

EINSTEIN'S ALLEY: The Report

Congressman Rush Holt
Honorary Summit Chair

December 9, 2003
East Brunswick, New Jersey



www.publicforuminstitute.org

OVERVIEW

Einstein's Alley: The Economic Summit was convened in East Brunswick, NJ by Congressman Rush Holt as part of a larger initiative to create jobs, stimulate innovation, and define a common vision for economic development in central New Jersey. Organized by the Public Forum Institute, the summit sought to identify and accelerate the development of recommendations that foster economic growth throughout the region and address challenges currently faced by central New Jersey. Nearly 300 delegates attended the summit, representing a cross section of New Jersey's business, labor, education, and government communities. Congressman Holt said that it was his hope that the effort would learn from, build on, and extend the work of many individuals and organizations who are looking at aspects of regional economic development.

This report summarizes the main economic objectives and strategic recommendations identified by the delegates. It also reviews the themes articulated by featured speakers and discussed by the delegates.

Key Findings (a complete summary is discussed on pages 13-17)

When asked what the first step should be to attract new businesses to the region, 50 percent of the delegates ranked "a skilled workforce" as the number one priority for development. The second place recommendation was "efficient transportation" (17 percent). When asked to identify the most significant roadblock to economic development in the region, the most common answer was "lack of coordination/cooperation."

Delegates participated in a series of workshops to generate recommendations for creating an environment of sustained economic growth. Recommendations from these workshops included:

- Communicate and publicize successful New Jersey start-ups.
- Advocate continuous learning.
- Foster regional and cross-sector collaboration and partnerships.
- Encourage joint university/start-up ventures.
- Hold quarterly mentoring/networking events.
- Create a web page for New Jersey businesses that features information about government funding and support.
- Maximize the role of public transportation for economic development corridors.

The Public Forum Institute, which organized the summit, is an independent, nonpartisan, not-for-profit organization based in Washington, D.C. A number of employers from the area sponsored the summit, including: Aventis, ETS, Johnson & Johnson, Lucent Technologies, Meridian Health, Millennium Consulting Services, NJM Insurance Group, New Jersey Resources, New Jersey Small Business Development Centers, Pfizer and Purdue.

A similar number of community groups acted as official summit cosponsors: Biotechnology Council of New Jersey, Inc., Mercer County Community College, New Jersey AFL-CIO, New Jersey Association of Women Business Owners, New Jersey Bankers Association, New Jersey Chamber of Commerce, New Jersey SEIU State Council, New Jersey Technology Council, Old Bridge Economic Development Corporation, Princeton University, The Regional Planning Partnership, Rutgers University and the Women President's Organization.

A REGIONAL VISION FOR CENTRAL NEW JERSEY

Presented by Congressman Rush Holt



Congressman Rush Holt outlines his vision for the preferred economic future of central New Jersey

Congressman Rush Holt initiated the summit by calling for a unified vision for central New Jersey. Holt described the region as one with great possibility, one that may have a very bright future ahead.

"I hope in the near future New Jersey will be known as the research state," said Holt, "and when people from around the world talk about Silicon Valley, Route 128, and Research Triangle, they will also talk about Einstein's Alley, a place where innovative, research-based industry gives people the quality of life and economy that will be the envy of the country."

A common theme Holt repeatedly highlighted throughout the day was that the fate of the region was in the hands of its people.

"We have the ingredients for the attractive future you would envision," said the Congressman. "Brighter futures and stronger economies are built by those who have the will to imagine, the determination to act, and the desire to influence their own destiny. There is work to be done by every person who cares about the future of this region."

Holt identified elements that must be present for the region to have a successful future.

"We're going to have to have high quality good paying jobs, real economic opportunity for everyone, high quality schools producing a well prepared workforce, and a sense of livability," said Holt.

Einstein's Alley, the name coined for the summit and other future regional initiatives, is an effort to develop central New Jersey into a national center of economic activity.

"Einstein's Alley," stated Holt, "is a vision for central New Jersey as a national leader attracting and supporting innovative companies, a home to vibrant communities, a region of cross-cutting conversation, and place of real networking opportunities."

Like all economic development efforts, Einstein's Alley will face its share of challenges.

"What is our challenge?" asked Holt of the delegates. "Lack of cooperation" was their response. Concluding his remarks, Holt declared, "This summit will be a start of that cooperation."

A FRESH PERSPECTIVE

Presented by Monmouth University President & Retired Vice Admiral Paul Gaffney II



Paul Gaffney urges delegates to consider the benefits of partnerships between business, government and education to promote economic growth

- Which State financial incentives are plausible today in this economic environment?

Retired Vice Admiral Paul Gaffney II, a true newcomer to central New Jersey, offered his viewpoint of the region. Gaffney commended the summit delegates for coming together “to seek clarity and simplicity.” This approach, essential to the development process, is not always clear or simple because it is not always apparent which issues are the most important and worthy of attacking first. It is also not clear how to organize for economic development.

Gaffney asked some pertinent questions:

- Should you focus on technology transfer or under capacity in higher education?
- How does R&D money move from within the region and how does it move into the region from elsewhere?

Gaffney admitted that these answers are not readily apparent to a newcomer. “But you seek other newcomers,” urged Gaffney, “so your strategies and programs should seek to bring some clarity to these and other questions.”

Gaffney addressed a high-level workforce crisis brewing in New Jersey. The crisis is a result of the State’s small capacity for higher education; more than 50% of college eligible students seek education outside of New Jersey. “When a student leaves,” said Gaffney, “chances are that he or she won’t return here for employment.” He later added, “Part of any answer to prosperity in New Jersey is good education.”

Gaffney also emphasized the importance of understanding the flows of R&D funding. As more plans and bureaucracies are organized to enhance technology-based economic development, one must identify the investors and the performers, and know the breakdown between investment in basic research versus investment in research-based product development.

For the state to effectively draw research money, Gaffney supported the use of more partnerships. Partnerships come in many forms, but should grow to include business, government, and universities both in and out of state. Gaffney advocated that industry and academia look to Fort Monmouth for new partnership opportunities.

EINSTEIN'S ECOSYSTEM:
BUILDING ENTREPRENEURSHIP IN CENTRAL NEW JERSEY
Presented by Erik Pages, President, EntreWorks Consulting



Erik Pages spoke of the value and reward of creating an entrepreneurial ecosystem in central New Jersey. "We can't do economic development like we did it in the past," said Pages. He suggested a new strategy that builds from within and actively embraces community entrepreneurs. A community's greatest challenge is to offer the support needed to encourage and aid those who are trying to start their own businesses. Entrepreneurs can generate jobs and innovation, diversify the local economy, and build new civic leadership.

Dr. Pages argues that a cultural change is necessary to foster entrepreneurship

The entrepreneurial ecosystem described by Pages is a cultural change, one where the region and community evolves to accommodate its entrepreneurs. The ecosystem is sustained by the concept of giving back, a primary goal of the ecosystem, where entrepreneurs can give back to the community and actively mentor other entrepreneurs.

Pages addressed some of the common myths of entrepreneurship. A very common myth is that technology is behind entrepreneurship. "Entrepreneurship is not about technology," said Pages, "it's about innovation."

Another myth is that venture capital is necessary for start-ups. Pages confirmed that only 2,000 to 3,000 firms are funded yearly and the average amount of venture capital given to each is \$11 million. This initial investment is not realistic for most small start-ups.

Pages identified three key elements of an entrepreneurial ecosystem: *networks*, *diversity*, and *culture*.

- A true network is one where you can go and get the valuable information you need without feeling ignorant or obtrusive. Pages described an ideal network as one in which there are only "two degrees of separation," i.e. where only two phone calls can get you all the information you need about starting your own business.
- A diverse community is one that is open to people with new and different ideas. Indexes have positively correlated high diversity with high levels of technology jobs and economic development.
- Culture is also a major factor that nurtures and encourages entrepreneurs. Among other means, the local newspaper's business section can positively influence the public opinion of entrepreneurs and build respect of their contributions to the community.

Pages concluded by saying, "Entrepreneurs are born, but they must be developed. More entrepreneurs will develop in a place with an entrepreneurial ecosystem than in one without."

STRENGTHENING CENTRAL NEW JERSEY'S R&D ADVANTAGE

Workshop Chair: Ralph Izzo, Vice President, Public Service Electric & Gas

Panelists: Vice Admiral Paul G. Gaffney II, President of Monmouth University; Debbie Hart, President, Biotechnology Council of New Jersey; Neal Masia, Assistant Director of Economic Policy, Pfizer, Inc.

The *Strengthening Central New Jersey's R&D Advantage* workshop derived the following recommendations:

Coordinate economic development efforts and rapid permit review

Economic development efforts in New Jersey need become more focused and efficient. Presently, many state and local agencies promote economic development in the state with very similar functions. This duplication of services is not an efficient or effective way to coordinate for successful economic development. Debbie Hart discussed the New Jersey Biological & Life Sciences Cluster (NJBLSC) model, a newly formed membership organization, seeks to bring more companies into New Jersey.

Hart also spoke of the need to streamline the permit review and approval process. Local reviews completed within 30 days of application would put New Jersey on a more competitive playing field with other states.

Create R&D Technology Zones or Clusters Incentives

The zones and incentives will seek to attract technology-based manufacturing, software development centers, technical support operations, and R&D enterprises. Neil Masia discussed how Technology Zones would accelerate the rate of high-technology job creation and capital investment, improve New Jersey's competitiveness, encourage the expansion of existing high-tech firms, and serve as a catalyst for coordinating resources devoted to business formation.

Develop private/public sector University research and development parks

Ralph Izzo proposed that incentives be offered to private developers to develop state-of-the-art R&D parks in partnership with the State's universities and public sector. The parks would create the optimal environment for cooperative university and private sector joint-venture R&D and technology transfer of multitude of fields.

Create R&D-based incentive programs to spur spin-off economic development and job creation

Create a life science or other targeted industry business development pilot

Analyze the economic costs and benefits of all recommendations to ensure optimization of resources given budget restraints

PREPARING THE WORKFORCE FOR THE FUTURE

Workshop Chair: Laurence Downes, CEO of New Jersey Resources & Chair of New Jersey Higher Education Commission

Panelists: Dr. Carl Van Horn, Director of the John J. Heldrich Center for Workforce Development; Dr. John Bakum, President of Middlesex County College; Adam Pechter, President and CEO of Prosperity New Jersey; Kevin McCabe, Deputy Commissioner of the New Jersey Department of Labor; Charles Wowkanech, President, New Jersey AFL-CIO.

The *Preparing the Workforce of the Future* workshop derived the following recommendations:

Develop better collaboration and more partnerships

Some ideas related to this observation involved partnering with non-profit think tanks and organized labor, funding/encouraging small business partnerships, and encouraging diversity.

Advocate continuous learning

"We all must recognize that continuous learning is key, but learning can take many forms," voiced Downes when addressing the summit delegates. Providing an introduction to business in middle school, encouraging students to explore alternate career paths, developing programs that award degree credit for work experience, and targeting the technological generation gap in older workers were some of the ideas to come out of the workshop.

Offer incentives that support workforce development

Some of the incentive measures mentioned were seeking government aid for part-time students and offering incentives that encouraged New Jersey employees to stay in-state.

Recognize and respect vocational/technical education

Downes made the point that every worker has his/her own individual talents. "There is no such thing as an unskilled worker," said Downes. Suggestions made in the workshop for strengthening vocational education were to develop more internship/apprenticeship programs and bring vocational education back into the area high schools.

Restructure and consolidate the New Jersey Department of Labor

Currently, most workforce development funds in New Jersey are spread throughout different state agencies. To better leverage these resources, the workshop encouraged the consolidation of the state's workforce development programs into a single, expanded program.

Expand career academies

This effort includes increasing public/private partnerships, getting small and medium sized companies to contribute their resources, helping students get a better feel for the "real world," and helping grow the workforce to fill the changing job market.

SUPPORTING SMALL BUSINESS & ENCOURAGING ENTREPRENEURSHIP

Workshop Chair: Greg Olsen, CEO of Sensors, Inc.

Panelists: Bernadette Tiernan, Associate State Director, New Jersey Small Business Development Centers; Joseph Montemarano, the Director for Industrial Liaison, Princeton University

The *Supporting Small Business and Entrepreneurship* workshop derived the following recommendations:

Communicate and publicize successful New Jersey start-ups

Simply getting the word out about successful entrepreneurs and ventures is a great way to encourage entrepreneurship. The key is communicating existing success stories and ongoing new ones. Successes are effectively conveyed through local business papers and publications.

Encourage joint university/start-up ventures

Universities can be very valuable assets for assisting start-ups. Many are very willing to collaborate and help with research and funding.

Invest New Jersey pension funds in New Jersey venture capital

This measure is not intended to create new spending, but rather make better use of existing state funding. As a mode of investment, venture capital, although risky, creates very solid returns in terms of high numbers of new jobs.

Use the SBIR system for start-up funding.

Small Business Innovative Research (SBIR) is an excellent way to finance a new company. SBIR is a series of government grants that can be a better financing option than venture capital. By accepting these funds, however, you sacrifice any equity or patent rights.

Hold quarterly mentoring/networking events

Mentoring and networking events can be a good way for interested parties to come together. Some ideas suggested were events that gathered big companies with small businesses and entrepreneurs to procure products and services; events that brought together early-stage entrepreneurs with successful entrepreneurs; and events that gathered lending institutions with entrepreneurs.

Create a web page for New Jersey businesses with government funding information

A comprehensive web site identifying different funding and procurement opportunities through business and government would be a useful resource for entrepreneurs.

Lower insurance costs

Many small businesses and entrepreneurs struggle with the price and availability of business and health insurance.

Ease home-business restrictions

Leverage State and Federal funding

PROMOTING LIVABLE COMMUNITIES & SUSTAINABLE DEVELOPMENT

Workshop Chair: Gail O'Reilly, O'Reilly Associates

Panelists: David Ausherman, Senior Associate, Fregonese Calthorpe Associates; Dr. Martin Robins, Director of the Voorhees Transportation Center at Rutgers University and the Transportation Policy Institute; Bill Watson, President of Trent Towne Group, LLC, and Associate of the Watson Institute at Thomas Edison Community College; Marty Johnson, President & Founder, Isles, Inc.; Martin Bierbaum, Executive Director, Land Use Municipal Resource Center; Carlos Macedo Rodrigues, PP, AICP Manager, Plan Implementation, New Jersey Office of Smart Growth; Barbara L. Lawrence, Executive Director, New Jersey Future; Tracy Challenger, President, The Agora Coalition

The *Promoting Livable Communities & Sustainable Development* workshop derived the following recommendations:

Engage the citizens in the planning

Not only is this critical for ensuring that objectives reflect the needs and desires of the community, it is also critical for future buy-in and ratification of any proposed plan. By engaging citizens in the planning, local elected officials will know that their constituents care about making the right choices for long-term development.

Develop tools to assess impact of development and investment proposals

These tools would primarily concern tracking dollars and cents and where they allocated in within the proposals.

Develop structure for regional action by private sector, NGOs, and citizens

Community members must not solely rely on the government for action. People with vested interests must move forward to create change.

Address public policy constraints at all levels (e.g., funding, taxation, education, and land use)

Forums at both the state and local level are needed to discuss and evaluate different policy constraints.

Provide balanced choices for development and preservation

Citizens need a broad range of options when considering development. These options, however, will be approached differently at different stages in the life cycle.

Maximize the role of public transportation for economic development corridors

Public Transportation can be highly effective in supporting economic development scenarios.

SCENARIO PLANNING AND ATTAINMENT OF A REGIONAL VISION

David Ausherman, an expert in regional scenario planning, delivered the keynote presentation. Ausherman has spent several years as a planner for Portland, Oregon, widely recognized as one of the most livable and well-planned cities in America. He has also worked on similar projects in Utah, Illinois, Tennessee, and Colorado.

Ausherman stressed to delegates that the visioning process wasn't one-size-fits-all, and that a diverse group of stakeholders should be integrated into the process. He explained that scenario planning is a unique approach that effectively deals with the chaos and unknowns of the future. Scenario planning does not predict how a region will develop, but rather tells a story of how it can develop. It does so by contrasting choices with their consequences when conducting thorough and consistent analyses. It does not, however, develop master plans, focus on single outcomes, or automatically avoid the unpleasant. According to Ausherman, scenario planning often leads to effective and pragmatic plans and strategies.

The success of scenario planning is dependent upon the public, its ability to develop a vision, and its willingness to act upon it. Regional planners use focus groups, scientific surveys, public workshops, mass media, and the Internet to garner widespread public involvement. For regions to develop their own distinct visions, planners must listen to and incorporate local values into the process. When planning for growth, the local principles of prosperity, livability, sustainability, and mobility should guide the vision.

CONCLUSION

Congressman Holt reiterated that not all economic futures are created equal: some futures are better than others. Indeed, brighter futures and stronger economies are built by those who have the vision to imagine, the desire to influence their own destiny, and the determination to act with purpose.

Einstein's Alley seeks to make central New Jersey a national center for research-based industry.

By working together, we can make our region home to more entrepreneurs and small businesses, cutting edge companies, and a robust entrepreneurial spirit. Doing so will require us to prioritize and implement many of the solutions discussed here today.

Einstein's Alley is about more than just business and industry, however. It also about building communities in which we all want to live. Such a region will feature additional first-rate, good-paying jobs and expanded economic opportunity for all. It will also have outstanding schools and livable communities that have high-quality but affordable housing, public transportation, recreational space, and safe neighborhoods.

Central New Jersey has long lived and thrived on the frontier of scientific and technological innovation. We can and should capitalize on this competitive edge. But we have work to do, and we can begin blazing the next economic trail with *Einstein's Alley*.

This summit is intended to be a catalyst for an on-going, consensus-building process that will take on a life of its own. We have all heard of "think globally, act locally." The success or failure of *Einstein's Alley*, however, will require us to "*think ambitiously, act specifically.*" Every person who cares about the future of this region has a role to play. Starting here, starting now, we have begun to claim a brighter and more promising economic future. Thank you for the work you have done today, and thank you for the work you about to do.



Workshop chairs summarize each of the recommendations developed before leading summit delegates through the ranking process.

eFORUM RESULTS

DEMOGRAPHICS

In what capacity are you here today?	%
Small business (<500 employees)	29
Large business (>500 employees worldwide)	20
Education	14
Economic development / NGO	8
Other	8
Government representative	6
Elected official	6
Interested citizen	5
Chamber of Commerce / Trade association	4
What is your home county?	%
Mercer	28
Other	23
Monmouth	17
Middlesex	14
Somerset	9
Hunterdon	9

GENERAL

The following questions were asked by Jonathan Ortman of the Public Forum Institute

The most important trend driving the economy in the next 10 years will be:	%
Economic globalization	38
Technology innovation	25
Aging of the Baby Boom generation	20
Global developments (e.g., terrorism)	12
Tax policies	4
Other	0
What is the most significant roadblock to economic development in the region?	%
Lack of coordination / cooperation	28
Current state of the economy	17
Inadequate infrastructure	14
Corporate downsizing	12
Access to early stage venture capital	10
Skilled workforce	6
Other	5
Restrictive tax policies	4
Investment in R&D	3
What is the first step in attracting new businesses to the region?	%
A skilled workforce	50
Efficient transportation	17
Housing costs	9
Other	7
Excellent schools	5
Safe neighborhoods	4
Advanced telecommunications	4
An appealing civic life	4
Quality health care	0

ENTREPRENEURSHIP

The following questions were asked by Dr. Erik Pages

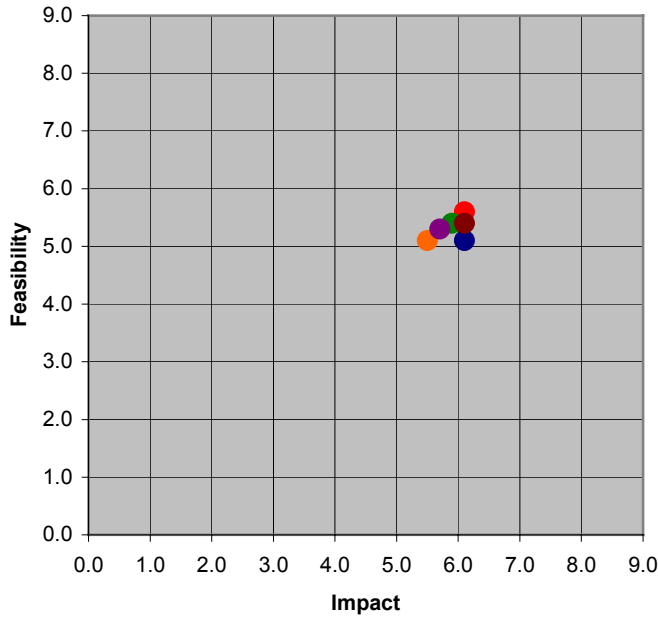
Does your community have an active strategy to help local entrepreneurs?	<u>%</u>
No	40
Unsure	35
Yes	25
In your opinion, what is the biggest challenge facing entrepreneurs?	<u>%</u>
Finding and keeping high quality employees	30
Financing	19
Cash flow	15
Current economic conditions	14
Sales	8
Managerial duties	7
I don't know	5
Other	2
Technology is behind entrepreneurship	<u>%</u>
Agree	41
Disagree	24
Strongly agree	21
Unsure	11
Strongly disagree	4
Which of these would make the biggest difference in promoting entrepreneurship?	<u>%</u>
Mentoring program for entrepreneurs	34
Enhance the skills and capacity of support organizations	21
Eliminate infrastructure barriers to capital access, social networks, etc	11
Inspire students toward business and entrepreneurship	11
Promote strong role models	9
Inspire students toward science, technical majors and entrepreneurship	8
More entrepreneurship classes for colleges	4
Other	2
Will you now go back & ensure that your community is encouraging & supporting entrepreneurs?	<u>%</u>
Yes	87
No	13

WORKSHOP RECOMMENDATIONS:

The following recommendations were rated on a scale from 1 (low) to 9 (high) on two sets of criteria, impact and feasibility. The numbers below reflect the average response for each and the combined score of the two.

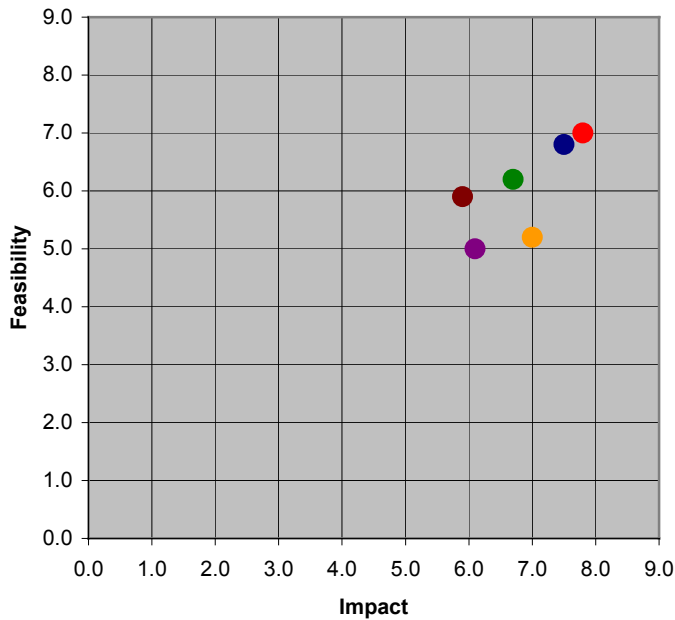
1 - Strengthening Central NJ R&D Advantage	IMPACT	FEAS.	TOTAL
Creation of R&D Technology Zones or Clusters Incentives	6.1	5.6	11.7
Analyzing the economic costs and benefits of all recommendations to ensure optimization of resources given budget constraints	6.1	5.4	11.5
Emerging R & D Based Incentive Programs to spur spin off economic development and job creation	5.9	5.4	11.3
Coordinate Economic Development Efforts and Rapid Permit Review	6.1	5.1	11.2
Life Science or Other Targeted Industry Business Development Pilot	5.7	5.3	11.0
Development of Private Sector/Public Sector/University Research and Development Parks	5.5	5.1	10.6
2 - Preparing the Workforce of the Future	IMPACT	FEAS.	TOTAL
Continuous learning	7.8	7.0	14.8
Collaboration & partnerships	7.5	6.8	14.3
Recognition / Respect for vocational-technical education	6.7	6.2	12.9
Incentives	7.0	5.2	12.2
Career Academies	5.9	5.9	11.8
Restructure / Consolidate NJ Department of Labor	6.1	5.0	11.1
3 - Supporting Small Business & Encouraging Entrepreneurship	IMPACT	FEAS.	TOTAL
Communicate and publicize successful NJ start-ups. Get the word out.	7.5	7.9	15.4
Encourage joint university/start-up interactions	7.2	6.8	14.0
Hold quarterly mentoring/networking events: "Meet the Entrepreneur"	6.4	7.2	13.6
Create web page for NJ business / government information	6.5	7.1	13.6
Use the SBIR system for start-up funding	6.4	6.3	12.7
Ease home-business restrictions	6.3	6.2	12.5
Leverage state / federal funding	6.4	5.6	12.0
Lower insurance costs	7.1	4.4	11.5
Invest NJ pension funds in NJ venture capital	5.6	4.3	9.9
4 - Promoting Livable Communities & Sustainable Development	IMPACT	FEAS.	TOTAL
Maximize role of public transportation for economic development corridors	8.2	5.4	13.6
Provide balanced choices for development and preservation	7.4	5.5	12.9
Develop tools to assess impact of development and investment proposals	6.5	6.1	12.6
Engage citizens in planning	6.9	5.5	12.4
Develop structure for regional action by private sector, NGOs, citizens	6.9	5.4	12.3
Address public policy constraints at all levels (e.g., funding, taxation, education, and land use)	7.3	4.8	12.1

Strengthening Central New Jersey's R&D Advantage



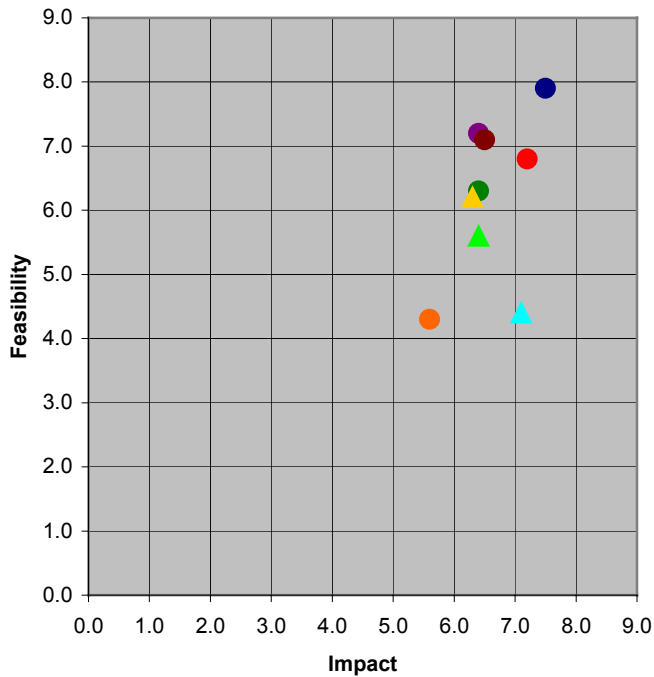
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Preparing the Workforce of the Future



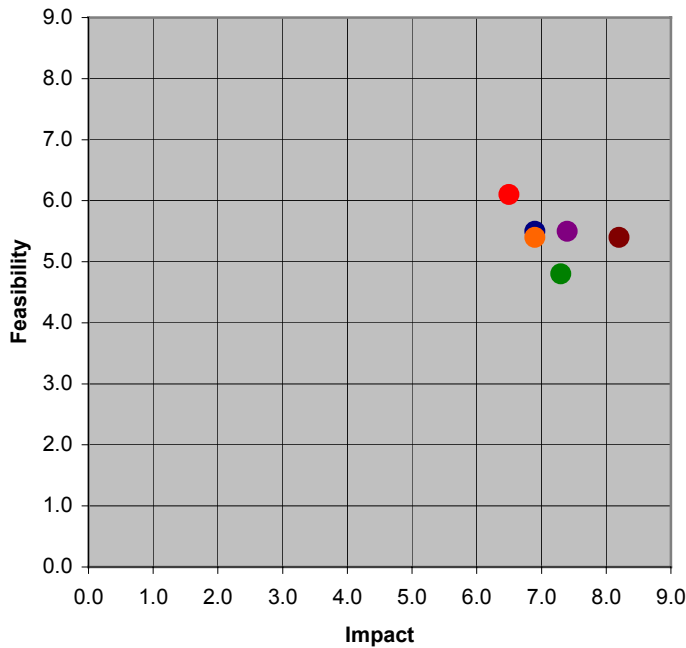
- Collaboration & partnerships
- Continuous learning
- Incentives
- Recognition / Respect for vocational-technical education
- Restructure / Consolidate NJ Department of Labor
- Career Academies

Supporting Small Business & Encouraging Entrepreneurship



- Communicate and publicize successful NJ startups. Get the word out.
- Encourage joint university/startup interactions
- Invest NJ pension funds in NJ venture capital
- Use the SBIR system for startup funding
- Hold quarterly mentoring/networking events: "Meet the Entrepreneur"
- Create web page for NJ business / government information
- ▲ Lower insurance costs
- ▲ Ease home-business restrictions
- ▲ Leverage state / federal funding

Promoting Livable Communities & Sustainable Development



- Engage citizens in planning
- Develop tools to assess impact of development and investment proposals
- Develop structure for regional action by private sector, NGOs, citizens
- Address public policy constraints at all levels (e.g. funding, taxation, education, and land use)
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