

# Innovation Hot Spots

## North Country Proposal

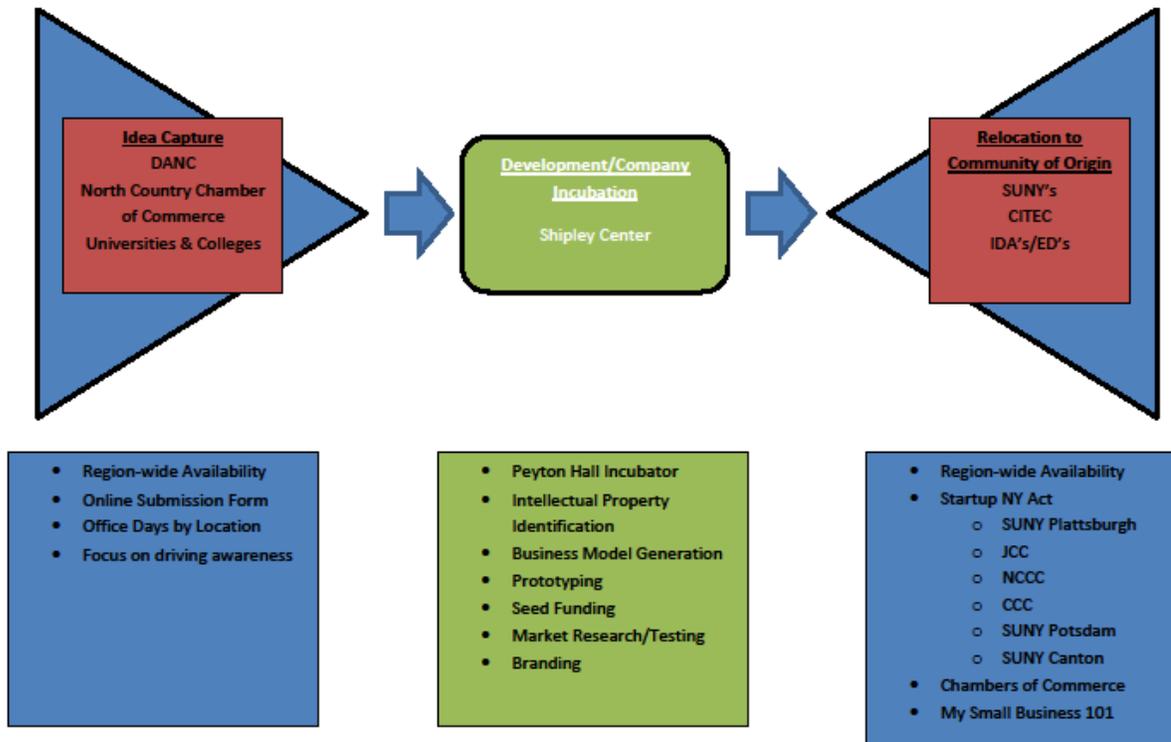
### *Overview*

Everyone is focused on economic development using innovation as the spark. As such, many models have been developed to pursue organic growth through innovation and entrepreneurship. Most of these models pursue the “if we build it, they will come” approach, investing resources in incubators, equipment, and talent with the hope of attracting entrepreneurs from the outside to establish themselves in the region. This model has experienced limited success, with many incubators and business parks vacant and few quantifiable successes.

The North Country has a history with and takes pride in self-sufficiency, which is just another term for innovation. As such, the North Country’s model should be “if we harness the existing human talent, the infrastructure will sprout up to support them.” This is the model of the original Silicon Valley, where Stanford invested in two college students to found HP when the surrounding area was mostly farmland. The success of the model caused supporting infrastructure to develop which fed continuous renewal with ever more startups attracting ever more talent and resources. The current best demonstrated practices of Tech Stars and Y-Combinator focus on the “voice of the customer,” in this case, the entrepreneur. Designing the model to begin with the entrepreneur will proceed along the lean startup approach, with resources and services evolving to fit the specific needs of the regional entrepreneurs. Once the infrastructure develops, outside entrepreneurs will be enticed to the region thereby creating the continuous cycle that feeds the success of recognized innovation hotbeds such as Silicon Valley, Route 128, and Research Triangle.

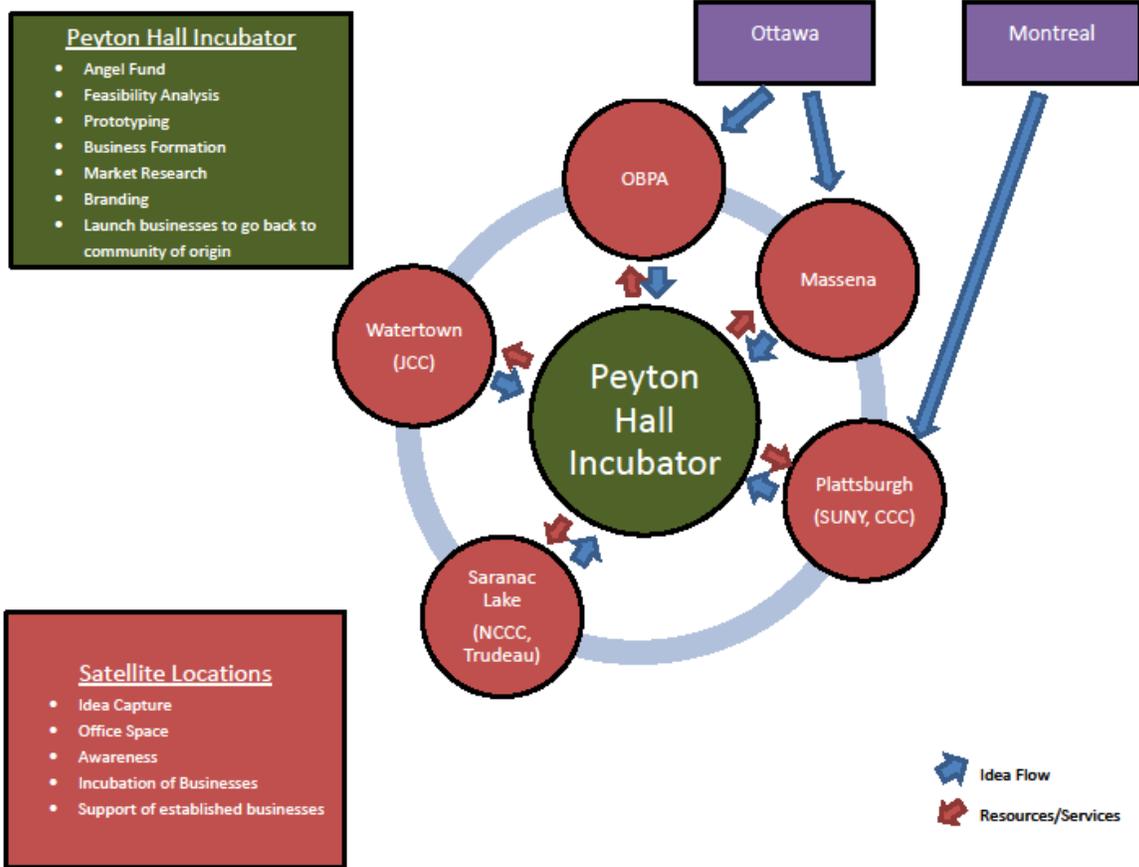
Rural areas cannot afford redundancy, with limited resources and services. In order to best leverage existing infrastructure, pockets of greatness must be identified, scaled, and made available across the North Country to serve as the backbone onto which additional infrastructure will form. Clarkson University has developed a scalable model with a track record of success through CAMP, the Shipley Center for Innovation, and the Reh Center for Entrepreneurship. By centralizing resources/services at Clarkson and de-centralizing idea generation/capture across the region, the North Country can harness the existing intellectual capital to create the businesses we need in order to drive economic development. Adding to this model is the region’s proximity to Canada and the ability to scale across the border. The visual representation of all partners and relationships is outlined below:

## Innovation Hot Spot - 3 Component Model



### *Proposed Model*

The proposed structure is a spoke and wheel model with Clarkson University at the hub and formal locations in Plattsburgh (SUNY/CCC), Watertown (JCC), Ogdensburg (OBPA), Massena, and Saranac Lake (NCCC/Trudeau). Leveraging the SUNY campuses in each location under the Startup NY Act will further support this proposal and maximize impact of that program.



Clarkson has built the supporting infrastructure to service entrepreneurs including:

- Rapid prototyping
- Intellectual property identification and protection
- Seed Funding
- Accounting
- Business model generation
- Market research
- Branding
- Staffing

By leveraging the existing support infrastructure, the Innovation Hot Spot can extend the Clarkson Model across the North Country through external offices strategically located in population centers. The focus of the model is to identify, vet, and train entrepreneurs/innovators through existing programs to then be established in their communities of origin. These locations will deliver the message that the model is available and conduct idea capture. Once captured, feasibility analysis will

be conducted at Clarkson to provide a Go/No Go decision. If accepted, the entrepreneur will be provided a “commercialization caddy” to hold their hand through the commercialization process, bringing resources and services to them, as needed.

Golden Technology Management, LLC, located in Peyton Hall, Potsdam, NY will serve as the commercialization caddy, taking businesses and injecting managerial expertise to drive scale. Golden Technology is uniquely qualified and poised to assist The North Country Innovation Hot Spot in establishing a world-class and internationally connected business incubation initiative that is coordinated and operated from Peyton Hall. Golden Technology will write an investment thesis for such operation (further described below) and will provide and/or manage start-up infrastructure and services for new businesses that includes;

- Rapid product and/or prototyping and testing,
- Incorporation,
- Capital formation,
- Core business contracts,
- Intellectual property protection,
- Business modeling,
- Accounting and bookkeeping,
- Web-presence,
- Marketing and lead generation,
- Sales process definition,
- Sales execution,
- Business growth and development and
- Follow on funding and liquidity events.

Golden Technology will form an advisory board for the effort that includes international business contacts, local/regional business executives, economic development officials, bankers, academics and physicians. This board will be unique and highly qualified to quickly advance the business growth of each venture served - as well as to advise each business with regard to how best to advance the economic, environmental educational and physical health of the community.

Golden Technology’s incubator staff will work in Peyton Hall and coordinate its efforts closely with Hot Spot staff and partners and will be incentivized through stock options in the business they serve. Individual advisors, to the extent they perform direct services and business development work may be incentivized with stock options in the ventures they serve. Any individual with stock option compensation will agree to re-invest a percentage of returns over a certain threshold (multiple of base-salary) back into new businesses served by the incubator.

The proposed model can be described linearly below:

1. Awareness
2. Idea Capture
3. Feasibility Analysis
  - a. Intellectual property landscape (“freedom to operate”)
  - b. Market feasibility (is there a market)
  - c. Technical feasibility (should we build it not could we build it)
4. Go/No Go Decision
  - a. If Go, proceed to steps 5-7
  - b. If No Go, provide feedback on why and work with entrepreneur to iterate idea or pivot and go back to step 2
5. Identify vision of the innovator/entrepreneur
6. Commercialization caddy assigned
7. Commercialization plan outlined
  - a. Business Model Canvas
  - b. Prototyping
  - c. Beta testing
8. Execute

#### *Focus*

The Innovation Hot Spot Program’s focus will direct resources primarily to those efforts with the potential to create leading products and services in highly attractive growth markets. Target business opportunities will fall generally into two categories. Category One is the highest priority, highest return category. Category Two are business that can generate success and benefit the local region.

#### Category One Targets:

A large opportunity exists to leverage regional resources to create “great products for hot markets”. Great Products have an inherent competitive advantage. By applying technological innovation in novel ways, products can outperform and achieve rapid market penetration. The following attributes will be used to evaluate product potential

- Unique, defendable, competitive advantage
- Efficiency of early stage capital
- Demonstrable features and benefits
- Easily prototyped and tested with real customers

Great products are engineered to satisfy the specific demands of Hot Markets. Hot Markets are those attracting the highest levels of investment relative to size and growth rate. Market’s attracting the largest amounts of venture capital will be targeted including but not limited to:

- Water treatment and environmental technologies represent growing global markets
- Improving Social Networking Environments

- Gaming and Gamification of Mobile Applications and Web-Based Services as a proxy for improved access to traditional services previously unavailable
- Advanced Materials
- Medical devices
- Clean Technology
- Security

Category Two Targets:

Category two targets are likely to be project-based and/or more local in nature. Northern New York is a vast agricultural resource capable of producing, processing, packaging and distributing much of the food demand for the Northeast U.S. including high-quality products for niche metropolitan markets. Potential lucrative local businesses include:

- Local Food for Local Consumption
- Local Food for Export to Thruway and Metropolitan Markets
- Web/Interactive Services
- Health Care Improvements
- High value wood and stone products
- Energy
- Building Systems and Materials Incorporating Local Timber and Stone in Advanced Materials

Category two targets will also include ad-hoc product and/or service opportunities generated by students, faculty or the surrounding community. The Hot Spots Program will serve to promote entrepreneurship across Northern New York. There is tremendous value in pursuing new ventures and the associated entrepreneurial mentality that it promotes to young people in the community. Managers of the initiative must have the discretion to deploy only limited resource into those opportunities viewed not likely to succeed or with limited value potential. As a community-based organization the incubator will be in a position to encourage all entrepreneurs if through nothing else than “free advice.”

There are special opportunities in the North Country to leverage and support potential ventures from Quebec and Ontario. There are key organizations that have developed connections and expertise in this realm, particularly the North Country Chamber of Commerce, the St. Lawrence County I.D.A and the Ogdensburg Bridge and Port Authority. They will be engaged in relevant marketing, training and specialized support.

*Logistics*

Idea capture will be conducted at each location on a weekly basis as well as through a publicly available online submission form. Hot Spot program staff will dedicate one day per week for each location and hold “open office hours” with a focus in idea capture and training. Once captured, the idea will be vetted at the Clarkson location and a full feasibility analysis will be provided. The

feasibility analysis will include technical feasibility, market feasibility, and intellectual property landscape. The feasibility analysis will be presented by Hot Spot program staff to the entrepreneur/innovator and a Go/No Go decision will be made. After the decision, the entrepreneur/innovator will provide their vision for what they want to do with the idea which will serve as the definition of success for the project. This “success” definition will serve as the foundation for the commercialization plan that will be formulated by a team including Hot Spot program staff, the entrepreneur/innovator, satellite location experts, Shipley Center staff, and Reh Center staff. Clarkson will provide additional commercialization support in the form of research through faculty/students, rapid prototyping, and training. Training will include multiple options including quarterly boot camps held on Clarkson’s campus with certification for attending entrepreneurs/innovators opening opportunities for funding through the Clarkson Angel Group, SPEC Fund, and ABC Fund. Additional training will be provided at satellite locations in the form of My Small Business 101 through the Reh Center.

### *Timeline*

Year 1 of the proposal will focus on driving awareness of the model across the region as well as base lining the innovation capacity of the population. Existing infrastructure will be identified and centralized to provide smooth access. Resources/services to be captured will include:

- Lawyers
- Accountants
- Manufacturing capabilities
- Investment
  - Angels
  - Venture Capitalists
  - Banks
  - Grants
- Real Estate
- SBDC’s
- IDA’s/Economic Developers
- Mentors
- Markets
- Research

Year 2 will de-centralize services and resources to external locations to offer point-of-use access where applicable. De-centralizing the model after proven success will allow for scalability and growth. Focus on expansion of the model will also include partners in Canada (Ottawa and Montreal) mainly through the OBPA and Plattsburgh locations.

### *Expected Outcomes*

By pursuing the proposed model, the North Country will be able to build a vibrant innovation community that is self-sufficient and uses internal resources to identify, vet, and create internal startups. The critical mass of startups will drive economic development in two ways:

1. Through direct employment in startups
2. Through indirect employment in supporting infrastructure
  - a. Manufacturing
  - b. Retail
  - c. Construction
  - d. Support services

The 21<sup>st</sup> century knowledge economy places ideas as the most precious resources. The self-sufficient nature of the North Country drives practical ideation through everyday need which will deliver applicable concepts and innovation that are marketable. Capturing these ideas will drive confidence in regional entrepreneurs and hope to regional residents which will drive momentum for the model. After initial successes, the model will become self-sustaining as the continuous cycle of renewal will deliver jobs and entrepreneurs will be trained in startups today to create their own ventures tomorrow.

*Budget*

The proposed budget includes hiring a full-time Hot Spots program staff member to coordinate satellite location activities and student coops to support idea capture. The proposed model provides a 3.73:1 match through Clarkson University with additional matching provided through partners. All funds will be distributed to support the program including:

- Administrative costs of startup formation
  - Business formation (LLC, S-Corp, C-Corp)
  - Branding (Logo, Business Cards, Website)
- Marketing
  - Program Website
  - On-site training/awareness events
- Seed Funding
  - Proof of concept

The total budget with a detailed breakdown by section is outlined below:

<b>Total Budget</b>	
Wages	\$85,000
Travel	\$15,000
Ignition Grants	\$135,000
Marketing	\$5,000
Training	\$10,000
<b>Total</b>	<b>\$250,000</b>

<b>Wages</b>	
New FTE Salary	\$50,000
Benefits	\$20,000
Student Co-op	\$15,000
<b>Total</b>	<b>\$85,000</b>
<i>*Assumptions:</i>	
Student Interns	30 hours/week

<b>Travel</b>	<b>RT mileage</b>	<b>Total</b>
Potsdam to Watertown	150	\$3,390
Potsdam to Saranac Lake	125	\$2,825
Potsdam to Ogdensburg	65	\$1,469
Potsdam to Plattsburgh	180	\$4,068
Admin Travel	1 site visit/month	\$3,526
<b>Total</b>		<b>\$15,000</b>
<i>*Assumptions:</i>		
Weeks of travel	40	
Mileage rate	0.565	
Admin Visits/year	12	

<b>Ignition Grants</b>		
Incorporation	\$250	
Logo / Business Cards	\$250	
Website	\$900	
Provisional Filing	\$100	
Total Cost Each	<b>\$1,500</b>	
<b>Ten Businesses Selected In Each Location</b>		
Potsdam/Canton	10	\$27,000
Watertown	10	\$27,000
Saranac Lake	10	\$27,000
Ogdensburg/Massena	10	\$27,000
Plattsburgh	10	\$27,000
<b>Total</b>	<b>50</b>	<b>\$135,000</b>

<b>Marketing</b>	<b>Year 1</b>	<b>Years 2-5</b>
Program Website	\$2,500	\$500
Brochures	\$2,500	\$5,000
<b>Total</b>	<b>\$5,000</b>	<b>\$8,000</b>

<b>Training</b>	
MSB101	\$10,000
<b>Total</b>	<b>\$10,000</b>
<i>*Assumptions:</i>	
2 Classes/Year	

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