West Virginia ARPA Broadband Investment Plan

Request for Comment Regarding Unserved Areas

Issue Date: July 12, 2021
Response Deadline: August 30, 2021, at 3:00 PM EDT

The West Virginia Department of Economic Development (“WVED”), in coordination with the West Virginia Broadband Enhancement Council and the State Broadband Office, seeks to increase the availability of broadband services available to West Virginians utilizing American Rescue Plan Act (ARPA) and other funding sources through a series of programs, collectively known as the West Virginia ARPA Broadband Investment Plan (“Broadband Investment Plan”). This initiative seeks to target available funding to unserved addresses and avoid duplication of previously funded projects to the extent practical. However, existing location information on the availability of broadband information from federal sources has well-known limitations. These limitations impact the accuracy and granularity of determinations about which locations do and do not currently have access to broadband service.

To support the implementation of the Broadband Investment Plan, WVDED requests comments from Internet Service Providers (ISPs) and communities to improve the accuracy of the maps that will be used to determine eligibility for funding under the programs of the Broadband Investment Plan.

Target Areas

The programs of the Broadband Investment Plan will define projects and eligibility for funding at the address level, using statewide address data developed by the State of West Virginia. Accompanying this information request, WVDED is publishing a preliminary map of Target Areas and areas not targeted identified by address (“Target Area Map”). Links to the preliminary Target Area Map downloadable address data and an on-line webmap may be found at at https://broadband.wv.gov.

Target Area addresses are subcategorized as “Unserved” or “Potentially Unserved.” For the purposes of this Broadband Investment Plan, addresses are unserved if they have no current access to internet service with at least 25 Mbps download and 3 Mbps upload (25/3 Mbps) and are not in an area with an existing state, federal, or locally
funded project to deliver mass-market broadband service with services of at least 25/3 Mbps. Addresses with current or future access to service by satellite providers or mobile wireless networks are not considered served if they are not also served by a terrestrial broadband provider of fixed home broadband service offering serves with a speed of at least 25/3 Mbps.

### Target Area Map Address Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Target Area</td>
<td>a. Unserved</td>
<td>Not reported as served 25/3 Mbps to FCC (excluding satellite)</td>
</tr>
<tr>
<td></td>
<td>b. Potentially Unserved</td>
<td>Within a census block reported as served 25/3 Mbps to FCC, but that may contain some unserved addresses</td>
</tr>
<tr>
<td>2. Not Eligible</td>
<td></td>
<td>In an area that is likely served at 25/3 Mbps OR that is likely to be served at 25/3 Mbps by a state, locally or federally funded project (excluding satellite)</td>
</tr>
</tbody>
</table>

The preliminary Target Area Map is informed but not fully determined by broadband speed and availability reported by ISPs to the Federal Communications Commission (FCC) through its Form 477 process as of the most recent release, June 30, 2020. Addresses located within census blocks that have no reported access to consumer terrestrial internet service of at least 25/3 Mbps are classified as “Unserved” unless they are also in an area with an existing state, federal, or locally funded project to deliver mass-market broadband service with services of at least 25/3 Mbps.

FCC Form 477 data tends to exaggerate the true extent of broadband service availability at the address level because the FCC instructs ISPs to report service in an entire census block, even if an ISP can provide service to a small part of a block—the “one-served—all-served” issue.¹ This issue is especially pronounced in rural areas, where census blocks tend to be larger. For this reason, the preliminary Target Area maps include an intermediate subcategory, “Potentially Unserved.” Addresses shown as “Potentially Unserved” are in census blocks have reported access to consumer terrestrial internet service of at least 25/3 Mbps, but WVDED has preliminarily

¹ Other categories of inaccuracy may also exist in some locations, such as if an ISP erroneously reports service or service at a given speed in blocks where it is not available.
determined that they are more likely to be among the unserved addresses located within census blocks that are reported as served to the FCC. This preliminary determination is inferred from patterns of reported service in adjacent census blocks and the technology type of reported service.

Addresses not classified as “Unserved” or “Potentially Unserved” or which are in area known to WVDED to have an existing state, federal, or locally funded project to deliver mass-market broadband service with services of at least 25/3 Mbps are identified on the preliminary Target Area Map as “Not Eligible.”

Treatment of “Potentially Unserved” Areas in Plan Programs

The WVDED will release details of Broadband Investment Plan proposed Programs separately. Prior to the conclusion of this request for comment, proposals to Plan programs may target addresses identified as “Potentially Unserved,” but present documentation confirming the addresses are unserved. After the conclusion of this request for comment, WVDED intends to publish a revised Target Area Map. Addresses classified as “Potentially Unserved” in the preliminary Target Area Map about which WVDED does not receive credible information at the address level from serving ISPs may become eligible targets for funding from proposed Programs without additional documentation from the applicants of those projects regarding existing service availability.

Request for Comment

Through this request, WVDED seeks information from ISPs and communities that will allow it to classify broadband availability more accurately at the address level. It especially seeks data to narrow the number of addresses identified as “Potentially Unserved,” to reclassify them as either “Unserved” or “Not Eligible.”

Eligible Respondents

Eligible respondents may be either:

(i) an ISP currently providing service to mass-market consumers in West Virginia,

(ii) a Regional Planning and Development Council, or

(iii) a Local Economic Development Authority.

Other “Community Organizations,” such as a West Virginia municipality, county, school district, or a group such as a local broadband committee, should provide relevant information to their local Regional Planning and Development Council or Local Economic Development Authority if requested.
Due to the technical requirements of this Request for Comment, this Request for Comment is not soliciting direct responses from members of the general public and business users. However, input from the general public and business users is requested through the West Virginia Broadband Enhancement Council’s Survey and Speed Test found at https://broadband.wv.gov/west-virginia-internet-speed-test/.

The Council uses this survey and speed test to collect information from the general public about broadband availability and speeds on an ongoing basis. Members of the general public are encouraged to contribute information about broadband at their locations through this site. Members of the general public and business users can also assist Community Organizations when asked for participation from the local community to support a response from a Regional Planning and Development Council or Local Economic Development Authority.

Response Template and Respondent Information

Responses should include a completed Broadband Availability Response Template, a Microsoft Excel document, available at https://broadband.wv.gov. Separate Templates are available for ISPs submitting information about their own network and for all other respondents. Responses must include the respondent’s legal name and d/b/a if applicable. Responses must include contact information (e-mail and phone) for a primary point of contact for the response who is knowledgeable about the response and can answer questions.

Submission of Address Information

Respondents may submit addresses shown on WVDED preliminary Target Area Map. Submissions may claim the addresses to be either currently served or unserved but must submit claimed served and claimed unserved addresses separately. Responses must include the unique ID code attribute for each address corresponding to the code for that address on the preliminary Target Area Map.

ISP Own Network Submission Requirements

ISPs may submit information about service (or lack of service) to addresses by their own networks. Such respondents must provide the following additional attributes for each claimed served address submitted:

1. The name of the ISP offering service at that location.
2. The technology with which the address is served (Fiber-to-the-Premise, Cable, Fixed Wireless, or Digital Subscriber Line).
3. The maximum download speed offered to consumers at the address.
4. The maximum upload speed offered to consumer at the address.

Responding ISPs must accompany their response with additional information that supports the claim that addresses are served. The required supporting information varies by technology type.

Respondents claiming that addresses are served by either cable or fiber-to-the-premise networks must also show the ISP’s existing fiber or cable network routes within the municipalities in which the respondent has submitted addresses. Routes may be either actual coaxial cable or fiber line routes, or the roads along which the applicant has existing network in the municipality or municipalities. The preliminary Target Area Map download link and webmap will include a roads layer divided into segments with a maximum length of 0.1 mile. Respondents submitting roads should utilize this layer.

Respondents claiming that addresses are served by a fixed wireless network must include a propagation plot of coverage overlapping all of the submitted addresses, and an accompanying description of key assumptions used. The key assumptions shall include the prediction tool used, terrain and clutter resolution used to generate the plot, the signal strength (RSSI or RSRP for an LTE network) threshold at which areas are considered covered or uncovered, and the assumed height above ground level of end user transceiver equipment. Propagation plots may show multiple levels of service, but at a minimum should clearly identify signal strength at which users could expect to receive service at or in excess of 25/3 Mbps.

Respondents must identify the sites used in the coverage projection. For each access point, the response must identify:
   1. The latitude and longitude of the site,
   2. Base station antenna information including manufacturer, model, azimuth, down tilt, and center line,
   3. Base station equipment information with manufacturer, model number, and EIRP,

Information must be provided by sector for sectorized sites.

Respondents claiming that addresses are served by a digital subscriber line network must include the wire center office or remote terminal locations at which copper lines serving the submitted addresses terminate. For each wire center office or remote terminal location, the respondent should identify the DSL technology standard deployed at that location, and the maximum copper loop length at which the ISP can
support service of at least 25/3 Mbps using that technology.

Respondents may provide additional supporting information, such as speed tests or field survey data, but not as a substitute for required information.

Responses from ISPs about future planned service should not be submitted unless such service will be deployed within 24 months pursuant to a binding, enforceable commitment to or requirement of a local, state, or federal government agency. The requirement or commitment must bind the ISP to deploy to the specific addresses and to the timeframe. Responses about future planned service must clearly identify the source and terms of the requirement or commitment and must be submitted separately from responses regarding existing deployed service.

Requirements for Community or ISP Other Network Submission

Regional Planning and Development Councils and Local Economic Development Authorities must accompany their response with additional documentation that supports the claim that addresses are unserved or served. ISPs submitting information about services or a network other than their own should provide similar documentation. Examples of documentation may include:

1. End-of-line surveys of cable or fiber infrastructure on poles. Routes may be either actual coaxial cable or fiber line routes, or the roads along which cable or fiber serving customers exists in the community, or routes surveyed along which no cable or fiber infrastructure serving customers was observed. The preliminary Target Area Map will include a roads layer divided into segments with a maximum length of 0.1 mile. Respondents submitting roads should utilize this layer.

2. Speed test results. Speed test results must identify the address at which the speed test was conducted, the date of the test, the ISP over whose network the test was conducted. If possible, the broadband service tier subscribed to by the customer at that location is desirable to include.

3. Consumer surveys. Consumer surveys should identify the area in which the survey was conducted, the number of responses, the questions asked and responses, the dates over which responses were selected, the method of sample selection, and the media over which the survey was conducted (e.g. on-line, telephone, mail). If used to identify unserved addresses, the survey should identify by address the responses to the following questions or similar when possible.
   a. From which ISPs have respondents attempted unsuccessfully to obtain broadband service equal to or exceeding 25/3 Mbps in the last year?
b. From which ISPs are respondents currently receiving internet service less than 25/3 Mbps?

File Formats

Map information must be provided in electronic format. Addresses and other requested must be listed on the Broadband Availability Response Template file. Existing fiber or cable routes or routes surveyed along which no cable or fiber infrastructure serving customers was observed may be submitted as either a shapefile or a KMZ/KML file. Wire center, remote terminal, and wireless propagation plots also may be submitted as either a shapefile or a KMZ/KML file.

Supporting documentation other than mapping information may be submitted in Microsoft Word, Microsoft Excel or PDF formats. Include in all file names the respondent’s name and either “served” or “unserved.”

Questions

Eligible respondents may submit questions about the processes and procedures for responding to this information request to wvbroadband@wv.gov on or after July 12, 2021, with the subject, “Unserved Area Request for Comment.” WVDED will post responses to questions at https://broadband.wv.gov. Questions received after August 17, 2021, may not be answered prior to the information submission deadline.

Information Submission and Deadline

Information submitted in response to this request, including the Broadband Availability Response Template and all other supporting documentation, should be submitted through the response file request link for this Request for Comments posted at WV Comment Upload Portal. The password required for upload submissions is WVbroadband. Responses must be submitted not later than August 30, 2021, at 3:00 PM EDT. Early responses are encouraged.

Response Review and Validation

WVDED staff and contractors will review responses and supporting documentation and may undertake desktop analyses or field inspections to validate submitted data. Respondents may be asked to provide additional information and respond to questions about information submitted.

Based on its review, WVDED will make a determination regarding the strength of evidence regarding broadband availability at addresses submitted and may change the
classification of addresses appearing on the preliminary Target Area Map if it has strong, credible, and clear evidence supporting the change. Submitting addresses for review does not guarantee WVDED will change their classification.

Response Confidentiality

Responding ISPs may request that WVDED treat as confidential and not publish or make public documentation supporting claims about the submitted addresses that identifies elements of the ISP’s network.

ISPs requesting confidential treatment of supporting documents must attach a letter to their response that specifically identifies the documents or specific parts of documents for which they are requesting confidential treatment and identify the relevant public records exemption listed in W.Va. Code Sections 29B–1–4 or 31G–1A–5.

WVDED will not treat as confidential and may publish or otherwise provide public access to the addresses submitted by respondents to WVDED.