Northern Tier



Bradford, Sullivan, Susquehanna, Tioga, and Wyoming Counties

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Introduction

The Migration Patterns report was prepared by the Central Pennsylvania Workforce Development Corporation (CPWDC) for the Northern Tier Workforce Investment Board. The Northern Tier region includes Bradford, Sullivan, Susquehanna, Tioga, and Wyoming Counties.

All data is provided by the U.S. Census Bureau's American Community Survey (ACS). The ACS has single year, 3-year, and 5-year estimates. Data from the 3-year survey includes areas with a population of 20,000 or more, while the single-year survey's threshold is 65,000. Due to the relatively small populations found in the Northern Tier, the 3-year ACS surveys were selected for analysis. Rural areas such as the Northern Tier benefit from this multi-year survey because more counties are included in the data collection. Only Sullivan County is not included in the three-year ACS because of its low population.

American Community Survey 3-year estimates are based on data collected between, for example, January 2007 and December 2009 for the 2007-2009 survey. This data represents the average characteristics over the 3-year period. Equal weight is given to each of the 36 months, so the data should be interpreted as an annual average that may or may not have fluctuated during the survey time period.

While this report identifies if there was net in- or out-migration and by how much, it does not identify the specific county from which people relocated or the county to which they moved. Results are only presented by Individual county; the data does not allow for a regional perspective that encompasses all counties as a whole. Similar to other survey results, the data used in this report is dependent on where people declare residency.

Despite these limitations, migration patterns are presented by age group which may allow the reader to infer the purpose for individuals' relocations, but such conjectures should not be considered factual.

Methodology

The objective of this report is to compare two main data sets:

- Geographic mobility in the past year by current residence
- Geographic mobility in the past year for residence one year ago

The "current residence" data set identifies the in-migration that occurred in the area, while out-migration is identified in the "residence one year ago" data set. Simply comparing the levels of these data sets determined if there was net in-migration, where there were more people moving into a county, or net out-migration, where more people moved out of a county.

The focus of this report is on total in- or out-migration for the entire population, not the workforce. Additional datasets from the ACS are available that focus on gender, citizenship, marital status, education, income, and poverty status. Please see the *Geographic Mobility Report* for further information.



Interpreting Results

In its most basic form, migration patterns reveal how the population is changing. While the specific causes for migrating in or out of a county are unknown, several implications can be made when reviewing the results. Even though they are assumptions, they can be supported by referencing other data or using local knowledge of the area. For example, labor market conditions may be revealed if there is a large wave of working age individuals leaving or coming to the area. Migration patterns only point to the local factors that have caused people to move; they do not reveal the true cause of the migration.

The results of this analysis are likely skewed by the presence of post-secondary institutions, training programs, or correctional facilities. While incarcerated at these institutions or attending post-secondary or other training programs, individuals typically declare residence in the county, but may or may not remain they are no longer incarcerated or when they have completed their training.

Results

As described in the methodology, the in-migration and out-migration data sets were compared to determine net-migration levels. Net in-migration is identified by positive values, while net out-migration uses negative values.

In addition to the people that moved between counties during each time period, there were non-migrants who stayed in the same county.

The following table identifies the average number of non-migrants for the Northern Tier counties:

Non-Migration Patterns									
Geography	Non-Migration	"Current" Population	Percent Non- Migration						
Pennsylvania	12,016,896	12,316,543	97.6%						
Bradford County	58,329	60,606	96.2%						
Sullivan County		Not Available							
Susquehanna County	39,112	40,797	95.9%						
Tioga County	38,119	40,266	94.7%						
Wyoming County	26,332	27,676	95.2%						

Based on the average for the 2005-2007, 2006-2008, and 2007-2009 American Community Surveys using the "current residence" datasets

The "current residence" dataset is not available in Wyoming County for 2006-2008; this value has been replaced by the "residence one year ago" dataset

In each county, the majority of the population is formed by individuals who did not move out of the county in the past year. This table does not reveal the intra-county movement; only individuals who did not move or moved within the county are counted in this table. Similarly, the State non-migration value does not show how many people moved to different counties. At least in the Northern Tier, it is



common for only a small percentage of the population to relocate amongst counties from year to year. Nonetheless, there are still large waves of individuals moving into and moving away from each county.

The following table identifies the average in- and out-migration patterns for each Northern Tier county:

Average Migration Patterns									
Geography	In-Migration	Out-Migration							
Pennsylvania	299,646	233,787							
Bradford County	2,277	2,271							
Sullivan County	Not Available								
Susquehanna County	1,685	2,066							
Tioga County	2,147	1,593							
Wyoming County	1,157	1,593							

Based on the average for the 2005-2007, 2006-2008, and 2007-2009 American Community Surveys The "current residence" dataset, which identifies in-migration levels, is not available in Wyoming County for 2006-2008

On average, Bradford and Tioga Counties demonstrated higher in-migration levels, while Susquehanna and Wyoming Counties experienced higher out-migration levels.

During each survey time period, there were changes to the population caused by differing levels of migration, which is referred to as *net-migration*. If there was a higher level of in-migration, the net-migration values shown in the following table indicate more people migrated into the area, while negative net-migration values signify more people migrated away from the area. The following table shows the net-migration in the Northern Tier counties:

Net-Migration										
Geography	2005-2007 Survey	2006-2008 Survey	2007-2009 Survey	Total Change						
Pennsylvania	65,698	63,290	68,589	197,577						
Bradford County	11	-105	110	16						
Sullivan County		Not Available								
Susquehanna County	-19	-72	-1,051	-1,142						
Tioga County	594	718	349	1,661						
Wyoming County	-438		-309	-747						

Based on the 2005-2007, 2006-2008, and 2007-2009 American Community Surveys

The "current residence" dataset, which identifies in-migration levels, is not available in Wyoming County for 2006-2008

Positive net-migration levels indicate net in-migration; negative net-migration levels indicate net out-migration.



Despite source data being 3-year estimates, they represent average annual estimates based on individuals' current residences or residences 1 year ago. As shown with the average migration patterns table, both Bradford and Tioga County experienced a total positive change spanning the 3 time periods. For Bradford County specifically, net out-migration during the 2006-2008 survey time period lowered the overall increase in the county. Susquehanna and Wyoming Counties demonstrated a total negative change during the time periods, which each demonstrated net out-migration.

Net-migration numbers reveal the overall "change" associated with in- and out-migration patterns. This is only a small piece of the puzzle – it does not show if these people came to area for employment opportunities, if they left the area because of a lack of or mismatch of skills and job openings, or if they are even in the labor force. Additional data from the American Community Survey provides insight as to who may be coming to or leaving the area and the purpose of their relocation. Specifically, migration patterns are available by age group and are shown in the following tables.

Please note that the change values will be the same for both the "Residence Change" and "Migration" sections of the tables. This is because of the non-migration population that was discussed earlier. Basically, the non-migration population makes up a large portion of the total population. Since these individuals did not move out of the county, they do not have an effect on the net-migration or the "change" seen in the tables. The only factor causing any change is the net-migration caused by individuals in-migrating to the county or out-migrating away from the county.



	Bradford County										
				Resi	idence Cha	ange					
		2005-2007			2006-2008			2007-2009			
AGE	Current	Previous		Current	Previous		Current	Previous		Total	
GROUP	Year	Year	Change	Year	Year	Change	Year	Year	Change	Change	
_	Residence	Residence		Residence	Residence		Residence	Residence			
Total	60,827	60,816	11	60,517	60,622	-105	60,473	60,363	110	16	
1-4	2,917	2,882	35	2,885	2,842	43	2,956	2,984	-28	50	
5-17	10,709	10,544	165	10,363	10,194	169	10,425	10,189	236	570	
18-19	1,258	1,439	-181	1,242	1,515	-273	1,525	1,787	-262	-716	
20-24	3,270	3,569	-299	3,174	3,387	-213	3,479	3,716	-237	-749	
25-29	3,421	3,466	-45	3,685	3,698	-13	2,804	2,817	-13	-71	
30-34	3,279	3,153	126	3,156	3,123	33	2,803	2,792	11	170	
35-39	3,584	3,486	98	3,634	3,516	118	3,769	3,577	192	408	
40-44	4,928	4,880	48	4,701	4,683	18	4,395	4,381	14	80	
45-49	4,925	5,020	-95	4,910	5,168	-258	4,927	5,095	-168	-521	
50-54	4,513	4,462	51	4,580	4,546	34	4,746	4,696	50	135	
55-59	3,824	3,781	43	3,970	3,933	37	4,379	4,320	59	139	
60-64	3,873	3,844	29	3,824	3,756	68	3,840	3,752	88	185	
65-69	2,810	2,768	42	2,936	2,907	29	2,895	2,903	-8	63	
70-74	2,381	2,344	37	2,360	2,311	49	2,615	2,523	92	178	
75+	5,135	5,178	-43	5,097	5,043	54	4,915	4,831	84	95	
					Migration	1					
AGE		2005-2007			2006-2008			2007-2009		Total	
GROUP	In-	Out-	Net	In-	Out-	Net	In-	Out-	Net	Total Change	
Citooi	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Change	
Total	2,288	2,277	11	2,367	2,472	-105	2,175	2,065	110	16	
1-4	78	43	35	140	97	43	122	150	-28	50	
5-17	329	164	165	381	212	169	370	134	236	570	
18-19	43	224	-181	13	286	-273	71	333	-262	-716	
20-24	429	728	-299	381	594	-213	235	472	-237	-749	
25-29	235	280	-45	288	301	-13	252	265	-13	-71	
30-34	289	163	126	171	138	33	100	89	11	170	
35-39	145	47	98	168	50	118	223	31	192	408	
40-44	133	85	48	118	100	18	108	94	14	80	
45-49	156	251	-95	161	419	-258	116	284	-168	-521	
50-54	102	51	51	110	76	34	112	62	50	135	
55-59	87	44	43	84	47	37	97	38	59	139	
60-64	102	73	29	147	79	68	157	69	88	185	
65-69	42	0	42	29	0	29	18	26	-8	63	
70-74	52	15	37	69	20	49	97	5	92	178	
75+	66	109	-43	107	53	54	97	13	84	95	



	Susquehanna County										
				Resi	idence Cha	ange					
		2005-2007			2006-2008	2008 2007-2009					
AGE	Current	Previous		Current	Previous		Current	Previous		Total	
GROUP	Year	Year	Change	Year	Year	Change	Year	Year	Change	Change	
	Residence	Residence		Residence	Residence		Residence	Residence			
Total	41,022	41,041	-19	40,796	40,868	-72	40,572	41,623	-1,051	-1,142	
1-4	1,922	1,758	164	1,845	1,828	17	1,789	1,927	-138	43	
5-17	7,057	7,034	23	6,850	6,884	-34	6,946	7,114	-168	-179	
18-19	945	1,099	-154	924	1,147	-223	1,006	1,422	-416	-793	
20-24	2,323	2,467	-144	2,267	2,294	-27	2,278	2,273	5	-166	
25-29	2,407	2,505	-98	2,573	2,610	-37	1,754	2,063	-309	-444	
30-34	2,122	1,991	131	2,077	1,998	79	1,764	1,827	-63	147	
35-39	2,332	2,315	17	2,332	2,285	47	2,341	2,302	39	103	
40-44	3,406	3,341	65	3,165	3,164	1	2,892	2,968	-76	-10	
45-49	3,476	3,376	100	3,532	3,284	248	3,497	3,324	173	521	
50-54	3,145	3,050	95	3,225	3,173	52	3,535	3,516	19	166	
55-59	2,758	2,766	-8	2,922	2,963	-41	3,097	3,178	-81	-130	
60-64	2,433	2,556	-123	2,360	2,396	-36	2,669	2,675	-6	-165	
65-69	1,984	2,020	-36	2,129	2,174	-45	2,297	2,276	21	-60	
70-74	1,580	1,580	0	1,467	1,473	-6	1,594	1,594	0	-6	
75+	3,132	3,183	-51	3,128	3,195	-67	3,113	3,164	-51	-169	
					Migration)					
AGE		2005-2007			2006-2008			2007-2009		Total	
GROUP	In-	Out-	Net	In-	Out-	Net	In-	Out-	Net	Change	
dicor	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Change	
Total	1,720	1,739	-19	1,882	1,954	-72	1,453	2,504	-1,051	-1,142	
1-4	218	54	164	148	131	17	100	238	-138	43	
5-17	254	231	23	239	273	-34	186	354	-168	-179	
18-19	52	206	-154	26	249	-223	47	463	-416	-793	
20-24	188	332	-144	249	276	-27	274	269	5	-166	
25-29	299	397	-98	274	311	-37	109	418	-309	-444	
30-34	184	53	131	210	131	79	91	154	-63	147	
35-39	50	33	17	86	39	47	77	38	39	103	
40-44	121	56	65	121	120	1	77	153	-76	-10	
45-49	124	24	100	261	13	248	229	56	173	521	
50-54	95	0	95	67	15	52	67	48	19	166	
55-59	61	69	-8	117	158	-41	114	195	-81	-130	
60-64	16	139	-123	44	80	-36	44	50	-6	-165	
65-69	24	60	-36	16	61	-45	21	0	21	-60	
70-74	13	13	0	10	16	-6	5	5	0	-6	
75+	21	72	-51	14	81	-67	12	63	-51	-169	



	Tioga County									
				Resi	idence Cha	ange				
	2005-2007			2006-2008				2007-2009		
AGE	Current	Previous		Current	Previous		Current	Previous		Total
GROUP	Year	Year	Change	Year	Year	Change	Year	Year	Change	Change
	Residence	Residence	504	Residence	Residence	740	Residence	Residence	240	4.554
Total	40,392 1,655	39,798	594	40,151	39,433	718 88	40,256 1,517	39,907	349 97	1,661
5-17	6,600	6,471	129	6,429	6,208	221	6,445	6,291	154	504
18-19	1,355	1,377	-22	1,323	1,360	-37	1,449	1,473	-24	-83
20-24	3,195	3,115	80	3,065	3,003	62	2,813	2,896	-83	59
25-29	2,297	2,270	27	2,419	2,430	-11	2,248	2,353	-105	-89
30-34	2,200	2,179	21	2,178	2,031	147	1,979	1,921	58	226
35-39	2,444	2,326	118	2,393	2,418	-25	2,317	2,324	-7	86
40-44	2,708	2,667	41	2,658	2,500	158	2,553	2,422	131	330
45-49	3,060	3,047	13	3,043	3,040	3	3,098	3,084	14	30
50-54	2,950	2,959	-9	2,988	2,967	21	3,104	3,093	11	23
55-59	2,614	2,558	56	2,743	2,708	35	2,984	3,035	-51	40
60-64	2,344	2,281	63	2,251	2,200	51	2,445	2,416	29	143
65-69	2,040	2,059	-19	1,969	1,986	-17	2,170	2,115	55	19
70-74	1,608	1,593	15	1,731	1,733	-2	1,836	1,764	72	85
75+	3,322	3,254	68	3,355	3,331	24	3,298	3,300	-2	90
	<u> </u>	<u> </u>			Migration)	<u> </u>	<u> </u>	<u>-</u>	<u> </u>
		2005-2007			2006-2008			2007-2009		
AGE	In-	Out-	Net	In-	Out-	Net	In-	Out-	Net	Total
GROUP	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Change
Total	2,394	1,800	594	2,095	1,377	718	1,952	1,603	349	1,661
1-4	153	140	13	178	90	88	207	110	97	198
5-17	324	195	129	342	121	221	347	193	154	504
18-19	223	245	-22	158	195	-37	63	87	-24	-83
20-24	516	436	80	382	320	62	298	381	-83	59
25-29	265	238	27	223	234	-11	226	331	-105	-89
30-34	115	94	21	184	37	147	132	74	58	226
35-39	185	67	118	66	91	-25	74	81	-7	86
40-44	168	127	41	193	35	158	174	43	131	330
45-49	95	82	13	82	79	3	73	59	14	30
50-54	73	82	-9	83	62	21	89	78	11	23
55-59	65	9	56	40	5	35	45	96	-51	40
60-64	63	0	63	51	0	51	40	11	29	143
65-69	41	60	-19	39	56	-17	77	22	55	19
70-74	22	7	15	6	8	-2	81	9	72	85
75+	86	18	68	68	44	24	26	28	-2	90



	Wyoming County										
				Resi	idence Cha	ange					
		2005-2007			2006-2008			2007-2009			
AGE	Current	Previous		Current	Previous		Current	Previous		Total	
GROUP	Year	Year	Change	Year	Year	Change	Year	Year	Change	Change	
	Residence	Residence		Residence	Residence		Residence	Residence			
Total	27,581	28,019	-438	N/A	27,957		27,489	27,798	-309	-747	
1-4	1,254	1,327	-73	N/A	1,224		1,173	1,231	-58	-131	
5-17	4,794	4,713	81	N/A	4,778		4,757	4,763	-6	75	
18-19	831	871	-40	N/A	849		813	875	-62	-102	
20-24	1,663	1,881	-218	N/A	1,838		1,702	1,799	-97	-315	
25-29	1,564	1,588	-24	N/A	1,669		1,394	1,417	-23	-47	
30-34	1,661	1,705	-44	N/A	1,573		1,438	1,389	49	5	
35-39	2,132	2,111	21	N/A	1,941		1,865	1,900	-35	-14	
40-44	1,731	1,725	6	N/A	1,924		1,857	1,898	-41	-35	
45-49	2,206	2,186	20	N/A	2,144		2,141	2,095	46	66	
50-54	2,097	2,116	-19	N/A	2,150		2,220	2,209	11	-8	
55-59	1,746	1,789	-43	N/A	1,983		2,010	2,100	-90	-133	
60-64	1,847	1,896	-49	N/A	1,717		1,815	1,794	21	-28	
65-69	1,318	1,289	29	N/A	1,396		1,378	1,359	19	48	
70-74	824	832	-8	N/A	788		956	956	0	-8	
75+	1,913	1,990	-77	N/A	1,983		1,970	2,013	-43	-120	
	<u>:</u>		-	<u>-</u>	Migration	1		<u>-</u>	-	<u> </u>	
1.05		2005-2007			2006-2008			2007-2009			
AGE	In-	Out-	Net	In-	Out-	Net	In-	Out-	Net	Total	
GROUP	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Migration	Change	
Total	1,116	1,554	-438		1,717		1,198	1,507	-309	-747	
1-4	35	108	-73		103		41	99	-58	-131	
5-17	198	117	81		231		216	222	-6	75	
18-19	161	201	-40		158		145	207	-62	-102	
20-24	189	407	-218		432		270	367	-97	-315	
25-29	140	164	-24		212		146	169	-23	-47	
30-34	64	108	-44		62		86	37	49	5	
35-39	68	47	21		83		35	70	-35	-14	
40-44	64	58	6		138		82	123	-41	-35	
45-49	36	16	20		21		64	18	46	66	
50-54	9	28	-19		26		28	17	11	-8	
55-59	75	118	-43		136		36	126	-90	-133	
60-64	20	69	-49		0		21	0	21	-28	
65-69	29	0	29		4		24	5	19	48	
70-74	13	21	-8		21		0	0	0	-8	
75+	15	92	-77		90		4	47	-43	-120	

