

**Economic Impact  
Of the  
Warehousing and Transportation  
Industry  
In  
Franklin County, Pennsylvania**

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## **Executive Summary**

The decade of the 1990's saw a decline in the numbers of manufacturing jobs in Franklin County. All indications are that this decline will be permanent in that these jobs will not be returning to the County.

Because of its proximity to a number of major market areas in the Mid-Atlantic region, and because Interstate Route 81 runs through its heart, and because there are currently over 2800 acres of real estate zoned for commercial use within 5 miles of I-81, Franklin County has the potential to grow a significant number of jobs in the warehousing, storage, and transportation industry that can replace the loss of manufacturing jobs.

Most importantly, this study found that the salary levels of the lost manufacturing jobs can be matched by the transportation and warehousing jobs.

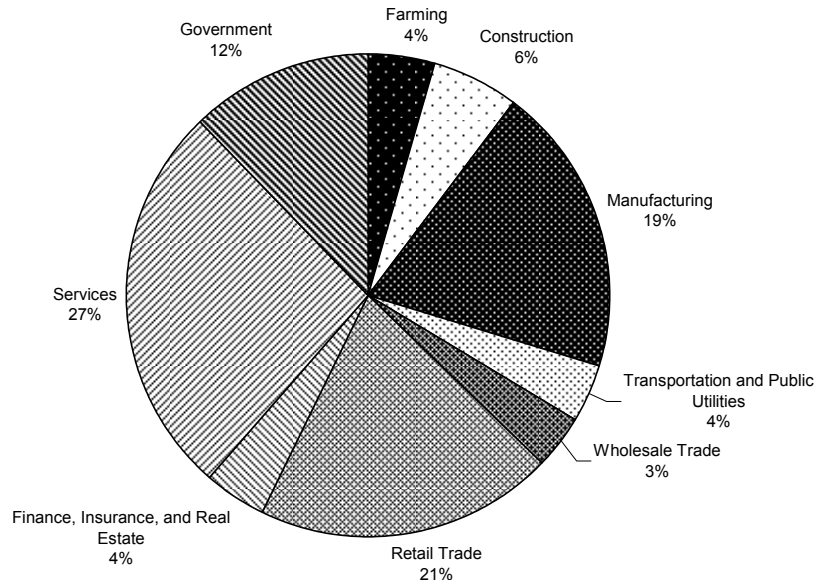
For these reasons, the growth of the transportation and warehousing industry in Franklin County holds the potential to be a significant source of future economic development in the county.

## 1.0 Background

As described in the 2003 Franklin County Profile<sup>1</sup> distributed by the Franklin County Area Development Corporation, County, Pennsylvania, is located in South-central Pennsylvania. It can be characterized as largely rural with a moderate amount of manufacturing activity taking place within the county. Franklin County is working to expand its economic base to include a broader range of businesses while seeking to retain its manufacturing capability.

The county straddles Interstate 81, the major route of travel between the Northeast and Southern Midwest of the United States. The county is within a one-day's drive of nearly 40% of the population of the United States and is within easy reach of the metropolitan areas of Washington, DC; Baltimore, MD, Philadelphia, PA; Pittsburg, PA; New York City, NY; Cleveland and Columbus, OH, and Boston, MA.

Because of its proximity to the I-81 corridor, the county's major employers include manufacturing firms, wholesale and retail trade services, and government. In 2002, Franklin County had a civilian workforce of approximately 63,300 employees with an unemployment rate of 4.9%.



**Chart 1-1: Franklin County Employment in 2000 by Major Employer Category<sup>2</sup>**

The major non-manufacturing, service and government employers in the county include: Letterkenny Army Depot, Summit Health, Chambersburg Area School District, Franklin

County Government, Menno-Haven, Inc., Waynesboro Area School District, Greencastle-Antrim School District, South Mountain Restoration Center, and Wal-Mart.

The major manufacturing and industrial employers in the county are: Grove Worldwide, K-Mart Corporation, Regency Thermographers, Inc., Ingersoll-Rand Company, World Kitchens, York Refrigeration – North America, Target Corporation, TBWood’s Incorporated, Food Lion, Inc., Landis Gardner Division of Unova, Inc., Jerr-Dan Corporation, National Book Network, Martins Famous Pastry Shoppe, Inc., and Ingram Book Group.

The major transportation facilities serving the county include:

Highways: I-81 [N-S], I-76 (Pennsylvania Turnpike) [E-W], I-70 [E-W], US-30 [E-W] and US-11 [N-S].

Rail: Norfolk-Southern and CSX Transportation. Beth Intermodal serves the Cumberland County Business Park providing transshipment services between rail and truck.

Air: Baltimore-Washington International, Dulles International, and Ronald Reagan National Airport are within 75 miles of Franklin County. Harrisburg International Airport is within 60 miles, and Washington County (MD) Regional Airport is with 10 miles.

## **2.0 Challenge**

Throughout the decade of the 1990's, Franklin County has been losing its manufacturing base. While this is not new to the Northeastern United States, nor even in Pennsylvania, it does represent a considerable loss of jobs and income to the county. The challenge facing Franklin County is how to develop alternative job opportunities and alternative sources of income at a scale and rate that does not significantly alter the economic viability of the county.

Fortunately for Franklin County, the I-81 corridor provides a potential opportunity to provide a significant growth in job opportunities. This opportunity revolves around the transportation and warehousing industry.

Franklin County currently has a surplus of nearly 2800 acres that are available for commercial development along this I-81 corridor.<sup>3</sup> Using this acreage and promoting these sites to transportation and warehousing companies and companies with transportation and warehousing requirements, Franklin County can build a viable and sustaining economic base into the future.

This study will compare the long term trends in employment in Franklin County, and look at the factors that make the transportation and warehousing opportunity a potential candidate for future job growth in the county.

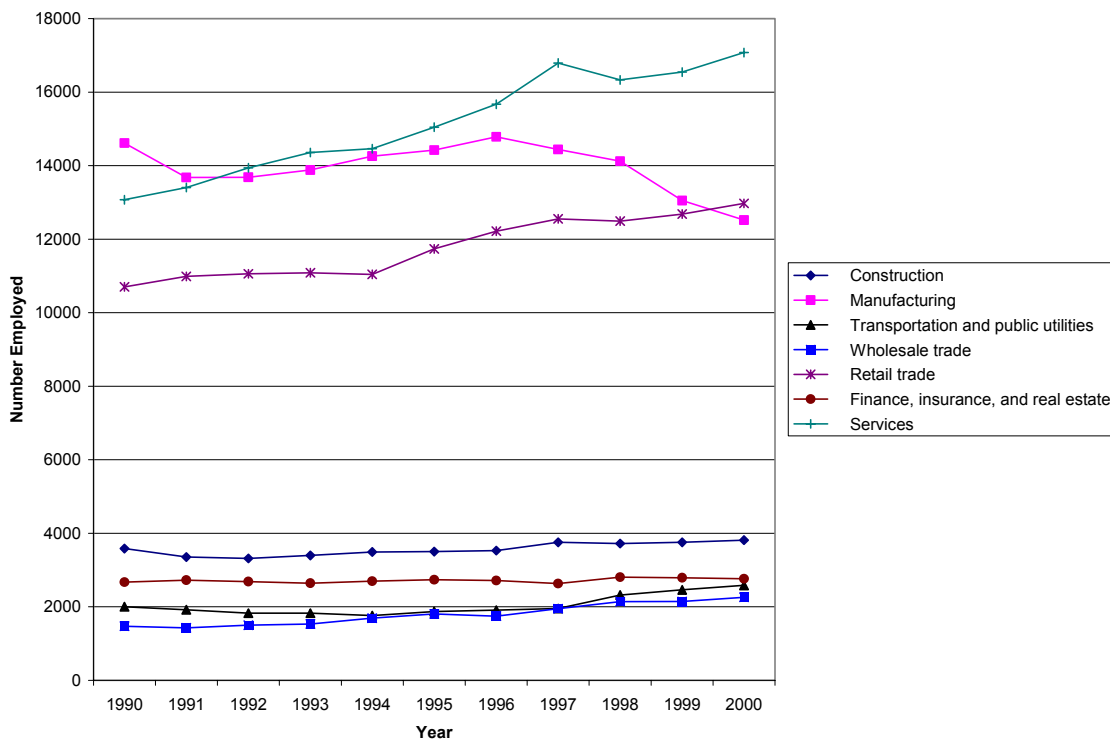
## 2.1 Comparison of Job Growth by Industry

Utilizing data from the same source as that used for Chart 1-1 above, the total full-time and part-time number of jobs by industry type was collected for the period 1990-2000 for Franklin County. This data provides a time series analysis of what industry segments are experiencing a growth in jobs and what industry segments are experiencing a decline in jobs.

As shown in Chart 2-1, every major category of industry experienced some measure of job growth in Franklin County throughout the decade, except for manufacturing. In fact, over the decade, manufacturing experienced a decline of nearly 2000 jobs, or just over 14% of the 1990 manufacturing workforce.

The industry segments achieving the largest growth in this period include the service industry and the retail trade industry. These two industry segments also comprise the largest segments of the private employment workforce.

Agricultural and Government jobs have not been included in this analysis, as there is little that the local Economic Development Corporation can do to affect the job levels in these industry segments.



**Chart 2-1: Franklin County Job Trends by Industry<sup>4</sup>**

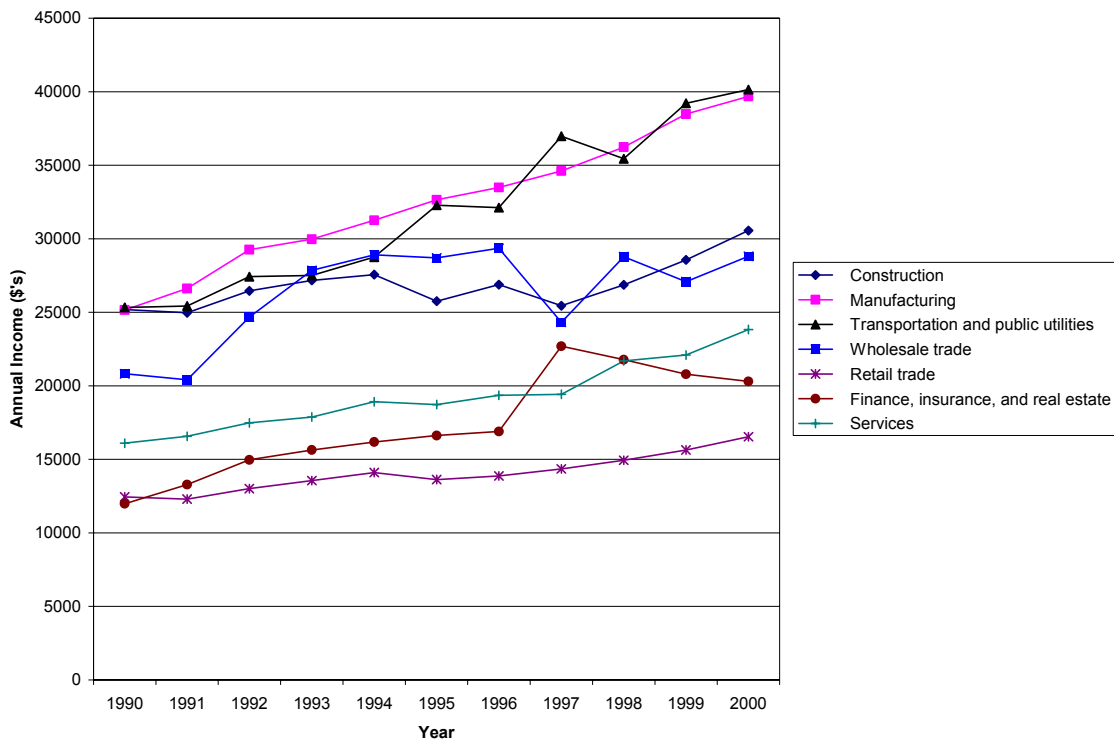
## 2.2 Comparison of Employee Income by Industry

In looking to replace this loss of manufacturing jobs, and in turn, provide for better paying positions in the county, Chart 2-2 tracks the annual income over this same eleven year period by annual income per employee.

This comparison shows that while manufacturing has been losing jobs, the average annual income per employee in manufacturing has risen steadily. In addition, manufacturing has supported a consistently high income level per employee.

Interestingly though, the Transportation and Public Utilities industry segment has not only sustained the same consistently high income level per employee, it has over three of the last four years actually exceeded the income levels of the manufacturing segment.

Not surprisingly, every other industry segment fails to enjoy the same high annual income levels of the manufacturing and transportation and public utility segments.

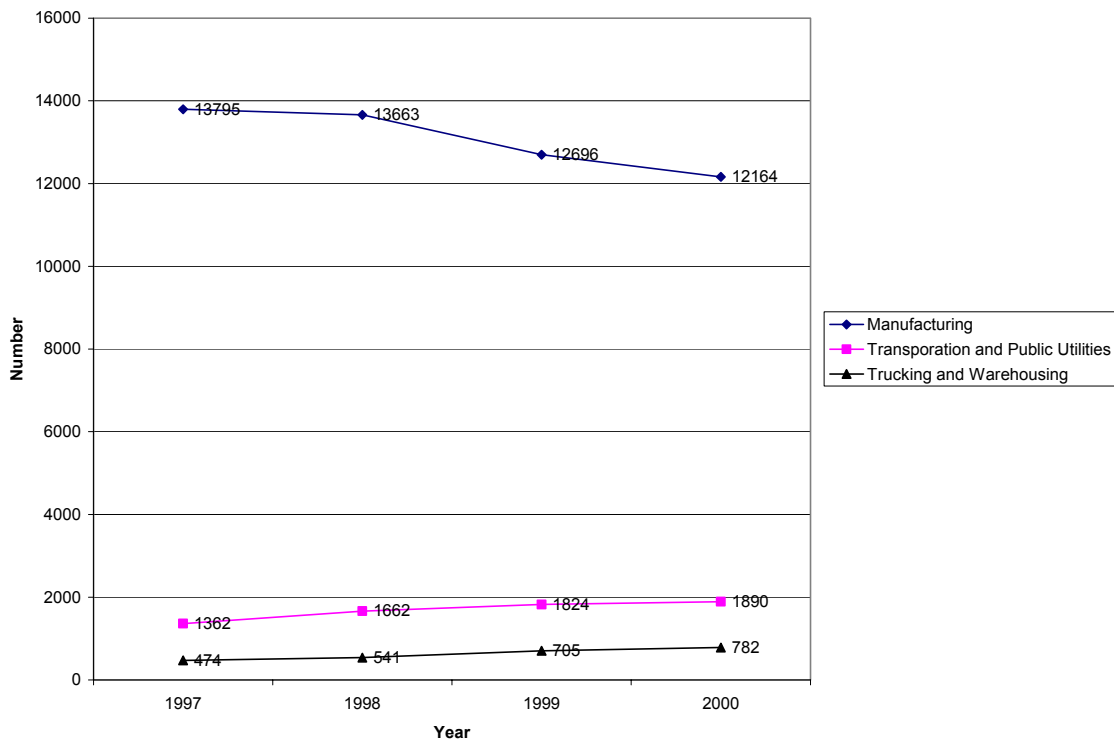


**Chart 2-2: Franklin County Employee Income by Industry<sup>5</sup>**

### 2.3 Trucking and Warehousing vs. Manufacturing

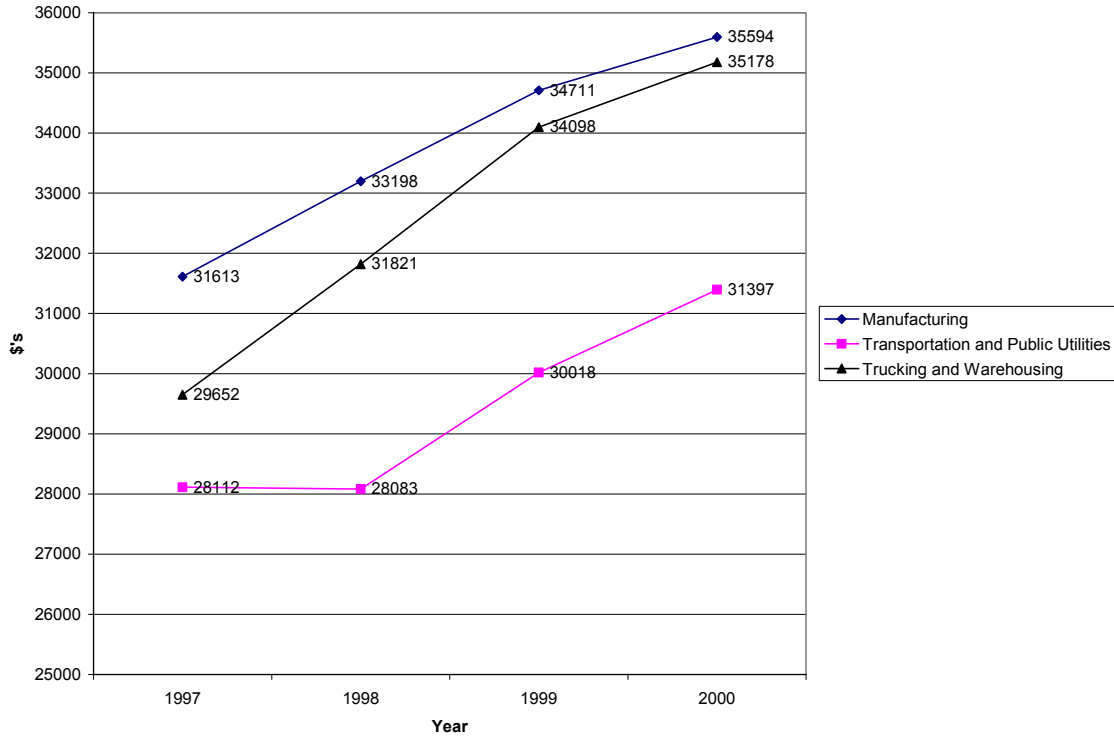
Concerned that the Trucking and Warehousing segment of the Transportation and Public Utilities industry might have a different growth trend or might have different employee incomes, a further comparison was researched. Using data from the Department of Labor, Bureau of Labor Statistics for just the four years (1997 -2000), the Manufacturing and Transportation and Public Utilities Industry Segments were compared to each other and to the Trucking and Warehousing Sub-segment of the Transportation and Public Utilities Industry Segment.

Chart 2-3 shows the relative sizes of these industries in Franklin County and track quite closely with the numbers gathered from the Bureau of Economic Analysis of the Department of Commerce. Manufacturing shows a decline of just over 1600 jobs in this four year period, while the Transportation and Public Utility Industry Segment shows an increase of just over 500 jobs, with the Trucking and Warehousing portion of that segment accounting for slightly over 300 job increases.



**Chart 2-3: Franklin County Employment by Industry (1997-2000)<sup>6</sup>**

Since the number of jobs by industry segment tracks quite closely between the data provided by the Bureau of Economic Affairs and the Bureau of Labor Statistics, the next step was to compare the Average Annual Income Rates by these Industry Segments. Chart 2-4 shows this comparison.



**Chart 2-4: Franklin County Average Annual Income<sup>7</sup>**

Significantly, the Trucking and Warehousing Annual Income values track quite closely to the Manufacturing Industry Segment. In fact, as can be seen from Chart 2-4, the Trucking and Warehousing Industry Segment actually tracks more closely to the Manufacturing Segment than does the overall Transportation and Public Utilities Industry Segment.

From the foregoing, it can be concluded that replacing lost manufacturing jobs with jobs from the transportation and warehousing industry is a viable option for Franklin County.

## 2.4 Impact of Increased Trucking and Warehousing Jobs

Aside from just replacing the lost manufacturing positions, there is a wider impact on the overall Franklin County economy from an increase in Trucking and Warehousing jobs. This is due to the fact that for each new job created there will be a ripple effect throughout the county as these new jobs require increases in goods and services. This increase in additional goods and services will result in a corresponding increase in jobs and income in other sectors of the Franklin County economy. This additional increase in income is referred to as the “multiplier” effect.

The table in Appendix A was derived from data generated on the Bureau of Economic Analysis (BEA) website and compares Franklin County to the United States as a whole. Using the distribution of income for the United States, an expected distribution of income was generated for Franklin County. Where Franklin County exceeded the income that would normally be expected, when comparing it to the United States, the difference was noted in green lettering (positive numbers) in the Difference column. Where the difference was less than what would normally be expected, it was noted in red lettering (negative numbers surrounded by parentheses) in the Difference column.

These difference values can now be used to calculate basic vs. non-basic industries and businesses. Base industries are those assumed to be ‘export’ industries, responding to autonomous demand from outside the local economy. Non-base industries are those that are residentiary, or those that service the local economy. A major use of defining export base industries is to quantitatively project the impacts of changes in these base industries on total local employment and income. This is done through the use of the multiplier concept. The multiplier measures the total change in local income and/or employment for a given change in demand for output from the exporting business or industry; or given a change in employment in the exporting business or industry.

A multiplier value was calculated in two ways. First, it can be assumed that all Agriculture, Manufacturing, Extractive Industries, and Federal and State government activities are basic-export industries. Or, second, a multiplier can be determined through the calculation of a location quotient (LQ). A location quotient is a measure of economic structure and may also be known as a coefficient of localization or specialization. If a community specializes in a good or service, relative to another larger entity, the product or service is presumed to be an export item.

One of the problems in using the location quotient method to determine a multiplier is that the LQ consistently underestimates basic employment, overestimating the multiplier. For this reason, both methods were used to calculate separate multipliers resulting in a potential range of results.

From the foregoing analysis, and using the data carried forth from Chart 2-4, if 500 new jobs were created in the Trucking and Warehousing Industry segment, there would be a corresponding increase in income by \$17,379,000 in the county. This income from this

industry segment would have a ripple effect in the county of somewhere between \$37,365,000 and \$56,308,000.

Alternatively, if 1000 new jobs were created, the corresponding impact on Franklin County would be an increase in income of between \$74,730,000 and \$112,616,000. Potentially, the transportation and warehousing industry could be a \$100 million dollar industry for the county.

For this model, it was assumed that the number of working hours in a year is 1976, and the average hourly rate of \$17.59 was used. The average hourly rate was based upon the annual income number for the Transportation and Warehousing Industry in the year 2000 as derived from data cited above from the Bureau of Labor Statistics.

### 3.0 Issues and Opportunities

#### Employment

Population migration is defined as the movement of people from one place to another. For economic development specialists, this movement of people, not unlike the movement of plant, equipment, and capital can impact the economic development of a region.

There can be several types of population migrations:

- Data from the US Census has shown that there has been a constant movement of people away from rural areas to more urban areas,
- There has been a steady movement of people from the Northeast to the South and Southwestern areas of the country, and
- Relatively young adults tend to migrate more often than older citizens.

From an economic view, there are two factors that stand out as the reasons behind this migration:

- Earnings potential, and
- Quality of life and/or amenities available.

In theory, people will tend to move in order to make more money, to seek a better quality of life, or to find a greater variety of amenities available.

As shown in Table 3.1 below, derived from data provided by the County Population Estimates and Estimated Components of Change Report from the Population Estimates Branch of the US Bureau of the Census, Franklin County has experienced a moderate increase in population growth for the years 2000-2002.

	<u>2000</u>	<u>2001</u>	<u>2002</u>
<b>Pop Est</b>	129549	130406	131598
<b>Under 65</b>	108708	109248	110153
<b>Over 65</b>	20841	21158	21445
<b>Births</b>	396	1589	1570
<b>Deaths</b>	271	1235	1171
<b>Int'l Migration</b>	46	183	183
<b>Internal Migration</b>	70	364	636
<b>Residual</b>	-5	-44	-26

**Table 3.1: Franklin County Population Data**<sup>8</sup>

There has been a net increase in population due to both a rising birth rate as well as a positive internal migration, coupled with a small migration of people into the county from outside the United States.

This would seem to be at odds with the way the US Department of Agriculture has classified Franklin County in accordance with their Typology Codes from 1989. That

report designated Franklin County as a non-metro manufacturing county that in theory should be suffering from a net outflow of people.

However, a Current Population Survey (CPS) Report (*Why People Move – Exploring the March 2000 Current Population Survey*) covering the period March 1999 – March 2000 published by the US Bureau of the Census<sup>9</sup> found that the primary cause of the migration of people was for housing and housing-related reasons at 52% of those moving in that time period, as opposed to moving for family reasons at 26% and for job or work related reasons at 16%. Clearly, if people are moving into Franklin County it is not because of a rising tide of new jobs. It is more likely due to population shifts related to the need for affordable housing.

Supporting this presumption is a review of the Franklin County’s Population Migration on a County by County basis in the year 2000. Table 3.2 looks at the migration patterns into and out of Franklin County for the eight counties surrounding Franklin:

	In	Out	Net
Washington, Maryland	1803	1062	741
Frederick, Maryland	425	329	96
Cumberland, PA	1608	1856	-248
Adams, PA	389	450	-61
Fulton, PA	431	348	83
Perry, PA	57	80	-23
Juniata, PA	50	29	21
Huntingdon, PA	283	192	91
Total	5046	4346	700

**Table 3.2: Population Movement Into and Out Of Franklin County in 2000<sup>10</sup>**

From this data, there was a net gain of 700 people moving into the county from the counties immediately surrounding Franklin County. From the CPS report on *Why People Move* cited above, movement into and out of surrounding counties generally is identified with people looking for housing. Movement well beyond adjacent counties is normally associated with work-related activities, such as job changes, promotions, or reassignments.

However, as postulated below, the growth in the population in Franklin County can be explained as people moving into the county in search of affordable housing, a rural lifestyle, or a changing economic base in the area. Washington County in Maryland has seen significant growth in recent years.

Franklin County is experiencing a period of moderate population growth. Based upon the data for the past three years, the population in excess of age 65 is growing; however the number of births is exceeding the number of deaths in the county resulting in a slightly younger county in 2003 over that in 2000. So, while the county is aging, its rate is not as much as other PA counties where there is both a declining birth rate as well as an increasingly aged population.

The migration into the county both internally and internationally is both positive. Given the decline in manufacturing, this population growth is, on the surface, difficult to explain. However, with a growing economy in Washington County, MD just to the south, and a rapidly expanding Harrisburg metropolitan area, this growth might be explained by people moving into the county in search of affordable housing, a rural lifestyle, and/or a changing economic base.

In an effort to determine whether Franklin County was becoming a new bedroom community, the commuting times to work were compared from information available in both the 1990 and the 2000 census data in Table 3.3.

	1990 Census <sup>11</sup>	2000 Census <sup>12</sup>
Ave. Travel Time	20.41 minutes	23.00 minutes
% Working Outside the County	30.39%	28.2%

**Table 3.3: Franklin County Commuting Data**

From this data, the apparent commuting patterns have not changed over the ten years between census data collections. From this information, it would appear that if Franklin County were becoming a bedroom community to a larger metropolitan area, the average travel time and the percent of people working outside the county would have gone up. It would appear that while people are moving into the county, they are working locally.

Several new warehousing and transportation centers have opened in the county providing upwards of 600+ jobs over the past three years. These centers have started to attract employees that might otherwise have gone out of county for similar paying jobs, as well as have brought management level employees into the county.

The amenities of lower Pennsylvania taxes, a relatively easy commute, a decent infrastructure, and lower home prices all contribute to this slowly growing county. At issue is whether this moderate growth can be augmented by bringing in industries with job opportunities to attract even more people to move into the area.

## I-81 Truck Traffic and Congestion

The growth of the warehousing and trucking industry in Franklin County is not without its critics. Many of these critics cite the increase in truck traffic and congestion that will accompany this industrial development.

Compounding this are two recent efforts to look at the truck traffic in I-81, and the major recommendations that surround these reviews.

### *Virginia*

First, in Virginia there is an effort to build a major truck-only roadway built by a private consortium called Safer Transportation and Roadways (STAR) Solutions. This plan calls for \$6.4 billion dollars to be spent for doubling the current I-81 infrastructure with a combination of federal, state, and private funds combined with a proposal to charge tolls.

In Virginia, I-81 runs for 325 miles, the most of any state for the highway that begins in Tennessee and ends at the Canadian border, spanning 824 total miles. Dubbed, the North American Free Trade Agreement (NAFTA) highway, this has become the major avenue of commerce for goods shipped on north-south routes between Mexico and Canada.

Traffic along I-81 has doubled from approximately 25,000 vehicles a day in 1990 to as many as 53,000 vehicles per day in 2003. Further, approximately 40% of this volume is accounted for by truck traffic.<sup>13</sup>

This effort by the State of Virginia could potentially accommodate a doubling of the volume of this truck traffic.

### *Pennsylvania*

A recently released conceptual plan of the Pennsylvania Department of Transportation calls for the widening of I-81 to create a third lane along 28 miles in Franklin County. Citing data similar to the Virginia study, it is anticipated that the current volume of traffic on I-81 of approximately 42,700 vehicles in Chambersburg will double over the next decade. Also, similar to the Virginia study, approximately 40% of this volume is due to truck traffic.<sup>14</sup>

The Pennsylvania Department of Transportation estimates that its current expansion plans will be done within existing rights of way and will be accomplished over a seven year period.

### *Implications*

From the foregoing review of the truck traffic and congestion along the I-81 corridor, it is clear that I-81 will continue to be a major North-South trucking route, with or without an increase in warehousing or distribution facilities in Franklin County. The County would

appear to be ideally positioned to take advantage of this situation and to create a viable industry based upon a geographic proximity to a number of major market areas in the mid-Atlantic region.

While the growth of the warehousing and distribution industry in the County may increase the stress on the local highway infrastructure, there is significant opportunity to work with the Pennsylvania Department of Transportation to alleviate this stress.

## **Conclusion and Recommendations**

The further development and expansion of the transportation and warehousing industry in Franklin County is a viable alternative to replacing the loss of manufacturing jobs in the county. In order to accomplish this, the following is recommended:

- Promote the advantages of Franklin County to the Transportation, Distribution and Warehousing Industry as a logical and affordable place to do business.
- Develop a master plan of industrial development sites along the I-81 corridor.
- Work with local government leaders and citizens groups to provide an advisory panel to address how best to manage business zoning around highly frequented access points on Interstate 81.
- Prepare an industrial development plan that can accommodate the orderly growth of new warehousing and storage facilities.
- Work with the PA Department of Transportation and with State Government leaders to promote the expansion and upgrading of Interstate Route 81 in a way that will take into account the needs of the transportation and warehousing industry as well as the local citizenry of Franklin County.
- Work with local communities organizations and government leaders on how best to prepare for this influx of new jobs on such areas as housing, schools, community services, zoning, sewer and water utilities, electricity and power, and other infrastructure supporting areas.
- Explore the further development of intermodal transportation and shipping facilities as a means of increasing the desirability of Franklin County as a transportation and warehousing center of operations.
- Conduct further research into the specific areas that will be impacted by growth in this industry segment.

**Appendix A**  
**Multiplier Analysis**

Figures for Calendar Year 2000

Figures in \$ x 1000		Franklin County <sup>15</sup>	United States <sup>16</sup>	Distribution of Total Earnings In US	Expected Earnings in Franklin County	Difference
40	Earnings by place of work	1846787	6088880000			
81	Farm earnings	39139	40629000	0.67%	12323	26816.00
82	Nonfarm earnings		6048251000			
90	Private earnings		5104978000			
100	Ag. services, forestry, fishing and other	(D)	41992000			
110	Agricultural services	29393	36841000	0.61%	11174	18219.00
120	Forestry, fishing, and other	(D)	5151000			
121	Forestry	(D)	1321000	0.02%	401	
122	Fishing	(D)	1650000	0.03%	500	
123	Other	0	2180000	0.04%	661	(661.00)
200	Mining	(D)	51748000			
210	Metal mining	0	2515000	0.04%	763	(763.00)
220	Coal mining	(D)	5890000	0.10%	1786	
230	Oil and gas extraction	(L)	36743000	0.60%	11144	
240	Nonmetallic minerals, except fuels	(D)	6600000	0.11%	2002	
300	Construction		365045000			
310	General building contractors	(D)	84573000	1.39%	25651	
320	Heavy construction contractors	(D)	42457000	0.70%	12877	
330	Special trade contractors	84376	238015000	3.91%	72191	12185.00
400	Manufacturing		966634000			
410	Durable goods		609808000			
413	Lumber and wood products	20399	31963000	0.52%	9695	10704.00
417	Furniture and fixtures	3267	19729000	0.32%	5984	(2717.00)
420	Stone, clay, and glass products	46785	27724000	0.46%	8409	38376.00
423	Primary metal industries	(D)	37492000	0.62%	11372	

426	Fabricated metal products	40017	67429000	1.11%	20452	19565.00
429	Industrial machinery and equipment	249396	127946000	2.10%	38807	210589.00
432	Electronic and other electric equipment	29214	110647000	1.82%	33560	(4346.00)
435	Motor vehicles and equipment	(D)	67261000	1.10%	20401	
438	Other transportation equipment	(D)	49516000	0.81%	15018	
441	Instruments and related products	3496	53729000	0.88%	16296	(12800.00)
444	Miscellaneous manufacturing industries	(D)	16372000	0.27%	4966	
447	Ordnance	(N)	(N)			
450	Nondurable goods		356826000			
453	Food and kindred products	32595	66461000	1.09%	20158	12437.00
456	Tobacco products	0	2794000	0.05%	847	(847.00)
459	Textile mill products	(D)	17262000	0.28%	5236	
462	Apparel and other textile products	5243	17123000	0.28%	5193	50.00
465	Paper and allied products	0	33423000	0.55%	10137	(10137.00)
468	Printing and publishing	26266	73397000	1.21%	22262	4004.00
471	Chemicals and allied products	(D)	94951000	1.56%	28799	
474	Petroleum and coal products	1265	9322000	0.15%	2827	(1562.00)
477	Rubber and misc. plastics products	17784	39803000	0.65%	12072	5712.00
480	Leather and leather products	0	2290000	0.04%	695	(695.00)
500	Transportation and public utilities		418240000			
510	Railroad transportation	514	13808000	0.23%	4188	(3674.00)
<b>520</b>	<b>Trucking and warehousing</b>	<b>42492</b>	<b>85283000</b>	<b>1.40%</b>	<b>25867</b>	<b>16625.00</b>
530	Water transportation	91	9405000	0.15%	2853	(2762.00)
540	Other transportation	15440	102665000			
541	Local and interurban passenger transit	4041	13534000	0.22%	4105	(64.00)
542	Transportation by air	(D)	60559000	0.99%	18368	
543	Pipelines, except natural gas	(D)	957000	0.02%	290	
544	Transportation services	6634	27615000	0.45%	8376	(1742.00)
560	Communications	31971	132969000	2.18%	40330	(8359.00)
570	Electric, gas, and sanitary services	13182	74110000	1.22%	22478	(9296.00)
610	Wholesale trade	65169	378265000	6.21%	114730	(49561.00)
620	Retail trade		530339000			
621	Building materials and garden equipment	18862	31179000	0.51%	9457	9405.00

622	General merchandise stores	21121	56763000	0.93%	17216	3905.00
623	Food stores	47766	75714000	1.24%	22964	24802.00
624	Automotive dealers and service stations	36814	88657000	1.46%	26890	9924.00
625	Apparel and accessory stores	4966	24611000	0.40%	7465	(2499.00)
626	Home furniture and furnishings stores	8795	36663000	0.60%	11120	(2325.00)
627	Eating and drinking places	40325	123511000	2.03%	37461	2864.00
628	Miscellaneous retail	35952	93241000	1.53%	28280	7672.00
700	Finance, insurance, and real estate		573441000			
710	Depository and nondepository institutions	23588	135336000	2.22%	41048	(17460.00)
730	Other finance, insurance, and real estate		438105000			
731	Security and commodity brokers	2925	146689000	2.41%	44491	(41566.00)
732	Insurance carriers	(D)	88988000	1.46%	26990	
733	Insurance agents, brokers, and services	8503	50006000	0.82%	15167	(6664.00)
734	Real estate	13416	111705000	1.83%	33881	(20465.00)
735	Combined real estate, insurance, etc.	(N)	(N)			
736	Holding and other investment offices	(D)	40717000	0.67%	12350	
800	Services		1779274000			
805	Hotels and other lodging places	8478	52442000	0.86%	15906	(7428.00)
810	Personal services	17100	46773000	0.77%	14186	2914.00
815	Private households	3037	13279000	0.22%	4028	(991.00)
820	Business services	34776	465946000	7.65%	141324	(106548.00)
825	Auto repair, services, and parking	22556	50414000	0.83%	15291	7265.00
830	Miscellaneous repair services	9345	21171000	0.35%	6421	2924.00
835	Amusement and recreation services	8193	59073000	0.97%	17917	(9724.00)
840	Motion pictures	518	27884000	0.46%	8457	(7939.00)
845	Health services	190773	462951000	7.60%	140415	50358.00
850	Legal services	12522	120921000	1.99%	36676	(24154.00)
855	Educational services	18885	71724000	1.18%	21754	(2869.00)
860	Social services	21303	60952000	1.00%	18487	2816.00
865	Museums, botanical, zoological gardens	(D)	2647000	0.04%	803	
870	Membership organizations	24552	56723000	0.93%	17204	7348.00
875	Engineering and management services 12/	28599	243122000	3.99%	73740	(45141.00)
880	Miscellaneous services	(D)	23252000	0.38%	7052	

900	Government and government enterprises		943273000			
910	Federal, civilian	120166	189309000	3.11%	57418	62748.00
920	Military	6170	75609000	1.24%	22933	(16763.00)
930	State and local	187771	678355000	11.14%	205748	(17977.00)
931	State government		194549000			
932	Local government		483806000			
				100.00%		

		Assumption Method	Location Quotient
Basic Industries		858366	570227
Multiplier		2.15	3.24

Impact Base (Assumes 500 Jobs at \$17.59/hour)	Total County Benefit:	
17379	<b>37365</b>	<b>56308</b>

Impact Base (Assumes 1000 Jobs at \$17.59/hour)	Total County Benefit:	
34758	<b>74730</b>	<b>112616</b>

## Endnotes

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- <sup>1</sup> 2003 Franklin County Profile, Franklin County Area Development Corporation, Chambersburg, PA < <http://www.fcadc.com> >.
- <sup>2</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, Table CA25, May 2003; Online < <http://www.bea.doc.gov/bea/regional/reis/> > April 5, 2004.
- <sup>3</sup> Mike Ross (2004) Roundtable Presentation, *Existing/Proposed Industrial & Commercial Sites*, Franklin County Area Development Corporation, February 2004.
- <sup>4</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, Table CA25, May 2003; Online < <http://www.bea.doc.gov/bea/regional/reis/> > April 5, 2004.
- <sup>5</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, Table CA05, May 2003; Online < <http://www.bea.doc.gov/bea/regional/reis/> > April 5, 2004.
- <sup>6</sup> US Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages (SIC), Series ID's EWU420554050D, EWU420555050D, EWU420554050E, EWU420555050E, EWU420554050E42, EWU420555050E42; Online < <http://data.bls.gov/servlet/surveyoutputServlet> > April 11, 2004.
- <sup>7</sup> US Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages (SIC), Series ID's EWU420554050D, EWU420555050D, EWU420554050E, EWU420555050E, EWU420554050E42, EWU420555050E42; Online < <http://data.bls.gov/servlet/surveyoutputServlet> > April 11, 2004.
- <sup>8</sup> U.S. Bureau of the Census, Population Estimates Branch, *County Population Estimates and Estimated Components of Change Report*; Online < <http://eire/census.gov/popest/data/coasro.php> > March 14, 2004.
- <sup>9</sup> U.S. Census Bureau; Online < <http://www.census.gov/prod/2001pubs/p23-204.pdf> > March 14, 2004.
- <sup>10</sup> U.S. Bureau of the Census, Franklin County Population Migration Data (CY2000); Online < <http://eire/census.gov/popest/data/counties.php> > March 19, 2004.
- <sup>11</sup> U.S. Census Bureau, 1990 Census Lookup (1.4a); Online < <http://homer.ssd.census.gov/cdrom/lookup/1082581187> > April 21, 2004.
- <sup>12</sup> U.S. Census Bureau, American Fact Finder, GCT-P12, Employment Status and Commuting to Work:2000, Census 2000 Summary File 4, Franklin County, Pennsylvania – Census Tract; Online < <http://factfinder.census.gov/servlet/GCTTable?> > April 21, 2004.
- <sup>13</sup> Steve Ginsburg (2004) The Washington Post, *Safety, Va. Scenery at Issue in Push for Trucks-Only Road*, March 28, 2004; Online < <http://www.washingtonpost.com/wp-dyn/articles/A30021-2004mar27.html> > April 18, 2004.
- <sup>14</sup> Jim Hook, Public Opinion, *Widening I-81, Study Outlines \$550M Plan*, Public Opinion, November 15, 2003; Online < <http://www.publicopiniononline.com/news/stories/20031115/localnews/647329.html> > April 18, 2004.
- <sup>15</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, Table CA05 (Franklin County), May 2003; Online < <http://www.bea.doc.gov/bea/regional/reis/> > April 5, 2004.

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<sup>16</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, Table CA05 (United States), May 2003; Online < <http://www.bea.doc.gov/bea/regional/reis> > April 5, 2004.