

## 2007 Engineers Week Elevator Pitch Competition – Friday, Feb 23<sup>rd</sup> – 6pm – B&H Room 190

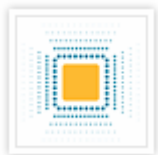
To enter, please email [Lauren Brennan@brown.edu](mailto:Lauren_Brennan@brown.edu) with your name, concentration, and year. Contest is open to all Brown students.

A representative from the Governor's office will judge the competition for a \$200 monetary prize. All judges' decisions will be final. You will be judged on originality of your idea, transformative effect of your idea, practicality/implementation potential, communication skills, and persuasiveness. You will be given 60 seconds to pitch your proposed application or idea for the competition.

### What applications have been tested on the network so far?

With its public and private sector partner, RI-WINs is testing a number of exciting applications. They include:

- a port security demonstration project that allows government agencies and emergency personnel to share and distribute real-time information about activity in Narragansett Bay;
- a web-based inspection system that provides real-time data exchange for food inspectors dealing with threats of infectious disease or food contamination;
- transmission and video from remote cameras for DOT field personnel so they can access maps and other critical information in their offices;
- new connectivity for classroom teachers to enhance the learning experience of their students.



### Rhode Island Wireless Innovation Networks (RI-WINs)

*Making Rhode Island the first state in the country with a wireless border-to-border broadband network.*

### What is RI-WINs?

The Rhode Island Wireless Innovation Networks (RI-WINs) is a project of the non-profit Business Innovation Factory to make Rhode Island the first state in the country with a border-to-border, broadband wireless network. RI-WINs mission is to strengthen Rhode Island's economy by creating a statewide platform for wireless broadband innovation in business, healthcare, education, and public safety.

### Why do we need RI-WINs?

RI-WINs seeks to do what current commercial networks cannot: create a wireless broadband network that extends border-to-border, leaving no community—rural or urban—without coverage. A state-wide broadband wireless network will make Rhode Island an innovation hotspot which will create high wage jobs for Rhode Islanders and position Rhode Island institutions as national and global innovators.

### Who will use RI-WINs?

Mobile workers who need to stay connected wherever they are. Field agents who need to send and receive information in real time. Government agencies that need to provide better services on a smaller budget. Businesses, both big and small, that want to develop and implement new wireless solutions and become more competitive. Emergency responders, EMTs, police, firefighters, and homeland security personnel. Teachers who want to turn the world into a classroom for their students. Entrepreneurs who want test new ideas in Rhode Island. These are the people who will use and benefit from RI-WINs.

### **Will RI-WINs compete with current networks?**

RI-WINs will not compete with current networks. Current networks, geared towards consumer focused voice, video, music and text services, operate with business models that only make sense in areas with a dense population. These providers will not build out their networks in rural areas without enough population to support their investment.

RI-WINs is targeting a different market. It will serve the enterprise data and application market. RI-WINs will be the only network in Rhode Island with coverage in every community and will service enterprise users and mobile workers who need a border-to-border broadband connection to provide better services and solutions to their clients and customers.

The RI-WINs target market is only .01% percent, or \$16M, dollars of the current total Rhode Island telecommunications market, estimated to be \$1.3B dollars.

RI-WINs will not compete with providers in the large consumer sector of the wireless market. In fact RI-WINs will partner with any provider that wants to offer its customers access to the state's only border-to-border broadband network.

### **Why won't current providers build a border-to-border network?**

Current network providers have no plans to build a border-to-border network. Profit models for these providers tie network expansion exclusively to consumer and not enterprise demand. As a result, services are concentrated in areas of the state with the highest population density and largest customer base.

### **How will RI-WINs benefit Rhode Island's economy?**

Border-to-border coverage will enable businesses, government agencies, and other public sector enterprises to develop new wireless solutions, become more competitive, and deliver better services to their customers and clients. By helping Rhode Island institutions to innovate they will be better positioned to grow and to create new and higher wage jobs for Rhode Islanders. By offering innovators from outside of Rhode Island access to the nation's only statewide network, RI-WINs will attract new research and development activity to the state and stimulate investment in our economy which will create new and higher wage jobs for Rhode Islanders

### **What steps has RI-WINs taken to build the network?**

In May of 2005, RI-WINs released results from a feasibility study showing that constructing a statewide network was economically and technologically feasible and that organizations from across the state, both private and public, would utilize a border-to-border broadband wireless network to innovate and become more competitive.

Based on these findings and close collaboration with leaders in business and government, RI-WINs went live with a pilot test of the network in June 2006. The pilot, now in full swing, is operating several applications on a small-scale version of the network to test the network's effectiveness and troubleshoot issues in advance of a state-wide roll out.

### **What will it cost to build a border-to-border broadband network?**

The Business Innovation Factory recently released a business plan showing that the total cost to build and operate the network is \$28 million, including initial construction, financing costs, and operating expenses through year three, after which revenue from the network will be sufficient to meet all expenses.

These figures are based on an analysis conducted by Altman & Vilandrie, a Boston-based technology consulting firm. Our estimates for the costs of building and operating a state-wide network have been reviewed by many outside

experts. In addition to Altman & Vilandrie, who have been directly involved with many similar projects, the RI-WINs business model has incorporated expert input from IBM and Stratum Broadband, organizations with extensive experience in network design and operations.

### **What is the next step?**

With the pilot phase completed, the next step is state-wide rollout. RI-WINs has developed a financially self-sustaining non-profit model for building and operating the network. The first step in this process is securing financing for the project.

In January 2007, the Business Innovation Factory (BIF) asked the state of Rhode Island to provide the project with a credit enhancement that will enable BIF to secure private sector funding for the statewide rollout.

### **Why does RI-WINs need state credit enhancement?**

Rhode Island has a jumpstart on the competition in becoming the first border-to-border broadband state. Most other city and municipal efforts are still in the planning stages while RI-WINs is already operational with its pilot network. This lead will diminish, however, as other projects mature.

A credit enhancement from the state will enable RI-WINs to quickly secure financing and move the project forward. A credit enhancement allows the State to support the project without the direct investment of funds, minimizing the budgetary impact of the project.

A state credit enhancement will also allow RI-WINs to operate as a non-profit with an economic development and job creation focus.

### **Why should the state support RI-WINs?**

The state of Rhode Island will benefit directly from its partnership in RI-WINs. Every state agency that has mobile workers providing services to Rhode Islanders across the state can benefit from a border-to-border broadband wireless network.

RI-WINs will be operated by the non-profit Business Innovation Factory. It will focus on its economic development mission to create new, higher wage jobs for all Rhode Islanders.

### **When will the build-out be complete?**

Once financed, it will take 12-18 months to build the network. Network base stations will be placed on existing structures where possible, minimizing new tower construction. Using new Wi-Max technology RI-WINs will require approximately 125 base stations to accomplish its goal of border-to-border coverage.

### **What is the Business Innovation Factory?**

The Business Innovation Factory (BIF) is an independent, non-profit organization created in 2004 to help organizations, both in and outside of Rhode Island, innovate. A major focus of BIF's mission is building the public/private sector partnerships that are critical to success in the 21<sup>st</sup> century global economy. BIF achieves this mission by focusing on collaborative innovation projects with transformational potential in areas such as healthcare, education, security, ubiquitous computing and customer experience innovation. RI-WINs is a project of the Business Innovation Factory.

For more information, visit [www.businessinnovationfactory.com](http://www.businessinnovationfactory.com).