



Loudoun County

VIRGINIA

WHERE TRADITION MEETS INNOVATION

Staff Response to BMI: Emergency Broadband Implementation Plan

Building & Development, Planning & Zoning, Mapping &
Geographic Information, Information Technology

November 17, 2020

The Key Issues

1. Implement the recommendations to decrease processing times and costs for critical communications infrastructure
2. Expedite provisions of the Dark Fiber Wide Area Network in partnership with Segra
3. Overlay Loudoun County's Wireless Gap Analysis with the Segra Dark Fiber Wide Area Network
4. Identify funding to complete buildout to Bluemont Community Center, Philomont Community Center, Philomont Fire and Rescue, Loudoun Heights Fire and Rescue and Loudoun Height Public Safety Radio Tower.
5. Identify additional solutions to deploy critical broadband to underserved areas of Loudoun County
6. Report back about the structure of the existing cable television franchise agreements, the current status of all franchise agreements, and legal options available to negotiate contracts that will improve broadband access.

Issue 1. Critical Communications Infrastructure Improvement Item and Broadband Strategic Plan

The lengthiest part of the review process for telecommunication tower applications is the approval of a Commission Permit (CMPT) and Special Exception (SPEX). Most new towers in Loudoun County will require approval of a concurrent CMPT/SPEX application.

- SPEX uses necessitate review by the Planning Commission (Commission) and approval by the Board. The SPEX process allows the Board to impose Conditions of Approval to address these impacts.
- All new towers, except those shown on the 2019 CP or located within overhead utility transmission line right-of-way containing existing structures greater than 80 feet in height, require CMPT approval from the Planning Commission following Public Hearing and subsequent Board ratification.
- Current Application Fees apply the highest legislative application fee to concurrent applications rather than an aggregate fee. Building and Zoning Permit fees associated with new construction towers and monopoles and alterations or additions to existing towers are charged the same fee.

Issue 1. Critical Communications Infrastructure Improvement Item and Broadband Strategic Plan

Expediting Options - Staff proposes the following options for Board consideration to accelerate the review of telecommunication facilities:

1. Waive PRAP Requirement
2. Reduce Legislative Land Development Application Fees
3. Eliminate CMPT and SPEX Requirement
4. Establish a Telecommunications Application Ombudsman
5. Establish Telecommunications Application Assistance Meetings

Issue 2. Expedite Provisions of the Segra Dark Fiber Wide Area Network

Loudoun County government is utilizing the County school system's existing contract with/Segra as a mechanism to add additional fiber optic cable to improve access to government buildings in rural areas of the County.

In addition to providing fiber to County facilities, Segra is making additional middle mile fiber available to private carriers to extend broadband to underserved areas in the west, which has become a top priority for the Board of Supervisors.

Segra is on track to complete its scope of work with the County by March 2021.

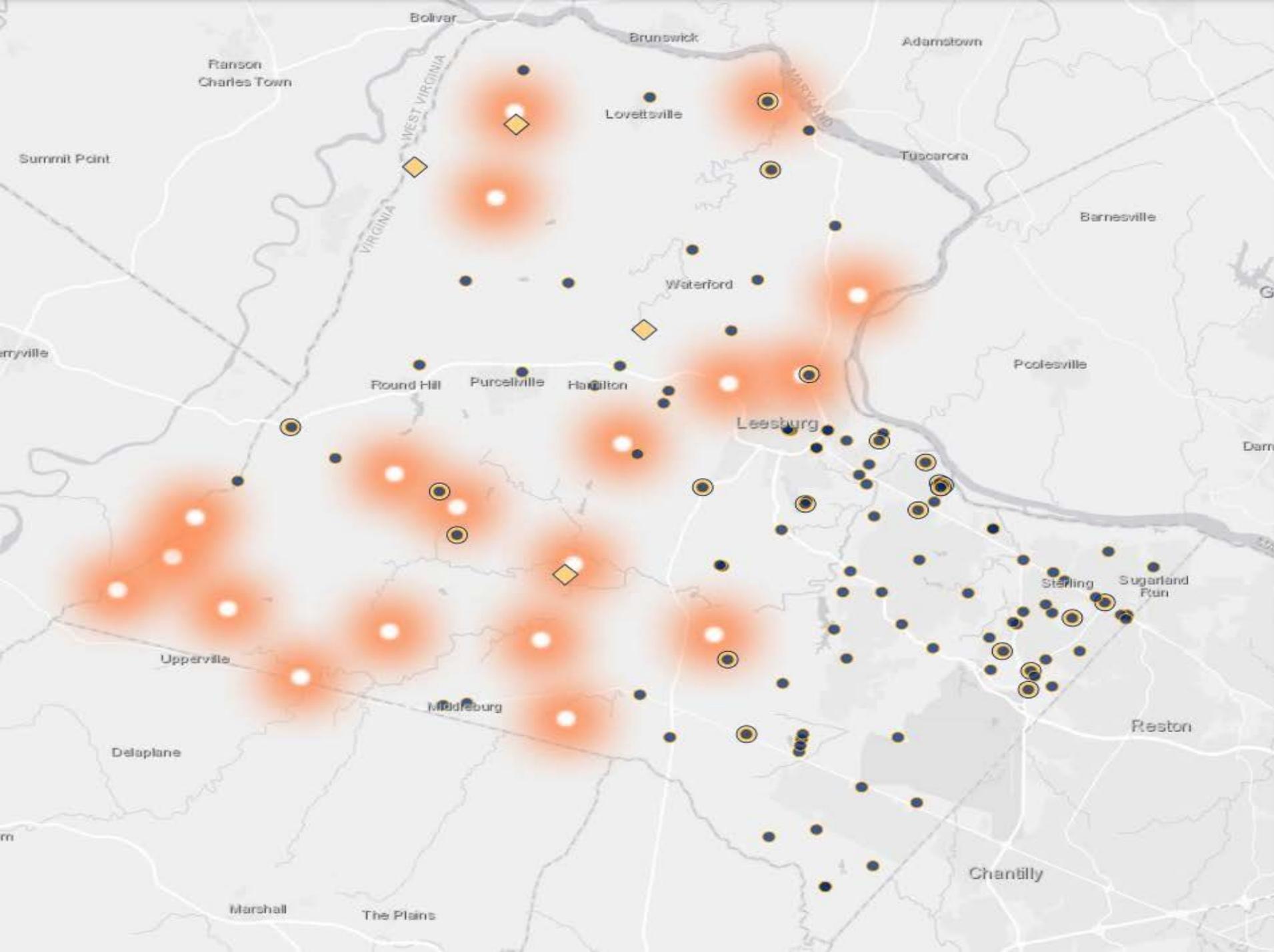
Issue 2. Expedite Provisions of the Segra Dark Fiber Wide Area Network

Expediting Options - Staff proposes the following options for Board consideration:

1. Because the fiber is already in place and ready to use by private carriers, there is not a need to expedite the provisions in the Segra agreement.
2. There could be benefit gained by expediting the build out of the five remaining County sites in Western Loudoun, which will be discussed under Issue 4.

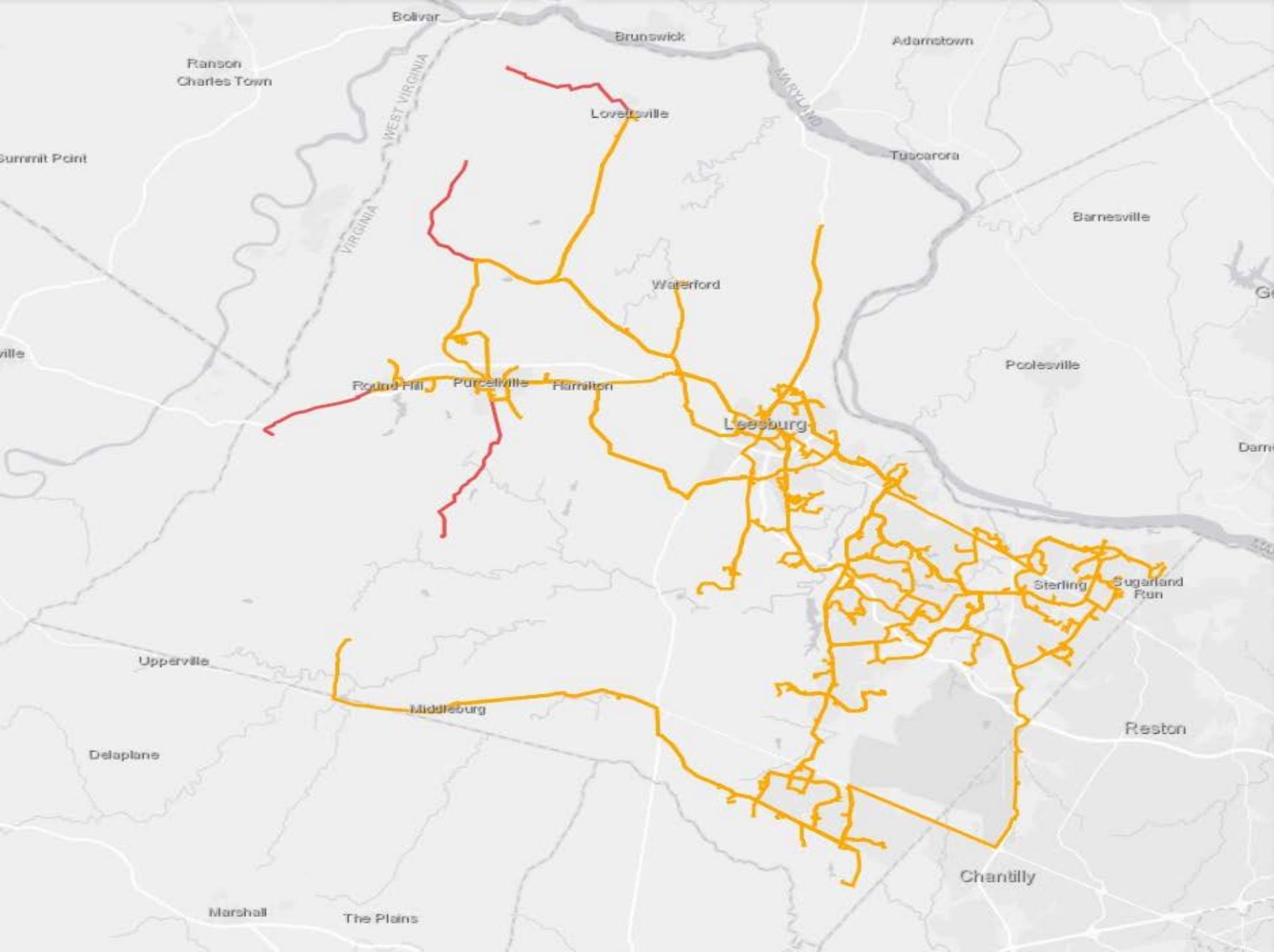
Issue 3. Create an active tracking document

- Staff created an interactive map and story map using data points directed by the Board as well as other data to illustrate the level of connectivity in the County as well as the need
- From this exercise, staff was able to identify 4 areas that are underserved that the Board could choose to focus efforts on



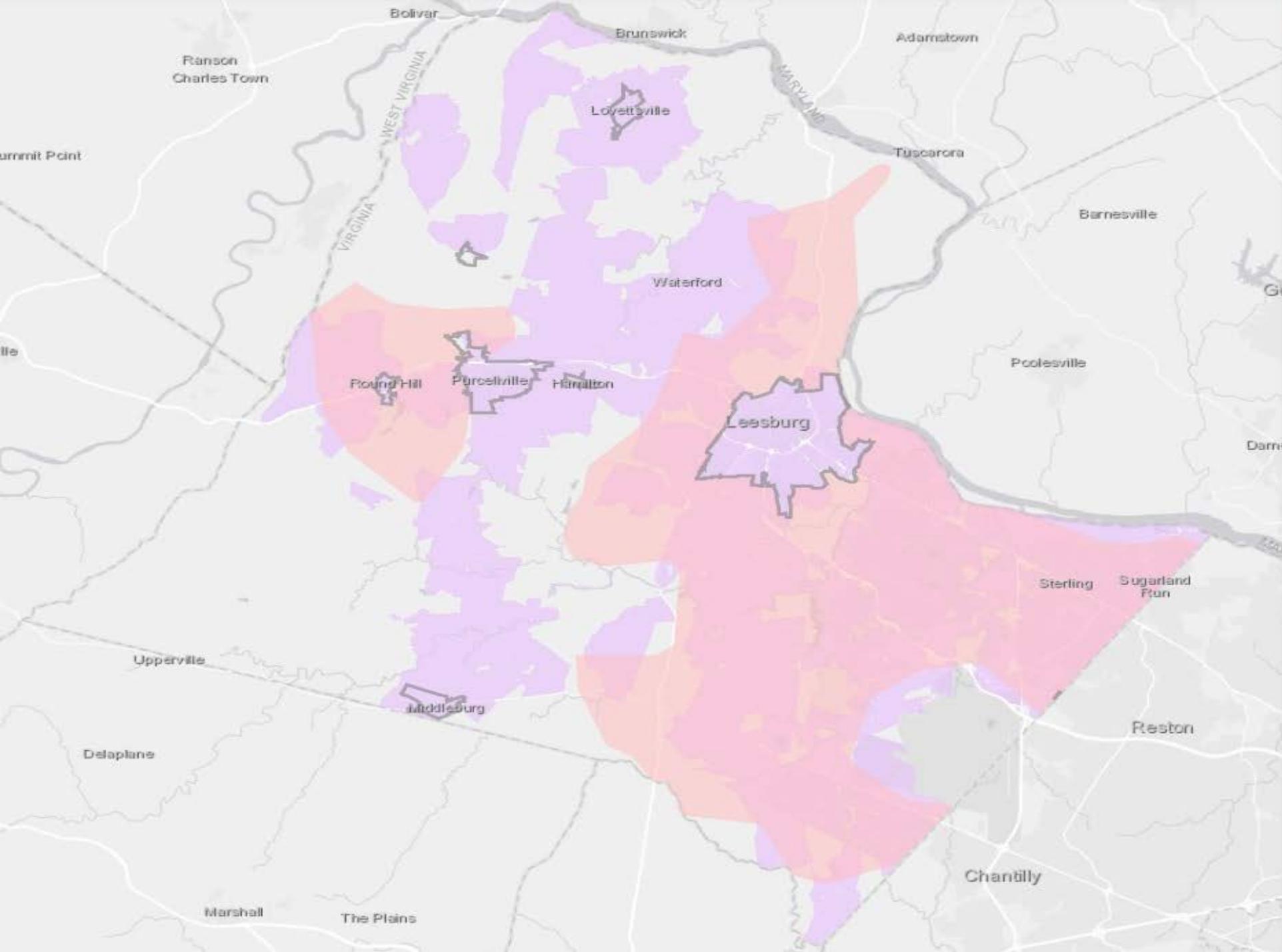
Legend

- Telecommunication Facility
- Telecommunication Facility Built Since the GAP Analysis
- ◇ Telecommunication Facility - Active or Approved
- Permitted Commercial Tower Development Areas (PCTDAs)



Legend

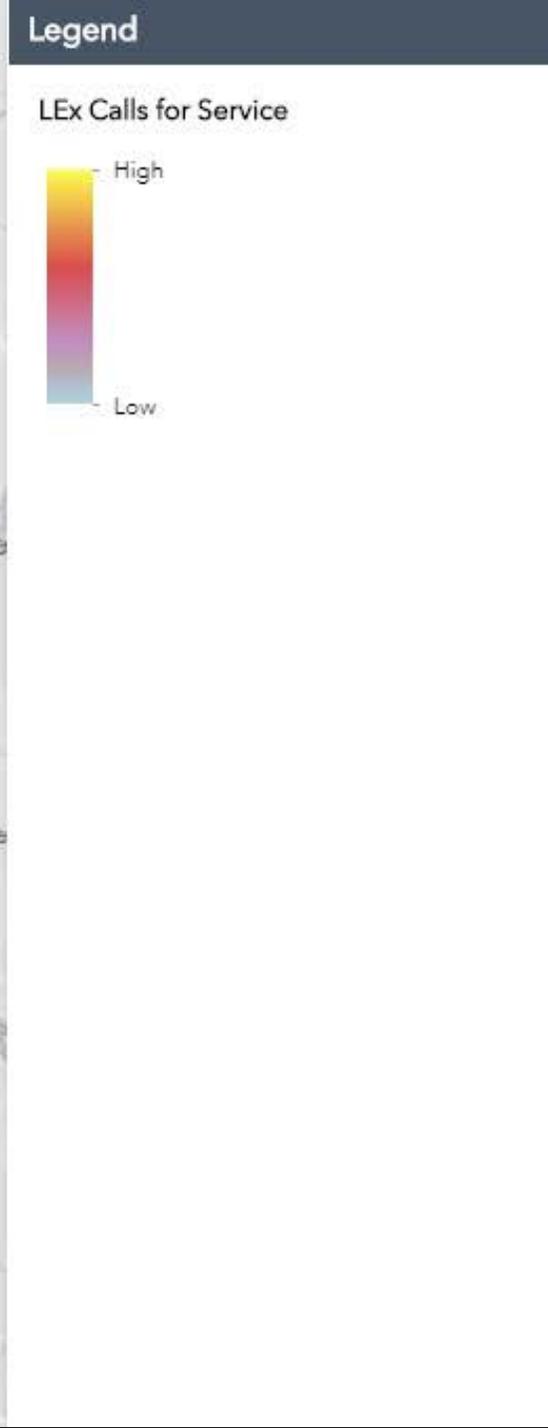
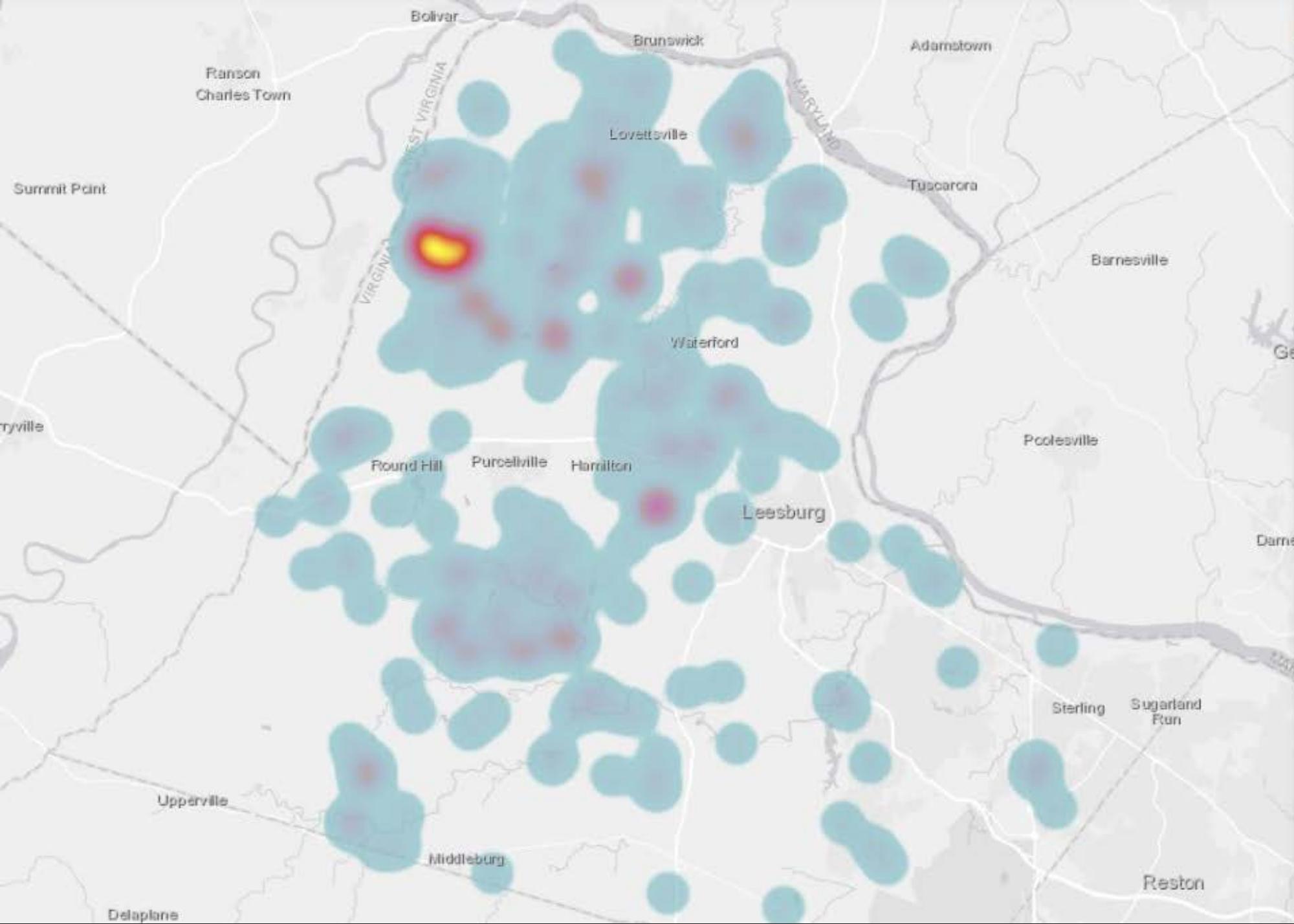
- Loudoun County/LCPS Dark Fiber (In Progress)
- Future Dark Fiber
- New Fiber Build

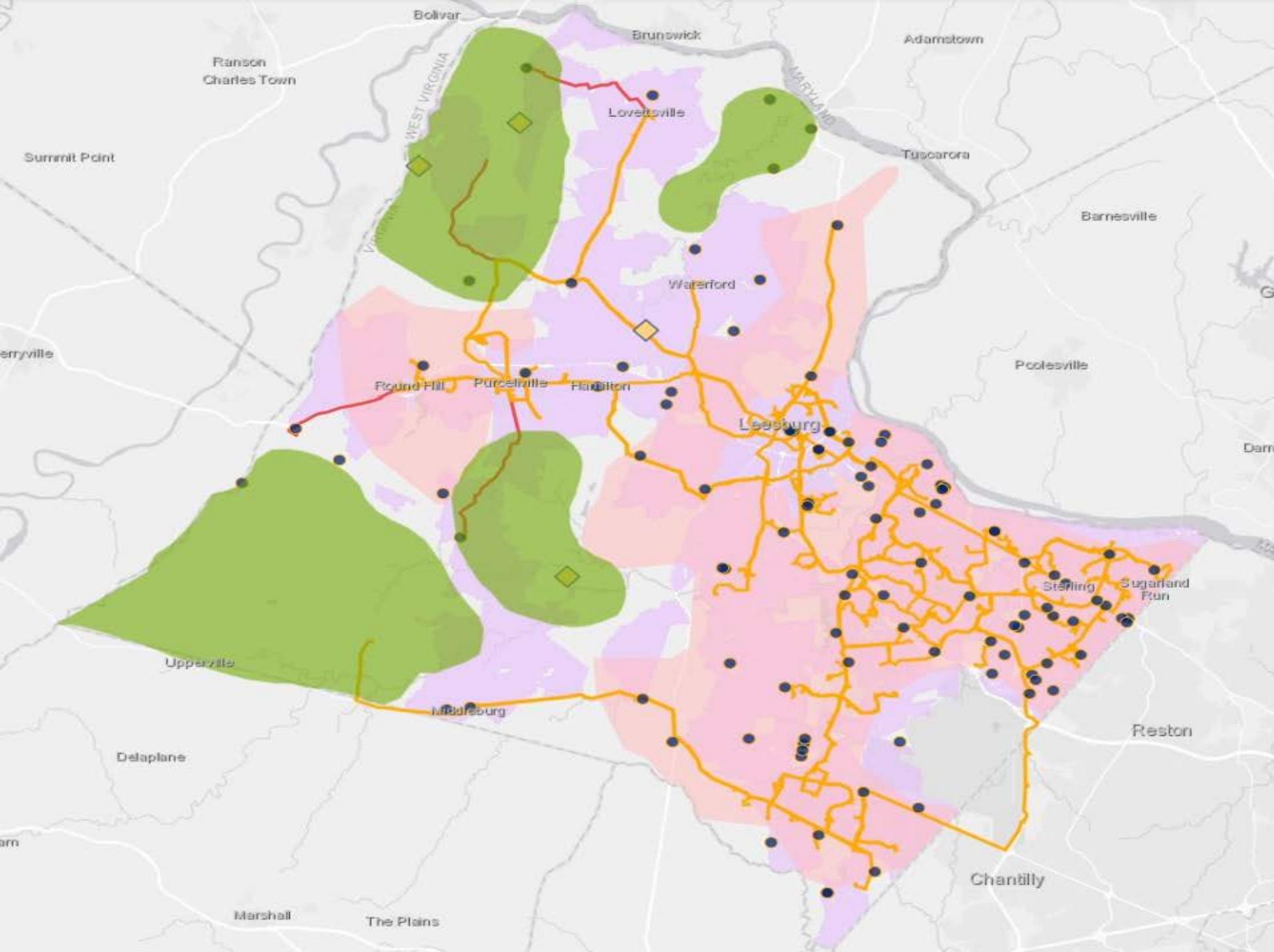


Legend

- Incorporated Town Boundaries
- Verizon Fios General Service Area
- Comcast Xfinity Service Area by Census Block







Legend

- Select Areas - Unserved/Underserved
- Telecommunication Facility
- Telecommunication Facility - Active or Approved
- Loudoun County/LCPS Dark Fiber (In Progress)
- Future Dark Fiber
- New Fiber Build
- Verizon Fios General Service Area
- Comcast Xfinity Service Area by Census Block

Issue 4. Identify Funding for Five Remaining Western Loudoun sites

The contract award to Segra, approved by the Board on December 3, 2019, included the build out of a PWAN to all current County facilities except for five Western Loudoun sites (because they were not covered by the Lumos (Segra) contract awarded by LCPS). The five sites are:

- Bluemont Community Center
- Philomont Community Center
- Philomont Fire and Rescue Facility
- Loudoun Heights Fire and Rescue Facility
- Loudoun Heights Public Safety Radio Tower

Issue 4. Identify Funding for Five Remaining Western Loudoun sites

Expediting Options - Staff proposes the following options for Board consideration:

1. Given the estimated cost to run this fiber, a formal Request for Proposal (RFP) process will be conducted to publicly solicit proposals from dark fiber providers interested in providing this service/infrastructure in Western Loudoun. Additionally, there appears to be more than one potential broadband infrastructure provider available which further supports staff's recommendation for the issuance of a formal competitive process versus a sole source contract award process.

Issue 5. Identify Additional Solutions to Deploy Critical Broadband to Underserved Areas

Staff has evaluated mapping information collected from a number of sources including, but not limited to, LEX data, Comcast, Verizon, Segra and NOVEC and has identified areas in western Loudoun County, that are deemed underserved.

1. Northeast area between VA-287 and Route 15 (Taylorstown, Eastern Lovettsville)
2. Northwest portion of Loudoun County (Hillsboro, Neersville, Britain, Edgegrove)
3. Southwest corner of Loudoun County (Upperville, Rock Hill, Bloomfield, Trapp, Howardsville, Randolph Corner, Willisville, Saint Louis, Paxson)
4. Central Area South of Purcellville (South of the Town of Purcellville, Circleville, North Fork, Mount Gilead, Flint Hill, Philomont, Mountville, Marble Quarry)

Issue 5. Identify Additional Solutions to Deploy Critical Broadband to Underserved Areas

Expediting Options - Staff proposes the following options for Board consideration:

1. Complete Buildout of Four Western Loudoun Fiber Runs and Five Facility Connections
2. Solicit Proposals for Last Mile Fiber Solutions
3. Unsolicited Proposals and Public-Private Partnerships

Issue 6. Existing Cable Franchise Agreements

The Verizon Franchise will expire on June 25, 2021, and the Comcast Franchise will expire on February 21, 2022. The County is currently engaged in the Cable TV renewal process.

Cable TV Renewal Process

- While the County can regulate cable TV service, its ability to regulate cable service does not extend to broadband and other non-cable services.
- Although federal and state law both limit the County's authority, the Virginia statute imposes additional restrictions that would likely deprive the County of important benefits provided in the existing franchise agreements.
- If the parties cannot agree on franchise terms in informal discussions, the County cannot simply deny either cable operator's request for renewal.

Issue 6. Existing Cable Franchise Agreements

Legal Options Available to Negotiate Contracts that Will Improve Broadband Access

- In negotiating the current franchises, the incumbent cable operators used the OCF terms as a template for a negotiated franchise.
- Considering both the legal framework and the competitive business environment, we have no reason to believe that either Cable TV provider's position has changed.
- Therefore, they may be willing to agree to terms comparable to those in place today, but reluctant to make significant further concessions

Recommended Actions

- The most impactful step at this point may be the acceleration of the four additional fiber runs connecting five county facilities.
- Should the Board desire to accelerate the construction funding for this project, staff would request direction to prioritize the full construction budget of approximately \$4.5 million in FY 2022 of the forthcoming Amended FY 2021 – FY 2026 CIP.
- Staff will continue to examine ways to provide funding that could support public-private partnerships to build out the last-mile