4,283	9,175
1995-96	10,953	7,077	3,876	8,455
1996-97	10,779	7,691	3,088	8,637
1997-98	10,932	7,342	3,590	9,042
1998-99	11,322	8,557	2,765	9,301
1999-00	11,395	8,345	3,050	9,612
2000-01	11,147	8,715	2,432	9,605
2001-02	11,783	8,161	3,622	9,620
2002-03	12,164	8,223	3,941	9,300
2003-04	12,262	8,195	4,067	9,678
2004-05	11,912	7,757	4,155	9,362
2005-06	11,252	8,100	3,152	9,436
2006-07	10,748	8,132	2,616	9,362
2007-08	10,931	8,531	2,400	9,699
2008-09	9,629	9,090	539	9,261
2009-10	10,223	8,624	1,599	8,533

Figure 8. Intra-regional Migration Flows Impacting Allegheny County: 1994-2010

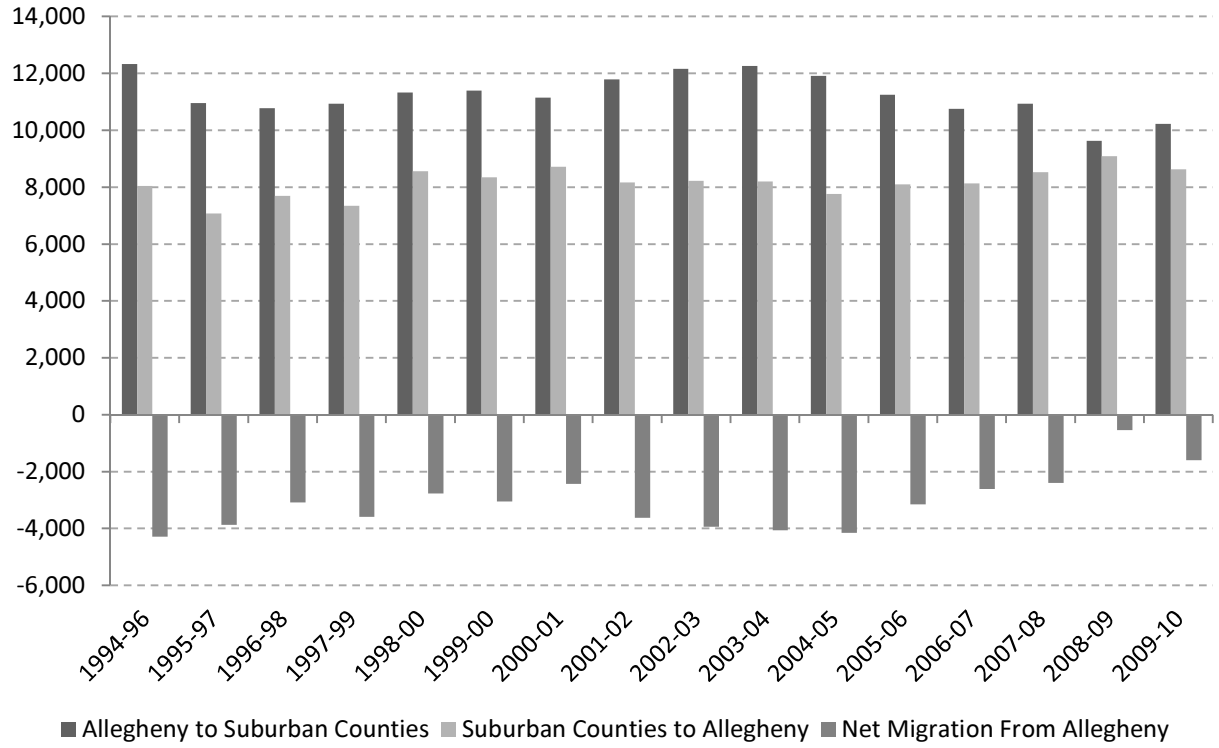


Table 5. Cumulative Migration Flows within Southwestern Pennsylvania 2009-2010

Originating County \ Destination County	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	Washington	Westmoreland	Subtotal
Allegheny		279	1,458	2060	296	52	154	203	2,309	3,412	10,223
Armstrong	340		*	245	*	*	144	*	*	394	1,123
Beaver	1,249	*		375	*	*		259	63	54	2,000
Butler	1604	219	415		16		20	228	52	153	2,707
Fayette	305	*	26	*		105	28	*	293	693	1,450
Greene	75	*	*	*	149		*	*	226	27	477
Indiana	233	182	18	48	*	*		*	*	280	761
Lawrence	227	*	336	193	*	*	*		*	*	756
Washington	1,857	*	108	99	348	208	26	*		438	3,084
Westmoreland	2,734	442	86	210	588	24	231	21	463		4,799
Subtotal:	8,624	1,122	2,447	3,230	1,397	389	603	711	3,406	5,451	

Table 6. Net Migration within Southwestern Pennsylvania 2009-2010

Originating County \ Destination County	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	Washington	Westmoreland
Allegheny	-61	209	456	-9	-23	-79	-24	452	678
Armstrong	*	26	*	*	-38	*	*	-48	
Beaver	-40	-26	*	-18	-77	-45	-32		
Butler	16	*	-28	35	-47	-57			
Fayette	-44	28	*	-55	105				
Greene	*	*	18	3					
Indiana	*	-26	49						
Lawrence	*	-21							
Washington	-25								

* 10 or fewer tax filings of migrants between counties

Appendix: Summary of annual migration flows by county, 2000-2010

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
In-migration										
Allegheny	30,073	29,142	28,240	27,126	25,918	27,756	28,522	30,099	31,191	28,800
Armstrong	2,365	2,270	2,342	2,346	1,836	1,917	1,980	1,968	1,807	1,777
Beaver	4,526	4,584	4,754	4,662	4,620	4,694	4,545	4,741	4,508	4,632
Butler	7,224	7,284	6,754	6,687	7,107	7,133	6,575	7,027	6,441	6,289
Fayette	3,030	3,260	3,232	3,145	2,885	2,936	3,052	3,030	3,031	2,871
Greene	1,116	1,187	1,115	1,089	1,000	1,124	1,070	1,121	1,093	1,023
Indiana	2,517	2,480	2,574	2,529	2,382	2,381	2,403	2,361	2,462	2,150
Lawrence	2,088	2,169	2,141	2,205	2,202	2,058	2,113	2,075	2,057	1,844
Washington	6,589	6,527	6,544	6,558	6,833	6,507	6,564	6,987	6,353	6,219
Westmoreland	9,683	9,694	9,937	9,489	9,940	9,971	9,979	10,211	9,315	9,076
Out-migration										
Allegheny	35,566	34,000	34,476	34,882	35,795	35,283	32,847	33,163	30,505	29,767
Armstrong	2,440	2,298	2,227	2,360	2,358	2,169	2,081	1,995	2,053	1,869
Beaver	5,217	4,986	4,729	4,900	5,090	5,348	4,854	4,807	4,647	4,161
Butler	6,090	5,939	5,889	6,337	6,440	6,210	6,098	6,260	6,034	5,701
Fayette	3,739	3,343	3,381	3,396	3,107	3,000	3,053	3,115	3,131	2,740
Greene	1,250	1,185	1,143	1,115	1,076	1,128	1,069	1,065	1,151	1,026
Indiana	2,828	2,721	2,512	2,750	2,579	2,631	2,569	2,643	2,480	2,364
Lawrence	2,434	2,302	2,299	2,323	2,338	2,356	2,268	2,326	2,245	2,152
Washington	5,788	5,896	5,477	5,755	5,736	6,157	6,078	5,823	5,668	5,534
Westmoreland	9,541	9,531	8,945	9,331	9,660	9,749	9,681	9,638	9,271	8,462
Net Migration										
Allegheny	-5,493	-4,858	-6,236	-7,756	-9,877	-7,527	-4,325	-3,064	686	-967
Armstrong	-75	-28	115	-14	-522	-252	-101	-27	-246	-92
Beaver	-691	-402	25	-238	-470	-654	-309	-66	-139	471
Butler	1,134	1,345	865	350	667	923	477	767	407	588
Fayette	-709	-83	-149	-251	-222	-64	-1	-85	-100	131
Greene	-134	2	-28	-26	-76	-4	1	56	-58	-3
Indiana	-311	-241	62	-221	-197	-250	-166	-282	-18	-214
Lawrence	-346	-133	-158	-118	-136	-298	-155	-251	-188	-308
Washington	801	631	1,067	803	1,097	350	486	1,164	685	685
Westmoreland	142	163	992	158	280	222	298	573	44	614

Note that county migration flows may include migration to other counties within Southwestern Pennsylvania

Notes

[i] Some previous reports that have used IRS migration data to study population change in the Pittsburgh region include: Ghambir Batta, “Migration Patterns and Trends of the Ten-County Region of Southwestern Pennsylvania, 1980 – 1985”, City of Pittsburgh Department of City Planning, 1987; Christine Nolan, “The Public Policy Implications of Current Population Dynamics in the Pittsburgh Metropolitan Region”, Graduate School of Public and International Affairs, University of Pittsburgh, September 1996; Christopher Briem, “Population Migration and the Pittsburgh Region: Update for 1999-2000”, University Center for Social and Urban Research, University of Pittsburgh, December 2001; Lena Andrews, “Origins and Destinations of Pittsburgh Migrants”, Center for Economic Development, Carnegie Mellon University, April 1, 2004. Research using other data to study migration flows impacting the Pittsburgh region include Robert Gradeck, “Migration and the Pittsburgh Region 1985-1990”, unpublished thesis, Georgia Institute of Technology, October 1995.

[ii] For more on the collection of IRS migration data see: Emily Gross, “Internal Revenue Service Area-To-Area Migration Data: Strengths, Limitations, and Current Trends”, Internal Revenue Service, 2005, on the Internet at http://www.irs.gov/pub/irs-soi/05gross.pdf.

[iii] For more on the changes in the definition of metropolitan regions see OMB Bulletin No. 03-04 Attachment: Metropolitan Statistical Areas, Micropolitan Statistical Areas, Combined Statistical Areas, New England City and Town Areas, Combined New England City and Town Areas 2003 Lists 1 through 8, Statistical and Science Policy Branch, Office of Information and Regulatory Affairs, Office of Management and Budget, 2003.

[iv] The new geographical categories of both Metropolitan and Micropolitan Statistical Areas make the previously used abbreviation MSA confusing. For this report the abbreviations Metro SA and Micro SA are used to designate the two types of core based statistical areas (CBSAs).

[v] The concentration of students in Allegheny County has another potential bias in IRS migration statistics. Students who are claimed on their parents tax return will not be captured by this data. However, students are more likely to file independently as they get older. If a student begins filing an independent tax return while in school and then moves away they will be captured by this data when they leave even though they were not captured when they arrived. This pattern matches that found in. “Migration analysis: A case study for local public policy “, by Paul R. Voss, Roger B. Hammer and Ann M. Meier; Population Research and Policy Review 20: 587–603, 2001.