

Toward an Economic Development Strategy for Erie

Findings and Recommendations of Consultants

**The FutureWorks Company and
Regional Technology Strategies, Inc.**

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Introduction

This is the report of a consultant team that has been under contract to the Economic Development Corporation of Erie County (EDCEC) to assist in the establishment of an economic development strategy for the region. The consultant team has consisted of Regional Technology Strategies, Inc. (RTS) of Chapel Hill, North Carolina and The FutureWorks Company of Boston, Massachusetts. Trent Williams of RTS has served as the Project Administrator and Brian Bosworth of FutureWorks has served as the Principal Investigator and Client Liaison. The consultant team was asked to analyze the regional economy, assess the factors affecting competitiveness in the region, make recommendations to strengthen the regional economy, and assist in the preparation of an Erie County Economic Development Strategy.¹

The client in Erie has consisted of four organizations, each participating in a project management committee with RTS and FutureWorks. The lead organization is the EDCEC, the contracting party whose president has been the primary point of contact for the consultant team and coordinator of the project management team. The Erie Conference on Community Development, the City of Erie, and the County of Erie have been the other partners in the project. The project was funded by the Erie County and City Councils, GPU Energy, the Erie Community Foundation, and the Pennsylvania Department of Community and Economic Development through the commitment of a State Planning Assistance Grant.

This project began in June 2000 with the expectation that it would be completed by the end of 2000. However, in the early autumn of 2000, all parties agreed that a significant change in the scope and schedule of the consultants' work would enhance the project. The decision was made to extend the completion date to the early autumn of 2001, making this a 12-month rather than 6-month project.

Further, it was agreed that the consultant team would expand its work to include additional tasks aimed at involving a wider range of people in the community through detailed surveys and issue-focused seminars. The purpose of the surveys was to probe more deeply into the opinions and ideas of community leaders and the general citizenry of Erie and to engage them more directly in reflecting on problems and opportunities in the region. The purpose of the seminars or forums was to begin to explore concrete solutions for some of the more vexing challenges facing the region. The consultant team brought to Erie carefully selected expert practitioners from other regions who presented and discussed strategies undertaken in those regions to address critical problems similar to those facing Erie.

¹ The geographic focus of our work has been the Erie Metropolitan Statistical Area – Erie County. We have considered economic issues that involve the surrounding, non-metro counties but virtually all our data analysis has been at the county level. When we refer to "the region" in this report, we generally refer to the entire county.

This report sums up the findings of the consultant team and presents recommendations for economic development strategy in Erie. The report is divided into five sections and one appendix.

- Part One is an Executive Summary providing a short summary of findings and key recommendations.
- Part Two reviews the current economic situation in Erie, updating an earlier interim report.
- Part Three reports and analyzes results from the surveys undertaken in April, May and June 2001.
- Part Four provides primary findings of the consultant team as derived from its analysis of the regional economic situation, the survey results, the forums, and from other assessments of key institutions and factors shaping economic development in the region.
- Part Five offers the consultant team's specific recommendations for Erie. These recommendations are grouped into five major areas: Getting Organized, Getting Connected, Getting Smarter, Getting Competitive, and Getting Started.
- The appendix includes a set of tables that compare the economy and demography of Erie with selected other metropolitan areas – three in Pennsylvania and three from other parts of the country.

The consultant team thanks the organizations in Erie that financed and helped direct this study. We are also very appreciative of the time and effort of those hundreds of Erie residents who completed the surveys and participated in the forums.

As we hope this report makes clear, a new strategy and an aggressive commitment to economic development in Erie must be a very high priority for the entire region. The consultant team believes that, over the next ten years, the region is headed for serious economic problems. Unless the leaders and residents of Erie take dramatic steps to counter current trends, we believe the regional economy will continue to shrink relative to the rest of the nation, income and opportunity will erode, and people – especially young adults – will begin to leave the region at an accelerating pace.

In some places where we have worked over the past several years, we have come essentially to the conclusion that the people of that region need mostly to keep doing what they have been doing, perhaps with a few adjustments, and the economy will continue to do well. This is not the situation in Erie. You cannot keep doing what you have been doing.

On the other hand, we see positive signs that the general citizenry and key leaders are ready to support bold new steps that could turn things around. As we tested new ideas and strategies in the surveys and forums, we uncovered a frank awareness of the serious constraints on economic growth and real receptivity to important changes that we think can make a huge difference. This attitude is a critical asset. Without it, many of our recommendations may not seem feasible and we possibly would not have made them. The widespread willingness to change that we uncovered and documented in the surveys certainly does not make these recommendations less ambitious, but it does make them a whole lot more doable.

Part One

Executive Summary

Major Findings, on the Positive Side

1. Erie has important locational assets and generally good transportation infrastructure.
2. Erie has a low cost of living with affordable housing.
3. There is a strong tradition of civic involvement in Erie.
4. There is no shortage of land and facilities potentially available for business expansion and industrialization. There are substantial "in-fill" opportunities in the City of Erie where brownfield re-development needs to continue.
5. Development of the Convention Center can create momentum for related growth of a commercial and entertainment district along Erie's bayfront.
6. There is generally a high level of informed awareness of the need for proactive development strategies.
7. There is a high level of optimism among leaders in Erie about the region's economic future.

Major Findings, on the Negative Side

1. Erie's population is growing very slowly, barely at all.
2. Per capital income growth lags the national average and the state average.
3. The total income of the region is falling relative to other areas.
4. Urban-suburban income disparities are growing.
5. There are not enough good wage new jobs being created in Erie and many of the highest paying jobs are being cut back.
6. Erie lags the nation in the growth of high tech firms and "new economy" business sectors.
7. Erie lags well behind the rest of Pennsylvania and the nation in educational attainment beyond high school.
8. There are serious problems of duplication, overlap, competition, and sprawl resulting from the highly fragmented system of civil jurisdictions in the Erie region.
9. There are major leadership and management issues impacting economic development in Erie.

Major Recommendations

Getting Organized – On the Civic Side

1. We recommend the immediate establishment of a high-level, civic coordinating council to integrate the activities of the region's principal business-based civic institutions. Its goal will be implementing the recommendations of this report and other major economic development initiatives that might emerge.

Getting Organized – On the Government Side

2. We recommend that local government authorities and civic leaders undertake a five year plan to expand and strengthen the authority of the County of Erie to assume larger responsibilities for selected civil functions critical to sound community and economic development in the region. We see three particularly important and tightly related targets for this process:
 - expanding County government responsibility for regional land use planning;
 - developing some form of countywide revenue sharing; and
 - expanding jointly administered and regionally coordinated governmental services.
3. We recommend that the County offer incentives and financial assistance to those Municipalities that have an interest in the consolidation of municipal governments. We further recommend that Erie officials from all sectors petition the State to join immediately in this incentive strategy.
4. We recommend that the proposed Civic Coordinating Council, in cooperation with education leaders and County officials, establish a regional task force or commission in Erie to explore new strategies for the alignment and amalgamation of public education, with special emphasis on issues of finance and equity.
5. We recommend that the proposed Civic Coordinating Council work with elected officials to undertake a "performance and potential audit" study of the County government to identify areas where the County might strengthen internal capacity.

Getting Connected

6. We recommend a coordinated, countywide effort to develop an Internet Access Strategy and Program through the rapid deployment of broadband network infrastructure that will optimize long-term economic development outcomes for the region. We propose careful consideration of the following factors as important design criteria:
 - Make this a countywide effort. Much of the early momentum is coming from the City of Erie but many of the businesses and higher income households who might be "early adopters" of high-speed connections are in the suburbs.
 - Develop an integrated system that offers telephone, cable TV access, and Internet connections as a package to potential customers. Other regions have found the scope of service offerings to be a critical factor of financial and technical feasibility.
 - Find a private provider to manage and help finance the basic infrastructure and to secure multiple providers who would compete on the dimensions of service and price for customers in the region.
 - Create a regional community-based effort that would develop the education and training programs to help people figure out how to fully use the broadband network for governmental, civic, and educational functions as well as for

economic development. This group could develop workbooks and training programs for residences, small businesses, and government leaders.

Getting Smarter

7. We recommend the careful design and phase-in of an innovative community college in Erie focused primarily on the technical and occupational skill development needs of the adult population of the region.

Getting Competitive

8. Build and strengthen mechanisms of inter-firm cooperation in the small firm-dominated metals and plastic sectors.
9. Leverage locational assets to attract a greater share of the high end of the distribution, transportation and logistics industry already beginning to cluster in the NAFTA Corridor around Niagara-Buffalo.
10. Capitalize on the potential for additional health-related manufacturing and services.
11. Establish a new program for seeding and supporting new business – the Program for Advanced Technology Entrepreneurship.
12. Accelerate development of the commercial and entertainment district in the downtown of Erie.

Getting Started

13. An organizing committee should be established, drawing from the four groups that have managed this strategy development to date. This group, in consultation with the board chairs of the non-profit corporations and the County Executive and the Mayor, would draw up an initial plan of organization, membership, and mission for the Civic Coordinating Committee.

Part Two

Current Economic Situation in Erie

A Few Quick Highlights

While the number of jobs in the Erie metropolitan region increased by 10 percent from 1989 to 1998, the region's overall population remained nearly stationary. This lagged national trends, where a 17 percent growth in jobs outpaced a 10 percent growth in population over the same period. The increase in jobs in Erie was propelled largely by service sector employment, and especially by lower-wage, sometimes part-time jobs. Of course, unemployment fell, and more people decided to enter the work force. Unfortunately, most families are only slightly better off as personal income grew by only about 3.9 percent per year,² apparently respectable in an absolute sense, but in fact well below the national average.

Several manufacturing sectors, notably plastics and industrial machinery, saw modest employment increases over the period of 1989 to 1998. Other manufacturing industries such as food products, paper products, and electrical equipment have seen sharp employment decreases as major employers have shut down or scaled back operations. The only significant growth from outside the services or manufacturing sectors came from the insurance industry, which gained about 500 jobs over the decade.

Although the County's unemployment rate for the past few years has been the lowest in over a decade, optimism should be tempered by the region's population stagnancy. The area's population has not grown appreciably in the last two decades. This is mostly attributable to migration away from Erie. Moreover, the unemployment rate in Erie (as in the rest of the nation) has begun to climb as the national economy begins to move into a recession.

Erie has historically been manufacturing-dependent, and that trend continues. As of 1998, 31 percent of private-sector jobs were in manufacturing – 70 percent higher than the national rate of employment in manufacturing. Furthermore, in addition to capturing 31 percent of the region's private sector jobs, manufacturing accounts for 43 percent of the region's private sector wages – indicating that many of the highest-paying industries are manufacturers. Many Erie manufacturers are suppliers or make components that are integrated in other assemblies or sub-assemblies.

Because of this manufacturing dependency, a prolonging of the past several months of very slow growth (or, as now begins to appear more likely, moderate recession) in the manufacturing sector will impact Erie more severely than other less manufacturing dependent regions.

The Erie regional economy has four manufacturing groups that are especially prominent. Not only are they the largest area employers, they also represent areas of distinct specialization. The Erie economy seems to be particularly good at manufacturing certain kinds of (1) plastics products (for instance, injection molded items); (2) industrial

² This is net income growth adjusted for inflation.

equipment and machinery; (3) fabricated metals; and (4) transportation equipment (an industry dominated locally by General Electric). Two sub-sectors within the industrial machinery and equipment sector deserve a special mention. *Special dies, tools, jigs and fixtures* (SIC 3544) and *Miscellaneous industrial machinery* (SIC 3599) have much larger concentrations of firms and employees than the rest of the country. These concentrations apparently have been very competitive because their growth has outpaced the rest of the country.

Throughout the national economy, technology-intensive concentrations of firms and employment are playing a critical role as current and future wealth drivers. Those concentrations are not present in Erie. Different approaches to measuring the regional economy's "high tech" presence yield about the same result. Technology-intensive employment is well below the national average and is declining, not growing, relative to the rest of the nation. By one common measure, the Erie economy's share of high tech employment in 1988 was only 64 percent of what was experienced in the national economy, and by 1998 this figure had decreased to just over half the national share.

The business startup rates in the Erie regional economy are lower than the national average but in line with other older industrial cities in the Northeast and Midwest. The good news is that comments during the interviews with business and civic leaders indicate a strong, if somewhat dated, entrepreneurial tradition. Several interviewees pointed out that there are many companies that were started in Erie and have remained locally owned – mostly in precision manufacturing. The bad news is that there has been little recent entrepreneurial activity.

Methodology of this Analysis

Economic Data Sources: To assess the region's current economic composition, several data sources were used. The most complete source of economic data that is commercially available is derived from Employment Security Filings, called ES-202 data. These data contain information at the four-digit SIC (Standard Industrial Classification) level on employment and on wage payments. Although commercially available, a considerable time delay exists in the data's publication, so that the most current employment figures from this source extend only through calendar year 1998. For this report, ES-202 files, enhanced and published by Minnesota IMPLAN Group, Inc., were used for the years 1989 and 1998. This period provided the basis for judging how industrial employment has shifted during the past decade.

Labor market information available from the Commonwealth's Center for Workforce Information and Analysis is structured similarly to the ES-202 reports, but the Commonwealth withholds disclosing confidential information on firms that comprise the majority of employment in a given sector. The most recently published labor market data are from calendar year 1999. In this report, these data, as well as *County Business Patterns*,³ are used to compare and supplement the ES-202 files and to provide additional historical data.

³ CBP are annual reports of the U. S. Census Bureau which provide information on the total payroll and jobs of all firms by SIC, by county on an annual basis.

Because of the time lag, specific employment and wage figures are inherently outdated even before they are published. To compensate for this shortcoming, the “official” two-year-old statistics were augmented by data from a private database, *Dun & Bradstreet Marketing Lists*, which uses current estimates on employment, and from local media sources.

Throughout this report, considerable attention is given to two measures of employment and wages, those being *location quotients*, and *average wage percentages*.

Understanding Location Quotients: Location quotients indicate relative areas of specialization within an economy and provide clues on where to begin looking for geographic concentrations of firms that may generate regional competitive advantages.

Location quotients are calculated by measuring the percentage of a region’s total employment (or total number of establishments) found within a particular industry, compared to (divided by) the same ratio for the nation as a whole. If the resulting ratio is greater than 1.0, the region is considered to be *specialized* in that industry. Values over 2.0 indicate highly specialized employment. The higher the location quotient, the more significant the regional specialization. Location quotients in certain of Erie County’s manufacturing industries surpass 4.0, meaning that their employment rate is over 4 times the national average.

Some of the industries discussed in this report have large absolute employment figures, but this employment is in proportion to Erie’s population size. For example, even though approximately 4,500 of the region’s residents are employed by wholesalers, most regions of Erie’s size would have even greater employment in this industry. Using location quotients, the region was found to have a lower-than-average concentration of employment in wholesale trade. However, other sectors do contain higher-than-average shares of employment in the region. A prominent example of this phenomenon is the plastics industry, which has a far greater representation in the Erie economy than in other similarly sized regions.

Average Wage Percentages: A useful and quick way to calibrate an industry’s income-generating potential within a regional economy is to compare the average wage in that industry to the average wage for the entire regional economy (in Erie the one county MSA). As stated, the ES-202 data used in this report provide total payroll and total employment figures for every industry. From these data, an average wage per employee can be calculated. Because ES-202 data do not distinguish between part-time and full-time employment, a lower average wage can reflect low wages and/or a preponderance of part-time employees.

In this report, average wages for particular industries are compared to the similarly calculated average wage for the regional economy as a whole. In this regional figure, however, retail employment is excluded from these averages, so that a “non-retail average” is used. This is done in order to more accurately capture the effects of industries that are wealth-generating, because the most important components of an economy, from an economic development viewpoint, are those sectors that attract wealth from other regions. Industries that do this are called “traded” sectors – because they essentially trade with other economies. The retail trade industry is the largest single component of the economy that is *not* considered a traded sector, and is therefore excluded from the average wage calculations. Additionally, the typically lower wages

offered in retail trades deceptively shift regional average wages lower. Therefore, a regional average wage excluding retail industries is used in this report.

Erie County's average annual non-retail wage was \$30,372 during 1998 (the latest year for which data are available). Comparing a specific industry's average wage to this regional average wage yields a quotient expressed in this report in percentage form. Percentages over 100 indicate an industry paying wages that are greater than the regional average non-retail wage. Likewise, percentages below 100 indicate lower-than-average wages.

As an example, the region's insurance industry paid an average annual wage of \$40,060 – 132 percent of the regional average. On the other hand, nursing care companies pay an annual average wage of \$17,866 – 59 percent of the regional average.

Major Manufacturing Specialization

Erie's has historical trend of manufacturing-dependency, continues today. As of 1998, 31 percent of private-sector jobs were in manufacturing – 70 percent higher than the national rate of employment in manufacturing. Thirty years ago the region was even more manufacturing-dependent than it is today, with over half of all private-sector jobs being manufacturing-related. Data from 1970 show that 43,000 of Erie County's 83,000 private sector jobs were in manufacturing industries. Even though the region has witnessed several high-profile plant closings and an overall decline in the number of manufacturing jobs, the *proportion* of manufacturing employment has decreased more slowly than that of the national average. This slower decline has been because some of the region's industrial employers continue to increase their Erie employment, and because manufacturing across the United States shrank in employment during the 1990s much more than it did in Erie.

Plastics: Over the past decade, the most rapidly growing component of the manufacturing sector is plastics production. In fact, throughout the long period of general decline in manufacturing employment, the region's plastics firms continued to increase employment, with the result that plastics employment is much more concentrated in Erie than in the nation as a whole.. Erie County's location quotient (explained above) for the plastics industry is 5.87, meaning that the County holds nearly six times the national percentage of employment in plastics production. The industry's importance within the larger manufacturing sector swelled as well, as the plastics industry now accounts for about 14 percent of total manufacturing employment, with over 4,600 jobs as of 1998 in about 60 firms. Between 1989 and 1998, Erie's plastics employment grew by 20 percent.

Furthermore, Erie's concentration in plastics is not due to any national decline; in fact, national plastics employment grew by 7.2 percent over the past decade, even as manufacturing as a whole declined. Most of Erie's plastics employment is in SIC 3089, *miscellaneous plastics products*.. This sub-category of plastics production includes a very wide array of highly customized products aimed at narrow market niches.

Plastics production and injection molding remains a bright spot from an economic development standpoint, due to the pronounced regional specialization, the high rate of new job creation. Throughout the last several years, firms such as Plastek Industries,

Erie Plastics, Foamex, among others have added to their payrolls, giving the region an increasing specialization in a growing, value-added field and also providing for optimism in Erie's manufacturing sector.

Unfortunately, jobs in the plastics industry generally pay slightly below Erie's typical non-retail wages. The region in total paid an average of \$28,206 in 1998, slightly below the County's non-retail job average of \$30,372. That means that the significant increase in jobs in this sector – occurring at the same time that employment in other, higher-wage manufacturing areas has contracted – has actually contributed to a general decline in the total contribution of the manufacturing sector to the region's wealth.

Industrial Machinery and Equipment: Another cluster of economic activity is represented by SIC 35 the *Industrial machinery and equipment* sector. This sector includes tool and die makers, machine shop jobbers, firms engaged in metalworking, and manufacturers of assembly equipment. Erie's roughly 5,500 employees in this industry are scattered among over 170 firms, with many of those firms being sole proprietorships or employing fewer than five people (Modern Industries' operation is the largest, with slightly over 500 employees).

Even without a major single industrial anchor, or a sub-sector of particular specialization, the sector yields a location quotient of 2.35. This means that Erie has more than twice the national rate of employment in the industrial machinery industry. *Industrial machinery* is also a relatively fast growing sector, having added 28 percent (about 1,200 new jobs) to its employment ranks between 1989 and 1998, a much faster rate than for the nation's aggregate industrial machinery industry. The preponderance of smaller firms in this industry points to the strong tradition of entrepreneurship in the metalworking industry and the general competitiveness of the Erie area in this regard. Even better, the region's industrial machinery firms pay wages that are generally high – 28 percent above the non-retail wage average.

Combining a regional specialization, a mass of smaller firms, a field with entrepreneurial potentialities, and relatively high wages, the various components of the Industrial machinery industry may attract attention for high value-added economic development efforts in good times over the coming years.

However, in the past year or two, growth in *industrial machinery and equipment* has slowed appreciably and there are new concerns about competition from other regions and other countries. This sector is very vulnerable to ups and downs in the national economy. As recessionary pressures increase, demand for industrial machinery has slackened. The next few years are likely to see some contraction of employment in Erie.

In addition, a recent visit by industry leaders to the rapidly growing *industrial machinery and equipment* industry in China left many discouraged about the competitive challenge posed by the Chinese economy. There is also growing concern about the replacing the cadre of skilled tool and die makers and machinists now entering retirement years. With the rise of the small dis-aggregated firms came the loss of the industry-based apprenticeship traditions that have produced the highly skilled workers needed in this industry in past decades. While reliable hard numbers are difficult to come by, it appears the number of students in post-secondary training preparing for these skilled trades is a small fraction of those who will leave the industry over the next several years.

Transportation Equipment: Throughout the last thirty years, the most conspicuous manufacturing firm in Erie has been General Electric. This remains true today, with GE's Transportation Division employing nearly 5,000 people. GE almost single-handedly comprises the *Transportation equipment* sector in Erie, which shows up on the ensuing charts as one of the region's main industrial specializations.

Very few regions can claim such a commanding share of a national industry. GE's employment in Erie accounts for over 13 percent of total national employment in the manufacture of railroad equipment. With the substantial size of this one operation, and the amount of wages generated by the *Railroad equipment* sector (\$252 million in total wages, or \$52,000 per job), a substantial part of the region's economy is tied to GE's continued economic health. The transportation equipment industry pays, on average, 166 percent of the County's average non-retail wage.

Unfortunately, Erie weathered substantial cutbacks at the GE facility in the 1980s and 1990s. From 1989 to 1998, jobs in this industry group decreased by about 8 percent. Further cuts more recently at the GE facility are not reflected in these numbers. The region needs to be mindful of the penetrating impact that additional cuts would have on the economy, given Erie's dependence on this plant.

Fabricated Metals: In addition to Industrial machinery and Transportation equipment, another metal-related industry with a high specialization in Erie is that of *Fabricated metals*. This industry, which includes boiler shops, sheet metal plants, and manufacturers of other metalwork, employs about 5,700 people. Unlike the above industries, Erie's employment in Fabricated metals is decreasing, with the industry losing 4 percent of its workforce between 1989 and 1998. Much of this employment decline is due to the closing of Zurn Industries' boiler shop, and a generally profound decline throughout the nation's fabricated metals employers that has affected Erie as well. Although declining in employment, the industry pays relatively well, with wages averaging 13 percent above the non-retail average.

Metalworking and metal-related industries present a major specialization in Erie's economy. Using a "definition" of a cross-sectoral metalworking cluster that includes 100 different 3- and 4-digit SIC codes⁴, the Erie economy yields a location quotient of 3.98. This definition included industries in both primary and fabricated metals, as well as other industries that use such products heavily in their own production process. Even excluding GE's locomotive operation from the equation (which is by far the largest single input), the location quotient remains high at 2.83 – meaning that the region has a significant specialization in a broad range of metalworking industries.

Also significant is that the above-mentioned location quotients remained essentially constant during the last ten years. This shows that even though employment (in terms of absolute numbers) decreased, it did so in relation to national trends in the metalworking industries, and the region is not necessarily at a greater competitive disadvantage in the metals industry.

⁴ Definition from: E. Feser, E. Bergman and S. Sweeney. *Targeting North Carolina Manufacturing: Understanding the State's Economy Through Industrial Cluster Analysis*. University of North Carolina, 1996.

Other manufacturing industries: As can be seen in Table 1, there are many more manufacturing sectors than the four major ones described above. However, with most of the remaining sectors, employment tends to be dominated by one major industrial employer. For example, if one looks at the sector of *Paper and allied products*, the 1,718 employees listed are nearly all attributable to International Paper's plant. Likewise, the decline of employment (as noted in the table) within this sector is less a reflection of a regional competitive disadvantage, but simply a result of the plant closing three of its production lines three years ago. A similar scenario exists with other industries as well, such as the industry listed above as *Instruments and related products*. The most prominent employer in this industry is Steris, and like the paper industry example, Steris accounts for most of the (in this case, positive) employment fluctuations seen in Table 1.

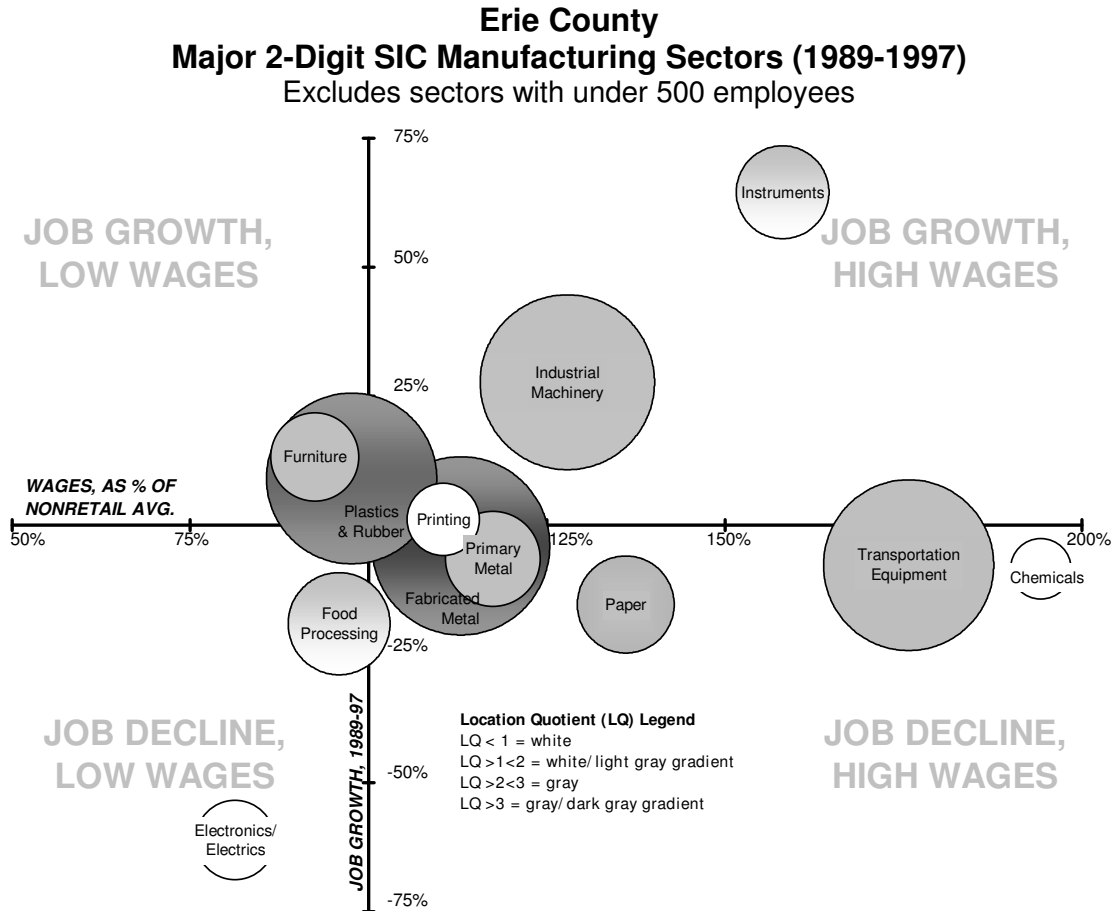
**Table 1:
Erie's Major Manufacturing Industries**

Industry	1998			1989 Employment	1989-98 Employment Change
	Employment	Location Quotient	# of Firms		
<i>Fabricated metal products</i>	5,722	3.55	120	5,963	-4.0%
<i>Industrial machinery and equipment</i>	5,525	2.35	173	4,327	27.7%
<i>Rubber and misc. plastics products</i>	5,275	4.88	66	4,839	9.0%
<i>Transportation equipment</i>	5,246	2.59	10	5,688	-7.8%
<i>Food and kindred products</i>	1,889	1.05	29	2,336	-19.1%
<i>Paper and allied products</i>	1,718	2.37	7	2,031	-15.4%
<i>Primary metal industries</i>	1,640	2.15	15	1,756	-6.6%
<i>Instruments and related products</i>	1,565	1.69	12	812	92.7%
<i>Furniture and fixtures</i>	1,429	2.52	18	1,263	13.1%
<i>Electronic & other electric equipment</i>	1,142	0.63	31	2,936	-61.1%
<i>Printing and publishing</i>	954	0.57	40	944	1.1%
<i>Chemicals and allied products</i>	674	0.61	11	737	-8.5%

source: IMPLAN ES-202 data.

Table 1 indicates the major shifts that are taking place within Erie's manufacturing sector. Many industries that once accounted for substantial shares of regional employment are now declining in employment, such as *Electrical equipment*, *Fabricated metals*, *Paper products*, and *Food products*. This is occurring as the large companies that dominated these industries have closed or reduced their operations. Meanwhile,

much of the employment growth over the study period has been from midsize manufacturers in the identified growth sectors.



Major Non-manufacturing Specializations

Although manufacturing captures attention through its large numbers of employees and high wage payments, Erie has other specializations outside of manufacturing, particularly in insurance, education, and health.

Insurance: Erie Insurance’s location in downtown Erie contributes to the healthy performance of the region’s insurance industry. According to the ES-202 employment data, 2,225 people are employed by insurance carriers in Erie County – a figure that grew by 25 percent between 1989 and 1998. Most of this employment is attributable to Erie Insurance Group, one of the County’s largest employers. Erie Insurance’s employment has increased as the company has expanded and entered new markets, while keeping its headquarters in the City of Erie.

In addition to being a growing force in the Erie area labor market, the insurance industry is also a source of relatively high-income jobs. The industry contributed over \$89 million in wages to the region’s economy, resulting in an average wage of \$40,060 per job – second only to Transportation equipment among the region’s large-scale employment sectors.

Services: Much of the employment growth in the Erie area economy has occurred in various service sectors. In fact, the County gained more than 7,000 new service sector jobs between 1989 and 1998. While manufacturing and wholesaling sectors posted sizable employment losses during that period, the service sector grew by 29 percent.

In 1998, service jobs were 30 percent (33,809 jobs) of Erie's total private sector, but those jobs accounted for only 25 percent of the region's total private sector payroll. This shows that jobs in the service sector generally pay much less than jobs in other sectors of the economy. In fact, many of the industries with the highest employment, such as *Help supply services*, *Residential care services*, and *Social services* rely largely on part-time and/or lower-wage employment.

Erie County's share of employment in Services is just slightly below national averages – the regional location quotient for Services is 0.90. Service sectors have not traditionally been the strength of Erie's economy, but many of the individual service sectors are growing rapidly and are potentially significant economic and employment forces. In particular, the region is increasing employment concentration in *Educational services* and *Health services*. Some of the major service industries are detailed below.

Business Services: With a location quotient of 0.57, the Erie area has very low relative employment in *Business services* – a sector that is often a barometer of regional business infrastructure. The sector contributed nearly 2,000 jobs to the regional economy between 1989 and 1998, a rate that seems explosive but is in fact entirely consistent with national rates of growth in the field. The 5,264 employees in this sector are mostly concentrated in the lower value-added sectors of *Business services* such as building maintenance services and temporary employment agencies. In fact, about 1,600 of those new jobs originated from *Personnel supply service* firms – temporary agencies – resulting in jobs that are usually part-time and often at a low wage. This part-time nature is reflected in the industry's payroll, as the typical job paid the equivalent of \$14,428 per year.

Call Centers: Although the 1998 data do not reflect this, Erie has become home to several large call centers. The term *call center* is actually an informal designation rather than a tangible economic SIC code as defined by government standards. For that reason, and because of the newness of the industry to the Erie area (with most of the employment arriving during the past three years), data are not yet available on the paid wages of call center firms.

The largest of these new businesses is West TeleServices, whose Erie "customer contact center" opened in 2000 with an announced plan to employ over 2,000 people at full capacity. Other large call centers include Teletron Marketing Group with over 700 jobs at its center, and DialAmerica Marketing's Erie center that also employs over 500.

Most jobs at call centers are part-time. At this point, it is unclear exactly what proportion of jobs in the field are part-time positions, or what levels of pay and benefits compensate call center jobs. Telemarketing industry representatives often note that part-time jobs fill a need in communities for part-time work. While there is some truth to this claim, it is important, not to think of call center employment as a substitute for the employment that is declining in other sectors. Additionally, as with manufacturing enterprises, the teleservice industry may likely substitute technology for labor at some point in the future, as the industry continues to automate.

Educational Services: The Erie area has a concentration of employment in educational services. With about 3,500 employees at higher education or private education providers, plus about 6,000 at local school districts, the region has higher than the average employment in educational specialties. Even though the region does not host a major research university, the smaller colleges and educational centers are among the County's major employers and contribute to the growing educational employment sector. Among Penn State Erie, Gannon University, Mercyhurst, and Edinboro University, the region has a significant concentration of small-college employment. The Gertrude Barber Center and the Lake Erie College of Osteopathic Medicine add to the region's educational specializations.

Health Services Industries: As of 1998, Erie had more than 12,000 jobs in the various healthcare industries, comprising 11 percent of the region's total private sector jobs. Health care also accounted for almost 13 percent of Erie's total wages, indicating that health professions on average pay slightly higher than do most of the region's industries. Additionally, Erie has a greater concentration of employment in health fields than one would expect based on Erie's population. In 1998, the 12,015 employees in *Health services* (SIC 80) amounted to 15 percent more than would be the case if the region mirrored the national average of health industry employment. This means that Erie has clearly emerged as the regional health center for Northwest Pennsylvania.

Health services are still growing, although not rapidly. Overall, Erie County's health services industry gained more than 1,400 employees between 1989 and 1998 – an increase of 13.6 percent. Throughout the country, the past decade has witnessed propulsive growth in health-related fields, with total national health services employment increasing by 32 percent over the same ten years. Moreover, the employment concentration, or *location quotient*, for Erie's health employment (while still 15 percent above the national average) actually decreased slightly over the period. This suggests that despite the modest employment growth, the region is not becoming noticeably more specialized in healthcare, at least relative to the rest of the country. Still, it is a vibrant, high-wage sector, and quite important to the region.

Saint Vincent Health Center, Hamot Medical Center, and Erie's VA Medical Center are the region's major employers. Much of the recent growth in health services, however, has come from smaller providers, such as doctors' offices and community clinics.

High Technology Commerce

As the United States passes into an era of unprecedented technological advancement, individual regions are scrambling to keep up with this pace of change. In this dynamic environment, technology-intensive operations, such as research and development facilities or high technology manufacturing, are major income producers and wealth generators within a regional economy due to their high value-added content.

To assess Erie's competitiveness in such a high technology setting, several performance measures can be used. Among these measures are cross-sectoral definitions of high technology industries, business start-ups, and high technology awards. Because there is no single standardized definition of *high technology*, the phrase may include elements of scores of discrete industries. Therefore, judging a region's strengths or weaknesses depends on a comprehensive cross-sectoral definition. One such definition is developed

by the American Electronics Association (AEA) to represent high technology sectors. The definition includes 45 four-digit SIC codes ranging from manufacturing to communications to software and computer services.⁵

Applying this definition to Erie County's 1998 economic data shows 2,749 jobs in the cluster. When compared to the same industries' national employment, this produces a location quotient of only 0.53 – meaning that Erie's employment in these high technology sectors is roughly one-half of the national average. This shortcoming becomes even more pronounced when *Telephone communication services* are removed from the definition. This sector accounted for 1,014 of the region's 2,749 "high technology" jobs, and by taking this group out of the cluster definition, the region generates a non-telephone high tech location quotient of 0.41.

This low share generates cause for concern when one examines the ten-year trend of high tech employment in the region over the period of 1989-1998. Over this period, Erie's high technology employment remained stationary in terms of absolute numbers, but decreased in terms of concentration – the 1989 economic data show 2,893 employees in high tech companies, giving a slightly higher location quotient of 0.64. This means that as the U.S. labor market is becoming increasingly technology-oriented, Erie has not been following suit.

The same results occur when the economy is looked at from another high-technology definition. Feser, *et al.* identified a series of "benchmark" manufacturing clusters (unlike the AEA cluster above, this one deals exclusively with manufacturers).⁶ One of the manufacturing clusters identified 37 four-digit SIC industries with inputs up and down the electronics and computer manufacturing supply chains. When applied to Erie County, this set of 37 industries yields only 1,893 employees, for a location quotient of 0.78. This means that the region has just 78 percent of the employment one would expect for a region of Erie's size – particularly surprising considering the manufacturing intensity of the region's economy. These particulars are ominously foreboding for Erie, because higher technology manufacturing jobs usually generate higher value-added per job than other manufacturing jobs and thus have greater wealth-generating potential for the regional economy.

A third "high tech" measure was also applied, which specified the types of firms that trade within the supply chains of the nation's largest high tech clusters, then measured regional employment concentrations in these high tech clusters.. By this measure, the Erie economy showed some strength in the high tech portions of aerospace and industrial machining clusters, and above average concentrations of employment within the high tech sub-sectors of chemical and plastics. It also, however, showed very low concentrations in two important areas – information technology and instruments (0.46) and communications services and software (0.19).⁷

⁵ This definition appears in numerous AEA publications, and is available in its entirety on-line at AEA's website, <www.aeanet.org>.

⁶ E. Feser, E. Bergman and S. Sweeney. *Targeting North Carolina Manufacturing: Understanding the State's Economy Through Industrial Cluster Analysis*. University of North Carolina, 1996.

⁷ These calculations mean that employment in Erie in these areas is only 46 percent and 19 percent, respectively, of what it would be if Erie was the same as the national average.

Because all the above results were achieved by examining 1998 data, some employment information may have changed since. However, our anecdotal information suggests that nothing has changed. Overall, the analysis highlights the reality that Erie's regional economy has a low proportion of high-technology employment and there is no growth.

Another way to look at a regional economy on the high tech dimension is to analyze, not job distribution or its current production mix, but rather its underlying *capacity* for innovation and future growth. The Progressive Policy Institute has developed a "New Economy" index as a tool to measure this. This index relies on 16 critical indicators or measures to predict the ability of a region to thrive.

1. Percentage of all jobs which are professional, managerial, and technical jobs
2. workforce education (educational attainment of adult workers)
3. export focus of manufacturing (percent of output for export)
4. gazelles (rapidly growing small companies)
5. job churning
6. new publicly traded companies
7. on-line population
8. broadband telecommunications capacity
9. computer use in schools
10. commercial internet domain names
11. Internet backbone
12. high tech workers
13. degrees granted in science and engineering
14. patents
15. academic research and development
16. venture capital⁸

It has not been feasible to develop an index based on these measures for Erie, and in any case, it would be useful to do so only in conjunction and comparison with similar indices for several other medium-sized and small metro areas. Nonetheless, there seems little reason to be complacent about these performance indicators in Erie.

New Firm Creation

Another indicator of economic robustness is that of new firm creation, showing the rate at which companies are started. By analyzing recent data on new business creation, one can get a cursory appreciation for a region's attractiveness to entrepreneurs, before such data presents itself in conventional data sources, such as employment or population figures.

To accomplish this, a private business database, *Dun & Bradstreet's Marketing Database*, was engaged. This database keeps track of businesses of all sizes and their dates of establishment. By comparing Erie to other metropolitan areas, and to the nation as a whole, one can see if the rate of business creation deviates substantially from national or regional norms.

⁸ Atkinson, Robert D. and Randolph H. Court. *The New Economy Index: Understanding America's Economic Transformation*. Washington, D.C.: Progressive Policy Institute. 1998. www.neweconomyindex.org.

For the purpose of this analysis, ten comparison metro areas were chosen, with regard to their proximity to Erie in location, size, or industrial composition. The number of firms created in the 1998-1999 biennium was compared to each region's population to arrive at a measure of the number of firms created per 1,000 population.

Our analysis indicates that between January, 1998 and December, 1999, 1.78 new businesses were created in Erie County for every 1,000 residents. This rate is consistent with the business creation rates in other metro areas (both larger and smaller than Erie) in Pennsylvania, New York and Ohio. Erie, in fact, ranks near the top of the comparison MSAs; some areas (such as Buffalo, NY and Jamestown, NY) have marginally higher rates, and others (such as Pittsburgh, PA and Johnstown, PA) have new firm creation rates that are somewhat lower than Erie's.

Perhaps more significant, though, is that the new firm creation rate for Erie is well below the *national* average. Erie's rate of 1.78 firms/1,000 people compares to a national figure of 2.52 firms/1,000 people – meaning Erie's rate is 30 percent less. This is not wholly surprising because the Northeast and Midwest populations are growing much more slowly than the national average. Still, the lag of new business creation illustrates that this slower population growth is also translating into slower commercial growth.

Additionally, there are a few small, early stage technology companies with significant growth potential. They include SBIR award winners Cybersonics and Lawrie Technology, Inc. There may be other young firms with growth potential, but we found little awareness of them if they are present in the region.

We could find no formal venture capital presence within the regional economy including local, early-stage funds. There may be a few individual low-profile, investors willing to put equity into local projects, but our inquiries about this yielded no leads. While major venture capital funding is usually extremely mobile – big chunks of venture money will seek out a good deal even in very remote places – Erie's lack of small, locally-based seed funds or private, so-called "angel" investors may put the region at some disadvantage. The larger venture funds will rarely encounter in Erie new deals on a scale that would justify careful scouting here. Frequently, it is the smaller, locally-based investor groups that first see the new ventures, and get them to the level where larger funds might be interested.

Demographic Migration

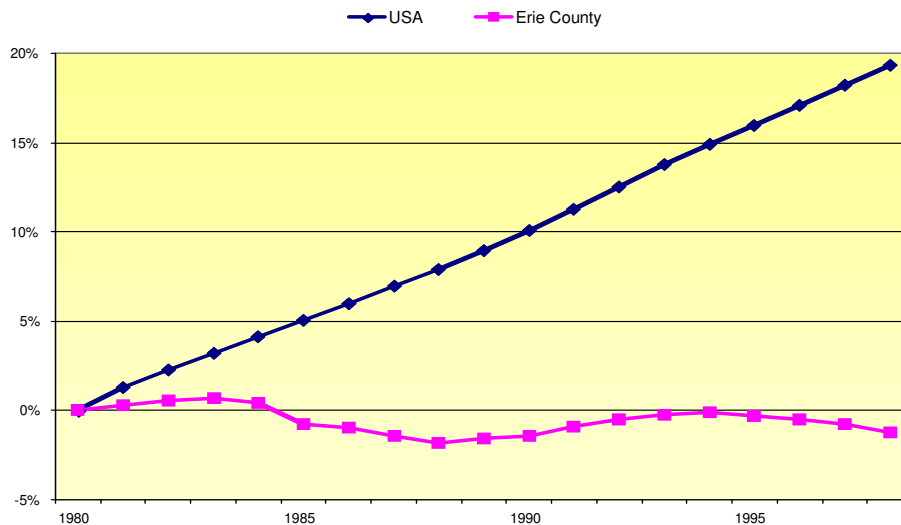
An analysis of Erie's economy would be incomplete without mention of the demographic shifts currently taking place in the region. Most notable is the ongoing outmigration from Erie County. Throughout the 1990s, the total population in Erie remained more or less steady, with the 1999 Census estimate placing the County's population at 276,993 – within 0.3 percent of the 1990 Census population.

In demographic terms, this lack of population growth is attributable to "net domestic outmigration." Between 1990 and 1999, 11,540 more people moved out of Erie County than moved into the County. An analysis of the inflows and outflows of people in recent years (between 1995 and 1999) shows that about 16 percent of these out-migrants moved to any of Erie's four bordering counties, and 29 percent stayed within the

Commonwealth of Pennsylvania. More revealing, however, is that 31 percent of out-migrants moved to the South and 8 percent moved to the Western U.S.⁹

During this period, the number of in-migrants to the Erie area was less than the number of out-migrants. 20 percent of in-migrants moved from adjacent counties, 36 percent from other counties in Pennsylvania, and 22 percent from the South. This ongoing situation has resulted in Erie's population remaining basically constant over the last 20 years. Figure A shows the percent change in population witnessed over the last twenty years in Erie and in the U.S. as a whole. It illustrates that while the nation as a whole grew in population by nearly 20 percent between 1980 and 1998, the Erie area actually lost population.¹⁰

**Figure A:
1980-1998 Population Change**



This imbalance of inflows and outflows should draw attention to the issue of outmigration and highlight the importance of addressing this situation, and its root causes, in the region's economic development efforts.

In Summary

The Erie area economy is in a period of profound transition, and is the data provide little basis for optimism. The only moderately bright spots are the performance of a few key sectors, such as plastics production (where wages are below the non-retail average) and industrial machinery and insurance (where wages are above the non-retail average). There is some potential for growth in small but emerging sectors such as instruments production. On the services side, health care and educational services may continue to grow.

Still, the overall trends are troubling, especially when viewed from an economic development standpoint. The first area of concern is the region's demographic changes

⁹ Source: Internal Revenue Service Annual Migration Files

¹⁰ Source: U.S. Census Bureau

– particularly the stagnant population growth that has come from considerable outflow of residents. This has contributed to keeping unemployment figures relatively low by effectively removing a segment of the population. This demographic situation must be viewed along with the employment situation in order to get a balanced picture of current economic trends.

Secondly, there is inexorable erosion in the manufacturing base. The historically large contribution to regional income of the transportation equipment industry looks like it will further decrease unless there is a sudden turnaround in the fortunes of the local GE facility

A third cause for concern is the lack of employment in high technology industries. In an era when high-technology employment is growing throughout the country, the Erie area is lagging behind. This shortcoming will become more noticeable in future years if the region continues to trail national trends in the development of high technology firms and employment.

Part Three

Analysis of Survey Responses

Introduction

Good economic development planning frequently begins with a frank assessment of the current situation in the community. Very often this assessment relies heavily on analysis of "objective" socio-economic data from standard statistical sources. An equally important, more subjective, analysis looks at community characteristics and attitudes and at the local assets available to support economic development.

A survey of business, community, education and government leaders in Erie was conducted on-line and via fax to gather subjective data. Of those leaders who were contacted by the project team and asked to complete the survey, nearly two-thirds complied. This is a remarkable level of response and is itself one of the best positive signs. The survey was also reproduced in the newspaper so that interested members of the general public could participate. Again, a surprisingly large number of individuals took that opportunity.

Altogether, about 170 leaders and 140 members of the public participated in the survey. The project team is enthusiastic about the survey response; however, a note of caution is in order. While the citizen input is interesting, the results should not be generalized to the broader population because it is a small, self-selected sample of people. Their input may provide some good insight into the opinions of the citizenry at large but these are only the views of those who were interested, informed, and concerned enough to respond to the survey.

The "leaders" were asked to categorize as themselves business, community, education, or government. Because business leaders comprised almost half of the people who participated in the leaders' survey, the aggregate is heavily weighted toward the perspective of business. To represent the perspective of the different components of the Erie community, this summary describes survey results in aggregate and for each group within the leadership. The citizens were divided into working age and retirees.

RTS and The FutureWorks Company believe this survey is as detailed and dependable as could be constructed for this purpose. Respondents were advised that their confidentiality would be safeguarded. The electronic responses were entered directly into a password protected web site, to which only RTS and FutureWorks have access. The written responses were treated with confidentiality, entered on the same web site, and then destroyed.

We believe this survey represents a strong cross-section of Erie, particularly from the "leadership" cadre where a very high percentage of those asked to respond participated. We believe the results are important and dramatic. We urge the results be carefully considered.

Assets and Appeal

The Assets: The Erie survey began by asking participants to select the top three assets for economic development from a list of twelve potential assets and the option to select and specify "other." Potential economic development assets include inherent assets such as location or natural resources and created assets such as good leadership, a highly skilled work force or a good highway system.

TABLE 2

THE TOP THREE ASSETS FOR ECONOMIC DEVELOPMENT IN ERIE

survey results by category of respondent

ASSETS (In Order of Overall Rating)	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Government	Working Age	Retirees
Relatively Low Cost of Living	1	3	3	2	1	1
Strong Work Ethic	3	2	4	1	2	2
Strong Institutions of Higher Education	4	1	7	4	3	3
Ample Recreational Opportunities	5	6	10	3	4	4
Affordable Housing	8	9	5	5	5	5
Good Private Sector Leadership	2	5	6	8	12	8
Strong Sense of Community	6	8	2	10	6	10
Good Public Schools	11	4	1	9	9	6
Opportunities for Workers to Gain New Skills	10	10	9	6	10	7
Other (describe below)	7	13	12	13	8	11
Good Transportation Infrastructure	9	12	13	7	7	12
Numerous Decent Wage Jobs	12	7	8	12	11	9
Good Government Leadership	13	11	11	11	13	13

Responses were aggregated by allocating three points for first place, two points for second place, and one point for third place. If a respondent selected more than one asset for each rating, the answer was not included in the calculations. The rankings sum the points (Table 2).

The economic development asset given the highest rating for Erie was the *relatively low cost of living*. It was followed by *strong work ethic*, *strong institutions of higher*

education, ample recreational opportunities, and affordable housing. Taken together, these assets describe a pleasant, affordable place to live.

Only the *strong institutions of higher education* suggest a potential for dynamic economic development. It should be noted that a *strong work ethic* is invariably cited by virtually every city and town as a major local economic development asset. If it were not among the top three assets in Erie, that absence probably would indicate a serious problem with the workforce.

While a strong work ethic appears near the top of almost every community's assessment of its economic development assets, in Erie that assessment is tempered by the very low ranking given "numerous decent wage jobs" and the uniformly low ranking given "opportunities for workers to gain new skills." Assets associated with a dynamic economic environment received relatively few mentions. Few people selected *opportunities for workers to gain new skills* or *numerous decent wage jobs* as development assets for Erie. The *low cost of living*, while an asset, could also be seen as the result of relatively low wages and their impact upon local prices.

These rankings raise serious questions about Erie's economic development potential. The local economic development outlook depends heavily upon local leadership and upon the local workforce – and it appears that the leadership picture in Erie is problematic. Private sector leadership is well-regarded by all except government officials, but government leadership is near or at the bottom of all lists - and lowest among business leaders. Those mutually low opinions raise questions about the effectiveness of the local public-private partnership. Moreover, only the educators ranked a sense of community high among Erie's assets.

Despite the obvious problems, when the responses are compiled for each category of respondent, they reveal a perhaps understandable and certainly not surprising tendency for leaders in all sectors to pat themselves on the back. Consider:

- Business leaders rank *good private sector leadership* as the #2 development asset, while no other group placed it above #5, and working age citizens actually rate it as #12 out of the possible twelve choices.
- Educators rank good public schools as #1 as a development asset, but no other group shares that high opinion. In fact, the public schools are in 8th place when all responses are considered.

The link between education and economic development is well recognized, and an important bright spot is the generally positive opinions of local institutions of higher education. However, perceptions of elementary and secondary education are very uneven. Educators give the public schools the highest ranking of any asset by any group, and the community leaders give them an above average ranking, but very few business and government leaders ranked the public schools among Erie's top assets.

The people who selected the *other* category most frequently mentioned inherent resources such as Lake Erie – providing a scenic location, recreational opportunity, and dependable water supply – and Erie's location near major markets.

Attractiveness: A series of questions about Erie as a place to live addressed the combined impact of the potential economic development assets. The survey asked respondents to rate Erie as an attractive place to live for people in different stages of their adult lives (Table 3). The stages were: (1) young people just finishing their education and launching a career; (2) families looking for a good place to live and raise a family; and (3) older adults needing good health care, retirement services, and recreation.

Responses to these questions were consistent across all groups of participants and with the ratings given potential economic development assets. Erie is considered a nice place for families and for retirees. The cost of living is low, housing is affordable, and there are lots of recreational opportunities. Erie is not seen as particularly attractive to young people.

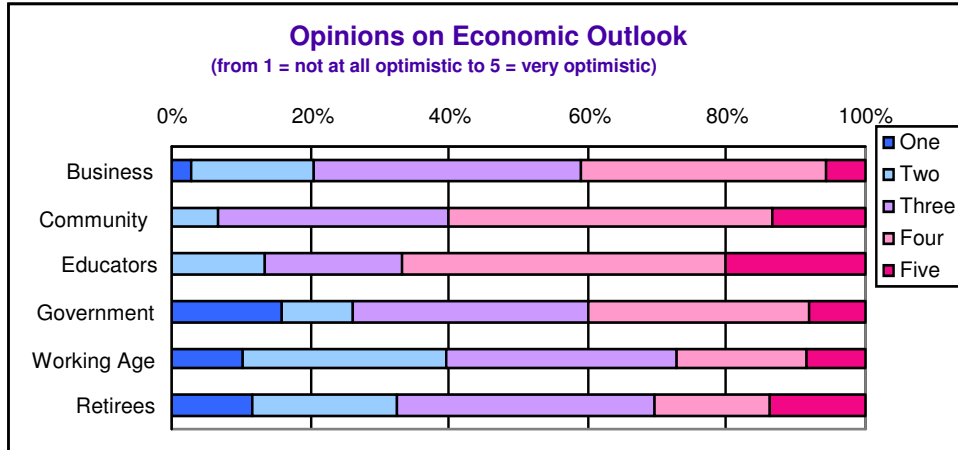
TABLE 3			
HOW ATTRACTIVE IS ERIE ...			
(coded 1 not attractive - 5 very attractive)			
The points assigned represent the total of the ranking points assigned by each group.			
	For young people just finishing their education and launching a career	For families looking for a good place to live and raise a family	For older adults needing good health care, retirement services, and recreation
Business	157	300	279
Community	68	138	120
Educators	33	59	62
Government	103	185	190
Citizens - Working Age	181	356	347
Citizens - Retired	83	171	161
TOTAL	625	1209	1159
# responses	307	304	307
AVG rating	2.0	4.0	3.8

Young people launching their careers are looking for good jobs and opportunities to increase their skills, which are not seen as prevalent in Erie. Overall, the general citizenry gave lower ratings than did the people in leadership positions. Working age citizens were least positive about Erie as a place to live during each of the three major stages of adult life.

Optimism and Confidence in Key Institutions

A set of three questions assessed local optimism and confidence in leadership. First, respondents were asked to place themselves on a five-point scale ranging from not at all optimistic to very optimistic about Erie's economic future. On a similar scale, they were asked to assess both the capacity of the local government and of the major civic institutions to lead and manage change in the region.

CHART 1



On average, people are generally optimistic about Erie's economic future, although the largest numbers placed themselves in the middle (Chart 1 above and Table 4 below). Leaders saw a rosier picture than did the citizens who participated in the survey – educators and community leaders were especially optimistic. Least optimistic were working age citizens, the only group with an average rating below the mid-point on the optimism scale.

Although most respondents leaned toward optimism about Erie's economic future, it is not clear why. The survey revealed a low level of confidence in the capacity of local government to lead and manage change (Chart 2 and Table 5), and it suggested that there is also some skepticism about the leadership that might be expected from non-governmental civic institutions (Chart 3 and Table 6). Within the leadership groups, business people were especially negative about local government, although their skepticism was shared by all participants in the citizen survey. Only educators, the most positive group of survey respondents, gave local government a rating above the mid-point on the confidence scale.

TABLE 4

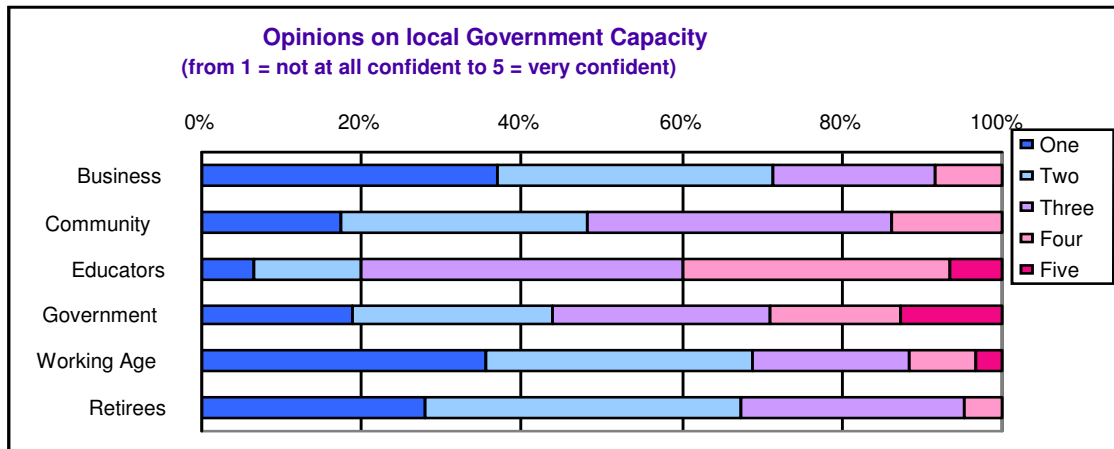
**HOW OPTIMISTIC DO YOU FEEL GENERALLY ABOUT
ERIE'S ECONOMIC FUTURE?**

From one (not at all optimistic) to five (very optimistic)

survey results by category of respondent

RATING	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Government	Working Age	Retirees
One	3%	0%	0%	16%	10%	12%
Two	18%	7%	13%	10%	29%	21%
Three	38%	33%	20%	34%	33%	37%
Four	36%	47%	47%	32%	19%	16%
Five	5%	13%	20%	8%	8%	14%

CHART 2



Remarkably, even among the government leaders surveyed, 44 percent expressed low levels of confidence about local governments' ability to lead and manage change while only 30 percent expressed positive levels of confidence above the midpoint.

TABLE 5

HOW CONFIDENT ARE YOU ABOUT THE CAPACITY OF LOCAL GOVERNMENT TO LEAD AND MANAGE CHANGE?

From one (not at all confident) to five (very confident)

survey results by category of respondent

RATING	LEADERSHIP SURVEY			CITIZEN SURVEY		
	Business	Community	Educators	Government	Working Age	Retirees
One	37%	17%	7%	19%	35%	28%
Two	34%	31%	13%	25%	33%	40%
Three	21%	38%	40%	27%	20%	28%
Four	8%	14%	33%	17%	8%	5%
Five	0%	0%	7%	13%	3%	0%

Respondents showed a higher level of confidence in the capacity of civic organizations, but it still hovers around the mid-point of the confidence range. Again, the community leaders are the most sanguine about the capacity of their major civic institutions to lead and manage change in the region. It is the only group in which more than half the respondents expressed a level of confidence above the midpoint. The general citizenry was more skeptical about the capacity of the civic leadership than were any of the leadership groups.

CHART 3

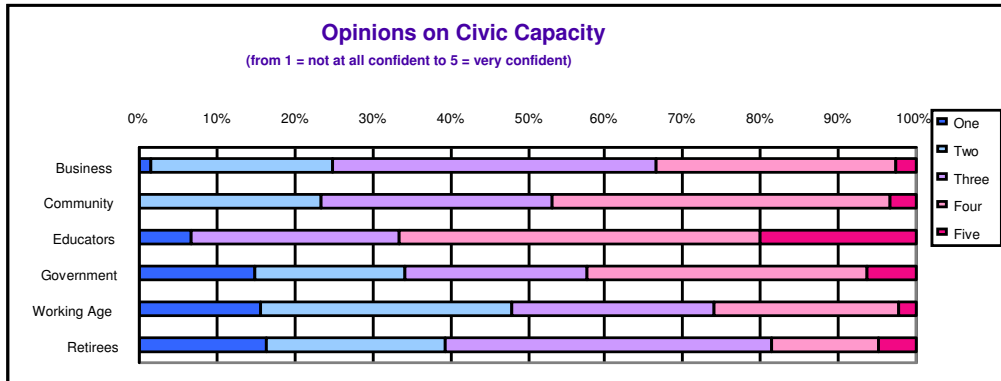


TABLE 6

HOW CONFIDENT ARE YOU ABOUT THE CAPACITY OF THE MAJOR CIVIC INSTITUTIONS TO LEAD AND MANAGE CHANGE?

From one (not at all confident) to five (very confident)
survey results by category of respondent

RATING	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Government	Working Age	Retirees
One	1%	0%	7%	15%	15%	16%
Two	24%	23%	0%	19%	32%	23%
Three	42%	30%	27%	23%	26%	42%
Four	31%	43%	47%	36%	24%	14%
Five	3%	3%	20%	6%	2%	5%

Table 7 summarizes the average of the responses to the three questions about general optimism and confidence in civil and civic institutions (the score was established by total of the points awarded and dividing by the number of responses). Every category of respondent expresses a higher level of general optimism than seems warranted by their confidence in the leadership capacity of their civic and civil institutions.

TABLE 7

AVERAGE RATINGS OF OPTIMISM REGARDING ECONOMIC FUTURE AND LOCAL CAPACITY OF GOVERNMENT AND CIVIC INSTITUTIONS TO LEAD/MANAGE CHANGE

QUESTION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Government	Working Age	Retirees
How optimistic do you feel, generally, about Erie's economic future?	3.2	3.7	3.7	3.1	2.9	3.0
How confident are you about the capacity of local government to lead and manage change?	2.0	2.5	3.2	2.8	2.1	2.1
How confident are you about the capacity of the major civic institutions to lead and manage change?	3.1	3.3	3.7	3.0	2.6	2.7

Sources of New Jobs

An important question regarding Erie's economic future was, "Where will the jobs come from?" Erie's past was as a manufacturing center, but its future role is not yet defined. The survey asked people to rate each industry according to the number of new jobs it was likely to produce, from none to few to many. The results made clear that people expect the service industries to be the source of most new jobs. Most placed the service industries in either the few or many categories, and retail services rated higher than either business or personal services. There was very little difference in the opinions of business leaders (presumably those most "in the know") and the other groups surveyed. Almost everyone completing the survey seemed quite well informed about future job prospects (and the consultant team generally shares their opinions).

Few survey respondents expect the manufacturing industries that have been the core of Erie's economic base to produce more than a few new jobs in the future. Existing manufacturing firms were seen as more likely job sources than either start-ups or new manufacturing locations.

TABLE 8

HOW ARE INDUSTRIES EXPECTED TO CONTRIBUTE TO JOB GROWTH?

Rated 1 = no new jobs; 2= a few new jobs; 3 = many new jobs

average survey results by category of respondent

INDUSTRY	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Government	Working Age	Retirees
Retail Services	2.3	2.4	2.3	2.3	2.5	2.3
Business Services	2.2	2.4	2.4	2.2	2.2	2.1
Personal Services	2.0	2.3	2.2	2.2	2.3	2.3
Telecommunications & Information Processing	2.1	2.1	2.1	2.2	2.3	2.2
Existing Manufacturing Firms	2.2	1.9	2.1	2.2	1.8	1.8
Manufacturing Start-ups	1.9	1.8	2.1	2.1	1.7	1.8
New Manufacturing Locations	1.8	1.7	2.1	1.9	1.7	1.5
Finance & Insurance	1.8	1.8	2.0	1.9	2.1	2.1
Transportation, Distribution, & Logistics	1.9	2.0	2.0	2.0	1.9	1.7
Government	1.6	1.7	1.5	1.7	1.7	1.8

The telecommunications and information processing industries, which in Erie are dominated by call centers, are seen as second to retail services in terms of job creation potential. (Here the consultants are less optimistic.) Transportation, distribution and logistics are expected to produce only a few new jobs; finance and insurance, even fewer.

Other factors contribute to job growth in a broader context. For example, business start-ups contribute to job growth in all industries, but, in Erie, entrepreneurial activity was seen as below average by all groups of survey respondents. Advanced technology has been an engine for job growth nationally, particularly where there is a high quality telecommunications infrastructure. In Erie, only the educators and the government leaders evaluated overall support for advanced technology firms as above three on a five-point scale. The telecommunications infrastructure is generally rated as average.

TABLE 9

SUPPORT FOR HIGH TECH & ENTREPRENEURIAL DEVELOPMENT

Rated 1 = low to 5 = very high

survey results by category of respondent

QUESTION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Government	Working Age	Retirees
Compared to other regions with which you may be familiar, how would you rate the level of entrepreneurial activity (new business formation and expansion) in Erie?	2.7	2.9	2.5	2.8	2.6	2.7
How would you rate the support available for advanced technology companies in such fields as information processing, computer services, software development, telecommunications and Internet services?	2.6	3.0	3.4	3.2	2.7	2.7
How would you rate the telecommunications infrastructure in the region for electronic commerce, business to business transactions, and on-line training?	3.0	3.1	2.9	3.0	3.2	3.2

The overall rating of telecommunications as average is somewhat at odds with strong concerns expressed by several individual businesses who are very sensitive to telecommunications infrastructure. While the average firm might rate the telecommunications adequacy as a "3," the firms more directly impacted by electronic commerce needs have registered much sharper concern in individual interviews.

Views About Erie

Survey respondents were presented with several propositions or statements about Erie and asked whether they agreed with the statement. Some of these propositions were worded negatively and some positively. Possible answers range on a five point scale from strongly agree to strongly disagree. There were three sets of three statements each.

Image and Vision: The first set of three statements addressed the image and vision of Erie. Perceptions matter in economic development, and the survey responses suggest that Erie's image is a problem area. Almost 70 percent of survey respondents agree that

Erie is viewed as an older depressed manufacturing center, a rust belt city (Table 10). This view is held most strongly by the general citizenry, while leaders – especially in government – are more likely to disagree. Over 70 percent do not believe that there is a compelling and unified vision among leaders in the region about how Erie should develop (Table 11). Not surprisingly, a similar percent agrees that there is no shared positive image and no plan for marketing the region (Table 12). Almost all educators, usually the most positive group, agreed that the region lacks a shared image and marketing plan.

TABLE 10

Erie's image is of a Rust Belt city – an older, depressed manufacturing center.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	23%	20%	33%	10%	34%	44%
Mildly Agree	40%	47%	27%	40%	45%	37%
No Opinion	7%	17%	0%	4%	8%	0%
Mildly Disagree	22%	10%	33%	30%	5%	16%
Strongly Disagree	8%	7%	7%	16%	8%	2%

TABLE 11

**There is a compelling and unified vision among
leaders in the region about how Erie should develop.**

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	3%	0%	0%	8%	5%	5%
Mildly Agree	15%	30%	13%	24%	17%	14%
No Opinion	5%	7%	0%	8%	6%	7%
Mildly Disagree	36%	13%	53%	36%	28%	33%
Strongly Disagree	41%	50%	33%	24%	44%	42%

TABLE 12

There is not a shared, positive image and no plan for marketing the region.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	45%	53%	40%	20%	36%	42%
Mildly Agree	34%	13%	53%	40%	35%	35%
No Opinion	5%	7%	0%	8%	8%	5%
Mildly Disagree	14%	20%	7%	30%	15%	19%
Strongly Disagree	1%	7%	0%	2%	6%	0%

These are very high negative numbers and should be taken very seriously. If leaders and the general citizens of Erie have these opinions, they inevitably are communicating them to the outside world. Self-image, more than any other single factor, determines image.

Decline and Development: A second set of three propositions dealt with issues of decline and development. Overall, eight out of ten respondents supported accelerated downtown and waterfront development, and six of ten indicated strong support (Table 13). The most consistent support comes from the business, community and education leaders. While people want to see accelerated development, two-thirds agree that center city decline is continuing (Table 13). About half agreed that there are too few specific destinations in Erie, attractions building on natural resources and location advantages (Table 14). Taken together, these responses indicate solid support for more physical development and redevelopment than is occurring.

TABLE 13

Accelerating downtown and waterfront development would be a very positive step for the entire region.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	68%	70%	67%	54%	57%	51%
Mildly Agree	19%	17%	27%	22%	26%	26%
No Opinion	4%	0%	0%	6%	2%	2%
Mildly Disagree	5%	10%	0%	6%	9%	14%
Strongly Disagree	3%	3%	7%	12%	6%	7%

TABLE 14

There is continuing decline in the central city.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	32%	40%	40%	20%	38%	40%
Mildly Agree	41%	30%	33%	38%	24%	33%
No Opinion	5%	3%	0%	12%	13%	0%
Mildly Disagree	16%	10%	27%	24%	18%	23%
Strongly Disagree	5%	17%	0%	6%	6%	5%

TABLE 15

There are too few specific destination attractions building on natural resources and location advantages that would bring people and firms to the region and create a sense of excitement, making current residents more enthusiastic about their home.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	21%	30%	20%	12%	20%	26%
Mildly Agree	33%	40%	47%	24%	24%	16%
No Opinion	7%	0%	7%	10%	12%	9%
Mildly Disagree	29%	20%	20%	28%	29%	30%
Strongly Disagree	11%	10%	7%	26%	14%	19%

Leadership and Governance: The third set of three propositions explores attitudes toward regional leadership – civic and governmental. The responses to these propositions underscore the perception that there are serious leadership issues affecting economic development prospects for Erie.

Eight of ten survey respondents agree that it is difficult to get new initiatives and ideas through the numerous organizations – both civic and civil – or to build consensus in the region about new directions (Table 16). More than 40 percent *strongly agreed* with that statement. There is consensus across all the groups surveyed that this is a problem.

TABLE 16

It is very difficult to get new initiatives and ideas through the numerous organizations – both civic and civil – or to build consensus in the region about new directions.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	48%	40%	27%	32%	42%	53%
Mildly Agree	38%	37%	53%	44%	39%	30%
No Opinion	3%	10%	7%	14%	12%	14%
Mildly Disagree	10%	10%	7%	6%	4%	2%
Strongly Disagree	1%	3%	7%	4%	3%	0%

Responses to the other two questions provide some insights into the reasons behind the perceived leadership problems. Only one in five respondents agreed that there is good communication and cooperation among local governments (Table 17). Although government leaders judged themselves somewhat less harshly, overall they agree with the other leadership groups and the general citizenry. Only 36 percent of government leaders themselves could agree that there was good intergovernmental communication within the region. Only 4 percent felt strongly that there was.

TABLE 17

There is good communication and cooperation among the numerous local governments.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	1%	0%	13%	4%	4%	2%
Mildly Agree	16%	20%	20%	32%	11%	19%
No Opinion	7%	13%	7%	8%	9%	2%
Mildly Disagree	27%	47%	33%	34%	28%	35%
Strongly Disagree	48%	20%	27%	22%	48%	42%

Of course, it is routine and perhaps almost fashionable to criticize government for redundancy, fragmentation, and poor coordination. Perhaps most people are just not made aware of positive developments on the civil agenda. Still, these startlingly high numbers suggest there is a real problem.

TABLE 18

There are too many small and under-funded civic organizations competing for scarce financial and leadership support from the business community.

survey results by category of respondent

OPINION	LEADERSHIP SURVEY				CITIZEN SURVEY	
	Business	Community	Educators	Gov't	Working Age	Retirees
Strongly Agree	37%	40%	27%	30%	37%	37%
Mildly Agree	40%	27%	40%	22%	34%	44%
No Opinion	5%	17%	13%	30%	19%	12%
Mildly Disagree	10%	17%	20%	12%	7%	5%
Strongly Disagree	8%	0%	0%	6%	3%	2%

There is also broad agreement that Erie has too many small and under-funded civic organizations, which compete for scarce financial and leadership support from the business community (Table 18). Among the leadership groups, business leaders were most likely to agree with this statement.

Priorities for Action

The last part of the survey asked respondents to rate the importance of several economic development issues and to set priorities for actions to promote economic development in Erie. The question about importance of issues was omitted from the newspaper survey, which most citizens used. Therefore, only the leadership survey answers are presented for that question (Table 19below).

Although it was not the first choice of any leadership group, *establishing an aggressive and coordinated regional marketing plan* was the combined first choice for most important action option. The first choice of business, community and education leaders was *reorganizing local government institutions and strengthening mechanisms of inter-governmental cooperation to align resources and leadership behind a consensus vision that can more effectively mobilize change*. Because government leaders rated that option so low, tied for seventh place, it ranked second overall. The comparable action option for the civic infrastructure rated last overall and among the groups, was in last place for community and government leaders.

The third most important issue overall was *building and expanding research and development capacity to accelerate Erie's transition to a "high tech" economy*. This was followed by three options relating to (1) improved skills for workers and (2) better meeting employers' labor force needs. Although responses to previous questions showed that it has broad support, *accelerating physical re-development* was not rated among the most important options. *Emphasizing an international orientation in Erie's economic development* ranked eighth of the nine options presented.

Every action option was ranked well above three on the five-point scale of importance. In fact, there are narrow differences in the total scoring. The intensity of importance

scoring between the highest rated and the lowest rated is not all that great. None of these actions can be said to be "rejected" by leadership.

But if all these actions are important, which would rise to the top given Erie's finite resources?. This leads to the question of priorities (Table 20). While generally similar to importance rankings, priority rankings showed some important departures. For example, the highest priority overall and for each group except government and educators is to *reorganize local governments and strengthen inter-governmental mechanisms*. The second highest priority is *a regional marketing plan*.

TABLE 19				
ACTION OPTIONS RATED BY IMPORTANCE				
5 = extremely important to 1= not important				
survey results by category of respondent listed in order of total score				
ACTION	LEADERSHIP SURVEY ONLY			
	Business	Community	Educators	Government
Establishing an aggressive and coordinated regional marketing plan.	4.5	4.4	4.3	4.1
Reorganizing local government institutions and strengthening mechanisms of inter-governmental cooperation to align resources and leadership behind a consensus vision that can more effectively mobilize change.	4.7	4.8	4.6	3.8
Building and expanding research and development capacity to accelerate Erie's transition to a "high tech" economy.	4.2	4.6	4.5	4.2
Working with employers to define better their labor force needs and to expand on-the-job training opportunities.	4.0	4.4	4.4	4.3
Establishing new and expanding current education and training programs at the sub-baccalaureate level for current and new workers to develop, upgrade, and maintain their transferable skills.	4.2	4.3	4.3	4.2
Creating more and better opportunities for under-educated, under-employed, low-income workers to develop the entry level skills and behaviors needed to make them employable at good wage levels.	4.0	4.5	4.1	4.2
Accelerating physical re-development – for example, downtown, parks, and waterfront – to make Erie more attractive to current and prospective residents, industrial prospects, tourists, and conventioners.	4.2	4.4	3.9	3.8
Emphasizing an international orientation to Erie's economic development, positioning the region in the global marketplace, promoting exports, multiculturalism, and internationally focused infrastructure.	3.8	4.2	3.6	4.0
Reorganizing civic institutions to consolidate and coordinate their resources and leadership behind a consensus vision that can more effectively mobilize change.	4.1	4.0	4.1	3.3

Sub-baccalaureate education and training rises to a rating of three when action options are prioritized, and *research and development* falls to four. The workforce action options remain in the middle of the pack, followed by *accelerated physical development*. Erie sits on the border between the U.S. and Canada, but survey respondents gave *international orientation* the lowest priority. The table lists the action priorities in the order of their ranking from the aggregated surveys. It also shows the percentage of total points awarded given each option. This allows for more accurate comparisons. For example, the top two categories rank well above the next group.

TABLE 20

ACTION PRIORITIES BY CATEGORY OF RESPONDENT

Share of Total Points: first priority = 5; second = 4; third = 3; fourth = 2; fifth = 1

ACTION	LEADERSHIP SURVEY				CITIZEN SURVEY		
	Business	Community	Educators	Gov't	Working Age	Retirees	All
Reorganize local governments, Strengthen inter-governmental mechanisms	20%	21%	14%	12%	17%	18%	17%
Regional marketing plan	17%	16%	21%	16%	13%	10%	15%
Sub-baccalaureate education/training	12%	12%	13%	16%	11%	12%	12%
R&D for a high tech economy	11%	8%	10%	12%	11%	10%	11%
More employer-focused on-the-job training	8%	8%	14%	13%	11%	8%	10%
Entry-level training for low-income	7%	9%	7%	11%	10%	11%	10%
Accelerated physical development	12%	9%	10%	8%	9%	8%	9%
Reorganize civic institutions	7%	6%	5%	3%	7%	8%	6%
International orientation	3%	5%	4%	6%	8%	9%	6%

Part Four

Major Findings

Major Findings on the Positive Side

1. Erie has important locational assets and generally good transportation infrastructure.

Erie's location has brought significant advantages in the industrial economy of the past several decades, and many of those advantages will remain into the foreseeable future. Most obviously, it is situated in an attractive setting. It has miles of beautiful coastline along Lake Erie and Presque Isle bay, relatively little of which is over-developed or over-populated. This generous bayfront affords a wide variety of recreational and entertainment possibilities. There are important opportunities for water-related tourism and good access to both summer and winter sports.

Erie is well located from an economic standpoint. It is highly accessible to key centers of industrialization in the Midwest and Northeast and has uncommon transportation scope with air, water, rail, and highway access. The highway system will support continued growth if well maintained. The port, Pennsylvania's only fresh water port, gives Erie trans-shipment capability and world connections through the St. Lawrence seaway system. The rail system meets the current industrial market needs and could be expanded for commuter service if demand grows.

Regarding air transport: the lack of direct service to major population centers such as New York and Chicago frustrates many business travelers, and the frequency of service even to Pittsburgh and Cleveland seems poor. These are demand issues, however, not supply issues, and the airport does have runway expansion capability. With current expansion plans and availability of land, the underlying capability of the airport will not serve as a barrier to future growth of the region. This is not to suggest there is no problem in Erie with air service (or cost); however, the potential physical capacity of the airport seems adequate.

Erie is on an historic north-south trading route made more important than ever by NAFTA. That location and its transportation infrastructure assets combine to make possible a growing distribution and logistics industry.

At a time when the rest of the country is just beginning to appreciate the strategic importance of water supply, Erie is in a very advantaged position, boasting some of the lowest water rates (and best supply) of any major manufacturing center in the United States. The region has capitalized on this asset with an excellent distribution system.

The surveys suggest that most of Erie residents concur that the region is relatively well located and well-endowed from a natural resource perspective. Market proximity, physical attractiveness, abundant fresh water, and the relatively large amounts of close-in green space and open land were frequently cited as key assets for the region. Erie's transportation strengths are probably under-appreciated.

2. Erie has a low cost of living with affordable housing.

Housing costs in Erie are well below the national average. The Greater Erie Board of Realtors reported in 1998 that the average sale price for single family homes in Erie County was \$103,000. In that same year, the national average for a previously built home was \$162,900, and for a newly constructed home was \$179,400.¹¹

A housing affordability analysis¹² based on 1990 census information indicates that for the typical Pennsylvania household, it took 2.3 years of total wages to pay for a house and rent equaled 13.2 percent of median gross annual wage for the state as a whole. In Erie, housing cost equals 2.0 years of total wages, and rental housing amounted to only 8.9 percent of median gross wages.

3. Erie has a strong tradition of civic involvement.

Business- based civic involvement has a long tradition in Erie. The Erie Conference on Community Development is a well regarded, action-oriented civic leadership body and has had little apparent difficulty in recruiting business and other CEOs for its various committees and task forces.

4. There is no shortage of land and facilities potentially available for business expansion and industrialization. There are substantial "in-fill" opportunities in the City of Erie where brownfield re-development needs to continue.

Over the past several years, much of the Erie region's economic development efforts have focused around land assembly – making sure there is appropriate space for the small manufacturing operations that have been the principal source of new wealth generation for the past few decades. The various jurisdictions have emphasized the development of industrial parks and the redevelopment of older industrial space. The state has supported an aggressive brownfield development initiative. A variety of financing arrangements have evolved to support this land assembly approach to development. Land and building costs in Erie are well below the national average for industrial and commercial users.

Erie has no "land assembly" problem. There is no shortage of land or buildings potentially appropriate for industrialization, and there are specialized institutions that can support such new development as seems likely over the next several years. Except perhaps for specialized facilities like Knowledge Park, the current inventory of land and buildings seems adequate to meet likely future needs, and there is little reason that additional land needs to be converted to commercial or industrial development. The caveat is, of course, that brownfield re-development in Erie continues unabated.

¹¹ Erie County Housing Study, 2000.

¹² Also reported in the Erie County Housing Study, 2000.

5. Development of the Convention Center can create momentum for related growth of a commercial and entertainment district along Erie's port.

Over the past year, there have been positive developments in the planning for a new convention center with related strengthening of the hospitality industry in Erie. The survey revealed that there is strong support for continuing these efforts.

The statement "Accelerating downtown and waterfront development would be a very positive step for the entire region" received an exceptionally strong positive response. Although a few respondents questioned the appropriateness of emphasizing new development in Erie and a few others raised questions about continued waterfront access, most respondents from all sectors supported the idea of continuing to emphasize downtown and waterfront development. Overall, about 80 percent of the respondents indicated strong or mild agreement with the proposition that accelerating downtown and waterfront development would be a very positive step for the entire region. Interestingly, almost no one was undecided or simply had no opinion about this issue. Although most supported it, there was a small core of strong opposition, especially among the government leaders category.

Downtown and waterfront development can contribute to addressing the problem of image and general attractiveness for Erie.

6. There is a generally high level of informed awareness of the need for proactive development strategies.

Leaders and the general citizenry in Erie seem generally knowledgeable about their region's economic problems and prospects. Realistically, they do not expect their manufacturing firms to be the source of many new jobs, and they do not expect many new manufacturing firms will locate here. They rightly see the service sector as the principal job creator in years ahead, and their concern about the wage levels of those service sector jobs, especially in the retail sector, is well-grounded.

There seems to be a widespread willingness to act in support of new development objectives. There is almost complete unanimity about the lack of a clear common vision for the future of Erie and the absence of a regional marketing plan and about the importance of developing both. These views were as strongly expressed in the "citizen survey" as they were in the "leadership survey." Establishing an aggressive and coordinated regional marketing plan was widely supported. It was the combined first choice for the most important action item.

7. Erie's leaders are optimistic about the region's economic future.

Perhaps the most important (and somewhat surprising) finding from our extensive surveying was the unexpectedly high level of optimism expressed by leaders in Erie – from business, government, community, and education – about the region's economic future.

Consider the response to the survey question "How optimistic do you feel generally about Erie's economic future?" Respondents were asked to rate their optimism on a scale of from one (not at all optimistic) to five (very optimistic). Far more "leadership" respondents indicated optimism (by marking four or five) than pessimism (by marking

one or two). Interestingly, the "citizen survey" revealed a significant disparity, as more felt generally pessimistic than optimistic.

What makes this result especially important is that, in response to other questions about development assets, image and attractiveness, vision, confidence in leadership, expectations about new job creation, and development priorities, these same leaders were far less positive. We interpret this as good news: Erie's leaders see the problems clearly and assess them realistically, but they nonetheless are optimistic about confronting them.

Major Findings on the Negative Side

1. Erie's population is growing very slowly, barely at all.

Over the last 10 years, population in the Erie region has increased by only about 0.2 percent annually, putting it in the bottom 10 percent for population growth among all metropolitan areas in the United States. From 1980 to 1990, it lost population. That trend has not changed in recent years; growth over the past three years has been at about the same 0.2 percent annual level, and Erie ranks 235th in the rate of population growth among 276 metro areas in the U.S. While Pennsylvania is one of the slowest-growing states in the country (48th among the 50 states plus the District of Columbia over the past 10 years), Erie is one of the slowest-growing regions in Pennsylvania. Even compared to other manufacturing-dominated regions in the Midwest, Erie's growth has lagged. Some places with similar economies (such as Fort Wayne, Indiana and Grand Rapids, Michigan, both of which have older populations) have witnessed double-digit population increases over past 10 years).

Between 1990 and 1998, 11,540 more people moved out of Erie County than moved in. Only 165 of that net outmigration stayed within the surrounding four counties (in fact, only 29 percent stayed within Pennsylvania at all).

Population growth is probably the most simple and direct indicator of the economic vitality of a region. If people don't like their economic prospects in a region, large numbers of them will leave. This is happening in Erie now, and may accelerate if the economic slowdown continues.

Over a 10-year period, little of a region's population change can be attributed to differences in the birth rate (although of course regions with older populations will have a lower birth rate than regions with younger populations). Increases in the population of a metro region (especially for a smaller, middle-sized region like Erie that is not close to other metro areas), effectively measures both current and prospective job growth and general attractiveness. This makes it a very good short and mid-term indicator of how well a region is doing. It clearly reflects the choices that people make in where they want to live. Erie's very slow growth relative to the nation as a whole (and relative even to the rest of slow-growing Pennsylvania) is an immediately apparent and dramatic sign that things are not going well.

Overall slow population growth masks some important changes within the region as people continued to move from the towns to the rural areas in Erie County. The City of Erie lost 5 percent of its population over the 1990s, while the rest of the County gained 6 percent. Most of that increase went to the outer townships where new infrastructure must be built to accommodate the growth.

2. Per capita income growth lags the national average and the state average.

Per capital income in Erie in 1999 (the last year for which estimates are available) was \$24,433. This placed Erie well below the state level of \$28,605. More importantly, Erie is falling further behind. Per capita income growth in Erie over the past few years has averaged on 3.9 percent per year, while the state as a whole has gained about 4.7 percent annually (Pennsylvania ranks 33rd among the 50 states plus the District of

Columbia). Per capita income growth in Erie has trailed even the slower-growing comparison regions, such as Scranton-Wilkes Barre-Hazleton.

While it is not fair to compare Erie with some of the larger and very rapidly growing metro areas such as Las Vegas, Austin, Charlotte, and San Diego, it is reasonable to compare it with other smaller metro areas, especially those in the Midwest and Mideast. Not only the larger metro areas of the South and Southwest, with their rapidly increasing costs of living, have seen strong recent growth in personal income. Per capita income growth in Grand Rapids, Michigan has almost doubled that of Erie. Sioux Falls, South Dakota, with a population of 170,000, has seen substantial per capita income growth throughout the 1990s, and growth has averaged 5.5 percent over the last two years of the decade, culminating in a 1999 per capita income of \$30,341. Boise City, Idaho, with a population of 432,000, has had 4.8 percent annual growth to its 1999 level of \$27,408. Rochester, Minnesota, with a population of 124,000, has seen growth averaging 6.6 percent annually with a 1999 per capita income of \$32,359. Just 15 years ago, Erie's per capita income exceeded that of all these regions.

This relatively slow growth in Erie's personal income is even more dramatic in the context of the recent very rapid growth in the national economy. From 1993 to 1999, per capita income in Erie slipped from 93 percent of the national average to 87 percent. Erie's faring this poorly in a strong economy augurs very badly for future prospects as the economy cools and flirts with recession.

3. The total income of the region is falling relative to other areas.

The combination of slow population growth and slow growth in per capita income means that the size of the regional economy, measured in terms of income, is shrinking quickly relative even to the rest of Pennsylvania, but especially to the rest of the U.S.

From 1994 through 1998, total personal income in Erie (the total of all wages, salaries, dividends, interest, rent, and transfer payments) was \$5.86 billion. In 1998, this figure had increased to \$6.57 billion, a total change of 12.1 percent, or about 2.4 percent per year. This contrasts with average annual increases of 3.1 percent in Scranton-Wilkes Barre, 4.0 percent in Reading, and 4.2 percent in Allentown-Bethlehem, all themselves relatively slow-growing communities in Pennsylvania. Other industrial regions in the Midwest also outperformed Erie: the economy of Fort Wayne, Indiana increased by 4.2 percent annually in that period, while Grand Rapids, Michigan increased by 5.3 percent annually. But the U.S. as a whole increased by over 6 percent annually during those high-growth years – almost two and one-half times faster than Erie. And this figure includes rural places – average annual growth in metropolitan areas was even higher.

Even over just half a decade (and in fact it has been going on much longer), this represents a dramatic relative difference with huge consequences. Consider the investment decisions facing a major retailer or consumer-oriented financial services business that might face the choice of locating (or staying) in a region like Erie with total income barely increasing at all – during the best of times – or locating in a region with average or above-average growth in incomes and local purchasing power. Only those few businesses looking for a very special niche (or willing to operate at a very low margin where they might squeeze out competitors) are likely to chose Erie.

These same issues weigh heavily in the investment and location calculus even of firms who are not dependent for their markets on the regional economy. The best firms – those we would want to locate or expand in Erie – would be apprehensive about their ability to recruit and retain workers in an economy that is growing so slowly. They will face more serious obstacles in recruiting and relocating workers in an economy that is shrinking relative to the nation as a whole rather than in one that is growing.

4. Urban-suburban income disparities are growing.

For several years there has been a significant income gap between those who live in the city and those who live outside the city in the boroughs and townships. Unfortunately, that gap is widening, not shrinking. There is increasing segregation of the poor in the Erie region.

**Table 21
Poverty Rates in Erie:
Differences Between the City and the Suburbs**

Year	Erie MSA Overall	City of Erie	Suburbs
1969	9.3	11.1	7.5
1979	10.0	13.4	7.5
1989	12.9	19.3	8.7
1993 (estimated)	13.9	21.3	9.3
1995 (estimated)	13.1	20.4	8.6
1997 (estimated)	12.7	20.2	8.3

Table 21 shows dramatically that the city’s poverty rate is nearly two and one-half times that of the suburbs. This difference is greater than the national average difference between center cities and the rest of their metropolitan areas. The disparity should be of special concern to economic development officials given the substantial evidence from national empirical research that the higher the urban-suburban income disparity, the slower the growth of the overall regional economy.¹³

It should come as some comfort to all that sustained national economic growth in the 1990s modestly reduced the overall rate of poverty in the Erie MSA, at least when measured from 1989 to 1997. But even though the poverty rate in the City of Erie declined slightly from 1993 to 1997, it remains above the level of 1989. In the suburbs, by contrast, after edging up for about 15 years, poverty fell sharply from 1993 to 1997, below the level of 1989.

There are widening disparities in education attainment, as the proportion of the region's population that did not complete high school is concentrated in the City of Erie, and a larger percentage of those with college degrees move out into the suburbs.

Census data that would enable us to document fully the growing disparities for the most recent years are not available yet. However, there have been sharp increases in Erie (and in other closer in communities) in the percentage of children eligible for free or

¹³ See Gottlieb, Paul D., “The Effects of Poverty on Metropolitan Area Economic Performance: A Policy-Oriented Research Review” in *Urban-Suburban Interdependencies* ed. Rosalind Greenstein and Wim Wiewel (Lincoln Institute of Land Policy: Cambridge, Massachusetts, 2000).

reduced school lunches – much sharper than in the outer suburbs. Because it is based on family income, free lunch eligibility is usually a very reliable indicator of poverty concentration. When the year 2000 census is released, it undoubtedly will show that the 20-year pattern of economic segregation in Erie has continued unabated or even increased over the past few years.

5. There are not enough good wage new jobs being created in Erie, and many of the highest-paying jobs are being cut back.

While the manufacturing sector continues to be the dominant employer in the Erie region, its share of total private sector jobs has dropped sharply over the past few decades. In 1970, for example, manufacturing accounted for 52 percent of private sector jobs; today it accounts for just about 31 percent (and 43 percent of total private sector wages). This reduction in the percent of jobs in manufacturing has been significantly slower in Erie than for the U.S. as a whole (where manufacturing accounts for only 18 percent of private sector jobs), but further reduction in Erie seems inexorable. Manufacturing employment slipped 4.2 percent in the 1990s in Erie even as it managed to increase in a several other major manufacturing centers (including Fort Wayne and Grand Rapids).

The loss of a manufacturing job is more significant than the loss of a job in other economic sectors because, as noted above, the average manufacturing wage is much higher than the average wage in most other sectors. But there are substantial variations in manufacturing wages paid in Erie. For example, the plastics industry – which has seen increased jobs in the past decade – actually pays less on average than the rest of the region's non-retail sectors. While the *furniture and fixtures* industry has added a few hundred jobs, average wages here are even further below the overall non-retail average. The very steep job decline in the *electronic and electrical equipment* industry (a loss of about 1800 hundred jobs from 1989 to 1998 – a decline of over 60 percent), has not had the devastating impact that might be assumed because those jobs are not well-paying at all; they pay only about 80 percent of the non-retail average. In stark contrast stands the *transportation equipment* industry, locally dominated by the GE plant, where the average annual wage of about \$52,000 is 166 percent of the region's non-retail average. Unfortunately, employment at the GE plant has been significantly reduced over the past several years and future prospects are not promising.

In 1998 all wage and salary earnings accounted for \$4.2 billion - two-thirds of all personal income in the region. Conservatively, about half of that, or roughly \$2.1 billion, was probably earned in the "traded sectors" of the economy, where net new wealth is produced as goods and services are sold to buyers outside the region. By contrast, in the "non-traded sectors" (such as retail), income is simply re-distributed through sales within the region.¹⁴ The very high-wage transportation equipment industry contributes about \$252 million annually – probably about 12 percent of all traded sector earnings in the region. That is a very high level of dependency on the fortunes of one firm (GE) in one relatively narrow market.

¹⁴ Our estimate of the split between traded and non-traded is just a crude, "seat of the pants" calculation that might be 10% off in either direction. It is used here only to illustrate the huge importance of the transportation equipment sector in general and GE in particular..

With the clear exception of the *industrial machinery* industry, the manufacturing sector in Erie is not highly diversified. In *paper and allied products*, one firm (International Paper, formerly Hammermill) dominates employment and income generation. That is also the case for *instruments and related products*, where Steris accounts for most of the total jobs and almost all of the recent job growth.

Industrial machinery and equipment has been the strongest component of the regional manufacturing economy. From 1989 to 1998, these firms added over 1200 jobs. These were well-paying jobs averaging 128 percent of the non-retail average salary. It is a relatively small firm-dominated, dis-aggregated industry that in 1998 had 173 firms employing an average of 32 people each. Historically, there have been relatively lower barriers to entry for new entrepreneurs with skilled machining backgrounds and a desire to open their own small shops. When people talk about an entrepreneurial tradition in Erie, they generally point to these tool and die makers, machine tool builders, and skilled machinists who have set up their own shops.

Erie has netted most of its new job growth in the services portion of the economy. In 10 years from 1989 to 1998, the service sectors added 7,000 jobs to a total of 33,809. Unfortunately, many of these jobs pay below the average wage for the economy as a whole. In 1998, Erie's overall service sector accounted for 30 percent of the jobs, but only 25 percent of the region's private sector payroll. *Health services* represents a relative bright spot and perhaps is a place to look for growth opportunities.

New business formation has been relatively low in Erie over the past several years. Our analysis indicates that while the pace of new firm creation in Erie in 1998 and 1999 was about the same as in the rest of Pennsylvania, it significantly lagged behind the national average. The opinion of the survey respondents was consistent with this analysis. Most respondents rated Erie's level of entrepreneurial activity below that of other regions with which they were familiar.

6. Erie particularly lags the nation in the growth of high tech firms and "new economy" business sectors.

Over the past several years, there has been a growing accumulation of evidence about the importance of what has become known as the "high tech" sector in determining the pace and intensity of regional economy growth. Most of the faster-growing metro regions in the U.S. have built that growth on the high tech sector of their economy. One highly regarded study concluded that it could explain about two-thirds of the output growth differential among metro areas on the basis of the their initial high tech density and the relative growth of high tech firms.¹⁵ This suggests that no region will demonstrate economic growth above the national average (or perhaps even close to it) if it does not have a both a strong base and rapid growth in high technology industries.

In this sense, "high tech" refers to a mix of high value-adding manufacturing industries and service industries. While there are various definitions, the manufacturing categories usually include drugs and pharmaceuticals, computer and office equipment, communications equipment, electronic components and accessories, aircraft and parts, guided missiles and space vehicles, search and navigation systems, instrumentation,

¹⁵ Ross C. DeVol, *America's High-Tech Economy: Growth, Development, and Risks for Metropolitan Areas* (The Milken Institute, Santa Monica CA: 1999).

laboratory apparatus, and surgical and medical instruments and supplies. The services industries usually include telephone communication services; computer programming, data processing and other computer-related services; motion picture production and allied services; engineering, architectural, and surveying services; and research development and testing services. Business leaders will recognize these groups as relatively high-margin or high value-added business sectors, which is what has made them so important to rapidly growing regional economies. More than many traditional industries with lower margins, they produce greater wealth in the regional economy.

On both the manufacturing and services side, Erie has a very low base of employment or earnings coming from these categories and little recent growth. The small electronics and electric equipment sector is actually shrinking and in any case is very low-wage. The only bright spot on the manufacturing side has been recent high-wage growth in the instruments industry; as noted above, however, this industry is dominated by just one firm. On the services side, software, data processing, motion picture and video, and telecom services are very small sectors in Erie and have shown little recent growth.

RTS and FutureWorks performed an analysis of the potential for high tech growth using different methodologies. The first of these was developed by the American Electronic Association, and the other is based on an innovative approach developed at the University of North Carolina for measuring the existence and growth of particular clusters of enterprises in both manufacturing and services that might support high tech growth. The AEA approach reveals employment in Erie high tech sectors to be less than half the national average and declining less in 1998 than 1989. The UNC approach yields consistent results and underscores special weaknesses in the telecom and software service sectors, where employment in Erie stands at only about one-fifth of the national average.

Clearly, the slow emergence of the high tech portion of the Erie economy is both dramatic and extremely troubling. Even those who insist that Erie's future lies in traditional manufacturing will be distressed. Manufacturing will survive in Erie only to the extent that it manages to deploy the most sophisticated technology. Low-tech manufacturing will continue to decline at an ever-increasing pace. The technology sector needed to support a competitive manufacturing base has not emerged in Erie.

7. Erie lags behind the rest of Pennsylvania and the nation in educational attainment beyond high school.

Unfortunately, little recent information is available about educational attainment since the results of the 2000 Census for this measure have not yet been released. 1990 data are summarized in Table 22 on the next page.

These data make clear that while Erie compared favorably in 1990 with the rest of Pennsylvania and the nation as a whole in terms of high school completion, it compared unfavorably at the post-secondary level. For example, 18.7% of the national 25 and older population had some post-secondary education short of a degree, but only 14.1% of Erie's population had some post-secondary studies short of a degree. Even though Erie's percentage is above the average for the state, it represents a full one-third less than the national average. For associate's, bachelor's, and graduate degrees, Erie lagged behind the rest of Pennsylvania as well as the rest of the nation.

Table 22
Comparison of Highest Level of
Education Attainment for Persons 25 or older (%)
1990 Census Data

	No High School Diploma	High School Diploma	Some College No Degree	Associates Degree	Bachelors Degree	Graduate or Professional Degree
United States	24.8	30.0	18.7	6.2	13.1	7.2
Pennsylvania	25.3	38.6	12.9	5.2	11.3	6.6
Erie	22.5	42.0	14.1	5.1	10.7	5.5

Until the 2000 Census data are released, we will not have hard data on past decade's changes in Erie's education attainment level and the potential trajectory of future. The public and private four-year schools in Erie have probably increased their production of two-year and four-year degrees, and it is to be expected that some who gained those degrees have stayed on in the region. On the other hand, Erie has not had the benefits of a community college in this past decade – as has been available to most of the rest of the state and nation. (Although the Northwest Pennsylvania Technical Institute received funding from the County and the state as a community college, its emphasis on short-term, industry-driven training resulted in few academic degrees or technical certificates.) Therefore, it seems unlikely that the pace of new post-secondary credentials awarded has been greater in Erie than elsewhere in Pennsylvania, and in fact the absence of a community college suggests that Erie probably has lagged behind much of the rest of the state. If so, given that Erie has not gained much population from outside the region while losing a significant share of its more educated population, it seems quite probable that Erie has fallen further behind the rest of Pennsylvania and the nation in its stock of workers with post-secondary credentials.

8. There are serious problems of duplication, overlap, competition, and sprawl resulting from the highly fragmented system of civil jurisdictions in the Erie region.

With 22 townships, 2 cities, and 14 boroughs, the one-county Erie MSA could hardly be more fragmented in terms of civil jurisdictions. This fragmentation has not been offset by cooperation, and has had a profoundly negative impact on the region's development. It has fed a staggering pace of urbanization (much higher than the national average), rapidly chewing up agricultural land and open space, straining public infrastructure (and making it much more expensive), eroding educational quality, potentially setting off economic development competition among the multiple jurisdictions, and precluding even the most rudimentary forms of "smart growth." The wide disparities in local governments' revenue-raising capacity exacerbate existing inequities in economic and educational opportunity, and promise to accelerate social polarization.

Our survey revealed deep and widespread concerns about the extent and effectiveness of communication and cooperation among the numerous local governments in the region. In response to the statement that "There is good communication and cooperation about local governments" almost nobody (except a handful of educators) strongly agreed and overall only one in five even mildly agreed. Over 75% of the business leaders and the general citizenry expressed strong or mild disagreement with

this assertion while (as might be expected) public sector leaders from government and education were not quite so negative. Even at that, however, over half of the government leaders could not agree strongly or mildly with the suggestion that there is good cooperation among local governments.

In virtually every one of our conversations with business leaders in the region, the fragmentation of local government and the apparent lack of cooperative and coherency among the multiple jurisdictions on economic development issues were the first problems mentioned. For many in Erie, fragmentation of local governments is viewed as an unfortunate fact of life - the inevitable product of state constitution and law and regional tradition. However, we detected a growing consensus that it is not a fact of life – it is a barrier to thoughtful growth and development that needs to be and can be overcome.

The consensus "most important asset" for Erie as determined from the surveys is that Erie is a nice attractive place with open space and beautiful vistas and with reasonably well-developed transportation infrastructure. The recent years' haphazard approach to land use planning – which results from poor cooperation (and perhaps even competition) among the local jurisdictions will steadily eat away at this "most important asset." By continuing the current pace of urbanization and open space conversion, Erie local government officials are shooting themselves in the foot.

Fragmentation of civil jurisdiction and the resultant wide variations in revenue capacity is contributing to the region's major disparities in public education. The growing concentration of the region's poverty in the city core has made it far more difficult to educate the city's children, and the overall achievement and attainment levels of the region clearly have suffered. When serious, job-creating investors look at the Erie region and see low levels of education achievement, they will rarely ask for comparisons among school districts. They understand that there is only one work force in the region and it makes little difference to investors that different districts have different levels of achievement. If the concentration of poverty leads to wide disparity in education opportunity, as it has in Erie, the economy of the entire region suffers, as it has in Erie.

9. Serious leadership and management issues impact Erie's economic development.

About 80 percent of the survey respondents agreed with the statement "It is very difficult to get new initiatives and ideas through the numerous organizations – both civic and civil – or to build consensus in the region about new directions." The consistency of affirming response to this statement was remarkable – very few strongly or even mildly disagreed with it.

When the survey asked about important priorities for actions, the business, education, and community leaders and the general citizenry all made a very similar choice. As might be expected from the previous discussion above, they gave their top votes to the idea of "Reorganizing local government institutions and strengthening mechanisms of inter-governmental cooperation to align resources and leadership behind a consensus vision that can more effectively mobilize change." Only the public sector officials from education and local government had other higher priorities.

Although it is somewhat more muted, there is also concern about leadership from the civic side as well. Over two-thirds of those surveyed agreed strongly or mildly with the proposition that there are too many small and under-funded civic organizations competing for scarce financial and leadership support from the business sector. Especially telling was the fact that 77 percent of the business leaders surveyed agreed with this statement. The concern about the difficulty of gaining consensus around new initiatives is an indictment of civic leadership as much as of government leaders.

There is concern about economic development marketing and Erie's image as a "Rust Belt" city. We have also observed some uncertainty of responsibility among the development-related institutions, as well as a proliferation of training and technology services (some supported by the state) aimed at existing manufacturers in the region.

Part Five

Recommendations

It is the view of the consultant team that Erie's economic development prospects are poor.

There is little vitality in the regional economy and as the national economic slowdown deepens, or even continues for a prolonged period, jobs and incomes in Erie will decline. There are few bright spots in the regional economy. There is much reliance on one plant, GE Transportation Systems; this dependency on one firm is increasingly risky in a slowing economy. The plastics and industrial machinery and equipment industries, a solid component of the regional economy for years, are facing new competitive challenges. There is little foundation for growth in new technology sectors – either on the manufacturing side or the service side. People are leaving, educational attainment is lagging, and urban-suburban disparities drag down the regional economy. Accelerating sprawl and open space conversion threaten the most important assets of the region. Key institutions of government, education, and civic leadership are not very well positioned to offer the kind of leadership the region needs to turn things around. Erie does not have a very positive image even among its own residents

On the other hand, we certainly think positive change is feasible and we offer a number of recommendations for the most critical actions. None of these measures will be easy and some will be expensive. None is going to turn things around in the very short run and, almost no matter what, things will get worse before they will get better. However, a relatively limited number of bold initiatives, if undertaken with commitment and consistency, can make a big difference.

Some may see our recommendations for Erie as going well beyond conventional approaches to regional economic development – we would agree. It is a measure of our concern for the region that we offer a wide-scope strategy addressing basic resource foundations of land use, education, public infrastructure, and local government. More limited strategies – i.e., an industrial park here, a loan fund there, a new training program, a tourism marketing plan – while they should be pursued, will have little impact if the big issues are not addressed. The big problems run deep and solutions must be as big and aggressive.

It will take time to fully develop many of these recommendations. In some cases, we have been able only to point directions and sketch out a pathway rather than drawing a detailed map. For example, we are not as knowledgeable about Pennsylvania law governing local government as we would like to be in further developing our recommendations for reform in this area. Nor have we been able to become as well-informed about issues of public education and municipal finance as we would like to be, given our recommendations for reform here. Where we see the clear need for further research and study we have so indicated. In some areas legal expertise will have to become involved with implementation planning to find safe passage through a judicial and jurisdictional minefield.

Our recommendations are grouped into five major areas. **Getting Organized** proposes a number of changes in the governance of civil and civic institutions. It calls for a restructuring of local government and a re-design of the major civic institutions. **Getting Connected** calls for bold steps to assure every business and residence in Erie quick and inexpensive access to high-speed Internet connection, with training and technical assistance to optimize their use of broadband technology. **Getting Smarter** offers our prescription for quickly changing educational attainment levels in the Erie region, building the skilled and educated workforce necessary for a knowledge-based economy. **Getting Competitive** lays out a series of measures designed to help the private sector firms in the region work cooperatively to enhance their competitive position in world markets. A final section, **Getting Started**, provides suggestions on next steps and on managing the final design of the initiatives.

Our recommendations are aimed at implementation over about a five-year period. Choosing this timeframe is purely pragmatic. Because they are fairly bold, these recommendations probably do not lend themselves to action over a shorter period. On the other hand, because the situation in Erie is precarious, it is not responsible to put forth recommendations that would take ten years to have impact. By that time, people will have voted with their feet about Erie's economic future – we think far too many will have left.

Getting Organized

We see this as the most important imperative facing the region. Our experience is that those regions do best in which local government and civic institutions are effectively organized to support the needs of the regional economy and have the confidence of leaders and the general public. We see this effective organization as the greatest single predictor of regional economic performance. Here's why: The regional economy is a production system, not merely an assortment of unrelated, atomistic enterprises. Firms producing the region's wealth are connected to each other just as importantly if not as obviously as workstations in a plant or office are connected to each other. They depend on the same physical infrastructure and they share the same workforce. These connections do not respect civil boundaries. Efforts to influence the pace and direction of economic growth must similarly transcend these civil boundaries. They need to work on the regional level – where the economy works.

Of course, many of the factors that help make these inter-connected firms competitive are determined purely in the private marketplace, and are not subject to much influence by well-meaning civic and civil authorities. Economic development strategy inevitably works on the margins. Development strategy cannot simply start a new high-wage industry or quickly make existing ones more competitive. Development strategy can influence only the foundations of growth – the public infrastructure, the knowledge and skill endowment, access to technology, the responsiveness of regulatory bodies – and the spatial dimensions of growth – where it occurs and who gains economic opportunity from it.

If development strategy is to have any real impact, it must be very carefully organized and very carefully targeted. It is especially important therefore that governmental and civic institutions are organized effectively to focus on the right issues, build a true regional consensus about goals and objectives, mobilize all the resources of the region to support the necessary actions, and hold all parties mutually accountable to clear performance objectives.

We conclude that, if a region's leadership – especially in a region that is struggling – wants to make an important contribution to wealth and opportunity for its people, it must begin by getting organized. It needs to be organized at the level of the economy, and be able to direct public investment and influence private investment rationally for the region as a whole.

On the Civic Side

We lead off here because we see a new approach to civic leadership as critical to all the recommendations that follow. While many of the region's leaders are concerned about the efficiency and effectiveness of Erie's institutions of civic improvement, the depth of concern is far less than with respect to the governmental side. The total budget and staff of these civic institutions are a miniscule fraction of the public sector outlays, and region-wide civic institutions are not highly fragmented relative to other regions.

Still, we believe that over the next five years, focus and accountability will be critical to the successful role of civic institutions in contributing to growth and development. We think the civic sector needs a general overhaul and streamlining if it is to make its optimal contribution to turning things around in Erie.

In addition, those agencies in the region responsible for economic development need to review their current division of responsibilities. Services aimed at existing businesses (especially in the manufacturing sector) are spread across several different organizations. Technical training and technology-related consulting assistance are provided to some degree by several different organizations that might profit from stronger coordination or even consolidation.

Recommendation #1

We recommend the immediate establishment of a high-level, civic coordinating council to integrate the activities of the region's principal, business-based civic institutions, focusing its goal on implementing the recommendations of this report and other major economic development initiatives that might emerge.

Here we will refer to this proposed group as the Civic Coordinating Council. We believe this grouping should include the Erie Conference on Community Development, the Erie Area Chamber of Commerce, the Erie Convention and Visitors Bureau and the Economic Development Corporation of Erie and its affiliates. There are several other groups that have a charter not necessarily rooted in the civic infrastructure of the region, such as the regional Workforce Investment Board, state-supported organizations (i.e., the IRC and the Ben Franklin program) and the Port and Airport Authorities among

others). They should be asked to join the Council if they agree to sign on to the work program and help implement its goals.

We do not believe this consolidation requires a formal re-structuring of each of these entities and it need not require the actual dissolution of the existing boards – just their agreement to coordinate policy and major program activities under the Coordinating Council. In fact, the board chairs of the existing bodies might be ex officio members of the Coordinating Council. Other members of the Coordinating Council would include the County Executive and other key leaders from business, education, and community-based organizations.

The Civic Coordinating Council might not need to appoint new staff if it can sort out reporting responsibility among the presidents and executive directors of the existing bodies. On the other hand, the Coordinating Council should have a strong charter and clear mission statement. Especially if it does not hire its own Executive Director, it has to have a strong chairperson willing to invest time as well as reputation.

The goal of this re-structuring would be to implement the recommendations of this report, streamline leadership, and improve accountability for major civic improvements in the region. This body would not replace or diminish the role of other groups in the region, only fill the need for someone to be in charge of developing consensus around directions, assigning responsibility for actions, and monitoring implementation. There is bound to be some overlap and duplication of effort in the governance and management of these organizations that could be rationalized by the Coordinating Committee.

One of the most important tasks to be supervised by this Coordinating Council will be the development of an integrated marketing plan for Erie. There has been agreement in the region that it lacks a coordinated vision of how best to "sell" Erie – to itself as much as to others. The recent establishment of the Convention and Visitors' Bureau and current plans for a convention center and new hotel will focus even more attention on this marketing strategy. The Coordinating Council can work with the key agencies who will have marketing responsibilities (the EDCEC, the Chamber and the Convention, and the Visitors' Bureau as well as the multiple units supported by state agencies) to develop a clear and mutually reinforcing message. A place to start is with the organization of "on-line" information, which is somewhat outdated and not well organized.

A second early-on task of the Coordinating Council will be to review the adequacy of resources for economic development in the region. As noted above, it has been hard to assess whether current programs are sufficiently resourced because there are so many agencies involved. Services to firms already in the region are spread among many apparently unrelated institutions and might be confusing to those firms seeking access.

The Senior Vice-President of the Grand Rapids Michigan Right Place Program visited Erie in May 2001 to speak at one of the economic development forums. He described the basic elements of the "Right Place" program, considered one of the nation's "best practice" regional development efforts. He stressed the need for accountable organization, sharp focus, and strong private sector leadership. Over 75 percent of the budget for the Right Place program comes from the private sector, and the organization raises the rest through operating budget contributions from the public sector and project-specific grants. By comparison, the EDCEC receives less than 15 percent of its annual

operating needs from the private sector and is very dependent on project specific grants from local, state, and federal authorities.

On the Government Side

Our assessment is that the current structure of civil jurisdiction – local government – in Erie has contributed to a number of trends that are prejudicial to economic development in the region. Not only is local government not part of the solution to Erie's economic development needs, it is a major part of the problem. This is not to assert that local leaders have sought explicitly to limit economic development opportunities. In fact, some have been thoughtful and articulate advocates of planned investment and smart growth.

However, the very multiplicity of jurisdictions with widely disparate revenue capacity, competing short-term interests, and few effective mechanisms of cooperation have created a sharply uneven playing field for the wealth-producing private sector. The fragmentation of civil jurisdiction has under-supported K-12 education and failed to establish effective post-secondary educational institutions – at the very time that the emergence of a skill-based, knowledge-based economy places Erie at even greater risk. Because there is no region-wide land use plan, ugly and wasteful suburban sprawl has eroded one of Erie's most important long-term assets by chewing up open space, generating traffic congestion, and making the entire region less physically attractive.

Our most ambitious recommendation would be for the Erie region to promote the consolidation/merger of many its 38 fragmented, overlapping, and competing civil jurisdictions. If leaders in the region wished to make a strong statement of commitment to change and progress, there would be no bolder and, over the long haul, no more consequential way to do it.

On the other hand, we are concerned that a sweeping consolidation of civil jurisdictions is simply not feasible in the Erie region within the next five years that is our time horizon for action. We have concluded that divisions among political jurisdictions run deep and that local government leaders are not prepared to advocate consolidation of civil jurisdictions. Moreover, there may not yet be enough pain. Many of the negative economic trends we see have been masked by the last ten years of nearly unprecedented growth in the national economy. While that mask may very well slip away over the next few years, it will take a while for the harsh impacts of slow growth, poor growth, and no growth to be widely felt.

The Erie region needs a countywide governance body that can progressively assume greater authority and responsibility for critical economic development-related civil functions that ought not be exercised independently by competing local institutions. In our view, the County of Erie government is best positioned – perhaps uniquely positioned – to assume this role.

If widespread consolidation of civil jurisdiction in Erie is "off the table," there seems only one realistic alternative – to gradually vest the County government with the authority and resources for carrying out those functions that, if left to multiple jurisdictions, would continue to drag down the community and economic development of the entire region. We think that the County government needs to step up to a higher level of responsibility

for reducing fragmentation and overlap among the several jurisdictions, and offering new approaches to coordination of governmental services in the region.

Recommendation # 2

We recommend that local government authorities and civic leaders undertake a five year plan to expand and strengthen the authority of the County of Erie to assume larger responsibilities for selected civil functions critical to sound community and economic development in the region.

We see three particularly important and tightly related targets or opportunities for this process:

- expanded County government responsibility for regional land use planning;
- some form of countywide revenue sharing and tax coordination; and
- an expansion of jointly administered and regionally coordinated governmental services.

Land use planning: An ambitious but potentially politically difficult strategy would be to seek to place all planning, zoning, and permitting in the hands of the County government. An only slightly less aggressive approach would be to give the County planning department the authority to review and approve the zoning and permitting authority of the other jurisdictions. The more limited but still feasible approach would be to strengthen the land use planning capability of the County planning department, and to depend on a process of public hearings and the dissemination of the County land use strategy to influence local jurisdictions.

Importantly, these need not be seen as "all or nothing" choices. Not all the jurisdictions in Erie would need to agree to any of these alternatives. Only a few of the non-County jurisdictions, including the City of Erie and its neighbors, could decide to pool with the County their approach to land use planning, zoning, and regulation. We think these few could demonstrate the advantages and create the momentum that over time would convince other local jurisdictions to participate.

Revenue sharing and tax coordination: New forms of regional cooperation are essential to developing an effective approach to revenue sharing in the region and for coordinating revenues and public expenditures. Without some way of beginning to level the playing field among jurisdictions in the region, even sharper variations in tax capacity will inevitably develop, and the multiple jurisdictions will continue to compete for property tax-generating new investment. To the extent that competition plays out in housing development, it obviously impairs efficient investment in public infrastructure and hurts the entire region. As it plays out in commercial and industrial development, it just as obviously impairs economic development and again hurts the entire region.

One form of revenue sharing would be adoption of a "regional asset districts" approach where all the local jurisdictions agree to underwrite the costs of maintaining certain services or facilities that support that particular asset. These approaches have been tried successfully in other regions and appear to be feasible under Pennsylvania law.

Another approach is an agreement to share or apportion revenue derived from new economic development related investment. Under such an approach, new revenue deriving from property-based tax on new commercial or industrial facilities would be shared between the jurisdiction where the investment occurs and a regional pool which would be used to equalize per capita expenditures for certain public services such as schools or infrastructure. This approach might require new legislation in Pennsylvania.

Still another form of revenue sharing that has been suggested by the Council of Great Lakes Governors would involve the application of a conversion tax to all farmland and open space that is converted to other uses. Proceeds from such a tax could be channeled into a fund that could be used for urban revitalization, including brownfield re-development. This option carries the added benefit of beginning to put some brakes on the rapid urbanization of greenfields in the Erie region.

Several metropolitan regions in other parts of the United States have moved to revenue sharing and coordination in public finance in many forms to reduce disparities among jurisdictions. There are many working models available to officials in the Erie region.

Expanding and coordinating regional public service: A third area of opportunity lies in the coordination and joint delivery of public services. Here we see considerable potential of regional cooperation.

In June 2001, Richard Porth, Executive Director of the Capital Region Council of Governments (the COG) in Central Connecticut, visited Erie as part of the economic development forums. He described the COG's role in creating and coordinating the Capitol Region Partnership, which brought together eight major regional organizations with shared responsibility for public support of economic development in this multi-jurisdictional region. He outlined the accomplishments of the Partnership in strengthening the region's economy, facilitating inter-town and interagency cooperation, strengthening the region's economic hub – Hartford – and generating a stronger regional identity.

We believe the accomplishments cited by Porth in Central Connecticut are also feasible in Erie, and that Erie's Council of Governments can play an important role in helping to catalyze action. We believe that there are many opportunities for coordinated service delivery among municipalities. With close cooperation between the County government and the COG, we urge concerted action to progressively widen and deepen the joint services provided on a joint or countywide basis.

In addition to urging this county governance, we would encourage targets of opportunity for municipal consolidation. For example, we would recommend that Erie and the townships and boroughs closest to Erie investigate the consolidation of several civil functions or outright merger. Notwithstanding our concern about opposition to governmental consolidation generally, it may be that we have misread the opposition to consolidation, especially among particular municipalities. Perhaps limited approaches to consolidation are feasible.

Recommendation # 3

We recommend that the County offer incentives and financial assistance to those Municipalities that have an interest in the consolidation of governments. We further recommend that Erie officials from all sectors, including the proposed Civic Coordinating Council, petition the State to join immediately in this incentive strategy.

The fragmentation of responsibility for public education in Erie is causing serious and long-lasting problems for the region. We believe the gradual integration of public education in the Erie region into a single system ultimately will prove essential to any significant improvement in educational achievement and attainment in the region. Again, however, we see little foundation for moving quickly to a school consolidation strategy. School rivalries run just as deep as political divisions.

Recommendation #4

We recommend that the proposed Civic Coordinating Council, in cooperation with education leaders and County officials, establish a regional task force or commission in Erie to explore new strategies for the alignment and amalgamation of public education, with special emphasis on issues of finance and equity.

We also urge consideration in the short term of such measures as countywide choice among public schools, countywide magnet schools, and perhaps the establishment of a regional technology school.

School district leaders will most certainly welcome this approach. District personnel already meet regularly in the County, and of course the three-County Northwest Intermediate Unit based in Edinboro provides assistance and coordination to school districts in the region. Still, we think it critical that public and civic officials, elected and appointed, must begin to assume a new level of leadership in promoting consistency, cooperation, and (in our judgement) eventual consolidation among the Erie County schools.

In all these areas, further research and analysis will be essential before developing a firm plan of action to eliminate the problems resulting from fragmented local government in Erie. Still, the broad outlines of a strategy are clear and the areas discussed above are the most obvious places to get started. Each is a problem area in which the lack of unity and consistency obviously and immediately impairs the economic growth of the region.

We understand that some, perhaps several, of the local governments in the region will be unenthusiastic about "surrendering" important civil responsibilities to the County of Erie. Getting agreement sufficient to build momentum for these actions certainly will require strong support from the business community. To help consolidate that support, we recommend that the private sector undertake a special effort to review and

strengthen the capacity of the County government to build accountability and support for this strategy.

Recommendation #5

Specifically, we recommend the proposed Civic Coordinating Council work with elected officials to undertake a "performance and potential " audit of the County government to identify areas where the County might strengthen internal capacity.

Getting Connected

Business and government leaders in Erie are increasingly concerned about being "left behind" in the push toward high-speed Internet connectivity. We believe these concerns are justified. Telecommunication providers in Erie have not been aggressive in developing and marketing high-speed Internet connectivity to businesses and residences. Nationally, competition has resulted in substantial capacity in developing the basic skeletal infrastructure for high-speed Internet connection. But in local markets, businesses and residents are often faced with a lack of competition that fails to create the incentives that would actually link individual customers to intra-city connections.

This is the situation that prevails in Erie. The region apparently is viewed by the major telecom providers as a relatively small market, not warranting major investments. Broadband Internet connections remain limited and expensive. Major businesses are concerned about support for electronic commerce that depends on high-speed Internet connections. Individual citizens are forced to rely on dial-up connections to the Internet. Faced with this situation and the prospect of little change in the years ahead, there has been growing interest in treating high-speed connection to the Internet as a "public infrastructure" issue and finding new strategies to provide it through publicly owned or publicly based services. Several other regions throughout the US have moved to provide high-speed Internet access through government-supervised strategies.

For example, the Director of Technology Services for Cary, North Carolina visited Erie for one of the economic development forums to describe the program under development in that region to provide integrated voice, data, and telephony services. He provided extensive supporting materials highly relevant to the situation that faces Erie. He was optimistic both about the feasibility of the Cary approach and the economic impact on the region.

Based on the experience of Cary and several other cities, counties and regions around the country, and after consideration of how such an initiative could contribute to development in Erie, we believe that a carefully crafted initiative to accelerate the availability of high-speed Internet access is warranted. However, we urge a conservative approach and believe further careful study is essential.

The economic development impact of "universal" Internet access in Erie needs to be carefully understood. It is important for existing firms whose competitive environment demands a greater commitment to electronic commerce to have better Internet access in Erie than is now available to them. If the existing manufacturing base in Erie is to continue to provide over the next 5 -10 years roughly the same proportion of the region's total income it now provides, it will have to evolve, among several other factors, sophisticated electronic commerce capability.

We are especially concerned for the smaller, dis-aggregated firms in the plastics and precision machining sectors of the regional economy. The larger firms probably can take care of themselves. But the current strength of Erie's economy lies with its smaller manufacturers where financial and technology resources are limited. Internet access will help these small firms, but only if they can also get help in how best to use the new high-speed connections and how to implement electronic commerce with customers, suppliers, and internally.

Especially in today's economy, there is no reason to anticipate that universal high-speed Internet access in Erie will attract droves of new "dot-coms" by turning Erie into some sort of "high tech center." There simply are no longer that many telecom-dependent, footloose firms out there. Over time, Erie might attract a few companies looking for better world-wide telecom connections in a relatively low-cost environment. And again, over time, local entrepreneurs may begin to build new companies that optimize high-speed Internet connection, perhaps especially companies that serve the manufacturing base of the region. But there should be no illusions that universal high-speed access will immediately draw significant new investment into the region. This will happen slowly and probably will follow, not lead, trends in the national economy. But we are confident that within the next few years, there will be a resurgence nationally of entrepreneurial activity in the "high tech" sector. Erie can begin to prepare for this by offering its entrepreneurs and potential entrepreneurs the skilled workers to accompany the network infrastructure.

Ultimately, the greatest impact of this strategy will come from how it helps shape skills and attitudes in the region. The more important economic results of this strategy will evolve from the new skills of residents who can begin to use the Internet more widely for a variety of purposes, integrating it into their daily life and developing work skills.

We are especially interested in how a program of "wiring Erie" for the Internet can create a stronger sense of community and build "sizzle" in the region, countering the prevailing attitude that Erie is getting left behind. Somewhat isolated physically, Erie can strengthen its connections to the rest of Pennsylvania and the rest of the world.

Recommendation #6

We therefore recommend a coordinated, countywide effort to develop an Internet Access Strategy and Program through the rapid deployment of broadband network infrastructure that will optimize long-term economic development outcomes for the region.

We propose careful consideration of the following factors as important design criteria:

- Make this a countywide effort. Much of the early momentum and leadership is coming from the City of Erie, but many of the businesses and higher-income households who might be "early adopters" of high-speed connections are in the suburbs.
- Develop an integrated system that offers telephone, cable TV access, and Internet connections as a package to potential customers. Other regions have found the scope of service offerings to be a critical factor of financial and technical feasibility.
- Find a private provider to manage and help finance the basic infrastructure and to secure multiple providers who would compete on the dimensions of service and price for customers in the region.
- Create a regional community-based effort that would develop the education and training programs to help people figure out how to fully use the broadband network for governmental, civic, and educational functions as well as for economic development. This group could develop workbooks and training programs for residences, small businesses, and government leaders.

Getting Smarter

We do not wish here to convey the sense that people in Erie are somehow not as "smart" as people elsewhere. Of course that is not true. Rather, on average, the population is not as well educated or trained beyond high school as are people in other economic regions with which Erie competes. We use this phrase therefore to suggest the challenges Erie faces in increasing the post-secondary education and skills attainment of the regional workforce. It is unlikely that there can be significant improvements in the Erie economy without a sharp increase in the skill endowment of the region.

Of course some of this problem lies with the public education system that perhaps is not doing as well as it should in preparing high school graduates for college or other venues of post-secondary skill development. But even if that situation were to change overnight (and it won't), it would take years – one or two decades – before the movement of new high school graduates through college makes a significant statistical difference in the attainment level of the region's population. Of course it is critical from an economic development standpoint to continue to work to improve the quality of the K-12 system. Families will not locate to or stay in a region where their children cannot get a decent education. But generational changes in skill levels mean too little too late in the modern economy.

In years past, the lack of post-secondary educated people in a region was generally seen as a "demand side problem." That is, it was assumed that people did not pursue post-secondary study primarily because they had good economic prospects without it. There were good jobs with good futures available for high school graduates. In the past

few years, labor economists have begun to appreciate the "supply side" issues of education and skill attainment. As the economy has developed a skills and knowledge bias, those regions with an available stock of more highly trained individuals have done better than those with fewer post-secondary trained workers. Especially since the mid-1990s, investment in high wage creating jobs has flowed disproportionately to regions with higher education attainment levels, regardless of low unemployment rates. Many companies in the "knowledge economy" would rather take their chances in a worker-scarce but high-skill area than in a worker-rich but low-skill area. This does not lead us to suggest a "if we build (train) it, they will come" strategy, but it does force sharp attention to issues of educational attainment in a region looking to develop and grow.

We think there is a big problem on the supply side in the post-secondary, sub-baccalaureate labor market in Erie. Employers recruit for jobs requiring a bachelors' degree or an advanced degree from a national or even international labor pool. If there were a surge of demand for four-year and advanced degrees in Erie, employers could recruit most of those people to Erie from outside the region. However, at the sub-baccalaureate level, employers are still dependent on the regional labor market and that is where Erie has a serious supply problem.

This problem will not be solved with on-the-job training or grants to employers for customized job training, important as those strategies can be. Employers will focus training for their current workers – to the extent they provide such training – on short-term, task-specific activities that rarely result in a technical or professional credential for the worker. This will not change the general education and skill attainment level of the Erie workforce.

Recommendation #7

We recommend the careful design and phase-in of an innovative community college in Erie focused primarily on the technical and occupational skill development needs of the adult population of the region.

There is reason to believe that the absence of a community college in Erie over the past several years has significantly contributed to the prevailing situation of low post-secondary skill attainment. As we have previously noted, the lack of occupational demand has had a lot to do with this, but it also appears that there has been a limited supply of programs offering credentialed occupational/technical skills in the Erie region, at least relative to other parts of the state and nation. Over the past few years, the pace at which post-secondary credentials have been issued by two-year colleges elsewhere in Pennsylvania and the nation has increased, and Erie has fallen further behind.

On the other hand, merely establishing in Erie today a conventional community college that looks much like others around the state will not be adequate to meet the current challenges. While it might be a good strategy to avoid falling further behind, it is not a sufficient strategy to pull even, much less to leapfrog ahead.

We recommend therefore a very focused effort to build an innovative community college that can respond directly and very quickly to skill needs and potential demand in the region. Such an institution would be concerned primarily with "terminal degrees" – one and two-year associate's degrees and credentials that would immediately qualify the recipient for good wage jobs in technical and occupational employment clusters. These programs would be extensively modularized to allow for part-time study since most adults with full-time job and family responsibilities cannot go to school for the equivalent of six or more credit hours at a time. The institution should be run by administrators and taught by faculty who are specialized in adult education.

This new institution would certainly have a "general studies" curriculum to augment its focus on occupation/technical education, but its mission would be primarily to help under-educated adults develop the knowledge and skills they need to move into high paying jobs in the regional economy.

The capabilities of existing post-secondary institutions in Erie need to be carefully incorporated in the design of a new initiative. For example, existing higher education institutions in Erie can provide the non-residential, first two years of a four-year program for those who are seeking that. There are other two-year associate's degree programs and even some one-year credential programs available in Erie. However, we do not believe that there are sufficient offerings available today from these other educational institutions in Erie to provide the necessary range of occupational/technical courses at the time, place, and cost that will work for the thousands of adults in the region who might avail themselves of programs with this orientation.

James Jacobs of the Community College Research Center at the Teachers College of Columbia University visited Erie to participate in one of the economic development forums addressing post-secondary education. Jacobs underscored the importance of the sub-baccalaureate labor market. He offered to organize a team of national experts on community colleges to return to Erie to assist in the design of a new two-year institution college. We urge that the County take up this offer by Jacobs. The past few years have seen a great deal of ferment and innovation among community colleges around the nation as they all struggle to respond to the lifetime learning imperative. Erie can take advantage of the best practices that have emerged from this innovation.

We estimate that it will require two or three years to properly organize a two-year public institution in Erie that can offer the range and quality of educational programming appropriate to the needs of adult workers in the regional economy. The institution must be carefully structured for accreditation and must meet the state's requirements for providing reimbursement to the institution on an FTE basis. As that process moves forward, the region may begin to experiment with loan, grant, or voucher programs for adults that might "kickstart" the college, and begin to demonstrate the importance attached to this effort by local officials.

Getting Competitive

The recommendations above have focused on building a competitive region by reorganizing the public and civic institutions, developing a new strategy for Internet connection, and strengthening post-secondary education.

This section focuses more on the challenges facing the private sector firms in Erie and how they might be supported as they rise to those challenges. We suggest a set of inter-connected initiatives that offer major potential to strengthen the existing economic base and to generate new business development.

We think it is very important to do everything possible to shore up existing key sectors and, simultaneously to begin now to build new growth into the Erie economy. It is also important to understand that these are tightly connected strategies; it is not a question of one versus the other. New businesses are not likely spring forth from nowhere to become major sources of income and jobs in the Erie economy. New industry groups will evolve from existing ones.

Even the so-called "new technology" firms will seldom suddenly pop up, unrelated to anything now going on. For example, software development firms are far more likely to emerge in response to market opportunity presented by local existing manufacturers or local health care providers than in response to, for example, the financial service markets of New York or the electronics industry of the northern California. Entrepreneurs are not literally born in a garage. Most of them come out of existing areas of regional specialization. Erie's current economic strengths will not simply fade away to be replaced by unrelated new ones. Rather, especially if guided by thoughtful development policies, the current strengths will evolve into new ones. The recommendations that follow are meant to facilitate that process.

Recommendation #8

Build and strengthen mechanisms of inter-firm cooperation in the small firm dominated metals and plastic sectors.

In several of Erie's key industry groups, particularly the manufacturing sector, much of the strength lies with small and entrepreneurial establishments that have become highly specialized around particular technologies and markets. That specialization has been critical to their competitiveness; they have been able to offer highly customized products to relatively narrow market niches that have specialized requirements for plastics and metals and for the machines, tools, dies, jigs, fixtures and other equipment to machine and build them. Because they are small and nimble, these firms have been able to react quickly to changing market conditions and new production technologies.

Now, those firms are facing new competitive challenges from equipment manufactures in other nations with radically different costs. In this environment, being small has some disadvantages. Market- and technology- sensing mechanisms are limited. The lack of a skilled workforce is a growing problem.

Many manufacturing firms are discovering that cooperation with other similar and complementary firms can be a critical strategy in shaping their competitive advantage. Because segmented markets tend to demand customized products and services tailored to narrow applications and particular needs, many firms – especially the smaller and mid-sized ones – now find that they must specialize around a few core competencies rather than trying to be all things to all customers. That often leads to the need to cooperate with other specializing firms, using one another's complementary capabilities to do jointly what it is not feasible to do individually.

Working together, firms can sometimes afford to make improvements or gain capabilities that they could not afford by themselves. Firms with complementary products can join forces to gain access to markets that demand a wider mix than they can offer separately. They can work together to develop products that use their joint capabilities. Firms facing the need to upgrade the skills of current workers or attract new people into the industry can share the cost of training programs.

Of course, much of this is not new. Firms have always worked together when they needed to extend their own resources. Joint ventures have been around for a long time. Industry and trade associations have long provided a way for firms to cooperate on such things as insurance programs and legislative lobbying. Still, many experts in modern manufacturing agree that new technologies and new global markets forces seem to put a higher premium on knowing when and how to put these collaboratives together.

Economic development and publicly supported manufacturing assistance organizations are also paying a lot more attention these days to networks and inter-firm cooperation. They are following these same trends of market and technological change; they know the businesses they are trying to help are interested in forming alliances. In addition, many economic development agencies are impatient with old-fashioned "one-by-one" strategies of working with individual firms as though they were unconnected in the regional economy. With scarce resources, innovative development programs are looking for new strategies of reaching more firms.

These are not new ideas in Erie for the firms, their associations (such as the Northwest Pennsylvania Manufacturers Association), or the economic development organizations that seek to help them. However, we see greater opportunity for inter-firm cooperation in Erie. We are impressed with the record of success of the Grand Rapids Right Place Program. Its efforts to help their small manufacturing base achieve "world class" status have emphasized convening Industry Councils that provide members with more opportunities for networking, sharing of best practices, and taking leadership roles in community-wide workforce development. This approach could work well in Erie.

Recommendation #9

Leverage locational assets to attract a greater share of the high end of the distribution, transportation and logistics industry already beginning to cluster in the NAFTA Corridor around Niagara-Buffalo.

The global economy is shifting rapidly toward electronically-facilitated commerce in ways that offer potential for the development of a "high-end" distribution, transportation and logistics cluster in Erie. Economic development officials in Western New York have already targeted this industry for major attention in their region, for reasons of location and multi-modal transportation access that have as much application in Erie as in Buffalo.

As customer-supplier relationships evolve and as companies find Internet solutions to reach their consumers, there are huge impacts affecting distribution, transportation and logistics. For example, large shipments from manufacturers to distribution centers will be converted into smaller shipments and the number of shipments will increase sharply. Smaller shipments can be moved more quickly than larger ones. Cycle times will continue to shrink, increasing manufacturing margins that can then be reinvested into faster and better delivery. Just as important, sophisticated logistics expertise becomes very important.

These trends could combine in a way that creates considerable market advantage for transportation-advantaged regions like Erie. Transportation inter-dependencies create a "magnet" around which economic activity has grown. Transportation inter-dependencies go deep. Even if most firms that ship by rail do not frequently ship by priority air, they frequently ship by truck. Many firms that ship by truck often rely on air cargo and sometimes on priority air freight. All these shipping alternatives create a market for warehousing and distribution services and logistics management. In other words, an array of manufacturing and non-manufacturing companies that share a dependence on or market interest in transportation and distribution have been able to find advantage in other regions, and they could do the same in Erie.

Erie should focus on the highest-wage, highest-technology segments of this sector. Erie does not want merely to become a big truck stop on a distribution corridor. It wants to be the center of logistics for transportation and distribution.

This industry is in fact a dynamic and surprisingly high-wage growth sector. In Indianapolis, for example (site of a major Federal Express air and surface transit hub), the transport and distribution sector contributes more than 17 percent of the region's traded sector earnings. Even the warehousing sub-group is relatively high-wage. The contribution of the Indianapolis warehousing industry to earnings was greater than its contribution to employment, meaning its wages were above the average wages paid in the traded sector. Average wages in warehousing amount to \$38-40,000 per year in 1998 dollars.

Land use constraints – traffic and transportation infrastructure, air quality, and water availability – will be important challenges if these opportunities are to be realized in Erie

(although virtually any kind of economic change will impact these same land use issues). Of course, economic development strategy that looks to an advanced technology transportation and distribution cluster puts a special premium on something that government leaders throughout Erie have not been good at – regional cooperation. The advanced technology, high value-adding companies likely to be attracted to a transportation and distribution cluster in Erie are the very companies most likely to be influenced positively by smart growth strategies that avoid congestion, prevent sprawl, and protect the environment.

A distribution, transportation and logistics action team should be appointed by the Civic Coordinating Council to review the current situation in this industry in the Niagara-Buffalo-Erie-Cleveland corridor, to identify key developments and local trends, and to assemble an economic development strategy of recruitment and expansion. Erie has federally a designated free trade zone that could be a useful component of a new development strategy.

Recommendation # 10

Capitalize the potential for additional health-related manufacturing and services.

The health sector has been one of the few bright spots in the regional economy over the past few years. It has rung up impressive employment gains even as the health industry nationally has been forced into a deep restructuring. It has emerged as the health care center for northwestern Pennsylvania. While it probably poses no real threat to health care facilities in the much larger markets of Cleveland and Pittsburgh, there is potential to serve additional population groups in western New York and even in the extreme northeast of Ohio.

However, the health care sector in Erie may be large enough to demonstrate its most important economic impact not by expanding health care per se, but rather by generating health-related manufacturing and services in Erie itself. The hospitals and sub-acute care facilities of Erie should be seen as the core of an emerging cluster. These health care facilities need specialized materials and services that could be produced in the region; if carefully coordinated, they constitute a big enough market to begin to stimulate new business development. These same facilities offer access to research expertise that could support new business in the bio-medical and bio-engineering industries.

A health industries action team should be assembled by the Civic Coordinating Council. This team can begin working with the health care providers, insurance firms, and other current health-related product manufacturers and service firms to identify new business opportunities in the region and develop the starting points to recruit and expand such operations in Erie.

Recommendation #11

Establish a new program for seeding and supporting new business – the Program for Advanced Technology Entrepreneurship.

As has been noted several times in this report, Erie's entrepreneurial tradition has faded in recent years, with few start-ups in newer, technology intensive efforts. We don't think there is a single cause for this, and we believe a multi-faceted strategy is needed to turn this situation around. A new Program for Advanced Technology Entrepreneurship would develop a series of new technology and new business-focused initiatives. There is already a developing plan for establishment of an "Erie Technology Incubator" linked to Erie's New Communities Initiatives (former Enterprise Zone designation). This proposal might be supplemented by an aggressive entrepreneurship training program that could provide special assistance and business mentoring to emerging firms in technology intensive industries.

Because we believe that many new businesses emerge to meet the needs of existing businesses in a region, we urge consideration of a "new markets" initiative. Under such a strategy, the larger firms in Erie that regularly purchase technology-related goods and services from outside the region would agree to inventory and identify high-priority opportunities for local sourcing of technology purchases.

We also suggest the formation under this new program of a private equity seed capital fund that might make very early stage investments in emerging businesses based in the region. The fund might use professional venture management to review investment opportunities, but top level executives of local firms could become involved in helping identify technology and market relationships for the portfolio firms.

Recommendation #12

Accelerate development of the commercial and entertainment district in the downtown of Erie.

In many of our early interviews with key leaders in Erie, we were told that the region lacks a sense of vibrancy and energy. We have referred to this as a lack of "sizzle." Many believe that Erie is losing its "brightest and best" young adults because of this. Detailed survey work confirmed that this is a widely shared view. We believe the recommendations calling for an Internet access program for Erie, if implemented, will begin to create a sense of pride in the region – some sizzle. It should offer several opportunities for creative activities to engage the citizenry in innovative and interesting governmental and civic initiatives that will contribute to a much better self-image for Erie.

However, it is also important that Erie develop a commercial and entertainment district in the downtown that will begin to "show off" the city and the region to visitors, and give all residents of the region the kind of downtown that all major metropolitan areas need. Efforts are already well underway to develop a convention center and hotel complex, and there are other attractive waterfront activities emerging. There are unusually

accessible water-based recreation opportunities in Erie that are promising areas for future development.

The fact that these opportunities have not been previously developed probably reflects the limited growth of purchasing power in the region over the past several years. The regional economy has not seen as much growth in personal income as have many other parts of the country, which may well have been a drag on new entertainment-related facilities in the City of Erie. An aggressive new focus on tourists and visitors could change that and begin to create a larger market for downtown development.

It has not been our experience that tourism and visitor promotion is a high value-adding strategy for most regions. Jobs in entertainment and hospitality industries are often low wage. However, if tourism and visitor-focused activities can begin to create the markets that will support the emergence of a commercial and entertainment district in the downtown, it will have important consequences for the entire region, from the urban amenities it makes feasible if not from the jobs. We therefore hold it important to continue to encourage and support accelerated development for the downtown area.

Getting Started

The first thing to do is to establish the Civic Coordinating Council, by whatever name it would be known. Formation of this group is essential to create a clear locus of responsibility for moving forward in considering the findings and recommendation of this report and establishing an implementation plan. While many of the measures suggested in this report are under the control of local government authorities, a single civic body can assume a coordinating role that could help catalyze actions by disparate groups in the public sector as well as by non-governmental groups.

We believe an organizing committee should be established, drawing from the four groups that have led this strategy development to date – the Economic Development Corporation of Erie County, the Erie Conference on Community Development, the City of Erie, and the County of Erie. This group, in consultation with the board chairs of the non-profit corporations and the County Executive and the Mayor, would draw up an initial plan of organization, membership, and mission for the Coordinating Committee. The initial, substantive work of the Council would be to consider and debate the recommendations of this report. It would decide which to adopt, which to modify, and which to "send back" for more study. Based on recommendations from the organizing committee, it would establish a process by which to assign responsibility for follow-up actions and for monitoring progress.

The consultant team believes that it will be important to establish early momentum for this work. While none of these ideas presented here can be considered a "quick hit," it will be important to establish an implementation schedule that allows for at least a few specific actions that can be completed within a 3-6 month period.

A Final Note

As noted at the outset of this report, we believe that, if authorities in Erie do not move rapidly to take hard steps to strengthen the regional economy, future prospects are not good. Even at that, we think things will get worse before they get better. The lack of growth momentum in the national economy will most certainly accelerate the slowdown in Erie and cause unemployment to increase.

However, we also cited a strong civic tradition and a sense of optimism among the leaders in all sectors. We believe these factors will carry the day.

Appendix Comparing Erie to Other Metropolitan Regions

MSA Counties in Comparison Study

Erie PA = Erie County
 Scranton - Wilkes Barre - Hazleton PA = Lackawanna, Columbia, Luzerne, and Wyoming counties
 Allentown - Bethlehem - Easton PA = Lehigh, Carbon, and Northampton counties
 Reading PA = Berks County
 Columbus GA - AL = Muscogee, Chattahoochee, and Harris counties GA; Russell County AL
 Fort Wayne IN = Adams, Allen, DeKalb, Huntington, Wells, and Whitley counties
 Grand Rapids - Muskegon - Holland MI = Kent, Allegan, Muskegon, and Ottawa counties

Land Area & Population Density: Central City Counties

CENTER CITY COUNTY	Land area (square miles)	Persons per square mile, 2000
Erie - Erie County	802	345.4
Scranton - Lackawanna County	459	450.1
Allentown - Lehigh County	347	864.9
Reading - Berks County	859	416.9
Columbus - Muscogee County	216	841.7
Fort Wayne - Allen County	657	481.5
Grand Rapids - Kent County	856	642.8

Population Change: Central City Counties and MSAs

CENTER CITY COUNTY	2000 Population	1990 - 2000 Population Change		
		Number	Rate	MSA Rate
Erie - Erie County	280,843	5,268	1.9%	1.9%
Scranton - Lackawanna County	213,295	(5,802)	-2.6%	-2.2%
Allentown - Lehigh County	312,090	20,960	7.2%	7.2%
Reading - Berks County	373,638	37,115	11.0%	11.0%
Columbus - Muscogee County	186,291	7,011	3.9%	5.3%
Fort Wayne - Allen County	331,849	31,013	10.3%	10.1%
Grand Rapids - Kent County	574,335	73,704	14.7%	16.1%

NOTE: In Erie and Reading, the MSA consists of a single County.
 Where there are multiple center cities, the first named determines the central County.

MSA and Central City County Populations, 2000

Metropolitan Area	2000 Population		
	Central County	MSA Total	% Population in Central County
Erie PA	280,843	280,843	100.0%
Scranton - Wilkes Barre - Hazleton PA	213,295	624,776	34.1%
Allentown - Bethlehem - Easton PA	312,090	637,958	48.9%
Reading PA	373,638	373,638	100.0%
Columbus GA - AL	186,291	274,624	67.8%
Fort Wayne IN	331,849	502,141	66.1%
Grand Rapids - Muskegon - Holland MI	574,335	1,088,514	52.8%

Race and Ethnicity: Central City County, 2000

CENTER CITY COUNTY	White	Black	> One Race	Asian	Hispanic*
Erie - Erie County	89.8%	6.0%	1.0%	0.7%	2.2%
Scranton - Lackawanna County	95.9%	1.2%	0.5%	0.7%	1.4%
Allentown - Lehigh County	83.2%	3.1%	1.1%	2.1%	10.2%
Reading - Berks County	84.8%	3.3%	0.9%	1.0%	9.7%
Columbus - Muscogee County	55.0%	29.3%	2.4%	1.7%	10.4%
Fort Wayne - Allen County	81.3%	11.2%	1.5%	1.4%	4.2%
Grand Rapids - Kent County	80.3%	8.7%	1.6%	1.8%	7.0%

* Hispanic refers to ethnicity, and may be of any race.

SOURCE: Preliminary data from 2000 Census.

1990-99 Migration Estimates: Central City Counties

CENTER CITY COUNTY	1990-99 Net Migration			1990 Population	1990 Foreign-born Pop.
	Domestic	International	Total		
Erie - Erie County	-11,540	2,420	-9,120	275,575	5,428
Scranton - Lackawanna County	-8,460	857	-7,603	219,097	4,120
Allentown - Lehigh County	-3,075	4,456	1,381	291,130	12,442
Reading - Berks County	7,928	3,605	11,533	336,523	8,921
Columbus - Muscogee County	-15,805	917	-14,888	179,280	6,101
Fort Wayne - Allen County	-9,693	2,711	-6,982	300,836	5,882
Grand Rapids - Kent County	-11,368	8,043	-3,325	500,631	15,798

**Age and Labor Force Status:
Central City Counties**

CENTER CITY COUNTY	1999 Population by Age			1999 Civilian Labor Force	
	<18 Years	65+ Years	Working Age	Total	% of18-64
Erie - Erie County	72,267	39,475	165,251	140,809	85.2%
Scranton - Lackawanna County	45,510	40,845	120,165	103,390	86.0%
Allentown - Lehigh County	68,283	50,397	181,175	156,124	86.2%
Reading - Berks County	85,524	55,807	216,880	182,574	84.2%
Columbus - Muscogee County	48,287	21,430	112,341	87,085	77.5%
Fort Wayne - Allen County	85,947	37,121	193,403	173,970	90.0%
Grand Rapids - Kent County	155,129	59,211	336,048	331,012	98.5%

**SOURCES OF PERSONAL INCOME
CONTRIBUTIONS TO PERSONAL INCOME (\$000s), 1998**

METROPOLITAN AREA	EARNINGS	DIVIDENDS, INTEREST, RENT	TRANSFER PAYMENTS
ERIE	\$ 4,206,968	\$ 1,263,778	\$ 1,098,990
ALLENTOWN-BETHLEHEM-EASTON	\$ 11,223,242	\$ 3,253,112	\$ 2,526,006
READING	\$ 6,573,210	\$ 1,806,266	\$ 1,407,948
SCRANTON-WILKES BARRE-HAZELTON	\$ 8,623,827	\$ 2,850,290	\$ 3,167,349
COLUMBUS	\$ 4,163,044	\$ 1,003,329	\$ 924,390
FORT WAYNE	\$ 8,910,442	\$ 2,474,290	\$ 1,444,797
GRAND RAPIDS-MUSKEGON-HOLLAND	\$ 19,768,521	\$ 4,936,770	\$ 3,022,029

**SOURCES OF PERSONAL INCOME
CONTRIBUTIONS TO PERSONAL INCOME (%), 1998**

METROPOLITAN AREA	EARNINGS	DIVIDENDS, INTEREST, RENT	TRANSFER PAYMENTS
ERIE	64%	19%	17%
ALLENTOWN BETHLEHEM EASTON	66%	19%	15%
READING	67%	18%	14%
SCRANTON WILKES BARRE HAZELTON	59%	19%	22%
COLUMBUS	68%	16%	15%
FORT WAYNE	69%	19%	11%
GRAND RAPIDS-MUSKEGON-HOLLAND	71%	18%	11%

AVERAGE ANNUAL PAY			
METROPOLITAN AREA	1999	Percent change 1998-9	Rank Among 316 US MSAs
ERIE	\$ 27,864	1.4%	163
ALLENTOWN-BETHLEHEM-EASTON	\$ 32,154	4.7%	62
READING	\$ 31,002	1.5%	79
SCRANTON-WILKES BARRE-HAZELTON	\$ 26,593	2.0%	201
COLUMBUS	\$ 26,131	4.3%	221
FORT WAYNE	\$ 30,052	4.2%	103
GRAND RAPIDS-MUSKEGON-HOLLAND	\$ 31,913	2.7%	67

SOURCE: Bureau of Labor Statistics, November, 28, 2000.

MSA PER CAPITA INCOME							
METROPOLITAN AREA	1994	1995	1996	1997	1998	1994-98 INCREASE	PERCENT CHANGE
ERIE	\$ 20,929	\$ 20,765	\$ 21,617	\$ 22,685	\$ 23,622	\$ 2,693	12.9%
ALLENTOWN-BETHLEHEM-EASTON	\$ 22,969	\$ 23,815	\$ 24,799	\$ 26,335	\$ 27,599	\$ 4,630	20.2%
READING	\$ 23,373	\$ 24,114	\$ 25,046	\$ 26,439	\$ 27,511	\$ 4,138	17.7%
SCRANTON-WILKES BARRE-HAZELTON	\$ 19,917	\$ 20,836	\$ 21,663	\$ 22,792	\$ 23,764	\$ 3,847	19.3%
COLUMBUS, GA-L	\$ 18,420	\$ 19,129	\$ 20,017	\$ 21,288	\$ 22,435	\$ 4,015	21.8%
FORT WAYNE, IN	\$ 22,652	\$ 23,691	\$ 24,188	\$ 25,549	\$ 26,659	\$ 4,007	17.7%
GRAND RAPIDS-MUSKEGON-HOLLAND	\$ 22,157	\$ 23,121	\$ 24,122	\$ 25,618	\$ 26,694	\$ 4,537	20.5%

MSA TOTAL PERSONAL INCOME (\$000,000s)							
METROPOLITAN AREA	1994	1995	1996	1997	1998	1994-98 INCREASE	PERCENT CHANGE
ERIE	\$ 5,862.0	\$ 5,815.0	\$ 6,052.8	\$ 6,340.8	\$ 6,569.7	\$ 707.7	12.1%
ALLENTOWN-BETHLEHEM-EASTON	\$14,023.5	\$ 14,556.5	\$ 15,193.2	\$ 16,182.8	\$ 17,002.4	\$ 2,978.8	21.2%
READING	\$ 8,143.1	\$ 8,442.9	\$ 8,814.5	\$ 9,356.3	\$ 9,787.4	\$ 1,644.3	20.2%
SCRANTON-WILKES BARRE-HAZELTON	\$ 2,660.0	\$ 13,169.2	\$ 13,592.9	\$ 14,157.3	\$ 14,641.5	\$ 1,981.5	15.7%
COLUMBUS	\$ 5,034.9	\$ 5,196.1	\$ 5,432.8	\$ 5,791.1	\$ 6,090.8	\$ 1,055.8	21.0%
FORT WAYNE	\$10,598.1	\$ 11,151.7	\$ 11,466.4	\$ 12,196.9	\$ 12,829.5	\$ 2,231.4	21.1%
GRAND RAPIDS-MUSKEGON-HOLLAND	\$21,912.7	\$ 23,164.2	\$ 24,492.6	\$ 26,337.8	\$ 27,727.3	\$ 5,814.6	26.5%

CIVILIAN LABOR FORCE 1991-99

METROPOLITAN AREA	1991	1995	1999	1991-99 Change
ERIE	135,364	138,836	140,809	4.0%
ALLENTOWN-BETHLEHEM- EASTON	306,457	300,079	313,388	2.3%
READING	174,789	177,324	182,574	4.5%
SCRANTON-WILKES BARRE- HAZELTON	308,653	310,939	304,615	-1.3%
FORT WAYNE	240,892	266,068	263,192	9.3%
GRAND RAPIDS	495,641	548,897	614,660	24.0%
COLUMBUS GA	107,496	113,973	127,448	18.6%

MSA UNEMPLOYMENT RATE TRENDS

YEAR	ERIE	ALLENTOWN- BETHLEHEM- EASTON	READING	SCRANTON- WILKES BARRE- HAZELTON	FORT WAYNE	GRAND RAPIDS- MUSKEGON- HOLLAND	COLUMBUS GA
1991	7.2%	6.7%	6.4%	8.8%	6.3%	8.0%	5.6%
1992	7.7%	7.5%	6.7%	9.8%	6.4%	7.6%	7.4%
1993	7.1%	6.6%	5.9%	8.9%	5.0%	5.6%	6.7%
1994	6.7%	5.8%	4.9%	7.9%	4.4%	4.5%	6.1%
1995	6.4%	5.6%	4.8%	7.7%	3.9%	4.0%	6.0%
1996	5.8%	5.4%	4.3%	7.1%	3.5%	4.1%	5.1%
1997	5.9%	5.0%	4.3%	7.3%	2.9%	3.4%	4.9%
1998	5.2%	4.6%	4.3%	6.2%	2.8%	3.0%	4.7%
1999	5.0%	4.2%	4.1%	5.6%	2.9%	3.2%	5.1%

NON-AGRICULTURAL EMPLOYMENT BY INDUSTRY, 2000 (000s of jobs)

LABOR MARKET AREA	Total Non-Ag Employment	Mining & Construction	Manufacturing	Transportatio & Public Utilities	Trade	Finance, Ins., Real Estate	Services	Government
ERIE	136.6	5.2	34.1	5.0	29.9	5.5	41.0	15.9
SCRANTON	287.7	11.6	55.8	16.7	68.1	13.5	86.3	35.7
READING	171.5	7.9	41.6	8.5	40.1	8.4	45.7	19.3
ALLENTOWN	286.4	12.7	55.4	17.1	62.4	14.4	92.1	32.3
COLUMBUS, GA	121.6	5.6	20.8	4.6	26.4	8.5	34.4	21.3
FORT WAYNE	279.0	14.6	73.6	14.3	66.2	14.4	68.8	27.1
GRAND RAPIDS	596.7	28.4	164.2	20.8	149.2	23.0	154.0	57.1

EMPLOYMENT CHANGE BY INDUSTRY: 1991-2000

LABOR MARKET AREA	Total Non-Ag Employment	Mining & Construction	Manufacturing	Transportation & Public Utilities	Trade	Finance, Ins., Real Estate	Services	Government
ERIE	13.5%	40.5%	-4.2%	22.0%	15.0%	-5.2%	31.0%	15.2%
SCRANTON	10.2%	7.4%	-9.4%	18.4%	6.4%	11.6%	31.4%	7.9%
READING	14.0%	17.9%	-5.5%	32.8%	17.6%	-3.4%	37.2%	12.2%
ALLENTOWN	13.6%	18.7%	-12.3%	28.6%	14.7%	10.8%	31.0%	18.3%
COLUMBUS	24.0%	30.2%	1.5%	35.3%	25.7%	30.8%	61.5%	0.9%
GRAND RAPIDS	34.4%	56.9%	24.9%	30.0%	33.7%	26.4%	53.8%	17.5%
FORT WAYNE	18.8%	43.1%	14.5%	2.9%	14.5%	2.9%	35.7%	12.9%

MANUFACTURING EMPLOYMENT TRENDS 1991-2000 (000s of jobs)

Year	ERIE	READING	ALLENTOWN-BETHLEHEM-EASTON	SCRANTON-WILKES BARRE-HAZELTON	COLUMBUS	FORT WAYNE	GRAND RAPIDS	UNITED STATES
1991	35.6	44.0	63.2	61.6	20.5	64.3	131.5	18,406
1992	35.0	44.3	62.0	60.9	20.7	65.9	132.2	18,104
1993	35.5	43.5	61.5	59.6	20.7	68.6	135.6	18,075
1994	34.9	43.9	60.5	58.3	20.7	71.3	143.5	18,321
1995	35.0	43.6	59.5	56.8	20.9	74.1	150.8	18,524
1996	34.1	43.1	56.9	55.5	21.3	73.6	151.4	18,495
1997	34.1	44.2	57.0	54.9	21.7	75.1	154.6	18,675
1998	34.4	42.8	56.2	54.9	21.9	75.8	159.1	18,805
1999	34.4	41.8	55.4	54.3	21.6	75.1	160.3	18,543
2000	34.1	41.6	55.4	55.8	20.8	73.6	164.2	18,437
1991-2000 % Change	-4.2%	-5.5%	-12.3%	-9.4%	1.5%	14.5%	24.9%	0.7%