"Strategy and Action Plan for Economic Development."

Section One Introduction

Introducing this Report

This is the final report by FutureWorks of a consulting engagement with the Northwest Pennsylvania Regional Planning and Development Commission. FutureWorks' objective in this project has been to assist the Northwest Commission and allied organizations in the region to develop a "Strategy and Action Plan for Economic Development." FutureWorks began its work in mid-March 2002 with the expectation of completing it by mid-October 2002. The research, analysis and consensus building activities of the workplan were complete in October and the preliminary recommendations were already public. However, there was agreement to defer the final report until 2003 in order to give public and private sector leaders in the region more opportunity to discuss the preliminary recommendations before they were put in final form.

This report must be clearly understood for what it is. It is <u>not</u> the *region's development strategy*. It is rather the recommendations of FutureWorks about what the region's development plan should be. This is not a narrow difference. When this project began, there was some expectation that it would result in the delivery and acceptance of a strategy and detailed action plan for Northwest Pennsylvania. Some expected that FutureWorks would actually write for approval by the Northwest Commission and allied organization a document that would be presented as their detailed blueprint for economic development.

This report can be quickly converted into the region's development strategy because most of the recommendations have been widely endorsed by the Steering Committee for the project. However, for it to be truly the region's plan, it must be embraced and "owned" by an accountable group with the widely accepted authority to set development policy for the region. Early in this project, it became apparent to FutureWorks that no such widely accepted authority was in place; and it was not reasonable to attempt to create it within the 12 months of this project. In fact, designing that accountable, accepted authority became a critical task of the project.

This was not totally unanticipated. Below is an excerpt from FutureWorks original proposal to the Northwest Commission. It was subsequently incorporated into the contract and made part of the Workplan Summary that was widely distributed in the region to introduce the project.

In approaching a project of this nature, we see ourselves playing two major roles that can sometimes come into conflict, especially if not well understood at the outset of the project. First, we must serve as an independent analyst, helping our clients – and their clients, the citizens of northwest Pennsylvania – understand better the strengths and weaknesses of their regional economy and of current efforts to improve it. If we are to add value to the thoughtful work already undertaken in past years, we must deliver that analysis from a perspective that is clearly understood to be informed, objective, and unbiased. In short, our clients and their clients have to depend on us to "tell it like it is."

But we have a second role. We must also be a facilitator; helping private and public sector leaders in Northwest Pennsylvania reach agreement on a strategy and action plan for regional development. In this sprawling, multi-jurisdictional region, no single institution or individual calls the shots. Consensus and collaboration are essential and that has to be based on a platform of trust and anchored by system of mutual accountability. Part of our job is to build that trust and strengthen mutual accountability, by facilitating a better common understanding of problems and building a consensus about what to do.

We are comfortable with both these roles and we understand how they can work together and reinforce each other. Our approach to this is to be direct and candid in our assessment of the issues, ambitious in our recommendations about strategies to confront these issues, and responsive to the practical realities of the region as we help build consensus. As the process set forth below in our work plan moves toward completion, our plan would be as follows:

- We will present unvarnished and objective information in as much detail and with as much supporting data as we can muster and we will make clear recommendations for how we think the region should act on that information.
- We will then work hard to help the key groups and individuals in the region reach consensus to the maximum feasible extent on detailed strategies and actions.
- Where our recommendation differs significantly from what seems to be a strong consensus we will note it and move on.
- Where no consensus emerges around key strategies and actions we will offer our own best recommendations and move on.

In our judgement, there is strong consensus about the program aspects of what must be done to halt the accelerating decline of Northwest Pennsylvania. There is widespread optimism (with some healthy skepticism in some quarters) that it can be done. There is not a full consensus about *how to organize to get it done*. There is not yet a structure to facilitate the emergence of that consensus.

Our recommendations deal with these issues. We call for the merger of key multi-county development bodies into a single entity with clear authority and accountability for economic development in the region. We offer what we see as a doable process to carry out that merger in an orderly fashion over no more than 24 months, *while still implementing other critical initiatives*. While not all parties are equally enthusiastic about the merger, we see enough of a consensus among key stakeholders to carry it out.

FutureWorks has always admitted to a bias toward institutional capacity and leadership in our work on regional development. In an important sense, strategy is always the easy part. Good strategic ideas are widely disseminated and easily emulated. But, far too frequently, we have seen good strategy fail for lack of institutional capacity and effective leadership. Therefore, we place a great deal of emphasis on examining the capacity of key regional institutions to carry out the strategies we recommend and we frequently put as much emphasis on these organizational and leadership changes as on the economic development strategies themselves.

This project is an example. Most development practitioners in Northwest Pennsylvania know what strategies this region must adopt. They know that the only way to turn things around is to retain, grow, and attract high value-adding firms. They know that these firms will prosper in regions that can offer them good access to advanced technology, and sophisticated business strategies, entrepreneurial capital and skilled workers to support them. In fact, we have been impressed with the knowledge and apparent skills of development practitioners in the region.

However, in our judgement, the economic development system in the region is not organized appropriate to the tasks it faces. The development organizations are splintered and their effectiveness is sharply limited. Our recommendations call for dramatic changes in organization and management.

As a result, our recommendations for implementing the major strategies may not be as detailed as some anticipated when this project began. In some case, the specific implementing actions will depend on the organizational changes. Too much detail will get in the way of negotiating these changes, while too little detail will lead to confusion and uncertainty about just why the changes are essential. We are confident that this document provides the right balance and we have come to trust the process of change.

Quick Overview of the Planning Process

The FutureWorks Company of Belmont Massachusetts was hired to assist the Northwest Pennsylvania Regional Planning and Development Commission and allied organizations in the region in developing the foundation for a Strategy and Action Plan for Economic Development in NW Pennsylvania. In this process, FutureWorks staff followed generally accepted planning practice, working from information gathering to strategy development and then action planning. Throughout the process, FutureWorks staff filled multiple roles, serving as a source of information and analysis, as a facilitator for public participation, and as a creative force in plan development.

The strategic planning process is shaped by the conviction that strategic decisions are decisions based upon information. Thus, an effective strategic plan rests upon a foundation of information. We recognize economic development as an ongoing activity and realize that significant activities preceded our involvement. We began information gathering with a review of documents and reports from previous planning efforts for insights into the evolution of the current economic situation.

Development of these recommendations for economic development strategy in Northwest Pennsylvania drew upon our scan of the regional economy and an assessment of the local capacity to promote and support economic development. Analysis of statistical data, in-person and telephone interviews, and a survey each contributed to the information base.

- The scan of regional economic structure and performance began with an analysis of regional economic activity and population trends. This provided a picture of how jobs and wealth have been produced in Northwest Pennsylvania and directed our attention to trends and events affecting the sectors that have been major jobs and wealth producers. Then, more in-depth analysis focused on the structure and recent performance of key wealth producing industries. The analysis used data from the US Department of Commerce Bureau of the Census and the US Department of Labor Bureau of Labor Statistics and in some cases, industry databases modified by IMPLAN to provide more complete coverage. Detailed information about data sources and the analysis presented at the first symposium and succeeding analyses comprise Appendix B.
- Leaders from the major business clusters, the community, and the developmentrelated institutions in Northwest Pennsylvania were invited to take an on-line survey. Survey results helped FutureWorks develop a deeper understanding of

how regional leaders perceived the strengths and weaknesses of both the regional economy and the current public-private development efforts. Later, citizens were invited to take the electronic survey to add their voices to the planning process. The survey instrument and survey results are in Appendix C.

Individual interviews contributed to information gathering at several points
during the planning process, adding texture and detail to the statistical
information and survey results. Initial interviews with economic development
professionals provided insight into the current economic development support
activities, complemented the survey, and sought explanations for forces behind
the trends described by economic and demographic data. Once regional
economic development assets and liabilities were identified, interviews with
relevant individuals contributed to our understanding of forces affecting them and
of relevant development efforts currently underway.

Effective strategic planning also requires participation of the entities that will be called upon to implement the plan. FutureWorks' emphasis throughout plan development was on an open, inclusive process that sought involvement of the local economic development community, government and business leaders at every stage. The planning process began in March 2002 and concludes with a presentation of this document in February 2003. Opportunities for participation included three regional symposiums, five steering committee meetings, the on-line survey, and numerous interviews. The timeframe of these activities and additional detail are provided below.

- A Steering Committee drawn from the leadership of the region's economic development entities, elected officials, and businesses convened to kick-off the plan development and assisted throughout the process. Membership on the steering committee was fluid and purposely informal; it expanded over time to add expertise on identified topics of interest. The names of individuals who participated in at least one meeting of the steering committee are listed in Appendix A.
- The information gathering process began immediately to supplement statistical analysis with in person and telephone interviews as well as the survey of business and community leaders. The survey ran from August to October. Interviews began in April and continued until the plan was in final form. A list of all individuals who were interviewed is in Appendix A. This list may in fact be partial. It does not include for example some unplanned telephone conversations and e-mail exchanges with interested parties that sometimes ranged as wide and deep as the formal interviews. Moreover, there were occasional participants in small group meetings who were not adequately identified.
- The *first regional symposium* was held in June and attended by almost 200 people. It began with a presentation of the statistical analysis and a summary of the survey findings. In a facilitated process using small group work, participants then developed their visions and goals for the region, based upon what they defined as *centers of excellence* in Northwest Pennsylvania. While each group was asked to prioritize goals, there was no attempt to develop broad consensus on a single vision statement or goal at this session. Finally, groups of participants developed and prioritized *actionable ideas* for moving Northwest Pennsylvania

forward in terms of quality of life and economic growth. An overview of the topics discussed at that symposium and a summary of their suggestion for goals is attached in Appendix C.

- Following the first symposium, FutureWorks staff developed a series of
 emerging ideas, which were presented in detail to the steering committee for its
 review and comment at the next meeting and in follow-up telephone interviews.
 Their comments plus additional information about identified issue areas were
 used to transform the emerging ideas into preliminary recommendations,
 which were the focus of steering committee meetings during July, September
 and October.
- The draft plan was presented at an October 23 **second regional symposium**. In a facilitated process using small group work, participants reviewed the five major programmatic initiatives included among preliminary recommendations. They suggested modifications, and then evaluated the initiative's importance to the region's economic future and the urgency of implementation. Participants also suggested potential lead agencies and partners to promote the implementation. Their input shaped this final document. The lists of symposium participants are included in Appendix A. An overview of the topics discussed at that symposium and a summary of the group's analysis of the initiatives is attached in Appendix C.
- Once the steering committee came to an initial, broad consensus and initiatives began to crystallize, a *press conference* was held to put the key initiatives before a broader public. The press conference, held in conjunction with the second regional symposium, led to broad media coverage of proposed initiatives.
- Finally, on January 8, 2003 all members of the Steering Committee received from FutureWorks, a detailed eight-page *preview* of the findings and recommendations that were to be included in this final report of FutureWorks.

The NW Commission has strongly supported efforts to ensure an open and participatory process. Information generated during the planning process - economic scan, survey results, and emerging ideas - have been posted on the NW Commission web site where they have been available to the public for review and comment.

We have detailed this process in order to underscore that it has been as open and participatory as possible. Some of our recommendations will be new to some people in Northwest Pennsylvania, but not to members of the Steering Committee. FutureWorks adopted early a commitment to "no surprises." Our analysis of the problems facing the region, our strategic framework for thinking about development prospects, our suggestions about the goals and objectives of development in the region, and our specific recommendations about what to do have been on the record for weeks, in some cases for months.

Of course, these findings and recommendations will not receive a uniform reception throughout the region. They are all provocative; some are very ambitious; and a few might be the subject of some contention. We do not wish to create the impression that the Steering Committee itself is unanimous in its support of every element of this report.

Because the composition of the Steering Committee was fluid, it was not feasible or desirable to proceed only on a full consensus approach. We believe there is a strong consensus and agreement within the Steering Committee about our findings and about our analysis of the problems. We believe there is general support for the statement of strategic objectives and for the five major programmatic recommendations, although inevitably adherence to these major initiatives varies according to the relative familiarity that different members of the Steering Committee have with the different issues.

It has been understandably more problematic to gain full consensus around the proposals for major structural changes in roles and responsibilities for economic development in the region. They affect virtually every individual that has been involved in the Steering Committee, either as a practitioner or a board member and FutureWorks has had no expectation of full accord on the details of these reforms in how responsibility for economic development is organized and funded. Organizational change, especially at the level we propose can be very unsettling. Still, we believe the general logic that supports these changes is well understood and widely accepted and that the members of the Steering Committee will work diligently to implement these reforms.

What Follows

In the sections that follow, we summarize our findings and recommendations. Section Two is the summary **Analysis of Regional Economic Structure and Performance**. There is a brief historical overview but most of the analysis focuses on the past ten years.

Section Three is the **Problem Statement**. It was developed by consensus in the meetings of the Steering Committee. In our discussions of this problem statement there was some initial concern that we were overstating the degree of the problem. However, those concerns were removed as we reviewed the background information on economic and demographic change in the region over the past several years.

In Section Four, we offer the *Goal Statement*. It is meant to focus our collective attention on targets of economic development in the region. This was developed by consensus in the Steering Committee and reflects discussion in the two economic development symposiums that were held in June and October 2002.

Section Five offers a **Strategic Framework** to guide growth and development in the region over the next several years in directions consistent with the goal. We believe this framework will be as useful in five or even ten years as it is today. It provides the perspective and guiding principles to shape current initiatives, but it will also generate new initiatives in the years to come.

Section Six is the *Action Plan*. It describes eight major initiatives that we believe must be implemented over the next few years and it offers guidance on how to get started on carrying them out. These are each major undertakings and will require enormous energy and commitment from leaders in the region. Because of this, we have not tried to provide a detailed step by step approach. We think it important that there be room to adjust, refine, and take advantage of particular opportunities.

There are four sets of *Appendices* to this report. Appendix A is a short list of individuals who participated in the Steering Committee for this project. As we have noted the

composition of this group was fluid. We have included all those who participated in at least one meeting. Appendix B consists of a series of economic tables, charts, and graphs that we constructed in the course of our work. We believe these will be helpful to others as they continue this analysis. Appendix C summarizes the discussions at the two regional economic development forums and reviews sentiments expressed by participants in those sessions. Finally, Appendix D is a detailed review of responses to the electronic survey we carried out under this project. It helped shape our work in important ways, pointing us toward particular issues and people and helping us understand the context of our analysis.

Section Two

Background Information and Analysis Of Regional Economic Structure and Performance

Defining the Region.

The Northwest Pennsylvania region comprises Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, and Warren counties. These eight counties in the northwestern corner of Pennsylvania are the current service area for the local development district, the Northwest Pennsylvania Regional Planning and Development Commission (the Commission).

Erie County is defined by the Census as the Erie metropolitan statistical area (MSA), and Mercer County was the Sharon MSA until 2000 Census results put it into the Youngstown (OH) MSA. The remaining six counties lie outside any metropolitan area and are predominantly small cities, towns and rural areas, including extensive publicly owned forest. Most residents consider the region essentially rural. Forest County with only 5,000 residents is the most rural county in PA. The 2000 Census shows that 55 percent of the eight-county population lives in metropolitan areas. This is well below the national average of 80 percent. Moreover, by any standard Erie and Mercer counties are certainly not very highly urbanized.

We found little or no sense of a common regional identity in Northwest Pennsylvania. The smaller counties view Erie as a place apart, and the southernmost county, Lawrence, periodically considers leaving the Northwest Pennsylvania local development district to join the Pittsburgh Regional Alliance to the south. A limited sub-regional sense of economic identity occurs around Lake Erie, and the I-80 and I-79 corridors that cross the region from east to west and north to south, respectively. The divisions that inhibit a regional identity — metropolitan or non-metropolitan; an interstate highway corridor or not; a Great Lakes area or not — are reinforced in much of Northwest Pennsylvania by mountainous terrain that impedes not only physical infrastructure but also television and cell phone signals. One person interviewed described the region as so fragmented that people who lived there identified primarily with their high school.

Ironically, one of the major assets of this eight-county region has to do with that emphasis on local community. This is a region of many small towns, each with a distinctive flavor and identity. That distinctiveness is what appeals to the residents; it is the source of their community pride; it is what makes them interesting. In an era of homogenization, it is also an important economic development asset. Not many places (especially in the mid-west and Northeast) can offer the quality of life associated with small towns. But, to the extent that it prevents leaders in the region from seeing their common problems and opportunities and pursuing joint actions, it is also a huge liability.

Regional Economic History.

This brief overview of economic history provides a context for the more data-based economic analysis that follows. It also provides insight into the forces that created the situation Northwest Pennsylvania faces today.

At the turn of the last century, Northwest Pennsylvania — although lacking a major metropolitan area — was a center of industry and energy production, home to the US oil industry, and the Great Lakes terminus of the Erie Canal. By mid 20th century, the center of the oil industry had moved to the southwestern states, but Northwest Pennsylvania's oil wells, coal mines, metals and machinery contributed significantly to the industrial might behind the Allied victory in World War II. Northwest Pennsylvania prospered as a center for manufacturing processes requiring highly skilled craftsmen. Tool and die shops — the firms that make the parts manufacturing firms use to make their products — served customers with such skill that some were, and still are, called jewelers.

The second half of the 20th century brought forces damaging to the economic fortunes of Northwest Pennsylvania. This manufacturing-centered economy suffered from the broad decline in the US manufacturing sector, which was the major customer for the industrial machinery, the molds made by tool and die shops, and the metals produced in Northwest Pennsylvania. The plastics industry, especial injection molded products, was a bright spot, adding jobs in the region and demand for molds produced by the tool and die shops. Manufactured housing has grown and prospered in recent years. However, wages in the plastics and manufactured housing industries are on average lower than those in the heavier manufacturing industries where employment has declined.

The impact of the shrinking customer base has been exacerbated by increased competition for those who remained. A second challenge comes from international competitors with far lower operating costs. Products that can be characterized as a commodity are produced more cheaply elsewhere, leaving US producers with niche markets for specialized products. For example, overall steel production has faltered dramatically in the face of international competition, but specialty and fabricated steel products have not been hurt as badly. For Northwest Pennsylvania, fabricated metal producers have held up better than primary metal producers have.

The US Department of Commerce International Trade Administration reported that the US tool and die making industry share of the world market has declined from 45 percent in 1995 to one-third in 2000. The decline appears to be accelerating as imports surge. US tool and die imports for the first three-quarters of 2001, were more than 65% above imports for the first three quarters of 2000. Even if the ITA decides that China and other nations are competing unfairly and tariffs are imposed, the industry will still decline. Highly skilled workers can help Northwest Pennsylvania tool and die shops identify market niches but even these will face competition.

Changing technology poses a third and related challenge to the regional economy. Manufacturing industries have evolved, and firms have to adopt new technologies in order to be competitive. A consistent result of new technologies is a reduced need for labor, particularly semi-skilled labor. New machines and computers enable a few workers to produce what once required many. This dynamic continues. For example, new technologies such as Rapid Solidification Process (RSP) Tooling can lower costs

and lead times for mold making, thus making the US tool and die industry more competitive, but this process requires far fewer workers. The niche markets and specialized products where US producers are most competitive use innovative technologies, fewer but more skilled workers.

Technology is reshaping sales as well as production. Customers want to do business via Internet, which requires high-speed access and interactive web sites for reverse auctions. This national and international trend has a major impact on Northwest Pennsylvania, where relatively few firms are ready to do business on-line and face high costs for developing the capacity. Particularly in the more rural areas, the less expensive DSL or cable Internet access is not available, only the more expensive T1 lines.

At the end of the 20th century, US rural areas doing well economically were either tourist-retirement destinations or on the fringes of growing metropolitan areas. Neither characterizes Northwest Pennsylvania. The region flourished as a predominantly rural/small town industrial area, and has done little to exploit natural beauty and recreational resources to attract tourists and retirees. The nearest metropolitan areas — Pittsburgh, Erie, and Youngstown — have been engaged in the same struggle to make the transition from heavy industry to the new economy. Instead of leading regional economic growth, Northwest Pennsylvania metropolitan areas are lagging.

Demographic Trends.

Demographic trends are important to the economy — and thus to an economic development strategy — from several perspectives. Residents create demand for local goods and services. They are customers for the retail, service, finance, insurance, real estate, and construction industries. On the supply side, the resident population comprises the local workforce, which is a crucial source of regional advantage or disadvantage. Key points about recent demographic trends are summarized below, and more detailed information can be found in Appendix B.

In overall population growth, Pennsylvania lags the nation, and Northwest Pennsylvania lags the state. Between 1990 and 2000, the population of the eight-county region was essentially stable, growing by just 0.6 percent. During the same decade, the population of Pennsylvania increased by 3.4 percent, and the US population total increased by 13.1 percent. More recent data shows population change in the region moving into the negative range. The most recent population estimates (for July 1, 2001) show all eight counties of the region losing population. The rates of population loss for the April 2000 to July 2001 interval range from 0.4 percent in Crawford and Erie counties to 0.8 percent in Venango. Pennsylvania's population was stable, and the US population increased by 1.2 percent.

Census data indicate that Northwest Pennsylvania attracts few in-migrants. Residents are both less ethnically diverse and older than state or national averages.

Slow or no population growth reflects the low level of in-migration. 2000 Census data shows that 88 percent of the people (aged five and over) living in Northwest Pennsylvania in 2000 had been living there in the same county in 1995. Only 5 percent had moved in from a different state. Pennsylvania residents are less likely to move than the average American is. Nationally 8 percent of people lived in a different state in 2000 than they did in 1995.

- Northwest Pennsylvania population has a low level of ethnic diversity that is
 consistent with the very low rate of in-migration. Just fewer than ninety percent of
 Erie residents are non-Hispanic Whites, and that percentage is higher in every other
 county, giving a regional average of 93.3 percent. The comparable numbers are
 84.1 percent for Pennsylvania and 69.1 percent for the US.
- Northwest Pennsylvania has a smaller percentage of the population in the typical working ages of 18 to 64 year old ranges (59.7 percent) than either the state of Pennsylvania (60.6 percent) or the US (61.9 percent). Although survey respondents described the region as a good place to raise a family, the regional percentages of children and families with children under eighteen are well below the national average but slightly higher than the state average.

Modern economic development theory sees workforce as the crucial factor in creating the locational advantage to support economic development. The quality of the workforce as well as the quantity is important, and so we use educational attainment and occupational data to provide useful insights on the quality aspect. The large number of institutions of higher education in Northwest Pennsylvania would suggest a relatively well educated populace. However, both migration and educational attainment data reinforce the popular perception that educated young people leave this region.

2000 Census data helps quantify the extent that educational attainment of Northwest Pennsylvania residents lags averages for the state and the nation. While Northwest Pennsylvania does a better job of graduating students from high school, far fewer adults have continued their formal education. Nationwide slightly more than half of adults aged 25 or older have some formal education beyond high school, in Northwest Pennsylvania the comparable ratio is just 37 percent.

Educational Attainment, Percent of Population Aged 25 or Older, 2000

HIGHEST LEVEL OF EDUCATION	NW PA	PA	US
Less than 9th grade	5%	5%	8%
9th to 12th grade, no diploma	12%	13%	12%
High school graduate (includes equivalency)	45%	38%	29%
Some college, no degree	15%	16%	21%
Associate degree	5%	6%	6%
Bachelor's degree	11%	14%	16%
Graduate or professional degree	6%	8%	9%

One individual presented the following scenario as a metaphor for the local workforce situation. A manufacturing company employed thousands in Northwest Pennsylvania. It hired people without a high school degree and paid them more than high school teachers earned. Supervisors discouraged workers from continuing their education, and no one looked to the future. Now, the factories are closed. The employees are out of work and ill-prepared for the 21st century job market where employers want employees with both technical and problem-solving skills.

That scenario and other, similar stories have produced an adult workforce with a very low rate of post-secondary education. Formal education that stops with a high school

degree is not likely to produce a worker who is prepared to make the transition from manufacturing to a knowledge-based economy — or even from traditional to new manufacturing processes.

There is little reason to expect the education statistics to improve. Northwest Pennsylvania has no two-year college providing the technical education — either degreed or certificate-based — that will enable the region's displaced workers to enhance their skills and compete in the contemporary labor market. The region's numerous colleges and universities, which have the potential to be an important economic development resource, operate a limited number of sub-baccalaureate programs to fill what is a huge gap in the region's education and training system.

Income Trends

Total personal income (TPI) is a measure of overall economic activity, and recent data reveals the downturn in the economic fortunes of Northwest Pennsylvania. Between 1990 and 1995, TPI for the eight county region grew by almost 23 percent, compared to 21 percent for Pennsylvania and 19 percent for the US. The relationship reversed for the 1995 to 2000 interval when TPI for Northwest Pennsylvania grew by 20 percent, compared to almost 27 percent for both Pennsylvania and the US.

A second income measure, per capita income is TPI divided by the population. Per capita income measures individual welfare as well as economic activity. Per capita incomes across the Northwest Pennsylvania region are well below the national and state averages. However, per capita incomes are generally lower outside metropolitan areas, where costs of living are also lower. In 2000, the US non-metro per capita income was about 70 percent of the metro area average, and for Pennsylvania, the comparable ratio was 75 percent. This significant difference suggests assessing per capita incomes in the context of metropolitan and non-metropolitan area averages.

When per capita incomes for Northwest Pennsylvania counties are compared to the metro and non-metro averages, it appears that in the context of national economic trends, the Northwest Pennsylvania region is lagging because metropolitan areas within the region are not doing well. Erie is not doing well – nor is Youngstown. The Pittsburgh economy is not growing at a level that would have an impact on outlying areas. Poor performance in metro areas is pulling the region down. Compared to the relevant averages, the lowest relative per capita incomes are in the metro counties of Erie and Mercer and in very rural Forest County.

The highest wages in the region are paid to workers in the following industries: mining; manufacturing; transportation, communications, and utilities (TCU); and finance, insurance and real estate (FIRE). Of these, only manufacturing employs enough people to be among the top sources of earnings for the Northwest Pennsylvania economy.

Employment Trends

Employment for a region is measured by the number of jobs held by residents and also by the number of jobs at facilities within the region. While these measures tend to move in the same direction and both indicate the health of the economy, they are describing two different things and come from two very different data sets. Still, a significant difference between trends in these two indicates changing patterns of commuting. For

example, employment at firms in Erie County has increased more than has the number of employed Erie County residents, and so we conclude that a growing number of workers are commuting to jobs in Erie from outside the county.

Key Industries

Location quotients are used to identify geographic concentrations of different industries, usually based upon the share of total employment in an industry relative to the industry's share of national employment. A location quotient greater than one indicates a relative concentration; for example if the location quotient is 3.7, that means the industry accounts for 3.7 times as many jobs in the region as would be expected based upon national employment in that industry.

A high location quotient is not just happenstance. When a region gets significantly more employment from a particular industry than would be predicted by national averages, that means the region has some advantage over other regions, an advantage that induces those firms to locate their plants and hire more workers than similar firms in other regions. It means the region has a *comparative advantage* in that industry.

We use a combination of location quotients and the number of jobs to identify the industries most important to the regional economic base. More detailed location quotient tables can be found in Appendix B.

Manufacturing: Manufacturing has been central to the regional economy. Northwest Pennsylvania manufacturers are prominent in industrial supply chains but produce relatively few consumer goods. Mainstays of the regional economy have been tool and die shops, industrial machine and equipment producers, metals and plastics. As noted in the discussion of economic history, much of the industry that used these products has moved on. Still, a comparison of 1990 and 2000 Census data shows that Northwest Pennsylvania residents not only depend more heavily upon manufacturing industries for jobs, but also have experienced a relatively smaller loss of manufacturing jobs than the US as a whole. As a result, the location quotient for manufacturing employment of Northwest Pennsylvania residents increased from 1.4 to 1.6 during the 1990 – 2000 decade.

MANUFACTURING JOBS AS % OF TOTAL EMPLOYMENT

YEAR	NW PA	PA	US
1990	25%	20%	18%
2000	22%	16%	14%

SOURCE: Calculated from 1990 Census and 2000 Census, Summary file 3.

Northwest Pennsylvania has done a good job of retaining its manufacturing industries in the face of nationwide decline. The region has, however, experienced several major plant closings and the loss of numerous jobs in machine shops during the last two years. Nationally, manufacturing employment decline for the year ending September 2001 is estimated at 1.2 million jobs. (Employment Policy Foundation, Washington, DC) The experience since then is marked by continuing lay-offs and plant closures. The manufacturing industries that survive will be nimble, constantly updating technologies in

order to be competitive. They will require far fewer employees to produce the same or even more output.

Location quotients for manufacturing industries shown in the following table demonstrate that manufacturing remains a key component of the local economic base. Some manufacturing is linked to the natural resource base. There is a concentration of employment in wood products and furniture, reflecting the region's hardwood resource, and a smaller concentration in paper products. Location quotients show a concentration in petroleum and coal products, but today those industries provide relatively few jobs in Northwest Pennsylvania. Plastics continues to be a key industry sector, but the greatest concentration as indicated by both location quotients and actual number of jobs are in primary and fabricated metals and industrial machinery. Below we have highlighted those sub-sectors with high location quotients and high employment.

Location Quotients for Key Manufacturing Industries, 2000

SIC Code	Description	Location Quotient	2000 Employment
20	Food and kindred products	0.92	3,682
21	Tobacco products	0.04	3
22	Textile mill products	0.04	52
23	Apparel and other textile products	0.21	311
24	Lumber and wood products	1.94	3,793
25	Furniture and fixtures	1.65	2,171
26	Paper and allied products	1.36	2,112
27	Printing and publishing	0.60	2,185
28	Chemicals and allied products	0.63	1,543
29	Petroleum and coal products	3.78	1,142
30	Rubber and misc. plastics products	3.92	9,419
31	Leather and leather products	0.40	67
32	Stone, clay, and glass products	1.51	2,073
33	Primary metal industries	4.07	6,751
34	Fabricated metal products	3.46	12,606
35	Industrial machinery and equipment	2.30	11,535
36	Electronic & other electric equipment	0.99	4,024
37	Transportation equipment	1.63	7,139
38	Instruments and related products	0.85	1,701
39	Miscellaneous manufacturing industries	0.66	612

Source: Calculated from, IMPLAN ES202 data.

Non-Manufacturing While manufacturing has dominated the past, many are looking to non-manufacturing industries for future growth. Three notable industries are tourism, education, and health care. Although education and health care account for a disproportionate number of jobs and income in Northwest Pennsylvania, we found little recognition of their contribution to the economic base. In contrast, tourism does not play a key role in the regional economy, but many see it as a target for the future.

Health care is a potential target industry for growth due to potential spin-offs from Pittsburgh and because the region already has a large number of well-paying jobs in this

industry. The relatively old — and aging — population is likely to continue demanding a high level of medical services. The location quotient for health services indicates that employment is 30 percent higher than average, and that industry accounts for a substantial number of jobs, many well paying.

Education services also has a relatively high location quotient, reflecting the large number of post-secondary education institutions in Northwest Pennsylvania. The high location quotient for education services is potentially a very positive factor. Education is more than a source of jobs. It is also the source of skills that builds the 21st century labor force. Research and development activities at educational institutions can promote technology transfer and spark new business creation.

As noted previously, most US rural areas have prospered as tourist/vacation destination sites or as the beneficiary of dispersion of economic activities from near-by growing metropolitan areas. The latter has not been working for this region, and so tourism is gaining attention. Also, Northwest Pennsylvania has notable scenic and recreational

Location Quotients for Non-Manufacturing Industries, 2000

SIC Code	Description	Location Quotient	2000 Employment
41	Local and interurban passenger transit	1.87	2,094
42	Trucking and warehousing	0.90	3,922
48	Communication	0.73	2,876
49	Electric, gas, and sanitary services	1.19	2,410
50	Wholesale trade - durable goods	0.67	6,646
51	Wholesale trade - nondurable goods	0.47	3,139
58	Eating and drinking places	1.09	21,094
59	Miscellaneous retail	1.17	8,520
60	Depository institutions	0.83	3,973
61	Nondepository institutions	0.31	505
62	Security and commodity brokers	0.22	397
63	Insurance carriers	0.98	3,403
64	Insurance agents, brokers, & service	0.64	1,157
65	Real estate	0.48	1,708
67	Holding and other investment offices	0.57	328
70	Hotels and other lodging places	0.58	2,574
73	Business services	0.45	10,421
78	Motion pictures	0.46	649
79	Amusement & recreation services	0.72	3,046
80	Health services	1.30	31,083
81	Legal services	0.51	1,230
82	Educational services	1.40	5,767
83	Social services	1.49	9,897
84	Museums, botanical, zoological gardens	0.74	186
86	Membership organizations	1.62	4,192
87	Engineering & management services	0.29	2,404

Source: Calculated from IMPLAN ES202 data.

assets from its mountains, rivers, and Lake Erie as well as historic treasures such as the site of the first US oil well, and numerous Victorian structures with both architectural and historic significance.

Location quotients can be notable for what is not present in the region as well as for what is there. For example, location quotients for tourism-related industries are uniformly low. Industries such as eating and drinking places (SIC 58), hotels (SIC 70), motion pictures or amusement and recreation services (SICs 78 and 79) have a long way to go before Northwest Pennsylvania offers the services and accommodations that attract tourists.

Other "missing links" as indicated by very low location quotients are in the finance, insurance and real estate industry (SICs 60-67), legal services and business services. These industries are all crucial components of the business support system, and the low location quotients indicates a weak support system for small and new businesses (large established firms can provide these services internally).

Engineering and management services, which usually support high technology industries, are extremely low. Wholesale trade also has low location quotients, probably reflecting the intermediate nature of the region's manufactured products.

Survey of Regional Assets and Liabilities

Between April and September, some 200 individuals completed the community survey designed by FutureWorks to elicit their opinions regarding regional assets and liabilities for economic development. A few highlights are discussed below. Full survey results are in Appendix C.

How Optimistic Are You About the Economic Future of NW Pennsylvania? (From low of 1.0 to high of 5.0)		
Overall	3.02	
Development Practitioner	3.50	
Business Owner/Manager	2.94	
Business Employee	2.77	
Elected Government Official	2.89	
Appointed Government Official	3.29	
Educator	3.06	
Non-Profit	3.21	

We found the survey to be very revealing. It demonstrated that concern about the regional economy and prospects for the future is deep and widespread. In terms of how different groups see the future, there is slightly more optimism among economic development practitioners than the rest of the population.

Also striking is that almost everyone agrees about assets and liabilities of the region. Everyone agrees that the natural resources and recreation of the region are its top assets. On the other hand, we have not observed as much consensus about how to convert those assets into economic advantage. Everyone shares a deep concern about the problems posed by young people leaving the region. We imagine this is not just an

economic issue; that it must have very personal relevance to residents who stay here as their younger family members move away.

Six Highest Rated Assets (from a list of 15 (From low of 1.0 to high of 5.0)		
Natural beauty of physical environment	4.2	
Abundant recreation opportunities	4.0	
Good health care facilities	3.9	
Strong accessible higher education	3.9	
Strong work ethic	3.9	
Low cost of living	3.9	

Six Lowest Rated Assets (from a list of (From low of 1.0 to high of 5.0)	15)	
Telecom infrastructure	1.85	
Economic base	2.85	
Decent wage jobs	2.93	
Good government leadership	3.03	
Strong and effective institutions for		
regional cooperation	3.12	
Access to financial capital	3.22	

Business Owner/Manager High and Low Assets (From low of 1.0 to high of 5.0)	
Three Highest	
Natural beauty of physical environment	4.6
Institutions of higher education	4.1
Abundant recreation opportunities	4.0
Three Lowest	
Telecom infrastructure	1.0
Decent wage jobs	1.8
Support to entrepreneurs and small	
businesses	2.3

Rating NW PA as a Place to Live (From low of 1.0 to high of 5.0	
For young people launching career	2.2
For families	4.2
For older adults	3.6

We single out for attention the very low scores given to the questions about the level of confidence people have in their institutions of leadership. When asked, "How confident are you of the collective capacity of local government to lead/manage change in the region" virtually everyone offered a low assessment. The owners and managers of firms and economic development practitioners were very low in their assessment of leadership

in the public sector. The collective assessment of confidence in the region's economic development related agencies also was very low.

Confidence in Leadership A (From low of 1.0 to high of 5.0)	
"How confident are you of the collead/manage change in the region	ollective capacity of local government to on?"
Overall	2.4
Elected Officials	3.6
Owner/Managers	2.2
Development Practitioner	1.8

Confidence in Leadership B (From low of 1.0 to high of 5.0)	
"How confident are you of the re lead/manage change?"	gion's economic development related agencies to
Overall	2.9
Elected Officials	2.7
Owner/Manager	2.6
Development Practitioner	3.3

Most striking was the receptivity to change in the region's economic development structure. The desire to consolidate regional economic development organizations was especially high in the business community and low only among elected officials and economic development practitioners.

Support for consolidating and re-structuring all or most existing regional and local development programs into regionally focused public-private partnership to lead economic development in the region. (From low of 1.0 to high of 5.0)		
Overall	3.88	
Elected gov't official	3.00	
Appointed gov't official	3.88	
Business Owner/Manager	4.11	
Eco Development Practitioner	3.00	

If Goal is "Good Jobs," Rate These Strategies (From low of 1.0 to high of 5.0)		
Promoting expansion of existing firms	4.25	
Diffusion of advanced technologies	4.23	
Intensifying marketing of region	4.01	
Encouraging entrepreneurship and new firms	4.32	
Building on proximity to Pittsburgh and		
linking to development there	3.30	
Promoting tourism and recreation industries	3.66	
Expanding R & D capacity to accelerate		
transition to "high tech" economy	4.24	

The Economic Development Support System.

There are multiple economic development agencies in most counties of Northwest Pennsylvania, and they represent a resource for retaining, growing and attracting quality jobs. They have been targeted at, and by most accounts, effective at business retention. A recent analysis prepared for the Appalachian Regional Commission rates business retention efforts in Northwest Pennsylvania as extremely effective. (Analysis of Business Formation, Survival and Attrition Rates of New and Existing Firms and Related Job Flows in Appalachia, prepared for the Appalachian Regional Commission, October 18, 2001.)

However, retention alone is not enough. Attrition is inevitable and if a region is successful only at holding on to most of what it has, it will decline. The regional performance in entrepreneurship was found to be significantly less positive. Interviews with economic development entities in the region found little effort devoted to business attraction.

By operating loan funds, acting as developers and landlords, a number of local economic development entities in Northwest Pennsylvania have parlayed public funds into a nest egg that generates operating revenue. This entrepreneurial behavior has shielded them from the funding vagaries and cutbacks that have reduced the number of sub-regional economic development agencies elsewhere.

As part of this economic scan, FutureWorks intended to aggregate the resources that the local economic development entities represent; for example, the combined capitalization of revolving loan funds. However, the multiplicity of local economic development organizations and for some, concern about sharing this information put that task beyond the scope of this planning process. Instead, the strategic plan calls for the lead economic development agencies from the region's eight counties to develop an inventory of capabilities.

Economic development organizations are challenged to support the evolution of the regional economy. Because this economy was so prosperous in the manufacturing era, there is lingering attachment to manufacturing industries and some reluctance to shift to the knowledge-based economy. State economic development programs that target manufacturing industries reinforce a manufacturing bias. Public intervention is probably needed to offset the very weak business support system documented in the location

quotient analysis, but the emphasis should be upon building rather than supplanting a private sector business support system.

Current Activities Related to Identified Priorities

Interviews with relevant individuals in the region surfaced several ongoing or planned economic development activities that are implementing one or more of the economic development strategies set forth in this plan. These efforts have to be counted among the regional assets or resources. Among them are efforts to:

- improve access to telecommunications infrastructure
- promote business use of e-commerce
- retain existing employers
- modernize the tool and die industry
- improve technology transfer from near-by research universities to regional institutions and then to firms and entrepreneurs in the region
- formalize the network of state-designated lead economic development organization in each county
- create a history-centered tourist destination attraction

Also, implementation of the strategy for Erie City and County, which FutureWorks staff worked on last year, includes numerous efforts relevant to the strategic plan for the Northwest Pennsylvania region – which includes Erie.

The action plans that are the heart of this document incorporate our knowledge of the on-going activities and seek to build upon what is already happening in the region. Consistent with the strategic planning model, some implementation has already begun. The action plans should be updated as new information about relevant programs becomes available and as implementation proceeds.

Section Three

The Problem Statement

Relative to other parts of the US, Northwest Pennsylvania is losing wealth, good jobs and talented people. The prospects for some of the important wealth producing sectors of the economy do not look good. If things don't turn around, the gradual economic decline of recent years could well accelerate over the rest of this decade.

After several discussions of regional economic trends, the steering committee agreed upon this problem statement. It lays bare the harsh realities exposed by the economic analysis summarized above.

It is important to acknowledge that the problems this region faces have not just popped up suddenly with no advance warning. The national economic distress of the past two years has deepened concern about the economic prospects of the region. But even during the very good years of strong growth in the national economy, there were lagging trends in Northwest Pennsylvania. During most of the 1990s and back into the 1980s, per capita income growth in Northwest Pennsylvania lagged the nation and most of the rest of the state. During those same years, population growth was below the national average and below the rest of the state. As the nation entered into a recession the structural problems of the region became more apparent to all.

That there has been little attention to this loss of economic competitiveness until very recently, is an indication of problems in the economic development apparatus and leadership of Northwest Pennsylvania. The economic warning signs have been there for a few decades at least, but the alarm was not sounded, or at best the signals were muted.

Some assert that this is simply the story of rural and small town America. They suggest that Northwest Pennsylvania is just another reflection of the immutable shift of wealth and people to metropolitan places. There is some justification for this point of view. Rural America as a whole is de-populating and dis-investing. However, it is not accurate to suggest that there is nothing to be done. In many non-metropolitan regions of the country, population is increasing and per capita income is rising faster than the national average. This is true in parts of New England, the South, the Mid-West, the Upper Plains, the Mountain States and the Far West. There are plenty of other regions with far less going for them then Northwest Pennsylvania that have halted the negative trends of de-population and dis-investment.

This region has some very important assets. Large parts of it are breathtakingly beautiful and there are abundant recreation opportunities. It is rural but not at all remote, especially from major population centers in western Pennsylvania, New York, and Northeast Ohio. It has affordable small towns and open space. It has a reasonably well-developed highway infrastructure and generally good access to water. It is close enough to major population centers in Western Pennsylvania and Northeast Ohio to receive consideration as a location alternative to more congested and more expensive urban areas.

On the other hand, the objective indicators of development are very troubling. There has been a 15-year accelerating decline in high wage jobs in the region. Most of the net new jobs being created are in low wage service occupations. Young people are leaving because they sense, with justification, that they have no good economic future in Northwest Pennsylvania. There is little evidence that they are coming back after they have families and are launched on their career. The existing workforce is aging rapidly. The numbers of older people not working is growing in relation to the numbers of younger ones who are.

Local governments in the region are not pulling together to seek efficiencies and greater effectiveness. Most people surveyed and interviewed over the course of our work observed a high degree of parochialism. They decry the lack of vision and widespread resistance to change and new ideas. They don't think they are getting much help from their state government to turn things around.

Our independent assessment is that there is an economic crisis facing Northwestern Pennsylvania. In the absence of dramatic new commitment by public and private sector leaders to change fundamentally the competitive advantages of Northwest Pennsylvania, there is no reason to expect that things will get any better.

Most of the problems facing this region stem from macroeconomic forces in the national and global economy, not from poor economic development strategy and organization. However, it makes little sense to resist change or to defend the strategies and organizations currently in place — they clearly are not up to the task of turning things around. It is time for new approaches to economic development in the region.

Section Four The Goal Statement

To build wealth in Northwest Pennsylvania by retaining, attracting, and creating high-value jobs and people in the region.

This goal statement synthesizes the discussions of a regional vision from the first regional forum and the input of steering committee members. It is simple and clear. The goal statement contrasts sharply with the realities expressed in the problem statement. That contrast is the justification for the far-reaching initiatives proposed in this plan.

Participants in the first regional forum focused on both the number and quality of available jobs in their discussions of a vision for the region. Many goal statements generated during the regional forum spoke of needing good jobs to attract young people to the region. They recognized the link between the quality of the workforce and the quality of the jobs. Some identified particular industries they thought offered the best hope for future growth – most blending the region's manufacturing history with an infusion of high technology and recognition that small and medium sized firms have been engines of economic growth.

Goals articulated by forum participants called for employment increases, quality jobs that paid well, greater diversity, improved infrastructure and greater competitiveness for the region's businesses. Although the forum discussions embraced a broad range of topics, the issue always came back to well-paying, quality jobs. The steering committee agreed with this perspective and added an emphasis on people.

This goal statement requires some amplification if it is to be useful in driving a development strategy that might be anything other than generic. The place to begin is with the recognition that the only way to increase per capita wealth in the region is to increase the number of and ability of private sector firms to produce higher value-added goods and services.

Economic development is mostly a private sector affair. Wealth, income, and jobs are created in the private sector. Government can impede or improve the process through informed education and commerce policies and through the quality and relevance of the scientific and technological institutions and skill development it supports. But the jobs and wealth engine is a private sector engine.

For this to happen, our businesses must make, distribute, market and sell goods and services that are worth more. They must compete successfully in higher value added markets. Though the pace and complexity of market places have changed dramatically over the last two decades, firms still compete and prosper on the basis of market share and margins. They make money by being able to sell the finished goods for more than they paid for the raw material, parts and components needed to make them and they sell their services for more than it costs to produce them. In these volatile, segmented and often lucrative global niche markets they create this difference -- this margin-- by adding

value in such dimensions as design, engineering, function, precision, reliability in speed of delivery, and appearance.

The ability of firms to increase the value they add per employee is dependent on their ability to add more technology, strategy, and skill in the production process. Those firms using relatively basic technologies, low skilled workers and managers and very traditional business practices are, as a general rule, not able to add a great deal of value to the raw materials and component goods with which they start. They tend to compete only at the relatively low ends of their markets where products must meet far less exacting requirements, where they are more homogeneous, less differentiated and therefore tend to compete chiefly on the basis of price. Usually the most critical factor input within these markets for competitive advantage is the cost of labor. Domestic firms are at a competitive disadvantage when they try to compete with other producers in many other countries on the basis of labor costs and for that matter resource costs. In the US, lower value-added manufacturing operations are, at best, an endangered species.

A development strategy based on the of goal increasing wealth through higher value-adding firms paying good wages would bring to the region new firms whose value-added per employee is above the average of firms already in the region. It would help those firms already here to increase their ability to add value and it would support indigenous or newly locating entrepreneurs who can create new firms with higher than average value-adding capacity.

Of course there will be firms locating in the region and growing in the region that sell goods and services at below the regional average of value-added per employee. But development agencies pursuing the goal above would not spend their resources on those firms. Any form of public subsidy to firms that pay below the average wage in the region simply hastens the decline of the average wage in the region. Providing subsidized infrastructure or reduced cost job training to low wage, low value-adding firms is not sound economic development. Wage decline in Northwest Pennsylvania needs no help from publicly supported economic development programs.

The good news is that everyone can play. This is not a narrowly focused "high tech" strategy. Whether its firms are producing railroad engines, injection molding plastic combs, generating new strains of aerobic bacteria to biodegrade oil field waste, or manufacturing blue jeans, a region's economic progress will be determined by its companies; capacity to increase the margin between what they pay for inputs and their actual selling price. The goal is to produce goods and services that the market will pay more for regardless of the starting point.

On the other hand, it is a technology strategy. The goal is to increase the level of technology used to produce goods and services in the region. That means giving businesses the supporting infrastructure they need to use advanced technologies, especially telecommunications and information processing infrastructure. It also means a major effort to ratchet up education and skill development in the region, so that those businesses will be able to find here and attract here the human resources they need to optimize advanced technology and sophisticated business strategies.

Trade-offs between the standard of living and the quality of life: In any region, people make constant trade-offs between the quality of their life and their standard of

living. Development cannot be only about building the material wealth that can be measured strictly in economic terms. It must also acknowledge that people want to pursue a life of quality and value. This is very clear in Northwest Pennsylvania. Most of the people that live here value deeply the pace and quality of their lives, their relatively easy access to nature, their small towns, their modest cost of living, their small governments, and their relative distance from what is often seen as the frenetic life of their big city counterparts.

The challenge is to work aggressively toward the goal of this economic development strategy while maintaining these qualities. In our view, these are not at all incompatible. In fact, we see them as inter-dependent. The quality of life in Northwest Pennsylvania is the chief economic development asset. But that does not mean it will somehow be "used up" to achieve development. Rather, it has to be nurtured. Economic development will bring the good jobs and wealth to the region that will enable families to live there.

Section Five

The Strategic Framework

This strategic framework is designed to exploit Northwest Pennsylvania's assets and address its liabilities. The plan is shaped by these strategies. While there are other useful strategies, the strategic planning process is designed to set priorities and focus on the key issues. These were identified as the most important strategies for the economic future of Northwest Pennsylvania. The common thread is industrial evolution, helping the regional economy and workforce make the transition from the old economy to the new.

We have identified six broad strategies that should guide economic development in Northwest Pennsylvania over the next 5-10 years. All the actions we recommend flow directly from and support these strategies. However, over time thoughtful adherence to these strategies will demand new actions and will shape new development priorities for the region.

We discuss these strategies below.

I. Develop effective institutions for regional leadership and coordination

We have already noted our bias toward issues of institutional capacity. What distinguishes the economic development efforts of more successful regions from less successful ones is seldom the programs they carry out or even the policies they pursue. It is more frequently the institutional capacity they exhibit as they design and implement those programs and policies.

In Northwest Pennsylvania, institutional capacity is limited by organizational fragmentation, uncertain responsibilities, and the lack of a common vision of economic success and the way to get it. We think this has been a problem at the county level and at the regional level.

In our opinion, there are two particular attributes of effective institutions that warrant special attention. First, they have joint public sector and private sector leadership working in a true partnership. Both sectors should put money on the table to support economic development. Both lend their time and their staff to support development and they seek to align their own organization's missions to regional economic development.

This partnership is out of balance in Northwest Pennsylvania. The public sector has had too great a share of responsibility for financing and leading development. The private sector needs to step up to a higher standard of responsibility.

Secondly, strong development institutions have a regional perspective and see their responsibility not as single civil jurisdictions but rather as economic regions. If development organizations are "owned" by political jurisdictions, they will inevitably be held accountable to how they advantage the political jurisdictions, and there lies trouble.

Especially in a property tax dependent state of multiple small political jurisdictions, like Pennsylvania, the pressures to claim the public economic benefits of development will lead to inappropriate competition among these groups. Again, this is out of balance in the region. There is too much emphasis on "jurisdiction specific" economic development and not enough on what is best for the overall region.

Northwest Pennsylvania is an unusually large economic region and there clearly are sub-regions within it. Still, the eight counties that are members of the Northwest Commission have both common and disparate needs. It is not necessary that all jurisdictions in the region move in lockstep on every single issue. There will be opportunities where three or four counties need to carve out and pursue their separate interest, but only to the degree this not impair the interests of the larger region as a whole. But, they will get more done when they work together than when they work separately.

In the following section, we offer some specific recommendations to strengthen economic development institutions in the region

II. Diversify the economic base by recruiting new job creating investment and talent to the region and strengthening support for entrepreneurs.

Our strongest impression of current economic development efforts in the region — beyond the immediately obvious issues about organization and leadership reviewed above — is the extent of its orientation to the region's relatively traditional manufacturing base. Most of the tools and activities of economic development in the region — fixed asset financing, subsidized land and buildings, procurement aid — are those appropriate to traditional manufacturing. This is somewhat understandable since manufacturing has been very good to this region in the past and continues to dominate the regional economy.

However, we have observed an apparent reluctance to undertake an outward-oriented, market-focused strategy to attract new firms in growth sectors to the region. This cannot continue. Northwest Pennsylvania must immediately get to work in attracting and building new growth sector firms in the region and it must develop new development programs and tools better suited to that purpose.

In many regions where FutureWorks has provided regional economic development services, we find ourselves advising development agencies to "ease back" on some of their more heavily recruitment oriented activities in favor of more attention to existing industries. We often cite research that seems to indicate that about 80% of net job growth in most regions in the United States comes from firms that have been in that region for at least five years.

In Northwest Pennsylvania, our message must be quite different. Here we think the development strategy needs to shift toward a far more aggressive effort to attract new job-creating investment to the region and to build new businesses that can be the source of growth and high wage job creation in the future.

We have concluded from our analyses that there are simply insufficient enterprise foundations for adequate growth in the region. There is little evidence of dynamism in the established business sectors that now produce most of the wealth and income in the

region. There are simply not enough new companies in growth oriented sectors; the engines of new growth are not there. The region needs to gear up a marketing and recruitment campaign and an entrepreneurship support system to bring new firms into the region and support new firm creation.

We believe that the region needs to move immediately and aggressively to develop a stronger capacity to attract and build new enterprise in the region. In a complex global economy no region can afford to say, "We have enough." And, by any stretch, Northwest Pennsylvania does not have nearly enough.

This is not to suggest that there are no firms in the region that can grow. That is absolutely wrong. In the course of our work, we directly encountered and were told about dozens of small and mid-sized firms that have the capacity for growth. These firms deserve more, not less, attention from development programs. If carefully supported and nurtured (and many of them do not require much support or nurturing) these firms, most of them apparently created with the past 5-10 years, could create hundreds of new jobs over the next ten years.

Moreover, there is a history of new business formation and entrepreneurship in the region, especially in the metal and plastics working industry and to a somewhat lesser degree in the wood working industry. This entrepreneurial behavior was especially apparent 15-25 years ago when larger firms in the region downsized and skilled workers and managers left the factories to organize their own small firms. The pace of new firm creation has slowed recently, but there are entrepreneurs and a culture of entrepreneurship in the region. With support, these entrepreneurs and new ones who will be drawn in by *entrepreneurial sizzle* can help create new firms.

Business and entrepreneurial recruitment is a very competitive enterprise as states and localities seek to gain attention of investors and attract major job creating new investment. Most states offer some incentives to new investment, usually some temporary exemptions from certain taxes and sometimes special financing for facility development or workforce training.

Pennsylvania has some incentive arrangements for newly locating firms but it has not been nearly as aggressive as many other states in this arena. In part at least, this is probably due to a sense that, because it has aging physical infrastructure and higher costs of doing business (taxes, energy, transport), Pennsylvania is not under any circumstances likely to a very attractive location to many newly expanding firms. Therefore, it should concentrate on how best to grow new firms with indigenous entrepreneurs and how best to help existing firms stay healthy and grow.

The history of state economic development in Pennsylvania reveals two dominant patterns. One is the proliferation of literally dozens of financing and small-scale assistance programs aimed at providing services to the state's aging manufacturing base. This has resulted in a bewildering array of "small bucket" programs typically implemented through competitive grants to county level organizations. We have observed that these small grants programs tend to seed competition and division and create multiple, under-resourced small programs at the local level rather than promoting cooperation for more significant development initiatives.

Secondly, the state has invested millions in promoting new technology development and technology commercialization tied to its major universities. This has been an inward focused strategy. There has been little effort to market Pennsylvania in such a way as to be attractive to newly locating businesses or to develop a market profile that suggests receptivity to external investors. While the science and technology commitments to the university sector are impressive in their scale (if of uncertain consequence), Pennsylvania has done little to modify its image as a not-very-business-friendly state.

As a result, there is little state help available for attraction and the Northwest region is not likely to compete successfully in attracting firms that will expect major incentives to reduce the cost of there location. But incentives are a very small part of successful business recruitment programs. More important are aggressive marketing programs to present the competitive advantages of the region in a positive light and targeting that marketing toward those groups of firms likely to be most interested in those competitive advantages. It is also important to provide highly accessible information about the costs of doing business, available facilities, the pool of workers, the support available from such institutions as colleges, universities, and technology centers, and regional economic development bodies.

This strategy has to be much more than advertising the availability of industrial space in facilities built on speculation in subsidized industrial parks. It cannot be just about recruiting established firms that can move in, offer jobs, and start production. Rather, it has to be about attracting entrepreneurs and risk-takers to the region and building the support system that will help them grow and prosper.

In the next section we offer specific recommendations to establish a marketing and branding campaign and to create a new venture capital pool for supporting new small business.

III. Accelerate the technological advancement and marketing capability of the existing and emerging high value-adding manufacturing base.

Having just observed that Northwest Pennsylvania must move away from an almost exclusive emphasis on assistance to existing traditional manufacturing to a strategy of attraction and entrepreneurship focused on new sectors of the economy, we must now call for continued and increased investment in manufacturing modernization. Northwest Pennsylvania has become so dependent on its manufacturing base that it must do everything possible to assist in accelerating the modernization of competitive manufacturing, even as it goes after new kinds of companies in new growth sectors.

We cannot emphasize strongly enough how important the manufacturing sector of Northwest Pennsylvania has been and continues to be to the regional economy. Over 22% of all workers in the region are employed in manufacturing. This is 37.5 percent higher than the state average and nearly 60 percent higher than the national average. Fortunately, manufacturing has been somewhat more resilient than elsewhere. During the 1990s, manufacturing employment decreased 25 percent in Pennsylvania and 29 percent nationally, but it decreased only about 12% in Northwest Pennsylvania.

But even more important is the contribution of manufacturing to the total wealth created in the regional economy. The average wage in all of manufacturing is 140 percent of the average wage for all private sector employment. In one sub-sector, railroad equipment

manufacturing, wages are 202 percent of the regional average. Since there were about 5700 people employed in that sub-sector in 2000 (fewer now), it is obviously hugely important to the regional economy. Every time one worker in that sub-sector is laid off, it is as if two average wage workers lost their jobs.

In 2000, 24,000 workers were employed in the manufacture of fabricated metal products, industrial machinery and industrial equipment where average wages ranged from 150 to 180 percent of the average wage for the region. Another 6,700 were employed in primary metal industries where wages are about 140 percent of the regional average. Another 9,500 were employed in the manufacture of plastic projects where wages are lower, much closer to the regional average.

Other sectors of the economy don't come close to this contribution to wealth in the region. Next most important in manufacturing would be lumber and wood products and furniture and wood fixtures. About 6000 workers are employed in this sector and wages are about 120 percent for the average wage for the region. Wages are higher in paper and allied products, but employment here has dropped precipitously over the past several years to only about 1500 workers in total.

In the non-manufacturing sector, the biggest contributor to regional wealth is the health sector. It is a huge employer of over 31,000 people and it has enormous importance to the region as a source of future growth. However, a lot of the heath care jobs are in relatively low wage caregiver occupations, and even with the relatively high salaries of doctors and nurses, the average wage in the health sector is less is only about 10 percent above the average-wage for the region as a whole.

This analysis supports our contention that even as the region gears up for a major new program of targeting business recruitment and even as it develops new ways to finance and nurture new firms in new growth sectors of the economy, it has to expand and intensify support for the accelerated modernization of key manufacturing groups.

But, it is important to be strategic about this. Services and programs to help the manufacturing firms should be prioritized to emphasize business and technology functions that are most associated with competitive success. Existing and emerging firms should get help in mastering those technologies most directly linked to their ability to compete successfully in high value added manufacturing markets. Firms should be encouraged to pursue new growth markets and to develop the particular competencies associated with competitive success in those markets. Small firms should be encouraged to work together in ways that can support their accelerated specialization as they join their complementary capabilities.

In the next section of this report we offer concrete recommendations toward these objectives.

IV. Build a world-class education and training system for current and new workers.

The trend of change toward a skill-based or knowledge economy in the US is so frequently observed that it has become somewhat of a cliché. But that does not make it any less true or any less important for Northwest Pennsylvania. The national and global economies are shifting rapidly in a direction that gives economic advantage to people,

firms, and regions that are skilled at gathering and managing knowledge. Higher skill content jobs pay higher wages. Higher skilled firms add more value. Regions with a relatively highly skilled population and the ability to attract and create more skilled people do better than regions that are not so advantaged.

Northwest Pennsylvania is not in a good position in this trend. The current workforce is not highly skilled. While relative to the US and to the rest of Pennsylvania, this region has done a good job of getting most of its young people through high school, it has not done as well in the attainment of post-secondary degrees and skills.

Most residents apparently hold the K-12 systems in the several counties of the region in general esteem, although comparative information on school performance was not available. The electronic survey suggested that the K-12 system is viewed as a strong asset by most of the people surveyed.

The following table (reproduced from an earlier section) shows that in this region a relatively high percentage of the adult population has completed high school but a significantly lower percentage has had any post-secondary study. For the US as a whole, 52 percent of the adult population has at least some college or more. In Northwest Pennsylvania, only 37 percent have some college or more

Educational Attainment, Percent of Population Aged 25 or Older, 2000

HIGHEST LEVEL OF EDUCATION	NW PA	PA	US
Less than 9th grade	5%	5%	8%
9th to 12th grade, no diploma	12%	13%	12%
High school graduate (includes equivalency)	45%	38%	29%
Some college, no degree	15%	16%	21%
Associate degree	5%	6%	6%
Bachelor's degree	11%	14%	16%
Graduate or professional degree	6%	8%	9%

It looks like things are going to get worse. The region has a lower percentage of its young people and adults in post-secondary than the national average. Many of those who do gain post-secondary credentials are leaving the region.

Most alarmingly, Northwest Pennsylvania lacks the institutions that might be expected to change pattern of attainment that over time. There is no community college in the region and not enough programs of post-secondary technical skill development.

This relative paucity of opportunity for credentialed post-secondary technical skill development looms as a serious handicap for Northwest Pennsylvania. Many of the working adults in the region graduated from high school at time when their diploma, if complemented by a good attitude and a strong back, promised steady work at a good wage sufficient to support a middle class life. But the rules governing economic success have changed dramatically since then. These adult workers are not now adequately equipped to succeed or thrive on the job. Now, continuing their career development and maintaining their family supporting earnings demands more education and skill development. They require credentialed increments of knowledge and skill development delivered on a flexible, modularized, and steadily accruing basis over their lifetime.

Helping these poorly prepared adults gain post-secondary credentials is essential for several reasons. With the application of new technologies and business strategies, the skill content of all jobs has jumped dramatically and the number of new jobs requiring high skills has increased far faster than the number that do not. Therefore, worker education and training increase productivity for individual businesses and the economy as a whole. The economic bias toward post-secondary education and training is steadily increasing. Census Bureau data shows that monthly earnings increase significantly with increased education levels. Income disparities are directly correlated with differences in educational attainment. Failing to help under-prepared adult workers gain post-secondary credentials means consigning them to the bottom part of an alarmingly two-tiered economy.

If adult workers in Northwest Pennsylvania are similar to workers in other regions, they are figuring out for themselves that they need more skills. According to the National Household Education Survey (NHES), the estimated number of adults participating in any form of adult education increased from 58 million in 1991 to 90 million in 1999. This represents a stunning increase of over 50 percent in less than a decade. In 1999, almost half of those 90 million in adult education were taking work-related courses and 18 million of them were seeking a formal post-secondary credential. Most of these 18 million already had some post-secondary degree or credential, but the NHES estimated that 3.5 million adults whose highest educational attainment was a high school diploma were attempting to get a post-secondary credential and another 8.9 million were enrolled in some form of work-related education or training. The NHES also found that millions of additional working adults were interested in adult education, but did not pursue it because they lacked time, available and accessible programs, and money.

As new investors consider Northwest Pennsylvania as a possible location for their new facilities, the existing education and skill profile of the workforce will certainly be a liability. However, the big liability will be the absence of specialized institutions to help them prepare workers with the right technical skills.

In many regions with a generally under-skilled workforce, investors will go forward in creating new businesses and establishing new facilities for existing businesses if they see the potential of support from post-secondary, sub-baccalaureate education and training institutions. The rapid growth of advanced technology businesses in such states as North Carolina and Georgia has not been the result of investor judgements that the existing workforce necessarily has the requisite skills to optimize their investment. Rather, it has been a judgement that the sub-baccalaureate community and technical colleges have the capacity to help them quickly prepare entry level workers, assure a constant flow of appropriately prepared new workers, and install the programs to systematically upgrade the skills of those workers.

It is on this dimension — the capacity to change the stock of skills in the region — that Northwest Pennsylvania is most vulnerable and it is to this issue that we direct our action recommendations in the following section of the report.

V. Improve regional infrastructure for a 21st century economy

There are problems of infrastructure that are very particular to Northwest Pennsylvania. It is a large, disaggregated, and decentralized region. Its major urban area is not in the

center; it is way up in the corner. Most of its other population centers are small and they are widely scattered. The region is filled with multiple civil jurisdictions, most of them small and under-resourced. The counties possess few powers not given to cities, and townships. There are major and significant geographical divisions — rivers, valleys, forests and mountains.

There is also a history of rivalry and competition among the multiple jurisdictions. One person remarked during the course of this work that most of the civil jurisdictions would rather do without than cooperate with another jurisdiction to develop something they could not afford on there own. Most others agreed with this characterization, adding that high school athletic rivalries trump mutual interest and prevent cooperation.

A result of that is a heightened risk that the region will lack the essential ingredients of public infrastructure to allow new development. Small jurisdictions with limited revenue and bonding resources may lack the ability to support critical development activities. In our work, we were advised of current or evolving circumstances where the lack of water and sewage lines and treatment capability were bringing the potential of further industrialization to a standstill.

Another result of the multiplicity of governing bodies and the lack of inter-governmental cooperation is the apparent inability to contain sprawl. Traditional measures of sprawl such as the conversion of agricultural land to commercial/industrial use or the rate of urbanization as contrasted with the rate of population growth are hard to establish in the region. However, it is clear from visual observation that much of the recent development is scattered and on the outer fringes of population centers. The risk is that such haphazard growth will erode what everyone agrees is the region's chief asset — its accessible and beautiful natural resources.

These issues lead us to conclude that the region needs a better mechanism for planning and financing infrastructure improvements.

The absence of adequate telecommunication infrastructure poses special problems for the region. One of the reasons that new growth sector companies have not developed in Northwest Pennsylvania is the lack of broadband communications. The Northwest Commission recently has hired an engineering and consulting firm to develop a regional strategy plan with the objective of enhancing telecommunication services throughout Northwest Pennsylvania. In our view this is a very important issue and warrants continued attention by development leaders in the region. Our concern is that the private sector will not see its interest in investing in a large-scale system of broadband technology and that the fractured system of public infrastructure will not be able to manage the cooperative planning and financing that will be necessary.

In the next section of this report, we offer specific recommendation for developing new approaches to infrastructure planning and financing for Northwest Pennsylvania.

VI. Leverage the region's recreation advantages for high value-added tourism.

At several points in our work in Northwest Pennsylvania, we were pointed toward the location and natural resource assets that give this region potential advantage in the tourism and travel sectors of the economy. In addition, the relatively new hotel and

motel taxes that have been enacted offer the resources to begin to take advantage of these assets. We agree that there is untapped tourism capability, but we are concerned that many current efforts are oriented chiefly toward promotion activities.

We believe that tourism in Northwest Pennsylvania must shift from a promotion model to a development model. This means investing in the facilities, programs and destination locations that will bring tourist and business travelers to the region. The forest and lakes of Northwest Pennsylvania are indeed beautiful but while they may catch occasionally the interest of tourists and visitors, it is the facilities that attract them, and it is at the facilities that they will spend money. Without destination facilities with structured activities and programs, tourism revenue will be limited to low-wage jobs in service establishments.

We urge that tourism be shifted to economic development organizations and that it be viewed as in investment strategy, not a promotion strategy. An investment strategy would focus on building the cultural and recreational facilities that will draw visitors, tourists and business travelers.

Section Six

The Action Plan: Eight Critical Initiatives

Overview

The action plan is focused on implementing the broad strategies outlined above. We have identified eight major initiatives. For each recommended initiative, we have defined the entity with lead responsibility for implementation plus partner organizations whose involvement is important for success. The plan identifies the estimated amount and source of resources needed for implementation, and establishes a general timetable.

In some of these initiatives the action steps are more obvious and immediate than in others, where more information might be required. It has not been feasible or even appropriate to develop within the context of this strategic planning process all the concrete information that will be necessary to full implementation of the initiative. Thus, in these initial action plans, we have to estimate the resources that will be required and describe them in general terms. As implementation proceeds and more information is gathered it will be possible to improve the accuracy of the estimates. For those recommendations that require few or no additional resources, this is not an issue. Others do require a significant commitment of resources. In keeping with the emphasis on implementation, however, activity begins — often with specific feasibility studies or other investigation — before the action plan can be finalized.

Despite incomplete information, the action plan format is employed here to emphasize our sense of urgency and to encourage rapid implementation. It is our belief that if action is not rapid and decisive, the Northwest Pennsylvania regional economy faces decline of a magnitude that will make economic recovery far more difficult than it is today.

Our eight recommended initiatives are divided into two broad categories. Three have to do with organization, governance and financing. They are about building the institutions and financing mechanisms that can support a stronger commitment to economic development. Five are more programmatic in nature, they call for new activities or major expansions of existing activities designed to get the region's economy going in the right direction.

The Organization, Governance, and Financing of Economic Development in Northwest Pennsylvania

We are not the first to observe that economic development issues for Northwest Pennsylvania include organizational problems as well as a need for industrial evolution. Seven years ago, the Northwest Pennsylvania Regional Economic Development Delivery System Plan (The Brandow Company, Camp Hill PA January 18, 1995) found serious problems in the relationships among and between economic development agencies in the region – especially the IDCs.

That 1995 description of agency relations (pages ii and iii) included "a lurking sense of secrecy and competition" among development agencies plus "considerable levels of

suspicion and finger-pointing" in relationships between financial and technical assistance agencies. Not surprisingly, the findings went on to describe gaping holes in customer service.

Some progress has been made since 1995 in some quarters. Most notably, county IDCs are working together to form a network. Still, our interviews with economic development professionals reveal persistent problems that undermine the effectiveness of economic development efforts in NW Pennsylvania.

We have concluded that a wholesale re-structuring of institutional responsibilities for economic development is necessary. There are simply too many organizations competing for attention and resources. The competition and confusion put off public and private sector leaders, who should be more involved and more accountable for development in the region. Organizational capability is fragmented and resources are dissipated among too many groups. It is too hard to determine which entity is to be held accountable for which set of outcomes. Implementation of the programmatic initiatives in this economic development plan requires a system of regional cooperation and coordination that simply does not exist today. The current fragmented system of uncoordinated and at times actually competing agencies fails to make most effective use of available resources to promote economic development. Northwest Pennsylvania cannot afford to continue in this way.

If Northwest Pennsylvania is to *get going*, it must also *get organized*. It must transform the plethora of economic development entities in Northwest Pennsylvania into an effective force promoting regional economic development. The emphasis is on role clarification, the development of an organizational structure promoting collaboration rather than competition, and on leadership.

We have three major recommended initiatives in this area.

Initiative # 1

Consolidate those development-related bodies that have a multicounty, regional responsibility into one multi-purpose organization.

We recommend the merger into a single organization of at least three major regional entities — the Northwest Pennsylvania Regional Planning and Development Commission, the Northwest Pennsylvania Industrial Resources Center, and the Northwest Pennsylvania Workforce Investment Board.

There are other groups that might be incorporated into this new entity.

• This includes the Lawrence-Mercer County Workforce Investment Board. However, this would have to be a decision of elected officials in those two counties. Under the often strange federal and state laws governing the formation of regional workforce boards to administer the federal Workforce Development Act, the authorities of Lawrence and Mercer counties are entitled to their own WIB, even though the two counties hardly constitute a discrete labor market area. By all accounts, the private public board that governs the LawrenceMercer WIB is satisfied with the current arrangement, but should be given the opportunity to affiliate with the new entity that is recommended here.

- There are two federal and state supported Small Business Development Centers in the region, one based at Gannon and the other at Clarion. They operate under an agreement with the state SBDC program office at the University of Pennsylvania. We recommend that the newly merged entity we describe in this recommendation negotiate with the state SBDC office about the feasibility of a more direct regional governance role. While there was no evidence during our study that the SBDCs as currently structured are not adequately managed installations, there have been some suggestions that the missions and activities of the SBDCs overlap at times with those of other development groups.
- Finally, the newly merged entity should negotiate with the Ben Franklin
 Technology Partners of Central and Northern Pennsylvania about a more direct
 ownership and governance role in the Northwest Pennsylvania activities of the
 Ben Franklin program.

Northwest Pennsylvania is by any standard a resource-scarce region that cannot afford the luxury of multiple regional bodies with overlapping responsibilities. There are probably some savings in the merger of the common administrative functions of these separate organizations region but the major justification for this merger is to gain focused leadership for the many bold changes need to be made in the region's economic development strategy and programs.

Northwest Pennsylvania needs a single entity to step up to new responsibilities to lead economic development strategy in the region. Separately, the three primary organizations cannot play that role. Their missions are too narrow and there is too much uncertainty about leadership. The region needs a system of support for economic development that will (a) direct and monitor implementation of the major initiatives set forth in this plan, (b) provide a basis for ongoing regional cooperation in economic development, and (c) coordinate resources to achieve synergy among various activities promoting economic development. The merged coordinating entity would:

- Function as the lead economic development organization for the region, with clear responsibility for economic research and planning.
- Support regional cooperation on regional issues while allowing individual counties or sub groups of counties to act independently when that is the appropriate response.
- Assume responsibility for certain development-related functions that might be more efficiently carried out by a single regional organization than by separate groups at the county and municipal level. This could include real estate management and development lending.
- Promote integration not only of technical and financial assistance but also of workforce and economic development. To accomplish this, the system should encompass the regional planning commission, the region's workforce investment boards, the IRC, and the county economic development entities – organized around a single lead agency for each county.
- Allocate the resources to the various initiatives and establish accountability standards and measures, but not necessarily run all the programs.

We see this as a *staged merger* with the first step being the creation of a holding company which would become the overall governing body of the merging organizations, which would continue to have separate boards for a period of 12 to 24 months. The holding company would be a new legal entity with a founding small, interim board of directors (the board directors of the "subsidiary" entities plus one "outside" private sector director chosen by the others). This board would gradually (over about 12 to 24 months) phase out the existing subsidiaries, reconstituting itself at each step to meet the negotiated requirements of state and federal funders.

The goal would be to build gradually a single multi-function organization to carry out all the multi-county economic development activities for the NW region. The emphasis here is on gradually. Full immediate merger would occupy everyone's time for several months and it would inevitably delay getting started on the other initiatives. There are bureaucratic interests in the state and federal organizations with resource authority over these three principle organizations that find it convenient to maintain partitions between their local constituent organizations and others, even though it makes no sense at the regional level. It will take time to navigate and manage this bureaucracy.

Some compromises may emerge as this process unfolds. It may not be critical that the Lawrence-Mercer WIB be merged into the consolidated effort if authorities there think it somehow important to go their own way. Maybe the universities will make an effective case for keeping a direct "ownership' of the SBDC's and maybe the merged entity will be able to influence the SBDC's without taking them over.

Obviously, the directors of the holding company would have to deal with the question of executive leadership for the fully merged entity but at least they would have the time to get that done. The entities would operate as "wholly owned subsidiaries" for the time being until the holding company board gradually consolidates boards, staffs, programs, and budgets.

The holding company would negotiate a formal agreement with the Local Economic Development Network (see below) with a clear understanding of mutual responsibilities for such issues as marketing the region, lead management, development lending, real estate development and management, and the new program emphases we have recommended.

In addition to rationalizing and streamlining economic development functions in the region, there are other very important advantages to this approach. First, it provides a forum for public and private sector leadership in the region. There is virtually no private sector leadership in the Northwest Commission, and little public sector involvement in the IRC. A merged organization will offer new opportunities for both sectors.

Second, a single merged entity is going to be much more powerful in Harrisburg. One explanation for the limited attention this region has received from the State lies in its fragmentation and the absence of organized private sector leadership. That this region cares enough about its economic future to make these wrenching changes in organization will generate more attention and more support. A merged entity gives the region a more powerful voice in Harrisburg.

Third, a new entity will re-invigorate economic development practitioners throughout Northwest Pennsylvania. To be sure, some at the local level who have learned how to

manipulate the current system for their advantage will have to learn new rules and develop new relationships. But that will be generally healthy. There is too much cynicism in the current organization of development in the region. Starting over with a single regional entity will stimulate a new sense of possibility and promise.

But most importantly, this merger has real and symbolic importance to the customer. It will streamline service to existing firms and indigenous entrepreneurs. It will send a powerful message to potential new investors that the region has its act together to support new business development.

Action Steps: The board chairs of the three major regional organizations should meet immediately to set up a timetable and process for this merger. A **merger task force** should be established and should seek legal counsel to draft articles of incorporation and by-laws to establish the new entity that will become the temporary holding company for the merging entities. The task force would also determine how to amend the articles of incorporation and by-laws of the existing organizations to subject them to the authority of the holding company. A founding board of directors for the holding company would be appointed. That process should be complete in at least six months.

The board of directors of the holding company will then preside over the development of the new entity as a single legal body. As noted, that process of full merger may take some time as negotiations with state and federal authorities unfold. We recommend that the merger task force institute a series of meetings:

- with locally elected officials to garner their advice and input;
- with private sector leaders from the region to ask for stronger involvement and leadership; and
- with state government officials, starting with the Governor, to advise them of this new approach to economic development in Northwest Pennsylvania and to ask for their cooperation and support.

In this period an administrative and facility consolidation plan would be developed, and an executive leadership search committee would be established. A long-range planning committee should be established to develop a vision and clear statement of mission for the new organization. It should begin to craft an organization chart and a staffing plan. We believe that this merger can be accomplished within 18-24 months.

The new entity established through this process would carry out all the functions now managed separately by the Northwest Commission, the WIB and the IRC (and, as noted, perhaps others). But it also would also provide new leadership for development functions not now carried out by any group. It would provide the leadership for a major new approach to marketing the region to attract new firms, new entrepreneurs and new skilled workers and managers. It would take the lead on all aspects of skill development throughout the region. It would build the capacity to analyze the regional economy and to provide updates of major trends and issues facing the region.

Initiative # 2

Consolidate the various county-level economic development related organizations into one entity per county and establish a formal Local Economic Development Network with one representative per county to work with the newly consolidated regional development authority.

The current fragmentation of economic development related organizations in most of the counties of NW Pennsylvania is confusing, expensive, inefficient, and ineffective. It needs to change.

We considered briefly the alternative of recommending the elimination of all economic development organizations below the regional level and the consolidation of functions and resources into a single regional entity. We have decided not to recommend that sweeping change. The county development organizations should be the front line of economic development. A single regional body could not hope to get close enough to the existing businesses to spot problems and opportunities. It could not stay on top of the infrastructure issues. It could not maintain adequate linkages with all the education and workforce development entities. It could not manage new investor interest.

We conclude Northwest Pennsylvania needs a strong local economic development presence in each county and the new regional entity needs a network of local partners. However, we also believe that this has to be a *coherent system* of development organizations, working together for the common benefit and focused on critical development functions.

Therefore, we recommend the consolidation of all economic development functions in each county of Northwest Pennsylvania into one single economic development entity per county. There should be one economic development group in each county that would have a public-private board of directors and be supported by private and public funds. If local chambers of commerce see themselves as having significant economic development responsibility (and several do), they should affiliate with this single, countywide organization and not operate separate programs

There should be no distinction between tourism development and economic development. It seems inappropriate and unnecessary to maintain separate tourism *promotion* boards at a time when state and local government should be seeking to consolidate functions and reduce administrative expenses. Moreover, the continued separation of tourism from development creates an inappropriate and artificial distinction between tourism development and economic development. It also perpetuates the wrong-headed notion that tourism development is essentially an issue of promotion — passing out brochures and maps — rather than doing the hard work of developing tourism facilities that would attract people to the region. In our view tourism should be viewed as a business sector just like manufacturing and other sectors. Investments in developing tourism infrastructure and facilities should be subject to the same cost benefit analysis used in conventional economic development programs. We therefore recommend that the county level tourism promotion agencies be consolidated into the single countywide development entities.

We recommend the formalization of the currently informal Local Economic Development Network. We urge that only one organization per county be a member of the Network. We believe that it should be established as a formal entity with articles of incorporation and by-laws. It could be staffed by one of the member groups on a periodically rotating basis or by such other mechanisms as its members might agree.

The Network would be the formal link to and the partner of the newly merged regional economic development entity called for in our first recommendation above. The Network would serve as a principle point of coordination and develop formal protocols for communications and for such development functions as lead management. It would make sure that its membership is appropriately informed of business contacts between the regional entity and companies in the region.

We see the Local Economic Development Network as the responsible party to design and manage the Regional Branding, Marketing, and Business Recruitment Effort discussed below. We also recommend that the Network undertake the development of a regional resources and capabilities inventory to fully catalogue all the development programs and activities in the region.

Generally, we urge that county level economic development organizations should not be in the business of managing real estate (such as industrial parks and incubators), in ways that detract from their principle mission of helping existing businesses improve their competitiveness and helping attract new firms to the region. We are also concerned about the number of separate business lending programs in the region that are operated by these public and quasi-public development agencies. The danger is that the various economic development groups will devote too much of their time to real estate management and business lending. We therefore urge the establishment of a task force from among the members of the Network and key staff of the merging regional organization to assess the feasibility of establishing a single real estate management and development function or fully privatizing these functions.

That task force should also investigate the feasibility of consolidating the administration of all existing loan programs in the region under a unitary system of private, professional management. There may be savings to be derived from joint administration or even income to be realized form *securitizing* the outstanding loans. We realize that the various groups now operating loan programs have come to depend on loan returns to help finance their operating costs. There may be ways that these organizations could continue to receive some return from loans they originated and also receive some origination fees from new loans.

Action Steps; Local economic development groups in the region are already moving toward this model. In Erie, there is substantial movement toward consolidating countywide development functions. A few counties have effectively had a unitary development function for some time. Moreover, there is an exiting network of organizations that has been meeting and is working toward greater coherence.

The key action step here lies less with the heads of the existing county and municipal groups and more with locally elected officials. We recommend that there be convened a task force of county elected officials to consider this recommendation and develop a plan to make it happen.

Initiative # 3

Establish a Fund for the Future of Northwest Pennsylvania

The bold initiatives described in this plan will not occur without additional resources and a financing mechanism. Creating a <u>single</u> fund to underwrite these new costs is smarter and more strategic than trying to raise money separately for each new idea. A high profile fund can create a sense of coordinated purpose, high ambition and momentum. If positioned well with articulate spokespersons, it can attract funding from sources where more prosaic approaches would not be successful. We suggest a Fund for the Future of NW Pennsylvania be created to finance the new initiatives of this Action Plan. It would supplement rather than replace current support for various on-going activities. It would be created and endowed by private and public sector partners.

We believe it is necessary and feasible to raise about \$25 million over five years. We see those resources to be to be allocated very roughly as follows:

- About \$2.5 million over five years for the marketing, branding and new business recruitment campaign that is outlined below.
- About \$3.5 million over five years to support expanded technical assistance and intensive market development for the region's cluster of high value-adding small and medium-sized manufacturing, existing and emerging;
- About \$4 million over five years as support for the design and non-capital start-up costs of a new regional technical college, as described below. (Of course this would not include annual operating costs which would have to come from state funds, some local government share, and tuition and fees);
- About \$4 million over five years as "pump-priming," seed capital for the Regional Authority for Infrastructure and Telecommunication Finance (Again, more capital support from the state on an annual basis would be essential);
- About \$4 million as a "grant" to support "non-investment" activities associated with the regional seed capital fund (investment funds would come from private investors seeking a financial return); and,
- About \$4 million to be held in reserve to facilitate specific projects that would lead directly to high wage jobs in the region.

Of course it is a lot easier to see how to sped this money than how to raise it. It does seem daunting to contemplate a fund-raising effort of his magnitude. However, we believe it is doable. It is a target of \$4-5 million per year for five years. It is not a permanent expenditure item for any party asked to contribute. It is an investment in the health of the region. If properly profiled and described, the Fund itself can become an important marketing tool for the region.

As much as \$3 million of this funding could come from the "operating reserves" of economic development organizations in Northwest Pennsylvania. There is no need to save for a rainy day when it is pouring outside.

Even in these tough fiscal times, the public sector in the region ought to plan to come up with at least \$5 million over the next five years. That is \$1 million per year of new money from the eight counties, collectively. Ideally, it would be apportioned on the basis of size,

but the average is only \$125,000 per county per year. The counties might consider the sale of capital assets and public land to help raise this money.

Over five years, about \$7.5 million or \$1.5 million per year ought to come from the private sector, especially from those firms with the greatest vested interest in the vitality of the region's economy. While all businesses should be asked to make contributions, those businesses that are more dependent on a vibrant regional economy should see this as an investment. This would include banks and other depositary institutions, energy companies, transportation companies.

Independent, corporate and community and private foundations should be asked to contribute to this plan. It might be necessary to allow the foundation to allocate their grants to elements of the plan.

The State should be asked to contribute \$10 million in "unrestricted" money to this Fund. Additional state support (and federal funding) will be necessary to support the on-going costs of some new initiatives (<u>i</u>. <u>e</u>., the technical college and the infrastructure authority).

Federal grants should also be available although again it might be necessary to apply for specific programs and to earmark those resources to particular parts of the plan.

Action Steps: The board chairs of the Northwest Commission, the IRC and the WIB should take the lead action here. To get started, this group could organize a fund-raising committee to develop a strategy and identify the materials that will be necessary and to recruit a high-level private sector spokesperson to lead the effort.

Strengthening Economic Development Programs in Northwest Pennsylvania

In addition to the major structural and financing initiative recommended above, we propose five major new initiatives to revitalize and re-direct economic development programs in the region. These initiatives are inter-connected and inter-dependent.

Initiative # 4

Launch a Regional Branding, Marketing, and Business Recruitment Effort

As we have observed throughout this report, the growth prospects of those business segments now predominating in the region and paying above the medium wage are not at all good. New growth as measured by net new jobs will have to come in large part from new investment and that requires an aggressive marketing strategy. Effective marketing demands a coordinated and consistent message emphasizing those economic clusters that might be expected to find comparative advantage in Northwest Pennsylvania (e.g., transportation, logistics and warehousing; health services; biomedical spin-offs from Pittsburgh; nano-technology applications in metalworking and plastics; manufactured housing; high-value, active tourism; etc.). The objective of this new campaign would be to target and attract new investors, entrepreneurs, and talented people into the region.

The first ingredient in this marketing campaign is to establish a clear and compelling "brand" that everyone agrees to sell and that is based on existing economic strengths. Assets of the region should be aggressively promoted. The brand would have to convey a strong sense of the region's key attributes, such as its clusters of machining expertise, enviable transportation/location advantages, low cost of living, affordable and high quality housing, great recreational opportunity, cultural and educational benefits from the large number of colleges and universities in the region, etc. However, the marketing campaign would help translate those "brand assets" into competitive advantages for potential investors.

A good economic development marketing program would be carefully targeted, by business category and geography. It would work hand-in-glove with the marketing efforts of firms now in the region who are seeking new customers and new markets. We see this as an international campaign of advertising and representation that would be directed by the Local Economic Developers' Network (in close cooperation with the newly created regional development authority) with one strategy, one message, and one budget.

Action Steps: This program can get underway within the next several months. The Local Economic Development Network should organize an Advisory Committee of marketing specialists within the region from public and education institutions as well as private firms. With that resource available, a logical set of activities might include the following:

- Hiring an experienced economic development marketing firm to lay out a general plan and to help identify the research and materials that need to be available before launching the program;
- Developing a sophisticated web presence, backed with easily accessible data files so that interested parties can quickly obtain detailed information directly through the internet;
- Carrying out the specific research about target industry markets (FutureWorks
 has suggested several areas that would have some market appeal, but there are
 more specialized research firms to generate specific target lists);
- Identifying specific messages and markets that would reach entrepreneurs, people who would come to Northwest Pennsylvania to start a new company;
- Contracting with a media/advertising firm to develop and place marketing messages in appropriate media;
- Developing a program to work with firms in the region to identify specific opportunities for highly targeted marketing.

This initiative is also about attracting people. For example, well-educated young workers are particularly important to the economy: they have the most current education, work long hours to build their careers, and are the most mobile segment of the population. Their skills, flexibility, mobility and future potential make them desirable to employers, particularly those in fast-growing businesses and in professional and creative services. Yet the US has three and a half million fewer 25-34 year olds today than in 1990. When the economy recovers, access to talent is likely to be a major constraint on economic growth, both nationally, and especially in Northwest Pennsylvania. We suggest policy-oriented research to quantify the flows of young workers into and out of the region, identifying the principal factors that lure them away or keep them home or bring them here.

We suggest this program be budgeted at about \$2.5 million over the next five years.

Initiative # 5

Intensify Efforts to Improve the Global Competitiveness of the Region's Manufacturing Base

The manufacturing sector currently contributes a huge share of the region's wealth. As observed above, wages in manufacturing are 140% of the average private sector wage and 161% of the average wage in the services sector (the largest employer in the region). If precision manufacturing, the leading component of that sector in Northwest Pennsylvania, declines as fast as some are predicting over the next 5-10 years in the number of establishments and jobs, and the total value-added, even a wildly successful marketing strategy won't help.

It is therefore critical to re-double efforts to retain and strengthen the existing base of manufacturers, especially the small precision machining firms. We recommend the establishment of an expanded program of assistance to targeted firms in the manufacturing sector. IRC would lead this effort with expanded resources. We emphasize that this would not replace any existing programs of the IRC.

We see three critical components of this expanded program:

- Finding new market opportunities will require a formal, global marketing initiative helping even the smaller firms get very good at market development. We suggest the establishment of a marketing institute for the precision machining industry in the region, helping the small firms undertake market research, develop specific marketing plans and training employees in market development strategies and practices.
- 2. As the existing manufacturing base seeks new global market opportunities, it will need help to combine and recombine technical and market capabilities through inter-firm networking. We propose that firms be supported in creating new manufacturing and marketing networks, combining their complementary capabilities in ways that will give them access to markets and jobs otherwise not available to them.
- Building more sophisticated telecommunications capabilities for the firms, especially in electronic commerce. We urge that firms receive extensive training and, as necessary, capital assistance for developing an expanding electronic commerce capability.

None of these are wholly new functions for the IRC. However we urge a major ratcheting up of these efforts. We recommend new spending of about \$700,000 per year over the next five years for these programs

Initiative # 6

Developing an Occupational and Technical College for Northwest Pennsylvania

Northwest Pennsylvania is at a serious competitive disadvantage because it lacks a post-secondary institution whose primary mission is to help young people and adults gain the occupational and technical skills associated with high wage, high skill jobs. The 21st century economy is driving the emergence of career-focused, high skill occupational clusters that have sophisticated and ever-changing skill requirements. These skills cannot be adequately developed in secondary school programs or in colleges and universities whose primary mission in to award four-year degrees. Northwest Pennsylvania must begin work now to create a new regional institution of post-secondary education and training with the authority and capacity to educate and credential career holders in these occupational clusters over a lifetime of education and skill development.

It has been argued that the current trajectory of occupational change in the US economy means that workers in the 21st century will make far more frequent job changes —six, seven, eight or more in their career — than workers in the 20th century. Current experience supports that contention, but it is also clear that workers are not necessarily making that many changes *across* occupations. Job changes frequently come *within* broad occupational clusters and less frequently involve occupational displacement. Intra-occupational job change is increasingly apparent in such clusters as health sciences, manufacturing technology, information and telecommunications technology, public safety, human services, business administration, early childhood development and education and many other high skill areas. Instead of finding narrow job ladders within these clusters, workers encounter wide-ranging lattices. "Getting ahead," means being able to move laterally and diagonally as well as horizontally.

Individuals entering into these technically oriented occupations (at almost any level) will need stronger credentials at entry. If they expect to rise toward higher paid and more responsible positions within these career occupations, they will need regular increments of new skills and credentials that attest to those skills. This is not a modest adjustment in the labor market; it is a huge structural shift that affects millions of workers, especially those in occupations that have not previously been associated with baccalaureate degrees.

A regional post-secondary educational institution in Northwest Pennsylvania can help both young people and adult workers. It can help both build a solid foundation to enter these high skill occupations and then stay with them as they and their employers discover the need for new skills. It can develop a career pathway of credentials that certify both the strong foundation and the periodic addition of major new increments of knowledge and capability.

A post-secondary institution focused on occupational and technical skill development also can be a big advantage for four-year schools who are otherwise facing a declining pool of traditional college age students. By attracting to post-secondary study young people and adults who would not traditionally attempt post-secondary study, this new institution will help build a larger pool of potential four-year students. This new institution would develop articulation and credit transfer agreements with the four year schools so

that individuals in these 21st Century occupations can move seamlessly from less than one-year to one-year, two-year, three-year, and four-year programs and degrees.

This new institution could be organized and funded under the Pennsylvania Community College Act of 1963, but we do not believe it should try to look like the other community colleges established over the past 50 years. Unlike those two-year colleges, it would not have a transfer mission, <u>i. e.</u>, an objective of providing students the first two years of non-residential study toward a traditional four-year degree. There are already accessible four-year colleges and universities in the region with non-residential programs. Instead this new institution would be sharply focused on career, technical and occupational education and would focus on credentials that have application in the work place. This new school would have a high profile to attract working adults and college-age youngsters throughout the region, be tightly linked to employers, and be seen as a cornerstone of the region's economic recovery.

It would employ both direct and adjunct faculty in a flexible, multi-campus approach, with a lot of on-line courses, sometimes contracting with existing higher education institutions and other 2-year colleges through the state's Virtual Community College. However, it would have its own brand. We believe this college has the best chance of success if it is set up on a multi-county basis with a geographic service area that includes all the eight counties of Northwest Pennsylvania. It could even serve some of the counties further to the east that also are not now served by a community college.

Action Steps: The chairs of the Boards of Directors of the WIB, the IRC, and the Northwest Commission and the chair of the Local Economic Development Network should appoint a committee to begin planning a multi-county post-secondary college for occupational and technical education and training. It should be a broadly based committee with representatives of the existing post-secondary system, the secondary schools, the private sector, and the county commissioners. The state Department of Education should be asked to designate a representative. That planning committee should take inventory of other developments underway in the region that are related to this initiative. The planning committee should also contract with a firm specialized in education planning and development first to undertake a detailed assessment of issues and options and then to begin a feasibility assessment.

Initiative # 7

Regional Authority for Infrastructure and Telecommunication Finance

Infrastructure financing systems in Northwest Pennsylvania are not working well. There needs to be a middle ground between distant and often unwieldy state authorities and small, sometimes inefficient local governments. In many traditional areas (water and sewage) and certainly in some new areas (telecommunications), the multiple, small jurisdictions in the region are not able to meet needs required for a vibrant economy.

It is recommended that the region establish a new entity with the authority to borrow and lend money and to build and manage infrastructure facilities throughout the eight counties of Northwest Pennsylvania. We see this entity serving as a regional bond bank, pooling financing, reducing transaction cost, and offering more professional management. We believe that it should be organized to finance (and even operate)

multi-modal regional telecommunication networks (providing cable TV, Internet access and telephone services) throughout the region. It would aim to attract public and private investors.

Action Steps: This is in many ways the most opened-ended of the recommendations we offer. The implementing steps are not clear. It is suggested that the President of the Northwest Commission and the chair of the Local Economic Development Network appoint a task force to investigate the issues and options associated with this recommendation. It appears that, because this entity would issue bonds, enabling state legislation might be necessary, although current laws governing the establishment of inter-local bodies may provide sufficient authority to proceed. The idea of using public funds, through bond issuance, is certain to be controversial and suggest that new legislative authority would be prudent

Initiative #8

Regional Seed Capital Fund for Entrepreneurial Development

Northwest Pennsylvania needs a highly visible new commitment to entrepreneurs and new business formation. The region has not witnessed a burst of entrepreneurial activity in the past few decades and is now suffering the consequence. We recommend a major campaign to seed the region with new businesses that carry the potential for growth and demonstrate the region's potential to other new and established firms. Northwest Pennsylvania needs to create (and market) a business culture that prizes and rewards risk and new business formation.

One of the primary reasons that the region is not dong well now is that it did not participate in the burst of entrepreneurial economic activity that characterized most of the national economy in the 1990's. This is not just the "dotcom" phenomenon (In fact, Northwest Pennsylvania may have been fortunate to escape the burst that followed the explosive growth of these start-up companies.) This region has had little entrepreneurial activity even in more traditional sectors of the economy.

Entrepreneurs need help develop business plans. They need help to build management teams. Some of these things they can get from groups like the Small Business Development Centers. However, they also access to existing capital and there is little help available in Northwest Pennsylvania for this. A major shortcoming in this region has been the lack of equity-based capital for start-up, small, and rapidly growing companies. Other regions have found ways to build a network of "angel investors" and to help the entrepreneurs market their ideas to traditional sources of capital, including banks. Other regions have also found strategies to help create pools of early stage capital.

A close relationship with the Ben Franklin Technology Partners will be important. Its mission is to identify individuals with new technologies and assist them in commercializing their technology. It has an investment program that includes funding for product prototype and initial manufacturing to test markets.

We recommend a *comprehensive business innovation model* that would seek to provide a range of capital related services to new firms. This should include the active recruitment of entrepreneurs — a visible program to nurture those who are here and attract new ones to the region. It would include training and technical support on business planning and market analysis (the SBDCs can help here). It would include active networking with private sources of early stage equity financing. It would include direct assistance in linking entrepreneurs to business advisers, technology partners and management talent. It would include networking with traditional and non-traditional sources of equity and new-equity financing outside the region. It also should include effort s to create venture fund the Northwest Pennsylvania that can make direct investments in firms organized by indigenous entrepreneurs and those attracted to an entrepreneurial region.

Action Steps: We recommend creating incentives to a "market-based approach" to this initiative. That is, we suggest an effort to attract private individuals into this niche of the economic development arena, perhaps by offering to underwrite initial expenses in developing the approach outlined above. Public funds then could be applied on an ongoing basis to costs associated with business plan development, market analysis and other function outlined above. We do not think it will be necessary to use public funds to help seed the venture fund (although public funds have been used successfully for such activities in other places).

Final Observations

These recommendations are bold and dramatic, and they will be very difficult to carry out. FutureWorks has heard concern that the sheer enormity of these several initiatives will paralyze action, that the prospect of implementing these wrenching changes is so daunting that it will discourage authorities in the region even from trying. Frankly, we agree that this is the most serious liability of this plan. These are enormous undertakings.

We are also concerned that this report sets up unrealistic expectations of the economic development practitioners in the region. Some might try to hold the organizations accountable to the initiatives recommended here without stronger public and private sector leadership than they have had and without the kind of resources called for in the proposed Fund for the Future.

We have tried to address these liabilities by being cautious in suggesting the implementing actions. On one hand, we need avoid providing too much implementing detail and thereby placing unnecessary limitations on the inventiveness of local authorities. These are complex issues that will require negotiation and compromise. Too much detail in this report runs the risk of making the initiative a non-starter before the ink is barely dry. On the other hand, we have an obligation to at least suggest a pathway toward implementation. For each initiative, we have tried to *suggest how to get the process started* but to leave room for compromise and consensus development along the way.

Also, it has been hard to establish priorities to mange these initiatives. Those associated with structural and organizational change and financing are obviously interconnected. The more programmatic initiatives could not be carried out without the structural changes we call for. So, we think there must be action to set in motion each of

those first three initiatives before moving on the next five. As our survey and interviews revealed, there is little confidence in existing leadership in economic development. Those structural changes have to come first and the re-organizations set in motion must be well underway before the program activities can be attempted.

Among the program initiatives, our order of presentation suggests our sense of priorities. Everyone agrees that the marketing campaign is immediately necessary. In some ways, it is also the easiest. It requires no new laws. There is capacity in the region to manage it. There are professional development marketing firms who know how to do this. The money could be the first dollars in to the fund-raising efforts we have suggested. In fact the operating reserves of the Northwest Commission and the IRC could probably finance this initiative right away. Getting started quickly here would create sense of purpose and momentum that would support the other initiatives.

The role of the state in this strategy is very important. Very early on a delegation of high level officials from the region, included state legislators, should visit the Governor and his key lieutenants in Harrisburg to explain the plan and seek their explicit support.

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FutureWorks has appreciated the opportunity to work with the economic development leadership of Northwest Pennsylvania in this project. We gained new friends and renewed respect for the challenges that face locally elected officials and economic development practitioners.

APPENDICES

APPENDIX A: KEY PARTICIPANTS IN THE PLANNING PROCESS

APPENDIX B: ECONOMIC SCAN STATISTICAL ANALYSIS

APPENDIX C: SELECTED RESULTS FROM REGIONAL

ECONOMIC DEVELOPMENT SYMPOSIUMS

APPENDIX D: SUMMARY OF RESPONSES TO ELECTRONIC

SURVEY

APPENDIX A: KEY PARTICIPANTS IN THE PLANNING PROCESS

Steering Committee (People who attended at least one steering committee meeting*)

NAME ORGANIZATION

Andersen, David NW PA IRC

Anderson, Janet Erie County Economic Dev.

Castonguay, Dick Venango EDC

Cornwell, Jan Erie County/NW PA RPDC Board

DiTullio, Ann PA Governor's Office Eighmy, Scott Board Chair, NW IRC

Fadden, Joe Congressman Peterson's staff

Ferry, Sue MAIC

Gent, Hank Legal Counsel, NW Commission

Goucher, Ned NW PA RPDC
Grunenwald, Joe Clarion University

Hall, Stephen Crawford County Development Corp

Knorr, Barney Keystone S.D.

Kosak, Stephen Venango Area Community Foundation

Lutz, Robin Pennsylvania Senate

Lynch, Jack Crawford County Planning Department

Murray, Bob Venango County Commission

Novotny, Rick Corry RDA/IDC

Pascarel, Dennis CEO Seneca Printing & Label, Inc

Peterson, John US Congress
Reichard, Larry Penn Northwest

Sherman, Jack Forest County IDA/IDC

Simon, Phil NW Workforce Investment Board

Steiner, Bill NW PA RPDC Thompson, Deb Consultant, Erie

Wagner, Bill Northwest Savings Bank

White, Mary Jo PA Senate

Wilson, Bill Franklin Businessman

Winkler, Peter Congressman Peterson's staff

STAFF

Bosworth, Brian FutureWorks Inc.

Dusenbury, Pat FutureWorks Inc.

^{*} We apologize to those we might have inadvertently left off this list.

Interviews

(This is a very partial list of the formal interview carried out by FutureWorks. It does not include scores of people with whom we have more informal exchanges, telephone conversations and e-mail exchanges. In addition, it does not include the Steering Committee members with whom we have multiple exchanges over the course of the project.

Northwest Pennsylvania Regional Planning and Development Commission Staff

CHRIS BEICHNER, PTIA Coordinator
NED GOUCHER, Associate Director
DALE MASSEY, (Transportation Planning)
DENISE McCLOSKEY, International Trade Specialist (CALL HER)

Local Economic Development Entities

Several of these individuals wear multiple hats, but they were interviewed because they head local economic development organizations in Northwest Pennsylvania. Those designated by the State of Pennsylvania as the (county) local economic development agency are marked with an asterisk (*).

Mike Allyn, Titusville Community Development Agencies, (Crawford County)
Janet Anderson,- Erie County Economic Development Specialist
Dick Castonguay, Venango Economic Development Corporation*
Valerie Decorte: Clarion County Economic Development Corporation*
Sue Ferry, Meadville Area Industrial Commission* (Crawford County)
Steve Hall, Crawford County Development Corporation
Peter Kay, Erie County*
Linda Nicht, Lawrence County Economic Development Corporation *
Rick Novotny, Corry Redevelopment Authority (Erie County)
Larry Reichard – Penn NW Development Corporation (Mercer Co.)*
Deborah Roberts, Warren County Development Association* (Note: Warren County Is
Re-Organizing Its Ed Function, And A New Director Has Not Yet Been Appointed.)
Farley Wright – Forest County Industrial Development Corporation

Education and Training Institutions

Dan Brockett, Penn State University, Cooperative Extension, Ced Joe Gruenwald - Clarion University (Also On Steering Committee)
Phil Simon – Northwest Pennsylvania WIB
Joane Stitzinger and Marie Whipple, Warren-Forest Higher Education Council Joanne Wheeler – Clarion-Venango Educational Resource Alliance (C/Vera)

Private Sector

Erin Baker and Mike Gildea, Technology Council Of Northwest Pennsylvania (Brt-Erie) Don Lewis, Structural Modulars, (Clarion County, Also On Wib) Steven Kosak, Venango Area Community Foundation Chester Marshall, Tapco Tube, Inc. Russ Shertoma, Attorney At Law, Meadville Laith Wardi, Business Retention Technologies (Erie)

APPENDIX B: ECONOMIC SCAN STATISTICAL ANALYSIS

Additional Analysis

The SF3 socio-economic data for Pennsylvania from the 2000 Census became available September 25, 2002, too late to be included in presentations at the June forum. As soon as it become available, relevant information calculated from DP-3: Profile of Selected Economic Characteristics and DP-2 Profile of Selected Social Characteristics was developed and shared with the steering committee. Population trends for the 1990-2000 Census interval show described previously population growth in NW PA lagging both the state and national averages. The most recent Census data is the July 1, 2002 estimate for county population. This data shows the region losing population.

April 1, 2000 through July 1, 2001 Population Change

GEOGRAPHIC AREA	NUMBER	PERCENT
Clarion County	-287	-0.7
Crawford County	-320	-0.4
Erie County	-1207	-0.4
Forest County	-36	-0.7
Lawrence County	-483	-0.5
Mercer County	-611	-0.5
Venango County	-467	-0.8
NW PA Region	-3411	-0.5
Pennsylvania	6,096	+0.0
United States	3,374,981	+1.2

Source: Census Population Estimates Series P-25.

Slow or no population growth reflects the low level of in-migration. 2000 Census data shows that 88 percent of the people (aged five and over) living in NW PA in 2000 had been living there in the same county in 1995. Only 7 percent moved in from a different state. The comparable proportion for the state is 86 percent and for the US, 79 percent. Pennsylvania residents are less likely to move than the average American.

Change of Residence

RESIDENCE IN 1995	US	PA	NW PA
Same house in as in 1995	54%	64%	64%
Different house in the U.S. in 1995	43%	35%	36%
Same county	25%	22%	24%
Different county	18%	13%	12%
Same state	10%	8%	7%
Different state	8%	6%	5%
Elsewhere in 1995	3%	1%	1%

SOURCE: DP-2: Profile of Selected Social Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

EDUCATION

The following tables quantify the extent that educational attainment of NW PA residents lags averages for the state and the nation. While NW PA does a better job of graduating students from high school, far fewer adults have continued their formal education.

Educational Attainment, Percent of Population Aged 25 or Older, 2000

HIGHEST LEVEL OF EDUCATION	NW PA	PA	US
Less than 9th grade	5%	5%	8%
9th to 12th grade, no diploma	12%	13%	12%
High school graduate (includes equivalency)	45%	38%	29%
Some college, no degree	15%	16%	21%
Associate degree	5%	6%	6%
Bachelor's degree	11%	14%	16%
Graduate or professional degree	6%	8%	9%

County level data:

HGHEST LEVEL	Clarion	Crawford	Erie	Forest	Lawrence	Mercer	Venango	Warren	NW PA
Less than a High School Diploma	18%	18%	15%	21%	18%	17%	19%	15%	17%
High School Diploma (inc. GED)	50%	48%	42%	53%	46%	45%	49%	49%	45%
Some College	12%	14%	17%	13%	15%	15%	13%	16%	15%
Associate Degree	4%	4%	5%	4%	6%	5%	6%	6%	5%
Bachelor's Degree	9%	9%	13%	6%	10%	11%	8%	10%	11%
Advanced Degree	6%	5%	8%	3%	5%	6%	5%	4%	6%

SOURCE: DP-2: Profile of Selected Social Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

OCCUPATIONS

The distribution of workers by occupation shows that NW PA has a relatively high concentration of workers in production, transportation and material moving and relatively few managerial and administrative workers. The occupational distribution is consistent with the relatively small proportion of adults with post-secondary educational credentials.

Occupations of NW PA Workers

OCCUPATIONS	NW PA	PA	US
Management, administrative professional, and related	28%	33%	34%
Service	16%	15%	15%
Sales and office	25%	27%	27%
Farming, fishing, and forestry	1%	0%	1%
Construction, extraction, and maintenance	9%	9%	9%
Production, transportation, and material moving	22%	16%	15%

County Level Data

OCCUPATIONS	Clarion	Crawford	Erie	Forest	Lawrence	Mercer	Venango	Warren
Management, professional, and related	26%	26%	29%	24%	27%	28%	26%	26%
Service	17%	16%	16%	16%	15%	17%	17%	15%
Sales and office	24%	21%	26%	19%	27%	25%	24%	24%
Farming, fishing, and forestry	1%	1%	0%	2%	0%	1%	1%	1%
Construction, extraction, and maintenance	12%	9%	8%	13%	11%	8%	9%	9%
Production, transportation, and material moving	21%	26%	21%	27%	21%	21%	24%	25%

SOURCE: Calculated from DP-3: Profile of Selected Economic Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

EMPLOYMENT OF RESIDENTS

The 2000 Census found that NW PA has a smaller proportion of the population aged 16 and older who are in the labor force and employed than in the state as a whole or in the US. This is consistent with the region's relatively high proportion of people beyond the usual retirement age. The data suggest that Forest County may be emerging as a retirement destination.

Labor Force Participation Rate

LABOR FORCE STATUS	NW PA	PA	US
In the labor force	60%	62%	64%
Civilian labor force	60%	62%	63%
Employed	56%	58%	60%

County Level Data

LABOR FORCE STATUS	Clarion	Crawford	Erie	Forest	Lawrence	Mercer	Venango	Warren
In the labor force	57%	59%	63%	49%	58%	58%	58%	62%
Civilian labor force	57%	59%	63%	49%	58%	58%	58%	62%
Employed	53%	56%	59%	46%	54%	55%	54%	59%

SOURCE: DP-3: Profile of Selected Economic Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

EMPLOYMENT BY INDUSTRY

It is striking how much more NW PA depends upon the manufacturing industries for jobs than either the state of Pennsylvania or the nation.

INDUSTRY	NW PA	PA	US
Agric., forestry, fishing, hunting, & mining	2%	1%	2%
Construction	5%	6%	7%
Manufacturing	22%	16%	14%
Wholesale trade	3%	4%	4%
Retail trade	13%	12%	12%
Transportation, warehousing, & utilities	5%	5%	5%
Information	2%	3%	3%
Finance, insurance, & real estate	4%	7%	7%
Prof., management, & admin services	5%	8%	9%
Educational, health and social services	23%	22%	20%
Arts, entertainment, & rec., food & lodging	8%	7%	8%
Other services	5%	5%	5%
Public administration	4%	4%	5%

SOURCE: Calculated from DP-3: Profile of Selected Economic Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

County Level Data

INDUSTRY	Clarion	Crawford	Erie	Forest	Lawrence	Mercer	Venango	Warren
Agric., forestry, fishing, hunting, & mining	4%	4%	1%	5%	1%	2%	2%	3%
Construction	6%	6%	5%	8%	7%	5%	5%	4%
Manufacturing	17%	26%	24%	20%	17%	20%	20%	27%
Wholesale trade	3%	2%	3%	1%	4%	4%	3%	2%
Retail trade	14%	11%	12%	13%	13%	13%	14%	18%
Transportation, warehousing, & utilities	6%	4%	4%	7%	7%	5%	6%	5%
Information	1%	2%	2%	1%	2%	2%	2%	1%
Finance, insurance, & real estate	3%	3%	5%	2%	5%	4%	4%	3%
Prof., management, & admin services	4%	5%	6%	3%	5%	5%	5%	3%
Educational, health and social services	25%	21%	24%	18%	21%	24%	24%	20%
Arts, entertainment, & rec., food & lodging	9%	7%	8%	10%	7%	8%	6%	6%
Other services	5%	5%	5%	4%	5%	5%	5%	4%
Public administration	3%	4%	3%	7%	4%	4%	5%	4%

SOURCE: DP-3: Profile of Selected Economic Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

A comparison of 1990 and 2000 data shows that NW PA not only depends more heavily upon manufacturing industries for jobs, but also has experienced a relatively smaller loss of manufacturing jobs than the US as a whole. The region has, however, experienced several major plant closings and the loss of numerous jobs in machine shops during the last two years.

MANUFACTURING JOBS AS % OF TOTAL EMPLOYMENT

YEAR	NW PA	PA	US
1990	25%	20%	18%
2000	22%	16%	14%

SOURCE: Calculated from 1990 Census and 2000 Census, Summary file 3.

HOUSEHOLD INCOME

The household income data from the 2000 Census is for the year 1999. People are asked to report how much the household income totaled for the previous year. The income distribution for households in NW PA shows more a larger proportion of households in the under \$50,000/year lower income categories and far fewer households earning more than \$75,000/year.

Households by Income (In 1999)

INCOME RANGE	NW PA	PA	US
Less than \$10,000	10%	10%	10%
\$10,000 to \$14,999	8%	7%	6%
\$15,000 to \$24,999	17%	14%	13%
\$25,000 to \$34,999	15%	13%	13%
\$35,000 to \$49,999	18%	17%	17%
\$50,000 to \$74,999	18%	19%	19%
\$75,000 to \$99,999	7%	10%	10%
\$100,000 to \$149,999	4%	7%	8%
\$150,000 to \$199,999	1%	2%	2%
\$200,000 or more	1%	2%	2%

The median income, the income level where half the households earn more and half the households earn less, is significantly lower, and no county in NW PA approaches the state or national median.

Median Household Income, 1999

AREA	Median Household Income
Clarion	\$ 30,770
Crawford	\$ 33,560
Erie	\$ 36,627
Forest	\$ 27,581
Lawrence	\$ 33,152
Mercer	\$ 34,666
Venango	\$ 32,257
Warren	\$ 36,083
NW PA	\$ 35,000
PA	\$ 40,106
US	\$ 41,994

SOURCE: DP-3: Profile of Selected Economic Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data. NW PA median is estimated by FutureWorks from the county level data.

Households by Income (1999) County Level Data

INCOME RANGE	Clarion	Crawford	Erie	Forest	Lawrence	Mercer	Venango	Warren
Less than \$10,000	13%	10%	10%	13%	12%	10%	12%	8%
\$10,000 to \$14,999	9%	9%	8%	10%	9%	8%	9%	8%
\$15,000 to \$24,999	19%	17%	15%	22%	16%	17%	18%	17%
\$25,000 to \$34,999	16%	16%	14%	15%	15%	16%	15%	16%
\$35,000 to \$49,999	17%	18%	19%	19%	17%	19%	18%	20%
\$50,000 to \$74,999	16%	17%	19%	14%	18%	18%	18%	20%
\$75,000 to \$99,999	6%	7%	8%	4%	7%	7%	6%	7%
\$100,000 to \$149,999	3%	4%	4%	2%	4%	3%	3%	3%
\$150,000 to \$199,999	1%	1%	1%	0%	1%	1%	0%	1%
\$200,000 or more	1%	1%	1%	0%	1%	1%	1%	1%

SOURCE: DP-3: Profile of Selected Economic Characteristics: Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data.

The following tables provide more detailed breakdowns for data that was used in the June 6 presentations. Earnings are the primary source of income. ES02 employment data shows the differing levels of pay for jobs in industries down to the 4-digit SIC level. The following table shows the pay index for all industries that accounted for at least 5,000 jobs in NW PA in 2000. The average pay is 1.00. The 1.40 ratio for manufacturing means that jobs in manufacturing pay 40 percent more than the average wage. Conversely, the .54 for retail trade means that jobs in retail trade pay just 54 percent of the region's average wage.

INDUSTRY	PAY INDEX
Construction Total	1.17
Construction - Special Trade Contractors	1.13
Manufacturing Total	1.40
Manufacturing - Transportation Equipment- Railroad	2.02
Manufacturing - Transportation Equipment	1.87
Manufacturing - Industrial Machinery & Equipment- Metal Working	1.68
Manufacturing - Industrial Machinery & Equipment	1.55
Manufacturing - Primary Metal Industries	1.52
Manufacturing - Fabricated Metals	1.39
Manufacturing - Rubber And Misc. Plastics	1.14
Manufacturing - Rubber And Misc. Plastics - Misc. Plastics Products - Plastics NEC	1.11
Manufacturing - Rubber And Misc. Plastics - Misc. Plastics Products	1.10
Transportation & Public Utilities	1.26
Wholesale Trade Total	1.15
Wholesale Trade - Durables	1.17
Finance, Insurance, Real Estate	1.30
Retail Trade Total	0.54
Retail - Auto Dealers & Service Stations	0.92
Retail - Misc.	0.67
Retail - General Merchandise - Dept. Stores	0.53
Retail - General Merchandise	0.51
Retail - Food Stores - Grocery Stores	0.51
Retail - Food Stores	0.50
Retail - Eating & Drinking Places	0.34
Services Total	0.87
Services - Health	1.16
Services - Health - Hospitals	1.11
Services - Health - Hospitals - General	1.10
Services - Educational	0.86
Services - Health - Skilled Nursing Care Facilities	0.75
Services - Health - Nursing & Personal Care Facilities	0.73
Services - Social	0.69
Services - Business	0.68

SOURCE: IMPLAN ES 2002 data.

Location Quotients for Employment

A location quotient (LQ) shows concentrations of employment relative to a norm, in this case the national distribution of employment. If an area has the same proportion of employment in an industry as the national average, the LQ for that industry is 1.00. Where there is a concentration of jobs in a particular industry the LQ is above 1.00 and the amount by which it exceeds one indicates the relative concentration. For example a LQ of 1.50 shows 50 percent more employment in the industry that the national average would predict. Manufacturing is seen as the core of employment in NW PA, and the following table lists location quotients for the -digit SIC manufacturing industries along with their 2000 employment.

2000 Location Quotients and Employment Totals for Manufacturing Industries

SIC	DESCRIPTION	LQ	EMPLOYMENT
20	Food and kindred products	0.92	3,682
21	Tobacco products	0.04	3
22	Textile mill products	0.04	52
23	Apparel and other textile products	0.21	311
24	Lumber and wood products	1.94	3,793
25	Furniture and fixtures	1.65	2,171
26	Paper and allied products	1.36	2,112
27	Printing and publishing	0.60	2,185
28	Chemicals and allied products	0.63	1,543
29	Petroleum and coal products	3.78	1,142
30	Rubber and misc. plastics products	3.92	9,419
31	Leather and leather products	0.40	67
32	Stone, clay, and glass products	1.51	2,073
33	Primary metal industries	4.07	6,751
34	Fabricated metal products	3.46	12,606
35	Industrial machinery and equipment	2.30	11,535
36	Electronic & other electric equipment	0.99	4,024
37	Transportation equipment	1.63	7,139
38	Instruments and related products	0.85	1,701
39	Miscellaneous manufacturing industries	0.66	612

SOURCE: IMPLAN ES 2002 data.

The ES202 data is available at the more detailed 4-digit level from IMPLAN, which imputes values for the data not disclosed to protect confidentiality in government publications. The following table lists all the 4-digit manufacturing industries with location quotients above 1.00 in NW PA. It also lists the employment totals to indicate the importance of employment concentrations to the region's employment base. This is important information because a high location quotient may be registered for an industry with relatively few jobs if that industry provides few jobs nationwide. An example is found in the first row of the table, production of fluid milk.

Employment for Manufacturing Industries with Location Quotients Above 1.00

SIC CODE	DESCRIPTION	<u>LQ</u>	EMP 2000
	FOOD PROCESSING		
2026	Fluid milk	4.05	587
2033	Canned fruits and vegetables	2.81	455
2038	Frozen specialties, NEC	3.18	441
2047	Dog and cat food	4.21	195
2052	Cookies and crackers	4.37	505
2053	Frozen bakery products, except bread	6.49	152
2064	Candy & other confectionery products	1.18	136
2082	Malt beverages	1.68	126
2092	Fresh or frozen prepared fish	1.54	152
2096	Potato chips and similar snacks	4.30	319
	APPAREL		
2331	Women's & misses' blouses & shirts	1.99	71
	WOOD & LUMBER		
2421	Sawmills and planing mills, general	3.42	1156
2426	Hardwood dimension & flooring mills	1.98	180
2435	Hardwood veneer and plywood	2.31	167
2439	Structural wood members, NEC	2.67	301
2448	Wood pallets and skids	2.79	308
2449	Wood containers, NEC	3.10	58
2451	Mobile homes	4.66	723
2452	Prefabricated wood buildings	6.93	410
	FURNITURE & FIXTURES		
2511	Wood household furniture	3.69	1118
2515	Mattresses and bedsprings	2.16	188
2522	Office furniture, except wood	1.70	174
2531	Public building and related furniture	1.57	200
2542	Partitions and fixtures, except wood	4.32	402
2599	Furniture and fixtures, NEC	1.17	46
	PAPER		
2621	Paper mills	4.43	1449
2653	Corrugated and solid fiber boxes	1.26	403
2655	Fiber cans, drums & similar products	2.88	100
2675	Die-cut paper and board	2.48	119
	PUBLISHING		
2711	Newspapers: publishing, or publishing and printing	1.07	1121
2761	Manifold business forms	1.80	184
	CHEMICALS		
2819	Industrial inorganic chemicals, NEC	1.38	170
2842	Polishes and sanitation goods	2.68	209
2891	Adhesives and sealants	11.52	743
2892	Explosives	1.05	18
2899	Chemical preparations, NEC	1.97	180
		_	

REFINERIES, ETC. 2911 Petroleum refining 4.07 800 2951 Asphalt paving mixtures and blocks 3.32 124 2952 Asphalt felts and coatings 4.84 160 2992 Lubricating oils and greases 1.86 57 PLASTICS TUBORITOS 57 3052 Rubber & plastics hose & belting 1.33 97 3061 Mechanical rubber goods 5.16 706 3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics bottles 3.34 301 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing </th <th>SIC CODE</th> <th>DESCRIPTION</th> <th>LQ</th> <th>EMP 2000</th>	SIC CODE	DESCRIPTION	LQ	EMP 2000
2951 Asphalt paving mixtures and blocks 3.32 124 2952 Asphalt felts and coatings 4.84 160 2992 Lubricating oils and greases 1.86 57 PLASTICS Rubber & plastics hose & belting 1.33 97 3061 Mechanical rubber goods 5.16 706 3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics pipe 11.01 567 3084 Plastics bottles 3.34 301 3085 Plastics foam products 1.33 203 3086 Plastics pipe 11.01 567 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3111 Leather tanning and finishing 1.24 32 3221 Glass containers 7.68 <td></td> <td>REFINERIES, ETC.</td> <td></td> <td></td>		REFINERIES, ETC.		
2952 Asphalt felts and coatings 4.84 160 2992 Lubricating oils and greases 1.86 57 PLASTICS 7 PLASTICS 3052 Rubber & plastics hose & belting 1.33 97 3061 Mechanical rubber goods 5.16 706 3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3119 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 321 Glass containers 7.68	2911	Petroleum refining	4.07	800
2992 Lubricating oils and greases 1.86 57	2951	Asphalt paving mixtures and blocks	3.32	124
PLASTICS Rubber & plastics hose & belting 1.33 97 3061 Mechanical rubber goods 5.16 706 3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 321 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3271 Concrete block and brick 1.41 72 72 72 72 73 73 74 321 Gray and ductile iron foundries 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 3.36 Copper foundries 5.60 539 3366 Copper foundries 5.52 199 3366 Copper foundries 5.52 199 3366 Copper foundries 5.52 199	2952	Asphalt felts and coatings	4.84	160
3052 Rubber & plastics hose & belting 1.33 97 3061 Mechanical rubber goods 5.16 706 3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics foam products 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 1.24 32 3111 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 <td< td=""><td>2992</td><td>Lubricating oils and greases</td><td>1.86</td><td>57</td></td<>	2992	Lubricating oils and greases	1.86	57
3061 Mechanical rubber goods 5.16 706 3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 303 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware		PLASTICS		
3069 Fabricated rubber products, NEC 1.05 125 3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS Teather goods, not elsewhere classified 1.30 35 3111 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT Teather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT Teather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT Teather goods, not elsewhere classified 1.30 35 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241	3052	Rubber & plastics hose & belting	1.33	97
3082 Unsupported plastics profile shapes 2.79 173 3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS	3061	Mechanical rubber goods	5.16	706
3083 Laminated plastics plate & sheet 6.86 467 3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS	3069	Fabricated rubber products, NEC	1.05	125
3084 Plastics pipe 11.01 567 3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40	3082	Unsupported plastics profile shapes	2.79	173
3085 Plastics bottles 3.34 301 3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products <	3083	Laminated plastics plate & sheet	6.86	467
3086 Plastics foam products 1.33 203 3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS	3084	Plastics pipe	11.01	567
3087 Custom compound purchased resins 2.70 179 3089 Plastics products, NEC 5.96 6379 LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 5.68 408 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries	3085	Plastics bottles	3.34	301
Real Street Real Street	3086	Plastics foam products	1.33	203
LEATHER GOODS 3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and re	3087	Custom compound purchased resins	2.70	179
3111 Leather tanning and finishing 1.24 32 3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97	3089	Plastics products, NEC	5.96	6379
3199 Leather goods, not elsewhere classified 1.30 35 GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 4		LEATHER GOODS		
GLASS, CLAY, CEMENT 3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3363 Aluminum die-castings 5.60 539 <	3111	Leather tanning and finishing	1.24	32
3211 Flat glass 11.05 417 3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3363 Aluminum die-castings 5.60 539 3365 Aluminum fou	3199	Leather goods, not elsewhere classified	1.30	35
3221 Glass containers 7.68 408 3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS NON-FABRICATED METALS 3.40 1225 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133<		GLASS, CLAY, CEMENT		
3241 Cement, hydraulic 7.06 298 3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3366 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366	3211	Flat glass	11.05	417
3255 Clay refractories 11.55 184 3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3221	Glass containers	7.68	408
3262 Vitreous china table & kitchenware 5.42 63 3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3241	Cement, hydraulic	7.06	298
3269 Pottery products, NEC 4.50 125 3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3255	Clay refractories	11.55	184
3271 Concrete block and brick 1.41 72 NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3262	Vitreous china table & kitchenware	5.42	63
NON-FABRICATED METALS 3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3269	Pottery products, NEC	4.50	125
3312 Blast furnaces and steel mills 3.40 1225 3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3271	Concrete block and brick	1.41	72
3313 Electrometallurgical products 9.05 97 3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199		NON-FABRICATED METALS		
3316 Cold finishing of steel shapes 3.27 158 3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3312	Blast furnaces and steel mills	3.40	1225
3317 Steel pipe and tubes 27.02 1947 3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3313	Electrometallurgical products	9.05	97
3321 Gray and ductile iron foundries 6.33 1166 3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3316	Cold finishing of steel shapes	3.27	158
3341 Secondary smelting and refining of nonferrous metals 3.97 153 3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3317	Steel pipe and tubes	27.02	1947
3351 Copper rolling and drawing 7.74 402 3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3321	Gray and ductile iron foundries	6.33	1166
3356 Nonferrous rolling and drawing, NEC 15.00 551 3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3341	Secondary smelting and refining of nonferrous metals	3.97	153
3363 Aluminum die-castings 5.60 539 3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3351	Copper rolling and drawing	7.74	402
3365 Aluminum foundries 2.14 133 3366 Copper foundries 8.52 199	3356	Nonferrous rolling and drawing, NEC	15.00	551
3366 Copper foundries 8.52 199	3363	Aluminum die-castings	5.60	539
	3365	Aluminum foundries	2.14	133
3369 Nonferrous foundries, NEC 5.79 81	3366	Copper foundries	8.52	199
	3369	Nonferrous foundries, NEC	5.79	81

SIC CODE	DESCRIPTION	LQ	EMP 2000
	FABRICATED METALS		
3411	Metal cans	2.61	177
3412	Metal barrels, drums, and pails	11.78	197
3421	Cutlery	1.10	30
3423	Hand and edge tools, NEC	9.04	796
3432	Plumbing fixture fittings and trim	3.13	178
3433	Heating equipment, except electric	8.20	384
3441	Fabricated structural metal	1.88	405
3442	Metal doors, sash, and trim	1.29	271
3443	Fabricated plate work (boiler shops)	3.87	924
3444	Sheet metalwork	2.35	721
3446	Architectural metal work	1.85	167
3449	Miscellaneous metal work	1.34	49
3451	Screw machine products	3.47	439
3452	Bolts, nuts, rivets, and washers	1.59	198
3462	Iron and steel forgings	18.97	1354
3463	Nonferrous forgings	13.67	292
3466	Crowns and closures	13.17	136
3469	Metal stampings, NEC	2.53	534
3471	Plating and polishing	2.89	607
3479	Metal coating and allied services	3.16	442
3491	Industrial valves	3.65	228
3492	Fluid power valves & hose fittings	12.88	1146
3494	Valves and pipe fittings, NEC	3.00	157
3495	Wire springs	11.04	372
3496	Misc. fabricated wire products	1.16	156
3498	Fabricated pipe and fittings	2.52	195
3499	Fabricated metal products, NEC	10.06	1853
	INDUSTRIAL MACHINERY		
3531	Construction machinery	1.67	365
3532	Mining machinery	32.19	1094
3536	Hoists, cranes, and monorails	2.86	59
3541	Machine tools, metal cutting types	3.98	386
3542	Machine tools, metal forming types	6.14	266
3543	Industrial patterns	3.73	70
3544	Special dies, tools, jigs & fixtures	11.00	4119
3545	Machine tool accessories	1.08	128
3547	Rolling mill machinery	6.74	83
3549	Metalworking machinery, NEC	3.61	109
3559	Special industry machinery, NEC	3.76	718
3563	Air and gas compressors	4.57	266
3567	Industrial furnaces and ovens	9.55	417
3568	Power transmission equipment, NEC	8.10	383
3599	Industrial machinery, NEC	3.62	2539

SIC CODE	DESCRIPTION	LQ	EMP 2000
	ELECTRICAL MACHINERY		
3625	Relays and industrial controls	1.50	196
3641	Electric lamps	15.72	736
3643	Current-carrying wiring devices	1.14	170
3645	Residential lighting fixtures	3.52	174
3675	Electronic capacitors	2.09	99
3678	Electronic connectors	6.15	350
3679	Electronic components, NEC	3.38	1279
3691	Storage batteries	3.06	176
	TRANSPORT. EQUIP		
3713	Truck and bus bodies	1.73	201
3715	Truck trailers	1.03	103
3743	Railroad equipment	69.12	5758
3792	Travel trailers and campers	7.38	441
3799	Transportation equipment, NEC	1.07	83
	MEASURING INSTRUMENTS		
3823	Process control instruments	2.06	347
3824	Fluid meters and counting devices	15.02	421
3829	Measuring & controlling devices, NEC	1.95	173
3842	Surgical appliances and supplies	3.21	744
	MISC. MANUFACTURING		
3931	Musical instruments	4.25	173
3944	Games, toys, and children's vehicles	1.98	118

Employment totals show that non-manufacturing industries have become important sources of jobs in NW PA. The following table presents both location quotients and 2000 employment totals for non-manufacturing industries.

2000 Location Quotients and Employment Totals for Non-Manufacturing Industries

SIC CODE	DESCRIPTION	LQ	EMPLOYMENT
40	Railroad transportation	1.06	4
41	Local and interurban passenger transit	1.87	2,094
42	Trucking and warehousing	0.90	3,922
48	Communication	0.73	2,876
49	Electric, gas, and sanitary services	1.19	2,410
50	Wholesale trade - durable goods	0.67	6,646
51	Wholesale trade - nondurable goods	0.47	3,139
58	Eating and drinking places	1.09	21,094
59	Miscellaneous retail	1.17	8,520
60	Depository institutions	0.83	3,973
61	Nondepository institutions	0.31	505
62	Security and commodity brokers	0.22	397
63	Insurance carriers	0.98	3,403
64	Insurance agents, brokers, & service	0.64	1,157
65	Real estate	0.48	1,708
67	Holding and other investment offices	0.57	328
70	Hotels and other lodging places	0.58	2,574
73	Business services	0.45	10,421
78	Motion pictures	0.46	649
79	Amusement & recreation services	0.72	3,046
80	Health services	1.30	31,083
81	Legal services	0.51	1,230
82	Educational services	1.40	5,767
83	Social services	1.49	9,897
84	Museums, botanical, zoological gardens	0.74	186
86	Membership organizations	1.62	4,192
87	Engineering & management services	0.29	2,404

SOURCE: IMPLAN ES 2002 data.

Again, more detailed data is available and the following table lists the 2000 employment for the non-manufacturing industries with location quotients above 1.00. It reveals concentrations plus a large number of jobs health care services and educational services.

SIC CODE	DESCRIPTION	LQ	EMPLOYMENT
	TRANSPORTATION SERVICES		
4013	Railroad switching and terminal establishments	1.22	4
4119	Local passenger transportation, NEC	1.89	816
4142	Bus charter service, except local	5.40	307
4151	School buses	2.65	931
4213	Trucking, except local	1.18	2566
4432	Freight trans. on the Great Lakes-St. Lawrence Seaway	14.09	63
4493	Marinas	1.60	105
-	COMMUNICATION		
4832	Radio broadcasting stations	1.59	439
	UTILITIES		
4911	Electric services	1.48	1260
4922	Natural gas transmission	3.82	216
4923	Natural gas transmission and distribution	2.73	223
4924	Natural gas distribution	1.03	161
4941	Water supply	1.42	113
4952	Sewerage systems	1.73	36
4953	Refuse systems	1.16	358
	WHOLESALE TRADE		
5015	Motor vehicle parts, used	2.85	295
5033	Roofing, siding, & insulation	1.06	102
5039	Construction materials, NEC	1.21	111
5051	Metals service centers and offices	1.42	532
5052	Coal and other minerals and ores	3.18	28
5074	Plumbing & hydraulic heating supplies	1.15	339
5085	Industrial supplies	1.31	459
5087	Service establishment equipment	1.24	251
5093	Scrap and waste materials	1.41	395
5099	Durable goods, NEC	1.26	250
5111	Printing and writing paper	1.14	61
5144	Poultry and poultry products	1.26	48
5145	Confectionery	1.57	213
5171	Petroleum bulk stations & terminals	1.43	195
5172	Petroleum products, NEC	1.05	232
5181	Beer and ale	1.08	265
	RETAIL TRADE		
5231	Paint, glass, and wallpaper stores	1.09	166
5261	Retail nurseries and garden stores	1.07	254
5271	Mobile home dealers	1.50	157
5311	Department stores	1.12	6748
5331	Variety stores	1.53	556
5399	Misc. general merchandise stores	1.30	589
5411	Grocery stores	1.20	8723
5421	Meat and fish markets	1.19	137
5441	Candy, nut, and confectionery stores	2.49	176

5499 Miscellaneous food stores 1.43 5511 New and used car dealers 1.31 5521 Used car dealers 1.22 5541 Gasoline service stations 1.56 5561 Recreational vehicle dealers 1.01 5571 Motorcycle dealers 1.38 5611 Men's and boys' clothing stores 1.58 5641 Children's and infants' wear stores 1.46 5661 Shoe stores 1.30 5713 Floor covering stores 1.15 5722 Household appliance stores 1.05 5735 Record & prerecorded tape stores 1.96 5810 Eating and drinking places unallocated 1.09 5912 Drug stores and proprietary stores 1.09 5921 Liquor stores 1.71 5944 Jewelry stores 1.40 5946 Camera & photographic supply stores 2.37 5949 Sewing, needlework, and piece goods 1.56 5961 Catalog and mail-order houses 3.67	299 3459 306 2394
5521 Used car dealers 1.22 5541 Gasoline service stations 1.56 5561 Recreational vehicle dealers 1.01 5571 Motorcycle dealers 1.38 5611 Men's and boys' clothing stores 1.58 5641 Children's and infants' wear stores 1.46 5661 Shoe stores 1.30 5713 Floor covering stores 1.15 5722 Household appliance stores 1.05 5735 Record & prerecorded tape stores 1.96 5810 Eating and drinking places unallocated 1.09 5912 Drug stores and proprietary stores 1.09 5921 Liquor stores 1.71 5944 Jewelry stores 1.40 5946 Camera & photographic supply stores 2.37 5949 Sewing, needlework, and piece goods 1.56 5961 Catalog and mail-order houses 3.67 5962 Merchandising machine operators 1.31	306 2394
5541 Gasoline service stations 1.56 5561 Recreational vehicle dealers 1.01 5571 Motorcycle dealers 1.38 5611 Men's and boys' clothing stores 1.58 5641 Children's and infants' wear stores 1.46 5661 Shoe stores 1.30 5713 Floor covering stores 1.15 5722 Household appliance stores 1.05 5735 Record & prerecorded tape stores 1.96 5810 Eating and drinking places unallocated 1.09 5912 Drug stores and proprietary stores 1.09 5921 Liquor stores 1.71 5944 Jewelry stores 1.40 5946 Camera & photographic supply stores 2.37 5949 Sewing, needlework, and piece goods 1.56 5961 Catalog and mail-order houses 3.67 5962 Merchandising machine operators 1.31	2394
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5571 Motorcycle dealers 1.38 5611 Men's and boys' clothing stores 1.58 5641 Children's and infants' wear stores 1.46 5661 Shoe stores 1.30 5713 Floor covering stores 1.15 5722 Household appliance stores 1.05 5735 Record & prerecorded tape stores 1.96 5810 Eating and drinking places unallocated 1.09 5912 Drug stores and proprietary stores 1.09 5921 Liquor stores 1.71 5944 Jewelry stores 1.40 5946 Camera & photographic supply stores 2.37 5949 Sewing, needlework, and piece goods 1.56 5961 Catalog and mail-order houses 3.67 5962 Merchandising machine operators 1.31	70
5611Men's and boys' clothing stores1.585641Children's and infants' wear stores1.465661Shoe stores1.305713Floor covering stores1.155722Household appliance stores1.055735Record & prerecorded tape stores1.965810Eating and drinking places unallocated1.095912Drug stores and proprietary stores1.095921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	79
5641Children's and infants' wear stores1.465661Shoe stores1.305713Floor covering stores1.155722Household appliance stores1.055735Record & prerecorded tape stores1.965810Eating and drinking places unallocated1.095912Drug stores and proprietary stores1.095921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	145
5661 Shoe stores 1.30 5713 Floor covering stores 1.15 5722 Household appliance stores 1.05 5735 Record & prerecorded tape stores 1.96 5810 Eating and drinking places unallocated 1.09 5912 Drug stores and proprietary stores 1.09 5921 Liquor stores 1.71 5944 Jewelry stores 1.40 5946 Camera & photographic supply stores 2.37 5949 Sewing, needlework, and piece goods 1.56 5961 Catalog and mail-order houses 3.67 5962 Merchandising machine operators 1.31	309
5713Floor covering stores1.155722Household appliance stores1.055735Record & prerecorded tape stores1.965810Eating and drinking places unallocated1.095912Drug stores and proprietary stores1.095921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	192
5722Household appliance stores1.055735Record & prerecorded tape stores1.965810Eating and drinking places unallocated1.095912Drug stores and proprietary stores1.095921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	601
5735Record & prerecorded tape stores1.965810Eating and drinking places unallocated1.095912Drug stores and proprietary stores1.095921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	245
5810Eating and drinking places unallocated1.095912Drug stores and proprietary stores1.095921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	186
5912 Drug stores and proprietary stores 1.09 5921 Liquor stores 1.71 5944 Jewelry stores 1.40 5946 Camera & photographic supply stores 2.37 5949 Sewing, needlework, and piece goods 1.56 5961 Catalog and mail-order houses 3.67 5962 Merchandising machine operators 1.31	360
5921Liquor stores1.715944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	21094
5944Jewelry stores1.405946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	1731
5946Camera & photographic supply stores2.375949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	465
5949Sewing, needlework, and piece goods1.565961Catalog and mail-order houses3.675962Merchandising machine operators1.31	526
5961 Catalog and mail-order houses 3.67 5962 Merchandising machine operators 1.31	141
5962 Merchandising machine operators 1.31	182
	2402
	210
5992 Florists 1.24	378
5995 Optical goods stores 1.10	188
FINANCE, INSURANCE, REAL ESTATE	
6021 National commercial banks 1.16	2366
6036 Savings institutions, not Federally chartered 2.63	669
6061 Credit unions, Federally chartered 1.61	446
6159 Misc. business credit institutions 1.24	153
6331 Fire, marine, and casualty insurance 2.17	2815
6553 Cemetery subdividers and developers 1.85	163
6712 Offices of bank holding companies 6.16	255
HOTELS AND LODGING	
7032 Sporting and recreational camps 1.61	98
7033 Trailer parks and campsites 1.39	78
PERSONAL SERVICES	
7218 Industrial launderers 1.00	142
7219 Laundry and garment services, NEC 1.28	30
7231 Beauty shops 1.26	1267
7261 Funeral service and crematories 1.42	342
BUSINESS SERVICES	
7312 Outdoor advertising services 1.30	48
7359 Equipment rental & leasing, NEC 1.45	611
7533 Auto exhaust system repair shops 1.49	87
7538 General automotive repair shops 1.05	746
7692 Welding repair 1.79	4 4=
7694 Armature rewinding shops 2.85	147 145

SIC CODE	DESCRIPTION	LQ	<u>EMPLOYMENT</u>
	RECREATION SERVICES		
7933	Bowling centers	1.28	244
7992	Public golf courses	1.44	427
7997	Membership sports & recreation clubs	1.26	1038
	MEDICAL SERVICES		
8011	Offices and clinics of doctors of medicine	1.00	4602
8031	Offices of osteopathic physicians	5.00	578
8041	Offices and clinics of chiropractors	1.10	246
8043	Offices and clinics of podiatrists	1.54	109
8049	Offices of health practitioners, NEC	1.43	777
8051	Skilled Nursing care facilities	1.96	6371
8059	Nursing and personal care facilities, NEC	1.03	548
8062	General medical and surgical hospitals	1.47	12775
8071	Medical laboratories	1.61	623
8093	Specialty outpatient facilities, NEC	2.14	1119
	EDUCATION SERVICES		
8211	Elementary and secondary schools	1.56	1824
8221	Colleges, universities and professional schools	1.55	3249
8222	Junior colleges and technical institutes	1.64	155
8231	Libraries	1.17	72
8243	Data Processing schools	1.11	84
8244	Business and secretarial schools	4.18	143
	MISC SERVICES		
8322	Individual and family social services	1.50	2870
8331	Job training and Vocational rehabilitation services	1.46	1055
8361	Residential care	2.31	4421
8422	Arboreta and botanical or zoological gardens	1.87	121
8631	Labor unions and similar labor organizations	2.00	686
8641	Civic, social and fraternal associations	2.41	2974

SOURCE: IMPLAN ES 2002 data.

Appendix C:

Selected Results from Regional Economic Development Symposiums

Results of Discussion Groups at First Economic Development Symposium June 6, 2002 Franklin Pennsylvania

The participants in the symposium were organized into discussion groups for the purpose of discussing and then rating a series of choices about economic development goals. There was not effort to record or summarize the discussions, but the final "votes" of the participants on a number of choices were tabulated. Summarized on the following pages, they indicate the goals of economic development as defined by public and private sector economic development leaders in the region.

Choice Points Centers of Excellence

"Develop Your Stars"

Having discussed a vision for your county/region, let's see if we can reach some consensus on what you all see as being your *centers of excellence*.

Back in the '80s, Thomas J. Peters and Robert H. Waterman wrote a book, *In Search of Excellence*, which argued the best business strategy was to do what you do best, to excel at what you know best. It encouraged Americans in all walks of life to "stick to their knitting," that means being on the leading edge in a few fields.

What do you see as being the Centers of Excellence	of your county/region?
In other words, 5-15 years from now, how do you wa	nt others to be describing your
county/region: "IS A GREAT PLACE FOR	."

(You have six votes only to assign in the following four categories.)

People Power (Social Character)

(You have one	vote here)
35	Citizen Participation: broad-based inclusion; spirit/pride; public/private partnerships for local action; open government.
45	Traditional Values: family, work ethic, free enterprise; self-reliance, religious freedom, neighborhood/town identity.
4	Cosmopolitan: diversity of ethnic/racial traditions; appreciation for a variety of art and cultural experiences; enjoyment of local diversity, e.g., ethnic restaurants, festivals and clubs.
4	International Flavor: significant percent of foreign born, cross-cultural exchange, international trade.
N/A	Other
 Quality of (You have two 	
31	Natural beauty and quality of natural environment (air, water, land).
22	Relaxed, safe, friendly.
18	High quality elementary and secondary education.
30	High quality post-secondary education and worker training.

20	Architectural appeal, outstandingly built environment, historic preservation, tree-lined streets, and good city/town design.
6	Quality, affordable housing.
15	Good civic amenities (meeting places, swimming pools, sports facilities, senior citizens centers, trails, greenways.)
18	Leisure, recreation and entertainment (non-work satisfaction.)
2	Arts and culture, cultural history.
11	Access to and quality of medical care.
2	Other
 Kinds of (You have one 	Employers e vote here.)
8	Corporate or regional headquarters.
3	Administrative/white collar offices.
35	Small, locally-owned businesses, self-employment; local entrepreneurship; lots of family farms; small business joint ventures.
38	Mid-sized firms (possibly part of national corporations.)
3	Large production operations, e.g., large manufacturing plants (branch plants) or large claims or credit processing offices, large corporate farms.
2 • Kinds of (You have two	
6	Agriculture and forestry-related industries.
2	Heavy industry and mass production.
38	Light manufacturing and custom/batch production.
51	High technology industries.
2	Retail, general trade.
6	Transportation, warehousing, and wholesale distribution.
1	Insurance, finance, banking, real estate.
0	Construction, mining.
10	Health, wellness and medicine.

0	Entertainment.
16	Recreation, tourism and resorts.
27	Research and development firms, innovations centers, laboratories.
9	Education industry (colleges, universities, technical and vocational schools, residential high schools.)
4	Retirement industry.
2	Bedroom community.
5	Professional/business services (attorneys, CPAs/financial consultants/stock brokers, engineers/architects, doctors/dentists/ diagnostic testing, etc.)
1	Other

CHOICE POINT #1B

Centers of Excellence

General Descriptor

Looking at your county/region as a whole, how would you want it to be described 10-15 years from now? You can base your judgment on who you are now as well as on who you want to be.

1 VOTE

8	A Center for Education, Learning, and Scholarship.
0	A Center for Religion, Philosophy, Peace Studies, Humanitarian Pursuits.
1	A Center for the Arts and Culture.
9	A Center for Tourism, Recreation, and Retreat.
10	A Center for Transportation, Utilities, and Telecommunications.
22	A Center for Trade, Commerce, and Finance.
2	An Administrative Center (for government, law, business headquarters.)
3	A Bedroom Community or "Satellite" in a Larger Metropolitan Area.
0	A Retirement Community.
23	A Manufacturing Center.
3	A Center for the Health Industry, Wellness, etc.
1	A Gaming Mecca.
4	Other

The Discussion Group Notes From The Second Economic Development Symposium October 23, 2002 Franklin, Pennsylvania

This is a slightly edited compilation of the discussion group notes from the Economic Development Symposium on October 23, 2002 held at the Franklin Inn in Franklin Pennsylvania.

Where to Start

Participants were asked twice (at the beginning of the session and at the end) to rate the initiatives, not in terms of relative importance, but rather in terms of where to start. In other words, they were asked to indicate which of these ideas would be the best place to start in that it might prove more immediately doable and might create momentum that would build toward success for the others.

INITIATIVE	BEFORE	AFTER
MARKETING	39%	51%
MANUFACTURING	14%	17%
TECHNICAL COLLEGE	11%	8.5%
INFRASTRUCTURE	26%	17%
SEED CAPITAL	10%	6.5%

Summary of Comments from Each Discussion Group

Initiative under Discussion: Multi-County Technical College (Three Groups)

Question 1: Is this a good idea? On a scale of 1 to 10 how critical will this initiative be in vitalizing the Northwest Pennsylvania economy? See if you can reach group consensus on a score.

Group	1	:
10		

Group 2

Ranked a 10; although we all realize this is a long-term project and unlikely to see immediate results we feel the Technical Education aspect makes this a top priority.

Group 3:

Three tens; two eight's; and one 5.5 meant no consensus but an agreement that it was sorely needed

Question 2: What variations, changes, extensions would you suggest to improve this Strategy? In the course of this discussion, using group knowledge of similar efforts elsewhere, identify ways in which you have seen it work to the best advantage.

Group 1:

- Systemic changes in Harrisburg
- Some existing entities need to be used effectively and tied together
- Use states with successful systems as models
- Changes in accreditation

Group 2:

MPTI is a failed venture because there was not enough oversight; one individual operated MPTI, making all decisions independently. The New College must be accredited. Students need not only to learn skills but how to OPERATE as well as MARKET a business. We need articulation between established schools to show the ability to organize and focus on a common goal. Hopefully, taking action will influence legislators in Harrisburg to take steps to establish NEW accredited schools.

Group 3:

- It must be industry driven
- Not a cookie cutter community college
- Do ground work with area job providers first
- Must have an educational career ladder and provide the opportunity to get a job or continue education elsewhere for an associates degree

Question 3: Who would be the most appropriate lead for this strategy? Is it an existing organization or would an additional organization or consortium need to be assembled?

Group 1: WIB???

Group 2:

Stan Shelley volunteers PMI to be the lead in the initiative. PMI is already articulating with Edinboro U (primarily Tool & Die - Associate Degree) and is currently working on other affiliations. We must have articulation agreements with finalized dates and work aggressively toward the goal- not at a snail's pace! PMI is trying credentialing of metal working skills.

"Regionalize" the PMI? The negative comment from the table was that in terms of size and dollars spent on PMI so far, its history of success leaves a lot to be desired and does NOT generate a successful image. If we are to go with PMI we must address this lackluster image problem.

Group 3:

A consortium of business, higher education, vo-tech, WIB that is industry driven to develop from the bottom up. A seamless partnership from training to higher skills training; i.e. university partners with radiology training leading to a degree

Question 4: Who are the appropriate partners to collaborate to make this a success?

Group 1:

- Business community
- Government Leaders
- WIR
- Existing institutions of higher learning/post-secondary institutions

Group 2:

We must have an open door policy and communicate and collaborate with all training facilities, colleges, both WIBs, general High School (informing students as early as the 8 & 9th grade that there exist alternatives to the traditional 4-year degree), as well as the obvious county Vo-Tech Schools.

Group 3:

- University working with job providers, non-academic trainers, community colleges
- It needs a unifying entity and a secure source of funding

Question 5: What is a good timing for this Strategy: very urgent, moderately urgent, not urgent? How would you suggest getting it started, when and at what pace?

Group 1:

N/A

Group 2:

VERY URGENT! PMI has already begun the process because of the urgency

Group 3:

- I. Very urgent need to link all educational sources together
- II. need to cut deals with providers
- III. need a strong leader with good credentials and credibility

Question 6: What sources of funds/resources might be brought to bear on this strategy: private, philanthropic, governmental (federal, state, local)?

Group 1:

Current, available educational funds from federal, state, local, business, and tuition

Group 2:

Dept of Labor Demonstration Grants; federal Earmark Grants; hone in on private foundation education monies; we can also check to see if there is ARC funding available

Group 3:

All of the above

Initiative under Discussion: Authority for Infrastructure

(two groups)

Question 1: Is this a good idea? On a scale of 1 to 10 how critical will this initiative be in vitalizing the Northwest Pennsylvania economy? See if you can reach group consensus on a score.

Group 1:

One 10; five 9s, and 8.5 and two 8s – average was 9. Issues are old infrastructure not meeting needs of new economy; multiple small systems in water and sewer; maintaining the old urban area in Erie

Group 2:

10 but not sure if an authority is the way to go – perhaps a co-op or users group. Some kind of regional entity is needed

Question 2: What variations, changes, extensions would you suggest to improve this Strategy? In the course of this discussion, using group knowledge of similar efforts elsewhere, identify ways in which you have seen it work to the best advantage.

Group 1:

There should be two different authorities – one for telecom and one for water and sewer – and two separate funds. We should first investigate where the state is heading

Group 2

- 1. Statewide bonding for water and sewer:
- 2. What for telecom ????

Question 3: Who would be the most appropriate lead for this strategy? Is it an existing organization or would an additional organization or consortium need to be assembled?

Group 1:

The NW Technology Council in conjunction with NW Planning

Group 2.

In combination, PennVest – more funding needed; NW Commission; and perhaps private partners

Question 4: Who are the appropriate partners to collaborate to make this a success?

Group 1:

Telecom vendors; suppliers; economic development entities; NW Planning; DCED; DEP; Penn DOT; congressman

Group 2:

PennVest; NW commission, Private industry; state legislature, DEP

Question 5: What is a good timing for this Strategy: very urgent, moderately urgent, not urgent? How would you suggest getting it started, when and at what pace?

Group 1:

Very urgent

Group 2

Extremely urgent – is needed now for our communities

Question 6: What sources of funds/resources might be brought to bear on this strategy: private, philanthropic, governmental (federal, state, local)?

Group 1:

This is the most costly initiative – need state, federal, local government funding; access fees; partnership with private companies; bonds

Growth Alliance sees \$200 million in need – (\$38 million in Legis)

Group 2

- 1. State funding through PennVest; Utility companies
- 2. Need resources for funding infrastructure improvements in new industrial park

Initiative under Discussion: Marketing Branding & Business Recruitment (four groups)

Question 1: Is this a good idea? On a scale of 1 to 10 how critical will this initiative be in vitalizing the Northwest Pennsylvania economy? See if you can reach group consensus on a score.

Group 1:

9 or 10

Group 2:

10 – sub-regionally and by cluster – highest skill level, finding common threads, work ethic

Group 3:

10

Group 4:

Overwhelming 10!

Question 2: What variations, changes, extensions would you suggest to improve this Strategy? In the course of this discussion, using group knowledge of similar efforts elsewhere, identify ways in which you have seen it work to the best advantage.

Group 1:

- 1. Reduce costs to business worker's comp, medical malpractice, consolidate data and streamline government control
- 2. Target people who have roots here, who own businesses or influence where firms locate

- 3. Send marketing brochure to every HS reunion class; target baby boomers
- 4. Lake is a big deal but people don't know about Presque Isle
- 5. Have to address problems such as transportation, political climate and infighting between communities that has driven the economy down, perceptions of CEOs
- 6. Emphasize key benefits such as lifestyle/QOL, safety, historic context, friendly people
- 7. Think about gateways to the region

Group 2:

Need more resources – NW region's marketing currently limited by utility contributions – no support from the state level. Need to find more private sector support. Define effective marketing.

Group 3:

- VI. Develop a strategy using an outside source to determine perceptions external and internal marketing base it on research findings
- VII. Brand is a feeling not a thing and it needs to reflect economic and tourist feelings, attract people coming in for employment.
- VIII. Each county has its own need and identity one initiative umbrella; for example, Nova Scotia Doers and Dreamers campaign is regionalized within the province via "trails"
- IX. Need to get people in region to "become part of something bigger" ask each other why not?

Group 4:

We need to have forums on a regular basis to keep all parties informed of the changing environment and when activities are planned throughout the region- to feed off each other. We have so many variations within our region we realize it will be difficult to come to a consensus. Lois & Neil are involved with the Victorian Heritage theme of the area and wanted that to be prominent in any branding proposal. We must cultivate high value tourism, the moneyed and educated people who will STAY in the region for 5-7 days.

Question 3: Who would be the most appropriate lead for this strategy? Is it an existing organization or would an additional organization or consortium need to be assembled?

Group 1:

Professional marketers running the program under the oversight of the NW Commission

Group 2.

Consortium of local economic development entities

Group 3:

NW Commission plus stakeholders

Group 4:

A new board/consortium consisting of influences throughout the region with each facet EQUALLY weighted (Presque Isle represented, of course, but with no more influence than hiking / Heritage/canoeing interests, etc. of other areas in the region). *It would have been nice to be able to use a Chamber of Commerce for a lead, but then the question becomes WHICH Chamber of Commerce. Rather than open that can of worms, we feel the new board would be most acceptable alternative.

Question 4: Who are the appropriate partners to collaborate to make this a success?

Group 1:

did not answer this

Group 2:

Utilities, private sector, state, feds

Group 3:

Stakeholders such as chambers, tourist promotion agencies economic development entities, private developers, businesses, etc.

Group 4:

Chambers of Commerce, CVBs, foundations, special interest groups (Victorian/hiking/boating, etc); capture and INCLUDE every facet of the region

Question 5: What is a good timing for this Strategy: very urgent, moderately urgent, not urgent? How would you suggest getting it started, when and at what pace?

Group 1:

urgent

Group 2:

Urgent – need to evaluate what is in place and determine what is missing and next step

Group 3:

Urgent – should have started yesterday

Group 4:

VERY URGENT! One dissenter ranking it a 5 on a scale of 1-10

Question 6: What sources of funds/resources might be brought to bear on this strategy: private, philanthropic, governmental (federal, state, local)?

Group 1:

State funding; money from conventions and visitors bureau

Group 2.

All of the above – plus finding other means including selling advertising

Group 3:

From the stakeholders – including businesses. We need to raise money on our own to encourage government investment

Group 4:

Bill Steiner said some KOZ \$\$ might be available; 2nd generation wealth; foundations; hotel-motel tax (Forest & Lawrence counties only counties without h-m tax presently)

Initiative under Discussion: Seed Capital Fund (two groups)

Question 1: Is this a good idea? On a scale of 1 to 10 how critical will this initiative be in vitalizing the Northwest Pennsylvania economy? See if you can reach group consensus on a score.

Group 1:

10 – without financing the future is questionable

Group 2:

9 – can't do anything without capital.

Question 2: What variations, changes, extensions would you suggest to improve this Strategy? In the course of this discussion, using group knowledge of similar efforts elsewhere, identify ways in which you have seen it work to the best advantage.

Group 1:

- Large pool of funds accessible for small business lending and market development
- Identify a regional cluster to support as a region

Group 2:

- Make it a general fund, not industry-specific but target toward industries that have a chance to return investment;
- Venture capital groups are needed also for existing companies and those that are for sale.
- There is state digital funding, but this needs local control.
- Is there need for high-risk entrepreneurs? Equity is a key factor to minimize risk.
- Angel investor network screens companies and develops venture capital pool –
- Define criteria for investment. Leverage funds and provide low-interest loans
- Add a marketing component and "buy" entrepreneurs:
- Require that corporate headquarters be here Home grown investment bring resources.

Question 3: Who would be the most appropriate lead for this strategy? Is it an existing organization or would an additional organization or consortium need to be assembled?

Group 1:

Kurt Busek

Group 2:

Ben Franklin – private venture capitalists; local foundations, private firm with Wall Street investment banker capability, university funds

Question 4: Who are the appropriate partners to collaborate to make this a success?

Group 1:

Local established wealth-holders, successful regional businesses, authority figure – someone with an identity, Dad's dog food, John Lee, Kit Land, Joe Grunenwald, John Peterson

Group 2:

NW Commission, Economic Development entities, Erie chamber and Growth Partnership, CEO fund, political leaders, existing companies – should be driven by business

Question 5: What is a good timing for this Strategy: very urgent, moderately urgent, not urgent? How would you suggest getting it started, when and at what pace?

Group 1:

Very urgent – should have been done last year, but must have good thought prior to execution

Group 2:

Very urgent – need access to capital

Question 6: What sources of funds/resources might be brought to bear on this strategy: private, philanthropic, governmental (federal, state, local)?

Group 1:

Public, private, philanthropic

Group 2:

All of the above – mostly equity investors

Initiative under Discussion: Enhance Manufacturing Competitiveness (two groups)

Question 1: Is this a good idea? On a scale of 1 to 10 how critical will this initiative be in vitalizing the Northwest Pennsylvania economy? See if you can reach group consensus on a score.

Group 1:

9-10

Group 2:

10

Question 2: What variations, changes, extensions would you suggest to improve this Strategy? In the course of this discussion, using group knowledge of similar efforts elsewhere, identify ways in which you have seen it work to the best advantage.

Group 1:

Do research first then work from there per county coordinated at a regional level – target specific businesses with each industry having its own program. We need a research capacity. Looking at tool and die that is losing jobs to the Chinese – try e-commerce, joint purchasing, types of joint ventures; look to the Germany for a model – internally aligned to be externally focused.

Group 2:

Promote greater use of technology – get people to think differently about how they run their business (focus on life cycles) we need a more highly skilled manufacturing workforce – build on infrastructure (roads and schools), improve the tax base, assist in marketing efforts

Question 3: Who would be the most appropriate lead for this strategy? Is it an existing organization or would an additional organization or consortium need to be assembled?

Group 1:

Co-led by private industry with IRC or other organization – we need to get it to the grass roots

Group 2:

IRC

Question 4: Who are the appropriate partners to collaborate to make this a success?

Group 1:

IRC; Ben Franklin; Specific national association for industry program- for example manufactures association in Erie has 6,000 members; labor groups; ED organizations

Group 2:

Trade organizations, manufacturers associations, and business calling programs

Question 5: What is a good timing for this Strategy: very urgent, moderately urgent, not urgent? How would you suggest getting it started, when and at what pace?

Group 1:

Very urgent

Group 2:

Very urgent and overdue. Get the word out; expand the Business Calling Program, find out firms' needs and make referrals

Question 6: What sources of funds/resources might be brought to bear on this strategy: private, philanthropic, governmental (federal, state, local)?

Group 1:

Apply and redirect existing sources; state loans for education and training Pittsburgh and IBEW are taking money from union fees

Group 2:

All of the above – all resources are now available

APPENDIX D:

SUMMARY OF RESPONSES TO ELECTRONIC SURVEY

Who Responded to the Survey?

FutureWorks developed an on-line survey to elicit opinions about the region's economic assets and liabilities, and about the outlook for future job growth in NW PA. Information gathered in initial interviews plus FutureWorks' experience elsewhere were the basis for individual questions. During the several months that the survey was available on-line through the NW Pennsylvania Regional Planning and Development web-site, 216 people responded. Survey responders reflect the region's geography. About 40 percent live in Erie County, which is consistent with the 2000 proportion of NW PA residents who call Erie home. The percentage of jobs and of survey responders' jobs in Erie County are slightly higher. Most people identify with their home county rather than with the region.

In which county do			
you live?	Count	Pct.	0% 50% 100%
Erie	81	40.7%	40.7%
Warren	14	7.0%	7.0%
Crawford	31	15.6%	15.6%
Venango	25	12.6%	12.6%
Forest	0	0.0%	0.0%
Mercer	20	10.1%	10.1%
Clarion	11	5.5%	5.5%
Lawrence	5	2.5%	2.5%
none of above	12	6.0%	6.0%

In which county do						
you work?	Count	Pct.	0%	50	0%	100%
Erie	85	42.7%		42	7%	
Warren	14	7.0%	7.0%			
Crawford	34	17.1%	17.	1%		
Venango	22	11.1%	11.1%			
Forest	1	0.5%	0.5%			
Mercer	18	9.0%	9.0%			
Clarion	11	5.5%	5.5%			
Lawrence	9	4.5%	4.5%			
none of above	5	2.5%	2.5%			

Which county do you			
identify with?	Count	Pct.	0% 50% 100%
None. I identify primarily with			14.6%
the region as whole.	29	14.6%	36.7%
Erie	73	36.7%	6.0%
Warren	12	6.0%	
Crawford	30	15.1%	15.1%
Venango	21	10.6%	10.6%
Forest	1	0.5%	0.5%
Mercer	17	8.5%	8.5%
Clarion	8	4.0%	4.0%
Lawrence	8	4.0%	4.0%
none of above	0	0.0%	0.0%

FutureWorks considers private sector input to be crucial to the development of an economic strategy. Few private sector individuals came to steering committee meetings, although more participated in the regional forums. However, the majority (58 percent) of the 216 responses to our survey came from private sector business owners, managers or employees. An on-line survey is proven to be the most effective instrument to achieve that input, because it allows individuals can participate at their convenience.

What is your occupation?	Count	Pct.	0% 50% 100%
Economic development practitioner	20	10.1%	10.1%
Business owner/manager	83	41.7%	41.7%
Employee in private business	35	17.6%	17.6%
organization	0	0.0%	0.0%
Elected government official	9	4.5%	4.5%
Appointed government official	17	8.5%	8.5%
Educator	17	8.5%	8.5%
organization	14	7.0%	7.0%
none of above	4	2.0%	2.0%

We often disaggregated survey responses by category of respondent based upon their occupation. For example, because survey results are the primary conduit for private sector input, we compare the private sector response – in particular business owners and managers - to the total response. We also highlight the responses of economic development professionals and/or government officials when they differ from the overall pattern. Clearly some categories contain so few responders that separating them provides little useful information. It is worth noting that no official of a union or other employee organization responded to this survey. One question that elicited varying responses was about the region's likely economic future. Results are shown below.

How you feel generally about the economic future of NW PA?

Vei	V	ery optimistic			
ALL	5%	25%	41%	23%	7%
ED Practitioner	5%	10%	30%	40%	15%
BusinessOwner/Manager	5%	27%	46%	14%	9%
Private-sector Employee	3%	40%	37%	17%	3%

Another approach uses a single statistic, the average rating, for each group. For example, individuals responded to this question with a rating from one (very pessimistic) to five (very optimistic) and we can calculate an average response for each group. The average (mean) value of the responses to this question from economic development professionals, the people responsible for implementing economic development activities, was 3.50, which is higher than the average for any other group. The average for all responses regarding regional economic outlook averaged 3.02, just over the midpoint of 3.0 on the pessimism to optimism scale. (NOTE: Because there is no option for a zero rating, the mid-point of this scale is 3.0, not 2.5.) Business owners and managers

averaged 2.94, just under the midpoint, while private sector employees were most pessimistic at 2.77. Among government officials those who were elected were less optimistic (mean = 2.89) than those who were appointed (mean = 3.29).

Regional Assets and Liabilities

An important starting point for any economic development plan is to identify the assets and liabilities that a region brings to the economic development competition with other regions. Thus we asked survey respondents to rate lists of potential assets and potential liabilities. These lists were developed from interviews with regional leadership. The highest rated assets were the physical environment and recreational opportunities.

	Not at a	ll an ass	et					
How do you rate these fac as economic developmen assets?		2	3	4	5	Mean	Not at al an asset	Very Stror asse
a strong work ethic	1 0.5%	12 6.1%	38 19.3%	94 47.7%	52 26.4%	3.93		
widespread public & private sector support for economic developmen	7 3.6%	28 14.4%	73 37.4%	68 34.9%	19 9.7%	3.33		
attractive and affordable housing	2 1.0%	15 7.7%	45 23.1%	99 50.8%	34 17.4%	3.76		
natural beauty of physical environ	1 0.5%	2 1.0%	33 16.9%	78 40.0%	81 41.5%	4.21		
a skilled workforce	2 1.0%	12 6.2%	52 26.9%	93 48.2%	34 17.6%	3.75		
good government leadership	22 11.3%	35 17.9%	68 34.9%	55 28.2%	15 7.7%	3.03		
good telecommunications infrastru	29	170 85.4%	0	0	0	1.85		
good private sector leadership	7 3.6%	17 8.7%	67 34.2%	87 44.4%	18 9.2%	3.47		
good public (K-12) schools	2 1.0%	14 7.2%	60 30.8%	86 44.1%	33 16.9%	3.69		ı
a healthy economic base	16 8.3%	60 31.1%	61 31.6%	49 25.4%	7 3.6%	2.85		
good access to financial capital	8 4.1%	38 19.7%	65 33.7%	67 34.7%	15 7.8%	3.22		
strong and effective institutions for regional cooperation		41 21.2%	70 36.3%	59 30.6%	13 6.7%	3.12		
numerous decent wage jobs	11 5.6%	66 33.8%	57 29.2%	47 24.1%	14 7.2%	2.93		
support for entrepreneurs and smale		27 13.9%	73 37.6%	55 28.4%	24 12.4%	3.24		
good opportunities to workers to g		31 16.1%	74 38.3%	61 31.6%	23	3.35		
abundant recreation opportunities	1 0.5%	8 4.1%	36 18.5%	94 48.2%	56 28.7%	4.01		
low cost of living	2	7 3.6%	45 23.0%	90 45.9%	52 26.5%	3.93		
many strong and accessible institution of higher education		13 6.7%	38 19.5%	88 45.1%	55 28.2%	3.94		
good health care facilities	1 0.5%	8 4.1%	33 17.0%	103 53.1%	49 25.3%	3.98		
good transportation infrastructure	12 6.2%	45 23.2%	46 23.7%	69 35.6%	22 11.3%	3.23		
a strong sense of community	5 2.6%	13 6.7%	63 32.6%	75 38.9%	37 19.2%	3.65		
strong local economic development organizations		21 10.8%	54 27.8%	85 43.8%	20	3.39		

In the next tier of community assets are those with an average rating between 3.5 and 4.0 on the five-point scale. These included were health care facilities (3.98), institutions of higher education (3.94) and the K-12 school system (3.69), a strong work ethic (3.93) and a skilled workforce (3.75), the low cost of living (3.93) and attractive affordable housing (3.76), and finally, a strong sense of community (3.65). In the modern economy, strong human resources supported by top caliber education and training opportunities are a key source of competitive advantage. While responses are more positive about the current worker skills and the formal education system, they are less positive about workers opportunities to gain new skills.

On the negative side, only one potential asset rated below 2.5, and that was the telecommunications infrastructure. Given the contribution of telecommunications to economic activity across the board, this is a crucial component. Clearly, the region's telecommunications system needs to be improved as part of any economic strategy.

A review of the ratings of potential regional assets for the different types of responders, it shows general consensus on most issues. Mean scores are listed in the table below.

How do you rate these factors as economic development assets?

			Business					Non-profi
Potential Economic		Econ. Dev	Owner	Business	Elected	Appt'd		Manager/
Development Asset	ALL	$\textbf{Practition} \varepsilon$	/Manager	Employee	Official	Official	Educator	Employee
a strong work ethic	3.93	4.05	3.81	4.00	4.33	4.31	3.88	3.64
widespread public & private so								
support for economic develop	3.33	3.25	3.14	3.37	3.67	3.81	3.19	3.79
attractive and affordable housing	3.76	3.75	3.80	3.74	3.78	3.81	3.00	4.29
natural beauty of physical								
environment	4.21	4.20	4.19	4.06	4.44	4.25	4.50	4.36
a skilled workforce	3.75	3.75	3.63	3.94	3.67	4.00	3.56	3.79
good government leadership	3.03	2.90	2.79	3.17	3.67	3.25	3.35	3.07
good telecommunications								
infrastructure	1.85	1.75	1.87	1.97	2.00	1.88		1.57
good private sector leadership	3.47	3.40	3.38	3.60	3.67	3.63	3.35	3.64
good public (K-12) schools	3.69	3.50	3.55	3.69	3.89	3.88	4.18	3.71
a healthy economic base	2.85	3.25	2.63	2.85	3.11	3.19	2.56	3.14
good access to financial capital	3.22	3.25	3.14	3.34	3.22	3.31	3.06	3.43
strong and effective institution								
regional cooperation	3.12	2.95	3.03	3.29	3.44	3.25	3.25	3.14
numerous decent wage jobs	2.93	3.20	2.78	2.97	3.22	3.31	2.75	2.93
support for entrepreneurs and								
small businesses	3.24	3.35	3.05	3.43	3.33	3.50	3.06	3.29
good opportunities to workers								
gain new skills	3.35	3.40	3.29	3.49	3.33	3.44	3.06	3.36
abundant recreation opportunitie	s 4.01	3.90	3.90	3.91	4.11	4.31	4.25	4.36
low cost of living	3.93	4.00	3.85	3.83	3.78	4.06	4.13	4.29
many strong and accessible								
institutions of higher education	3.94	4.05	3.85	3.89	4.11	4.25	4.00	3.86
good health care facilities	3.98	4.05	3.90	3.94	4.56	4.06	3.94	4.21
good transportation infrastructur	e 3.23	3.55	3.17	3.17	3.22	3.44	2.87	3.36
a strong sense of community	3.65		3.44	3.66	3.89	4.19		3.93
strong local economic develor	2.30	21.10		2.00	2.00			
organizations	3.39	3.75	3.15	3.37	3.78	3.69	3.38	3.64

The different responses reveal that outside the private sector, people tended to rate their own efforts higher than others do. For example, elected officials rated public sector leadership higher than any other group, educators rated the schools most highly, and economic development practitioners and elected officials were most positive about economic development efforts. Other notable differences relevant to the regional economic outlook are:

- (a) employers and educators expressing lower opinions of the local work ethic (and to a lesser degree of workforce skills) as well as of the local economic base.
- (b) government officials and non-profit representatives seeing greater support for economic development than do others, and
- (c) business owners and managers having the lowest opinion of programs to support entrepreneurs.

The tendency to think well of oneself and less well of others is especially apparent in the responses to two questions about the leadership capacity. One question asked people to express their confidence in the capacity of the region's economic development agencies to lead and manage change. The other asked the same question about the region's local governments. Answers could range from 1, not at all confident, to five, very confident.

For the economic development agencies, the average rating from all responders was 2.85, below the mid-point of 3.0 and an overall vote of little confidence. Disaggregating the responses reveals that economic development practitioners are most confident about their own ability, while their clients rated them much lower. Business owners and managers have the least confidence in economic development agencies. Local elected officials also have little confidence in their economic development agencies.

How confident are you of the region's economic develop-related agencies capacity to lead/manage change in the region?

Mean response on a scale from 1 (not at all confident) to 5 (very confident)

ALL	Econ. Dev. Practitioner	Business Owner /Manager	Business Employee	Elected Official	Appt'd Official	Educator	Non-profit Manager/ Employee
2.85	3.25	2.58	3.00	2.67	3.00	3.18	3.21

The region's local governments inspire even less confidence and received lower marks from every group except elected officials. In fact, elected officials were the only group that positively rated local government capacity to lead and manage change. For all responses, the average response is only 2.41 on the scale of one to five. Economic development practitioners rated local government very low (1.85 average) and no other group rated them at or above the mid point.

How confident are you of local government's capacity to lead/manage change in the region? Mean response on a scale from 1 (not at all confident) to 5 (very confident)

AL	.L	Econ. Dev. Practitioner	Business Owner /Manager	Business Employee	Elected Official	Appt'd Official	Educator	Non-profit Manager/ Employee
2.4	11	1.85	2.20	2.66	3.56	2.82	2.82	2.29

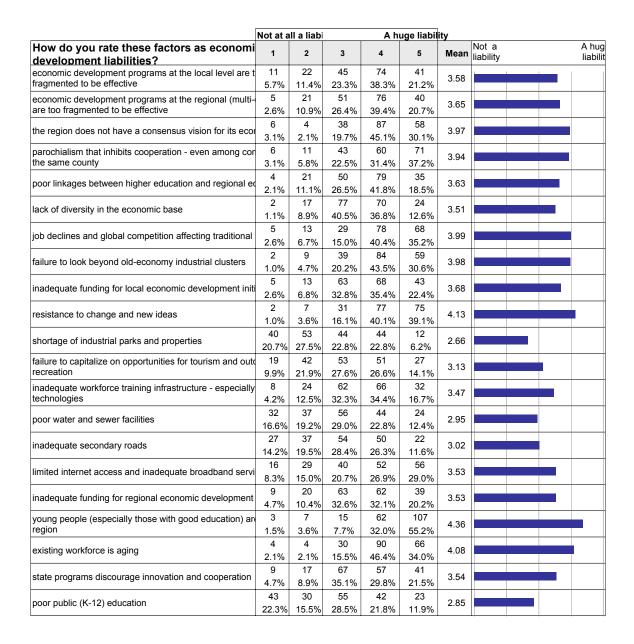
The low levels of confidence, especially between the local government and the region's economic development agencies indicate a problem area. This relationship should be a partnership and a foundation of local and regional economic development programs. It is functioning so poorly in NW PA that it is in fact more of a liability than an asset.

The on-line survey also included a list of potential liabilities that was evaluated on a five-point scale, from 1 (not at all a liability) to 5 (a huge liability). Again, the mid-point is three, but in this case a high rating indicates a highly negative situation. Several of the potential liabilities mirror potential assets from the previous table. This is because that particular factor was described both negatively and positively during the interviews with regional leaders that informed development of the on-line survey.

Overall, liabilities were given higher average scores that regional assets, and so there is a longer list of those rated on average above 3.5. The most serious liabilities inhibiting regional economic development are the exodus of young people, especially those with good education, and the related aging of the workforce as well as a resistance to change and new ideas – another factor linked to an absence of youth. All had an average rating over 4.0.

Two pairs of closely related liabilities averaged just below 4.0. One was (a) job declines and global competition affecting traditional industries and (b) a failure to look beyond old-economy industrial clusters. The second was (a) the absence of a regional consensus vision for the economic future and (b) parochialism that inhibits cooperation – even among communities in the same county. The final group of potential liabilities that were rated above 3.5 described fragmentation of economic development activities at the local and regional level, poor linkages between higher education and the regional economy, state programs discouraging creativity, limited Internet access, and lack of diversity in the economic base.

Taken together, the highest rated liabilities produce a consistent picture of a region with an aging industrial base, an aging workforce, and a failure of leadership. The latter reinforces the mutual votes of no confidence (described above) expressed by local economic development practitioners and elected officials. As a result, there has not been an effective response to the external forces that have made the local economic base outmoded. The only potential liabilities rated below the mid-point of 3.0, suggesting that they really are not liabilities, refer to the regional water and sewer infrastructure, K-12 public education, and supply of industrial properties and parks.



Given the emphasis on the negative that the questions about potential assets and liabilities produced, a logical question becomes, "Who would want to live here?" The answers, shown below, suggest that survey respondents see regional assets related to quality of life, especially for families, and to a lesser extent for retirees.

	Not at all attractive			Vei	ry attrac	tive		
Please evaluate NW PA as a place for the f categories of people to live.	1	2	3	4	5	Mean	Not at all attractive	Ver attracti
For young people just finishing their education and career.	52 26.3%	81 40.9%	42 21.2%	21 10.6%	2 1.0%	2.19		
For families looking for a good place to live and rai	4 2.0%	5 2.5%	22 11.2%	87 44.2%	79 40.1%	4.18		
For older adults needing good health care, retiremerecreation.	3 1.5%	25 12.8%	56 28.6%	69 35.2%	43 21.9%	3.63		

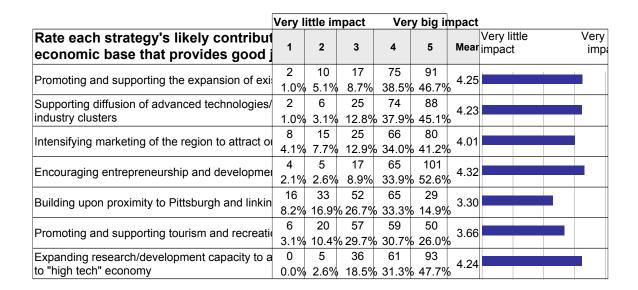
Looking to the Future

The survey asked people to evaluate several existing industries as potential sources of job growth in the region. Results were consistent and strongly negative. It is striking that none of the proposed sources of job growth received a single rating on the positive side of average. This list of possible job growth scenarios was developed from the programs and activities mentioned during interviews with regional leaders. The overwhelmingly negative response indicates that people in NW PA realize that a new and different approach is needed.

	Virtual	ly no n	ew jobs	Ma Ma	ny new	jobs		
How do you see each of the followin source of new jobs for NW PA?	1	2	3	4	5	Mean	No nev jobs	Mar new jo
Existing manufacturing companies expanding	35	130	32	0	0	1.98		
Existing manufacturing companies expanding	17.8%	66.0%	16.2%	0.0%	0.0%	1.90		
New manufacturing companies moving to region	63	91	44	0	0	1.90		
New manufacturing companies moving to region	31.8%	46.0%	22.2%	0.0%	0.0%	1.90		
New manufacturing companies being created	49	107	42	0	0	1.96		
New manufacturing companies being created	24.7%	54.0%	21.2%	0.0%	0.0%	1.90		
Expanded or new finance and insurance busine	48	116	33	0	0	1.92		
Expanded of flew liftance and insurance busine	24.4%	58.9%	16.8%	0.0%	0.0%	1.92		
Expanded or new telecommunications and infor	42	94	59	0	0	2.09		
firms	21.5%	48.2%	30.3%	0.0%	0.0%	2.03		
Expanded or new call centers	42	103	51	0	0	2.05		
Expanded of flew call centers	21.4%	52.6%	26.0%	0.0%	0.0%	2.00		
Expanded or new business services firms	35	122	36	0	0	2.01		
Expanded of new business services ininis	18.1%	63.2%	18.7%	0.0%	0.0%	2.01		
Expanded or new retail and entertainment servi	40	108	47	0	0	2.04		
Expanded of new retail and entertailment servi	20.5%	55.4%	24.1%	0.0%	0.0%	2.04		
Expanded or new government operations	83	93	19	0	0	1.67		
Expanded of new government operations	42.6%	47.7%	9.7%	0.0%	0.0%	1.07		
Expanded or new transportation, distribution, ar	54	99	41	0	0	1.93		
Expanded of flew transportation, distribution, ar	27.8%	51.0%	21.1%	0.0%	0.0%	1.90		
Expanded and new tourism and outdoor recreat	23	118	51	0	0	2.15		
programs	12.0%	61.5%	26.6%	0.0%	0.0%	2.10		

The survey asked responders to assess the likely impact of several potential strategies for pursuing the goal of a regional economic base that provided good jobs. These strategies, some new and some already in place, elicited a strong positive response. Five of the seven were rated above 4.0 on the five-point scale. The greatest enthusiasm was for promoting entrepreneurship and the development of small business. Support for existing business also received strong positive support.

Two related strategies that referred to encouraging development and use of new technology received virtually identical high ratings of 4.24 and 4.23. Once called for expanding the region's research and development capacity to accelerate the transition to a "high tech" economy and the other called for support of technology transfer and diffusion to established industry clusters. Finally, intensified marketing ranked just over 4.0. The potential strategies generating less enthusiasm were (a) promoting and supporting tourism and (b) building upon proximity to Pittsburgh and linking to development there. Still, even those rated above the mid-point of 3.0. Overall results are summarized below.



Another question asked about organizational strategy. A lack of coordination and cooperation between many of the region's economic development entities and local governments quickly become apparent during interviews with regional leaders. Even more striking was the limited private sector role. Thus, the survey included a question addressing that issue. There was overall positive response to this option, but the average rating, 3.88, was not as strong as support for most of the proposed strategies.

	Strong	ıly aga	inst	Str	ongly si	upport		
Do you support re-structuring of ecoprograms into a public-private partn		2	3	4	5		Stronç agains	Stron supp
development?	13	13 6.6%	39 19.9%	50 6 25.5%	81 6 41.3%	, 3.88		

Disaggregating the responses reveals a clear divide in opinions between the local economic development practitioners and elected officials on one side, and the private sector on the other. Educators, as a group, are the most supportive of restructuring, while appointed officials and staff of non-profits fall in the middle.

Do you support re-structuring of economic development programs into a public-private partnership for economic development?

Mean response on a scale from 1 (strongly against) to 5 (strongly support)

ALL	Econ. Dev. Practitioner	Business Owner /Manager	Business Employee	Elected Official	Appt'd Official	Educator	Non-profit Manager/ Employee
3.88	3.00	4.11	4.06	3.00	3.88	4.19	3.64

Seeking Consensus

During interviews, FutureWorks staff heard numerous conflicting opinions about the economic situation in NW PA. The most relevant of these statements were distilled into seventeen statements that covered a broad variety of topics related to economic development. As part of the on-line survey, respondents were asked to indicate whether or not they agreed with the statement, using a scale from one (strongly disagree) to five (strongly agree). The results for all respondents are shown below.

	Strongly disagree Strongly				ongly a	gree	
Please indicate if you agree with following	ng:1	2	3	4	5	Mean	Strong Strong disagre agre
The best days for the NW PA region are forever in th	61 31.0%	51 525.9%	40 20.3%	41 20.8%	4 2.0%	2.37	
There is not a shared, positive image and no plan for	4 2.0%	30 15.2%	16 8.1%	76 38.6%	71 36.0%	3.91	
There is no regional identity.	5 2.6%	33 16.8%	26 13.3%	79 40.3%	53 27.0%	3.72	
There is a compelling and unified vision among leade how NW PA should develop.		57 5 29.5%	31 16.1%	30 15.5%	10 5.2%	2.29	
There is good communication and cooperation amon governments.		70 35.7%	27 13.8%	32 16.3%	9 4.6%	2.31	
NW PA needs an influx of new people with new ideas	1 0.5%	13 6.6%	26 13.3%	79 40.3%	77 39.3%	4.11	
Few destination attractions build on natural, historic, attract new people/firms.	33 16.9%	56 5 28.7%	33 16.9%	53 27.2%	20 10.3%	2.85	
Young, educated people leave because want to live in would stay even if good jobs were available.		65 33.2%	13 6.6%	42 21.4%	14 7.1%	2.39	
The private sector provides strong and consistent lea economic development efforts.		62 32.0%	43 22.2%	55 28.4%	11 5.7%	2.84	
Too many local/regional economic develop. programativity in lending and development.		47 5 24.2%	63 32.5%	42 21.6%	14 7.2%	2.83	
NW PA enjoys an important locational advantage bed between Pittsburgh and Erie.	15 7.7%	28 14.4%	43 22.1%	73 37.4%	36 18.5%	3.45	
NW PA is well positioned to move into the information	41 20.9%	53 5 27.0%	48 24.5%	43 21.9%	11 5.6%	2.64	
People here do not want to hear any new ideas exce	17 8.7%	43 22.1%	36 18.5%	77 39.5%	22 11.3%	3.23	
Colleges/universities in region making important cont economic development.	10 5.1%	31 15.8%	43 21.9%	78 39.8%	34 17.3%	3.48	
Diversification of the industrial base is crucial to the ϵ PA.	6 3.1%	7 3.6%	7 3.6%	56 28.6%	120 61.2%	4.41	
NW PA does a good job of retaining the businesses t	53 27.2%	65 33.3%	19 9.7%	51 26.2%	7 3.6%	2.46	
There is good support for entrepreneurs in NW PA.	26 13.5%	50 5 25.9%	53 27.5%	52 26.9%	12 6.2%	2.87	

The strongest point of agreement is on the need for diversifying the industrial base of NW PA. That and the statement that NW PA needs an influx of new people with new ideas were the only two statements with a mean score over 4.0, indicating a solid positive consensus. On the negative side, no statement rated below 2.0. The strongest negative consensus was disagreement with the statements that (a) there is a compelling and unified vision among leaders in the region about how NW PA should develop and (b) there is good communication and cooperation among the numerous local governments. Beyond these statements, the aggregated results showed few concentrations of responses that would indicate consensus.

When the results are disaggregated, there are still few examples of either strong agreement or strong disagreement. The disaggregated results are the final table in this appendix.

Please indicate if you agree with the following statements Mean response on a scale from 1 (strongly disagree) to 5 (strongly agree)

			Business					Non-profit
Statement about NW PA	ALL	Econ. Dev. Practitioner	Owner /Manager	Business Employee	Elected Official	Appt'd Official	Educator	Manager/ Employee
The best days for the NW PA	71			1				1 1
region are forever in the past.	2.37	1.95	2.38	3.06	1.89	1.94	2.25	2.00
There is not a shared, positive								
image and no plan for marketing the region.	3.91	4.30	3.93	4.09	3.44	4.12	3.69	3.14
There is no regional identity.	3.72	4.20	3.77	3.56	3.78	4.06	3.06	3.50
			<u> </u>	0.00	00		0.00	
There is a compelling and unified vision among leaders in the region								
about how NW PA should develo								
	2.29	1.95	2.35	2.53	3.00	2.13	2.19	1.92
There is good communication ar cooperation among the numerou								
local governments.	2.31	2.05	2.21	2.69	3.78	2.12	2.00	2.07
NW PA needs an influx of new								
people with new ideas.	4.11	4.10	4.12	4.38	3.78	3.88	4.00	4.00
Few destination attractions build								
natural, historic, location resourc								
to attract new people/firms.	2.85	2.75	2.91	3.23	2.89	2.47	2.56	2.43
Young,educated people leave				0.20				
because want to live in exciting								
places. Few would stay even if								
good jobs were available.	2.39	2.35	2.26	2.77	2.67	2.31	2.63	1.71
The private sector provides stror and consistent leadership to								
regional economic development								
efforts.	2.84	2.10	3.07	3.11	3.13	2.81	2.50	2.38
Too many local/regional econom								
develop. programs crowd out								
private activity in lending and	2.83	2.45	2.93	3.00	2.44	3.19	2.75	2.43
development. NW PA enjoys an important	2.03	2.45	2.93	3.00	2.44	3.19	2.13	
locational advantage because is								
the corridor between Pittsburgh								
and Erie.	3.45	3.05	3.24	3.74	3.89	3.41	3.75	3.85
NW PA is well positioned to mov								
into the information-based economy.	2.64	2.40	2.62	2.82	2.89	2.65	2.56	2.93
People here do not want to hear	2.07	2.40	2.02	2.02	2.00	2.00	2.00	2.00
any new ideas except perhaps the								
own.	3.23	3.55	3.22	3.18	2.56	3.24	3.44	2.79
Colleges/universities in region								
making important contribution to	2.40	2.00	2.50	2.62	2 70	2 47	2 44	2.42
region Os economic developmen Diversification of the industrial ba	3.48	3.00	3.59	3.62	3.78	3.47	3.44	3.43
is crucial to the economic future								
NW PA.	4.41	4.65	4.29	4.62	4.44	4.24	4.31	4.64
NW PA does a good job of								
retaining the businesses that are	0.40	0.00	4.00	0.40	0.00	0.40	0.50	0.04
here.	2.46	3.60	1.98	2.18	3.22	3.18	2.56	2.64
There is good support for	2.87	3.15	2.69	2.94	3.22	2.82	3.00	2.93
entrepreneurs in NW PA.	2.01	0.10	2.03	2.37	J.ZZ	2.02	3.00	2.33