GO Virginia Region 2 Council Meeting Agenda
February 1, 2019, 3:00p.m. to 5:00p.m., Greenfield Education and Training Center, 57 S. Center Dr., Daleville, VA

3:00—3:05  Call to Order
3:05—3:30  Council Business

  Council Meeting Minutes
  Future Meeting Dates: May 7, 10am-12pm; August 2, 10am-12pm; October 22, 3pm-5pm
  Council Membership Update
  TEConomy Update

3:30—4:45  Projects

  Review of New Project Applications
  Project Development and Existing Grantees

4:45-4:50  Reference Items
4:50—5:00  Public Comment
Go Virginia Region 2 Council Meeting Minutes  
November 1, 2018  
3:00pm-5:00pm  
Virginia Western Community College  
Natural Science Center  
Roanoke, VA 24015

Members in Attendance: Marla Akridge, Ab Boxley, Kenneth Craig, Beverly Dalton, Dr. John Dooley, Watt Foster, William Fralin, Dr. Victor Iannello, Floyd Merryman, Marty Muscatello, Debbie Petrine, John Williamson, Dr. Ray Smoot, Georgeann Snead.

Members Participating Remotely: Dr. Brian Hemphill and John Putney.

Staff in Attendance: Dr. John Provo, Dr. Scott Tate, and Jennifer Morgan.

Public in Attendance: Gail Johnson, Alleghany Highlands Economic Development Corporation; Rich Diddams, Liberty University; Annette Patterson, The Advancement Foundation; Kerstin Plunkett, Virginia Western Community College; Sam English, Valleys Innovation Council; Stephanie Seagle, Virginia Western Community College; Sadie Remington, City of Salem; Jackie Rearick, Liberty University; Deborah Flippo, Draper Aden Associates; Aisha Johnson, City of Roanoke.

Chairman Smoot convened the meeting at 3:05pm.

Council Business

Chairman Smoot introduced Georgeann Snead to the Council and noted Council vacancies in the Lynchburg, Roanoke Alleghany Highlands, and New River Valley regions due to E.W. Tibbs, Eddie Amos, Patrick Collingnon, and Michael Flemming resigning from the Council.

Chairman Smoot asked the Council to approve minutes from the August Full Council Meeting. Mr. Williamson moved to approve the minutes and Mr. Iannello seconded the motion. All were in favor and none opposed. Mr. Williamson moved to approve the minutes from the September Executive Committee meeting and Chairman Smoot seconded the motion. All were in favor and none opposed.
Chairman Smoot asked staff to highlight the changes made in the Bylaws. Staff noted that all Council suggestions were made. The Bylaws have approved staggered terms for the Council. Mr. Dooley moved to approve the Bylaws and Mrs. Petrine seconded the motion. All were in favor and none opposed.

Staff presented to Council a document regarding Council liability insurance while engaging in their Council duties due to Council questions.

**Project Review**

**Project One: Expanding the Business Development and Entrepreneurial Ecosystem, The Advancement Foundation**

**Council Questions and Discussion:**

Dr. Scott Tate (OED) provided a summary of staff review and expert feedback of the project. Ms. Annette Patterson (Applicant) provided a summary of the project. Reviewer concerns centered around better document the match commitments, the applicant’s ability to connect and engage the types of companies and entrepreneurs identified by the project, and the ability to produce the stated project outcomes. Mr. Dooley and Mr. Iannello described their concerns with the definition of outcomes and the ability for the project to create actionable goals. Mr. Fralin asked Ms. Patterson to describe her local match contributions and how revenue would be achieved. Mr. Fralin and Mr. Williamson expressed their concerns centered around the ability of The Advancement Foundation to take on this project. Chairman Smoot asked staff to work with the applicant to make the changes Council discussed to bring the project back before the Council at their next meeting. Mr. Iannello motioned for the Council to table this application until the next meeting. Mr. Williamson seconded the motion and all were in favor and none opposed.

**Project Two: Advanced Manufacturing Partnership Lab (AMPL): Connecting Industry and Academic for Innovation, Liberty University**

**Council Questions and Discussion:**

Dr. Scott Tate (OED) provided a summary of staff review and expert feedback of the project. Mr. Rich Diddams (Applicant) provided a summary of the project. Staff noted reviewer concerns due to
lack of required local participation contribution, the similarity of the project in relation to the current GO Virginia funded project with Liberty University in that it is too early to see outcomes from that project, and the absence of a clear strategy to utilize the equipment and facility to grow higher wage jobs. The applicant noted that they did not differentiate the ROI numbers and used the model calculated for their previous project. Council expressed their concerns with the longevity of purchasing the equipment and who would use the machines. Mr. Fralin and Mr. Iannello asked about how the applicant would secure the local participation documentation. Mr. Boxley stated this is one of the more focused projects the Council has heard. He stated the output of the project are the students trained to work on these machines and recommends this project. Mr. Boxley motioned to approve the project with the condition that the applicant receives the 20% cash or substantive in-kind match from the localities. Mr. Iannello seconded the motion. All were in favor and none opposed. Mr. Craig abstained due to his relation with the project.

Speaker’s Bureau Update

Mr. Williamson and Mr. Dooley reiterated to the Council the need to speak to local governments across the region about GO Virginia and requesting funds be set aside to support projects in their area. Mr. Dooley asked Council members to sign up to represent GO Virginia in front of their local governments. Mr. Fralin noted that engaging local governments about project match is a proactive approach.

Current Project Update

Staff shared with Council that all current grantees submitted their quarter three reports to staff and DHCD with no issues. A full report will be presented to Council at their next meeting.

Teconomy Update

Mr. Iannello informed Council that Teconomy is a consulting firm hired by the state to work with universities across the state to ensure university research can produce higher paying jobs. Mr. Fralin asked how Teconomy is interfacing with colleges and universities technology transfer centers to support the region.

Staff noted a call for concept papers from the Virginia Research Investment Fund to ensure Council was aware of the ask.
Staff informed Council there another six to eight possible projects currently being developed with staff.

Chairman Smoot called for public comment and with no public comment heard adjourned the meeting.

Chairman Smoot adjourned the meeting at 5:11pm.
Overview

The purpose of this briefing report is to provide a high-level baseline assessment of entrepreneurial development and identification of potential priority actions in GO Virginia Region 2 – Roanoke-New River-Lynchburg.

TEConomy Partners, LLC was engaged by the GO Virginia Statewide Board to prepare this report. It is an independent and objective assessment of its entrepreneurial development position, to facilitate a situational assessment of the region's entrepreneurial ecosystem, and to help identify priority actions with local leaders to help strengthen the ecosystem.

Setting the Context: Importance of Entrepreneurial Development for Regional Growth

In 2017, there were 1,673 surviving traded sector startups formed since 2007 in Region 2.

- 1,166 jobs in 2017 were found in these 1,673 surviving startups.
- By comparison, over the 2007-2017 period, total traded sector employment declined by 5,223 in Region 2.
- So entrepreneurial growth has been a differentiator in Region 2 (Figure 1) during the overall declines in the region's traded sector employment below the heights reached before the Great Recession of 2008-2009.

Strategic Framework: Focus on Entrepreneurial Development Stages Across Traded Sector

Entrepreneurship is a process involving an interconnected set of potential in traded sector industry development.

Focus on Entrepreneurial Development Across Traded Sector Industries

Strategic Framework: Focus on Entrepreneurial Development Stages Across Traded Sector

Entrepreneurship is a process involving an interconnected set of development stages supported by public and private resources and services that generate successful new startup businesses. In order to drive regional economic growth, if a region is underperforming in any services that generate successful new startup businesses to drive entrepreneurship, the following framework for assessment is used:

- Regional Economic Assessment Project: Final Briefing Report
- Overview
- Project Work Plan
- Assessment of Ideation in Region 2
- Appendixes

Appendixes:
- Appendix A: Listing of Working Group Members
- Appendix B: Data Trends on Entrepreneurial Development
- Appendix C: Regional Asset Inventory
- Appendix D: Competitive Benchmarking
- Appendix E: Benchmark Case Study Profiles

Table of Contents

1. Project Overview
2. Project Key Steps
3. Framework for Assessment
4. Situational Assessment
5. Identification of Potential Priority Actions

Appendices:
- Appendix A: Listing of Working Group Members
- Appendix B: Data Trends on Entrepreneurial Development
- Appendix C: Regional Asset Inventory
- Appendix D: Competitive Benchmarking
- Appendix E: Benchmark Case Study Profiles

Focus on Entrepreneurial Development Across Traded Sector Industries

Gaps and Weaknesses:

- Lower rate of startups formation – 11,166 jobs in 2017 compared to 1,673 surviving startups since 2007.
- Lower business formation than mid-sized benchmark regions – lower business formation than mid-sized benchmark regions.
- Strong new academic drivers – University of Virginia, Virginia Tech, and Liberty University.
- Innovation and talent attraction is lagging in the region despite a strong and growing university research base and increased activities to promote innovation in the region.

Strengths and Opportunities:

- Major new academic drivers – University of Virginia, Virginia Tech, and Liberty University.
- Ideation in the region.
- Strong focus on neurosciences, and Liberty University expansion, including engineering program.
- Diversity in startup activities across traded sector industry clusters.
- Traded sector startups found in three key hubs within region – Roanoke area with 45% of the 1,673 surviving startups since 2007, Lynchburg with 30%, and Blacksburg area with 18%.
- Number of traded sector startups falling in 2016 (271) and 2017 (247) – nearly 24,000 net outmigration from 2012-2017, while mid-sized benchmark regions gained in migration, on average, of over 2,000.

Recent data trends in entrepreneurial development

- Recent data trends in entrepreneurial development.
- Entrepreneurial startup formation and innovation and talent attraction is lagging in the region despite a strong and growing university research base and increased activities to promote innovation in the region. Of particular importance to GO Virginia is focusing on those new startups in traded sector industry activities that serve customers and markets beyond their local communities, and as a result, can help the region achieve growth. These include a wide variety of industry clusters, including but not limited to health care, science and technical services, infrastructure technology, finance and insurance, transportation and warehousing, mining, and agriculture and food processing.

Benchmarking

- Competitive position to peer regions.
- Go Virginia’s project: Overview of Work Plan for Go Virginia’s project.

Assessment of Ideation in Region 2

Overview

The work plan for preparing this Region 2 entrepreneurial development assessment involved examining:

- Recent data trends in entrepreneurial development.
- Ongoing entrepreneurial activities and stakeholders.
- Competitive position to peer regions.

These analyses were then utilized to develop a situational assessment of gaps and weaknesses to address and opportunities to build upon.

Based on the situational assessment and informed by best practices nationally, a set of potential priority actions has been identified for further development by GO Virginia Region 2 to catalyze the identification of potential priority actions has been identified for further development by GO Virginia Region 2 to catalyze the development of a robust innovation ecosystem.

By comparison, over the 2007-2017 period, total traded sector employment declined by 5,223 in Region 2.

So entrepreneurial growth has been a differentiator in Region 2 (Figure 1) during the overall declines in the region's traded sector employment below the heights reached before the Great Recession of 2008-2009.

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Assessment of Commercial Viability in Region 2

**Overview:**
- Advantages in university research commercialization holds local region's potential despite base of small business innovation in the region

**Strengths and Opportunities:**
- Significant SBIR/STTR activities – well above mid-sized benchmark regions by approximately 2-1, with 228 Phase 1 awards and 153 Phase 2 awards from 2010-2017
- Growth of RAMP accelerator – focus on high-growth potential innovation-led startups, building more efficient source of pre-seed funding
- Efforts of VT’s KnowledgeWorks with SBA pre-seed funding through involving loan fund
- Presence of the Center for Advanced Research and Lighting – focus on new product development with weighing, including identifying technology enterprises, proof of concept and prototyping

**Gaps and Weaknesses:**
- Virginia Tech’s technology transfer efforts lagging, especially when compared to national averages, though slightly lagging on licensing efforts compared to mid-sized benchmark regions
- Major “re-orientation” of technology transfer underway at VT; the university needs to deal with minimal funding for licensing and growth of intellectual property through tech transfers in standards and apprehensions

**Startup Job Generation Important Contributor in Traded Sector Industry Cluster Transitions**
- Contribution of startup activity in Region 2 must be pronounced in offsetting the decline of traditional traded sector industries.
- Among emerging growth industries mixed performance – 68% of growth in ICT cluster
- Faster growth in high growth startups formed since 2007, increased by having greater than 226,000 of private sector business, generated sustained growth reaching 20% in 2017, with 10.8 more high-growth companies in nearly every industry cluster

**Potential Priority Actions Identified for Entrepreneurial Development in Region 2**
- **Generate increased idea and greater activities in commercial viability for traded sector, high-growth oriented businesses, integrated with VT’s and LU’s technology commercialization efforts**
- **Advance innovation networks bringing together startups and existing companies focused on advancing commercialization and increasing talent connections**
- **Address need for more startup risk capital for market entry, including establishing an angel investor network and micro-loan fund**
- **Concept of a “Regional Entrepreneurial Quarterback”**

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**Assessment of Growth & Scalability in Region 2**

**Starting Point:**
- Traditionally traded sector industry cluster transitions making sense in today, with opportunities may be encouraging growing regions from a small workforce and intense challenges in standards and apprehensions

**Strategic Plan:**
- **Contribution of Entrepreneurial Development to Traded Sector Industry Cluster Growth**
- **Assessment of Commercial Viability in Region 2**
- **Assessment of Growth & Scalability in Region 2**
- **Assessment of Market Entry in Region 2**

**Assessment of Market Entry in Region 2**

**Overview:**
- Advantages of high-growth oriented traded sector industry cluster transitions making sense in today, but lack of startup capital commercialization holds region back

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- **Concept of a “Regional Entrepreneurial Quarterback”**
Potential Priority Action: Address need for more startup risk capital for early-stage market entry by traded sector

- **Overall levels and growth of risk capital in the region**
- **Gaps in market entry by traded sector**
- **Existing models to fund high-growth startups are limited**

Possible Activities:

- **Seek to form a multi-regional seed fund**
  - **Early-stage rounds**
  - **Seed stage and participation in follow-on capital**
  - **Support from GO Virginia**

**BigDecimal**

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  - **Seed stage and participation in follow-on capital**
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Regional Employment Distribution by Age of Firm for Traded Sector Industries

- Majority of employment base is contained within older firms, mirroring wider state and national trends

[Graph showing regional employment distribution by age of firm for traded sector industries]

Traded Sector Employment Levels by Firm Age for Traded Sector Industries

- Majority of employment base is contained within older firms, mirroring wider state and national trends

[Graph showing traded sector employment levels by firm age for traded sector industries]

Overall New Business Formation Rates for Region Based on BDRC Firm Level Data

- Trends in overall new business formation rates for region follow state until 2012, but then observe decline in activity

[Graph showing overall new business formation rates for region over time]

BDRC Profile of Startup Activity Trends in Region

- 11,166 jobs found in Region 2 in 2017 associated with start-up activity in traded sector industries over the past decade

[Graph showing BDRC profile of startup activity trends in region]

Year over Year Survival Rate Trends in Regional Traded Sector Startups

- Significant churn within startups, though generally net employment gains from those surviving startup firms outpace employment loss from failures across region

[Graph showing year over year survival rate trends in regional traded sector startups]

Net Employment Impacts Generated by Traded Sector Startup Firms in VA

- Significant churn within startups, though generally net employment gains from those surviving startup firms outpace employment loss from failures across region

[Table showing net employment impacts generated by traded sector startup firms in VA]

- *Indicates GO Virginia regions with research universities

- **Startups defined as having firm age < 10 years as of 2017

- Significant churn within startups, though generally net employment gains from those surviving startup firms outpace employment loss from failures across region

[Table showing net employment impacts generated by traded sector startup firms in VA]
### Employment Growth Impacts Generated by Current Traded Sector Startup Firms in Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Firm Employment Growth</th>
<th>Firm Employment Growth Ups</th>
<th>Total Firms in Region</th>
<th>Total Firms of Surviving Firms</th>
<th>Total Employment of Surviving Firms</th>
<th>Job Growth Before Startup and Existence</th>
<th>Job Growth After Startup and Existence</th>
<th>Total Ups and Downs</th>
<th>Ups and Downs Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynchburg</td>
<td>290 (45%)</td>
<td>150 (43%)</td>
<td>1200 (48%)</td>
<td>780 (40%)</td>
<td>350 (45%)</td>
<td>600 (31%)</td>
<td>700 (32%)</td>
<td>290</td>
<td>100</td>
</tr>
<tr>
<td>Roanoke</td>
<td>150 (31%)</td>
<td>80 (22%)</td>
<td>900 (50%)</td>
<td>540 (60%)</td>
<td>240 (36%)</td>
<td>360 (40%)</td>
<td>420 (50%)</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>Blacksburg</td>
<td>105 (18%)</td>
<td>60 (25%)</td>
<td>750 (50%)</td>
<td>510 (55%)</td>
<td>210 (41%)</td>
<td>270 (50%)</td>
<td>300 (50%)</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

### Profile of Traded Sector High Growth Startup Activity in Region

- Region: A generation of high-growth startups is in line with statewide averages:
  - High-growth firm share of surviving startups: just slightly below statewide average:
    - Region: 12.9%
    - State-Avg: 12.8%
  - Jobs per surviving high-growth firm slightly more in Region:
    - Region: 34.5 jobs
    - State-Avg: 32.3 jobs

### Geographic Distribution of Traded Sector Startup Activity in Region

#### Close Look at Subregional Entrepreneurial Activities

Three traded sector entrepreneurial hubs emerge in Region 2, comprising 93% of startup firms and related jobs since 2007 that are in existence in 2017.

### Contribution of Entrepreneurial Development to Leading Industry Clusters

Significant dynamics among industry clusters – move away from traditional industries, with current strength in health care and emerging strength in ICT and Engineering/MBD.

#### Regional Priority Clusters from 2007

- Manufacturing
- Life Sciences and Health Care
- Food and Beverage Processing
- Emerging Technologies and IT

#### Traded Sector Employment Impact

- Agriculture & Food
- Business Services
- Energy & Natural Resources & Finished Products
- Health Care Services
- Information Technology & Technical Services
- Manufacturing

#### Significant Dynamics Among Industry Clusters

- Manufacturing
- Life Sciences and Health Care
- Food and Beverage Processing
- Emerging Technologies and IT
Initial Analysis of Broader Innovation Ecosystem Activity

Key Measures:
- R&D and Commercialization
- Patent Activity of Inventors Residing in Region
- Venture Capital
- Federal Small Business Innovation Research Awards

Academic R&D Expenditures (Millions)

<table>
<thead>
<tr>
<th>Region</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Tech</td>
<td>$398.2</td>
<td>$450.1</td>
<td>$454.4</td>
<td>$496.2</td>
<td>$513.1</td>
<td>$504.3</td>
<td>$521.8</td>
<td>$3,338.0</td>
</tr>
<tr>
<td>Other Institutions</td>
<td>$0.7</td>
<td>$3.8</td>
<td>$2.6</td>
<td>$5.0</td>
<td>$2.6</td>
<td>$2.2</td>
<td>$5.7</td>
<td>$22.6</td>
</tr>
</tbody>
</table>

Field R&D Expenditures, 2010-16 (Millions)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Sciences</td>
<td>$675.6</td>
<td>20.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological and Biomedical Sciences</td>
<td>$440.0</td>
<td>16.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>$378.6</td>
<td>16.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical/Electronic/Communications</td>
<td>$299.7</td>
<td>16.1%</td>
<td></td>
<td></td>
<td></td>
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University Technology Transfer Metrics

Per $10M in Research Expenditures, Avg. 2010-16

<table>
<thead>
<tr>
<th>Region</th>
<th>License/Option Executed</th>
<th>Licensing Income</th>
<th>Startups Formed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Tech</td>
<td>0.78</td>
<td>$50,711</td>
<td>0.09</td>
</tr>
<tr>
<td>U.S.</td>
<td>1.04</td>
<td>$413,677</td>
<td>0.13</td>
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Total Patents, 2014-17

<table>
<thead>
<tr>
<th>Region</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
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<td>588</td>
<td>540</td>
<td>426</td>
<td>2,080</td>
</tr>
<tr>
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<td>11</td>
<td>17</td>
<td>12</td>
<td>7</td>
<td>53</td>
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Technology Class Area	Region 2: Roanoke/New River/Lynchburg

<table>
<thead>
<tr>
<th>Area</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lenses and optical parts</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biopharmaceuticals</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital computing or data processing equipment or methods, specially adapted for specific functions</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC/AC power converters</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life sciences and medical devices</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials analysis methods and technologies</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light guides; Structural details of arrangements comprising light guides and other optical elements, i.e. couplings</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Region 2: Roanoke/New River/Lynchburg

<table>
<thead>
<tr>
<th>Fall-Off in Venture Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Pre-Seed Angels</td>
</tr>
<tr>
<td>Early Stage</td>
</tr>
<tr>
<td>Later Stage</td>
</tr>
</tbody>
</table>

SBIR/STTR Awards

<table>
<thead>
<tr>
<th>Region 2: Roanoke/New River/Lynchburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award Counts</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Virginia Tech</td>
</tr>
</tbody>
</table>

SBIR/STTR Awards

<table>
<thead>
<tr>
<th>Region 2: Roanoke/New River/Lynchburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award Amounts (Millions)</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Virginia Tech</td>
</tr>
</tbody>
</table>

SBIR/STTR Awards

<table>
<thead>
<tr>
<th>Top Companies Receiving Phase II Awards, 2015-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Nova Innovations, Inc.</td>
</tr>
<tr>
<td>Nanocomps, LLC</td>
</tr>
<tr>
<td>Neurogenics, LLC</td>
</tr>
<tr>
<td>Nanosonic, LLC</td>
</tr>
<tr>
<td>Prime Photonics, LLC</td>
</tr>
<tr>
<td>Tech Research Corporation</td>
</tr>
<tr>
<td>International Scientific Technologies, Inc.</td>
</tr>
<tr>
<td>Innovative Wireless Technologies, Inc.</td>
</tr>
<tr>
<td>Ceramic Tubular Products</td>
</tr>
<tr>
<td>Innovative Technologies International, Inc.</td>
</tr>
</tbody>
</table>
**Appendix C: Inventory and Stakeholder Discussions**

Entrepreneurial Activities Across Stages of Entrepreneurial Development

<table>
<thead>
<tr>
<th>Entrepreneurial Activity</th>
<th>Innovation &amp; Commercialization</th>
<th>Market Entry</th>
<th>Growth &amp; Scalability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Development Centre</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Centers for Advanced Engineering and Manufacturing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Commonwealth Innovation Fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberty University Center for Entrepreneurship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynchburg Regional Business Alliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity Lynchburg Accelerator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Business Development Centers – Roanoke and Lynchburg</td>
<td>✓ (E2P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechPad</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Innovation Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Western Community College Entrepreneurship Plus Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VT Apex Innovation Center for Innovation and Entrepreneurship</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VT Creative Innovation Fund</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* See inventory profiles

**Appendix D: Competitive Benchmarking**

Regional Use of SBA Loans

- SBA 7(a) loans are the agency's primary program for financial assistance to small businesses
  - Amounts up to $5M
  - SBA guarantees 75% to 85%
  - Qualification: for profit business, SBA size standards, demonstrate good creditworthiness, ability to repay
  - Use of proceeds: start-up costs, buying land/building/equipment, new construction, working capital, seasonal lines of credit
  - Benefits: Flexible, long-term, lower down payments, no prepayment penalties

<table>
<thead>
<tr>
<th>Industry Cluster</th>
<th>Totals 2010</th>
<th>Amounts($)</th>
<th>% of Total Loan Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Food Processing</td>
<td>10</td>
<td>$1,938,000</td>
<td>5%</td>
</tr>
<tr>
<td>Transportation, Distribution &amp; Logistics</td>
<td>13</td>
<td>$3,766,500</td>
<td>9%</td>
</tr>
<tr>
<td>Information Technology &amp; Communications Services</td>
<td>4</td>
<td>$320,300</td>
<td>1%</td>
</tr>
<tr>
<td>Financial &amp; Insurance Services</td>
<td>2</td>
<td>$1,087,000</td>
<td>3%</td>
</tr>
<tr>
<td>Engineering, R&amp;D, Testing &amp; Technical Services</td>
<td>4</td>
<td>$3,356,000</td>
<td>8%</td>
</tr>
<tr>
<td>Energy, Natural Resources &amp; Finished Products</td>
<td>11</td>
<td>$3,535,500</td>
<td>9%</td>
</tr>
</tbody>
</table>

*Data Source: TEConomy 2018

**Regional Utilization of SBA Loans vs. State & U.S. Totals**

- In 2017, regional companies approved for loan funding at a lower level relative to US

**Stakeholder Discussions and Inventory**

- Bob Bokel, CARF
  - Alan Burke, CS Center for Entrepreneurship
  - Audra Templeton, Opportunity Lynchburg
  - James Conklin, Commonwealth Law Firm and owner/Operator of TechPad, a co-working space in Blacksburg
  - Ross Ellis, Commonwealth/Grants/Revenue
  - John Bright, serial entrepreneur, former with Carilion Institute and active consultant
  - Greg Fieldman, Valley Innovation Council
  - Meredith Hubert, VIC
  - Victor Serebry, Redwood Physics-co-founder VIC
  - Doug Lawrence, serial entrepreneur and angel investor, co-founder VIC
  - Stephanie Aines, SBIR – Lynchburg Region
  - Megan Lees, Lynchburg Regional Business Alliance
  - Derek Gagnon, VIC
  - Rachel Heflin, Roanoke-Blacksburg Technology Council
  - Jim Mondello, VT Corporate Innovation Center
  - James Harvey, FTE Innovation Fund/Middleland Capital
  - George McCall, Electronic Design & Manufacturing, Inc.
  - Road Stephens, Capital卓
  - Plus, Plus funding from AS/BS loans engaged with entrepreneurship

**Informing the “Situational Assessment”**

- See Excel handout for inventory profiles
Benchmarking: Regions Selected and Comparative Measures

**Regions Selected**: TECconomy solicited and received input across the 49 Virginia regions on regions they benchmark themselves against, useful comparisons.

**Comparative Measures**: Organized across stages of entrepreneurial development.

### Commercial Viability

<table>
<thead>
<tr>
<th>Ecosystem Element</th>
<th>Measure</th>
<th>GO VA Region 2</th>
<th>VA</th>
<th>U.S.</th>
<th>Benchmarking Groups: Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIR/STTR Awards</td>
<td>$88/$194</td>
<td>$155</td>
<td>$127</td>
<td>$15</td>
<td>$590</td>
</tr>
<tr>
<td>Number of Phase I Awards, 2010-2017</td>
<td>585</td>
<td>513</td>
<td>58</td>
<td>127</td>
<td>15</td>
</tr>
<tr>
<td>Number of Phase II Awards, 2010-2017</td>
<td>298</td>
<td>180</td>
<td>92</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Number of Phase III Awards, 2010-2017</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Universities with Industry &amp; Commercialization</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Tech</td>
<td>5</td>
<td>17</td>
<td>91</td>
<td>28</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Virginia Commonwealth University</td>
<td>0.30</td>
<td>0.45</td>
<td>0.16</td>
<td>0.14</td>
<td>0.06</td>
<td>-</td>
</tr>
</tbody>
</table>

### Growth & Viability

<table>
<thead>
<tr>
<th>Ecosystem Element</th>
<th>Measure</th>
<th>GO VA Region 2</th>
<th>VA</th>
<th>U.S.</th>
<th>Benchmarking Groups: Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. TM Licenses</td>
<td>Number of U.S. TM Licenses per 100,000 population, 2010-2017</td>
<td>1.7</td>
<td>2.9</td>
<td>0.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Reg. TM Licenses</td>
<td>Number of Registered TM Licenses</td>
<td>118%</td>
<td>117%</td>
<td>23%</td>
<td>31%</td>
</tr>
<tr>
<td>Number of U.S. TM Licenses</td>
<td>54</td>
<td>51</td>
<td>57</td>
<td>112</td>
<td>511</td>
</tr>
<tr>
<td>Change in TM License Value, 2010-2017</td>
<td>-43%</td>
<td>235%</td>
<td>82%</td>
<td>139%</td>
<td>125%</td>
</tr>
<tr>
<td>Percentage of High Growth Companies</td>
<td>2</td>
<td>297</td>
<td>-</td>
<td>57</td>
<td>13</td>
</tr>
</tbody>
</table>

### Ideation

<table>
<thead>
<tr>
<th>Companies</th>
<th>Measure</th>
<th>GO VA Region 2</th>
<th>VA</th>
<th>U.S.</th>
<th>Benchmarking Groups: Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Startups</td>
<td>Number of Local Startups</td>
<td>10%</td>
<td>12%</td>
<td>26%</td>
<td>17%</td>
</tr>
<tr>
<td>Number of Patent Filings</td>
<td>9%</td>
<td>9%</td>
<td>16%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Share of Employment in Younger, Traded Sector Firms</td>
<td>81%</td>
<td>88%</td>
<td>85%</td>
<td>84%</td>
<td>91%</td>
</tr>
<tr>
<td>Share of Employment in Traded Mfg.</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Share of Employment in Traded R&amp;D</td>
<td>67%</td>
<td>56%</td>
<td>67%</td>
<td>49%</td>
<td>135%</td>
</tr>
<tr>
<td>Share of Employment in Traded Services</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

### Market Entry

<table>
<thead>
<tr>
<th>Companies</th>
<th>Measure</th>
<th>GO VA Region 2</th>
<th>VA</th>
<th>U.S.</th>
<th>Benchmarking Groups: Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIR/STTR Funding</td>
<td>SBIR/STTR Funding per Award, 2010</td>
<td>$174</td>
<td>$222</td>
<td>$863</td>
<td>$370</td>
</tr>
<tr>
<td>SBIR/STTR Funding per Company, 2010</td>
<td>$672</td>
<td>$8</td>
<td>$174</td>
<td>$315</td>
<td>$954</td>
</tr>
<tr>
<td>SBIR/STTR Funding per Phase I Awards, 2010-2017</td>
<td>$315</td>
<td>$954</td>
<td>$1,221</td>
<td>$164</td>
<td>$255</td>
</tr>
</tbody>
</table>

### Cross-Cutting Ecosystem Element: Talent Dynamics

<table>
<thead>
<tr>
<th>Ecosystem Element</th>
<th>Measure</th>
<th>GO VA Region 2</th>
<th>VA</th>
<th>U.S.</th>
<th>Benchmarking Groups: Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth &amp; Working Age Population</td>
<td>Growth &amp; Working Age Population, 19–64 — 2017</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Share of Population Ages 25–64, (25–64, working age) — 2012–2017</td>
<td>18%</td>
<td>22%</td>
<td>23%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Share of Employment in Younger, Traded Sector Firms</td>
<td>81%</td>
<td>88%</td>
<td>85%</td>
<td>84%</td>
<td>91%</td>
</tr>
</tbody>
</table>

*Regional Baseline and Comparative Measures.*
Benchmark Case Study: Birmingham, AL

**Regional Context:**
- Mid-South region with research anchor, including University of Alabama and numerous private research institutions
- Research culture is strong and growing
- Challenge of keeping talent local is pressing

**Key Tools:**
- Accelerate Birmingham (an accelerator focused on the local innovation ecosystem)
- Venture Creation (an accelerator focused on early-stage startups)
- Local support for entrepreneurship

**Successes:**
- Many companies graduated and $7M+ capital raised from Accelerate Birmingham
- Over 60 companies graduated and $29M+ capital raised from Venture Creation
- 80% of graduates are still operating

**Challenges:**
- Limited support for early-stage startups
- Limited access to external funding sources

**Best Practice Lessons:**
- Foster a strong local ecosystem that includes accelerators, co-working spaces, and incubators
- Provide targeted support for early-stage startups

Benchmark Case Study: Charlotte, NC

**Regional Context:**
- Fast-growing technology hub in the southeast region
- Concentrated in research and development

**Key Tools:**
- Innovate Charlotte (Charlotte Regional Partnership for Entrepreneurship)
- Access toscale (an accelerator focused on growth-stage companies)
- Charlotte Accelerator (an accelerator focused on early-stage companies)

**Successes:**
- Over 50 companies graduated and $15M+ capital raised from Innovate Charlotte
- Over 100 companies graduated and $50M+ capital raised from Access toscale
- 80% of graduates are still operating

**Challenges:**
- Limited support for early-stage startups
- Limited access to external funding sources

**Best Practice Lessons:**
- Foster a strong local ecosystem that includes accelerators, co-working spaces, and incubators
- Provide targeted support for early-stage startups

Benchmark Case Study: Chattanooga, TN

**Regional Context:**
- Mid-South region with research anchor, including University of Tennessee and numerous private research institutions
- Research culture is strong and growing

**Key Tools:**
- Fertile Ground (an accelerator focused on the local innovation ecosystem)
- Venture Creation (an accelerator focused on early-stage startups)
- Local support for entrepreneurship

**Successes:**
- Many companies graduated and $7M+ capital raised from Fertile Ground
- Over 60 companies graduated and $29M+ capital raised from Venture Creation
- 80% of graduates are still operating

**Challenges:**
- Limited support for early-stage startups
- Limited access to external funding sources

**Best Practice Lessons:**
- Foster a strong local ecosystem that includes accelerators, co-working spaces, and incubators
- Provide targeted support for early-stage startups

Benchmark Case Study: Dayton, OH

**Regional Context:**
- Mid-South region with research anchor, including University of Tennessee and numerous private research institutions
- Research culture is strong and growing

**Key Tools:**
- Innovate Dayton (an accelerator focused on the local innovation ecosystem)
- Venture Creation (an accelerator focused on early-stage startups)
- Local support for entrepreneurship

**Successes:**
- Over 50 companies graduated and $15M+ capital raised from Innovate Dayton
- Over 100 companies graduated and $50M+ capital raised from Venture Creation
- 80% of graduates are still operating

**Challenges:**
- Limited support for early-stage startups
- Limited access to external funding sources

**Best Practice Lessons:**
- Foster a strong local ecosystem that includes accelerators, co-working spaces, and incubators
- Provide targeted support for early-stage startups

Benchmark Case Study: Gainesville, FL

**Regional Context:**
- Mid-South region with research anchor, including University of Florida and numerous private research institutions
- Research culture is strong and growing

**Key Tools:**
- Florida Innovation (an accelerator focused on the local innovation ecosystem)
- Venture Creation (an accelerator focused on early-stage startups)
- Local support for entrepreneurship

**Successes:**
- Many companies graduated and $7M+ capital raised from Florida Innovation
- Over 60 companies graduated and $29M+ capital raised from Venture Creation
- 80% of graduates are still operating

**Challenges:**
- Limited support for early-stage startups
- Limited access to external funding sources

**Best Practice Lessons:**
- Foster a strong local ecosystem that includes accelerators, co-working spaces, and incubators
- Provide targeted support for early-stage startups

Benchmark Case Study: Greenville, SC

**Regional Context:**
- Mid-South region with research anchor, including University of South Carolina and numerous private research institutions
- Research culture is strong and growing

**Key Tools:**
- Greenville Innovation (an accelerator focused on the local innovation ecosystem)
- Venture Creation (an accelerator focused on early-stage startups)
- Local support for entrepreneurship

**Successes:**
- Many companies graduated and $7M+ capital raised from Greenville Innovation
- Over 60 companies graduated and $29M+ capital raised from Venture Creation
- 80% of graduates are still operating

**Challenges:**
- Limited support for early-stage startups
- Limited access to external funding sources

**Best Practice Lessons:**
- Foster a strong local ecosystem that includes accelerators, co-working spaces, and incubators
- Provide targeted support for early-stage startups
Benchmark Case Study: Nashville, TN

Regional Context:
- A mid-sized region anchored by major research universities, serving among some of the leading healthcare companies.

Key Tools:
- The University of Tennessee Health Science Center, offering a range of health-related services and memberships in various networks.
- The Tennessee Innovation & Entrepreneurship Program, providing seed funding and networking opportunities.
- The Nashville Entrepreneur Center, offering mentoring and accelerator services.
- The Nashville Venture Firm, offering various investment options.

Challenges:
- Limited access to capital for startups.
- Difficulty in attracting and retaining skilled workforce.
- Rivalrous relationships among regional partners.
- Limited branding and recognition.

Successes:
- Increased number of startups.
- Enhanced regional collaboration.
- Improved economic development.

Best Practice Lessons:
- Importance of having a strong anchor for entrepreneurship.

Benchmark Case Study: Raleigh-Durham, NC

Regional Context:
- A mid-sized region anchored by major research universities with strong focus on innovation and growth.

Key Tools:
- The North Carolina Research Triangle Park, offering opportunities for startups and growth.
- The Duke University’s Innovation & Entrepreneurship Program, providing mentorship and networking opportunities.
- The University of North Carolina’s Research Park, offering technology transfer and commercialization services.
- The Triangle Investor Network, facilitating connections with investors.

Challenges:
- Limited access to capital for startups.
- Difficulty in attracting and retaining skilled workforce.
- Rivalrous relationships among regional partners.
- Limited branding and recognition.

Successes:
- Increased number of startups.
- Enhanced regional collaboration.
- Improved economic development.

Best Practice Lessons:
- Importance of having a strong anchor for entrepreneurship.

Benchmark Case Study: Susquehanna, PA

Regional Context:
- A mid-sized region with major research universities, but pressure on research-oriented colleges and universities.

Key Tools:
- The Pennsylvania State University, offering opportunities for startups and growth.
- The Penn State Research Park, offering technology transfer and commercialization services.
- The Penn State Business Incubator, offering mentorship and networking opportunities.
- The Penn State Entrepreneurship Program, offering various investment options.

Challenges:
- Limited access to capital for startups.
- Difficulty in attracting and retaining skilled workforce.
- Rivalrous relationships among regional partners.
- Limited branding and recognition.

Successes:
- Increased number of startups.
- Enhanced regional collaboration.
- Improved economic development.

Best Practice Lessons:
- Importance of having a strong anchor for entrepreneurship.

Benchmark Case Study: West Lafayette, IN

Regional Context:
- A mid-sized region with major research universities.

Key Tools:
- Purdue University, offering opportunities for startups and growth.
- The Purdue Research Park, offering technology transfer and commercialization services.
- The Purdue University’s Business Incubator, offering mentorship and networking opportunities.
- The Purdue University’s Entrepreneurship Program, offering various investment options.

Challenges:
- Limited access to capital for startups.
- Difficulty in attracting and retaining skilled workforce.
- Rivalrous relationships among regional partners.
- Limited branding and recognition.

Successes:
- Increased number of startups.
- Enhanced regional collaboration.
- Improved economic development.

Best Practice Lessons:
- Importance of having a strong anchor for entrepreneurship.

Innovating Tomorrow’s Economic Landscape
TEConomy Partners is a global leader in research, analysis and strategy for innovation-based economic development. Today, we’re helping nations, states, regions, universities, and industries blueprint their future and translate knowledge into prosperity.
**Region 2 GO Virginia Council**

Project Title: Increasing the Birth Rates of New High Growth Companies for Region 2

Applicant: The Advancement Foundation (TAF)

Localities covered: Alleghany, Bedford, Botetourt, Giles, Pulaski, Roanoke County; Covington, Salem, Roanoke

Growth & Diversification Plan Strategy Area(s): Entrepreneurship

**GOVA Funds Requested: $300,000**  
**Matching Funds: $964,000**  
**TOTAL COSTS: $1,264,000**

**Project Description:**

TAF’s Innovation Mill (The Mill) is a new initiative for TAF which will leverage business resources, entrepreneur resource partners, industry experts, and established community and economic development partners to increase business readiness and success rate for new high growth companies. The program offers 6 steps for preparedness: 1. Free 360 evaluations of concept and knowledge by a team of regional business leaders; 2. Assembly of a team of industry experts, students, and mentors to advance R&D; 3. Customer Discovery to validate minimum viable product; 4. Connections - Industry leader focus groups to build relationships and identify industry partners; 5. Student engagement in solution sessions and identification of potential hires; and 6. Investor insight sessions to provide feedback and identify opportunities for capital.

At each stage of the program, there is an opportunity to refer to entrepreneur resource partners for scalability, investment, and 1 on 1 mentoring. The program expects a number of ancillary benefits: building an industry network, engaging students in experiential learning that will infuse entrepreneurial mindset in the future workforce, branding our region as a high growth startup community, and providing more opportunities to engage investors in early stage development. The Mill will recruit 50 new potential high growth companies over 2 years and work with them 1 on 1 through proof of concept and development of next stage strategies for growth. They estimate 70% will move on to other resources within the ecosystem to continue to scale. The applicant estimates an ROI of $1.5 million from the creation of 40 higher wage jobs (greater than $37,000) plus a number of other possible ROI numbers, through such areas as leveraged funds, value of volunteers, and capital deal investment.

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<tr>
<th>Type of Funds</th>
<th>Totals</th>
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<td>Local Match Waiver Requested?</td>
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*These answers will autofill from previous tabs.*
REVIEWERS included: Dr. John Dooley, CEO, The Virginia Tech Foundation (Council Reviewer); Sarah Lyon-Hill, Senior Economic Development Specialist, Virginia Tech (staff reviewer); Jody Keenan, Executive Director of Virginia SBDC Network (Subject Matter Expert or SME); Erik Pages, President of EntreWorks Consulting (SME); and Marty Kaszubowski, Executive Director for Innovation Initiatives at Old Dominion University (SME).

Strengths:

- “The primary value, it seems, is that this project might become the initial entry point for founding teams of potential high-growth ventures in the region, i.e., a regional top-of-the-funnel filer that becomes a “force multiplier” that benefits the other entrepreneurial support programs in the region who would otherwise have to do it themselves.”

- “There is awareness across the region among entrepreneurs and partners about the existing TAF programs. The plan to engage more entrepreneurs at the top of the funnel is valid.”

- “This responds to [Region 2 strategy of] ‘supporting entrepreneurship.’ The project also addresses issues presented by SCHEV and VT studies analyzing the challenges facing entrepreneurs and ecosystems.”

- “Local economic development organizations do appear to be on board with project. Strong and diverse base of support letters are on hand.”

- “Strong partnerships are in place and should help to ensure that referrals to system are made.”

- “Project has nice focus on high-growth firms and on building long-term relationships to help those firms grow. “

- “The program focuses on start-ups in all four target industry clusters. If successful, it is very likely that the program will spur tangible job growth, realistically, within a five to ten year timespan.”

- “Historically, TAF’s reach is broad and rooted in multiple rural and urban counties in the region, which is a unique aspect of this regional entrepreneurial organization that provides diverse, widespread impact opportunities.”

- “The proposed project is closely aligned to the [Region 2] strategy of entrepreneur development. That appears to be the primary focus of the proposed program. It is good to see connection in the latest version of the proposal linkages to other regional assets which share this objective.”

- “The endorsement letters of regional stakeholders is impressive and encouraging.”

- “The development and implementation of a comprehensive support program for regional start-ups has great potential and is a welcome addition to the entrepreneur eco-system.”

- “The proposal expands on TAF efforts which have been well received and forward looking in the region. It addresses the top end of the funnel. This centralized system will recruit new and early stage companies to fill and support the growth within the entrepreneurial pipeline.”

- “The experiences and expertise of the three project team members identified in the proposal suggest positive results in past project management and program delivery.”
Weaknesses:

- “The sustainability plan is vague.”
- “The proposal doesn’t address specific strategies regarding the priority clusters. I would suggest that it would be helpful for the proposal team to identify industry expertise that correspond to the priority clusters to support the mentoring component of the proposed program. It would also be helpful if recruiting efforts for program participants could have some focus on the priority cluster areas of the Region 2 plan.”
- “The expected active engagement of the stakeholders remains somewhat ambiguous. If the proposal team can facilitate meaningful interactions and engagement of the identified stakeholders the program has great chance for success.”
- “A key component for the success of the program is highly dependent upon the successful recruitment of industry expertise in support/mentoring roles. The proposal could have been enhanced with identified commitments of industry leaders to the proposed project.”
- “The program being offered is not especially innovative – similar business model canvas, value proposition, customer discovery, mentor network, service-provider, etc. programs have been and still are offered in most every part of the state”
- “The project write-up does not specifically describe how it will define high-growth potential ventures and what specific features or factors the team will use to filter out candidates that do not have the desired potential. More specifically, it’s not enough to simply ask the local economic development offices or local service providers to send their high growth entrepreneurs into this program. Those organizations typically recognize that main street businesses are somehow not the same as, for example, a B2B enterprise software company, but they rarely end up being effective sources of referrals until they are handed a very specific definition/profile of the kind of company being targeted. The proposed program will need to develop and publicize that specific definition/profile, and it would help to do so now and put it in the proposal.”
- “They aren’t really offering any new or innovate services so they will need to be very high-touch and very effective in their programming to be successful.”
- “From an organizational standpoint it seems like a lot of moving parts to manage and coordinate.”
- “Is there an advisory group of key (5-7) decision makers supporting the staff and guiding the direction? Even with the 4 teams of 5 and the BID teams, it seems like a sprawling group.”
- “The program specifics and timelines are not clear to me. (ie: what is the curriculum; how many week does the company engagement last; when does the engagement end; is there ongoing follow-up after the engagement)”
- “With 50 possible start-ups, there is concern that participants in the different support teams may burnout. TAF has addressed this somewhat with the proposal of introductory workshops, but more details on what these participants would have to do and the time requirement, basically descriptions on how to best utilize their expertise without burning them out over time, would help.”
- “It’s not clear that they are offering a really distinctive service to these firms. The linkage to team of mentors is innovative and different, but other services (eg. Market development plan)
are also available elsewhere. In addition, they are likely overly optimistic about grant funding opportunities for these companies. SBIR is likely primary option for most of them.”

- “Team heavily promotes their ability to recruit high growth firms, but I don’t see much evidence of how they will do this. They point to their connection to regional networks, but existing players (such as SBDC) have these same networks. What will they do differently to find companies to participate?”

- “Can this scale to support 50 companies? It will be tough to manage that.”

- “The goals for high growth teams seem aggressive for a rural area. .... Is there any historical performance data from TAF that could support the Mill projections?”

- “I also worry that plans are fairly ambitious—region has been working on these issues for many years and it seems unlikely that there are 50 “undiscovered” high growth companies who are ready, willing, and able to participate in and benefit from the program.”
<table>
<thead>
<tr>
<th>Stage</th>
<th>Programming</th>
<th>Resources</th>
<th>Consulting</th>
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<td>CoLab, The Hive, 11th St Hive, INNOVATION MILL</td>
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**KEY:**
- PROPOSED PROJECT - INNOVATION MILL
- GoVA--Funded by GO Virginia Grant
### Strategies for Increasing the Birthrate of New High Growth Companies

#### Strategy #1: 360 Evaluation Team
**Purpose of**
Outline plan of action/training based on business type, needs survey, identified weaknesses, develop proof of concept and leverage community resources.

**WHO**
Economic Development, Higher Education, Resource Agencies, Community Leaders

**Ideal Outcome**
Creation of recommended resources that will assist the entrepreneur in their development.

**Ancillary Benefits**
Resource Agencies practicing the work of collaboration through ACTION that is helping specific scalable businesses move forward.

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#### Strategy #2: Business Innovation & Development Teams (support)
**Purpose of**
BID Team sets strategies, prioritizes, addresses weaknesses, challenges, potential innovations and filters focus groups feedback.

**WHO**

**Ideal Outcome**
Working team that assists the entrepreneur in addressing weaknesses of the concept, research, address industry specific challenges, streamline learning curve.

**Ancillary Benefits**
 Networking across industry, entrepreneurs, higher education, students engage in the practice of using an entrepreneurial mind set, students feel more connected to the community and potential industry.

---

#### Strategy #3: Target Customer Discovery (proof of concept)
**Purpose of**
Large groups of potential end users brought together for presentation of product, discovery, awareness.

**WHO**
Target customers for product

**Ideal Outcome**
Client discover, concerns, potential improvement, pricing, sales channels and distribution.

**Ancillary Benefits**
Strengthening the support system for industry growth for new and early stage companies, brand our region as a highly supportive community for new and early stage business development.

---

#### Strategy #4: Industry Expert Focus Groups (innovation, knowledge exchange)
**Purpose of**
Learning curve reduced, strategies, implementation challenges, expert advice, problem solving, increase connections, solutions, access to resources.

**WHO**
Target Industries list

**Ideal Outcome**
Expert advice, problem solving, increase connections, solutions

**Ancillary Benefits**
Strengthening the support system for industry growth for new and early stage companies, brand our region as a highly supportive community for new and early stage business development.

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#### Strategy #5: Higher Education Focus Groups (Innovation, research)
**Purpose of**
Focus groups for innovation discussions, problem solving.

**WHO**
Target Institutions - varied from STEM to general business classes for various industries

**Ideal Outcome**
Student perspectives shared, solutions discovered, cross generation conversations, experiential learning, connections.

**Ancillary Benefits**
Strong support system for industry growth, brand region as a highly supportive of new/early stage high growth companies, Network industry, entrepreneurs, higher education, students engage/practice use of an entrepreneurial mind set, student retention/connection community.

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#### Strategy #6: Investors (Becoming Investible Ventures)
**Purpose of**
Informal - advising posture, early discussions, proof of concept, discover investor concern/desirables when determining investment.

**WHO**
Growing list based on investor industry interest

**Ideal Outcome**
Investors engaged early, connected and share insights as potential investors.

**Ancillary Benefits**
Brand the region - support of new/growing companies, mentoring relations/network, conversation that will lead to real relationships, potential early funding, develop...
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<th>Company</th>
<th>High Wage Jobs</th>
<th>Low wage jobs</th>
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Project Title: Ignite
Applicant: The United Way of Southwest Virginia (UWSWVA)
Localities covered: Pulaski, Giles, city of Radford
Growth & Diversification Plan Strategy Area(s): Talent/Workforce
GOVA Funds Requested: $109,237  Matching Funds: $102,886  TOTAL COSTS: $218,474

Project Description:
UWSWVA proposes to expand Ignite to all Pulaski, Giles, and Radford 8,175 middle and high school students. Ignite facilitates regional collaboration between schools and employers to equip and retain the next generation of the local workforce. Ignite Program Goals include: 1.) Educational Alignment: Coordinate activities and training events which strengthen relationships and communication between educational entities and industries; 2.) Industry Experience: Assess and inform student career interests; create meaningful internship opportunities with local employers and promote those opportunities throughout the region in partnership with all regional school systems through an electronic platform; evaluate the success of internship placements and skill attainment, and evaluate impacts on post-secondary planning and filling workforce gaps; 3.) Occupational Awareness: identify, support, and facilitate initiatives that introduce the region’s youth, parents, teachers, and counselors to occupational career opportunities and learning experiences; translate student awareness to interest, then to action, in students’ academic and career planning.

Ignite seeks to address gaps between educational systems and employers, building a platform to deliver long-term systemic changes that grow the local economy. The proposed project will prioritize partnerships with employers in GO Virginia Region 2’s four key target industries: Manufacturing; Life Sciences and Health; Food and Beverage Processing; and Emerging Technology/IT. The project will target not only key industries, but also high demand occupations, providing opportunities in administration, sales, production, healthcare, and food and service-related occupations, among others.

With a focus on capacity-building within systems and across organizations, industries, and geographies, this project’s success will be most greatly demonstrated in the promotion of regional collaboration that translates into broad community benefits. The project will position more students for jobs that pay a living wage, improve availability of local talent to employers, create awareness of occupational opportunities, and lead to long-term partnerships that accelerate long-term, sustainable economic change.

Calculation of return on investment includes benefits of participation for students and families, employers, and the local economy. Results for students have been fairly well documented, including increased training, work experience, and credentialing leading to better paying jobs; clearer career identity and goals; and a better understanding of classroom material leading to increased engagement and academic achievement. Return on investment for employers is demonstrated in how important the investment in internship and other work-based learning initiatives are in the strategic search for new, better prepared employees.

UWSWVA requests $109,237 toward the proposed project to be fully implemented over the next two years (July 2019-June 2021). Though the project is time-limited due to its focus on capacity-building, the partnerships developed and program activities will continue to expand in the long-term to meet the needs of educators, students/parents, employers, and ongoing efforts to grow and diversify the local economy. GO Virginia funding will cover some personnel, contracting expenses for program
coordination with each of the participating schools, and software development. Leadership development will be facilitated through the Youth Success team at United Way of Southwest Virginia. The total project budget is $218,474.

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<tr>
<td>At least 20% of GO VA Request</td>
<td><strong>YES</strong></td>
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**REVIEWER SUMMARY:**

**REVIEWERS included:** Marla Akridge, Executive Director, Alleghany Highlands Economic Development Corporation (Council Reviewer); Elli Travis, Economic Development Specialist, Virginia Tech (staff reviewer); Randall Stamper, Assistant Vice Chancellor, Grants and Federal Workforce Programs, Virginia’s Community Colleges (Subject Matter Expert or SME); Phyllis Newbill, Ph.D., Outreach and Engagement Coordinator, Institute for Creativity, Arts, and Technology, Center for Research in SEAD (Science, Engineering, Arts, and Design) Education (SME).

**Strengths:**

- “This project offers a credible, tested strategy for growing skilled talent in a region. The work holds the potential to both inspire young people to explore local employment options and build relationships that will help them connect to those jobs in their futures.”
- “Directly related to growing skilled talent; also focuses partly on IT preparation and training, internships, etc.”
- “Shows need, in a rural area”
- “Support letters were good.”
- “Extensive partnerships with area school divisions and employers are already established in the original Ignite footprint; would use lessons learned to expand to three other counties/city;”
- “The team has developed an enviable model for regional collaboration with government, school systems, industry, and regional organizations. The team has already laid the groundwork for an impressive regional collaboration across sectors, and the potential for regional benefit is significant.”
• “Could be replicated.”
• “Seems to be a well-known and supported program in its communities; included in ED pitches; connections cited to workforce development boards, colleges, and school divisions.”
• “The IGNITE project seems to be working well in its charter location. The extension makes sense, especially given the similarities in the localities targeted.”
• “Investments in young people's futures are probably the most efficient way to be innovative and forward looking. Given the love of home that is central to local culture here, this project does have potential for promoting sustainable, long-term economic growth.”
• “I like the tie in with 4-H reality store – .... there was a lot of praise for the positive effects of that programming”
• “No concerns about ability to execute.”

**Weaknesses:**

• “The application says that the Ignite program is successful; where are the data that demonstrate that?”
• “12 internships per year is very low given the size of the population targeted.”
• “Idea of internships is fantastic, not easy to implement due to logistics, insurance liability, and other issues.”
• “A weakness of the project could be a missed opportunity to help learners think critically about the kinds of work being done in their region. While the project is likely to do significant good in helping local students identify local jobs, I would like to see some analysis by the learners to determine whether a given business or industry is a benefit to the larger region. I hope that the learners will have the opportunity for nuanced conversations about healthy workplace cultures, environmental sustainability, and labor issues”
• “This seems to suggest that the outcome is direct from high school to work, which doesn’t seem like a wise approach to employment in the 21st century. “
• “Not especially innovative, other regions have been doing these things”
• “The list of “metrics” is extensive. It might be too ambitious”
• “High school diploma is not enough; what are they doing with colleges and universities?”
• “If higher-wage job growth occurs as a result, it will be many years away, as is the case with most investments in education and children. This is not a reason not to invest in this direction; rather, it is a caution for adjusting expectations of immediate measurable results.”
• “Suggests that school divisions need help in connecting with employers, but doesn’t explain why that is or what they cannot do. “
• “I would like more details on how this work will actually be accomplished. There are a lot of lofty ambitions to do important work, but it is not clear from this proposal how they will engage teachers and employers, how they will get internship sites, etc.”
• “I would feel more comfortable if all of the 12 elementary/middle schools they plan on engaging signed a letter of support, same for businesses, etc. (only Pulaski, Giles, and Radford are included in the letter of support)”

• “All the metrics are also activity based, not outcomes based.”

• “Need to elaborate how services and activities will become an integral part of the school divisions long-term.”
Project Title: Ignite

Applicant: The United Way of Southwest Virginia (UWSWVA)

Localities covered: Pulaski, Giles, city of Radford

Growth & Diversification Plan Strategy Area (s): Talent/Workforce

Type: Capacity Building

GOVA Funds Requested: $99,406
Matching Funds: $102,886
TOTAL COSTS: $202,292
Project Overview:

- UWSWVA proposes to expand Ignite to all Pulaski, Giles, and Radford 8,175 middle and high schools students.

- Ignite facilitates regional collaboration between schools and employers to equip and retain the next generation of the local workforce.

- Three core foci:
  - Connect K-12 and industry
  - Create industry experience opportunities (internships, etc)
  - Enhance occupational awareness
Reviewer Comments - Strengths & Weaknesses:

- Partnerships and support letters from industry and school system are present and impressive.
- Replicates an established K-12 focused program that has garnered much attention and praise.
- Comprehensiveness and focus on systems change.
- Ability of organization to execute is clear.
- Program is too young to have clear evidence of impact, success.
- Is the connection strong enough to higher wage jobs in target sectors in terms of industry experience opportunities and occupational awareness?
- Serves a relatively small portion of Region 2.
## Assessment Grid

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<th>CRITERIA</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>1:1 Match</td>
<td>YES</td>
</tr>
<tr>
<td>Local Match</td>
<td>YES</td>
</tr>
<tr>
<td>Local Participation Requirement</td>
<td>YES</td>
</tr>
<tr>
<td>Alignment with G&amp;D Plan</td>
<td>YES</td>
</tr>
<tr>
<td>Implementation Capability</td>
<td>YES</td>
</tr>
<tr>
<td>Line of Sight to Per Capita</td>
<td>Likely</td>
</tr>
<tr>
<td>Innovative/Move the Needle</td>
<td>Somewhat</td>
</tr>
<tr>
<td>Staff Assessment</td>
<td>Addresses K-12 capacity building and talent strategies; applicant may need to clarify line of sight to per capita/building greater capacity; replicability in region; and sustainability details</td>
</tr>
</tbody>
</table>
Applicant: 5 minute overview & response
Council Discussion & Action
Project Title: Increasing the Birth Rates of New High Growth Companies for Region 2

Applicant: The Advancement Foundation (TAF)

Localities covered: Alleghany, Bedford, Botetourt, Giles, Pulaski, Roanoke County; Covington, Salem, Roanoke

Growth & Diversification Plan Strategy Area (s): Entrepreneurship

Per Capita GOVA Funds Requested: $300,000
Matching Funds: $964,000
TOTAL COSTS: $1,264,000
Project Overview:

- TAF’s Innovation Mill (The Mill) focuses on leveraging business resources, entrepreneur resource partners, industry experts, and partners to increase business readiness and success rate for new high growth companies.

- The program includes 6 steps:
  1. Free 360 evaluations of concept and knowledge by a team of regional business leaders;
  2. Assembly of a team of industry experts, students, and mentors to advance R&D;
  3. Customer Discovery to validate minimum viable product;
  4. Connections - Industry leader focus groups to build relationships and identify industry partners;
  5. Student engagement in solution sessions and identification of potential hires; and
  6. Investor insight sessions to provide feedback and identify opportunities for capital.
Reviewer Comments - Strengths & Weaknesses:

- Strong partnerships evident and documented.
- Important focus on high-growth firms and on building long-term relationships to help those firms grow.
- Addresses the top end of the funnel - a centralized system that will recruit new and early stage companies to fill and support the growth within the entrepreneurial pipeline.
- May need more specific strategies regarding the priority clusters.
- A key component is successful recruitment of industry expertise in support/mentoring roles. Applicant could have included identified commitments of industry leaders to the proposed project.
- A lot to coordinate and manage; referral system may need more specificity and thought to ensure that high potential entrepreneurs are able to be identified and referred.
- Goal of 50 firms may be aggressive/ambitious for region.
<table>
<thead>
<tr>
<th>CRITERIA;</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:1 Match</td>
<td>YES</td>
</tr>
<tr>
<td>Local Match</td>
<td>YES</td>
</tr>
<tr>
<td>Local Participation Requirement</td>
<td>YES</td>
</tr>
<tr>
<td>Alignment with G&amp;D Plan</td>
<td>YES</td>
</tr>
<tr>
<td>Implementation Capability</td>
<td>Good track record, but complex</td>
</tr>
<tr>
<td>ROI</td>
<td>Potentially good</td>
</tr>
<tr>
<td>High Wage Job Creation Potential</td>
<td>YES, but perhaps less than estimated</td>
</tr>
<tr>
<td>Innovative/Move the Needle</td>
<td>Somewhat - may fill a gap</td>
</tr>
<tr>
<td>Staff Assessment</td>
<td>Applicant has strengthened the project; holds potential to reach/support higher growth entrepreneurs in more rural parts of Region 2; may need evidence of industry support; justify or revise ROI; describe capacity to implement; refine target entrepreneurs and referral process</td>
</tr>
</tbody>
</table>

11
Applicant: 5 minute overview & response
Council Discussion & Action
February 1, 2019  
Region 2 Council  

Attention Region 2 Council Members:  

In late 2018, Virginia Tech (CPE) had the opportunity to process remittances for several of the sub-grantees. As such, we had some lessons learned and have established some new procedures and options to ensure continued success moving forward:  

1. Virginia Tech will offer sub-grantees the option to receive an advance portion of their reimbursements to assist organizations with cash flow.  

2. Sub-grantees that prefer to receive remittance payments through direct deposit will be provided the opportunity to sign up for that service.  

3. Virginia Tech has added staff to assist with operation of the growing Go Virginia project portfolio.  

4. Virginia Tech is hosting a best-practices orientation conference call on February 7, 2019 for all sub-grantees and DHCD staff members.  

We will continue to monitor and modify processes as necessary.  

Sincerely,  

Meghan Gaskill  

Meghan Gaskill  
Project Manager  
mlgaskill@vt.edu  
540-231-9617
## Quarterly Project Status Report October 1, 2018—December 31, 2018 (Quarter 4)

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Manager</th>
<th>Start Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Ecosystem Development</td>
<td>Meredith Hundley</td>
<td>April 24, 2018</td>
<td>Project is on track with milestones, main barrier was an approval of IRB application required to start primary data collection.</td>
</tr>
<tr>
<td>Center for Energy Research and Education Industry Lab</td>
<td>Rich Adams, David Fazzina, Jacqueline Rearick</td>
<td>May 9, 2018</td>
<td>Project is ahead of schedule in terms of milestones. Lab already in use by community college and six industry site visits have been completed</td>
</tr>
<tr>
<td>Enhancing the Region through New Technology for Unmanned Systems (Drone Zone)</td>
<td>Dr. John Rainone</td>
<td>June 4, 2018</td>
<td>Project is largely on track with some road bumps grantees is working to overcome. I-6 Challenge Grant was not funded which would have provided additional tuition for community college and dual enrollment students as well as a Drone Zone manager. The Drone Zone team is working to find additional funding sources while the grant is resubmitted. Dual enrollment and community college students will begin courses in Fall 2019. The shutdown negatively affected the company who was going to contribute match, hence the delay in receiving that funding.</td>
</tr>
<tr>
<td>Region 2 Talent Collaborative</td>
<td>Ben Bowman, Marty Holliday, Morgan Romeo</td>
<td>October 22, 2018</td>
<td>Given the late contract-signing of the project, it seems to be on track with business and student engagement.</td>
</tr>
<tr>
<td>RAMP</td>
<td>Robert McAden, Mary Miller</td>
<td>May 29, 2018</td>
<td>Project appears to be largely on track. The procurement process for mentor matching is taking longer than expected as grantees evaluate options other regions are using to find the best fit for Region 2. Clinic delayed due to weather has been rescheduled. Business workshops are demand driven, so grantees are working to encourage interest and participation.</td>
</tr>
<tr>
<td>Stopping the Brain Drain</td>
<td>Erin Burcham</td>
<td>April 15, 2018</td>
<td>Research is on track and has included a good range of participants from each of the regions. Consultant will deliver study results in March.</td>
</tr>
<tr>
<td>Project Name</td>
<td>Team Members</td>
<td>Status</td>
<td>Notes</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Wood Haven</td>
<td>Beth Doughty, John Hull</td>
<td>May 18, 2018</td>
<td>On Track</td>
</tr>
</tbody>
</table>
Project Name: **Capital Ecosystem**  
Project Manager: Meredith Hundley  
Project Start Date: April 24, 2018  
Period Covered: October 1, 2018—December 31, 2018 (Quarter 4)

### PROJECT STATUS THIS MONTH

<table>
<thead>
<tr>
<th>OVERALL PROJECT STATUS:</th>
<th>SUMMARY: Project is on track with milestones, main barrier was an approval of IRB application required to start primary data collection.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Previous Quarter</th>
<th>Current</th>
<th>Upcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Survey</td>
<td>Drafted Capital Landscape Report</td>
<td>Final Capital Landscape Report released</td>
</tr>
<tr>
<td>Analyzed Survey</td>
<td>Conducted Angel Investor Seminars</td>
<td></td>
</tr>
<tr>
<td>Began Angel Investors Focus Group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Barriers: IRB approval process has been cumbersome with multiple stakeholders, delaying survey instrument

Products:

- Surveys and Stakeholder Engagement: Survey approved by IRB on 11/10 and deployed  
- Capital Landscape Study: Access to secondary data obtained & analysis conducted  
- Online Dashboard: Data beginning to be added into Tableau  
- Capital Pathways Plan: Accelerated plans with seminars & workshops
**GO Virginia Region 2**

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**Project Name:** Center for Energy Research and Education Industry Lab  
**Project Manager:** Rich Adams, David Fazzina, Jacqueline Rearick  
**Project Start Date:** May 9, 2018  
**Period Covered:** October 1, 2018—December 31, 2018 (Quarter 4)

---

### PROJECT STATUS THIS MONTH

<table>
<thead>
<tr>
<th>OVERALL PROJECT STATUS:</th>
<th>SUMMARY: Project is ahead of schedule in terms of milestones. Lab already in use by community college and six industry site visits have been completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track/ ahead of schedule</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Previous Quarter</th>
<th>Current</th>
<th>Upcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete final design and lab configurations</td>
<td>Acquire electron microscope</td>
</tr>
<tr>
<td></td>
<td>Site visits from private industry partners and prospects</td>
<td>Acquire microscopy lab equipment</td>
</tr>
<tr>
<td>Framatone donates lab equipment ($1 million)</td>
<td>Market CERE Industry labs to Region 2</td>
<td></td>
</tr>
<tr>
<td>Transport Framatone equipment to facility</td>
<td>Begin academic use of Industry Labs</td>
<td></td>
</tr>
</tbody>
</table>

**Barriers:** None

**Products/Metrics:**

- Industry/educational partnerships (1): CVCC utilizing a CERE lab
- Industry site visits (6): SPARQ, BWXT, Framatone, ICISI, Farfield, CAS Severn
Project Name: **Enhancing the Region through New Technology for Unmanned Systems (Drone Zone)**

Project Manager: Dr. John Rainone  
Project Start Date: June 4, 2018  
Period Covered: October 1, 2018—December 31, 2018 (Quarter 4)

### PROJECT STATUS THIS MONTH

<table>
<thead>
<tr>
<th>OVERALL PROJECT STATUS</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed due school funding for community college classes but this has been resolved.</td>
<td>Delayed because I-6 Challenge Grant was not funded which would have provided tuition for college and DE students. The Drone Zone team is working to find additional funding sources while the grant is resubmitted.</td>
</tr>
</tbody>
</table>

#### Previous Quarter | Current | Upcoming |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Convene drone zone focus group as the project management team</td>
<td>Approval of Unmanned Systems Career Studies Certificate Program by VCCS complete, SACSCOC approved</td>
<td>Student enrollment</td>
</tr>
<tr>
<td>Begin the procurement process to purchase software.</td>
<td>Enroll students – college course delayed until Fall 2019</td>
<td>Courses offered</td>
</tr>
<tr>
<td>Purchase and install software and coordinating training for program instructors</td>
<td>First two semesters of course offered – program delayed until Fall 2019</td>
<td>Coordinate job placement for program completers</td>
</tr>
<tr>
<td>Hired project liaison to coordinate efforts between SUBGRANTEE and subject matter experts and employers 9/28/18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Barriers: Tuition funding preventing the training of high school and college students and the overall start date of the project

Products/Metrics:  
- Nine businesses currently engaged
Project Name: **Region 2 Talent Collaborative**

Project Manager: Ben Bowman, Marty Holliday, Morgan Romeo

Project Start Date: October 22, 2018

Period Covered: October 1, 2018—December 31, 2018 (Quarter 4)

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<table>
<thead>
<tr>
<th>PROJECT STATUS THIS MONTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL PROJECT STATUS:</td>
</tr>
<tr>
<td>On track</td>
</tr>
</tbody>
</table>

**SUMMARY:** Given the late contract-signing of the project, it seems to be on track with business and student engagement.

<table>
<thead>
<tr>
<th>Previous Quarter</th>
<th>Current</th>
<th>Upcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of project management team and official launch, communication and project tracking mechanism, and Talent Development and Retention program</td>
<td>Inventory current career expo and CTE marketing efforts – Expo meetings held October 22</td>
<td></td>
</tr>
</tbody>
</table>

**Barriers:** No barriers listed

**Products/Metrics:**

- Establishment of an existing worker training program: Three Workforce Boards in New River Valley, Roanoke Valley and Lynchburg Region have started promoting EWT
- Upskilling of 75 workers in three years: 24 employees participated in Leadership development training, to move from skilled electrical, mechanical and related employment into leadership and project management positions
**GO Virginia Region 2**

Project Name: **Regional Acceleration and Mentorship Program**

Project Manager: Robert McAden, Mary Miller

Project Start Date: May 29, 2018

Period Covered: October 1, 2018—December 31, 2018 (Quarter 4)

| OVERALL PROJECT STATUS: Roughly on track | SUMMARY: Project appears to be largely on track, except for the mentor matching piece. Need to check in with grantee to better understand barriers and plan to make up for workshops and clinics that did not occur in the quarter they were supposed to. |

<table>
<thead>
<tr>
<th>Previous Quarter</th>
<th>Current</th>
<th>Upcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finalize programming for second cohort and procure materials</td>
<td>Hold 2 Pitch &amp; Polish clinics (one rescheduled for spring due to weather)</td>
<td>Follow-up on progress of first cohort companies</td>
</tr>
<tr>
<td>Evaluate and build or subscribe to a mentor database—grantee carefully evaluating existing options as first choice option no longer exists.</td>
<td>Complete programming for second cohort</td>
<td>Complete evaluation of second cohort</td>
</tr>
<tr>
<td>Determine criteria and method for providing seed funding to cohort companies</td>
<td>Hold a Demo Day for cohort companies</td>
<td>Hold 2 Regional Mentor Workshops</td>
</tr>
<tr>
<td>Select companies for second cohort</td>
<td>Distribute seed funding to cohort companies</td>
<td>Launch third cohort application process (companies and mentors)</td>
</tr>
<tr>
<td>Select mentor pool for second cohort</td>
<td>Hold an alumni event for all mentors and cohort participants</td>
<td>Hold RAMP Information Sessions for potential applicants and mentors</td>
</tr>
<tr>
<td>Launch second cohort</td>
<td>Identify 5 potential grant sources for evaluation (In progress, 2 identified)</td>
<td>Hold 1 Mentor Networking Event</td>
</tr>
<tr>
<td>Hold 3 Pitch &amp; Polish clinics (demand driven)</td>
<td>Evaluate cadence of RAMP-in-Residence - determine demand for additional</td>
<td>Produce Quarterly Report</td>
</tr>
</tbody>
</table>
**GO Virginia Region 2**

<table>
<thead>
<tr>
<th>Hold 1 Mentor Education/Networking Event</th>
<th>Review progress on website and social media strategy and analytics and implement changes as needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Produce Quarterly Report</strong></td>
<td></td>
</tr>
</tbody>
</table>

Barriers: Mentorship matching software procurement delayed as grantee seeks software appropriate for Region 2 entrepreneurs and mentors. Desire is to focus on Region 2 mentors, not those outside of the state.

Metrics:

- 9 companies and 12 mentors engaged
- 1 Pitch & Polish clinic hosted
- 4 companies and 9 mentors participating in the Pitch & Polish clinic

Products

- One pitch and polish clinic held that assisted 4 entrepreneurs.
- One mentor event engaging 12 mentors
- 8 startup mentor connections
- Design work started on the RAMP Website Redesign
- 1 summer intern
**GO Virginia Region 2**

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**Project Name:** *Stopping the Brain Drain*

**Project Manager:** Erin Burcham  
**Project Start Date:** April 15, 2018  
**Period Covered:** October 1, 2018—December 31, 2018 (Quarter 4)

---

**PROJECT STATUS THIS MONTH**

<table>
<thead>
<tr>
<th>OVERALL PROJECT STATUS:</th>
<th>SUMMARY: Research is on track and has included a good range of participants from each of the regions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Previous Quarter</th>
<th>Current</th>
<th>Upcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducted 10 interviews with business leaders with good regional representation</td>
<td>Launch electronic study</td>
<td>Develop resources for Region 2 businesses based on findings for talent attraction and retention</td>
</tr>
<tr>
<td>Focus groups (goal of 5, actual is 7). 4 with higher education administrators, 3 with young professionals.</td>
<td>Convene Talent Action Coalition</td>
<td>Implement a regional program to connect college students to businesses</td>
</tr>
<tr>
<td>Conducted 32 interviews with business leaders with good regional representation</td>
<td>Develop talent attraction and retention metrics program</td>
<td>Continue to meet with the Talent Action Coalition</td>
</tr>
<tr>
<td>Utilize findings from the focus groups and in-depth interviews to design the electronic quant/qual study (process underway by November)</td>
<td></td>
<td>Evaluate resources, programming, and metrics of success</td>
</tr>
</tbody>
</table>

---

**Barriers:** Launching the electronic quantitative-qualitative hybrid study has been delayed pending school approval.

**Products/Metrics:**

- See number of interviews and focus groups listed above.
**Project Name:** Wood Haven Road Water and Sewer Infrastructure Enhancement  
**Project Manager:** Beth Doughty, John Hull  
**Project Start Date:** May 18, 2018  
**Period Covered:** October 1, 2018—December 31, 2018 (Quarter 4)

### PROJECT STATUS THIS MONTH

<table>
<thead>
<tr>
<th>Previous Quarter</th>
<th>Current</th>
<th>Upcoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of the Transportation Impact Analysis</td>
<td>Procurement of engineering services for PE/Design</td>
<td>Produce Construction Documents</td>
</tr>
<tr>
<td>Submission of the Land Use Application</td>
<td>Produce PE/ Survey (Now working on developing construction plans)</td>
<td>Permitting</td>
</tr>
<tr>
<td>Public Meeting</td>
<td></td>
<td>Bid Project/Contract Negotiations</td>
</tr>
<tr>
<td>Planning Commission Hearing</td>
<td></td>
<td>Construction</td>
</tr>
</tbody>
</table>

**SUMMARY:** Project appears to be on track

**Barriers:** For the PE/survey, topographic survey work in progress/mostly complete. Meeting on October 22nd included discussion of alignments with regulatory agencies. To market the site effectively, it needs improvement. WVRIFA is actively engaged in improving site readiness.

**Products/Metrics:**

- Investment in Marketing Site: Received grant from Appalachian power. Updated information on Virginia scan including Tier level
- Number of projects (active company recruitment files): 3
- Number of prospects (active company visits): 1
- Leveraged private investment: Installation of natural gas