

GO Virginia Region 2

GO Virginia Region 2, Executive Committee Meeting

May 22, 2020, 1:00p.m.- 3:00p.m.

Connect from your computer via:

https://virginiatech.zoom.us/j/95897841477?pwd=NUphcUhkbFlUNFFGUG1Hck42RDh Mdz09 Password: 456253

or by phone: +1 929 436 2866, Meeting ID: 958 9784 1477

Participants will be muted upon joining the session.

- Introduction
- Project review and action
 - Re-Tooling Virginia Manufacturers to Medical PPE
 - Multi-regional proposal submitted by GOVA Region 1 and GENEDGE
 - New River Valley Business Continuity Team
 - Regional proposal submitted by New River Valley Health District
 - Roanoke Regional Recovery Program
 - Regional proposal submitted by Roanoke Regional Partnership
- Staff updates and other committee business

Please contact John Provo, jprovo@vt.edu with any questions.

OUTREACH & INTERNATIONAL AFFAIRS

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OFFICE OF ECONOMIC DEVELOPMENT



"From the Council's bylaws: "The Executive Committee will have the authority to act judiciously on behalf of the Council when time sensitive matters occur, as determined by the chair, before a meeting of the full Council can be held."



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1) Current situation

The current shortages of critical Personal Protective Equipment (PPE) and other medical supplies such as ventilators should not be unexpected given the current state of the supply chain for these items. Prior to the outbreak of the novel corona virus, a large percentage of these items were manufactured overseas, particularly in China. For example, it is reported that over 50% of masks were manufactured in China prior to the outbreak in Wuhan. As the outbreak became more serious, the Chinese government closed export for masks and other PPE products to capture that supply for their own domestic needs. China also began procurements from overseas vendors and stockpiles to build their own bank. Given this supply chain is extended, global, and focused on cost for these commodities, the introduction of a sudden reduction in Chinese capacity had a devastating effect on the ability to supply these products in the US.

This risk has been highlighted in previous planning exercises with the potential shortage of PPE showing up as a recurring problem in similar types of pandemic scenarios. A sudden surge in requirements based on increased usage would normally stress a supply chain enough. The over-reliance on imported supply in this scenario only increases the level up disruption and increases the difficulty of responding quickly to the need. According to IBIS World, 37-38% of the total medical device, medical instrument and medical supply markets in the US are served by imported product. The effects of this disruption on the nation and the economy are now well known but not unexpected given the structural imbalances present in the current supply chain.

This latest crisis serves as an object lesson in the importance of not only planning for cost and delivery, but for having robust supply chain risk planning in place to minimize the impact of and respond to disruptions for key infrastructure sectors of the economy. Medical supply chain is only one of many critical strategic supply chains that have the same issues and share this risk profile. The increase in global trade has created imbalances that have provided for lower cost products but has at the same time increased strategic risks for the nation.





Re-Tooling Virginia Manufacturers for Strategic Industries

The over-reliance on foreign supply driven by primarily commercial goals, , including advanced technology products has reduced the capacity of American suppliers to easily produce critical materials in a time of need. As critical industries have increasingly moved overseas for production, the ability to scale up domestic production has become more difficult.



As we can see from the level of imports in critical product categories, there are several that have at least the same, and in some cases far greater, exposure to the potential disruption of foreign supply. To use a phrase popular in some areas of Virginia, *"the current challenges in procuring PPE and medical supplies are only the canary in the coalmine signaling a greater risk that will require a dedicated national planning effort to address"*. The issues are systemic and will require focus and investment in order to manage the risk to our nation appropriately. Without structural changes to these critical industries, we remain vulnerable to similar disruption in the future.

2) Challenges

The challenges we are experiencing in Virginia in response to the current crisis as a result of the disrupted supply chain are similar but different in the near term vs. the mid-to-long term. In both cases, they require an understanding of demand, identification of gaps in supply to meet that demand and focused procurement and allocation of available inventory to balance supply to demand. Near term acute needs for products create stresses that must be responded to in a reactive manner due to the lack of preparation at all levels. While we are focusing in the short term on the medical PPE response, the other strategically critical supply chains would experience similar challenges if there was the same kind of significant disruption as happened with regards to medical PPE. The Coronavirus outbreak in China resulted in supply chains for automotive and other transportation products to also be disrupted. As of May 3, 2020, no domestic automotive facilities are operating, including tier 1 and most tier 2 suppliers. Tesla, with the largest domestic supply chain is the only major that was not significantly affected. It remains closed due to California's stay at home executive order. The challenges and approaches identified for the current crisis illustrate the kinds of issues and solutions that would apply to other vulnerable industries and we propose using



the medical PPE response as the first phase of work that can serve as a model for reshoring other critical supply chains in response to the current level of risk.

a) Near Term Demand and Supply Issues

At the state level, there was an initial reliance on the Federal Strategic Stockpile to provide the needed surge capacity. It has been estimated that prior to the outbreak in the US, the inventories in the stockpile were a very small percentage of the overall need for a pandemic response, possibly as little as 1% of the total need. Complicating this problem is the difficulty in predicting the usage and need for the response. Models employed are providing a constantly moving target (driven by "the peak") for the understanding and projecting demand. These short-term demand increases are driving spot and contract market pricing up for what are essentially commodities, further straining traditional procurement mechanisms.

The lack of understanding of demand requirements over time has an impact on identifying existing supply that can be procured to fill these gaps. The Commonwealth is competing with other states, the federal government and other entities to procure existing supplies. The initial focus has been on identifying distribution partners that can access larger quantities of product and competing for procurement. In addition, the state has many companies that have expressed interest in providing products. Due to lack of understanding requirements, the procurement criteria, and access to purchasers, many of these opportunities are not being utilized. Most suppliers require some retooling of existing capacity to shift production to needed products. They also require raw materials, from tier 2, 3 and 4 suppliers, which in many cases are "sold out". The lack of clear procurement and supply channels creates additional risk and limits willingness for new suppliers to engage.

Given the projected shortfalls in supply, end users have in some cases worked to figure out how to reduce the demand by changing clinical protocols or making process changes. These changes, largely out of necessity, have helped mitigate some of the short-term demand but are largely implemented ad hoc. The adoption of these seems to be largely at an individual facility level. There is a lot of information available about the potential for either different strategies (i.e. reuse of PPE using decontamination) or using product alternatives or substitutes that help address the same needs but the impact of these changes on the demand is unknown.

The use of Emergency Use Authorizations (EUAs) by the FDA has allowed for introduction of new sources of supply on a temporary basis. These policies reduce near term barriers to utilize materials and facilities that in normal times would be considered inferior for the applications. This results in additional confusion for companies that are considering re-tooling to address Commonwealth shortfalls, both in the short and longer term.

By necessity, these challenges will continue to drive most of the state's effort in the near term to address the needs for Virginia's providers and first responders.

b) Mid-to-Long Term- Demand and Supply Challenges

The primary challenge in the longer term is to understand, characterize and fulfill demand with the expectation of similar disruptions to foreign supply chains without accepting the risk of a repeat by default. The danger is that once things return to "normal" in terms of usage, supply is managed

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primarily by large distributors, and their access to cheaper imported products will result in a return to the same practices of prioritizing lower costs over mitigating risks for the next disruption. In Virginia, we must step up to the challenge to understand the vulnerabilities and develop strategies to mitigate them by developing supply that is at least domestic, and preferably Virginia based.

While there may be suppliers currently producing products that can help fill some of the needs, the effort will surely require re-tooling suppliers from other industries to produce PPE or medical equipment. There are several types of costs that provide an obstacle to bringing these suppliers online to fill needs.

First, there are costs associated with becoming a registered supplier of FDA PPE or other medical devices. In the near term, some of these facilities are operating under Emergency Use Authorizations. As we build capacity in VA to meet both ongoing supply needs and surge, companies will need to establish themselves as an FDA registered supplier. The total hard cost to establish business as an FDA Supplier may range from as low as \$70,000 to \$100,000. Some of the typical costs associated with accomplishing this may be:

- Site assessment: \$4 K
- 510 K preparation: Not needed for class I devices, for Class II approximately \$20 K with testing and support
- Certification Testing: Varies from \$10 K to \$20 K depending on whether a predicate device has been produced.
- General training and other requirements specific to the PPE: \$6 K
- Supplier Scouting: To assist in building the companies supply chain for raw materials: \$10 K to \$20 K depending on complexity
- ISO 13485 preparation and registration: If converting from ISO 9001: \$20,000. Developing a new Quality Management System: \$30,000.

While this will get them qualified as a supplier, establishing efficient and competitive production processes will require some additional capital investment. For example, some Virginia companies are producing N95 masks using their current cut and sew processes. However, to make an ongoing and

sustainable business would require implementing a modern manufacturing line that can cost from \$100 K to \$250 K

(https://www.eworldtrade.com/pd/ew55001026/nautomatic-cup-mask/264566/).

Building a vertically integrated supply chain within Virginia will also require that we address the materials required to produce products. To follow the above example, the primary material used for making N95, surgical type 2 masks and gowns is a



three-layer composite called polypropylene SMS. Spun-bond polypropylene makes up the inner and outer layers, and the core is a non-woven, melt blown material that captures the virus.

In Virginia, we have one supplier plant in Floyd, VA owned by Hollingsworth and Vose making PP SMS (<u>https://www.hollingsworth-vose.com/Company/COVID-19-Response/</u>). As an existing supplier for this market they are sold out globally. Replicating their capacity with an additional laminating line

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would cost on the order of \$2 to \$4 million installed. A polypropylene melt blown line costs about the same.

There are suppliers who are looking at providing functionally comparable products that can be certified for medical PPE use. For example, we are working with another Virginia polypropylene supplier that can produce staple fiber to produce carded non-woven fabrics that can potentially replace the SMS layer. Developing these capacities will require product development, testing and regulatory compliance work to make the transition from current markets to the production of PPE. It is important to note that these lines must operate in GMP environments, with positive pressure, HEPA filtered and conditioned air so developing a vertically integrated capacity in Virginia is a significant undertaking.

These businesses will need assistance to understand:

- the market potential,
- where they need to be positioned competitively and
- how they can realize an adequate return on investment

in order to make a good business case to enter or expand the business. Facilitating this will most likely require a focused effort at the state level to not only lead the development of a Virginia supply chain, but to potentially help fund some of these out of pocket costs.

The goal is to ensure that available capacity meets future needs, both in a steady state and in a crisis response mode. The lack of a planned capacity response to sudden needs will continue to have significant impacts on the state unless we can shift business to domestic, and ideally Virginia, suppliers, pre-position products or materials to respond to surge demands, and develop plans for rapid deployment of production capacity to support crisis response.

These challenges are specifically related to the need for medical supplies and PPE. As noted in the situation analysis above, there are also other industries that have similar needs. They may have different regulatory requirements or need different equipment for efficient production, but they have similar needs in understanding the competitive space and developing a business case to pursue those markets. The approach proposed to address the PPE shortages can serve as a pilot and should be directly transferable to other strategic industries as well.

3) Proposed approach

As noted in the challenges above, the medical PPE supply chain serves to illustrate the risks inherent in critical supply chains with a significant reliance on imports. As we have experienced, a significant disruption in the supply of imported products exposes the lack of capacity and the ability to respond to critical needs. The following approach is designed to address short term critical needs in medical PPE supply, but more importantly to focus on developing resources to provide capacity to meet demand if there are further disruptions to supply. The approach is illustrated using medical PPE, but the same actions would be taken to develop domestic, and ideally Virginia-based, capacity in any strategic industry. The approach can also accommodate addressing industries in Virginia that have been inordinately affected by the COVID-19 crisis. The proposed approach would be to initially focus on medical PPE as the first phase of work with the expectation that in follow on phases additional strategic industries will be targeted for reshoring or to provide for diversification of those businesses with permanent impacts from the economic downturn expected as we move forward.



a) Near Term Phase 1

In the near term, the focus should be on identifying and acquiring products needed to address critical shortages. The general steps are the same as the mid-to-long term approach but must be done very responsively with the emphasis on speed to supply rather than building sustainability and resilience into the supply chain.

- i) This starts with the effort to consolidate demand and understand the current supply gaps and we must continue to make progress in developing near term procurement targets based upon anticipated short-term need.
- ii) If possible, the state should create the ability to provide the potential suppliers with their demand profiles at the product level, including information such as the quantity needed over time, the desired and maximum price points, and the detailed requirements so that companies can match their current capabilities to the opportunity to provide product.
- iii) There should be a focused effort to identify suppliers who can currently meet procurement criteria. The GENEDGE team currently is working to identify suppliers who express interest in providing PPE and helping them evaluate their level of readiness to provide products. We will provide a portal that allows companies to express their capabilities and capacities and provides potential buyers or partners the ability to search the data to make connections.
- iv) As suppliers are identified, the state should track the available capacity for production by categories to understand the actual capacity to produce and buy products today, the potential capacity from re-tooling companies to provide products, and additional capacity for either donation or long-term development.
- v) As the capacities are understood, the state should then track utilization of this capacity through comparing purchasing activity to the available capacity with the goal of ensuring that there is enough supply for expected demand.
- vi) Where there are near term shortfalls or where the ability to provide supply will require time to develop, there should be dedicated efforts to provide alternatives to the existing supply. A good example of this would be developing decontamination capacity to allow for safe reuse of items in short supply such as N95 masks. Utilizing processes like those developed by Battelle, which uses concentrated hydrogen peroxide vapor to decontaminate N95 masks, could provide significant capacity for reuse of the masks to extend the potential life to mitigate the shortfalls in supply.

GENEDGE will continue to support these efforts. This includes developing the ability to identify and capture the population of Virginia company prospects, help them provide products where possible and pursue re-tooling to address future needs as well. There is no funding requested to provide this support as we will address that as part of our core MEP mission, assuming continuing support from the General Assembly to match our cooperative agreement MEP Federal investment.

From the outreach activities that have been conducted over the first few months of the crisis, there is significant interest by Virginia companies both in providing PPE in the short term and re-tooling to produce PPE for the longer term. GENEDGE has created a web-based supply chain portal where we are able to capture interested companies from Virginia and beyond. We are currently combining our data with that from a similar survey conducted by VDEM to identify potential suppliers interested in moving into PPE production. This data shows strong interest in each region of the Commonwealth and is shown in **Appendix 1**.



b) Mid-to-Long Term, Phase 1

While the near term plays out, now is the time to also focus on developing a Virginia-based supply network that can provide sustainable impact to the Commonwealth, and potentially the nation, by building a planned capacity and response to the expected recurrence of the corona virus. While there will be a sense of relief when the current "peak" passes, there is a significant probability that there will be another round of demand as the current social distancing and isolation policies are relaxed and we re-enter the fall season. While there is great hope in finding an effective immunization, recall that no such immunization was every developed for the last large viral outbreak, HIV. We should be preparing now so that we are better equipped to handle the expected second and perhaps additional wave(s) of infection.

- i) Identify strategic critical products and their materials
 - (1) Apply learnings from the near-term response to engage end users, develop and update a list of products and the materials that are needed to produce them.
 - (2) This analysis should include identification of items most at risk of supply interruption due to disruptions in imported supply, as well as understanding current supply chain capacity.
 - (3) Work with end users to understand the requirements for these products to develop a competitive profile that would describe both technical and commercial requirements by product and material.
- ii) Identify and prioritize capacity needs at the product and/or material level
 - (1) Understand demand requirements over time and under stress (steady state, seasonal, surge, etc.)
 - (2) Evaluate existing vs. potential capacity relative to demand
 - (3) Understand current utilization of existing capacity (purchases/capacity at a product level)
 - (4) Explore potential process improvement to reduce capacity gaps (i.e. decontamination)
- iii) Complete an analysis of workforce requirements to support new capacity development and inform training needs within each region to support business expansion.
- iv) Identify and engage suppliers to develop capacity (see full service offering in Appendix 2)
 - (1) Capability analysis relative to opportunity
 - (2) Re-tooling/commercialization planning
 - (3) Business case validation
 - (a) Where current competitive situation makes the business unprofitable, look for innovation to make supply viable
 - (i) Product innovation
 - (ii) Process improvement
 - (iii) Technology application
 - (4) Support prototyping development to qualify products for supply
 - (5) Assist with regulatory compliance needs to ensure product is ready for medical market
 - (6) Achieve production readiness so that re-tooled suppliers can be utilized
- v) Match suppliers to demand to utilize capacity created
 - (1) Support suppliers positioned for ongoing supply to replace higher risk imports
 - (2) Support strategic stockpile procurement of products and/or raw materials
 - (3) Implement supply agreements for surge capacity where applicable



c) Phase 2 and beyond

The Commonwealth, given the Port of Virginia, an excellent interstate highway system which traverses all compass points well, and an educated, flexible and diverse workforce is well positioned to take advantage of opportunities to expand industrial capability for other strategic and critical industries.

Long Term View Required

To do so requires playing for the long term. Use of advanced manufacturing technologies allows for higher value-added output per employee in greenfield or re-tooled operations. Much of our industrial capacity has not taken advantage of hard and soft automation and suffers from under capitalization. This has placed our industrial base at disadvantage versus emerging economies that have emphasized greenfield facilities.

Market Demand Profiles

Demand for these opportunities will come from Federal initiatives that support re-shoring, critical and strategic sectors intentionally reducing sourcing risks, and initiatives to bolster our Department of Defense supply chains, which are increasingly vulnerable to offshore supply disruption. GENEDGE will support initiatives that are driven by Commonwealth and regional priorities where a shared vision supports expansion and re-tooling efforts.

Adaptation of Phase 1 Methodology

GENEDGE will adapt its approach as demonstrated in the medical PPE and equipment markets to assist willing and capable manufacturers to pivot their resources to start up and / or diversify their market and product offerings. Similar requirements exist for critical and strategic industrial segments to PPE. GENEDGE has demonstrated its capability to adjust our services to meet those demands in a rapid and effective manner.

Agility to Drive Results

GENEDGE, as a part of the NIST Manufacturing Extension Program National Network [™], can reach across borders without competitive economic development barriers to create sustainable supply chain and technology solutions. This is an inherent advantage that GENEDGE will leverage for the good of the Commonwealth and the Nation.

GENEDGE proposes to manage a program over two years to implement the mid-to-long term approach. The focus for the first year would be on addressing the needs for medical supplies and PPE with the expectation that additional opportunities will be identified at the state or federal level. The processes and tools developed in the first year can easily be redirected to additional critical strategic supply chains as they are identified. Given the expected focus on additional re-shoring efforts for strategic supply chains, we can follow the guidance to prioritize activities in the second year of the program. **Appendix 3** provides some initial detail on potential target industry sectors for consideration.



4) Milestones and Deliverables

| | | | Anticipated |
|------------|----------------------------------|--|-------------------|
| Milestones | | Deliverables | Completion Date |
| 1) | Develop and publish | • Playbook addressing concerns for re-opening | June 2020 |
| | guidance for companies as | Webinar series to prepare businesses to | |
| | they re-open | reopen | |
| | | On-site or remotely delivered client support | |
| | | services | As required. |
| Ph | ase 1, Medical PPE - July 1, 202 | | |
| 1) | Identify strategic critical | List of products and the materials that are | Initial |
| | products and raw material | needed to produce them | completion: |
| | and technology | Identification of items most at risk of supply | October 2020 |
| | requirements | interruption in imported supply, | |
| | | Documented understanding of current supply | Updates: |
| | | chain capacity. | Ongoing |
| | | Competitive profile describing both technical | |
| | | and commercial requirements by product and | |
| 2) | | materiai. | lucitical |
| Z) | capacity and prioritize | Demand requirements over time and under stress (steady state, seesand, surge, etc.) | initiai |
| | product and/or material | Stress (steady state, seasonal, surge, etc.) | October 2020 |
| | level | Evaluation of existing vs. potential capacity relative to demand | 0000001 2020 |
| | | System in place to measure current utilization | Updates: |
| | | of existing capacity (nurchases/capacity at a | Ongoing |
| | | product level) | |
| | | Identified process improvements to reduce | |
| | | capacity gaps (i.e. decontamination) | |
| 3) | Complete an analysis of | Documented training needs within each | October 2020 |
| | workforce requirements | region to support business expansion. | |
| | | Integration with Regional workforce | |
| | | development efforts through CC partners | |
| 4) | Identify and engage | For each supplier engaged: | Ongoing: |
| | suppliers to develop | Capability analysis relative to opportunity | July 2020 to June |
| | capacity | Re-tooling/commercialization plan | 2021 |
| | | Business case validation | |
| | | Support prototyping development to qualify | |
| | | products for supply | |
| | | Complete regulatory compliance certification | |
| | | to ensure product is ready for medical market | |
| | | Achieve production readiness so that re- | |
| - | NALLAR A PLAN PLAN | tooled suppliers can be utilized | 0 |
| 5) | Match suppliers to demand | Documented supplier capacity developed to | Ungoing: |
| | to utilize capacity created | replace nigner risk imports | August 2020 – |
| | | Strategic stockpile procurement of products and (or row materials | July 2021 |
| | | allu/OF FdW Midlefidis | |
| | | Implement supply agreements for surge capacity where applicable | |



Re-Tooling Virginia Manufacturers for Strategic Industries

| | | Anticipated |
|-----------------------------------|--|------------------|
| Milestones | Deliverables | Completion Date |
| 6) Identify target(s) for Phase 2 | • Target industry agreed upon by Region and | March 2021 |
| effort | State Go Virginia boards | 1 |
| 7) Interim Report | Report detailing progress and metrics | June 2021 |
| Phase 2, Target TBD - April, 2021 | - June 30, 2022 | Initial |
| products and respective raw | List of products and the materials that are needed to produce them | |
| material and technology | Identification of items most at risk of supply | 2021 |
| requirements | interruption in imported supply, | |
| | • Documented understanding of current supply | Updates: |
| | chain capacity. | Ongoing |
| | Competitive profile describing both technical and commercial requirements by product and | |
| | material | |
| 9) Identify and prioritize | Demand requirements over time and under | Initial |
| capacity needs at the | stress (steady state, seasonal, surge, etc.) | completion: June |
| product and/or material | • Evaluation of existing vs. potential capacity | 2021 |
| level | relative to demand | |
| | System in place to measure current utilization | Updates: |
| | of existing capacity (purchases/capacity at a product level) | Ongoing |
| | Identified process improvements to reduce | |
| | capacity gaps (i.e. decontamination) | |
| 10) Complete an analysis of | Documented training needs within each | June 2021 |
| workforce requirements | region to support business expansion. | |
| | Integration with Regional workforce | |
| 11) Identify and engage | development efforts through CC partners | Ongoing: |
| suppliers to develop | Capability analysis relative to opportunity | April 2021 to |
| capacity | Re-tooling/commercialization plan | June 2022 |
| | Business case validation | |
| | Support prototyping development to qualify | |
| | products for supply | |
| | to ensure product is ready for medical market | |
| | Achieve production readiness so that re- | |
| | tooled suppliers can be utilized | |
| 12) Match suppliers to demand | Documented supplier capacity developed to | Ongoing: |
| to utilize capacity created | replace higher risk imports | May 2021 – July |
| | Engagement with strategic distributors to buy "Made in VA" production | 2022 |
| | • Strategic stockpile procurement of products | |
| | and/or raw materials | |
| | Implement supply agreements for surge capacity where applicable | |
| 13) Final Report | Report detailing progress and metrics | lune 2022 |
| | Report actaining progress and methos | June 2022 |

Additional Phases may be added as needed.



5) Partnerships

- a) VHASS/VHEMP/VDEM/VDH for understanding demand, needs and opportunities for process improvement at the clinical level for medical PPE and select equipment, and supplier prospect referrals for technical assistance.
- b) UVA-Wise, VA Tech, VCU, ODU, Longwood (participating GoVA region examples) and VCCS as regionally deployed For workforce needs & innovation support.
- c) Manufacturing Technology Center (MTC) to provide delivery and project management
- d) Third Party integrators (for example CART) to drive innovative solutions where needed
- e) NIST-MEP for technology transfer and national sourcing support
- f) Local & Regional Economic Development to provide local engagement, referrals, and focus through our network of Regional Growth Managers
- g) VEDP for outreach, candidate referrals to GENEDGE and business expansion support
- h) VMA for awareness, support for Federal policy initiatives

6) Potential funding request

| Source | Amount | Share |
|-----------------------------|--------------|-------|
| GENEDGE/NIST-MEP Cares | \$ 1,075,000 | 24% |
| Federal Funds | | |
| GoVA – Regions 1,2,3,4,5 | \$ 2,950,000 | 67% |
| Client fees – Private Funds | \$ 400,000 | 9% |
| Total | \$ 4,425000 | 100% |

| | Total Cost | GENEDGE Share | | Client Share | | GO Virginia Share | |
|---------------------|-------------|---------------|-------------------|---------------------|-----------|-------------------|-------------|
| Program Management | \$200,000 | 15% | \$30,000 | 0% | 0 | 85% | \$170,000 |
| Supply Chain Tools* | \$75,000 | 100% | \$75 <i>,</i> 000 | 0% | 0 | 0% | 0 |
| Research | \$100,000 | 33% | \$33,000 | 0% | 0 | 77% | \$77,000 |
| Market Research | \$75,000 | 47% | \$35,000 | 0% | 0 | 53% | \$40,000 |
| Company Services | \$3,975,000 | 23% | \$902,000 | 10% | \$400,000 | 67% | \$2,663,000 |
| Total | \$4,425,000 | 24% | \$1,075,000 | 9% | \$400,000 | 67% | \$2,950,000 |

*provided as In-Kind Match

7) Expected Outcomes

- a) Visibility of supply chain for critical products
- b) Understanding of capacity required
- c) Potential savings in product usage/demand from process improvement
- d) Capacity expansion through re-tooled Virginia suppliers
- e) Increased utilization of capacity
- f) Increased/retained revenue and jobs for re-tooled suppliers
 - i) Target: 25 suppliers per year with first year focused on PPE supply chain development and second year focused on strategic industry to be determined.



Re-Tooling Virginia Manufacturers for Strategic Industries

| | Year 1 | Year 2 | Total |
|----------------------|--------------|--------------|--------------|
| Suppliers Served | 25 | 25 | 50 |
| New/Retained Revenue | \$40,625,000 | \$40,625,000 | \$81,250,000 |
| Other Investments | \$5,000,000 | \$5,000,000 | \$10,000,000 |
| New/Retained Jobs | 250 | 250 | 500 |

g) Reduced Risk of shortages to End Users

8) Performance Metrics

| | | Anticipated Completion |
|--|--------------|--------------------------|
| Metric | Goal | Date |
| # of businesses served | 50 companies | 25 by June 2021, |
| | | 25 by June 2022 |
| # of jobs created or retained | 500 jobs | 250 by June 2022, |
| | | 250 by June 2023 |
| New or retained revenues from new | \$81,250,000 | \$40.625,000 – June 2022 |
| product capacity | | \$40.625,000 – June 2023 |
| Other Investments in machinery, tooling, | \$10,000,000 | \$5,000,000 – June 2022 |
| workforce and working capital | | \$5,000,000 – June 2023 |
| Amount of PPE production capacity | TBD | June 2021 |
| developed | | June 2022 |
| Reduction in supply chain risk for PPE | TBD | June 2021 |
| | | June, 2022 |
| New/innovative products | TBD | June 2021 |
| completed/released to production | | June 2022 |
| PPE Supply Chain Capacity Utilization | TBD | June 2022 |
| | | June 2023 |

Additional rows may be added as needed.

For further information:

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|---|----------------------|--------------|
| Bill Donohue, President, Executive Director | bdonohue@genedge.org | 276-732-5755 |

Appendix 1



Overview of Prospective PPE re-tooling Prospects

14 May 2020



Appendix 2 - Service Offerings

• Lean and Six Sigma Services • Supplier Scouting Services

ISO System Certification

Prototype Development

Capital Access for Growth

Third Party Proof of Concept

ISO Management System Implementation

Risk Management

GENEDGE ALLIANCE will focus our efforts with companies on the following program offerings:

- Business Growth Acceleration
- Innovation Services
- New Product Development
- Competitive Analysis
- Technology Driven Market Intelligence
- Adjacent Market Development
- Marketing Collateral Development
- Total Cost of Ownership for focused DOD markets
- Value Chain Optimization

PROGRAM OFFERINGS:

Below summarizes how and what we will offer organizations.

Service Delivery Offerings: Al A Carte Menu Company Services may include:

Business Growth Acceleration

Deliverables: This focused effort will validate the business case to include reviewing the targeted customer attributes, the offer definition and financial business case. It also includes completion of a deliverables roadmap and market brief to fully describe the opportunity and develop the funding plan for execution.

Innovation and New Product Development

> Innovation Services:

Deliverables: Provide leading edge services to help the company develop new, meaningfully unique product and service ideas that are dramatically different from existing offerings. We help focusing the enterprise to create, develop and commercialize new ideas rapidly to profitably build a substantial share of target DOD markets, and to achieve a sustainable business model for growth, today and tomorrow. > New Product Development Services:

Deliverables: This service introduces concepts, process and tools to help make informed decisions about features and benefits within new product design. Various decision points in the process with specific deliverables accelerate the product development. Tailored approaches using tools from Lean Product Development and Design for Lean Six Sigma are introduced depending upon the needs of the company.

Market Research and Execution:

> Competitive Analysis:

Deliverables: A custom market research program to assist companies in evaluating their competitive position relative to new target DOD markets for commercial potential utilizing existing or parallel competencies.

> Technology Driven Market Intelligence sm (via RTI):

Deliverables: This service allows companies to evaluate existing technologies and there probability of success in diverse markets, resulting in a narrowing of probable opportunities for deep dive analysis and exploration.

> Adjacent Market Analysis:

Deliverables: A custom market research program to assist companies in evaluating new or adjacent DOD markets for commercial potential utilizing existing or parallel competencies.



> Collateral Creation:

Deliverables: This service includes development of media and marketing collateral to communicate the value proposition effectively to target DOD customers. Services may include video, social media, web design and search engine optimization, development of marketing materials, etc. as required.

Supply and Value Chain Optimization Services:

> Total Cost of Ownership:

Deliverables: Companies today lack systematic methods to determine true cost of ownership, beyond just piece prices. Using a NIST – MEP developed EXCEL based model that will be given to the company, the business is taught to evaluate true costs, allowing for better sourcing decisions given multiple choices. Freight, cost of quality, expediting, among other factors are included in the model and rely on public domain sources for updates to factors.

> Value Chain Optimization:

Deliverables: This service allows a company to optimize the value chain in conjunction with the order to delivery cycle. It provides the platform to work with top tier and lower suppliers to address system constraints and eliminate bottlenecks that hinder on time, on quality delivery of finished products. > Lean and Six Sigma Services:

Deliverables: These services provide a very comprehensive and structured approach for continuous process improvement, creating quality, cost, delivery and cycle time benefits that will differentiate your company from your competition. We will tailor and deploy improvements to assure the company has the flexibility, tools and skills required to achieve and sustain continuous process improvement to provide a competitive edge in the targeted DOD market(s).

> Supplier Scouting Services (via RTI),

Deliverables: As companies ramp up new technologies, gaps in supply chains will occur for critical technologies. This service develops a group of pre-qualified suppliers that can be brought on stream quickly to allow the company to ramp up development work and production for commercial launch. **> Risk Management**:

Deliverables: The customer will be assisted in developing a risk management plan for the supply chain

that is used to support product / service creation and delivery.

Mitigation plans will be developed where issues are determined to minimize exposure.

ISO Management System Implementation:

Deliverables: Most DOD companies rely on MIL specs and standards to guide their quality system. This service assists a company to develop an enhanced quality management system that can be certified to the international standards organization systems such as ISO9001, TS 16949, and AS 9100.

Product Commercialization Services:

> Product Commercialization: Services will be acquired and managed on behalf of participating companies to achieve product and company certifications, as well as prototype services for the development of new offerings.

> Product and/or Management Certification: High growth technology markets such as Modeling and Simulation, Cyber Security, Unmanned Aerial Systems and Advanced Manufacturing may require companies to obtain product and / or management certifications they do not have, from organizations such as ISO, ASTM, NSF, FCC, FDA, etc.

> **Prototype Services:** Prototypes may need to be sourced where a rapid entry into the market requires the use of service shops that specialize in rapid tool and / or product development.

> Capital Access for Growth: Services to support growth and restructuring, including the use of strategic partnerships, joint ventures, and public - private partnerships (P3's) to achieve market entry and market expansion.

Industrial Demand Signals – Re-shoring – other than PPE

The United States is quickly realizing that security requires developing and managing supply chains which reduce risk of business interruption. The Department of Defense has led Federal advocacy to expand domestic supply. GENEDGE operates a current project – Rural DoD Supply Chain Development, which is serving the following companies that are either entering the DoD space or are expanding services.

The COVID-19 pandemic has exacerbated problems for a broad set of manufacturing businesses. In latter March 2020, Thomas.Net, the world's leading industrial sourcing and marketing platform surveyed executives and decision makers from 1073 small and mid-sized companies regarding their interest / need in re-shoring supply. Following are excerpts from that study, titled **Corona Virus Impacts on North American Manufacturing**.

• **1 in 2 U.S. Manufacturers Now Seeking Domestic Sources of Supply:** We saw a reduced desire in sourcing internationally (from 43% to 34%), and an increased number of respondents (47% from 43%) are now looking to source in North America.

• Creative Coping Strategies Starting to Emerge: From increasing capacity to support customers impacted by degraded supply chains to using live feed cameras to deliver machinery acceptance tests, we see American ingenuity at its best.



GEN**EDGE**

80% 71% 60% 55% 40% 20% 18% 12% 0% Disrupted shipping and Offshore factory Price surges (cost of goods Other - please specify suspension or production increasing significantly) logistics restrictions Feb-20 Mar-20

The sectors are a very representative sample of demand sources for manufactured goods. The pain encountered can be characterized as follows.



The types of manufactured goods and raw materials causing disruptions is as follows:







The areas of supply chain gaps, except for PPE are representative of a very significant portion of manufacturing establishments in Virginia.

For technology businesses, sourcing from China is a large vulnerability which is portrayed in the following graphic.



Figure 4 - Tech business Reliance on China for Product Development

The rate of re-shoring activity is growing significantly. Nearly 1 out of 2 companies is now re-shoring as a risk reduction strategy. Sadly, the other leading strategy is turning down orders.



Figure 5 - Re-shoring Activities, Now



Supplementary Demand Information – Re-Tooling Virginia Manufacturers for Strategic Industries



The likelihood of re-shoring continues to grow

Figure 6 - Likelihood of Reshoring due to Covid-19

The concentration of companies in manufacturing, engineering and technology businesses in Virginia is as follows:

| | | Virginia | Totals | Under 1 | 5 empl. | 15 to 4 | 9 empl | over 5 | 0 empl |
|------------|---|-----------|---------|---------|---------|---------|--------|--------|---------|
| NAICS | Description | Est. | Empl. | Est. | Empl. | Est. | Empl. | Est. | Empl. |
| 311 | Food Manufacturing | 558 | 31,440 | 380 | 1,546 | 99 | 2,568 | 79 | 27,326 |
| 312 | Beverage and Tobacco Product Manufacturing | 382 | 10,077 | 257 | 1,315 | 92 | 2,331 | 33 | 6,431 |
| 313 | Textile Mills | 50 | 3,528 | 22 | 56 | 10 | 329 | 18 | 3,143 |
| 314 | Textile Product Mills | 159 | 2,977 | 128 | 397 | 18 | 466 | 13 | 2,114 |
| 315 | Apparel Manufacturing | 85 | 1,276 | 70 | 254 | 8 | 232 | 7 | 790 |
| 316 | Leather and Allied Product Manufacturing | 16 | 192 | 14 | 50 | 1 | 32 | 1 | 110 |
| 321 | Wood Product Manufacturing | 458 | 13,907 | 260 | 1,208 | 132 | 3,742 | 66 | 8,957 |
| 322 | Paper Manufacturing | 122 | 8,464 | 59 | 214 | 23 | 656 | 40 | 7,594 |
| 323 | Printing and Related Support Activities | 579 | 9,692 | 476 | 1,988 | 66 | 1,750 | 37 | 5,954 |
| 324 | Petroleum and Coal Products Manufacturing | 32 | 902 | 20 | 57 | 4 | 135 | 8 | 710 |
| 325 | Chemical Manufacturing | 362 | 15,122 | 264 | 851 | 52 | 1,417 | 46 | 12,854 |
| 326 | Plastics and Rubber Products Manufacturing | 220 | 15,687 | 128 | 316 | 35 | 949 | 57 | 14,422 |
| 327 | Nonmetallic Mineral Product Manufacturing | 397 | 8,611 | 260 | 1,253 | 92 | 2,546 | 45 | 4,812 |
| 331 | Primary Metal Manufacturing | 72 | 3,896 | 39 | 113 | 15 | 426 | 18 | 3,357 |
| 332 | Fabricated Metal Product Manufacturing | 806 | 17,778 | 566 | 2,488 | 166 | 4,449 | 74 | 10,841 |
| 333 | Machinery Manufacturing | 437 | 14,046 | 315 | 958 | 63 | 1,864 | 59 | 11,224 |
| 334 | Computer and Electronic Product Manufacturing | 488 | 12,542 | 397 | 970 | 52 | 1,443 | 39 | 10,129 |
| 335 | Electrical Equipment, Appliance, and Componen | 170 | 7,867 | 109 | 295 | 28 | 755 | 33 | 6,817 |
| 336 | Transportation Equipment Manufacturing | 266 | 56,942 | 163 | 498 | 33 | 900 | 70 | 55,544 |
| 337 | Furniture and Related Product Manufacturing | 402 | 9,408 | 296 | 1,240 | 68 | 1,848 | 38 | 6,320 |
| 339 | Miscellaneous Manufacturing | 724 | 8,355 | 628 | 1,823 | 60 | 1,582 | 36 | 4,950 |
| | Metal Service Centers and Other Metal Merchant | | | | | | | | |
| 423510 | Wholesalers | 77 | 972 | 56 | 216 | 17 | 483 | 4 | 273 |
| 488991 | Packing and Crating | 29 | 281 | 23 | 93 | 5 | 118 | 1 | 70 |
| 541330 | Engineering Services | 2,770 | 52,284 | 2,115 | 6,863 | 427 | 11,117 | 228 | 34,304 |
| 541380 | Testing Laboratories | 192 | 2,633 | 140 | 535 | 43 | 1,247 | 9 | 851 |
| 541715 | Research and Development | 451 | 17,789 | 335 | 1,018 | 63 | 1,833 | 53 | 14,938 |
| 561910 | Packaging and Labeling Services | 37 | 626 | 30 | 118 | 4 | 111 | 3 | 397 |
| | Commercial and Industrial Machinery and | | | | | | | | |
| 811310 | Equipment | 640 | 3,735 | 572 | 1,851 | 61 | 1,451 | 7 | 433 |
| | | 10,981 | 331,029 | 8,122 | 28,584 | 1,737 | 46,780 | 1,122 | 255,665 |
| *Source:) | Virginia Employment Commission, Loher Market Infa | rmation 0 | 1 2010 | | | | | | |

*Source: Virginia Employment Commission, Labor Market Information, C



In conclusion, there is a 50% probability of opportunities to re-shore being considered seriously across the major industrial sectors in the United States. Virginia companies that can create a strong value proposition, goods of high quality that are competitively priced, with strong response and turn around capabilities can win new business for the long term. Projected demand sectors are portrayed in Figure 1, and supply sectors are provided in Figure 2.

This projection is based on very limited secondary sources of market information. GENEDGE proposes to address this comprehensively in the first phase of the proposed project, while we address the medium and long term critical needs for alternate sources of PPE production in Virginia.

Thomas Survey Details:

Respondent's Firmographics:

- Revenue: Business revenues span from less than \$4.9 million to over \$500 million
- Employees: Company size spans from less than 100 to over 1,500 employees
- **Business Descriptor:** 74% of the respondents identify as OEMs and custom manufacturers
- Headquarters Location: Identified by state/province

Questions? Contact

| Dean Young, Vice President, Industrial Development | dyoung@genedge.org | 804-323-6000 |
|--|----------------------|--------------|
| Bill Donohue. President | bdonohue@genedge.org | 276-732-5755 |



REGION: Region 2

SUPPORT ORGANIZATION: Virginia Tech Office of Economic Development **APPLICANT**: New River Health District **PROJECT NAME**: New River Valley Business Continuity Team

APPLICATION QUESTIONS:

1. Please list the participating localities and how they will be engaged in the project (a minimum of 2 is required).

Counties of Giles, Floyd, Montgomery, Pulaski, City of Radford and the towns within the counties listed.

2. Please describe the project budget and sources of matching funds. The Sources & Uses Template should also be used to outline the project budget and \$2:1 match.

The NRV Business Continuity Team (BCT) is proposed to be launched with \$100,000 in Go Virginia funding with 50% match coming initially from local government CARES Act funding.

Funds will be used for staffing capacity at the New River Health District to advise businesses through situations when positive cases of COVID-19 are present at a place of employment in the Region 2 targeted industries. Project expenses will be for staffing costs associated with a medical director-level role; staffing for public relations expertise; contract services for environmental cleaning at the impacted firm; contract services for nursing to conduct on-site testing; supply expenses for certificate upon completion of the protocol established by the medical director, on-site COVID-19 testing, and marketing of the program to eligible businesses.

Based on feedback from Region 2 support staff and re-tooling of the initial proposal by local government managers along with the New River Valley Public Health Task Force, the BCT can start up and serve businesses with the proposed \$150,000 budget. Should the program be oversubscribed by businesses eligible for Go Virginia funding, a future request could be submitted. The BCT project is concurrently seeking additional funding through the Community Development Block Grant (CDBG) program for non-eligible Go Virginia businesses. The CDBG funding will focus on smaller businesses and those that are sometimes referred to as Main Street businesses. The BCT project may also pursue US Economic Development Administration funding to serve businesses outside of the GO Virginia scope and within the entitlement

communities of Blacksburg, Christiansburg and Radford since the CDBG program referenced above will not be eligible for entitlement communities.

3. Please provide a brief summary of the project. Additionally, please describe how this effort will help mitigate the economic impacts of the COVID-19 crisis in the short and mid-term.

The project involves the time sensitive development of a Business Continuity Team "BCT" capable of quickly providing, in one call, access to all technical resources necessary for business owners to operate in the COVID environment. The team will work in coordination with the New River Health District-Virginia Department of Health to provide employers 24/7 technical assistance from a multi-disciplinary team, on-site testing, public and employee relations and education, sanitization of their facility, and certification of best practices.

This project will assist in mitigating the economic impacts of COVID by providing cost efficient resolution of problems for businesses and by instilling confidence in consumers and employees. This confidence will be developed by providing an immediate coordinated response to outbreaks, consistent public messaging, education, and the development of best practices throughout the region. All of these will help to stabilize the region's overall economy through the coming months.

The project geography as proposed is for the New River Valley portion of Go Virginia Region 2, primarily due to the geography served by the New River Health District, the entity coordinating the BCT. The model being proposed is highly transferable and readily implementable by other health districts.

The primary value-add of the BCT is a wrap-around program to help businesses quickly navigate a challenging situation that does not have extensive guidance readily available. It makes available the best public health resource in the region to those who need it along with expertise to directly assist the businesses.

It is the intent that any testing conducted by the BCT would be directed through the Virginia Tech program established by the Fralin Biomedical Research Institute as is currently the case with all testing conducted by the NRV Public Health Task Force.

4. Please describe why this project is a priority for the Regional Council and how it will support regional economic resilience and/or recovery efforts.

This project is critical to existing business and industry in order to continue operations during COVID-19 in the event an employee tests positive. The BCT will respond rapidly to provide up to date medical advisement to the employer and will facilitate critical communications to the employees and community. The program will also provide access to funds to off-set the expense of cleaning a facility. All of the steps taken together will yield confidence in employees to return to work and the community to support the impacted business.

5. Please describe how/if this project aligns with the Region's Economic Growth and Diversification Plan, which industries will benefit from the effort, and what the expected outcomes of the project will be.

This project aligns with the Region 2 Economic Growth and Diversification Plan by delivering a resource that will keep businesses in operation during a time that could force them to close. This strategy will directly retain jobs and help firms return to regular operations in less time all the while preserving their reputation in the community.

The BCT services with Go Virginia funding will be dedicated to the businesses in the targeted industry sectors established in the Economic Growth and Diversification Plan

to include Advanced Manufacturing, Life Sciences and Healthcare, Information and Emerging Technologies, along with Food and Beverage Manufacturing.

The project lead will establish marketing resources to widely advertise the program to eligible businesses. The outreach for firms eligible through Go Virginia align well with the targeted industries for Onward NRV, the economic development marketing organization for the region. Marketing of the BCT resource will be supported by outreach from Onward NRV to their industry partners to ensure they are aware of the program and how to engage the BCT.

REQUIRED ATTACHMENTS:

□ Project Application to Regional Council

□ Letter from Regional Council Chairman stating support of the request

- □ Budget Overview: Sources & Uses Template
- □ Match Documentation

Economic Resilience and Recovery Program (ERR)

FAST ACCESS Application Questions

REGION: Region 2

SUPPORT ORGANIZATION: Roanoke Regional Partnership

APPLICANT: Beth Doughty

PROJECT NAME: Roanoke Regional Recovery

APPLICATION QUESTIONS:

1. Please list the participating localities and how they will be engaged in the project (a minimum of 2 is required).

City of Roanoke, City of Salem, City of Covington, Town of Vinton, Roanoke County, Franklin County, Botetourt County, Alleghany County, and Virginia Career Works

2. Please describe the project budget and sources of matching funds. The Sources & Uses Template should also be used to outline the project budget and \$2:1 match.

The Roanoke Regional Partnership would like to request a GO Virginia grant for \$100,000 to rapidly engage with regional businesses with \$35,000 in in-kind from eight localities within the Roanoke Region and Virginia Career Works, and \$15,000 in cash contributed by the Roanoke Regional Partnership.

As for expenses, the project will fund a professional business retention and engagement facilitator \$18,000, a training for \$15,000 to empower the Roanoke Regional Recovery Coalition to coach regional businesses, \$41,000 for one-onone coaching of businesses for unique situations, and \$8,040 for administration, and \$17,960 to develop long-term strategies with the Roanoke Regional Recovery Coalition.

3. Please provide a brief summary of the project. Additionally, please describe how this effort will help mitigate the economic impacts of the COVID-19 crisis in the short and midterm.

The main goal of this project is to rapidly engage regional companies in the targeted traded sectors as identified in the Go Virginia Region 2 Economic Growth and Diversification Plan to assist them with immediate and long-term recovery and build future resilience in response to the downturn in the economy due to COVID-19.

In phase one, a recovery coalition will be formed to advise and implement recovery-focused resources and programming for sectors that align with GO Virginia's guidelines. The coalition will bring local governments, economic development organizations, workforce professionals, regional service organizations, and higher education representatives together in Region 2, building new capacity to develop and implement long-term strategies to address COVID-19 related challenges.

The next step in phase two will include round table sessions to quickly engage regional companies in the recovery process. A professional business retention and engagement expert with experience and knowledge of crisis recovery will assist the recovery coalition in rebuilding the Roanoke Regional business community. The round table sessions will be used to share workforce and financial stability best practices during crisis recovery, share local, state and federal business resources to support their current and future workforce, understand processes and product capabilities (to discover new supply chain opportunities that could lead to a stronger and more efficient production stream), identify opportunities for strategic and impactful assistance by agencies and governments, and gather data for long-term strategies. The sessions will also encourage connectivity between regional business leaders to create a support network for resource sharing (for example, available and needed labor; PPE; supply chain needs; etc.) and identification of crucial elements needed for recovery (to include training, public policy, and supply chain).

Following the round table sessions, the recovery coalition will provide coaching sessions for regional companies. The coaching sessions will provide tailored information for companies to include best practices for employee health and safety, connectivity to workforce funding opportunities, short-term and long-term workforce attraction and engagement, work-from-home best practices, and connectivity to supply chain needs to support productivity and continuity of operations. College students may also have more opportunities for regional employment post-graduation due the connectivity within the Roanoke Regional Partnership's Experience Leadership Institute, a summer long program to connect students to Roanoke Regional employers.

An analysis will be formulated from the round table sessions and coaching sessions for the advisory coalition to guide and execute recovery-based services and programming through a long-term strategy (for the next phase, which is not included in the initial Roanoke Regional Recovery grant) that could include; but not limited to: 1. Expanding regional capacity to coordinate and deliver business support services (that could include PPE) 2. Identifying and connecting critical suppliers of goods and services to reduce service and production disruptions; 3. Expanding workplace health and sanitation activities to support continuity of operations; 4. Maintaining and managing a remote workforce to keep people employed and productive; 5. Developing new industry-aligned on-the-job training program that would meet critical needs; and 6. Expanding existing training programs that have been identified as mission-critical

4. Please describe why this project is a priority for the Regional Council and how it will support regional economic resilience and/or recovery efforts.

The GO Virginia funding will create a sustainable COVID -19 recovery program for identified sectors (manufacturing, healthcare, food and beverage processing and technology) in the Roanoke Region that will generate results beyond the initial project. The project that will continue to improve the economy for Region 2 by addressing health and safety, workforce, supply chain, PPE, and other barriers for growth. The approval of the GO Virginia Board is crucial to bringing together all regional partners, creating a long-term strategy, and effectively designing a program of work. It is also important to utilize the skills and experience of a business retention crisis expert to guide regional and local economic developers and other regional partners for faster business recovery efforts. This project will lead to the next phase that will create future regional initiatives around economic resilience in Region 2 and potentially future GO Virginia projects.

5. Please describe how/if this project aligns with the Region's Economic Growth and Diversification Plan, which industries will benefit from the effort, and what the expected outcomes of the project will be.

The Roanoke Recovery project aligns with the Region's Economic Growth and Diversification Plan by focusing on the enhancement of employer engagement activities that will encourage more aligned skill development, create opportunities for regional employment post-graduation, and promote the hiring of in demand occupations during the recovery phase of COVID-19. The project will focus on sectors that align with GO Virginia; to include, manufacturing, food and beverage processing, healthcare, and technology.

The project outcomes would include meeting immediate needs of regional employers related to the COVID-19 crisis; creating a network of businesses within the traded sectors; gathering data and intelligence to share with state and local governments, agencies and other resource providers for training and business resource development; and developing a regional sustainable business retention and expansion strategy that while COVID-19 centric will establish practices that will have impact beyond COVID-19 and be adaptive to future disasters.

REQUIRED ATTACHMENTS:

Project Application to Regional Council

□ Letter from Regional Council Chairman stating support of the request

□ Budget Overview: Sources & Uses

Template

□ Match Documentation