

FDi

Supplement

WWW.FDIINTELLIGENCE.COM

Rhode Island reboots

INDUSTRIAL LEGACY GIVES WAY TO
ADVANCED SECTORS AS STATE REGAINS
ITS COMPETITIVE EDGE



PRODUCED BY

FDi
Magazine

SPONSORED BY

**GREATER
PROVIDENCE
CHAMBER OF
COMMERCE**

CONTENTS

Published by The Financial Times
Ltd, Number One Southwark Bridge,
London SE1 9HL,
UK Tel: +44 (0)20 7873 3000.
Editorial fax: +44 (0)1858 461873.

Staff members can be contacted by
dialing +44 (0)20 7775 followed by
their extension number

Editor-in-Chief
Courtney Fingar 6365
courtney.fingar@ft.com

Deputy Editor
Jacopo Dettoni 4339
jacopo.dettoni@ft.com

Global Markets Reporter
Natasha Turak 6480
natasha.turak@ft.com

Production Manager
Richard Gardham 6367
richard.gardham@ft.com

Deputy Production Editor
Andrew Petrie 6230
andrew.petrie@ft.com

Executive Editor
Brian Caplen 6364
brian.caplen@ft.com

Art Director
Paramjit Virdee 6535
paramjit.virdee@ft.com

Advertisement Executive
Daniel Macklin 4120
daniel.macklin@ft.com

Global Commercial Director
Chris Knight 6718
chris.knight@ft.com

Associate Publisher
Charlotte Lloyd +34 (0)682736571
charlotte.lloyd@ft.com

Associate Publisher
Luke McGreevy +971 (0)4 391 4398
luke.mcgreevy@ft.com

Publishing Director
Angus Cushley 6354
angus.cushley@ft.com

B2B Marketing Manager
Lauren Drew +44 (0)20 7873 4462
lauren.drew@ft.com

Marketing Executive
Jay Seenundun 6896
jay.seenundun@ft.com

Subscriptions/ Customer services

CDS Global, Tower House, Lathkill
Street, Sovereign Park, Market
Harborough, Leics, UK. LE16 9EF
ft@subscription.co.uk
tel: 0845 456 1516 (customer
services) 01858 438417 (overseas),
fax: +44 (0)1858 461 873

Subscription rates
One-year: full price
£415/€520/\$670

Please contact us for details of other currencies

The Financial Times adheres to a self-regulation
regime under the FT Editorial Code of Practice:
www.ft.com/editorialcode

Printed by Wyndeham Group in the UK

Registered Number: 227590 (England and Wales)
ISSN: 1476-301X © Financial Times Ltd 2017. FDI is a
trademark of Financial Times Ltd 2017. "Financial
Times" and "FT" are registered trademarks and ser-
vice marks of the Financial Times Ltd. All rights
reserved. No part of this publication may be repro-
duced or used in any form of advertising without prior
permission in writing from the editor. No responsibil-
ity for loss occasioned to any person acting or refrain-
ing from acting as a result of material in this publica-
tion can be accepted. On any specific matter, refer-
ence should be made to an appropriate adviser.
Registered Office: Number One Southwark Bridge,
London SE1 9HL, UK

Reprints are available of any FDI Magazine article, with
your company logo and contact details inserted if
required (minimum order 100 copies).
For details telephone 0207 873 4816.
For one-off copyright licences for reproduction of
FDI magazine articles telephone 0207 873 4871.
Alternatively, for both services
e-mail synd.admin@ft.com



HOW RHODE ISLAND TURNED THE CORNER

63 Rhode Island has made a comeback from a major slump that saw it lose more manufacturing jobs per capita than any other US state over the decade to 2011. Besides offering tax incentives, the local government has worked in close collaboration with business and educational institutions to drive the growth of advanced industries.

A LESSON IN COLLABORATION

66 David Dooley, president of the University of Rhode Island, talks about how the state's educational institutions have helped drive economic recovery after the financial crisis and are now powering growth by partnering with international manufacturers.

BUILT FOR SUCCESS

67 Rhode Island governor Gina Raimondo talks about the state's industrial roots, why attracting international businesses is important, and how investing in manufacturing-focused training programmes is boosting job creation.

THE JOB LOT

68 Quonset Business Park is home to a wealth of companies, contributes more than 5% of Rhode Island's GDP and is forecast to employ more than 16,000 people by 2030.

MANUFACTURING REMADE

69 Performance-based incentives have been a crucial part of Rhode Island's drive to boost commerce, coupled with financial help for students to ensure a skilled and steady pipeline of talent for the companies drawn to the state.

Costs of this report were underwritten by the Greater Providence Chamber of Commerce.
Reporting and editing were carried out independently by FDI Magazine.



City slick: the rebirth of Rhode Island's capital, Providence, has led the way in reviving the state's fortunes

How Rhode Island turned the corner

RHODE ISLAND HAS MADE A COMEBACK FROM A MAJOR SLUMP THAT SAW IT LOSE MORE MANUFACTURING JOBS PER CAPITA THAN ANY OTHER US STATE OVER THE DECADE TO 2011. BESIDES OFFERING TAX INCENTIVES, THE LOCAL GOVERNMENT HAS WORKED IN CLOSE COLLABORATION WITH BUSINESS AND EDUCATIONAL INSTITUTIONS TO DRIVE THE GROWTH OF ADVANCED INDUSTRIES, AS NATASHA TURAK REPORTS

In the late 18th century, a young Englishman named Samuel Slater emigrated to the US, landing in Rhode Island. An apprentice in the textile industry, he brought with him the technical knowhow and design used in the UK's textile factories and modified them for American use, designing the country's first mills that would eventually fuel much of its economy. The British called him 'Slater the Traitor' for replicating British technology; in US history, he is known as the Father of the American Industrial Revolution.

Slater Mill stands to this day, although Rhode Island has seen its share of ups and downs since the boom years of the Industrial Revolution and the US's post-war manufacturing heyday. For generations, the tiny north-eastern state was a manufacturing hub and a national capital for costume jewellery. However, hard times hit in the early 2000s when the industry faced import competition from China.

"Rhode Island has seen some very tough times," says state secretary of commerce Stefan Pryor. "From 2001 to 2011, we lost per capita the most manufacturing jobs in the US."

The comeback kid

True to its pioneering spirit, the Ocean State has proved it can make a comeback. Following the recession, the state with a population of just over 1 million suffered among the highest unemployment rates in the US – now that figure sits at 4.3%, below the national average.

"Rhode Island has restored all of the private sector jobs lost during the recession and ours is a much healthier economy now. The economic development of the past few years has been significant," says Mr Pryor. Indeed, in the past 17 months the state has landed 17 business relocation and expansion deals from major multinationals including General Electric, Johnson & Johnson, Virgin, Priceline and Finlays.

What spurred this turnaround? In 2016, Rhode Island commissioned Washington, DC-based think tank the Brookings Institute to write an economic report for the state. The report, entitled 'Rhode Island innovates: A competitive strategy for the Ocean State', concluded that the state has a number of powerful but underutilised assets. These included sector expertise and world-class universities and colleges.

"The state still has five growing advanced industry competitive advantages," the institute wrote. "Biomedical innovation, cyber and data ►

analytics, maritime technology and manufacturing, advanced business services, and design and custom manufacturing.

“The state’s strong universities and research facilities – Brown University, the University of Rhode Island [URI], the Rhode Island School of Design [RISD], Johnson & Wales University, the Naval Undersea Warfare Center and others – have also helped by steadily supplying skilled workers and new discoveries that have market potential.”

Old state, new rules

A new set of investment vehicles has moved through the state legislature, according to Mr Pryor. “We offer incentives for job growth, relocation and real estate development which are catalysing the economy and enabling us to pledge back to companies the personal income taxes generated by new jobs they create,” he says.

The Rebuild Rhode Island Tax Credit enables the state to invest up to 20% of a project cost into real estate projects – often resulting in a direct return on investment, he adds. Further incentives include tax credits for manufacturers investing in equipment and creating jobs.

New and innovative leadership has also proved crucial. Governor Gina Raimondo, a venture capitalist, former state treasurer and the state’s first female governor, has overhauled much of Rhode Island’s old rules for business. The past few years have seen the convergence of key stakeholders from academia, government and business to create support networks and reinvest in key sectors.

According to the Brookings Institution, Rhode Island institutions conduct more than \$320m in research each year, and the 30% growth in research activity is nearly double the national rate of 16%. Brookings also ranks Rhode Island first in New England for advanced industries job growth, and the US

Chamber of Commerce puts it second in the country for innovation and entrepreneurship.

Chasing the radar

The challenge now, says Greater Providence Chamber of Commerce president Laurie White, is tackling the lack of awareness that hinders Rhode Island. “It’s just not on the radar screen,” she admits. “Our story is very different than it was a decade ago. We’re an Ivy League city with a great talent base, and we’ve been able to get our universities, colleges, hospitals and technical academies into the discussion to share our innovation story.”

Thanks to unprecedented state investment, small businesses – especially the state’s legacy manufacturers – are staying competitive.

“We’ve created something called Innovation Vouchers, which enables businesses seeking R&D to work with our universities – URI, Brown, RISD. More than 30 matches have been made and the state pays the bill of up to \$50,000 each time,” says Mr Pryor.

The governor’s office has also for the first time provided state funding to Polaris Manufacturing Extension Partnership, a public business development entity providing training to small manufacturers. One of these is ChemArt, a proud local manufacturer celebrating its 40th year in business.

“ChemArt has worked with Polaris; it helped us achieve new certifications, gave us training in lean manufacturing,” says David Marquis, president of ChemArt, which uses photochemical machining to create ornaments and metal finishings. “It’s great access to smart people who can come and look at our plant, and they’ve really done a tremendous job rejuvenating the area.”

“Key to the governor’s initiative, career training schools are seeing a bump up in funding,” says Christian Cowan, Polaris director. “We’ve got a close relationship with the Community College of Rhode Island, which is developing new two-year certificate programmes feeding into large and small manufacturers.”

“This state has a lot of small companies with access to many different specialties,” Mr Marquis continues. “It’s the workforce, the people, and we finally have a government that sees the value in that. We’re in a cycle of evolution.”

New neighbours

The decision of major investors to choose Rhode Island over neighbouring Massachusetts or New York for some facilities speaks for itself. Steve Olyha, CEO of British tea producer Finlays Extracts & Ingredients, described his company’s experience moving into the state.

“The Rhode Island Commerce Corporation worked closely with us in promoting our ambition of bringing to market innovative ideas,” he says. “Through a significant financial investment that has been greatly supported by state tax incentives, we

[[
[PROVIDENCE IS]
AN IVY LEAGUE
CITY WITH A GREAT
TALENT BASE
]]

will further our global leadership position.”

Virgin Pulse, a workplace health-focused subsidiary of global giant Virgin Group, initially planned to relocate its global headquarters to Boston, but finally decided to instead expand in Providence, in a move that will create 300 jobs. “You’ve got a major metropolitan city that is not as expensive as Boston and a front row seat to hiring from all these great schools,” says CEO David Osborne. “With the millennials in the workforce and all the local universities, Providence will enable us to accomplish the growth we want.”

GE Digital is currently building a new facility in Providence. A spokesperson for the company says: “The city was a top choice because of its tech talent pipeline, its location along the north-east corridor and the quality of life it allows us to offer our employees.”

And in a recent development, low-cost carrier Norwegian Air has chosen Providence as a base for its transatlantic flights, with direct routes from Providence’s TF Green airport to cities in Ireland and the UK, starting at \$69. This will prove especially beneficial for businesses involved in the newly built West Ireland Trade Centre in central Providence, whose manager David Minton describes the city as a perfect location to test north-eastern US markets.

The brain train

Numerous efforts in Rhode Island are bridging the interests of academia and business. The University of Rhode Island has developed a dual-language and engineering degree involving studying abroad, which is in direct interest to foreign investors such as Toray, a Japanese manufacturer which has invested \$4m in URI’s engineering facilities and hires many of its graduates.

“Fifty-five per cent of our engineering grads have stayed in Rhode Island to work,” says URI president David Dooley. “That’s because companies such as Toray, AmJet, General Dynamic Electric Boat, FM Global and now GE and more are anxious to hire engineers, especially from our international engineering programme.”

Another groundbreaking project is a new nursing education centre, which Mr Dooley says when completed will be the most advanced in the world. This took years of negotiation and collaboration from numerous stakeholders, including URI, Brown University, Rhode Island College, state and local government, and a private developer.

“A public-private partnership of this scale had never been done in Rhode Island before, but we knew we could make this an economic engine for the city of Providence and the state,” says Mr Dooley. The private developer was able to access \$50m in tax credits, and the shared facility – featuring academic, office and housing space – will open in late 2017.

“It turned out to be catalytic in a major way,” adds Mr Dooley. A recently signed initia-



Academic score: Rhode Island School of Design is a world-famous centre of innovation and learning

tive called I-95 will see Wexford Science & Technology turn old highway land into a million-square-foot plus multi-use innovation complex. “There’s no question Wexford would have had no interest in investing in Rhode Island had it not been aware of what we’d done with the nursing education centre. The state, the city, three educational institutions, and we pulled it off,” says Mr Dooley.

“Our point is very simple; here’s a beautiful place you can live – you’re close to the ocean, it’s affordable and extremely safe, yet you’re 45 minutes from Boston and three hours from New York,” he adds.

Additionally, Retail.com and *GQ Magazine* are among several media outlets to have recently lauded Rhode Island for its food and arts scene. “You can enjoy everything that’s attractive about this part of the US from this location – and the whole north-east is then your oyster. That’s our pitch,” says Mr Dooley. ■

A lesson in collaboration

DAVID DOOLEY, PRESIDENT OF THE UNIVERSITY OF RHODE ISLAND, TALKS TO **NATASHA TURAK** ABOUT HOW THE STATE'S EDUCATIONAL INSTITUTIONS HAVE HELPED DRIVE ECONOMIC RECOVERY AFTER THE FINANCIAL CRISIS AND ARE NOW POWERING GROWTH BY PARTNERING WITH INTERNATIONAL MANUFACTURERS

Though just 60 kilometres by 77 kilometres in size, Rhode Island is home to an array of higher education institutions, from small and mid-sized colleges to an Ivy League university and prestigious arts and trade schools. When asked about the state's recovery from the years following the global financial crisis, many Rhode Islanders credit the work of some of its oldest and most valued assets: its colleges and universities.

Dr David Dooley joined the University of Rhode Island (URI) faculty as president in 2009. "When I joined, the sense was that URI was an underutilised asset on the part of the state," he says.

"It was never clearer than at that time that URI needed to play a key role for the state if it was ever going to come out of the dive that it was in. So we set out to position URI to be the state's primary economic development partner, and the private sector's primary partner for growth."

Developing the workforce

URI prides itself on being Rhode Island's premier publicly funded research institution. With nearly 15,000 undergraduate and 3000 graduate students coming from more than 60 countries, it plays an important role in workforce development.

Its concerted engagement in the state's economy began in 2009, when Mr Dooley joined the executive board of the commerce chamber and URI began designing a comprehensive development strategy. This involved creating a research foundation to handle all the university's intellectual property, and bringing into that Polaris Manufacturing Extension Partnership – a statewide organisation offering business improvement programmes – and the state's Small Business Development Center.

URI also established the Business Engagement Center, a single portal for the private sector, non-profit organisations and state and local government entities to access all of URI's assets from employee and intern recruitment to facilities and R&D.



Dr David Dooley, president, URI

"That's been extraordinarily successful," says Mr Dooley. "We have also really strengthened our relationships inside state and local legislatures so that they are aware of our enthusiasm in sitting down with them to find ways we can partner to advance the state."

Centre for innovation

One major initiative in the works, supported by Rhode Island governor Gina Raimondo, is URI's Innovation Campus. "The idea of an innovation campus is to harness our research capability with the private sector to build a single location where the R&D prowess of the state can be put to work for the private sector. URI was designated as the lead academic institution in that entire effort by statute," says Mr Dooley. The project will be a \$40m investment once the private sector matches the state's \$20m in funding.

"The aim is to attract companies in advanced industries either to expand or relocate in URI or Rhode Island, partnering with us on a campus where research will lead to new products and companies, and drive economic expansion in the state by creating new opportunities for product development and investment," adds Mr Dooley.

URI already has robust partnerships with private foreign investors. Japanese polymer film manufac-

SO WE SET OUT TO POSITION URI TO BE RHODE ISLAND'S PRIMARY ECONOMIC DEVELOPMENT PARTNER

turer Toray, which employs more than 600 people at its facility in Rhode Island's Quonset Business Park, has invested \$4m in the school's engineering building and student scholarships.

"It uses many of our students as interns, and has hired many of our graduates in business, engineering and chemistry, who are now employed in leadership positions," says Mr Dooley. Toray sponsors research projects on URI's campus, conducted by both graduate and undergraduate students.

"It's been one of our main drivers of international partnerships over the years, the fact that we're producing students with these kinds of capabilities. We have very strong global networks, working with probably all the top 30 major German manufacturers. Siemens, ZF, Deutsche Bank, Volkswagen, Audi – all those groups hire our engineers and take our students as interns during their years abroad."

Along with neighbours Brown University and Rhode Island College (among others), URI is zealously pursuing opportunities for engagement and growth, which in turn help keep its graduates in the state.

"That's our mission as the state's public research university," says Mr Dooley. "We've been here 125 years, and we'll be here another 125 years. We're not going anywhere." ■

Q&A: GINA RAIMONDO

Built for success

RHODE ISLAND GOVERNOR GINA RAIMONDO TALKS TO **NATASHA TURAK** ABOUT THE STATE'S INDUSTRIAL ROOTS, WHY ATTRACTING INTERNATIONAL BUSINESSES IS IMPORTANT, AND HOW INVESTING IN MANUFACTURING-FOCUSED TRAINING PROGRAMMES IS BOOSTING JOB CREATION

Q How does Rhode Island's history, and your family's history within that, tie into your drive to revive people's livelihoods in the state's manufacturing sector?

A Rhode Island has been a leader in manufacturing for a very long time. The US's industrial revolution started in Rhode Island, in the city of Pawtucket. And when I was a child, the parents of nearly everybody I knew worked in a manufacturing facility.

A lot of people made jewellery; we were the jewellery manufacturing capital of the world. My father worked his whole career at the Bulova watch factory. There were more than 1000 people working there at the time he was there – just one example of our rich and successful history of making things.

Q What are some of the initiatives you have launched to fuel the growth of new manufacturing jobs?

A Because we have such strong history in manufacturing, and we still have many top-notch advanced manufacturers creating good jobs, I want to support manufacturers as much as possible. So we are doing a few things.

First of all, we are planning to make a big investment in the state's career and technical schools that is focused on manufacturing, so we can ensure young people have the skills they need [to work] for manufacturers.

We're also making it easier for manufacturers of all sizes to invest in equipment and in job training, so we are writing tax credits enabling them to buy equipment, because advanced manufacturing is all about innovation – so a lot of equipment – and skills. They also need the skilled workforce, so we are continuing to invest in skills and helping manufacturers train people.

Q How are you leading policy changes in education and why

is this so important for Rhode Island's economic development?

A We've made a huge commitment to training programmes geared at manufacturers. Some are for high school students, so for example we have a programme where we enable manufacturers to partner with high schools, and we set up specific career and technical programmes in the schools.

For example, one of our biggest manufacturers here is General Dynamic Electric Boat. It makes very sophisticated submarines for the military, so we set up several welding programmes – it hires a lot of welders – in our high schools, so that we can produce enough welders for Electric Boat, straight out of high school.

We also have another programme that is very successful, and manufacturers love it, called the Real Jobs Rhode Island programme. This is for people who are mid-career: job training that helps them to acquire the skills they need to go into manufacturing.

Q What role does international business have in your growth strategy, and how valuable is the contribution of international companies to the state's economy?

A It is extremely valuable. Rhode Island is a great place to invest and to do business, and we want to be as open as possible to international investors and international companies. We recently announced that a major British tea company, Finlays, is opening a facility in Rhode Island.

The University of Rhode Island, our flagship university, has phenomenal science programmes mixed with foreign languages, and manufacturers love that because they want people to speak another language but also have technical and science skills. We're always encouraging international companies to set up shop here, invest here, work with our local universities, and create jobs here. ■



CURRICULUM VITAE

GINA RAIMONDO

2015

Rhode Island

Governor

Previously

Rhode Island, state treasurer;
Point Judith Capital,
co-founder



Port authority: Quonset Business Park boast direct links to highway, rail and sea infrastructure

The job lot

QUONSET BUSINESS PARK IS HOME TO A WEALTH OF COMPANIES, CONTRIBUTES MORE THAN 5% OF RHODE ISLAND'S GDP AND IS FORECAST TO EMPLOY MORE THAN 16,000 PEOPLE BY 2030. NATASHA TURAK LOOKS AT HOW STATE SUPPORT HAS BEEN VITAL TO THIS SUCCESS

Occupying 1300 hectares on Rhode Island's Narragansett Bay on the site of two former naval bases, Quonset Business Park is humming with activity. Surrounded by green land and its Atlantic eastern flank, with a name believed to be a Native American word for 'small long place', Quonset is a pillar of growth and production for the state. Welcoming visitors to the park, David Preston, founder of Rhode Island marketing agency New Harbor Group, says: "Let's see what 11,000 jobs looks like."

This is not an exaggeration. Since the 1980s, more than 200 companies have established themselves at Quonset across a range of sectors. Manufacturing accounts for 53% of Quonset jobs, while wholesale, retail, transportation and warehousing, health, and even the state's National Guard comprise many others.

Many different tenants

A 15-minute drive will take visitors across a shipyard, international engineering companies, plastics and polymer film manufacturers, book pub-

lishers, seafood processors, vast auto lots for Porsche, Ford and Volkswagen, retail shopping space, chemical plants, and even a marine research centre, to name a few of the park's tenants. The flags of France, Germany, Japan and Sweden are just some of those seen flying from the offices of international companies. The park even has an on-site health-care non-profit, childcare centre and golf course for employees.

With its roots in US military history – Quonset is the birthplace of the Quonset hut, which are prefabricated all-purpose steel structures used widely during the Second World War by the US Navy as barracks and offices – the area continues to serve its country. Anchor tenant General Dynamics Electric Boat currently employs 3715 staff in its production of nuclear submarines for the US military, and plans to hire up to 3000 more by 2030.

Since the establishment in 2005 of quasi-state agency Quonset Development Corporation (QDC), the park's operator and a subsidiary of Rhode Island Commerce Corporation, Quonset has

seen 4351 new jobs created and \$598m in private investment. The business park's operations are funded solely by park revenue.

A 2016 Bryant University study found that Quonset supports 21,102 Rhode Island jobs, meaning one in every 23; adds \$2.85bn to the state's economy, making up 5.2% of state GDP; and generates \$113.1m in tax revenues for state and local government. And on average, Quonset workers' wages are 8.3% higher than the state average.

The Quonset offering

QDC's streamlined development process ensures a 90-day timeline from site control to construction, as well as pad-ready building sites and pre-completed environmental permits. And the park offers direct access to highway, rail and sea infrastructure – more than 75 companies use the state's Port of Davisville, for instance, putting Rhode Island in the top 10 auto importers for North America.

QDC managing director Steven King, a decorated US Army veteran and University of Rhode Island alumnus, is keen to stress that the state's strong public support network has been important. "We've had great leadership from the governor's office to the environmental community and state regulators to work with us – the ability to offer sites pad-ready for development is a key marketing tool," he says.

A newcomer to Quonset is British tea company Finlays, which is set to create 73 local jobs and increase the state's GDP by \$15.3m. "Finlays is one of the beneficiaries of the governor's new programmes for economic development incentives, which, when leveraged against what we are doing, is very strong," says Mr King.

Quonset offers rebates to tenants for the length of their lease and number of jobs created. "When you add to that the governor's Rebuild Rhode Island and Qualified Jobs Incentive tax credits, it's very compelling. Finlays took advantage of all of that," he adds.

The park is projected to host more than 16,000 jobs by 2030, according to QDC management. With its continuous stream of projects and infrastructure developments in the pipeline, it appears that as long as Rhode Island can produce talented workers, they will find a home and join the roll of US industriousness at Quonset. ■



On the spot: Christian Cowan, centre director of state-wide training entity Polaris MEP, makes regular visits to manufacturing facilities throughout Rhode Island

Manufacturing remade

PERFORMANCE-BASED INCENTIVES HAVE BEEN A CRUCIAL PART OF RHODE ISLAND'S DRIVE TO BOOST COMMERCE, COUPLED WITH FINANCIAL HELP FOR STUDENTS TO ENSURE A SKILLED AND STEADY PIPELINE OF TALENT FOR THE COMPANIES DRAWN TO THE STATE. NATASHA TURAK REPORTS

Until only a few years ago, Rhode Island was one of few states in the US offering no business incentives to investors. However, faced with severe job loss over the past two decades and often overlooked in favour of neighbouring Massachusetts, the state could not afford to rest on its laurels.

A 2016 op-ed from the Brookings Institute entitled 'RI needs to exploit its advantages' highlighted some measures Rhode Island could take to turn this around – one being the overhaul of state policy toward business. The authors wrote: "Becoming more competitive matters... the regulatory environment is a repellent to firms and workers with other choices."

Enter governor Gina Raimondo with a statewide call for key stakeholders to come together: the Greater Providence Chamber of Commerce (GPCC), the Rhode Island

Commerce Corporation, Polaris Manufacturing Extension Partnership (MEP), the University of Rhode Island, local community colleges and many more.

"The prior governor's office did not believe that incentives were the way to go," says Laurie White, president of the GPCC, which represents 1100 businesses across Rhode Island. "Ms Raimondo understood correctly that Rhode Island needed a very powerful sweetener in its toolbox: performance-based incentives. Not just handing out dollars, but rewarding jobs being created. Legislative programmes to authorise commerce to enable these incentives and deploy them with a budget that would match – that's what I am most proud of."

Sweetening the deal

True to its manufacturing legacy, Rhode Island has committed to ini- ►

tatives supporting job creation for manufacturers of all sizes. One is the Manufacturing Investment Tax Credit – this provides a refundable credit on a competitive basis for businesses investing in new equipment that helps to create jobs. Another is the Qualified Jobs Incentive Tax Credit, where manufacturers that add five new jobs are eligible to apply for refundable tax credits.

This has paid off. The whopping 17 major investment announcements from private companies in the past year-and-a-half – from companies such as Virgin Pulse, Johnson & Johnson and Priceline's Agoda – are a testament to Rhode Island's all-in strategy.

One of these companies is GE Digital, whose new IT office in Providence will hire an initial 100 engineers, data scientists and other young professionals to develop software and drive innovation.

"Since GE Digital did not previously have an office in Providence, the Qualified Jobs Incentive Tax Credits and the First Wave Closing Fund the state secured made it more affordable for us to open an office here," says Jeff Monaco, GE's vice-president of digital workplace technology. "The Chamber of Commerce went out of its way to ensure we could make Providence a new home for some of GE Digital's operations."

Ecosystem boost

An important player in Rhode Island's manufacturing landscape is Polaris MEP, a public state-wide entity providing development and training programmes to local manufacturers in vital areas such as digitalisation and lean manufacturing.

"There is a unique merging right now of the legacy manufacturing environment and this public-private relationship between the state and companies looking to grow," says Christian Cowan, Polaris MEP's centre director.

When Mr Cowan began working at Polaris in 2014 it was engaged with roughly 30 companies a year, providing business improvement and support services. "After I started, for the first time ever in Rhode Island's history, the state supported us with funding," he recalls. "It never did that before."

"The governor's manufacturing initiatives really allowed Polaris to engage with more companies, so last year we worked with 200 rather than the initial 30. That allowed us more

WE'VE BEEN COLLABORATING WITH OUR PUBLIC AND PRIVATE UNIVERSITIES TO CREATE NEW COMPUTER SCIENCE MINORS

outcomes, which all measured in sales impacts, job impacts and costs savings for these companies," he adds.

Another of Ms Raimondo's initiatives is the Real Jobs Rhode Island Partnership. Designed for mid-career workers, it creates additional custom workforce training for manufacturers, up-skilling current employees and ensuring a pipeline of talent for the industry.

"We've had great discussions with manufacturers and educators about this ecosystem that's needed; large companies benefit from small companies being around from a supplier standpoint, a talent standpoint, and an IP standpoint," says Mr Cowan. "It's really about building that entire ecosystem to make sure there are support systems for both the large and smaller companies, as well as the spaces and programmes for those companies to interact."

A lesson in growth

Advancements in education are central to the state's economic growth plans. "We're going to invest in manufacturing initiatives for our high school students, and we're going to make it easier for manufacturers to hire and train Rhode Islanders," Ms Raimondo said in her annual 'State of the State' address.

To meet today's industry needs, this means advanced technological skills training. Thanks to investments in the governor's computer science for Rhode Island initiative, CS4RI, Rhode Island is poised to become the first state with computer science classes at every public school.

In addition to CS4RI, the state has launched its P-Tech

Manufacturing Alliances programme, which pairs several high schools with local community colleges and then with partner employers offering mentorship and career exposure opportunities.

"We've also been collaborating with our public and private universities to create new computer science minors," says state secretary of commerce Stefan Pryor. "This is producing more college graduates with cross-disciplinary knowledge, while the focus on computer science skills makes them great job candidates."

"We have had a terrific run of luck with one of our exports, which is talent, but we'd like to retain much more of that talent."

Fellowship funding

The Rhode Island Commerce Corporation has introduced its unique Wavemaker fellowship programme, which allows partial student debt forgiveness for qualified candidates working in 'Steam' fields in Rhode Island – science, technology, engineering, art and design and mathematics. This commitment of public funds to keeping the best and brightest in Rhode Island after graduation ensures a robust talent pool for growing businesses in the state.

"There are many industry partners focused on making sure middle and high school kids are aware of the benefits of manufacturing, and that manufacturing is not dark, dirty and dangerous anymore. It's highly technical," says Mr Cowan. "So there's really a strong push to make sure that pipeline of talent is there for the long haul in Rhode Island." ■