

**OFFICIAL OCTOBER 2012 UPDATE SUBMISSION TO
THE NATIONAL TELECOMMUNICATIONS AND INFORMATION
ADMINISTRATION UNDER THE
STATE BROADBAND DATA AND DEVELOPMENT GRANT PROGRAM
FOR THE STATE OF IOWA**



October 1, 2012

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October 1, 2012

Ms. Anne W. Neville
SBI Grant Program Director
National Telecommunications and Information Administration
U.S. Department of Commerce
Room 4716
1401 Constitution Avenue, NW
Washington, DC 20230

Dear Ms. Neville:

As the State Broadband Designated Entity, in partnership with the Iowa Economic Development Authority, please accept this submission from Connected Nation on behalf of the state of Iowa's State Broadband Initiative (SBI) Grant Program, known as Connect Iowa.

The Connect Iowa program and its collective stakeholder community continue to be faithful and energized contributors to the National Telecommunications and Information Administration's (NTIA) SBI program. Now more than ever, the significance of complete and validated data as compiled through the Federal Communications Commission's (FCC) National Broadband Map is instrumental in forging the innovation economy of the 21st century. As the Commission relies upon this unique resource to distribute monies under the Connect America Fund, through the Universal Service Fund reform, the Connect Iowa program equally values this data in informing meaningful program interventions relating to broadband access, adoption, and use initiatives. Truly, this coordination embodies the spirit of the SBI and demonstrates the joint effort of the NTIA, FCC, state governments, industry, and non-profits like Connected Nation as it continues to serve as a key tool for the American public and policymakers. We are proud of the role that Connect Iowa has played in creating and maintaining such a powerful tool that has benefitted and surely will continue to benefit broadband providers, consumers, and businesses nationwide.

The artifacts that comprise this submission should be found to be compliant with the October 1, 2012, deadline for the semi-annual data update and in accordance with the terms of the July 1, 2009, Notice of Funds Availability (NOFA) and all subsequent clarifications pertaining to delivery of state-level mapping of broadband service availability. This packet includes:

Inventory of Deliverables, Connect Iowa: October 1, 2012

<u>NOFA Requirement</u>	<u>Data Transfer Model</u>	<u>Data Description</u>
Appendix A: 1(a)(i)	BB_Service_CensusBlock	Broadband Service Availability of Facilities-Based Providers in Census Blocks of No Greater Than Two Square Miles in Area

Appendix A: 1(a)(ii)	BB_Service_RoadSegment	Broadband Service Availability of Facilities-Based Providers by Road Segment in Census Blocks Larger in Area Than Two Square Miles
Appendix A: 1(b)	BB_Service_Wireless	Broadband Service Availability of Wireless Services Not Provided to a Specific Address
Appendix A: 3(b)	BB_ConnectionPoint_MiddleMile	Broadband Service Infrastructure Middle-Mile and Backbone Interconnection Points
Appendix A: 4	BB_Service_CAInstitutions	Community Anchor Institutions-Listing
Appendix A: 4	n/a	Community Anchor Institutions-Narratives
VII.A.1(a)	n/a	Accuracy and Verification Report
n/a	DataPackage.xlsx	Worksheets of Contact Information, Record Count, and Provider Summary Table
n/a	n/a	List of Changes and Corrections to the Dataset
n/a	n/a	Non-Participating Provider (NPP) Narratives
n/a	n/a	Broadband Provider Roster and Participation Status

In addition, this data update submission should be found to be compliant with the additional program requirements instituted by the National Telecommunications and Information Administration since the time of the April 2012 SBI data submission for the Connect Iowa program. Specifically, these new requirements are:

SBI Data Transfer Model

The submission of the broadband dataset for October 1, 2012, is contained within the SBI Data Transfer Model as released on the Grantee Workspace on August 9, 2012. All efforts have been made to comply with formatting, domain, and metadata requirements to include as much information on each provider as possible.

Additional Submission Guidance

New to the semi-annual submission for October 2012 is a more robust version of the ReadMe text file. As per the template released on the Grantee Workspace on May 18, 2012, this file contains a high-level summary of the items contained within the submission, including the exact file deliverables, a description of the errors and warnings from the Check Submission report, and extraneous information of which the NTIA and other users of the dataset should be made aware.

This submission continues to follow the speed technology guidance released by the Program Office on August 9, 2012, to review speed tier codes in correspondence with technology of transmission codes. In the April 2012 submission, descriptions were provided in the methodology paper that offered an explanation for any submitted technology of transmission and speed combinations that were outside of the expected value range. That practice continues in this submission as technology and speed combinations are reviewed and scrutinized; any questionable information supplied by providers is reviewed more in depth with the provider to ensure the information is accurately captured or a proper explanation is provided as to why the speed information should be submitted as supplied even if it falls outside the expected value range.

Also in this submission is a narrative describing the data and coverage estimation of a non-participating provider. While Connect Iowa continues outreach to all providers prior to each submission period, the need to submit broadband service data for all providers regardless of their participation is evident as the SBI program continues into this sixth round of data submissions. The submission of this estimated broadband service area for providers that have not supplied data to Connect Iowa is essential in being able to portray a more accurate depiction of the current broadband landscape.

In addition to the requirements mentioned above, please find this methodology paper to be inclusive of the ongoing section pertaining to industry mergers and acquisitions – specifically this section details any and all mergers or acquisitions that have taken place in Iowa since the April 2012 submission. The intent of this updated section is to provide a better understanding of how the broadband provider landscape has changed since the last submission cycle.

This October 2012 semi-annual data update under the SBI Grant Program continues to demonstrate our dedication to implementing the joint purposes of the Recovery Act and the Broadband Data Improvement Act (BDIA) by gathering comprehensive and accurate state-level broadband mapping data, developing state-level broadband maps, aiding in the development and maintenance of the National Broadband Map, and undertaking statewide initiatives for broadband planning.

Broadband Service Availability — Provider Outreach and Verification

This data update submission under the SBI program includes datasets for 98.5 percent of the Iowa provider community, or 197 of 200 total providers. There are 196 participating providers and one additional non-participating provider whose estimated coverage areas has been submitted. Of the 196 participating providers, 50 supplied an update to their network or coverage area(s), while 119 have reported no change. The remaining 27 represent providers who previously supplied data but were non-responsive in the October 2012 update effort; therefore their previous dataset is being put forward as part of this compilation. A complete roster by provider depicting participation status and contact record is contained herein. Of the 3 providers that are not represented in the attached datasets, 2 have refused to participate in the voluntary program or were non-responsive to multiple contact attempts, and one provider is currently in some form of progress toward data submission but was not able to submit coverage areas at the time of this submission.

In addition to the facilities-based and middle-mile broadband providers tracked above, this submission contains datasets for three resellers that were able to provide sufficient information on their service area(s) to be included in the data transfer model.

As the aforementioned roster and attached methodology documentation will attest, it is the collective opinion of the Connect Iowa principals that all commercially reasonable efforts were made to account for 100 percent of the known Iowa broadband provider community, pursuant to this semi-annual data update submission.

Connect Iowa has also continued to perform broadband verification activities through several means. In addition to confirmation of service area(s) by each provider, Connect Iowa conducts field validation efforts. To date, 133 (66.50 percent) providers have been validated through field verification activities. Additional details on verification activities are contained within the Field Validation Methodology.

The Connect Iowa website, (www.connectiowa.org), continues to serve a prominent role in the outreach and data collection effort. This program asset provides a way for the general public to participate in the process by offering interactive tools for users to test their connection speed, submit broadband inquiries, or contact a program representative.

As an indicator of stakeholder penetration, the Connect Iowa website encountered 5,426 unique visits during this reporting period (26,431 total to date for the life of the grant awarded on January 1, 2010). Additionally, this pronounced Web activity netted 13 broadband inquiries over this same reporting period (219 grant inception to date). The website also provides access to the My ConnectView™ interactive mapping application, which allows consumers and broadband providers to confirm or dispute the coverage represented on the broadband inventory map. These consumer-initiated actions are facilitated through the Connect Iowa website and the Connect Iowa interactive mapping tool (My ConnectView™) that offer the stakeholders the vehicles to provide information regarding availability in their respective service area, either in affirmation or contest of the reported data represented in the Connect Iowa mapping artifacts. Since the initial data collection and release of corresponding maps, feedback in the form of broadband inquiries has allowed Connect Iowa to identify additional areas that are in need of field validation, which is scheduled as soon as possible.

Community Anchor Institutions

Connect Iowa has established an ongoing mechanism for gathering data on the location and broadband connectivity of Community Anchor Institutions (CAI), in accordance with the data requirements of the SBI NOFA Technical Appendix. Since the April 2012 data submission, the CAI outreach process method has been modified to improve data collection. Specifically, the outreach process is a more focused sector-specific and relationship-oriented approach that generates more responses than general contact.

In conjunction with Iowa Economic Development Authority, outreach was conducted during this data update reporting period by Connect Iowa to continue identification of existing, centralized sources for CAI connectivity data. Additionally, outreach was coordinated to distribute the CAI

survey to institutions throughout the state through multiple methods including a customized online survey available on the Connect Iowa website. During this reporting period Connect Iowa has developed a number of new relationships with statewide associations such as Iowa Library Services, Iowa Department of Public Safety, Association of Community Colleges and Iowa League of Cities, to promote the importance of broadband connectivity at anchor institutions and participation in this data collection process. It became apparent that these relationships are beneficial to the entire success of the Grant Program, and the CAI engagement is a logical extension of new and existing relationships. Connect Iowa will continue to build upon these new relationships over the coming months and utilize its contacts throughout the state to collect data and raise awareness of this project.

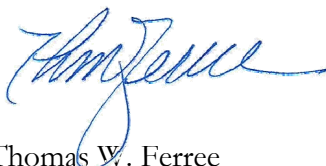
In addition to fostering and building relationships with state agencies, associations, and organizations, Connect Iowa has also developed a sector-specific calendar that supports CAI outreach as well as research and communications efforts. This focused approach allows a corporate commitment to capturing CAI data in addition to developing meaningful sector-specific content.

Connect Iowa is also working hard to clarify CAI information associated with wireless broadband. NTIA has requested in-depth questioning of CAI listing a wireless broadband service as their sole form of connectivity. This follow-up allows us to better understand the reason for adopting the wireless broadband service.

From our work in Iowa, as well as other states, we recognize the great value of this data to future collaboration efforts within the state as well as its value to the National Broadband Map. We plan to continue to bring best practices to the Connect Iowa efforts, along with an investment of both human and technical resources required to reach our goal of increasing the data that is secured and reported as part of this process.

The Connect Iowa program exists to improve data on the deployment and adoption of broadband services and to assist in the extension of broadband technology across all regions of the great state of Iowa, as well as the United States and its territories through contribution to the National Broadband Map. We look forward to the continuing work ahead and improving upon our data collection methods.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Tom Ferree', with a stylized flourish at the end.

Thomas W. Ferree
President and Chief Operating Officer
Connected Nation, Inc.

DATA ACQUISITION: IOWA COMMUNITY ANCHOR INSTITUTIONS METHODOLOGY

In this sixth reporting period of the SBI, Connect Iowa, working in close coordination with the state of Iowa, has established an ongoing mechanism for gathering data on the location and broadband connectivity of Community Anchor Institutions (CAI), in accordance with the data requirements of the SBI NOFA Technical Appendix. Since the April 2012 data submission, the CAI outreach process method has been modified to improve data collection. Specifically, the outreach process is a more focused sector-specific and relationship-oriented approach that generates more responses than general contact.

Connect Iowa has continued to identify and process CAI data obtained through an ongoing statewide outreach campaign. Physical address information continues to be augmented through manual sourcing and geocoded by Connect Iowa through Esri ArcGIS software.

Connect Iowa continues to utilize a customized online survey hosted through SurveyMonkey, with a landing page on the Connect Iowa website that was developed during the first reporting period. This survey, in combination with a customized data-gathering spreadsheet, was distributed on a regular basis to a targeted list of CAI throughout the state as well as organizations and agencies that work closely with the CAI. The distributions were completed with the support of the state client. Connect Iowa will continue to use these data-gathering tools for future targeted outreach efforts throughout the coming months leading up to the next reporting period. These materials are customized to fit the CAI categories as defined in the SBI NOFA.

The survey can be accessed at this link:

<http://www.surveymonkey.com/s/RRZ9KHC>

In addition to the survey, Connect Iowa has developed a number of new relationships with statewide associations such as Association of Community Colleges, Iowa Department of Public Safety, Iowa League of Cities, and Iowa Library Services, to promote the importance of broadband connectivity at Community Anchor Institutions and participation in this data collection process. It is apparent that these relationships are beneficial to the entire success of the grant program, and the CAI engagement is a logical extension of new and existing relationships. Connect Iowa will continue to build upon these new relationships over the coming months and utilize its contacts throughout the state to collect data and raise awareness of this project.

In addition to fostering and building relationships with state agencies, associations, and organizations, Connect Iowa has also developed a sector-specific calendar that supports CAI outreach as well as research and communications efforts. This focused approach allows a corporate commitment to capturing CAI data in addition to developing meaningful sector-specific content.

Connect Iowa conducts significant research as part of an ongoing process to identify existing, centralized sources for CAI connectivity data. In tandem with these efforts to identify existing data, Connect Iowa continues to identify key CAI contacts in an effort to distribute and promote the online survey and raise awareness of the importance of CAI broadband connectivity. Also, when

possible, Connect Iowa works with the Iowa Economic Development Authority to identify existing relationships that can support CAI outreach.

Connect Iowa has an ongoing mission to educate CAI throughout the state on the importance of participating in the project. Participation by these institutions will raise awareness about the importance of broadband connectivity and the need to report the requested data for inclusion on the National Broadband Map.

The greatest challenge with collecting CAI data continues to be educating the CAI about the Connect Iowa project as well as self-awareness of their own CAI connectivity (specifically upload and download speeds). Connect Iowa will continue to research key CAI organizations and agency contacts in an effort to raise awareness of this project among CAI. When applicable, the Iowa Economic Development Authority will continue to be briefed on the current CAI data and provided information so it can assist with outreach and promotion within the state.

A CAI summary of all processed and submitted data is provided below:

CAI Type	Total	Physical Address	Lat/Long	Technology of Transmission	Download Speed	Upload Speed
K-12 Schools	1853	1853	1844	121	121	123
Libraries	602	602	600	313	399	233
Healthcare	177	177	177	68	60	60
Public Safety	1,174	1,174	1,170	73	65	66
Higher Ed Institutions	105	105	102	30	30	30
Other Government	678	678	676	297	251	280
Other Non-Government	3	3	3	1	2	2
Total	4,592	4,592	4,572	903	928	794

During the coming months, CAI data collection will be supported by regular reporting to the Connect Iowa team. The CAI data is proving an invaluable resource to all components of the Connect Iowa effort. The data identifies potential local champions, sector trends, and opportunities for improvement as well as opportunities to educate CAI not familiar with their current connectivity.

SBI DATA SUBMISSION METHODOLOGY

The submission of the broadband dataset for October 1, 2012, is contained within the SBI Data Transfer Model and additional components as released on the Grantee Workspace on August 9, 2012. Connected Nation (CN) has reviewed all literature that relates to the release and use of this data transfer model and recognizes that it does not replace or dictate how data is stored, processed, or displayed for the state, as it is meant primarily as a means to transfer the broadband data from all states and territories and populate the National Broadband Map in a seamless fashion.

Connected Nation has complied with the following guidance documents published by NTIA:

- Technical Mapping Guide, as released on the Grantee Workspace on March 24, 2011, was followed to ensure the completeness and validity of the submission through completion steps and checklists, completing the DataPackage spreadsheet, uploading broadband datasets into the Data Transfer Model, and checking the dataset using the SBDD_CheckSubmission receipt process.
- Naming Conventions and Category of End User, as released on the Grantee Workspace on March 26, 2012, was followed to ensure the consistency of individual file and zip package naming.

In addition to the methodologies contained herein, the Changes and Corrections documentation, as well as the DataPackage.xls containing contact information, the data dictionary, and a provider summary table, the following feature classes are submitted within the SBI Data Transfer Model for the state of Iowa.

Inventory of Deliverables, Connect Iowa: October 1, 2012

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Appendix A: 3(b)	BB_ConnectionPoint_MiddleMile	Broadband Service Infrastructure Middle-Mile and Backbone Interconnection Points.
Appendix A: 4	BB_Service_CAInstitutions	Community Anchor Institutions-Listing.

The provider data collected by CN on behalf of the state of Iowa have been formatted per the given specifications and uploaded into the appropriate feature classes of the SBI Data Transfer Model. Wireline availability is contained within census blocks and road segments, wireless availability is contained as polygons of coverage areas, and middle-mile connections and Community Anchor Institutions are contained as point data. All speed data is contained at the census block, road segment, or wireless polygon level of availability. All efforts have been made to comply with formatting, domain, and metadata requirements to include as much information as possible.

Connected Nation has continued outreach to satellite providers on their availability, technology, and speed information, but granular coverage is not yet available. Submitted within the wireless feature class are the satellite companies providing service to Iowa as a polygon of the state boundary. Efforts will continue to collect, process, or otherwise create more granular satellite data based on

availability analyses and guidance received from NTIA. Process development is underway at CN as well to be able to create more granular satellite coverage based on satellite equipment positioning and geographic inputs.

DATASETS FOR IN-KIND MATCH

Connect Iowa received a listing of Community Anchor Institution (CAI) addresses and technology data from the Iowa Communications Network as part of an in-kind match contribution to assist Connect Iowa with its mapping and planning goals - \$25.

IOWA FIELD VALIDATION METHODOLOGY

CN focused a portion of its time on specific validation processes such as:

- conducting random spectrum analysis studies throughout the state using an Avcom PSA-37-XP spectrum analyzer;
- conducting mobile speed tests throughout the state using an iPhone, Android (or other smart phone) as well as provider-specific aircards (Sprint 3G/4G, Clearwire et al);
- identifying pre-selected, provider-submitted wireless transmit tower sites and cross-referencing data about that tower against the Federal Communications Commission (FCC) databases such as Antenna Structure Registration and/or the Universal Licensing System;
- cross-referencing Federal Registration Number data against available FCC Form 477 data as well as the FCC **CO**mmission **RE**gistration **S**ystem (CORES);
- validating provider submitted data (for example: latitude/longitude) using a handheld Garmin eTrex Summit GPS unit or GPS enabled software such as Microsoft Streets and Trips;
- locating physical wire-line attributes (such as Central Offices, Remote Terminals, CATV plant, etc.) and comparing them against provider submitted data; and
- conducting on-net and off-net speed tests using the FCC portal at <http://www.broadband.gov/qualitytest/about/> or using the Ookla Net Metrics enabled speed test utility located on each of CN's program specific websites.

Additionally, CN cross-referenced numerous public documents in order to ensure that all known broadband providers were located and contacted. This included searching membership logs from trade associations (WISPA, WCAI, PCIA, etc.), the Cable Television Fact Book, Public Utility Commission records, Public Service Commission records, Chamber of Commerce, etc.

To date, Connected Nation's staff conducted on-site validation tests in Iowa on the following providers: Ace Telephone Association; Algona Municipal Utilities; Alliance Communications; Alpine Communications; Ambercomm; AT&T Inc.; Atkins Telephone; Aventure Communications; Ayrshire Farms Mutual Telephone Company; Bitwind Communications LLC; Brooklyn Mutual

Telecommunications Cooperative; Butler-Bremer; Cable ONE Inc.; Casey Mutual Telephone Company; Cedar Falls Utilities; Central Scott Telephone; CenturyLink (acquired Qwest Corporation); Chat Mobility; Circle Computer Resources (d.b.a. Cramer IT); Citizens Mutual Telephone Cooperative; City of Hawarden; Clarence Telephone Company; Clearwire Corporation; CML Telephone Cooperative Association of Meriden, Iowa; Colo Telephone Company; Community Cable Television Agency of O'Brien County; Community Digital Wireless; Complete Communication Services; Coon Rapids Municipal; Coon Valley Cooperative Telephone; Cooperative Telephone Company; Cooperative Telephone Exchange; Cornbelt Telephone; Cumberland Telephone; Danville Mutual Telephone Company; East Buchanan Telephone Cooperative; Ellsworth Cooperative Telephone Exchange; Evertek Enterprises; Farmers & Merchants Mutual Telephone Company; Farmers Cooperative Telephone Company-Dysart; Farmers Mutual Cooperative Telephone Company – Harlan; Farmers Mutual Telephone Company-Jesup; Farmers Telephone Company-Essex (also d.b.a. Heartland Net); Farmers Mutual Telephone of Stanton; Fenton Co-Op Telephone Company; FiberComm LC; Frontier Communications Corporation; Goldfield Access Network; Grand Mound Cooperative; Grand River Mutual Telephone Corporation; Griswold Cooperative Telephone; Grundy Center Municipal Utilities; Harlan Municipal Utilities; Hickory Tech; Hubbard Cooperative Telephone Association and Cable; Huxley Communications Cooperative; I-35 Telephone Company; IAMO Telephone Company; ImOn Communications; Internet Consulting Services LLC; Internet Solver, Inc.; Iowa Telecom Service Inc.; JAB Wireless (formerly d.b.a. KeyOn Communications, Dynamic Broadband); Jefferson Telephone Company; Junction Telephone; Kalona Cooperative Telephone Company; KDSC Inc.; Killduff Telephone; LaPorte City Telephone Company; Laurens Municipal Communications Utility; Leap Wireless International; Lenox Municipal Utilities; LoganNet; Lone Rock Cooperative Telephone Company; Long Lines; Mahaska Communications Group; Manning Municipal; Marne and Elkhorn Telephone; Martelle Telephone; Massena Telephone Company; MCC Iowa (d.b.a. Mediacom Iowa LLC); Mediapolis Telephone Company; MidIowa Net; Millford Cable TV Inc.; Minburn Communications; Minerva Valley Telephone Cablevision, Inc.; Muscatine Power & Water (d.b.a. MachLink); Mutual Telephone Company; Mutual Telephone Company of Morning Sun Iowa; NetConx; Nexgen Integrated Communications, LLC; Northern Iowa Telephone Company; Northwest Telephone Company; Ogden Telephone Company; Panora Communications Cooperative; Partner Communications Cooperative; Prairie iNet; Premier Communications; Radcliffe Telephone Company, Inc.; Readlyn Telephone; Reasnor Telephone; RingTel Communications; River Valley Telecommunications Coop.; Royal Telephone Company; Ruralwaves Wireless Internet; Sac County Mutual Telephone; Scranton Telephone Company; Sharon Telephone Company; SpeedNet LLC; Spencer Municipal Utilities; Sprint Nextel Corporation; Sully Telephone Association; Superior Telephone Cooperative; Swisher Telephone; Templeton Telephone Company; Terril Telephone Cooperative; T-Mobile USA; Traer Municipal Utilities; U.S. Cellular; USA Communications (d.b.a. Farmers Mutual Telephone Cooperative-Shellsburg); Van Buren Telephone Company Inc.; Verizon Communications Inc.; Villisca Farmers Telephone Company; Walnut Telephone Company; Webster-Calhoun-Cooper Telephone Association; Wellman Cooperative Telephone Association; West Liberty Telephone Company (also d.b.a. Cloudburst 9 LLC and Liberty Communications); Western Iowa Networks; Western Iowa Telephone Association; Windstream (d.b.a. Iowa Telecom Services); Woolstock Mutual Telephone; and WTC Communications, Inc.

In addition to the field verification tests that have been conducted, Connected Nation has also conducted work in the field to collect information for the Non-Participating Provider RuralWaves Wireless Internet, which, by nature of the methodology required for this collection, is also included in the above list.

From program initiation through this reporting period, CN has completed in-the-field validation testing against 133 companies (out of a universe of 200 viable providers) totaling 66.50 percent within the state of Iowa. This percentage also considers the non-participating provider (NPP) records submitted to NTIA for RuralWaves Wireless Internet as may be contained herein (see “Data Submission and Coverage Estimation of Non-Participating Provider” below).

CN has also continued to review provider datasets for accurate speed information, platform listings, and other intricacies that may fall outside of the standard SBI Data Transfer Model parameters, as published on the NTIA Grantee Workspace on August 9, 2012. Any providers whose submitted coverage and attributes are anticipated to come into question have been further reviewed and confirmed; details on a case-by-case basis are presented below.

Alpine Communications, LC

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 15 Mbps service; screenshot below.

Package	Speed	Monthly Prices
Silver	Up to 300 kbps	\$28.95
Fusion Gold	Up to 6MB/500kbps	\$39.95
Gold	Up to 3MB/512kbps	\$39.95
Fusion Platinum	Up to 12MB/1MB	\$49.95
Platinum	Up to 6 MB/512kbps	\$49.95
Fusion Diamond	Up to 15MB/3MB	\$99.95
Diamond	Up to 12MB/1MB	\$99.95

Blue Earth Valley Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 15 Mbps service; screenshot below.

Surf the Internet at speeds from 1Mb to 15Mb/second. All plans allow for multiple users at the same location, business or residential. Stop wasting time waiting for web sites and files to download and see the benefits of BEVCOMM High Speed Internet today!

BTC, Inc.

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 12 Mbps service; screenshot below.

Community	256K	1Mbps	3Mbps	5Mbps	8Mbps	10Mbps	12Mbps
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Cascade Communications Group

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 12 Mbps service; screenshot below.

ZOOM WARP SPEED

Up to 1 Mbps Upload/12 Mbps Download
For just \$64.95/month*

Central Scott Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 20 Mbps service; screenshot below.

Residential High-Speed Internet Service

Connection speeds up to 20 Mbps

CenturyTel, Inc.

Issue: DSL platform with maximum advertised download speed in tiers 7, 8, and 10, higher than expected value range for the technology.

Resolution: Provider website advertises 25 and 40 Mbps service; screenshot below.



The screenshot displays two service options side-by-side. Each option features a 'Connection Speeds up to' header, a speed value (25 Mbps or 40 Mbps), and a '\$50 PREPAID CARD' graphic. Below the speed, it says '(where available)' and 'Fully powered for virtually any Internet task, work or play.' (for 25 Mbps) or 'Our ultimate Internet offering' (for 40 Mbps). Both plans show a 4-star rating and a link to 'See all customer reviews:'. A speed comparison section shows a '4MB music file (estimated download time)' with a timer icon and a bar chart. For 25 Mbps, the time is 2 seconds; for 40 Mbps, it is 1 second. Both sections end with a 'Start Now' button.

Service Plan	Connection Speed	Download Time (4MB file)
25 Mbps	25 Mbps	2 seconds
40 Mbps	40 Mbps	1 second

Farmers Mutual Telephone – Stanton

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 10 mbps service; screenshot below.

10 Mb and customer speeds are also available. Call for details!

Farmers Mutual Telephone – Nora Springs

Issue: Technology of transmission code 40 with maximum advertised download speed in tier 8, lower than expected value range for the technology.

Resolution: Provider confirmed that they offer tier 8 speeds on DOCSIS 3.0.

Hawkeye Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider confirmed that 12 Mbps service is available, but speeds are not advertised on the website.

Jab Wireless

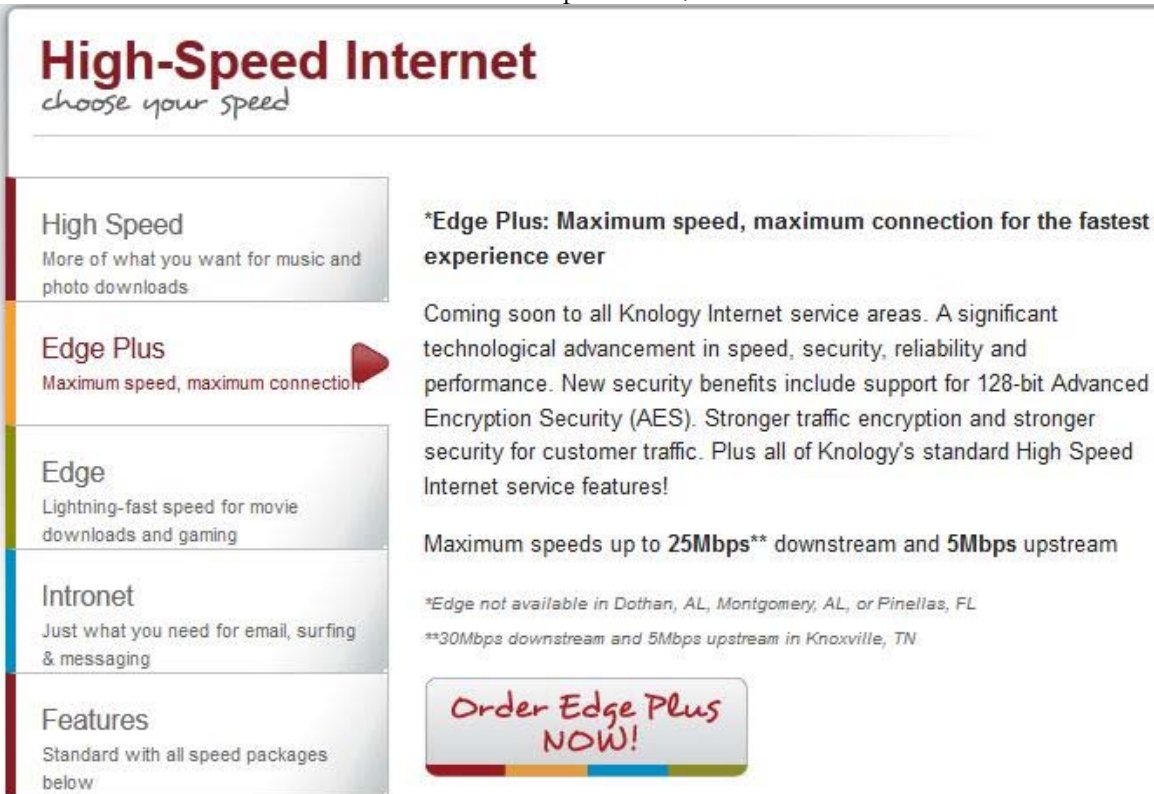
Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider confirmation was not received prior to submission; Jab Wireless acquired the KeyOn service area and neither advertises the speeds on their websites.

Knology of the Plains, Inc.

Issue: Technology of transmission code 40 with maximum advertised download speed in tier 8, lower than expected value range for the technology.

Resolution: Provider website advertises 25 Mbps service; screenshot below.



The screenshot shows the Knology High-Speed Internet website. The header reads "High-Speed Internet" with the tagline "choose your speed". On the left, there is a vertical menu with five options: "High Speed" (More of what you want for music and photo downloads), "Edge Plus" (Maximum speed, maximum connection), "Edge" (Lightning-fast speed for movie downloads and gaming), "Intronet" (Just what you need for email, surfing & messaging), and "Features" (Standard with all speed packages below). The "Edge Plus" option is highlighted with a red arrow. To the right of the menu, there is a section for "Edge Plus" with the text: "*Edge Plus: Maximum speed, maximum connection for the fastest experience ever". Below this, it says "Coming soon to all Knology Internet service areas. A significant technological advancement in speed, security, reliability and performance. New security benefits include support for 128-bit Advanced Encryption Security (AES). Stronger traffic encryption and stronger security for customer traffic. Plus all of Knology's standard High Speed Internet service features!". Further down, it states "Maximum speeds up to 25Mbps** downstream and 5Mbps upstream". Below this, there are two footnotes: "*Edge not available in Dothan, AL, Montgomery, AL, or Pinellas, FL" and "**30Mbps downstream and 5Mbps upstream in Knoxville, TN". At the bottom right, there is a button that says "Order Edge Plus NOW!" in red text.

La Motte Telephone Company, Inc.

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider confirmed that 10 Mbps service is available, but they have not updated their website yet.

Marne & Elk Horn Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider confirmed that 10 Mbps service is available, but they do not advertise it on their website.

Northern Iowa Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 15 Mbps service; screenshot below.

Download	128K	3 Meg	8 Meg	15 Meg
Upload	128K	384K	512K	1 meg
Static IP	\$10.00	\$10.00	\$10.00	\$10.00
Filtering	\$2.00	\$2.00	\$2.00	\$2.00

Osage Municipal Utilities

Issue: Technology of transmission code 41 with maximum advertised download speed in tier 8, higher than expected value range for the technology.

Resolution: Provider website advertises 25 Mbps service; screenshot below.

Speed	Residential	Business
Lite (1 mbps/512 kbps)	\$29.95	\$29.95
Plus (10/2 mbps)	\$45.95	\$55.95
Premium (15/4 mbps)	\$65.95	\$75.95
Extreme (25/10 mpbs)	\$99.95	\$249.95

Palmer Mutual Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 10 Mbps service; screenshot below.

Monthly Fee - Residential 10 Mb (Residential customers ONLY)	\$44.95
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Peoples Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 10 Mbps service; screenshot below.

10 Mbps	\$59.95
10 MBps + NU-Basic TV	\$71.90
10 Mbps + NU-Entertainment TV	\$104.90
10 Mbps + NU-Variety TV	\$109.90

River Valley Telecommunications Coop

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider representative confirmed that tier 7 service is available, but they are in the process of updating their website to reflect the upgraded speeds.

Spiral Solution and Technologies

Issue: Fixed wireless platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 10 Mbps service; screenshot below.

Extreme
\$49.99 per month
10.0 mbps download speed

3.0 mbps upload speed

T-Mobile USA, Inc.

Issue: Mobile wireless platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website confirms that download speeds greater than tier 6 are available; screenshot below.

T-Mobile customers with 4G phones are already experiencing data speeds that are comparable to or faster than the speed of a home broadband network. And with recent improvements to our 4G network-doubling our theoretical download speeds-we're giving our customers enhanced 4G data speeds. We've seen average download speeds on our HSPA+ 42 Mbps-capable data stick approaching 10 Mbps with peak speeds of 27 Mbps, and download speeds approaching 8 Mbps with peak speeds of 20 Mbps on our upcoming HSPA+ 42 Mbps-capable smartphones.

Terril Telephone Cooperative

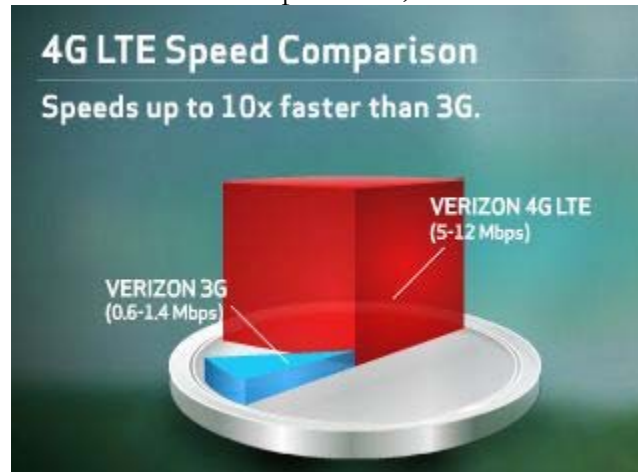
Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Confirmed with provider that tier 7 service is available, but website has not yet been updated.

Verizon Wireless

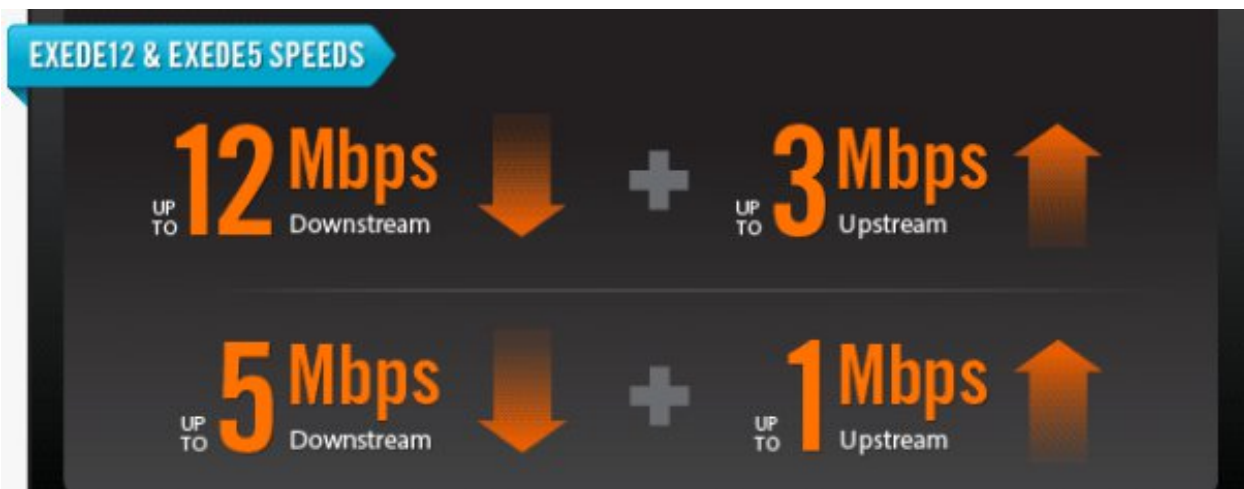
Issue: Mobile wireless platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 12 Mbps service; screenshot below.

**ViaSat, Inc.**

Issue: Satellite platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 12 Mbps service; screenshot below.



West Iowa Telephone Company

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 20 Mbps service; screenshot below.

RURAL AREAS

	Breeze	Zip	Whiz	WOW	Crusin'	Bazinga
Download Speeds Up To	128 kbps	1.5MB	3MB	5MB	10MB	20MB
Upload Speeds Up To	64 kbps	768 kbps	1.5MB	2.5MB	2.5MB	2.5MB

Windstream

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 12 Mbps service; screenshot below.

See which of our speeds matches your online activities. Choose the right Internet speed (WATCH VIDEO)	3 Mbps (Basic Use)	6 Mbps (Most Popular)	12 Mbps (Fastest Option)
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WTC Communications, Inc.

Issue: DSL platform with maximum advertised download speed in tier 7, higher than expected value range for the technology.

Resolution: Provider website advertises 10 Mbps service; screenshot below.

Here are our new Internet speeds and pricing:

Download	Upload	Price
1 Mbps	512K	34.95
5 Mbps	1 Mbps	49.95
7 Mbps	1 Mbps	64.95
10 Mbps	2 Mbps	79.95

DATA SUBMISSION AND COVERAGE ESTIMATION OF NON-PARTICIPATING PROVIDER

As part of its ongoing broadband mapping efforts, CN has developed a series of processes with the goal of submitting coverage estimation mapping data to NTIA for every known and qualifying last-mile broadband provider, regardless of platform type (cable modem, DSL, fixed wireless, etc.). This state specific collection of coverage estimation methodology papers (see Appendix A) demonstrates the estimated broadband service territory for the providers in this state that have either been non-responsive or that have refused to participate in the SBI mapping initiative.

ACCURACY AND VERIFICATION: PROVIDER VALIDATION METHODOLOGY

Broadband providers maintain their service area data in many different formats, all in varying levels of complexity and granularity. In order to ensure that the data required by the NTIA is standardized across all providers and that it is as accurate as possible, CN translates and formats the data that providers are able to supply into a GIS shapefile and produces maps for the provider to review. The resulting map(s) and review process allow for providers to see their service area in a geographic format – for some providers, this is the first time they have seen maps of their broadband service area. Having the mapped service area allows providers to quickly identify any issues that appear in the data representation, whether the issue is in the data translation into a GIS format or from the original data collection and submission. Often data is provided from various sources and through the review and revision process, local engineers who operate the networks and work in the field are able to ensure that the tabular data that has been submitted is accurate and represents the real-world network extent. Any issues in how the service area is represented on the map(s) are remedied by CN, whether they are additions, removal of service, or any other revisions. Revised maps of service area representations are sent to the provider for review and approval; CN will revise data and return maps as many times as necessary until the provider is in agreement that the map represents their service area as accurately as possible. Once the review process has been completed and final approval of the data is provided, the data is deemed ready for NTIA submission.

Once the data collection has been aggregated at a statewide level, static maps of statewide and county-level availability are produced and made publicly available. In addition, consumers can visit the interactive online tool, My ConnectView, to create customized views of broadband service areas and analyze corresponding demographic information. Leveraging broadband service data on various platforms allows for public users, providers, and other stakeholders to review, scrutinize, and provide feedback on the represented data. This feedback becomes a validation method in itself as consumers submit inquiries to CN either affirming where service is not available or identifying areas where broadband service is shown on the map, but in actuality is not available. This allows for a follow-up to providers regarding revisions to the data as it is represented; it also allows for CN to identify locations where on-site visits may be necessary to complete field validation of available services. Public feedback on all forms of mapping products serves as a localized validation method for provider-supplied information and allows CN to resolve inaccuracies as they are identified to ensure that only the highest quality information is provided to stakeholders.

Additionally, non-participating provider narratives that were submitted in previous mapping cycles are subjected to the same level of scrutiny. Occasionally, a provider may elect to voluntarily participate (thus eliminating the need for future data estimation activities in the field). However, more often than not, the NPP narrative is updated with a combination of data gleaned from the provider's website, data obtained through FCC research and/or data collected/verified in the field by a CN staff engineer.

Estimates derived from provider-validated data indicate that approximately 2.02 percent of Iowa households do not have terrestrial fixed broadband service available, and approximately 0.01 percent of Iowa households have neither mobile nor fixed broadband service available.

Within rural areas of the state, results derived from provider-validated data indicate that approximately 3.65 percent of rural Iowa households do not have terrestrial fixed broadband service available, and approximately 0.01 percent of rural Iowa households have neither mobile nor fixed broadband service available. Please note that the availability estimates presented are based on Census 2010 household information.

The estimates above, in accordance with NTIA's definition of available broadband service as specified in the SBI NOFA, include broadband service with download speeds of at least 768 Kbps and upload speeds greater than 200 Kbps.

In addition, due to the nature of the SBI data collection methodology as defined by the NTIA and based on both census block geographic units and street segment data, the estimates of broadband availability derived from provider-validated data may include an overstatement of the actual number of households with broadband availability. Under the census block-based data collection method, a provider will typically report broadband availability for an entire census block whether its network is present across the whole or only a subset of that census block. This potential overestimation at the census block level can be amplified as the data is aggregated across the entire state.

WIRELESS METHODOLOGY

Broadband Service Availability in Provider's Service Area Wireless Services Not Provided to a Specific Address

Data solicited from a fixed wireless provider to create propagation models include, but are not limited to:

1. The name of the structure.
2. Whether the transmitting device is operational or proposed.
3. The maximum advertised downstream speed, the maximum advertised upstream speed.
4. The typical downstream speed, the typical upstream speed (peak periods for both).
5. The frequency range of spectrum being used (as prescribed by NTIA). This may include (but is not limited to) spectrum authorizations identified within the Federal Communications Commission (FCC) Universal Licensing System (ULS) database or located on the FCC's Spectrum Dashboard. This research often proves to be exceptionally effective when estimating the coverage area of an NPP.
6. The primary population center(s) being served (for geopolitical boundary reference).
7. The physical address of the transmit site (in the event latitude/longitude is unavailable from the provider this allows a quick reference point for geocoding).
8. Latitude in either Degrees, Minutes, and Seconds and/or in Decimal Degrees (typically received as NAD 27 or NAD 83).
9. Longitude in either Degrees, Minutes and Seconds and/or in Decimal Degrees (typically received as NAD 27 or NAD 83).

10. Antenna pattern (e.g. omni-directional, 180°, 120°, 90°, etc.).
11. Azimuth of antenna (e.g. 360° with magnetic declination if known).
12. Approximate transmit radius (in feet, miles, or kilometers).
13. Polarity of transmit antenna (Vertical or Horizontal).
14. Transmit antenna gain (in dBi).
15. Line loss (applicable only to providers using coax, heliax, waveguide or other forms of cabling – excludes power-over-Ethernet devices).
16. Mechanical and/or Electrical beam tilt (if applicable).
17. Equipment Manufacturer (allows easy cross-reference against manufacturer's specification sheet).
18. Power output of the transmitting device (if unknown, FCC standards or manufacturer specifications are applied).
19. AMSL at base of tower site.
20. Antenna centerline AGL (height of antenna above ground level measured at the centerline of the actual antenna).
21. Foliage factors (Evergreens/Deciduous and percent of ground cover).
22. Ground Clutter (primarily used in rural areas to account for foliage and in metropolitan areas to account for types and heights of buildings if known).
23. Average gain of receive antenna.
24. Receive antenna is estimated at height above average terrain (HAAT) of 6.2 meters/20 feet.
25. Federal Registration Numbers (if applicable) which may allow opportunities to cross-reference and/or obtain additional data from the FCC's ULS and the **COM**mission **RE**gistration **S**ystem.

Propagation modeling combines scientific data and empirical mathematical formulation for the characterization of radio wave propagation as a function of frequency, distance, and other conditions. Propagation software(s) typically use the Irregular Terrain Model (also known as Longley-Rice) of radio propagation for frequencies between 20 MHz and 20 GHz. This model is based on electromagnetic theory and statistical analyses of the combination of terrain features and radio measurements, then predicting the median attenuation of a radio signal as a function of distance and the variability of the signal in time and in space. For metropolitan areas, the software can typically be adjusted to use the Okumura-Hata model which accounts for predicting the behavior of cellular transmissions in areas where buildings are the primary obstructions. The resulting product from either model depicts a graphical illustration of the theoretical propagation characteristics of a selected frequency range based on defined variables (receiver sensitivity of the home/mobile device, foliage factor, and digital elevation terrain input).

After converting propagation models into a geospatial format, additional processing is completed to remove the small pixels representing service present in the resulting dataset. These areas are initially created based on the parameters entered in the software from the provider equipment information, the underlying data parameters of elevation, hillshade, etc., and the limitations of the software itself

to display a broadband service area as accurately as possible. Generally, these random pixel striations appear as a result of signal levels reaching the highest elevated points within the prescribed radius. Typically, while this pixilation anomaly shows legitimate areas where signals can be received, these highly elevated points may have exceedingly sparse populations or are entirely void of population. As a result, and congruent to the *Wireless Technology Methodologies and Business Logic* white paper submitted to NTIA on January 20, 2011, all independent pixels representing service that are less than 0.125 square miles in area have been removed from the geospatial representation of each wireless provider.

BROADBAND INQUIRIES METHODOLOGY

CN collects consumer feedback in the form of broadband inquiries (BBIs). These inquiries represent any type of communication received from the public regarding broadband service. Once BBIs are received across the state, this information is overlaid with the broadband availability information which was collected through the SBI program. This allows for a real-world comparison of the broadband landscape to the information received from broadband inquiries. Consumers submitting these inbound comments and/or inquiries are able to provide information regarding five categories: 1) residents who do not have broadband but want it; 2) residents who have broadband but want a different provider; 3) residents who do not have broadband, but the broadband inventory maps indicate that they do; 4) residents who have broadband but want a faster connection speed; and 5) residents who have broadband but want a less expensive service option.

BBIs are submitted frequently by consumers via the Connect Iowa website. Inquiries often seek help to identify local broadband provider options, or to learn when a specific provider may be able to provide service to that consumer. Consumer comments also provide information which may help modify maps with actual service area information. The primary objectives of CN regarding these inquiries are 1) to improve the accuracy of the state maps with submitted consumer information and follow-up field research; 2) to provide broadband options to consumers through cooperation with mapped providers and by facilitating new broadband service options; and 3) to map and analyze information from consumers about areas of unmet broadband demand and alternatives to currently mapped services. A prime example of the second option is the utilization of the Rural Utility Service satellite eligibility tool. By simply entering the consumer's address, the CN engineer can quickly determine if the consumer meets the initial qualification status for BIP satellite subsidies.

New BBIs are assigned to either the GIS department or the Engineering & Technical Services (ETS) team depending on the category entered by the consumer on the website submission form. The GIS or ETS team members respond to each inquiry according to the information requested by the consumer. Many BBIs can be resolved through desktop research; however, if a BBI requires research in the field, the assigned ETS team member conducts such research when performing field validations in the area of the inquiry, or at other such time as is practical and appropriate. GIS and ETS team members respond to and conclude BBIs via telephone contact and/or e-mail communication.

The broadband inquiry process has been implemented in each of the CN state programs with successful results. Altogether CN has received over 18,600 broadband inquiries since 2007, allowing the state programs to evaluate each inquiry for broadband demand and data verification. These inquiries are continuously examined against current broadband availability, updated every six months, to determine if previously unserved households have been expanded to and can now receive broadband at their residence. This database of broadband inquiries has also allowed the CN state programs to aggregate demand in concentrated areas to show providers the exact locations where the population has made it clear that they would purchase broadband if it was made available to them. Providers in the states have responded to this process and have expanded to areas knowing that their investment will be worthwhile. Data verification methods have also proven successful, as the state programs have been able to show those inquiries that indicate the broadband service areas are misrepresented on the map to providers, who then verify where service cannot reach in regard to that residence(s). The broadband coverage in these states has been altered to create a more accurate map based on the inquiries submitted by the public.

During this reporting period, the Connect Iowa project has received a total of 13 inquiries (219 grant inception to date). As more inquiries are submitted to Connect Iowa, a more thorough validation of the broadband landscape can be performed, while also allowing providers to see which areas have a high demand for broadband adoption.

MY CONNECTVIEW METHODOLOGY

My ConnectView is an online, interactive mapping tool for viewing, analyzing, and validating broadband data. Developed using Esri's ArcGIS for Server and Adobe's Flex Framework and hosted and maintained by Connected Nation, My ConnectView is a multi-functional, user-friendly way for local leaders, policymakers, consumers, and technology providers to devise a plan for the expansion and adoption of broadband.

First and foremost, My ConnectView allows consumers to locate their residence and identify providers that offer broadband Internet service to that location. The interactive platform allows for users to build and evaluate broadband expansion scenarios using a wealth of data, including several coverage analysis layers, speed analyses, Community Anchor Institutions, and tools to search and export household demographic information, as well as extract data in GIS, spreadsheet, and/or PDF formats.

My ConnectView also features more interactive data layers and additional tools than ever before to allow the consumer to explore the broadband data. My ConnectView provides consumers with the ability to print, e-mail, and provide feedback on the broadband data displayed on the interactive map. Through the collection of this feedback, a visual demand for broadband is presented. This visualization allows the CN state programs the ability to validate the broadband availability for accuracy. If residents within a region state they are without broadband, but the interactive map shows otherwise, this allows CN to approach the providers within that area in an effort to trim down their coverage to more accurately represent real-world availability on the ground.

The Connect Iowa project launched My ConnectView on April 2, 2012, and has received 1,599 visits this reporting period; to date the interactive mapping applications have received 8,033 visits.

SPEED TEST METHODOLOGY

The 784 speed tests that are represented in the Connect Iowa Speed Test Report during this reporting period (5,347 grant inception to date) are the result of a partnership between CN and Ookla Net Metrics. Utilizing this relationship increases the level of confidence in the data being collected and provides for a far greater sample size than could be collected by a single testing site.

Ookla owns and operates Speedtest.net, as well as develops and deploys speed tests, such as the Connect Iowa speed test website, for partners around the world. This network of sites that is developed and run on its testing technology provides Ookla with a vast dataset that, due to the variability of geographic information collected across the varying speed test sites, is geocoded utilizing Geo-IP technology. This technology allows for tests to be geocoded to points of aggregation, typically larger nodes across provider networks. While there are hundreds of thousands of tests that have been conducted, the level of aggregation is only sufficient for county-level detail due to the test results being located at these larger nodes and not at an absolute location for each speed test.

In an effort to validate broadband data from the Connect Iowa project, speed test information is collected throughout the state. Speed tests provide speed information on the path taken through all networks (a provider's network as well as additional networks) a local machine must connect to in order to reach the host test. The benefit of this collection of speed information is two-tiered. First, it allows for a comprehensive dataset of speeds, while also providing Connect Iowa with the information on where broadband services are available. Second, unlike theoretical speed information which was received through the data collection process, the use of speed tests provide real-world information on the speeds that currently exist within the state of Iowa.

PROVIDERS DEEMED NON-VIABLE

The following list of companies represents the remainder of the broadband provider universe that was originally identified as complete for outreach to begin for the State Broadband Initiative. These providers are not included in the Data Package for the October 2012 submission because they have been deemed non-eligible under the parameters and guidance of the SBI grant program. This list of companies includes, but is not limited to: providers offering service but below the current definition of broadband, those that have gone out of business, technology consulting firms, infrastructure or network construction companies, non-facilities based general resellers, etc.

	Company Name	URL	Comments
1	21Globe, Inc.	n/a	This company is not a broadband provider.
2	360networks	http://www.360networks.com	Acquired by another company.
3	650Net	n/a	This company is not a broadband provider.
4	A 007 Access	n/a	This company is a nonfacilities-based reseller.
5	AAA Internet Service	n/a	This company is no longer in business.
6	Aaccess Network Communications	n/a	This company is not a broadband provider.
7	Access Media 3, Inc.	n/a	This company has no service offerings in Iowa.
8	Access123.net	n/a	This company is not a broadband provider.
9	ACERX.NET	n/a	This company is not a broadband provider.
10	Affinity Wireless Solutions, LLC	n/a	This company was acquired by KeyOn Communications.
11	Airespring, Inc.	http://www.airespring.com/	This company is a nonfacilities-based reseller.
12	Airewaves Broadband, LLC	n/a	This company is no longer in business.
13	AirNet	n/a	This company is no longer in business.
14	American Relay	n/a	This company is not a broadband provider.
15	Arrowheadnet.com	n/a	This company is not a broadband provider.
16	Bannon Communications	n/a	This company is not a broadband provider.
17	bargainisp.net	n/a	This company is not a broadband provider.
18	Barnes City Cooperative Telephone Company	n/a	This company is not a broadband provider.
19	Bel-Net Network Services	n/a	This company is no longer in business
20	Broadband National	http://www.broadbandnational.com/	This company is not a broadband provider
21	BTC	n/a	This company was acquired by Western Iowa Networks.
22	Cable Television	n/a	This company is no longer in business.
23	Calhoun County Electric Co-Op	n/a	This company is not a broadband provider.
24	Camino-Net Internet Services	n/a	This company is not a broadband provider.
25	Cannon Valley Telecom, Inc.	n/a	This company does business in MN.
26	Celito Communications	n/a	This company has no service offerings in Iowa
27	cFree Wireless Network	n/a	This company is no longer in business.
28	CFY-CyberNet	n/a	This company is doing business as Cedar Falls

			Utilities.
29	City of Brookings Telephone Fund	http://www.swiftel.net/	This company is a nonfacilities-based reseller of Sprint.
30	ClearTouch.Com	n/a	This company is no longer in business.
31	Com Link	n/a	This company is no longer in business.
32	CommSpeed Iowa, L.L.C.	n/a	This company was acquired by SpeedNet, LLC.
33	Community Internet Service	n/a	This company is no longer in business.
34	Covad Communications	n/a	This company has no service offerings in Iowa.
35	CyberStorm Wireless	n/a	This company is no longer in business.
36	Deltaforce	n/a	This company is not a broadband provider.
37	deluxehost.com	n/a	This company is not a broadband provider.
38	DGUI	n/a	This company is no longer in business.
39	Dial National	n/a	This company is no longer in business.
40	Dialer.net	n/a	This company is not a broadband provider.
41	Digital Telecommunications, Inc.	n/a	This company is no longer in business.
42	DSL @ Interlync	http://www.interlync.com/	This company is a nonfacilities-based reseller.
43	DTS-NET.COM	n/a	This company is a nonfacilities-based reseller.
44	Dura Cable	n/a	This company is not a broadband provider.
45	Farmers Telephone Company - Batavia	http://www.bataviatelphone.com	This company offers service but it is below the FCC definition of broadband.
46	Fast Dependable Access	n/a	This company is no longer in business.
47	Forbin Wireless	http://www.forbin.net/	This company offers service but it is below the FCC definition of broadband.
48	fyrSTORM Wireless	n/a	This company is no longer in business.
49	Global Crossing Telecommunications, Inc.	http://www.globalcrossing.com	Acquired by another company.
50	Great Lakes Communication Corp.	http://www.glecom.com	This company offers service but it is below the FCC definition of broadband.
51	Hubwest	n/a	This company is not a broadband provider.
52	Hubwest Protected Networks LLC	n/a	This company is not a broadband provider.
53	I Spot ACCESS	n/a	This company is not a broadband provider.
54	Imbris, Inc.	n/a	This company is no longer in business.
55	IMGISP.NET	n/a	This company is not a broadband provider.
56	Incredible Networks	n/a	This company is no longer in business.
57	Indianola Municipal	n/a	This company is not a broadband provider.

	Utilities		
58	Inercom Communications, Inc.	n/a	This company is no longer in business.
59	Interactiveinfo.com Inc.	n/a	This company does business in New York and has no service offerings in Iowa.
60	Inter-County Cable Company	n/a	This company is doing business as Brooklyn Mutual Telecommunications Cooperative.
61	Interlink LC	n/a	This company is no longer in business.
62	Iowa Cable and Telecommunications Association	n/a	This company is not a broadband provider.
63	Iowa City Telecommunications	n/a	This company is not a broadband provider.
64	IowaOne.net	n/a	This company is no longer in business.
65	IPNS	n/a	This company does business in Oregon and has no service offerings in Iowa.
66	iRadical	n/a	No information found for this company.
67	i-rule.net	n/a	This company is no longer in business.
68	ISPartner.net	n/a	No information found for this company.
69	Jenco Speed Web	n/a	This company offers fixed wireless in Ohio and has no service offerings in Iowa.
70	LCSisp.com	n/a	This company is not a broadband provider.
71	LightEdge Solutions, Inc.	n/a	This company is not a broadband provider.
72	Lightyear Network Solutions, LLC	http://lightyear.net/	This company is a nonfacilities-based reseller.
73	Local Link	n/a	This company has no service offerings in Iowa.
74	Longview Communications	n/a	This company has no service offerings in Iowa.
75	MainBoard	n/a	This company has no service offerings in Iowa.
76	Maine Cable and Wireless	n/a	No information found for this company.
77	Manilla Telephone Company	n/a	This company was acquired by Farmers Mutual Telephone Cooperative of Harlan, IA.
78	Maple Leaf Networks	n/a	This company has no service offerings in Iowa.
79	Marcin Company	n/a	No information found for this company.
80	Metropolitan Telecommunications Holding Company	n/a	This company is a nonfacilities-based reseller.
81	MFW Cable	n/a	This company is not a broadband provider.
82	Millenicom Inc.	http://www.millenicom.com/	This company is a nonfacilities-based reseller.
83	Nanomega.Com	n/a	This company is no longer in business.
84	NetAccess, Inc.	n/a	This company is not a broadband provider.
85	NetSpeed Online	n/a	This company is no longer in business

86	New Century Telecommunications	n/a	This company is not a broadband provider.
87	New Edge Network, Inc.	n/a	Acquired by another company.
88	Northwest Internet Services	n/a	This company has no service offerings in Iowa.
89	Northwest ISP	n/a	This company is no longer in business
90	One Communications Corporation	n/a	Acquired by another company.
91	Oneota Net	http://www.oneota.net/wirelessdsl.shtml	This company offers service but it is below the FCC definition of broadband.
92	OpenCom, Inc.	n/a	This company is a nonfacilities-based reseller
93	OrbitCom, Inc.	n/a	This company is a nonfacilities-based reseller
94	Overarch Broadband	n/a	This company has no service offerings in Iowa.
95	Pacific Internet Exchange	n/a	This company is a nonfacilities-based reseller
96	PAETEC Communications, Inc.	http://www.paetec.com/	Acquired by another company.
97	Prairie Communication	n/a	This company is no longer in business.
98	Prairie Fire Internet	n/a	This company is no longer in business.
99	PremoWeb	n/a	This company is not a broadband provider.
100	Professional Computer Solutions	http://www.pcsia.net	This company offers service but it is below the FCC definition of broadband.
101	Quad-Cities Online Broadband Plus	n/a	This company is not a broadband provider
102	RACOM	n/a	This company is not a broadband provider.
103	Rankin Communication Systems	n/a	This company is not a broadband provider.
104	RockRapids.net	n/a	This company is not a broadband provider.
105	S & S Wireless Internet	n/a	This company is no longer in business.
106	Siebring-Kruss Wireless	n/a	This company is no longer in business.
107	Simply Dialup A Metrogeek Company	n/a	This company is not a broadband provider
108	SIRIS	n/a	This company is not a broadband provider.
109	Sling Broadband	n/a	This company has no service offerings in Iowa.
110	Sparkplug Central, Inc.	n/a	This company was acquired by Airband Communications.
111	Speakeasy DSL	n/a	This company is a backhaul provider and a general reseller of DSL; part of a 2010 merger between Covad, Megapath, and Speakeasy.
112	State Wireless	n/a	This company is not a broadband provider.
113	Support Corps of America	n/a	This company is no longer in business.
114	Surferz.Net	n/a	This company is not a broadband provider.

115	T1 Shopper	http://www.t1shopper.com/	This company is not a broadband provider.
116	Total Access Networks, Inc.	n/a	This company is not a broadband provider.
117	TRX, Inc.	n/a	This company is not a broadband provider.
118	TSISP.NET	n/a	This company is no longer in business.
119	Twin Rivers Valley	n/a	This company is no longer in business.
120	United Western Net	n/a	This company is no longer in business.
121	UNUM Telecommunications, Inc.	n/a	This company is no longer in business.
122	VPM Global Internet Services, Inc.	n/a	This company is a nonfacilities-based reseller.
123	WilTel Communications, LLC	n/a	This company was acquired by Level 3 Communications.
124	Wireless Roanoke, Inc.	n/a	This company is no longer in business.
125	wisbin	n/a	This company is not a broadband provider.
126	WispAir	n/a	This company is no longer in business.
127	www.AmericanAngels.com	n/a	This company is no longer in business.
128	YEEZOO.NET	n/a	This company is no longer in business.
129	YLISP (Your Local ISP)	n/a	This company is not a broadband provider.
130	YourT1Wifi.com	n/a	This company has no service offerings in Iowa.

**APPENDIX A: ESTIMATION OF NON-PARTICIPATING PROVIDER:
RURAL WAVES, LLC**

RURAL WAVES, LLC

As part of its ongoing broadband mapping efforts, Connected Nation has developed a series of processes with the goal of submitting mapping data to NTIA for every known and qualifying last-mile broadband provider, regardless of whether the provider has chosen to support and participate in the State Broadband Initiative (SBI) program.

The following narrative provides detail regarding the ongoing data collection and coverage estimation activities related to RuralWaves, LLC (RW) a wireless Internet service provider (WISP), located in Correctionville, Iowa with a service area around Galva, Holstein, Schaller, Early, Correctionville, Washta, Battle Creek, and Anthony, Iowa. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation and site verification techniques that support the underlying data.

Background

CN staff members attempted to obtain the participation of the provider with 25 instances of communication (via telephone and e-mail between April 8, 2010, and December 5, 2011). During the period from May 1, 2012 through August 13, 2012, 7 additional attempts were made to contact the provider; no responses were received.

The Issue


RW by its lack of responsiveness since April 8, 2010, has predicated its unwillingness to participate in the Connect Iowa broadband mapping initiative.

Identification of Provider's Service Plans, Service Area, Legal Name, d.b.a., FRN, and Licensing

CN began has built a file based on research information from the public domain (e.g. provider's website, etc.) and, as time progressed, enriched the file with information obtained through on-the-ground data collection, site verification, and coverage estimation exercises. For example, CN reviewed the provider's website (www.ruralwaves.us) and called the RW office to determine the residential service plans (**Exhibit A**) as 1 Mbps download x 256 kbps upload of the providers' service area (**Exhibit B**). A search for a Federal Registration Number (FRN) on the FCC Commission REgistration System (CORES) system yielded an FRN of 0016095986 (**Exhibit C**) with contact information relative to the owner of the company. Also, to support field validation of access points, the FRN was referenced against the FCC Universal Licensing System (ULS) to identify any spectrum authorizations that may be held by the provider that could supplement the dataset of estimated coverage by isolating and identifying active wireless access points for the service area. This process yielded a 3650 MHz license for Station WQKB927 (**Exhibit D**), Radio Service: NN-3650-3700MHZ with 0 unique locations. Research conducted during this mapping cycle indicates that there has been no change to the provider's service area or maximum advertised speeds.

Exhibit A: Service Plans

CLIENT CITY	ISP	TEST DATE	SERVER	DOWNLO	UPLOAD	LATENCY	ZIP CODE	LOCATION	COUNTY	ADDRESS	CITY
Correctionville	Long Lines Internet	5/18/2010 08:54:17 CDT	Chicago	1422	495	30	51004	Work	Woodbury	301 E Main St	Anthon
Correctionville	Qwest Communications	5/3/2010 14:38:38 CDT	Chicago	535	240	57	51016	Work	woodbury	312 driftwood street	correctionville
Schaller	netINS	5/18/2010 14:32:44 CDT	Chicago	509	498	26	51020	Work	ida	116 S. Man St.	Galva
Schaller	netINS	5/17/2010 10:16:04 CDT	Chicago	1988	525	30	51338	Work	Clay	202 N. Main St.	Everly
Washta	Qwest Communications	4/23/2010 17:31:40 CDT	Chicago	538	241	61	51016	Home	Woodbury	1488 Lenox Ave	Correctionville
Washta	Qwest Communications	5/12/2010 20:52:12 CDT	Chicago	534	79	89	51048	Home	cherokee	231 650th	pierson



RuralWaves® is a high-speed, wireless internet service that works without telephone lines and eliminates the need for a second phone line. This service provides continuous access to the internet in your home, business or farm for educational, economic and entertainment purposes.

RuralWaves® has been providing wireless internet service to homes, farms, and business owners in Galva, Holstein, Schaller, Early, Correctionville, Washta, Pierson, Battle Creek and Anthon since May of 2003. **We currently provide service to over 350 business and residential customers all across northwest Iowa!**

Advantages of wireless internet service include:

- Faster connections;
- Saves you money – no need for second telephone lines;
- Instant emails – no busy signals when you call home or the office;
- Enjoy continuous connections 24 hours a day, 7 days a week, 365 days a year;
- Free local technical support.

How Do I Know if I Can Participate?

Wireless internet service is based on several factors, including the distance from your home or business to our transmission equipment in Galva, Holstein, Schaller, Early, Correctionville, Washta, Battle Creek and Anthon. In general, our service area encompasses a ten-mile radius of our transmission equipment. Our technician will come to your home or business and conduct a FREE site test to determine if you can receive a signal.

What does RuralWaves® cost?

There is a one-time, basic installation fee of \$75.00. Typical monthly service is as follows:

Basic service	\$ 34.99
Residential service	\$ 39.99
Business service	\$ 49.99

Done

Internet 100%

Exhibit B: Service Area



Exhibit C: Federal Registration Number

https://fjall050.fcc.gov/cores Federal Comm... Bing

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avorites Suggested Sites Free Hotmail Web Slice Gallery

C Registration System

[Close Window](#)

Registration Detail	
FRN:	0016095986
Registration Date:	02/12/2007 12:36:00 PM
Last Updated:	
Business Name:	RuralWaves Wireless Internet
Business Type:	Private Sector , Limited Liability Corporation
Contact Organization:	Rural Waves, LLC
Contact Position:	Manager
Contact Name:	August L Bahrke
Contact Address:	515 Sioux Ave Correctionville, IA 51016 United States
Contact Email:	aug@ruralwaves.us
ContactPhone:	(712) 372-4095
ContactFax:	(712) 372-4098

Exhibit D: WQKB927 License Reference

U.S. License - 3650-3700 MHz License - WQKB927 - Rural Waves, LLC - Microsoft Internet Explorer provided by ConnectKentucky

http://wireless2.fcc.gov/ulsApp/ulsSearch/license.jsp?licKey=3008834

File Edit View Favorites Tools Help

U.S. License - 3650-3700 MHz License - WQKB927 - R...

U.S. License

3650-3700 MHz License - WQKB927 - Rural Waves, LLC

[New Search](#) [Refine Search](#) [Return to Results](#) [Printable Page](#) [Reference Copy](#) [Map License](#)

MAIN ADMIN LOCATIONS			
Call Sign	WQKB927	Radio Service	NN - 3650-3700 MHz
Status	Active	Auth Type	Regular
Dates			
Grant	03/24/2009	Expiration	03/24/2019
Effective	03/24/2009	Cancellation	
Area of Operation: N			
Operating Nationwide including Hawaii, Alaska, and US Territories.			
Frequency Bands			
003650.0000000-003700.0000000			
Licensee			
FRN	0016095986 (View Ownership Filing)	Type	Limited Liability Company
Licensee			
Rural Waves, LLC 515 Sioux Ave Correctionville, IA 51016 ATTN Aug Bahrke		P:(712)372-4095 E:aug@ruralwaves.us	
Contact			

Internet 100%

U.S. License - 3650-3700 MHz License - WQKB927 - Rural Waves, LLC - Locations Summary - Microsoft Internet Explorer provided by

http://wireless2.fcc.gov/ulsApp/ulsSearch/licenseLocSum.jsp?licKey=3008834

File Edit View Favorites Tools Help

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FCC Home | Search | Updates | E-Filing | Initiatives | For Consumers | Find People

Federal Communications Commission

Universal Licensing System

FCC > WTR > ULS > Online Systems > License Search [FCC Site Map](#)

3650-3700 MHz License - WQKB927 - Rural Waves, LLC

Locations Summary

[New Search](#) [Refine Search](#) [Return to Results](#) [Printable Page](#) [Reference Copy](#) [Map License](#)

MAIN ADMIN LOCATIONS			
Call Sign	WQKB927	Radio Service	NN - 3650-3700 MHz
0 Total Locations 10 Locations per Summary Page			
No Locations			
0 Total Locations 10 Locations per Summary Page			

U.S. Help	U.S. Glossary - FAQ - Online Help - Technical Support - Licensing Support
U.S. Online Systems	CORES - U.S. Online Filing - License Search - Application Search - Archive License Search
About ULS	Privacy Statement - About ULS - ULS Home

Internet 100%

Preliminary Identification of Provider's Coverage Area

CN extracted the RW service area map directly from the provider's website. Information from that website was utilized to create a Google Earth image overlay (**Exhibit E**). The image overlay was positioned to match the Google Earth base map's roadways, county boundaries, and water bodies. The degree of accuracy of the image overlay was maintained at less than .5 mile (2,640 ft.) to establish a minimum search criteria of a given wireless access point. The provider's service area depiction is represented by the wireless propagation model as shown in Exhibit B. Using the Google Earth overlay each location was examined via an aerial zoom and street level observation to identify possible wireless access point structures at the center points of the studies. The location's center coordinates were inputted into Google Earth and examined utilizing the zoom option of the aerial imagery. A portion of the transmitting locations structures were identified. This process provided a means of establishing coordinates for 10 validation points to identify structures with operational equipment. All 10 locations were entered into the Microsoft *Streets & Trips* mapping application (**Exhibit F**) to develop a route for the validation process.

Exhibit E: Google Earth: Provider's Service Area Image Overlay

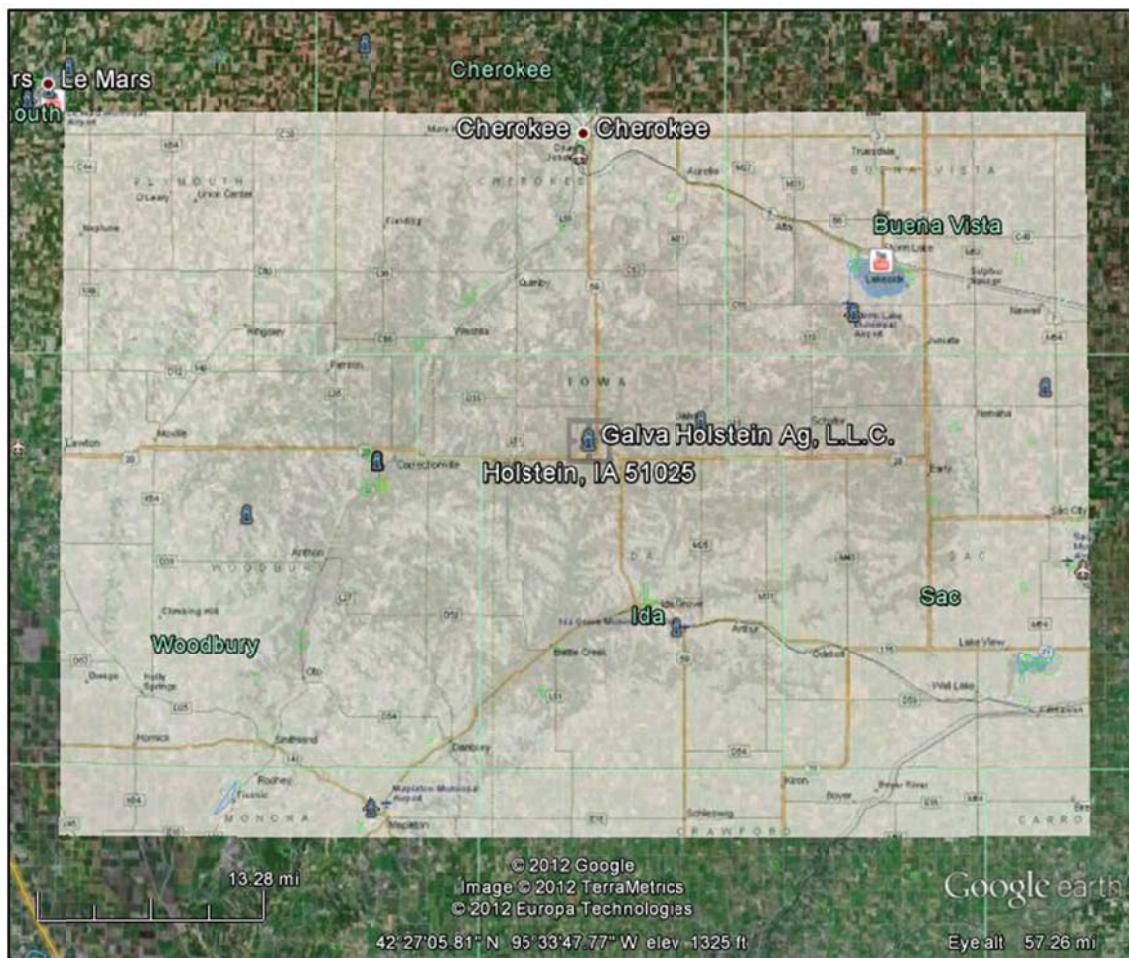
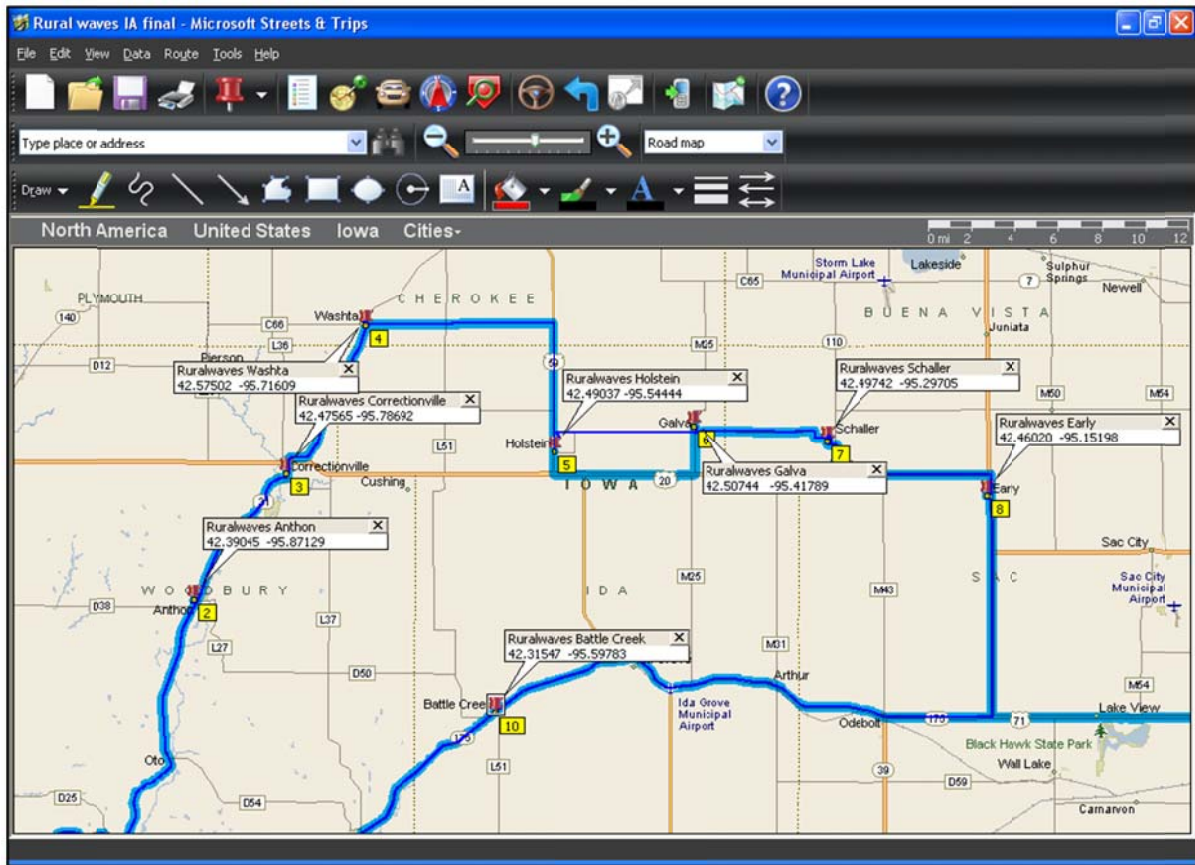


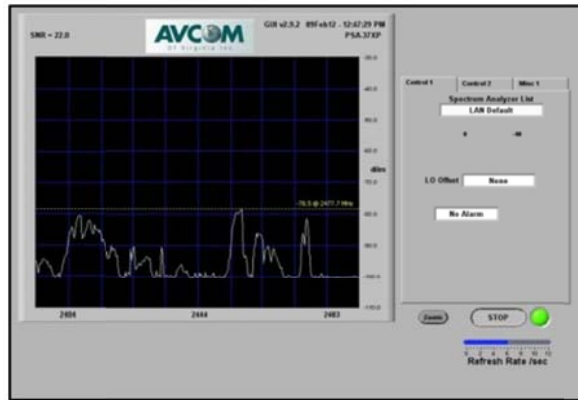
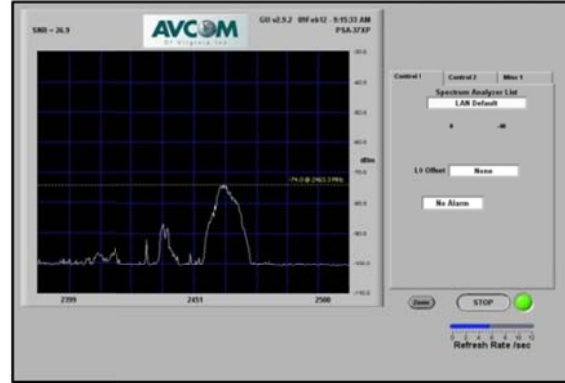
Exhibit F: Validation Points for AP Structures



Testing Techniques

CN staff developed a data collection and site validation route based on information derived from the Google Earth image overlay and data obtained from RW's publicly available coverage on its website. The CN wireless engineer was equipped with an AVCOM PSA-37XP analyzer with RF detection from 1 MHz to 6 GHz and an array of antennas tuned specifically for the 900 MHz, 2.4 GHz, 3.65 GHz, and 5 GHz frequency bands (**Exhibit G**). Each validation point was scrutinized for frequency of operation. A screen image of the operating frequency (or frequencies) was captured; general notes were recorded for each location—approximate antenna height, frequency of operation, antenna type (omnidirectional or directional antenna), and photographs were taken of the access points.

Exhibit G: Field Data for Rural Waves, LLC Office/Hub Locations



Primary Population Center Covered by Service (city, county, etc.)	Transmission Location (water tank tower, silo, rooftop or other structure)	Decimal Degree Conversion (automatically converted here if you completed columns K, L and M)	Decimal Degree Conversion (automatically converted here if you completed columns O, P and Q)	Is the Transmit Antenna Omni-Directional?	Transmit Frequency (MHz)	Polarity (V or H)	Antenna Elevation (feet above ground)
Anthon	Watertower	42.390450	-95.871290	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	70
Correctionville	Elevator	42.475650	-95.786920	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	120
Washta	Elevator	42.575020	-95.716090	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140
Holstein	Elevator	42.490370	-95.544440	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	200
Galva	Elevator	42.507440	-95.417890	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	180
Schaller	Tower	42.497420	-95.297050	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	110
Early	Elevator	42.460200	-95.151980	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	150
Battle Creek	Elevator	42.315470	-95.597830	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	180



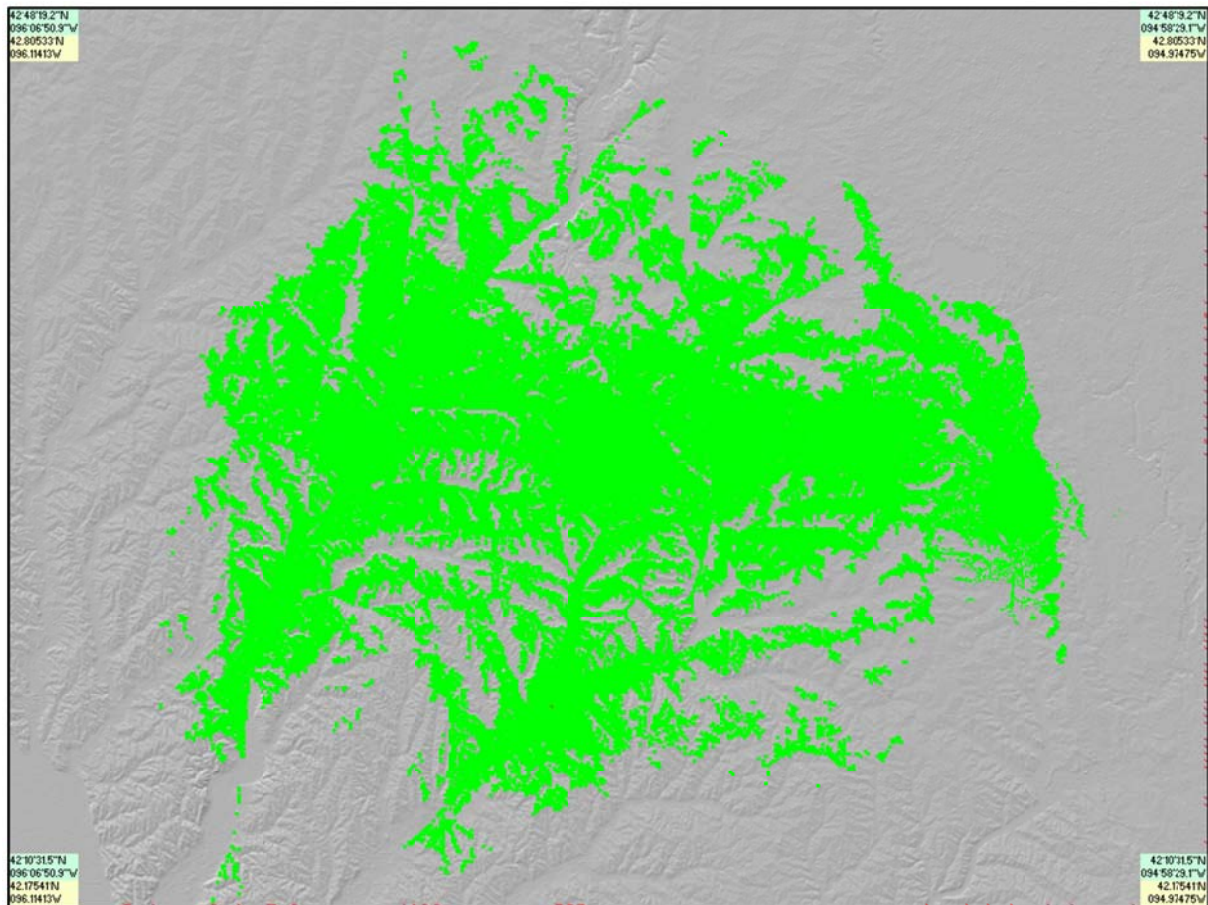
Results and Submission for October 2012

Of the 10 locations visited during the original coverage estimation and validation point route, 8 access points were identified and relative information was logged into the RW field validation notes file (**Exhibit H**). The field data and the publicly available data were transferred to the CN Provider Information file. A composite propagation study was completed based on the field data (**Exhibit I**). Both documents were forwarded to RW as courtesy copies, and the provider was advised that the estimated coverage information would be submitted to Connect Iowa and the NTIA unless the provider notified CN, within 48 hours, of discrepancies of the estimated coverage. The provider did not respond to CN and, as of this date, CN continues to believe that the information is an accurate estimation of the service area of Rural Waves, LLC based on all research conducted from April 1, 2012, to present.

Exhibit H: Field Validation Notes

Test City	Test State	Test County	Location Description	Engineer	(N) Lat Decimal	(-)(W) Long Decimal	Peak Freq	Peak Sig Strength	Spectrum Analyzer	Notes
Anthon	IA	Woodbury	Watertower	John Determan	42.390450	-95.871290	2463	-74	Avcom PSA-37XP	On small water tower on hill low foliage
Correctionville	IA	Woodbury	Elevator	John Determan	42.475650	-95.786920	2454	-76	Avcom PSA-37XP	On elevator low foliage
Washta	IA	Cherokee	Elevator	John Determan	42.575020	-95.716090	2433	-79	Avcom PSA-37XP	On elevator low foliage
Holstein	IA	Ida	Elevator	John Determan	42.490370	-95.544440	2418	-64	Avcom PSA-37XP	On elevator low foliage 900 Also
Galva	IA	Ida	Elevator	John Determan	42.507440	-95.417890	2406	-77	Avcom PSA-37XP	On elevator low foliage Contrend also
Schaller	IA	Sac	Tower	John Determan	42.497420	-95.297050	2460	-79	Avcom PSA-37XP	By school on small tower
Early	IA	Sac	Elevator	John Determan	42.460200	-95.151980	2454	-74	Avcom PSA-37XP	On elevator Low foliage
Battle Creek	IA	Ida	Elevator	John Determan	42.315470	-95.597830	2477	-78	Avcom PSA-37XP	On elevator Low foliage

Exhibit I: RuralWaves Composite Coverage



APPENDIX B: BROADBAND PROVIDER LOG



Broadband Provider Log

Complete	350
Non-Responsive/Refused	5
In Progress	2
Count of Datasets by Status	357
Total Unique Providers Represented	200

Provider Name	Platform	Status	NDA Execution Date	Notes
Alliance Communications Cooperative, Inc.	Fiber	Data Added to Statewide Inventory	1/28/2010	[JUL-17-12 Matthew Brunt] Change: Fiber coverage expanded due to DSL coverage area being converted over to fiber.
AT&T Inc.	Mobile Wireless	Data Added to Statewide Inventory	12/16/2009	[AUG-20-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
CenturyLink	DSL	Data Added to Statewide Inventory	12/4/2009	[AUG-08-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Clear Lake Independent Telephone Company	Fiber	Data Added to Statewide Inventory	5/6/2020	[AUG-06-12 Matthew Brunt] Change: Provider expanded fiber service area.
Clear Lake Independent Telephone Company	DSL	Data Added to Statewide Inventory	5/6/2020	[AUG-07-12 Matthew Brunt] Change: Provider converted portions of DSL coverage area over to fiber.
Communications 1 Network, Inc.	Fiber	Data Added to Statewide Inventory	4/14/2010	[AUG-08-12 Matthew Brunt] Change: Provider expanded fiber coverage.
Community Digital Wireless, LLC	Fixed Wireless	Data Added to Statewide Inventory	5/6/2010	[AUG-06-12 Matthew Brunt] Change: Provider added an additional tower and can now offer tier 6 download speeds in portions of their service area.
Corn Belt Telephone Company	Fixed Wireless	Data Added to Statewide Inventory	2/15/2010	[AUG-14-12 Matthew Brunt] Change: Provider added an additional tower.
CoxCom Inc.	Cable	Data Added to Statewide Inventory	1/29/2010	[AUG-13-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
F&B Communications, Inc.	Fiber	Data Added to Statewide Inventory	2/19/2010	[AUG-01-12 Matthew Brunt] Change: Provider now offers fiber in portions of their coverage areas.
F&B Communications, Inc.	DSL	Data Added to Statewide Inventory	2/19/2010	[AUG-01-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Farmers Mutual Telephone Company - Nora Springs	Fiber	Data Added to Statewide Inventory	1/26/2010	[AUG-23-12 Matthew Brunt] Change: Provider expanded fiber coverage area.
Farmers Mutual Telephone Company - Nora Springs	Cable	Data Added to Statewide Inventory	1/26/2010	[AUG-23-12 Matthew Brunt] Change: Provider converted portion of cable over to fiber.
Farmers Mutual Telephone Company - Nora Springs	DSL	Data Added to Statewide Inventory	1/26/2010	[AUG-23-12 Matthew Brunt] Change: Provider converted portion of DSL over to fiber.
Frontier Communications Corporation	DSL	Data Added to Statewide Inventory	1/22/2010	[AUG-09-12 Matthew Brunt] Change: Provider added one DSLAM location.
Grand Mound Cooperative Telephone Association	Fiber	Data Added to Statewide Inventory		[AUG-22-12 Matthew Brunt] Change: Provider expanded fiber coverage area.
Hawkeye Telephone Company	DSL	Data Added to Statewide Inventory	2/12/2010	[AUG-30-12 Matthew Brunt] Change: Provider can now offer tier 10 download speeds in portions of their coverage area.
Hospers Telephone Exchange, Inc.	Cable	Data Added to Statewide Inventory	1/11/2010	[AUG-01-12 Matthew Brunt] Change: Provider expanded cable coverage and can now offer tier 7 download speeds and tier 3 upload speeds.
Kalona Cooperative Telephone Company	Fiber	Data Added to Statewide Inventory	1/20/2010	[AUG-23-12 Matthew Brunt] Change: Provider expanded fiber coverage.
Kalona Cooperative Telephone Company	DSL	Data Added to Statewide Inventory	1/20/2010	[AUG-23-12 Matthew Brunt] Change: Provider converted portions of DSL coverage area over to fiber.
La Motte Telephone Company, Inc.	Fiber	Data Added to Statewide Inventory	2/16/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer fiber throughout coverage area.
Leap Wireless International, Inc.	Mobile Wireless	Data Added to Statewide Inventory	4/6/2010	[JUL-18-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Lenox Municipal Utilities	Fiber	Data Added to Statewide Inventory	4/20/2010	[JUN-14-12 Matthew Brunt] Change: Provider converted cable coverage area over to fiber.
Miles Cooperative Telephone Association	Fiber	Data Added to Statewide Inventory	5/17/2010	[AUG-21-12 Matthew Brunt] Change: Provider now offers fiber in portions of their coverage areas.
Monarc Technologies	Fiber	Data Added to Statewide Inventory	2/16/2011	[AUG-07-12 Matthew Brunt] Change: Provider expanded fiber coverage area.
Northeast Iowa Telephone Company	Fixed Wireless	Data Added to Statewide Inventory	4/13/2010	[AUG-06-12 Matthew Brunt] Change: Provider added an additional tower and can now offer tier 6 download speeds in portions of their service area.
Spacenet Inc.	Satellite	Data Added to Statewide Inventory		[SEP-12-12 Matthew Brunt] Correction: Initial submission of provider's coverage, but they were in service previously.
Spiral Communications LLC	Fixed Wireless	Data Added to Statewide Inventory		[AUG-22-12 Matthew Brunt] Change: Initial submission for this provider.
Sprint Nextel Corporation	Mobile Wireless	Data Added to Statewide Inventory	1/14/2010	[JUL-18-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
T-Mobile USA, Inc.	Mobile Wireless	Data Added to Statewide Inventory	1/8/2010	[AUG-09-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
United States Cellular Corporation	Mobile Wireless	Data Added to Statewide Inventory	2/15/2011	[AUG-06-12 Matthew Brunt] Change: Provider now offers tier 6 download speed and tier 5 upload speeds to portions of their service area.
USA Communications	Fiber	Data Added to Statewide Inventory	1/27/2010	[JUL-31-12 Matthew Brunt] Change: Provider upgraded a portion of their infrastructure over to fiber, and can now offer tier 7 download speeds and tier 4 upload speeds.
USA Communications	Cable	Data Added to Statewide Inventory	1/27/2010	[JUL-31-12 Matthew Brunt] Change: Provider converted portion of their cable coverage area over to fiber.

Verizon Communications, Inc.	Mobile Wireless	Data Added to Statewide Inventory	12/14/2009	[JUL-18-12 Matthew Brunt] Changes and/or Corrections: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
ViaSat, Inc.	Satellite	Data Added to Statewide Inventory	1/8/2010	[AUG-30-12 Matthew Brunt] Changes: Provider can now offer tier 7 download and tier 5 upload speeds to portions of their service area.
West Liberty Telephone Company	Fixed Wireless	Data Added to Statewide Inventory	1/25/2010	[AUG-21-12 Matthew Brunt] Change: Provider added two fixed wireless towers and now offers tier 6 download speeds.
Western Iowa Networks	Fiber	Data Added to Statewide Inventory	2/22/2010	[AUG-07-12 Matthew Brunt] Change: Provider converted portion of their DSL coverage over to fiber.
Western Iowa Networks	DSL	Data Added to Statewide Inventory	2/22/2010	[AUG-07-12 Matthew Brunt] Change: Provider converted portion of their DSL coverage over to fiber.
Woolstock Mutual Telephone	Fixed Wireless	Data Added to Statewide Inventory	5/19/2010	[AUG-22-12 Matthew Brunt] Change: Provider added two fixed wireless towers.
Butler-Bremer Communications	Backhaul	Backhaul Provider Only Processing Complete	4/20/2010	
Fibernet Communications, LLC	Backhaul	Backhaul Provider Only Processing Complete	3/9/2010	
Sprint Nextel Corporation	Backhaul	Backhaul Provider Only Processing Complete	1/14/2010	
Andrew Telephone Company	DSL	Speed Only Update; Data Processing Complete	1/19/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 6 download speeds.
Butler-Bremer Communications	DSL	Speed Only Update; Data Processing Complete	4/20/2010	[JUL-31-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 6 download speeds.
Butler-Bremer Communications	Cable	Speed Only Update; Data Processing Complete	4/20/2010	[JUL-31-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 6 download speeds.
Butler-Bremer Communications	Fiber	Speed Only Update; Data Processing Complete	4/20/2010	[JUL-31-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 6 download speeds.
Colo Telephone Company	Fiber	Speed Only Update; Data Processing Complete	1/28/2010	[JUL-23-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 7 download and upload speeds.
Complete Communication Services	Cable	Speed Only Update; Data Processing Complete	6/17/2010	[AUG-06-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds.
Complete Communication Services	Fiber	Speed Only Update; Data Processing Complete	6/17/2010	[AUG-06-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds.
Grand River Mutual Telephone Corporation	DSL	Speed Only Update; Data Processing Complete	2/5/2010	[JUL-17-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 3 upload speeds.
Grand River Mutual Telephone Corporation	DSL	Speed Only Update; Data Processing Complete	2/5/2010	[JUL-17-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 3 upload speeds.
Grand River Mutual Telephone Corporation	Fiber	Speed Only Update; Data Processing Complete	2/5/2010	[JUL-17-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 3 upload speeds.
Griswold Cooperative Telephone Company	DSL	Speed Only Update; Data Processing Complete	4/21/2010	[JUN-21-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 5 download speeds.
ImOn Communications, LLC	Cable	Speed Only Update; Data Processing Complete	2/8/2012	[JUN-21-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 8 typical download speeds and tier 4 typical upload speeds.
La Motte Telephone Company, Inc.	DSL	Speed Only Update; Data Processing Complete	2/16/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now provide tier 7 download speeds.
Marne & Elk Horn Telephone Company	DSL	Speed Only Update; Data Processing Complete	2/11/2010	[JUL-27-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 7 download and upload speeds.
New Ulm Telecom, Inc.	DSL	Speed Only Update; Data Processing Complete	3/10/2010	[JUL-17-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds.
Osage Municipal Communications Utility	Cable	Speed Only Update; Data Processing Complete	5/18/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 8 download speeds and tier 7 upload speeds.
Palmer Mutual Telephone Company	DSL	Speed Only Update; Data Processing Complete	1/21/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds.
Prairieburg Telephone Company, Inc	DSL	Speed Only Update; Data Processing Complete	3/25/2010	[JUL-27-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 4 download and tier 3 upload speeds.
Preston Telephone Company	DSL	Speed Only Update; Data Processing Complete	2/5/2010	[JUL-19-12 Matthew Brunt] Correction: Provider made correction to download speed. Speed now set to tier 6 download.
Sac County Mutual Telephone Co.	DSL	Speed Only Update; Data Processing Complete	2/15/2010	[AUG-22-12 Matthew Brunt] Change: Provider now offers tier 3 upload speeds.
Springville Cooperative Telephone Association, Inc.	DSL	Speed Only Update; Data Processing Complete	2/15/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 3 upload speeds.
Sully Telephone Association Inc	DSL	Speed Only Update; Data Processing Complete	4/28/2010	[AUG-10-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 5 download speeds and tier 3 upload speeds.
Van Buren Telephone Co Inc	DSL	Speed Only Update; Data Processing Complete	1/26/2010	[JUL-19-12 Matthew Brunt] Change: Provider upgraded infrastructure and can now offer tier 6 download speeds.
RuralWaves Wireless Internet	Fixed Wireless	No Update-Estimated Coverage Submitted for Non-Participating Provider		
Schaller Telephone Company	DSL	Partial Data Received		[SEP-17-12 Ashley Hitt] Provider supplied speed data, but not spatial coverage. Will work to obtain geographic service area for next submission.
Ace Telephone Association	Backhaul	No Update to Provide	3/8/2010	
Ace Telephone Association	DSL	No Update to Provide	3/8/2010	
Algona Municipal Utilities	Cable	No Update to Provide	2/9/2010	
Algona Municipal Utilities	Fiber	No Update to Provide	2/9/2010	
Alliance Communications Cooperative, Inc.	Backhaul	No Update to Provide	1/28/2010	
Alpine Communications, LC	DSL	No Update to Provide	2/24/2010	
Alpine Communications, LC	Fiber	No Update to Provide	2/24/2010	
Alta Municipal Utilities	Cable	No Update to Provide	5/18/2010	
Arcadia Telephone Cooperative	DSL	No Update to Provide	5/6/2010	
AT&T Inc.	Backhaul	No Update to Provide	12/16/2009	
Aventure Communications	Backhaul	No Update to Provide	4/8/2010	
Aventure Communications	Fixed Wireless	No Update to Provide	4/8/2010	
Ayrshire Farmers Mutual Telephone Company	DSL	No Update to Provide	2/17/2010	
Ayrshire Farmers Mutual Telephone Company	Fixed Wireless	No Update to Provide	2/17/2010	
Bellevue Municipal Utilities	Fiber	No Update to Provide	5/20/2010	
Bernard Telephone Company, Inc.	Backhaul	No Update to Provide	5/19/2010	
Bernard Telephone Company, Inc.	DSL	No Update to Provide	5/19/2010	
Bernard Telephone Company, Inc.	Fiber	No Update to Provide	5/19/2010	
BEVCOMM	DSL	No Update to Provide	6/16/2010	
BitWind Communications, LLC	Fixed Wireless	No Update to Provide		
Board of Water Electric & Communication Trustees of the City of Muskegon	Cable	No Update to Provide	5/14/2010	
Board of Water Electric & Communication Trustees of the City of Muskegon	DSL	No Update to Provide	5/14/2010	
Board of Water Electric & Communication Trustees of the City of Muskegon	Fiber	No Update to Provide	5/14/2010	
Board of Water Electric & Communication Trustees of the City of Muskegon	Fixed Wireless	No Update to Provide	5/14/2010	

Cable ONE Inc.	Cable	No Update to Provide	12/7/2009	
Cascade Communications Company	DSL	No Update to Provide	1/23/2010	
Cascade Communications Company	Fiber	No Update to Provide	1/23/2010	
Casey Mutual Telephone Company	Backhaul	No Update to Provide	5/3/2010	
Casey Mutual Telephone Company	DSL	No Update to Provide	5/3/2010	
Cedar Falls Utilities	Cable	No Update to Provide	6/16/2010	
Cedar Falls Utilities	Fiber	No Update to Provide	6/16/2010	
Center Junction Telephone Company	DSL	No Update to Provide	3/12/2010	
Central Scott Telephone Company, Inc.	DSL	No Update to Provide	4/22/2010	
Central Scott Telephone Company, Inc.	Fixed Wireless	No Update to Provide	4/22/2010	
CenturyLink	Backhaul	No Update to Provide	12/4/2009	
Chat Mobility	Mobile Wireless	No Update to Provide	1/19/2010	
Circle Computer Resources	Fixed Wireless	No Update to Provide	7/6/2010	
Citizens Mutual Telephone Cooperative	DSL	No Update to Provide	2/26/2010	
Citizens Mutual Telephone Cooperative	Fiber	No Update to Provide	2/26/2010	
City of Hawarden	Cable	No Update to Provide	5/20/2010	
Clarence Telephone Company, Inc.	Fiber	No Update to Provide		
CML Telephone Cooperative Association of Meriden, Iowa	Fiber	No Update to Provide	1/25/2010	
Comelec Services, Inc.	Fixed Wireless	No Update to Provide	5/7/2010	
Community Cable Television Agency of O'Brien County	Cable	No Update to Provide	5/5/2010	
Community Cable Television Agency of O'Brien County	Fixed Wireless	No Update to Provide	5/5/2010	
Coon Creek Telecommunications Corp.	DSL	No Update to Provide	2/9/2012	
Coon Rapids Municipal Utilities	Cable	No Update to Provide	4/22/2010	
Coon Valley Co-op Telephone Association, Inc.	DSL	No Update to Provide		
Coon Valley Co-op Telephone Association, Inc.	Fixed Wireless	No Update to Provide		
Cooperative Telephone Company	DSL	No Update to Provide	2/2/2010	
Cooperative Telephone Company	Fixed Wireless	No Update to Provide	2/2/2010	
Cooperative Telephone Exchange	Backhaul	No Update to Provide	2/2/2010	
Cooperative Telephone Exchange	Fiber	No Update to Provide	2/2/2010	
Corn Belt Telephone Company	DSL	No Update to Provide	2/15/2010	
Corn Belt Telephone Company	Fiber	No Update to Provide	2/15/2010	
Cumberland Telephone Company	DSL	No Update to Provide	4/27/2010	
Cumberland Telephone Company	Fixed Wireless	No Update to Provide	4/27/2010	
Danville Mutual Telephone Company	DSL	No Update to Provide		
Dixon Telephone Company	Cable	No Update to Provide	5/5/2010	
Dumont Telephone Company	DSL	No Update to Provide	2/25/2010	
Dumont Telephone Company	Fiber	No Update to Provide	2/25/2010	
Dunkerton Telephone Cooperative	DSL	No Update to Provide	4/15/2010	
Ellsworth Cooperative Telephone Association	DSL	No Update to Provide	1/25/2010	
Evertex Enterprises	Cable	No Update to Provide	2/3/2010	
Evertex Enterprises	Fiber	No Update to Provide	2/3/2010	
Evertex Enterprises	Fixed Wireless	No Update to Provide	2/3/2010	
F&B Communications, Inc.	Fixed Wireless	No Update to Provide	2/19/2010	
Farmers & Merchants Mutual Telephone Company	Fiber	No Update to Provide	5/7/2010	
Farmers & Merchants Mutual Telephone Company	Fixed Wireless	No Update to Provide	5/7/2010	
Farmers Cooperative Telephone Company-Dysart	DSL	No Update to Provide	3/12/2010	
Farmers Mutual Cooperative Telephone Company - Harlan	Cable	No Update to Provide	2/5/2010	
Farmers Mutual Cooperative Telephone Company - Harlan	DSL	No Update to Provide	2/5/2010	
Farmers Mutual Cooperative Telephone Company - Harlan	Fiber	No Update to Provide	2/5/2010	
Farmers Mutual Cooperative Telephone Company - Harlan	Fixed Wireless	No Update to Provide	2/5/2010	
Farmers Mutual Cooperative Telephone Company - Harlan	Fiber	No Update to Provide	5/21/2010	
Farmers Mutual Telephone Company - Jesup	DSL	No Update to Provide	4/20/2010	
Farmers Mutual Telephone Company - Jesup	Fiber	No Update to Provide	4/20/2010	
Farmers Mutual Telephone Company - Nora Springs	Fixed Wireless	No Update to Provide	1/26/2010	
Farmers Mutual Telephone Company of Stanton, Iowa	Backhaul	No Update to Provide	4/9/2010	
Farmers Mutual Telephone Company of Stanton, Iowa	Cable	No Update to Provide	4/9/2010	
Farmers Mutual Telephone Company of Stanton, Iowa	DSL	No Update to Provide	4/9/2010	
Farmers Mutual Telephone Company of Stanton, Iowa	DSL	No Update to Provide	4/9/2010	
FiberComm L.C.	Backhaul	No Update to Provide	2/15/2010	
FiberComm L.C.	DSL	No Update to Provide	2/15/2010	
FiberComm L.C.	Fixed Wireless	No Update to Provide	2/15/2010	
Frontier Communications Corporation	Backhaul	No Update to Provide	1/22/2010	
Goldfield Access Network, L.C.	DSL	No Update to Provide	1/22/2010	
Grand Mound Cooperative Telephone Association	DSL	No Update to Provide		
Grand Mound Cooperative Telephone Association	Fixed Wireless	No Update to Provide		
Grand River Mutual Telephone Corporation	Fixed Wireless	No Update to Provide	2/5/2010	
Grundy Center Municipal Utilities	Cable	No Update to Provide		
Grundy Center Municipal Utilities	Fixed Wireless	No Update to Provide		
Harlan Municipal Utilities	Cable	No Update to Provide	5/5/2010	
Harmony Telephone Company	Fiber	No Update to Provide	1/12/2010	
Heart of Iowa Communications Cooperative	Backhaul	No Update to Provide	1/7/2010	
Heart of Iowa Communications Cooperative	DSL	No Update to Provide	1/7/2010	
Heart of Iowa Communications Cooperative	Fiber	No Update to Provide	1/7/2010	
HickoryTech Corporation	DSL	No Update to Provide	2/2/2010	
Hospers Telephone Exchange, Inc.	DSL	No Update to Provide	1/11/2010	
Hubbard Cooperative Telephone Association and Cable	DSL	No Update to Provide	5/14/2010	
Hughes Network Systems, LLC	Satellite	No Update to Provide	2/5/2010	
Huxley Communications Cooperative	Backhaul	No Update to Provide	1/25/2010	
Huxley Communications Cooperative	DSL	No Update to Provide	1/25/2010	
Huxley Communications Cooperative	Fiber	No Update to Provide	1/25/2010	
I-35 Telephone Company	DSL	No Update to Provide	2/2/2010	
I-35 Telephone Company	Fiber	No Update to Provide	2/2/2010	
I-35 Telephone Company	Fixed Wireless	No Update to Provide	2/2/2010	
IAMO Telephone Company	DSL	No Update to Provide	1/25/2010	
IAMO Telephone Company	Fixed Wireless	No Update to Provide	1/25/2010	
IMU Network Services	Fiber	No Update to Provide	5/10/2010	
IMU Network Services	Fixed Wireless	No Update to Provide	5/10/2010	
Iowa Connect, Inc.	Fixed Wireless	No Update to Provide	5/12/2010	
Jab Wireless, Inc.	DSL	No Update to Provide	6/14/2010	[JUL-10-12 Dwayne Goodman] Jab Wireless acquired all KeyOn Communications, Inc. assets; now becoming a broadband provider for the state.
Jab Wireless, Inc.	Fixed Wireless	No Update to Provide	6/14/2010	[JUL-10-12 Dwayne Goodman] Jab Wireless acquired all KeyOn Communications, Inc. assets; now becoming a broadband provider for the state.
Jefferson Telephone Company	DSL	No Update to Provide	1/22/2010	
Jefferson Telephone Company	Fiber	No Update to Provide	1/22/2010	
Keystone Farmers Cooperative Telephone Company	DSL	No Update to Provide	4/12/2010	
La Motte Telephone Company, Inc.	Fixed Wireless	No Update to Provide	2/16/2010	
La Porte City Telephone Co	DSL	No Update to Provide	2/22/2010	
Laurens Municipal Communications Utility	Cable	No Update to Provide	6/2/2010	
Lehigh Valley Cooperative Telephone Association	Fiber	No Update to Provide	4/16/2010	
LISCO Wireless	Backhaul	No Update to Provide	1/28/2010	
LISCO Wireless	DSL	No Update to Provide	1/28/2010	
LISCO Wireless	Fiber	No Update to Provide	1/28/2010	
Lone Rock Cooperative Telephone Company	DSL	No Update to Provide	2/15/2010	

Mabel Cooperative Telephone Company	DSL	No Update to Provide	4/8/2010
Manning Municipal Communication & Television System Utility	Cable	No Update to Provide	4/22/2010
Manning Municipal Communication & Television System Utility	Fixed Wireless	No Update to Provide	4/22/2010
Marne & Elk Horn Telephone Company	Backhaul	No Update to Provide	2/11/2010
Marne & Elk Horn Telephone Company	Fixed Wireless	No Update to Provide	2/11/2010
Martelle Cooperative Telephone Association	Cable	No Update to Provide	5/5/2010
Martelle Cooperative Telephone Association	DSL	No Update to Provide	5/5/2010
Massena Telephone Company	Backhaul	No Update to Provide	6/18/2010
Massena Telephone Company	DSL	No Update to Provide	6/18/2010
Mediacom Communications Corporation	Backhaul	No Update to Provide	1/12/2010
Mediacom Communications Corporation	Cable	No Update to Provide	1/12/2010
Mediapolis Telephone Company	DSL	No Update to Provide	4/14/2010
Midlwa Net	Fixed Wireless	No Update to Provide	
Midwest Broadband LLC	Fixed Wireless	No Update to Provide	7/6/2010
Miles Cooperative Telephone Association	DSL	No Update to Provide	5/17/2010
Milford Cable TV Inc.	Cable	No Update to Provide	4/21/2010
Minburn Communications	DSL	No Update to Provide	4/7/2010
Minburn Communications	DSL	No Update to Provide	4/7/2010
Minburn Communications	Fiber	No Update to Provide	4/7/2010
Minburn Communications	Fiber	No Update to Provide	4/7/2010
Minerva Valley Telephone Cablevision, Inc.	DSL	No Update to Provide	4/7/2010
Modern Cooperative Telephone Company Inc.	DSL	No Update to Provide	
Mutual Telephone Company	Fiber	No Update to Provide	1/25/2010
Mutual Telephone Company of Morning Sun, Iowa	DSL	No Update to Provide	5/5/2010
Mutual Telephone Company of Morning Sun, Iowa	DSL	No Update to Provide	5/5/2010
Mutual Telephone Company of Morning Sun, Iowa	Fixed Wireless	No Update to Provide	5/5/2010
NetConX, Inc.	Fixed Wireless	No Update to Provide	4/6/2010
Nexgen Integrated Communications, LLC	DSL	No Update to Provide	
Nexgen Integrated Communications, LLC	Fiber	No Update to Provide	
North English Cooperative Telephone Company	DSL	No Update to Provide	5/12/2010
Northeast Iowa Telephone Company	Backhaul	No Update to Provide	4/13/2010
Northeast Iowa Telephone Company	DSL	No Update to Provide	4/13/2010
Northeast Iowa Telephone Company	Fiber	No Update to Provide	4/13/2010
Northern Iowa Telephone Company	DSL	No Update to Provide	1/25/2010
Northwest Telephone Cooperative Association	Backhaul	No Update to Provide	2/17/2010
Northwest Telephone Cooperative Association	DSL	No Update to Provide	2/17/2010
Northwest Telephone Cooperative Association	Fixed Wireless	No Update to Provide	2/17/2010
Ogden Telephone Company	Backhaul	No Update to Provide	3/17/2010
Ogden Telephone Company	DSL	No Update to Provide	3/17/2010
Olin Telephone Company, Inc.	DSL	No Update to Provide	2/23/2010
Onslow Cooperative Telephone Association	DSL	No Update to Provide	2/3/2010
Oran Mutual Telephone Company	DSL	No Update to Provide	2/8/2010
Osage Municipal Communications Utility	Fixed Wireless	No Update to Provide	5/18/2010
Palo Cooperative Telephone Association	DSL	No Update to Provide	5/19/2010
Panora Communications Cooperative	Cable	No Update to Provide	1/29/2010
Panora Communications Cooperative	Cable	No Update to Provide	1/29/2010
Panora Communications Cooperative	Fiber	No Update to Provide	1/29/2010
Panora Communications Cooperative	Fiber	No Update to Provide	1/29/2010
Panora Communications Cooperative	Fixed Wireless	No Update to Provide	1/29/2010
Panora Communications Cooperative	Fixed Wireless	No Update to Provide	1/29/2010
Partner Communications Cooperative	Cable	No Update to Provide	5/15/2010
Partner Communications Cooperative	DSL	No Update to Provide	5/15/2010
Partner Communications Cooperative	Fiber	No Update to Provide	5/15/2010
Prairie iNet	Fixed Wireless	No Update to Provide	3/16/2010
Prairieburg Telephone Company, Inc	Fixed Wireless	No Update to Provide	3/25/2010
Premier Communications	Cable	No Update to Provide	1/25/2010
Premier Communications	Fiber	No Update to Provide	1/25/2010
Radcliffe Telephone Company, Inc.	Backhaul	No Update to Provide	4/26/2010
Radcliffe Telephone Company, Inc.	Fiber	No Update to Provide	4/26/2010
Readlyn Telephone Company	DSL	No Update to Provide	2/23/2010
Readlyn Telephone Company	Fiber	No Update to Provide	2/23/2010
River Valley Telecommunications Coop	DSL	No Update to Provide	3/23/2010
River Valley Telecommunications Coop	Fiber	No Update to Provide	3/23/2010
River Valley Telecommunications Coop	Fixed Wireless	No Update to Provide	3/23/2010
Rockwell Cooperative Telephone Association	Backhaul	No Update to Provide	5/12/2010
Rockwell Cooperative Telephone Association	DSL	No Update to Provide	5/12/2010
Rockwell Cooperative Telephone Association	Fiber	No Update to Provide	5/12/2010
Royal Telephone Company	Fiber	No Update to Provide	2/12/2010
Sac County Mutual Telephone Co.	Backhaul	No Update to Provide	2/15/2010
Scranton Telephone Company	Backhaul	No Update to Provide	2/1/2010
Scranton Telephone Company	DSL	No Update to Provide	2/1/2010
Sioux Valley Rural Television, Inc.	Fixed Wireless	No Update to Provide	6/7/2010
South Slope Cooperative Telephone Company	DSL	No Update to Provide	2/2/2010
South Slope Cooperative Telephone Company	Fiber	No Update to Provide	2/2/2010
Spencer Municipal Utilities	Backhaul	No Update to Provide	2/18/2010
Spencer Municipal Utilities	Cable	No Update to Provide	2/18/2010
Spencer Municipal Utilities	Fiber	No Update to Provide	2/18/2010
Spring Grove Cooperative Telephone Co	Fiber	No Update to Provide	
Sully Telephone Association Inc	Fiber	No Update to Provide	4/28/2010
Superior Telephone Cooperative	DSL	No Update to Provide	5/24/2010
Swisher Telephone Company	Fiber	No Update to Provide	2/2/2010
Templeton Telephone Company	Backhaul	No Update to Provide	3/12/2010
Templeton Telephone Company	DSL	No Update to Provide	3/12/2010
Terril Telephone Cooperative	DSL	No Update to Provide	2/12/2010
Titonka Telephone Company	Backhaul	No Update to Provide	5/4/2010
Titonka Telephone Company	DSL	No Update to Provide	5/4/2010
Traer Municipal Utilities	Fixed Wireless	No Update to Provide	4/14/2010
USA Communications	DSL	No Update to Provide	1/27/2010
Van Horne Cooperative Telephone Company	Backhaul	No Update to Provide	5/18/2010
Van Horne Cooperative Telephone Company	DSL	No Update to Provide	5/18/2010
Van Horne Cooperative Telephone Company	Fiber	No Update to Provide	5/18/2010
Walnut Telephone Company	Backhaul	No Update to Provide	4/14/2010
Walnut Telephone Company	Cable	No Update to Provide	4/14/2010
Walnut Telephone Company	DSL	No Update to Provide	4/14/2010
Walnut Telephone Company	Fiber	No Update to Provide	4/14/2010
Walnut Telephone Company	Fixed Wireless	No Update to Provide	4/14/2010
Webb-Dickens Telephone Corporation	Fiber	No Update to Provide	1/25/2010
Webster-Calhoun Cooperative Telephone Association	Fiber	No Update to Provide	5/21/2010
West Iowa Telephone Company	Cable	No Update to Provide	1/27/2010
West Iowa Telephone Company	DSL	No Update to Provide	1/27/2010
West Iowa Telephone Company	Fiber	No Update to Provide	1/27/2010
West Liberty Telephone Company	Backhaul	No Update to Provide	1/25/2010
West Liberty Telephone Company	DSL	No Update to Provide	1/25/2010
West Liberty Telephone Company	Fiber	No Update to Provide	1/25/2010
Western Iowa Networks	Fixed Wireless	No Update to Provide	2/22/2010

Western Iowa Telephone Association	DSL	No Update to Provide	4/22/2010	
Winnebago Cooperative Telecom Association	Backhaul	No Update to Provide	1/22/2010	
Winnebago Cooperative Telecom Association	DSL	No Update to Provide	1/22/2010	
Winnebago Cooperative Telecom Association	Fiber	No Update to Provide	1/22/2010	
Winnebago Cooperative Telecom Association	Fixed Wireless	No Update to Provide	1/22/2010	
Woolstock Mutual Telephone	DSL	No Update to Provide	5/19/2010	
WTC Communications, Inc.	Cable	No Update to Provide	3/22/2010	
WTC Communications, Inc.	DSL	No Update to Provide	3/22/2010	
WTC Communications, Inc.	Fixed Wireless	No Update to Provide	3/22/2010	
Wyoming Mutual Telephone Company	DSL	No Update to Provide	2/19/2010	
Atkins Telephone Company	DSL	No Update Provided - Use Last Submission Data	5/14/2010	
Atkins Telephone Company	Fiber	No Update Provided - Use Last Submission Data	5/14/2010	
Baldwin Nashville Telephone Company, Inc.	DSL	No Update Provided - Use Last Submission Data	2/3/2010	
Baldwin Nashville Telephone Company, Inc.	Fiber	No Update Provided - Use Last Submission Data	2/3/2010	
Bernard Telephone Company, Inc.	Fixed Wireless	No Update Provided - Use Last Submission Data	5/19/2010	
Brooklyn Mutual Telecommunications Cooperative	DSL	No Update Provided - Use Last Submission Data	4/21/2010	
Cogent Communications, Inc.	Backhaul	No Update Provided - Use Last Submission Data		
East Buchanan Telephone Cooperative	DSL	No Update Provided - Use Last Submission Data	4/30/2010	
East Buchanan Telephone Cooperative	Fixed Wireless	No Update Provided - Use Last Submission Data	4/30/2010	
Eastlight, LLC	Fixed Wireless	No Update Provided - Use Last Submission Data		
Farmers Telephone Company-Essex	DSL	No Update Provided - Use Last Submission Data	1/27/2010	
Farmers Telephone Company-Essex	Fixed Wireless	No Update Provided - Use Last Submission Data	1/27/2010	
Fenton Co-Op Telephone Company	DSL	No Update Provided - Use Last Submission Data	4/16/2010	
Independence Telecommunications Utility	Cable	No Update Provided - Use Last Submission Data	4/9/2010	
Internet Consulting Services, LLC	Fixed Wireless	No Update Provided - Use Last Submission Data	5/19/2010	
Iowa Network Services	Backhaul	No Update Provided - Use Last Submission Data	3/5/2010	
Kalnet	Fixed Wireless	No Update Provided - Use Last Submission Data	5/21/2010	
Killduff Telephone Company	DSL	No Update Provided - Use Last Submission Data		
Knology of the Plains, Inc.	Cable	No Update Provided - Use Last Submission Data	7/13/2011	
Level 3 Communications, LLC	Backhaul	No Update Provided - Use Last Submission Data	12/14/2009	
Loganet	Fixed Wireless	No Update Provided - Use Last Submission Data		
Long Lines	Backhaul	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	Backhaul	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	Backhaul	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	Backhaul	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	Backhaul	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	Backhaul	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	Cable	No Update Provided - Use Last Submission Data	5/4/2010	
Long Lines	DSL	No Update Provided - Use Last Submission Data	5/4/2010	
Lost Nation-Elwood Telephone Company	Fiber	No Update Provided - Use Last Submission Data	4/13/2010	
Lynnville Telephone Company, Inc.	DSL	No Update Provided - Use Last Submission Data		
Reasnor Telephone Company, LLC	DSL	No Update Provided - Use Last Submission Data		
RingTel Communications	DSL	No Update Provided - Use Last Submission Data	2/17/2010	
Searsboro Telephone Company	DSL	No Update Provided - Use Last Submission Data		
Sharon Telephone Company	Backhaul	No Update Provided - Use Last Submission Data	5/20/2010	
Sharon Telephone Company	DSL	No Update Provided - Use Last Submission Data	5/20/2010	
Sharon Telephone Company	Fiber	No Update Provided - Use Last Submission Data	5/20/2010	
Sharon Telephone Company	Fixed Wireless	No Update Provided - Use Last Submission Data	5/20/2010	
SpeedNet, LLC	Fixed Wireless	No Update Provided - Use Last Submission Data		
Wellman Cooperative Telephone Association	DSL	No Update Provided - Use Last Submission Data	5/19/2010	
Wellman Cooperative Telephone Association	Fiber	No Update Provided - Use Last Submission Data	5/19/2010	
Wellman Cooperative Telephone Association	Fixed Wireless	No Update Provided - Use Last Submission Data	5/19/2010	
Windstream Communications	DSL	No Update Provided - Use Last Submission Data		
Zayo Group, LLC	Backhaul	No Update Provided - Use Last Submission Data		
Windstream Communications	DSL	Solicited Initial Data		
Netconnect	Fixed Wireless	Refused to Participate		[JUL-17-12 Joel Brick] Received e-mail from company representative refusing to participate.
Eastlight, LLC	Fiber	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 11 contact attempts were made this period.

Knology of the Plains, Inc.	Backhaul	Non-Responsive to Multiple Attempts	7/13/2011	In addition to numerous contact attempts made during past mapping submission periods, 5 contact attempts were made this period.
Mechanicsville Telephone Company	DSL	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 7 contact attempts were made this period.
Mechanicsville Telephone Company	Cable	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 7 contact attempts were made this period.