

FEBRUARY 2013

ECONOMY RI

A Research Publication by Fourth Economy Consulting

Economic
DEVELOPMENT
Data Analysis & Assessment



Acknowledgements

We would like to thank the following organizations and businesses who contributed their time, ideas, and guidance during the stakeholder interview process utilized in the development of this analysis:

(add)ventures
Arkwright Advanced Coating, Inc.
Banneker Industries
Betaspriing
Brito's Landscaping Services
Business Innovation Factory
Cytosolv, Inc.
The Economic Development Foundation of Rhode Island
Fidelity Investments
Globex Industries
Horton Interpreting Service, Inc.
J.C. Electric, Inc.
Nabsys, Inc.
Peregrine Group
Pilgrim Screw
Rhode Island Association of Independent Colleges and Universities
Rhode Island Monthly Communications, Inc.
Rhode Island Public Expenditures Council
The Providence Chamber of Commerce
The Rhode Island Foundation
United Natural Foods
VIBCO Vibrators

We would also like to thank the staff from the Rhode Island Economic Development Corporation, the Rhode Island Statewide Planning Program and the Rhode Island Office of Regulatory Reform.

Several photos used in this report are courtesy of the Rhode Island Department of Transportation and the Statewide Planning Image Library.



Rhode Island
Economic Development Corporation



This report was prepared and published by Fourth Economy Consulting, in collaboration with Economic Partners, Inc. and Britt Page Consulting, under contract with the Rhode Island Economic Development Corporation, and on behalf of the Rhode Island Sustainable Communities Consortium.

February 2013

Fourth Economy Consulting
Pittsburgh, PA

www.FourthEconomy.com
info@fourtheconomy.com

The work that provided the basis for this publication was supported by funding under an award with the U.S. Department of Housing and Urban Development. The substance and findings of the work are dedicated to the public. The author and publisher are solely responsible for the accuracy of the statements and interpretations contained in this publication. Such interpretations do not necessarily reflect the views of the Government.



14 Business Climate Analysis

A key task within the business climate analysis was an examination into how Rhode Island has performed in national business climate rankings, both overall and in comparison to its neighboring and/or peer states.



40 Financial Resource Analysis

This section will examine the extent of the financial resources available in Rhode Island, preliminarily identify any gaps, and provide best practice examples for Rhode Island to consider as it advances its economic competitiveness agenda.

This report features statements from interviewees regarding economic development in Rhode Island. Look for boxes with the plus sign highlighting their thoughts, ideas, and critiques.



56 Targeted Cluster Analysis

This section provides an analysis of the strengths, weaknesses, opportunities, and threats associated with Rhode Island's industry clusters, a critical first step in developing a cluster strategy.



78 Regulatory Environment Analysis

This section provides an assessment of Rhode Island's regulatory reform efforts in comparison to peer states, examines the process that a small business undergoes when starting a new business, and highlights regulatory best practices.



86 Marketing Analysis

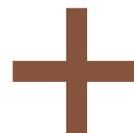
This section reviews online economic development marketing resources, analyzing the effectiveness of existing resources and providing suggestions for an improved marketing structure.

Rhode Island ranks third
in the U.S. in knowledge
worker migration.

#3



Executive Summary



Background

The Partnership for Sustainable Communities, a coalition between the U.S. Department of Housing and Urban Development (HUD), U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA), began in 2009 as a federal initiative to improve the social and economic status of communities nationwide. To achieve its aims, the partnership focuses on the coordination of community-wide investments in housing, transportation, water and other infrastructure, supporting six defined livability principles:

- Improvement of transportation choices
- Promotion of equitable and affordable housing
- Enhancement of economic competitiveness
- Support of existing communities
- Coordination and leverage of federal policies and investment
- Investment in healthy, safe, and walkable neighborhoods

After receiving a \$1.9 million HUD Sustainable Communities Regional Planning Grant (SCRPG), the State of Rhode Island began development of a Regional Plan for Sustainable Development (RPSD) in early 2012, a collaborative effort to expand the regional development plans in place since 2006. Led by a strong vision for success and a consortium of state agencies, municipalities and nonprofit organizations, this project seeks to define a path for Rhode Island's improvement, protecting the distinctive traditions, history and quality of place of the area while bolstering the economy and reviving the vibrancy of the state.

Fourth Economy Consulting (FEC) was hired to conduct an independent Economic Data Analysis and Assessment and provide suggestions for short-term guidance to the Rhode Island community and considerations for the Sustainable Rhode Island campaign.

This Economic Data Analysis and Assessment focused on five areas:

Business Climate Analysis

Analyzed existing reports and compared Rhode Island's rankings regionally. Dissected the indicators used in selected rankings to get a better understanding of what these indicators actually mean for the state.

Financial Resource Assessment

Produced an inventory and evaluated existing capital programs from state and municipal sources. Identified gaps in financing.

Targeted Cluster Analysis and Validation

Identified existing recognized industry clusters, performed original data research and provided insight into emerging opportunities for growth in the coming years.

State Regulatory Environment

Performed a macro level assessment of the state's regulatory environment and analyzed company experiences by conducting a scenario exercise. Conducted a national scan of best practices in regulatory reform.

Marketing Analysis

Identified and assessed existing state, regional, and municipal business marketing efforts. The analysis considered the various entities responsible for marketing, the messages conveyed and the target audiences.

This Economic Development Analysis and Assessment builds off of the work of many previous economic development studies and initiatives by stakeholders such as the Rhode Island Public Expenditures Council, the Rhode Island Foundation, and the Science and Technology Advisory Council, among others. While taking past efforts into account, this Assessment also lays the groundwork for future economic development planning. This Analysis and Assessment will help inform the development of the State's new Economic Development Plan, which will be a component of the overall Regional Plan for Sustainable Development.

This Executive Summary highlights the findings, guidance and considerations resulting from FEC analysis.

Findings

Business Climate Analysis

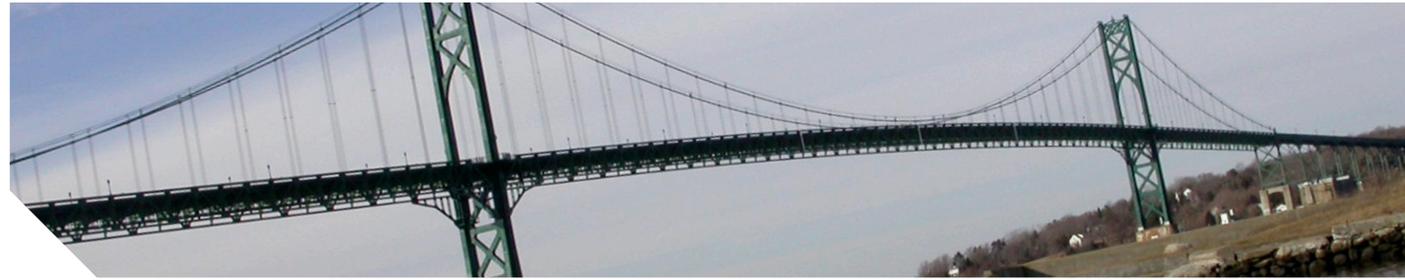
The term business climate refers to the ways in which a community or state and their related community assets support business development. A key task within the business climate analysis was an examination into how Rhode Island has performed in national business climate rankings, both overall and in comparison to its neighboring and/or peer states. The state's performance, positioned near the bottom of several rankings, has been much publicized. The FEC team pursued a deeper analysis than what has been documented previously.

Business Climate Rankings

While it is very important to take a critical look at state rankings, it is also important to keep in mind that Rhode Island is not Texas, and Texas is not North Dakota. The idea of rankings presents a linear type of thinking that does not necessarily reflect the conditions, assets and opportunities that lie within each unique location. *While the overall ranking performance is important, it is also important to move beyond the overall rankings mind-set and drill deeper into specific measures that make up those rankings.* Rhode Island should further consider the context of the rankings and choose to monitor the most credible and relevant measures contained therein.

FEC conducted research into Rhode Island's position on a variety of business climate rankings. A set of rankings was chosen based on their thoroughness or approach and included:

- State New Economy Index – Information Technology and Innovation Foundation
- Beacon Hill Institute Competiveness Index – The Beacon Hill Institute
- Assets and Opportunity Scorecard – The Corporation for Enterprise Development
- Small Business Survival Index – The Small Business Entrepreneurship Council
- State Business Tax Climate Index – The Tax Foundation
- The State Entrepreneurship Index – The University of Nebraska



Each of these reports published an overall position score for each state. Our approach focused not just on that score, but also on the underlying measures that drove the development of the composite score. In order to understand the relationship between these measures, FEC utilized the categories developed for the Fourth Economy Community Index, which are: Investment, Talent, Sustainability, Place, and Diversity. FEC identified areas where Rhode Island is doing well (+) and challenges for the state (-) in each category.

Additional definitions of each of these categories and the measures associated with each can be found in the full report.

Investment considers measures that relate to or impact the amount of wealth generated or available in a defined economy. FEC found...

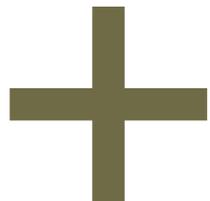
- + Rhode Island has made recent progress in the tax climate indicator by lowering the Personal Income Tax rate
- + Business leaders interviewed noted the quality of place and other high value resources of the state as a tax-mitigating factor
- + Small business ownership rates, average annual pay, sales tax, foreign direct investment and growth in high-tech jobs are all positive measures for the state
- The Rhode Island tax climate is still a challenge for the state with property tax, corporate tax, gas tax, utility and unemployment insurance rates all in the bottom quintiles compared nationally
- Personal saving rates in the state are low, which results in an inability to invest in education and other longer-term investments

Talent considers measures that relate to the quality and availability of a high valued workforce, education, and resources to support innovation. FEC found...

- + Rhode Island places third in the migration of US knowledge workers metric, an asset upon which to build
- + Rhode Island ranked above 20 in two and four-year college degrees, workforce education and patents per thousand persons
- Low rankings in high school degree attainment
- Early childhood education enrollment

Sustainability includes measures of a community's ability to conserve environmental, social, and economic resources for the next generation. Given the nature of the rankings analyzed, the majority of the metrics in this category reference economic sustainability. FEC found...

- + Broad health care coverage provided for children and adults
- + New businesses formed
- Per capita government debt
- Reliance on federal funding
- Entrepreneurship and business incubation rates





Place includes measures that relate to the quality of a resident's (or business's) life. FEC found...

- + Rhode Island housing is more affordable than neighboring states
- + The state is connected to the world with internet speeds that are in the top 6 nationally
- Home ownership rates are low and, despite being affordable compared to neighboring states, housing affordability is low when compared nationally
- Highway infrastructure cost effectiveness was ranked 50

Diversity includes measures that relate to the overall economic, social and cultural diversity of a location. FEC found...

- + The state performs better in the areas of business ownership by race and business value by gender but is still ranked at 21 and 30 respectively
- Rhode Island receives low scores in unemployment by race
- Homeownership by race
- Four-year degree attainment by race

These key metrics illustrate how a single score can be a misleading way of looking at a state's performance. The full report provides a detailed review of all of the measures analyzed and should inspire a conversation that moves beyond the headlines and looks at the underlying metrics and their positive or negative impacts on the business climate in the state.

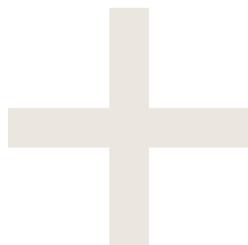


FIGURE A:
Factors Impacting the Cost of Doing Business

Cost of Doing Business Factor	Rhode Island's Peer Standing	Data Source(s)
Taxes		
Personal Income	Competitive	Tax Foundation & KPMG Report "Location Matters", Tax Foundation's "State Business Tax Climate Index" Annual Report
Corporate Income	Not Competitive	
Sales Tax	Not Competitive	
Property Tax (Tier 1)	Not Competitive	
Unemployment Insurance	Not Competitive	
ETRs: New Mfg. and R&D Firms	Not Competitive	
Tax Expenditures	Competitive	Economic Partner's Expenditure Database; RI's "Tax Expenditure Report"
Housing	Competitive	American Community Survey
Energy	Competitive	Energy Information Administration
Labor	Competitive	Bureau of Labor Statistics
Transportation		
Air Travel	Even	US Department of Commerce
Motor Fuel	Even	
Commute Time	Competitive	

Cost of Doing Business

A company's cost of operations in a specific location is dictated by a variety of factors, including taxes, tax expenditures, housing, energy, labor and transportation. These costs can support a company's growth or location decision-making, and they are often cited as the most important indicators of a state or community's competitiveness.

FEC analysis identified these cost factors and Rhode Island's position compared to a peer group which includes neighboring states: Massachusetts, Connecticut, New Hampshire and includes Delaware due to similar state characteristics.

FIGURE B:
Tax Comparison of Benchmark States

Benchmark States	Personal Income	Corporate Income		Sales & Property		Unemployment Insurance		Effective Tax Rates for Newly Established Operations		
	Single Filer, \$110,000*	Main	Mfg. & Svc. Apportion.	Main Sales**	Property - Buildings	Rate	Max. Pay	Capital Intensive Mfg.	Labor Intensive Rate	R&D Facilities
Connecticut	6.00%	8.250%	100%	6.00%	1.708%	3.700%	\$15,000	9.6%	10.3%	18.3%
Delaware	6.75%	8.700%	33.3%***	-	3.964%	3.100	\$10,500	4.4%	7.4%	19.5%
Massachusetts	5.30%	8.250%	100%	6.25%	2.842%	3.250%	\$14,000	7.9%	13.1%	21.2%
New Hampshire	5.00%	8.500%	50%***	-	2.125%	3.700%	\$12,000	7.7%	12.8%	14.2%
Rhode Island	4.75%	9.000	50%	7.00%	3.370%	2.970%	\$19,000	6.6%	13.2%	23.9%

* 2012 data; \$110,000 chosen for clarity (vs. \$100k cut off)

** "Sales & Property," the following "Tier 1" cities were used, respectively: Hartford, Wilmington, Boston, Manchester, & Providence

*** "Standard factors: Sales" apportionment used

Note: Not all taxes are included; this is intended to serve as an overview of a selection of significant taxes

Source: KPMG & Tax Foundation's "Location Matters"; Economic Partners' Tax Expenditure Database (where *)

According to data pulled from KPMG and the Tax Foundation's seminal "Location Matters" report, Rhode Island's tax structure does not compare favorably either nationally or regionally. In nearly all categories (highlighted comparisons shown in Figure B above), Rhode Island has a higher tax rate than most of its peer states.

It fares particularly poorly with its Corporate Income Tax Rate (at 9%, at least 0.3% higher than the next lowest), published Sales Tax Rate (7%), and its expected effective tax rates for newly established labor-intensive manufacturing and R&D facilities (13.2% and 23.9%, respectively).¹ However, because this data does not consider the sales tax base in its comparison, while the Tax Foundation index does, Rhode Island does in fact fare better in terms of sales tax in the business climate rankings analysis.

Tax expenditures on economic development are a way for a state to lower the cost of doing business, and Rhode Island is investing at a level on par with the peer states, though there is no way currently to quantify the impacts and efficacy of these investments. Tax expenditures amount to money removed from revenue streams before those streams "pour" into a budgetary pool, from which,

then, governmental departments, programs, and initiatives are funded. In the latest year wherein tax expenditure data is available, Rhode Island offered 57 tax expenditures supporting economic development outcomes.

For all those expenditures reporting cost estimates, the State of Rhode Island spent at least \$461.23 million on economic development tax expenditures in 2009.² These costs are expected to increase to \$497.2 million by 2013.

In addition to the economic development expenditures described above, Rhode Island does have cost advantages, as compared to its peer states. From housing to energy to high-skilled labor, businesses can access all at – relatively – bargain rates, in comparison to Massachusetts and Connecticut. Further, with either an hour's drive or an hour and ten minute MBTA Commuter Rail Train ride from Providence, Rhode Island workers and residents have easy access to the Boston market, while enjoying low-cost, fast, local travel alternatives and commutes.

¹ For Providence, and related "Tier 1" cities as selected by KPMG and the Tax Foundation; sales tax data exclude exemptions for manufacturing.

² This compares to a *New York Times* estimate of \$356 million

FIGURE C:
State Economic Development Expenditures
[destination in millions, 2009]

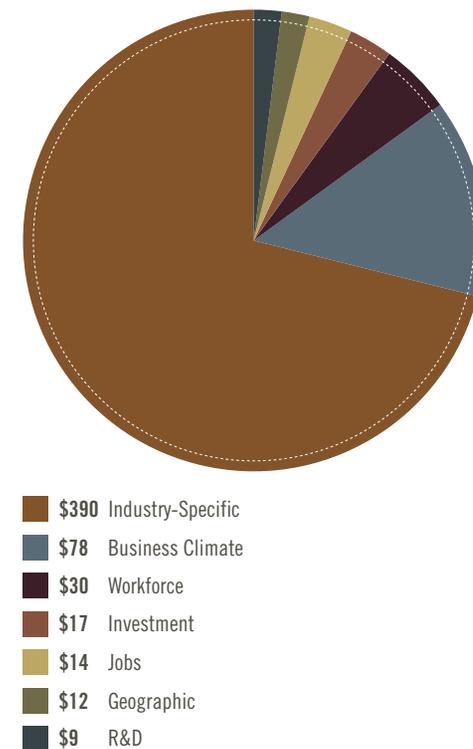
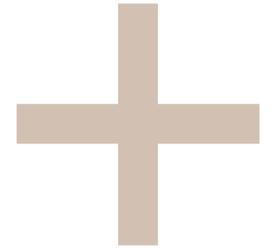


FIGURE D:
Rhode Island Financial Support Strength [by company stage, preliminary review]

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	
Seed stage; initial capitalization	Start-up financing (Series A round of investment); first revenue, no profit	Second stage financing (Series B round of investment); viable business	Working capital; lines of credit with commercial bank	Scaling (Series C round of investment); ramping up operations; mature	Financing Description
Angel Networks	Venture Capital; Micro loans	Venture Capital; Commercial; SBA loans	Venture Capital; Commercial; SBA loans; RI Small Biz Loan Fund	Commercial; RIEDC / RIIFC / IRBA loans; Tax Incentives	Primary Financial Provider(s) / Programs
LOW	LOW - MEDIUM	MEDIUM	MEDIUM	MEDIUM - HIGH	Financial Resource Capacity in Rhode Island



Financial Resource Assessment

The availability of a range of financial resources for business expansions is critical for communities and states looking to grow jobs. At the state-level, the most prominent source for economic development funding is the Rhode Island Economic Development Corporation (RIEDC), the state’s quasi-public economic development organization. However, the Rhode Island Industrial Facilities Corporation, the Rhode Island Industrial-Recreational Building Authority, Capital Center Commission, the Quonset Development Corporation (now a subsidiary of RIEDC), and the Department of Labor and Training’s Workforce Development Services Program, also support critical economic development financial resources. These resources range from revolving loan funds to workforce development assistance grants.

Localities and local development companies also play a key role in meeting local firms’ financial needs across Rhode Island, sometimes doing so in creative ways that can be reflected upon at the state level to great benefit.

In 2012, Rhode Island based companies secured nearly \$72 million in venture capital funding from 11 recorded investments, the highest level of venture capital investments since 2005. Rhode Island’s venture capital totals, however, pale in comparison to those received by neighboring states, with Massachusetts-based companies, for instance, receiving nearly \$57.2 billion in financing between 1995 and 2012, while Rhode Island-based firms received less than \$1 billion. Per capita analysis is not useful when comparing venture investments as scale is more related to resulting job creation and economic impact.

When Rhode Island’s public and private financial resources are considered as a whole, Rhode Island faces significant gaps in the availability of funding for early-stage companies. Its programs do, however, provide more competitive funding packages to more mature firms within the state and/or looking to locate in the state.

Targeted Cluster Analysis and Validation

Industry clusters are an economic development concept that was introduced in the 1990's by Harvard researcher, Michael Porter. In their basic form clusters are groups of related industries operating in a defined location. The concept of a 'targeted' cluster is an economic development concept that emphasizes that certain actions can be undertaken by government, non-profits or even the cluster itself that will benefit many companies within the cluster. Analysis of industry clusters and their strengths, weaknesses, opportunities and threats (SWOT) is a critical first step in a cluster development strategy.

Based on the most current data from Rhode Island Department of Labor and Training, the Rhode Island economy contains roughly 458,000 nonfarm employees. Employment in the State has decreased over the past 10 years, with the total number of jobs decreasing by 4.5 percent between 2002 and 2012. The manufacturing sector took the biggest hit from both an absolute and a relative standpoint, losing 21,317 jobs (34.2 percent of sector employment). Over that same period, the education and health services sector made the greatest gains, with employment increasing by 14,883 jobs (16.9 percent).

The FEC team reviewed the existing industry cluster definitions (see Figure F) used by RIEDC and the STAC. Where clusters had not been defined, we assessed the overall cluster makeup and used the corresponding NAICS codes.

"I've seen a need for better micro loan programs (under \$250,000) targeting existing businesses. As banks become more risk adverse and regulated, the state could play a role here."

FIGURE E:
Rhode Island's Nonfarm Employment [2012]

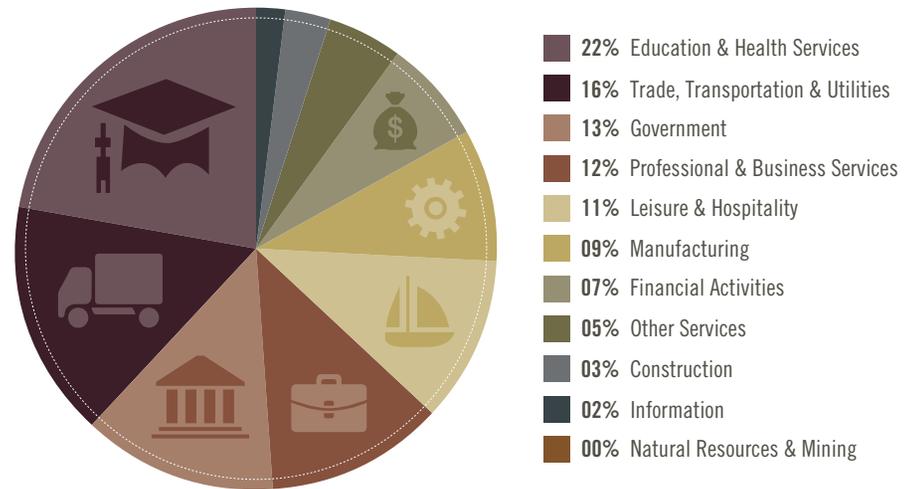


FIGURE F:
Cluster Definitions

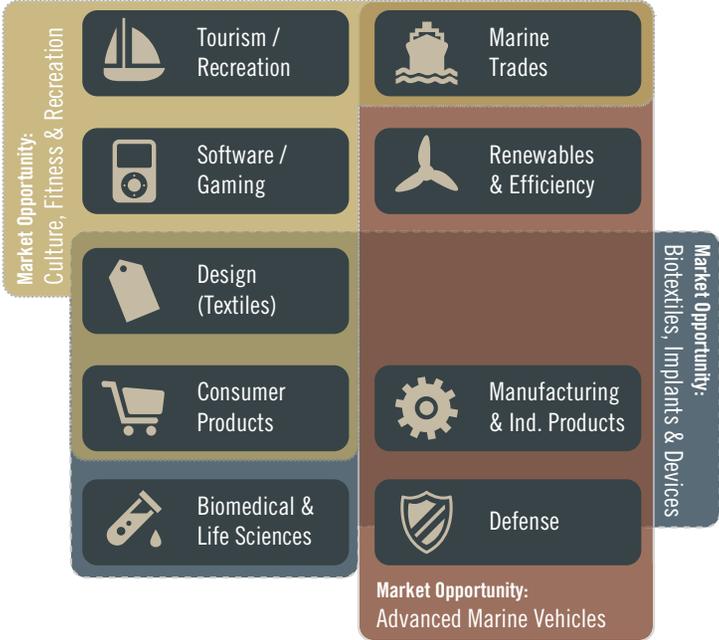
RIEDC Clusters	STAC Cluster Definition
Manufacturing and Industrial Products	Advanced Manufacturing
Consumer Products and Design	Design
Health and Life Sciences	Health Care & Life Science
IT & Digital Media	IT & Digital Media
Defense and Homeland Security	Marine Trades & Defense
Green Economy (Renewable Energy & Energy Efficiency)	STAC Wind Turbine Components; BLS green definition and state survey
Marine Trades	Marine Trades & Defense

RIEDC Clusters	NAICS Definition
Financial Services	Financial Services: 5211 - 5259
Tourism and Hospitality	Arts & Rec: 7111 - 7139; Accommodation & Food: 7211 - 7225



A SWOT analysis was conducted for each cluster. The analysis demonstrated that due to the limited size of most clusters and limited focus, Rhode Island should not focus on any specific cluster. Rather, FEC is recommending that Rhode Island focus on specific market opportunities presented by the alignment of key industries and assets. The graphic below illustrates three possible Market Opportunity Networks, and their complementary alignment, though further analysis will likely yield additional opportunities.

FIGURE G:
Linking Clusters to Market Opportunities



Advanced Marine Vehicle Market Opportunity Network

The Advanced Marine Vehicles Market Opportunity Network would include firms engaged in producing advanced boats and ships that are more energy efficient than current vehicles and energy independent or innovative in other aspects. It would include producers of components, parts and equipment for the bodies and engines of subs, ships and boats. This sector can leverage the presence of NUWC Newport and the state’s defense contractors as well as commercial marine vehicles and shipping trades.

Biotextiles, Implants and Devices Market Opportunity Network

The Biotextiles, Implants & Devices represents a possible Market Opportunity Network that would leverage the assets and resources of Rhode Island in biosciences research and commercialization. Biotextiles include implantable devices such as surgical sutures, hernia repair fabrics, vascular and endovascular prostheses, artificial skin, anterior cruciate ligament (ACL) prostheses and parts of artificial hearts.

This network can incorporate the Design & Consumer Products industries for design and product expertise to produce new biomaterials, surgical threads, medical supplies and implantable materials, parts and devices. In addition, this network can leverage manufacturers that produce components, parts, equipment or finished products. These may include medical devices for in vitro or in vivo uses as well as artificial prosthetics or other biomedical/biomechanical parts.

Culture, Fitness & Recreation Market Opportunity Network

The Culture, Fitness & Recreation Market Opportunity Network would reach a broad range of industries and sectors. It would connect the state’s strengths in marine trades with outdoor recreation and tourism. Emphasizing the access to the ocean, marine sports and other outdoor, sports or fitness activities can also use advanced textiles with (nautical or otherwise) sportswear, toys, games, fitness equipment and more. Tourists attracted to the beaches and oceans would also find that Rhode Island makes a variety of products that support their favorite activities and hobbies. The software and computer design component may also be involved through game development, sports or fitness applications, and design tools.

State Regulatory Environment Analysis

Rhode Island's regulatory system is not unlike its peers around the country. Over the years, regulations have been passed at the national, state and local level in an effort to protect public health, welfare and safety. The impact of these regulations, as well as their unintended consequences, is a subject of much discussion in Rhode Island and in other states. Many regulations have grown organically over time creating a maze of paperwork and compliance requirements that in many cases impedes or even prevents business from efficiently starting or growing operations. According to the Rhode Island Secretary of State's website, Rhode Island has over 1,600 regulations in place. While it is difficult to draw comparisons across states based on total number of regulations, Rhode Island has undertaken regulatory reform efforts that are comparatively in sync or slightly ahead of benchmark states.

Rhode Island continues to make progress in working to enhance its regulatory environment. This is being done in five ways identified during this study process:

1. The Office of Regulatory Reform continues to implement Governor Chafee's 2010 Executive Order to create a clear, predictable and reliable regulatory system. Additionally, on demand technical assistance to navigate the state and local regulatory system is provided to the small business community through the Small Business Ombudsman.
2. Rhode Island 2012 Public Law 445 requires each regulatory agency to review 25 percent of its regulations each year for four years until all existing regulations have been evaluated for any adverse impacts on small businesses. Governor Chafee accelerated this initiative by requiring the review to take place within a year and a half.

3. Regulatory agencies must provide an economic impact analysis for any proposed regulations that affect small businesses and cannot promulgate any new regulations during the review process unless they comply with the review mandate.
4. The Office of Regulatory Reform is also working with the State Building Inspector and the State Fire Marshal to create an electronic permitting system to improve customer service.
5. Department of Business Regulation continues to enhance its online tools such as its e-licensing system.

These efforts will make it easier for businesses looking to locate or grow in Rhode Island, who currently need to comply with dozens, potentially hundreds, of codes, regulations and operating standards.

The major sources or types of regulations that impact a business include:

- Building Codes
:: Including plumbing, mechanical, electrical, property maintenance, energy conservation and more.
- Department of Environmental Management
:: Including waste reduction and recycling, stormwater management, pollutions discharge and more.
- Fire Safety Codes
- Department of Health
- Department of Labor and Training
:: Including Occupational Codes, Family Medical Leave, Disability and more.
- Division of Taxation
- Jobs development act, corporate structure requirements, sales and use tax, and more.

Marketing Analysis

Marketing municipalities, industry sectors and the state of Rhode Island is vital for the economic growth of the state. As a result, FEC has conducted a review of online resources provided by the state to analyze the effectiveness of existing resources and provide suggestions for improvements as they relate to economic development best practices and in conjunction with other analysis provided throughout this report.

Online media were analyzed on a graduated scale throughout the process. State media were reviewed on usability, technical and analytical factors; industry sector media were reviewed on usability and technical factors; and local media were reviewed on usability factors.

The results of this analysis demonstrates the following:

- Content organization across state, cluster, and regional platforms lacks an asset-focused, business-friendly approach.
- The technical structures of many online resources are not optimized for maximum search capability.
- Social interaction, online conversations, and community generation across online media does not occur with regularity or with intent to foster an innovative network.

Please note that since the compilation of this data, both the RIEDC and Visit Rhode Island websites have undergone upgrades, which address some of the guidance provided by FEC in this report.



Rhode Island's Scientific Research & Development Services sector has seen a 21% growth since 2002.

21%

“Rhode Island's size and scale provide some unique market advantages such as easy access to political and business leaders, sense of community, one media market and blend of rural and urban settings.”



Guidance and Considerations for Rhode Island



Initial Guidance

The following section summarizes the initial guidance for the Rhode Island community and considerations for the Sustainable Rhode Island campaign.

1 Create One Voice – Set a Clear Course

- Empower a point person to lead and oversee the economic development planning efforts and serve as point for the plan and program strategies once established.
- More coordination, shared ownership of the state's economic development plan.
- Structure Communication and Transparency of the state's economic development plan and the state's economic development website should be retooled to serve this purpose.

2 Sustain Dialogue, Link Assets and Partners

- Establish Specialized Asset or Knowledge Teams to engage in the planning process and share their expertise to build consensus recommendations. Teams could include Financial, Tax Policy, Innovation and Incubation, Research and Higher Education, Tourism and Community Engagement.

3 Focus on Grow, Innovate (and Retain)

- Coordinate Existing Study Findings and Recommendations a great deal of analysis has been and continues to be performed. The gap seems to be in the implementation of recommendations.
- Further Promote, Expand and Market Existing Micro Loans and Grants to support more companies based in the state.

4 Implement a Business Climate Dashboard

- A business climate dashboard of individual metrics will allow the state to track progress towards its goals and to readily communicate its actions and results. In addition to the metrics outlined in the STAC "Benchmarking the Knowledge Economy" report, Rhode Island should track other business climate metrics around the areas of Investment, Talent, Sustainability, Place, and Diversity.

5 Convene Industry Leaders Around Market Opportunity Networks

- Convene and/or support a partnership of industry leaders and other stakeholders around the specific opportunities. These groups could be involved in the Sustainable Rhode Island campaign in the short-term. Ultimately, such a group would:
 - :: Promote research and commercialization
 - :: Support the alignment of incubator and accelerator programs
 - :: Host business networking events to match needs and assets and promote business development
 - :: Create a mentoring program that can provide industry expertise to new and expanding firms

6 Continue to Advance Regulatory Reform

- Continue the current surveying and analysis of regulations that affect businesses in the state. If possible add additional resources to expedite the process and to develop recommendations for the current legislative cycle.
 - :: Increase the resources available to the Office of Regulatory Reform to provide additional hiring capacity (state or contracted employees). This investment would allow for an expedited review and analysis process and demonstrate to the business community and economic development community a commitment to regulatory improvements.
- When regulatory analysis is complete review the impacts against the industry cluster recommendations contained in this report.
- Continue to communicate to the stakeholder and business community regarding the efforts and progress of the Office of Regulatory Reform. Continue to publish annual reports that allow the business community to gauge the process and results.
- Perform similar scenario exercises with all agency and municipal regulators participating so that all can see the overlap of regulations, difficulty to comply and economic impact that a company will face.

Considerations for Sustainable Rhode Island Campaign

1 Focus on Grow, Innovate (and Retain)

- Create a statewide incubator network and seek to expand existing incubators and Innovation Resources to support regional and national trends around small business creation and entrepreneurship.
- Invest in entrepreneurship...once partners in place. Rhode Island, first and foremost, needs to develop statewide and community-level, partnerships to implement its economic development priorities. Once those partnerships are established, particularly with colleges and universities, the State should consider match-investing in incubators and co-working spaces, entrepreneurial programming, and other financing mechanisms needed for the businesses of entrepreneurs to grow and prosper.

2 Evaluate financial resource programs

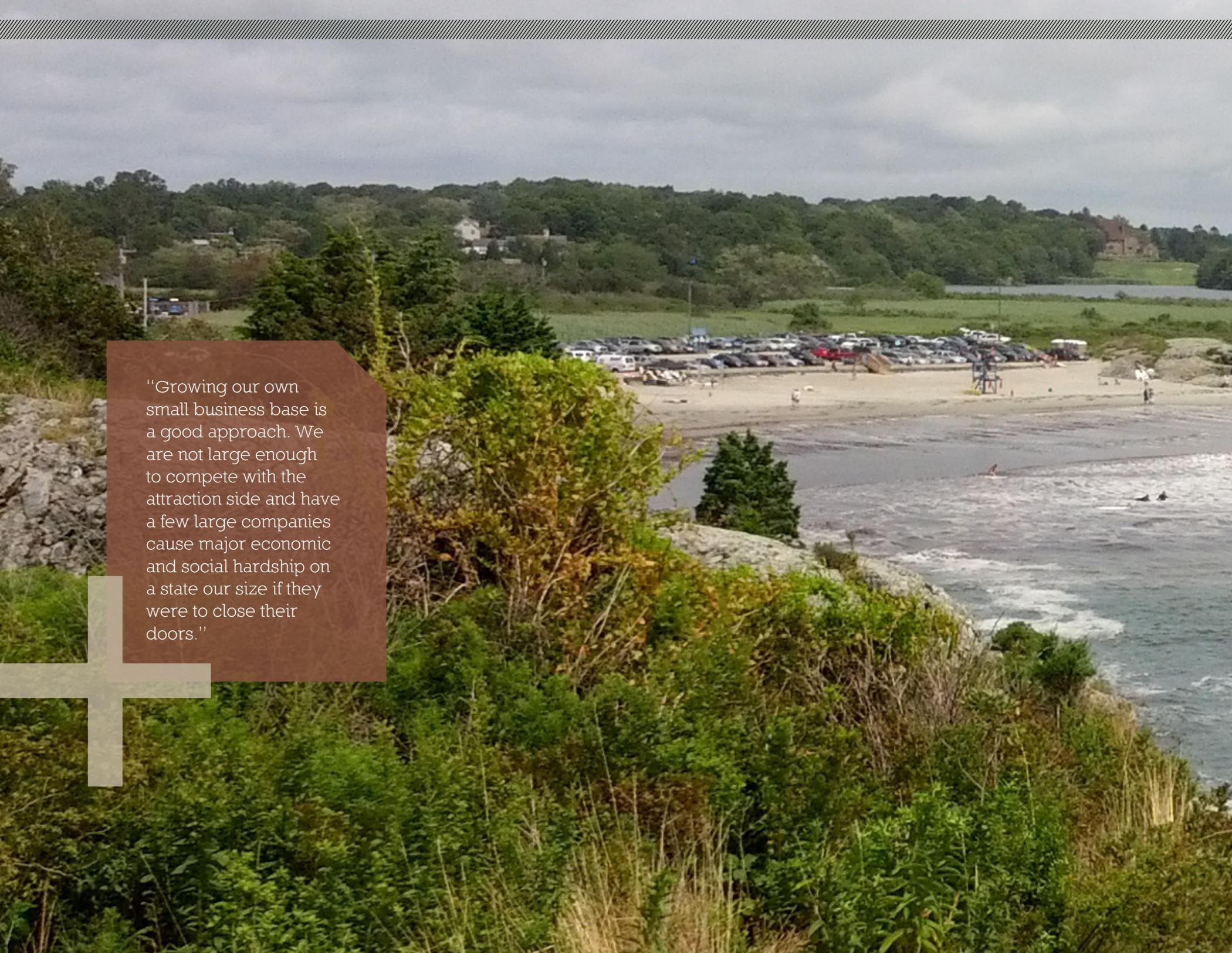
- Create and implement a financial resource program evaluation protocol to create more transparency and improve understanding of economic development investment outcomes.

3 Define and validate Market Opportunity Networks

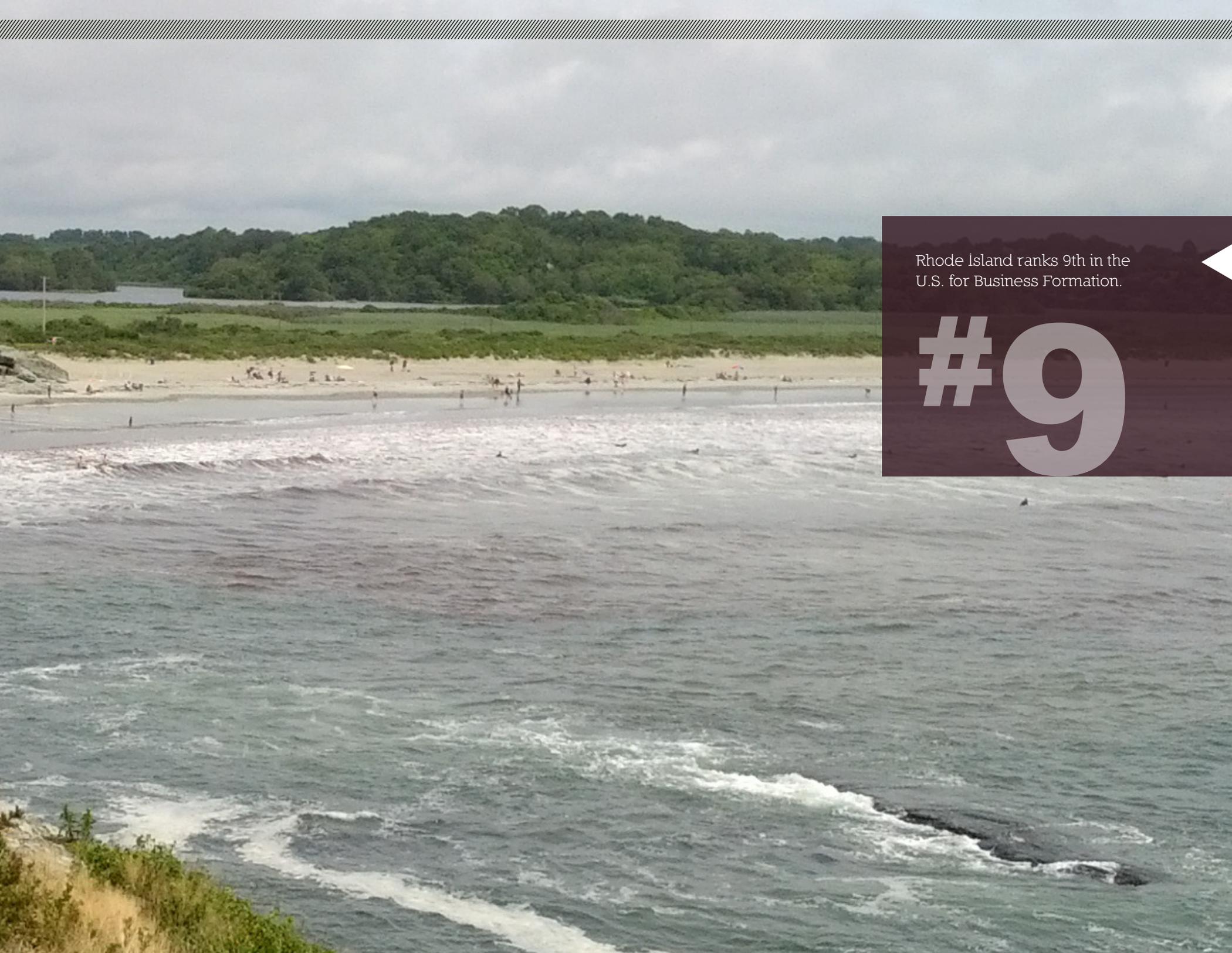
- Define and validate specific cross-cluster market opportunities.
- Identify critical gaps in the redefined Market Opportunity Networks.

4 Continue regulatory reform efforts

- Identify regulations that can be eliminated or consolidated.

A scenic view of a coastal area. In the foreground, there is a rocky cliffside covered in lush green vegetation. In the middle ground, a large parking lot filled with cars is situated on a sandy beach. Beyond the parking lot, there is a body of water with waves breaking. In the background, there are rolling green hills and a few buildings. The sky is overcast with grey clouds.

“Growing our own small business base is a good approach. We are not large enough to compete with the attraction side and have a few large companies cause major economic and social hardship on a state our size if they were to close their doors.”



Rhode Island ranks 9th in the
U.S. for Business Formation.

#9

Rhode Island ranks
5th for Foreign Direct
Investment.

#5



1.0 Business Climate Analysis

1.1 Business Climate Report (Rankings Analysis)

The term business climate refers to the ways in which a community or state and the related community assets support business development. A key task within the business climate analysis was an examination into how Rhode Island has performed in national business climate rankings, both overall and in comparison to its neighboring and/or peer states. Given the negative publicity that Rhode Island has received due to its position within many of these rankings, it was necessary to take a closer look to determine what could be learned and improved upon to better the State's business climate. Over 20 businesses and business support organizations were also interviewed to provide additional insight, beyond the data, into the pros and cons of doing business in Rhode Island. Their comments offer additional insights and possible strategic direction related to key measures and ranking categories.

1.1.1 Rankings in Context

There is no doubt that state performance rankings attract a lot of attention. They are of great interest to the media, elected officials, the business community and residents at-large. But they are only one part of a very complex economic performance story. Further compounding the use of and reliability of rankings is the fact that not all adopt the most rigorous, relevant or transparent methods, and positive or negative scores do not impact all businesses in the same way.

In order to identify and understand the more valid and relevant rankings, it is critical to examine the data points and how they may align with an overall strategy discussion. With that said, four key cautionary points should be made when looking at business climate rankings.

Bundled Thinking

Rankings too often present all places equally. While these studies often adjust for population or other normalizing methodology, they cannot easily reflect a state's culture, history, regional diversity, unique asset base or strategic goals. Some sectors are highly cost driven and demand interstate access while others value research assets and access to venture capital. Rankings that do dig deeper into sector performance or asset analysis assume that those sectors or assets are valued equally for all states or regions. Obviously this is not always the case.

Media Outlets (Advertising, Focus, Transparency)

Rankings and “best places” reports that are produced by larger media outlets such as CNBC and Forbes, travel or business publications are popular, but they should be considered within the context of their larger business and mission. First, while media organizations have the resources and talent to conduct rigorous analyses they are also reliant on advertisers. While this fact may not directly influence the analysis, it is a consideration when comparing those efforts with other more independent research results. Second, rankings research is not a media outlet's core expertise or focus area. While they can be related, their rankings draw a much broader audience and are intended to do so. Helping a state improve upon or maintain their ranking is not a primary directive. Finally, media outlets often do not reveal their detailed methodologies (or when changes in those methodologies are made), data sources or reasoning why one data point was chosen over another. Consequently, we have chosen not to include rankings from outlets such as CNBC and Forbes as part of this study.

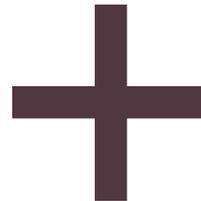
Self Reporting and Surveys

Rankings developed primarily through self-reporting and surveys, such as site selection rankings, may provide a snapshot of a business climate or state's performance, but they are only doing so through one perspective or experience. CEO surveys and expansion project competitions are examples of how some rankings are developed. This approach can raise questions on the quality of the survey tool, marketing efforts and response rates. Again, while they may be useful in the context of performance, they may not offer an accurate reflection of a states actual economic performance or condition.

Ability to Affect Change

Place based factors such as climate, neighboring metros, and natural assets such as lakes, mountains and beaches are all subject to personal preferences and experiences. While these factors are beyond the control of any policy maker, they still influence and are part of many best place rankings. It is critical to determine to what degree a ranking and measures within rankings can actually be influenced or changed and in what time frame.

Understanding the methods and reasoning behind rankings can greatly enhance a state's ability to plan strategically and address key performance measures.



1.1.2 Moving Beyond the Rankings

While it is very important to take a critical look at state rankings, it is important to keep in mind that Rhode Island is not Texas, and Texas is not North Dakota. The idea of rankings presents a linear type of thinking that does not necessarily reflect the condition, assets and opportunities that lie within each unique location. So while the overall ranking performance is important, it is also important to move beyond the overall rankings mind-set and drill deeper into specific measures that make up those rankings. Rhode Island should further consider the context of the rankings and choose to monitor the most credible and relevant measures contained therein.

Choosing the Rankings

For the analysis, several factors helped to inform which business climate rankings were selected. First, the consulting team was asked to review an initial group of rankings currently monitored by the Rhode Island Economic Development Corporation. Rhode Island asked for suggestions on which from that initial list should be eliminated and which should be added. FEC applied the four “rankings in context” points discussed above while also drawing upon our own experience with some of the more highly valued and recognized state rankings and organizations.

We then considered the general economic and statistical trends occurring within Rhode Island to ensure there was an appropriate alignment between the challenges and opportunities reflected in those trends with the types of measures and metrics evaluated among the possible ranking reports.

In order to complement rather than duplicate information already known, FEC also consulted three recent business climate and competitiveness reports prepared by the Rhode Island Public Expenditures Council (RIPEC), one of which was conducted in partnership with KPMG and Ernst and Young. Each of these reports evaluated several of the rankings analyzed here by FEC.

As a result the following rankings/organizations were chosen for analysis.

The Rankings/Organizations:

- 2012 State New Economy Index – The Information Technology and Innovation Foundation (ITIF) defines the “New Economy” as one that is reliant on knowledge and innovation for growth. ITIF produces the State New Economy Index to help determine the degree to which the structure of a state’s economy matches the ideal structure of the New Economy.

Full Report:
www2.itif.org/2012-state-new-economy-index.pdf

- 2011 Beacon Hill Institute Competitiveness Index –The Beacon Hill Institute (BHI) competitiveness index is based on a set of 44 indicators divided into eight sub-indexes – government and fiscal policy, security, infrastructure, human resources, technology, business incubation, openness, and environmental policy. The breadth of the BHI index distinguishes it from more narrowly focused measures of competitiveness that target only taxes, high tech, or economic freedom.

Full Report:
www.beaconhill.org/Compete11/Compete2011.pdf

- 2013 Corporation for Enterprise Development (CFED) Scorecard – The Corporation for Enterprise Development Assets & Opportunity Scorecard is a comprehensive look at Americans’ financial security today and their opportunities to create a more prosperous future. It assesses the 50 states and the District of Columbia on 101 outcome and policy measures, which describe how well residents are faring and what states can do to help them build and protect assets.

Full Report:
<http://assetsandopportunity.org/scorecard/>

- 2011 Small Business Entrepreneurship Council (SBEC) Council Survival Index – The Small Business Entrepreneurship Council’s Small Business Survival Index ranks the 50 states and District of Columbia according to some of the major government-imposed or government-related costs affecting investment, entrepreneurship, and business. The Index ranks the states according to their public policy climates for entrepreneurship.

Full Report
www.sbecouncil.org/resources/publications/survivalindex2011/

- 2013 Tax Foundation State Business Tax Climate Index - The Tax Foundation’s 2013 edition of the State Business Tax Climate Index enables business leaders, government policymakers, and taxpayers to gauge how their state’s tax systems compare. The index is a hierarchical structure built from five components: Individual Income Tax, Sales Tax, Corporate Income Tax, Property Tax, and Unemployment Insurance Tax.

Full Report:
http://taxfoundation.org/sites/taxfoundation.org/files/docs/2012_tax_foundation_index_bp62.pdf

- 2012 University of Nebraska State Entrepreneurship Index – Prepared by The University of Nebraska - Lincoln Bureau of Business Research, the State Entrepreneurship Index is used to track entrepreneurship in all 50 states. The index is composed of 5 components that consider the income of entrepreneurs, business formation rates, technological innovation, and growth in the number of entrepreneurs.

Full Report:
http://bbr.unl.edu/documents/September_2012_BIN.pdf

While this is not an exhaustive list by any means, it does provide a relevant and rigorous base of business climate indicators given the objectives for this analysis and in the time allotted. Full definitions for each of the individual measures and information on methodologies each organization employed to develop their rankings can be found within each ranking report.

**FIGURE 1:
 Rankings/Organizations Abbreviations**

Resource	Abbrev.
Beacon Hill Institute	BHI
Corporation for Enterprise Development	CFED
New Economy Index	NEI
Small Business Survival Index	SBSI
Tax Foundation	TF
University of Nebraska	UN

The Methodology

First, FEC was asked to provide Rhode Island with an overall ranking summary that compares Rhode Island to its regional neighboring states and suggested peer states. The regional neighboring states were identified as Connecticut, Massachusetts, and New Hampshire. FEC suggested that Delaware be included as an additional peer state due to its similarities in overall population, number of counties contained within each state (Delaware with 3 and Rhode Island with 5), and geographical character (size and port locations). FEC assembled the data contained in each of the 6 ranking reports to reflect the change over time for the past three years (when available). That summary chart is included as part of the Business Climate resource on the RIEDC website.

While this overall ranking comparison does provide a quick visual for how Rhode Island compares to its neighbors and peers, it does not offer any new insights for Rhode Island that have not already been documented in recent reports. Nor does it offer a very useful planning tool to address Rhode Island’s challenges and leverage its strengths and affect change. For that we need to drill down a bit deeper and take a different approach.

An overall ranking tells one story, the individual measures that constitute the ranking or index provide more strategic guidance. In this case, each of the overall ranking or index provides several individual measures that are also ranked on a scale from 1 to 50. When combined, these measures produce the score for that respective overall ranking.

In order to most effectively visualize and analyze these measures, FEC employed its Fourth Economy Index methodology. The Fourth Economy Index is an initiative launched in 2010 to provide a baseline county-level capacity measure and tracking for modern economic growth. More information on the Fourth Economy Index can be found at www.FourthEconomyIndex.com.

Based on how each of the six ranking organizations defined each measure, FEC assigned each measure to one of the following five Fourth Economy Index categories:

Investment considers measures that relate to or impact the amount of wealth generated or available in a defined economy.

Talent considers measures that relate to the quality and availability of a high valued workforce, education, and resources to support innovation.

Sustainability includes measures of a community's ability to conserve environmental, social, and economic resources for the next generation.

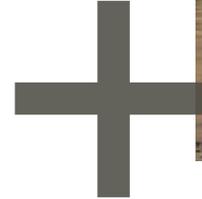
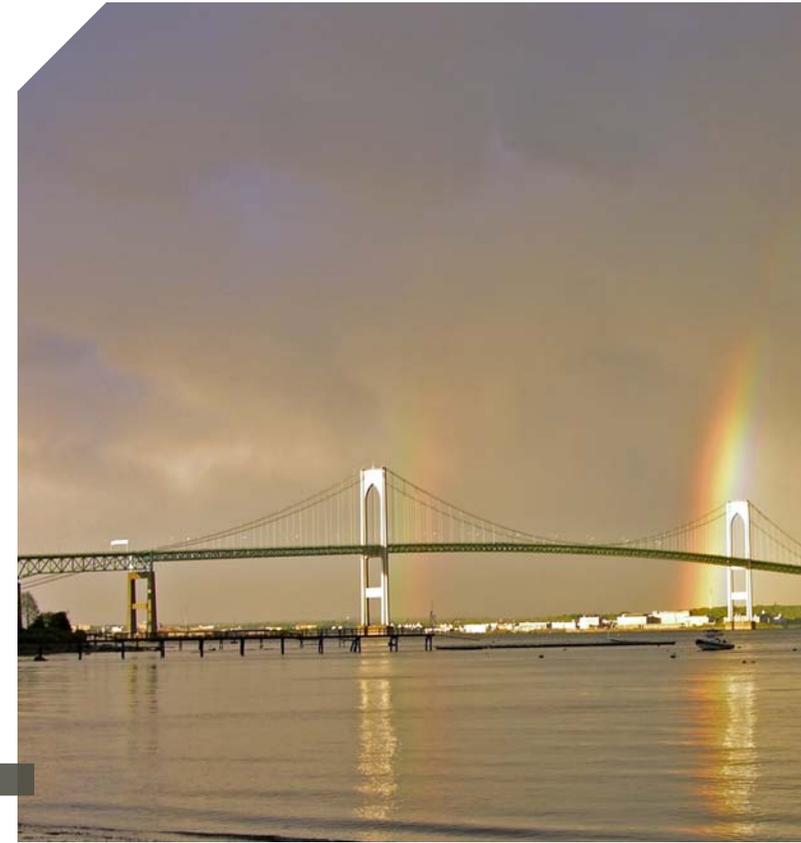
Place includes measures that relate to the quality of a resident's (or business's) life.

Diversity includes measures that relate to the overall economic, social and cultural diversity of a location.

Within each of these categories, the measures were placed within a bottom, middle or top quintile and color-coded (red/yellow/green) based on their 1 to 50 ranking. This approach helps to further operationalize the rankings, producing a clear visual, or dashboard, of the challenges and opportunities and driving the discussion toward potential action areas and to what degree the various measures may support or align with sector development opportunities. All of these measures, along with an analysis of their performance over the past three years, can be found in the Business Climate reference on the RIEDC website.

The following sections highlight the five Fourth Economy Index categories and the associated measures for each. FEC further points out:

- Notable challenges (What's Holding Rhode Island Back?),
- Strengths (The Upside), and
- Excerpts from the 22 interviews conducted with Rhode Island businesses and economic development organizations (featured throughout the report).



The PONT Group is focused on improving Rhode Island's position in top rankings and indices that benchmark the states. Some examples of these are the *Forbes Best States for Business Ranking* and *Chief Executive Magazine's Best and Worst States for Business Ranking*. There are many key indices which will be targeted in an effort to improve perception of Rhode Island as a good place to live, work, and do business. The program is an important component to building positive perceptions of Rhode Island as an investment destination. Rhode Island's ranking program will consist of conversations with the rankings authors to ensure they are receiving accurate and current economic data for Rhode Island, and The PONT Group will work with them to correct any incorrect information they may have. There will also be opportunities to include Rhode Island-centric narrative in the editorial surrounding the rankings. Some of the rankings are subjective and not based on data, but surveys. In those instances, we will work to improve perceptions of the publications' survey base through public relations and good news stories about the state.

1.1.3 The Analysis: Investment

Investment considers all measures that relate to or impact the amount of wealth generated or financial resources available in a defined economy.

Investment is the largest of the five categories framing the business climate ranking analysis. The measures contained within the Investment category are all about money, wealth and access to capital. It also captures Rhode Island's best documented challenge - its tax climate.

What's Holding Rhode Island Back?

While there have been steps taken to address the state's tax climate in recent years, such as adjustments to the personal income tax rate, work in this area still remains. Property taxes, unemployment insurance taxes, corporate income taxes, and gas and utility taxes present a higher than average burden to all residents and businesses and is reflected in the rankings.

While the tax climate remains a challenge and impacts all businesses and residents to some degree, not all businesses view it the same way. Those businesses that are attracted to Rhode Island for its high value resources such as its higher education, research

base and quality of life, are more likely to show a greater resiliency towards paying higher taxes. And in areas such as property tax, corporate tax and unemployment insurance, Rhode Island, Connecticut and Massachusetts all fall within the bottom quintile according to the Tax Foundation. Stakeholder interviews reinforced that this issue is important for many private companies in the state. The northeast generally has a higher cost structure but with high value resources.

An additional consideration is that not all businesses are subject to Rhode Island's higher Corporate Level tax rate (9.9 percent). Many smaller businesses and start-ups are more likely to be registered as LLCs or Sub-Chapter S corporations and subject to Rhode Island's Personal Income tax rate of 4.75% percent for an individual single filer. While it is difficult to say how Rhode Island's performance would improve if the state chose to address its corporate and property tax as well as unemployment insurance, the Tax Foundation did bump the state up 6 places from 43 to 37 on the Personal Income Tax measure (between the 2011 to 2013 Tax Foundation Ranking) on the heels of the state lowering that rate. Depending on the how aggressively the state chooses to address the other tax rates, one could expect a similar performance improvement.

Center for Enterprise Development
2012 Scorecard Report

Promote College Savings: To decrease college debt and increase college attainment for people of color, Rhode Island should improve its 529 college savings plan by minimizing barriers to savings for low-income families, such as the creation of a no-fee option for accounts.

The Upside

Rhode Island has been performing well in several key measures that support a focus on technology, capital investment, entrepreneurship and new wealth. The state is the mid or top quintile in key areas such as Sales Taxes (25), Average Annual Pay (27), Venture Capital (20), and Small Business Ownership Rates (14). Rhode Island has showed significant gains in the New Economy Index tracking of growth in High-Tech Jobs; the state is the fastest mover in the nation, moving seven spots since 2010 to 16 overall.

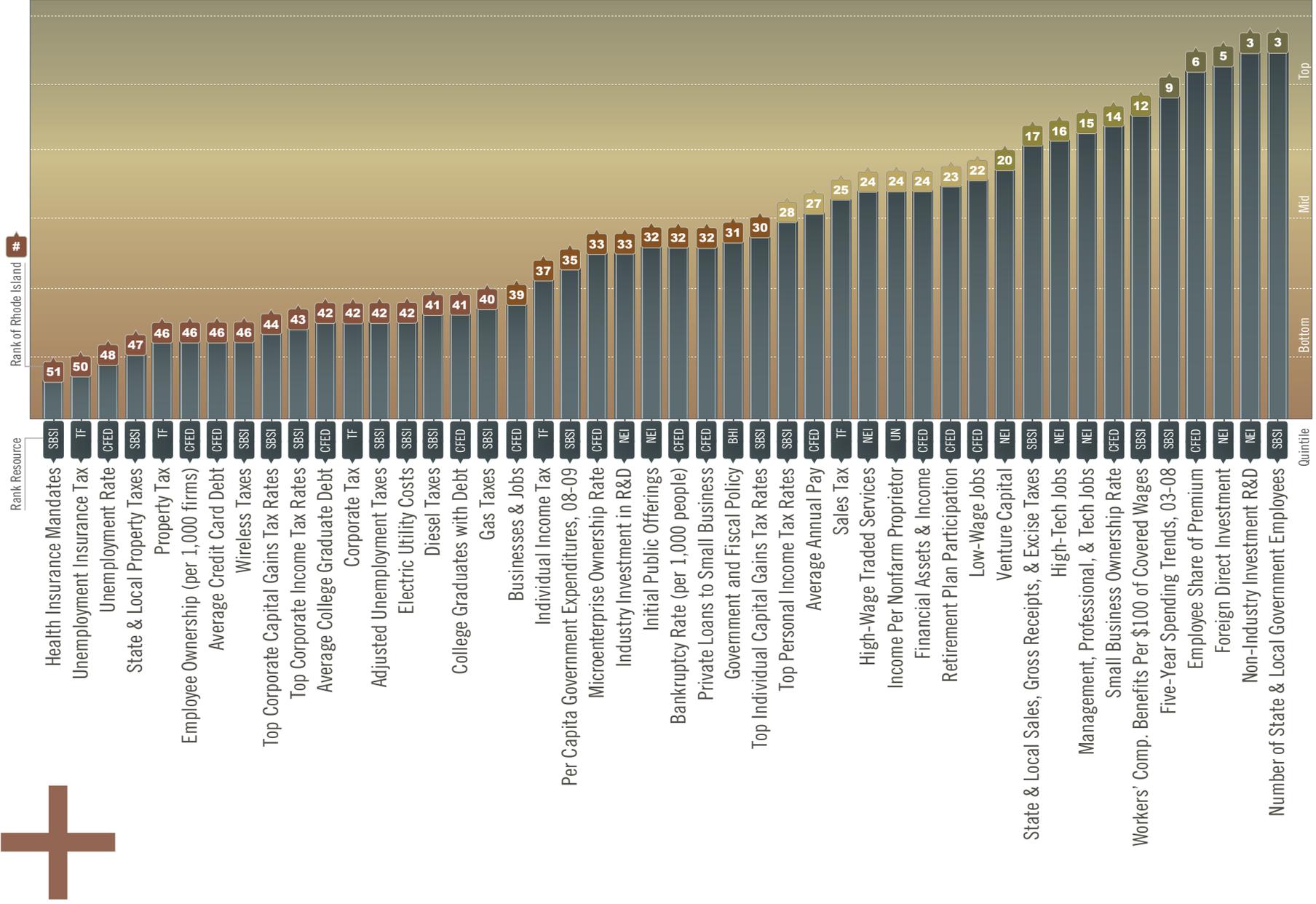
Rhode Island's high value northeast location along with its port and maritime related assets has the state ranked number 5 in Foreign Direct Investment (New Economy Index – 2012). The top five include two of Rhode Island's neighbors, New Hampshire (1) and Connecticut (3). The New Economy Index defines Foreign Direct Investment as the state's share of workers employed by foreign-controlled companies. While it is likely that a majority of this share has resulted from foreign companies acquiring existing U.S. establishments in recent years, it remains a critical indicator of a state's ability to attract and grow viable investment from international sources.



"Rhode Island has shown its willingness to tackle its problematic tax system. Tax pundits were surprised when the state became a flat-tax pioneer, and the broad consensus for improvement means that this may be the Ocean State's moment. Rhode Island can compete with its border states and beyond, and it has recently shown the political will to do so. As the economy improves, capital and investment will flow to those states best positioned for it."

Tax Foundation 2013
State Business Tax Climate Index

FIGURE 2:
Investment Measures [latest year data available]



1.1.4 The Analysis: Talent

Talent is by far the most important ingredient for a competitive and sustainable economy. High value human capital and a steady flow of it helps to fuel innovation, sustain profitable legacy industries and attract capital sources.

What's Holding Rhode Island Back?

While Rhode Island only has 4 measures in the lower or bottom quintiles, they are notable. The New Economy Index has placed the state 50th in the Educational Attainment of Recent Migrants from Abroad age 25 and older. This cohort has been cited as a key driver for innovation, patents and founding high growth or “gazelle” firms. Only Massachusetts placed in the top quintile (12) on this measure among Rhode Island’s neighboring states.

While attracting immigrants with advanced degrees is important, ensuring a solid K-12 performance is equally critical. Not only do the K-12 systems represent the future talent source, well performing systems help to attract and retain investment. Rhode Island has produced mid-quintile scores in 8th Grade Reading Proficiency (27), and 8th Grade Math Proficiency (26). But the state has produced lower scores in Early Childhood Education Enrollment (43) and the Percentage of population 25 years old and over who have at least a high school degree, GED or alternative degree (42). The Brookings Institution recently published a paper on the Education Gap, defined as the years of education required by the average job vacancy in a metro area divided by the years of education attained by the average working-age person in that area. The Providence metro area ranked 83 out of the 100 largest metros.³ This points towards areas for further research and improvement.

The Upside

There are several key positives for Rhode Island in the Talent category, and these are important. While the state may perform poorly in attracting educated migrants from abroad, the New Economy Index places Rhode Island among the top performing states in Attracting U.S. Knowledge Workers. Rhode Island takes the third spot only behind Massachusetts (2) and Vermont (1). According to the New Economy Index, factors that drive the migration of knowledge workers include having a strong higher education system, a large number of high-wage, professional and managerial jobs, as well as a high quality of outdoor life.

The New Economy Index cites research that for every 1 percent increase in a region’s level of educational attainment there is a .04 percent increase in per-capita real income. This trend also raises the wages on average for other cohorts, even those with less than a high school education. Rhode Island performed in the top quintile for the two-year (18) and four-year (14) college degrees.

The Beacon Hill Institute also highlighted Rhode Island as the number 3 state for “Technology.” Its study combines several key measures under Technology to include Academic Science and Engineering R&D, Patents per 100,000 inhabitants, Science and Engineering Graduates and Employment in the High Tech Industry – all key talent base indicators demonstrating Rhode Island’s capacity to support high value, high growth enterprises.

³ Rockwell, Jonathan. Education, Job Openings, and Unemployment in Metropolitan America. Rep. Metropolitan Policy Program at Brookings Institute, n.d. Web.

FIGURE 3:
Talent Measures [latest year data available]

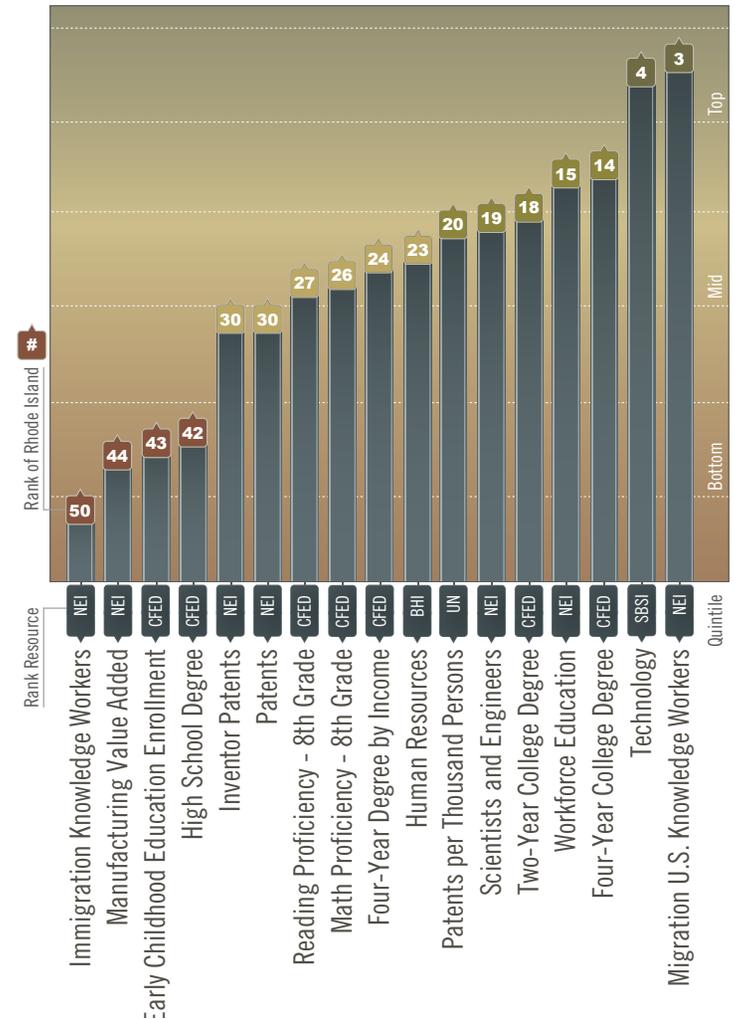
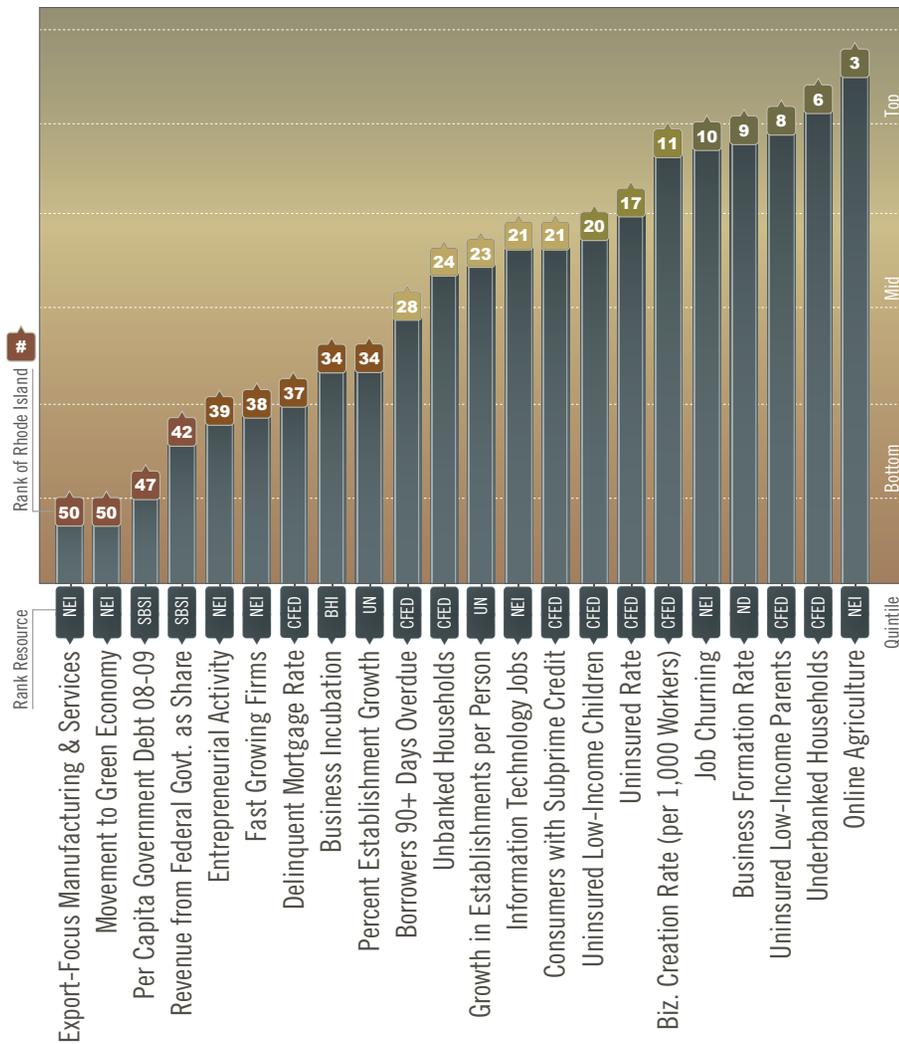


FIGURE 4:
Sustainability Measures [latest year data available]



1.1.5 The Analysis: Sustainability

Sustainability includes measures of a community’s ability to conserve environmental, social, and economic resources for the next generation.

Given the nature of the rankings analyzed for this effort, the majority of the indicators reference economic sustainability. As communities, states and regions, we must all think about how our decisions and choices today will impact our long-term economic and social capacity.

What’s Holding Rhode Island Back?

Ensuring a sound fiscal environment for residents and businesses is an issue of economic sustainability. How long and far can an economy go if new businesses are not starting up and both personal and government debt continue to cloud confidence for the future? This is not just a question for Rhode Island, but the nation as a whole as we are all well aware.

For Rhode Island several key measures pose a challenge for economic sustainability such as Per Capita Government Debt, a reliance on Revenue from the Federal Government, Entrepreneurial Activity and Business Incubation. In each of these areas Rhode Island ranks in the bottom quintile. While the debt picture is likely a longer-term policy discussion and Rhode Island can gain comfort that “you are not alone” in that debate, the entrepreneurial issues can be (and should be) addressed sooner.

Corporation for Enterprise Development

“The recession and its aftermath have left unprecedented numbers of Rhode Island families financially insecure: 14% of households are poor. However, even more families in Rhode Island are financially vulnerable. The 2012 Assets & Opportunity Scorecard shows that 22% are asset poor, meaning that they lack the financial resources – money in the bank, assets in a home or car – to weather a job loss or other emergency.”

There are also several measures in the low to mid quintiles related to personal debt and financial security. The Corporation for Enterprise Development (CFED), which monitors many of these measures, suggested that in order to protect homeowners and stabilize communities, Rhode Island should “adopt policies that prevent unnecessary foreclosures, protect homeowners going through the process, help borrowers recover after a foreclosure and stabilize communities by enabling land banking of foreclosed properties.” While Rhode Island does have a land bank and provisions for it, that process may be reviewed to determine where it could be improved and more widely utilized.

“This year, Rhode Island ranks 19th, with a competitiveness index of 5.39. The state has clear strengths in technology and security. However, it ranked below the national mean on fiscal policy, infrastructure and business incubation... Suppose that Rhode Island were to raise these sub-indexes just to the national mean of 5.0, surely a manageable proposition; then its ranking would rise to 13th in the nation, its index would increase to 5.81, and state GDP would increase by an estimated \$800 million annually.”

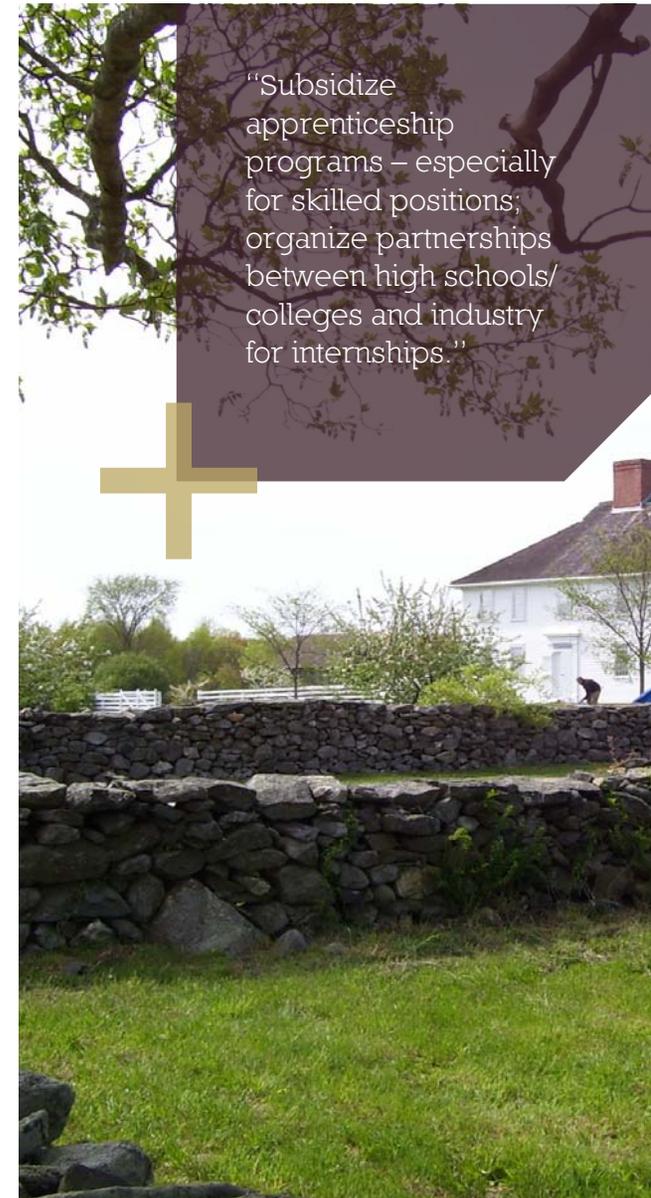
Beacon Hill Institute
11th Annual State Competitiveness Report - Page 11

The Upside

While the cost of health care may be debated both within Rhode Island and nationally, Rhode Island overall ranks well on several key health care measures. CFED places Rhode Island in the top quintile on the health care coverage of Low-Income Children (20) and Parents (8), and the overall Uninsured Rate (17). Protecting and ensuring the health and quality care of residents of all income levels is a fundamental sustainability measure. Stakeholders have cited the cost of health related regulations as a weakness of the state but a balance can be struck to ensure cost and system performance are aligned. The Office of Regulatory Reform is currently conducting an analysis that will provide additional insights into the real impacts of health care costs (see Section 4 for more information).

There are also strong indicators on the economic sustainability front. Both CFED and the University of Nebraska’s State Entrepreneurial Index note Rhode Island’s business creation performance. The University of Nebraska’s ranking moved Rhode Island up from 11 to 9 for the rate of New Businesses Formed (establishment births per person) between 2010 and 2011. CFED also placed Rhode Island high at number 11 for creating New Businesses per 1,000 Workers.

Another key factor is Job Churning. The New Economy Index defines “job churn” as the number of business establishment start-ups and failures as a percentage of total establishments. On this measure Rhode Island was ranked number 10. The report notes that, “Steady growth in employment masks the constant churning of job creation and destruction, as less innovative and efficient companies downsize or go out of business and more innovative and efficient companies grow or take their place...Along with jobs and income, it is frequently these entrepreneurial businesses—including new manufacturers—that bring fresh new ideas and innovations to the marketplace, replacing those of less innovative incumbents, and thus raising living standards.”⁴



“Subsidize apprenticeship programs – especially for skilled positions; organize partnerships between high schools/colleges and industry for internships.”

⁴ Atkinson, Robert D., and Luke A. Stewart. The 2012 State New Economy Index. Rep. Information Technology and Innovation Foundation, n.d. Web. Dec. 2012.

1.1.6 The Analysis: Place

Place includes all measures that relate to the quality of a resident's (or business's) life.

Place-based factors have a strong influence on investment decisions and potential investors' perceptions of a city, region or state, yet they are also among the most difficult to quantify and systematically affect. While crime, commute times, housing quality and costs can be measured, how individuals value civic spaces, recreational assets and the quality of the built environment is more difficult to interpret. Most often evaluating place-based assets represents a healthy blend of measureable factors, personal tastes and experiences.

What's Holding Rhode Island Back?

Many of the place-based challenges facing Rhode Island are also common among its neighboring states and the northeast region in general. The state is in the bottom quintile in Housing Costs (46), Home Ownership (46) and Overall Affordability (43). That being said, housing costs, whether renting or buying, are more affordable than neighboring New England States (see Section 1.2.3). This presents an opportunity for reframing the discussion around these low rankings.

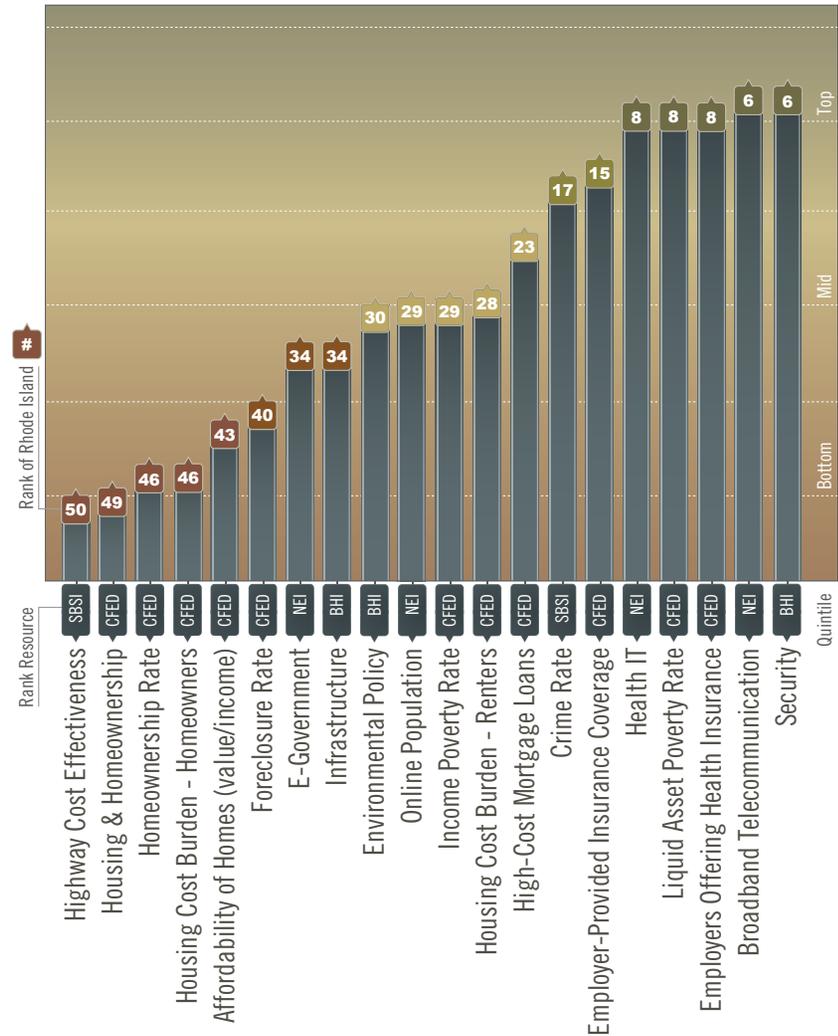
Another Rhode Island challenge is one shared with the northeast region. Weather and extremely high traffic volumes place most of Rhode Island's major highway arteries into a constant state of repair. As a result, Rhode Island's highway infrastructure and the cost effectiveness of that infrastructure were ranked 50 out of 50 by the Small Business and Entrepreneurship Council's ranking index.

Another challenge represented in both the rankings and in stakeholder interviews was Rhode Island's use of E-Government services. The New Economy Index ranked Rhode Island 34 in this category.

The Upside

It was not that long ago that highways and off ramps were the most critical infrastructure factor in economic development. In many industry sectors this transportation infrastructure is less critical than a company's internet connectivity to the global marketplace. On this point Rhode Island shines, listed in the top 10 by most rankings and number 1 by game publisher and software distributor Pando Networks noting in their 2011 report that "Rhode Island is the fastest state in the Union, averaging 894KBps..." This is thanks in no small part to Broadband Rhode Island, an initiative of the Rhode Island Economic Development Corporation that works to create new opportunities by expanding broadband use and digital literacy across Rhode Island.

FIGURE 5:
Place Measures [latest year data available]



“Entrepreneurs fuel the economy and job growth,” said Karen Kerrigan, President and CEO of SBE Council. “Fostering U.S. innovation, particularly in the technology sector, is critical to ensuring our country’s continued global leadership and economic competitiveness. Broadband connectivity, particularly through mobile devices, is propelling entrepreneurs and new businesses responsible for creating millions of new jobs every year.”

While Rhode Island also performs well in key health care coverage and safety measures, several key assets exist for the state that are harder to quantify but no less important. Rhode Island offers a geographic diversity that includes a highly valued shoreline, urban centers and rural regions. Stakeholder interviews affirmed that the size of the state allows for a highly connected market with the ability to network with policy makers and between businesses. They also point towards shorter commutes, a stable workforce and market proximity to Boston and New York without the higher lease rates as key place-based advantages.

Rhode Island ranks 6th in the country for Broadband Tele-communications.

#6

“Despite being in the highly dense northeast corridor, our workforce has relatively short and easy commutes.”



1.1.7 The Analysis: Diversity

Diversity includes measures that relate to the overall economic, social and cultural diversity of a location.

Economic, demographic and cultural diversity has strong associations with economic growth, performance and sustainability. Diversity in a population and economy helps to generate new ideas, perspectives, and innovation. Therefore, even though traditional business rankings pay little attention to diversity measures (as demonstrated by the fact that the CFED ranking is the only one we analyzed with any real diversity measures), it is nevertheless critical for states to consider. PolicyLink, a national research and action institute, was conducting a more detailed examination of diversity in Rhode Island as FEC was developing this business climate study, but we have also highlighted a few key diversity measures.

What's Holding Rhode Island Back?

Rhode Island generally ranks low in key diversity measures, such as Four-Year Degrees by Race, Unemployment by Race, and Homeownership by Race, i.e. there is a greater disparity between non-Hispanic whites and people of color in rates of educational attainment, employment, and homeownership. This is most likely a function of its overall demographic structure. Rhode Island has a higher percentage of non-Hispanic White residents (76 percent) as compared to the U.S. average (64 percent). While low rankings in measures related to diversity are not a direct indicator of failing policies or a lack of a welcoming environment, they should

be examined closely to determine if there are any conditions or policies creating unintentional barriers to the State performing higher in these areas. This is especially important given the shifting dynamic of Rhode Island's demographics, according to research done by PolicyLink. Over the last 30 years, the percentage of Rhode Island residents of color has increased from seven to 24 percent. In just the last decade, Rhode Island's Latino population grew 44 percent, the Asian population grew 28 percent, and the African American population grew 23 percent. Meanwhile, the non-Hispanic white population declined by six percent.

The Upside

Rhode Island scored in the mid quintile for Business Value by Gender and Business Ownership by Race. The Beacon Hill Institute (BHI) also ranked Rhode Island 21st for Openness, which it defines as "a measure of how connected the firms and people in the state are to the rest of world." BHI based this measure on the level of exports as well as the percent of population born abroad. Each of these key diversity measures present Rhode Island with a solid core upon which to build.

Furthermore, Rhode Island has experienced income gains for all levels of earners. Whereas nationally, the bottom half of earners have actually experienced wage decreases over the past three decades, Rhode Islanders' wages have been increasing. This has contributed to Rhode Island's lower than average income inequality and poverty rates.

FIGURE 6:
Diversity Measures [latest year data available]



"We need to pay particular attention to minority-owned businesses. Immigrant populations especially are often very entrepreneurial but have higher barriers to start-up to include language skills and business planning."



1.2 Cost of Doing Business

A company’s cost of operations in a specific location is dictated by a variety of factors including taxes, tax expenditures, housing, energy, labor and transportation. These costs can support a company’s growth or location decision-making and are often cited as the most important indicators of a state’s or a community’s competitiveness.

1.2.1 Taxes

According to data pulled from KPMG and the Tax Foundation’s seminal “Location Matters” report, Rhode Island’s tax structure does not compare favorably either nationally or regionally. In nearly all categories (highlighted comparisons shown in Figure 8), Rhode Island has a higher tax rate than most of its peer states.

It fares particularly poorly with its Corporate Income Tax Rate (at 9%, at least 0.3% higher than the next lowest), published Sales Tax Rate (7%), and its expected effective tax rates for newly established labor-intensive manufacturing and R&D facilities (13.2% and 23.9%, respectively).⁵ Because this data does not consider the sales tax base in its comparison, while the Tax Foundation Index does, Rhode Island does in fact fare better in terms of sales tax in the rankings analysis (see Section 1.1.3).

⁵ For Providence, and related “Tier 1” cities as selected by KPMG and the Tax Foundation; sales tax data exclude exemptions for manufacturing

FIGURE 7:
Factors Impacting the Cost of Doing Business

Cost of Doing Business Factor	Rhode Island’s Peer Standing	Data Source(s)
Taxes		
Personal Income	Competitive	Tax Foundation & KPMG Report “Location Matters”, Tax Foundation’s “State Business Tax Climate Index” Annual Report
Corporate Income	Not Competitive	
Sales Tax	Not Competitive	
Property Tax (Tier 1)	Not Competitive	
Unemployment Insurance	Not Competitive	
ETRs: New Mfg. and R&D Firms	Not Competitive	
Tax Expenditures	Competitive	Economic Partner’s Expenditure Database; RI’s “Tax Expenditure Report”
Housing	Competitive	American Community Survey
Energy	Competitive	Energy Information Administration
Labor	Competitive	Bureau of Labor Statistics
Transportation		
Air Travel	Even	US Department of Commerce
Motor Fuel	Even	
Commute Time	Competitive	

FIGURE 8:
Taxes

Benchmark States	Personal Income	Corporate Income		Sales & Property		Unemployment Insurance		Effective Tax Rates for Newly Established Operations		
	Single Filer, \$110,000*	Main	Mfg. & Svc. Apportion.	Main Sales**	Property - Buildings	Rate	Max. Pay	Capital Intensive Mfg.	Labor Intensive Rate	R&D Facilities
Connecticut	6.00%	8.250%	100%	6.00%	1.708%	3.700%	\$15,000	9.6%	10.3%	18.3%
Delaware	6.75%	8.700%	33.3%***	-	3.964%	3.100	\$10,500	4.4%	7.4%	19.5%
Massachusetts	5.30%	8.250%	100%	6.25%	2.842%	3.250%	\$14,000	7.9%	13.1%	21.2%
New Hampshire	5.00%	8.500%	50%***	-	2.125%	3.700%	\$12,000	7.7%	12.8%	14.2%
Rhode Island	4.75%	9.000	50%	7.00%	3.370%	2.970%	\$19,000	6.6%	13.2%	23.9%

* 2012 data; \$110,000 chosen for clarity (vs. \$100k cut off)

** "Sales & Property," the following "Tier 1" cities were used, respectively: Hartford, Wilmington, Boston, Manchester, & Providence

*** "Standard factors: Sales" apportionment used

Note: Not all taxes are included; this is intended to serve as an overview of a selection of significant taxes

Source: KPMG & Tax Foundation's "Location Matters"; Economic Partners' Tax Expenditure Database

The Tax Foundation expands upon this analysis in its other annual report, the 2013 "State Business Tax Climate Index." Within it, Rhode Island is called out for:

- Having one of the top ten least competitive corporate tax rates in the country
- Being "tied for second-highest" Tier 1 city state sales tax rate in the country at seven percent, behind only California at 7.25 percent⁶
- In the company of many other Northeastern states (Connecticut, New Jersey, Vermont, and Massachusetts) when weighing the "economic damage" property tax rates have, relative to their tax bases
- Standing among the five worst states for Unemployment Insurance taxes (along with Massachusetts, Kentucky, Idaho, and Maryland), as well as among the worst for its benefit costs, particularly if employment separation is beyond the employer's control⁷

⁶ As selected by the Tax Foundation, which, for Rhode Island, was Providence

⁷ "Rhode Island." Drenkard, Scott, and Joseph Henchman. 2013 State Business Tax Climate Index. Rep. Tax Foundation, Oct. 2012. Web.

There are, however, areas where Rhode Island is more competitive as compared to its peer states. At 4.75 percent, its personal income tax rate is below that of all of its neighboring states. This not only has implications for individuals living and working in the state, but also small business owners filing as S-corporations, who may pay a rate closer to this, as compared to the less favorable corporate rate. One interviewee, in fact, noted that the tax he faced for his S-corporation was "not a problem."

Rhode Island also, as noted in the "Tax Climate Index," "mitigates the negative economic impact of the capital stock tax by allowing corporations to pay the higher of the two taxes" (the capital stock or corporate income tax). This does allow Rhode Island to be more competitive, on an initial tax comparison basis, for new capital-intensive firms.

Overall, while it does fare favorably in some areas, Rhode Island (as also expressed in its rankings) fares poorly on a cost-tax basis as compared to its peer group.

FIGURE 9:
Economic Development Tax Expenditures
[estimate in millions, 2009]

Benchmark States	Economic Partners		New York Times (total)
	Total	Per Capita	
Connecticut	\$598.0	\$170.85	\$860.0
Delaware	\$23.0	\$25.98	\$43.1
Maine*	\$304.0	\$233.85	\$504.0
Massachusetts	\$1,670.0	\$253.41	\$2,260.0
Rhode Island	\$461.2	\$439	\$356.0

* ME substituted for NH for relevancy & accuracy

Sources: Economic Partners' Tax Expenditure Database; New York Times' Tax Incentive Database



1.2.2 Tax Expenditures

Tax expenditures are reductions or refunds of taxes from a baseline tax level. They include tax credits (i.e. first time home-buyers' tax credit), deductions (i.e. charitable giving), exemptions (i.e. basic food stuffs), and preferential tax rates (i.e. capital purchases taxed at a lower rate than other inputs). Tax expenditures amount to money removed from revenue streams before those streams "pour" into a budgetary pool; from which, then, governmental departments, programs, and initiatives are funded.

States have a mixed record on tracking, assessing, evaluating, and/or disclosing their annual tax expenditures. Most states, including Rhode Island (which is still more transparent than many of its peers), fail to disclose the costs of at least a handful of major tax expenditures within their annual or bi-annual cost-evaluations. These missing data result in understated estimates of tax expenditure cost totals. Given these limitations, throughout this sub-section data is pulled not only from Economic Partners' Tax Expenditure Database, but also from the New York Times' Incentives database, released in late 2012, to further support conclusions.⁸

In the latest year wherein tax expenditure data is available (2009, from a 2012 report from the Rhode Island Department of Revenue), Rhode Island offered 57 tax expenditures supporting economic development outcomes.⁹

For all those expenditures reporting cost estimates, the State of Rhode Island spent at least \$461.23 million on economic development tax expenditures in 2009.¹⁰ These costs are expected to increase to \$497.2 million by 2013.

Combined with its budgetary line items designated for economic development purposes, including the \$4.3 million state allocation to the Rhode Island Economic Development Corporation, Rhode Island is expected to spend at least \$548.4 million on economic development programs, tax breaks, and support staff in 2013. (More on this can be found later in Section 2: Financial Resources.)

At an absolute level, compared to its peer states in 2009, Rhode Island spent more than Maine and Delaware, but less than Connecticut and Massachusetts on economic development tax expenditures. On a per resident basis, however, Rhode Island spent 70 percent more than any of its peer states on these economic development incentives.

In that economic development tax expenditures can lower the cost of doing business in Rhode Island, lowering the effective tax rate for chosen individuals, industries, and/or firms (see Section 2.1.3), Rhode Island's investment in this area is competitive. However, "competitiveness" in this area may not be a foundation of cost competitiveness, but a symptom of a lack of competitiveness elsewhere (i.e. the broader tax structure).

⁸ Story, Louise, Tiff Fehr, and Derek Watkins. "US Government Incentives." The New York Times, 5 Dec. 2012. Web.

⁹ <http://www.dor.ri.gov/taxexpenditure/2012%20Tax%20Expenditures%20Report.pdf>

¹⁰ This compares to a NY Times estimate of \$356 million

FIGURE 10:
State Economic Development Expenditures
[source in millions, 2009]

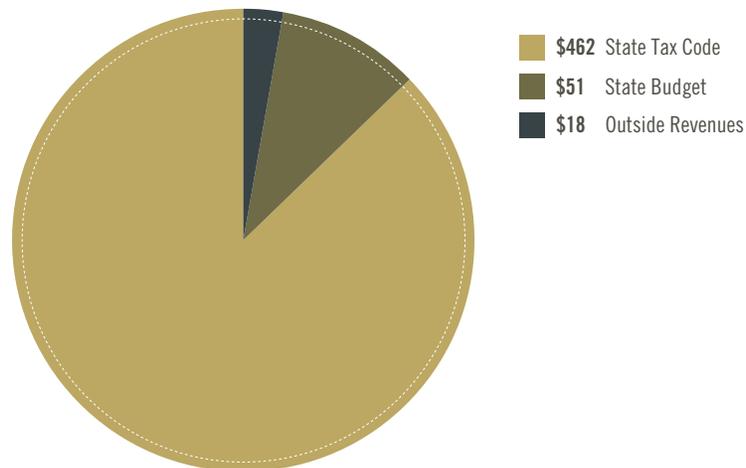


FIGURE 11:
State Economic Development Expenditures
[destination in millions, 2009]

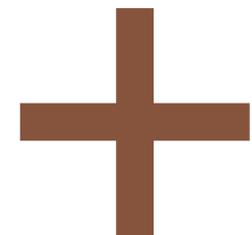
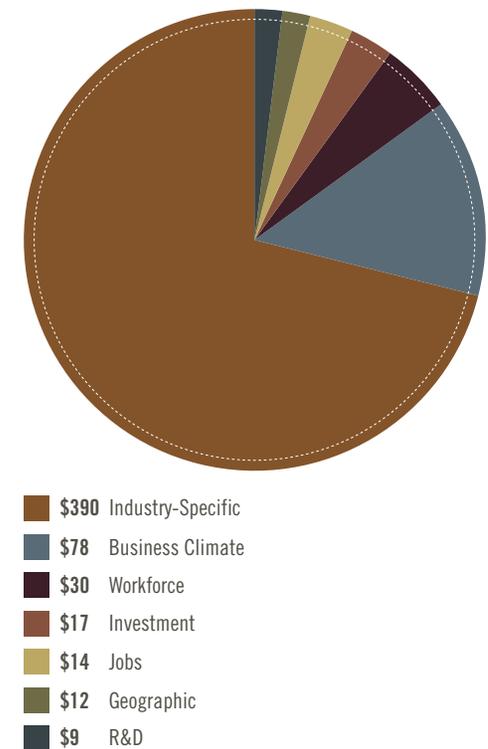




FIGURE 12:
Financial & Quality Characteristics of State Housing Units
 [median estimates, 2011]

Benchmark States	Value of Owner-Occupied Housing	Gross Rent for Occupied Units Paying Rent	Monthly Owner Costs for Units w/ Mortgage	Monthly Owner Costs for Units w/o Mortgage	Owner-Occupied Units (as %)	Housing Units Built Post-1980 (as %)
Connecticut	\$278,700	\$1,021	\$2,052	\$805	67.4%	28.3%
Delaware	\$236,900	\$960	\$1,567	\$442	71.6%	50.9%
Massachusetts	\$326,300	\$1,034	\$2,042	\$672	62.1%	25.6%
New Hampshire	\$237,500	\$939	\$1,884	\$704	71.5%	43.3%
Rhode Island	\$245,500	\$875	\$1,842	\$654	60.6%	23.3%

Source: ACS, 2011

FIGURE 13:
Labor Costs by Occupation
 [mean hourly estimates, May 2012]

Benchmark States	All Occupations	Occupations by Entry-Level Educational Requirement		
		Less than High School Diploma	Bachelor's or Higher	Master's or Higher
Connecticut	\$25.40	\$17.72	\$34.79	\$41.10
Delaware	\$22.80	\$15.78	\$33.94	\$42.54
Massachusetts	\$26.32	\$17.93	\$37.17	\$39.15
New Hampshire	\$21.74	\$15.98	\$29.96	\$33.96
Rhode Island	\$22.78	\$16.34	\$30.73	\$36.76

Source: Bureau of Labor Statistics; Manual crosswalk calculations

1.2.3 Housing

Rhode Island provides potential employers and employees with very competitive housing and rental prices, as well as competitive monthly maintenance costs. Those choosing to live in Rhode Island will, on average, spend less than individuals choosing to live in either of its neighboring New England states.

Homes in Rhode Island are, however, older than those in any of its peer states (only 23.3 percent of the state's housing units was constructed in the past 31 years) and has lower levels of owner-occupied units (four of ten units are not owner-occupied). While not detrimental in and of themselves, these measures can be indicators of the quality of the housing stock, as it exists, as well as how well it is being presently maintained.

Nevertheless, Rhode Island's housing prices put it among the most competitive of the Northeast.

1.2.4 Labor Rates

Rhode Island is even with New Hampshire in measures of the availability of affordable labor. In May 2012, across the workforce, the average wage of a Rhode Island worker was \$22.78. This compares with \$26.32 for neighboring Massachusetts – an already significant 15.5% difference.

This disparity only continues to grow when looking at workers in occupations that require higher levels of entry-level education. While there is only a \$1.59 difference between the labor force in Massachusetts and Rhode Island in occupations requiring less than an HS diploma, the difference expands to \$6.44 when looking at those in occupations requiring a Bachelor's degree or more.

In other words, while workers in lower-skilled occupations get paid similar average wages across all of Rhode Island's peer states, Rhode Island offers businesses the advantage of a higher-skilled workforce at a significant discount.

1.2.5 Energy

Rhode Island consistently has among the lowest electricity prices for its residential, commercial, and industrial sectors of any of its peer states, and consistently the lowest in New England.¹¹ Compared to Massachusetts and Connecticut, for instance, the difference ranges from 5.5 percent (residential electricity as compared to Massachusetts) to 31 percent (commercial energy as compared to Connecticut).

The high price of electricity in Connecticut is a significant cost advantage for Rhode Island and its businesses. Apparently unaware of the low relative cost of electricity in Rhode Island, one stakeholder interviewed during this process claimed that electricity was a major cost issue; this further demonstrates how marketing the true cost advantages of Rhode Island is important.

1.2.6 Transportation

Of its peer states' nine national and regional airports (of those among the top one hundred most used in the country), Rhode Island's Theodore Francis Green Memorial State Airport fared well. In the third quarter of 2012, T.F. Green had the second lowest average fares, and of all the second-tier (non "major" international) airports, was second only to Hartford's in the number of total flights departing.

Rhode Islanders' airport access, both through Providence and via Boston Logan, is an asset.

¹¹ "Rankings: Average Retail Price of Electricity to Residential Sector, October 2012." Rhode Island. US Energy Administration, 2012. Web.



FIGURE 14:
Average Retail Price of Electricity by End-Use Sector
[cents per kilowatthour, November 2012]

Benchmark States	Residential	Commercial	Industrial	Rank	
				#1 Rank	#2 Rank
Connecticut	17.83	14.90	12.72	8.99	
Delaware	13.61	10.46	8.35	-	
Massachusetts	13.79	13.44	12.44	5.40	
New Hampshire	16.00	13.43	12.08	-	
Rhode Island	13.07	11.37	10.65	12.30	

Source: Energy Information Administration

FIGURE 15:
Air Travel Costs by Airport
[from top 100 airports]

Benchmark States	Average Fare Q3 2012*	Total Flights (#, 2011)	
		Domestic	International
Connecticut			
Hartford, CT	\$402	35,073	1,905
White Plains, NY	\$326	18,825	46
New York, NY (JFK)	\$388	122,663	68,310
Delaware			
Philadelphia, PA	\$391	184,308	17,895
Massachusetts			
Boston, MA	\$364	149,058	17,454
Albany, NY	\$414	22,723	497
New Hampshire			
Manchester, NH	\$36	18,483	269
Portland, ME	\$40	14,009	696
Rhode Island			
Providence, RI	\$355	26,018	487

* Averages may be skewed by international travel

Source: Research and Innovative Technology Administration, Bureau of Transportation Statistics

FIGURE 16:
Motor Fuel Costs

Benchmark States	Motor Gas Prices, Excluding Taxes (All Grade Avg. 08-10)	Motor-Fuel Tax Rates (2010)	
		Gasoline	Diesel
Connecticut	\$2.415	\$0.250	\$0.396
Delaware	\$2.312	\$0.230	\$0.220
Massachusetts	\$2.358	\$0.210	\$0.210
New Hampshire	\$2.375	\$0.196	\$0.196
Rhode Island	\$2.329	\$0.320	\$0.320

Source: U.S. Dept of Energy, Energy Information Administration; Federal Highway Administration, Highway Statistics 2010

FIGURE 17:
Commute Times

Benchmark States	Median Travel Time to Work (minutes)
Connecticut	24.7
Delaware	24.3
Massachusetts	27.6
New Hampshire	25.9
Rhode Island	22.9

Source: U.S. Dept of Commerce, U.S. Census Bureau, American Community Survey, 1 Year Estimates



Without taxes, the state of Rhode Island also has the second lowest motor gas prices of its peer states and the lowest of all those in the Northeast at \$2.33 per gallon (per a rolling 2008-2010 average). However, its tax rates, both on gasoline and diesel, overcome any natural distribution/cost advantage it holds, at times standing fifty percent more than those taxes of its peer states.

One area where Rhode Islanders enjoy a continuous transportation advantage is in commute time. At a mean of 22.9 minutes, Rhode Islanders spend less time commuting, on average, than workers in any of its peer or neighboring states. These differences multiply quickly, and result in Rhode Islanders, at year's end, spending less time in the car – wasting potential productivity, decreasing quality of life, and costing individuals more in gasoline.

Compared to Massachusetts, for instance, assuming a ten commute week on a 52 week year, the average Rhode Islander spends 40.7 fewer hours commuting each year: an entire work week.

Also of note, like many of its peer states – Massachusetts, Connecticut, and Delaware – Rhode Island maintains one of the busiest Amtrak stations in the country (#18). In Fiscal Year 2011, the Providence station serviced approximately 626,000 passengers.¹² While less than half of those serviced by Boston's South Station (1.34 million), it is comparable to those served in Wilmington, Delaware (718,000) and more than fifty percent more than those served in Stamford (385,000).

Further connecting Rhode Island residents to the Boston market is the MBTA's commuter rail, running from Providence to Boston's South Station. The Providence station serves approximately 2,000 people per day (or 4,000 trips) at a cost of \$10 each way.^{13, 14} Rhode Island is also served by MBTA through the T.F. Green Airport Station and the new Wickford Junction Station in North Kingstown, open as of April 23, 2012.¹⁵ The Wickford Junction Station represented a major, \$58 million investment for the state, including \$25 million to construct a new, 1,100 car parking garage.¹⁶

Rhode Island's access to markets – via car, train, commuter rail, and airline – at reasonable prices and distances, leaves the state either even with or competitive with most of its peer states.

¹² Amtrak Fact Sheet, Fiscal Year 2011: State of Rhode Island. Rep. Amtrak Government Affairs, n.d. Web.

¹³ Associated Press. "MBTA Ridership on RI Line to Green Lagging." *MBTA Ridership on RI Line to Green Lagging*. The Sun Chronicle, 4 Apr. 2011. Web.

¹⁴ Further, the MBTA does not pay for Rhode Island service. Rhode Island transfers its federal transportation funding to the MBTA, and also purchases capital stock (i.e. double-decker trains) for the system that can be used on multiple lines.

¹⁵ Residents of Pawtucket also likely take advantage of the South Attleboro, Massachusetts Station for their Boston commuting needs

¹⁶ Anderson, Patrick. "MBTA Expands to Wickford, Ups Prices." *MBTA Expands to Wickford, Ups Prices*. Providence Business News, 5 Apr. 2012. Web.

1.2.7 Cost of Business Conclusion

Rhode Island's competitive cost disadvantages are well publicized, and by now, well known: largely driven by its tax structure. Rhode Island, in a majority of the examined areas of taxation, falls behind most of its peer states. This reality creates an economic disincentive for companies to want to remain and grow jobs in the state. Most Rhode Island residents cite taxes as the number one barrier to the creation of new jobs. Further complicating its position is a generous though less-than-transparent tax expenditure system, working off of a tax structure that, as discussed in Section 4: State Economic Development Regulatory Environment, is as intricate as it is comprehensive. For instance, employers in the state face a far greater unemployment insurance liability – and greater number of paths to face that liability - for their workers post-employment, even when the employer is not in the wrong.

Rhode Island does also have significant cost advantages as compared to many of its peer states. However, these advantages are often not promoted as well as they could be. From housing to energy to high-skilled labor, businesses can access all at – relatively – bargain rates. Further, with either an hour's drive or an hour-and-ten-minute MBTA Commuter Rail Train ride from Providence, Rhode Island workers and residents have easy access to the Boston market, while still enjoying low-cost, fast, local travel alternatives and commutes.



Rhode Island electricity prices are 14.8% lower than in Connecticut. Massachusetts spends over 40 more hours per year commuting than Rhode Islanders.

14.8%



1.3 Guidance for Rhode Island's Business Climate

FEC's analysis of Rhode Island and benchmark states has shaped the following considerations. Economic Development is part vision and communication, part linking assets and part focusing on unique opportunities and strengths. Rhode Island must focus on all three aspects to improve its overall performance. Doing so creates more sustainable communities and often requires greater alignment between assets and resources, rather than a drastic overhaul of efforts.

1.3.1 Create One Voice – Set a Clear Course

A key success factor in any strategic or organizational planning process is developing and creating consensus in clearly articulated goals, processes and resources to advance that plan. Just as critical is the identification of roles and personnel responsible for its execution.

While this is important for all states, it is even more so for Rhode Island. Rhode Island's size has helped to solidify a highly functional and engaged community stakeholder base across the state. That base includes economic development intermediaries such as chambers of commerce, foundations, research organizations, higher education and business incubators to name a few. Harnessing and fully leveraging this talent and energy for maximum economic benefit will require continued state leadership through heightened coordination and communication.

Of course, creating a common vision is the goal of the Sustainable Communities campaign, which will bring together partners from a consortium of state, municipal, and non-profit organizations to address housing, land use, economic and workforce development, transportation, and infrastructure investments. The following initial guidance can be incorporated into that process.

“New geography or zone-based incentives should be established. For instance, for a life science company that chooses to locate in a particular area, for every million dollar they raise (private equity) they would be eligible for a loan of \$300K that would not be paid back unless they move out of the zone or miss other growth milestones.”

Initial Guidance:

Empower a Point Person: Ensure that a position is empowered to lead and oversee economic development planning efforts and serve as a point person for plans and program strategies once established.

More Coordination, Shared Ownership: While the state should help to provide a vision, common direction, coordination, resources and communication for the economic development strategy, it is important that ownership in the plan and implementation of specific projects that support the plan also remain focused at the community or local levels. Every community has its own culture and local goals. To ensure full engagement in and support for the plan, it is critical that it be driven at the local level toward statewide goals.

Structure Communication and Transparency: Communication protocols and pathways should be established among the state leadership, community stakeholders, economic development partners and private sector. The overall plan, to include its mission, vision and programs, should be clearly posted on the state's website to further ensure transparency and stakeholder input.

1.3.2 Sustain Dialogue, Link Assets and Partners

While Rhode Island's size may present challenges in some ways, it creates major advantages in others. There are very few places that offer as highly engaged, networked and skilled of a community stakeholder base for economic development as does Rhode Island. The state should link and leverage these valued resources, research and strategies to impact overall economic competitiveness.

Initial Guidance:

Establish Specialized Asset or Knowledge Teams: Rhode Island is fortunate to have a range of economic development stakeholders interested in creating a path forward for the State's economy, and the real strength for Rhode Island lies in its ability to identify and network these partners and organizations to benefit the State as a whole.

Rhode Island has already begun to convene and leverage its key economic development partners and intermediary organizations, and this effort should be continued and expanded in order to share and compare these efforts to determine how best to leverage and incorporate this knowledge as part of the statewide strategy.

This effort can be structured through the formation of specialized "action-oriented" asset or knowledge teams to help address and impact specific areas. With many points of intersection and dependency between them, Rhode Island should work to coordinate these teams and ensure that policy or program connections are made within the broader strategy context. To assist in the process, a representative from each team could serve on a working committee of the Rhode Island EDC Board of Directors.

Additional areas of focus can be developed or changed as needs or opportunities arise. The initial teams should, at a minimum, focus on the following areas:

- **Tax Policy** – Rhode Island's tax rates and policy climate continue to hold the State back in many economic and competitiveness performance measures. Considerable research has been done by the Rhode Island Public Expenditures Council (RIPEC) into identifying the tax related barriers and suggestions advanced on how to address them. Nationally, the Tax Foundation also has provided insights into ways to Rhode Island might address its tax climate. Rhode Island should consult with the Tax Foundation and industry representatives to review tax policy issues, review performance measures and coordinate recommended changes to Rhode Island's tax structure.
- **Innovation and Incubation** – Small business development and the retention and growth of legacy industry through product and system innovation represents a key growth strategy for Rhode Island. Many resources are positioned in Rhode Island to support this approach such as the Beta Spring business accelerator and the Business Innovation Factory (see Section 3.6). Currently an effort to reinvent the Rhode Island Center for Innovation and Entrepreneurship (RICIE) is underway, led by several of the key business, innovation and knowledge economy stakeholders. RIEDC spearheaded the initial creation of RICIE in 2008, with Brown joining as a partner to providing space and additional funding. This incarnation, dubbed RICIE 2.0, should be fully engaged by Rhode Island to help advance this discussion of how it can best

be incorporated and/or featured within the statewide strategy. It should focus on creating strategies that will not only create a stronger, statewide entrepreneurial environment, but also an environment that supports small businesses wherever possible. One such suggestion that came from our interviews was a re-examination of the state's procurement policies, both for small business compliance and paperwork burden as well as the projects themselves – splitting large projects into smaller ones whenever possible.

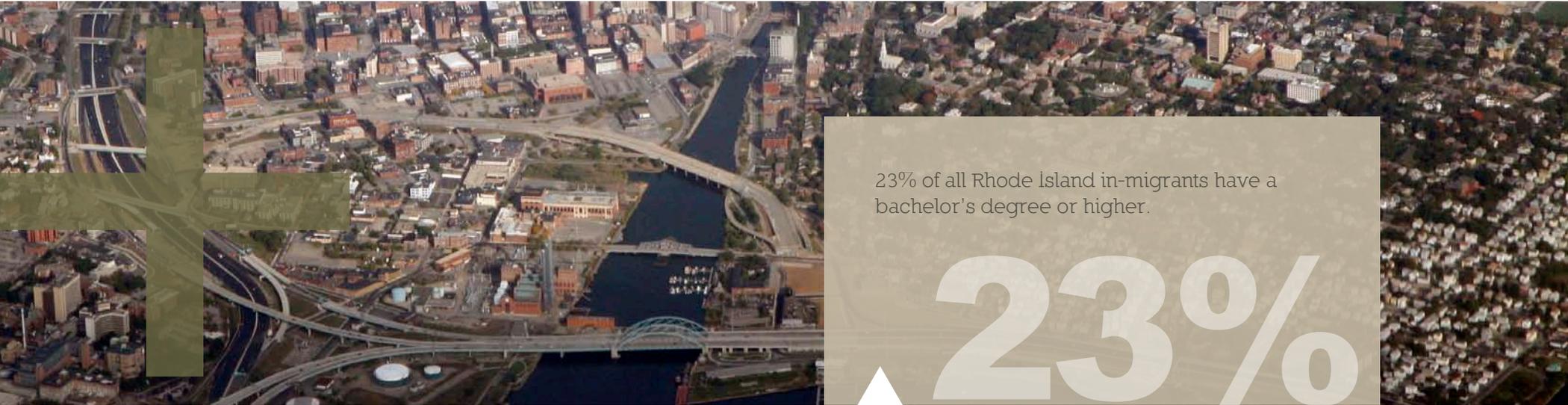
- **Research and Higher Education** – Rhode Island's higher education institutions have established roles in the State's economic development landscape. Business creation opportunities such as those represented by life science company Nabsys, a Brown University spinout, take time to realize but offer high impact. Existing programs such as bRIdge, a program of the Rhode Island Association of Independent Colleges and Universities, help to connect Rhode Island businesses with student interns.

In January 2013, Governor Chafee announced state funding to support a university-collaboration focused on economic research for the State.¹⁷ This effort is a solid step forward and can provide an initial organizational structure for future activity and partnerships. This investment and partnership should be fully leveraged to achieve greater economic impact.

Beyond the economic policy research role, Rhode Island should focus on developing new pathways that create greater applied research opportunities across all industry sectors with



¹⁷ "RI Gov Says \$200K University Collaboration Will Focus on Economic Policy Research." The Republic. N.p., 15 Jan. 2013. Web.



23% of all Rhode Island in-migrants have a bachelor's degree or higher.

23%

a special emphasis on target opportunities to include biotextiles, medical devices, software/gaming and marine trades (see Section 3.3). A desire for greater partnerships with the State's institutions of higher education was repeatedly brought up during interviews with private sector stakeholders. Efforts can include leveraging the respective schools' alumni base for industry attraction, securing management talent and venture funding. Pennsylvania's Ben Franklin Technology Partnership and Georgia's Research Alliance offer potential models scalable to Rhode Island's market and fiscal context.

Public and private stakeholders should include (but not be limited to) the Science and Technology Advisory Council (STAC), the Association of Independent Colleges and Universities – Rhode Island (AICU-RI) and its member schools, the University of Rhode Island, and the Greater Providence Chamber of Commerce, as well as the State's largest health care systems Care New England Health System and Lifespan Health Services. Industry participation should include those representing university spinouts and those who have utilized other State higher education industry outreach programs.

- Tourism and Recreation – Tourism and Recreation have been identified as opportunity growth areas for Rhode Island (see Section 3.2.2). In addition to Rhode Island's natural assets and central coastal location within the broader New England region, the State's emerging creative arts sector can further fuel its Hospitality sector. This is especially important in light of Rhode Island's above average unemployment. A robust Hospitality sector can help not only create more entry and mid-level employment opportunities for a wide range of skill sets, it can offer more vertical movement within organizations based on performance and skill set development. Rhode Island should draw upon the resources and research found within the members of the Rhode Island Hospitality Association to identify barriers and opportunities to growth for this important sector.
- Community Engagement – In 2012, the Rhode Island Foundation spearheaded a community outreach effort called "Make It Happen Rhode Island." This effort brought together numerous stakeholders from the public and private sectors throughout the state. It directly solicited comments and ideas to help improve Rhode Island's overall economic competitiveness. Recent projects like the Rhode Higher Education Consortium and the revamping of the Rhode Island Center for Innovation and Entrepreneurship (RI-CIE 2.0) can trace their genesis to the "Make It Happen" initiative. This was a unique statewide effort and continues to hold stakeholders' interest in how their input will translate into action. Rhode Island should fully leverage the results of this effort and explore its other ideas and suggestions contained therein as it begins the extensive community stakeholder engagement that will be part of the Sustainable Communities campaign.

1.3.3 Focus on Grow, Innovate (and Retain)

While aspects of this action were identified in the previous section, it deserves special emphasis and focus. The reality is that very few business relocations or expansions of any significant scale and impact occur each year, so at best this opportunity is limited. Those that do occur are often cost sensitive with personal and business market drivers beyond the control or influence of any one government or community.

Rhode Island's high tax reputation further compounds the challenge. While recent steps have been taken to improve upon this condition, most notably in lowering the personal state income tax, additional work in key areas such as the Corporate Tax rates, State Unemployment Insurance, and Property Tax remains.

A better and more sustainable economic pathway forward for Rhode Island is the adoption of an aggressive and broad "Grow and Retain Your Own" approach. Innovation and entrepreneurship should be positioned as the primary directive for the state. Like many states, more than 87 percent of Rhode Island businesses employ less than 20 people. Only 2.2 percent employ more than 500.¹⁸

The focus should be broad to include not only technology-related start-ups, but all sectors and all industry types, and should be promoted to guide policy and programs. Many of the key measures and assets important in doing so are reflected in Rhode Island's ranking analysis and stakeholder interviews. These include a highly educated resident base, best in the nation broadband infrastructure, attractive quality of life factors and proximity to Boston and New York. Beyond proximity for existing residents, Massachusetts and New York represent the top two states for net in-migration of new residents to Rhode Island (see Section 3.7 for a full migration analysis). These neighboring markets represent potential new business start-up attraction, knowledge transfer and a broader pool of venture capital sources.

Initial Guidance:

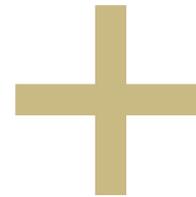
Expand Existing Incubators and Innovation Resources: Rhode Island should expand and further leverage existing incubators and innovation resources such as Beta Spring and the Business Innovation Factory. The future planning of the Rhode Island Center for Innovation and Entrepreneurship 2.0 presents an important opportunity to identify the critical resource needs, additional partners, and policies and capacity potential to accelerate new business start-ups while ensuring the overall competitiveness of Rhode Island's existing businesses.

Coordinate Existing Study Findings and Recommendations: Review and determine the statewide scalability/applicability of existing regional study efforts such as the Knowledge Economy: An Action Agenda and the Knowledge Economy Benchmark Report.¹⁹ These reports identify strategies, activities, and work completed and suggest measures related to key high growth strategies. The Action Agenda represents a critical partnership with key Rhode Island knowledge economy stakeholders including the Greater Providence Chamber of Commerce, the Association of Independent Colleges and Universities, the Innovation Providence Innovation Council, the Rhode Island Center for Innovation and Entrepreneurship, the Rhode Island Department of Education, the RI Science and Technology Advisory Council, the City of Providence, the Governor's Workforce Board, the Providence Foundation and the Rhode Island Economic Development Corporation.

Further Promote, Expand and Market Existing Micro Loans and Grants: Rhode Island already offers a small business loan fund which targets smaller businesses looking for a direct, fully-secured loan. The Small Business Loan Fund provides up to \$250,000 for both manufacturing and non-manufacturing businesses. Several stakeholders noted that there is a need for greater awareness of these types of loans and where the state can expand or create new micro loan programs, it should do so. Micro loans are important components of "grow your own" and innovation-base strategies. Discussions on how best to market existing and create new micro-loan and grant programs should be part of the specialized asset teams on innovation/incubation and research and higher education.

¹⁸ *County Business Patterns, Establishments by Size*. Rep. US Bureau of Labor Statistics, 2012. Web.

¹⁹ *Knowledge Economy and Action Agenda*. Rep. Greater Providence Chamber of Commerce & Rhode Island Science & Technology Advisory Council. Web.



1.3.4 Establish a Business Climate Dashboard

A business climate dashboard refers to a set or grouping of select indicators that can be monitored over time to gauge overall economic performance. The dashboard can include both “Leading Indicators” (indicators that signal a future event or outcome) and “Lagging Indicators” (indicators that result from an action or event). For instance, increasing broadband speed (a leading indicator) can help to increase the number of high tech businesses starting up in a region (a lagging indicator). Leading indicators can be influenced by policy or other action intended to produce a certain outcome. When developing tactics and approaches as part of a strategic plan, one should focus on how they can best influence leading indicators.

While Rhode Island should continue to monitor and work towards improving its overall rankings, tactics for doing so should focus on key individual measures. Rhode Island is encouraged to take a “portfolio approach” in order to more systematically address its competitive position. This allows for relevant actions and tactics to be developed that are linked with actual performance measures and indicators.

It is also important to recognize that intersections and linkages exist between categories and measures. For instance, affecting tax policy by lowering rates can influence business confidence and in turn lead to increased hiring rates and lower

unemployment. This can also result in higher business creation rates, more home ownership and lower unemployment by race. Overtime, changes in individual measures will translate to changes in overall performance, ideally for the better.

Time and resources will not permit Rhode Island to effectively impact all measures and rankings. Therefore the State should narrow its focus to a few key areas to impact.

First, this analysis points towards Rhode Island adopting an overall competitiveness strategy built upon innovation, knowledge and a “grow your own” approach. In this regard, both the “Moving the Needle” report (RIPEC), and the “Benchmarking the Rhode Island Knowledge Economy” report prepared in partnership with the Greater Providence Chamber of Commerce and the Rhode Island Science and Technology Advisory Council, offer a core set of relevant indicators that should be included as part of Rhode Island’s business climate dashboard. These reports offer a valuable summary of Rhode Island’s knowledge assets while capturing many of the indicators identified in this report’s business climate analysis.

In addition to those reports, Fourth Economy’s business climate analysis has provided five additional categories of indicators to include in a dashboard. All of those indicators can be found, along with an analysis of their performance over the past three years, in in the Business Climate resource on the RIEDC website. The chart below uses a sampling of those indicators to demonstrate how Rhode Island could organize all of the dashboard indicators in order to suggest key leading and impact (or lagging) indicators. Organizing indicators by leading or lagging creates a more user-friendly format for use in a short and mid-term strategic planning process.

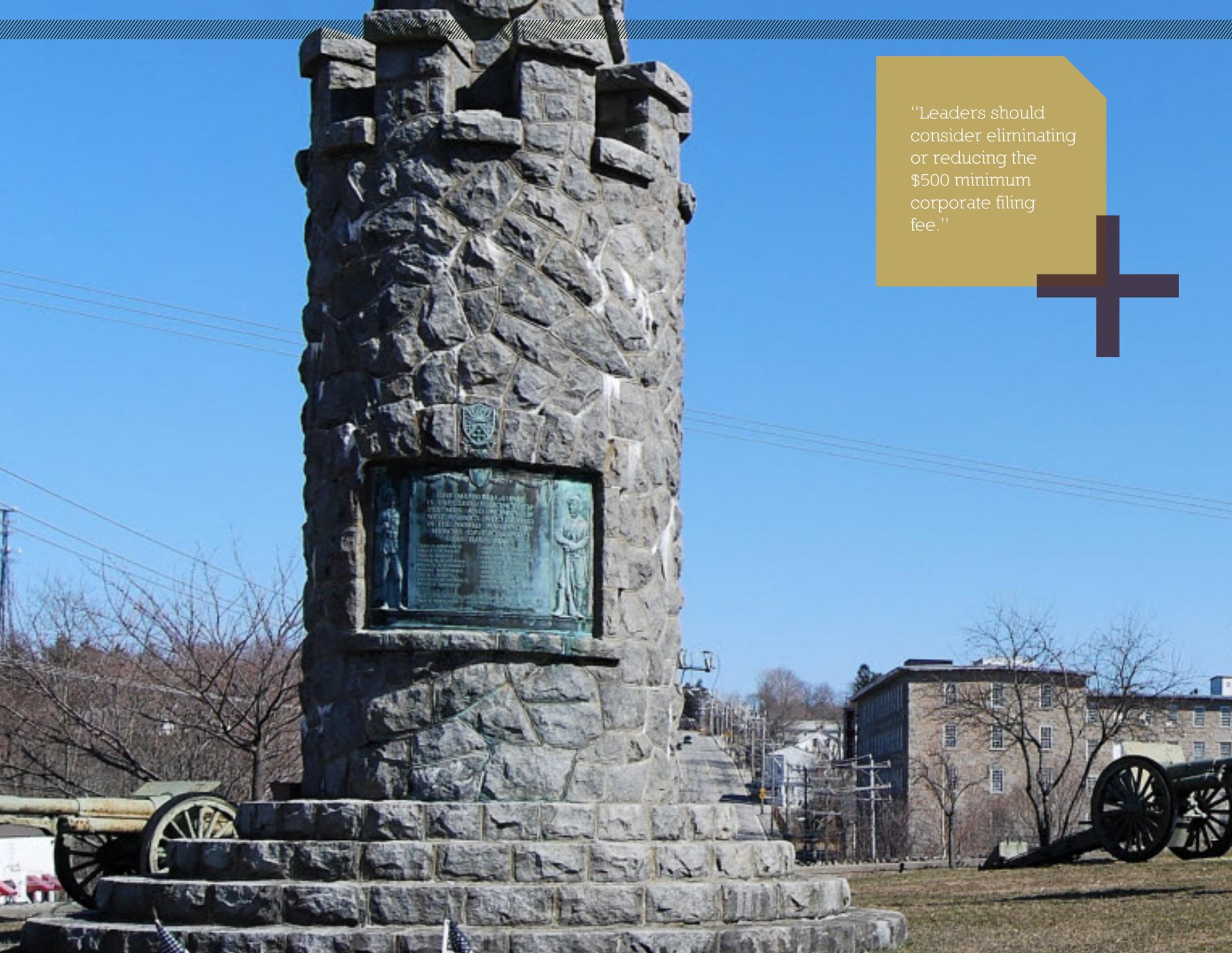
FIGURE 18:
Business Climate Dashboard

	Leading Indicator	Source	Rank	Trend	Impact Indicator	Source	Rank	Trend
Investment	Industry R&D	NEI	33	◀	High-Tech Jobs	NEI	16	▲
	Small Business Ownership Rate	CFED	14	N/A	Low-Wage Jobs	CFED	22	N/A
	Corporate Tax Rate	TF	42	▼	Unemployment Rate	CFED	48	N/A
	Individual Tax Rate	TF	37	▲	Small Business Ownership	CFED	14	N/A
	Property Tax Rate	TF	46	▲				
Talent	High School Degrees	CFED	42	N/A	Scientists & Engineers	NEI	19	▼
	Four-Year College Degrees	CFED	14	N/A				
Sustainability	Uninsured Low-Income Children	CFED	20	N/A	Business Creation Rates	CFED	11	N/A
	Job Churning	NEI	10	▼	Per Capita Government Debt	SBSI	47	N/A
Place	Forclosure Rate	CFED	40	N/A	Home Ownership	CFED	46	N/A
Diversity	Business Ownership by Race	CFED	50	N/A	Unemployment by Race	CFED	32	N/A

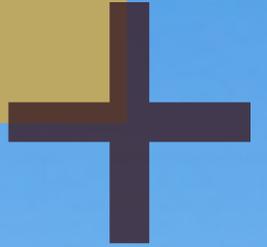
NOTE: While this dashboard is presented in chart form, it is not intended to illustrate a direct causal relationship. Rather, it is intended to demonstrate some examples of general outcomes or impact indicators as a result of affecting the leading indicators for each category.

²⁰ *Moving the Needle*. Rep. Rhode Island Senate Policy Office and the Rhode Island Public Expenditure Council, 15 Jan. 2013. Web.

²¹ Camoin Associates, Inc., and Innovation Policyworks, LLC. *Benchmarking the Rhode Island Knowledge Economy*. Rep. Greater Providence Chamber of Commerce and Rhode Island Science & Technology Advisory Council, n.d. Web.



“Leaders should consider eliminating or reducing the \$500 minimum corporate filing fee.”





The Governor's Workforce Board has made more than \$63 million worth of strategic investments since 2005.

\$63M

2.0 Financial Resource Analysis

The availability of a range of financial resources for business expansions is critical for communities and states looking to grow jobs. Rhode Island has a sizeable portfolio of financial resources - including grants, loans, loan guarantees, and tax expenditures (incentives) - available for businesses of all sizes and stages of growth. These resources originate from federal, state, local, and private-sector actors, each holding different recipient requirements, and each having different funding levels.

This section will examine the extent of the financial resources available in Rhode Island, preliminarily identify any gaps in such resources, and provide best practice examples for Rhode Island to consider, in both the short- and the long-term, as it advances its economic competitiveness agenda.

2.1 Rhode Island's Financial Resources & Funding Mechanisms

This section of the report will identify and inventory the administrators of these various financial resources, the financial programs they have available, and, where possible, ascertain their current levels of funding for comparison to peer states.



2.1.1 State Resources

At the state-level, the most prominent source for funding is the Rhode Island Economic Development Corporation (RIEDC), the state's quasi-public economic development organization. Per its website: "From small business loans to expansion financing, RIEDC can assemble a complete financial package to meet your business needs... [the RIEDC] serves as a clearinghouse for special business and tax incentives available through the state." Through the RIEDC firms can access state-sponsored loan guarantees (via the Job Creation Guaranty Program), tax exempt bonds for the purchase of fixed manufacturing assets (Rhode Island Industrial Facilities Corporation), bond and mortgage insurance to assist in the purchase of needed real estate and equipment. (Rhode Island Industrial-Recreational Building Authority (IRBA), loans for qualifying smaller enterprises (Rhode Island Small Business Loan Fund), and loans for commercial development in urbanized centers. Stakeholder interviews conducted during this process revealed a mix of experiences with these state programs; though many of the programs themselves were cited as helpful, the process of utilizing the programs and the requisite paperwork was cited as a barrier for small businesses.

The RIEDC also provides information on 50 state and local business tax incentives,²² many of which are discussed in greater detail later in this section.

²² <http://riedc.com/business-services/business-incentives>



The Governor's Budget for Fiscal Year 2013 showed the RIEDC's revised 2012 revenues totaling approximately \$23.4 million.²³ The RIEDC uses these revenues to finance, among other activities, the work of the:

- Renewable Energy Fund (transferred in June 2009)
- Job Creation Guaranty Program (approved by General Assembly in 2010 authorizing RIEDC to provide bonds and loans not in excess of \$125 million)
- Quonset Development Corporation (a subsidiary of RIEDC as of 2005 with the mission of managing commercial development on all Navy lands on two former bases at Quonset Point)
- I-195 Redevelopment District (created by General Assembly as subsidiary in Fiscal Year 2012 to: purchase I-195 surplus land from the RI Dept of Transportation; issue bonds to pay for said land; and to provide office space and technical support to the I-195 Commission to guide and oversee that land's development)
- Rhode Island Airport Corporation (a component unit of the RIEDC)
- Small Business Loan Fund Corporation (a component unit of the corporation) was created to capitalize a loan fund for small businesses in Rhode Island through the U.S. Department of Commerce.

Further, the Rhode Island Industrial Facilities Corporation, the Rhode Island Industrial-Recreational Building Authority, and Capital Center Commission, frequent RIEDC partners, were expected to expend an additional approximately \$10.9 million for economic development purposes in Fiscal Year 2013, though nearly all of those expenditures are expected to be funded from non-state sources.

While the RIEDC is the state's primary economic development agency, economic development ends are also bolstered at the state-level through the Division of Planning and the Department of Labor and Training, Workforce Development Services.

The Division of Planning is comprised of three programs: Statewide Planning, Housing & Community Development, and the Water Resource Board. The Statewide Planning program is responsible for the development of the state Comprehensive Economic Development Strategies (CEDS), and for allocating funding from the EDA; the Office of Housing and Community Development is similarly responsible for administering the state's Community Development Block Grant (CDBG) grants and related programs.

Rhode Island's Workforce Development Services Program, within the Department of Labor and Training, matches current job-seekers with suitable job-openings, and works with employers to train the next generation of Rhode Island workers. It funds, amongst other programs, Employment Services, Job Training Partnership Act & Other Training Programs, Labor Market Information, and the Governor's Workforce Board. The Governor's Workforce Board, which works with nine industry partnerships to improve the state's workforce's skill base to meet employer needs, has "made more than \$63 million worth of strategic investments" since it was established.²⁴

State-Level Resources: Financial

Rhode Island Economic Development Corporation (RIEDC)

Quasi-public agency serves as a government and community resource to help streamline the business expansion in, and relocation to, Rhode Island; assists companies with commercial real estate, business financing, workforce training and other relevant issues.
<http://www.riedc.com>

↳ Rhode Island Small Business Loan Fund

Provides RI's qualifying smaller businesses with fixed interest rate loans of up to \$250,000 to acquire and improve land, purchase buildings or equipment, or to provide working capital.

<http://www.riedc.com/business-services/financing/sblf>

↳ Job Creation Guaranty Program

RIEDC can serve as a guarantor of private loans or can help to meet certain bond obligations for the benefit of businesses in technology and innovation-driven industries aiming to create permanent, high-paying, full-time jobs.

<http://www.riedc.com/business-services/financing/job-creation-guaranty-program>

↳ Rhode Island Industrial Recreational Building Authority (IRBA) Bond/ Mortgage Insurance

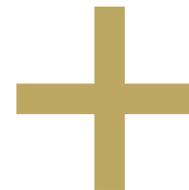
IRBA offers borrowers debt insurance on tax-free bonds, taxable bonds, and conventional mortgages to cover up to 90% of real estate, 80% of machinery, and 75% of tourist-travel recreation projects in RI.

<http://www.riedc.com/business-services/financing/irba>

Rhode Island Industrial Facilities Corporation (RIIFC)

Issues tax exempt and taxable bonds for the development of fixed assets for a manufacturing project or select commercial facilities.

<http://www.riedc.com/business-services/financing/riifc>



²³ "Governor's Budget." *Budget Office*. State of Rhode Island, 1 Jan. 2013. Web.

²⁴ "Governor's Workforce Board RI." *Governor's Workforce Board RI*. N.p., n.d. Web. <<http://www.rihric.com/>>.

2.1.2 Federal Resources at State-Level

The US Small Business Administration (SBA), through private lenders, provides America's small businesses loan guarantees, loans, microloans, grants, bonds, and other financial assistance. For the State of Rhode Island, its customized "Resource Guide" lays out detailed information on all of its programs, business prerequisites, and the necessary steps firm owners need to take to get access to such funding.²⁵

According to the RI SBA website, in 2011, the last full year for which data was available, Rhode Island businesses had a loan volume of \$126.5 million through 447 SBA-backed loans, up "nearly 78 percent" from the prior year, despite loan counts decreasing by 10.²⁶ The Bank of Rhode Island, Coastway Community Bank, Citizens Bank, Webster Bank, and the Washington Trust Company were the top five SBA lenders, by number of loans, that year.

In the fourth quarter of 2012 (October 1 – December 31, 2012), Rhode Island's SBA approved 73 loans across the state, totaling over \$18.01 million.²⁷ The City of Warwick led the 23 municipalities listed, with 11 loans totaling \$3.8 million. Approximately \$15.5 million of these loans were "7(a) Loans," the SBA's primary business loan program. The 7(a) Program has broad eligibility requirements and credit criteria, giving it flexibility in loan structure, usage, and availability. 7(a) loans pass through private funders.

Another \$3 million originated from the SBA's "504 Project Participation" Program, which provides long-term, fixed-rate subordinate mortgage financing for "the acquisition and/ or renovation of capital assets including land, buildings, and equipment." 504 loans are provided through Certified Development Companies (CDCs), who then work with banks and other lenders to make loans in first position on fair terms.²⁸

Three Rhode Island Certified Development Companies during the fourth quarter also received 504 Loan Debenture Funding (pass through) totaling \$2.54 million: New England Certified Development Corporation; the Ocean State Business Development Authority; and the Bay Colony Development Corporation.

In the third quarter of 2012, another \$13.8 million was lent out to Rhode Island based firms with SBA backing.

Federal Resources at State-Level: Financial

U.S. Small Business Administration: Rhode Island District Office

The SBA offers information on its small business loans (largely through private lenders), grants, bonds and other financial assistance to firms in Rhode Island <http://www.sba.gov/about-offices-content/2/3144>

- ↳ **7(a) Loans**
The SBA's primary business loan program; has flexibility in loan structure, variety, and availability; its guarantees only apply to a portion of a loan with maximum 7(a) loan amount of \$5 million.
- ↳ **Special Purpose 7(a) Loans**
Variation of the 7(a) program to address particular financing needs of certain small businesses; generally covered by same rules, regulations and fees of regular 7(a) and include: SBAExpress, Patriot Express, Rural Lender Advantage Loans, Advantage Loans, CAPLines, the International Trade Loan Program, Export Express, and the Export Working Capital Program.
- ↳ **504 Loans**
An economic development program that supports small business growth by providing long-term, fixed-rate subordinate mortgage financing for acquisition and/or renovation of capital assets.
- ↳ **Micro Loans**
The SBA's micro loan program provides smaller loans, ranging from \$500 to \$50,000, to women, veteran, and other small business owners through intermediaries nationwide.
- ↳ **Small Business Investment Company (SBIC) Program**
An alternative to bank financing for small businesses, the SBIC program provides gap financing for growth capital to qualifying small businesses.
- ↳ **Small Business Innovation Research (SBIR) Program**
The SBIR program commits funds to help small businesses advance their technical research & development potential through eleven different federal departments.
- ↳ **Small Business Technology Transfer (STTR) Program**
The STTR program reserves a percentage of federal research & development funding for small businesses and non-profit research institution partners.
- ↳ **Surety Bond Guarantee Program**
The Surety Bond Guarantee program is a public-private partnership between the federal government and surety companies to provide small businesses with the bonding assistance necessary for them to compete for public and private contracting and subcontracting opportunities.

2.1.3 Tax Expenditures as State Resources

FEC identified 57 tax expenditures supporting economic development outcomes in the State of Rhode Island, based on a 2012 report by the Department of Revenue (see Section 1.2.2).²⁹ The Division of Taxation administers these tax programs. Tax expenditures can lower the cost of doing business in the state for qualifying companies and/or allow such companies (or individuals) to invest in property, capital, or other businesses at more affordable rates.

Economic Development Tax Expenditures

Definition: Any tax credits, deductions, exemptions, and otherwise preferential tax treatment instituted to directly catalyze or support business development and/or job creation within the state.

Categories: Research and Development; Business Property or Capital; Job Creation/ Retention; Job Training; Geographically Targeted; General “Business Friendly” Investments; and Industry Specific Incentives.

For all those expenditures reporting cost estimates, the State of Rhode Island spent at least \$461.23 million on economic development tax expenditures in 2009.³⁰ Based upon Rhode Island’s own projections, the cost of Rhode Island’s economic development tax expenditures are projected to increase by \$36 million to \$497.2 million by 2013.

²⁵ U.S. Small Business Administration. Rhode Island Small Business Resource. Rep. N.p.: Reni, 2012. Rhode Island Small Business Resource. U.S. Small Business Administration. Web.

²⁶ U.S. Small Business Administration. Record SBA Loan Volume Exceeds \$126 Million in Rhode Island. U.S. Small Business Administration, 20 Oct. 2011. Web.

²⁷ Approved Loans Rhode Island Cities and Towns. Rep. U.S. Small Business Administration, n.d. Web.

²⁸ Provides Community Redevelopment Act credit

²⁹ 2012 Tax Expenditures Report. Rep. Department of Revenue Office of Revenue Analysis, 16 Aug. 2012. Web.

³⁰ Most recent data and compares to a NY Times estimate of \$356 million



FIGURE 19:
Rhode Island Tax Expenditures

Type	Expenditure / Incentive (Category)	FY2009 Cost
Rhode Island’s Most Costly Tax Expenditures		
Exemption	Purchases Used for Manufacturing Purposes (Industry-specific)	\$305.9 million
Deduction	Net Operating Losses (Business Climate)	\$42.7 million
Exemption	Manufacturers’ Machinery and Equipment (Industry-specific)	\$29.3 million
Exemption	Agricultural Product for Human Consumption (Industry-specific)	\$18.9 million
Preferential Tax Rates	Jobs Development Act (Jobs)	\$14.1 million
Notable Rhode Island Tax Expenditures		
Credits & Exemptions	Research & Development	\$8.5 million
Exemption	Boats or Vessels Generally	\$6.2 million
Credit	Motion Picture Production	\$3.1 million
Exemption	Aircraft and Aircraft Parts	\$1.2 million

2.1.4 Municipal and Local Resources

Localities and local development companies also play a role in meeting local firms' financial needs across Rhode Island. For instance, the Ocean State Business Development Authority and the South Eastern Economic Development Corporation both assist companies across the state in receiving SBA 504 loans. Some communities offer their own small business loan products (e.g. Central Falls, Cranston, East Providence, Pawtucket, and Providence Economic Development Partnership) or tax incentive programs (e.g. Burrillville, Middletown, Newport, Providence Economic Development Partnership, and Woonsocket). (Note that Rhode Island's county governments have no major governmental functions, beyond courts, so all local support is provided by Rhode Island's 39 municipalities.)

Other innovative, forward-thinking financial resource programs supported at the local level include, though are not limited to:

- The Town of Burrillville's "Exterior Improvements in Redevelopment Districts" tax program, to localize and strengthen its commercial core³¹
- The City of Cranston's revolving loan and microloan funds³²
- The City of East Providence's commercial loan and microloan programs, as well as their "2+2 Façade Improvement Program"³³
- The Town of Middletown's assessed valuation exemptions for job creation, new construction, and renovations³⁴
- The City of Newport's "Arts and Entertainment District," and its geographically- and industry-targeted tax breaks³⁵
- The City of Pawtucket's commercial matching loan program, as well as its "Arts and Entertainment District" benefits³⁶
- The City of Providence's tax incentives within its Arts and Entertainment District, as well as its property tax exemptions for industrial land use through the Providence Economic Development Partnership³⁷
- The City of Woonsocket's "Job Creation Incentive Programs"³⁸

Local tax stabilization, micro-loan, and job creation incentive programs were all discussed positively during stakeholder interviews conducted during this process. More information on each of these programs, as well as many others found across all of Rhode Island's municipalities, can be found on their websites.

Local Development Company Resources: Financial

Business Development Company

Non-bank lender that finances the growth and expansion of companies in Rhode Island, Southern Massachusetts, and Eastern Connecticut.

<http://www.bdcri.com/about-what.asp>

Ocean State Business Development Authority

Assists companies to receive small business loans for job creation; uses SBA's 504 Loan Program with ratio of 1 job created/ saved within 1 year of project completion for each \$50,000 of 504 Funds.

<http://www.osbda.com/>

South Eastern Economic Development (SEED Corporation)

Finances small businesses in Massachusetts and Rhode Island; SEED makes loans ranging from \$1,000 micro loans to \$5.5 million SBA 504 Loans, and administers a small business technical assistance program.

<http://seedcorp.com>



³¹ "Town of Burrillville - Economic Development." Town of Burrillville - Economic Development. Town of Burrillville - Rhode Island, n.d. Web. <http://www.burrillville.org/Public_Documents/BurrillvilleRI_EconDev/index>.

³² "The City of Cranston, RI." Economic Development. The City of Cranston, RI, n.d. Web. <<http://www.cranstonri.com/generalpage.php?page=23>>.

³³ "Economic Development." City of East Providence. N.p., n.d. Web. <<http://www.eastprovidenceri.net/content/660/default.aspx>>.

³⁴ "Middletown Economic Development." Middletown Economic Development. N.p., n.d. Web. <<http://www.middletownedc.com/>>.

³⁵ "Department of Planning and Development." City of Newport. N.p., n.d. Web. <<http://www.cityofnewport.com/departments/planning-development/home.cfm>>

³⁶ "City of Pawtucket." Economic Development. N.p., n.d. Web. <<http://www.pawtucketri.com/departments/planning/economicdevelopment.php>>.

³⁷ "Tax Incentives." Opportunity Providence - Your Gateway to Economic Development Resources. Providence Economic Development Partnership, Web.

³⁸ "Woonsocket, RI." Economic Development. N.p., n.d. Web. <<http://www.ci.woonsocket.ri.us/econdev.htm>>

2.1.5 Private-Sector Resources

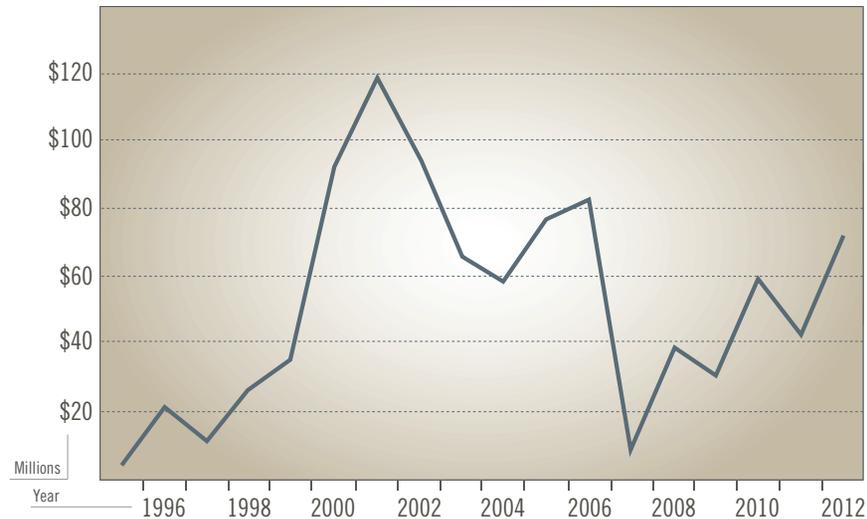
In 2012, Rhode Island based companies secured nearly \$72 million in venture capital funding from 11 recorded investments (approximately \$6.5 million per investment).³⁹ This was the highest level of venture capital investments since 2005.

Venture capital in Rhode Island peaked, along with the nation, between 2000 and 2002, bringing in aggregate investments of between \$92.6 and \$118.7 million annually. After showing some returning strength through 2006, the recession hit the area hard, resulting over a 90 percent drop in local investment in 2007. The state has, however, since showed a renewed attractiveness for such investments, steadily posting gains since 2008, though at levels still far below that of even 2006.

Rhode Island's venture capital totals pale in comparison to those totals received by its neighboring states, and were called out in stakeholder interviews as an impediment to doing business in the State. While Rhode Island-based firms received \$935 million in funding between 1995 and 2012, Massachusetts-based companies received nearly \$57.2 billion in financing, while Connecticut-based firms received nearly \$6.3 billion. New Hampshire firms too, over the period, secured approximately three times the amount of venture capital (\$2.8 billion), as compared to Rhode Island companies. In 2012, for example, one New Hampshire firm alone, DataGravity, secured \$42 million from investors Charles River Ventures in Boston, General Catalyst of Cambridge, and Andreessen Horowitz of Silicon Valley.⁴⁰

Rhode Island has not been without substantial firm investments. Several, such as Mnemosyne Pharmaceuticals, Inc. (\$5.4 million in early 2012 from Access BridgeGap Ventures of Cambridge and Providence's Slater Technology Fund), have successfully raised millions in financing.⁴¹ These investments, however, like those in most of New Hampshire outside of the Boston "reach," do not compare in size and frequency to those in the Boston metro. Per capita analysis is not useful when comparing venture investments, as scale is more related to resulting job creation and economic impact.

FIGURE 20:
Venture Capital Investments in Rhode Island Firms



In a July 2011 article in the *Journal of Financial Economics*, econometrician Xuan Tian parses the dynamics between the location of prospective investment firms and the location of venture capital investors to determine why they locate where they do.⁴² Among his conclusions, all other factors held equal, were:

- Venture capital investors are likely to be in close proximity to the largest industry players within their targeted investment industries (i.e. VC firms looking to invest in biotech, will likely be close to Novartis, et al, in Cambridge);
- Entrepreneurs tend to seek out venture capital investors who are geographically closer to the bigger players;
- Within industries heavily focused on research and development (such as biopharmaceuticals), entrepreneurial firms and venture capital investors are located closer together than other industries; and
- With firms that are further away from the venture capitalist investor, VC firms more often engage in "staging" their investments, in lieu of the larger investments they might make with closer firms they could more easily "monitor." ("The investor firm located further away from an entrepreneurial firm tends to finance the firm with a larger number of financing rounds, a shorter duration between successive rounds, and with a smaller amount in each.")

³⁹ Venture Capital by Industry. Rep. PriceWaterhouseCoopers MoneyTree Survey, 2012. Web.

⁴⁰ Solomon, Dave. "Nashua Startup Attracts \$30 million in Venture Capital" *New Hampshire Union Leader*. 30 January 2013.

⁴¹ Grimaldi, Paul. "Providence Biotech Company Raises \$5.4 million" *Providence Journal*. 16 February 2012.

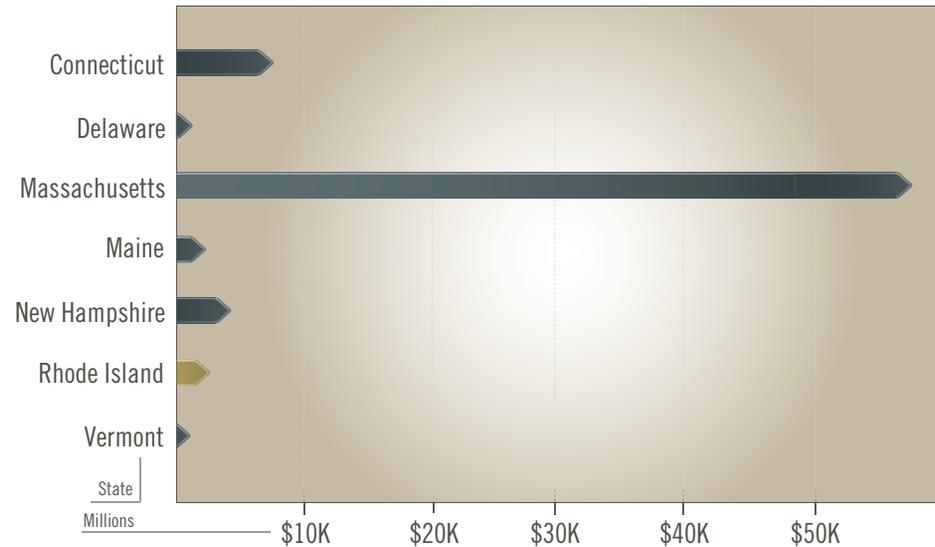
⁴² Tian, Xuan. "The Causes and Consequences of Venture Capital Stage Financing" *Journal of Financial Economics*. Volume 101, Issue 1. July 2011. Pages 132-159.

Rhode Island faces these dynamics annually: regional venture capitalists, concentrated largely in Boston, wanting to be close to their investment companies; while entrepreneurs themselves also wanting to be closer to similar industry-stage firms and their investors, drawn to the Boston-Cambridge market's "gravity." While venture capital firms do invest in Rhode Island, even in biotechnology (41 percent of Rhode Island's venture capital investment since 1995 has been in this sector), these investments pale in size to those received by firms in the Boston metropolitan area, and are – per the article – staggered or staged.

Mitigating the investment-agglomeration dynamics that have held Rhode Island firms back will require a regional or statewide effort – a coordinated attempt to bolster and support slates of companies for out-of-state investment. Ideally, such an initiative would be necessary only until enough of a start-up industry mass grows in Providence, for instance, for venture capital firms to begin looking, independently and more aggressively, at the investment opportunities in the Rhode Island market, and for local entrepreneurs to feel confident enough in their ability to gain funding from these firms to remain in the area.

Some of the more prominent venture capital firms servicing Rhode Island include Angel Street Capital and Bay Capital Advisors, both based in Providence, and the state-backed Slater Technology Fund, which was highlighted in stakeholder interviews as a particularly good program. Angel investment firms servicing Rhode Island include the Providence-based Cherrystone Angel Group, and five other New England-focused groups, including the Bay Angels, Beacon Angels, and Common Angels. The New England Investment Network is an online platform designed to connect entrepreneurs to angel investors worldwide. The firms servicing Rhode Island are shown in the tables below. In 2012, Point Judith Capital, one of Rhode Island's larger venture capital firms, moved from Providence to Boston.

FIGURE 21:
Venture Capital Expenditures [1995 - 2012]



⁴³ Venture Capital by Industry. Rep. PriceWaterhouseCoopers MoneyTree Survey, 2012. Web.

Venture Capital Firms Servicing Rhode Island

Angel Street Capital

Providence-based company provides early-stage companies with consulting services and capital; long track record of investing in digital media firms and those in related industries.

<http://www.angelstreetcapital.com/>

Bay Capital Advisers

Based in Providence, aims to address capital needs of firms at the smaller end of the lower middle market through BCA Mezzanine Fund, LP, and BCA Mezzanine Fund II, LP, each licensed as a Small Business Investment Company (SBIC) by the SBA.

<http://www.baycapllc.com/>

Long River Ventures

Invests smaller amounts of capital (\$500,00 to \$1 million) in seed and early stage companies in healthcare, IT, and other tech-driven sectors; invest in Northeast, both in Boston and New York, as well as in secondary markets between.

<http://www.longriverventures.com/>

Providence Capital Group (PCG)

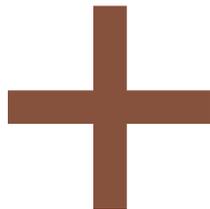
Venture capital and buyout firm located in Warwick, Rhode Island.

<http://providencecapitalgroup.net/>

Slater Technology Fund

State-backed venture capital fund that provides seed funding to promising entrepreneurs and their nascent technology ventures in Rhode Island.

<http://www.slaterfund.com/>



Angel Investment Organizations / Firms Servicing Rhode Island

Angel Investor Forum

Provides investors with chance to pool their resources to fund seed-stage opportunities with a particular focus in Connecticut and Northeast area.

<http://angelinvestorforum.com/>

Bay Angels Investment Group

Cape Cod-based angel investment group that provides funding to early stage-companies in the Cape, the Islands, Southeastern Massachusetts, and Rhode Island; looks to identify tech-driven startup companies for investment.

<http://www.bayangels.net/>

Beacon Angels

Boston-based angel group that makes investments in the \$100,000 to \$300,000 range in small, fast growing companies in the Northeast, including Massachusetts, Vermont, Rhode Island, Maine, Connecticut, and New Hampshire.

<http://beaconangels.com/>

Cherrystone Angel Group

Based in Providence, offers early stage investment funds to companies in Rhode Island and nearby Connecticut and Massachusetts that need capital for growth; Rhode Island's first organized angel investment group.

<http://www.cherrystoneangelgroup.com/>

CommonAngels

Group of leading private investors who look to invest in early stage software, information technology and internet companies in the Northeast.

<http://commonangels.com/>

Harbor Light Capital Partners

Private investment firm looking to invest in early and growth stage companies located in the Northeast.

<http://www.hlcp.com/>

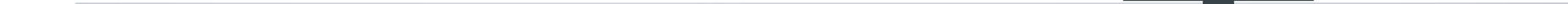
New England Investment Network

Online platform connecting entrepreneurs in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont with angel investors worldwide.

<http://www.newenglandinvestmentnetwork.com/home>

2.1.6 Other State Resources (Mechanisms and Facilitators of Financing)

Public and private financing resources are only useful if they have advocates, champions, and mechanisms to reach the individuals and firms that need them. Organizations such as the Center for Women & Enterprise, the Rhode Island Small Business Development Center, and Rhode Island SCORE place an emphasis on supporting entrepreneurship; others such as the state's Chambers of Commerce provide support for all types of businesses in their locality, while also supporting an improved economy throughout the state; and still other organizations focus on specific business needs like talent or real estate, such as the Governor's Workforce Board or the Economic Development Foundation of Rhode Island, respectively.



“What gets lost in these reports is identifying opportunities for many of our low paying and under-skilled workforce. We need to identify a balance of economic opportunity for all of our workforce.”

State-Level Resources: Entrepreneurship, Business Administration & Industry Support



Capital Good Fund

Non-profit, certified Community Development Financial Institution; provides, among other services, small business loans for low-income Rhode Island residents.

<http://www.capitalgoodfund.org>

Center for Women & Enterprise

Provides women entrepreneurs in New England with programmatic and resource access and support to develop their businesses; offers scholarships; office in Providence.

<http://www.cweonline.org/bAboutOurWork/CWEProvidence/tabid/227/Default.aspx>

Division of Taxation

Administers and provides information and evaluation reports on current state business tax incentive programs.

<http://www.tax.state.ri.us/>

Economic Development Foundation of Rhode Island

Organization resulting from the 2005 merger of three private, not-for-profit economic development organizations: the Blackstone Valley Development Foundation, Inc., the Industrial Foundation of Rhode Island, Inc., and the Woonsocket Industrial Development Corporation; strives to expand community tax bases and create quality jobs through well-designed real estate projects.

<http://www.edf-ri.com/>

Governor's Workforce Board

Supports strategies to improve the skill base of the RI workforce and to anticipate future needs of growing and emerging businesses; the Board has made more than \$63-million worth of strategic investments; site provides links to RI Tax Credits supporting such training; lists nine industry partnerships; currently has RFP for Innovation Partnership Grants.

<http://www.rihric.com/>

Greater Providence Chamber of Commerce

Advocates for growing and protecting the business community in Rhode Island; provides information on SBA loans.

<http://providencechamber.com/>

Minority Business Enterprise Compliance Office

Promotes the development of certified Minority Business Enterprises (MBE), Women Business Enterprises (WBE), and Disadvantaged Business Enterprises (DBE) through providing certification, advantages in state procurement opportunities, business assistance, and advocacy programs and services.

<http://www.mbe.ri.gov/index.php>

netWORKri

One-Stop Career Center System with offices in Providence, West Warwick, Woonsocket, and Wakefield; provides links to RI Tax Credits supporting such training.

<http://www.networkri.org/>

Newport County Chamber of Commerce

The Chamber has taken a leading role in economic development and community planning throughout Newport County and Greater Rhode Island; members are eligible for programs and services that directly benefit their businesses or organizations.

<http://www.newportchamber.com/economic-development>

Rhode Island Foundation

A proactive community and philanthropic leader working to meet the needs of the people of Rhode Island.

<http://www.rifoundation.org>

Rhode Island Manufacturing Extension Service

A non-profit organization that aims to help Rhode Island manufacturers of all sizes and industries succeed and prosper; funded, in part, through the National Institute of Standards and Technology, Manufacturing Extension Partnership (NIST-MEP).

<http://www.rimes.org/>

Rhode Island Quick Start (Office of Secretary of State)

Online assistance with navigation of State- and Federal-required business start-up documentation.

<https://www.ri.gov/SOS/quickstart/>

Rhode Island Site Selector

RIEDC, partnered with the Economic Development Foundation of Rhode Island, created a GIS-based tool to assist prospective businesses identify suitable facilities within the state.

<http://www.risitelocator.com/>

Rhode Island Small Business Development Center (RISBDC)

Through regional offices in Providence, Lincoln, Newport, and Warwick, provides entrepreneurs with support and no-fee counseling to create, transform and grow their businesses; provides links to financial resources.

<https://www.risbdc.org>

Rhode Island Science & Technology Advisory Council (STAC)

Identifies ways for Rhode Island to support entrepreneurship and new company creation; works with Rhode Island leadership to create a toolkit of updated programs to help nascent ventures grow.

<http://stac.ri.gov/creation/>

Rhode Island SCORE

Volunteer organization of working and retired business owners, professionals, and executives working who provide entrepreneurs with free counseling.

<http://ri.score.org/>

2.2 Reviewing Rhode Island’s Financial Resource System

This section will provide: a preliminary assessment of the financial resources available for firms in Rhode Island; the latest findings from economic development program evaluation literature, and its potential impact on Rhode Island’s future economic development priorities; and some brief models and examples of financial programs of other states that could be considered moving forward.

2.2.1 Preliminary Assessment of Financial Resources in Rhode Island, by Company Stage

FEC’s analysis of the financial resources available in the state identified a number of resources but many with limited financial resource capacity.

Figure 22 demonstrates the findings of that analysis.



FIGURE 22:
Rhode Island Financial Support Strength [by company stage, preliminary review]

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	Financing Description
Seed stage; initial capitalization	Start-up financing (Series A round of investment); first revenue, no profit	Second stage financing (Series B round of investment); viable business	Working capital; lines of credit with commercial bank	Scaling (Series C round of investment); ramping up operations; mature	
Angel Networks	Venture Capital; Micro loans	Venture Capital; Commercial; SBA loans	Venture Capital; Commercial; SBA loans; RI Small Business Loan Fund	Commercial; RIEDC / RIIFC / IRBA loans; Tax Incentives	Primary Financial Provider(s) / Programs
LOW	LOW - MEDIUM	MEDIUM	MEDIUM	MEDIUM - HIGH	Financial Resource Capacity in Rhode Island



Connecticut

Job Expansion Tax Credit (JET)

Through the JET, Connecticut firms are eligible for up to \$500 worth of tax credits per month, per new full-time employee (for certain select hires, this can be worth up to \$900 per month). Available through 2013, the credit is meant to quickly spur hiring, and can be used against the Insurance Premium tax, the Corporate business tax, the Utilities company tax, or the general Income tax. Firms must meet certain requirement thresholds before qualifying.

Research and Development Tax Credit for Grants to Institutions of Higher Education

To spur private-sector investment in higher-education research within the state, Connecticut created this R&D tax credit. The credit, equal to 25 percent of the higher amount of investment – over that of the previous three years – that a firm makes to an institution of higher education for the purpose of research and development.

Small Business Express Program (EXP)

The EXP program provides loans and grants to small businesses in Connecticut with the goal of job creation and economic growth. It provides access to capital through the EXP Revolving Loan Fund, and loan and grant funds through its Job Creation Incentive Loans and its Matching Grants. The Revolving Loan fund assist firms to purchase machinery and equipment, absorb construction of leasehold improvements, have working capital, or even to pay for relocation costs. Loan amounts range from \$10,000 to \$100,000 and incur an interest rate of 4 percent on terms up to 10 years. The EXP Job Creation Incentive Program focuses on businesses expecting to create new jobs over the next year, and covers the costs of training, marketing, and working capital. Loans range from \$10,000 to \$300,000 at interest rates of up to 4 percent on 10 year terms. Matching Grants range from \$10,000 to \$100,000, must be matched by the local business, and can cover expenses ranging from working capital, to the purchase of machinery and equipment, to construction costs.

Massachusetts

Economic Development Incentive Program (EDIP)

The EDIP is a tax incentive program aimed to foster job creation across the state. Certified expansion projects within targeted area communities can be awarded up to a 10 percent investment tax credit to support the project. For Enhanced Expansion Projects (EEPs), expecting to create at least 100 new, full-time jobs, the Commonwealth may also consider the project for up to a 10 percent capital investment tax credit. The EDIP also consists of a Manufacturing Retention Project (MRP), designed to retain or create manufacturing jobs in the state through access to similar tax incentives.

Job Creation Incentive Program

Qualifying biotechnology and medical device manufacturing companies looking to locate in or expand in Massachusetts (over 10 new jobs) may be eligible for incentive payments equal to half of the new jobs' salary, multiplied by the respective income tax rates of the newly hired employees.

2.2.2 Models and Examples from Other States

In reviewing its own financial resources, it may be helpful for Rhode Island policymakers to also be aware of what other states, in the region and across the country, are providing their in-state companies. These programs – ranging from direct financing to tax credits to venture fund access - are designed to meet demonstrated needs not just felt by firms within their borders, but firms across the country. These examples, many with publically available impact reports, could serve as models for Rhode Island policy-makers as they seek to better target and support local industries within the State.

MassDevelopment (MDFA)

MassDevelopment “provides real estate and equipment financing at low interest rates through direct loans or through its Emerging Technology Fund” (ETF). It caps direct loans at \$3 million for real estate and \$500,000 for equipment. The ETF is capped at \$2.5 million or 25 percent of total project cost. MassDevelopment also provides tax exempt bond financing to manufacturers looking to make substantial capital or facility investments in the state.

New York

Capital Access Program (CAP)

New York’s CAP program is a \$19 million initiative that provides matching funds to financial institutions for loan loss reserves to incentivize small business lending. CAP funding can be used with term loans or lines of credit, on “financing capital needs, technology or facility upgrades, business startups or business expansions,” with investments administered and managed by participating lenders.

Economic Transformation Program

The Economic Transformation Program “was created to assist communities affected by the closures of correctional and juvenile justice facilities” to help leverage private sector investment to transform economies previously dependent upon such employers. It provides \$50 million in capital funding to support economic development initiatives and five fully refundable tax credits to new businesses locating in the affected areas. The Jobs credit is equal to 6.85 percent of wages. The Investment credit is equal to 6 percent of investment, but up to 10 percent, if it involves the reuse of a now vacated facility. The Property credit waives 25 percent of eligible property tax credit during a business’ first year of relocation. Job Training and Sales credits and refunds are also available. Up to \$50 million in capital funding is also available for companies in particular industries making investments in-line with regional economic plans.

Excelsior Jobs Program

The set of Excelsior tax credits (Jobs, Investment, Research & Development, and the Real Property) are available for high tech, bio-tech, clean-tech, back-office, distribution, agri-business, and manufacturing firms that are preparing to create jobs or make significant capital investments. The number of expected jobs created to be eligible depends upon the industry. The Jobs Tax credit is for 6.85 percent of wages per new job. The Investment credit is for 2 percent of qualified investments. The R&D credit is for 50 percent of the Federal Research and Development credit, and up to 3 percent of research expenditures in New York. The Property credit is for firms investing in certain distressed areas.

Job Development Authority: Direct Loan Program

Empire State Development, “to provide financing for the growth of manufacturing and other private businesses within New York,” offers companies direct loans of \$50,000 to \$3.5 million, varying based upon the risk of the investment.

Manufacturing Assistance Program (MAP)

The MAP program helps New York manufacturers make capital investments to improve production, productivity and competitiveness. The program targets larger-scale, export-oriented firms looking to make a minimum capital investment of \$1 million. Empire State Development caps a project’s potential assistance through MAP at \$1 million.





2.3 Guidance and Considerations for Rhode Island's Financial Resource System

Much of the guidance outlined in Section 1: Business Climate Analysis are also applicable to improving Rhode Island's Financial Resource System. Though some overlap exists, we have provided guidance in this section below.

2.3.1 Initial Guidance

1. **Convene financial partners.** Regularly convene financial resource partners to discuss and troubleshoot financial and investment issues within the State of Rhode Island. This could include representatives from the State, RIEDC, local municipal policymakers, venture capital firms, angel networks, incubators, small business development centers, and private sector partners (the largest recipients of SBA lending funds, for instance). This could constitute one of the "Asset or Knowledge Teams" outlined in Section 1.3.1.

a. This group should be convened with the expectation of meeting for the long-term, though should be leveraged in the short-term to develop specific policy proposals to make investing in Rhode Island firms easier and more cost-effective.

b. This group should be responsible for mapping the financial resource programs available by company size, stage and industry, and identifying and proposing solutions to fill gaps. Particular attention should be paid to: who is receiving funds, how much they are receiving, how much they could potentially receive, as well as the barriers and challenges in disbursing funds to firms in Rhode Island.

2. **Map the financial "deployment" system.** Funding resources mean nothing if those funds are not able to reach the companies and individuals who need them. Rhode Island, for its size advantage, appears to lack a well-known, core financial resource infrastructure or "deployment" system, particularly at the entrepreneurial level.

2.3.2 Considerations for Sustainable Rhode Island Campaign

1. **As emphasized in Section 1.3.2, Rhode Island should focus its long-term vision and priorities on growing and retaining businesses.** This strategy takes into account the real barriers that Rhode Island faces in attracting existing businesses, and plays on its strengths and assets, which are well positioned to support innovation and entrepreneurship. However, as discussed in Section 1.3.2, several barriers need to be addressed, including expanding and coordinating incubators, financial programs, and venture capital.

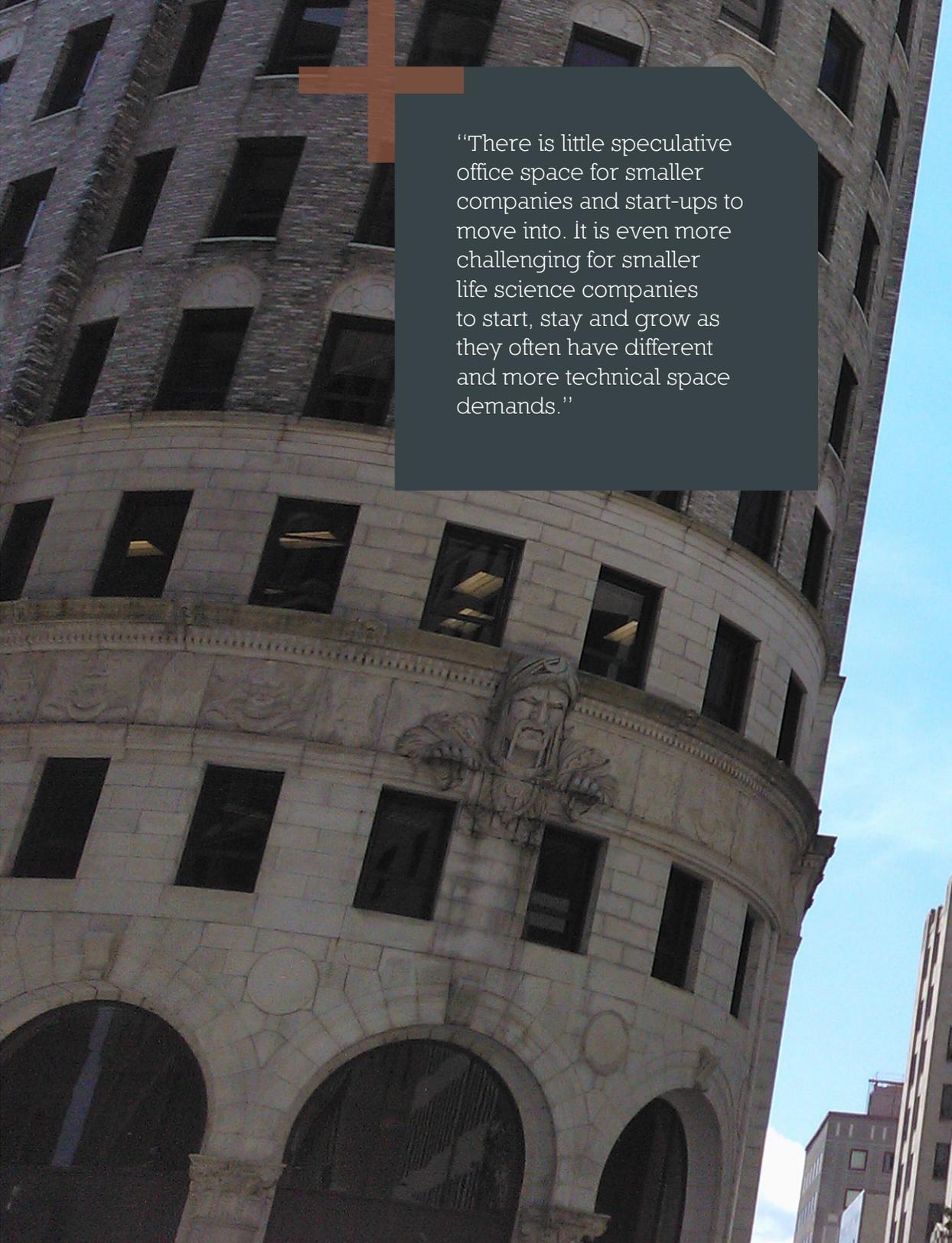
a. **Create statewide network of incubators.** Create a statewide network of incubators, based in the larger downtowns, that would simultaneously serve as hubs for: entrepreneurial education, one-stop training connections through local community colleges, co-working spaces, a source for SBA/ SBDC/ SCORE counseling, Chamber of Commerce connections, and information on all of the financial resources – at the federal, state, and local level – that are available to a firm of their size, stage, and industry. This activity would require a moderate capital investment in individual incubators and an overarching commitment of resources to a linked network.

b. Invest in entrepreneurship... once partners in place. Rhode Island, first and foremost, needs to develop statewide and community-level, partnerships to implement its economic development priorities. Once those partnerships are established, particularly with colleges and universities, the State should consider match-investing in incubators and co-working spaces, entrepreneurial programming, and other financing mechanisms needed for the businesses of entrepreneurs to grow and prosper. The state should also consider making it more appealing for private investors to invest in angel networks and venture capital funds, beyond its VC Tax Credit, which is underutilized and under-publicized.

c. Develop statewide VC group. Develop a statewide venture capital and angel fund group, convened by RIEDC, that also includes: successful local entrepreneurs, representatives from the state's Business Plan Competition, and representatives from Rhode Island and regional VC firms.

- i. The group should serve as a hub for entrepreneurial information and resources in the state.
- ii. This group could serve as a mentorship program for promising Rhode Island companies to prepare for and get access to regional NYC and Boston VC opportunities.

2. Financial resource program evaluations are not important, they are necessary. The state needs to regularly run and release rigorous evaluations of all of its loan, loan guarantees, grants, and other financial resource programs. Doing so is critical for two reasons: 1) It allows a baseline understanding of the effectiveness, efficacy, and efficiency of the programs so that adjustments, where necessary, can be made; and 2) It will assist with building the type of public-capital needed for the state to once again take a proactive role (if that's the role it chooses to play) in economic development.

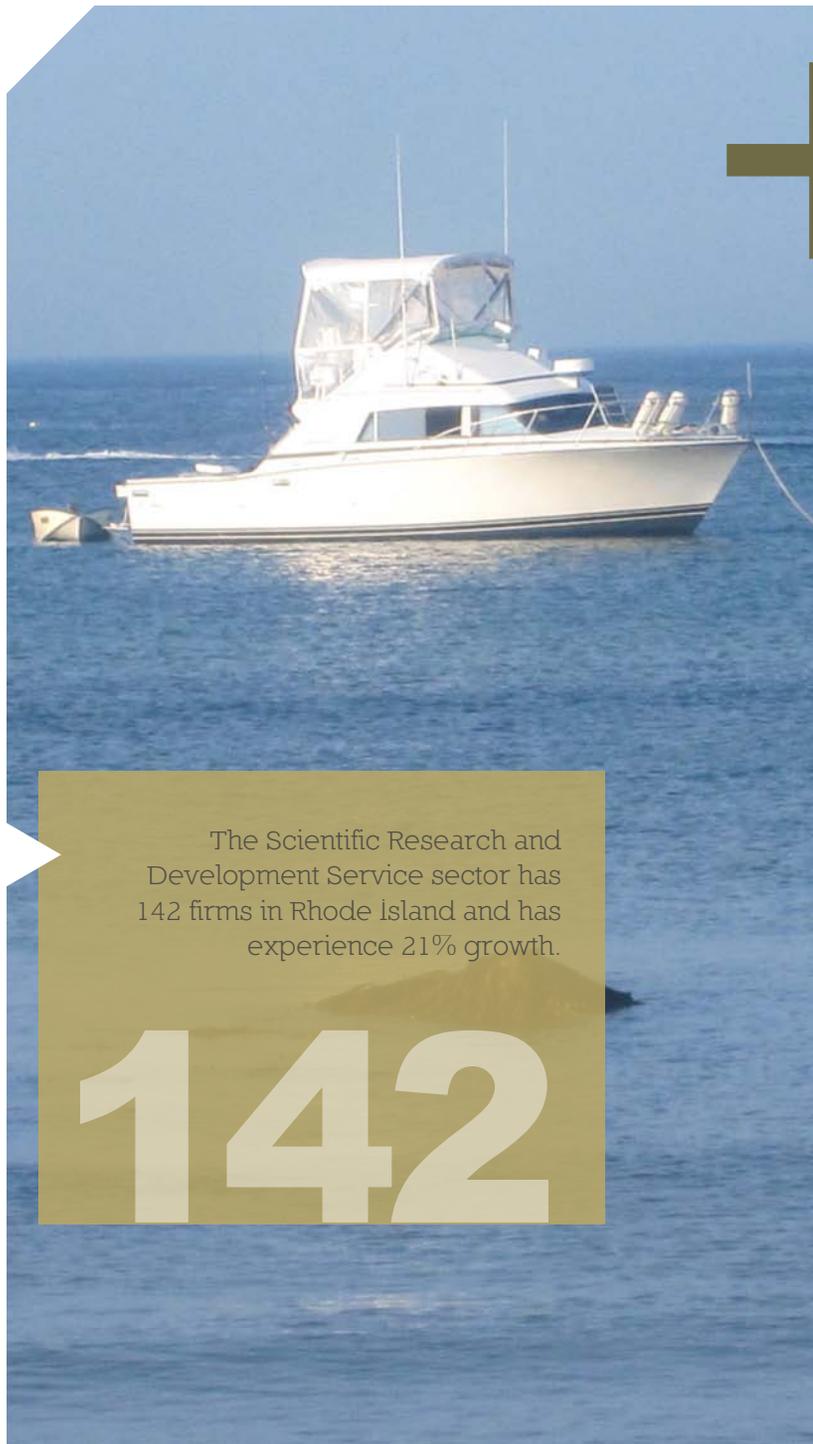


“There is little speculative office space for smaller companies and start-ups to move into. It is even more challenging for smaller life science companies to start, stay and grow as they often have different and more technical space demands.”



22% of employment comes from the Education and Health Services sectors.

22%



The Scientific Research and Development Service sector has 142 firms in Rhode Island and has experience 21% growth.

142

3.0 Targeted Cluster Analysis

Industry clusters are an economic development concept that was introduced in the 1990's by Harvard researcher, Michael Porter.⁴⁴ In its basic form, clusters are groups of related industries operating in a defined location. The concept of a 'targeted' cluster is an economic development concept that emphasizes that certain actions can be undertaken by government, non-profits or even the cluster itself that will benefit many companies within the cluster. Analysis of industry clusters and their strengths, weaknesses, opportunities and threats (SWOT) is a critical first step in a cluster development strategy.

3.1 About Rhode Island's Economy

Based on the most current data from Rhode Island Department of Labor and Training, the Rhode Island economy contains roughly 458,000 nonfarm employees. Employment in the State has decreased over the past 10 years, with the total number of jobs decreasing by 4.5 percent between 2002 and 2012 (Figure 24). The manufacturing sector took the biggest hit from both an absolute and a relative standpoint, losing 21,317 jobs (34.2 percent) of sector employment. Over that same period, the education and health services sector made the greatest gains, with employment increasing by 14,883 jobs (16.9 percent).⁴⁵

The education and health services sector comprises the largest share of total employment – 22 percent of all Rhode Island jobs in 2012. (Figure 23)

⁴⁴ Porter, Michael. "Economic Clusters." Institute for Strategy and Competitiveness. Harvard Business School. Web.

⁴⁵ Labor Supply & Demand: Third Quarter 2012. Rep. Rhode Island Department of Labor & Training, 2012. Web

FIGURE 23:
Rhode Island's Nonfarm Employment [2012]



- 22% Education & Health Services
- 16% Trade, Transportation & Utilities
- 13% Government
- 12% Professional & Business Services
- 11% Leisure & Hospitality
- 09% Manufacturing
- 07% Financial Activities
- 05% Other Services
- 03% Construction
- 02% Information
- 00% Natural Resources & Mining

In analyzing a state's economy a common approach is to utilize industry clusters to group inter-connected firms and their related partnering institutions into a defined industry category. This approach allows firms and the government to identify specific opportunities and challenges to maintaining and/or growing jobs within the cluster.



FIGURE 24:
Rhode Island Nonfarm Employment 2002 and 2012

	2002	2012	Change 2002 - 2012	RI % Change 2002 - 2012	U.S. % Change 2002 - 2012
Total Nonfarm	479,442	457,692	(21,750)	-4.5%	2.2%
Natural Resources & Mining	208	183	(25)	-12.0%	43.5%
Construction	19,417	15,833	(3,583)	-18.5%	-17.6%
Manufacturing	62,308	40,992	(21,317)	-34.2%	-21.7%
+ Durable Goods	41,025	26,583	(14,442)	-35.2%	-21.2%
+ Non-Durable Goods	21,283	14,408	(6,875)	-32.3%	-22.5%
Trade, Transportation & Utilities	80,458	72,208	(8,250)	-10.3%	-0.6%
+ Wholesale Trade	16,450	16,400	(50)	-0.3%	-0.5% ◀
+ Retail Trade	53,125	45,117	(8,008)	-15.1%	-1.6%
+ Transportation & Utilities	10,883	10,692	(192)	-1.8%	2.5%
Information	11,200	10,400	(800)	-7.1%	-22.5% ◀
Financial Activities	32,892	30,725	(2,167)	-6.6%	-1.4%
Professional & Business Services	48,908	54,033	5,125	10.5%	12.0%
+ Administrative & Waste Services	23,192	23,775	583	2.5%	4.9%
Education & Health Services	88,058	102,942	14,883	16.9%	25.5%
+ Educational Services	19,267	25,958	6,692	34.7%	25.6% ◀
+ Health Care & Social Assistance	68,792	76,983	8,192	11.9%	25.4%
Leisure & Hospitality	47,967	49,367	1,400	2.9%	13.8%
+ Arts, Entertainment & Recreation	7,125	7,292	167	2.3%	8.2%
+ Accommodation & Food Services	40,842	42,075	1,233	3.0%	14.8%
Other Services	21,992	21,383	(608)	-2.8%	0.0%
Government	66,033	59,625	(6,408)	-9.7%	2.1%
+ Federal Government	10,242	10,008	(233)	-2.3%	1.7%
+ State Government	18,117	16,000	(2,117)	-11.7%	0.7%
+ Local Government	37,675	33,617	(4,058)	-10.8%	2.7%

◀ Rhode Island percent of change outperforming U.S. percent of change

3.2 Cluster Strengths, Weaknesses, Opportunities & Threats (SWOT) Analysis

3.2.1 Methodology

There are a variety of approaches to defining and analyzing these clusters and Rhode Island, through RIEDC and the Science Technology Advisory Committee, has made previous efforts to define the state's industry clusters. Later in this section we will describe a new concept called Market Opportunity Networks which seeks to move beyond a static 'cluster' definition and instead looks at the market opportunities and challenges that will be experienced by an industry sector.

To begin though, FEC examined clusters defined by the North American Industry Classification System (NAICS). Many of the clusters RIEDC has identified align with clusters defined by the Rhode Island Science and Technology Advisory Committee (STAC)

in their report.⁴⁶ FEC used those definitions as they demonstrated a logical approach to categorizing the industries. Furthermore, given the size of Rhode Island, the aim is to focus resources and investment, rather than disperse it. The definitions for other clusters that were not in the STAC report are in Figure 25.

The Rhode Island clusters were compared along a number of quantitative and qualitative factors, defined in the Cluster Analysis reference on the RIEDC website. FEC compared each cluster and each industry code to the U.S. to create a national benchmark. In some cases, this focus on RI and the U.S. may lead to tunnel vision or bias regarding the opportunities and potential for Rhode Island. These limitations were balanced by analyzing detailed industry data as well as data that translate to industry

clusters but do not directly align with NAICS. This additional analysis includes patents, occupations, R&D, venture investment and high growth firms related to the identified clusters. This approach creates an enhanced Industry Cluster view and can better identify strengths and weaknesses.

Finally the analysis examined cross-cluster opportunities and industry linkages based on strengths and opportunities where Rhode Island may be able to focus on specific and significant market opportunities. These market opportunities will have to be more fully defined through a process that convenes representatives across the Market Opportunities. Examples and suggestions of possible scenarios for Market Opportunity Strategies are presented in Section 3.3.

The clusters were prioritized through a SWOT process. We defined specific benchmarks for each factor and cluster to determine where it fit into the SWOT matrix. Factors in which Rhode Island outperformed the national benchmark were deemed a "strength" whereas "weaknesses" were those factors where the state performed below the benchmark. One way in which this SWOT analysis differs from others is that it includes "threats" and "opportunities" that were not purely external. For example, in several cases Rhode Island has a high intensity of patent activity that relates to a cluster, which would traditionally be categorized as a strength, but the intensity of patent activity is eroding. In this case, we classified that as a threat rather than a strength since it represents a strength that is in danger. Similarly, there are some cases where a silver lining in a weakness was found and is therefore classified as an opportunity.

The clusters are presented in descending order of the total Strengths and Weaknesses. IT & Digital Media is the top ranked cluster. Across this portfolio the aim was to provide balance between job growth, wages and other factors, rather than focus on only job growth or only high wage clusters.⁴⁷



FIGURE 25:
Cluster Definitions

RIEDC Clusters	STAC Cluster Definition
Manufacturing and Industrial Products	Advanced Manufacturing
Consumer Products and Design	Design
Health and Life Sciences	Health Care & Life Science
IT & Digital Media	IT & Digital Media
Defense and Homeland Security	Marine Trades & Defense
Green Economy (Renewable Energy & Energy Efficiency)	STAC Wind Turbine Components; BLS green definition and state survey
Marine Trades	Marine Trades & Defense

RIEDC Clusters	NAICS Definition
Financial Services	Financial Services: 5211 - 5259
Tourism and Hospitality	Arts & Rec: 7111 - 7139; Accommodation & Food: 7211 - 7225

FIGURE 26:
Cluster SWOT Analysis

Strength Weakness Opportunity Threat

	IT & Digital Media	Tourism	Health Care & Life Science*	Design & Consumer Products**	Marine Trades & Defense	Manufacturing & Industrial Products	Financial Services	Wind Turbine Component Manufacturing	Green - Renewable Energy	Green - Energy Efficiency
Job Growth										
Growth vs. U.S. Cluster										
Firms in High-Growth Industries										
Exporting							N/A			
Expanding / Declining Industries										
High-Growth Firms (INC 500)										
Patents		N/A					N/A			
R&D Intensity		N/A		N/A						
Venture Investment		N/A								
Cluster Firm Size										
Wages										
Occupations										
Market Outlook				N/A						
Strengths	7	9	6	8	5	3	5	2	5	8
Weaknesses	1	1	2	1	4	4	2	9	6	4
Opportunities	3	0	2	0	3	4	0	0	1	1
Threats	2	0	3	2	1	2	4	2	1	0
Strengths + Opportunities	10	9	8	8	8	7	5	2	6	9

* Several indicators reflect the emerging cluster of BioTech.

** Most quantitative indicators relate to the Design portion of the cluster. See cluster SWOT for additional information.

⁴⁶ Rhode Island Science and Technology Advisory Committee. Benchmarking the Rhode Island Knowledge Economy 2012, http://stac.ri.gov/assets/521/Benchmarking_the_RI_Knowledge_Economy_2012.pdf.

⁴⁷ Quarterly Census of Employment and Wages. Rep. US Bureau of Labor Statistics. Web.

A summary SWOT for each cluster is provided as Figure 26, while a detailed SWOT Analysis for each of the above clusters can be found in the Cluster Analysis reference on the RIEDC website. Furthermore, we have identified three potential Market Opportunity Networks, or specific market opportunities that can provide more focus and concentration of investment and resources than a more broadly defined cluster. They are: Biotextiles, Implants and Devices, Advanced Marine Vehicles and Culture, Fitness and Recreation (described in detail in Section 3.3). How these clusters align with the Market Opportunity Networks is defined in the following section.



3.2.2 Rhode Island's Industry Cluster Portfolio

IT & Digital Media is the top ranked existing cluster with a balance of job growth, high wages and future market opportunity; the only notable weakness is in the labor supply where some critical skill and occupation gaps exist.

- The software and computer design component aligns with the Culture, Fitness & Recreation Market Opportunity Network. In particular the elements that support game development, sports or fitness applications, and design tools.

The Tourism cluster, despite some rough times, has been and will likely continue to be a generator of significant jobs for the state that also attracts wealth and spending from out of state. The disadvantage of this cluster is that the jobs pay generally low-wages, however, Rhode Island has a significant number of people who need these jobs and are not qualified for jobs in other sectors.

- The Arts & Recreation sectors of the Tourism cluster align with the Culture, Fitness & Recreation Market Opportunity Network. Emphasizing the access to the ocean, marine sports and other outdoor, sports or fitness activities can leverage other segments of Culture, Fitness and Recreation, such as sportswear, fitness equipment and more beyond tourism spending.
- The hospitality segment of Tourism is a supporting sector that will respond to demand but not in and of itself drive growth.

Design & Consumer Products is a traditional cluster for Rhode Island that has been struggling in some areas. Recent trends have increased the outlook for this cluster. This cluster also provides strong potential job growth across a variety of skill and wage levels.

- The Design & Consumer Products cluster aligns with the Culture, Fitness & Recreation Market Opportunity Network. Examples include advanced textiles for sportswear and fitness apparel, sports and fitness gear and equipment that should include but not be limited to marine and beach activities.
- The Design & Consumer Products cluster also aligns with the Biotextiles, Implants and Devices Market Opportunity Network, providing design and product expertise to produce new biomaterials, surgical threads, medical supplies and implantable materials, parts and devices.

FIGURE 27:
Cluster Growth and Wages [sorted by average wages]

	U.S. 2002 - 2012	RI 2002 - 2012	Average Wages	Growth ▲ Decline ▼
Wages ABOVE Rhode Island Average				
Design & Consumer Products	2.1%	0.7%	\$60,294	RI ▲ U.S. ▲
Renewable Energy	10.0%	9.0%	\$49,959	
Health Care & Life Science	1.9%	1.2%	\$49,111	
Energy Efficiency	-1.0%	17.0%	\$49,974	RI ▲ U.S. ▼
Financial Services	-0.1%	-0.7%	\$78,241	
IT & Digital Media	-0.4%	-0.2%	\$67,639	RI ▼ U.S. ▼
Wind Turbine Component Manufacturing	-0.8%	-1.8%	\$50,403	
Marine Trades & Defense	-0.4%	-1.4%	\$47,337	
Wages BELOW Rhode Island Average				
Tourism: Arts & Recreation	3.3%	7.2%	\$24,447	RI ▲ U.S. ▲
Tourism: Hospitality	2.3%	4.4%	\$16,592	
Manufacturing & Industrial Products	-1.0%	-1.9%	\$42,865	RI ▼ U.S. ▼

Marine Trades & Defense is another traditional cluster that should be included in the portfolio because it provides high-skill and high-wage jobs that cannot easily be replaced. Furthermore, with the move toward re-shoring and protecting critical skills, such as ship-building, it would be more difficult to rebuild than to maintain this cluster. Rhode Island also enjoys two competitive advantages in this cluster – one of which is its access to the ocean, which is common to other coastal states – while the other is the presence of the Naval Undersea Warfare Center (NUWC) Newport, which is unique to Rhode Island.

- Marine Trades would provide the core of the Advanced Marine Vehicles Market Opportunity Network. This network would include firms engaged in producing advanced boats and ships that are more energy efficient and energy independent or innovative in other aspects.
- Marine Trades also aligns with the Culture, Fitness & Recreation Market Opportunity Network in the production and service of boats and ships for recreational uses.
- Defense is more of a market than a cluster.⁴⁸ Although it can be the largest market or customer for many firms, it is not the only market for those goods and services as many of the top contractors serve commercial markets as well. Engineering services, marine equipment, weapons and aerospace are the prime products and services. Defense aligns with the Advanced Marine Vehicles Network and the Biotextiles, Implants & Devices Network, where in both cases it can serve as a primary market and source of research funding.

⁴⁸ "NUWC's Economic Impact Nears \$1B in 2012." Providence Business Times. 17 Jan. 2013. Web.

Manufacturing & Industrial Products is included in the portfolio because of the difficulty of replacing high skill and high wage jobs once they are gone. It is also included because this cluster links to the marine trades, defense and potentially the biotech clusters. Employment in the cluster for the state has rebounded sharply since 2011 and the move to re-shore manufacturing bodes well for the future.

- Manufacturing & Industrial Products aligns with the Biotextiles, Implants & Devices Network as a producer of components, parts and equipment as well as finished products. These may include medical devices for in vitro or in vivo uses as well as artificial prosthetics or other biomedical/ biomechanical parts.
- Manufacturing & Industrial Products aligns with the Advanced Marine Vehicles Network as a producer of components, parts and equipment for the bodies and engines of ships and boats.

Health Care & Life Sciences is a strong cluster, but the statistics in this cluster are dominated by health services. Health Care and Life Sciences remains important in Rhode Island as a provider of a large and growing number of good jobs, however the dynamics of growth in healthcare are driven by external government regulations and market forces over which Rhode Island has limited influence. Within the cluster, there is an emerging biotech sector that could become a significant emerging cluster.

- The Biotextiles, Implants & Devices represents an emerging Market Opportunity Network that leverages the assets and resources of Rhode Island in the biosciences research and commercialization. Biotextiles include implantable devices such as surgical sutures, hernia repair fabrics, vascular and endovascular prostheses, artificial skin, anterior cruciate ligament (ACL) prostheses and parts of artificial hearts.

Financial Services provides extremely high wages but recent job growth has been volatile. Many of the job losses were driven by larger national and global market forces, but also by corporate management decisions and mismanagement. Ultimately, Financial Services is an industry that is increasingly managed and operated on a global scale. Therefore, the ability of Rhode Island to establish a niche and to affect the growth of that niche is subject to corporate decision makers without strong ties to Rhode Island. Rhode Island does benefit from its proximity to Boston and New York City, but it can likely capture these spillovers without investing significant resources in the effort, especially since those efforts can put it into a bidding war with deep-pocketed neighbors.

- Financial Services does not align with the three preliminary Market Opportunity Networks but it remains a source of high wage jobs and will continue to play an important role in the state economy. The focus for Rhode Island is to "Maintain the Base" that exists in the state, which means supporting the growth and expansion of existing financial services firms. If future conditions are more favorable for Rhode Island to establish a competitive advantage, then it can be more aggressive at that time.



Green Economy

FEC reviewed the Green Economy sector utilizing the definition supplied by the US Department of Labor.⁴⁹ This definition included the following subcategories that have previously been identified in Rhode Island.

The **Wind Turbine Component Manufacturing** cluster has demonstrated weak performance to date and the current market outlook is weak. Many of the jobs from the wind industry come from the installation, maintenance and repair of wind farms, rather than the production of components. These kinds of jobs tend to be located where the wind farms are located, which somewhat limits the employment potential for Rhode Island.

- The focus for Rhode Island is to “Maintain the Base” and be cautious about significant investment at this time. Wind Turbines are part of the larger Renewable Energy cluster and as such it represents part of the diversity that is required for a sustainable energy strategy.

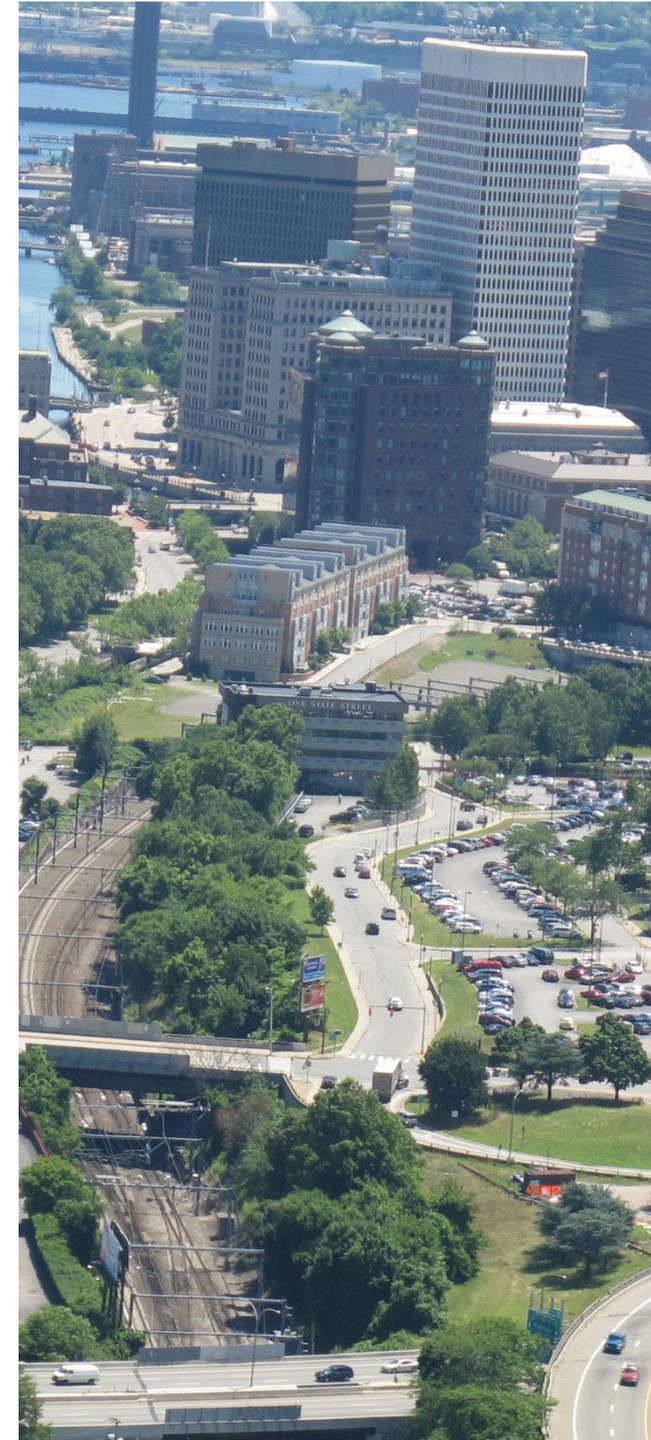
Renewable Energy is an emerging aspect of the Green Economy in Rhode Island. The problem for Rhode Island is that it has breadth, but little depth in Renewable Energy. There are several industries represented by only one firm, which means that the state really does not have an industry. Furthermore many of the potential jobs are in engineering services but the firms and workers may not actually be involved in Renewable Energy. The market for Renewable Energy is affected by a number of external factors beyond the influence of any one state.

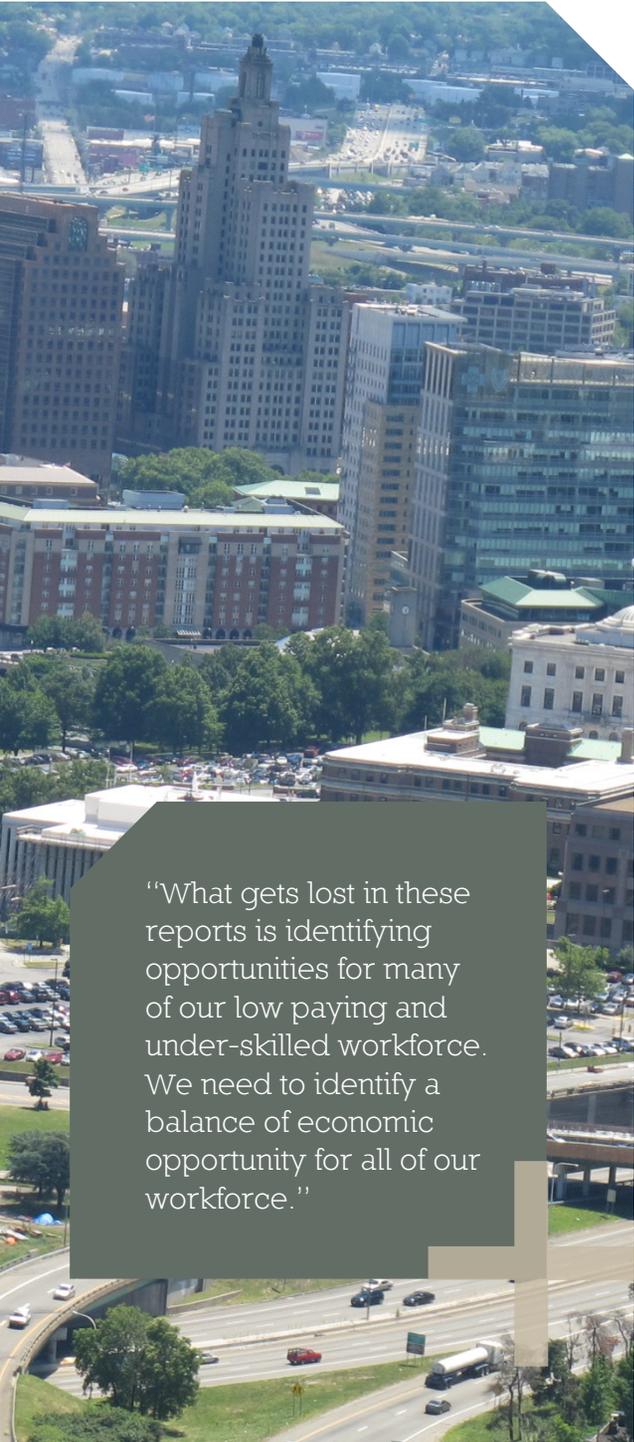
- The Renewable Energy sector may align with the Advanced Marine Vehicle Network, but the primary focus for Rhode Island is to increase demand for renewable energy in the state, which can drive further development of the sector. Significant investments in building the supply or supporting new firms is not likely to increase demand in state or out of state.

Energy Efficiency is another emerging cluster of the Green Economy, but one that has more presence and potential for the state of Rhode Island. For Rhode Island this cluster includes a variety of materials producers as well as design, engineering and testing services.

- Energy Efficiency aligns with the Advanced Marine Vehicle Network by providing materials, equipment and design services to increase the energy efficiency and operational performance of ships and boats.

⁴⁹ The definition can be found here, http://www.bls.gov/green/green_definition.htm. The BLS has included hundreds of industries with green jobs potential and the full list can be found here: <http://www.bls.gov/news.release/ggqcew.t03.htm>.





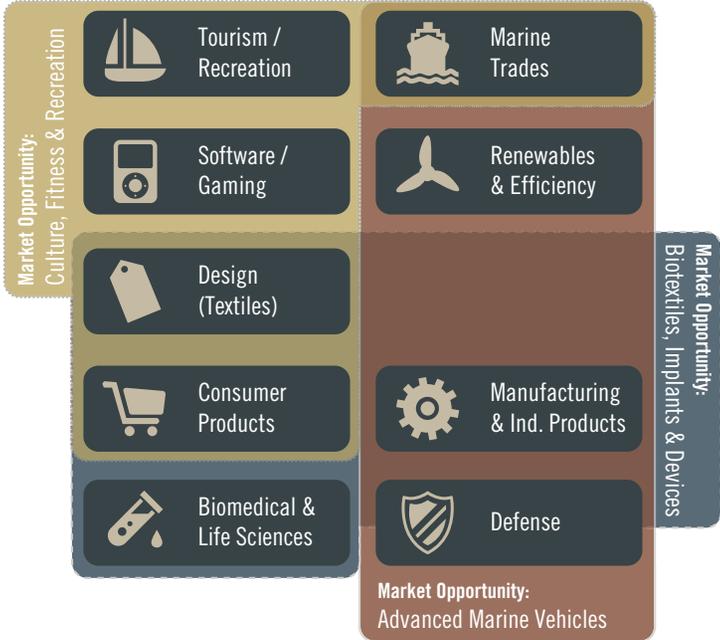
3.3 Why Market Opportunity Networks

The presence of a number of industries does not necessarily make a cluster. A cluster strategy has to go beyond merely identifying and documenting the firms, jobs and metrics common to cluster studies. It is not wise to assume that the presence of different industries or elements of a cluster means that they are actually trading, collaborating or even aware of each other.

To be effective a cluster strategy must be a cluster BUILDING strategy. Market opportunities are the most effective ways to convene, align and unify firms and industries into an active cluster. Many of the potential clusters in Rhode Island are small or have serious gaps in commercial or other assets. A common challenge for Rhode Island is that even its largest clusters are small on the national and global scale. Convening industry leaders to identify and define potential market opportunities provide a path to quickly get to scale and to provide a unifying focus for the state cluster strategy.

Focusing on Market Opportunity Networks helps to prioritize which gaps to fill and builds links between clusters that can address the scale and size disadvantage in Rhode Island. Following are three examples of how to focus and bridge the clusters to define possible market opportunities: Biotextiles, Implants and Devices, Advanced Marine Vehicles and Culture, Fitness and Recreation. While these may be valid market opportunities, they are intended primarily as examples to initiate more dialogue and analysis that involves industry leaders and researchers.

FIGURE 28:
Linking Clusters to Market Opportunities



3.3.1 Defining the Market Opportunity Networks

Advanced Marine Vehicle Market Opportunity Network

The Advanced Marine Vehicles Market Opportunity Network would include firms engaged in producing advanced boats and ships that are more energy efficient than current vehicles and energy independent or innovative in other aspects. It would include producers of components, parts and equipment for the bodies and engines of subs, ships and boats. This sector can leverage the presence of NUWC Newport and the state's defense contractors as well as commercial marine vehicles and shipping trades.

Biotextiles, Implants and Devices Market Opportunity Network

The Biotextiles, Implants & Devices represents an emerging Market Opportunity Network that leverages the assets and resources of Rhode Island in the biosciences research and commercialization. Biotextiles include implantable devices such as surgical sutures, hernia repair fabrics, vascular and endovascular prostheses, artificial skin, anterior cruciate ligament (ACL) prostheses and parts of artificial hearts.⁵⁰

This network can incorporate the Design & Consumer Products industries for design and product expertise to produce new biomaterials, surgical threads, medical supplies and implantable materials, parts and devices. In addition, this network can leverage manufacturers that produce components, parts, equipment or finished products. These may include medical devices for in vitro or in vivo uses as well as artificial prosthetics or other biomedical/biomechanical parts.



Culture, Fitness & Recreation Market Opportunity Network

The Culture, Fitness & Recreation Market Opportunity Network reaches a broad range of industries and sectors. It connects the state's strengths in marine trades with outdoor recreation and tourism. Emphasizing the access to the ocean, marine sports and other outdoor, sports or fitness activities can also use advanced textiles with (nautical or otherwise) sportswear, toys, games, fitness equipment and more. Tourists attracted to the beaches and oceans would also find that Rhode Island makes a variety of products that support their favorite activities and hobbies. The software and computer design component may also be involved through game development, sports or fitness applications, and design tools.

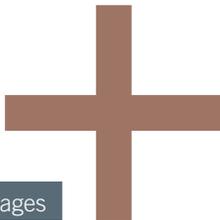
Growth Drivers

A full list of the industries that comprise these Market Opportunity Networks can be found in the Cluster Analysis reference on the RIEDC website. Below is a list of the industries that are driving the growth of those Networks.

⁵⁰ "Introduction to Biotextiles." Weblog post. Biotextiles 2012. MT 366 Biotextile Product Development, 9 Jan. 2012. Web



FIGURE 29:
Rhode Island Growth Drivers



NAICS	Industry	Jobs	Growth	Firms	Wages
Biotextiles, Implants & Devices					
3149	Other Textile Product Mills	364	2%	34	\$43,341
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	490	40%	11	\$76,295
3391	Medical Equipment and Supplies Manufacturing	1,462	4%	62	\$49,902
5417	Scientific Research and Development Services	704	21%	142	\$79,199
Culture, Fitness & Recreation					
3149	Other Textile Product Mills	364	2%	34	\$43,341
3322	Cutlery and Handtool Manufacturing	243	14%	6	\$59,092
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	346	7%	33	\$53,685
7113	Promoters of Performing Arts, Sports, and Similar Events	145	29%	26	\$26,340
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	14	50%	9	\$66,593
7121	Museums, Historical Sites, and Similar Institutions	1,606	105%	73	\$27,641
7131	Amusement Parks and Arcades	236	48%	12	\$18,791
7139	Other Amusement and Recreation Industries	5,264	6%	354	\$19,777
Advanced Marine Vehicles					
3279	Other Nonmetallic Mineral Product Manufacturing	262	41%	18	\$56,210
3314	Nonferrous Metal (except Aluminum) Production and Processing	1,103	2%	32	\$59,659
3321	Forging and Stamping	607	1%	23	\$46,804
3363	Motor Vehicle Parts Manufacturing	274	437%	4	\$55,712
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	150	8%	6	\$53,685
4832	Inland Water Transportation	75	63%	3	\$29,628
4883	Support Activities for Water Transportation	255	68%	18	\$37,028



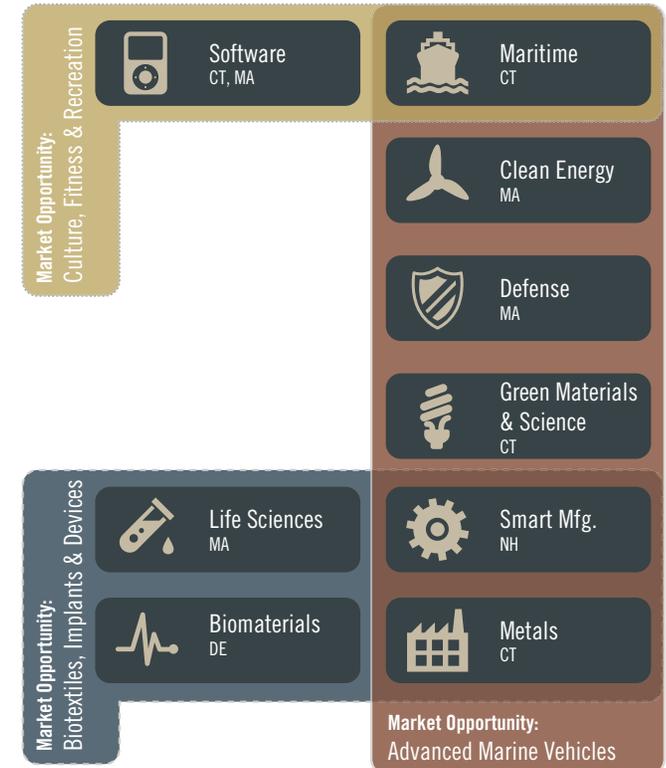
3.4 Regional Relationship and Models

FEC’s suggestions for the Market Opportunity Networks are based on an analysis that indicates the three named categories are best aligned with state industry sector assets. We also explored how the recommended Networks align with states in the region and other models for cluster development.

3.4.1 Peer States and the Biotextiles, Implants and Devices Network

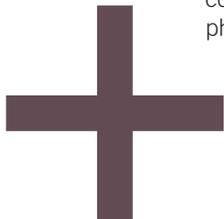
The Biotextiles, Implants and Devices Network can leverage activity from Connecticut in Photonics⁵¹. They may also be able to leverage activity in Biosciences related to the Connecticut United for Research Excellence (CURE).⁵² The focus in Connecticut is more on pharmaceuticals, which may provide partnership opportunities for Rhode Island firms. CURE also offers some potential model strategies related to the R&D Tax Credit Exchange Program that allows start-ups to redeem unused tax credits for 65 cents on the dollar. Connecticut Innovations consistently invests capital in Bioscience cluster companies, with \$103 million in 61 companies, which provides a sense of the scale that is required in pharmaceuticals.

FIGURE 30:
Linking Market Opportunities to Peer States



⁵¹ “Industry Focus.” Connecticut Innovations, <<http://www.ctinnovations.com/Portfolio/IndustryFocus.aspx>>Web.

⁵² CURE. Connecticut United for Research Excellence, 2006. <<http://www.curennet.org/>>Web.



Delaware includes biomaterials as one of the focal areas for its biotechnology efforts.⁵³ The Delaware Biotechnology Institute is a public private partnership that provides a major focal point for these efforts. Biomaterials is one of the research areas for DBI where the focus is on innovative biomaterials for medical materials, pharmaceutical, and bio-electronic applications. Current areas of research that align with the Biotextiles, Implants & Devices network include:

- Biosurface modifications to promote or prevent protein absorption
- Rapid separation and sensing of proteins
- Cell and tissue engineering
- Synthesis of new peptide and protein architectures that change conformation as a function of pH and temperature
- Integrated “lab-on-a-chip” devices for high-throughput screening and directed molecular evolution of enzymes
- Bio-optoelectronics research, which brings optoelectronics and biology together to create next-generation “smart” fiber optics, biosensors and DNA-based transistors.

The Massachusetts Life Science Center (MLSC) is a 10-year, \$1 billion effort to grow Life Sciences.⁵⁴ This is a large and diverse strategy that can attract a significant amount of attention and activity to the New England states. Unfortunately for Rhode Island, it will create a strong gravitational attraction that may pull activity out of Rhode Island, therefore any efforts to leverage the MLSC will require caution.

3.4.2 Peer States and the Advanced Marine Vehicles Network

The Connecticut Maritime Coalition is a trade association that links private, public, environmental, military and institutional leadership and resources. Much of the focus here is on maritime transportation, which helps to build demand for Advanced Marine Vehicles.

Connecticut’s Metal Manufacturing Education and Training Alliance (METAL) received a \$1.7 million federal workforce-training grant for a two-year project to provide a range of training in new workplace technologies and manufacturing processes. The cluster’s efforts have been funded by \$135,000 from the Department of Economic and Community Development and over \$970,000 from industry contributions. This public-private model may provide an approach for integrating industry workforce efforts.

The Massachusetts Clean Energy Center (MassCEC) is dedicated to accelerating the success of clean energy technologies, companies and projects in Massachusetts. MassCEC helps clean energy companies grow, supports municipal clean energy projects and invests in residential and commercial renewable energy installations creating a robust marketplace for innovative clean technology companies and service providers. The state has a broad portfolio of Clean Energy in photovoltaic, wind, solar, biomass and geothermal. Furthermore, the state is progressive in its demand policies, so it can provide an important source of demand for Rhode Island firms.⁵⁵

The Defense Technology Initiative (DTI) was established by the Massachusetts High Technology Council in 2003 to promote job creation and growth opportunities for the New England defense sector. DTI has developed a sustainable New England strategy in response to the Base Realignment and Closure (BRAC) that will both strengthen the region’s defense technology cluster and provide specific business opportunities for its members. DTI provides some market aggregation and political clout for Rhode Island and other New England states.

3.4.3 Peer States and the Culture, Fitness & Recreation Network

Connecticut’s eBizCT IT Cluster is affiliated with the Connecticut Technology Council and has outlined its strategies in the Competitiveness Agenda Project (2010).⁵⁶ They promote networks, university-industry collaboration and global connectivity. They will be receiving annually budgeted and appropriated public funds. They are also focusing on increasing and improving incubators and accelerators.

Massachusetts has the Design Industry Group of Massachusetts that promotes connectivity with others in the design zone, facilitates roundtables to build awareness of the design industry and influences policy to promote design.⁵⁷ They also link to cultural and tourism assets such as the Hanover Theatre for the Performing Arts, Massachusetts Museum of Fine Arts, and Massachusetts Museum of Contemporary Art.

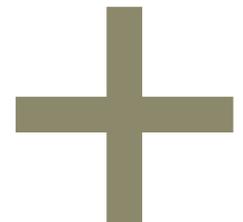
⁵³ “Delaware Biotechnology Institute.” Delaware Biotechnology Institute. <<http://www.dbi.udel.edu/>>Web.

⁵⁴ “Programs.” Massachusetts Life Sciences Center. <<http://www.masslifesciences.com/programs.html>>Web.

⁵⁵ Massachusetts has set aggressive renewable energy targets and placed a surcharge on electric ratepayers that funds the Renewable Energy Trust Fund that then invests in clean energy projects and infrastructure.

⁵⁶ Linking Connecticut’s Future with the Emerging Global Trade Grid. Rep. Strategic Cluster Initiative: Connecticut Maritime Coalition, July 2000. <[http://www.ctmaritime.com/downloads/10 July 2000 Strategic Maritime Cluster Final Report.pdf](http://www.ctmaritime.com/downloads/10%20July%2000%20Strategic%20Maritime%20Cluster%20Final%20Report.pdf)>Web.

⁵⁷ DIGMA. Design Industry Group of Massachusetts, n.d. <<http://www.digma.us/about/whatisdigma/index.html>>Web.



3.5 PolicyLink High-Opportunity Occupations and Market Opportunity Networks

PolicyLink identified a variety of high-opportunity occupations for different education levels in Rhode Island. The industry analysis conducted by PolicyLink is at the sector level, which is too aggregated to translate to the four or six digit NAICS classification used to define the clusters. However the occupations reported by education level roughly can be correlated to the Market Opportunity Networks defined in this report, as presented in Figure 31.

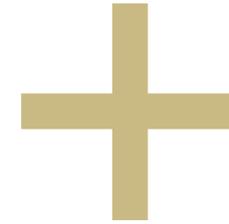


FIGURE 31:
Opportunity Occupations and Market Opportunity Networks

Occupation by Education	Occupation Opportunity Index (High / Med / Low)	Advanced Marine Vehicles	Biotextiles, Implants & Devices	Culture, Fitness & Recreation
High School or Less				
Metal workers and plastic workers	Med	✓		
Textile, apparel & furnishings workers	Low		✓	✓
Food & beverage serving workers	Low			✓
Other food preparation and serving works	Low			✓
More than High School, Less than Bachelor's Degree				
Health technologists and technicians	Med			✓
Electrical & electronic equipment mechanics, installers, & repairers	Med	✓		
Life, physical and social science technicians	Low		✓	
Entertainment attendants and related workers	Low			✓
Bachelor's Degree or Higher				
Advertising, marketing, promotions, public relations, and sales	High			✓
Engineers	High	✓	✓	
Physical scientists	High	✓	✓	
Computer occupations	High	✓		✓
Life scientists	High		✓	
Media & communications workers	High			✓
Entertainers & performers, sports & related workers	High			✓
Art & design workers	High			✓





3.6 Promoting Economic Growth

Rhode Island has an abundance of industry, educational, and public organizations, initiatives, and physical assets in place that can support the continued development of target clusters. The key will be to leverage and market these assets effectively, strategically augmenting initiatives and funding mechanisms that are already in place in order to encourage growth in particular areas of market opportunity. Selected infrastructure that support target clusters are highlighted below, along with strengths related to the target clusters and market opportunities.

3.6.1 Physical Infrastructure and Location

Rhode Island is well positioned along the I-95 corridor, which offers direct access to major metropolitan hubs of Boston to the north and New York to the south. Drive time to I-95 from almost anywhere in the State is 35 minutes or less, with some areas east of Narragansett Bay closer to 45 minutes away. The State is also served by T.F. Green, an international airport centrally located and providing direct flight service to 25 cities, and excellent rail and shipping options.

Rhode Island contains 70 industrial parks totaling over 8,000 acres. RIEDC maintains a list of these parks and, where possible, information on tenants.⁵⁸ Certain of the State's industrial parks have high proportions of tenants related to target clusters. For example, the Newport Corporate Park in Middletown hosts a number of firms related to the Defense cluster, including Northrop Grumman and General Dynamics – Electric Boat.

The State has also been putting tools in place that will enable firms to more easily identify potential sites for relocation or expansion. In 2010 RIEDC, in partnership with the Economic Development Foundation of Rhode Island and others launched RSiteLocator.com, an online tool that provides “free, comprehensive, and accurate information to businesses looking to relocate or expand in the Ocean State.” The web site enables businesses to search for property using a number of criteria including location, price, property type, size, and others.

Rhode Island has the highest broadband speed in the nation, and 97 percent of Rhode Island residents have access to broadband.⁵⁹

3.6.2 Educational Assets, Joint Initiatives

Rhode Island is home to highly regarded colleges and universities, many of which have education programs and initiatives that directly relate to target clusters. Examples include:

- The Rhode Island Center for Innovation & Entrepreneurship is intended to be “a state-wide hub to connect, educate and accelerate entrepreneurs in areas such as life sciences, technology, design, engineering and the environment.” (See Section 1.3.2)
- The Rhode Island School of Design is internationally recognized as one of the nation's best fine arts and design schools, making the school a talent feeder for existing and businesses in the Consumer Products and Design cluster.
- The University of Rhode Island is regarded as one of the country's top oceanographic research and education institutions. The research and commercialization opportunities stemming from URI's oceanography research and programs represent an asset for a number of target clusters including marine trades and defense, advanced manufacturing, tourism, and the emerging bioscience industry.⁶⁰
- In general, there are signs that Rhode Island's higher educational institutions are responding to market opportunity and labor demands by expanding or initiating new programs. For example, Johnson & Wales is in the process of creating a new Center for Physician Assistant Studies, which will be the State's first Physician Assistant program.

⁵⁸ Rhode Island Economic Development Corporation. Select Business and Industrial Parks in Rhode Island With Tenants. Rep. Rhode Island Economic Development Corporation, Feb. 2010. Web.

⁵⁹ Pando Networks. “Comparing Internet Speeds Across the Nation.” Comparing Internet Speeds Across the Nation. New York Times, 13 Sept. 2011. Web.

⁶⁰ “Rhode Island Bioscience Industry Skills Gap Taskforce.” Tech Collective, Rhode Island's Biotechnology Industry Association., 9 Nov. 2009. Web.

3.6.3 Business Incubators and Industry Organizations

Rhode Island is home to several business incubators or accelerators aimed at facilitating new business creation and overall industry competitiveness. One example is Betaspring, a “mentorship-driven startup accelerator program for technology and design entrepreneurs.” Betaspring assists start-ups from Rhode Island and around the country and has accelerated 57 companies to date. The Business Innovation Factory is another Rhode Island-based organization aimed at helping businesses adopt innovative systems and products.

In addition, the State contains nonprofits and industry organizations that focus on components of target clusters. For example, the Rhode Island Science and Technology Advisory Council (STAC) undertakes research related to science and technology issues in Rhode Island, maintains lists of science and technology grant and funding opportunities, and organizes statewide conferences and research symposiums.

Another organization related to the State’s target clusters is the Rhode Island Manufacturing Service (RIMS), aimed at sustaining “quality manufacturing in Rhode Island in an increasingly competitive marketplace by helping solve business problems.” RIMS could potentially serve as an effective platform for launching new initiatives that link Advanced Manufacturing with other cluster targets like Marine Trades and Defense.

⁶¹ “GWBRI Industry Partners.” GWBRI Industry Partners. Governor’s Workforce Board Rhode Island, n.d. Web.

3.6.4 Workforce Development

Rhode Island’s Workforce Development Services Program matches current job-seekers with suitable job-openings, and works with employers to train the next generation of Rhode Island workers. It funds the Governor’s Workforce Board, which works with nine industry partnerships to improve the state’s workforce’s skill base to meet employer needs. The Workforce Board has issued skills gap reports related to several of the target clusters or components thereof including bioscience, marine technologies, hospitality/tourism, information technology, and defense.⁶¹

3.6.5 Capital

As described in Section 2: Financial Resource Assessment, a number of state agencies in Rhode Island administer business financing programs, including RIEDC, the Rhode Island Industrial Facilities Corporation, and the Industrial-Recreational Building Authority. Financing and tax exemptions through these agencies are generally available to businesses across industries and would apply to most target clusters. RIIFC tax exempt and taxable bonds are targeted towards the development of fixed assets for manufacturing projects and select commercial facilities.

Private investment from venture capitalists and angel investors has historically been small in Rhode Island compared to neighboring states and the number of such firms operating out of Rhode Island is limited. However, as described in Section 2.1.5, the State does contain a small number of private firms offering capital for start-up or growth, including Cherrystone Angel Group, Angel Street Capital, and Bay Capital Advisers, Providence Capital Group, and Slater Technology Fund. All of these groups are potential resources for businesses across most of the target

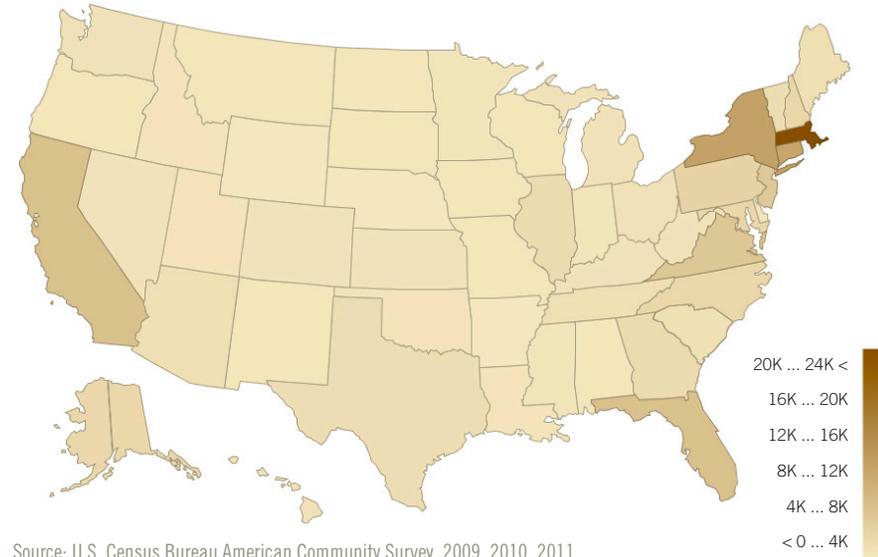
sectors, though if the investment portfolios available online is an indication of area of focus going forward, some might be easier for target clusters to tap into than others. For example, six of the 15 investments profiled on Cherrystone’s web site have been in the medical field and another four were in software.

3.6.6 Innovation Talent Base

Although Rhode Island tends to measure poorly in overall business climate rankings, drilling down into the particulars of those ranking systems reveals certain areas of strength that are important to target clusters, particularly knowledge economy industries. As indicated in Section 1.1.4, Rhode Island ranks in the top quintile of states for a number of indicators related to Talent. The New Economy Index places Rhode Island among the top performing states in attracting U.S. knowledge workers, behind only behind Massachusetts and Vermont. The Beacon Hill Institute highlighted Rhode Island as the number three state for “Technology,” a category that combines a number of factors that are key talent base indicators. And the State performs well on higher education indicators (percent of population age 25 and older with a 2- year college degree and with a 4-year college degree) and share of private sector employed as scientists or engineers. Such indicators illustrate that Rhode Island has a sizable knowledge economy talent base to support growth in target clusters like IT and Digital Media and bioscience, and components of the Marine Trades and Defense and Design and Consumer Products clusters. Stakeholder interviews conducted during this process revealed that business owners are particularly interested in creating stronger connections between themselves and institutions of higher learning, as well as working with K-12 institutions to increase alignment between curriculum and industry needs.

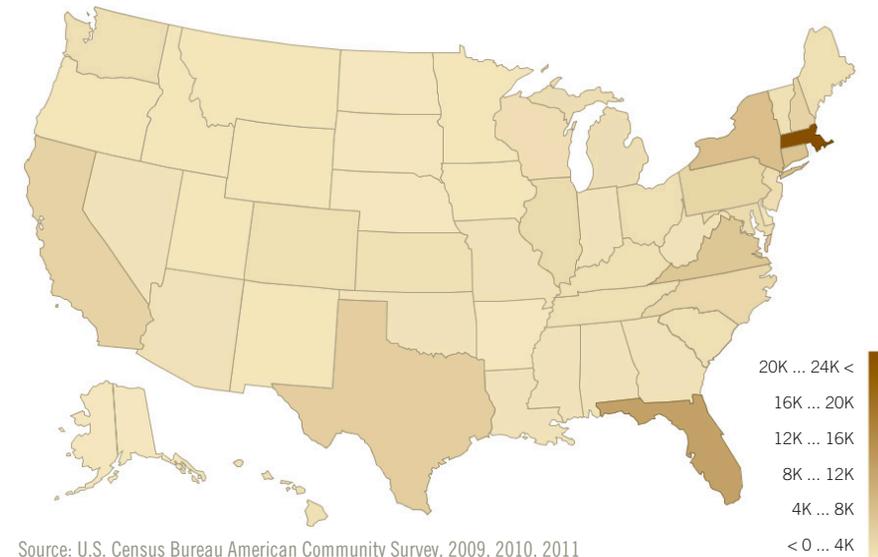


FIGURE 32:
Sources for In-Migration [2009 - 2011]



Source: U.S. Census Bureau American Community Survey, 2009, 2010, 2011

FIGURE 33:
Sources for Out-Migration [2009 - 2011]



Source: U.S. Census Bureau American Community Survey, 2009, 2010, 2011

3.7 Migration of Residents

One way to increase or loose talent is through migration of residents. The FEC team analyzed the flows of people into and out of Rhode Island. The overall population level seems to have leveled off around 1.05 million following a sharp decline between 2004 and 2008.

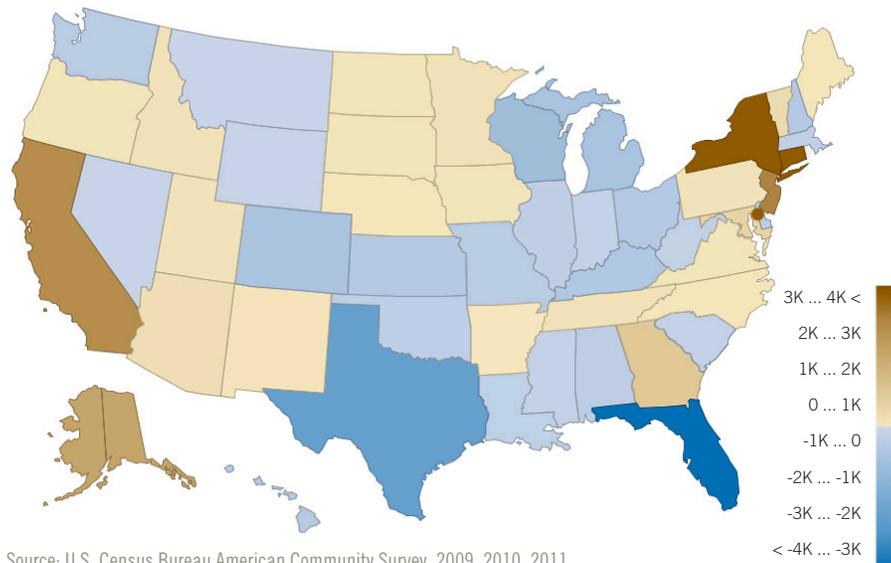
As might be expected, Rhode Island receives many migrants from neighboring New England states (Figure 32), but these same states also pull residents from Rhode Island (Figure 33). Rhode Island also has significant flows of migration (in and out) with more distant states such a Florida and California. Arkansas is the only state from which Rhode Island attracted no residents.



Looking at the net flows with other states, Rhode Island has most of its gain in new residents from neighbors such as New York, New Jersey and Connecticut, but it also has significant gains from California and Alaska (Figure 34).

The top ten sources for in-migration show that Rhode Island is trading residents with a core of neighboring states. For the more distant states, Florida and California each provided about 5,000 new residents from 2009 to 2011, but Rhode Island lost more than 10,000 to Florida for a net loss of 5,000 whereas fewer than 3,000 moved to California, which resulted in a net gain for Rhode Island (Figure 35, Figure 36). The reasons people have moved, whether for retirement, work or school are not known at this time. Some states have surveyed out-migrants to get more information about who is leaving and why, but these are generally part of a larger marketing, talent attraction and talent retention effort.

FIGURE 34:
State by Net Migration To / From Rhode Island [2009 - 2011]



Source: U.S. Census Bureau American Community Survey, 2009, 2010, 2011

FIGURE 35:
Top 10 Sources of Rhode Island In-Migrants [2009 - 2011]

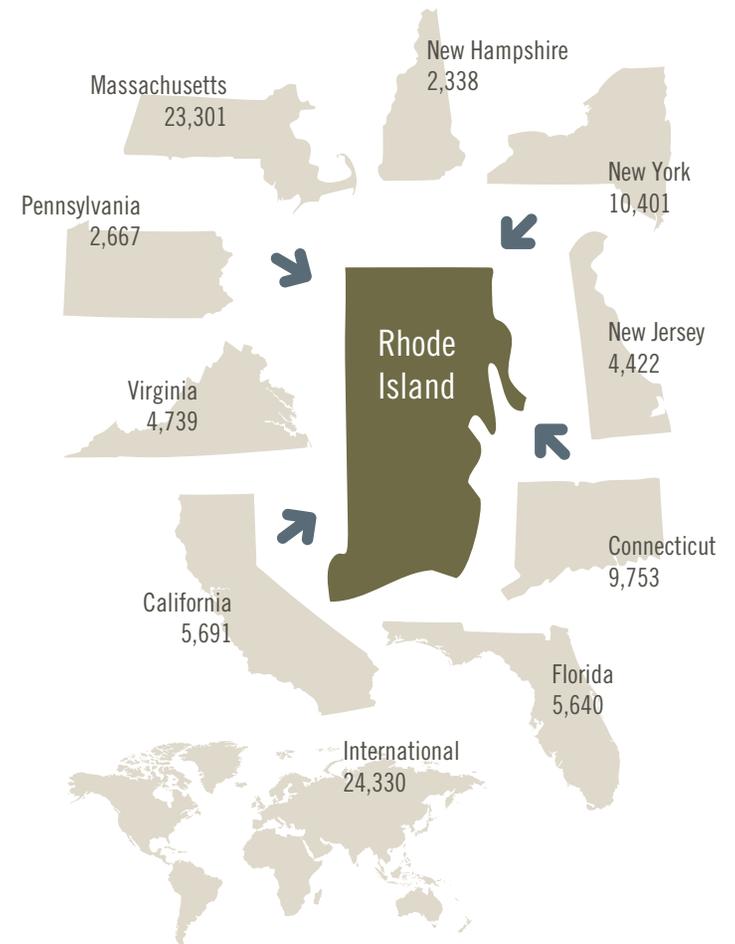
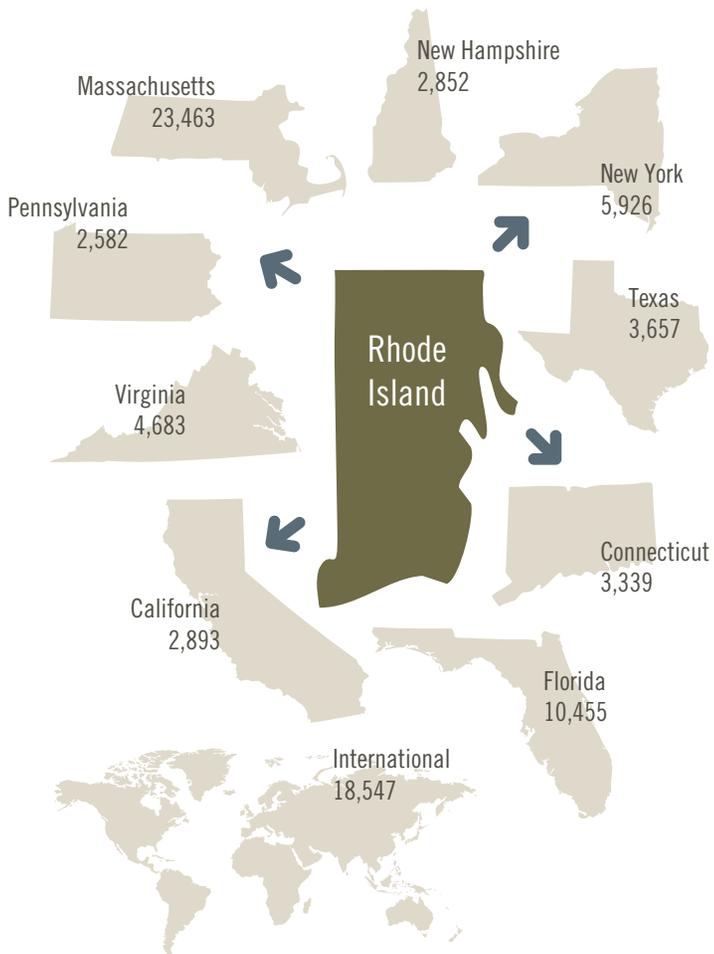




FIGURE 36:
Top 10 Destinations of Rhode Island Out-Migrants [2009 - 2011]



The largest net gains came from New York and Connecticut, followed by New Jersey, California and Alaska (Figure 37). The net gain from Alaska occurred because no Rhode Islanders moved to Alaska. Arkansas, Nebraska and North Dakota are also not on the map of destinations for Rhode Islanders leaving the Ocean State.

On a net basis, the largest net outflows for Rhode Islanders are from Florida, Texas, Wisconsin, Michigan and Colorado.

FIGURE 37:
Top Net Migration Sources & Losses [2009 - 2011]

State From/To	In	Out	Net
Top In-Migration Locations			
New York	10,401	5,926	4,475
Connecticut	9,753	5,339	4,414
New Jersey	4,422	1,329	3,093
California	5,691	2,893	2,798
Alaska	2,076	0	2,076
Top Out-Migration Locations			
Florida	5,640	10,455	-4,815
Texas	1,212	3,657	-2,445
Wisconsin	46	1,112	-1,066
Michigan	440	1,215	-775
Colorado	360	1,076	-716

Source: U.S. Census Bureau American Community Survey, 2009, 2010, 2011.



Data is not available to develop detailed profiles of who leaves the state, but it is available for the in-migrants. Rhode Island has had particular success in attracting younger residents 18 to 24 years old (most likely college students). Overall, compared to U.S. migration rates, Rhode Island attracts a larger than expected proportion for all age groups younger than 44 years (Table 9).

Continuing the college theme, Rhode Island has also had success in attracting more educated residents with at least a Bachelor's degree. Again, compared to U.S. migration rates, Rhode Island attracts a larger than expected proportion for the more educated migrants (Table 10).

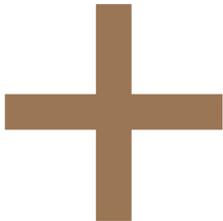


FIGURE 38:
Age Profile of In-Migrants

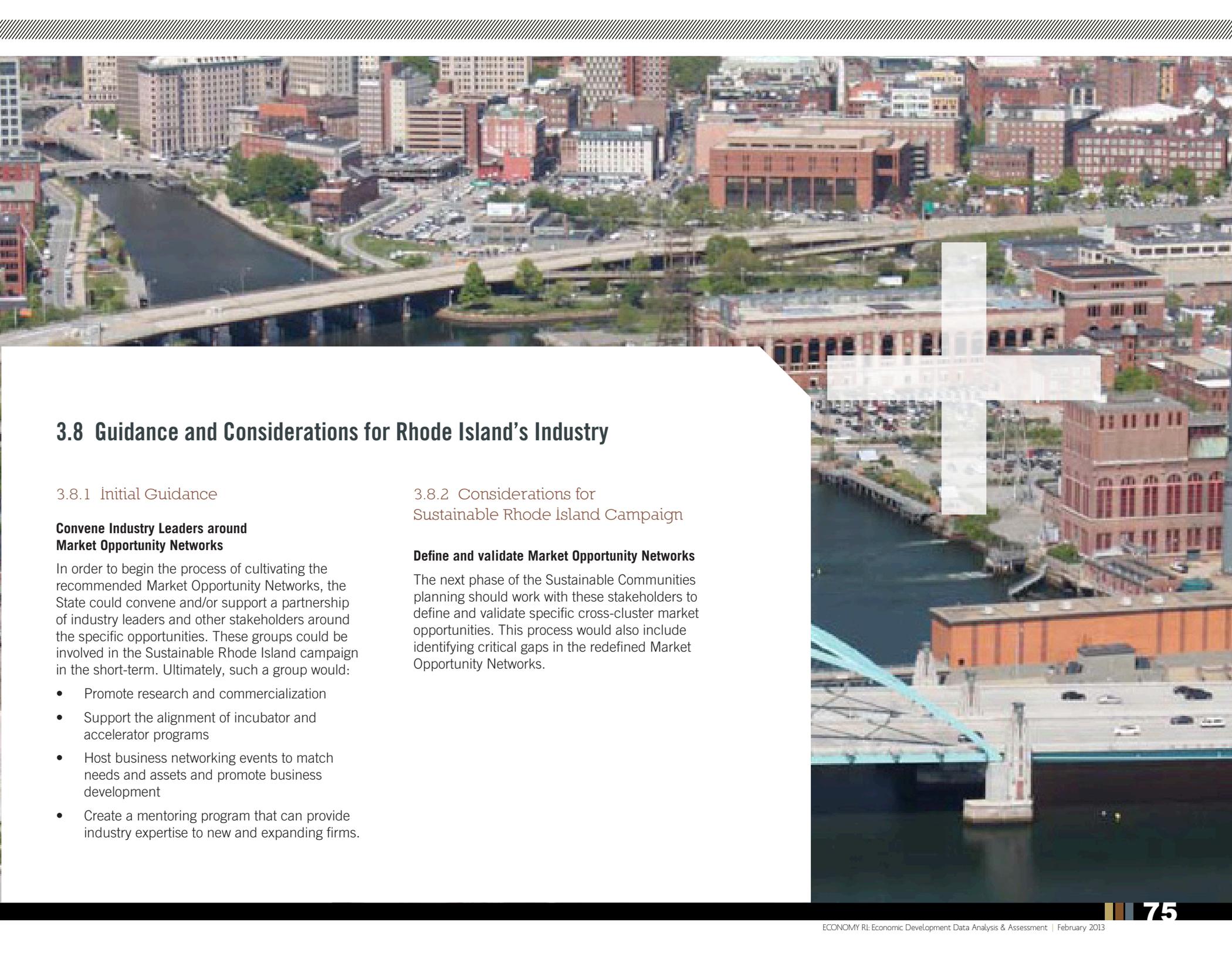
Age	Different State	Int'l	Total	Share
1 to 4 years	1,595	422	2,018	5% ◀
5 to 17 years	2,698	1,180	3,878	10% ◀
18 to 24 years	13,302	2,494	15,796	41% ◀
25 to 34 years	5,876	1,533	7,409	19% ◀
35 to 44 years	3,264	993	4,257	11% ◀
45 to 54 years	1,768	321	2,089	5%
55 to 64 years	890	509	1,399	4%
65 to 74 years	652	72	725	2%
75 years and over	864	79	943	2%
Total	31,287	7,300	38,588	100%
Median Age (years)	39.5	22.8	24.5	

◀ Rhode Island has a larger share than the U.S.
Source: U.S. Census Bureau American Community Survey, 2011 Five Year Estimates

FIGURE 39:
Educational Profile of In-Migrants [population aged 25 years and over]

Educational Attainment	Different State	Int'l	Total	Share
Less than high school graduate	1,227	781	2,007	5%
High school graduate (includes equivalency)	2,355	589	2,943	8%
Some college or associate's degree	2,577	736	3,313	9%
Bachelor's degree	4,208	789	4,997	13% ◀
Graduate or professional degree	3,243	597	3,840	10% ◀
Total	13,463	3,543	17,006	44%

◀ Rhode Island has a larger share than the U.S.
Source: U.S. Census Bureau American Community Survey, 2011 Five Year Estimates

An aerial photograph of a city, likely Providence, Rhode Island, showing a river, a highway bridge, and various industrial and commercial buildings. A large white crosshair is overlaid on the right side of the image. A blue double-line graphic element is visible in the lower-left quadrant of the image.

3.8 Guidance and Considerations for Rhode Island's Industry

3.8.1 Initial Guidance

Convene Industry Leaders around Market Opportunity Networks

In order to begin the process of cultivating the recommended Market Opportunity Networks, the State could convene and/or support a partnership of industry leaders and other stakeholders around the specific opportunities. These groups could be involved in the Sustainable Rhode Island campaign in the short-term. Ultimately, such a group would:

- Promote research and commercialization
- Support the alignment of incubator and accelerator programs
- Host business networking events to match needs and assets and promote business development
- Create a mentoring program that can provide industry expertise to new and expanding firms.

3.8.2 Considerations for Sustainable Rhode Island Campaign

Define and validate Market Opportunity Networks

The next phase of the Sustainable Communities planning should work with these stakeholders to define and validate specific cross-cluster market opportunities. This process would also include identifying critical gaps in the redefined Market Opportunity Networks.

A large suspension bridge with a white sailboat on the water in the foreground. The bridge has tall, white, arched towers and a green-painted steel deck. The water is a deep blue, and the sky is a clear, light blue. In the background, there are green trees and some buildings on a distant shore.

“Our higher education institutions provide a key talent pool. There is a great potential for internships. Brown’s PRiME program is a good example. However, high schools and State colleges are not as consistent, and young talent migrating out of State due to lack of job opportunities. We need greater and broader collaboration between the state, K-12 and higher education overall.”



New York and Connecticut provided nearly 4,500 net in-migrants each to Rhode Island between 2009 - 2011.

4,500

4.0 Regulatory Environment Analysis

4.1 Assessment

Rhode Island's regulatory system is not unlike its peers around the country. Over the years, regulations have been passed at the national, state and local level in an effort to protect public health, welfare and safety. The impact of these regulations, as well as their unintended consequences, is a subject of much discussion in Rhode Island and in other states. Many regulations have grown organically over time creating a maze of paperwork and compliance requirements that in many cases impedes or even prevents business from efficiently starting or growing operations. According to the Rhode Island Secretary of State's website, Rhode Island has over 1,600 regulations in place. While it is difficult to draw comparisons across states based on total number of regulations, Rhode Island has undertaken regulatory reform efforts that are comparatively in sync or slightly ahead of those states assessed later in this document.

In fact, Rhode Island began its reform efforts in 2010 and just last year Governor Chafee accelerated the process and included additional funding in the state's budget. This revised time frame corresponds to that of other best practice states. However, regulatory reform is often a complicated and extremely time consuming process involving multiple agencies, government jurisdictions and often external groups. Often, these various parties will advocate for regulations aimed at protecting health and welfare



Rhode Island ranks 11th in the country for Business Creation.

#11

while lacking the macro level perspective on how the regulations will relate to others their cumulative business impact.

Literature on regulatory reform, including reports that compare regulatory climate, is relatively nonexistent. The FEC has identified a handful of regulatory analysis reports; however efforts thus far have primarily been focused on specific topic areas such as healthcare, environmental and child/elder care related regulation. One business focused report that contained cross state comparison was identified, namely the “Five State Comparative Study of State Regulations affecting Small Business,” published in 2011 by a group in Minnesota.⁵² This report illustrated minor deviations in regulations and cost of compliance from one state to another. One notable finding was that businesses “did not appear to object as much to the number of requirements and regulations as they did to the perceived

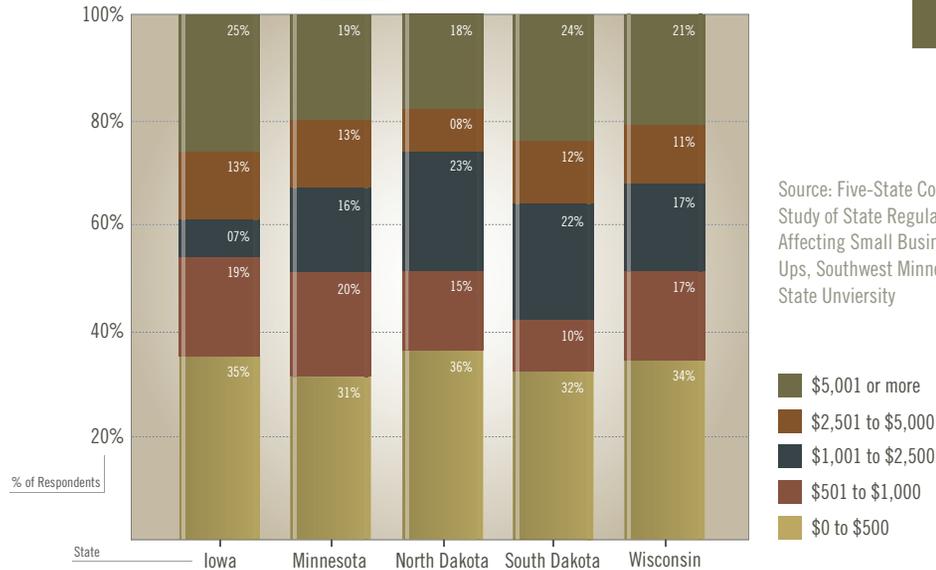
cumbersome process of securing the necessary information in order to comply.” This is a recurrent critique concerning governmental regulations. In response, many states have continued to improve their regulatory information systems to better support transparency and accessibility of both information and compliance resources.

Our research suggests that Rhode Island should not seek a specific benchmark in regards to the total number of regulations. Rather, the literature supports the work that is currently being undertaken to determine the economic impact of regulations on businesses, evaluate regulations for clarity and ease of compliance and where appropriate, make recommendations to amend or repeal regulations.

Rhode Island continues to make progress in working to enhance its regulatory environment. This is being done in five ways identified during this study process:

1. The Office of Regulatory Reform continues to implement Governor Chafee’s 2010 Executive Order to create a clear, predictable and reliable regulatory system. Additionally, on demand technical assistance to navigate the state and local regulatory system is provided to the small business community through the Small Business Ombudsman.
2. Rhode Island 2012 Public Law 445 requires each regulatory agency to review 25 percent of its regulations each year for four years until all existing regulations have been evaluated for any adverse impacts on small businesses. Governor Chafee accelerated this initiative by requiring the review to take place within a year and a half.
3. Regulatory agencies must provide an economic impact analysis for any proposed regulations that affect small businesses and cannot promulgate any new regulations during the review process unless they comply with the review mandate.
4. The Office of Regulatory Reform is also working with the State Building Inspector and the State Fire Marshal to create an electronic permitting system to improve customer service.
5. Department of Business Regulation continues to enhance its online tools such as its e-licensing system.

FIGURE 40:
To Satisfy All State & Regulatory Requirements, I Had to Invest _____ to Get My Business Started...



Source: Five-State Comparative Study of State Regulations Affecting Small Business Start-Ups, Southwest Minnesota State University

⁵² Rich, Michael. Five State Comparative Study of State Regulations Affecting Small Business Start Ups. Rep. Southwest Minnesota State University Center Market Advisory Center, Dec. 2011. Web.

4.1.1 Comparison

The following state related regulatory efforts were examined to establish a benchmark during the study period.

Massachusetts

Regulation reform efforts are housed in the Executive Office of Housing and Economic Development.⁵³ Since 2010, it has been required that a business impact statement be completed for any new regulation. These impact statements have an emphasis on understanding the effects regulations have on small business. In addition, an ongoing regulatory review is underway and as of the most recent report (December 2012) over 446 regulations were reviewed; resulting in 286 recommendations. These recommendations include regulatory body consolidation, changes to compliance processes and elimination of outdated regulations. On January, 2013 Massachusetts Governor Patrick proposed additional legislation to further enhance a wide range of regulations.⁵⁴

Connecticut

Connecticut has been less structured in pursuing regulatory reform. The state's previous Governor Rell issued an Executive order in 2010 and convened a Task Force to provide recommendations. The resulting recommendations detailed actions that the Governor and legislature should undertake.⁵⁵ It is unclear how many of these recommendations were pursued as no additional information could be found in our review. Current Governor Malloy convened a Regulations Modernization Task Force in September 2012.⁵⁶ The focus of this group is largely on implementation of a system that supports online access to all regulations. The group is currently evaluating the approach and will be making recommendations in the coming months.

Delaware

Current Delaware Governor Markell, signed a June 2012 Executive Order calling for agency review of regulations and along with business related impacts.⁵⁷ The Executive Order states that a report will be delivered to the legislature in one year (June 2013) and must include recommendations for elimination or changes to the state's existing regulations. A series of public hearings and internal agency analysis will be used to identify regulatory barriers and develop the required recommendations.

New Hampshire

There is no systematic regulatory reform effort underway in New Hampshire.

Ohio

Ohio's regulatory reform efforts are getting praise from the business community and trade groups. The Common Sense Initiative is the state's effort to make the regulatory environment in state work better for businesses. "CSI was established to create a regulatory framework that promotes economic development, is transparent and responsive to regulated businesses, makes compliance as easy as possible, and provides predictability for businesses" says the organization's website.⁵⁸

The CSI was created in January 2011 by Executive Order from Governor John Kasich and is being managed by the state's Lieutenant Governor, Mary Taylor. The CSI is noted for the transparency of its efforts, which are enhanced by a robust web presence, strategic plan, semi-annual progress reports and open communication platform.

To date 249 regulations have been modified or rescinded as a result of the work of the CSI. The Executive Order calls for economic impact analysis of all regulations and independent analysis conducted by CSI to determine the regulations business impacts.

4.2 Best Practices

A number of states received praise for their regulatory reform efforts, including previously described Massachusetts.

Utah

Many people cite Utah for its regulatory reform efforts and overall business climate. In 2011, current Governor Gary Herbert began a push to reform the state's regulatory system. The Governor ordered state agencies and authorities to review all regulations and identify those that impact business. The resulting recommendations led to 368 modifications or rescissions of regulation.

Last summer the Governor went further and now requires that any proposed regulation include a letter signed by the rulemaking board that states that a cost benefit analysis has been done and found that the benefits outweigh the costs of regulation. In addition the Governor's Office of Economic Development must review each proposed regulation to determine the impact on employers. This requirement includes a special focus on small businesses.

⁵³ "Regulation Reform." Regulation Reform. Commonwealth of Massachusetts, n.d. Web. 06 Feb. 2013. <<http://www.mass.gov/hed/economic/initiatives/regulation-reform/regulation-reform.html>>

⁵⁴ Governor of Massachusetts. Governor Patrick Builds On Regulatory Reform Successes; Files Legislation To Improve Business Climate for Licensed Professionals. Governor Deval Patrick, 7 Jan. 2013. Web.

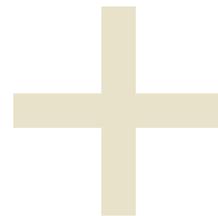
⁵⁵ Report of the Permitting Task Force to Governor M. Jodi Rell. Rep. Connecticut Department of Economic and Community Development, Apr. 2010. Web.

⁵⁶ "Regulations Modernization Taskforce." Regulations Modernization Taskforce. Dannel P. Malloy, Governor of Connecticut, n.d. Web.

⁵⁷ State of Delaware. Executive Order Launches Regulatory Reform and Review. Executive Order Launches Regulatory Reform and Review. State of Delaware, 14 June 2012. Web.

⁵⁸ Common Sense Initiative." Common Sense Initiative. John R. Kasich, Governor of Ohio, n.d. Web.





These are two examples that highlight what other analysts and observers cite as best practices in regulatory reform and relief. The best practices include:

1. Conduct economic impact analysis of current and proposed regulations on businesses,
2. Provide a forum for private businesses to register identified regulatory barriers to growth,
3. Seek consistency and predictability in the administration of regulations and provide easy to understand information to businesses,
4. Create a transparent process for evaluating and reforming regulations, and
5. Engage the business community in the process and seek balanced approaches to protection and impacts of regulation.

It should be noted that currently Rhode Island's Regulatory Reform efforts have incorporated four of the five of the best practice models within its initiative. The second item, "provide a forum for private businesses to register identified regulatory barriers to growth", is being addressed through Governor Chafee's survey of the business community slated to be complete on February 15, 2013.

On February 4, 2013 Governor Chafee reached out to more than 5,000 Rhode Island businesses and asked them to complete an online survey to highlight the effects of state and federal regulations on their business operations. The data from this survey will be invaluable in the ongoing regulatory reform process.

4.3 Municipal Considerations

In addition to state level regulations, there are a host of local zoning, permitting, and regulatory bodies that can impact business startup and operations. These regulations vary by location and are difficult to assess as each jurisdiction has a unique process for educating and making available information on these regulations to businesses. The largest impediment at the local level is the varying time frames and fees for responses on filings seeking regulatory compliance. Days to months can pass as regulatory and permitting bodies review and work through approval processes.

In the stakeholder interviews the timeline for receiving fire code compliance approval was the primary regulatory issue we noted. New laws have increased the compliance requirements and local officials, in many cases, are struggling to maintain efficient turnaround times.

The state's Office of Regulatory Reform has been working with local municipalities to identify impediments in the state to municipal regulatory framework and is seeking to alleviate barriers. There is an effort underway to include municipal regulations in a more readily accessible electronic format.

Regulations in Action

FEC conducted three company expansion/ location scenarios with communities in the Rhode Island. The three scenarios were fictitious and any similarity with real company attractions/ expansions is coincidental.

The scenarios and suggested locations were:

- Hotel/ Conference Center development in a Rural Community
- Call Center in a Medium Population Community
- Manufacturing and Sales Company in an Urban Community

FEC shared the scenarios with the local point of contact whom would typically serve as point on a company inquiry. In addition, the scenarios were shared with the Office of Regulatory Reform for their input.

Overall findings

A business looking to locate or grow in Rhode Island will need to comply with dozens, potentially hundreds, of codes, regulations and operating standards. The three scenarios identified specific codes that a company would need to comply with.

The Hotel/ Conference Center for instance would need to review and comply with as many as 298 regulations in order to begin operations and this number would increase if it sought to locate in a more urbanized or redevelopment area. The other two scenarios would have required less effort but the process could prove just as onerous depending on final location selection.

The major sources or types of regulations that impact a business include:

- Building Codes
:: Including plumbing, mechanical, electrical, property maintenance, energy conservation and more
- Department of Environmental Management
:: Including waste reduction and recycling, stormwater management, pollutions discharge and more
- Fire Safety Codes
- Department of Health
- Department of Labor and Training
:: Including Occupational Codes, Family Medical Leave, Disability and more
- Division of Taxation
:: Jobs development act, corporate structure requirements, sales and use tax, and more

The Regulatory Process

The three primary issues of the regulatory system are the number of regulations, clarity of the intent and compliance mandates and the process by which they are administered. Reform can happen in four ways – first, reduce the number of regulations by eliminating or enhancing the balance of compliance and regulatory intention. The second is to ensure that regulations are easy to understand, predictable in nature and provide reliable and accurate timelines. The third is to improve the system of regulatory administration across jurisdictions and finally, to create a vigorous process of vetting regulations before they are adopted or amended. The scenarios that were implemented for this project demonstrated

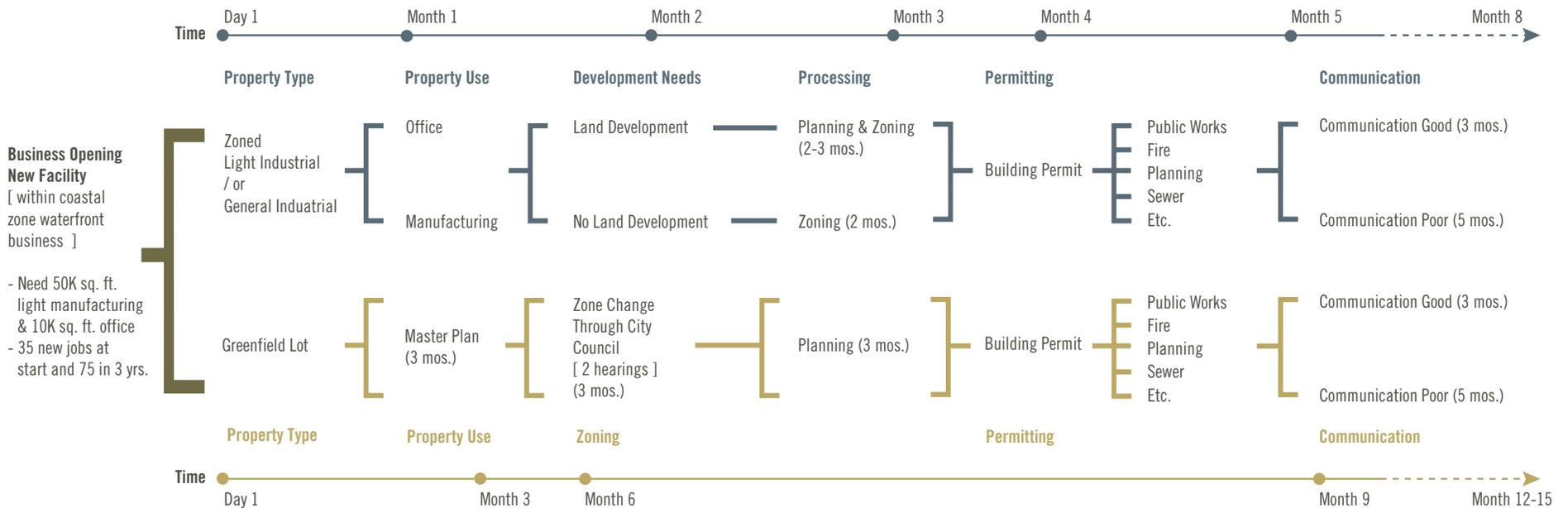
that there could be a drastic difference in time and cost of up front regulatory compliance. Factors can include:

- Efforts of the developer to comply in a timely manner by being prepared
- Adherence to reasonable timeframes on the part of regulatory bodies in prosecuting the applications
- Conflicts between regulatory requirements
- Whether the development is in a greenfield, urban, redeveloping location, etc.
- The use of the development, i.e. simple office space to hotel and conference center
- And many more

The FEC team provides the following as a simple example of how the process may work. Real examples happen every day and a larger effort to map these timelines and regulatory intersects is required to fully grasp how to improve this situation for the long-term. There are no easy, single action, answers to fixing this problem.

Based on the scenarios, the figure below highlights a basic regulatory scenario and the time frames associated with it. The example shown is the most basic of regulatory scenarios within the state. There is a wide variance in the amount of time this process would take across Rhode Island’s municipalities.

FIGURE 41:
Business Expansion Process



4.4 Impediments

4.4.1 Types of Businesses Most Affected

At this time information from the Office of Regulatory Reform's financial impact survey is not available. As that analysis becomes available it would be worthwhile to compare the sectors with the most significant impacts against the industry cluster analysis contained in this report.

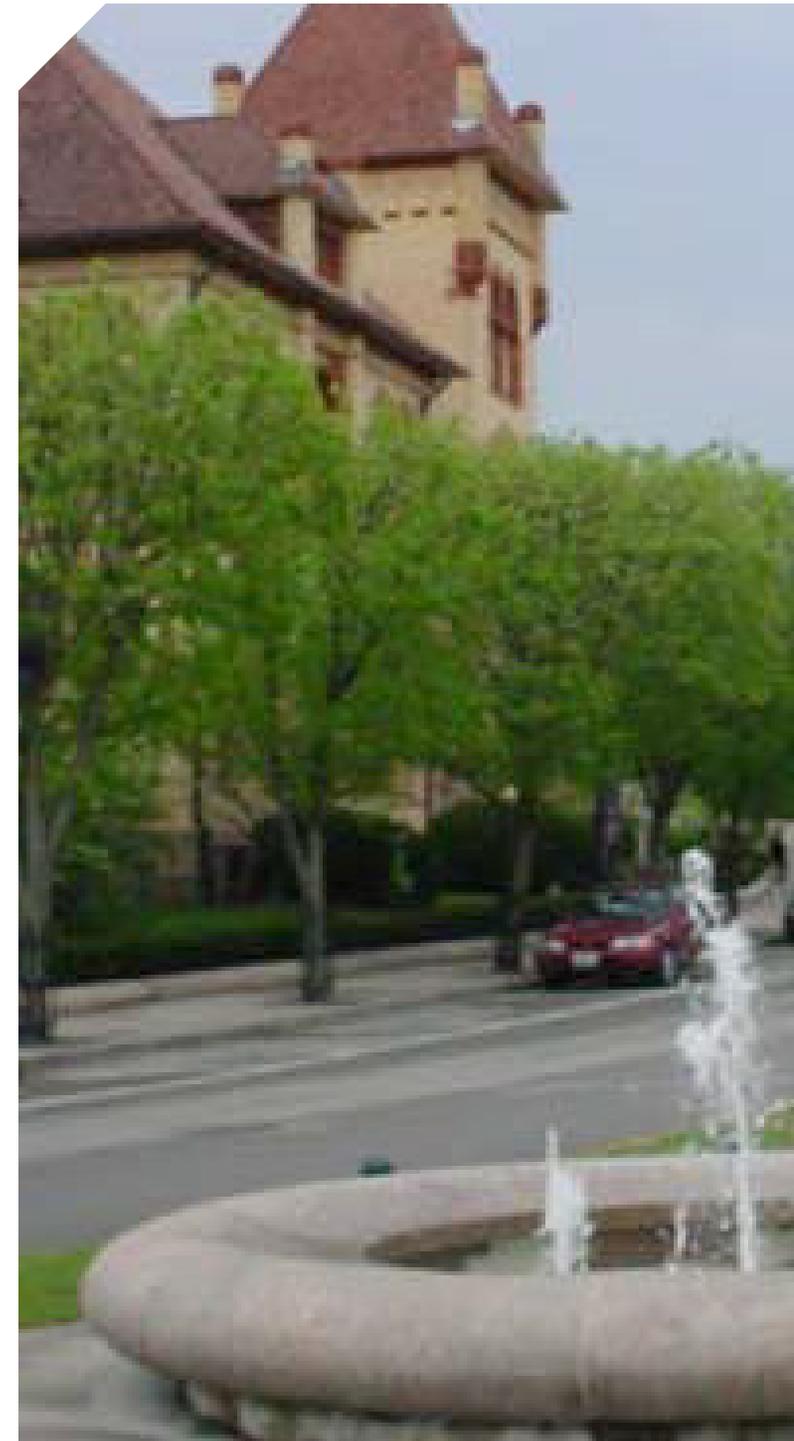
4.5 Guidance and Considerations for Rhode Island's Regulatory System

4.5.1 Initial Guidance

- Continue the current surveying and analysis of regulations that impact businesses in the state. If possible add additional resources to expedite the process and to develop recommendations for the current legislative cycle.
 - :: Increase the resources available to the Office of Regulatory Reform to provide additional hiring capacity (state or contracted employees). This investment would allow for an expedited review and analysis process and demonstrate to the business community and economic development community a commitment to regulatory improvements.
- When analysis is complete review the impacts against the industry cluster analysis contained in this report.
- Continue to communicate to the stakeholder and business community regarding the efforts and progress of the Office of Regulatory Reform. Continue to publish annual reports that allow the business community to gauge the process and results.
- Perform similar scenario exercises with all agency and municipal regulators participating so that all can see the overlap of regulations, difficulty to comply and economic impact that a company will face.

4.5.2 Considerations for Sustainable Rhode Island Campaign

- Identify regulations that can be eliminated or consolidated and work with the agencies and legislature to do so.



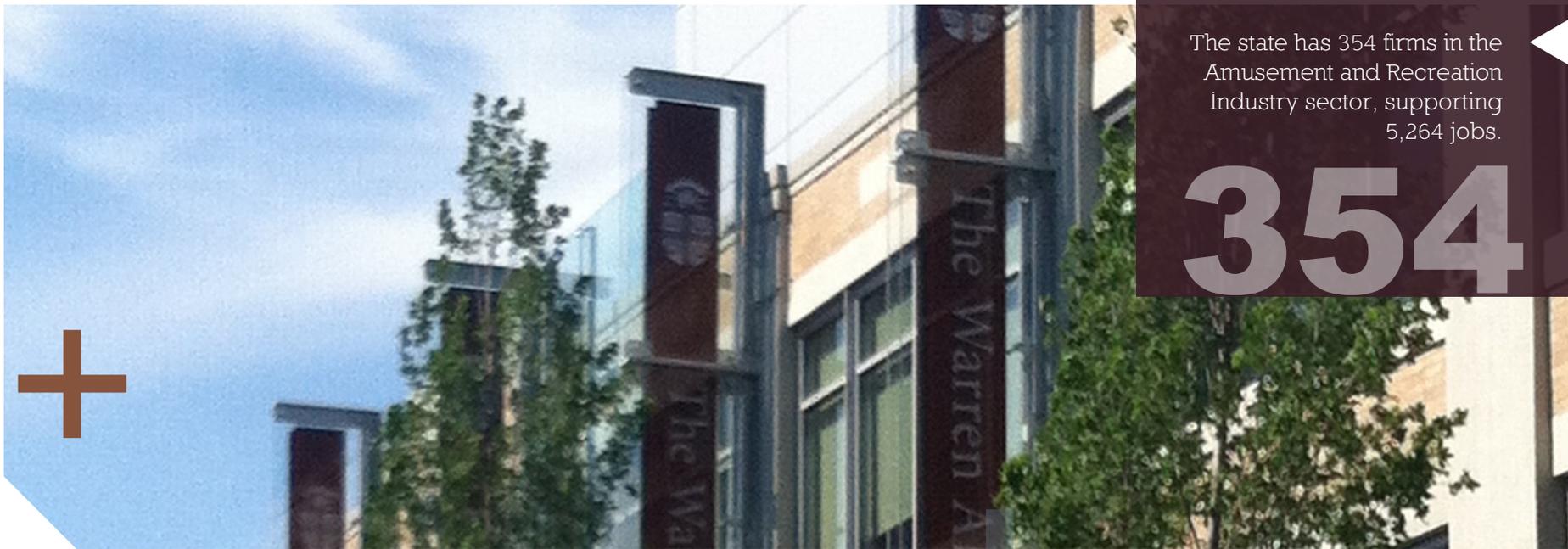
A photograph of a stone wall with a path and a grassy area. The wall is made of large, dark grey stones and has a flat top. A path made of large, flat stones runs along the wall. In the foreground, there is a grassy area with some small white flowers. The background shows more trees and a clear sky. A decorative horizontal line with a repeating pattern is at the top of the image. A semi-transparent grey crosshair is overlaid on the left side of the image. A semi-transparent brown box with a white border is overlaid on the path, containing the text.

“Rhode Island
is a great
beta site for
testing new
products and
innovations”



Rhode Island saw 24,330
international in-migrants between
2009 - 2011.

24,330



The state has 354 firms in the Amusement and Recreation Industry sector, supporting 5,264 jobs.

354

5.0 Marketing Analysis

5.1 Overview of Marketing Analysis Process

Marketing municipalities, industry sectors and the state of Rhode Island is vital for the economic growth of the state. As a result, FEC has conducted a review of online resources provided by the state to analyze the effectiveness of existing resources and provide suggestions for improvements as they relate to economic development best practices and against other analysis provided throughout this report.

Online media were analyzed on a graduated scale throughout the process. State media were reviewed on usability, technical and analytical factors; industry sector media were reviewed on usability and technical factors; and local media were reviewed on usability factors.

Analytical Analysis

The analytical analysis consisted of a review of site visits, traffic sources and referral sources of two statewide sites. Google Analytics is used as the analytics tool to track site traffic and was analyzed over a 17-month period starting August 2011 (as this was the earliest common date available).

Technical Analysis

The technical analysis used online review software to review sites' backend structure and features of the site, which optimize its performance. Items considered included: page descriptions and URL structure; blog access, frequency, and RSS feeds; social media integration and sharing options; page indexing, landing pages, alt tags, and referral links; and mobile optimization.

Usability Analysis

The usability analysis, which was conducted on all sites, was approached from the perspective of a business owner who has a business located in a Rhode Island municipality or looking to locate to a Rhode Island municipality. While some of the items included in the usability analysis affect the technical analysis and overall optimization and functionality of the sites, it was important to review these features to assess their accessibility from the end user's perspective. For example, if a site has a blog, but it is buried deep within the site structure, it may score highly on the technical analysis while scoring poorly on the usability analysis.

The following items were reviewed as part of the usability analysis:

- Search: When a basic web search is performed, where does the site appear in the search engine results page (SERP)?
- Sense of Place: Does the community use content and photography to paint a picture of their community?
- Ease of Doing Business: Is it easy to find how to start a business in the community and is the process clear and easy to understand?
- Aesthetics: Is the site presented in a visually appealing way?
- Functionality: Is information located in a logical location and does the site function as the end user would expect?
- Current: Is the site maintained and kept up-to-date?
- Social: Are universal icons and widgets used to depict social media sites and are sharing icons displayed to easily share content from the site?
- Email: Does the site collect email addresses from visitors on the first level in order to maintain connection with end users?
- News: Is there an up-to-date news section with relevant stories?
- Blog/Feed: Is there a blog and/or RSS feed to increase interaction?
- Contact: Is contact information displayed in text format and is there a direct email address on all pages?
- Map: Is there a map and is the map interactive to allow directions, or points of interest?

It should be noted that an effective economic development marketing plan should have a mixed media approach, both earned and unearned. For this review, FEC was provided a list of online-only resources to review. The marketing analysis conducted was limited to online resources that are publicly available.

Additionally, the marketing realm is constantly shifting, changing, and adapting in reaction to internal and external forces, and Rhode Island is no exception. FEC recognizes and applauds the state for proactively taking steps to address multiple suggestions throughout this section even prior to its publication. By recognizing the importance of economic development marketing, particularly online, Rhode Island is positioning itself well for attracting and retaining business opportunities.

5.2 Strategies for Effective and Efficient Marketing

Business in the innovation economy is fast-paced and changes often. Today's business owners, entrepreneurs, and operations managers are using online resources frequently that reflect this innovative economy. They are seeking like-minded communities to conduct business that foster the same creative, avant-garde atmosphere, while balancing a sense of place.

At the same time, communities are struggling to balance budgeting issues and maintaining a financially attractive community for businesses to locate. Too often, marketing falls through the cracks in this process. However, an investment in marketing efforts will lead to an increase in business activity and, thus, an increase in business-generated tax revenue and add to the overall sense of place of the community.

With several collectively small improvements to the overall marketing strategy of the state, its industry sectors, and its municipalities, Rhode Island can make a greater marketing impact and see an increase in overall economic development. It is evident that Rhode Island takes great pride in its deep history rooted in the early formation of our country. Its unique seaside location also provides an opportunity for industry clusters not available to most U.S. regions. The art of storytelling is a valuable marketing tool that can play a vital role in Rhode Island's success. Through recognizing its assets and presenting them in a logical way, the state can downplay its disadvantages and showcase the elements that make Rhode Island an ideal place to live and conduct business.

5.2.1 Market Rhode Island's Assets

Despite economic development reports that have pointed to Rhode Island's faults in the past, there are quite a number of high-quality assets that should be the focus of the state's marketing efforts. These specific assets are detailed in Section 5.4 below.

Rhode Island should take every opportunity to incorporate state assets into the state's brand and marketing elements. The state should be steadfast in the asset promotion and recognize that these assets are what separate Rhode Island as a unique place to do business. These assets should be the core drivers behind communications, social media, testimonials and case studies, and general content generation. State marketers should be able to pinpoint at least one asset in all communications released. By asking the question "what asset(s) does this communication emphasize," the state can ensure an asset-based strategy that highlights these identified positive features of Rhode Island's brand.

Similarly, the targeted industry sectors and municipalities of the state should implement this same strategy. By having this unified asset-based communications, Rhode Island can ensure the brand is managed in a positive light, by emphasizing the strengths of the state.

5.2.2 Use a Theme

To tie these assets and communications together with a larger branding effort, the state should incorporate a global economic development theme. A theme will show the dedication to business success within the state; demonstrate a unified effort throughout the state, clusters, and municipalities; and provide an easy and recognizable point-of-entry to online support of economic development efforts.

FEC has conceptualized the “Advantage Rhode Island” theme as one that places the state in a positive light. This theme should have creative elements around it that, again, are asset-oriented. Some form of these creative elements should be on cluster and city and town sites, with a link to an appropriate RIEDC landing page, to establish unity and control over the overall strategy of economic development marketing efforts.

Similarly, these creative elements should be included on higher education sites throughout the state. By linking to a different landing page targeted at students and entrepreneurship development, this effort will introduce the state’s dedication and resources to building businesses and provide ease of information access to the audience.

5.2.3 Know Your Audiences and Support Them

The state should focus on three core audiences within economic development efforts: Students, Entrepreneurs, and Existing Business Owners.

The student audience is, arguably, the most critical of those presented, as it represents the future talent, but, more importantly, future entrepreneurs and future business owners. Strategic outreach should occur within this audience to share state resources, assets, and support to drive homegrown efforts. Keeping this talent within the state is critical to Rhode Island’s future success. Content should be generated to help students determine viable business needs, market potential, cluster support. The message should be clear and step-by-step to hand hold this audience through the process.

Very similar to students, entrepreneurs also require a bit of direction in understanding what resources are provided by the state. Resources and processes should be highlighted, as well as specific case studies of success. Demonstrating a greater support network of resources will help this audience achieve success. This should be an area where Rhode Island can excel, due to its small size and close proximity to someone who can help.

Finally, existing businesses require support to grow their business into the next stage. Programming and resources should be targeted to uplift these businesses. Obviously, different businesses require different support levels. Understanding where these weaknesses are and bridging these gaps will help generate a culture of support and business growth within the state.

5.2.4 Rely on Testimonials

Traditionally, it appears that the state has gathered testimonials, however the content published has been weak. Existing “testimonials” are more along the lines of company profiles. Testimonials should be more like case studies, where a business problem is identified, a solution (involving the RIEDC or other entity) is called out, and data-oriented results are shared.

A brief example...

ABCD Corporation required a minimum of \$1M to expand its new product line to accommodate customer demand. ABCD contacted RIEDC for help. RIEDC connected the company to the state’s new venture capital network. As a result, ABCD was able to acquire \$1M in funding from three different investors, expand their product line, and increase corporate profit by 25%.

Of course, standard testimonials should be longer and more detailed; however structuring these testimonials in a “problem – solution – results” fashion will greatly impact the value of this tool. These testimonials should be at the forefront of marketing and communications for the state. A searchable database should be generated, where users can search based on cluster, business-stage, or community. The state should manage the overall process for these testimonials, but should work with the municipalities and industry sector organizations to establish a normalized testimonial system that can be utilized by all organizations, under the umbrella of the Advantage Rhode Island theme. As previously mentioned, testimonials should also have an asset-centric message.

5.2.5 Build a Social Community

Much of the social media efforts across the state are not being utilized to their full potential. A social media strategy should be established to build the brand and the online presence of communities across the audiences. Establishing an online community demonstrates a strong physical community.

At the core of this strategy should be creating a conversation. Many of the state, cluster, and town social media are having one-sided dialogues. These media are merely pushing out information and content. Equally important to publicizing one's own content is to share the content of others and have a conversation. Social communities are a lot like physical communities. If the state is only releasing its own content and not communicating with its citizens, then citizens will view the state as distant and uninterested in their issues. Create a conversation and generate support. Social media should not be viewed as a project, but rather a culture and ecosystem that you are creating.

5.2.6 Optimize Your Efforts

The technical review showed some serious deficiencies in many behind-the-scene aspects of online marketing efforts at the state, industry sector, and city and town levels. While the issues were numerous, the good thing is that these are relatively easy to fix in order to optimize search-based traffic and interest. By adding page descriptions, feeds, and the like, economic development efforts can be found online and utilized. This will increase the usability of sites, becoming more resourceful, and meaningful content will be able to be found by those who need it.

5.2.7 Focus on Regional Alignment

Data and statistics throughout this report point to the greater Rhode Island region (Massachusetts, Connecticut, and parts of New York) as a key area of influence to Rhode Island's market. This is apparent in labor attraction, commuter statistics, and web traffic. Rhode Island should leverage the assets that define the greater region. The state should reach out to similar organizations within the region to establish a regional marketing platform to promote the regional assets, rather than using the same, or similar, assets to compete against one another. This concept was also suggested during stakeholder interviews, as many businesses rely on customers and suppliers from neighboring states or have offices in neighboring states, and therefore would benefit from collaborative economic development efforts.

5.3 Identify and Assess Business Marketing Efforts

The following sections detail the findings from analytical, technical and usability analyses on the state, industry sector, and city and town levels. FEC has attempted to provide a snapshot of the online marketing channels to show common trends among the organizations.

5.3.1 Statewide Economic Development Marketing

For this analysis, the online media channels of RIEDC and Visit Rhode Island were analyzed.



A Note on the Current State-Wide Marketing Efforts (by RIEDC)

Please note, that since the compilation of this data, both the RIEDC and Visit Rhode Island websites have undergone upgrades, which address some of the guidance provided by FEC in this report.

Understanding the areas in need of improvement, RIEDC and the Rhode Island Tourism Division have been engaged in redesign processes for their respective sites while this report was being written. This has resulted in the development of a completely redesigned RIEDC site and an enhanced Visit Rhode Island site.

The new RIEDC site has been revamped to provide easily accessible and relevant content to businesses. A focus was placed on making the site more user-friendly, with better functionality and simpler navigation, so it could serve as a practical resource for businesses. The site has given greater prominence to social media channels.

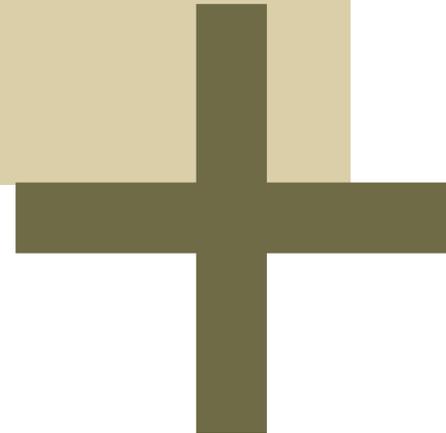
New functions include an “Ask a Question” feature, which brings the visitor to a simple form they can fill out if they have an inquiry. The appropriate RIEDC contact will respond within two business days.

In addition to the contact form, other new features of the site include: a streamlined help menu to guide users to appropriate business resources and financing programs, quick links to community profiles, and easy access to public documents. The new website also highlights, with images and descriptive language, Rhode Island’s key industry and infrastructure assets in a new “Economic Growth Centers” section on the homepage.

While these steps are significant and have added substantive value to the new RIEDC website, the RIEDC understands that opportunities exist for additional improvements to fully optimize the state’s online economic development marketing efforts. The RIEDC will continue to conduct an analytical and technical analysis of the new site and seek ways to make further changes based on the results and on the evolving needs of the business community.

The Visit Rhode Island website has also been improved and re-launched. The site features a new partnership with Rhode Island Monthly magazine through which the publication will make some of its content available on the Visit Rhode Island site. Images on the site have been enhanced to better reflect the natural, cultural and historical assets Rhode Island has to offer visitors.

The State Tourism Division recognizes that additional enhancements to its online presence could significantly contribute to the growth of the state’s tourism and hospitality industry. Governor Chafee’s proposed FY 2014 budget includes \$600,000 in additional funding to bolster the state’s tourism marketing efforts, portions of which would be used to produce new content for the Visit Rhode Island website and strengthen the state’s tourism related social media activities.



Analytical Review

RIEDC sees most of its traffic being generated from within the state. This supports the state's need to focus internally on growing and cultivating businesses, rather than attracting businesses to relocate to Rhode Island. The average visitor remains on the site for 2:11 minutes, which is rather low. Additionally, the bounce rate (the rate at which someone leaves directly from the page from which they enter), is high at 63.68%. By increasing relevant content that supports internal business growth, these statistics can be positively influenced. The site should be a resource for businesses, rather than a news portal. Content should encourage users to dig deeper for information within the site. Most keywords that visitors use to navigate to the site are generic: "RIEDC," "Rhode Island Economic Development," "RIEDC.com." The most content-specific keyword used to navigate to the site is "America's Cup 2012." While this helps speak to the state's sense of place, Rhode Island should focus on greater economic development keywords as targets for site traffic, such as: "building a business in Rhode Island," "Rhode Island business support," and "Starting a company in Rhode Island." These keyword targets speak to the target audiences and provide direct access to state-supported programs designed to impact these audiences. The largest spikes in traffic over the analyzed period were around the 38 Studios situation. The top landing pages for users entering the site, beyond the homepage, include (in order of traffic): Municipal Tax Rates, America's Cup, and Business Services-Renewable Energy. Much of the content on these pages seems to be outdated, which is troublesome since these are the top pages to which users are attracted. The Municipal Tax Rates page appears to have content from 2008-2009. Attention should be paid to how individuals are entering the site and ensuring that relevant content is located on those pages.

The Visit Rhode Island site has most of its traffic coming from out of state. Only 26.1% of traffic was from within Rhode Island during the period analyzed, while 43.1% was from regional states, including Connecticut, Massachusetts and New York. This speaks to the need to develop regional strategies with these states. On average, 3.77 pages were visited, demonstrating that the site's content keeps the users engaged. 84.53% of the traffic is search-based, representing quality, targeted keywords on pages of relevant content. Keywords such as "things to do in Rhode Island," "Rhode Island beaches," and "Rhode Island tourism" are among the top keywords used to generate traffic. These are a good cross section and balance of content on the site versus content the user expects to see. As anticipated, there are significant traffic spikes over the late spring to early fall months, mirroring Rhode Island's tourism season.

Technical Review

From a technical perspective, one of the main drivers of traffic to a site is a blog with an appropriate feed. While RIEDC has a news blog, there are certain items not included as part of this. To optimize this content, there should be greater blogging frequency that includes more content. Blog items should be shared socially by the RIEDC. The blog posts do not have social sharing buttons included in their structure, reducing the opportunity for users to share this content. Many of the internal site pages are missing unique page descriptions, thus reducing their ability to be properly indexed and found through search engines. Images throughout the site should use appropriate, keyword-based alt tags to increase search engine optimization (SEO). While the site appears to display correctly in a mobile environment, there is not a version that is optimized for mobile use. As mobile technology use increases, the need for a dedicated mobile site also increases. From a social perspective, items are shared on

average every two days. This should increase to generate interest and site traffic. RIEDC should share landing pages and content relevant to the core audiences to increase the sites effectiveness. Having conversations with individuals in social communities will also increase web traffic. There has been limited activity of people talking about RIEDC on social communities. Conversations will help generate an interest and build audience affinity.

Visit Rhode Island has a blog, but there are significant gaps (greater than four years) in posting activity. Increasing frequency of posting to this tool with relevant content will increase site traffic. It is not easy to find the blog. By adding it to the homepage, along with an appropriate RSS feed, it will help users locate the site. It also would appear that this content is not being shared socially. Increasing the conversation online and directing users to appropriate content will generate more relevant traffic. The tool utilized in this analysis could not detect unique page descriptions. Therefore, it can be assumed that search engines will have similar issues in detecting this information. Page descriptions define the content on the page, specific to a targeted set of keywords. Without these descriptions, content cannot be indexed properly. One aspect of the site that is very positive is its optimization for mobile use. While the categories on the mobile site are many and somewhat daunting, they still direct the user to the content desired in an organized manner. The Visit Rhode Island site has seen greater activity on social media sites. However, 1 day and 5 hours between posts on Twitter, on average, decreases the effectiveness of this effort, i.e. more frequent posts would increase search optimization. Also, adding social sharing buttons on blog posts will increase these conversations.

Usability Review

The biggest impact that RIEDC can have on its online marketing from a usability standpoint is reorganizing and updating content from the audience perspective. Audience-based landing pages based on support services for each will go a long way to increase the functionality of the media and ultimately support the economic development efforts of the state. Web information architecture should be intuitive. When a user visits the site, they should immediately be able to categorize themselves into an audience and find out exactly how the RIEDC supports that audience. From a social perspective, it is difficult to tell if the RIEDC is participating in online communities. By using common social and RSS buttons on the homepage, the RIEDC can immediately interact with their audience. Also, list-building for newsletter distribution should be a callout on the homepage, rather than a buried link. Staying in front of targeted audiences is essential. Although the RIEDC re-launched its e-newsletter in December 2012, an opportunity exists to also post the newsletter on the RIEDC website so audiences who are not on the distribution list can read it and subscribe. By maintaining a consistent marketing push to key users, the RIEDC can demonstrate its support of growing the state's economy. Finally, the property/building search database is a robust tool for businesses. This should be called out more on the site, rather than a link that is buried.

The Visit Rhode Island site maintains a fantastic sense of place with content organized in a simple and logical way. The "Stay, Do, See, Eat, Plan" navigation is easy to understand and utilize. By breaking the information into regional centers provides a more palatable digestion of the resources available. Social contests, such as the photography contest, provide user activity and engagement. The maps section could be a bit more interactive and robust, showing key, filterable points of interest for users to decide on the region(s) they would like to visit. Similarly to the RIEDC site, a call out for email campaigns on the homepage would allow site administrators to engage with targeted audiences on a regular basis.

5.3.2 Industry-based Economic Development Marketing

For the purposes of this review, FEC analyzed the online marketing resources of the following industry sectors.

These sectors represent a combination of resources provided by Rhode Island and detected by FEC. This analysis is not meant to be inclusive of all industry sectors in Rhode Island, nor exhaustive of all resources within the sectors themselves. This analysis is meant to serve as a cross section of efforts underway throughout the state and the marketing tactics being utilized publicly by the sectors to provide suggestions for the sectors themselves, as well as guide support for market opportunities.

For this review, industry sector trade association websites were analyzed broadly around these existing sectors throughout the state. By leveraging these sectors, Rhode Island can capitalize on market opportunities presented in Section 3.3. Some broad suggestions on how the state can focus on these market opportunities are located in Section 5.5.4 below.

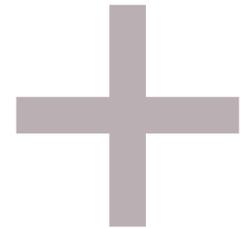


FIGURE 42:
Industry-Based Marketing Resources Analyzed

Industry Sector	Organization / Resource
Defense	Southeastern New England Defense Industry Alliance
Marine Trades	Rhode Island Marine Trades Association
Software / Gaming	Tech Collective
Biomedical & Life Sciences	Rhode Island Technology Advisory Council; Hospital Association of Rhode Island
Renewables & Efficiency	Rhode Island Green Building Council
Consumer Products	Rhode Island School of Design

“It would help if Rhode Island had a point person to help small minority or women owned businesses. . . walking then through steps for government procurement, putting small contractor and potential work in the ‘same room.’”

Technical Review

The largest area needing focus for the industry sector sites is search engine optimization. After performing numerous searches, specific industry sector sites do not appear in top-level results on search engine results pages (SERPs). This points to deficiencies with keyword placement, page descriptions, URL and page title structure, and lack of keyword-centric content. Tweaking some of these components can help amplify the messages of the sectors. There is also a limited social presence among the sectors. Some industries are using the media to promote themselves instead of building the sector. Conversations aren't happening. Online communities aren't being developed. This impacts the ability to develop industry sectors across the network. There are other times where sectors are promoting information and news not relevant to its audience. This reduces the validity of the network and degrades the social community. Industry sectors should have conversations with their stakeholders and use the media to build relationships and create affinity of its members. Use common icons to promote the social networks. Promote association site landing pages on social networks to drive traffic to the site. Many of the sites reviewed did not have a blog or and RSS feed, which exponentially increases the SEO of the site. Sector organizations should submit their sites to Google and other search engines regularly to ensure that new content is being indexed and searchable. One area where the industry sector sites excel is in authoritative sites linking to them. This also increases the sites value and credibility to search engines.

Usability Review

While the associations themselves know the industries they are working hard to promote, the end user visiting the site may not. It should be crystal clear what the organization's mission and goals are, the audiences it influences, and the results it produces. The cluster homepage should have a call to action clearly identified. “Become a member,” “Join us,” and “Support XYZ Organization” are all appropriate calls to action that are not easily found on the sites. Engagement is key. Association sites need to engage their audience, but also engage, and encourage, those not yet in the cluster to become involved, start a business, and thrive in Rhode Island. Associations should generate member affinity badges that members can place on their sites to show their involvement in the cluster (with a link to the association page). This provides credibility to the member and generates traffic to the organization site. Again, similar to the statewide marketing efforts, testimonials and case studies are very important. Demonstrate to users how the sector is successful. Share impact results and data. Show those inside and outside the industry why it is important, how it is succeeding, and the value of being involved.

The Rhode Island Science & Technology Advisory Council (STAC) has a great collaborative resource to locate funding opportunities, research equipment, and laboratory space in an easy-to-use system. Site users can locate resources needed and contact resource owners directly through the tool. Although it was not part of the detailed analysis outlined above, Rhody Ag's site (www.rhodyag.com) provides

excellent resources for getting started in agriculture within Rhode Island. It guides users through a step-by-step process for industry development. These features are important for business development and for fostering innovation.

5.3.3 Regional and Localized Economic Development Marketing

For this analysis, FEC reviewed the websites of 39 Rhode Island municipalities and analyzed the usability from the perspective of a person interested in starting business within the town.

Usability Review

For the usability review, FEC extrapolated 12 basic assets that should be considered in any community's website (see Section 5.1 above). Each website was scored accordingly. The area where regional sites collectively scored poorly was in the area of new content and having an RSS feed established. These items help enhance the site by being current to the end user and in SEO. Some sites had a copyright date and content dating back as far as 2004. This is not favorable to end users looking for the most current information. In today's economy, users turn to the web for current and relevant content that will help them. Outdated information turns away citizens and potential businesses.

Surprisingly, most sites scored poorly in having a map of their community. Burrillville had the best map example, with assets clearly identified in an interactive Google map. It allows users to easily see the location of points of interest, find directions to those locations, and see other points of interest close by.

Most sites scored highly in search results. While many sites were in the top spot when searching on town name, others were within the top three results. Often times, Wikipedia entries preceded the results for the actual town websites. Municipalities should strive to have their site be in the top location, as that

is the site and message they control. Information architecture should be a key concern to town website administrators. Sites often were cluttered with information and disorganized to the end user. Wastewater treatment plant information and sex offender searches on the town homepages turn away users from conducting business in those locations.

Very few cities and towns are participating in social media efforts and those who are participating do not have a clear defined goal for their efforts.

Most cities and towns struggle with defining a sense of place with their online presence. Many cities and towns have great pride in their community. These messages did not translate well to the web. Photos, videos, descriptions, and messages from residents all help define a sense of place. Similarly, it was very difficult to find out how to start a business within the communities analyzed. Warren, West Warwick, and Central Falls provide great information on starting a business. The process should be clearly defined in a step-by-step process with easy forms and clear direction. Normalizing this process in an easy-to-follow format has been introduced in section 3 of this report. Foster's street signs directing to local businesses also stands out as a great initiative to promote local businesses.

It's not a secret that cities and towns and communities often do not have the resources to dedicate to online marketing efforts. It would appear that RI.gov has a web template and hosting solution that allows communities to create their own website under their framework. While this may be an invaluable resource to the communities who take advantage of this solution, these sites scored rather low in the analysis. Revising and refreshing this design could lead to a more valuable web experience for the stakeholders in the state's communities and offer a better online marketing effort for those who take advantage of the platform.

5.4 Rhode Island's Marketable Assets

Just as the Cluster Analysis in section 4 of this report focuses on making the clusters fit Rhode Island, and not making Rhode Island fit the clusters, the same principal can be applied to the assets outlined below. FEC has identified clusters and market opportunities that provide a strong fit with the state's existing ecosystem. By focusing on these assets, Rhode Island can realize economic growth at the state, cluster, and local levels.

5.4.1 Small Enough to Serve

While in the past Rhode Island's physical size has been viewed as a negative, in many respects there are more positives to this trait than negatives. Due to the state's size, the networking base is stronger. There is a greater connection between the political leadership and citizens, creating an ecosystem of accomplishment. The culture of understanding issues, resolving those issues, and creating an environment of positive change is easier to establish. Recognition of this strength by the state and its citizens will go a very long way in establishing a culture of positive business growth.

5.4.2 Learning from the Learned

Rhode Island is home to a dozen colleges and universities. Many of these are second-tier institutions creating top-notch talent right in the state's backyard. With universities being the drivers for modern economic investment, Rhode Island should utilize this asset to its fullest potential. Talent, businesses, startups, research, innovation all speak to this report's overall strategy and go hand-in-hand with the future needs of the state of Rhode Island. Capitalizing on and promoting this asset will go a long way to increasing economic development activity in the state.

5.4.3 Location, Location, Location

There are two major players in regards to Rhode Island's location: the ocean and the land. The ocean supports industry clusters and provides opportunities not available to all states. The existing establishment of marine and defense clusters supports this asset. The land asset refers to the region around Rhode Island. The New England area sees great innovation and success with startups, business development and economic gardening initiatives. Utilizing this to the state's advantage will be a big factor in Rhode Island's success.

5.4.4 High Quality of Life

Rhode Islanders maintain a great amount of pride and determination for success in the state's future. This passion, coupled with the tremendous sense of place that exists throughout the state produces an affinity and pride not seen in most states. Nurturing this culture can create an attractive asset to build businesses and raise families for natives and transplants.

5.4.5 Growing Small Business

Of all of the assets listed, this is one that can be viewed as an asset in development. While there is support of small businesses within the state, Rhode Island can enhance this asset greatly. With a small business-small focus mentality, the state can create a culture of innovation and growth. Innovation incubators, cluster networks, and programmatic support will take this opportunity from concept to a state of mind that will allow the state to capitalize on this asset.



5.5 Guidance and Consideration for Rhode Island's Marketing Efforts

To complement the analysis provided in the previous sections, this section details specific marketing tactics that Rhode Island should implement on the state, cluster, and local levels. These suggestions take into consideration those items that can have the greatest impact for the state, the marketable assets, and the marketing strategies outlined in Section 5.2. While many suggestions are included throughout this section, this sub-section summarizes these activities. Naturally, all entities (state, clusters, cities and towns) can benefit from a global enhancement of audience focus, SEO, design, content, and branding.

5.5.1 Focus Areas for the State

Create and Manage a Statewide Theme

Creating a theme will incorporate a unified effort at all levels. FEC has recommended the “Advantage Rhode Island” theme, however a theme that has buy-in at the local level is important for statewide implementation. This theme should be embodied and embraced by local businesses and should be the driver behind state rebranding, cluster redevelopment, and business promotion.

Focus on Search Engine Optimization

An online presence is only valuable if people can find you. Increasing the optimization of online resources will enhance the ability for online users to find what they are looking for in Rhode Island. Hiring SEO professionals to optimize these sites, or, conducting training for webmasters, marketers, and communicators will help ensure continued success in this area.

Build a Testimonial Database

This database should feature photos and descriptions, filterable by audience, company size, cluster, and region, to establish a source of successes within the state. Testimonials should be based on the problem-solution-results format and be initiated at the local level.

Create a Social Media Strategy

The most successful builders of physical communities are also able to create successful online communities. Treat social media as a conversation and use media to position the state as a valuable resource within the community.

Be Audience-Topical

Focus on the audiences. Create content that becomes a resource for end users. Topics should focus on cluster discussions, entrepreneurship, starting a business, strengthening businesses, promoting local assets, and generating sense of place.

Align the Region

Establishing a regional marketing effort with neighboring states can only be to Rhode Island's benefit. With tourism attraction occurring in these states, along with a strength-in-numbers mindset, all regional partners can stand to benefit from a larger regional strategy to attract and grow economic development. This concept has been discussed in section 1 of this report.

5.5.2 Focus Areas for Industry Sectors

Maintain Consistent Quality

As major industry sectors within the state, there is a higher expectation on the level of design and quality. Rhode Island's future relies on these high-caliber industries for its future success and, as such, should make an investment to ensure these sectors present well to potential members and businesses.

Focus on the Members

The members are the cornerstones of any association. Rhode Island's industry sectors are no exception. These members, and member successes enhance the value to members and create a culture of success. Adding affinity programs, where members further take pride in their membership will also enhance the value of these networks.

Make Networks Social

Similar to the state's need to build a social media strategy, this should be an area of focus for the industries of the state. Create online conversations that drive member conversions and build success and affinity. Become a resource for the community.

5.5.3 Focus Areas for Cities and Towns

Build a Sense of Place

One of the most glaring issues with local websites is a lack of sense of place. Adding descriptions, local features, local culture, and photos will enhance this effort and is an easy way to show local pride throughout the sites.

Make Business Resources Intuitive

It was very difficult to find out how to start a business at the local level. This should be a call out on the town homepages, with a step-by-step process on what it takes to begin building a business. Normalizing this process in a statewide system has been referenced in section 3 of this report.



Get Back to Basics

Things like contact information, maps, collecting email addresses, having email addresses for key town contacts are all important features that were missing on most sites. Ease of locating this information should be a focus of the cities and towns.

Enhance Design & Content

Things like having a list of the economic development committee, web counters, sex offender checks, paying taxes online, etc. are not key features someone looking to do business within the town are concerned about. While important, often times these items were first and in the forefront of local websites. Consideration should be given to all audiences. Town websites should be professional, succinct, and a resource for citizens and future business owners alike.

5.5.4 Focus Areas for All

As Rhode Island focuses on its future, it will understand the market opportunities that exist across industries and work to develop these opportunities into true potential. Building off of the market opportunity suggestions outlined in Section 3.3, the state, industry sectors and cities and towns will all play an important role in promoting these markets internal and external to Rhode Island.

The market opportunity networks, as they incubate and identify, should establish collaborative tools across the markets. Online presence should focus first on fostering market innovations and, second, promoting the market. As critical gaps are targeted, as incubator and accelerator programs are refocused, and as events and programs are developed to foster cross-sector, market opportunity collaboration, communication across state, industries, and cities and towns will be paramount to achieving success.

Creating a localized resource database, with information similar to STAC's collaboration features, or RIEDC's Site Locator will go a long way in providing support to these networks. While these are important in identifying resources available and advertising them to those businesses and individuals who may have a need, they do not allow for tracking of usage throughout the system. Adding collaborative functionality, where the audiences have the opportunity to collaborate and research resources will provide a valuable return on investment. These resources should be promoted at the state and industry levels. Including research/innovation-based resource tracking as a functionality of online marketing efforts will help amplify the network's potential. Tools, such as Flintbox (www.flintbox.com) connect innovators and allow for intellectual property exchange within market opportunities.

An aerial photograph of a city, likely Providence, Rhode Island, showing a large lake in the center, surrounded by dense residential and commercial buildings. The sky is blue with some clouds. A dark grey semi-transparent box is overlaid on the left side of the image, containing text and a large number.

In 2012, Rhode Island had 457,692
Nonfarm jobs across the state.

457,692



“Growing our own small business base is a good approach. We are not large enough to compete with the attraction side and have a few large companies cause major economic and social hardship on a state our size if they were to close their doors”.



Rhode Island ranked 10th in the U.S. for job churning, which is currently trending downward.

#10

Conclusion

Rhode Island's Sustainable Communities initiative presents a unique opportunity to create a unified vision, and comprehensive plan of action, for Rhode Island's economic future. This Economic Development Data Assessment and Analysis is one small piece of that larger initiative. It will be critical for such a large undertaking to begin on solid ground, and the goal of this effort is to help lay the groundwork necessary for the initiative to be successful.

In advance of the regional planning effort, it was important to take a broad, but comprehensive look at Rhode Island's economy. Over the years, stakeholders have done a great deal of work to identify and address critical gaps and opportunities. However, the work of building a competitive economy is never done, and the Sustainable Communities initiative offers the opportunity to build off of the previous work and begin thinking not just about competitiveness, but also sustainability.

First, a sustainable economy requires rethinking what really matters. Therefore, in order to assess the business climate, Fourth Economy took a different approach to analyzing typical business climate rankings. Instead of focusing on overall rankings, FEC looked at the individual measures driving the rankings, organizing by the five key areas that we feel define a sustainable economy: Investment, Talent, Sustainability, Place, and Diversity.

This analysis revealed both strengths and weaknesses in each area. While small business ownership rates, average annual pay, sales tax, foreign direct investment and growth in high-tech jobs are all positive metrics for the state in terms of Investment, the Rhode Island tax climate is still a challenge for the state with property tax, corporate tax, gas tax, utility and unemployment



In non-industry investment of research & development, Rhode Island currently ranks third in the U.S.

#3

insurance rates all in the bottom quintiles when compared nationally. In Talent, Rhode Island has an unquestionable asset in the number of knowledge workers attracted to the state and the number of residents with two and four-year college degrees; however, increasing early childhood enrollment and high school degree attainment will be critical for creating a sustainable economy. Also critical to Sustainability will be decreasing reliance on federal funding and government debt, while continuing to build on the success of new business formation. Place is a traditionally overlooked, but key element of sustainable economic development, and in that category, Rhode Island fares particularly well – though housing affordability is low compared to the nation, it is significantly more affordable than neighboring states, and paired with top-rate broadband connection, makes for an attractive environment for businesses. Finally, Diversity remains a challenge for Rhode Island. While rates of business ownership for minorities provide some shining light, unemployment, homeownership, and educational attainment for minorities all rank low.

While all of these factors contribute to the overall business climate, cost cannot be ignored. A company's cost of operations in a specific location is dictated by a variety of factors, including taxes, tax expenditures, housing, energy, labor and transportation. These costs can support a company's growth or location decision-making, and they are often cited as the most important indicators of a state or community's competitiveness. FEC analyzed these cost factors and compared Rhode Island's position to a peer group, which includes the neighboring states of Massachusetts, Connecticut, and New Hampshire, as well as Delaware due to similar state characteristics. Rhode Island's tax structure compares poorly, both to its peers and nationally, and this is an issue that has already received and must continue to receive attention. However, Rhode Island does have cost advantages, as compared to its peer states. From housing to energy to high-skilled labor, businesses can access all at – relatively – bargain rates, in comparison to Massachusetts and Connecticut.

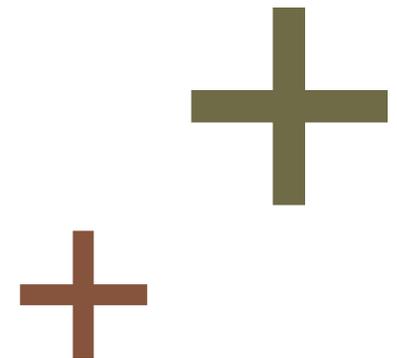
The availability of a range of financial resources for business expansions is also critical for communities and states looking to grow jobs. When Rhode Island's public and private financial resources are considered as a whole, Rhode Island faces significant gaps in the availability funding for early-stage companies. Its programs do, however, provide more competitive funding packages to more mature firms within the state and/or looking to locate in the state. Of course any state only has a finite amount of financial resources available to support economic development, and so most states choose to target those resources towards industries that they view as particularly desirable for their unique economy. RIEDC and the Science and Technology Advisory Council have identified many potential industry clusters for Rhode Island. FEC conducted a strengths, weaknesses, opportunities, and threats analysis for each of those clusters. The analysis demonstrated that due to the limited size of most clusters and limited focus, Rhode Island should not focus on any specific cluster. Rather, FEC is recommending an approach that includes the formation of Market Opportunity Networks, which are related companies and assets that align around a specific market opportunity. Three possible Market Opportunity Networks that could provide strong growth for Rhode Island are Advanced Marine Vehicles; Biotextiles, Implants & Devices; and Culture, Fitness & Recreation. These opportunities will need to be further vetted through the Regional Plan.

Supporting a competitive and sustainable economy also demands regulations that are fair and do not place unnecessary burden on businesses. Rhode Island's regulatory system is not unlike its peers around the country. Like nearly every other state, Rhode Island has a maze of regulations that frustrate the efforts of entrepreneurs and businesses to grow. Through talking with businesses and communities during this process, hurdles such as the lack of a common e-permitting system between municipalities, the complex nature of the fire code, and the lack of coordination between regulating agencies became particularly clear. However, unlike

many states, Rhode Island is taking huge steps to address this issue through the Office of Regulatory Reform and the Department of Business Regulation. It will be important during the regional planning phase to ensure that the results of this work are analyzed in relation to the economic development approach recommended as a result of this report, namely a focus on business growth and retention (versus attraction) and unique market opportunities (versus clusters).

Finally, marketing municipalities, industry sectors and the state of Rhode Island is vital for the economic growth of the state. FEC's analysis of web-based economic development marketing efforts suggest that an asset-focused, business-friendly approach, a technical structure optimized for maximum search capability, and increased social interaction, online conversations, and community generation across online media will all help create a more dynamic and effective approach.

Taken together, the findings of this report suggest that the unique nature of Rhode Island and its economy demand a unique approach to economic development. The Sustainable Communities Regional Plan will be an opportunity to create more coordination and shared ownership among economic development stakeholders, to begin a dialogue about how to best work together to address the big issues, and to create a strategy for growing and retaining the unique types of businesses that will be the bedrock of a sustainable economy.



Fourth Economy Consulting
700 River Avenue, Suite 333
Pittsburgh, PA 15212

412.325.2457
www.FourthEconomy.com
info@fourtheconomy

