

# Knowledge Economy: An Action Agenda

**Goal:** To craft a collaborative regional strategy that links and leverages resources and leadership critical to building the economy and knowledge capacity of the region across geographic, industry and academic boundaries (*source: NES final report*)

**Objective:** To make Providence the location of choice to grow new companies and keep them in Rhode Island, and attract others like them by developing the necessary infrastructure and environment including entrepreneurs, sole proprietorships, etc.

knowledge  
economy

## Key Organizations

**AICU-RI**  
Association of Independent  
Colleges and Universities

**GPCC**  
Greater Providence Chamber  
of Commerce

**IPIC**  
Innovation Providence  
Implementation Council

**RI-CIE**  
Rhode Island Center  
for Innovation and  
Entrepreneurship

**RIDE**  
Rhode Island Department of  
Education

**RIEDC**  
Rhode Island Economic  
Development Corporation

**STAC**  
Rhode Island Science &  
Technology Advisory Council

City of Providence

Governor's Workforce Board

The Providence Foundation

## Strategy 1:

**Get more people/ideas in the knowledge business pipeline:**

- > **Action: Develop good Intellectual Property and tech transfer policies and programs (RI Center for Innovation & Entrepreneurship - RI-CIE; Greater Providence Chamber of Commerce - GPCC)**

**Work Completed:** RI-CIE, along with several partners hosted the Life Sciences Technology Showcase in October, 2011. The event provided a variety of technologies available for license and investment from Brown University, University of Rhode Island, Lifespan, Women & Infants and other institutions. A nanotechnology showcase was held in the Spring 2011 to foster new collaborations between industry and universities. The GPCC has gathered institutional Intellectual Transfer policies from several of the state's research universities. **Work in Progress:** RI-CIE will offer an educational series on topics such as protecting intellectual property and how to access federal funding programs. RI-CIE will host a Green Technologies and Information Technology/Digital Media Technology showcase in the Spring of 2012. The GPCC and the RI Science & Technology Advisory Council (STAC) will post the Intellectual Tech Transfer policies on their websites in late 2011.

- > **Action: To improve institutional cultures to foster and encourage more commercialization outcomes (RI Science and Technology Advisory Council - STAC)**

**Work in Progress:** STAC will convene the players involved in tech transfer at the leading research institutions (URI, Brown, Lifespan, Care New England) to discuss specific action steps to improve institutional cultures to foster and encourage more commercialization outcomes. Two key needs identified are proof of concept centers and wet lab space. STAC will work with members of the General Assembly, particularly those that represent the Knowledge District, to assist in the discussion of identifying possible funding sources for these activities.

> **Action: Create an accelerator facility to provide mentoring and networking services in one-stop shopping environment (RI-CIE)**

**Work Completed:** In 2010, an additional 4,000 s.f. of supported “incubator office space” was opened at RI-CIE. Seven start-up companies were based in the incubator in addition to two “entrepreneurs in residence.” RI-CIE doubled its educational, mentoring and networking offerings. New programs were launched including workshops, LunchLabs and RI-CIE After Dark. RI-CIE successfully piloted a “Co-Working Membership” offering supported desk-space to a dozen entrepreneurs. **Work in Progress:** The RI-CIE Incubator now houses 10 start-up companies in individual offices and the new Co-Working Program is expanding. New programs include targeted workshops on issues such as valuation, tax consequences for founders, and business model basics. Monthly forum events will feature company pitches to provide start-ups with exposure to investors.

> **Action: Develop a Design focused Accelerator (The Providence Foundation)**

**Work Completed:** The final report on the feasibility of a design focused accelerator concluded that the next generation of accelerator/incubator is needed. It should be a high service design accelerator providing a physical space for networking, programming and collaboration. The report also identified ideas for policies to promote the design industry. **Work in Progress:** Matt Grigsby developed Anchor, a low service, design focused accelerator in Providence. The 13,000 s.f. industrial warehouse building is being transformed into an incubator space for designers, architects and commercial artists. **Work Needed:** The study and the results at Anchor and other local facilities will be reviewed by stakeholders to determine support for the development of a high service design focused accelerator.

> **Action: Develop Incubator/Wet Lab Space (RIEDC, City of Providence, Slater Technology Fund)**

**Work Completed:** The RIEDC has established a statewide database of available space with over 3,000 sites listed ([www.risitelocator.com](http://www.risitelocator.com)). The RI-CIE incubator is currently housing many of the Betaspring companies. The City of Providence submitted a grant to the U.S. EDA which included funding for a new bio venture accelerator, a feasibility study and implementation plan for a wet lab space incubator. **Work in Progress:** RIEDC is creating a virtual urban incubator through its broadband program. **Work Needed:** In 2012, the City and other stakeholders will reassess the proposed grant activities which were not selected for funding to determine the best approach to achieving these objectives. On a parallel track, the Slater Technology Fund will pursue separate opportunities with a view toward securing an arrangement for a pilot wet lab incubator space in the Knowledge District in 2012.

> **Action: Designate a Knowledge District or its equivalent to cluster activities and supports which includes setting goals and measures of progress and establishing an effective system of governance. (State of Rhode Island, City of Providence)**

**Work Completed:** The concept of the Knowledge District as a center for innovation and entrepreneurial businesses mixed with research and development activities of the institutions and others has been generally accepted and supported. Consistent with the goal of growing and strengthening the Knowledge District, which is generally thought to include the area from downtown Providence to the hospital campuses in upper South Providence, the General Assembly passed the I-195 Redevelopment Act of 2011. The Act provides that area will be administered by the I-195 Development Commission, a seven member appointed Board. In addition, the City is working with Perkins & Will to develop planning and zoning infrastructure that will encourage and support development by the institutions and other knowledge-

oriented organizations in this area. The opening of the new medical education facility, the Warren Alpert Medical School at Brown University, marked a new milestone in the development of the Knowledge District. **Work in Progress:** To monitor and support the work of the I-195 Development Commission; to complete the Perkins & Will study and implement its recommendations; and to continue to pursue development opportunities with Brown, Johnson & Wales, the hospitals and the growing number of start-up companies located in the area.

- > **Action: Facilitate access to funding sources including venture/angel capital (RI-CIE, Slater Technology Fund, RIEDC, City of Providence)**

**Work Completed:** RIEDC, in collaboration with Slater, Betaspring and the Small Business Loan Fund, received a grant for \$13.1 million pursuant to the State Small Business Credit Initiative (SSBCI) program in August, 2011. The RIEDC has reopened the Job Creation Guarantee (JCG) program and the Board approved the first deal in 2011. RI-CIE, in partnership with Brown's Technology Ventures Office and others, hosted a Life Sciences Technology Showcase that brought together venture/angel investors and corporate development executives from the Northeast region with life sciences and medical device entrepreneurs. In addition to 13 company pitches, the Showcase featured over 50 life sciences research projects available for partnerships or licensing from RI universities and hospitals. **Work in Progress:** RIEDC has several other deals in the pipeline for the Job Creation Guarantee Program. RIEDC will be creating a funding stream for urban businesses through the SSBCI program. A new Access to Capital sub-committee of the RIEDC Board has been created dedicated to looking at the capital continuum and how to address the funding gaps in RI. Work with the City of Providence to assist in developing suitable strategies for deploying the \$10 million HUD financing in ways that will leverage the development of the knowledge economy in Providence.

- > **Action: Review business climate issues to foster entrepreneurship (i.e. zoning, permitting, regulations) (City of Providence, Department of Planning and Development, Building and Zoning Department)**

**Work in Progress:** The City has retained the firm of Perkins & Will to create a detailed development framework for the downtown and Knowledge District that will consist of a development plan for the Knowledge District; revise zoning and land development regulations; and provide an assessment of utility capacity, needs and costs. The work of the Advisory Committee is expected to be completed by December, 2011. Draft regulations are projected to be completed by the end of October, 2011 with a public review and comment period conducted in late 2011. Public hearings will then take place before the City Plan Commission in early 2012. The regulations will then be forwarded to the City Council for action in March, 2012 with a public hearing anticipated in Spring, 2012. Final revisions and formal action by the City Council is expected in May, 2012.

## **Strategy 2: Develop and Implement a marketing program to reinforce and support Providence as the location for all knowledge-oriented businesses**

- > **Action: Connect local alumni entrepreneurs and build mentor networks for students and young alumni alike. (Association of Independent Colleges and Universities of RI - AICU-RI)**

**Work Completed:** Completed Statewide Knowledge Retention Survey and examined different ways of retaining more students in RI post graduation. Completed successful pilot of Dormcubator program and study and focus-group research for proposed mobile app. **Work in Progress:** Four programs are being implemented by AICU-RI through its bRIdge initiative during the current academic year: a mobile app is being created to connect students with internship opportunities at startups, small businesses and community nonprofits; a state-wide internship fair is planned for the 2012 RIBX; the community engagement program (Dormcubator) is being expanded for students with summer internships; and an advisory committee is being formed.

- > **Action: Create a brand identity for the Providence knowledge-based economy by implementing AngelouEconomics recommendations to help provide the basis for a branding initiative (GPCC, RIEDC)**

**Work Completed:** The RIEDC has secured funding for the creation of a private/public partnership to market the Knowledge District. The GPCC Board of Directors and the Innovation Providence Implementation Council (IPIC) both endorsed the program and the Chamber Board has approved private sector funding for this program. **Work in Progress:** Announce the private/public partnership at the Chamber's Annual Dinner in late November, 2011; create the entity and hire staff, including a Chief Attraction Officer.

- > **Action: Develop internal and external marketing teams and plans to approach likely candidates (GPCC)**

**Work in Progress:** To work with the newly established private/public partnership to assist in prospecting potential businesses for locating in the Knowledge District of Providence.

- > **Action: Extensively and consistently market the brand!! (GPCC)**

**Work in Progress:** Over 100 news article appeared in the Providence Journal and Providence Business News and other local media in 2011 related to the knowledge economy. IPIC facebook page is operational with recent postings of knowledge economy news. There is also an IPIC Twitter feed which is being promoted as well as knowledge economy advertisements appearing in RIBQ.

- > **Action: Develop presentation materials (GPCC & City of Providence)**

**Work Completed:** Complete set of marketing materials developed in partnership with the GPCC, RIEDC and City of Providence. Marketing materials used in the various trips made by government and business leaders to Texas, Baltimore and Pittsburgh. **Work in Progress:** Plans to utilize knowledge economy marketing materials during the trade mission to Israel. Work with the new private/public partnership to develop necessary marketing materials to support the work of this new entity.

### **Strategy 3: Increase and continue to increase institutional research and development**

- > **Action: Develop 2-3 selected, large multi-institutional projects/proposals; develop collaborative proposals for legislative allocations/earmarks; expand Federal support more generally including partnership opportunities; develop corporate/industrial sponsored programs (STAC)**

**Work in Progress:** STAC has formed a statewide working group comprised of representatives from sponsored research and corporate foundation offices at research and non-profit institutions. By identifying potential shared areas of interest, ideas in the pipeline and developing strategies to jointly pursue funding sources, the expected outcome of this group will be to expand federal and private institutional support for RI investigators as well as to identify topics for large inter-disciplinary, inter-institutional projects and proposals, and collaborative proposals for legislative allocations and earmarks and to develop corporate/industrial sponsored programs.

- > **Action: Create task forces to develop plans and projects in each of the NES niche areas (alternative energy, design, product safety, workforce development, health care, entrepreneurship) (IPIC)**

**Work in Progress:** Ties in with the work envisioned for the new private/public partnership to assist in business attraction and cultivation efforts. Also ties in with STAC efforts to increase federally sponsored research through infrastructure investments and the EPSCoR grant and with the goals of the IPIC grant program to spur creativity and collaboration across organizational boundaries.

#### **Strategy 4: Launch more and bigger collaborative programs and projects**

- > **Action: Expand the reach and scope/impact of the RI STAC and the Research Alliance; Build on current partnership initiatives such as IBM, Draper, Marine Biological Laboratory (STAC)**

**Work in Progress:** STAC and the Research Alliance are actively collaborating with the GPCC, RI-CIE, OSCAR, the RI Manufacturing Extension Service and other strategic community partners to identify and sponsor matchmaking events that build industry-academic partnerships. The group has facilitated matchmakers for Nanotechnology and Medical Devices and will target an additional area in 2012.

- > **Action: Build on existing and planned collaborations of the Medical School and the Hospitals; (Brown University, Lifespan, Women & Infants)**

**Work Completed:** Brown and Lifespan signed an expanded partnership agreement in October 2010; actively exploring a potential collaboration in brain sciences, building on existing strengths at Brown and the hospitals and supported by a major gift to Lifespan from the Frederick Henry Prince 1932 Trust to support that effort; collaborated in recruiting new faculty leaders with established strengths in both research and clinical care, with significant investments by both institutions in research space and support. **Work in Progress:** Continue to foster collaboration with the Brown Medical School, Lifespan and Care New England hospitals.

#### **Strategy 5: Create a trained workforce needed to advance knowledge-based economic activity**

- > **Action: Conduct work force needs analysis for RI's version of the knowledge-based economy (Governor's Workforce Board)**

**Work in Progress:** The Governor's Workforce Board has nine industry partnership contracts representing seven industries; Defense, Health Care, Marine Trades, Construction, Hospitality, Information Technology and Biotech. The Defense industry partnership will be completing a skills gap study in October/November. The other industry partners continue to update skills gap studies, gather workforce intelligence and provide industry driven training for new and incumbent workers.

- > **Action: Work with CCRI, Providence Career & Technical Academy, New England Institute of Technology and others to develop and implement a plan for meeting those needs (Governor's Workforce Board)**

**Work in Progress:** A 15 member Taskforce was appointed in December 2010 and began their work in March 2011. The Taskforce is charged with establishing and overseeing a "State Career Pathways System". Career pathways are a series of connected education and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment in that sector. The task force has identified two industries to "pilot": information technology and health care.

- > **Action: Support K-12 improvements – work with the Commissioner of Elementary & Secondary Education (RI Department of Education)**

**Work Completed/Work in Progress:** The Rhode Island Department of Education (RIDE) is partnering with the Governor's Workforce Board to organize technical training programs in the state priority sectors of IT and health care, with an emphasis on developing core academic skills combined with relevant technical knowledge and skill. As part of that effort, RIDE has rewritten regulations that impact high school students and their readiness to enter post-secondary education and training programs and the workforce, including revising statewide graduation requirements and developing new regulations governing career and technical education. Among the changes proposed is a new classification of career and technical education program called an "Innovation Program". Innovation programs are designed to promote the development of rigorous technical training for students through new delivery systems or in emerging markets, which may include the knowledge economy.

## **Strategy 6: Create a true public-private-institutional partnership to connect all of the initiatives (IPIC)**

### > **Action: Agree on a strategy and a plan and execute the plan (IPIC)**

**Work Completed/Work in Progress:** The I-195 Development Commission was created by State law and 7 members have been appointed to the Commission with a charge to bring together public and private resources to advance the knowledge economy. The RIEDC Board has identified as one of its key priorities the development of the Knowledge District and has created a Sub-Committee of the Board on this topic.

The City of Providence has appointed a cabinet-level Director of Economic Development who will be engaged in bringing together public and private resources. The RIEDC and GPCC have reached agreement on the establishment of a joint private/public partnership for business attraction/cultivation efforts for marketing the 600 acres encompassing the Knowledge District and beyond as defined by the City of Providence. **Work Needed:** To build on these efforts to develop a comprehensive plan for a truly effective private-public partnership.

### > **Action: Deliver a sustainable governance structure for the Providence Knowledge Economy (IPIC/195 Development Commission)**

**Work Completed:** I-195 Development Commission has been created and begun their work. **Work in Progress:** Continue to build on the work of the IPIC to bring private and public sector stakeholders together to plan their activities and investments in ways that produce a total effect that is greater than the sum of the parts. Work with the RIEDC and its Knowledge District Subcommittee and with the City's Director of Economic Development to build a governance structure that will support joint planning and investment. Build on the private-public partnership represented by the agreement to undertake a focused marketing effort under the combined leadership of the GPCC and RIEDC to demonstrate the potential value of collaboration between the private and public sectors. Support the work of the I-195 Commission and continue monthly meetings of the IPIC.

### > **Action: Focus on Implementation (IPIC)**

**Work Completed:** Distributed \$110,000 in grant funding to 7 projects. In partnership with STAC, GPCC and the IPIC completed the first-ever benchmarking analysis of the knowledge economy that included 23 different indicators to begin to measure Rhode Island's progress in growing a knowledge economy. **Work in Progress:** Continue monthly meetings of the IPIC whereby implementation reports are included on the agenda of each monthly meeting. Continue to monitor and update the Knowledge Economy Action Agenda; continue to issue Knowledge Economy grants as funding becomes available; review the Benchmarking data for possible mid-course corrections to the action agenda.