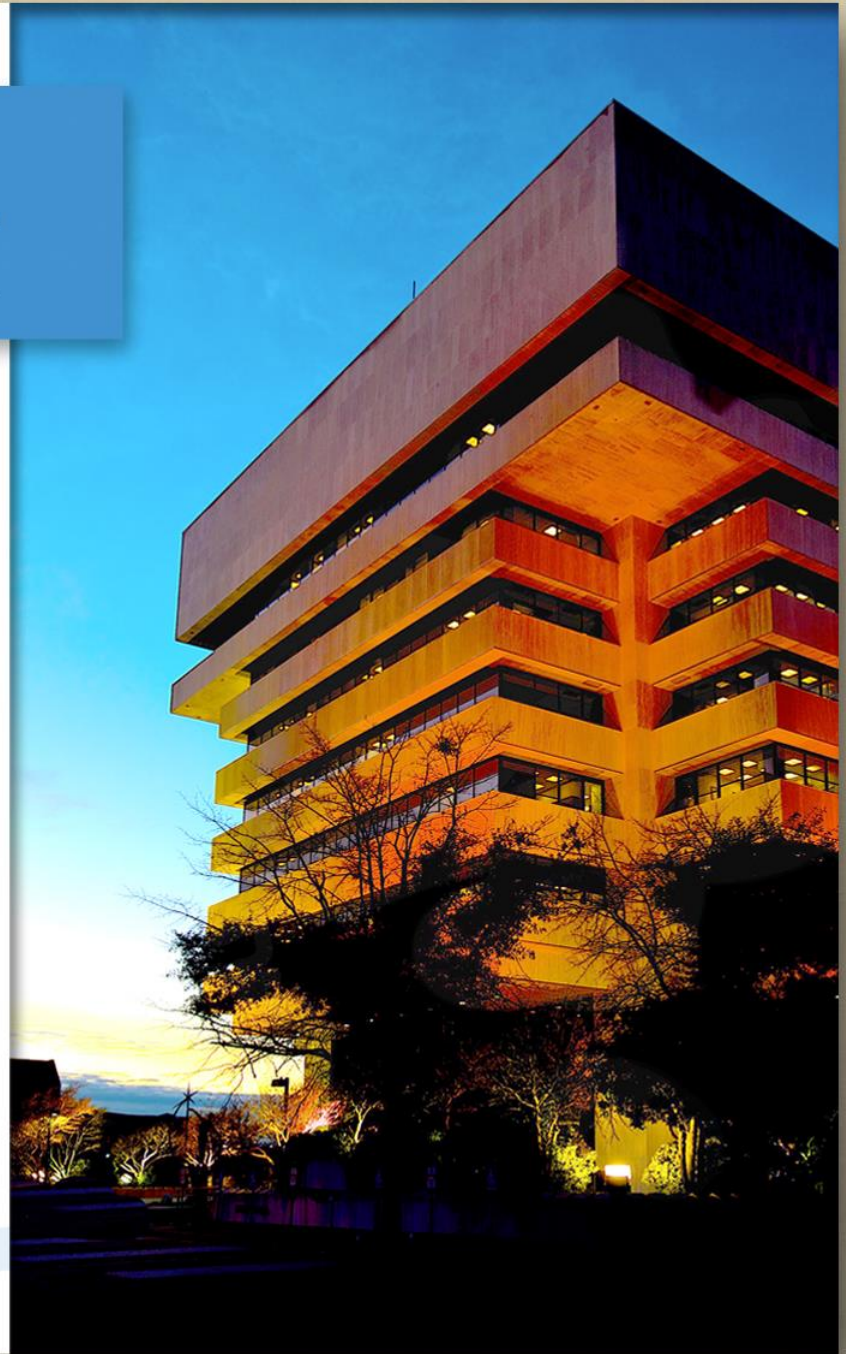# Regional Broadband Initiative

June 11, 2025

Historical Background

In 2018, the Hampton Roads Planning District Commission (HRPDC) endorsed the construction of a regional fiber network that would connect the Hampton Roads Communities to the ultrafast transatlantic subsea cables anchored in Virginia Beach

Virginia Beach Transatlantic Cables

- Newest and fastest cables in the world
    - According to Microsoft these speeds are "16 million times faster than the average home internet connection, with the ability to stream 71 million high-definition videos simultaneously."

- Connect Virginia Beach to Europe (Bilbao, Spain), South America (Brazil) and Africa (South Africa)

Background Continued

- Southside Network Authority (SNA) developed the Regional Connectivity Ring (RCR)
  - RCR serves five Southside cities: Norfolk, Portsmouth, Suffolk, Chesapeake and Virginia Beach.
- Global Technical Systems (GTS) was selected by the SNA to physically maintain and market the RCR
- Next phase is to extend the RCR to the Peninsula
- Ultimately connect north to Northern Virginia and south toward Atlanta, Georgia

Regional Broadband Goal

- Construct a fiber network that will:
  - Increase economic development opportunities
  - Provide high-speed internet infrastructure to unserved and underserved communities
  - Support local government operations

Economic Development Impact

Capacity	Description
Competitive ISP access	The regional connectivity will facilitate ISP vendors to compete in Hampton for service delivery
High-capacity connectivity	Provide high-capacity connectivity for institutions such as Hampton University, NASA Langley and other businesses with large bandwidth requirements
Flexible partnerships	Capability to establish partnerships with providers such as Verizon, AT&T, and GTS for middle-mile and last-mile delivery

Current State

- Hampton has been working in partnership with Newport News to extend the RCR to the Peninsula

- Identifying funding sources for planning and development of the physical fiber network installation and connectivity to the ring

  - Pursuing as available

- Consulting with the SNA about how to approach this ambitious goal

Ownership and Partnership Model

Cities like Newport News and Hampton would ideally own their fiber infrastructure

The SNA would facilitate interconnection and maintenance if desired, but ownership and control remain local

A fiber optic infrastructure strategic plan is necessary to design and implement this vision

Five-Phase Infrastructure Development Process

The Southside Network Authority recommends a five-phased approach:

1. Asset Assessment: Fielding and mapping all service endpoints and existing infrastructure ($200,000)

2. Needs Assessment: Identifying underserved areas and aligning with economic development zones ($30,000)

3. Conceptual Design: Drafting how the network should be laid out ($20,000)

4. High-Level Design: Creating a roadmap with timelines and priorities ($40,000)

5. Low-Level Design: Detailed engineering specs, cost estimates, and construction readiness ($1.7 million)

Total Build Out Cost

- Currently estimated that $15 million total would be needed to cover both Hampton and Newport News
  - Could be leveraged to secure additional grants
  - Could be offset by existing city fiber that can be integrated into the RCR
  - Total cost will be refined in the planning phase

Desired Outcomes

- Begin planning phase
- Join the SNA
- Design and build out a backbone network in both Hampton and Newport News
  - Connect to RCR through both the Hampton Roads and Monitor Merrimac Memorial Bridge Tunnels
- Recruit companies that can build out middle-mile and last-mile network & provide service

Next Steps

- Proceed with planning phases 1-3 ($250,000):
  - Asset Assessment = $200,000
  - Needs Assessment = $30,000
  - Conceptual Design = $20,000
- Work through terms for joining the SNA

Questions