Welcome! Since you’ve downloaded this document, you were able to find your way online, but there may be others in your community who aren’t as fortunate. The Commonwealth of Virginia’s broadband team wants to support your efforts to bring broadband connections to the residents of your community or region. If you have any issues or questions – however small – please don’t hesitate to reach out to us directly.

**STEP-BY-STEP PATH TO UNIVERSAL BROADBAND COVERAGE:**

This is the key section. Every person and community is tackling this problem from a different starting point so figure out where you are and start on the next step. We’re here to help, so even if your current step doesn’t include reaching out to the broadband team, don’t hesitate to check in if you hit a roadblock or you’re uncertain about what’s next.

1. **Decide to pursue universal broadband coverage**

   If you aren’t convinced that broadband is absolutely critical to the health, wealth, and success of your community then let us know and we can give you 100 more reasons why it is. The key to achieving universal broadband is a leader to push the needle and champion the effort – that’s you! Becoming acquainted with this toolkit and the Commonwealth broadband team is your first step in becoming your locality’s broadband champion.

2. **Reach out to the Commonwealth broadband team**

   This can be a quick check-in, but we should talk before you get going. There may already be a regional project you could be a part of. There may be major infrastructure going into your community that could affect your planning. Cheesy as it sounds, putting our heads together we’re more likely to get things off to a good start.

3. **Create an advisory committee**

   Garnering buy-in from local leadership is crucial to successful broadband deployments and creating a broadband advisory committee is a great way to get the ball rolling. Advisory committees should have representation from, but not limited to: local elected officials (supervisors, council members), local government administration (town, city and/or county), local government economic development staff, planning district commission, local broadband
experts, and other applicable constituents (public safety, libraries, schools, etc.). Once the advisory membership is established, the committee can meet monthly or quarterly and can help plan, manage, and execute the plan for universal broadband coverage. Many hands make light work, and there is going to be some work between you reading this, and your community getting fully connected.

4. **Hire or designate staff support inside local government**

Rome wasn’t built in a day and universal broadband coverage won’t be either. Broadband deployment, while manageable, is not a simple task and making sure this effort is properly staffed is critical. Localities typically staff broadband efforts with folks experienced in information technology (IT), economic development, state grants, or facility management. That said, based on what we’ve seen from many communities throughout Virginia, a hard-working leader within local government, empowered by the Advisory Committee and local elected officials, and working with internet service providers (ISPs), can move broadband from concept to reality. Whoever you decide to enlist, make sure they have our contact information for any questions they have along the way.

Another item you’ll want to get your hands around is your GIS capacity. If you’ve got a GIS department (or person) you’re in luck! These folks are incredibly useful. If you don’t, that’s ok. We can offer some suggestions and your friendly regional PDC will almost certainly have capacity, if not resources to support your effort.

5. **Check in with the Commonwealth broadband team**

Now is a good time in the process to have a call with our team. We can discuss the advisory committee, new staff, and walk you through the next steps, which are below. Are you noticing a theme here yet? Keep going!

6. **Identify existing Internet Service Providers (ISPs)**

There is most likely at least one ISP providing service to your community now and you need to get a comprehensive list of who those ISPs are. If you are unsure about who those ISPs are, reach out to the Commonwealth broadband team. Along with a list, make sure to have a point of contact at each company as open communication will be critical to getting these ISPs to expand their existing networks and making sure there is not an overbuilding of networks.

7. **Figure out your scope**
You can’t solve a problem without understanding the problem first so now is the time to get a more in-depth understanding of what the broadband needs are in your community. First step is reach out to existing ISPs to have a conversation about what they can share with you about where they provide service in your locality. ISPs are in a competitive business and much of the information you’re asking for may be considered proprietary. As with any good planning effort, flexibility here is key. While some providers are comfortable sharing some information, some providers will require a signed non-disclosure agreement to review the maps in person. Sometimes there’s a willingness to have a conversation with rough estimates. “Perfect” should not be the enemy of “good” here and some information is better than none.

After reaching out to your existing ISPs, talk to local leaders from the economic development authority, board of supervisors/town/city council, planning department, information technology, public safety officials, and the county/town/city administration leadership. These folks are on the front lines and have knowledge of unserved areas from their work or having heard directly from constituents.

8. **Take our broadband availability survey**

Once you have a rough idea of where service is and isn’t, take our broadband survey – [here](#). Federal broadband availability maps are recognized as insufficient at best. Surveying your knowledge of broadband availability in your community is important for our team to better understand the scope of the digital divide in the Commonwealth. The survey should not take more than 15 minutes and simply asks you to provide, as best as you can, your understanding of where service is and isn’t within your community. This survey should be submitted once per-locality (so we don’t get confused). Your best bet is probably to talk to a couple knowledgeable people and give us your best guess as to coverage. The specifics will get nailed down later.

9. **Talk to your neighbors/your PDC**

When it comes to broadband, bigger is always better (and cheaper) so talk to your neighboring localities, as well as your planning district commission, to see if there is a regional effort you can join or create. Larger projects, especially ones involving multiple localities, connect more people in a more efficient manner and score better in competitive grants programs (like VATI and others). Throughout this entire process, you should keep in communication with your neighbors and we’d suggest even holding regional meetings to discuss broadband. Remember - broadband doesn’t stop at your town, city or county’s border.

10. **Ensure support from relevant local leaders**
At this point your local leadership should be aware of the push for universal broadband coverage and on board but you’ll want to make sure other local leaders, such as your local delegate and senators are aware of the effort. When it comes to broadband supporters, the more the merrier.

11. Consider establishing a broadband authority

Even if your locality never goes down the path of owning or managing an inch of your own fiber, authorities have a wide array of options before them when entering into partnerships and applying for funding. Some broadband authorities are comprised of the board of supervisors, like Franklin County, while others are made up of a variety of different stakeholders, like Lancaster County. Again, there is no one-size-fits-all approach and each locality will be different.

12. Download and modify the model solicitation

Time to reach out to our team or go onto wired.virginia.gov, download the model solicitation, and give it a thorough read with your team. Working from this foundation, changes specific to your locality can be made. Make sure to work through the typical channels that a solicitation must go through, such as a local attorney and local administrator. Keep in mind that this is a starting point and each localities’ solicitation will be unique to their own circumstances.

This is a step where each locality can pursue a different path. Some will go the route of a formal RFP and procurement process, like Patrick County did. That’s generally a lot of work and may not be necessary. Some can pursue a more informal solicitation or RFI process, like the City of Suffolk.

We’ve got a model solicitation for you to modify but the key here is that you, your legal counsel, and your local leadership, all talk about what makes the most sense for your locality.

13. Identify local assets that could be used for this effort

Does your locality own any towers, conduit, fiber, or other telecommunication equipment? How about locality-owned facilities or land that could be used for towers or fiber? Time to figure out who has what where. Any asset that localities bring to the table will lower the cost for ISPs, incentivize more solicitation respondents, and serve as an in-kind match for state grant programs. Think outside the box here, like Dinwiddie County did when they made their county-owned water towers available for fixed wireless equipment.
14. **Identify any local ordinances or proffer rules that might affect your solicitation**

If new internet service providers will be affected by rules or practices specific to your locality, you should absolutely include them in your modified solicitation, so it makes a lot of sense to gather these now. If you've got any questions about whether you should make any changes, reach out to the broadband team.

15. **Consider a locally owned or controlled network as a part of your solution**

Many localities have used municipal networks to great advantage when building out their broadband infrastructure. While it is true that a universal coverage plan that only includes a municipal network wouldn’t be eligible for state funding, a plan that leverages municipal networks in conjunction with a private sector ISP would be eligible. Great examples would include locally controlled fiber serving towers that support a privately operated wireless ISP or a locally controlled fiber network that serves municipal operations from which a last-mile network is built. Examples of localities that have or plan to have such networks include Orange County and several Hampton Roads localities. Every locality has different assets and opportunities – reach out to the broadband team to talk about this option if you’re interested in pursuing it.

16. **Consider creating a service district to raise revenue**

Now that you have compiled the physical assets that your locality could use, it is time to talk about the all-important green. First, would your entire locality or specific regions/neighborhoods be a good candidate for a service tax district for broadband?

Service districts are great ways for a locality to raise revenues directly for the expansion of broadband. The new funds can be put towards a bond for the use of broadband deployment to unserved areas. We have found time and time again that both unserved folks and the served communities at large often support raising revenues that must be spent on essentials services such as connecting their community. This can be a neighborhood-by-neighborhood decision, so it is worth at least exploring this option.

One current issue is that this new legislation will likely be updated in the 2020 General Assembly session to permit maximum flexibility should a locality with a service district wish to go to the bond market. For the time being, this remains a great tool and one that will only improve.
17. **Consider other local funding options/opportunities**

Are there other funding options available for broadband? Refer to our attached checklist for a full listing of potential funding opportunities. Things like tax incentives and permit waivers can bring down costs for ISPs considerably and help “make the math work” for serving the unserved areas of your locality.

18. **Talk with your electric utility(s)**

Whether your locality receives electricity from investor-owned utilities like Dominion or Appalachian Power or from an electric cooperative or a combination of both, they have a role to play in broadband. Electric providers are allowed to participate in the delivery of broadband and since they already have a connection to most premises in your locality, are key partners in planning for new broadband service. If you don’t have a contact at your utility(s), reach out to the Commonwealth broadband team and we will get you connected (seriously, the broadband puns here are never-ending).

19. **Check in with the Commonwealth broadband team**

We’re back! We can walk through all the potential funding options and discuss how the solicitation process is shaping up. Consider us your consultants (pro-bono we should add) through this process.

20. **Release your solicitation**

The day has finally come for your exceptionally crafted solicitation to leave the nest and fly away. Exciting! Once the solicitation has been reviewed by your localities’ counsel, broadband advisory committee, and approved by your local leadership, it is time to follow your local procurement policy and release the solicitation. This is a major step towards universal broadband coverage so a pat on the back is in order as well.

21. **Receive solicitation responses**

To make things easier on yourself and your team, read solicitation responses as they come in. You should have periodic check-ins with your team throughout this review timeframe and don’t hesitate to reach out to respondents if there is further information you need or you have questions.

22. **Review solicitation responses with the Commonwealth broadband team and identify needs**
Once the solicitation response window has closed, it is time to loop back with our team and review them with us. Come to the meeting with an understanding of each response and bring questions. Has each respondent taken a least-cost, hybrid approach to universal broadband coverage? Have respondents factored in their plans with ongoing efforts of neighboring localities? Do two respondents re-applying together make more sense than just selecting one? Do the projections pass the smell test? These are the types of questions you need to be asking.

19A. What if we don't receive any responses to our solicitation?

While our hope is that this is rare, should this happen- you guessed it- please reach out to the Commonwealth broadband team. We’ll put our heads together on next steps such as re-scoping the solicitation and looking at a variety of other models for broadband deployment that could include municipal networks or unique partnerships.

19B. What if we receive 20 responses to our solicitation?

Well, aren’t you popular? If you receive multiple responses to the solicitation, you will need to review each one carefully and see if there are potential points for collaboration between the respondents. For instance, if one ISP already has service in the western portion of your locality and another ISP has service in the eastern portion and they both respond to the solicitation, it might make sense to sit down with both and see if they could respond as a consortium. For some localities it may make sense to pick one respondent, but for the majority it will require sitting down with two or three ISPs and working with them to craft a combined plan. You're in a procurement situation here, so it'll be important for you to be in contact with your city/town/county attorney to make sure you're following all the relevant rules.

23. Select one or more ISP partners

After thorough review of each response in conjunction with our team, your team, and local stakeholders, it is time to select one or more ISPs to partner. Always keep in mind that delivering universal broadband coverage is a balancing act between quality service and low cost deployment. Hybrid plans, including both fiber and wireless service, will most likely be the least cost solution for the most connections. Bedford County, for instance, has partnered with several different providers, both fiber and fixed wireless, to work towards universal coverage. Once you decide to partner with one or more ISPs, you can have introductory meetings between their staff and your own. Collaboration and communication will be crucial to this relationship so grab some lunch and get familiar with these folks.
24. Receive overview plan

The overview plan from the winning ISP(s) will expand upon their solicitation response and provide further detail. Things the overview plan should include: detailed timeline, role of locality assets in plan, and budget if the locality is supplementing engineering costs. If locality-owned assets are involved in the plan, make sure to loop in the facility managers so they are aware.

25. Consult the Broadband Checklist document to ensure your plan takes advantage of every funding opportunity and cost-reduction strategy

Time to whip out the handy-dandy checklist and make sure all the potential cost-reduction options you have are being utilized. When in doubt, call the Commonwealth broadband team.

26. Work with Commonwealth broadband team to get detailed plan generated with ISP partner(s)

Speaking of the Commonwealth broadband team, time for a check-in! Let’s discuss the overview plan the ISP(s) provided. We can serve as another set of eyes and answer questions. The detailed plan that will emerge from it should be fully engineered with budget outlays, timelines, and phased construction plans.

27. Using the detailed plan, apply for state and federal support for the next phase(s)

With an engineered plan in hand, the state and federal grant applications should write themselves. You already have a partner(s), you have fully engineered plans, you know your funding gap, and you have already done the legwork of determining local match. If applying for a state grant, reach out to our team for application help. There are a lot of federal opportunities for funding as well. For some localities, it may make sense to apply for the entire unserved area at once while for others it may make sense to apply for each phase separately.

28. Check in with the Commonwealth broadband team

This can be a wrap-up conversation where we discuss any outstanding items, next steps, and future funding sources to help your locality bridge the funding gap. The Governor and General Assembly, as well as stakeholders throughout Virginia's government and society will be working diligently to get more funding for the VATI program so we can better assist localities.
the end of the day, broadband is infrastructure and infrastructure costs money.

29. Begin building the next phase(s) of your network

Finally shovels hit the dirt and the build-out begins. Your role will be to frequently check in with your ISP partner(s) and make sure things are moving without issue. Run into a roadblock? Yep, you guessed it – reach out to the Commonwealth broadband team and we can help brainstorm solutions.

Determine ways that the local government, who has now poured blood, sweat, and tears into making this a reality, can further ensure the success once the build-out is complete:

Is your partner running into permitting or land-use difficulties? Who could help them better than their new best friends in local government?

How can you help make sure your constituencies know about your efforts and ultimately take advantage of this new service? This “marketing strategy” is part of the VATI application as well - so you’ve likely already put thought in this and are now executing on the plan.

This is the part of the plan where you want to make sure to keep the deck cleared for your new network partner to do what they do professionally – build a network and get people online.

30. Evaluate progress annually

Following the terms of your partnership with your ISP(s), evaluate progress on the plan annually. This step is critical to ensuring the project is done efficiently and effectively. These networks, while not rocket science, are complex infrastructure that needs to be correctly installed to avoid wasted time and money. As the old adage goes “measure twice, cut once.” Wait - this may be fiber we’re talking about here, so no more references to cutting.

31. Complete your coverage plan

The planning, engineering, grant writing, applying, building, and connecting has all led to this moment – universal broadband coverage for your locality. This is a monumental achievement for your community and will drastically improve the lives of your residents. Congratulations!

32. Throw a party
Time to celebrate, you deserve it. Just remember to use your new handy-dandy broadband to send us an invite to the party! Also don’t forget to invite your state and federal legislators who made this effort possible and will make the decisions about future broadband assistance.