

# The Greater Pittsburgh Region: Working Together to Compete Globally



*Our region faces an economic challenge. The time to act is now. In early 1994 a nine-month process began to develop strategies to revitalize our economy. Since then, thousands of citizens representing our region's many constituencies have worked together to produce a shared vision and move forward. Here is the report on this comprehensive process.*

**November 1994**

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## Preface

We want to thank the thousands of people and dozens of organizations and institutions who gave their time, energy and resources to shaping a new vision for the economic future of our region. To build broad consensus, foster cooperation and focus on the most vital economic development initiatives and programs, we have followed a process we outlined one year ago.

This process involved in some way more than 5,000 people from throughout our region and from all walks of life. They have expressed many opinions, debated many approaches and discussed many options. Some of the best and brightest minds in our region -- from government, business, labor, education, civic and religious organizations -- have helped reach the consensus needed to revitalize our economy for the next century.

The participants in the Regional Economic Revitalization Initiative have pursued the vision, "Working Together to Compete Globally" They have outlined strategies and initiatives that can propel the Greater Pittsburgh region to economic growth in the years ahead.

Most important, they have proposed strategies and initiatives that hold great promise for all of us. Our goal is to create an economy that offers jobs and opportunities to all citizens. The results of our work must reach into all communities, to all sectors of our society. Our mission will have failed if our economic revitalization plans do not embrace and involve all the people of our region.

The following report outlines the nine-month economic revitalization process. It describes some of the problems and opportunities examined by the Leadership Consortium and the Work Groups. And it culminates in recommendations for actions to be taken to push our region forward as a strong competitor in the global marketplace.

This report describes the steps we must take to achieve our vision for the next century. These actions are outlined under broad headings that describe the fundamental principles of our mission:

- Build on the strengths that hold the key to future job growth.
- Invest in wealth and job creation assets.
- Revive our entrepreneurial vitality.
- Make our region a leading destination for world visitors.
- Create an economic climate for the 21st century.
- Establish a new spirit of teamwork in economic development.
- Connect workers and students to the jobs of the future.
- Build one economy.

Our region has many strong economic development agencies which have taken and will take leadership roles in realizing this new agenda. Many initiatives are in progress, others require new coalitions and new public-private partnerships. To use an analogy appropriate for our region, we must build new bridges to economic development.

As you will see in this report, much hard work has been done to this point. The hardest work -- combining our talents, skills and resources to build a globally competitive regional economy -- lies ahead.

We look forward to working together and with you to fulfill the promise of the Regional Economic Revitalization Initiative.

**Robert Mehrabian**

Chairman  
Regional Economic  
Revitalization Initiative

**Thomas H. O'Brien**

Chairman  
Allegheny Conference  
on Community Development

# Acknowledgments

In 1993, the Allegheny Conference on Community Development asked Carnegie Mellon University President Robert Mehrabian to lead a planning process to develop a vision and strategies on which to base the economic development agenda for the Greater Pittsburgh region.

Participants in the economic revitalization process have represented the many constituents -- from business, labor, government, education, and religious, cultural and civic organizations -- that make up our region.

## Our Special Thanks To:

Companies and foundations that have contributed funds to the Regional Economic Revitalization Initiative

Alcoa Foundation	Federated Investors	Mellon Bank
Bell Atlantic	Heinz Endowments	R.K. Mellon Foundation
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Blue Cross of Western Pennsylvania	Hillman Foundation	PNC Bank
Carnegie Mellon University	Integra Foundation	PPG Industries
Duquesne Light	Jewish Healthcare Foundation	Price Waterhouse

### Participants in the three-phase economic revitalization process

Robert Mehrabian, Chairman	Sande K. Deitch	Donald H. Jones
Robert D. Alexander	Bruno Dellana	Roger Jones
Robert Baldis	Jerry Dempsey	Mark Kamlet
Lynn Barger	William S. Dietrich	Judy Kelly
Ralph Bean	Jane Downing	John Kosar
Joseph E. Beasley	Robert Eberly	Michael Krajovic
George Becker	Roger Fairfax	Thomas Lamb
Scott R. Becker	Karen Feinstein	Steven Leeper
Raymond T. Betler	Fred Fetterolf	Frank Mascara
Jeffry Boetticher	Richard Florida	Garland McAdoo, Esq.
Robert P. Bozzone	Thomas Foerster	Thomas B. McChesney
Howell Breedlove	Ronald Gamble	James McClure
Carol R. Brown	James Getty Jr.	Thomas McConomy
Ellsworth H. Brown	Robert Gleeson	Peggy McCormick Barron
Frank V. Cahouet	Dianna Green	T. J. McGarvey
Joseph Calihan	James A. Green	Gerald E. McGinnis
Barbara Campbell	John Greeno	Richard McMaster
Donald K. Carter	Frank Gustine	Thomas Michlovic
Raymond Christman	I. N. Randall Harper	Rowan Miranda
Robert A. Cinpinski	Melissa Hart	Joseph Molinero
Daniel Cohen	Michael Herman	Keith W. Morrison
James Colker	David J. Hirsch, Esq.	Robert Murphy

Gayland Cook	Eloise Hirsh	Thomas Murphy
Joseph Corcoran	Neal Holmes	Thomas J. Murrin
William J. Coyne	Earl Hord	John P. Murtha
Michael M. Dawida	Alvin Janovich	Thomas H. O'Brien
Larry Deeg	Justin M. Johnson	J. Dennis O'Connor
John C. Oliver III	Anthony Sanzo	Cecil Underwood
Johanna O'Loughlin	Vincent Sarni	Dennis Unkovic
Timothy Parks	Mark Sauer	Michael R. Veon
William J. Pinkerton	Michael Schwab	Richard Vidmer
Tony Prezioso	Jack Shea	Wesley W. von Schack
Charles J. Queenan Jr.	Richard P. Simmons	Milton A. Washington
Robert Randall	Paul Stackhouse Sr.	Michael Watson
John Remark	James C. Stalder	Alfred W. Wishart Jr.
Thomas Richards	Richard Stanizzo	Thomas H. Witmer
F. Brooks Robinson	Thomas W. Sterling	Roger E. Wright
James Roddy	William E. Strickland	Donald Wuerl
James Rohr	Frederick W. Thieman	Dennis Yablonsky
Arthur J. Rooney II	Rosemary Trump	Andre Young
James A. Rudolph	Frank Tugwell	
Ed Santry	John Turyan	

**Regional Economic Revitalization Initiative Staff**

Timothy McNulty, Project Director	Lynne Gerace, Associate Director
George Whitmer, Co-Director	Robyn Choi, Administrator
Jeffrey Lewis, Co-Director	

**Faculty Consultants**

Richard Florida	Robert Gleeson
-----------------	----------------

**Support Staff**

Hope Markiewicz	Diane Staub
-----------------	-------------

**Consultants**

Steven Branca	Tripp Umbach & Associates, Inc.
Steven Zecher	

**Research Partners**

Conference on Real Estate of Southwestern Pennsylvania	Pittsburgh High Technology Council
Connelly Center, Duquesne University	Price Waterhouse
The Enterprise Corporation of Pittsburgh	The Southwestern Pennsylvania Industrial Resource Center

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# A Vision for the Region

## Our Vision

The Greater Pittsburgh Region: Working Together to Compete Globally

## Our Mission

To create an exemplary quality of life through high-value jobs for all citizens by nurturing an economic environment that will foster retaining and expanding existing businesses, starting new firms and attracting other companies to our region.

### The Workplace of Tomorrow

Cutting-edge labor-management partnerships keep a flexible, diverse workforce and vibrant companies working together to the mutual advantage of all.

### A New Era of Entrepreneurship

The rates of new business start-ups and job growth surpass national averages and are achieved through an investment-stimulating tax and regulatory climate.

### Government with a Customer Focus

Public/private cooperation and a revolution in regional governance ensure that services are delivered in the most cost-effective and efficient means possible.

### An Outstanding Quality of Life for All Citizens

Cultural and entertainment assets adjoin natural recreational wonders to contribute to the high quality of life and make Greater Pittsburgh a leading destination for national and international visitors.

### Transforming Old Industries and Growing New Ones

University and industrial research in robotics, software, health systems and materials combines with a technical workforce, a fabrication and specialty manufacturing base and design, finance and marketing services to revitalize existing industry and create new industrial clusters.

### A Sustainable Advantage

The world's first region to restore its environment is now a center for "green products" and technologies for solving global environmental problems and reusing industrial sites.

### A Global Transportation Network

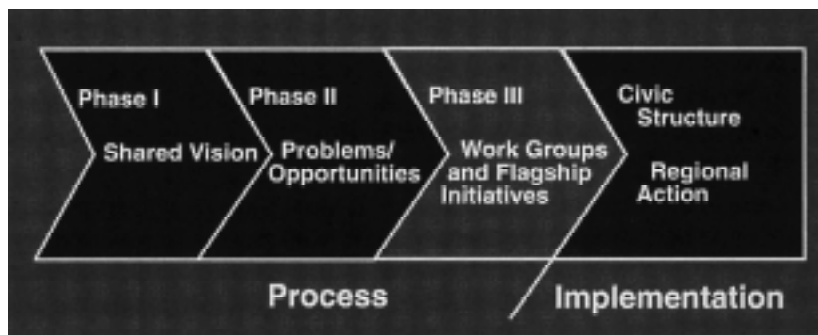
A one-hour commute links production and service centers throughout the region while the world's most advanced airport, the nation's first information highway hub, and rebuilt rail and river transport make the region a crossroads for global trade.

## How It Started: The White Paper

In 1993, the Allegheny Conference on Community Development commissioned an analysis of the competitiveness of the Greater Pittsburgh region. This analysis was conducted by a committee of community leaders chaired by Robert Mehrabian, president of Carnegie Mellon University. The resulting “White Paper” highlighted both the region’s economic resilience and its failure to successfully compete for economic growth with other regions.

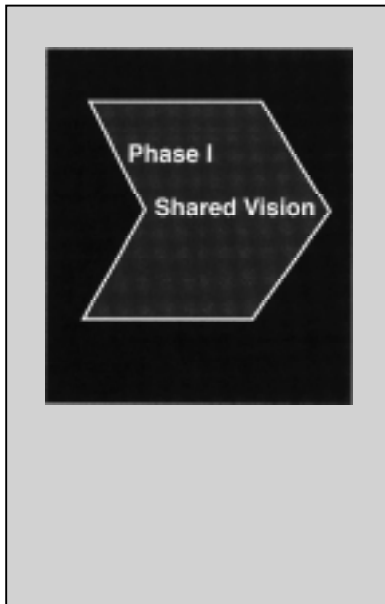
Specifically, it was found that members of the community did not have a shared vision of what the region’s economy could be. A crucial ingredient, consensus, was missing. The report proposed a nine-month, three-phase process to move from a disparate approach toward a more cohesive effort. Only in this way could effective economic revitalization actions be developed and implemented.

### The Three Phases of the Economic Development Process



Based on public reception of the white paper and support from a broad spectrum of sponsors, Carnegie Mellon’s Center for Economic Development created the Regional Economic Revitalization Initiative. This team has worked with citizens from throughout the Greater Pittsburgh region to gather viewpoints, conduct town meetings, produce analyses of key issues and develop specific action plans. This initiative represents the first concerted planning process for the Greater Pittsburgh region in a decade.

## I: Shared Vision



Since its formation in January, the Regional Economic Revitalization Initiative has focused on bringing the region together for a dialogue on our economic future. As a first step, a Leadership Consortium was created, including representatives from government, business, labor, education, community and religious organizations, counties throughout the region and northern West Virginia. Through its Leadership Consortium, extensive outreach sessions engaging more than 5,000 citizens and the KDKA-TV live broadcast of “Decision Point,” the initiative has helped produce a consensus about our region’s most pressing issues and goals.

Every facet of our diverse community has been involved in understanding our problems and opportunities and developing a strategic plan and flagship initiatives to achieve our economic vision of “working together to compete globally.”

## II: Problems and Opportunities



This phase of the process identified key problems and opportunities in regional revitalization and developed shared understanding among the work groups. The analysis of our region's problems and opportunities aided the formation of the flagship initiatives. A significant amount of networking occurred by using the resources, talents and skills of existing organizations to conduct workshops, seminars and interviews with all segments of our community.

These studies focus on key problems and opportunities facing the region, such as:

- How does Pittsburgh stack up as a site for new plants or offices?
- Are businesses in the region looking to expand and remain here or look elsewhere?
- What key industries are pivotal for Pittsburgh's future?
- What can be done to stimulate more business start-ups?

The results of this phase have been published in five separate reports, summaries of which are given in Appendix I. Outlines of the studies and key findings are presented below.

### **An Update of Economic Performance since 1990**

*by Carnegie Mellon University's Center for Economic Development*

Key regional economic trends since 1990 were examined -- the point at which the "White Paper" analysis ended. The update shows that the Greater Pittsburgh region continues toward recovery from the economic decline of the '70s and '80s, when it had the steepest job losses in the nation. Since December 1990, the region has created jobs at a rate only slightly below the national average and has outperformed metropolitan regions with a greater concentration of defense-related industries. The region's job growth remains concentrated in the service sector. While the rate of decline in manufacturing jobs has slowed, we are still losing manufacturing jobs faster than the national average.

The seeds of better economic performance are clearly present. The challenge facing us is to identify and capitalize on the local economic growth engines that can stimulate a true resurgence.

### **A Comparative Assessment of Southwestern Pennsylvania as a Business Location**

*by the Conference on Real Estate of Southwestern Pennsylvania (CRE), in consultation with Tripp Umbach & Associates, Inc.*

The study was a comparative analysis of a corporate location decision comparing the Greater Pittsburgh region with Atlanta, Baltimore, Charlotte, Cincinnati, Columbus and Minneapolis/St. Paul. The data showed our region to be an attractive location, ranking third out of the seven, with Charlotte first and Atlanta second. The overall findings are mixed -- some good, some bad -- but they point a way to forward action: address the locational deficiencies we face and market the strengths we already have.

### **Making the Grade: Assessing the Climate for Retaining and Expanding Manufacturing Businesses in the Greater Pittsburgh Region**

*by Carnegie Mellon University's Center for Economic Development, Duquesne University's Connelly Center and Price Waterhouse LLP*

Significant job growth in the Greater Pittsburgh region within the next five years depends largely on retaining and expanding the businesses already here. In order to investigate the probability of manufacturing firms expanding in our region rather than to other locations, researchers conducted interviews with 20 regional manufacturing firms. The key finding of this study was the need to develop a coordinated retention effort to support our region's manufacturing base. The retention strategy must integrate attention to overall business climate issues, such as taxes and worker's compensation, with targeted services in workforce and management education and training, and technology development and diffusion. A focus on total quality management programs was emphasized.

### **Thinking Differently About the Region: Southwestern Pennsylvania's Manufacturing and Technology Assets**

*by the Pittsburgh High Technology Council and the Southwestern Pennsylvania Industrial Resource Center (SPIRC)*

This report examined the Greater Pittsburgh region's manufacturing and technology industry base and the inter-relationship between and among these industries and the service sector. It identified five lead industrial "clusters" for future development that now employ approximately 250,000 people and contribute 21% of the region's wages and salaries. The "clusters" identified include:

***Metalworking:*** Primary steel, specialty steel, fabricated products and tungsten carbide.

***Chemicals and Plastics:*** Specialty chemical and plastic products.

***Biomedical Technologies:*** Medical and dental instruments, surgical appliances and supplies, health care information systems and an emerging molecular biology and genetic engineering sector.

***Information and Communication Products and Services:*** Software, engineering tools, data processing services and communication equipment.

***Environmental Technologies:*** Monitoring and assessment control, remediation, restoration and avoidance technologies.

## **Investing to Build our Entrepreneurial Vitality**

*by The Enterprise Corporation of Pittsburgh*

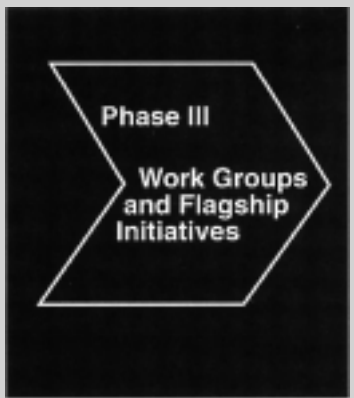
The objectives of this study were to: examine the entrepreneurial vitality of our region and compare it with that of other regions; and recommend actions, as appropriate, to significantly enhance this segment of our economy. The Greater Pittsburgh region's entrepreneurial vitality in terms of environment and services was ranked between 4-6 on a scale of 1-10. The data suggest that while we have improved somewhat over the last decade our rate of business formation relative to other regions is very low. In order to reach the national average, our new company formation rate must increase by about 90%.

## **Key Findings**

Taken together, the studies lead to certain findings. In particular, the region needs to:

- ❑ Coordinate major economic development plans and strategies to retain and expand existing businesses and attract new ones to the region.
- ❑ Establish more stable and consistent application of environmental regulation and assistance programs.
- ❑ Improve the system for the re-use of industrial sites.
- ❑ Implement balanced tax reforms to make the region more competitive.
- ❑ Redesign and coordinate the region's financing programs to meet the demands of a competitive business environment.
- ❑ Invest in human capital (education and training) and provide seed funding mechanisms to significantly improve entrepreneurship.
- ❑ Improve technology transfer from our universities.
- ❑ Develop and implement a regional marketing plan.
- ❑ Improve access between labor pools and job opportunities through investment in transportation services.

## III: Work Groups and Flagship Initiatives

A graphic consisting of a black arrow pointing to the right, with the text "Phase III" at the top, "Work Groups and Flagship Initiatives" in the middle, and "Initiatives" at the bottom. The arrow is set against a light gray background.

Phase III  
Work Groups  
and Flagship  
Initiatives

Six Work Groups were formed in July to focus on specific strategic initiatives. Their recommendations help form a blueprint for a regional economic development strategy designed to help stimulate the 100,000 jobs needed in the region. The following is a summary of the groups and the key issues they explored. (Key findings and recommendations of these groups are discussed in Appendix II.)

### Demonstration Projects

*Fred Fetterolf, chair*

**Desired Outcome:** Identify and mobilize support for projects designed to strengthen existing industrial clusters or help launch new clusters based on embryonic regional enterprises and technologies.

This Work Group reviewed proposals for projects designed to stimulate job growth in software, information technology, bioengineering, environmental industries and advanced manufacturing. In examining each project the Work Group investigated the potential for job growth and the impact on expanding the tax base.

### Destination Development

*Ellsworth Brown, co-chair*

*Roger Fairfax, co-chair*

**Desired Outcome:** To develop priorities for attracting more visitors to the area in order to realize employment opportunities in the region and to generate an increased economic impact. Specifically, the task force's objectives were to build a baseline of data which includes both current and potential additional assets to attract visitors to the region, as well as an examination of how we currently market the region and potential strategies for improving the effectiveness of marketing.

Tripp Umbach & Associates, Inc., were retained to assist this Work Group. An inventory of the region's assets for attracting visitors was completed along with an estimate of the number of jobs that could be created by developing new attractions or more effectively marketing current assets. This Work Group benchmarked efforts in Toronto, San Antonio and Tampa.

## Expanding Business Opportunities

*Tom Murphy, co-chair*

*Charles Queenan, co-chair*

**Desired Outcome:** Redesign the region's overall economic development strategy, including cooperation among various economic development organizations, and produce a blueprint for marketing, retention and expansion, start-up support, land assembly and refinancing activities.

This Work Group explored opportunities to link the major economic development organizations in the region to create a "hub" for marketing and retention. The group also examined the creation of a large-scale development fund to catalyze key economic development investments.

## Infrastructure

*Wes von Schack, co-chair*

*Jim Roddey, co-chair*

**Desired Outcome:** To develop priorities to improve access for individuals to areas of employment growth, especially through strengthening mass transit, and to improve access for the region's businesses to key markets and strengthen intra-regional connections for the movement of goods and services.

This Work Group identified the infrastructure investments necessary to support economic growth. A detailed assessment of current regional highway transportation plans and opportunities for investments in rail, air cargo and information technologies was conducted. An assessment of the infrastructure investments most critical to job creation was the goal.

## Labor/Management

*Tom Foerster, chair*

**Desired Outcome:** Nurture agreement(s) for labor/management relations in the region which creates world-wide recognition of Greater Pittsburgh as a center for visionary workplace relations.

"I want the world to recognize Greater Pittsburgh for having the most advanced labor/management relations" was Tom Foerster's charge to the Work Group. With the assistance of the Three Rivers Area Labor Management Committee this group engaged labor and management leaders in the region to identify strategies to make the region a world pacesetter in collaborative partnerships.

## Tax and Regulatory Action

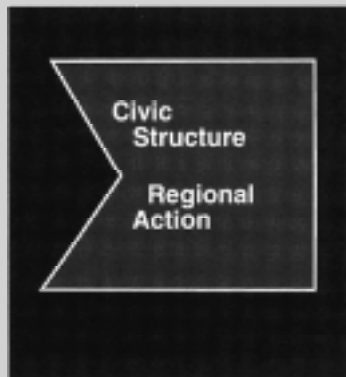
*Jim Stalder, chair*

**Desired Outcome:** Advocate for tax and regulatory actions and/or changes in government structure to lower the local cost of business.

This Work Group examined the tax and regulatory actions most critical to ensuring the region's competitiveness.

## Greater Pittsburgh in the Year 2000

### Working Together to Compete Globally



A hundred years ago, the Greater Pittsburgh region began the American industrial revolution. Fifty years ago, nearly a full generation ahead of the world, we began the transformation of industrial regions with the smoke control campaign.

The initiatives outlined below are about working together to compete globally. Over the last two decades our region has weathered dramatic economic changes. We have survived. It is now time to grow and lead once again.

Greater Pittsburgh in the year 2000 can be a center for new business creation, a 21st century center for the knowledge economy known world-wide for enterprise in multimedia technology, the production of environmental products and services, growing biomedical businesses and a vibrant manufacturing base producing quality goods for the world.

Waterborne taxis will traverse our rivers, bringing visitors from around the world to experience a riverfront teeming with commerce, natural resources, recreational and entertainment attractions. Most important, as a world leader in the next century, Greater Pittsburgh will be a region which offers real opportunity to all its citizens.

The starting point for this new beginning is to join together in a job creation mission. Leaders from business, labor, civic, educational and philanthropic institutions are prepared to embark on a mission to create a significant number of new jobs in the next five years. For example, we need 100,000 new jobs in the immediate six-county region to keep pace with the projected national average.

Nearly 80,000 of these jobs must be grown here. Many will come from expansion by companies already here. Others must emerge from individuals starting companies here. So the focal point of our efforts must be to grow our own future.

The flagship initiatives outlined below seek to grow this economy of the future. Eight challenges connect and underpin these initiatives:

- Build on the strengths that hold the key to future job growth.
- Invest in wealth and job creation assets.
- Revive our entrepreneurial vitality.
- Make our region a leading destination for world visitors.

- ❑ Create an economic climate for the 21st century.
- ❑ Establish a new spirit of teamwork in economic development.
- ❑ Connect workers and students to the jobs of the future.
- ❑ Build one economy.

Greater Pittsburgh is ready to meet these challenges.

## **Flagship Initiatives: An Agenda for a New Beginning**

Our vision is a simple one. It is a vision of a region working together to compete globally. It is a vision of Greater Pittsburgh growing at or above national rates as we enter the 21st century.

These flagship initiatives represent a starting point, an invitation to join together and build the region we collectively desire. This is not a master plan to be directed top down. It represents the outgrowth of a process which tapped the ideas, talent and vitality of individuals and organizations throughout the region. It is an agenda for connecting and linking many efforts into one strategic direction.

## **Build on the Strengths That Hold the Key to Future Job Growth**

A new economy is taking hold in the Greater Pittsburgh region. Historic strengths in manufacturing are combining with technology resources, service enterprises and expanding financial services to shape the industries that will act as our economic engines into the 21st century.

The Greater Pittsburgh region has the potential to be a world leader in at least five major industrial areas:

- ❑ **Metalworking.** This cluster contains over 40% of the region's manufacturing jobs and includes a resurgent primary steel base, and world leadership in stainless steel and tungsten carbide manufacturing.
- ❑ **Chemicals and Plastics.** Private and university research capabilities, and world leaders such as Alcoa, Arco Chemical, Aristech, Mine Safety Appliances, PPG and Tuscarora Plastics, have built this cluster which provides over 24,000 jobs throughout the region.
- ❑ **Health Systems and Biomedical.** The region is recognized world- wide as a medical research center and is home to vibrant medical instrument firms which generate 23% of all exports from the region. More than 130,000 jobs and wages totalling \$3.4 billion are based on this cluster.
- ❑ **Information and Communication Products and Services.** The dominant high technology industry in the region, this cluster is critical to competitiveness of the overall regional economy. More than 10,000 workers are employed in the software industry alone with strong growth opportunities in artificial intelligence, multimedia technologies, and industrial and consumer electronics.

- **Environmental Products and Services.** More than 850 firms make the region a world leader in environmental technology. A rich and broad-based research infrastructure holds the potential to make the region the hub of a new generation of environmentally sound products and services.

These industrial areas already represent 250,000 jobs and generate 21% of the wages and salaries in the region. It is these clusters that will provide a wellspring for starting new businesses, connect the region to the world economy and offer a wide array of quality jobs throughout the region, from the neighborhoods of the city to the communities throughout the river valleys.

Strategies to nurture growth in these industries and market the Greater Pittsburgh region as a center for the industries of the 21st century are vital to job creation.

## **Actions**

### **1. Mobilize Behind Projects that Combine Our Assets for Job and Industry Growth**

The following projects are emerging within the region to strengthen these areas of growth. With broad-based support, these projects can accelerate job and industry growth. To start and strengthen these critical efforts, mentoring teams will be established from a cross-section of public, private and community leadership. These teams will promote and help develop these projects and ensure that each project maximizes its job and business creation potential.

#### ***Support the Creation of a Research and Development Initiative to Make Pittsburgh the Robotics Capital of the World***

The Greater Pittsburgh region has been a major site for research and development of robotics. The opportunity now exists to become the leading global center for a new generation of robotics development and applications. This initiative involves the siting of a NASA robotics research facility in Lawrenceville and additional research in the development of smart vehicles and medical robotics.

This project has the potential to boost the region's established base of software companies and stimulate further enterprise creation. The project also opens new market and technology opportunities for a range of companies which could serve as vendors for large-scale product development.

Community support is needed to ensure continued funding, maximize new business start-up potential and ensure the development of a strong link between research and the existing business base in the region.

#### ***Create a Regional Hospital Information Network and Community-Based Jobs***

This project involves the development of an electronic data network for record and research exchange among regional hospitals. The project, spearheaded by the Hospital Council of Western Pennsylvania, will accelerate efforts to improve the competitiveness of the region's health systems institutions and draw on information technology innovations developed by regional companies. In addition, it affords an opportunity to establish a job creation bridge between growth industries and applications and the inner city employment base. Between 300 and 800 jobs may be created in community enterprise centers established by this project to transform paper records to the digitized form needed for the network.

Community support for the partnerships needed to make this job creation bridge a reality is critical.

***Establish the Biomedical Industry of Tomorrow through a Tissue Engineering Initiative***

The region's world leadership in organ transplants has been a vital contributor to reshaping the image of the Pittsburgh region. Advances in science are now making it possible to grow cells and tissues outside of the body for use in therapy and diagnostics. Pittsburgh is well poised to be a leading region in this new field of tissue engineering because of its knowledge base in transplantation, as well as strong programs at the University of Pittsburgh and Carnegie Mellon University in genetics, cell culturing, biomaterials and computer modeling. The universities have established a major initiative to promote the applied development of engineered tissue products and to support the formation of new companies in the region around these advances in technology.

Community support is essential to secure research funding and, most important, create an infrastructure which captures the business and job creation potential of this emerging area.

***Accelerate the Quality Revolution through the Establishment of a National Supplier Training Center***

Duquesne University, in partnership with Alcoa, Miles and a consortium of local companies, has mobilized an effort to make Pittsburgh one of only eight sites for high-quality training by the Consortium for Supplier Training. The consortium, which includes the leading quality companies in the world, has established these centers to accelerate the diffusion of quality practices to small and medium-sized companies. Basing a center at Duquesne will provide a unique tool for catalyzing the continued transformation of the region's manufacturing base. In addition, the center represents a critical link to global economic change and offers a specific tool for connecting the region's supplier base to the best companies in the world.

Community support is vital to marketing the center and helping to ensure that it is accessible to the maximum number of companies in the region.

***Initiate the Sustainable Pittsburgh Environmental Initiative***

The region has the resources and the potential to be the leading environmental industry center in North America. A comprehensive strategy for reaching this goal should be developed, including:

- ❑ A strategy to attract a major federal environmental research center;
- ❑ Development of a technology park for "green" design industries;
- ❑ Designation of the region as a national demonstration center for innovative industrial site reuse;
- ❑ a credible example is the reuse of the Pittsburgh Technology Center site;
- ❑ Support and expansion of projects to build environmental industries, including the development of low-income sustainable housing and construction;
- ❑ Encouragement of industrial recycling and sustainable manufacturing in the Mon Valley;
- ❑ Expanded access to pollution prevention services and the creation of emission trading plans to improve the climate for compliance with environmental regulations.

***Win the Race to be a Center for Maglev Manufacturing***

Pittsburgh's effort to become a world center for magnetic levitation transportation has embarked on a new and vital direction. The focus of this effort is to establish a manufacturing center for the development of Maglev production capabilities in transportation and related industries. This public/private and labor initiative focuses on building a regional capability in manufacturing systems that could be used worldwide. This cross-cutting initiative has the potential to be a catalyst to the region's information technology industry as well as its manufacturing base.

Community support is crucial to secure federal funding and solidify the partnerships needed to establish a manufacturing center.

**2. Make the Region a Technology Park**

The dramatic progress of the last year at the Pittsburgh Technology Center is evidence of readiness for real growth in technology companies and jobs. It is time to develop a strategy to make the Greater Pittsburgh region itself a Technology Park. Actions include:

- ❑ Devising a strategy for expanding the Pittsburgh Technology Center and planning additional technology parks or technology incubators to support key industries such as environmental and information technologies;
- ❑ Creating a Virtual Technology Park, where online networks connect companies in parks throughout the region to university technology and research resources.

## **Invest in Wealth and Job Creation Assets**

The remaking of our physical and natural infrastructure has been a central element of our region's renaissance. This new beginning will also require investment in infrastructure and human and industrial resources.

New capital investments in infrastructure, visitor attractions, the transformation of our riverfronts, new industries and business start-ups are essential to realize our vision for a new economy. The Greater Pittsburgh region needs a consensus investment agenda. This agenda must link public, private and community stakeholders to identify and mobilize resources for the investments -- human, physical and capital -- most critical to job and wealth creation. The success of the Strategy 21 process affords a good beginning, but new tools and new mechanisms to work together are essential.

### **Actions**

#### **1. Establish the Strategic Investment Partnership**

Building on their past success, the Strategy 21 partners (the Mayor of Pittsburgh, the county commissioners and the Allegheny Conference) should establish a "strategic investment partnership" to develop a consensus investment agenda to stimulate job growth. Potential projects include industrial parks, seed capital for entrepreneurship, riverfront development projects and expansion of the convention center.

The Partnership will build this agenda by developing an investment strategy. The strategy development process will solicit ideas from a cross-section of organizations capable of identifying priority investments for downtown, neighborhood, industrial and technology development and business creation projects, with an initial focus on the region's core.

#### **2. Build the PRIDE Fund: A New Tool for Job and Wealth Creation**

The Allegheny Conference should lead creation of a private development fund to catalyze economic development, tentatively known as PRIDE, Partnership for Regional Investment in Development and Entrepreneurship. PRIDE's exact size will be determined by an initial planning process, but it is expected to be in the area of \$50 million. It will be similar to resources in Cleveland and Tulsa. PRIDE will use the Strategic Investment Partnership to identify projects with strong job development potential. PRIDE will operate as a private fund, but work in tandem with the Pittsburgh Development Fund championed by Mayor Murphy and other public resources to support key projects. The PRIDE fund should set a target of investing 20% of its portfolio in business ventures which will enhance job and wealth creation for disadvantaged populations and neighborhoods.

## Revive Our Entrepreneurial Vitality

The region has established nationally recognized efforts to start and support new businesses. However, we need increased entrepreneurial vitality to realize the job growth we seek, particularly job growth bringing real opportunities to women, minorities and dislocated workers. While our region creates about 3,400 new companies each year, we must grow nearly double this number annually just to reach the national average for large metropolitan areas.

### Actions

#### Initiate an Entrepreneurship Vitality Campaign to Accelerate the Growth of New Businesses

The goal of this campaign is to make Greater Pittsburgh the leading center for new business creation between Boston and San Francisco by the year 2000. To be effective, the effort must assure funding for early start-ups, create visible efforts to retain and attract entrepreneurs, and integrate entrepreneurship into our culture. Elements of the campaign include:

- ❑ Building of \$3 to \$4 million annually in “adventure” capital for early stage start-ups;
- ❑ Increasing the number of entrepreneurially inclined people in the region by:
  - Initiating summer intern and post-graduate residency programs for entrepreneurially inclined students;
  - Investing to improve and expand entrepreneurial education in our MBA programs;
- ❑ Increasing the rate of new business formation by people already located here by:
  - Encouraging other universities to offer courses similar to Carnegie Mellon’s teaching programs for technical graduate students, faculty and staff on “How to Start a High Tech Business”;
  - Conducting an annual “Best Business Plan in Pittsburgh Contest”;
- ❑ Developing programs that maximize technology transfer from universities;
- ❑ Expanding programs to encourage women and minority entrepreneurs.

## **Make Greater Pittsburgh a Leading Destination for World Visitors**

The creation of a 21st century economy in the Greater Pittsburgh region depends upon an aggressive strategy to make the region a leading travel destination. The growth of the travel and destination industries is a critical source of entry-level jobs capable of bringing the new economy to all corners of the region. Destination development is essential to link Greater Pittsburgh to the world and attract investment and open markets for our products. Finally, with careful planning, an aggressive destination development strategy can leverage investment in the natural, recreational and cultural resources vital to our quality of life.

Our region is making critical progress. In the last year we surpassed Philadelphia as a destination. Now we must put in place a strategy to realize our full potential.

### **Actions**

#### **1. Complete an Attractions Development Strategy**

The region must develop an attraction investment strategy linking the core city to the region. This strategy should include efforts to build on our critical mass of attractions:

- ❑ A commitment to complete the Convention Center expansion by the year 2000;
- ❑ Completion of planned investment in the Cultural District;
- ❑ Support for the rapid development of a Steel Heritage Corridor;
- ❑ Identification and development of additional attractions.

This attraction investment strategy will help shape the priorities of the Strategic Investment Partnership.

#### **2. Invest in Riverfront Development**

The rivers hold the potential to define this region to the world. They are the signature piece of the region. Riverfront development holds the potential to integrate our natural and economic revitalization. Very simply, riverfront development is the vital step between what our region is today and what it seeks to become. Bold initiatives have been started. Plans exist for commercial and housing development, and trail construction is under way.

These efforts must be maintained at the forefront of the region's economic development agenda by adoption of a public and private goal to complete the integration of our riverfront by the year 2000 and continue the investments in our river lock and dam infrastructure which help us realize the full potential of this resource.

#### **3. Expand Regional Events**

Visitor and cultural organizations in the region must identify and develop a wide range of new or expanded events that create a vibrant visitor atmosphere in the region. They must join in a collaborative effort to expand events and festivals in the region. These events, such as the newly announced First Night Festival, are the building blocks of expanding tourism.

#### **4. Create a Visitor-Friendly Awareness Program**

A comprehensive campaign must be initiated to heighten the awareness of companies and employees and the general community of actions and strategies that can make the region a friendly destination for visitors.

**5. Ensure that Legalized Gambling, if it Comes, Supports Real Economic and Community Development**

All indications are that the Pennsylvania Legislature will consider legislation legalizing gaming during the 1995/96 session. It is imperative that the business and civic community, working closely with local government, monitor the legislative process to ensure, if gaming is enacted, the appropriate controls exist and true economic development occurs.

## Create an Economic Climate for the 21st Century

Ultimately, the future of our region rests with the managers, investors and entrepreneurs who create jobs. The success of our job creation mission will depend on the factors that shape the day-to-day viability of countless businesses. Can goods be moved to suppliers and customers? Can workers reach the job site? Will investments produce an adequate return? Is the teamwork needed to produce quality goods and services possible?

Without specific action to shape these day-to-day bottom-line conditions, no marketing or technology strategy can be effective. We need to work together to aggressively establish a job creation climate.

The following agenda is designed to mobilize all segments of our community to create the business climate that can support business and workers in the next century.

### Actions

#### **1. Establish the Pittsburgh Pledge: A Commitment to Build Cooperation Among Labor and Management in the Region**

The Pittsburgh Pledge will be an agreement signed by business and labor leaders, committing them to use all means possible to resolve disputes without a strike. It will help establish a new era of labor-management partnership. The Pledge will strengthen labor-management cooperation services in the region, help foster awareness and use of best practices for labor-management cooperation, expand labor-management partnerships for job creation.

The pledge will include:

- ❑ Creation of a database on contracts for proactive efforts at cooperation;
- ❑ Creation of a President's Council for ongoing dialogue;
- ❑ Joint benchmarking on best practices;
- ❑ Implementation of a public relations effort to improve recognition of the region's labor climate.

#### **2. Mobilize Support for the Projects Needed to Improve the Intra-Regional Movement of Goods, Expand Access to Developed Sites and Better Connect People to Jobs**

- ❑ The region must embrace a job-focused transportation plan. Key priorities include:
- ❑ Development of a public/private partnership to formulate and implement strategies and services that provide public housing residents with direct access to employment centers in the region;
- ❑ Completion of the Airport busway and East busway expansion;
- ❑ Completion of a multi-modal airport tollway;
- ❑ Expansion of the LRT line to connect Oakland and the North Side to the central business district;

- ❑ Completion of the Mon-Fayette Expressway between Morgantown and Pittsburgh.

### **3. Improve the Links between Greater Pittsburgh and the World Economy**

Rivers and rail opened the markets for the builders of Pittsburgh. International air service and air cargo will determine our ability to assume leadership in the 21st century economy. To realize the promise of our world-class airport, the following actions are needed:

- ❑ A doubling of the number of cities served by international flights by the year 2000 through a comprehensive effort to target gateways critical to business growth;
- ❑ Expansion of the air cargo facilities, including highway links and adoption of a private marketing plan to increase cargo shipments.

### **4. Prepare a Blueprint for Comprehensive Restructuring of Corporate and Local Taxes**

An independent tax council is being created and charged with developing a blueprint for comprehensive reform of state and local taxes. The goal of the council is to harness business, labor and political involvement in a detailed assessment of the options the region faces to achieve meaningful reform. This initiative has forged cooperation with Governor-elect Ridge and legislative and business leaders throughout the state to move this critical action forward immediately.

## Establish a New Spirit of Teamwork in Economic Development

The Greater Pittsburgh region has set the standard for public-private partnerships. We must set a new standard for partnership by creating a framework for collaboration to meet the challenges we face today. The challenges are clear. Our region's business services are not as strong as they should be. While we boast many strong business retention services, we lack a comprehensive retention strategy. Marketing efforts, particularly for tourism and international investments, remain fragmented. Finally, we need to recognize that we are the center of a broad region reaching into two other states.

No single agency can deliver the services and strategies our region requires. Borrowing from the lessons of the business revolution under way, we must create concrete mechanisms for the ventures and alliances that can deliver comprehensive marketing and retention strategies.

### Actions

#### 1. Create an Economic Development "Hub" for the Region

The economic development organizations with regional scope and programs should link with each other to serve as a hub for collaboration and cooperation in regional economic development. This initiative would enable these organizations to retain their key strengths and attributes but create the single point of contact and focal point for networking and cooperation the region desperately needs.

#### 2. Establish a Regional Economic Development "Business Plan"

The primary challenge of the new hub is to create a "business plan" for regional economic development. The initiative would invite organizations throughout the region to shape, develop and participate in this business plan.

The plan must be industry led and offer vehicles for mobilizing broad-based participation in marketing and retention. The marketing plan must create a vehicle for individual business and community leaders to effectively serve as ambassadors for the region. The marketing effort must forge a clear partnership with the real estate community, chambers of commerce throughout the region and industrial development and economic agencies in each county.

An effective retention and expansion plan must be private-sector driven. To be effective the plan must create a seamless partnership with the strong technology and business service efforts in the region. These efforts include the Western Pennsylvania Manufacturing Extension Program, quality promotion groups, the Ben Franklin Partnership and the early warning network operated by the Steel Valley Authority. Strong partnerships must be formed with organizations such as the Advanced Manufacturing Alliance and a grass-roots community effort aimed at city manufacturing firms, the Pittsburgh Manufacturing and Community Development Network.

The specifics of the business plan can only emerge from careful and inclusive planning. But the Revitalization Initiative process has created clear consensus on the following issues:

- ❑ Development of a unified regional international marketing plan to attract visitors, attract international investments, promote exports and link Greater Pittsburgh to the world economy. This plan must convey a coherent message of our region's strengths and assets and back that message with coordinated follow-up and response mechanisms. It must create a corps of Greater Pittsburgh "ambassadors" who will take our message to all corners of the U.S. and the world.

- ❑ Development of a regional retention strategy which includes extensive outreach and assistance to encourage business expansion in the region. This retention effort must identify and generate action on the business climate issues most pivotal to keeping and expanding companies. The retention effort should also act as a network for a number of valuable efforts aimed at accelerating quality by the manufacturing and service sectors.
- ❑ Development of a program to streamline business financing assistance throughout the region. The program must ease the difficulty businesses face in finding just-in-time financing support.
- ❑ Creation of a process for identifying, encouraging and supporting projects that stimulate the growth of new industries. This plan for supporting emerging opportunities, such as those in robotics and tissue engineering, must engage a broad base of public and private leadership and restore our ability as a region to seize opportunities for world leadership in new enterprises.

### **3. Recognize the Full Reach of the Greater Pittsburgh Region**

More than 70 counties in three states use the Greater Pittsburgh International Airport. That is the economic region that must be nurtured if real growth is to occur. Economic development strategies must recognize this region and take concrete steps to build regional action.

The following actions would be a start:

- ❑ Support the development of a tri-state initiative to support high-performance manufacturing. Initiated by 45 industrialists in southeastern Ohio, north central West Virginia and southwestern Pennsylvania, this not-for-profit corporation intends to help shape regional strategies for expanding high-performance manufacturing. Based at the Connelly Center at Duquesne University, it provides an opportunity to leverage resources and capabilities to rebuild our manufacturing capabilities.
- ❑ Convene a summit on technology growth between Pittsburgh and Morgantown. Interstate 79 is rapidly becoming a software and information technology corridor. A summit on technology growth would provide an opportunity to shape strategies to expand this growth.

## Connect Workers and Students to the Jobs of the Future

Natural resources, including coal, oil and forests, provided the foundation for the industrial emergence of our region. Our future economy depends on our human resources. The region has long been recognized for hardworking, skilled labor. But the changing demands of work require new investments and strategies. A number of promising initiatives and experiments are under way, providing a framework for a comprehensive strategy. The region must aggressively accelerate these efforts at transforming education and training programs to ensure that workers and students are connected to jobs of the future.

### Actions

#### 1. Empower Parents to Ensure Every Child is Ready to Learn

A set of milestones to help parents recognize the steps toward readiness to learn will be distributed throughout the region. HelpLine and Family Support Centers will assist parents with access to programs and resources to address developmental problems.

#### 2. Certify Every Student with a Career and Academic Passport (CAP) by Age 18

The Certificate of Initial Mastery Commission of the Allegheny Policy Council will spearhead the CAP effort, beginning implementation by September 1995. The CAP will ensure that students are prepared for meeting world-class standards for entry-level employment. As the first region in the Northeast to implement a CAP, Greater Pittsburgh will re-establish itself as a premier center for skilled workers.

#### 3. Ensure that All Students Receive Work Experience as an Integral Part of Their Education

Building on youth apprenticeship and other programs, the region will ensure that all students have an opportunity for meaningful work experience by age 18. The goal of this effort is to ensure that students have an opportunity to explore career interests and develop positive attitudes toward work.

#### 4. Create a JobLink Partnership

The Mayor of Pittsburgh, in cooperation with the U.S. Attorney, the Allegheny County Commissioners and community organizations, is developing a job partnership creating 500 entry-level jobs for youth by the summer of 1995.

#### 5. Start a New Generation of Teachers Campaign

This program will be established to encourage the best and the brightest in the region -- new college graduates or mid-career professionals -- to teach and continue teaching in the region's school districts. It will provide them with challenging professional development opportunities through businesses and universities. A particular focus of this program will be to recruit teachers for inner city schools and poor school districts.

#### 6. Link Teachers to the Changing Demands of the Workplace

A Teacher Business Internship Program will be established to provide elementary and secondary teachers an opportunity to work in high-performance work settings during the summer. A model for such a program has been started by the Mon Valley Education Consortium. The internship program will empower teachers to design curricula that better prepare students for the workplace.

## 7. Establish a Regional Training Agenda

A Workplace Skills Development Network is being established to link the training programs and services in the region. This network will bring together efforts ranging from basic literacy to improving math and science skills and the ability to work in flexible teams. The goal of the network is to create a framework for the diverse and effective programs in the region to collaborate and harness capabilities to more rapidly meet the region's training needs. A model approach was spearheaded by the Mon Valley Initiative (MVI) in the early 1990s. MVI brought together a variety of service providers to create new approaches to meet the training needs of unemployed youth, with each provider collaborating in areas of particular strength to create a cohesive approach which is more effective for students and workers.

The Network should establish a comprehensive regional agenda for improving training programs with particular attention to the following:

- ❑ Create innovative strategies for delivering training to disadvantaged populations, particularly public housing residents;
- ❑ Assist workers who lack a high school diploma to obtain a CAP.
- ❑ Ensure that literacy training is available on demand in every community in the region;
- ❑ Develop an education technology workplan to accelerate the ability to deliver interactive training services to the home and workplace.

## Building One Economy

Greater Pittsburgh cannot be a world-class region if it is a region of two economies, one of opportunity and quality jobs and one without. The imperative of building an economy which brings opportunity to all citizens and communities has emerged as a priority in almost every meeting and outreach session conducted to shape this blueprint. A recent economic benchmarking report documents the challenge of the gap in employment and income between whites and African-Americans without our region. Specific mechanisms to link all citizens to the economy of the future are found throughout this report:

The Regional Hospital Information Network will create jobs in a growing industry in inner city neighborhoods;

The PRIDE foundation will have a target of 20% of its investment for the job and wealth creation in communities with low employment and income growth;

New business start-ups by women and minorities will be a major focus of the entrepreneurship campaign;

The transportation investments will improve service to low-income areas of Pittsburgh and the Mon Valley, and improve access to the airport area. A plan will be developed to improve the ability of public housing residents to reach jobs in outlying areas.

The destination development strategies will create low-skill, entry-level jobs, while the demonstration projects and economic clusters will create higher skill-level jobs.

Initiatives to improve education and training services will help connect disadvantaged workers and students to the full range of jobs being created.

### Actions

There should be a community commitment to study the causes of the economic gap between whites and African-Americans. While it is the belief that the initiatives outlined in this report will help all citizens, particularly those who are most disadvantaged, the recommendations should be revisited within the coming year in light of the study findings.

## Making it Happen: Strategies for Moving this Agenda Forward

Greater Pittsburgh has the opportunity to begin growing again. The ability to seize that opportunity rests not with a few leaders, but with the collaborative leadership of a broad cross-section of our region. It must use the resources of the many expert agencies already at work on economic development. A clear strategy for continuing to work together must be established. This strategy must create a capacity for continuous improvement. Our diverse region must respond to new opportunities and challenges together, rather than wait for crisis to unite us.

### Actions

#### 1. Take Action in the First 100 Days

Actions based on the recommendations of the Regional Economic Revitalization Initiative must begin immediately.

##### *Actions in the first 100 Days*

- ❑ Teams and champions to implement major initiatives will be identified.
- ❑ Actions by organization boards to create the economic development hub will begin.
- ❑ The process to build the Strategic Investment Partnership and PRIDE Fund will begin.
- ❑ The Pittsburgh Pledge will be signed.
- ❑ The independent tax commission will be initiated.
- ❑ Mentoring teams and workplans for industry demonstration projects will be in place.
- ❑ Efforts to develop a regional business plan will be supported by a symposium on international marketing and exports.

#### 2. Establish a Working Together Consortium

The Leadership Consortium created to initiate this process should be expanded and convened periodically to monitor implementation, help forge and expand partnerships and collaboration, and provide a mechanism for responding to new challenges and opportunities.

The Consortium should not be a new organization. It should be a gathering place, an opportunity for the shareholders in the economic future of the region -- business, labor, public, educational, community and philanthropic representatives -- to assess the direction of economic development. The Consortium should not have a staff, but be a collaborative effort of Carnegie Mellon University, Duquesne University and the University of Pittsburgh, supported by the Allegheny Conference.

It should:

- ❑ Convene after the first 100 days to review progress and chart next steps.
- ❑ Continuously review progress by measuring job growth and other economic factors in the region, with special emphasis on relative unemployment and income in the minority community.

- ❑ Organize periodic benchmarking visits to other regions.
- ❑ Convene an annual competitiveness summit to review progress and set new goals.

## Appendices

# Economic Development Report Summaries

## 1. Results of Phase II: Problems And Opportunities

### **Toward A Shared Economic Vision for Pittsburgh and Southwestern Pennsylvania<sup>1</sup>**

*An Update on Economic Performance Since 1990, Volume 2, By Robert E. Gleeson, Center for Economic Development, H. John Heinz III School of Public Policy and Management, Carnegie Mellon University, September 1994.1*

### **Summary of Findings**

The Greater Pittsburgh metropolitan region continues toward recovery from the economic decline of the 1970s and 1980s when it had the steepest job losses in the nation. Since December 1990, the region has created jobs at a rate only slightly below the national average. Furthermore, since 1990 the Pittsburgh region has outperformed a number of metropolitan regions, particularly those with a greater concentration of defense-related industries.

The region's job growth remains concentrated in the service sector. While the rate of decline in manufacturing jobs has slowed, the Pittsburgh region is still losing manufacturing jobs faster than the national average.

The seeds of better economic performance are clearly present in our region. Since 1990, the region's economy has more closely mirrored national trends. The challenge facing us is to identify and capitalize on the local economic growth engines that can stimulate a true resurgence.

### **Introduction**

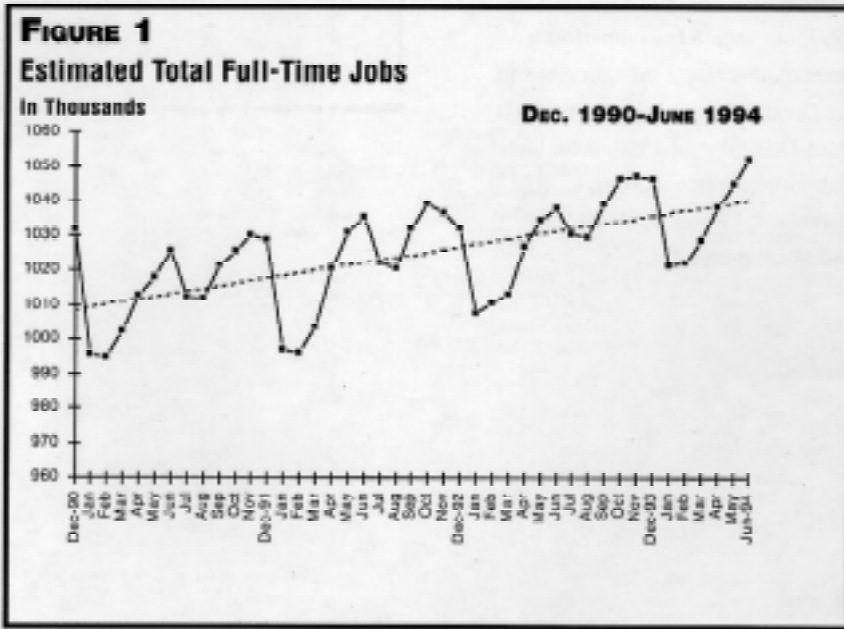
The November 1993 "White Paper" highlighted economic data and trends in the Pittsburgh five-county metropolitan region between 1970 and 1990 and compared the region with the other 24 largest metropolitan regions in the United States. To update the data, modifications in the definition of the region and the basic data source were made.

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<sup>1</sup> The full newsletter can be obtained through the Center for Economic Development in the H. John Heinz III School for Public Policy and Management at Carnegie Mellon University.

First, the U.S. Office of Management and Budget (OMB) has added a sixth county, Butler, to the original five Pittsburgh Metropolitan Region Counties; Allegheny, Beaver, Fayette, Washington and Westmoreland.

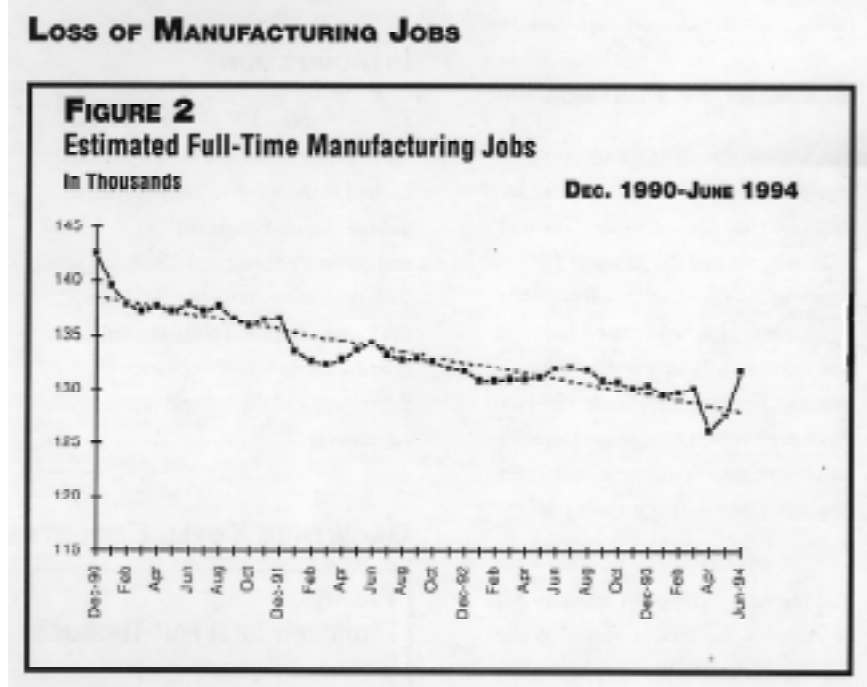
**GROWTH IN TOTAL EMPLOYMENT**



Second, the original source data was U.S. Department of Commerce Bureau of the Census. However, comparable data on employment by region and industry for years since 1990 are available only from surveys conducted by the U.S. Department of Labor. The latter is not as comprehensive as that of the Bureau of Census and is thus labeled as estimated. Furthermore, part-time jobs are often not counted by the Department of Labor's surveys. Consequently, the total number of jobs reported by the Department of Labor is fewer than that reported by the Department of Commerce's

historical data. Trends in both data series, however, do not vary substantially. This ensures that the Department of Labor's data are an excellent indication of recent trends.

The "White Paper" found that the Greater Pittsburgh Metropolitan region experienced the lowest rate of total employment growth in the nation between 1970 and 1990. Between December 1990 and June 1994, the U.S. Department of Labor estimates that full-time employment in our six-county region has fluctuated according to seasonal and national macroeconomic trends. Between December 1990 and December 1993, our region created a total of 14,500 additional full-time jobs. The total full-time job trend was slightly positive in each year between 1991 and 1993, with indications that 1994 will be another positive year. During 1991 and 1992, the



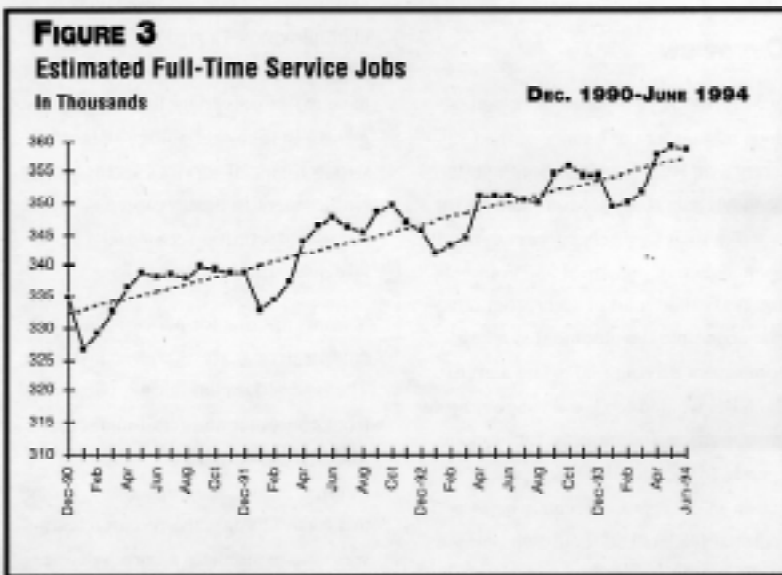
region's job growth kept pace with the national average. However, the region has lagged behind the nation through 1993 and 1994. Despite relative weakness since the start of 1993, our region has outperformed several other major urban regions in the Great Lakes and the Northeast since December

of 1990, including Baltimore, Boston, Chicago, Cleveland, Detroit, Philadelphia and Washington, D.C.

Between 1970 and 1990 the Pittsburgh Metropolitan Region experienced the largest percentage loss, about 54 percent, in manufacturing jobs of any major region in the nation. Although the highest rate of loss was in primary metals, job losses plagued almost all sectors of the local manufacturing base. Employment in the region's manufacturing sector has continued to decline steadily since 1990. Between December 1990 and December 1993, the U.S. Department of Labor estimates that our region experienced a net loss of 12,100 full-time manufacturing jobs, or about 8.5 percent. Data for the first months of 1994 indicate that we may be experiencing some gains, and that the region is losing manufacturing jobs more slowly than Boston, Baltimore and Philadelphia. However, our region's performance in manufacturing continues to lag behind the U.S. national averages.

### Growth in the Service Sector

**GROWTH IN SERVICE SECTOR JOBS**



The service sector added more than 170,000 new jobs between 1970 and 1990. Every major service sector experienced job growth during those 20 years. The greatest source of growth was in medical and health care, business, engineering and architectural, legal, accounting and auditing services. Despite this employment expansion, however, the region's service sector was relatively sluggish compared to other metropolitan regions. Our region had, in fact, the slowest rate of service sector job growth among major metropolitan areas in the nation.

The number of full-time service sector jobs has continued to grow each year since 1990. Between December 1990 and December 1993, 19,500 new service jobs were created in the region. Data for the first few months of 1994 indicate another year of job growth. But despite continued growth in local service sector jobs, the rate of service sector job growth in the six-county Greater Pittsburgh metropolitan region continues to lag behind U.S. national averages. Nevertheless, regional service sector growth has exceeded some other urban areas in the Great Lakes and the Northeast in recent years, including Baltimore, Boston, Philadelphia and Washington, D.C.

## **A Comparative Assessment of Southwestern Pennsylvania as a Business Location<sup>2</sup>**

*by the Conference on Real Estate of Southwestern Pennsylvania (CRE),  
in consultation with Tripp, Umbach & Associates, Inc., June 1994.*

### **Overview**

In May 1993, an alliance of organizations met under the banner of the Conference on Real Estate of Southwest Pennsylvania (CRE). Motivated by the fact that their business success depends upon an active industrial and commercial real estate market and recognizing that economic development is a key component driving real estate activity, the CRE wanted to take a vanguard role in supporting and pushing forward an agenda for economic development action in the region. Because many regional leaders had their own opinions of the region's strengths and weaknesses, the CRE wanted its contribution to be based on real market experience. It concentrated its efforts on analyzing the greater Pittsburgh region's relative attractiveness under actual site location decision-making conditions. This resulting report tells a "tale of seven cities" and a company's search for the best location among them.

Six regions of the United States were selected for comparative analysis with Southwestern Pennsylvania, including Atlanta, Baltimore, Charlotte, Cincinnati, Columbus, and Minneapolis/St. Paul. Because the comparative analysis involved the simulation of an actual corporate location decision, substantial data had to be collected on each competing region. Tripp, Umbach and Associates, Inc. was asked to perform the research.

Of the six regions selected, the parallels with the greater Pittsburgh region, except in population trends (population in the Greater Pittsburgh region has declined), are obvious: all have gained population over the last decade while maintaining relatively low levels of unemployment (a sign of healthy employment environments); and most have major university links, significant growth in high-technology industries, a strong financial services sector, major employment in health care, a substantial manufacturing sector and a generally diversified economic base.

Various options for performing the comparative analysis were considered. The selected methodology, borrowed from consumer and retail market research techniques, is commonly referred to as a shopping study. Using this methodology, the research team was able to simulate a corporate location decision process, using a hypothetical project which could be "shopped" in each of the six regions. This methodology proved effective, not only in gathering data on the locations but also in evaluating the relative performance of the economic development organizations in each region.

To supplement the research on competing regions, investigators also gathered qualitative data through a series of company interviews directed toward evaluating the greater Pittsburgh region as a place in which to operate a business. Included among those interviewed were companies which recently made a decision to locate an operation in Southwestern Pennsylvania, companies which considered Southwestern Pennsylvania but ultimately selected an alternate location and companies which recently moved operations out of Southwestern Pennsylvania. Additionally, interviews were conducted with companies which recently established or expanded operations in each of the competing regions to ascertain whether the companies considered the Greater Pittsburgh region in their site search.

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<sup>2</sup> The full report can be obtained through the Conference on Real Estate of Southwestern Pennsylvania.

## Findings

The data analysis shows the Greater Pittsburgh region to be an attractive location, ranking third out of the seven, with Charlotte first and Atlanta second. As demonstrated by the data, strengths in the greater Pittsburgh region include: good labor availability; a strong incentives package; good proximity to major markets; labor skills and training support; and good transportation links via interstate, air and rail. The Greater Pittsburgh region would possibly make it onto a regional short-list, but eventually would be eliminated for one fatal shortcoming: business climate. Many companies interviewed in the course of this research were negative about the Greater Pittsburgh region as a place to conduct business. The prevailing reasons were: high costs of existing manufacturing space and new construction; potential environmental roadblocks; perception of management/union problems; fractionalized government (companies indicated that government seems against them rather than for them); and a tax structure that appears anti-business (high corporate net income taxes). Similar results were obtained from companies interviewed in the competing regions: a number of them initially considered the greater Pittsburgh region but ruled it out on business climate issues early in their search.

Among the critical issues which must be addressed in order to improve the business climate of our region are:

- ❑ Coordinating economic development through one central body. In most regions studied, a regional Chamber of Commerce takes this lead role.
- ❑ Marketing the region effectively.
- ❑ Reversing corporate dissatisfaction by establishing a formal retention and expansion program.
- ❑ Addressing environmental and accessibility issues to use the Mon Valley's wealth of sites and deep labor pool.
- ❑ Reviewing options to broaden the availability and accessibility of manufacturing sites, manufacturing buildings and Class A office space in the region.
- ❑ Seeking an immediate dialog between environmental enforcement bodies, lawmakers, development companies and manufacturing corporations to investigate options for making Southwestern Pennsylvania's manufacturing sites competitively viable.
- ❑ Improving international service and addressing mass transit access issues of Greater Pittsburgh International Airport.
- ❑ Bringing union representatives into the regional economic development dialog, demonstrating the shared desire to see the region's population prosper and its ranks of unemployed reduced.
- ❑ Lobbying with state government for a reduction in the state's corporate net income tax rate to bring it in line with our competition.
- ❑ Lobbying with state government for more competitive rates for workers' compensation.
- ❑ Maintaining the competitiveness of current incentive programs.
- ❑ Monitoring the region's performance on key quality of life variables, including health care and crime, which could pose potential threats to the viability of the region.

## **Conclusion**

The findings generated by this study are mixed--some good, some bad -- but they point a way to forward action: address the locational deficiencies we face and market the strengths we already have.

The Greater Pittsburgh region is well located and compares quite favorably under an objective rating of site location factors. The main barriers to increased attraction of business facilities, and the retention and expansion of those the region already has, are barriers that can be changed or removed. The region needs unity -- unity of purpose and a unified organizational structure -- to carry forward a change in the region's national business climate image and to address our deficiencies on key location factors. The region also needs to commit the necessary long-term resources (both human and financial) to a unified regional organization. Such resources will enable it to make necessary regional changes and to communicate these changes to the national and international business community.

One thing evident from this study is that there is no "quick fix" Our region, and preferably the state as well, must create a vision for itself. It must commit to that vision for the duration, making planned and strategic steps to improve. Southwestern Pennsylvania's prime development objective must be consistency in government combined with a unity of purpose among all players.

## **Making the Grade: Assessing the Climate for Retaining and Expanding Manufacturing Businesses in the Greater Pittsburgh Region<sup>3</sup>**

*by Carnegie Mellon University's Center for Economic Development, Duquesne University's Connelly Center and Price Waterhouse LLP, September 1994.*

### **Overview**

Significant job growth in the Greater Pittsburgh region within the next five years depends largely on retaining and expanding the businesses already here. In order to investigate the probability of manufacturing firms expanding in the greater Pittsburgh region as opposed to other locations, researchers conducted interviews with 20 regional manufacturing firms. The results, presented in this report, suggest that the greater Pittsburgh region's capacity to retain and expand manufacturing firms is favorable if critical factors concerning business climate, support systems and infrastructure are upgraded and improved to meet the needs of growing companies. Included among the key issues to be addressed are:

- ❑ Establishing a coordinated retention effort, focused on high-performance business support services;
- ❑ Coordinating public services and economic development programs;
- ❑ Establishing more stable and consistent application of environmental regulation and assistance programs;
- ❑ Accelerating the transition to collaborative and flexible work environments and work organizations;
- ❑ Addressing problematic intra-regional transportation services;
- ❑ Implementing business tax reforms to strike a competitive balance within the portfolio of business taxes;
- ❑ Making workers' compensation rates more competitive; and
- ❑ Expediting efforts to improve training and workforce preparation.

Historically, the most significant source of new jobs is the expansion of existing business. Therefore, to stimulate substantial job growth in the greater Pittsburgh region within the next five years, all business support systems must function effectively to create a world-class business climate that encourages and supports regional business growth.

At the heart of job growth in virtually all sectors of our region's economy are manufacturing firms which remain a principal source of new wealth creation. This investigation, therefore, focuses on 20 regional manufacturing firms which, though not designed to be a statistically significant sample, represent the types of companies our region must cultivate for job retention and expansion. These companies are committed to continuing to do business in this region, but they raise a number of critical issues and concerns that must be addressed in order for the region to "make the grade" and to ensure that it is a globally competitive site for growth and expansion.

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<sup>3</sup> The full report can be obtained through the Center for Economic Development in the H. John Heinz III School of Public Policy and Management at Carnegie Mellon University.

Despite the overall statistics of declining employment in regional manufacturing, there is strong evidence that important elements of the greater Pittsburgh region's manufacturing base remain vital and competitive. Regional manufacturing firms are engaging in fundamental changes in the way they produce goods; virtually all of the firms interviewed report extensive efforts to adopt new quality practices. As these companies become quality providers and suppliers, they also are becoming more demanding customers, expecting a business support system which is able to keep pace with their transformation to total quality and continuous improvement practices. The region's business support systems, therefore, must continually adapt to meet the changing needs of local manufacturers, creating an overall infrastructure to support high quality, modern manufacturing.

## **Findings**

This focus on quality is the dominant factor shaping the competitiveness of the firms interviewed. Quality also has become the "lens" through which these firms assess the region's physical infrastructure, its business support systems and its overall attractiveness as a business location. Given the extensive commitment to pursue quality-based production, the ability of our region to offer services and a business climate conducive to total quality will likely shape our prospects for retention and expansion through the remainder of this decade and into the 21st century.

Key elements which surface as part of an evaluation of the region's climate for manufacturing businesses include: economic development services; environmental regulations; government; labor and management relations; physical infrastructure; public and private financing; taxes; and workforce.

### ***Economic Development Services***

Most firms report receiving valued assistance from regional economic development groups and from the Governor's Response Team. They cite, however, the importance of greater coordination and customer responsiveness from regional and state economic development and training services, and easier access to the wide array of existing grant and technical assistance programs.

Beyond the existing services, the firms indicate that a stronger national and international image would improve their opportunities for regional growth and suggest means by which to accomplish that, including filling the needs for: more organized, industry-specific business services that provide opportunities for networking, local partnering, market expansion and exchanges on best practices; and more expansive regional marketing programs.

### ***Environmental Regulations***

Half of the firms interviewed report concerns with environmental regulations. The needs for more stable and consistent application of environmental regulations and for an assistance program to effectively aid manufacturers in complying with environmental regulations were among the prominent issues. That is especially important because ongoing quality improvements to production processes must continue to comply with regulations and inconsistencies can result in costly delays in implementation.

Additionally, about one-third of the respondents specifically cite the need for more effective site re-use or "brownfield" policies.

### ***Government***

Nearly three-fourths of the manufacturers interviewed indicate that state and local government leaders need to demonstrate greater support for manufacturing businesses. Leadership and improved coordination were specifically cited as areas in need of attention, in addition to fragmentation in the delivery of public services which hinders delivery necessary for business growth in both older

industrial areas and in newer suburban districts. To help improve this situation, the firms suggest that local and regional governments adopt a more customer-oriented point of view regarding the provision of services to local manufacturing companies.

### ***Labor and Management Relations***

One-third of the firms interviewed report that the perception of poor labor/management relations has a negative impact on the region. In fact, one-sixth of the firms interviewed have experienced labor difficulties that negatively affected their decision to expand locally.

Despite the prevailing focus on the region's "labor problems," many local manufacturers frankly admit that the region has just as many "management problems." The firms believe a lack of understanding and commitment by both management and labor have hindered the adoption of more empowering, flexible work practices. They suggest that the challenges and opportunities facing the region are more complex than often presented by the media. In order to achieve a level of management/labor cooperation that enables implementation of modern, continuous improvement work environments, they maintain that the region must ensure that its workforce and its managers -- in both union and non-union settings -- are capable of embracing and implementing high-performance manufacturing strategies.

### ***Physical Infrastructure***

Firms located in newer industrial parks and developments report overall satisfaction with the quality of inter-regional roads, highways and transportation, while firms located in older industrial sites relying on truck transportation report less satisfaction. All firms report bottlenecks in the greater Pittsburgh's intra-regional transportation system, indicating that it is often easier to transport products into and out of the region than within the region. These intra-regional bottlenecks will grow in importance as regional manufacturers adopt just-in-time production capacities more systematically.

A few firms report that the new Greater Pittsburgh International Airport is an attractive advantage for their firm's and customer's business and personal travel but express concern over the region's limited air cargo transportation system. Other suggestions center on the needs to: establish a major railhead; streamline trucking regulations and expand regional commercial trucking services; and improve the availability of mass transit and the ability of workers in the city to reach suburban sites.

Finally, respondents singled out DQE's recent initiative to ensure the most competitive rates in the state for expansion of existing or start-up of new manufacturing facilities as a positive step toward addressing the high and inconsistent electric utility rates which constrain growth in the region.

### ***Public and Private Financing***

Older companies with proven records indicate they experience little difficulty in obtaining private funds from local financial institutions. Two firms currently involved in expansion, however, did have difficulty attracting the interest of local financial institutions to invest in regional manufacturing expansion.

Firms which have some experience with state and local financing programs report general satisfaction with them, but they also indicate that the application and approval processes for state and local financing are too lengthy and cumbersome to meet current needs. Public financing is useful for lowering the costs of expansions that can be planned with a long lead time but they are not effective for the fast-paced business environment of today. Respondents suggest that public financing programs need to become "just-in-time" suppliers of targeted capital for credit-worthy, aggressive growth companies.

***Taxes***

Five of the respondents consider the region's business tax climate to be a detriment. In order to create a competitive climate, nearly half of the firms agree that a critical challenge facing the region is to offer a stable and balanced tax system rather than adjust any single tax factor. Other firms note the need for greater tax incentives for investing in new technology and the importance of addressing workers' compensation rates which are consistently cited as being part of the region's overall noncompetitive business cost climate.

***Workforce***

The region's historic reputation for having a committed workforce and strong work ethic remains intact. The majority of the respondents express high satisfaction with the quality of their employees, but they also raise some concerns, including problems with: locating and attracting skilled technicians for today's modern work environment; finding production workers with multicraft skills who also are able to work in a flexible, decision-making environment; attracting specialized managers and engineers to the area; and encountering a growing number of applicants who are unable to pass pre-employment drug and alcohol screenings. The firms maintain that efforts to improve school-to-work transition and training at all levels are essential to ensure that the region offers a workforce which can accommodate future growth.

**Conclusion**

The key challenge facing the Greater Pittsburgh region is to develop a coordinated retention effort designed to support our region's manufacturing base. The retention strategy must integrate attention to overall business climate issues, such as taxes and workers' compensation, with targeted services in workforce and management education and training, and technology development and diffusion. The predominant focus on quality creates new opportunities for community, education, government and economic development support systems to work together to create a business climate conducive to this transition, which will have a significant impact on making the Greater Pittsburgh region a world-class competitor for retaining and expanding its manufacturing base.

A revamped retention strategy should focus on critical areas that will have an immediate impact on the region's competitiveness. Benchmarking studies conducted on behalf of the Regional Economic Revitalization Initiative provide models of success from other regions of the country and illustrate several points from which we can begin to develop such a strategy:

- ❑ Implement programs and strategies that convey a community-wide commitment to business growth and world-class manufacturing.
- ❑ Increase the availability of and provide greater access to training programs and services that improve the flexibility and adaptability of both management and production workers.
- ❑ Redesign the region's retention services and financing programs, making them more coordinated, customer oriented and responsive, so that they can effectively meet the demands of the increasingly competitive business environment.
- ❑ Begin a concerted effort to increase opportunities and improve the system for the re-use of industrial sites in the region.

## **Thinking Differently About the Region: Southwestern Pennsylvania's Manufacturing and Technology Assets<sup>4</sup>**

*by the Pittsburgh High Technology Council and the Southwestern Pennsylvania Industrial Resource Center (SPIRC), October 1994.*

### **Overview**

This report examines the Greater Pittsburgh region's manufacturing and technology industry base and the inter-relationship between and among these industries and the services sector.

While it is important to have accurate data on the contributions that manufacturing and high technology are making to the regional economy, it is equally important that a definitive point of view be established within the community regarding the part each can play in a regional economic development strategy. To that end, this report attempts to:

- ❑ Characterize and profile the existing manufacturing base in the region;
- ❑ Define the role and nature of high technology in the regional economy;
- ❑ Identify key industry "clusters" in manufacturing and high technology that represent a critical mass of business activity and employment that can be built upon for the future; and
- ❑ Demonstrate, in the process, the growing convergence and synergy that is occurring among the manufacturing, technology and service sectors of our economy.

### **Findings**

Jolting economic shifts in the region, nation and world over the past decade left their mark on the Greater Pittsburgh region, causing Southwestern Pennsylvania to begin the arduous task of redefining itself so it could enter the new global economy. During this period, civic, business and public leaders began a series of regional initiatives and developed various strategies to address the broad economic development challenges facing the region.

The perceived decline of manufacturing, which had defined Pittsburgh and the surrounding region for most of this century, caused many to question whether manufacturing was still important to the regional economy. In fact, manufacturing is especially critical at this juncture in our region's economic development. While our regional manufacturing base is smaller, it is still significant, having changed from a base dominated by large, traditional industries making products through large production runs to one characterized by smaller firms employing new management approaches and making diversified products in small lot sizes for new markets. The number of people employed in manufacturing has declined, but the number of firms has actually increased both nationally and regionally. As a result, our framework for assessing the impacts and benefits of manufacturing must broaden. Manufacturing is an important employer but because of automation and rationalization, industrial jobs will decline as a share of gross manufacturing output. It is important, therefore, to take into account the contributions manufacturing makes to the creation of wealth in the region. That includes the overall level of investment that occurs in technologies, information systems, infrastructure and human resources, which in turn lead to indirect jobs, rising standards of living and higher wages. The growth of our economy in the manufacturing sector, therefore, will ultimately depend upon the pace and degree to which high performance techniques and total quality management practices are adopted.

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<sup>4</sup> The full report can be obtained through the Pittsburgh High Technology Council.

High technology, in contrast, is a newer part of our economy, emerging in the 1980s as a promising growth area. Like manufacturing, however, many question the substantive impact it can have. In order to understand the prevalent role of high technology, its definition must be broadened. As other technology-intensive regions around the country have noted, it is no longer adequate to simply define high technology as firms that produce a “high technology” product, such as computers and software. The definition also must include companies that employ high percentages of scientific and technical personnel and that utilize knowledge-based technologies in their production processes. The role of high technology in the new economy, then, becomes multifaceted: it is a significant contributor to economic growth through such technology-based industries as information and environmental technology as well as through its application and utilization by the manufacturing and service industries.

The high technology industry in the Greater Pittsburgh region is dominated by small firms which have more than doubled in number between 1979 and 1993, contributing to substantial employment growth. Our economic future in the high technology sector, then, depends upon our region’s ability to grow flexible, market-driven, entrepreneurial small companies and to attract or retain autonomous divisions of larger companies.

Traditional economic thinking and analysis place business activity in familiar categories such as manufacturing, construction, retail trade and health services. That is the way companies generally describe themselves, how workers associate and identify themselves, and how data are gathered and evaluated when charting the fluctuations in economic performance. When probing for a better understanding of the workings of our regional economy, however, a more complex and interdependent framework is necessary.

The dual nature of the economic challenges facing our region has resulted in the increasingly interdependent and interrelated functions of the manufacturing, technology and service sectors. For example, in the environmental technology area, 129 firms employing nearly 9,000 people, make instruments and equipment, and another 716 companies, employing over 21,000 people, are engaged in manufacturing and engineering services. This is a positive development, not inconsistent with the objective of a strong manufacturing and technology base.

The convergence of manufacturing technology and services is incongruent with traditional business categories and leads instead to the concept of industry clusters, which are considered to be the drivers of the greater Pittsburgh region’s modern, knowledge-based economy. Clusters<sup>5</sup> are a way of identifying and defining groups of companies in a particular geographic area that are linked through their relationships. Most companies in a cluster will belong to the same industry, but members of a cluster go beyond that industry to include suppliers, customers and support service firms in a variety of interdependent sectors. The cluster concept is important for analyzing the regional economy for several reasons. First, these clusters represent areas of competitive advantage for our region, assuming the base of employment and business activity signify some combination of inherent advantage, local demand and synergy that have allowed the cluster to reach a level of critical mass. Second, many believe that once a cluster forms, it becomes interdependent and mutually supporting. A high level of talent, skill, capital and other resources associated with an industry cluster tend to reside disproportionately in a particular geographic area, increasing the likelihood that additional investment will be made or that further growth will occur in that location.

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<sup>5</sup> The theoretical basis for cluster analysis is adapted from the work of Michael Porter, particularly in his book, *The Competitive Advantage of Nations*.

Based upon this framework, we have identified five target “clusters” for examination in this report, including:

- ❑ Metalworking;
- ❑ Chemicals and plastics;
- ❑ Biomedical technologies;
- ❑ Information and communication products and services; and
- ❑ Environmental technologies.

These areas are not necessarily the only cluster targets upon which our region should be focusing. They do not represent an exhaustive or definitive review of the possibilities for economic development. They do, however, provide a set of natural and obvious lead industries for this region in the manufacturing and high technology areas. In aggregate, the companies represented through these clusters account for 242,037 jobs and 21% of the region’s<sup>6</sup> wages and salaries.

### ***Metalworking Cluster***

Metalworking remains today -- as it has been for the past 100 years -- the dominant manufacturing industry in southwestern Pennsylvania, both in terms of employment and number of firms. It accounts for over 40% of the region’s manufacturing workforce and more than one in three manufacturing establishments. While the number of people employed by the metalworking industry has decreased considerably in the region, particularly during the past 15 years, the total number of firms has actually increased, as more small businesses have entered the industry.

A number of key sectors compose the metalworking cluster:

- ❑ **Primary Steel** products form the core of this cluster, including carbon steel producers, blast furnace products, steel wire and related products, cold finishing of steel shapes, and steel pipes and tubes. Iron and steel foundries also form a substantial regional segment.
- ❑ **Specialty Steel** production in North America is centered in the Greater Pittsburgh region. Four firms that together account for at least 75% of the nation’s specialty steel market are either based or have facilities in southwestern Pennsylvania, and each has made significant investments in local facilities in recent years.
- ❑ **Fabricated Products** form a core sector of this cluster as well and include fabricated metal, sheet work and plate work (boilers).
- ❑ **Tungsten Carbide** manufacturing also is centered in southwestern Pennsylvania. This industry is an integrated chain of firms which include: pre-form manufacturers; wear parts, and tool and die manufacturers that use pre-form products to make tools and dies for cutting, stamping and forming; and metal cutting insert producers that make products for precision metalworking firms.

The metalworking cluster has evolved in the region, supported by a wide variety of supplier and customer sectors which provide important competitive advantages and opportunities for the cluster as

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<sup>6</sup> For purposes of this report, the Pittsburgh regional economy includes 13 counties: Allegheny, Armstrong, Beaver, Bedford, Butler, Cambria, Fayette, Greene, Indiana, Lawrence, Somerset, Washington and Westmoreland.

a whole. The estimated regional impact of this cluster is: 71,637 jobs; annual wages of \$1.40 billion; and 1,421 firms.

### ***Chemicals and Plastics Cluster***

Chemicals and plastics compose another interrelated cluster of manufacturing strength in southwestern Pennsylvania, containing both traditional industrial firms and businesses embracing new technological processes. Both components of this cluster represent current regional strengths and, more important, attractive future opportunities. The region's chemical industry includes an estimated 125 firms employing more than 10,000 people. There are some commodity chemical firms (such as producers of caustic soda), but most local firms are special chemical producers. The plastics industry, including approximately 175 firms which employ 14,000 people in the region, is dominated by small firms making plastic resins, rubber products and rubberized fabrics, and plastic rods, tubes, sheet, pipe and foam products. Nearly 50% of these firms have been started since 1970.

Consumption of plastic products is highest in the electronics, health care, construction, transportation, automotive and food packaging industries, with highest growth expected from increased demand in the areas of electronics and health care. The estimated regional impact of this cluster is: 27,865 jobs; annual wages of \$374 million; and 794 firms.

### ***Biomedical Technologies Cluster***

Over the past several decades, the Greater Pittsburgh region has emerged as a world-class health care and health-related research, development and clinical center. Our biomedical manufacturing and commercial technology capabilities have been slower to develop, however. The cluster is currently based in the following:

- ❑ A medical and dental instrument industry segment which includes surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, x-ray apparatus and tubes, and electromedical equipment.
- ❑ A surgical appliances and supplies segment, including sutures and bandages, wheelchairs, prosthetics, and implantable devices.
- ❑ Health care information systems, including integrated hardware and software used to monitor patients, track financial information, and collect and analyze data from medical equipment and instruments.
- ❑ A new, still emerging molecular biology and genetic engineering sector.

There is tremendous growth potential for this cluster, based on the size and innovations in the related medical sectors in the region, including health and hospital centers, private physician offices, laboratories, and education and research programs. The estimated regional impact is: 134,774 jobs; annual wages of \$3.46 billion; and 5,063 firms.

### ***Information and Communication Products and Services Cluster***

This cluster is a dominant presence in the high technology community and a substantial supplier to many sectors in the region. It is composed of a variety of interrelated industry sectors, including:

- ❑ **Software:** The greater Pittsburgh region is a leading center of software employment in the nation. With more than 310 firms employing a workforce of 9,800, Pittsburgh is ranked in the top five software regions in the U.S. While the software industry covers a wide variety of applications, the primary technology sectors in the Greater Pittsburgh region include networking, client server systems, and expert systems.

- ❑ **Engineering Tools** are an important core sector of information technologies as well and include such facets as computer-aided design and manufacturing; mechanical and electronic design automation; and architectural engineering and construction.
- ❑ **Data Processing Services:** Data processing companies provide such services as credit card authorization and billing, data entry, medical claims and payroll processing, and data center management. Network firms provide electronic data interchange, delivery of electronic mail, electronic file transfer and access to data and software. Systems integration, custom programming, and consulting are included under computer professional services.
- ❑ **Communication Equipment** is a key part of the region's industrial and consumer electronics industry and includes the production of such items as electronic computers, displays, storage devices, and peripheral and telecommunications equipment.

Information and communications services can be seen as a critical supplier to almost all sectors of industry and commerce in the region. Most sectors depend upon a wide variety of information and communications equipment services to remain competitive and productive in a global market. In recent years, most notably in the areas of financial services, health care, education and government, many sectors and large corporations have begun to actively outsource their requirements for information and communication technology. The estimated regional impact of this cluster is: 38,473 jobs; annual wages of \$1.3 billion; and 1,219 firms.

### ***Environmental Technologies Cluster***

The environmental products and services cluster has a long history in southwestern Pennsylvania, being linked to traditional manufacturing and early efforts to clean-up air and water pollution. With the global market recognizing and demanding state-of-the-art environmental technologies, it is an emerging powerhouse for the regional economy. Our region is already home to nearly 850 firms which are directly or indirectly involved in environmental technologies. The cluster is a diverse combination of products and related value-added services, including:

**Monitoring and assessment technologies**, used to establish and monitor the condition of the environment, include the design, development and operation of monitoring instrumentation with associated quality assurance and risk evaluation. This encompasses microsensors, chemical sensors, biosensors, space- and aircraft-based sensors, sampling services, automation systems for tracking pollutant levels and advanced techniques for data collection and analysis.

**Control technologies** render hazardous substances harmless before they enter the environment. These technologies include such pollutant treatment processes as: incineration, separation, oxidation, reduction, bioprocessing, absorption, filtration and neutralization.

**Remediation and restoration technologies** render harmful or hazardous substances harmless after they enter the environment and include such processes as eradication and encapsulation, and clean-up technologies such as chemical transformation, incineration, groundwater recharge, soil augmentation, and waste extraction and stabilization.

**Avoidance technologies** include equipment, processes and process sensors and controls designed to prevent or minimize the generation of pollutants, hazardous substances or other damaging materials. Examples in manufacturing are "design for the environment" or "green design."

The Organization for Economic Cooperation and Development (OECD) projects that environmental technologies and services have reached \$300 billion, with the U.S. holding \$134 billion of the

market. With an expected annual growth rate of 4-8%, this cluster holds significant promise for the U.S., which is already the leader in the world market. The estimated regional impact of this cluster is: 30,693 jobs; annual wages of \$871 million; and 845 firms.

## Conclusion

The region's economy will continue to be significantly shaped by local, national and worldwide market forces. It is difficult, therefore, to forecast trends with any certainty. It is possible, however, to begin to frame a vision of the elements that will need to be present if this region is to be nationally recognized as a center for manufacturing and high technology. Included among the critical elements for success are:

- ❑ modernization and growth of regional business;
- ❑ development of international business opportunities and partnerships;
- ❑ improvements in human resource training, recruitment and collaboration;
- ❑ increased, diversified, flexible support from the financial community;
- ❑ development of available, accessible and attractive real estate and brownfield sites;
- ❑ enhancements to local university research and development programs and partnerships; and
- ❑ synthesis of a favorable infrastructure climate and support services.

Addressing these factors and meeting the challenges of redefining regional economic development will require action on many fronts. Even then, there is no guarantee of success. However, by establishing a community consensus of the changing nature of our economy and the way in which manufacturing, technology and services interrelate to create new opportunities, our region can begin to realize its vision of being nationally recognized as a center for manufacturing and high technology.

## **Investing to Build Our Entrepreneurial Vitality<sup>7</sup>**

*by The Enterprise Corporation of Pittsburgh, November 1994.*

### **Overview**

The Enterprise Corporation of Pittsburgh conducted this study in support of the efforts of the Regional Economic Revitalization Initiative (RERI). Specifically, its objectives were to: examine the entrepreneurial vitality of our region and compare it with that of other regions; and recommend actions, as appropriate, to significantly enhance this segment of our economy.

Researchers used questionnaires, focus groups and personal interviews to compile data, community opinions and ideas on the entrepreneurial vitality of our region. Included among the respondents were: 67 entrepreneurs; 59 supporters of entrepreneurship, including people involved in economic development, trade associations, venture capital firms, universities, foundations and economic development agencies; 25 people in three focus groups composed of early-stage entrepreneurs (less than ten years in business), experienced entrepreneurs (over ten years in business, with some close to 30 years), and members of economic development and business assistance agencies; and more than 40 individuals considered to be most involved in economic and entrepreneurial development. In addition, quantitative data from three benchmark studies were examined, including two by the University of Pittsburgh (one on quality of life indices and one on economic indices) and the Development Report Card for the States, published annually by the Center for Enterprise Development in Washington, DC.

### **Findings**

Focus group participants ranked the Greater Pittsburgh region's entrepreneurial vitality between 4-6 on a scale of 1-10. The data suggest that while we have improved somewhat over the last decade, our gap in performance and standing relative to other regions is very low. Pennsylvania ranked 50th (last) in "Entrepreneurial Energy" in the 1994 Development Report Card for the States. This rank results from the combination of three factors: new company formation rate (45th); rate of change in the formation rate (49th); and job growth rate in new companies less than four years old (33rd). The gap between the rate and the number of new companies started is large: about 3,400 new companies are formed in this region each year, but in order to reach the national average, our new company formation rate must increase by about 90%, or over 3,000 new companies per year, to over 6,500. Nearly doubling the rate just gets us to the average formation rate -- in order to do better than average to close the gap faster, our improvement must be greater.

According to our research, the underlying causes of this poor entrepreneurial vitality are a result of three primary problems: the supply and use of our "natural resources" of potential entrepreneurs and technology; the nature of our culture, which hampers the rate of new company formation and success; and insufficient seed and early stage investment capital.

#### ***Supply and Use of Our Natural Resources***

Coal and water were the natural resources that helped a great steel industry flourish in our region for decades. Talented people, knowledge and technology are our resources now, but focus group responses indicate a problem with supply: there aren't enough of them. Our region does not have its share of people who are in the prime age bracket to start new companies -- generally people between the ages of 25 and 35. Our population is among the oldest in the U.S., averaging 5% above the national mean for people over the age of 65. Compared to several regions, this amounts to a "deficit" of about 110,000 in the targeted age bracket. This factor explains about one-third of our deficit in the

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<sup>7</sup> The full report can be obtained through the Enterprise Corporation of Pittsburgh.

rate of company formation -- even with 110,000 more people in the 25-35 age range, the Greater Pittsburgh region would still lag behind the national average in new business formation by about 2,000 new businesses.

Additionally, it was found that the Greater Pittsburgh region does not maximize the value of university technology to form new companies. Respondents listed universities as one of our region's greatest strengths, but concluded that they can and should do more to assist in spinning out local companies.

For example, university research and development has grown faster here than anywhere else in the U.S. over the past seven years. At \$268 million per year, our region ranks 10th in university R&D per capita. Both Carnegie Mellon University and the university of Pittsburgh have made improvements in their technology transfer activities in the recent past. Another facet which needs improvement is graduate programs, which are major importers of people in their early and mid 20s -- potential entrepreneurs. If we are to create more entrepreneurs, we must keep more of these "natural resources" in the region by implementing more aggressive programs to link students and graduates to entrepreneurial companies.

Corporations are under-utilized as resources as well. Entrepreneurs could find them helpful for testing new products or gaining useful customer feedback. Many corporations also have technology and potential business spin-outs that could form the basis of new businesses.

### ***Culture/Climate***

According to our research, a number of factors negatively affect the culture and climate of the Greater Pittsburgh region, hindering the success rate of local firms and the rate at which new companies form. Included among the more prevalent factors:

- ❑ Our work force and young people are not oriented to small, entrepreneurial companies. The prevailing trends in our region are towards the traditional employers rather than the perceived "risky" nature of newer, smaller firms.
- ❑ Government regulations and taxes are perceived to be unsupportive of business. Respondents cited Pennsylvania's corporate tax rate, worker's compensation insurance, the state sales tax and the City of Pittsburgh Business Privilege Tax as visible signs that business in general and a promising technology sector are not currently favored.

### ***Insufficient Investment Capital***

When asked to select just one action to improve the entrepreneurial vitality of the Greater Pittsburgh region, nearly 30% of the respondents cited improving access to capital as most important. The discussions in focus groups and interviews focused on "adventure capital," the high-risk capital needed in the formative phases of starting a business. Adventure capital, provided by individuals who can tolerate high risk and uncertainty, largely comes from individual investors rather than traditional venture capital firms. Without national or regional data on adventure capital or individual investors, it is difficult to quantify where our region stands in comparison to other areas or the nation as a whole. Our experience, however, does confirm the views of entrepreneurs and others: entrepreneurs often have a critical need for outside capital and we do not have an adequate supply of adventure capitalists or adventure capital. Despite some success in cultivating private investors over the years, too few people have made either several investments in private companies or significant investments in just one or two companies.

The only stable sources of capital in this area are the state's Ben Franklin Program and the federal Small Business Innovation and Research (SBIR) Program. The Ben Franklin Program is relatively

small and has declined in real terms over the past decade. Its focus is on technologies, which is demonstrated by the fact that only 11 out of 36 grants in 1994-95 were made to new companies. Small amounts of seed capital can make a big difference, though, as demonstrated by companies like Suprex and Automated Healthcare, which received critical start-up capital from both the Ben Franklin Program and SBIR and then went on to raise over \$15 million of outside venture capital.

Lack of seed capital means lost new businesses. Without more seed capital, our region will be limited in its ability to affect the issues of attracting and retaining more entrepreneurially inclined people, forming new companies based on university technologies and affecting more favorable culture and attitudes towards entrepreneurs.

## Conclusion

The Greater Pittsburgh region needs to take action and invest in its entrepreneurial infrastructure if it wants to realize its goal of 100,000 new jobs. This can be accomplished by providing seed capital for new and emerging business and funding for innovative programs. In addition, we need to address problems with supply and use of our natural resources and the current business climate of our region. Recommendations generated by this investigation include:

- ❑ Investing \$3-4 million annually in adventure capital initiatives (15 to 20 at \$200,000 each);
- ❑ Providing funding in the amount of \$2-3 million annually for innovative programs;
- ❑ Increasing the number of entrepreneurially inclined people in the region by:
  - Initiating summer intern and post-graduate residency programs for entrepreneurially inclined students;
  - Investing to improve and expand entrepreneurial education in our MBA programs;
- ❑ Increasing the rate of new business formation by people already located here by:
  - Encouraging other universities to offer courses similar to Carnegie Mellon's teaching programs for technical graduate students, faculty and staff on "How to Start a High Tech Business;"
  - Conducting an annual "Best Business Plan in Pittsburgh Contest" with significant cash rewards for participants in private sector and graduate, undergraduate and high school;
- ❑ Maximizing the potential of universities and their technology;
- ❑ Expanding programs to encourage women and minority entrepreneurs;
- ❑ Implementing a formal "mentor program" to link promising entrepreneurs with successful ones in order to increase the success rate of people who have started significant new businesses;
- ❑ Making the regional climate more favorable for business by:
  - Reconsidering taxes and government regulations that are perceived to be unfriendly toward business;

- Establishing a visible new business incubator, connecting with the source of more adventure capital, housing several assistance organizations, or focusing on a technology such as software;
- Promoting the success of entrepreneurs more widely in print and other media and promoting business ownership as a viable career option; and
- Issuing an annual “state of entrepreneurship” report measuring progress and the status of implemented programs.

# Demonstration Projects

## 2. Results of Phase III:

### Work Group Summaries

#### Desired Outcome

Identify and mobilize support for projects designed to strengthen existing industrial clusters or help new clusters based on embryonic regional enterprises and technologies.

#### Background – Key Findings

This work group concluded its historic ability to mobilize public and private resources and support for projects which advance new industries. The broad-based support to secure the Software Engineering Institute is but one example of this strength. The ability to mobilize community support and assistance for projects and initiatives that combine enterprise and technology resources is critical to creating the type of business and job creation climate the region needs.

The work group identified a series of criteria that provide a basis for screening potential projects for support. This screening process is not intended to supplant the market test that any project must meet. Rather, these screening criteria are intended to help identify projects which particularly merit community mobilization.

Four main criteria were established by the working group:

- ❑ Each project must have the potential to stimulate significant job growth.
- ❑ Each project must have the potential to expand the region's tax base.
- ❑ Projects must combine key assets in the region and build on clear strengths and capabilities.
- ❑ Projects must have the ability to contribute to national and international recognition of the region's revitalization.

In addition, the work group identified a series of additional criteria to assist in project identification.

- ❑ Projects must be environmentally friendly.
- ❑ Projects must have strong export potential.
- ❑ The projects selected for endorsement should strive for balance

of short- and long-term job impact.

The work group identified both candidate projects to support and a process for bringing coherent public and private endorsement. The result is the identification of a series of immediate efforts that are deserving of broad-based support and assistance and an outline of a potential mechanism for ensuring the region remains able to seize opportunities to build and expand emerging industries.

## **Recommendations**

### **1. Projects identified for support**

Though an exhaustive review of potential projects was not completed, a number of very dynamic opportunities emerged. Candidate projects were identified from among working group members, the Leadership Consortium and economic developing professionals. The projects identified, therefore, do not represent a comprehensive assessment of initiatives emerging in the community.

However, the projects identified are representative of the vibrancy of activity within the region to build new industries and establish new strengths. The projects mirror some of the key clusters which represent our future engines of economic growth and the potential areas where world-class standing for the region can be established.

The projects meet the criteria outlined above. These projects are a point of departure for recapturing our historic strength as a community which seizes opportunity.

- ❑ Support for a Robotics Research and Development Initiative
- ❑ Creation of a Regional Hospital Information Network
- ❑ Support for a Tissue Engineering Initiative
- ❑ Establishment of a National Supplier Center
- ❑ Pursuit of a Maglev Manufacturing Center

### **2. Sustaining Initiative**

The Work Group concluded that the critical imperative is to sustain the capacity to recognize and mobilize behind such projects and to make the mobilization meaningful. Support for projects must be cross-cutting and coherent. It must engage all segments of the regional community and create the deep links to all aspects of the economic development activity necessary to ensure that the full potential of a project for job and enterprise creation exists.

The work group proposes the following steps to ensure that this challenge is met.

#### ***Designate an Implementation Champion***

The work group believes these efforts must continue through the creation of an ongoing body to identify and respond to emerging opportunities. This ongoing effort must scan the community to encourage identification of projects and be capable of assembling mentoring teams and creating coherent public/private support.

#### ***Establish Mentoring Team***

A mentoring team should be established for each project identified. Each team could be drawn from a cross-section of regional public and private stakeholders.

The role of the mentoring team is to 1) Provide preliminary evaluation of project opportunities; 2) Create broad-based recognition and enthusiasm for the project; 3) Mobilize the specific support needed for project success; 4) Link the project to overall economic development activities in the region to ensure the job and enterprise impact of the effort.

***Create an Annual Emerging Opportunities Forum***

The work group recommends that a highly visible annual forum be developed to identify projects, build and maintain project support and generally showcase the region as a center for emerging industries. The forum could be linked to annual entrepreneurship, venture or technology events. A planning group with composition similar to this work group would be developed to prepare for the forum.

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# Destination Development

## Desired Outcome

To develop priorities for attracting more visitors to the area in order to realize employment opportunities in the region and to generate an increased economic impact. Specifically, the task force's objectives were to build a baseline of data which includes both current and potential additional assets to attract visitors to the region, as well as an examination of how we now market the region and potential strategies for improving the effectiveness of marketing.

## Background – Key Findings

In 1993, visitors to Pittsburgh spent \$1,074 billion and tourism-related industry in Allegheny County supported 31,300 full-time-equivalent jobs. During that year, tourism was responsible for \$607.9 million in total resident income, \$97.7 million in state government revenue and \$46.3 million in local government income.

Clearly, tourists do come to Pittsburgh and the regional economy receives substantial tourism-related benefits as a result. However, we can do much better.

The rewards of increased tourism in terms of jobs, business volume and government income will be significant. Available data indicate that tourism and tourist-related expenditures of \$58,310 lead to the creation of one full-time-equivalent job in the Pittsburgh economy. On the jobs-per-tourist-visit basis, one job is created for every 121 visits.

Tripp Umbach & Associates, Inc., a professional research firm, conducted one-on-one interviews with committee members to solicit their ideas and proposals for enhancing tourism and to identify specific issues in destination development that ought to be considered by the Revitalization Initiative and other relevant parties. In addition, subcommittees were assembled for visits to San Antonio, Tampa and Toronto, cities identified by the committee for benchmarking relative to assets, attractions, infrastructure and marketing. Committee members met with tourism personnel in each city to gather information about their relative tourism performance, to learn about the challenges these cities have faced and to discuss current projects and future plans for destination development.

## Recommendations

The information collected by the committee has led to some overarching recommendations:

### A. Focus on the Core to Benefit the Region

The committee concludes that primary emphasis should be placed on developing the region's core (for example, the City of Pittsburgh) as the focus of destination development. Research indicates that visitors to Pittsburgh come for multiple multi-day stays, and during their stays they travel to enjoy regional attractions outside the city. The reverse does not appear to be true: that is, regional destinations such as Seven Springs or Ohiopyle do not generate visitors to Pittsburgh. By focusing on development of a critical mass of tourist attractions and entertainment options in the city, combined with appropriate infrastructure and marketing to support these attractions, the whole region will benefit from increased visitors and visitor spending.

## **B. Destination Development Must Be Integrated With Regional Economic Development**

Destination development for Pittsburgh and the region should be a component of a joint economic development business plan that will coordinate programs and marketing for the region in an integrated framework. A dedicated Destination Development Committee should be established composed of representatives of government and the chief executives of the major attractions and event hosting facilities.

The work committee believes that future destination development must be market-driven to be successful. Development cannot be assumption-driven and it is not sound practice to say simply "we need more events," we need an aquarium." The need for these or other concepts must be dictated by the market and, once needs are identified, appropriate strategies for the fulfillment of these needs must be developed.

Identifying market needs and potential modes of fulfillment should be accomplished through a structured program of quantitative market research. The development of a comprehensive destination development business plan will require the research to be directed at multiple potential target markets, including:

- ❑ Convention, trade show and meeting planners;
- ❑ Tour groups (divided into international, national and multi-state regional);
- ❑ Individual leisure travelers (divided into international visitors, national, regional and sub-regional).

## **C. Leveraged Marketing**

The work committee is adamant that, before the region can market itself, it needs to decide its message. By integrating destination development planning within a larger unified regional economic development framework, an overall marketing theme will be developed that complements the theme developed for industrial and commercial development marketing.

Such a unified approach to economic development marketing follows the "branding" theme successfully employed by consumer product companies. In Europe, the approach has been adopted by the Birmingham region of the U.K., where all within the region are adopting the brand "Birmingham: Europe's Meeting Place." Showing not only the region's convention and tourism focus but also its desired position as a European business crossroads and a place for a meeting of cultures. Identifying, cultivating and promulgating the "right" identity for the new Pittsburgh is seen by the work committee as an important precursor to any marketing for movement toward supplanting the "smoky steel town" image. Leveraged marketing is a concept that members of the committee saw first-hand in Toronto, where both public and private sector funds are employed in a unified way to promote regional tourism.

In addition, the Destination Development Work Committee notes that the budget of the Greater Pittsburgh Convention and Visitors Bureau (GPCVB) lags behind that of other bureaus benchmarked. To compete, funding for destination marketing in the Pittsburgh region must be increased. San Antonio's CVP, for example, operated with a \$9.6 million budget, whereas the GPCVB has a total operating budget of approximately \$4.5 million. In Toronto, the Phantom of the Opera alone has \$4 million budget dedicated solely to advertising.

In Pittsburgh, the committee believes there is opportunity to bring all parties involved in destination marketing together for a pooling of resources. This will involve joint agreement on the “brand” theme and appropriate cooperative promotions.

#### **D. Things For Visitors To Do**

The city and region already contain numerous attractions. The city and region also play host to a number of tourist-oriented events, such as the Three Rivers Regatta and Arts Festival. However, few would argue against the fact that additional attractions and events will enhance our region’s ability to compete for a larger share of the national and regional market.

The market–driven process suggested above will identify those existing assets and events that are most marketable, and identify gaps in assets and events. Stemming from this work will be a prioritized list of asset and event development initiatives. During the work committee process, a wide range of potential new assets and events was put forward for testing in the research. They included:

##### **1. Arts and Entertainment**

- ❑ Creation of a National Jazz Hall of Fame & Museum, a project to celebrate the cultural contribution of jazz in America, an art form with deep roots in Pittsburgh.
- ❑ Development of a dedicated long-run theater to host the most popular Broadway shows, such as Phantom of the Opera or Miss Saigon. (The concept has worked in Toronto, Although it is a larger metro market and the project has been privately funded and marketed.)
- ❑ More intensive marketing outside the region for popular shows, such as Miss Saigon, when hosted at existing Pittsburgh venues (for example, the Benedum)
- ❑ Development of downtown multi-screen movie theaters for both first-run movies and locally developed “art” films

##### **2. Nightlife and Dining**

- ❑ Development of concentrated and vibrant night life in the Golden Triangle area. Pittsburgh lacks the concentrated vibrancy of nightlife as seen in the Flats of Cleveland or the Riverwalk area of San Antonio.
- ❑ Limiting a major artery in the Cultural District, such as Penn Avenue, to pedestrian traffic to allow development of outside dining and outside retail operation, to attract people into the downtown area for pre- and post-event dining and shopping.
- ❑ Building of downtown residential developments designed to keep a captive population in the downtown area, helping to promote local patronage of fledgling dining and entertainment facilities.

##### **3. River Development**

- ❑ Development of riverfront property throughout the city to realize the potential of the three rivers as a tourist attraction. The rivers can be an attraction in so many ways as a venue for events and dining onboard riverboats, as a scenic highway for river taxis between attractions, as a host to on-shore restaurants and parks. San Antonio’s Riverwalk is a prime example of successful development along a waterway. It is San Antonio’s most visited attraction and

plays host to a variety of dining, retail and entertainment facilities. Until a group of concerned citizens had a vision for the Riverwalk, the city had decided to use it for a municipal sewer.

- ❑ Outdoor recreation is a key component of destination development, and the riversides' potential for jogging, walking and cycling must continue to be realized through trail development.
- ❑ The conversion of one of the bridges between downtown and the North Side into a pedestrian bridge, lined with retail, entertainment and dining establishments. Such a development would link the two shores in a unique and appealing fashion, with the potential to spur further development on land.
- ❑ Riverboat gaming has tourism potential but the work committee members were divided on whether or not it is desirable for Pittsburgh. Most agree that if gaming does come to the city's rivers it must be carefully controlled.

#### 4. Theme Attractions

- ❑ Development of a "sports and leisure park," a concept that would allow tourists and local residents alike to experience a wide range of outdoor and indoor leisure pursuits they would not be able to try so easily in an alternative setting
- ❑ A National Air & Space Museum housed at the old terminal of the Greater Pittsburgh International Airport. The concepts for this were taken quite far in feasibility planning but have been shelved pending other potential uses for the terminal.
- ❑ Steel heritage and industrial heritage museums and corridors are seen as a way to be positive and upbeat about the region's industrial heritage; use this legacy as a tourist attraction. Significant research has been undertaken in many areas of the region on the feasibility of establishing "Heritage Parks" that would celebrate and communicate the region's importance in our nation's industrial heritage.

#### 5. Events

- ❑ Development of a wide range of additional weekend and periodic events aimed at bringing people in from the region and suburbs to the downtown area, and targeted also to appeal to tourists and promote a more permanent festive atmosphere in the city.
- ❑ An annual "International Day" celebrating business and cultural links with a different country each year. Business, political, arts and entertainment events would be scheduled with the goal of attracting a broad range of business people, groups, celebrities and individual travelers from the selected country.

The work committee found that the development of a geographically localized critical mass of attractions is a characteristic of most successful destinations and that the critical mass concept should be pursued in Pittsburgh. The San Antonio Riverwalk, Baltimore's Inner Harbor and the planned developments on Cleveland's Northshore, for example, all include the co-location of attractions to achieve a critical mass of entertainment, nightlife, dining and other tourism venues in a walkable, secure environment.

The attractions and events highlighted above must, where feasible, be located in the downtown area, either within the Golden Triangle, the North Side or Station Square areas. One development that ties together the riverfront development, downtown retail and residential development and the Convention Center expansion, provides a link between downtown and the North Side via the rivers and the bridges system, and naturally fosters development of sophisticated nightlife in the Downtown Cultural District. The Cultural Trust has already taken significant and important steps toward improving and developing the district's position as a vital and essential element of downtown development.

The work committee recognizes the importance of the Cultural District's development but also recommends that the entire "corridor" of development be stressed, running from the South Side through the Golden Triangle and North Side and into the Strip District. Critical mass would be achievable through stressing projects that link these partially separate areas. Such links include riverfront parks, the Three Rivers Heritage Trail (a top priority) as well as new attractions in the transitional areas between districts. The Convention Center under an expansion scenario could be designed to embrace both the Cultural District and the Strip District, forming a purpose-designed thoroughfare between the two. (Such a thoroughfare has been designed in the Birmingham Convention Center.)

## **E. Infrastructure**

In addition to having attractions and an integrated program of marketing, the Pittsburgh region needs a high-quality infrastructure to support an increased number of tourists

### **1. Convention-Hosting Facilities**

Virtually all of the committee members interviewed agreed that expansion of the Convention Center must be a priority, and construction of hotels to provide ample accommodations must occur concurrently. While the work committee's destination development process was underway, Coopers & Lybrand released the results of a detailed study that confirmed the need for a substantial expansion of the Convention Center.

### **2. Visitor Transportation and the Linkage of Attractions**

All of us who live in and around Pittsburgh know how challenging transportation can be in the city. Imagine, therefore, the difficulties visitors face. Many of the great tourist destinations in the world have tourist-friendly transportation systems: the Paris Metro, London's Underground, Boston's Beantown Buses and signpost heritage walks and San Antonio's Riverwalk are prime examples. Pittsburgh is making strides but a number of further suggestions and recommendations for improvement came out of the work committee process:

- ❑ Attractions and key sites need to be linked, both mentally (via guidebooks, maps and marketing) and physically (by signage and public transportation).
- ❑ Different attractions and sites appeal to different categories of visitors. Visitor categories must be defined and integrated programs developed to aid each group's access to the things that would most appeal to them.

## **F. Transportation**

While it is unlikely that tourism will spur mass transit development, tourists' needs must be taken into consideration in regional transportation planning. A light rail system linking downtown to Oakland will enhance the link between the Oakland-based attractions and accommodations and those downtown. Equally, a mass transit system between downtown Pittsburgh and the airport will make

the region much more visitor-friendly. In addition, the previously mentioned river developments will be of value in spurring the development of the rivers as a transportation artery for tourists, linking key river-accessible sites by water taxi and tour boat.

### **G. Visitor-Friendly Awareness Campaign**

Residents of Pittsburgh have a well-deserved reputation for friendliness. However, to reach our full potential as a destination, a comprehensive campaign to train hospitality workers and create a culture receptive to visitors is necessary.

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# Expanding Business Opportunities

## Desired Outcome

Redesign the region's overall economic development strategy, including cooperation between various economic development organizations and produce a blueprint for marketing, retention and expansion, start-up support, land assembly and refinancing activities.

## Background - Key Findings

The work group focused its analysis on three key areas: investment needs for regional economic development, the structure of development activities and gaps in the region's development services.

The work group reached the following findings:

### ❑ **Investment for Development**

There is no mechanism for corporate, philanthropic and government decision-makers to systematically review and make decisions about investment projects with regional significance. There is no mechanism for corporations and foundations to jointly invest in projects important to the region's economy and quality of life.

### ❑ **The Structure of Economic Development Activities**

There is no formal mechanism to enable the economic development agencies in the region to pursue a coordinated set of goals and functions and to avoid wasteful overlap, "turf" battles and gaps in services. The region needs to establish a single point of contact for marketing and retention.

### ❑ **Economic Development Services and Programs**

Although southwestern Pennsylvania has many effective programs designed to attract new firms to the region and to stimulate the startup of new firms, it has relatively few economic development tools available to encourage and assist existing firms to succeed and expand, and there is a need for more coordination in existing programs.

## Recommendations

The working group issued the following recommendations:

### 1. Restructuring Of Economic Development

- ❑ The agencies that play key roles in economic development by conducting regional programs and missions should develop a joint business plan to coordinate their economic development activities with ambitious, measurable goals and clear accountability for implementation.

### 2. Priority Setting For Investment

- ❑ Building on the success of Strategy 21, the Strategy 21 partners should create a Strategic Investment Partnership. The partnership will seek consensus on priorities for regional investment, with particular emphasis on projects that would help revitalize downtown Pittsburgh and ensure that projects are implemented.

### **3. New Financial Investment Tools**

- ❑ Private corporations and foundations would be asked to invest in a new Regional Investment Fund, which would in turn make investments in projects of regional significance. Projects would be expected to provide a return on the investments from the fund, although the return might be lower or less certain than traditional investments.

### **4. Expand Economic Development Programs**

The joint business plan for the region will address the following issues:

- ❑ A new Regional Business Financial Services Initiative to help businesses obtain financing from private banks and from public sector programs for expansion, exports and other needs by providing information and referral, credit analysis, loan brokering, loan monitoring and some direct loans for loan guarantees.
- ❑ A new Regional Business Retention Initiative to identify existing businesses which have opportunities for growth or which are facing problems with local government regulations, lack of financing or space for expansion, etc.; to assist firms in responding to problems and opportunities, and provide training to municipal officials in promoting business retention.
- ❑ A new Regional Business Market Development Initiative to help small businesses identify market opportunities locally, nationally and internationally.
- ❑ An expanded International Marketing and Business Recruitment Initiative to increase the number of domestic and foreign companies making new investments in the region through an increased presence overseas, a coordinated system for responding to inquiries and assisting in locations and a closer working relationship with foreign governments.

# Infrastructure

## Desired Outcome

To develop priorities to improve access for individuals to areas of employment growth, especially through strengthening mass transit, and to improve access for the region's business to key markets and strengthen intra-regional connections for the movement of goods and services.

## Background- Key Findings

In today's global economy, a region's success depends on its transportation network. Our citizens need affordable and reliable access to jobs and services and our businesses need access to customers and suppliers both within and beyond southwestern Pennsylvania.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) has created a substantially new method for the approval and funding of transportation projects. Considerably more emphasis is placed on local planning efforts. The plan approved by the Southwestern Pennsylvania Regional Planning Commission (SPRPC) will serve as the basis for future highway and transit projects in the region

Pursuant to its mission, the work group established three criteria for evaluating the many infrastructure projects proposed for the region. These criteria are:

- ❑ The project will have significant economic impact on the area.
- ❑ The project is doable; significant political and financial obstacles are manageable.
- ❑ The project is politically defensible, in other words, one that is worthy of widespread support in the community.

## Recommendations

The working group's recommendations along with their current status are as follows:

### *Transit Projects*

- ❑ **A fully funded Airport Busway to ensure completion prior to renovation of the Fort Pitt Bridge and Tunnel**  
Status: Funding is nearly in place but cash flow from various sources is uncertain.  
Completion is tentatively scheduled for late 1997, in time to provide relief from some of the congestion associated with Fort Pitt Bridge and Tunnel renovation.

- ❑ **Completion of the Spine Line, North Side to Oakland**  
Status: Preliminary engineering and draft Environmental Impact Statement work is beginning. Funding has not been committed. Sources are largely from federal discretionary programs, which are competitive and very uncertain.
- ❑ **Extension of the East Busway**  
Status: Funding is in place and the project is ready to go pending approval of the Environmental Impact Statement and right-of-way acquisition.
- ❑ **Future mass transit connections of the airport with downtown**  
Status: Considerable interest has been expressed to the work group for improved transit connections. Maglev is a possible alternative but conventional rail technologies should be studied.

### *Highway Projects*

- ❑ **Mon Fayette Expressway from Morgantown, West Virginia to Pittsburgh (developed by the Turnpike Commission)**  
Status: Segments from Morgantown to Uniontown and from I-70 to Route 51 are ready for construction pending resolution of a legal challenge. The Route 51-to-Pittsburgh segment is still in planning. Funding for the entire project is not yet complete and may rely on establishing new sources of revenue or increasing existing fuel taxes.
- ❑ **Airport Toll Road (developed privately)**  
Status: The project is under study by Allegheny County and private developers to determine economic feasibility and potential investment scenarios.

### *Air Service Development*

- ❑ **Support for acquisition of new international air service route authority for Pittsburgh International Airport**  
Status: There is considerable community support for applications for new route authorities. This support must be better organized and become proactive in seeking future granting of international route authorities.
- ❑ **Development of an air cargo facility at Pittsburgh International Airport, charging competitive rents, to capitalize on the investment in place**  
Status: Allegheny County is negotiating with developers to establish a significantly expanded air cargo facility at Pittsburgh International. Acquisition of international route authority for passenger service goes hand-in-glove with the need to expand international air cargo activity.

### *River Transportation*

- ❑ **Improved locks and dams through support of DINAMO's ongoing efforts to attract funding for major improvements and critical lock replacement**  
Status: DINAMO has been successful at attracting funding for necessary improvements from legislative sources. It is important to maintain the momentum so that all authorized and proposed funds are secured and projects are completed. Of particular concern is the planned replacement of Mon River Locks 2, 3 and 4 with town new locks and dams, and the raising of the pool elevation by six feet. Funds have been allocated for engineering but the project requires an additional \$700 million for completion.

### **Improved Maintenance of Transportation Projects**

The work group raised concern about current and long-term maintenance practices and funding and stated that any report on infrastructure development must include a strong endorsement of improved maintenance over historical levels for existing and proposed transportation facilities.

These projects require approval and funding by the local, state and federal governments. The region's business community should concentrate all efforts on these particular projects, recognizing their priority status in advancing the region's economic growth goals.

## **Policy Statements**

### **Statement On Maintenance**

The Work Group on Transportation and Communications Infrastructure has analyzed the many transportation projects proposed for the region and the funds available to develop these projects, and has made recommendations regarding priority projects. However, in the course of these deliberations, the group concluded that, to be economically competitive, this region must achieve the highest standards for the maintenance of the facilities it already has, as well as for proposed facilities. The reasons for the need for the highest maintenance standards are as follows:

1. Existing infrastructure represents billions of dollars of investment that are substantially amortized. Regular maintenance is required to retain the value of these assets for movement of goods and services and to minimize the need for costly new facilities.
2. Older communities must remain viable locations for business and residential investment. Maintenance of existing infrastructure is needed to assure long-term viability of all parts of the region
3. Southwestern Pennsylvania needs to compare favorably with other regions in the country on many evaluation factors. High-quality maintenance of infrastructure demonstrates the region's commitment to quality public services, assures long-term efficiency of systems and improves aesthetics of the area.

The work group recognizes the fiscal and climatic challenges in maintaining an aging infrastructure. It is also obvious that highway maintenance responsibility is fragmented among state, county and local jurisdictions without regard to efficiency of functional category of roads. There are many examples of single facilities being maintained by multiple jurisdictions with varying standards and on varying schedules. It is precisely for these reasons that the group feels that a renewed emphasis on maintenance is needed at this time. This region can no longer set standards that are "good enough." We must excel at all factors that affect the competitiveness of the region for new investment. To achieve the highest quality maintenance, the work group recommends the following:

1. Allocate funds in state and regional infrastructure funding plans that are sufficient for improved maintenance over current practices. If new funds for infrastructure become available, allocate a similar proportion for maintenance.
2. Convene a statewide task force to improve maintenance practices by defining clear jurisdictional and functional classifications and realign state, county and local responsibilities as needed to provide the highest quality and most efficient maintenance practices possible.
3. Evaluate the process of facility design, construction, supervision and inspection to yield the highest quality facilities that rely on less maintenance over the life of a project.

4. Earmark a maintenance fund for all new transportation facilities as part of the financing plan for those facilities, much in the spirit of operating endowments for cultural facilities.

The work group cannot overstate the importance of a well-maintained transportation system for efficiency, safety, user cost savings, aesthetics and community viability. The region's infrastructure policy should reflect the value of the investment in place as a legacy of previous generations and seek to pass this on to our successors in better condition.

### **Statement On Private Development Of Highways**

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 contains several provisions that encourage the private development and operation of highways. While this was commonplace in the 18<sup>th</sup> and 19<sup>th</sup> centuries, private highway financing has been effectively discouraged by recent federal legislation. ISTEA expressly encourages private highway development by:

- ❑ Providing for up to 50% federal match for toll highways and up to 80% for toll bridges and tunnels;
- ❑ Allowing private ownership as well as design, financing, construction and operation of highways if there is a contractual agreement with a public authority maintaining jurisdiction;
- ❑ Allowing states to make loans to private agencies of their federal share and allowing proceeds from such loans to be used for other state transportation purposes;
- ❑ Establishing a Congestion Pricing Pilot Program to test this method of congestion management through tolls.

The Airport Toll Road has been proposed to take full advantage of these provisions of ISTEA by providing a toll highway link between downtown and the airport. This highway is an eight-mile limited access alternative to the Parkway West, allowing a bypass of the Fort Pitt Bridge and Tunnel and Greentree Hill. This routing would be five miles shorter than the Parkway Tolls would be charged with a "congestion pricing" program to set tolls—user fees—at a level that only travelers needing to make this connection would be willing to pay. By this method, the trip between the airport and downtown should remain reliable and congestion-free at all times of day. Local traffic would continue to use the Parkway West.

Financing for the project would be provided by toll revenues and possibly by federal transportation funds. Toll revenues would also cover all or part of operating and maintenance. Project cost is estimated at \$200 to \$300 million. Cost is difficult to determine because of the unknown cost of right-of-way and the need to build a major Ohio River bridge crossing.

Private highway financing is still a relatively new concept. The project must be designed to provide a reasonable rate of return for investors or it cannot be built. Alternatively, if the project does not attract the interest of private developers but is deemed important to the region, public funding can be shifted from other transportation projects. Currently, no regular federal ISTEA funds are earmarked for this project in the Southwestern Pennsylvania Regional Planning Commission (SPRPC) Long-Range Plan. If federal funds are needed, this project would be competing with projects throughout the region that have been earmarked for funding. This decision rests with SPRPC.

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# Labor/Management

## Desired Outcome

Nurture agreement(s) for labor/management relations in the region which create world-wide recognition of Greater Pittsburgh as a center for visionary workplace relations.

## Background –Key Findings

This work group fostered an extensive dialogue among labor and management representatives throughout the region. This effort included nearly weekly meetings and brainstorming sessions conducted by the Three Rivers Area Labor-Management Committee.

The work group also sponsored a forum for 75 labor leaders in conjunction with the Community College of Allegheny County (CCAC). This forum generated dialogue on a wide range of opportunities where labor can play an effective role in economic development.

## Recommendations

The work group has forged the following recommendations.

The development and signing of a labor/management agreement which, at this point, is being referred to as the “Pittsburgh Pledge.” In this agreement, both labor and management will publicly acknowledge a commitment to use all available resources to avoid a work stoppage. This document will in no way diminish the rights of any party, but rather will assist each by providing additional tools which can be used to reach a mutually beneficial agreement. It is envisioned that the Pittsburgh Pledge will serve as a national model for positive labor/management relations. Additional components of the initiative will include a clearinghouse on best practices, expanded services for dispute resolution and efforts to promote high-performance workplaces.

The work group recommends that the Pledge be integrated into an aggressive national and international public relations campaign that projects the significance of the Pledge.

# Tax and Regulatory Action

## Desired Outcome

Advocate for tax and regulatory actions and/or changes in government structure to lower the local cost of business.

## Background—Key Findings

This work group determined to focus solely on state and local tax issues. Pittsburgh and Pennsylvania are consistently ranked as having among the highest business taxes in the nation. The work group concluded that without bold action on the tax issue, no effort to improve economic development could be effective.

Pennsylvania now stands at an economic crossroads where it must decide if it wants to perpetuate tax reform on a piecemeal or ad hoc basis, or accept the challenge to move aggressively toward rethinking its state and local tax structures. The fundamental challenge is to design and recommend a blueprint or framework for a tax system that will support a Pennsylvania economy as it grows and changes over the next 25 years. While the fundamentals of tax policy are slow to change, the pace of economic, technological and social change has accelerated dramatically.

The intensive analysis of the interaction between the economic, technological and demographic environment and tax system is needed. This interaction works in both directions. Economic and demographic developments have profound implications for the performance of the tax system in terms of its competitiveness, equity, revenue responsiveness to economic growth, stability of cash flows, economic efficiency and ease of compliance. In turn, the Pennsylvania tax system of the future should be designed to enhance the competitiveness of the sectors that will drive the Pennsylvania economy forward in the 21<sup>st</sup> century.

As an integral part of this process, we must develop an understanding of how existing state and local taxes serve as impediments to business expansion, development and retention. Recommendations for change must be accompanied by suggestions for replacement revenues where appropriate.

## Recommendations

### □ **Creation of an Independent Tax Review Council**

The work group recommends creation of the Pennsylvania Tax Review Council, an independent bipartisan effort to successfully revise the Commonwealth's tax structure, and to turn our economy once again into a competitive environment for business and, in turn, a better place to work and live for all Pennsylvanians. The Council will accept the responsibility for the development of a long-term Blueprint for Economic Growth Through Progressive Tax Policy.

The Council will be composed of an agreed upon number of public and private sector representatives singularly committed to the creation of a climate that will result in economic growth for the Commonwealth. It is envisioned that four of the Council members will come from the State Legislature. The remaining members of the Council will be solicited from a cross-section of business, local government, organized labor and the nonprofit sector.

The study will involve an intensive analysis of the performance of the tax system in terms of:

- ❑ Competitiveness;
- ❑ Equity;
- ❑ Revenue responsiveness to economic growth;
- ❑ Stability of cash flow;
- ❑ Economic efficiency and ease of compliance.

Recognizing the complexity of this undertaking, it is acknowledged that the resulting blueprint will be couched in terms of a long-term (for example, 5-10 years) process, with changes being implemented as budgeting and political considerations permits. Subject to meeting the funding requirements, it is envisioned that the project would begin this fall and that operational models and preliminary analyses will be available by the second or third quarter of 1995.

Also, as an integral part of this effort, the study will develop comprehensive, state-of-the-art computer-driven tax policy simulation models which will become definitive tools for “what if” measurements of alternative reform proposals. This analytic capability will eliminate the economic uncertainty associated with specific tax “reform” proposals of the past.

The technical support for this effort will be provided by a team of experts from Price Waterhouse LLP and the Policy Economics group of KPMG Peat Marwick LLP, nationally recognized experts in the field of economic analysis. Their work will be supported by other highly qualified experts.