

## RVA757 Connects releases plan for global internet hub

Group calls for digital infrastructure growth across Richmond, Hampton Roads

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RVA757 Connects, a nonprofit focused on regional cooperation for economic development in Richmond and Hampton Roads, released on Thursday its 10-point strategic plan for transforming the "megaregion" into the next global internet hub.

Virginia is already home to the world's largest internet hub in Loudoun County's Ashburn area, which has the world's greatest concentration of data centers — Data Center Alley — through



RVA757 Connects President and CEO John Martin presents the organization's digital infrastructure map in Williamsburg on Sept. 28. Photo courtesy RVA757 Connects.

which more than 70% of global internet traffic is routed. From 2017 to 2021, data centers contributed \$54.2 billion to Virginia's gross domestic product, according to a PricewaterhouseCoopers study released in September. And now RVA757 Connects hopes to build similar success across the megaregion.

Internet hubs have subsea and terrestrial cable landing points and access to physical fiber networks, a combination of data centers and internet exchange points, and internet service providers, according to RVA757 Connects, which defines a global internet hub as "a physical location that facilitates the exchange of internet traffic among multiple networks, internet service providers, content delivery networks and other interconnected entities."

The larger area stretching from greater Richmond to Hampton Roads has multiple strengths in digital infrastructure, said John Martin, president and CEO of RVA757 Connects, as he presented

the plan during the organization's 2023 Convergence conference, held at the Williamsburg Lodge. "It's really going to take two cities to make the next global internet hub," he said.

Virginia Beach currently has three subsea cables that land in the Camp Pendleton area: MAREA, which connects to Spain; BRUSA, which connects to Brazil and Puerto Rico; and DUNANT, which connects to France. The landing site has the capacity for a fourth cable, according to RVA757 Connects.

Virginia Beach-based Globalinx Subsea Colocation is <u>building four more subsea bore pipes</u> in the city's Sandbridge area, the city announced in May 2022.

The megaregion currently has 12 data centers, including the QTS Data Centers and Meta data center campuses in Henrico County. QTS' network access point in Henrico's White Oak Technology Park connects to the three cables that come through Virginia Beach.

The first strategy in the plan is establishing a global internet hub industry council, which the organization has done by converting the work group that developed the strategic plan and a map to show investors into a subcommittee of RVA757 Connects. So far, the organization has raised approximately \$100,000 for the council, including a \$50,000 grant from the Hampton Roads Community Foundation.

Its second strategy is to brief cities and counties in the I-64 corridor from Richmond to Hampton Roads. The council plans to give each jurisdiction a briefing.

"We've got to get everybody to understand, time kills deals. So if somebody comes to you" with a proposal for a digital infrastructure project, "already be educated so you can say yes or no, but don't have to study it then," Martin said.

Third, the organization plans to increase digital infrastructure investors' awareness of the corridor and its assets by sending resources like a map graphic showing the region's cable landing points, data centers and other relevant resources.

Fourth, the organization plans to support the growth of "robust local internet networks" by promoting the need for additional investment and creating an inventory of existing internet routes.

The fifth strategy is to pitch Virginia as a place for more international subsea cable landings. The internet hub council will work with Virginia Beach and the Hampton Roads Alliance to promote available sites — like the approved Sandbridge site — and to create and communicate no-anchor zones.

"We're also working with the Coast Guard because, believe it or not, these cables — sometimes anchors get dropped on them ... so we've got to have a very sophisticated communication system to tell ships, 'You're in a no-anchor zone,'" Martin said.

The sixth strategy is for the council to work with GO Virginia and other economic development organizations to inventory and market sites for potential data centers.

Next, the group plans to encourage the growth of the region's internet exchanges (IXs) and internet exchange points (IXPs), which are physical locations where internet companies like internet service

providers connect and exchange internet traffic. These allow networks to connect directly, rather than through third-party networks, creating shorter routes for internet traffic. Currently, the only one in the corridor is a DE-CIX point in Henrico's White Oak Technology Park. DE-CIX is a carrier- and data center-neutral internet exchange with operations in North America, Africa, Asia, Europe and the Middle East.

The eighth strategy is to support the concept of a fiber network ring — completing a regional ring in Hampton Roads, examining the need for one in the Richmond area and examining an I-64 corridorlong loop. Virginia Beach, Chesapeake, Portsmouth, Norfolk and Suffolk are building a 119-mile fiber ring managed by the Southside Network Authority with an expected completion in summer 2024. The Hampton Roads Planning District Commission is overseeing construction of a fiber extension to the Isle of Wight and Southampton counties.

The council's ninth strategy is promoting utility Dominion Energy's ability to provide power to digital infrastructure. In July 2022, Dominion said it wouldn't be able to meet Loudoun County data centers' demand for electricity until 2026 as it built out infrastructure. But data center development continues, and Dominion has accelerated some projects and is working with developers on some projects in individual cases, Washington Business Journal reported in March 2023.

The I-64 corridor can benefit from being near a large hub like Ashburn because as the area becomes more expensive and reaches its growth constraints, the Richmond area can present an attractive, less expensive alternative for developers, said Jon Hjembo, senior research manager for market research company TeleGeography.

"You have tons of intercontinental traffic moving straight through here, going to Ashburn," Hjembo said. "Find out .... who these potential partners who are ... generating traffic, building these networks, and take advantage of the fact that you're at this crossroads, both on the Eastern Seaboard itself, but also between Ashburn and the rest of the world."

For its 10th strategy, the council will work to advance the corridor's tech talent pipeline, from K-12 through higher education. The plan also includes a potential second component to the tech talent pipeline — a focus on advancing digital equity. The organization is working on bringing to the region the nonprofit PCs for People, which provides low-income families, nonprofits and individuals with low-cost computers, free training and no- to low-cost internet service.