FRANKLIN TOWNSHIP
ECONOMIC DEVELOPMENT STUDY

PHASE 1 REPORT

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CENTER
FOR URBAN
POLICY RESEARCH

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Executive Summary

The Center for Urban Policy Research has prepared this report in anticipation of the completion of an economic development study for Franklin Township. This analysis was conducted through CUPR's Rutgers Economic Advisory Service (R/ECON) under the direction of Sean DiGiovanna and Nancy Mantell. In this first phase, CUPR used industrial and occupational data to analyze Franklin Township's economic characteristics and to forecast future trends. The second phase will consist of an analysis of Franklin Township's economic development options and provide recommendations for implementing the most promising strategies.

The following report presents a series of economic analyses and forecasts on aspects of Franklin Township's industrial and occupational characteristics. The primary data source is the fully-disclosed New Jersey covered employment (ES202) data for all employers in the Township. In addition, we used data from the US Census Bureau and other state and regional agencies.

General Findings

Although not in itself intended to draw conclusions about Franklin Township's economic development milieu, this data analysis has enabled us to make some important observations about the Township's economy that will likely hold true under further investigation.

- *Franklin Township's economic base is strong and diverse.* Employment in Franklin Township has grown at a rate that surpasses the state and regional average. Further, the Township's economy has demonstrated a high degree of diversity, providing a wide range of employment opportunities for both white-collar and blue-collar workers.
- *The local economy has large employment concentrations in industries that are projected to grow.* Given the agglomerative nature of many of the "new economy" or "high-tech" industries, locations that have captured investment in these sectors in the past are likely to remain competitive in the future. In particular, the Township's strong concentration in Business Services and Engineering and Management Services should serve it well as those industries are forecast to be the growth leaders through 2012.
- *Franklin Township's employment base is a good match for the skills and talents of its residents.* The comparison of jobs offered by employers and jobs held by residents indicates that industries likely to locate in Franklin are able to find the workers they need and residents have the potential to find jobs locally.

Questions for Phase 2 of the Study

This analysis raised several interesting questions that might have import for future economic development planning within the Township and that should be considered during the completion of the second phase of the economic development study.

- *What are the impacts of the loss of large employers in the Township's historically competitive industries?* The loss of employment at Merrill Lynch and AT&T significantly reduced the competitiveness of Security and Commodity Brokers and Communications, respectively. Given these losses, the question arises as to how much effort the Township should put into recruiting in these particular industries.

- *What is the future of manufacturing in Franklin Township?* Although the manufacturing sector has been on the decline both statewide and nationally, Franklin Township posted impressive gains over the study period. Thus, the question arises as to whether, despite the forecast of manufacturing decline, the Township should still pursue growth in the manufacturing sector. On the one hand, it is not advisable for a location to be concentrated in declining industries. On the other hand, Franklin Township has demonstrated its competitiveness in this sector and manufacturing does tend to provide better jobs for low-skilled workers and has a greater impact on the local economy through the multiplier effect

- *Why is Franklin Township so underrepresented in retail activity?* Retail is underrepresented in Franklin Township and the industry generally performed poorly during a period when the Township's population—and, hence, demand for consumer goods and services—grew rapidly. Thus, it is important to understand why the retail sector has not done as well as it might have.

- *What are the prospects for an emerging agglomeration in the health sector?* Although Health Services is not currently a strong component of Franklin Township's economy, certain related industry sectors have been or are becoming competitive in the Township. Given the state's strength in the health field, what are the prospects for developing health related industries into a new competitive agglomeration?

Industries Targeted for Case Studies

Based upon the data analysis and the questions raised above, the following industry groups are likely candidates for more detailed case studies in Phase II.

Services

- Engineering and Management Services
- Business Services

These two industry groups were the strongest performers in the study period and are projected to grow at a high rate over the next decade. It is important to understand the characteristics and locational requirements of the strong performers within these two industries in order to help the Township keep its competitive edge.

- Health Services

Given the possibility of an emerging health sector agglomeration within Franklin Township, this large industry group needs to be studied in more detail. In particular, links need to be drawn to related industry groups in Manufacturing, FIRE, and Services.

Manufacturing

- Electronics
- Chemicals
- Instruments

These industries were overall strong performers for the Township and bucked the trend of decline within manufacturing. Phase II should identify the characteristics and locational requirements of firms within these industries, particularly among the more competitive and high-tech sectors within them.

- Printing

Phase II can help shed some light on whether the strong recent performance of Printing and Publishing can result in further agglomeration or will remain the province a few medium-sized firms.

Trade

- All Retail Industries

Given the significant under-representation of retail within Franklin Township and its recent weak performance, a detailed case study of the various sectors within the retail industry is called for.

Conclusion

While this data analysis has potentially raised as many questions as it has answered, it provides an excellent jumping-off point for the continuation of the economic development study in Phase II. The data have shown that Franklin Township enjoys a strong local economy that appears to serve the needs of both its residents and its employers well. The Township is concentrated in sectors that are forecast for strong growth and has significant presence in industries that are at the forefront of the new economy and high technology.

This study also exposed a few potential weaknesses that will be the object of further study. In particular, the implications of the closure of large firms on the competitiveness of traditionally strong industries (such as Security and Commodity Brokers and Communications) might indicate that the Township needs to give thought to encouraging the agglomerative tendencies within its competitive industries. In addition, more study needs to be made of the retail sector to determine its appropriate place within future development strategy.

The data also suggest some intriguing, but by no means certain, opportunities for future growth. The surprisingly strong performance of manufacturing indicates that, despite forecasts of declining employment, it may yet be an important component of the local economy in years to come. Finally, the data provide evidence for an emerging agglomeration in health-related industrial activity that should be investigated further.

1.0 INTRODUCTION

The Center for Urban Policy Research has prepared this report in anticipation of the completion of an economic development study for Franklin Township. This analysis was conducted through CUPR's Rutgers Economic Advisory Service (R/ECON) under the direction of Sean DiGiovanna and Nancy Mantell. In this first phase, CUPR used industrial and occupational data to analyze Franklin Township's economic characteristics and to forecast future trends. The second phase will consist of an analysis of Franklin Township's economic development options and provide recommendations for implementing the most promising strategies.

The following report presents a series of economic analyses and forecasts on aspects of Franklin Township's industrial and occupational characteristics. The primary data source is the fully-disclosed New Jersey covered employment (ES202) data for all employers in the Township. In addition, we used data from the US Census Bureau and other state and regional agencies. We conducted the following analyses:

Commutation analysis: Using 1990 (and available 2000) Census data, we conducted a baseline commutation pattern analysis for Franklin Township. This analysis details the most common points of origin for commuters to the Township as well as the most common destinations for Franklin's commuting residents.

Industrial trends and forecasts: In this section we analyze the changes in employment in broad industrial classifications, i.e. services, wholesale trade, retail trade, etc. We use this information to forecast trends in those industries using the relationship of employment in Franklin Township to that in Middlesex and Somerset counties, as well as other information.

Occupational analysis and forecast: We develop an estimate of the occupational distribution of Franklin Township for 2001. We then forecast occupational distribution based on this estimate and projected occupational employment growth for the township.

Basic economic analysis: In this section we conduct a thorough location quotient analysis to compare Franklin Township's industrial make-up with that of the region (Middlesex-Somerset), and the state as a whole. This analysis helps to identify those sectors in which the Township is specialized and which contribute to its basic economy.

Shift-share analysis: In this section we examine the causes of employment increases and declines across industries. Specifically, we determine whether employment gains or losses are the result of national trends, industry shifts, or local competitive advantage.

The final section of the report identifies the major strengths and weaknesses of Franklin Township's industrial landscape and discusses the impact of this analysis for the second phase of the economic development study.

2.0 THE REGIONAL ECONOMY

Before analyzing the particular industrial trends within Franklin Township, it is important to understand the regional context. Given that employers in the Township will depend upon attracting workers, customers and suppliers from beyond its borders, an examination of local commutation patterns will help us identify the appropriate regional boundaries.

In 1990 63% of people who worked in Franklin Township lived in Franklin, the rest of Somerset County, or Middlesex County. (Table 2.1) Also 68% of working Franklin Township residents worked in Franklin Township, the rest of Somerset County, or Middlesex County. Thus, it appears that a regional definition that encompasses Middlesex and Somerset Counties will account for a substantial majority of the Township's workforce.

Table 2.1

1990 Commutation Patterns

Live in Franklin Township	Number	% of Total	Cumulative	Work in Franklin Township	Number	% of Total	Cumulative
Work in:				Live in:			
Franklin & Work at Home	5506	22%	22%	Franklin & Work at Home	5506	17%	17%
Rest of Somerset	2348	9%	32%	Rest of Somerset	5718	18%	35%
Middlesex	9115	37%	68%	Middlesex	8981	28%	63%
Hunterdon	141	1%	69%	Hunterdon	1239	4%	67%
Mercer	1059	4%	73%	Mercer	957	3%	70%
Morris	911	4%	77%	Morris	1658	5%	75%
Monmouth-Ocean	369	1%	78%	Monmouth-Ocean	1298	4%	79%
Rest of Northern New Jersey	3177	13%	91%	Rest of Northern New Jersey	4507	14%	93%
Southern New Jersey	36	0%	91%	Southern New Jersey	254	1%	94%
New York City	1798	7%	99%	New York City	606	2%	96%
Other	327	1%	100%	Other	1342	4%	100%
Total	24787	100%		Total	32066	100%	

Source: *US Census of Population and Housing, 1990.*

Recently released data from the 2000 Census (Table 2.2) show that 17% of working Franklin Township residents live in the township, another 14% work in the rest of Somerset County, while 39% work in Middlesex or Hunterdon counties. Thus 69% of residents live and work in the Middlesex-Somerset-Hunterdon labor area, no aggregate change from the situation in 1990. One noticeable shift, however, is the reduction in the proportion of residents working in Franklin Township and the concomitant increase in the proportion of those working in the rest of Somerset County.

Census 2000 data for the residence of people who hold jobs in Franklin Township (other than those who both live and work in the township) are not yet available. In any case, it appears that there has been little change in the living/working pattern over the decade, so that we think the regional definition we used that includes Middlesex and Somerset counties is still reasonable.

Table 2.2

2000 Commutation Patterns of Franklin Township Residents

Live in Franklin Township	Number	% of Total	Cumulative
Work in:			
Franklin & Work at Home	4476	17%	17%
Rest of Somerset	3596	14%	31%
Middlesex/Hunterdon	10223	39%	69%
Rest of State	6051	23%	92%
Other	2017	8%	100%
Total	26364	100%	

Source: *US Census of Population and Housing, 2000.*

2.1 Regional Industrial Trends

In Middlesex County, private employment grew from 300,500 in 1990 to 343,400 in 2000,[1] an increase of 14.3%. Private employment grew even faster in Somerset County, from 118,400 in 1990 to 159,100 in 2000, a growth rate of 34.4%. In total, the regional job base rose by 83,600 jobs, an increase of 20%, and nearly twice the 11% average growth for the state.

Over the decade the distribution of employment by industry[2] changed significantly in the region (Figure 2.1) and even more significantly in the two counties. In 1990, 23% of private employment was in Manufacturing and 25% was in Services, while the largest sector in the region was Trade with 29% of jobs.

During the 1990s the number of manufacturing jobs in the region fell by over 12,000 with most of the loss coming in Middlesex County in the first two years of the period. Although employment in Trade grew over the decade, the slow growth rate resulted in Trade's proportional share falling below its 1990 level.

By 2000 Trade accounted for 27% of regional employment, 10% in Wholesale Trade and 17% in Retail Trade. The major growth sector in the region, as in the state, was Services. By 2000, the service sector accounted for 34% of jobs in the region. Growth over the decade was concentrated in Business Services, to an even larger extent than was the case for the state. In Middlesex/Somerset, jobs in Business Services accounted for 44% of new private sector jobs, compared to 26% in New Jersey.

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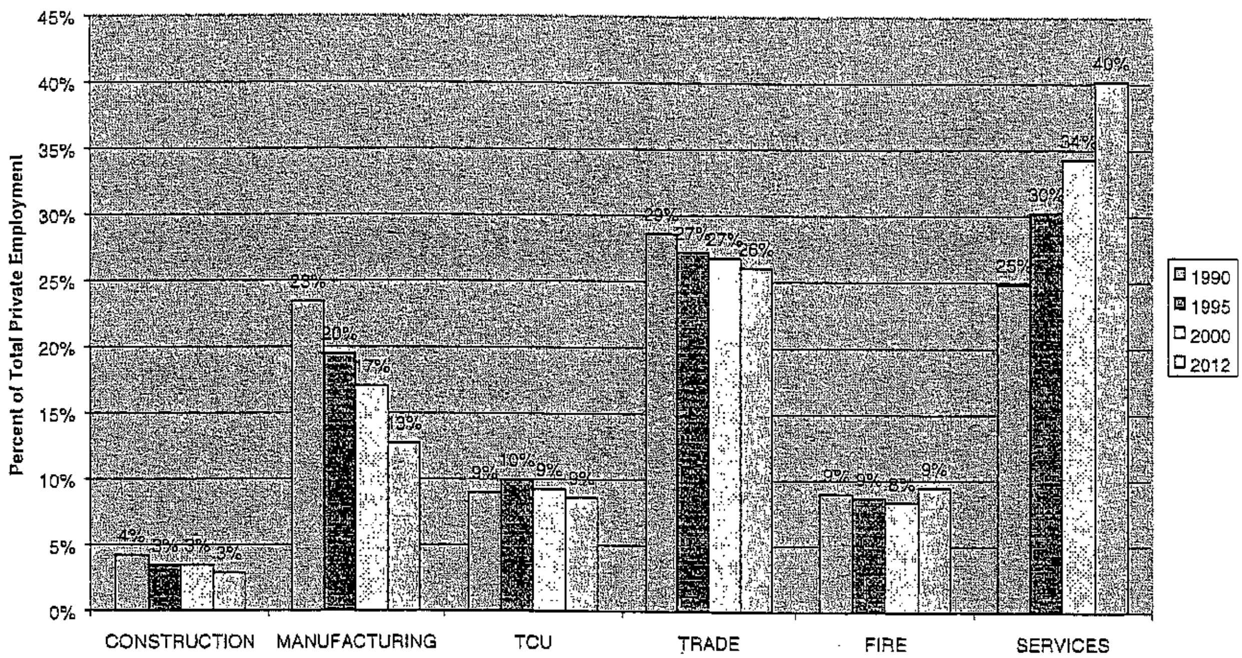
[1] Data from Regional Economic Information System, Bureau of Economic Analysis, web site.
[2] Information on the Standard Industrial Classification (SIC) system is provided in Appendix A.

Figure 2.1

Distribution of Employment by Industry
Middlesex/Somerset Region
1990 to 2012



Sources: NJDOL, Employment Covered by Unemployment Insurance; R/ECON™

In Middlesex County Manufacturing's share of employment fell from 25% to 19% of private sector jobs and Trade fell from 31% to 28%. At the same time Services increased from 24% to 34% of jobs, and jobs in Business Services increased from 6% to 14%, providing 54% of new jobs. The Transportation industry raised its job share from just under 5% in 1990 to just over 5% in 2000; it provided 9% of new jobs in the County. Although it still accounted for only 2% of private sector jobs in the County in 2000, people engaged in the Securities and Commodities industry had increased to nearly 8,000 and provided 8% of new jobs in the County.

In Somerset County Manufacturing's share of employment fell from 19% to 14% of private sector jobs, although the number of jobs in the sector was essentially stable. Trade accounted for 24% of jobs throughout the period, and accounted for 26% of new jobs. Service sector jobs increase from 27% to 35% of jobs; jobs in Business Services increased from 8% to 15% of jobs, providing 35% of new jobs. The Communications industry accounted for just under 9% of jobs in the County during the decade and just over 9% of new jobs.

Location quotients indicate how specialized an area is in a particular industry[3]. For this study we have calculated location quotients for the counties and region compared to New Jersey (Table 2.3). The following industries had location quotients of one or higher in both counties: Chemicals, Wholesale Trade, Insurance Carriers, Business Services, and Engineering and Management Services.

Table 2.3

Location Quotients for Selected Industries
Middlesex, Somerset and Combined Region Compared to New Jersey, 2000

Industry	Middlesex	Somerset	Combined
Construction	0.8	0.8	0.8
Manufacturing	1.3	1.0	1.2
Chemicals and Allied Products	1.9	1.8	1.9
Fabricated Metal Products	2.0	0.9	1.7
Electric and Electronic Equipment	0.9	1.7	1.2
Instruments and Related Products	0.7	1.7	1.0
Transportation, Communication and Utilities	1.0	1.6	1.2
Transportation	1.1	0.5	0.9
Communication	0.9	4.3	2.0
Trade	1.0	0.9	1.0
Wholesale Trade	1.3	1.0	1.2
Retail Trade	0.9	0.8	0.9
Finance, Insurance and Real Estate	1.0	1.3	1.1
Security, Commodity Brokers and Services	1.5	0.0	1.0
Insurance Carriers	1.2	2.2	1.5
Services	1.0	1.0	1.0
Business Services	1.4	1.5	1.5
Health Services	0.7	0.7	0.7
Engineering, Accounting and Management Services	1.3	1.1	1.2

Source: New Jersey Department of Labor

Other industries that had location quotients higher than one in Middlesex only were Fabricated Metal Products, Transportation, and Securities and Commodities Brokers. Other industries that had location quotients higher than one in Somerset only were Electrical and Electronic Equipment, Instruments, and Communications.

Those industries with high location quotients were, for the most part, the same industries that grew rapidly in the region during the 1990s (Figure 2.1). In Middlesex, industries

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[3] A location quotient greater than 1 indicates that an industry is more concentrated than average in the region.

with high location quotients and high growth rates were: Fabricated Metals, Transportation, Securities and Commodities Brokers, Business Services, and Engineering and Management Services. Chemicals manufacturing employment declined and Wholesale Trade employment grew slowly. In Somerset County Communications, Wholesale Trade, Insurance Carriers, Brokers, Business Services, and Engineering and Management Services grew rapidly, but the 3 manufacturing industries with high location quotients all lost jobs.

2.2 Regional Industrial Forecast

We have produced an econometric model for the counties and region to forecast employment growth in the Middlesex and Somerset counties. [4] The forecast runs from 2001 to 2012. It uses US data from DRI-WEFA, Inc. from their September 2002 baseline forecast as well as New Jersey data from the R/ECON[tm] Fall 2002 forecast as exogenous inputs to the regional forecast.

The US and New Jersey forecasts show recessions in 2002 which end in 2003. Thereafter growth is slow by historical standards for the rest of the forecast period. The regional forecast shows that employment in the region increased by 6,000 jobs in 2001, about half the average growth in the 1990s. It then decreased by about 4,000 jobs in 2002—that is, employment in 2002 was barely above the 2000 level. Job growth will resume in 2003, and average 1.4% a year—or 10,000 jobs—between 2002 and 2012. By 2012 employment in the region will have risen from 701,000 to 805,000 and population will have risen from 1.05 million to 1.2 million.

According to the forecast, the Service sector will continue to be the fastest growing sector, followed closely by Finance. Transportation and Utilities will also add jobs as will the Trade sectors. Both Manufacturing and Construction will lose jobs, although Manufacturing will decline at a much slower rate than in the past decade. By 2012 employment in Manufacturing will be only 13% of total private jobs, while the Finance, Insurance and Real Estate (FIRE) and Transportation, Utilities, and Communication (TCU) sectors will each account for 9% of jobs. The Trade sector will account for 26% of jobs, while the Services sector will have increased its employment share to 40%.

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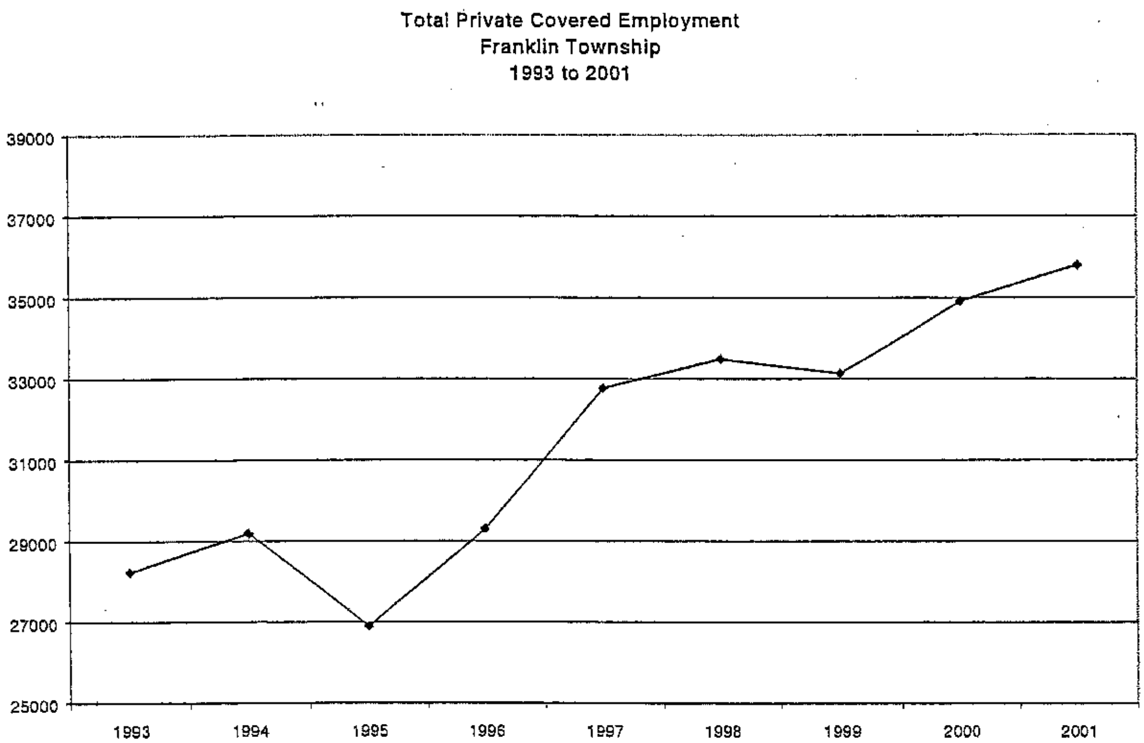
[4] See Appendix B for a description of the model.

3.0 FRANKLIN TOWNSHIP

3.1 Historical Trends

Private employment in Franklin Township grew from 28,200 in 1993 to 35,200 in 2001,[5] an increase of 25% over the eight year period (Figure 3.1). Thus private employment grew nearly as fast as it did in the 1990s in Somerset County, and faster than in the two-county region.

Figure 3.1



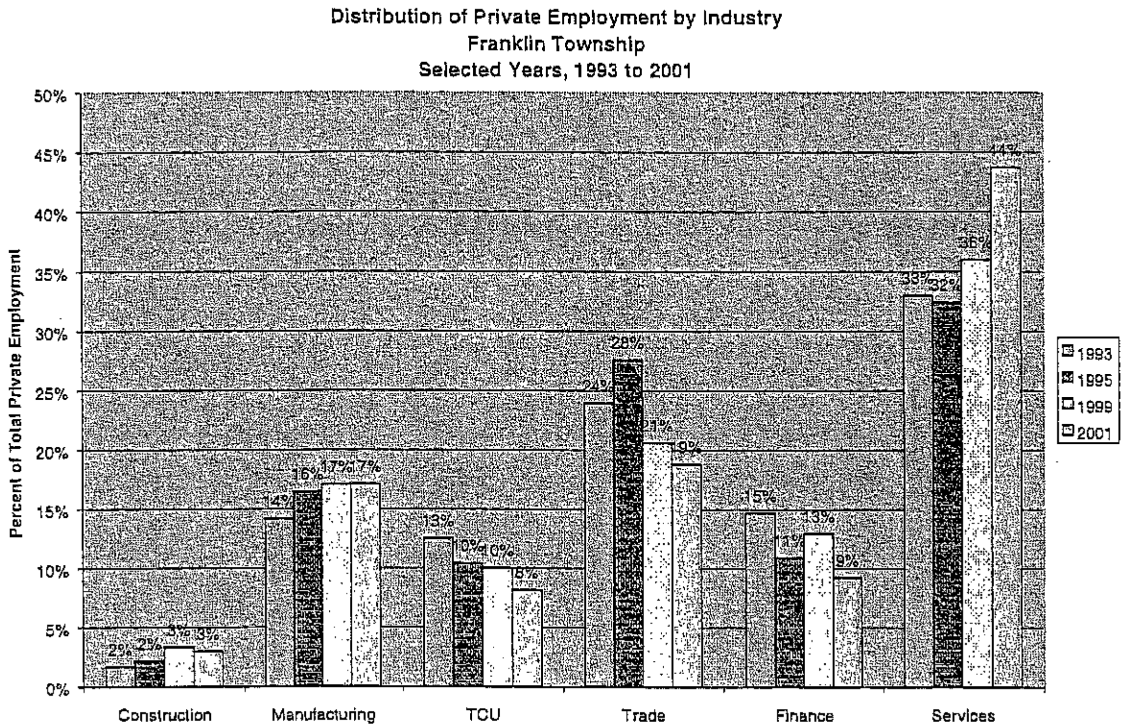
3.1.1 Industrial Trends

Over the period the distribution of employment by industry changed significantly in the township (Figure 3.2). In 1993, 14% of private employment was in Manufacturing and 33% was in Services. The Trade sector accounted for 24% of jobs, while the TCU sector was nearly as large as Manufacturing, with 13% of private sector jobs. During the period

[5] Data from NJDOL, Employment Covered by Unemployment Insurance, web site and transmission to R/ECON for this project. Data excludes agriculture, forestry, fishing and mining.

the number of manufacturing jobs in the township rose by over 2,000, with increases of 200 over more jobs in the Printing and Publishing, Chemicals, Electronics, and Instruments. Employment in Trade declined as a loss in jobs in the Wholesale sector overshadowed the gain in Retail.

Figure 3.2



Source: NJDOL, Employment Covered by Unemployment Insurance

By 2001 Trade accounted for only 19% of Franklin's private employment. The TCU sector lost jobs over the period—Communication had about 2,500 jobs in 1994, but was down to 1,200 in 2001. The major growth sector in the township, as in the region and the state, was Services. By 2001, the Service sector accounted for 44% of private sector jobs in Franklin, bringing in 65% of all new private sector jobs between 1993 and 2001.

Unlike the region and the state, Service sector growth in Franklin Township was concentrated in Engineering and Management Services—the so-called "high-end" services. This industry accounted for 43% of new jobs in the service sector and 28% of new private sector jobs in Franklin Township. Business Services and Private Educational Services accounted for 16% and 12% of new private sector jobs in the township, respectively.

3.1.2 Occupational Trends

Using an industry-occupation matrix for Somerset County[6] we have estimated the occupational distribution of employment in Franklin Township in 2001. (Table 3.1) We assume that the occupational distribution of jobs in any industry will be similar in Franklin Township to what they are in the county. The table indicates that 29% of jobs are in Management, Engineering, and Scientific fields, 12% are in other technical fields (including Medicine and Education), 8% are in Services, 10% are in Sales and Marketing, 22% are in Office and Support occupations, and 20% are in "blue-collar" occupations.

Table 3.1

Estimated Occupational Employment by Private Industry

Franklin Township, 2001

	TOTAL PRIVATE	TOTAL PRIVATE (% of TOTAL)	CONST	MANUF	TCU	TRADE	FIRE	SERVICES
Management Occupations	3,079	8.6%	62	518	611	344	285	1,256
Business and Financial Operations Occupations	2,863	8.0%	30	279	401	255	349	1,546
Computer and Mathematical Occupations	2,361	6.6%	0	100	32	163	225	1,841
Architecture and Engineering Occupations	1,005	2.8%	17	485	37	45	0	419
Life, Physical, and Social Science Occupations	560	1.6%	0	340	35	6	20	148
Community and Social Services Occupations	355	1.0%	0	0	3	0	0	352
Legal Occupations	169	0.5%	0	2	38	3	17	108
Education, Training, and Library Occupations	1,196	3.4%	0	1	0	7	0	1,188
Arts, Design, Entertainment, Sports, and Media Occupations	714	2.0%	0	186	5	52	2	468
Healthcare Practitioners and Technical Occupations	889	2.5%	0	23	27	59	8	752
Healthcare Support Occupations	1,047	2.9%	0	25	0	13	2	987
Protective Service Occupations	495	1.4%	0	8	4	34	2	444
Food Preparation and Serving-Related Occupations	1,244	3.5%	0	1	0	819	0	423
Building and Grounds Cleaning and Maintenance Occupations	829	2.3%	0	27	10	49	85	523
Personal Care and Service Occupations	395	1.1%	0	0	0	6	0	377
Sales and Related Occupations	3,480	9.8%	26	215	69	1,786	862	521
Office and Administrative Support Occupations	7,814	21.9%	125	778	613	1,836	1,319	3,053
Farming, Fishing, and Forestry Occupations	6	0.0%	0	0	0	4	0	0
Construction and Extraction Occupations	906	2.5%	717	26	24	18	59	23
Installation, Maintenance, and Repair Occupations	881	2.5%	53	176	88	282	7	226
Production Occupations	3,359	9.4%	5	2,460	174	196	11	480
Transportation and Material Moving Occupations	1,902	5.3%	15	381	574	646	6	166
TOTAL	35,651	100.0%	1,051	6,029	2,745	6,623	3,248	15,303

[6] NJDOL, September 2002.

3.2 Detailed Analysis of Franklin Township's Basic Economy

In order to get a clearer understanding of recent shifts in the Township's economy, CUPR has performed a detailed analysis of its *basic economy*. The basic economy represents that portion of economic activity that contributes to a region's exports—that which results in wealth being captured from outside the region. Studying the basic economy allows us to pinpoint those industries that are central to the region's economic growth and that might provide opportunities for future expansion.

The following analysis uses employment data to identify Franklin Township's basic industries for two years, 1995 and 2001. The analysis will be used to for three primary purposes:

- To identify those industries that have been important to the Franklin Township economy
- To identify the contribution of each industry to the Township's basic employment
- To determine which industries have performed well in the recent past in Franklin Township and those which are likely to do well in the future

The analysis is based on fully-disclosed ES202 data reported by employers to the state of New Jersey. Information on the Standard Industrial Classification (SIC) system used in this analysis is found in Appendix A.

3.2.2 Franklin Township's Economy in 1995

In 1995, private-sector businesses in Franklin Township employed approximately 27,870 individuals[7] (a low for the decade). Data for industry group (SIC 2-digit) employers with 250 employees or more are presented in Table 3.2. Wholesale Trade (Durable Goods) leads the way with 3,092 employees, while Business Services is a close second with 2,948. If we group these industries by economic sector, Services account for 33%, Trade for 28%, Manufacturing for 14%, and Transportation and Communication for 10%. Altogether, these industries account for over 87% of all employment in Franklin Township.

The final column in Table 3.2 presents location quotients for these industries relative to New Jersey. As noted previously, a value greater than 1 indicates the concentration of the industry in the region and this also indicates a basic industry. It is interesting to note that some industries with large employment are not necessarily concentrated in Franklin Township. For example, Health Services, with employment of 1,529 (or 5.5% of the Township's total) is still under-represented in the Township. On the other hand, Nonmetallic Minerals, with only 279 employees (or 1% of the Township's total) has a location quotient over 15, making it highly specialized in Franklin Township. This is due

[7] This figure includes workers in the primary (agriculture and mining) sector, but not in the government sector.

to the fact that very few communities in New Jersey have mining operations. Thus, Franklin's 279 employees represent a significant proportion of the state's total. The point is that the largest employers are not always the most important to the basic economy.

Table 3.2

Data for Industry Groups Employing over 250
Franklin Township, 1995

SIC Code	Industry Group	Franklin Employment	Location Quotient v. New Jersey
50	Wholesale Trade, Durable Goods	3,092	2.13
73	Business Services	2,948	1.30
48	Communication	2,261	3.63
62	Security and Commodity Brokers	1,818	6.40
28	Chemicals and Allied Products	1,686	1.78
80	Health Services	1,529	0.54
51	Wholesale Trade, Nondurable Goods	1,357	1.33
87	Engineering and Management Services	1,274	1.24
54	Food Stores	1,049	1.04
82	Educational Services	1,036	3.34
70	Hotels and Other Lodging Places	819	1.20
58	Eating and Drinking Places	811	0.53
36	Electronic and Other Equipment	748	2.28
59	Miscellaneous Retail	591	0.71
34	Fabricated Metal Products	484	1.59
17	Special Trade Contractors	410	0.55
83	Social Services	400	0.73
45	Transportation by Air	390	2.05
63	Insurance Carriers	321	0.63
30	Rubber and Misc. Plastic Products	296	1.06
64	Insurance Agents, Brokers, & Service	286	1.22
79	Amusement and Recreation Services	281	0.83
14	Nonmetallic Minerals, Except Fuels	279	15.41
33	Primary Metal Industries	276	2.42

Source: New Jersey Department of Labor

In order to focus solely on basic industries, we need to consider those industry groups with location quotients greater than 1. These are presented in Table 3.3. Basic employment is calculated as that portion of employment that results in a location quotient greater than 1. For example, of the 2,261 jobs in Communication, 623 are non-basic (taken alone they would result in a location quotient of 1) and 1,638 are basic.

Table 3.3

Franklin Township Basic Employment by Industry Group, 1995

SIC (2-digit)	Industry	Location Quotient	Basic Employment
48	Communication	3.63	1,638
50	Wholesale Trade, Durable Goods	2.13	1,637
62	Security and Commodity Brokers	6.40	1,533
28	Chemicals and Allied Products	1.78	739
82	Educational Services	3.34	725
73	Business Services	1.30	677
36	Electronic and Other Equipment	2.28	419
51	Wholesale Trade, Nondurable Goods	1.33	338
14	Nonmetallic Minerals, Except Fuels	15.41	260
87	Engineering and Management Services	1.24	246
45	Transportation by Air	2.05	199
34	Fabricated Metal Products	1.59	179
33	Primary Metal Industries	2.42	161
70	Hotels and Other Lodging Places	1.20	136
64	Insurance Agents, Brokers, & Service	1.22	50
54	Food Stores	1.04	42
89	Services, NEC	1.83	18
30	Rubber and Misc. Plastic Products	1.06	16
24	Lumber and Wood Products	1.37	12
		Total Basic Employment	**9,025**

Source: New Jersey Department of Labor

Table 3.3 indicates that 9,025 (or 32%) of Franklin Township's jobs are in basic industries. Communications, Wholesale Trade (Durable) and Security and Commodity Brokers are roughly equal in their primary importance to the basic economy. These industry groups do differ, however, due to the fact that employment in Communications and Security and Commodity Brokers is concentrated in large firms (AT&T and Merrill Lynch, respectively) while employment in Wholesale Trade is more diffuse.

Basic employment in Franklin is also strongly represented in Services (Educational, Business and Engineering) and Manufacturing (Chemicals, Electronics and Metals). One observation that should be made is to note the great diversity of the Township's employment base. In 1995, Franklin provided good opportunities for high-skilled, highly educated employees as well as low-skilled, blue collar employees.

Industry groups represent sizeable components of the economy. In order to identify more precisely the sources of Franklin's economic strength, we need to examine data at the industry sector (3-digit SIC) level. Industry sectors with location quotients greater than 1 are presented in Table 3.4, along with those industry groups identified in the previous analysis.

Table 3.4

Franklin Township Basic Industry Sectors, 1995

SIC Code		Industry	Location Quotient
14		Nonmetallic Minerals, Except Fuels	15.41
	142	Crushed and Broken Stone	28.66
	203	Preserved Fruits and Vegetables	2.19
	229	Misc. Textile Goods	1.57
24		Lumber and Wood Products	1.37
	243	Millwork, Plywood and Structural Members	8.03
	279	Printing Trade Services	5.02
28		Chemicals and Allied Products	1.78
	282	Plastics Materials and Synthetics	7.77
	283	Drugs	1.35
	284	Soap, Cleaners and Toilet Goods	2.95
	285/287*	Paints and Allied Products/Agricultural Chemicals	4.98
	291	Petroleum Refining	1.16
30		Rubber and Misc. Plastic Products	1.06
	308	Misc. Plastics Products	1.27
	327	Concrete, Gypsum and Plaster Products	1.07
33		Primary Metal Industries	2.42
	331	Blast Furnace and Basic Steel Products	2.30
	335	Nonferrous Rolling and Drawing	1.18
	336	Nonferrous Foundries (Casting)	2.30
	339	Misc. Primary Metal Products	8.90
34		Fabricated Metal Products	1.59
	342	Cutlery, Handtools and Hardware	6.27
	345	Screw Machine Products, Bolts, etc.	4.43
	346	Metal Forgings and Stampings	5.34
36		Electronic and Other Equipment	2.28
	361	Electric Distribution Equipment	2.95
	362	Electrical Industrial Apparatus	8.76
	364	Electric Wiring and Lighting Equipment	8.74
	367	Electronic Components and Accessories	1.15
	372	Aircraft and Parts	1.63
	399	Misc. Manufactures	1.24

SIC Code		Industry	Location Quotient
45		Transportation by Air	2.05
	451	Transportation by Air, Scheduled	2.48
	478*	Misc. Transportation Services	3.43
48		Communication	3.63
	481	Telephone Communication	4.09
	483	Radio and Television Broadcasting	3.02
	495	Sanitary Services	2.13
50		Wholesale Trade, Durable Goods	2.13
	501	Motor Vehicles, Parts, and Supplies	2.03
	502	Furniture and Home Furnishings	2.58
	504	Professional & Commercial Equipment	4.50
	506	Electrical Goods	1.27
	508	Machinery, Equipment, and Supplies	1.68
51		Wholesale Trade, Nondurable Goods	1.33
	511	Paper and Paper Products	1.33
	512	Drugs, Proprietaries, and Sundries	1.21
	513	Apparel, Piece Goods, and Notions	2.19
	514	Groceries and Related Products	1.12
	519	Misc. Nondurable Goods	1.92
54		Food Stores	1.04
	541	Grocery Stores	1.08
	549	Misc. Food Stores	3.57
	594	Misc. Shopping Goods Stores	1.19
	614	Personal Credit Institutions	2.76
62		Security and Commodity Brokers	6.40
	621	Security Brokers and Dealers	7.58
	622	Commodity Contracts Brokers, Dealers	5.34
	633	Fire, Marine, and Casualty Insurance	1.28
64		Insurance Agents, Brokers, & Service	1.22
	641	Insurance Agents and Brokers	1.22
	679	Misc. Investing	1.70
70		Hotels and Other Lodging Places	1.20
	701	Hotels and Motels	1.22
73		Business Services	1.30
	731	Advertising	4.65
	737	Computer and Data Processing Services	2.53

SIC Code		Industry	Location Quotient
	738	Misc. Business Services	1.19
	754	Automotive Services, Except Repair	1.27
	783	Motion Picture Theatres	1.35
	799	Misc. Amusement, Recreation Services	1.06
	805	Nursing and Personal Care Facilities	1.99
	809	Health and Allied Services	1.23
82		Educational Services	3.34
	821	Elementary and Secondary Schools (Private)	8.63
	835	Child Day Care Services	1.11
	863	Labor Organizations	1.05
	866	Religious Organizations	1.86
87		Engineering and Management Services	1.24
	873	Research and Testing Services	2.27
	874	Management and Public Relations	1.30
89		Services, NEC	1.83
	899	Services, NEC	1.83

Source: New Jersey Department of Labor ; * Estimate

In reviewing Table 3.4, we can see that there are several industry sectors that are now included in the basic economy that exist within industry groups that are not themselves part of the basic economy. For example, Nursing and Personal Care Facilities (SIC 805). with a location quotient of 1.99 is part of Franklin's basic economy, even though Health Services as a whole (SIC 80) is not.

Further, breaking down the data allows us to see more clearly the sources of basic industry strength. Thus, for Chemicals (SIC 28) we can see that Plastics (282) is more concentrated than Drugs (283). We can also see the relative strengths of Advertising and Computer Processing within Business Services (SIC 73) and the importance of Private Primary and Secondary school employment within Educational Services (SIC 82).

Table 3.5 presents the basic employment generated by the 3-digit industrial sectors identified above. Using this finer level of detail, we can now identify 11,898 jobs (or almost 43% of Franklin Township's total employment) in the basic economy.

Table 3.5

Basic Employment by Industry Sector
Franklin Township, 1995

SIC Code	Industry	Location Quotient	Basic Employment
481	Telephone Communication	4.09	1,654
621	Security Brokers and Dealers	7.58	1,528
504	Professional & Commercial Equipment	4.50	1,353
821	Elementary and Secondary Schools (Private)	8.63	895
737	Computer and Data Processing Services	2.53	812
805	Nursing and Personal Care Facilities	1.99	439
364	Electric Wiring and Lighting Equipment	8.74	418
873	Research and Testing Services	2.27	375
284	Soap, Cleaners and Toilet Goods	2.95	326
142	Crushed and Broken Stone	28.66	269
731	Advertising	4.65	255
282	Plastics Materials and Synthetics	7.77	245
285/287*	Paints and Allied Products/Agricultural Chemicals	4.98	208
513	Apparel, Piece Goods, and Notions	2.19	201
342	Cutlery, Handtools and Hardware	6.27	177
501	Motor Vehicles, Parts, and Supplies	2.03	172
519	Misc. Nondurable Goods	1.92	165
283	Drugs	1.35	154
279	Printing Trade Services	5.02	149
701	Hotels and Motels	1.22	148
508	Machinery, Equipment, and Supplies	1.68	146
502	Furniture and Home Furnishings	2.58	139
346	Metal Forgings and Stampings	5.34	133
339	Misc. Primary Metal Products	8.90	132
738	Misc. Business Services	1.19	102
203	Preserved Fruits and Vegetables	2.19	97
362	Electrical Industrial Apparatus	8.76	93
874	Management and Public Relations	1.30	92
345	Screw Machine Products, Bolts, etc.	4.43	84
541	Grocery Stores	1.08	68
506	Electrical Goods	1.27	65
308	Misc. Plastics Products	1.27	63
633	Fire, Marine, and Casualty Insurance	1.28	57
594	Misc. Shopping Goods Stores	1.19	56
614	Personal Credit Institutions	2.76	52
641	Insurance Agents and Brokers	1.22	50
483	Radio and Television Broadcasting	3.02	47
549	Misc. Food Stores	3.57	41
243	Millwork, Plywood and Structural Members	8.03	40
511	Paper and Paper Products	1.33	37
514	Groceries and Related Products	1.12	35

SIC Code	Industry	Location Quotient	Basic Employment
331	Blast Furnace and Basic Steel Products	2.30	29
361	Electric Distribution Equipment	2.95	27
478*	Misc. Transportation Services	3.43	24
512	Drugs, Proprietaries, and Sundries	1.21	23
495	Sanitary Services	2.13	20
835	Child Day Care Services	1.11	19
899	Services, NEC	1.83	18
622*	Commodity Contracts Brokers, Dealers	5.34	17
809	Health and Allied Services	1.23	17
399	Misc. Manufactures	1.24	15
336	Nonferrous Foundries (Casting)	2.30	14
367	Electronic Components and Accessories	1.15	14
799	Misc. Amusement, Recreation Services	1.06	14
754	Automotive Services, Except Repair	1.27	12
783	Motion Picture Theatres	1.35	11
229	Misc. Textile Goods	1.57	10
866	Religious Organizations	1.86	10
291	Petroleum Refining	1.16	8
335	Nonferrous Rolling and Drawing	1.18	7
372	Aircraft and Parts	1.63	7
679	Misc. Investing	1.70	7
327	Concrete, Gypsum and Plaster Products	1.07	2
863	Labor Organizations	1.05	1
		Total Basic Employment	**11,898**

Source: New Jersey Department of Labor; * Estimate

Looking at the 3-digit analysis, we can see that certain industry sectors (Elementary and Secondary Schools, Computer and Data Processing Services, Nursing and Personal Care Facilities) are much more important to the basic economy than the placement of their industry groups (at the 2-digit level) would indicate.

3.2.3 Franklin Township's Economy in 2001[8]

In 2001, Franklin Township employers reported information for over 35,800 employees.[9] This represents an increase of about 38% since 1995, an impressive showing. Table 3.6 provides information on industry groups employing more than 250. Due to the growth of the previous decade, there are more entrants on the list. Printing and Publishing (SIC 27)

[8] Data for 2001 was reported before the September 11 terrorist attack on New York City and Washington, DC. While the impact of September 11 might have significant consequences for the State of New Jersey as a whole, we do not believe that the direct impact on Franklin Township will be significant.

[9] Again, this figure includes workers in the primary (agriculture and mining) sector, but not in the government sector.

is particularly noteworthy, providing 776 jobs in 2001 compared to 215 in 1996. Other noteworthy increases include Motor Freight Transportation and Warehousing (SIC 42) and Instruments and Related Products (SIC 38).

Table 3.6

Data for Industry Groups Employing over 250
Franklin Township, 2001

SIC Code	Industry	Franklin Employment	Location Quotient
73	Business Services	5,686	1.63
87	Engineering and Management Services	4,019	2.51
50	Wholesale Trade, Durable Goods	2,658	1.58
28	Chemicals and Allied Products	1,971	2.00
80	Health Services	1,816	0.49
62	Security and Commodity Brokers[10]	1,660	3.04
36	Electronic and Other Equipment	1,408	4.60
82*	Educational Services	1,291	2.69
48	Communication	1,194	1.63
70	Hotels and Other Lodging Places	930	1.21
54	Food Stores	832	0.67
58	Eating and Drinking Places	828	0.44
27	Printing and Publishing	776	1.29
83	Social Services	723	0.77
51	Wholesale Trade, Nondurable Goods	709	0.57
34	Fabricated Metal Products	588	1.91
42	Motor Freight Transportation and Warehousing	545	0.80
17	Special Trade Contractors	520	0.45
15	General Building Contractors	518	1.44
49	Electric, Gas, and Sanitary Services	518	2.10
63	Insurance Carriers	517	0.72
59	Miscellaneous Retail	473	0.41
30	Rubber and Misc. Plastic Products	419	1.69
56	Apparel and Accessory Stores	365	0.65
53	General Merchandise Stores	354	0.52
45*	Transportation by Air	347	0.72
60	Depository Institutions	333	0.59
65	Real Estate	321	0.77
10-14*	Mining	318	18.97
38	Instruments and Related Products	306	0.85
61	Non Depository Institutions	254	1.15

Source: New Jersey Department of Labor ; * Estimate

[10] It is estimated that most of the employment in this industry has since been lost due to the departure of Merrill Lynch from the Township.

Table 3.6 clearly shows that the strengths of Franklin Township's economy have shifted slightly. Business Services (SIC 73) and Engineering and Management Services (SIC 87) both experienced phenomenal growth, while Communications (SIC 48) and Security and Commodity Brokers (SIC 62) have become less important.

Table 3.7 details both the location quotients and basic employment figures for industry groups in Franklin Township in 2001. At the industry group level, 11,645 or (32%) of Franklin Township's jobs are in the basic economy (representing no change in the share of the basic economy from 1995). Nevertheless, the components of basic employment have changed significantly.

Table 3.7

Basic Employment by Industry Group
Franklin Township, 2001

SIC Code	Industry	Franklin Employment	Location Quotient	Basic Employment
87	Engineering and Management Services	4,019	2.51	2,415
73	Business Services	5,686	1.63	2,200
62	Security and Commodity Brokers	1,660	3.04	1,114
36	Electronic and Other Equipment	1,408	4.60	1,102
28	Chemicals and Allied Products	1,971	2.00	987
50	Wholesale Trade, Durable Goods	2,658	1.58	979
82*	Educational Services	1,291	2.69	810
48	Communication	1,194	1.63	460
10-14*	Mining	318	18.97	301
34	Fabricated Metal Products	588	1.91	280
49	Electric, Gas, and Sanitary Services	518	2.10	271
27	Printing and Publishing	776	1.29	174
30	Rubber and Misc. Plastic Products	419	1.69	170
70	Hotels and Other Lodging Places	930	1.21	160
15	General Building Contractors	518	1.44	158
33	Primary Metal Industries	142	1.29	32
61*	Nondepository Institutions	254	1.15	32
		Total Basic Employment		**11,645**

Source: New Jersey Department of Labor; * Estimate

The most significant change is in the role of Engineering and Management Services and Business Services as the new leaders in Franklin Township's basic economy. Together, these two industry groups account for almost 40% of basic employment. A "second tier" of basic industry groups is represented by Security and Commodity Brokers, Electronics, Chemicals, Wholesale Trade (Durable) and Educational Services.

Notably Communications which was the basic employment leader in 1995 has fallen to a mid-point on the list. In 1995 it accounted for 18% of basic employment, whereas in 2001 it accounts for only 4%. Also, Wholesale Trade (Nondurable), an industry group that was the 8th largest basic employer in 1995, no longer contributes to the basic economy in 2001.

Due to inconsistencies in the state-level industry sector data for 2001, we were not able to complete an identical analysis to 1995 for the 3-digit SIC level. Nevertheless, we have provided employment figures for all industry sectors that employed 250 people or more in either 1995, 2001, or both. These figures are presented in Table 3.8 along with the number and percentage in growth or decline exhibited by the industry sector. Although not as informative as having the basic employment figures for industry sectors, it does allow us to make some interesting observations.

Table 3.8

Employment Change in Selected Industry Sectors
Franklin Township, 1995-2001

SIC Code	Industry	Franklin Employment		Growth (Decline)	
		1995	2001	Number	Percent
271	Newspapers	-	262	262	-
273	Books	-	350	350	-
493	Combination Utility Services	-	467	467	-
872	Accounting, Auditing and Bookkeeping Services	32	1,448	1,416	4425%
564	Children's and Infants' Wear Stores	11	307	296	2691%
384	Medical and Dental Instruments and Supplies	28	274	246	879%
632	Medical Service and Health Insurance	32	307	275	859%
836	Residential Care	58	433	375	647%
367	Electronic Components and Accessories	116	735	619	534%
874	Management and Public Relations	399	1,600	1,201	301%
421	Trucking and Courier Services, Except Air	126	421	295	234%
152	Residential Building Contractors	126	417	291	231%
738	Misc. Business Services	637	2,093	1,456	229%
736	Personnel Supply Services	416	1,151	735	177%
871	Engineering, Architectural, and Survey Services	173	414	241	139%
801	Offices of Doctors of Medicine	247	538	291	118%
531	Department Stores	168	345	177	105%
285	Paints and Allied Products	229	416	187	82%
342	Cutlery, Hand Tools, and Hardware	211	327	116	55%
737	Computer and Data Processing Services	1,343	1,968	625	47%
308	Misc. Plastics Products	296	419	123	42%
502	Furniture and Home Furnishings	227	302	75	33%
283	Drugs	591	775	184	31%
821	Elementary and Secondary Schools (Private)	1,013	1,243	230	23%

SIC Code	Industry	Franklin Employment 1995	Franklin Employment 2001	Growth (Decline) Number	Growth (Decline) Percent
142	Crushed and Broken Stone	279	318	39	14%
701	Hotels and Motels	819	930	111	14%
284	Soap, Cleaners and Toilet Goods	494	530	36	7%
581	Eating and Drinking Places	811	828	17	2%
805	Nursing and Personal Care Facilities	885	901	16	2%
364.	Electric Wiring and Lighting Equipment	473	430	(43)	-9%
451	Transportation by Air	390	347	(43)	-11%
621	Security Brokers and Dealers	1,761	1,510	(251)	-14%
873	Research and Testing Services	670	557	(113)	-17%
799	Misc. Amusement, Recreation Services	275	228	(47)	-17%
501	Motor Vehicles, Parts, and Supplies	339	274	(65)	-19%
504	Professional & Commercial Equipment	1,740	1,392	(348)	-20%
633	Fire, Marine, and Casualty Insurance	264	208	(56)	-21%
506	Electrical Goods	309	237	(72)	-23%
514	Groceries and Related Products	321	245	(76)	-24%
541	Grocery Stores	917	699	(218)	-24%
731	Advertising	325	243	(82)	-25%
282	Plastics Materials and Synthetics	282	206	(76)	-27%
641	Insurance Agents and Brokers	286	165	(121)	-42%
481	Telephone Communication	2,190	1,194	(996)	-45%
508	Machinery, Equipment, and Supplies	363	158	(205)	-56%
519	Misc. Nondurable Goods	345	49	(296)	-86%
594	Misc. Shopping Goods Stores	344	44	(300)	-87%
513	Apparel, Piece Goods, and Notions	371	39	(332)	-89%

Source: New Jersey Department of Labor, Industries employing over 250 either in 1995 or 2001.

First, three industrial sectors that had no employment in 1995 had grown significantly by 2001. Newspapers (SIC 271) and Books (SIC 273) added 612 jobs between 1995 and 2001 and account for the presence of Printing and Publishing (SIC 27) as a new basic industry group (Table 3.7). Similarly, the new employment in Combination Utility Services (SIC 493) explains the addition of Electric, Gas, and Sanitary Services (SIC 49) as a new basic industry group.

In addition, we can identify the sources of the new leading basic industry groups. The growth in Engineering and Management Services (SIC 87) was driven by Accounting and Bookkeeping (872), Management and Public Relations (874), and Engineering, Architectural and Survey Services (871). Growth in Business Services (SIC 73) was driven by Miscellaneous Business Services[11] (738), Personnel Supply Services (736), and Computer and Data Processing Services (737).

[11] The employment data indicate that this growth was driven largely by increased employment in the Corporate Security subsector.

According to the data on the largest industry sectors, the strongest growth was concentrated in the Service and Manufacturing sectors. The largest Service sectors experienced a net job growth of 6,455, while the largest Manufacturing sectors experienced a net job gain of 2,004. On the other side of the ledger, job losses were led by the trade sectors with a net loss of 1,347 jobs. FIRE and TCU were also net losers, but to a more modest extent.

3.3 Components of Economic Change in Franklin Township

In order to better explain the growth and decline of industry employment in Franklin Township, CUPR employed a shift-share model of industrial change. The shift-share model examines local, regional and national data to indicate whether a given change in local employment is due to industry or regional factors. Shift-share analysis compares the actual growth or decline in local industrial employment with what it would have been had it grown at the same rate as the national (or state) economy.

In the model, the expected level of employment is represented by the term NS (National Share). The difference of NS from actual employment is explained by two factors. First is the Industry Mix (IM), which represents the industry performance at the national (or state) level. The second component is the Regional Shift (RS), which represents the extent to which that industry has become more concentrated locally, and thus is a measure of local competitiveness.

The model was run at the industry group level comparing Franklin Township with both the United States and with the State of New Jersey for 1995-2001. Although differences between the model results were negligible, given New Jersey's somewhat strong variation from the US average, we decided to use the comparison of Franklin Township to New Jersey in order to identify the most competitive industries. Complete results for the shift-share analysis are presented in Appendix B. What follows is a discussion of each major sector and its strongest and weakest industry groups.

3.3.1 Services

There is no question that the service sector experienced phenomenal growth in Franklin Township between 1995 and 2001. Of course, this growth mirrors the growth of services in the economy generally. Nevertheless, the growth rates of industry groups such as Engineering and Management Services and Business Services significantly outstripped both the state and the nation.

Table 3.9 presents 1995-2001 shift-share data for selected industry groups within services. The table is divided among those groups that manifested strong, moderate, and weak performance, as determined by the RS score. As mentioned above, the RS score represents the number of jobs that were created (or lost) due to local competitiveness. This analysis identifies strong performers as those industry groups with an RS score greater than 100.

Table 3.9

Performance of Selected Industry Groups in the Service Sector
Franklin Township 1995-2001

SIC Code	Industry Group	Franklin Employment 1995	2001	Change	Franklin v. NJ NS	IM	RS
Strong Performance							
87	Engineering and Management Services	1,274	4,019	2,745	1467.5	312.4	2239.1
73	Business Services	2,948	5,686	2,738	3395.8	655.1	1635.1
83	Social Services	400	723	323	460.8	153.8	108.5
70	Hotels and Other Lodging Places	819	930	111	943.4	-116.0	102.6
Moderate Performance							
72	Personal Services	186	249	63	214.3	-11.0	45.8
81	Health Services	102	142	40	117.5	-11.3	35.8
80	Legal Services	1,529	1,816	287	1761.3	27.0	27.8
Weak Performance							
79	Amusement and Recreational Services	281	230	-51	323.7	22.4	-116.1
82	Educational Services	1,036	1,291	255	1193.4	241.1	-143.4

Among strong performers, Engineering and Management Services (SIC 87) is clearly dominant. In fact, this group represents the most competitive industry in the Township for the period. This performance represents the addition of some large employers in Accounting and Bookkeeping Services (872) and Management and Public Relations (874), as well as a number of medium-sized firms in Engineering, Architectural, and Survey Services (871).

Business Services (73) was the second strongest performer overall. This growth was driven by the expansion and addition of new firms within the security field, a division of Miscellaneous Business Services (738), Personnel Supply Services (736) and Computer and Data Processing Services (737).

Hotels and Other Lodging Places (70) was a strong performer in Franklin despite the industry's poor performance statewide (As indicated by its negative IM score). Conversely, even though Educational Services experienced job growth, this was not strong enough to match the impressive performance of that industry statewide.

Health Services (81) is an interesting case in that it experienced a modest gain despite statewide retrenchment. This indicates that the health industry might represent an emerging specialization in Franklin Township, and at the least singles the industry out as deserving of future study.

3.3.2 Manufacturing

Despite the contraction of the manufacturing sector throughout the state and the nation, Franklin Township exhibited strong growth in this sector from 1995-2001. In fact, four of the top ten industry group performers were in manufacturing. The strong relative performance of manufacturing (table 3.10) indicates that Franklin might be benefiting from the contraction of the industry in surrounding areas. While statewide forecasts indicate that manufacturing employment will continue to decline, Franklin's competitive advantage may allow it to sustain a high level of activity nonetheless.

Table 3.10

Performance of Selected Industry Groups in the Manufacturing Sector
Franklin Township 1995-2001

		Franklin Employment			Franklin v. NJ		
SIC Code	Industry Group	1995	2001	Change	NS	IM	RS
Strong Performance							
36	Electronic and Other Equipment	748	1,408	660	861.6	-238.1	784.5
27	Printing and Publishing	215	776	561	247.7	-33.6	562.0
28	Chemicals and Allied Products	1,686	1,971	285	1942.1	-373.7	402.6
38	Instruments and Related Products	42	306	264	48.4	-1.3	258.9
30	Rubber and Misc. Plastic Products	296	419	123	341.0	-105.8	183.8
34	Fabricated Metal Products	484	588	104	557.5	-119.2	149.7
Moderate Performance							
32	Stone, Clay and Glass	37	62	25	42.6	-8.7	28.1
35	Machinery	88	100	12	101.4	-22.9	21.6
39	Miscellaneous Manufacturing	95	109	14	109.4	-18.6	18.2
Weak Performance							
33	Primary Metal Products	276	142	-134	317.9	-79.6	-96.3
20	Food	219	55	-164	252.3	-61.0	-136.3

The strong performance of Electronic and Other Equipment (36) is due to the expansion of existing facilities and the addition of new ones, particularly in Semiconductors and Related Devices (3641). In Chemicals (28), strong growth was observed in the Drugs (283) and Paints and Allied Products (285) sectors.

Printing and Publishing (27) represents a new competitive industry in Franklin Township. This growth is due entirely to two new medium-sized firms—one each in Newspapers (271) and Books (273). It remains to be seen whether these new investments can be parlayed into a Printing and Publishing agglomeration.

Interestingly, the growth in Instruments and Related Products (38) is due almost entirely to the growth of Medical and Dental Instruments (384). Again, this indicates the possibility of a nascent specialization in the heath sector.

3.3.3 Finance, Insurance and Real Estate

It is difficult to identify any strong trends within the FIRE sector (Table 3.11). As stated earlier, the weak performance of Securities and Commodities Brokers (62) is due entirely to the departure of a single firm. Does this mean that Franklin Township is no longer an advantageous place to conduct brokerage services? On the other hand, Banking (60 and 61) has fared relatively well. Understanding these issues will be important as the FIRE sector is forecast to experience strong growth over the next decade.

Table 3.11

Performance of Selected Industry Groups in the FIRE Sector
Franklin Township 1995-2001

		Franklin Employment			Franklin v. NJ		
SIC Code	Industry Group	1995	2001	Change	NS	IM	RS
Strong Performance							
60	Depository Institutions	191	333	142	220.0	-38.2	151.2
63	Insurance Carriers	321	517	196	369.8	35.6	111.7
65	Real Estate	188	321	133	216.6	-2.7	107.2
Moderate Performance							
61	Non-depository Institutions	124	254	130	142.8	55.0	56.1
Weak Performance							
64	Insurance Agents	286	165	-121	329.4	-32.9	-131.6
62	Securities and Commodities Brokers	1,818	1,660	-158	2094.2	1032.3	-1466.4

The growth in Insurance Carriers (63) is largely the result of growth within Medical Service and Health Insurance (632). This is yet more evidence that the health sector is becoming increasingly important in Franklin Township.

3.3.4 Transportation, Communication and Utilities

The diverse TCU sector experienced a great deal of change in Franklin Township from 1995-2001. The two most concentrated industry groups in this sector in 1995—Communications (48) and Transportation by Air (45)—were both weak performers over the period. Conversely, Electric, Gas, and Sanitary Services (49) and Motor Freight Transportation and Warehousing (42)—both small industries in 1995—showed impressive growth (Table 3.12).

In the case of Communications, most of the job loss can be attributed to the retrenchment of one major company in the Telephone Communication (481) sector. Similarly, losses in Transportation by Air are the result of cutbacks by a single firm in Air Courier Services (4513) sub-sector.

Table 3.12

Performance of Selected Industry Groups in the TCU Sector
Franklin Township 1995-2001

SIC Code	Industry Group	Franklin Employment 1995	2001	Change	Franklin v. NJ NS	IM	RS
Strong Performance							
49	Electric, Gas and Sanitary Services	46	518	472	53.0	-12.3	477.3
42	Motor Freight Trans. and Warehousing	153	545	392	176.2	-39.2	408.0
Weak Performance							
45	Transportation by Air	390	347	-43	449.2	43.3	-145.6
48	Communication	2,261	1,194	-1,067	2604.4	-221.5	-1189.0

The strong performance of the Electric, Gas, and Sanitary Services group is due to the opening of a new facility within the Combination Utility Services (491) sector. This growth made SIC 49 part of the basic economy by 2001.

In the case of Transportation and Warehousing, the increase is the result of several new employers of small to medium size. In any event, this growth was not enough to make SIC 42 part of the basic economy—with a location quotient of .8 it is still underrepresented in the Township.

3.3.5 Trade

With a few exceptions, the trade sector performed weakly from 1995-2001. The strongest and weakest industry groups are presented in Table 3.13.

Table 3.13

Performance of Selected Industry Groups in the Trade Sector
Franklin Township 1995-2001

SIC Code	Industry Group	Franklin Employment 1995	2001	Change	Franklin v. NJ NS	IM	RS
Strong Performance							
56	Apparel and Accessory Stores	97	365	268	111.7	-7.2	260.5
57	Furniture & Home Furnishing Stores	47	239	192	54.1	5.6	179.3
53	General Merchandise Stores	184	354	170	211.9	-34.8	176.8
Weak Performance							
58	Eating and Drinking Establishments	811	828	17	934.2	-30.5	-75.7
59	Miscellaneous Retail Stores	591	473	-118	680.8	43.3	-251.0
54	Food Stores	1,049	832	-217	1208.3	-56.0	-320.3
50	Wholesale Trade, Durable Goods	3,092	2,658	-434	3561.7	-369.1	-534.6
51	Wholesale Trade, Nondurable Goods	1,357	709	-648	1563.1	-77.4	-776.7

The two industry groups within Wholesale Trade—Durable (50) and Nondurable (51)—represented two of the worst performers in Franklin Township overall. Given the large number of (relatively) small firms in these industries, it is difficult to pinpoint any one weakness. Rather, the decline appears to be across the board.

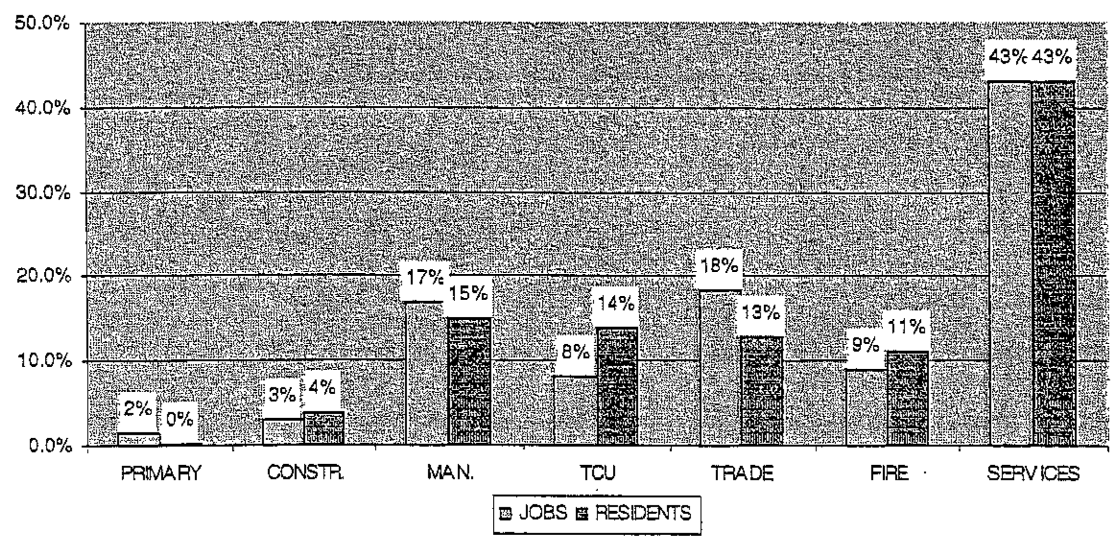
Retail performance is more mixed. Industry groups such as Apparel and Accessory Stores (56) and General Merchandise Stores (53) bucked the trend and increased employment despite the poor statewide performance of these industries. On the other hand, most of the other retail industries performed worse than the state. What is surprising about this is that Franklin had such low concentrations of retail activity to start with. The end result is that Franklin Township appears to be significantly underrepresented in retail activity. In 2001, the location quotient for all retail activity combined was only 0.48, meaning that Franklin Township has less than half of the retail activity of the average New Jersey community.

3.4 Matching Residents with Jobs

One measure of how well a locality's economy serves its population is to look at the jobs provided by the economy compared to the jobs held by local residents. Comparing employment figures for 2001 with census data on residents from 2000, Figure 3.3 indicates that Franklin Township does a fairly good job at providing employment opportunities to its residents.

Figure 3.3

Comparison of Jobs Available (2001) to Jobs Held by Residents (2000)



Sources: NJDOL and Census 2000

As the chart indicates, there are slight disparities in TCU and FIRE, signifying that the Township residents in Communications and Finance will have a higher incidence of commuting. On the other hand, Franklin Township needs to attract workers from the surrounding region to fill all positions in the Manufacturing and Primary sectors.

3.5 Industrial Forecast

We produced a forecast for employment by industry in Franklin Township by assuming that employment in Franklin Township in the forecast period would retain its current share of employment in the region. This is a conservative forecast based on recent trends (Table 3.14).

Table 3.14

Franklin Township Industrial Employment Forecast, 1995-2012

	Levels					Average Annual Growth Rates		
Franklin Township	1995	1999	2001	2002	2012	1995-2001	2001-2002	2002-2012
TOTALS	26,891	33,133	35,241	33,385	38,568	4.6%	-5.3%	1.5%
CONSTRUCTION	581	1,107	1,052	1,003	993	10.4%	-4.7%	-0.1%
MANUFACTURING	4,432	5,662	6,029	5,455	5,078	5.3%	-9.5%	-0.7%
28 CHEMICALS AND ALLIED PRODUCTS	1,699	2,287	1,971	1,783	1,660	2.5%	-9.5%	-0.7%
34 FABRICATED METAL PRODUCTS		496	588	532	495	na	-9.5%	-0.7%
35 INDUSTRIAL MACHINERY	89	608	100	90	84	2.0%	-9.5%	-0.7%
36 ELECTRIC AND ELECTRONIC EQUIPMENT	743	796	1,408	1,274	1,186	11.2%	-9.5%	-0.7%
38 INSTRUMENTS AND RELATED PRODUCTS	45	89	306	277	258	37.5%	-9.5%	-0.7%
	2,801	3,317	2,878	3,194	3,705	0.5%	11.0%	1.5%
TRANSPORTATION	583	1,068	1,166	1,294	1,501	12.3%	11.0%	1.5%
48 COMMUNICATIONS	2,191	2,219	1,194	1,325	1,537	-9.6%	11.0%	1.5%
TRADE	7,419	6,828	6,695	6,801	7,502	-1.7%	1.6%	1.0%
WHOLESALE TRADE	3,005	3,047	3,367	3,039	3,345	1.9%	-9.7%	1.0%
RETAIL TRADE	4,414	3,781	3,257	3,762	4,158	-4.9%	15.5%	1.0%
FINANCE,INSURANCE,AND REAL ESTATE	2,940	4,296	3,250	4,528	5,515	1.7%	39.3%	2.0%
62 SECURITY, COMMODITY BROKERS & SERVICES	3007 in 98	2,988	1,660	2,313	2,817	na	39.3%	2.0%
63 INSURANCE CARRIERS	322	454	517	720	877	8.2%	39.3%	2.0%
SERVICES	8,717	11,924	15,408	12,404	15,774	10.0%	-19.5%	2.4%
73 BUSINESS SERVICES	3,358	4,723	5,686	4,577	5,821	9.2%	-19.5%	2.4%
80 HEALTH SERVICES	1,504	1,628	1,816	1,462	1,859	3.2%	-19.5%	2.4%
87 ENGINEERNG, ACCOUNTNG, MANAGEMNT SVC	1,302	2,319	4,019	3,235	4,115	20.7%	-19.5%	2.4%

Sources: NJDOL and R/ECON™

The forecast indicates that employment in Franklin Township will increase by 5,200 positions between 2002 and 2012, growing at an average rate of 1.5% a year. While this is slower than in the past several years, it is considerably faster than the less than 1% annual growth forecast for the state. Employment in Manufacturing will decline by 400 jobs, after a large loss in 2002.

Relatively strong growth is forecast for the Communications industry, which should improve after the consolidation and downsizing of the recent past. The Trade sector will add about 600 jobs mostly in Retail. The FIRE sector will add about 1,000 jobs, nearly half of them in the Securities industry. This assumes that the current bear market turns around soon.

The Services sector will add over 3,000 jobs, nearly 75% of them in Business and Engineering and Management Services. In 2012, both Manufacturing and FIRE will account for about 14% of jobs in the township. Another 10% will be in TCU, 19% in Trade, and the Service sector will account for 41% of jobs in Franklin Township.

3.6 Occupational Forecast

The occupational forecast is derived from combining the 2012 industry forecast with the 2001 industry-occupation coefficients (Table 3.15). This assumes that technology will be unchanged over the next decade. Thus, it probably underestimates the occupational forecast for technical fields and overestimates the forecast for blue collar and office and support occupations.

Table 3.15

Occupational Employment Forecast for Franklin Township, 2012

	TOTAL*	% of TOTAL
Management Occupations	3,226	8%
Business and Financial Operations Occupations	2,963	8%
Computer and Mathematical Occupations	2,307	6%
Architecture and Engineering Occupations	839	2%
Life, Physical, and Social Science Occupations	445	1%
Community and Social Services Occupations	307	1%
Legal Occupations	169	0%
Education, Training, and Library Occupations	1,039	3%
Arts, Design, Entertainment, Sports, and Media Occupations	640	2%
Healthcare Practitioners and Technical Occupations	823	2%
Healthcare Support Occupations	899	2%
Protective Service Occupations	461	1%
Food Preparation and Serving-Related Occupations	2,019	5%
Building and Grounds Cleaning and Maintenance Occupations	697	2%
Personal Care and Service Occupations	338	1%
Sales and Related Occupations	5,404	14%
Office and Administrative Support Occupations	9,230	24%
Farming, Fishing, and Forestry Occupations	8	0%
Construction and Extraction Occupations	749	2%
Installation, Maintenance, and Repair Occupations	992	3%
Production Occupations	2,744	7%
Transportation and Material Moving Occupations	2,270	6%
	38,569	100%

* Total Private excluding Agriculture and Mining

Changes in the industrial structure of the township's employment has decreased the proportion of jobs in management, engineering, and scientific fields from 28% to 25% and the proportion in blue-collar occupations from 20% to 18%. It has increased the proportion in sales and marketing from 10% to 14%, and the proportion in office and support from 22% to 24%. The proportion in service occupations remains at 14% and the proportion in social, legal, educational, and arts occupations falls from 7% to 6%.

4.0 Analysis

The statistical analyses presented in the previous sections provide a great deal of detail on Franklin Township's industrial and occupational trends and outlook. Nevertheless, when confronted with such larges amounts of data and figures, it is possible to lose the forest for the trees. In this section, we discuss the implications of all the statistical work for the future of the Township's economy and the second phase of the economic development study.

4.1 General Findings

Although not in itself intended to draw conclusions about Franklin Township's economic development milieu, this data analysis has enabled us to make some important observations about the Township's economy that will likely hold true under further investigation.

- *Franklin Township's economic base is strong and diverse.* The data indicate that, in general, employment in Franklin Township has grown at a rate that surpasses the state and regional average. Further, the Township's economy has demonstrated a high degree of diversity, providing a wide range of employment opportunities for both white-collar and blue-collar workers.
- *The local economy has large employment concentrations in industries that are projected to grow.* Given the agglomerative nature of many of the "new economy" or "high-tech" industries, locations that have captured investment in these sectors in the past are likely to remain competitive in the future. In particular, the Township's strong concentration in Business Services and Engineering and Management Services should serve it well as those industries are forecast to be the growth leaders through 2012.
- *Franklin Township's employment base is a good match for the skills and talents of its residents.* The comparison of jobs offered by employers and jobs held by residents indicates that there are no glaring shortages in the Township's job market. This is good news from both a supply and demand standpoint in that industries likely to locate in Franklin are able to find the workers they need and residents have the potential to find jobs locally.

4.2 Questions for Phase II

Given the limitations of this data analysis, it is not possible to answer all questions with certainty. Nevertheless, this analysis did raise several interesting questions that might have import for future economic development planning within the Township and that should be considered during the completion of the second phase of the economic development study.

- *What are the impacts of the loss of large employers in the Township's historically competitive industries?* This analysis demonstrates that much can change in a rather short period of time when examining a small economy like that of Franklin Township. The loss of employment at Merrill Lynch and AT&T significantly reduced the competitiveness of Security and Commodity Brokers and Communications, respectively. The question arises as to how much effort the Township should put into recruiting to replace these industries. On the one hand, the local economy is concentrated with many other industries that are slated for strong growth, so the loss of these two might represent little net effect. On the other hand, both Securities and Communications are also forecast to grow and the fact that Franklin attracted these investments in the first place indicates the potential to attract them again. While this analysis can not answer these questions, they will be addressed in the rest of the study.

- *What is the future of manufacturing in Franklin Township?* Although the manufacturing sector has been on the decline both statewide and nationally, Franklin Township posted impressive gains over the study period. Thus, the question arises as to whether, despite the forecast of manufacturing decline, the Township should still pursue growth in the manufacturing sector. On the one hand, it is not advisable for a location to be concentrated in declining industries. On the other hand, Franklin Township has demonstrated its competitiveness in this sector and manufacturing does tend to provide better jobs for low-skilled workers and has a greater impact on the local economy through the multiplier effect. A better understanding of the particulars of Franklin's manufacturing strengths is needed to gauge the future importance of this sector to the Township's economy.
- *Why is Franklin Township so underrepresented in retail activity?* As discussed in section 3.3, the location quotient for the aggregate employment in all retail industries in 2001 was 0.48, indicating that Franklin has less than half of the retail activity of the average New Jersey community. Furthermore, the industry generally performed poorly during a period when the Township's population—and, hence, demand for consumer goods and services—grew rapidly. Thus, it is important to understand why the retail sector has not done as well as it might have. Is it because consumer demand is met by shopping centers outside, but close to the borders of the municipality? Is the land zoned for retail development insufficient or substandard in any way? What retail sectors, in particular, are demanded by residents and would be competitive if located within the Township?
- *What are the prospects for an emerging agglomeration in the health sector?* Although Health Services is not a part of Franklin Township's basic economy, certain related industry sectors—Nursing and Personal Care Facilities (805), Drugs (283), Medical and Dental Instruments (384), and Medical Service and Health Insurance (632)—have been or are becoming competitive in the Township. Given the state's strength in the health field, what are the prospects for developing health related industries into a new competitive agglomeration? The idea is particularly intriguing given the location of two major hospitals (Robert Wood Johnson and St. Peter's) very close to the Franklin Township-New Brunswick border.

4.3 Industries Targeted for Case Studies

Based upon the data analysis and the questions raised above, the following industry groups are likely candidates for more detailed case studies in Phase II.

Services

- Engineering and Management Services
- Business Services

These two industry groups were the strongest performers in the study period and are projected to grow at a high rate over the next decade. It is important to understand the characteristics and locational requirements of the strong performers within these two industries in order to help the Township keep its competitive edge.

- Health Services

Given the possibility of an emerging health sector agglomeration within Franklin Township, this large industry group needs to be studied in more detail. In particular, links need to be drawn to related industry groups in Manufacturing, FIRE, and Services.

Manufacturing

- Electronics
- Chemicals
- Instruments

These industries were overall strong performers for the Township and bucked the trend of decline within manufacturing. Phase II should identify the characteristics and locational requirements of firms within these industries, particularly among the more competitive and high-tech sectors within them.

- Printing

Phase II can help shed some light on whether the strong recent performance of Printing and Publishing can result in further agglomeration or will remain the province a few medium-sized firms.

FIRE

- Security and Commodity Brokers

Given the departure of Merrill Lynch and the weak local performance of this industry group, a case study should help determine whether or not to pursue future investment in this industry.

TCU

- Communications

Although the retrenchment of firms like AT&T has dealt this industry a severe blow, forecasts still call for growth over the decade. Research can help determine whether Communications is still a good fit for Franklin Township.

Trade

- All Retail Industries

Given the significant under-representation of retail within Franklin Township and its recent weak performance, a detailed case study of the various sectors within the retail industry is called for.

4.4 Conclusion

While this data analysis has potentially raised as many questions as it has answered, it provides an excellent jumping-off point for the continuation of the economic development study in Phase II. The data have shown that Franklin Township enjoys a strong local economy that appears to serve the needs of both its residents and its employers well. The Township is concentrated in sectors that are forecast for strong growth and has significant presence in industries that are at the forefront of the new economy and high technology.

This study also exposed a few potential weaknesses that will be the object of further study. In particular, the implications of the closure of large firms on the competitiveness of traditionally strong industries (such as Security and Commodity Brokers and Communications) might indicate that the Township needs to give thought to encouraging the agglomerative tendencies within its competitive industries. In addition, more study needs to be made of the retail sector to determine its appropriate place within future development strategy.

The data also suggest some intriguing, but by no means certain, opportunities for future growth. The surprisingly strong performance of manufacturing indicates that, despite forecasts of declining employment, it may yet be an important component of the local economy in years to come. Finally, the data provide evidence for an emerging agglomeration in health-related industrial activity that should be investigated further.

APPENDIX A: THE STANDARD INDUSTRIAL CLASSIFICATION SYSTEM

The Standard Industrial Classification (SIC) was originally developed in the 1930's to classify establishments by the type of activity in which they are primarily engaged and to promote the comparability of establishment data in describing various facets of the U.S. economy.

SIC codes were designed to classify economic activity in increasingly more specific categories. Eleven major divisions (industry groups) were in turn divided into industry sectors, which in turn were divided into sub-sectors. An example follows.

Division or Industry Group (two-digit SIC codes)

73 Business Services

Industrial Sector (three-digit SIC codes)

737 Computer Programming, Data Processing, and other Computer Related

Industrial Subsector (four-digit SIC codes)

7371 Computer Programming Services

7372 Prepackaged Software

7373 Computer Integrated Systems Design

: :

: :

7378 Computer Maintenance and Repair

7379 Computer Related Services, Not Elsewhere Classified

SIC codes were last revised in 1987. They are in the process of being replaced by the new North American Industrial Classification System (NAICS), which provides more detail (up to five-digit codes) and better groups some economic activity. Nevertheless, since historical data is not available in NAICS format, we have conducted our analysis using the SIC classification.

APPENDIX B: THE REGIONAL MODEL

As part of this project we have constructed econometric models to forecast non-agricultural employment in Middlesex and Somerset counties at the major industry level of detail. As part of the models we also forecast industry wage rates, wages and salaries, personal income, and the unemployment rate. The employment equations are the heart of the model.

Employment Equations

The basic form of all the employment equations is:

$$EM_{i,c} = f(EM_i, RW_{i,c}/RW_i, CPINJ/CPI, Other)$$

where *i* refers to the industry and *c* to the county. EM is employment in the county or U.S., RW is annual average wage rate in the county or U.S. CPINJ is an average Consumer Price Index for New Jersey based on the CPIs for the New York-New Jersey and Pennsylvania-New Jersey areas, and CPI is the U.S. all-urban Consumer Price Index. Other includes measures of regional demand or activity. Possibilities include: previous period's employment, county unemployment rate, personal income or its change, population or its change, and the mortgage rate.

The ratios involving the wage rates and inflation should have negative coefficients. The unemployment rate, if included, must also have a negative coefficient. The previous period's employment must have a positive coefficient that is less than 1 to avoid instability in the model. National employment, along with any income or population measures, should also have a positive coefficient.

Employment in an industry is affected positively by both the national demand in the industry sector (represented by national industry employment in the model) and the county demand for the industry's products (as represented by a variable such as income). Industry employment is negatively affected by factors such as the relative costs between the county and national economies. The wage rate and CPI ratios represent the relative costs of doing business in the county.

The actual variables chosen for each equation depend on whether the associated industry is an export industry (e.g. manufacturing) or a domestic industry (e.g. services). Export industries tend to be more strongly connected to national demand while domestic industries are more affected by county demand. Some variables are also only associated with particular industries. As examples, the mortgage rate appears in equations for construction employment, the difference between the mortgage rate and the treasury bill rate appears in some of the financial employment equations, and manufacturing and retail employment appear in some of the wholesale trade employment equations.

Wage Rate Equations

The general format for the wage rate equations is:

$$\ln(RW_{i,c}) = f(\ln(RW_i), \ln(CPINJ/CPI), \ln(EM_{i,c}/Em_i), \ln(RW_{i,c}\backslash 1)$$

The model assumes that the wage rate in an industry is positively associated with the national average wage for that industry (RW_i), regional prices relative to national prices

(CPINYNJ/CPI), regional employment relative to national employment ($EM_{i,c}/EM_i$) and, possibly, the previous period's wage rate ($RW_{i,c}\backslash 1$). The coefficients of all variables should have positive values. Furthermore, if the lagged wage rate variable is used it must be less than 1 to avoid stability problems.

Unemployment Rate Equations

The county-level unemployment rate equations have the following basic form:

$$UR_c = f(EMTM_c/EME, RUNC, UR_c\backslash 1)$$

The ratio between total nonagricultural employment in a county and total non-agricultural employment in the nation (EMTNc/EME) must have a negative coefficient to reflect the negative effect that an increased county share of national employment would have on the unemployment rate. The coefficients of the US unemployment rate (RUNC) and lagged county unemployment rate (URc\1) should be positive because of the positive association between county and national unemployment rates and the positive effect of the prior period's unemployment rate.

Income Equations

The equations for other personal income are of the form:

$$Ln(YOTH_c) = f(\ln(YOTH_c\backslash 1), \ln(YOTH), \ln(POP_c/NP)$$

The log-log form of the equation is used because of the multiplicative nature of the relationship. Other personal income is assumed to be positively related to national other personal income (YOTH), the ratio of county population to national population (POP_c/NP) and other personal income ($YOTH_c\backslash 1$) in the previous period. Total wages and salaries for each county are calculated using the following formula:

$$YW_c = E\,(EM_{i,c} * RW_{i,c})$$

which simply multiplies the employment by industry times the wage rate by industry and then sums the result to the county total.

Total personal income ($YRPIC_c$) is the sum of the wages and salaries and other income.

The independent variables used come from the R/ECON model of New Jersey and the DRI·WEFA forecast for the U.S. The population forecasts used for the counties are based on population projections provided by the N.J. Department of Labor (NJDOL).

The basic forecasts are made using data supplied by the Bureau of Economic Analysis. Then historical data for employment covered by unemployment insurance from the NJDOL is used to disaggregate the major industry data for the two counties to the 2-digit level of detail. The historical relationships between the 2 digit data for the 2 county region and Franklin Township are then used to produce probable employment levels in 2002 and 2012 in Franklin Township.

APPENDIX C: SHIFT-SHARE RESULTS

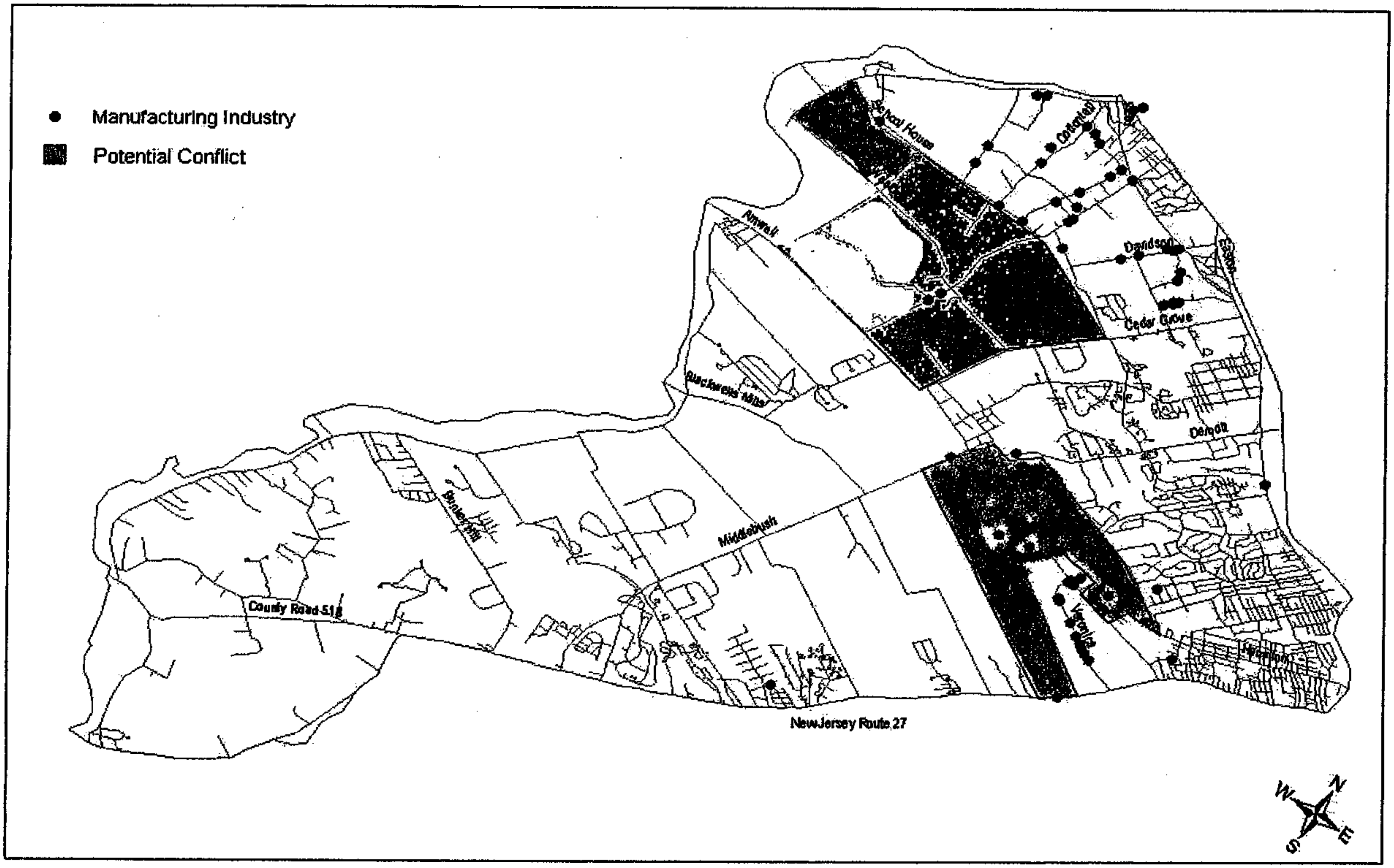
The following table provides the results of the shift-share analysis for all 2-digit SIC industry groups in Franklin Township as compared both to the United States and to New Jersey. The data are sorted in declining order by the RS score for the New Jersey comparison.

Table C.1

Shift-Share Analysis Results for 2-digit SIC Industry Groups. Franklin Township as compared to the United States and New Jersey, 1995-2001

	Franklin Employment			Franklin v. US			Franklin v. NJ		
SIC Code	1995	2001	Change	NS	IM	RS	NS	IM	RS
87	1,274	4,019	2,745	1441.4	217.8	2359.8	1467.5	312.4	2239.1
73	2,948	5,686	2,738	3335.2	738.9	1611.9	3395.8	655.1	1635.1
36	748	1,408	660	846.3	-130.8	692.6	861.6	-238.1	784.5
27	215	776	561	243.2	-38.8	571.6	247.7	-33.6	562.0
49	46	518	472	52.0	-8.9	474.9	53.0	-12.3	477.3
42	153	545	392	173.1	8.2	363.7	176.2	-39.2	408.0
28	1,686	1,971	285	1907.5	-255.0	318.5	1942.1	-373.7	402.6
15	151	518	367	170.8	15.9	331.3	173.9	1.2	342.9
56	97	365	268	109.7	-7.0	262.3	111.7	-7.2	260.5
38	42	306	264	47.5	-6.2	264.7	48.4	-1.3	258.9
30	296	419	123	334.9	-47.9	132.1	341.0	-105.8	183.8
57	47	239	192	53.2	2.3	183.6	54.1	5.6	179.3
53	184	354	170	208.2	-12.1	158.0	211.9	-34.8	176.8
60	191	333	142	216.1	-21.6	138.5	220.0	-38.2	151.2
34	484	588	104	547.6	-53.5	93.9	557.5	-119.2	149.7
63	321	517	196	363.2	-27.3	181.2	369.8	35.6	111.7
83	400	723	323	452.5	71.9	198.5	460.8	153.8	108.5
65	188	321	133	212.7	3.4	104.9	216.6	-2.7	107.2
70	819	930	111	926.6	5.1	-1.7	943.4	-116.0	102.6
10-14*	279	318	39	315.6	-35.7	38.0	321.4	-93.5	90.1
61	124	254	130	140.3	53.0	60.7	142.8	55.0	56.1
72	186	249	63	210.4	-12.4	50.9	214.3	-11.0	45.8
81	102	142	40	115.4	-0.3	26.9	117.5	-11.3	35.8
32	37	62	25	41.9	-2.5	22.6	42.6	-8.7	28.1
80	1,529	1,816	287	1729.8	-9.7	95.9	1761.3	27.0	27.8
35	88	100	12	99.6	-17.0	17.5	101.4	-22.9	21.6
39	95	109	14	107.5	-15.6	17.1	109.4	-18.6	18.2
55	115	119	4	130.1	-2.2	-8.9	132.5	-14.0	0.5
47	53	56	3	60.0	0.2	-4.1	61.1	-3.3	-1.8
37	20	17	-3	22.6	-3.1	-2.6	23.0	-2.2	-3.8
24	46	58	12	52.0	-4.5	10.4	53.0	24.2	-19.2
89	41	5	-36	46.4	-1.7	-39.7	47.2	-14.3	-28.0

Franklin Township: Potential Areas of Conflict between Manufacturers and Residents



Franklin Industrial Trends
Establishment Data 2003

		Number of Establishments			Location Quotients		
NAICS	Sector	Franklin	Somerset	NJ	Franklin to New Jersey	Franklin to Somerset	Somerset to New Jersey
31-33	Manufacturing	72	384	11,507	1.40	1.57	0.89
44-45	Retail trade	113	1,129	33,653	0.75	0.84	0.90
52	Finance and insurance	45	462	10,852	0.93	0.81	1.14
54	Professional and technical services	226	1,830	33,079	1.52	1.03	1.48
55	Management of companies	8	35	740	2.41	1.91	1.26
62	Health care and social assistance	134	846	22,672	1.32	1.32	1.00
	PRIVATE SECTOR TOTAL	**1,146**	**9,569**	**255,678**			

FRANKLIN TOWNSHIP ECONOMIC DEVELOPMENT STUDY

PHASE 2
FINAL REPORT

MARCH 2004

CENTER FOR URBAN POLICY RESEARCH (CUPR)

RUTGERS UNIVERSITY

33 LIVINGSTON AVENUE, SUITE 400
NEW BRUNSWICK, NJ 08901-1982

Principal Investigators
Sean DiGiovanna
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EXECUTIVE SUMMARY

The Center for Urban Policy Research has prepared this report upon the completion of an economic development study for Franklin Township. This analysis was conducted through CUPR's Rutgers Economic Advisory Service (R/ECON) under the direction of Sean DiGiovanna and Nancy Mantell. In the first phase, CUPR used industrial and occupational data to analyze Franklin Township's economic characteristics and to forecast future trends. The second phase consisted of a more detailed analysis of selected industries, as well as a more general analysis of Franklin Township's economic development infrastructure.

Phase 1 Revisited

In 2003, The Center for Urban Policy Research completed the first phase of the economic development study for Franklin Township. In Phase 1, we determined the following general findings:

- *Franklin Township's economic base is strong and diverse.* Employment in Franklin Township has grown at a rate that surpasses the state and regional average. Further, the Township's economy has demonstrated a high degree of diversity, providing a wide range of employment opportunities for both white-collar and blue-collar workers.
- *The local economy has large employment concentrations in industries that are projected to grow.* Given the agglomerative nature of many of the "new economy" or "high-tech" industries, locations that have captured investment in these sectors in the past are likely to remain competitive in the future. In particular, the Township's strong concentration in Business Services and Engineering and Management Services should serve Franklin Township well as those industries are forecast to be the growth leaders through 2012.
- *Franklin Township's employment base is a good match for the skills and talents of its residents.* The comparison of jobs offered by employers and jobs held by residents indicates that industries likely to locate in Franklin are able to find the workers they need and residents have the potential to find jobs locally.

In addition, we were able to draw some preliminary conclusions about the following industries:

- *Although the manufacturing sector has been on the decline both statewide and nationally, Franklin Township posted impressive gains over the study period.* The strong relative performance of manufacturing indicated that Franklin might be experiencing some benefit from the contraction of the industry in surrounding areas.
- *Franklin Township is underrepresented in retail employment.* The location quotient for the aggregate employment in all retail industries in 2001 was 0.48, indicating that Franklin had less than half of the retail activity of the average New Jersey community.

- *Although Health Services was not a part of Franklin Township's basic economy, there were indications of an emerging agglomeration in the health sector.* In particular, certain related industry sectors—Nursing and Personal Care Facilities, Drugs, Medical and Dental Instruments, and Medical Service and Health Insurance—have been or are becoming competitive in the Township.

In the second phase of the study, CUPR compared the Phase 1 results to more recent data on establishments in Franklin Township, Somerset County and New Jersey. The results of that comparison indicate:

- *The industrial strengths and weaknesses of Franklin Township seem to have held through 2003.* Manufacturing was still highly represented, while retail was still underrepresented. The intervening final closure of Merrill Lynch reduced the township's strength in brokerage activity.
- *Establishment data indicate a concentration in health industry activity.* The Phase 1 study predicted an emerging health industry agglomeration, and establishment data from 2003 are beginning to bear this out.

While we were not able to make an exact industrial comparison between the 2001 and 2003 time periods due to lack of equivalent data, the phase two analysis supports the major findings of Phase 1.

Industry Case Studies

The results of Phase 1 led CUPR to identify some industries that seemed to require greater examination—either because of their surprising concentration (manufacturing) or their unexpected absence (retail). Time and resources allowed for four case studies, the major findings of which are presented below.

Manufacturing

Despite the contraction of the manufacturing sector throughout the state and the nation, Franklin Township exhibited strong growth in this sector. The strong relative performance of manufacturing indicates that Franklin is benefiting from the contraction of the industry in surrounding areas. While statewide forecasts indicate that manufacturing employment will continue to decline, Franklin's competitive advantage may allow it to sustain a high level of activity nonetheless.

- Manufacturers stressed the location of Franklin as a major inducement to their decision to locate in the township. Respondents generally agreed that the connectivity to major roadways is crucial for ensuring the timely movement of goods and the ability to draw employees from the larger region.
- Manufacturing firms prefer a Franklin Township location due to the availability of land and the character of the landscape—an aesthetically pleasing environment and not a standard industrial park.

- The ability to expand *in situ* will be an important factor in determining whether manufacturers will stay in Franklin Township.

Retail

Initial research showed that the retail sector was underrepresented in Franklin Township. In 2001, the location quotient for all retail activity combined was only 0.48, meaning that Franklin Township had less than half of the retail concentration of the average New Jersey community. Analysis of the sector and interviews with retailers and others produced the following findings.

- Residents, community leaders and business owners alike complained about the lack of retail activity in close proximity to industrial facilities or residential concentrations.
- Grocery stores, family restaurants, fine dining, and entertainment establishments were most often cited by respondents as being needed in the township.
- The hotel industry is also looking for increased retail activity in proximity to Davidson Avenue and Worlds Fair Drive to make Franklin more competitive with hotel clusters in neighboring communities.
- Many retailers complained about the difficulty in marketing to local residents due to the lack of a local newspaper or other advertising venue.

Healthcare

While employment in health-related industries was not more highly concentrated in Franklin Township than in the state as a whole, the growth rate in this sector indicated that the township might contain an emerging cluster of such activity that will benefit future growth. Further, recent establishment data suggest that this is coming to pass.

- Respondents indicated that Franklin Township had all the necessary ingredients for an agglomeration in health-related industries, including a well-educated population, proximity to hospitals and research universities, and the presence of related manufacturing industries such as pharmaceuticals, biotechnology, and instruments.
- Respondents also pointed to a distinct shortage of primary care facilities and professionals in the Township.

Headquarters Activity

Franklin Township contains a surprising number of multilocational firms with operational headquarters in the township (Appendix A). In many cases, these headquarters functions are co-located with manufacturing or distribution facilities. Generally, these facilities have more linkages to the local community than those headquartered elsewhere. As a result, we included a study of headquarters locations that existed across industrial sectors.

- For firms with headquarters in Franklin Township, the connectivity to the larger region is crucial. Relatively easy access to an international airport and a major rail line were cited as important benefits of a Franklin location.
- The regional availability of high-quality business services was also important to those firms that subcontract legal, accounting and marketing functions.
- One drawback noted was the lack of fine dining establishments to which to take visiting clients and executives, with respondents stressing the need to go to New Brunswick for such occasions.
- The ability to expand headquarters facilities *in situ* will be an important determinant of whether such functions remain in the township or move elsewhere. Some respondents expressed concern about what they regarded as "overzealous" permitting and inspection processes.

Commercial Vacancies

Although not the subject of a case study in and of itself, the large amount of commercial real estate currently vacant in Franklin Township was expressed as a concern by both township officials and the hotel industry. Particularly worrisome are the two large properties vacated by Merrill Lynch and AT&T.

Discussions with real estate professionals and developers all indicate that there is little the township can do in the short term to fill these vacancies as their size and specifications limit the number of potential users. Nevertheless, as the township invests in its future economic development, these investments generally make Franklin Township a more attractive location, and thus should aid in finding re-uses for vacant office space.

Analysis of Development Infrastructure

In addition to the industry case studies, CUPR also conducted an analysis of Franklin Township's development infrastructure. Through public records as well as interviews with township officials and business leaders, we drew the following conclusions about the extent to which Franklin's infrastructure helps or hinders development.

Land Use

- The vast majority of economic activity is concentrated in the northern portions of the Township, while much of the residential development is taking place in the south. The perception among business owners is that infrastructure investments in industrial areas have not kept pace with those in residential areas.
- Due to the rapid growth of residential development and also of industrial development over the past decade, there exists the potential for conflict over future land use. This possibility is particularly acute in the northwest area of the

township, where large senior housing developments are located in close proximity to manufacturing and warehousing activity. Many business owners fear that the increased residential density will have negative consequences on the growth of their businesses and are expecting resident challenges to facility expansion, road improvements, and increased commercial traffic.

Transportation

- About 78% of Franklin Township residents work outside the township, and commuters from outside Franklin fill about 83% of township jobs. This results in a large volume of car traffic leaving and entering the township in the morning and afternoon hours.
- The consensus among business owners is that Franklin Township is well connected with the greater region and represents an advantageous location for shipping and receiving products and supplies.
- There is some perception that access in and out of the township is hindered by bottlenecks on Route 287 (particularly Exit 10) and along Easton Avenue. There is also a perception that local roads are often of poor quality.

Education and Workforce Development

- In general, business owners felt that the township schools were doing a sufficient job and that they in no way represented a drag on future economic development.
- Business owners report relatively little interaction with the Franklin Township school system and many felt that there should be more. In particular, some business owners believed that businesses working with school systems might lead to better job-preparedness skills for Franklin High School graduates.
- While there are many employment training and readiness programs available to township residents, such programs need to be better connected to employers within the township. Such facilitation should be a priority of the municipality.

Business Services

- Employers reported no difficulties in getting access to business services within Franklin Township or the surrounding area
- Business owners did express an interest to have more dining and amusement establishments within the township for entertaining clients and keeping employees local during lunch hours.

Local Government Support

- By and large, business owners gave the township high marks for their economic development efforts and their ability to listen to and work with employers.
- Complaints about permitting and inspection processes were commonplace. In a few cases, businesses indicated that inefficiencies in these areas might cause them to move their businesses elsewhere.

Development Priorities

Synthesizing the results from both Phase 1 and Phase 2, CUPR determined the following development priorities for Franklin Township. The recommendations below are summarized from the concluding chapter of the report and are intended to offer strategies for building upon the Township's success and thinking in some new directions.

- *Take proactive measures to reduce friction between employers and residents.* With the rapid growth of residential development in proximity to industrial areas, the township needs to be proactive in ensuring that the needs of both communities can be met in a way that protects resident quality of life, while enabling businesses to operate efficiently.

- *The School House Road/Weston Canal Road area (Senior Citizen Village) needs comprehensive development.* This area is becoming a large center of new residential development in close proximity to industrial uses. Without proper planning, there is a danger of further friction between residents and businesses as well as a risk of an underserved resident population.

- *The township can help reinvigorate the retail sector by encouraging both greater and more varied retail activity.* In particular:
    - The township should actively recruit new grocery stores.
    - Restaurants stand out as a type of retail activity with growth potential.
    - New retail development should be considered for areas with rapid residential growth, especially near the senior housing areas, which are currently underserved.

- *The township can anchor its emerging health-related industry agglomeration by helping to link the disparate industries together through special events and marketing campaigns.* Part of this effort should include marketing to primary care providers and encouraging them to open treatment offices within the township.

The newly constructed senior housing complexes should help make Franklin an attractive market for health care providers as the elderly population tends to require greater use of medical services.

- *The Township can capitalize on its attraction to small-to-medium-sized manufacturers by developing a marketing strategy highlighting its locational advantages, aesthetic appeal, and labor pool.* A similar marketing campaign can be used to tout the townships' advantage as a headquarters location.

- *The township should make every effort to streamline and clarify its permitting and licensing requirements and procedures.* Given the problems and frustrations business respondents expressed, developing informational brochures for common issues (such as expanding a parking area, or fire inspections) might help smooth these processes for both sides.

- *The township has an opportunity to help link graduates of the numerous local job training and readiness programs with employers that are looking for qualified applicants.* The township can work with local employers, service providers, and the school system to develop job fairs, resume books and apprenticeship programs.

- *The township should encourage tourism and recreation uses—particularly on preserved land and open space.* Activities geared towards natural and historical assets can help provide greater draw for hotel guests, residents and employees.

In our view, Franklin Township's economic development milieu has many strengths and few weaknesses. It has a growing and diverse employment base, a desirable location, and good quality development infrastructure. With proper planning, Franklin Township should be able to enjoy a more secure and stable economic future. It is our hope that this report will help the Township to take better advantage of its strengths and to address areas of weakness.

1.0 INTRODUCTION

The Center for Urban Policy Research has prepared this report upon the completion of an economic development study for Franklin Township. This analysis was conducted through CUPR's Rutgers Economic Advisory Service (R/ECON) under the direction of Sean DiGiovanna and Nancy Mantell. In this first phase, CUPR used industrial and occupational data to analyze Franklin Township's economic characteristics and to forecast future trends. The second phase consisted of a more detailed analysis of selected industries, as well a more general analysis of Franklin Township's economic development infrastructure.

Chapter 2 presents the major findings of the first phase of the study, published in 2003. In addition, we provide some updated data that demonstrates that the information developed from Phase 1 is still accurate.

Chapter 3 presents some brief case studies of industries identified in Phase 1 as requiring further study. We take a closer look at the manufacturing, retail, and health industries, as well as a study of firms headquartered in Franklin Township. For each case study, we conducted further data analysis, produced maps of the locations of firms, and spoke with several employers within Franklin as well as township officials. Each case study led to a number of findings, which in turn contributed to the final recommendations of the report.

Chapter 4 presents the results of our analysis of Franklin Township's development infrastructure. This is an asset analysis that identifies strengths and weaknesses (from an economic development standpoint) in transportation, education, business services, land use and government support. We detail how the current state of these characteristics might promote or inhibit development.

In Chapter 5, we present our recommendations for Franklin Township's development priorities. Using all the evidence collected, we point to some specific economic development strategies and provide information for their implementation over time.

Township representatives identified the following objectives as paramount in any future economic development approaches:

- The creation/attraction of tax-paying businesses is a priority
- Future residential development should be minimized
- Traffic congestion is an increasing problem and should be considered in future development strategies
- The Township prefers the development of local businesses—with presumably more commitment to the area—over the attraction of branch plants of firms headquartered elsewhere
- Future industrial development should minimize impact on the environment of the Township

In providing our recommendations, we kept these objectives in mind and hope the residents of Franklin Township will find them useful.

2.0 PHASE 1 RESULTS

In 2003, The Center for Urban Policy Research completed the first phase of the economic development study for Franklin Township. In this first phase, CUPR used industrial and occupational data to analyze Franklin Township's economic characteristics and to forecast future trends. The primary data source was the fully-disclosed New Jersey covered employment (ES202) data for all employers in the Township. In addition, we used data from the US Census Bureau and other state and regional agencies. We conducted the following analyses:

Commutation analysis: Using 1990 (and available 2000) Census data, we conducted a baseline commutation pattern analysis for Franklin Township. This analysis detailed the most common points of origin for commuters to the Township as well as the most common destinations for Franklin's commuting residents.

Industrial trends and forecasts: We analyzed the changes in employment in broad industrial classifications, i.e. services, wholesale trade, retail trade, etc. We used this information to forecast trends in those industries using the relationship of employment in Franklin Township to that in Middlesex and Somerset counties, as well as other information.

Occupational analysis and forecast: We developed an estimate of the occupational distribution of Franklin Township for 2001. We then forecast occupational distribution based on this estimate and projected occupational employment growth for the township.

Basic economic analysis: We conducted a thorough location quotient analysis to compare Franklin Township's industrial make-up with that of the region (Middlesex-Somerset), and the state as a whole. This analysis helps to identify those sectors in which the Township is specialized and which contribute to its basic economy.

Shift-share analysis: We examined the causes of employment increases and declines across industries. Specifically, we determined whether employment gains or losses were the result of national trends, industry shifts, or local competitive advantage.

Finally, the Phase 1 report identified the major strengths and weaknesses of Franklin Township's industrial landscape and discussed the impact of this analysis for the second phase of the economic development study, of which this is the final report.

The report detailing the results of the first phase can be obtained from the township's Web site (http://www.franklintwpnj.org/phase1_exec_summ.html). In this report, we are only reproducing some of the major findings and produce some new data that demonstrate that the results of Phase 1 still apply.

2.1 Phase 1 Major Findings

Although not in itself intended to draw conclusions about Franklin Township's economic development milieu, the data analysis in Phase 1 enabled us to make some important observations about the Township's economy.

- *Franklin Township's economic base is strong and diverse.* The data indicated that, in general, employment Franklin Township has grown at a rate that surpasses the state and regional average. Further, the Township's economy demonstrated a high degree of diversity, providing a wide range of employment opportunities for both white-collar and blue-collar workers.
- *The local economy has large employment concentrations in industries that are projected to grow.* Given the agglomerative nature of many of the "new economy" or "high-tech" industries, locations that have captured investment in these sectors in the past are likely to remain competitive in the future. In particular, the Township's strong concentration in Business Services and Engineering and Management Services should serve it well as those industries are forecast to be the growth leaders through 2012.
- *Franklin Township's employment base is a good match for the skills and talents of its residents.* The comparison of jobs offered by employers and jobs held by residents indicated that there are no glaring shortages in the Township's job market. This is good news from both a supply and demand standpoint in that industries likely to locate in Franklin are able to find the workers they need and residents have the potential to find jobs locally.

The data analysis also allowed us to make certain observations relating to particular industries within the township.

- *Although the manufacturing sector has been on the decline both statewide and nationally, Franklin Township posted impressive gains over the study period.* The strong relative performance of manufacturing indicated that Franklin might be experiencing some benefit from the contraction of the industry in surrounding areas.
- *Franklin Township is underrepresented in retail employment.* The location quotient for the aggregate employment in all retail industries in 2001 was 0.48, indicating that Franklin had less than half of the retail activity of the average New Jersey community.
- *Although Health Services was not a part of Franklin Township's basic economy, there were indications of an emerging agglomeration in the health sector.* In particular, certain related industry sectors—Nursing and Personal Care Facilities, Drugs, Medical and Dental Instruments, and Medical Service and Health Insurance—have been or are becoming competitive in the Township.

2.2 Phase 1 Revisited

In 2001, Franklin Township employers reported information for over 35,800 employees.[1] Table 2.1 provides information on industry groups employing more than 250. The table

[1] This figure includes workers in the primary (agriculture and mining) sector, but not in the government sector.

clearly shows that the strengths of Franklin Township's economy lie in Business Services (SIC 73) and Engineering and Management Services (SIC 87), with strong showings in Manufacturing (SICs 27, 28, 30, 34 and 36). Since Merrill Lynch had not yet completed its closeout, Security and Commodity Brokers (SIC 62) was still highly represented.

Table 2.1

Data for Industry Groups Employing over 250
Franklin Township, 2001

SIC Code	Industry	Franklin Employment	Location Quotient[2]
73	Business Services	5,686	1.63
87	Engineering and Management Services	4,019	2.51
50	Wholesale Trade, Durable Goods	2,658	1.58
28	Chemicals and Allied Products	1,971	2.00
80	Health Services	1,816	0.49
62	Security and Commodity Brokers[3]	1,660	3.04
36	Electronic and Other Equipment	1,408	4.60
82*	Educational Services	1,291	2.69
48	Communication	1,194	1.63
70	Hotels and Other Lodging Places	930	1.21
54	Food Stores	832	0.67
58	Eating and Drinking Places	828	0.44
27	Printing and Publishing	776	1.29
83	Social Services	723	0.77
51	Wholesale Trade, Nondurable Goods	709	0.57
34	Fabricated Metal Products	588	1.91
42	Motor Freight Transportation and Warehousing	545	0.80
17	Special Trade Contractors	520	0.45
15	General Building Contractors	518	1.44
49	Electric, Gas, and Sanitary Services	518	2.10
63	Insurance Carriers	517	0.72
59	Miscellaneous Retail	473	0.41
30	Rubber and Misc. Plastic Products	419	1.69
56	Apparel and Accessory Stores	365	0.65
53	General Merchandise Stores	354	0.52
45*	Transportation by Air	347	0.72
60	Depository Institutions	333	0.59
65	Real Estate	321	0.77
10-14*	Mining	318	18.97
38	Instruments and Related Products	306	0.85
61	Non Depository Institutions	254	1.15

Source: New Jersey Department of Labor ; * Estimate

[2] A location quotient greater than 1 indicates that an industry is more concentrated than average in the region.
[3] It is estimated that most of the employment in this industry has since been lost due to the departure of Merrill Lynch from the Township.

Table 2.2 details both the location quotients and basic employment figures for industry groups in Franklin Township in 2001. At the industry group level, 11,645 or (32%) of Franklin Township's jobs were in the basic economy. Again, the most significant industry groups were Engineering and Management Services and Business Services. Together, these two industry groups account for almost 40% of basic employment. A "second tier" of basic industry groups was represented by Security and Commodity Brokers, Electronics, Chemicals, Wholesale Trade (Durable) and Educational Services.

Table 2.2

Basic Employment by Industry Group
Franklin Township, 2001

SIC Code	Industry	Franklin Employment	Location Quotient	Basic Employment
87	Engineering and Management Services	4,019	2.51	2,415
73	Business Services	5,686	1.63	2,200
62	Security and Commodity Brokers	1,660	3.04	1,114
36	Electronic and Other Equipment	1,408	4.60	1,102
28	Chemicals and Allied Products	1,971	2.00	987
50	Wholesale Trade, Durable Goods	2,658	1.58	979
82*	Educational Services	1,291	2.69	810
48	Communication	1,194	1.63	460
10-14*	Mining	318	18.97	301
34	Fabricated Metal Products	588	1.91	280
49	Electric, Gas, and Sanitary Services	518	2.10	271
27	Printing and Publishing	776	1.29	174
30	Rubber and Misc. Plastic Products	419	1.69	170
70	Hotels and Other Lodging Places	930	1.21	160
15	General Building Contractors	518	1.44	158
33	Primary Metal Industries	142	1.29	32
61*	Nondepository Institutions	254	1.15	32
		Total Basic Employment		**11,645**

Source: New Jersey Department of Labor ; * Estimate

Given the time that has passed since September 2001, CUPR and the Township wanted to be certain that the trends observed in the data still held. As a result, we have analyzed more recent data provided by the state of New Jersey. This data consists of establishments by industry for Franklin Township, Somerset County and New Jersey for June 2003. We have produced a location quotient analysis of this data in Table 2.3.

Table 2.3

Establishments by Industrial Sector
Franklin Township, Somerset Count and New Jersey, 2003

NAICS Code	Industrial Sector	Number of Establishments: Franklin Township	Number of Establishments: Somerset County	Number of Establishments: New Jersey	Location Quotients: Franklin to New Jersey	Location Quotients: Franklin to Somerset
11	Agriculture, forestry, fishing and hunting	5	-	1,039	1.07	-
21	Mining	1	-	104	2.15	-
22	Utilities	4	12	315	2.83	2.78
23	Construction	78	907	24,483	0.71	0.72
31-33	Manufacturing	72	384	11,507	1.40	1.57
42	Wholesale trade	118	668	19,752	1.33	1.47
44-45	Retail trade	113	1,129	33,653	0.75	0.84
48-49	Transportation and warehousing	40	203	7,086	1.26	1.65
51	Information	21	200	4,091	1.15	0.88
52	Finance and insurance	45	462	10,852	0.93	0.81
53	Real estate and rental and leasing	28	269	8,693	0.72	0.87
54	Professional and technical services	226	1,830	33,079	1.52	1.03
55	Management of companies and enterprises	8	35	740	2.41	1.91
56	Administrative and waste services	75	-	14,413	1.16	-
61	Educational services	22	110	2,543	1.93	1.67
62	Health care and social assistance	134	846	22,672	1.32	1.32
71	Arts, entertainment, and recreation	13	124	3,157	0.92	0.88
72	Accommodation and food services	74	581	16,890	0.98	1.06
81	Other services, except public administration	66	880	22,628	0.65	0.63
99	Unclassified entities	3	286	17,981	0.04	0.09
	PRIVATE SECTOR TOTAL	**1,146**	**9,569**	**255,678**		

Source: New Jersey Department of Labor

It should be noted that the more recent data is for establishments, not employees and therefore not directly comparable to the data in Phase 1. Also, the industry codes are reported in the NAICS format and is not available in the older SIC format used in Phase 1, thus industry definitions will vary somewhat between the two data sets. Nevertheless, as the shaded rows indicate in Table 2.3, the relative concentration of the industries within Franklin Township has held—Manufacturing (NAICS 31-33) still shows a strong concentration, while Retail Trade (NAICS 44-45) is still underrepresented. Professional and Technical Services (NAICS 54) and Management (NAICS 55) are also strong sectors.

The only discrepancy seems to lie in Health Services (NAICS 62), with a greater than average concentration of establishments in 2003 compared to an under representation of employees in 2001. This indicates either growth in the Health sector compared to the county and state, or that healthcare businesses in Franklin Township are smaller on average than those in the county or state.

In any event, we can conclude the following from the data comparison:

- *The industrial strengths and weaknesses of Franklin Township seem to have held through 2003.* Manufacturing was still highly represented, while retail was still underrepresented. The intervening final closure of Merrill Lynch reduced the township's strength in brokerage activity.
- *Establishment data indicate a concentration in health industry activity.* The Phase 1 study predicted an emerging health industry agglomeration, and establishment data from 2003 are beginning to bear this out.

While we were not able to make an exact industrial comparison between the 2001 and 2003 time periods due to lack of equivalent data, the phase two analysis supports—or at the very least does not contradict—the major findings of Phase 1.

3.0 INDUSTRY CASE STUDIES

The results of Phase 1 led CUPR to identify some industries that seemed to require greater examination—either because of their surprising concentration (manufacturing) or their unexpected absence (retail). Time and resources allowed for four case studies, the results of which are presented below.

3.1 Manufacturing

Despite the contraction of the manufacturing sector throughout the state and the nation, Franklin Township exhibited strong growth in this sector from 1995-2001. In fact, four of the top ten industry group performers were in manufacturing. The strong relative performance of manufacturing (Table 3.1) indicates that Franklin might be experiencing some benefit from the contraction of the industry in surrounding areas. While forecasts indicate that manufacturing will enter a period of decline, Franklin's competitive advantage might allow it to sustain a high level of activity nonetheless.

Table 3.1

**Performance[4] of Selected Industry Groups in the Manufacturing Sector
Franklin Township 1995-2001**

		Franklin Employment			Franklin v. NJ		
SIC Code	Industry Group	1995	2001	Change	NS	IM	RS
Strong Performance							
36	Electronic and Other Equipment	748	1,408	660	861.6	-238.1	784.5
27	Printing and Publishing	215	776	561	247.7	-33.6	562.0
28	Chemicals and Allied Products	1,686	1,971	285	1942.1	-373.7	402.6
38	Instruments and Related Products	42	306	264	48.4	-1.3	258.9
30	Rubber and Misc. Plastic Products	296	419	123	341.0	-105.8	183.8
34	Fabricated Metal Products	484	588	104	557.5	-119.2	149.7
Moderate Performance							
32	Stone, Clay and Glass	37	62	25	42.6	-8.7	28.1
35	Machinery	88	100	12	101.4	-22.9	21.6
39	Miscellaneous Manufacturing	95	109	14	109.4	-18.6	18.2
Weak Performance							
33	Primary Metal Products	276	142	-134	317.9	-79.6	-96.3
20	Food	219	55	-164	252.3	-61.0	-136.3

[4] This table is a reproduction of Shift-Share results published in Phase 1. In the model, the expected level of employment is represented by the term NS (National Share). The difference of NS from actual employment is explained by two factors. First is the Industry Mix (IM), which represents the industry performance at the national (or state) level. The second component is the Regional Shift (RS), which represents the extent to which that industry has become more concentrated locally, and thus is a measure of local competitiveness.

The strong performance of Electronic and Other Equipment (36) was due to the expansion of existing facilities and the addition of new ones, particularly in Semiconductors and Related Devices (3641). In Chemicals (28), strong growth was observed in the Drugs (283) and Paints and Allied Products (285) sectors.

Printing and Publishing (27) represents a new competitive industry in Franklin Township. This growth is due entirely to two new medium-sized firms—one each in Newspapers (271) and Books (273). It remains to be seen whether these new investments can be parlayed into a Printing and Publishing agglomeration.

Interestingly, the growth in Instruments and Related Products (38) is due almost entirely to the growth of Medical and Dental Instruments (384). This adds further evidence to the possibility of a nascent specialization in the heath sector.

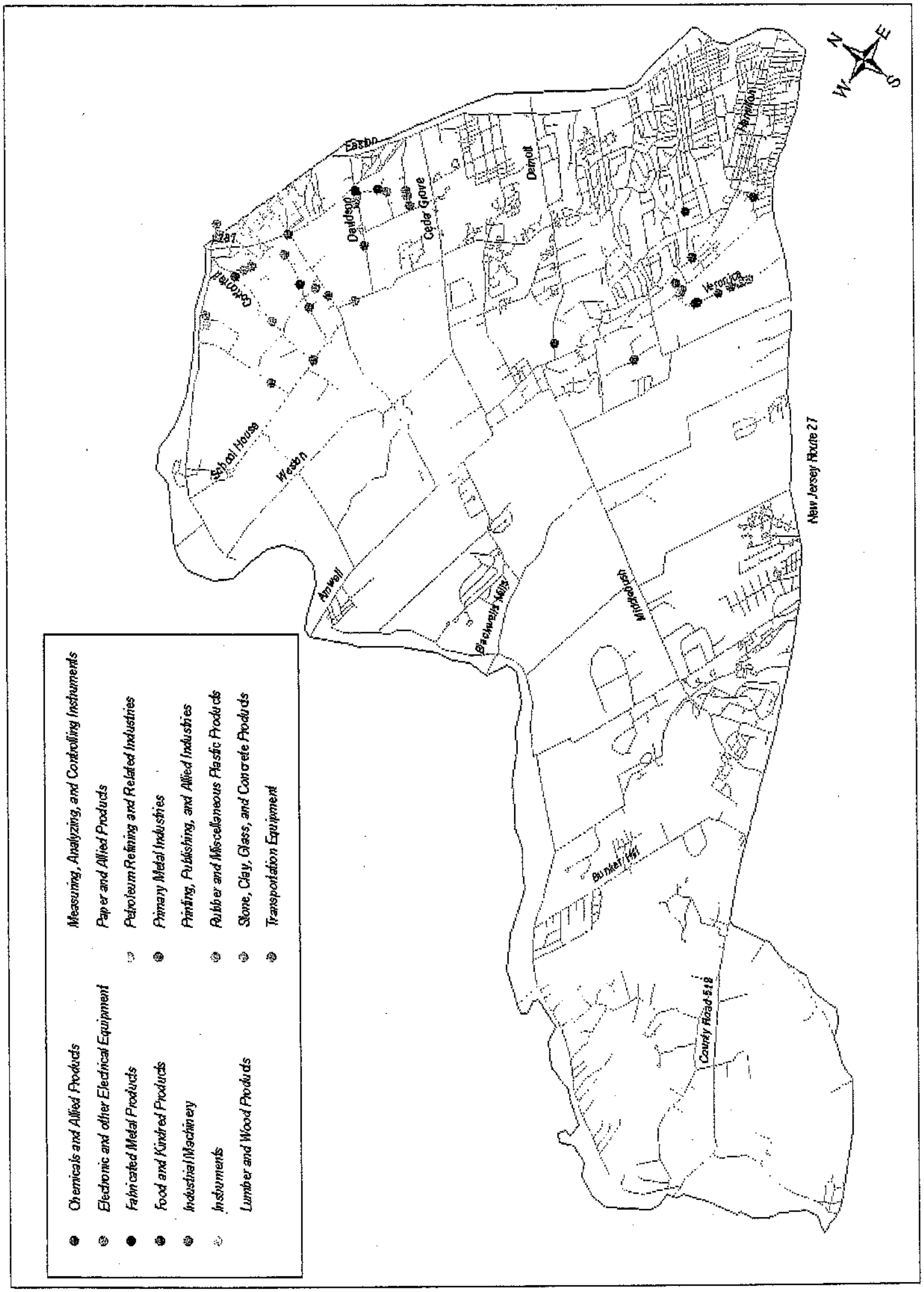
As a result of this sector's local strength in comparison to its relative weakness both regionally and nationally, CUPR decided to include manufacturing as one of its case studies. In particular, we looked at the strong performing industry groups of Electronic and Other Equipment (36), Chemicals (28), and Instruments and Related Products (38). Our goal was to determine what advantages Franklin Township offered that made it so competitive.

3.1.1 Locational Characteristics

The locations of manufacturing facilities within Franklin Township are shown in Figure 3.1. Looking at the map, we can identify three clusters of manufacturing activity. The first is along Veronica Avenue between Route 27 and Hamilton Street. The second is in the area bounded by Davidson Avenue and World's Fair Drive. The third and largest cluster is in the area bounded by Elizabeth Avenue, Randolph Road, School House Road and Route 287.

For the most part, these facilities are on individual lots, and in many cases have retained some of their natural character. In fact, in our discussions with manufacturers, the physical setting of the manufacturing sites were one of the most oft-cited advantages of the Township. Nevertheless, there are some areas where residential and industrial development are approaching each other (See Figure 4.1 and the discussion in Section 4.1)

Figure 3.1
Franklin Township: Manufacturing Industries by Type



3.1.2 Major Findings

Through interviews with manufacturers and visits to manufacturing sites, as well as a more general analysis of the manufacturing sector, we identified the following major findings for this sector.

- Manufacturers stressed the relative location of Franklin Township as a major inducement to their decision to locate in the township.

Respondents generally agreed that the connectivity to major roadways is crucial for ensuring the timely movement of goods. Most manufacturers source product inputs from and ship final products to the greater region, if not nationally or globally. Interruptions or delays in transportation cost manufacturers money. In general, manufacturers view Franklin Township as being well connected to the highway system, as well as having good access to Newark Liberty airport and the New Jersey seaports.

Similarly, good transportation access is crucial in manufacturers' ability to draw employees from the larger region. While the majority of manufacturing employees come from Somerset and Middlesex counties, many do come a great distance to work. Most respondents believed their workers had relatively stable commutes, though some did complain about traffic congestion on Route 287 and along Easton Avenue.

- Manufacturing firms prefer a Franklin Township location due to the availability of land and the character of the landscape.

By and large, manufacturing parcels are aesthetically pleasing to manufacturers, many with wooded sections and offset from both the road and from neighboring facilities. The most common comment was that manufacturing sites were not reminiscent of the standard industrial parks found in so many other communities. Rather, manufacturers liked having their own "campus" and felt in was better for impressing clients and colleagues.

- The ability to expand *in situ* will be an important factor in determining whether manufacturers will stay in Franklin Township.

Most manufactures stated that one of the benefits of their current location was the ability to expand on site as their business grows. Nevertheless, many stressed disappointment with permitting and inspection processes that seemed to make expansion difficult, if not impossible. While manufacturers were happy with the quality and location of their land, some believed that further expansion plans might be jeopardized by bureaucracy. A few even stated that the inability to expand on site might cause them to relocate their facility.

3.2 Retail

As discussed in the Phase 1 report, the location quotient for the aggregate employment in all retail industries in 2001 was 0.48, indicating that Franklin has less than half of the retail activity of the average New Jersey community. Furthermore, the industry generally performed poorly during a period when the Township's population—and, hence, demand for consumer goods and services—grew rapidly. Given the significant under-representation of retail within Franklin Township and its recent weak performance, this sector was chosen as a case study for the second phase of the report.

In 2001, Food Stores (Eating and Drinking Places and Food Stores) were the largest employers in the retail sector. Apparel and Accessory, General Merchandise, and Furniture and Home Furnishing stores also accounted for substantial employment. Most retail establishments were small, employing fewer than 20 workers on average. Table 3.2 compares data for 1995 and 2001 on the types of retail establishments. It should be noted that the 2003 data presented in Table 2.3 indicate a further drop in total retail establishments to 113.

Table 3.2

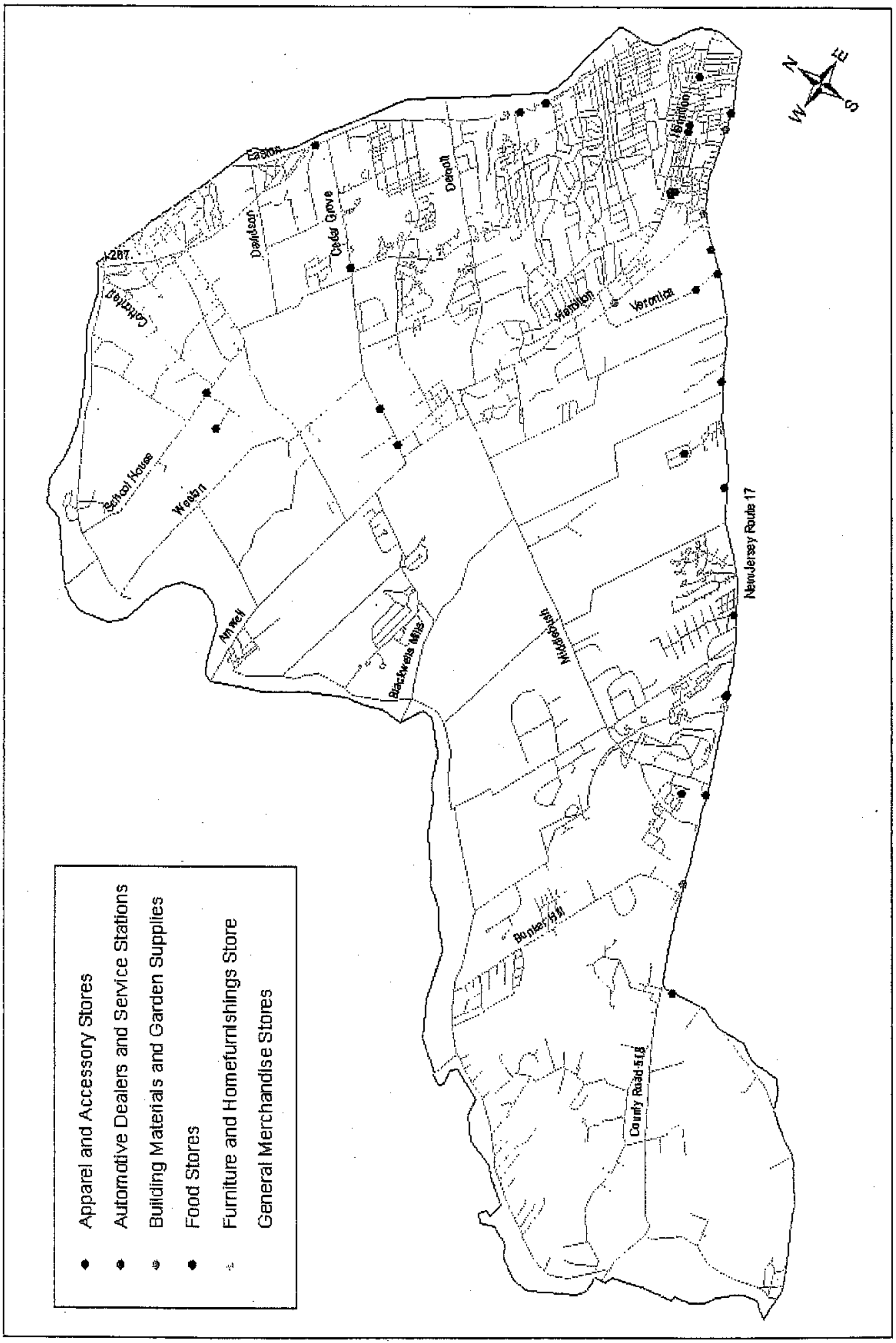
Franklin Township's Retail Sector, 1995-2001

Retail Sectors	Number of Establishments		Net Gain (Loss) of Firms
	1995	2001	
Eating & Drinking Places	80	69	(11)
Food Stores	38	29	(9)
Grocery Stores	23	17	(6)
Retail Bakeries	8	6	(2)
Specialized & Miscellaneous	7	6	(1)
Apparel & Accessory Stores	12	8	(4)
General Merchandise Stores	5	3	(2)
Furniture & Home Furnishing Stores	12	17	5
Miscellaneous Retail	49	44	(5)
Drug & Proprietary Stores	10	11	1
Florists	7	6	(1)
Other	32	27	(5)
Building Materials & Garden Supplies	5	4	(1)
Automotive Dealers & Service Stations	16	12	(4)
Total	217	186	(31)

Source: New Jersey Department of Labor

Figure 3.2

Franklin Township: Retail Establishments



3.2.1 Locational Characteristics

Figure 3.2 illustrates that retail activity is heavily concentrated along Route 27, Hamilton Street and Easton Avenue. This is not surprising as these are the major commercial arteries of Franklin Township. Note the paucity of retail establishments in proximity to the centers of manufacturing employment (Figure 3.1) as well as their absence from the hotel cluster on Davidson Avenue and the recent residential development in the School House Road area.

The lack of retail facilities in close proximity to workplaces and residences was one of the most cited observations among interview respondents. The same locational characteristics, though less pronounced, hold true for eating establishments represented separately in Figure 3.3.

3.2.2 Major Findings

- Residents, community leaders and business owners alike complained about the lack of retail activity in close proximity to industrial facilities or residential concentrations.

Almost every respondent we spoke with decried the lack of retail activity near places of work and residence. Manufacturers particularly stressed this point as they were concerned about employees having to travel far from the workplace to obtain lunch or other personal services. As a result, workers can be late coming back from lunch hour.

- Grocery stores, family restaurants, fine dining, and entertainment establishments were most often cited by respondents as being needed in the township.

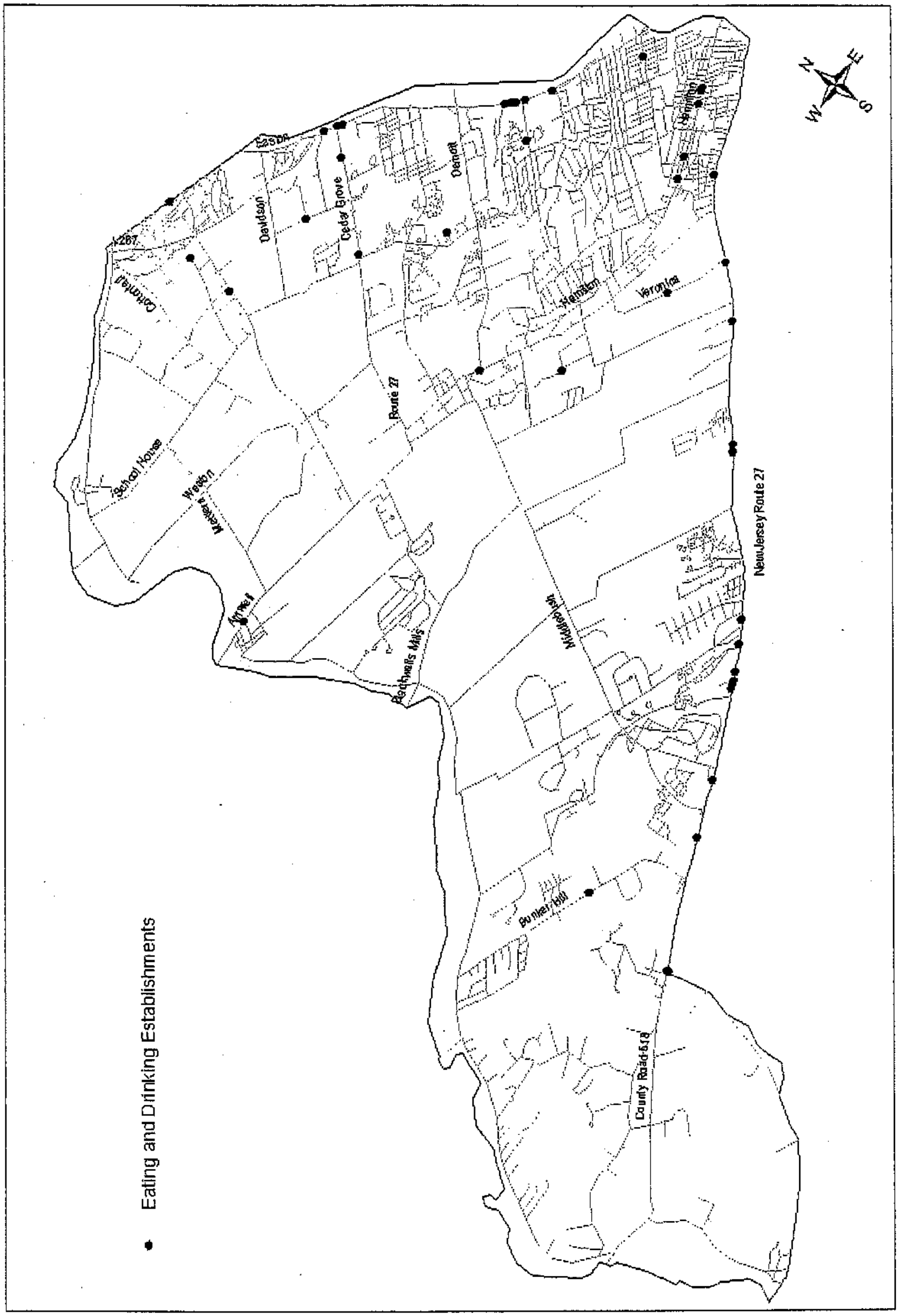
The small number of grocery stores in the township means that residents often go to neighboring communities to buy their groceries. Similarly, many respondents noted the lack of restaurants—both in the fine dining and family entertainment categories—within easy access of both workplaces and hotels.

- The hotel industry is also looking for increased retail activity in proximity to Davidson Avenue and Worlds Fair Drive to make Franklin more competitive with hotel clusters in neighboring communities.

Our discussions with hotel operators indicate a desire to enhance the retail offerings in the Davidson Avenue/World's Fair Drive area of the township. The hotel operators believe that having some personal services, clothing stores and restaurants close to the hotels would make Franklin Township a more attractive destination for the business traveler.

Figure 3.3

Franklin Township: Eating and Drinking Establishments



- Many retailers complained about the difficulty in marketing to local residents due to the lack of a local newspaper or other advertising venue.

Although Franklin Township has many great shops and restaurants, visitors—and even residents—often do not even know they exist. Many retailers felt that the sector would benefit by being better able to market to both residents and workers. Some indicated that neither the *Home News Tribune* nor the *Courier News* newspapers were specific enough Franklin Township to be effective marketing vehicles.

3.3 Healthcare

Although Health Services was not a part of Franklin Township's basic economy in 2001, certain related industry sectors—Nursing and Personal Care Facilities (SIC 805), Drugs (SIC 283), Medical and Dental Instruments (SIC 384), and Medical Service and Health Insurance (SIC 632)—have been or are becoming competitive in the Township. Given the state's strength in the health field, it seems there are prospects for developing health related industries into a new competitive agglomeration in Franklin Township. The idea is particularly intriguing given the location of two major hospitals (Robert Wood Johnson and St. Peter's) very close to the Franklin Township-New Brunswick border.

3.3.1 Locational Characteristics

Figure 3.4 illustrates the locations of the various components of the health industry within Franklin Township. The patterns of location generally follow those for other industries, though perhaps a bit more diffuse.

Locations of primary care providers are shown in Figure 3.5. We can identify three clusters—along Route 27, along Easton Avenue, and along Clyde Road. In addition, there are some offices along the other major commercial and industrial corridors.

3.3.2 Major Findings

- Respondents indicated that Franklin Township had all the necessary ingredients for an agglomeration in health-related industries.

Advantages cited included a well-educated population, proximity to hospitals and research universities, and the presence of related manufacturing industries such as pharmaceuticals, biotechnology, and instruments.

Figure 3.4
Franklin Township: Health Industry

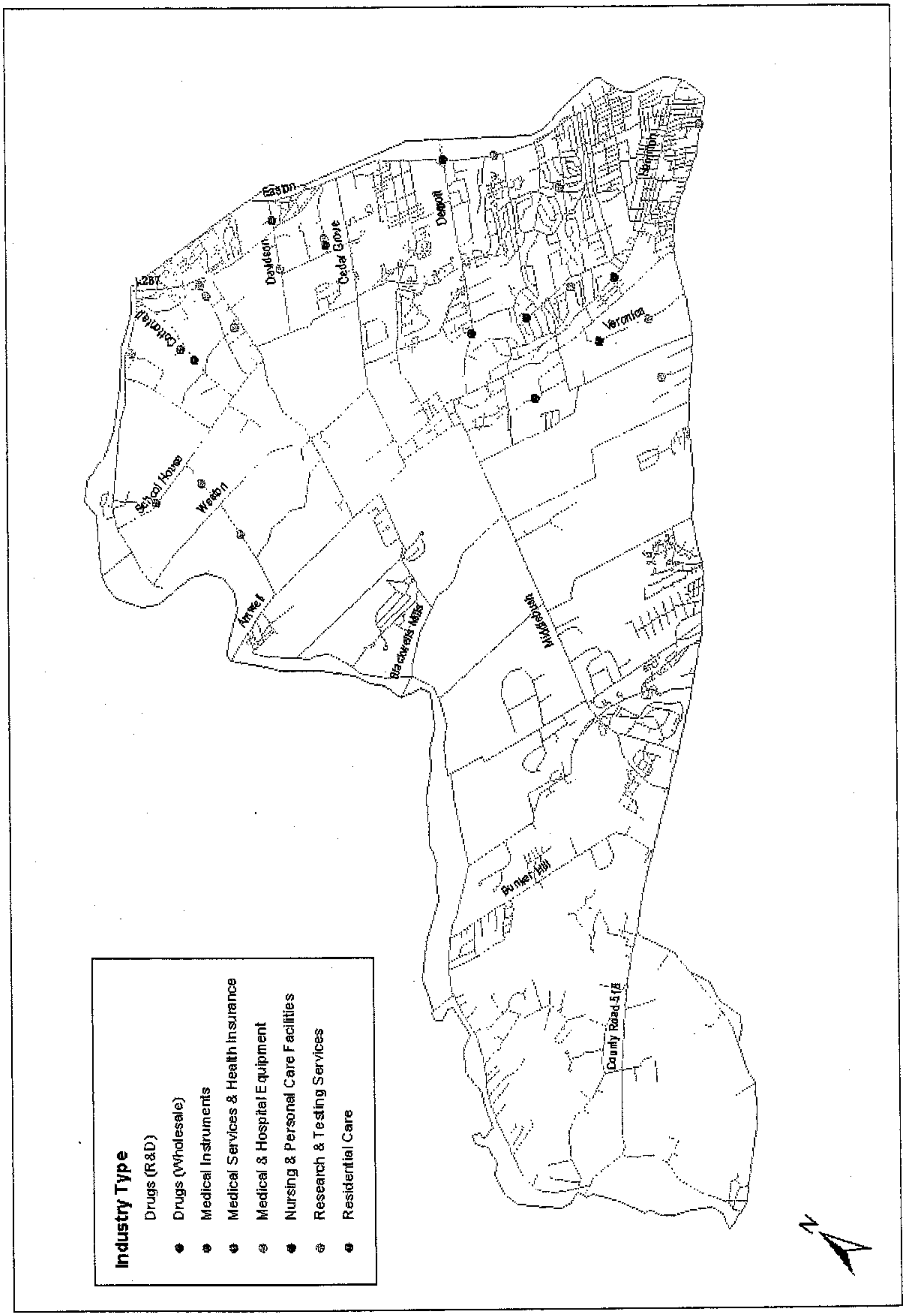
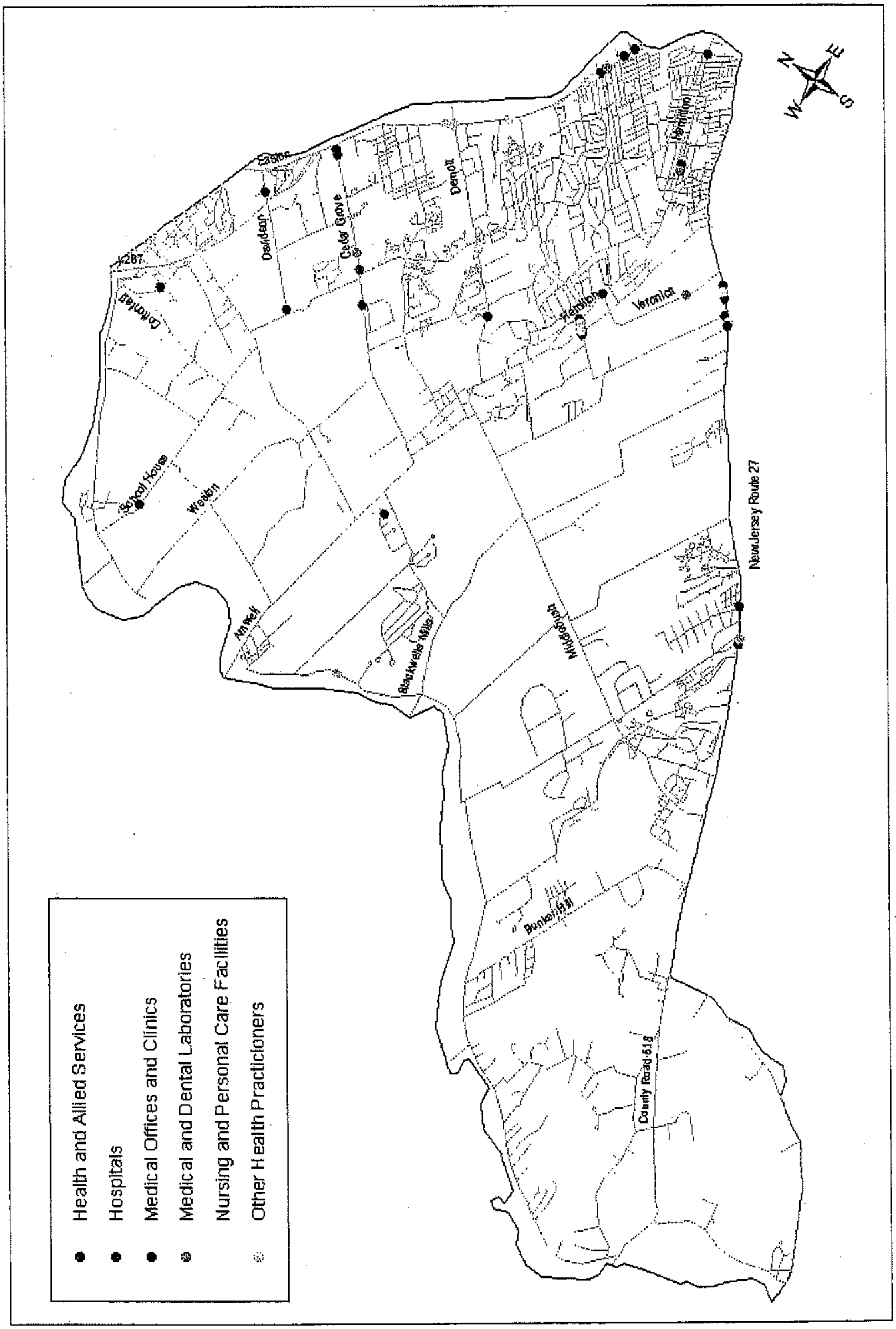


Figure 3.5
Franklin Township: Health Care Providers



- Respondents also pointed to a distinct shortage of primary care facilities and professionals in the Township.

This observation is echoed in the statistical data from 2001 and provides an opportunity for future growth within the health industry—especially with the expected growth in the senior population of the township.

3.4 Headquarters Activity

Franklin Township contains a surprising number of multilocational firms with operational headquarters in the township. In many cases, these headquarters functions are co-located with manufacturing or distribution facilities. Often, these facilities are more greatly tied to the community. As a result, we included a study of headquarters locations that existed across industrial sectors.

Those Franklin Township facilities that either serve as corporate headquarters or perform some headquarters functions are listed in Appendix A. There are a few concentrations within this headquarters population, including:

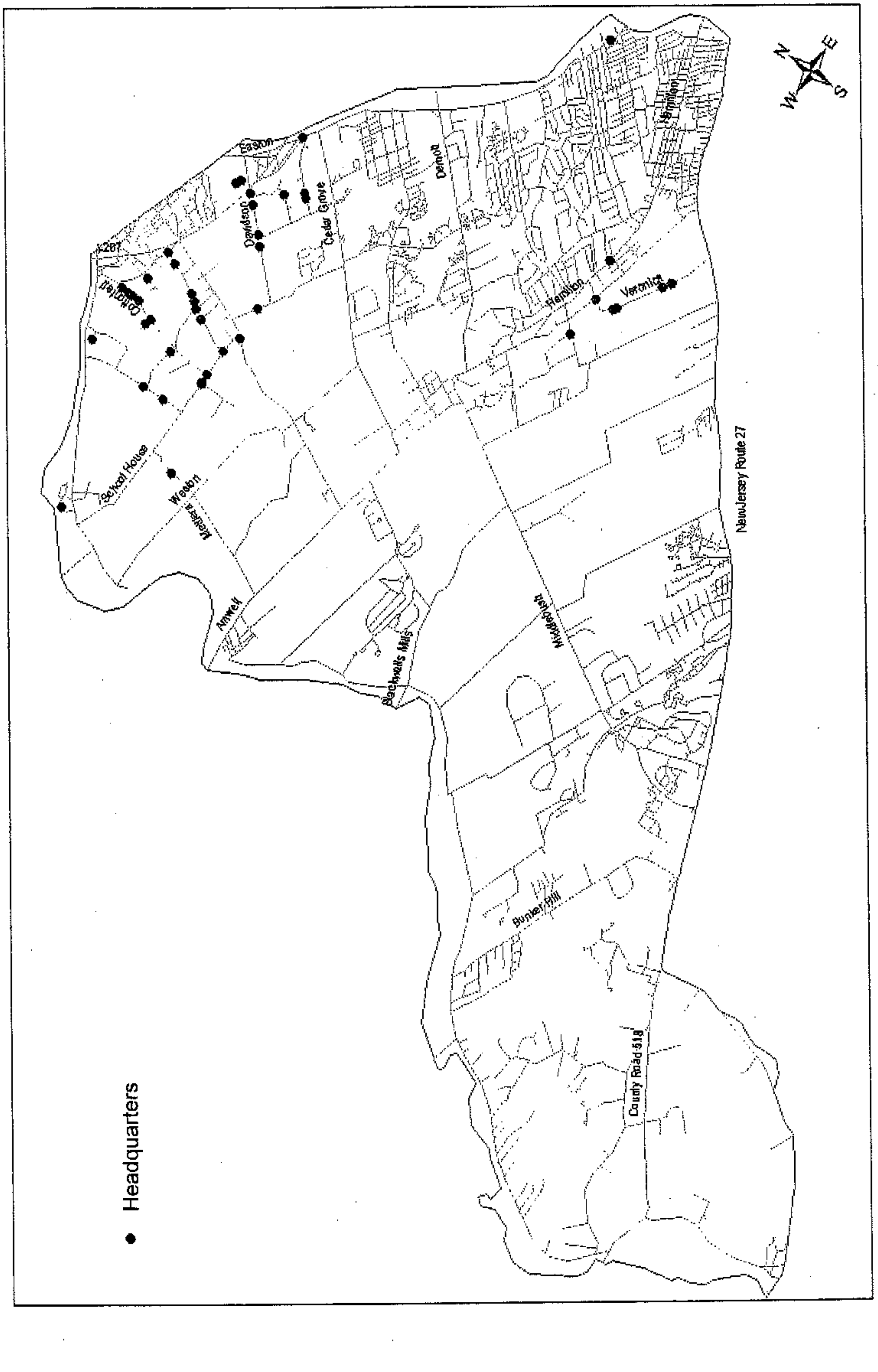
- Advanced Electronics and Optical Technologies
- Computer and Network Provisioning and Consulting
- Communications Technologies
- Health Services
- Management and Financial Services

It appears that Franklin Township has the ability to attract several corporate headquarters in some advanced technology sectors.

3.4.1 Locational Characteristics

Figure 3.6 indicates the locations within Franklin Township of headquarters facilities. Note the similar locational pattern to manufacturing firms (Figure 3.1). Specifically, we can identify three clusters of headquarters activity. The first is along Veronica Avenue between Route 27 and Hamilton Street. The second is in the area bounded by Davidson Avenue and World's Fair Drive. The third, and largest, cluster is in the area bounded by Elizabeth Avenue, Randolph Road, School House Road and Route 287.

Figure 3.6
Franklin Township: Headquarters Activity



3.4.2 Major Findings

- For firms with headquarters in Franklin Township, the connectivity to the larger region is crucial.

Relatively easy access to an international airport and a major rail line were cited as important benefits of a Franklin Township location. These locational advantages are similar to those stated by manufacturers. Nevertheless, the requirements for headquarters functions dictate easy access for employees and clients, thus the connectivity to Newark Aiport was stressed significantly.

- The local availability of high-quality business services was also important to those firms that subcontract legal, accounting and marketing functions.

Not all headquarters operations conduct bookkeeping, legal and marketing service in house. In many cases, especially for smaller firms, they rely on service providers to fulfill these important roles. For these firms, the availability of business services in close proximity is crucial. Respondents cited the richness of business services firm in the region. Note that many respondents contracted beyond Franklin for some of these services, and thus viewed this advantage as more of a regional feature rather than a local one.

- One drawback noted was the lack of fine dining establishments to which to take visiting clients and executives.

The ability to entertain visiting company executives and clients is important to corporate headquarters. Many respondents wanted more accessible and good quality restaurants for this purpose. Respondents often stressed the need to go to New Brunswick for such occasions.

- The ability to expand headquarters facilities *in situ* will be an important determinant of whether such functions remain in the township or move elsewhere.

Similarly to manufacturers, headquarters respondents stated disappointment with permitting and inspection processes that seemed to make expansion difficult. While happy with the quality and location of their land, some respondents stated that difficulties in expanding on site might cause them to relocate their headquarters.

3.5 Commercial Vacancies

Although not the subject of a case study in and of itself, the large amount of commercial real estate currently vacant in Franklin Township was expressed as a concern by both township officials and the hotel industry. Particularly worrisome are the two large properties vacated by Merrill Lynch and AT&T.

Discussions with real estate professionals and developers all indicate that there is little the township can do in the short term to fill these vacancies as their size and specifications limit the number of potential users. Nevertheless, as the township invests in its future economic development, these investments generally make Franklin Township a more attractive location, and thus should aid in finding re-uses for vacant office space.

- While there is little the township can do directly to fill the commercial office space vacated by Merrill Lynch and AT&T, pursuing the strategies outlined in this report should make Franklin Township a more attractive place for investment, and thus encourage a more rapid reuse of vacant facilities.

4.0 ANALYSIS OF DEVELOPMENT INFRASTRUCTURE

In addition to the industry case studies, CUPR also conducted an analysis of Franklin Township's development infrastructure. Through public records as well as interviews with township officials and business leaders, we drew the following conclusions about the extent to which Franklin's infrastructure helps or hinders development.

4.1 Land Use

Franklin Township is a large and diverse community, both demographically and geographically. Similarly, there are a wide variety of land uses designated in the township. Most of the commercial- and industrial-zoned land is located in the northern part of the township, with the southern two-thirds zoned mostly for residential use or for preservation.

4.1.1 Major Findings

- The vast majority of economic activity is concentrated in the northern portions of the Township, while much of the residential development is taking place in the south.

As seen in the maps in Chapter 3, very little economic activity is evident outside the area bounded by Easton Avenue, Route 287, and Route 27 north of Bennetts Lane. This is understandable, given the access of the northern part of the township to the highway system.

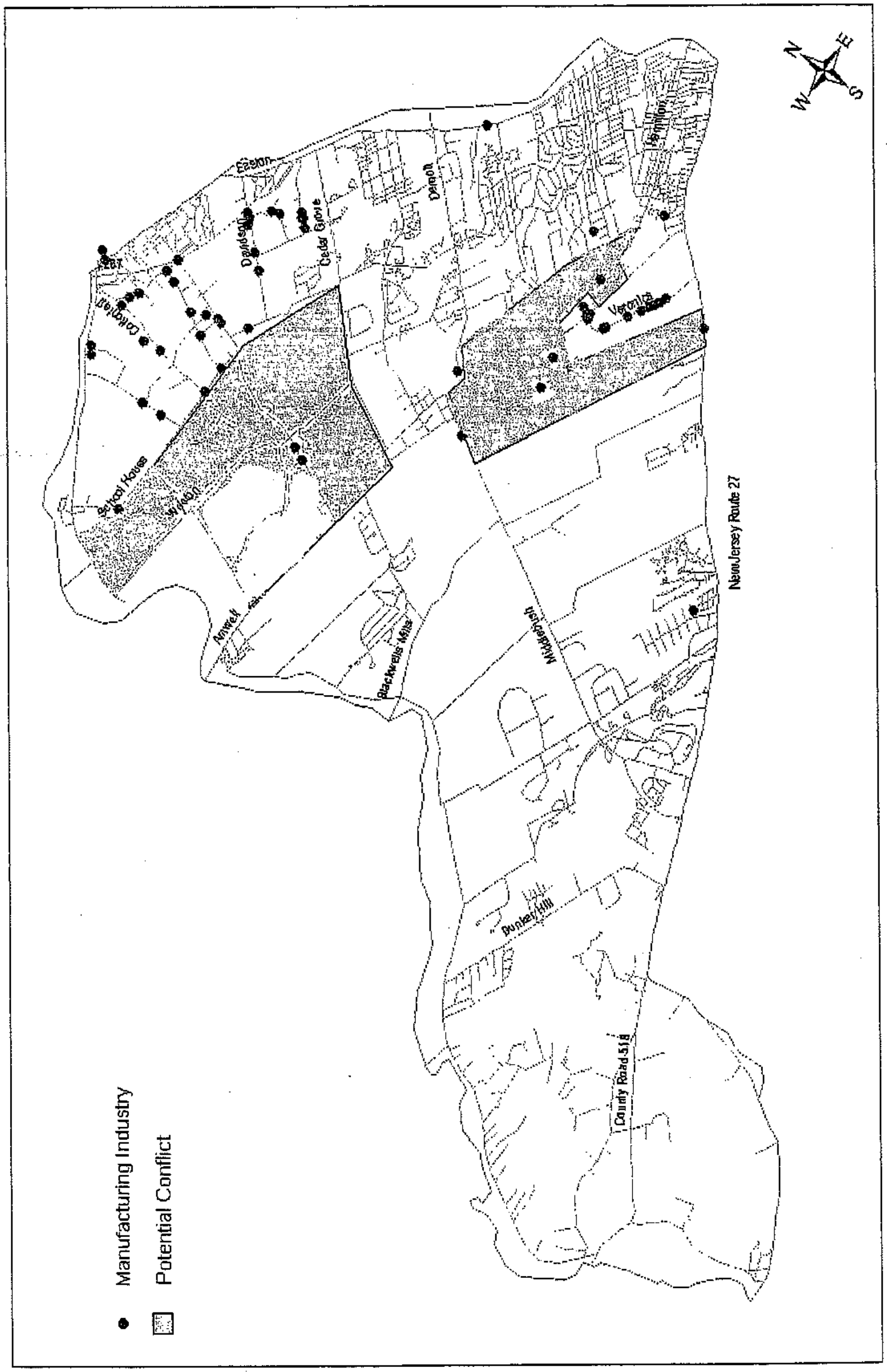
- Due to the rapid growth of residential development and also of industrial development over the past decade, there exists the potential for conflict over future land use.

This possibility is particularly acute in the northwest area of the township, where large senior housing developments are located in close proximity to manufacturing and warehousing activity. Many business owners fear that the increased residential density will have negative consequences on the growth of their businesses and are expecting resident challenges to facility expansion, road improvements, and increased commercial traffic.

Potential areas of conflict are highlighted in Figure 4.1. Immediately evident is the proximity of manufacturing to the planned Senior Citizen Village development along School House Road. Without adequate planning, conflict between residents and business owners will become more likely.

Figure 4.1

Franklin Township: Potential Areas of Conflict between Manufacturers and Residents



4.2 Transportation

Franklin Township is centrally located with convenient access to I-287, Route 1, Route 18, Route 27, and the New Jersey Turnpike. New Jersey Transit's Northeast Corridor line is also easily accessed in nearby New Brunswick and New Jersey Transit's Raritan Valley line is also accessible in Bound Brook. Bus service from Franklin to New York City and between Franklin and New Brunswick is also available. Internally, the township's road network is a collection of residential, local access streets and more heavily traveled arterial roads that serve as through roads for those traveling to nearby destinations, such as New Brunswick and Princeton, and as collector and distributor roads for I-287.

Franklin Township suffers from traffic congestion as a result of being both a major employment center and a growing residential community. Travel to and from I-287 generates the largest amount of traffic in the northern portion of the township. The employment centers in the northwest portion of the township result in congestion problems along South Middlebush Road, Easton Avenue, Cedar Grove Lane, and Amwell Road.

The proximity of major employment centers to the I-287 interchanges produces a large number of commuters utilizing these roads to access work places in the morning and to access I-287 in the evening. Additionally, residential developments in the central and southern portions of the township result in heavy traffic along Route 27, Easton Ave., and South Middlebush Rd. A number of the major roads in the township are owned and maintained by Somerset County or the State of New Jersey, resulting in limitations in the ability of the township to address transportation or traffic problems on its own.

The following areas of traffic concern were commented on both by business respondents and by township officials:

Easton Avenue and Davidson Avenue

This area suffers from extreme congestion. This is due to the proximity to the I-287 interchanges, major employment centers, and retail along Easton Avenue. and hotels on Davidson Ave. While area business representatives and local officials have identified congestion as a problem, it is not yet viewed as enough of a problem to cause firms and business to relocate from Franklin.

South Middlebush Road and Amwell Road

This is a major intersection in the township, averaging 23,000 vehicles per day according to township records. The intersection is currently stop-sign controlled; however, traffic lights are to be installed shortly. The installation of a traffic light and minor repairs to the roads and intersection are intended to address congestion. Additionally, the intersection suffers from poor geometry, but no plans are currently in place to address this problem.

Route 27

Route 27 is highly developed and generates a great deal of both local and through traffic. Commercial, residential, and business uses along Route 27, in addition to commuter traffic, make this the most heavily traveled road in the southern portion of the township. Direct access between Route 27 and I-287 is limited.

Easton Avenue and Landing Lane

This intersection is an additional area of high congestion, as it serves as a connection between Route 18 and I-287. The completion of the Route 18 extension to I-287 is hoped to lessen traffic at this intersection.

The overriding sentiment expressed by area business representatives and local officials is that although traffic congestion is a recognized problem it is an acceptable nuisance, as the transportation access available in Franklin to firms and businesses outweighs any inconveniences caused due to congestion.

Local officials are additionally seeking to alleviate congestion by making improvements to various roadways that connect to I-287, thus taking traffic pressure off of Easton Avenue and Davidson Avenue.

4.2.1 Major Findings

- About 78% of Franklin Township residents work outside the township, and commuters from outside Franklin fill about 83% of township jobs.

This results in a large volume of car traffic leaving and entering the township in the morning and afternoon hours. Despite this commuting congestion, most respondents indicated that such traffic was as bad or worse in most New Jersey communities and did not consider it a deterrent to staying in Franklin Township.

- The consensus among business owners is that Franklin Township is well connected with the greater region and represents an advantageous location for shipping and receiving products and supplies.

The connectivity of the township is near the top of the reasons many businesses gave for their location within the township. This is particularly the case for both manufacturers and corporate headquarters.

- There is some perception that access in and out of the township is hindered by bottlenecks on Route 287 (particularly Exit 10) and along Easton Avenue.

There is also a perception that local roads are often of poor quality. In particular, some business respondents indicated a belief that roads for residential use received better maintenance than those for industrial use. Nevertheless, planned improvements to Route 287 access should alleviate some of these concerns.

Future commercial, business, and residential development in Franklin will certainly produce greater amounts of traffic. Township, county, and state officials, therefore, must be prepared to meet increased traffic flows so that Franklin's transportation access continues to work to its advantage and traffic does not become a deterrent for firms and businesses.

4.3 Education and Workforce Development

At the beginning of the study, township officials expressed concern that current and prospective business owners held a negative view of the Franklin Township public school system. In particular, there was concern that a negative perception of the Franklin Township schools would act as an impediment to economic development. As a result, we asked all respondents to comment on their perceptions of the local schools and whether they viewed them as an aid or impediment to development.

We found no evidence of a negative opinion of Franklin Township's schools among business owners. In fact, many reported a desire to have more dealings with the school system. Nevertheless, we did discover that the local economy as a whole could benefit through grater linkages between education and training providers and employers.

4.3.1 Major Findings

- In general, business owners felt that the township schools were doing a decent job and that they in no way represented a drag on future economic development.

Thus, the initial concerns about a negative perception among business owners are unfounded.

- Business owners report relatively little interaction with the Franklin Township school system and many felt that there should be more.

In particular, some business owners believed that working with school systems might result in better job-preparedness skills for Franklin High School graduates.

- While there are many employment training and readiness programs available to township residents, such programs need to be better connected to employers within the township.

In addition to the local school system, there are a number of training providers involved in workforce development in the township. In particular, Raritan Valley Community College and First Baptist Community Development Corporation both offer an array of opportunities for workforce development. What is interesting is that, in both of these cases, the providers are located in the Somerset area of the township, while the employment opportunities are largely in the northwest portion of the township.

4.4 Business Services

The industrial data in Phase 1 of the study illustrated no shortage of business service providers in the township. Access to legal, accounting, and marketing services are important to the growth of businesses. As a result, we asked all of the respondents about their ability to obtain such services locally.

4.4.1 Major Findings

- Employers reported no difficulties in getting access to business services within Franklin Township or the surrounding area.

Most respondents indicated that they viewed access to business services from a regional perspective, including not only Franklin Township, but surrounding communities and even larger cities like Newark.

- Business owners did express an interest to have more dining and amusement establishments within the township for entertaining clients and keeping employees local during lunch hours.

While not ordinarily considered as business services, eating establishments were mentioned in so many responses to this question that we felt obligated to include it here. Again, this reinforces the perception of a general lack of retail activity in the township.

4.5 Local Government Support

One of the more intangible components of a community's development infrastructure is the ability of the local government to work with the business community in initial location decisions, problem-solving, and in maintaining a strong business climate. We asked all respondents about their interactions with local officials and about their expectations of what local government can best do to promote development.

4.5.1 Major Findings

- By and large, business owners gave the township high marks for their economic development efforts and their ability to listen to and work with employers.

Most respondents recognized the limitations of what local governments can do when so many factors of the business climate are set by state or national policy. Nevertheless, most thought the township was well managed. In particular, respondents commented on the success of the local government in maintaining an aesthetically pleasing community in concert with both industrial and residential growth.

- Complaints about permitting and inspection processes were commonplace. In a few cases, businesses indicated that inefficiencies in these areas might cause them to move their businesses elsewhere.

The complaints were repeated too often to ignore. Most cited were fire inspectors and the construction permitting process. In many cases, business owners recounted stories of confusing or conflicting requirements that led to the loss of money and time.

5.0 DEVELOPMENT PRIORITIES

Synthesizing the results from Phase 1, the industry case studies and the analysis of development infrastructure, CUPR determined the following development priorities for Franklin Township. The recommendations below are intended to offer strategies for building upon the Township's success and thinking in some new directions.

- *Take proactive measures to reduce friction between employers and residents.* With the rapid growth of residential development in proximity to industrial areas, the township needs to be proactive in ensuring that the needs of both communities can be met in a way that protects resident quality of life, while enabling businesses to operate efficiently.
    - One important part of this strategy is to begin a communications or marketing strategy that stresses to residents the need for industrial activity and what the township is doing to minimize "negative externalities" such as noise, congestion and pollution.
    - The flip side of this is to inform employers of the need to be vigilant in following local ordinances and minimizing community disruption. Open communication and vigorous code enforcement can help reduce friction.

- *The School House Road/Weston Canal Road area (Senior Citizen Village) needs comprehensive development.* This area is becoming a large center of new residential development in close proximity to industrial uses. Without proper planning, there is a danger of further friction between residents and businesses as well as a risk of an underserved resident population.
    - Retail development must be considered as the residential construction goes forward. The area is already underserved in retail and services, adding more people will only exacerbate the problem. On the other hand, restaurants, personal service providers, and doctors' offices can serve both the growing residential population and the employees in the area.
    - In addition, retail/commercial development carefully planned can serve as buffer between the competing uses in the area. Shops and offices can provide an important transition zone between manufacturing facilities and houses.

- *The township can help reinvigorate the retail sector by encouraging both greater and more varied retail activity. In particular:*
    - The township should actively recruit new grocery stores. With the large and increasing population of the township, there is no reason residents should need to go to neighboring communities to buy food.

- Restaurants stand out as a type of retail with growth potential. High demand for restaurants suitable for business dinning suggests that several sit-down restaurants should be established near the business and light industrial areas. In addition, this would provide places for entertainment near the hotels.
- New retail development should be considered for areas with rapid residential growth, especially the senior housing areas, which are currently underserved. Since retail is lacking in some areas of Franklin that have a substantial number of housing units, establishing small retail centers in such areas is a viable option. This would relieve congestion on the roads along which retail establishments are currently diffused. It would also provide retail access to residents of the Northwest and Southwest parts of Franklin, reducing the distance traveled to purchase groceries and other necessities.

- *The township can anchor its emerging health-related industry agglomeration by helping to link the disparate industries together through special events and marketing campaigns.*
  - The marketing strategy should consider the health industry in a broad sense, linking primary care providers with health-related businesses in the manufacturing, trade, and finance sectors.
  - Part of this effort should include marketing to primary care providers and encouraging them to open treatment offices within the township. The newly constructed senior housing complexes should help make Franklin an attractive market for health care providers.

- *The Township can capitalize on its attraction to small-to-medium-sized manufacturers by developing a marketing strategy highlighting its locational advantages, aesthetic appeal, and labor pool.*
  - Marketing information can be targeted to start-ups or potentially relocating firms at industry association meetings and in the local and regional business press.
  - A similar marketing campaign can be used to tout the townships' advantage as a headquarters location.

- *Given the problems and frustrations business respondents expressed with the permitting and licensing processes, the township should make every effort to streamline and clarify its requirements and procedures.*

  - Developing informational brochures for common issues (such as expanding a parking area, or fire inspections) might help smooth these processes for both sides.

- *The township has an opportunity to help link graduates of the numerous local job training and readiness programs with employers that are looking for qualified applicants.*
  - The township can work with local employers, service providers, and the school system to develop job fairs, resume books and apprenticeship programs.

- *The township should encourage tourism and recreation uses—particularly on preserved land and open space.*
  - Activities geared towards natural and historical assets can help provide greater draw for hotel guests, residents and employees
  - Audubon Society tours, Revolutionary War Trail, and "pick your own" farms are examples of recreational tourism that have good potential in the Township

In our view, Franklin Township's economic development milieu has many strengths and few weaknesses. It has a growing and diverse employment base, a desirable location, and good quality development infrastructure. With proper planning, Franklin Township should be able to enjoy a more secure and stable economic future. It is our hope that this report will help the Township to take better advantage of its strengths and to address areas of weakness.

APPENDIX A: HEADQUARTERS IN FRANKLIN

The following is a select list of firms that existed in 2001 and either served as a headquarters location of a multilocational firm or incorporated some headquarters functions in their Franklin Township location.

Advanced Electronics and Optical Technologies

American Fibertek, Inc: fiber optic technology for the transmission of video, audio and data signals - HQ, global sales and distribution network, security and surveillance related fiber optics
120 Belmont Drive
Somerset, NJ 08873-1204
732 302 0660
http://www.americanfibertek.com/

EMCORE Corporation offers the complete spectrum of compound semiconductor solutions for the broadband and wireless communications and solid state lighting markets.
145 Belmont Drive
Somerset, NJ 08873,
Tel: +1 732-271-9090
Fax: 732-271-9686
http://www.emcore.com/html.html

Kyocera Optics, administrative HQ in Somerset, but a wholly –owned subsidiary of Kyocera Electronics USA, San Diego
Kyocera Optics, Inc.
2301-200 Cottontail Lane
Somerset NJ 08873-1245
Tel: (732) 560-0060
Fax: (732) 560-9221
http://www.kyocera.com/koi/index.htm

Light Age, Inc.: designs and manufactures advanced medical systems; advanced industrial laser products and advanced scientific lasers for scientific research and for prototyping new laser applications.
Two Riverview Drive
Somerset, NJ 08873
Tel: 732-563-0600
Fax: 732-563-1571
http://www.light-age.com/index.html

Multilink Technology Corporation has developed into a leading provider of advanced semiconductor based components, modules and higher-level assemblies for use in high-speed optical networks.
300 Atrium Drive,
Second Floor
Somerset, NJ 08873-4105
Phone: 732-537-3700
http://www.mltc.com/index_flash.html

NanoOpto Corporation: applies proprietary nano-optics and nano-manufacturing technology to design and make components for optical networking
1600 Cottontail Lane
Somerset, NJ 08873-5117
http://www.nanoopto.com/

NSG America: a full service micro-optics solution provider, US HQ of Japanese firm
28 World's Fair Drive
Somerset, NJ 08873
Phone: (732) 469-9650
Fax: (732) 469-9654
http://www.nsgamerica.com/

Communication Services

Dynamic Mobile Data Systems was founded in 1994 to help companies benefit from the use of cutting-edge wireless technology. The company's software for two-way wireless communications and tracking gained some notable customers including Airborne, UPS and Con Edison.
285 Davidson Avenue
Suite 501
Somerset, NJ 08873
(732) 302-1700
Fax: (732) 302-9558
http://www.dmdsys.com/default.asp - Dynamic Mobile Data Systems; Somerset HQ serves clients nationwide

Technical Telephone Systems, Inc.: Integrated telephony services for large companies
14K Worlds Fair Drive
Somerset, NJ 08873
http://www.tts.com/

Computer and Network Provision and Consulting

Applied Information Services - HQ, global customers, web-based business solutions
http://www.appliedinfo.com/index2.asp

Infotech Global, Inc. (IGI): IT consulting, software development and outsourcing (esp. healthcare industry)
100 Franklin Square Drive
Somerset, NJ 08873
Phone: (732) 271-0600
Fax: (732) 271- 0271
http://www.igiusa.com/index.asp

InSys Technology LLC: an information systems consulting firm specializing in the development of Extranet and Internet applications
270 Davidson Avenue, Suite 201
Somerset, New Jersey 08873
Phone: 732.563.0002
Fax: 732.563.0004
http://www.insys.net/

Melillo Consulting, Inc.: Solution architect and integrator of proven and advanced information technologies
285 Davidson Avenue
Somerset, NJ 08873
Fax: 732-563-8450
http://www.mjm.com/mjmwebsite/default.htm

Software House International: a global procurement outsourcing company and leading business-to-business solution provider.
2 Riverview Drive
Somerset, NJ 08873
Phone: 1-888-764-8888 / 732-764-8888
Fax: 732-764-8889
http://www.shi.com/default.asp

Thoroughbred Software International, Inc.: markets software development systems and specialized applications for the Recreation, Reprographics and e-Commerce industries, and supports a community of over 1,000 value added resellers and partners.
285 Davidson Ave., Ste. 302
Somerset, NJ 08873
Telephone: 732-560-1377
http://www.tbred.com/

Velankani Information Systems, Inc.: engineering and IT services. Has facility in Bangalore, India
3 Executive Drive Somerset,
New Jersey 08873
TEL: 732-563-0700
FAX: 732-563-4824
http://www.velankani.com/

Vista International - global computer solutions company, either HQed in London or Somerset.
80 Cottontail Lane, Fourth Floor
Somerset, NJ 08873
Telephone: +1 732 563 9292
Fax: +1 732 563 9044
http://www.vistacomp.com/

Health Industry

American SurgiSite Centers: a multi-faceted company offering a wide variety of services to both patients and physicians (Laser eye surgery centers).
562 Easton Avenue
Somerset, NJ 08873
Tel: 800-955-SITE
http://www.americansurgisite.com/default.html

Huntingdon Life Sciences: works with a wide variety of products, including Pharmaceuticals, Agrochemicals, Industrial Chemicals, Veterinary Products, Foods and Flavourings, to help their manufacturers develop safer products for the market.
http://www.huntingdon.com/hls/home/index.html

MedPointe, Inc. A specialty pharmaceuticals company.
265 Davidson Ave., Suite 300
Somerset, NJ 08873-4120
(732) 564-2200
http://www.medpointeinc.com/home.html

Oticon Inc.'s long term mission is to become the U.S. market leader in providing high-performance hearing solutions that reflect the most advanced technical designs.
29 Schoolhouse Rd
PO Box 6724
Somerset, NJ 08875
http://www.oticon.com/eprise/main/Oticon/US_en/_index

Partners in Care, Corp.: a for-profit, multiple shareholder, New Jersey corporation, jointly governed by Saint Peter's University Hospital and physician members of the United Medical Group, P.C. The company is a Management Services Organization (MSO), whose core business is Health Risk Contract Management.
100 Franklin Square Drive
Suite 300
Somerset, NJ 08873
Phone: (732) 805-0400
http://www.piccorp.com/

Pharmagistics (formerly Lark Fulfillment): a rapidly growing and profitable sales, marketing, and logistical services company, providing integratable sales support, marketing support, sample accountability, third-party logistics, and contract sales services to pharmaceutical, biopharmaceutical, medical device and healthcare companies.
309 Pierce Street
Somerset, NJ 08873
PHONE: 732 356-7200
FAX: 732 356-4299
http://www.pharmagistics.com/index.html

STRIDES INC.: India based company, is Somerset location NA HQ or just branch plant? (I believe it is a subsidiary, but the parent company uses it to meet FDA regulations, so there must be some HQ functions.)
37 Veronica Avenue
Somerset, NJ 08873
http://www.stridesarco.com/

Terumo Medical: US HQ of Japanese firm, a high quality manufacturer of medical products, operating four factories and 38 sales branches in Japan, as well as 31 other locations.
TMC Corporate Headquarters
2101 Cottontail Lane
Somerset, NJ 08873
(732) 302-4900
(800) 283-7866
Fax: (732) 302-3083
http://www.terumomedical.com/

Management and Financial Services

Actrade Financial Technologies Ltd.: a provider of electronic payment technologies that deliver financial solutions for commercial trade.
200 Cottontail Lane
Vantage Court South
Somerset, NJ 08873
PH: 732-868-3100
FX: 732-868-1121
http://apps8njo.actrade.com/site/tadprgm.nsf/home?openform

Derivatives Portfolio Management, LLC: offers a portfolio of integrated services that include: investment accounting, financial reporting, multiple broker and trader reconciliation, risk transparency and fund administration services for more than $12 billion of assets.
Two Worlds Fair Drive
P.O. Box 6741
Somerset, NJ 08875-6741
Phone: 732-563-0030
Fax: 732-563-1193
http://www.dpmllc.com/

Elity Systems: software firm, strategic business applications, single facility with global sales
285 Davidson Avenue
Somerset, NJ 08873-4153
http://www.elity.com/index.asp

Hildebrandt International: provides strategic advice, managerial guidance and implementation support to professional services organizations and corporate legal departments worldwide
200 Cottontail Lane
Somerset, New Jersey 08873
T: 732 560-8888
F: 732 560-2566
http://www.hildebrandt.com/home

Others

Equipment Erectors, Inc: provides turnkey Material Handling Systems for Packages, Bulk Mail, Airline Baggage, and Containerized Cargo
15 Veronica Ave
Somerset, N.J. 08873
Phone: 732-846-1212
Fax: 732-846-0833
http://208.158.123.182/company.html

Zinsser Products: a broad product line that includes many paint and decorating specialty items (Also on list as William Zinsser & Co.)
173 Belmont Drive
Somerset, New Jersey 08875
(732) 469-8100
http://www.zinsser.com/

Sorbent Products Company a recognized, international leader in meltblown sorbent technology and sales (environmental technologies, particularly oil spill clean-up)
SPC Corporate Offices
645 Howard Avenue
Somerset, NJ 08873
Phone: 800-333-7672
732-302-0080
Fax: 732-302-0969
http://www.sorbentproducts.com/

Rotor Clip Company, Inc.: Manufactures metal retaining rings.
187 Davidson Avenue
Somerset, NJ 08873
http://www.rotoclip.com/

Micro Stamping Corp.: a high volume, high precision producer of custom, small, light gauge, metal stampings and assemblies.
140 Belmont Drive,
Somerset, NJ 08873
Phone 732.302.0800
Fax 732.302.0436
http://www.microstamping.com/

Budd Van Lines, Inc.
24 Schoolhouse Rd.
Somerset, New Jersey 08875
Phone (800) 833-2833 **or** (732) 627-0600 **Fax** (732) 627-0678
http://www.buddvanlines.com/

Toppan Printing Company America, Inc.: US HQ of Japanese Firm
1100 Randolph Road
Somerset, NJ 08873
http://www.ta.toppan.com/

Takara Belmont: furnishings and equipment for beauty salons, spas and barber shops. US HQ of Japanese firm
Takara Belmont
101 Belmont Dr.
Somerset, NJ 08873
T: 732-469-5000
F: 732-469-9430
http://www.takara-belmont.com/

Trap Rock Industries, Inc., producer of crushed stone and hot mix asphalt
Route 27
Kingston, N.J.
609-252-8927
http://www.traprock.com/