

Appalachian Migration Patterns, 1975-1980 and 1985-1990

Phillip J. Obermiller, Ph.D.
Appalachian Center, University of Kentucky

Steven R. Howe, Ph.D.
University of Cincinnati

Copyright 2000 by Phillip J. Obermiller and Steven R. Howe. All rights reserved.

Summary of Findings

Recent Appalachian migration patterns, particularly in the 1985 - 1990 period, have the following characteristics:

- Appalachia experienced remarkable demographic change; in- and outmigration accounted for a turnover of over a quarter of the region's population.
- Appalachia has become an amenity region for students seeking higher education; over 100,000 more college-enrolled students came into the region than departed it.
- Older Appalachians have been aging in place; relatively few persons 65 or older were newcomers to the region.
- Appalachia has become more diverse; African-American and Hispanic populations increased through migration, especially in the Southern sub-region.
- Appalachia has become poorer; migrants entering the region had lower-status jobs, lower incomes, less education, and were more likely to be living in poverty than those leaving the region.
- Conditions vary widely among Appalachian sub-regions. Northern and Central Appalachia have been losing population while simultaneously becoming a destination for low-income, blue-collar migrants with little formal education. Southern Appalachia has been gaining population, and its immigrants were more ethnically and racially diverse, better paid, more educated, and worked at higher status jobs than did migrants entering the other two sub-regions.
- Appalachian migration patterns have changed from long-range flows into distant metropolitan areas to short-range exchanges principally centered around cities in and immediately adjacent to the region.

Data Sources

The 1980 data come from the Bureau of the Census (U. S. Department of Commerce, 1986). The data set provides gross in- and outmigration statistics between 1975 and 1980 for each county (or county equivalent) in the United States. The migration data are stratified by age, race, and sex; included for each of these categories are statistics on college attendance, military status, group quarters status, and residence abroad in 1975. Data on country of birth are also provided by race and sex¹.

The 1990 data also come from the Bureau of the Census (U.S. Department of Commerce, 1995). The data set provides statistics on non-movers, movers within counties, and all county-to-county migration streams between 1985 and 1990. In New England, flows between minor civil divisions are also given. The migrant data include the following characteristics: age, college enrollment, educational attainment, Hispanic origin, household type, income in 1989, industry, occupation, place of birth and citizenship, poverty status in 1989, race, sex, and tenure.

Migration Streams

Although the Appalachian region gained about a quarter of a million new residents from net migration between 1975 and 1980 and a slightly larger number between 1985 and 1990, the internal dynamics of the migration streams tell another story. Much of Appalachia's 1980 growth due to migration occurred in the central and southern portions of the region, while northern Appalachia lost 1.1 percent of its population in net outmigration (Table 1a). In 1990 northern Appalachia's migration losses remained steady at 1.0 percent, but central Appalachia's earlier migration gains turned to a loss of 2.4 percent (Table 1b). It was only southern Appalachia's substantial growth in immigration that gave the region a net gain from migration in 1990.

Table 1a.
Total Migration Flows for U.S., Non-Appalachian U.S.,
Appalachia, and Appalachian Sub-regions, 1980.

Region	Sub-region	Total Immigration	Total Outmigration	Net Migration	Net Migration as a Percent of 1980 Population
Appalachia		3,178,937	2,952,143	226,794	1.1%
	Northern	1,393,428	1,506,881	(113,453)*	(1.1%)*
	Central	323,394	273,701	49,693	2.3%
	Southern	1,462,115	1,171,561	290,554	3.5%
Non-Appalachian U.S.		44,203,783	40,259,135	3,944,648	1.9%
Total U.S.		47,382,720	43,211,278	4,171,442	1.8%

* Negative numbers and percentages, are shown in parentheses on this and all subsequent tables.

Table 1b.
Total Migration Flows for U.S., Non-Appalachian U.S.,
Appalachia, and Appalachian Sub-regions, 1990.

Region	Sub-region	Total Immigration	Total Outmigration	Net Migration	Net Migration as a Percent of 1990 Population
Appalachia		3,193,745	2,949,483	244,262	1.2%
	Northern	1,307,272	1,403,102	(95,830)	(1.0%)
	Central	251,220	298,540	(47,320)	(2.5%)
	Southern	1,635,253	1,247,841	387,412	4.6%
Non-Appalachian U.S.		45,779,427	40,914,979	4,864,448	2.2%
Total U.S.		48,973,172	43,864,462	5,108,710	2.1%

Overall, the figures indicate that migration continues to be an important part of the Appalachian experience; between 1985 and 1990 the region became home to 3.1 million new residents while 2.9 million people moved away. This represents a turnover of over a quarter of the region's population. Although Appalachia had net gains in population in both census periods, these gains did not compare with those in the rest of the nation. Moreover, the overall figures for the region masked the fact that Northern and Central Appalachia were shrinking.

None of Appalachia's counties ranked in the top forty in the nation for attracting migrants in either census period, but in 1980 Pennsylvania's Allegheny County ranked twenty-sixth in the country for total outmigration, and thirty-third ten years later. The top thirty Appalachian counties with the largest numbers of migrants in 1980 are shown in Table 2a.

Table 2a.
Appalachia's "Revolving Door" Counties:
Counties with the largest numbers of both in- and outmigrants between 1975 and 1980.

Appalachian County	Principal City	State	Total Immigrants	Total Outmigrants	Net Migration
Gwinnett	Atlanta Metro	GA	69,690	25,948	43,742
Clermont	Cincinnati Metro	OH	34,840	20,433	14,407
Knox	Knoxville	TN	63,158	51,488	11,670
Greenville	Greenville	SC	54,648	43,025	11,623
Centre	State College	PA	40,109	29,054	11,055

Table 2a. (Continued)

Calhoun	Anniston	AL	27,290	18,123	9,167
Tuscaloosa	Tuscaloosa	AL	30,856	22,443	8,413
Montgomery	Blacksburg	VA	26,297	17,965	8,332
Monongalia	Morgantown	WV	22,735	18,034	4,701
Buncombe	Ashville	NC	26,318	22,035	4,283
Spartanburg	Spartanburg	SC	27,921	23,702	4,219
Madison	Huntsville	AL	41,070	37,067	4,003
Butler	Pittsburgh Metro	PA	24,826	21,382	3,444
Tompkins	Ithica	NY	32,982	30,073	2,909
Hamilton	Chatanooga	TN	48,738	46,269	2,469
Westmoreland	Pittsburgh Metro	PA	48,684	46,779	1,905
Sullivan	Kingsport	TN	22,149	21,367	782
Forsyth	Winston-Salem	NC	43,760	43,777	(17)
Cabell	Huntington	WV	18,969	20,509	(1,540)
Lackawanna	Scranton	PA	19,611	22,133	(2,522)
Mercer	Youngstown, OH Metro	PA	15,258	18,860	(3,602)
Luzerne	Wilkes-Barre	PA	27,254	31,208	(3,954)
Chautauqua	Jamestown	NY	17,423	22,586	(5,163)
Beaver	Pittsburgh Metro	PA	18,584	25,366	(6,782)
Washington	Pittsburgh Metro	PA	20,386	27,495	(7,109)
Kanawaha	Charleston	WV	30,265	38,293	(8,028)
Broome	Binghamton	NY	31,000	40,282	(9,282)
Jefferson	Birmingham	AL	82,271	91,600	(9,329)
Erie	Erie	PA	27,634	38,805	(11,171)
Allegheny	Pittsburgh	PA	133,166	204,633	(71,467)

Table 2b.
Appalachia's "Revolving Door" Counties:
Counties with highest rates of both in- and outmigration between 1985 and 1990.

Appalachian County	Principal City	State	Total Inmigrants	Total Outmigrants	Net Migration
Gwinett	Atlanta Metro	GA	136,393	62,386	74,007
Madison	Huntsville	AL	54,969	35,989	18,980
Jefferson	Birmingham	AL	72,089	90,458	18,369
Centre	State College	PA	43,839	26,773	17,066
Greenville	Greenville	SC	60,668	45,456	15,212
Tuscaloosa	Tuscaloosa	AL	32,599	20,161	12,438
Montgomery	Blacksburg	VA	30,836	19,714	11,149
Tompkins	Ithaca	NY	35,716	26,032	9,684
Buncombe	Ashville	NC	32,090	22,894	9,196
Knox	Knoxville	TN	62,841	54,089	8,752
Forsyth	Winston/Salem	NC	51,505	43,387	8,118
Spartanburg	Spartanburg	SC	30,192	22,688	7,504
Clermont	Cincinnati Metro	OH	31,690	24,457	7,233
Monongalia	Morgantown	WV	21,174	15,646	5,528
Douglas	Atlanta Metro	GA	19,781	14,356	5,425
Washington	Johnson City	TN	18,721	14,360	4,361
Anderson	Anderson	SC	19,922	16,074	3,848
Luzerne	Wilkes/Barre	PA	30,726	26,953	3,773
Calhoun	Anniston	AL	22,851	19,825	3,026
Hamilton	Chatanooga	TN	43,895	42,185	1,710
Butler	Pittsburgh Metro	PA	23,244	21,860	1,384
Chautauqua	Jamestown	NY	17,368	18,048	(680)
Lackawana	Scranton	PA	19,400	21,019	(1,619)
Sullivan	Kingsport	TN	20,142	21,779	(1,637)
Cabell	Huntington	WV	16,617	19,673	(3,056)

Table 2b. (Continued)

Erie	Erie	PA	29,069	32,462	(3,343)
Broome	Binghamton	NY	30,734	34,636	(3,902)
Washington	Pittsburgh Metro	PA	22,858	28,315	(5,457)
Beaver	Pittsburgh Metro	PA	17,595,	25,566	(7,971)
Westmorland	Pittsburgh Metro	PA	37,905	48,947	(11,042)
Kanawah	Charleston	WV	22,729	36,010	(13,281)
Allegheny	Pittsburgh	PA	125,889	174,381	(48,492)

These were the region's revolving door counties, which typically included larger cities and college towns. This population churning occurred in urban areas located in the northern (17 counties) and southern (13 counties) sub-regions. There are no large population centers in central Appalachia, consequently none of its counties experienced this phenomenon. Very little had changed by 1990 (Table 2b). Thirty-two counties had high numbers of both in-and out migration, and with only three exceptions (Douglas Co., GA, Washington Co., TN, and Anderson Co., SC) they were identical to the counties in the 1980 ranking.

County-to-county data are unavailable from the 1980 census. In 1990 the chief non-Appalachian sources of migrants to the region were in every case metropolitan areas located just outside the perimeter of the region (Table 3). Montgomery, Atlanta, Marietta, and Greensboro all lie in close proximity to the southern and eastern borders of the region; similarly, Cincinnati and Buffalo lie along its western and northern borders. The main sources of new residents in Appalachia were short-distance movers coming primarily from southern metropolitan areas that abut the region.

Table 3.
Chief Migration Streams into Appalachia from Outside the Region, 1990.

Donor County	State	Principal City	Appalachian Recipient County	Total Migrants
DeKalb	GA	Atlanta	Gwinnett	30,123
Hamilton	OH	Cincinnati	Clermont	13,744
Cobb	GA	Marietta	Cherokee	8,155
Fulton	GA	Atlanta	Gwinnette	7,006
Cobb	GA	Marietta	Paulding	5,822
Cobb	GA	Marietta	Douglas	4,135
Montgomery	AL	Montgomery	Elmore	3,516
Guilford	NC	Greensboro	Forsyth	3,516

Table 3. (Continued)

Cobb	GA	Marietta	Gwinnett	3,473
Fulton	GA	Atlanta	Cherokee	3,364
Erie	NY	Buffalo	Cattaragus	3,086
Cobb	GA	Marietta	Bartow	3,070

A similar phenomenon occurs among those leaving the region. In 1990 the chief Appalachian donor counties were located on the peripheries of major cities situated just outside of Appalachia (Table 4). These counties about Greensboro and Thomasville in North Carolina, Marietta and Atlanta in Georgia, and Cincinnati and Youngstown in Ohio. The only exception, Nashville, is located one county away from the region.

Table 4.

Chief Migration Streams from Appalachia to Destinations Outside of the Region, 1990.

Appalachian Donor County	Recipient County	Principal City	State	Total Migrants
Clermont	Hamilton	Cincinnati	OH	7,799
Gwinnett	DeKalb	Atlanta	GA	6,993
Gwinnett	Fulton	Atlanta	GA	5,318
Forsyth	Davidson	Thomasville	NC	4,615
Forsyth	Guilford	Greensboro	NC	3,476
Cherokee	Cobb	Marietta	GA	3,145
Knox	Davidson	Nashville	TN	2,522
Columbiana	Mahoning	Youngstown	OH	2,490
Douglas	Cobb	Marietta	GA	2,459

Most of the migration within the region took place between a metropolitan core and its suburban ring communities. For instance, over a quarter of the forty largest county-to-county migration streams in Appalachia were simply exchanges among Pittsburgh's core and periphery counties. Tables 5a and 5b use Allegheny County, PA as an example illustrating this "revolving door" phenomenon.

Similar exchanges occurred in Alabama on the Birmingham-Tuscaloosa axis as well as in the Huntsville area, and in South Carolina along the Greenville-Spartansburg-Anderson corridor. Knoxville, Chattanooga, and Johnson City were the focal points for core-perimeter exchanges in Tennessee; the same dynamic occurred around Cincinnati, Ohio; Charleston, West Virginia; Winston-Salem, North Carolina; and Birmingham, New York.

Table 5a.
Migration Flows Among Allegheny County, Pennsylvania,
and its Suburban Ring Counties, 1990.

Donor County	Recipient County	Total Migrants
Allegheny	Beaver	4,747
“	Butler	8,054
“	Indiana	2,295
“	Washington	7,734
“	Westmoreland	13,525
Beaver	Allegheny	4,379
Butler	“	4,027
Washington	“	5,789
Westmoreland	“	9,874
“	Armstrong	2,535
“	Fayette	2,252

Long-distance migrants from Appalachia have a much more diverse set of destinations than the short-range movers. Again using Pittsburgh’s Allegheny County as an example (Table 5b), the migration flows were principally south to Florida and Georgia, west to Arizona and California, and southeast to Maryland, Virginia, and North Carolina.

Table 5b.
Net Long-Distance Migration Flows
From Allegheny County, Pennsylvania, 1985-1990.

Donor County	Recipient County	State	Principal City	Net Migrants to Recipient County
Allegheny	Fairfax	VA	Reston	1,564
	Palm Beach	FL	West Palm Beach	1,471
	Pinellas	FL	St. Petersburg	1,171
	Maricopa	AZ	Phoenix	1,109
	Montgomery	MD	Bethesda	959
	Franklin	OH	Columbus	944
	Los Angeles	CA	Los Angeles	871

Table 5b. (Continued)

	Prince George's	MD	Baltimore Metro	863
	Broward	FL	Ft. Lauderdale	839
	Cumberland	PA	Harrisburg Metro	781
	Hillsborough	FL	Tampa	755
	Lee	FL	Ft. Myers	674
	Wake	NC	Raleigh	632
	San Diego	CA	San Diego	623
	DeKalb	GA	Atlanta Metro	555
	Volusia	FL	Daytona Beach	533

Migration Demographics

Appalachians appeared to be aging in place because older migrants were not contributing significantly to the overall population or to the older cohort within it (Table 6). Between 1985 and 1990 the region gained only 12,036 residents over the age of 65 through migration. By comparison, the region had a net gain of 115,887 school-aged migrants (5-19) and 116,339 migrants in their prime working years (20-64). The largest net flows of older migrants were into suburban Appalachian counties abutting Cincinnati, Atlanta, and Pittsburgh. Although western North Carolina is widely perceived as a retirement destination of choice, only Henderson County, NC appears among the top forty Appalachian destinations for older migrants. Between 1985 and 1990 Henderson County received 134 older migrants, all from Chicago's Cook County.

The important story lies in the sub-regional data. Northern and central Appalachia had small net losses of residents 65 and older through migration, and these areas experienced substantially larger net migration losses of people typically in the labor market. Moreover, central Appalachia lost nearly 10,000 school-aged children. Losing more residents in their prime earning years relative to those not in the labor market may have increased the dependency ratios (earners:non-earners) in Northern and Central Appalachia. Appalachia's success story as a migration magnet was in the southern portion of the region which netted well over a third of a million new residents, most of whom were of an age to be productively employed.

Table 6.
Total Migration Flows by Age,
Appalachia and its Sub-regions, 1990.

Region by Type of Migration	Sub-region	Ages 5-19	Ages 20-64	Ages 65 and older
Into Appalachia		795,425	2,195,777	202,543
	Northern	329,892	889,258	88,122
	Central	68,521	164,577	18,122
	Southern	397,012	1,141,942	96,299
Out of Appalachia		679,538	2,079,438	190,507
	Northern	311,567	992,660	98,875
	Central	78,380	201,201	18,959
	Southern	289,591	885,577	72,673
Net Appalachian Migration		115,887	116,339	12,036
	Northern	18,325	(103,402)	(10,753)
	Central	(9,859)	(36,624)	(837)
	Southern	107,421	256,365	23,626

From 1975 to 1980 the sex ratios among both immigrants and outmigrants were reasonably equal (Table 7a). Between 1985 and 1990 the migration streams brought slightly more men on net into the region than women (Table 7b), but the only population growth from migration was in the south where the sex ratios were fairly balanced. Central Appalachia gained slightly more men than women; in northern Appalachia the exodus of women from the area was about equal to that of men. In 1990 women left Northern and Central Appalachia at higher rates than did menⁱⁱ.

Appalachia as a whole had a net loss of 6,444 African-American residents in the 1975-80 period, and about two-thirds of this loss occurred in southern Appalachia (Table 7a). Outmigration from central Appalachia composed the other third.

Table 7a.
Total Migration Flows by Race and Sex for
Appalachia and its Sub-regions, 1980.¹

Region by Type of Migration	Sub-region	Black Migrants	White Migrants	Male Migrants	Female Migrants
Into Appalachia		151,870	2,984,592	1,592,032	1,586,905
	Northern	42,079	1,328,661	697,166	696,262
	Central	6,141	314,559	161,184	162,210
	Southern	103,650	1,341,372	733,682	728,433
Out of Appalachia		158,314	2,768,533	1,477,148	1,474,995
	Northern	41,491	1,451,523	753,619	753,262
	Central	8,876	263,150	134,902	138,799
	Southern	107,974	1,053,851	588,627	582,934
Net Appalachian Migration		(6,444)	216,059	114,884	111,910
	Northern	588	(122,862)	(56,453)	(57,000)
	Central	(2,735)	51,409	26,282	23,411
	Southern	(4,297)	287,521	145,055	145,499

Table 7b.
Total Migration Flows by Race and Sex for
Appalachia and its Sub-regions, 1990.¹

Region by Type of Migration	Sub-region	Black Migrants	White Migrants	Male Migrants	Female Migrants
Into Appalachia		200,121	2,906,053	1,600,408	1,593,337
	Northern	54,237	1,214,681	657,001	650,271
	Central	6,849	240,756	123,955	127,265
	Southern	139,035	1,450,616	819,452	815,801
Out of Appalachia		179,816	2,723,853	1,463,254	1,486,229
	Northern	48,929	1,330,761	695,036	708,066
	Central	9,234	286,005	146,024	152,516
	Southern	121,653	1,107,087	622,194	625,647

Table 7b. (Continued)

Net Appalachian Migration		20,305	182,200	137,154	107,108
	Northern	5,308	(116,080)	(38,035)	(57,795)
	Central	(2,385)	(45,249)	(22,069)	(25,251)
	Southern	17,382	343,529	197,258	190,154

Note: In Tables 7a and 7b, discrepancies between the race total and the sex total are due to other racial categories such as Asian, Pacific Islander, etc. which are not included in these tables.

In 1990 some 200,000 black migrants took up residence in the region, and another 180,000 moved away from the region (Table 7b). The net gain of about 20,000 African-American migrants occurred predominantly in the south, reversing by a wide margin the losses seen in the 1980 census. Northern Appalachia again had a net gain in black residents from migration, while the central portion of the region had a small net loss of about the same size as it had in 1980.

Table 8.
Total Migration Flows by Hispanic Designation,
Appalachia and its Sub-regions, 1990.

Region by Type of Migration	Sub-region	Hispanic	Non-Hispanic
Into Appalachia		54,614	3,139,131
	Northern	22,844	1,284,428
	Central	2,360	248,860
	Southern	29,410	1,605,843
Out of Appalachia		27,625	2,921,858
	Northern	13,512	1,389,590
	Central	1,616	296,924
	Southern	12,497	1,235,344
Net Appalachian Migration		26,989	217,273
	Northern	9,332	(105,162)
	Central	744	(48,064)
	Southern	16,913	370,499

The small Hispanic population in Appalachia grew between 1985 and 1990 with a net gain of 26,989 migrants, the majority of whom settled in the Southern sub-region (Table 8).

While this number, on its face, appears small, it is proportionally large: the net gain from migration represents 34.3% of Appalachia's 1990 Hispanic population. Fully half of the top forty Hispanic migration streams into the Appalachian region had their sources outside of the United States; the destinations for these migrants were primarily urban and suburban counties in the Atlanta and Pittsburgh metropolitan areasⁱⁱⁱ.

Table 9a.
Total Migration Flows by College Enrollment and Sex for
Appalachia and its Sub-regions, 1990.

Region by Type of Migration	Sub-region	Males Enrolled	Percent of all male migrants	Females Enrolled	Percent of all female migrants
Into Appalachia		253,060	14.7	260,347	16.6
	Northern	127,808	19.5	130,331	20.0
	Central	13,548	10.9	15,685	12.3
	Southern	111,704	13.6	114,331	14.0
Out of Appalachia		197,275	13.5	215,880	14.5
	Northern	106,493	15.3	114,090	16.1
	Central	14,836	10.2	18,835	12.3
	Southern	75,946	12.2	83,405	13.3
Net Appalachian Migration		55,785	----	44,467	----
	Northern	21,315	----	16,241	----
	Central	(1,288)	----	(2,700)	----
	Southern	35,758	----	30,926	----

The issue of an Appalachian “brain drain” has been raised by many people concerned about the region's future. The migration data address at least a portion of this concern. In 1990 Appalachia gained approximately 100,000 more college students than it lost through migration, but there was extreme variation by sub-region (Table 9a). Northern Appalachia gained a net of 37,566 college enrollees, southern Appalachia gained 66,684, while the central part of the region had a net loss of 3,988 college students. Overall, about one in every ten Appalachian college seats is occupied by migrants from outside the region^{iv}. Appalachia appears to have become an amenity region for students seeking a college education.

Table 9b.
Total Migration Flows of Persons over age 25
by Educational Attainment for Appalachia and its Sub-regions, 1990.

Region by Type of Migration	A S *	< 9 years of school	9-12 years of school without diploma	High school diploma or equivalent	Some college without a degree	Associate's degree	Bachelor's degree	Graduate or professional degree
Into Appalachia		158,792	258,093	537,293	352,537	128,271	313,284	169,383
	N	51,610	95,867	240,104	124,885	52,771	118,896	75,772
	C	28,389	26,790	42,285	23,164	6,668	13,202	8,329
	S	78,793	135,436	254,904	204,488	68,832	181,186	85,282
Out of Appalachia		137,153	215,728	471,522	309,238	123,211	337,652	165,776
	N	48,002	87,125	240,724	134,803	62,589	168,004	87,713
	C	26,172	27,587	47,709	27,217	8,881	19,448	9,697
	S	62,979	101,016	183,089	147,218	51,741	150,200	68,366
Net Migration		21,239	42,365	65,711	43,299	5,060	(24,368)	3,607
	N	3,608	8,742	(620)	(9,918)	(9,818)	(49,108)	(11,941)
	C	2,217	(797)	(5,424)	(4,053)	(2,213)	(6,246)	(1,368)
	S	15,814	34,420	71,815	57,270	17,091	30,986	16,916

* Appalachian Sub-regions: N = Northern, C = Central, S = Southern.

While many students came into the region to obtain an education, the question remains whether they stayed in the region after graduation. Between 1985 and 1990 Appalachia netted nearly as many migrants over age 25 without high school diplomas (63,604) as it did high school graduates (65,711) through migration (Table 9b). A net gain of migrants with associate's degrees (5,060) and graduate degrees (3,607) was more than offset by a net loss of 24,368 migrants holding bachelor's degrees. At the sub-regional level, the educational differences in net migration were quite distinct. Northern Appalachia gained over ten thousand migrants without a high school education, accompanied by net losses of migrants with higher educational attainment. Central Appalachia gained over 2,000 migrants with less than a ninth grade education while experiencing net losses in all higher educational categories. On a proportional basis, net migration cost Central Appalachia nine percent of its Bachelor degree holding population. Southern Appalachia had net gains in all educational categories including migrants without a high school diploma (50,234), high school graduates (71,815), migrants with some college or an associate's degree (74,361), and migrants with a bachelor's or graduate degree (47,902).

Table 10.
Total Migration Flows by Occupational Category,
Appalachia and its Sub-regions, 1990.

Region by Type of Migration	Sub-region	Executive Administrative Managerial & Professional	Technical Sales & Administrative Support	Service	Farming Forestry & Fishing	Skilled & Unskilled Labor
Into Appalachia		456,812	469,396	189,171	26,941	415,557
	Northern	182,516	176,794	83,732	10,542	141,884
	Central	23,336	26,286	13,385	2,517	33,224
	Southern	250,960	266,316	92,054	13,882	240,449
Out of Appalachia		486,178	487,333	180,702	24,505	377,308
	Northern	248,452	234,403	93,347	10,825	157,411
	Central	32,087	40,431	18,091	2,951	48,088
	Southern	205,639	212,499	69,264	10,729	171,809
Net Migration		(29,366)	(17,937)	8,469	2,436	38,249
	Northern	(65,936)	(57,609)	(9,615)	(283)	(15,527)
	Central	(8,751)	(14,145)	(4,706)	(434)	(14,864)
	Southern	45,321	53,817	22,790	3,153	68,640

Regarding the occupational status of Appalachian migrants, the region as a whole had a net loss of 47,303 higher status workers while experiencing net gains of 8,469 service workers and 40,685 lower status workers (Table 10). Northern and Central Appalachia lost workers in all employment categories with the heaviest net losses in the professional/managerial and technical/sales categories. Southern Appalachia had net gains across all categories, a slight majority being in the professional/managerial and technical/sales categories.

The Appalachian region lost a net 34,342 migrants with 1989 incomes of more than \$20,000 while netting 209,407 migrants with incomes of less than \$20,000 during that year (Table 11). Northern Appalachia netted 69,562 new residents with incomes of less than \$10,000 while losing migrants in each of the three higher income brackets. Central Appalachia had net losses in all income categories with the heaviest being in the two highest income brackets. The southern sub-region had gains through migration in all income categories with the majority by far being in the lowest two^v.

Table 11.
Total Migration Flows by Incomes of Persons 15 and older,
Appalachia and its Sub-regions, 1989.

Region by Type of Migration	Sub-region	Less than \$10,000	\$10,000-\$19,999	\$20,000-\$34,999	\$35000 or more
Into Appalachia		1,040,453	719,294	447,157	508,577
	Northern	467,057	292,030	166,271	193,401
	Central	97,861	57,884	27,537	24,954
	Southern	475,535	369,380	253,349	290,222
Out of Appalachia		842,645	707,695	470,824	519,252
	Northern	397,495	335,690	225,830	261,569
	Central	98,539	77,079	41,401	33,559
	Southern	346,611	294,926	203,593	224,124
Net Appalachian Migration		197,808	11,599	(23,667)	(10,675)
	Northern	69,562	(43,660)	(59,559)	(68,168)
	Central	(678)	(19,195)	(13,864)	(8,605)
	Southern	128,924	74,454	49,756	66,098

Table 12.
Total Migration Flows by Housing Tenure,
Appalachia and its Sub-regions, 1990.

Region by Type of Migration	Sub-region	Home Owners	Renters
Into Appalachia		1,546,843	1,298,895
	Northern	594,320	526,558
	Central	123,161	103,742
	Southern	829,362	668,595
Out of Appalachia		1,313,421	1,338,427
	Northern	602,944	646,538
	Central	122,859	149,483
	Southern	587,618	542,406

Table 12. (Continued)

Net Appalachian Migration		233,422	(39,532)
	Northern	(8,624)	(119,980)
	Central	302	(45,741)
	Southern	241,744	126,189

Appalachia had a net gain of well over a quarter of a million homeowners between 1985 and 1990, with the vast majority of that gain realized in the southern sub-region (Table 12). Northern Appalachia lost both renters (-119,980) and homeowners (-8,624), Central Appalachia saw a slight net gain in homeowners (302) and a substantial loss of renters (-45,741), while homeowners entering the southern sub-region (241,744) outnumbered renters (126,189) almost two to one.

Table 13.
Total Migration Flows by Poverty Status,
Appalachia and its Sub-regions, 1989.

Region by Type of Migration	Sub-region	Un-determined	Above Poverty Line	In Poverty
Into Appalachia		11,294	2,313,121	521,323
	Northern	5,558	879,154	236,166
	Central	1,270	160,979	64,654
	Southern	4,466	1,272,988	220,503
Out of Appalachia		10,738	2,231,474	409,636
	Northern	5,275	1,056,352	187,855
	Central	1,455	210,391	60,496
	Southern	4,008	964,731	161,285
Net Appalachian Migration		556	81,647	111,687
	Northern	283	(177,198)	48,311
	Central	(185)	(49,412)	4,158
	Southern	458	308,257	59,218

Table 13 shows the poverty status of Appalachian migrants in 1989. Eighteen percent of those entering Appalachia were in poverty while 15% of those departing had the same economic status, giving the region a net gain of 111,687 persons in poverty. Both Northern and Central Appalachia showed net losses due to migration of persons not in poverty, while also showing net gains in persons below the poverty line. The southern sub-region experienced an opposite phenomenon with impoverished migrants being outnumbered five to one by those above the

poverty line. Large metropolitan donor areas like New York City, Los Angeles, Atlanta, Cleveland, and Cincinnati were net contributors to the top forty inflows of poor migrants into the Appalachian region^{vi}.

State Migration Flows and Demographics

Appendix A, which includes Tables 14-26, presents net Appalachian migration flows for selected demographic categories by state. The Appalachian areas of twelve states and all of West Virginia vary greatly in population size; to adjust for this discrepancy the net proportionate gain or loss of population due to migration is also given for each categoryⁱⁱ.

The following summary statistics are based on those net proportionate gains and losses. In terms of total migration flows, Georgia grew by 12.3% while at the other end of the spectrum West Virginia lost 4.1%. Maryland had the most uneven sex ratio among its migrants, gaining over two and a half times more men than women. Georgia gained population in all age categories while West Virginia had the largest loss of migrants in the under-55 age cohorts and New York lost the most residents over 55 to migration. The African American migration flows were stable in most states, but Maryland's black population grew by 25.6%, New York's grew by 12.5% and West Virginia's dropped by 5.4%. The Hispanic populations in each of the Appalachian states grew substantially, led by Georgia at 53.8%ⁱⁱⁱ.

Migration contributed substantial numbers of people with incomes less than \$10,000 to New York (11.3%), Virginia (8.8%), and Maryland (6.8%). Proportionately, Georgia gained the most migrants with incomes of \$35,000 or more (17.1%) while Virginia, New York, and West Virginia had net losses in this income category of 9.3%, 7.7%, and 7.4% respectively. West Virginia lost 1.4% of its homeowners to migration, while in Georgia migration added 10.7% to the number of homeowners. In New York the number of people living in poverty grew by 12.3% due to migration, the largest gain of this kind among all the states.

Georgia posted the largest gain in migrants in the top occupational category (18.8%) while Kentucky, Ohio, Mississippi, Pennsylvania, New York, Virginia, and West Virginia lost migrants in this category in numbers ranging between five and ten percent. Migrants in service work grew by 13.4% in Georgia and 6.2% in South Carolina, while posting losses in West Virginia (5.6%), Ohio (4.3%), and Kentucky (4.2%). Migrant laborers contributed 13.4% to Georgia's workforce, and 5.1% to South Carolina's, while out-migration diminished this occupational category in West Virginia by 7.4% and in Kentucky by 4.5%.

West Virginia was the only state to have a net loss of population in all seven educational categories, followed by Kentucky with losses in the six highest categories. Alabama, Georgia, North Carolina, and South Carolina each had net educational gains across the board. Georgia also had the highest proportional net gains from migration, and this growth came predominantly from migrants with higher educational attainment.

In sum, the state-level data support the general conclusions reached for the sub-regions. Southern Appalachia has been growing and prospering. The states in Northern and Central

Appalachia have been losing migrants with skills, education and higher incomes while gaining migrants in poverty.

Conclusion

Migration is a key element in any complete understanding of the Appalachian region. Between 1975 and 1980 and again between 1985 and 1990 there was a large turnover of the region's population. This demographic trend reinforces the understanding that contemporary Appalachia is a socially and culturally heterogeneous region.

Appalachian migration patterns have changed from long-range flows into Northern, Southern, and Western states outside the region, to short-range urban-suburban exchanges principally centered around cities in and immediately adjacent to the region. With migration flows concentrated between urban and suburban counties, and 48% of the region's population living in urban counties, it is becoming increasingly difficult to characterize Appalachia as a demographically rural region.

The migrants entering Appalachia had lower-status jobs, lower incomes, less education, and were more likely to be in poverty than the people migrating away from the region. The impact of these migration patterns, however, was not even across the region. Northern and Central Appalachia were losing population while at the same time becoming a refuge for low income, blue-collar workers with little formal education. Southern Appalachia, on the other hand, was gaining population. Overall, these migrants were more ethnically and racially diverse, better paid, educated, and housed, and worked at higher status jobs than did migrants to the other two sub-regions.

Appendix A

Table 14.

Alabama Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		58,762	2.5%
Sex	Male	31,617	2.8%
	Female	27,145	2.2%
Age	05-24	18,375	2.5%
	25-54	32,923	3.1%
	55 and older	7,464	1.3%
Race/Ethnicity	White	50,673	2.7%
	Black	4,090	0.8%
	Hispanic	1,583	13.8%
Income	<\$10,000	23,016	3.2%
	\$10,000 - \$19,999	9,244	1.6%
	\$20,000 - \$34,999	5,528	1.6%
	> = \$35,000	8,817	2.2%
Housing Tenure	Own	42,535	2.4%
	Rent	15,486	2.7%
Poverty Status	Not Determined	(61)	(1.9%)
	Above	46,897	2.4%
	Below	11,185	3.3%
Occupation	Executive, administrative	8,283	3.2%
	Technical, sales	4,984	1.5%
	Service	2,193	1.7%
	Farming	467	2.0%
	Laborer	8,422	2.2%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 15.
Georgia Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		176,006	12.3%
Sex	Male	87,673	12.5%
	Female	88,333	12.1%
Age	05-24	50,442	11.1%
	25-54	108,474	15.5%
	55 and older	17,090	6.3%
Race/Ethnicity	White	152,785	11.7%
	Black	9,967	10.7%
	Hispanic	10,161	53.8%
Income	<\$10,000	29,123	8.4%
	\$10,000 - \$19,999	30,778	9.5%
	\$20,000 - \$34,999	37,680	15.1%
	> = \$35,000	48,333	17.1%
Housing Tenure	Own	116,005	10.7%
	Rent	62,711	19.3%
Poverty Status	Not Determined	412	14.5%
	Above	170,448	13.5%
	Below	7,856	5.7%
Occupation	Executive, administrative	32,003	18.8%
	Technical, sales	39,250	16.2%
	Service	10,297	13.4%
	Farming	1,435	8.9%
	Laborer	34,226	12.3%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 16.
Kentucky Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		(18,834)	(1.9%)
Sex	Male	(8,912)	(1.9%)
	Female	(9,922)	(2.0%)
Age	05-24	(10,628)	(3.2%)
	25-54	(9,265)	(2.2%)
	55 and older	1,059	0.5%
Race/Ethnicity	White	(18,906)	(2.0%)
	Black	(8)	(0.1%)
	Hispanic	411	14.8%
Income	<\$10,000	1,906	0.5%
	\$10,000 - \$19,999	(9,128)	(3.9%)
	\$20,000 - \$34,999	(5,965)	(5.7%)
	> = \$35,000	(3,332)	(3.4%)
Housing Tenure	Own	1,627	0.2%
	Rent	(21,874)	(9.7%)
Poverty Status	Not Determined	4	0.2%
	Above	(21,861)	(3.2%)
	Below	1,610	0.6%
Occupation	Executive, administrative	(3,501)	(5.3%)
	Technical, sales	(5,428)	(6.0%)
	Service	(1,953)	(4.2%)
	Farming	(245)	(1.5%)
	Laborer	(6,498)	(4.5%)

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 17.
Maryland Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		6,054	2.9%
Sex	Male	4,335	4.2%
	Female	1,719	1.6%
Age	05-24	2,534	4.1%
	25-54	3,164	3.4%
	55 and older	356	0.6%
Race/Ethnicity	White	3,866	1.9%
	Black	2,160	25.6%
	Hispanic	104	10.9%
Income	<\$10,000	3,906	6.8%
	\$10,000 - \$19,999	702	1.3%
	\$20,000 - \$34,999	(42)	(0.1%)
	> = \$35,000	94	0.3%
Housing Tenure	Own	791	0.6%
	Rent	1,546	2.7%
Poverty Status	Not Determined	8	1.8%
	Above	1,124	0.6%
	Below	1,205	5.3%
Occupation	Executive, administrative	(410)	(2.0%)
	Technical, sales	(595)	(2.2%)
	Service	(90)	(0.6%)
	Farming	87	3.8%
	Laborer	680	2.1%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 18.
Mississippi Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		2,824	0.6%
Sex	Male	1,734	0.8%
	Female	1,090	0.4%
Age	05-24	3,501	2.1%
	25-54	(1,473)	(0.7%)
	55 and older	796	0.7%
Race/Ethnicity	White	2,871	0.8%
	Black	(910)	(0.7%)
	Hispanic	268	11.9%
Income	<\$10,000	5,021	3.2%
	\$10,000 - \$19,999	495	0.4%
	\$20,000 - \$34,999	(1,818)	(2.7%)
	> = \$35,000	(1,886)	(3.8%)
Housing Tenure	Own	5,184	1.4%
	Rent	(2,706)	(2.6%)
Poverty Status	Not Determined	(74)	(10.8%)
	Above	(1,787)	(0.5%)
	Below	4,339	4.2%
Occupation	Executive, administrative	(2,251)	(5.7%)
	Technical, sales	(1,708)	(3.1%)
	Service	(211)	(0.9%)
	Farming	114	1.9%
	Laborer	1,996	2.0%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 19.

New York Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		13,021	1.3%
Sex	Male	7,812	1.6%
	Female	5,209	1.0%
Age	05-24	24,321	7.3%
	25-54	(7,766)	(1.8%)
	55 and older	(3,534)	(1.4%)
Race/Ethnicity	White	5,632	0.6%
	Black	2,228	12.5%
	Hispanic	3,211	25.3%
Income	<\$10,000	30,186	11.3%
	\$10,000 - \$19,999	(937)	(0.4%)
	\$20,000 - \$34,999	(7,197)	(4.5%)
	> = \$35,000	(13,098)	(7.7%)
Housing Tenure	Own	(1,206)	(0.2%)
	Rent	(3,650)	(1.5%)
Poverty Status	Not Determined	153	4.8%
	Above	(20,979)	(2.5%)
	Below	15,970	13.8%
Occupation	Executive, administrative	(9,293)	(7.3%)
	Technical, sales	(5,232)	(3.8%)
	Service	2,553	3.4%
	Farming	321	2.0%
	Laborer	179	0.1%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 20.

North Carolina Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		47,741	3.9%
Sex	Male	22,914	3.9%
	Female	24,827	3.9%
Age	05-24	15,799	4.5%
	25-54	17,765	3.2%
	55 and older	14,177	4.4%
Race/Ethnicity	White	43,799	4.0%
	Black	1,772	1.6%
	Hispanic	1,645	23.4%
Income	<\$10,000	17,547	5.6%
	\$10,000 - \$19,999	10,510	3.1%
	\$20,000 - \$34,999	5,741	2.6%
	> = \$35,000	5,871	3.1%
Housing Tenure	Own	29,776	3.2%
	Rent	14,460	5.4%
Poverty Status	Not Determined	186	8.8%
	Above	35,683	3.4%
	Below	8,547	6.0%
Occupation	Executive, administrative	4,321	3.3%
	Technical, sales	3,063	1.8%
	Service	2,825	3.9%
	Farming	520	3.1%
	Laborer	7,703	3.1%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 21.
Ohio Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		(11,570)	(0.9%)
Sex	Male	(4,694)	(0.8%)
	Female	(6,876)	(1.0%)
Age	05-24	(11,636)	(2.9%)
	25-54	(902)	(0.2%)
	55 and older	968	0.3%
Race/Ethnicity	White	(12,784)	(1.0%)
	Black	288	1.1%
	Hispanic	393	9.4%
Income	<\$10,000	6,988	1.8%
	\$10,000 - \$19,999	(9,718)	(3.2%)
	\$20,000 - \$34,999	(6,963)	(4.0%)
	> = \$35,000	(4,249)	(2.3%)
Housing Tenure	Own	8,669	0.9%
	Rent	(20,578)	(7.2%)
Poverty Status	Not Determined	171	6.2%
	Above	(20,720)	(2.0%)
	Below	8,640	4.2%
Occupation	Executive, administrative	(5,780)	(5.4%)
	Technical, sales	(9,812)	(6.8%)
	Service	(3,369)	(4.3%)
	Farming	(338)	(2.0%)
	Laborer	(2,307)	(1.1%)

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 22.
 Pennsylvania Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		(62,949)	(1.2%)
Sex	Male	(25,615)	(1.0%)
	Female	(37,334)	(1.3%)
Age	05-24	(25,898)	(1.7%)
	25-54	(28,171)	(1.2%)
	55 and older	(8,880)	(0.6%)
Race/Ethnicity	White	(72,812)	(1.4%)
	Black	1,734	0.8%
	Hispanic	5,467	19.0%
Income	<\$10,000	26,027	1.7%
	\$10,000 - \$19,999	(22,377)	(1.6%)
	\$20,000 - \$34,999	(32,428)	(3.9%)
	> = \$35,000	(37,816)	(4.2%)
Housing Tenure	Own	(8,102)	(0.2%)
	Rent	(64,784)	(5.4%)
Poverty Status	Not Determined	19	0.2%
	Above	(90,126)	(2.0%)
	Below	17,221	2.8%
Occupation	Executive, administrative	(38,532)	(6.7%)
	Technical, sales	(29,974)	(4.0%)
	Service	(5,206)	(1.5%)
	Farming	(282)	(0.6%)
	Laborer	(5,297)	(0.7%)

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 23.

South Carolina Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		42,055	5.1%
Sex	Male	22,787	5.7%
	Female	19,268	4.5%
Age	05-24	18,241	7.0%
	25-54	18,483	4.9%
	55 and older	5,331	2.8%
Race/Ethnicity	White	38,631	5.6%
	Black	1,772	1.3%
	Hispanic	1,531	28.0%
Income	<\$10,000	14,066	6.7%
	\$10,000 - \$19,999	7,820	3.7%
	\$20,000 - \$34,999	5,130	3.6%
	> = \$35,000	7,800	5.5%
Housing Tenure	Own	21,929	3.7%
	Rent	16,240	7.9%
Poverty Status	Not Determined	41	3.2%
	Above	33,920	4.8%
	Below	4,208	4.7%
Occupation	Executive, administrative	4,907	5.1%
	Technical, sales	6,432	5.2%
	Service	2,992	6.2%
	Farming	173	3.4%
	Laborer	8,479	5.1%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 24.

Tennessee Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		52,938	2.6%
Sex	Male	26,963	2.8%
	Female	25,975	2.5%
Age	05-24	19,093	3.2%
	25-54	20,903	2.3%
	55 and older	12,942	2.6%
Race/Ethnicity	White	49,501	2.6%
	Black	332	0.3%
	Hispanic	1,651	17.1%
Income	<\$10,000	26,124	4.4%
	\$10,000 - \$19,999	12,289	2.3%
	\$20,000 - \$34,999	657	0.2%
	> = \$35,000	2,760	0.9%
Housing Tenure	Own	36,210	2.4%
	Rent	14,147	3.0%
Poverty Status	Not Determined	(70)	(2.3)
	Above	34,368	2.3%
	Below	16,059	5.3%
Occupation	Executive, administrative	550	0.3%
	Technical, sales	2,386	0.9%
	Service	3,544	3.0%
	Farming	591	2.6%
	Laborer	9,094	2.6%

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 25.
Virginia Appalachian Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		6,930	1.1%
Sex	Male	4,878	1.7%
	Female	2,052	0.7%
Age	05-24	13,399	6.9%
	25-54	(7,814)	(3.0%)
	55 and older	1,345	(0.9%)
Race/Ethnicity	White	5,303	0.9%
	Black	(352)	(2.0%)
	Hispanic	452	18.6%
Income	<\$10,000	17,665	8.8%
	\$10,000 - \$19,999	1,555	1.0%
	\$20,000 - \$34,999	(5,521)	(6.4%)
	> = \$35,000	(7,005)	(9.3%)
Housing Tenure	Own	(2,353)	(0.5%)
	Rent	(533)	(0.4%)
Poverty Status	Not Determined	16	1.6%
	Above	(14,451)	(3.0%)
	Below	11,549	11.2%
Occupation	Executive, administrative	(4,827)	(9.2%)
	Technical, sales	(4,032)	(6.1%)
	Service	190	0.6%
	Farming	32	0.4%
	Laborer	(2,037)	(1.9%)

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

Table 26.
West Virginia Migration Flows by Selected Demographic Categories, 1985-1990.

Demographic Category	Demographic Subcategory	Net Gain or (Loss)	Proportionate Gain or (Loss) *
State Total		(68,716)	(4.1%)
Sex	Male	(34,338)	(4.3%)
	Female	(34,378)	(3.9%)
Age	05-24	(30,654)	(6.0%)
	25-54	(37,858)	(5.2%)
	55 and older	(204)	0.0%
Race/Ethnicity	White	(66,359)	(4.1%)
	Black	(2,768)	(5.4%)
	Hispanic	112	1.6%
Income	<\$10,000	(3,767)	(0.7%)
	\$10,000 - \$19,999	(19,634)	(4.7%)
	\$20,000 - \$34,999	(18,469)	(8.3%)
	> = \$35,000	(16,964)	(7.4%)
Housing Tenure	Own	(17,643)	(1.4%)
	Rent	(50,177)	(13.8%)
Poverty Status	Not Determined	(249)	(7.9%)
	Above	(70,869)	(5.3%)
	Below	3,298	1.1%
Occupation	Executive, administrative	(14,908)	(10.1%)
	Technical, sales	(17,271)	(8.9%)
	Service	(5,296)	(5.6%)
	Farming	(439)	(3.2%)
	Laborer	(16,391)	(7.4%)

* Net proportions are calculated as a percentage of the total 1990 state population over age five in the demographic category or subcategory.

REFERENCES

National Center for Educational Statistics. 2000. "Integrated Postsecondary Education Data System (IPEDS)." from <http://caspar.nsf.gov> accessed 8/6/2000.

U.S. Department of Commerce. 1986. *Census of Population and Housing, 1980 (United States): County Migration by Selected Characteristics, 1975 - 1980*. Washington, DC: Bureau of the Census.

U.S. Department of Commerce. 1995. *Census of Population, 1990: County to County Migration Flow File on CD-ROM, Special Project (SP) 312*. Washington, DC: Bureau of the Census.

NOTES

ⁱ The 1980 data were made available by the Inter-University Consortium for Political and Social Research. The authors would like to thank Mark Carrozza at the University of Cincinnati's Institute for Policy Research for his assistance in identifying and acquiring this data set. None of these institutions or individuals bear any responsibility for the analyses or interpretations presented here.

ⁱⁱ The net proportions used here and elsewhere in this study were calculated for migrants over age five in relation to the 1990 census population of the area in question.

ⁱⁱⁱ Caution should be used in interpreting the data on Hispanics. Because of the relatively small base populations of Hispanics in Appalachia, small numbers of migrants can result in large percentages.

^{iv} Although no exact figure exists, an estimate based on the compilation of available data indicates there are about a million students enrolled in the community colleges, colleges, and universities located in the Appalachian region (c.f. National Center for Educational Statistics, 2000).

^v Caution should be used in interpreting the data on income. Because they represent persons 15 and older they may be skewed, for instance, by large numbers of students, retirees, people in the early stages of their working careers, or those receiving public assistance.

^{vi} Poverty thresholds are determined by a federal formula that included 1989 income, size of family, and the number of related children under 18 years of age in the family. The average poverty threshold for a family of four persons was \$12,674 in 1989.