BECOMING A GLOBAL INTERNET HUB

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The I-64 Innovation Corridor – an 8,000-square-mile megaregion that runs from Richmond to Hampton Roads – is well on its way to becoming a full-fledged global internet hub.

This white paper details what a global internet hub is, why the distinction is important, the factors that make a region a global hub, how the I-64 Innovation Corridor is becoming one, the benefits a global internet hub offers businesses and entire communities, and why time is of the essence in realizing this promise for the I-64 Innovation Corridor.

This paper is made possible through RVA757 Connects, a 501(c)(3) organization dedicated to improving the economic success and quality of life for everyone in the Richmond (RVA) and Hampton Roads (757) regions. We are an inclusive, mutually supportive network of leaders representing business, higher education, and community stakeholders. We identify, support, and advance major opportunities, initiatives, and projects that will benefit both the RVA and 757 regions for generations to come. Advancing the awareness of and support for the I-64 Innovation Corridor in becoming a global internet hub is one of our organization's priorities. In fact, we believe this cause has the potential to transform our megaregion.

Global Internet Hubs

The best way to understand global internet hubs, or any internet hub city for that matter, is to see them as the concentrated hot spots, or nodes, on a world map of the internet.

The internet ecosystem is a collaborative "business model," a hyper-competitive set of interlocking partnerships that create and support a global network. These partnerships operate on local, country, and international levels. Continual rapid innovation, security, trust, and ability to scale are essential competencies to successfully operate in this system. While there are regulatory issues that come into play, in general, technology deployment and associated growth is limited by talent and adjacent enabling capabilities much more than regulations.

The notion of supply and demand is abstract, as much of the industry fills the growing network capacity as fast as it is built. With the ecosystem in a perpetual state of expansion, the concept of creative replacement is everywhere, and COVID-19 has increased the slope of the growth curve even more. In this industry, one doesn't compete, but rather collaborates and grows with the system.

Internet hubs are physical locations where carrier networks, content delivery networks (CDNs), social networks, cloud services, hosting, gaming, and IT service providers choose to *co-locate and interconnect*, usually within a massive data center (called internet exchange point or IXP) or within several data centers in the same metropolitan region via a cross connection.

Today, most major cities have internet exchange locations, making them regional internet hubs. Super large hubs become known as and are officially designated as a ***global internet hub***.

Currently, the top ten global internet hubs based on international capacity (and as ranked by TeleGeography) are[1]:

1. Frankfurt, Germany
2. London, United Kingdom
3. Amsterdam, Netherlands
4. Paris, France
5. Singapore, Singapore
6. Hong Kong, China
7. Stockholm, Sweden
8. Miami, United States
9. Marseille, France
10. Los Angeles, United States

Notably, eight out of the top ten global hubs have direct access to subsea cables.

Internet Hubs – The Incubators of a 21st Century Economy

Why are internet hubs important?

Don't be distracted by the fact that data centers don't create a lot of jobs. The truth is they don't. What they do create is an enormous opportunity to build a new, sustainable 21st century economy. The formation of a data center cluster is the first step in a fledging internet infrastructure ecosystem that, if properly nourished, grows new 21st century industries and jobs. Here's the proven pathway:

- **Phase 1:** The data center hub grows and increases in importance as more networks establish themselves in the area. This growth leads to even more inter-connected networks.
- **Phase 2:** Tech Talent is attracted to the growing data center cluster. A vibrant, growing internet ecosystem ***attracts talent***, particularly related to applications development and commercialization. Easy access to the underlying technologies is an essential resource, but the large-scale changes in workforce demand are often driven by the "user community" (those who use these technologies to create new products and services), as well as lower costs and access to new opportunities. This is known as applications development and commercialization, and virtually all businesses directly benefit from effective adoption of new digital technologies. But the real benefit is for the community, as this activity has evolved into a major exchange point.
- **Phase 3:** Companies are attracted to the major "exchange point" hubs, realizing the benefits of hyper-connectivity, digital speed, massive real-time data acquisition, access to computing capabilities such as ML (machine learning) and AI (artificial intelligence), and the growing pool of tech talent.
- **Phase 4:** Success fuels momentum. More companies are attracted to the region. Existing companies expand. New companies are started. The outcome? A 21st century economy growing the industries, companies, and jobs of tomorrow.

This process is not about building data center farms. It is about building an internet ecosystem that starts with data centers and expanded networks that, in turn, ignite an economic development chain reaction.

This perspective is critically important in fully appreciating why RVA757 Connects is championing this cause for the benefit of both regions. THE question is not whether the RVA region or the 757 region is a better location for any of the digital infrastructure assets, but rather how can our collective assets create and attract the tech talent and, ultimately, the 21st century industries and jobs that will provide economic opportunities for everyone who lives and works in the I-64 Innovation Corridor?

How the I-64 Innovation Corridor is Becoming a Global Internet Hub

Becoming a global internet hub doesn't happen by accident. The industry has identified ten key factors of success – the prerequisite conditions that create this potential. These factors include:

1. Access to international subsea cables
2. Data centers
3. Robust network of local fiber optic cables
4. Inexpensive power and/or access to renewable sources of energy
5. Relatively inexpensive land
6. Low risk of natural disaster
7. Proximity to large populations
8. Tech-savvy workforce
9. Economic incentives
10. Committed regional business and governmental leaders

Using these ten success factors as a lens, many of the internet network leaders around the world are becoming aware that the combined forces of the RVA and 757 regions are moving the I-64 Innovation Corridor towards a future designation as a global internet hub.

Here's a snapshot of what experts are seeing:

1. Access to international subsea cables:

Nearly 100 percent (99.7 to be exact) of all international data traffic travels through a network of subsea cables, and prior to 2017, all the Eastern Seaboard traffic landed either in New Jersey/New York (13 cables) or Florida (22 cables).[2] The destruction caused to the New York coastline by Hurricane Sandy in 2012 prompted the development of a third East Coast landing site in Virginia Beach.

Currently, Virginia Beach houses three subsea cables connecting the United States to Spain, France, Puerto Rico, and Brazil. These cables offer the fastest, most direct access from the United States to Europe and are three of the most modern, highest capacity routes in the world. A fourth cable, SEAx1, is currently under development and will be the first and only cable to directly connect the United States with South Africa. Construction is expected to be completed by the end of this year.

Up next is the new subsea cable along the east coast. Confluence Networks, LLC, has recently announced the development and construction of Confluence-1, the first subsea cable system dedicated to linking strategic global communications nodes on the East Coast of the United States, including: New York, NY; Miami, FL; Virginia Beach, VA; and Jacksonville, FL; and opening a new strategic node in Myrtle Beach, SC.

Confluence-1 is the first network to meet the need for direct, reliable, low-latency subsea connections among the major cable landings on the East Coast of the United States, thus facilitating the interconnection of many intercontinental cable routes within the Americas, and between the Americas, Europe, Africa, and Asia. The network specifically addresses the lack of availability of continuous dark fiber and diverse routing on the North-South route between New York and Miami.[3] If you're thinking "oh no," we are losing our advantage with the subsea cables just coming to Virginia Beach, think again. As previously stated, in this industry, one doesn't compete, but rather collaborates and grows with the system. Today, the world's population is 7.9 billion, climbing to 10 billion by the 2050s – and 60 percent are internet users today.

2. **Growing number of data centers:**

Every minute on the internet there are:

- 4,416,720 GB of data used by Americans
- 188,000,000 e-mails sent
- 18,100,000 texts sent
- 4,500,000 YouTube videos watched
- 4,497,420 Google searches
- 694,444 hours of video streamed on Netflix[4]

All this data must be captured, stored, routed, evaluated, and/or retrieved. This happens through a physical infrastructure or data ecosystem. All data, even data on the Cloud, has a physical location on a server. These servers are sometimes in a company's server room, but more and more frequently they are in large data centers. Data then travels from the data center through fiber optic cables to a network access point (NAP) to be routed to its final destinations. Fast, reliable internet does not exist without this infrastructure. As the amount of data and connected devices increase, more data centers and a more robust fiber network are required to keep pace.

There are currently over a dozen data centers along the I-64 Innovation Corridor. The QTC Data Center in Sandston (east side of the Richmond MSA near the RIC airport) houses the Richmond NAP, the location where the sub-sea cables converge with terrestrial fiber optic network and data center infrastructure. The Richmond NAP is the only International Interconnection Point in the mid-Atlantic and the only termination point for the Virginia Beach subsea cables. All data sent along the MAREA, Brusa, and Dunant cables pass through the Richmond NAP. This means that the most direct, lowest-latency, highest-speed connectivity from the U.S. to Europe, South America, and the Caribbean is the I-64 Innovation Corridor. Read this again: ***the most direct, lowest-latency, highest-speed connectivity to Europe, South America, and the Caribbean is the I-64 Innovation Corridor.***

Our data centers that rely on high capacity, low cost, low latency interconnections provide the backbone for social media and entertainment, public and private cloud/hybrid-cloud services, government agencies, and private sector computing capabilities. All along the I-64 Innovation Corridor, there are extraordinarily powerful computing centers for the Federal Reserve, Jefferson Lab, commercial banks, healthcare providers and insurers, defense contractors, and much more. A decade ago, it was common for the private sector and governments to have on-premise computing assets. However, that practice is rapidly changing. For example, the Commonwealth is moving much of their computing capability to private-sector data centers where it can access a range of hybrid cloud capabilities coupled with multi-layered enhanced security.

3. **Relatively inexpensive land:**

Unsurprisingly, data center operators prefer relatively inexpensive land. Years ago, real estate prices were a driving force for the development of the Northern Virginia data center market.

Today, land is currently selling for $2 million per acre in Loudoun County, and here is where the I-64 Innovation Corridor offers a strong advantage. For example, Facebook purchased 172 acres of land from Henrico County in 2017 for $10.8 million, or about $63,000 per acre for the construction of a new data center. While the cost of land is less of a factor in locating a data center compared to the overall cost of the finished product, starting off with a relatively lower cost for the physical footprint is usually a good first step.

4. **Access to inexpensive, reliable power and renewable energy:**

Co-location providers want access to inexpensive, reliable power. In some locations, this requires going out and securing renewable contracts with third parties. The best option is to get that energy from the incumbent utility.

Dominion Energy is proactively investing in reliable sources of renewable energy that is also supported by highly reliable nuclear base load generation. In the RVA region, Dominion is adding new solar power facilities to provide dedicated renewable energy for Facebook's data center. In Hampton Roads, Dominion is championing the Coastal Virginia Offshore Wind project, the first offshore wind initiative in the Mid-Atlantic and the first wind project built by an electric utility company in the United States.[5]

As Facebook, Microsoft, Google, and Amazon all plan to power 100 percent of their data center operations with renewable energy, Dominion's actions are sending a green light to the world's data center industry.

5. **Robust and growing local network of fiber optic cables:**

Over the past two years, public and private investment in in-ground (terrestrial) and wireless local network capacity has increased exponentially. Industry experts agree that the I-64 Innovation Corridor is in the early stages of this growth curve. For example, VDOT takes advantage of ongoing construction projects to lay new fiber cables. VDOT currently owns over 400 miles of fiber optic cables, and an additional 3,700 miles of fiber optics are underneath VDOT Right of Way corridors. Another example is the Hampton Roads Fiber Ring, a planned 100-mile-long regional fiber optic cable network that will connect the five South Hampton Roads cities (Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach). Later phases will connect to the Peninsula and the western sections of the region.

The ring will serve as the backbone of the 757's digital ecosystem, supporting Smart City and Internet of Things (IoT) development in each connected city, and will connect regional infrastructure. The latest progress on this initiative is available on the project's website at https://www.southsidenetworkauthority.com/.

6. **Low risk of natural disasters:**

   Both Facebook and QTC cited the region's low disaster risk as a reason for investing in the corridor. While the Virginia coast does experience the occasional hurricane, the risk is much lower than in Miami, the only location south of Virginia with direct access to subsea cables.

7. **Proximity to a large population:**

   Hampton Roads and Richmond represent a combined estimated 3.1 million people. As a megaregion, it ranks as the 19th largest population market in the United States, and both populations are growing: Hampton Roads saw a growth rate of 3.84 percent and Richmond saw a growth rate of 9.86 percent between 2010 and 2020.[6] The I-64 Innovation Corridor also has easy access to Northern Virginia, the 6th largest population market.

   But that's only half of the story. When it comes to internet networks, the lower the latency, the better the location. Think of it this way: you can't use a dataset until the last bit of data in that dataset arrives. The faster the entire datasets transfer, the sooner one benefits. The I-64 Innovation Corridor has the fastest internet speeds in the world and approximately half of the U.S. population lives within a 500-mile radius of the I-64 Innovation Corridor[7], giving the Corridor a compelling strategic identity and purpose.

8. **Growing tech-savvy workforce:**

   The I-64 Innovation Corridor has a workforce of over 1.5 million people, with over 48,000 people working in computer occupations.[8] Virginia is also one of the best educated states in the country (currently ranked #6 by U.S. News and World Report). There are 44 colleges and universities within the corridor, along with an abundance of technical schools.

   The Commonwealth of Virginia, donors, and private partners have committed more than $2 billion to expand Virginia's tech-talent pipeline through the Tech Talent Investment Program. The program promises to double the number of graduates in computer science and other closely related fields.

   Additionally, the Commonwealth of Virginia, in coordination with many higher education institutions, is supporting the development of a new industry-academic-government platform called the Commonwealth Center for Cloud Computing (C4). At its core, C4 will help better prepare students to work on digital transformation of all types of enterprises across Virginia. C4 is installing a set of advanced computing tools, systems, and network infrastructure to create a robust learning and development platform, one that will provide innovative educational experiences and direct linkages between business, governmental agencies, and our institutions of higher education. C4's open access will advance data analytics platforms, promote AI/ML technologies, provide resources to enable secure and safe systems, and much more. The Center will enable Virginia's universities to build programming to engage with industry and large-scale research consortia.

   This new Center of Excellence will include the University of Virginia, Virginia Tech, George Mason University, Old Dominion University, Virginia State University, Longwood University, and Virginia Commonwealth University. Other universities, colleges, and technology

development consortia have also signaled a desire to participate as well. The C4 work group building the Center recognizes the extensive, rapid-innovation digital ecosystem is based on a massive array of complex engagements and novel partnerships based on trusted relationships. A core objective is to ensure Virginia's universities are actively engaged in this advanced digital ecosystem.

9. Meaningful economic incentives:

Virginia offers a sales and use tax exemption to data centers making a minimum capital investment of $150 million and creating a minimum of 50 new jobs that pay at least 150 percent of the annual average wage in the locality.[9] The General Assembly recently passed legislation extending the incentive to data centers in distressed localities (defined as localities with higher-than-average unemployment and poverty rates).[10]

Localities along the I-64 Innovation Corridor, such as Henrico County, Chesterfield County, and Virginia Beach, offer reduced personal property tax rates for data centers and favorable property taxes (only 40 cents per $100 of assessed value, an 89 percent decrease from the tax rate prior to 2017). The property tax in Richmond is one-tenth that in Northern Virginia.[11] Virginia Beach has eliminated the machinery and tools tax altogether.

10. Committed regional business and governmental leaders:

The final factor of success is the intentionally of regional businesses and government officials in realizing the promise of global status and in doing everything possible to accelerate and capitalize on the nine previously mentioned factors through rapid innovation and capital investment (no excessive delays), stable tax and regulatory frameworks, and highly reliable and reasonably priced supportive infrastructure, particularly water and power. History has shown that many large urban centers have lost relative capability due to inability to access water or power coupled with long permitting processes.

Perhaps one of the best examples of this intentionality is Marseille, France. In just five years, Marseille became a global internet hub. How did this happen so fast? It started with a great, historic location for trade. Then came a growing concentration of network fibers – underground and undersea. The region's pro-business reputation helped make Marseille's market known for its openness and competitiveness. Realizing the opportunity to be a 21st century global hot spot, regional businesses and a supportive local government started doing everything possible to ignite Marseille's global hub potential. All of this conspired to make Marseille the internet success story it is today.[12]

The Advantages of Being a Global Internet Hub

Business Advantages:

- **Lower internet costs:** Being located near an internet hub decreases the operating costs of internet service providers, allowing the savings to be passed along to the end user. Internet hubs ensure that local internet traffic passes through cheap, local connections rather than more expensive, international links. As a significant portion of internet traffic is often local, the cost savings are real.

- **Enhanced communication ability:** The efficient interconnection points available in an internet hub encourage network operators to connect in the same location, prompting increased investment of fiber optic cables and data centers in the area. This

strengthened infrastructure then leads to decreased bandwidth requirements, increased internet speeds, more reliable internet, and broader access to highspeed internet.

- **Competitive advantage to conduct business at the speed of light:** Whoever accesses information first has an advantage in business. In the age of cloud computing and storage, it's widely known that being located near an internet exchange point, or IXP, provides a real-time advantage. This is especially important in the financial world, where a competitive edge of ten milliseconds can be worth millions of dollars for hedge funds and other financial trading stakeholders.

- **Edge Computing:** But it's not all about access to the cloud when it comes to speed. The Internet of Things (IofT) and 5G networks are ushering in a new form of local computing. Edge Computing enables data from IofT devices to be analyzed and used at the *edge of a network* before being sent to a data center or cloud. The biggest benefit of Edge Computing is the ability to process and store data faster, allowing for more efficient applications for retailers, businesses, manufacturers, etc. The "Worldwide Edge Infrastructure (Compute and Storage) Forecast, 2019-2023" report predicts that edge infrastructure is poised to be one of the main growth engines in the server and storage market for the next decade and beyond.

  What's enabling this? Two words: enhanced interconnectivity. The enhanced interconnectivity afforded by a growing hub enables improved edge access to more core applications. Locating in a growing hub enables growing edge computing capabilities.

- **Larger tech talent pool:** Internet hubs create a local environment that attracts internet service providers and the required support services, as well as companies looking to take advantage of the hub. All these companies require highly skilled, tech-savvy employees. This increased need both encourages outside talent to relocate and fosters investment in computer science education. The state of Virginia recently promised an additional 32,000 tech-savvy graduates over the next two decades.

Community Advantages:

- **Municipal/county budget funding:** Taxes on internet infrastructure contribute to communities. For example, taxes on Loudoun's 20 million square feet of data projects comprise 24 percent of the county's general fund.

- **Increased access to high-speed internet:** The additional fiber connectivity will impact the user community across every sector of the economy. Yet, companies are not the only ones to benefit from increased internet infrastructure. The entire community will have faster, more reliable internet, providing high-speed connections to everyone. This includes neighborhoods and corridors previously lacking access.

- **Improved public safety and transportation infrastructure:** More robust internet will help establish unified 911 centers that allow all facilities access to the same network. This enables data sharing between all 911 departments and improves regional natural disaster recovery. A more sophisticated digital network will support autonomous commercial and residential vehicles.

- **Enhanced educational opportunities:** Regional connectivity facilitates the integration of higher education for collaborative research, provides the bandwidth necessary for growing educational needs (such as virtual learning platforms), and increases

enrollment, retention, and graduation rates. These improvements are in addition to the increased investment in computer science education.

- **Improved healthcare:** The COVID-19 pandemic super-charged telemedicine. A larger local network enables greater remote access to doctors and specialists and enables healthcare providers to extend their range of service. Increased bandwidth and proximity to large data centers also enable healthcare facilities to quickly share large amounts of data and provide secure storage for medical records.

- **Increased work-from-home opportunities:** The COVID-19 pandemic also changed how we work. As restrictions lift, many companies are continuing to allow employees greater flexibility in working from home. Access to reliable, high-speed internet makes this possible. Being an internet hub will make locations even more attractive for both companies and workers embracing a work-from-home model.

  This is particularly important for the Hampton Roads region, as it is home to the largest naval base in the world. The Navy recently declared that it expects at least one-third of the supporting personnel in its base locations to telework, and this ability will be a consideration in future BRAC decisions. (Base Realignment and Closure, is the congressionally authorized process the Department of Defense uses to reorganize its base structure more efficiently.)

- **Enhanced locational appeal for remote workers:** Being an internet hub contributes to overall quality of life, making locations even more appealing for remote workers.

- **Growing economic development advantages:** Reliable, faster, international access will help enhance the appeal of new economic development initiatives. For example, Jefferson Lab is responding to the Department of Energy opportunity to create a new High Performing Data Facility, making it one of the four supercomputing facilities in the United States. Global Internet Hub status can help here.

- **Growing economy:** Perhaps the greatest advantage of being a global internet hub is being part of the future economy. All businesses will run on data and the growth of data will be exponential. IBM's widely quoted claim, first reported more than a decade ago, states that 90% of all data in existence today was created in the past two years.[13] We don't have to buy into IBM's precise calculation to get the point. The volume of data is growing at an exponential rate, so much so that the winning communities of tomorrow will be defined by bandwidth. Bandwidth and super-fast connections to the world will become more important than roads and air service. Doing business during the COVID shutdown makes this point. Some countries had to limit access to virtual conference calls. Even in the US, there were a few days of network slowdowns.

- **Future-proofing the community:** Perhaps the most important community benefit of becoming a global internet hub is the degree it will help a community remain relevant in the future with next gen capabilities. Every "next generation" of technology adds new functionality, capacity, and performance, often by an order of magnitude. In this industry, a generation is one to three years. The leading-edge hubs and users will have digital resources, tools, and capabilities that are not widely accessible by others. This includes access to real-time massive data acquisition/analytics, use of augmented intelligence, and creation of new, highly beneficial knowledge that will drive future economic growth.

Time is of the Essence

Time is of the essence to capitalize on the opportunity for the I-64 Innovation Corridor to become a global internet hub. We want to attract more than our fair share of attention and investment. Here are several reasons why we need to act fast:

- **The cloud needs more land, now:** COVID-19 has made digital infrastructure more important than ever. As a critical "connectivity" component to almost every business, internet traffic has been grown exponentially. The rush is on globally to secure property for data center growth. In many hub markets, server capacity is already being rented for facilities still under construction.

- **Virginia as a location is on the radar:** Recent activity among the largest cloud computing players suggests Virginia is a prime location, in part, because of access to Northern Virginia and the subsea cables. Loudoun County is the center of internet activity with a reported 60 to 70 percent of all internet traffic going through the county. In March 2021, Google announced a $600 million data center expansion there. Prince William County and Fauquier County are now seeing an uptick in interest in data center expansion. Southwestern Virginia is expanding their fiber network and leveraging their climate-controlled caverns and the water from flooded coal mines as unique, cost-saving cooling methods. The region currently houses four data centers. To the south, Microsoft has bought 900 acres of property in Mecklenburg County, Virginia, right near the small town of Boydton (900 acres is larger than New York's Central Park). Microsoft already operates 1.1 million square feet of data center space there. This will now be one of the largest concentrations of server capacity in the world.

- **Growing U.S. internet hubs:** Other regions across the U.S. are aware of the opportunities and advantages of being a growing internet hub and are hard at work to become a more attractive area for investment. Metro-regions like Nashville, Raleigh-Durham, and Atlanta are also trying to expand their data center markets as the catalyst that fuels their entire tech talent ecosystems and, eventually, their future economies.

- **Growing international internet hubs:** According to ITP.net, the last five years have seen Europe mature from an emergent regional internet hub to a fully-fledged global internet hub that boasts six out of the top ten largest internet city hubs in the world. The top four, known by the acronym FLAP, are Frankfurt, London, Amsterdam, and Paris, followed by Stockholm at number five. Coming in at number nine – beating Hong Kong and just one place below New York – is Marseille, which not only made the top ten list for the very first time but is also the fastest growing internet hub on the continent.[14] Other city hubs across Europe and around the world want to be on this list and are working hard to obtain this status.

There is a long list of regions that are two or more generations behind and the implications for them are huge. Data centers and the user community will migrate to regions with experienced talent, attractive living, and an academic-business-government partnership that works effectively to keep pace with the ecosystem's expansion needs.

RVA757 Connects' Immediate Next Steps

One of RVA757 Connects' top priorities is to ensure the I-64 Innovation Corridor becomes a top 15 global internet hub. Our work on this front starts with the following 2021 activities:

- Feature the global internet hub topic at our September 15 meeting: Ask Board and MIC members to identify missing information and to offer suggestions on action steps.
- Share the final draft of this white paper with our stakeholders: Share this concept with economic development leaders, state and local-level elected officials, and business leaders across the I-64 Innovation Corridor.
- Hold a webinar on this topic for RVA757 Connects' stakeholders: The first webinar is scheduled for October 1, and Civic Leadership Institute is co-hosting this virtual event.
- Feature the global internet hub concept at the Convergence 2021 event: On October 27, ChamberRVA and the Hampton Roads Chamber will hold their second annual Convergence event, which will feature RVA757 Connects' priorities for the I-64 Innovation Corridor and representatives from other global internet hubs.
- Create a plan to drive our hub status faster: Apply for a 2022 GO Virginia planning grant to assess the 15 other global internet hubs and learn how they became a global internet hub. Use the insights gained to formulate a strategic plan that will advance the I-64 Innovation Corridor's global internet hub status faster than would happen by happenstance. Once details are finalized, this grant will be led by Henrico County, Virginia Beach, the Alliance, and the Greater Richmond Partnership. RVA757 Connects will play a supporting role.
- Continue outreach: Continue to build awareness of, familiarity with, and support for becoming a global internet hub. Showcase this cause through RVA757 Connects' marketing communications efforts.
- Build this topic into future scope of work: Identify ways to help advance the global internet hub concept throughout 2022.

Summary

Dr. Barbara Boyan, Dean of the VCU School of Engineering, summed it up when she recently said: "We have embarked on a journey that will define our society. We are in the early stages of a new era where digital technologies are much more than enabling tools – they are now key drivers of business strategy, impacting innovation, social empowerment, life experiences, and will soon redefine everything from healthcare to global currencies."

The I-64 Innovation Corridor is well on its way to becoming one of the world's centers of the very latest digital infrastructure and related technologies. The foundational storyline is in place. The subsea fiber optic cables in Virginia Beach, the NAP in Henrico County, and the growing investment in data centers and expanded networks in between are the most visible signs of our early success. The rest of the story is now being crafted, starting with the acknowledgement from global internet experts that our megaregion has most, if not all, of the factors of success in place to create one of the leading internet hubs around the world.

Reaching global status is more than just an accolade or marketing claim. There are significant tangible business and community benefits that come with being a global internet hub, not the least of which are faster, more reliable internet, improved STEM education, a growing tech talent pool, and increased economic opportunities. As data management and access become increasingly important, a growing number of industries, not just tech companies, will prioritize locating in global internet hubs to effectively compete in the future. We want all of this and more for the RVA and Hampton Roads regions.

The biggest factor in becoming a global internet hub is intentionality. This includes building awareness of, support for, and investment in every prerequisite factor of success. RVA757 Connects is dedicated to this intentionality. As the organization that is igniting the promise of the I-64 Innovation Corridor, we will do everything possible to ensure our stakeholders – business, government, local and state-level elected leaders – are galvanized around our shared vision: ***becoming the next global internet hub.***

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