

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

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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 for Texas, please accept this submission from Connected Nation on behalf of the state of Texas' State Broadband Initiative (SBI) Grant Program, known as Connected Texas.

The Connected Texas 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 21<sup>st</sup> century. As the Commission relies upon this unique resource to distribute monies under the Connect America Fund, through the Universal Service Fund reform, the Connected Texas 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 Connected Texas 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, Connected Texas: October 1, 2012***

NOFA Requirement  
Appendix A: 1(a)(i)

Data Transfer Model  
BB\_Service\_CensusBlock

Data Description  
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	n/a DataPackage.xlsx	Accuracy and Verification Report 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 Connected Texas 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 are narratives describing the data and coverage estimation of non-participating providers. While Connected Texas 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 Connected Texas 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 Texas 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 approximately 85.86 percent of the Texas provider community, or 170 of 198 total providers. There are 156 participating providers and 14 additional non-participating providers whose estimated coverage areas have been submitted. Of the 156 participating providers, 55 supplied an update to their network or coverage area(s), while 80 have reported no change. The remaining 21 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 28 providers that are not

represented in the attached datasets, 26 have refused to participate in the voluntary program or were non-responsive to multiple contact attempts, and 2 providers are currently in some form of progress toward data submission but were not able to submit coverage areas at the time of this submission.

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

Connected Texas has also continued to perform broadband verification activities through several means. In addition to confirmation of service area(s) by each provider, Connected Texas conducts field validation efforts. To date, 146 (73.74 percent) providers have been validated through field verification activities. Additional details on verification activities are contained within the Field Validation Methodology.

The Connected Texas website, ([www.connectedtx.org](http://www.connectedtx.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 Connected Texas website encountered 6,858 unique visits during this reporting period (47,133 total to date for the life of the grant awarded on January 1, 2010). Additionally, this pronounced Web activity netted 21 broadband inquiries over this same reporting period (534 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 Connected Texas website and the Connected Texas 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 Connected Texas mapping artifacts. Since the initial data collection and release of corresponding maps, feedback in the form of broadband inquiries has allowed Connected Texas to identify additional areas that are in need of field validation, which is scheduled as soon as possible.

### ***Community Anchor Institutions***

Connected Texas 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 the Texas Department of Agriculture, outreach was conducted during this data update reporting period by Connected Texas 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 Connected Texas website. During this reporting period Connected Texas has developed a number of new relationships with statewide associations such as the following:

- Texas Association of Counties
- Texas Computer Education Association
- Texas Department of State Health Services
- Texas Health Care Association
- Texas HIE
- Texas Hospital Association
- Texas Library Association
- Texas Municipal League
- Texas State Teachers Association

Building relationships with entities such as these yields a positive impact in promoting 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. Connected Texas 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, Connected Texas 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.

Connected Texas 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 Texas, 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 Connected Texas 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 Connected Texas 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 Texas, 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,



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

## **DATA ACQUISITION: TEXAS COMMUNITY ANCHOR INSTITUTIONS METHODOLOGY**

In this sixth reporting period of the SBI, Connected Texas, working in close coordination with the state of Texas, 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.

Connected Texas 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 Connected Texas through Esri ArcGIS software.

Connected Texas continues to utilize a customized online survey hosted through SurveyMonkey, with a landing page on the Connected Texas 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. Connected Texas 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/2S72YFV>

In addition to the survey, Connected Texas has developed a number of new relationships with statewide associations such as: Texas Association of Counties, Texas Computer Education Association, Texas Department of State Health Services, Texas Health Care Association, Texas HIE, Texas Hospital Association, Texas Library Association, Texas Municipal League, and Texas State Teachers Association 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. Connected Texas 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, Connected Texas 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.

Connected Texas 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, Connected Texas 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, Connected Texas works with the Texas Department of Education to identify existing relationships that can support CAI outreach.

Connected Texas 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 Connected Texas project as well as self-awareness of their own CAI connectivity (specifically upload and download speeds). Connected Texas will continue to research key CAI organizations and agency contacts in an effort to raise awareness of this project among CAI. When applicable, the Texas Department of Education 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	10,601	10,601	10,102	105	97	97
Libraries	1,197	1,197	1,188	104	261	101
Healthcare	870	870	851	97	179	97
Public Safety	2,904	2,904	2,812	260	547	258
Higher Ed Institutions	441	441	425	36	106	35
Other Government	710	710	687	469	101	52
Other Non-Government	6	6	6	5	5	5
<b>Total</b>	<b>16,729</b>	<b>16,729</b>	<b>16,071</b>	<b>1,076</b>	<b>1,296</b>	<b>645</b>

During the coming months, CAI data collection will be supported by regular reporting to the Connected Texas team. The CAI data is proving an invaluable resource to all components of the Connected Texas 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 Texas.

***Inventory of Deliverables, Connected Texas: 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.

The provider data collected by CN on behalf of the state of Texas 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 Texas 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**

All datasets used in this project have been contributed in-kind. Datasets used by the project to date and their respective in-kind contribution value are as follows:

- Commission on State Emergency Communications Regional Planning Commission's input - \$7,395
- District & Municipal Public Safety Answering Point data - \$1,419
- K-12 School address data - \$26,895
- Texas ISD Superintendents and Technology Coordinators - \$3,768
- Texas Water Board Orthoimagery - \$465,000
- Texas Workforce Commission IT - \$82
- Workforce Solutions data - \$770

## **TEXAS 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 System (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 Texas on the following providers: Aledo Broadband; Alenco Communications, Inc.; Allegiance Communications; Alpheus (d.b.a. Aspen Communications); AMATechTel; Anvil Communications; AT&T, Inc.; AwesomeNet, Inc.; Baja Broadband; Basin 2 Way Radio, Inc.; Basin Broadband, Inc.; Big Bend Telephone Company, Inc.; Blossom Telephone; Border to Border Communications, Inc.; Brazoria Telephone Company (d.b.a. Coastal Link); Broadband Data Services of Texas LLC; Broadcomm.US; Broadwaves; Buffalo Cable TV; Cable One, Inc.; Cameron Telephone Company LLC; Cap Rock Telephone Cooperative, Inc.; Central Texas Cable Partners, Inc.; Central Texas Telephone Cooperative, Inc.; CenturyLink; Cequel Communications (also d.b.a. Cebridge, Suddenlink); Charter Communications; CKS Wireless, Inc.; Clearwire Corporation; Coleman County Telephone Cooperative LLC; Colorado Valley Telephone Cooperative LLC; Comcast Cable Communications LLC; Community Telephone Company, Inc.; Consolidated Communications; Conterra Communications; Cumby Telephone Company, Inc.; DCT Texas.Net; Dell Telephone Cooperative, Inc.; DET-com; Digitex.com; Dot 10 Wireless (which went recently went out of business but was assumed operational as of June 10, 2012); East Texas Broadband; East Texas Cable; East Texas DSL; East Texas WiFi; Eastex Telephone Cooperative, Inc.; ECTISP; Electra Telephone Company; eNet; ENMR Telephone Cooperative, Inc. (d.b.a. ENMR Plateau Communications, Inc.); ERF Wireless; ETAN Industries; Etex Communications LP; ETS Cablevision Company, Inc.; Farm to Market Broadband LP; Five Area Telephone Company, Inc.; Ganado Telephone Company, Inc.; GEUS; Gilmer Cable; Gower Computer Support, Inc.; GoZoe Wireless, LLP; Grande Communications Network LLC; Grayson CableRocket LLC; Greasy Bend Ventures, Inc. (d.b.a. Live Air Networks); GTEK Communications; Guadalupe Valley Communications Systems; GVEC.net; Helmsco/CentralLink; Hill Country Telephone Cooperative; Hometown Computing; Iguana Net; Indian Creek Internet; Industry Telephone Company; Internet America; JAB Wireless(also d.b.a.Dot 11 Networks, Partnership Broadband, Element Networks, and KeyOn Communications, Inc.); James Cable; La Ward Telephone Exchange, Inc.; Lake Livingston Telephone Company; Leap Wireless International, Inc.; Livingston Telephone Company, Incorporated; Maverick Internet; McDonald Group; Mid-Plains Rural Co-op, Inc.; Millenium Telecom; NDemand; NetWest Online, Inc.; Neu Ventures, Inc.; Nortex Communications; North Texas Broadband LLC; North Texas Cellular, Inc.; Northland Communications; NTS Communications; Our Town Internet; Panhandle Telephone Cooperative, Inc.; Peoples Communication; Phantom Wave (d.b.a. Argon Technologies); Poka Lambro Telephone Cooperative, Inc.; Presidio Community Wireless Network; Promptwireless LLP; RB3 LLC; Ridgewood Cable; Rioplex Wireless Ltd.; Riviera Telephone Company, Inc.; Rock Solid Internet & Telephone; Rodzoo Wireless; Santa Rosa Telephone Cooperative, Inc.; Skynet Communications; Skynet Country Online; Smithville System; SOS Communications; South Plains Telephone

Cooperative, Inc.; Southwest Arkansas Telephone Cooperative, Inc.; Southwest Texas Telephone Company; Speed of Light Broadband, Inc.; Sprint Nextel Corporation; Stamford Community Networks (scheduled to go out of business at the end of September); Starnet; Stelera Wireless LLC; Tatum Telephone; Taylor Telephone Cooperative, Inc.; Telecom Cable LLC; Texas Broadband, Inc.; Texas CellNet; Texas Wireless Internet; Texhoma Wireless; TheSPECnet (also d.b.a. ELC Internet Services, Inc.); TierOne Converged Networks, Inc.; Time Warner Cable, Inc.; TISD; T-Mobile USA, Inc.; Totalcom Communications, Inc.; TXOL Internet; Valley Telephone Cooperative, Inc.; Verizon Southwest, Inc.; Versalink Enterprises; VRFutureNet; WEHCo Video (d.b.a. Kilgore Video, Kilgore Cable); West Tex Connect; West Texas Rural Telephone Cooperative; Wes-Tex Telecommunications Ltd.; Wharton County Electric Cooperative, Inc.; Windjammer Communications, LLC; Windstream Communications; XIT Telecommunications & Technology Ltd.; Zito Midwest LLC (d.b.a. Galaxy Cable) and Zulu Internet.

In addition to the field verification tests that have been conducted, Connected Texas has also conducted work in the field to collect information for the non-participating providers, AMA TechTel, Anvil Communications, Broadwaves, CKS Wireless, East Texas Broadband, East Texas Cable Company, GoZoe Wireless, NDemand, Skynet Communications, StarNet Online, Telecom Cable, TheSPECnet, Inc., VRFuturnet, and Zulu Internet which, by nature of the methodology required for this collection, are also included in the above list.

From program initiation through this reporting period, CN has completed in-the-field validation testing against 146 companies (out of a universe of 198 viable providers) totaling 73.74 percent within the state of Texas. This percentage also considers the non-participating provider (NPP) records submitted to NTIA as may be contained herein (see “Data Submission and Coverage Estimation of Non-Participating Providers” 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.

**Alenco Communications, Inc.**

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

Resolution: Provider representative indicated that tier 7 speeds are indeed available to all customers in the Knippa exchange.

**AT&T Communications of Texas, Inc.**

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

Resolution: Provider website advertises 24 Mbps; screenshot below.



**AT&T Communications of Texas, Inc.**

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

Resolution: Provider confirmed tier 7 service is available.

**Big Bend Telephone Company, Inc.**

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

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

**Now offering speeds up to 12 Meg in Alpine and Ft. Davis!!!**

**Buffalo Cable TV**

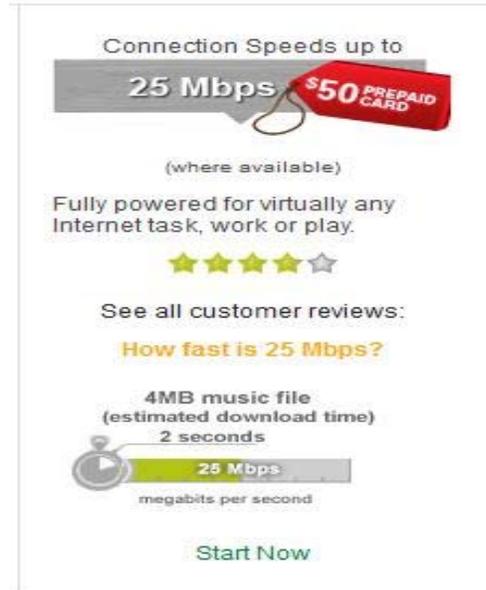
Issue: Technology of transmission code 40 with maximum advertised download speed in tier 5, lower than expected value range for the technology.

Resolution: Provider representative confirmed that service area is DOCSIS 3.0, but lower speeds are still advertised and in use.

### CenturyLink

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

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



### Cequel Communications (Suddenlink)

Issue: Technology of transmission code 40 with maximum advertised download speed in tiers 7 and 8, lower than expected value range for the technology.

Resolution: Provider representative confirmed that DOCSIS 3.0 is indeed in use, but speeds have not been turned up higher at this time.

### Consolidated Communications

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.

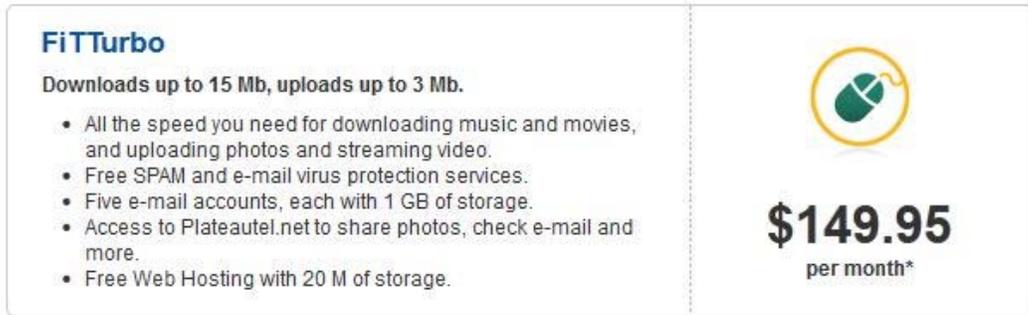
#### Get The Internet Speed You Need

- 3 Mbps – Ideal for sharing photos with your family and friends
- 6 Mbps – Ideal for watching media-rich content, movies and gaming
- 10 Mbps – Ideal for multiple users in a household
- 20 Mbps – Ideal for all the above plus more

**ENMR Telephone Cooperative, Inc.**

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.



**FiTTurbo**  
Downloads up to 15 Mb, uploads up to 3 Mb.

- All the speed you need for downloading music and movies, and uploading photos and streaming video.
- Free SPAM and e-mail virus protection services.
- Five e-mail accounts, each with 1 GB of storage.
- Access to Plateautel.net to share photos, check e-mail and more.
- Free Web Hosting with 20 M of storage.

  
**\$149.95**  
per month\*

**Guadalupe Valley Communications Systems**

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.

GVTC	768Kbps	1.5Mbps	5Mbps	8Mbps	12Mbps
Broadband	128Kbps	384Kbps	512Kbps	1Mbps	1.5Mbps
Month to Month	\$29.95	\$34.95	\$39.95	\$44.95	\$59.95
Double Play	\$24.95	\$29.95	\$34.95	\$39.95	\$54.95
<b>Triple Play</b>	<b>\$19.95</b>	<b>\$24.95</b>	<b>\$29.95</b>	<b>\$34.95</b>	<b>\$49.95</b>

**MegaPath Inc.**

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

Resolution: Provider website advertises 20 Mbps and 45 Mbps service; screenshots below.

DSL service provides download speeds up to 20 Mbps over a nationwide, multi-redundant private network that optimizes performance and security. DSL is an ideal broadband solution for small and medium-sized businesses that download large files or use the Internet extensively.

For maximum connectivity at a minimum cost, there's no greater value than MegaPath Business Ethernet. Choose the bandwidth—2 Mbps up to 45 Mbps—that best fits your business' needs.

**Millennium Telcom, LLC**

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

Resolution: Use of DOCSIS 3.0 throughout service area was confirmed, even at lower speeds.

**Nortex Communications**

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	Max Speeds	Monthly Price	Mail Boxes	Web Page	IP Address	Dial Up Account	DNS Hosting
DSL 3.0	3.0Mb x 512k	\$39.95 <a href="#">\$29.95 with Choice pkg.</a>	5	5mb personal	1 dynamic	1	No
DSL 5.0	5.0Mb x 768k	\$49.95 <a href="#">\$39.95 with Choice pkg.</a>	5	5mb personal	1 dynamic	1	No
DSL 8.0	8.0Mb x 1.0Mb	\$59.95 <a href="#">\$49.95 with Choice pkg.</a>	5	5mb personal	1 dynamic	1	No
DSL 15.0	15.0Mb x 2.0Mb	\$69.95 <a href="#">\$59.95 with Choice pkg.</a>	5	5mb personal	1 dynamic	1	No

**Nortex Communications**

Issue: Technology of transmission code 40 with maximum advertised download speed in tier 7, lower than expected value range for the technology.

Resolution: Confirmed use of DOCSIS 3.0 throughout service area; however, speeds are currently kept lower to be backwards compatible.

**North Texas Broadband, LLC**

Issue: Technology of transmission code 40 with maximum advertised download speed in tier 6, lower than expected value range for the technology.

Resolution: Use of DOCSIS 3.0 throughout service area was confirmed, even at lower speeds.

**Panhandle Telephone Cooperative, 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.

Speed	Residential
12 Mbps download**/1 Mbps up*	\$59.99
6 Mbps download/1 Mbps up*	\$54.99
3 Mbps download/384 Kbps up*	\$44.99

**Poka Lambro Telephone Cooperative, Inc.**

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

Resolution: Provider website advertises up to 30 Mbps service; screenshot below.

**Rock Solid Internet & Telephone**

Issue: Fixed wireless 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.

**The Top of The Rock™ - \$99.95/mo.**

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Our finest service! Speeds of up to 15000k (15 Mbps) download and up to 1524k upload. There is no better service anywhere in South Texas! Gamers and Power Downloaders get priority routing of their service!

**Skynet Communications**

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

Resolution: While this is a non-participating provider, customer service confirmed that 10 Mbps service is available.

**South Plains Telephone Cooperative, Inc.**

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.

SPTC is pleased to offer broadband internet service packages with speeds up to 20Mg download for residence and business.

We are confident you will find an option that will meet your needs and provide you good value for the price.

**Stelera Wireless, LLC**

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

Resolution: Provider website advertises 10 Mbps; screenshot below.

**Fast Facts**

<b>Network Technology:</b>	HSPA (High-Speed Packet Access)
<b>Frequency:</b>	1700/2100 MHz FCC licensed spectrum
<b>Current Speeds:</b>	Up to 10mbps on downloads, UP to 2mbps on uploads
<b>Headquarters:</b>	Oklahoma City, OK

**T-Mobile USA, Inc.**

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

Resolution: Provider website indicates that speeds higher 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.

**Time Warner Cable LLC**

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

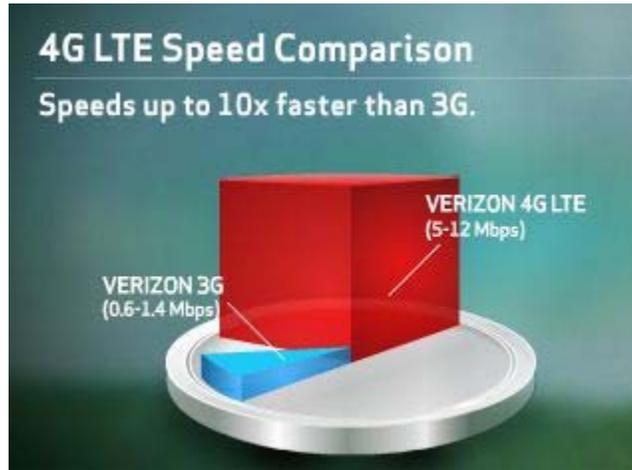
Resolution: Provider website advertises 30 Mbps service; screenshot below.



**Verizon Southwest Inc.**

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

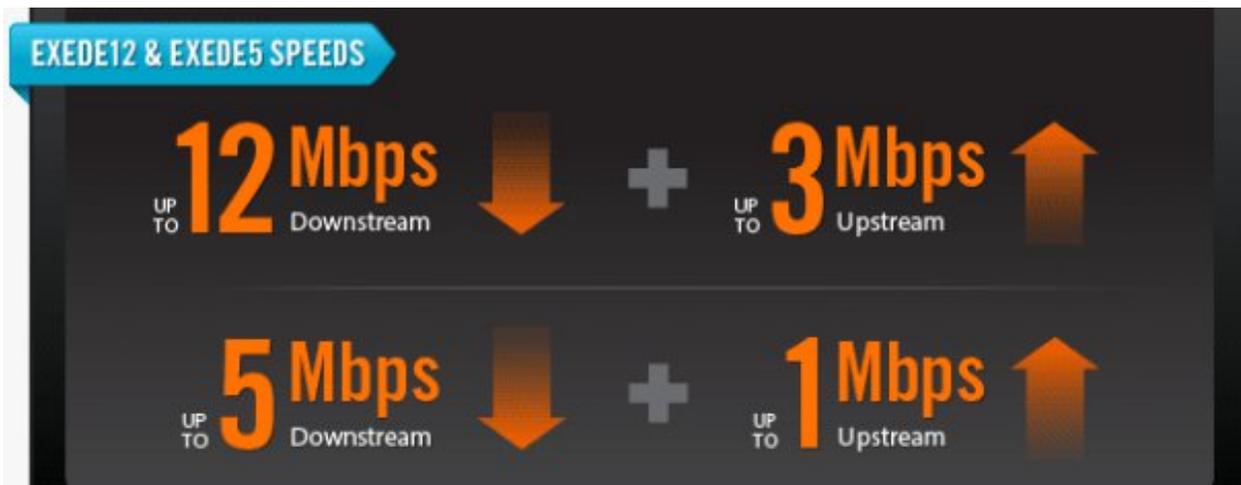
Resolution: Provider website advertises 12 Mbps service; screenshot below.



**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.



**Windstream Communications**

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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**West Texas Rural Telephone Cooperative, Inc.**

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

Resolution: Provider confirmed that tier 7 service is now available in Friona and Bovina.

## **DATA SUBMISSION AND COVERAGE ESTIMATION OF NON-PARTICIPATING PROVIDERS**

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 1.67 percent of Texas households do not have terrestrial fixed broadband service available, and approximately 0.10 percent of Texas households have neither mobile nor fixed broadband service available.

Within rural areas of the state, results derived from provider-validated data indicate that approximately 4.85 percent of rural Texas households do not have terrestrial fixed broadband service available, and approximately 0.30 percent of rural Texas 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 **CO**mmission **RE**gistration System.

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 Connected Texas 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 Connected Texas project has received a total of 21 inquiries (534 grant inception to date). As more inquiries are submitted to Connected Texas, 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 Connected Texas project launched My ConnectView on April 2, 2012, and received 1,641 visits this reporting period; to date, the interactive mapping applications have received 17,644 visits.

## **SPEED TEST METHODOLOGY**

The 555 speed tests that are represented in the Connected Texas Speed Test Report during this reporting period (7,492 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 Connected Texas 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 Connected Texas 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 Connected Texas 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 Texas.

### 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	01 Communications of Texas	<a href="http://www.o1.com">http://www.o1.com</a>	CLEC in California and a nonfacilities-based nationwide reseller.
2	1Source Tech	<a href="http://www.1sourcetc.com">http://www.1sourcetc.com</a>	Does not offer broadband services; not a broadband provider.
3	21Globe, Inc.	<a href="http://www.21globe.com/">http://www.21globe.com/</a>	Does not offer broadband services; not a broadband provider.
4	2473365 Wireless	n/a	No information could be located on company.
5	360networks	<a href="http://www.360networks.com/">http://www.360networks.com/</a>	Acquired by another company.
6	36db	n/a	Acquired by ERF Wireless.
7	4D Networks Corp.	<a href="http://www.4dn.com">http://www.4dn.com</a>	Provider does not serve consumers in Texas; Oklahoma provider.
8	802DSL.com	n/a	No information could be located on company; not a broadband provider.
9	A 007 Access	<a href="http://www.a007.com/">http://www.a007.com/</a>	Nonfacilities-based reseller of Quest DSL and mobile wireless.

10	AAA Internet Service	<a href="http://aaainter.net/dsl">http://aaainter.net/dsl</a>	Dial-up service and is also a nonfacilities-based DSL reseller.
11	Aaccess Network Communications, Inc.	<a href="http://www.aaccess.net">http://www.aaccess.net</a>	Not a broadband provider.
12	ABI Network Solutions, Inc.	<a href="http://abnetworksolutions.com">http://abnetworksolutions.com</a>	General reseller; requests for information were never returned.
13	AboveNet Communications, Inc.	<a href="http://www.abovenet.com">http://www.abovenet.com</a>	Company is a business provider only; does not offer residential service.
14	Acceris Communications Corporation	<a href="http://www.accerispartners.com">http://www.accerispartners.com</a>	Company does not provide Internet service; not a broadband provider.
15	Access Integrated Networks, Inc.	<a href="http://www.birch.com/About/accesscommredirect.aspx">http://www.birch.com/About/accesscommredirect.aspx</a>	Company no longer exists; changed name to Birch Communications in 2006.
16	Access One, Inc.	<a href="http://www.accessoneinc.com/access_one_direct.php">http://www.accessoneinc.com/access_one_direct.php</a>	Company is a business provider only; does not offer residential service.
17	Access Point, Inc.	<a href="http://www.accesspointinc.com/products.htm">http://www.accesspointinc.com/products.htm</a>	General reseller; nonfacilities-based.
18	Access123.net	<a href="http://access123.net/">http://access123.net/</a>	Website is a search engine for all types of products; company is not a broadband provider.
19	Access2Go, Inc.	<a href="http://www.acc2go.com/">http://www.acc2go.com/</a>	General reseller; nonfacilities-based.
20	Accutel of Texas, LP	<a href="http://www.accutel.net/">http://www.accutel.net/</a>	No viable information could be located on company; URL inactive; not a broadband provider.
21	ACERX.NET	<a href="http://acerx.net/">http://acerx.net/</a>	General reseller; nonfacilities-based.
22	ACN Communications Services, Inc.	<a href="https://www.myacn.com/phone/dslbundle.html">https://www.myacn.com/phone/dslbundle.html</a>	General reseller; nonfacilities-based.
23	Adirondack Area Network	<a href="http://www.aanet.org/">http://www.aanet.org/</a>	Provider does not serve consumers in Texas; New York State provider.
24	Advance Telephone Services	<a href="http://www.advanced-telephone.com/">http://www.advanced-telephone.com/</a>	Company does not provide Internet service; not a broadband provider.
25	Advanced Communicating Techniques	n/a	No viable information could be located on company; URL inactive; not a broadband provider.

26	Advanced Integrated Technologies, Inc.	<a href="http://www.a-i-t.com/">http://www.a-i-t.com/</a>	Company does not provide Internet service; not a broadband provider.
27	Advanced Wireless Solutions	<a href="http://www.awsolutions.net">http://www.awsolutions.net</a>	Company is B2B provider of networking solutions; not a broadband provider.
28	AEConnect	n/a	No information could be located on company; not a broadband provider.
29	AEI Wireless	<a href="http://www.aeiwireless.net">http://www.aeiwireless.net</a>	Based on website; speed offerings are not compliant to FCC broadband definition.
30	Aerie Network Services, Inc.	<a href="http://www.aerienetworks.com/">http://www.aerienetworks.com/</a>	No viable information could be located on company; URL is web search engine; not a broadband provider.
31	Aero Communications, LLC	n/a	Company categorized under Telecommunications consultant; no website located and is not a broadband provider.
32	Aeroconnect	<a href="http://www.aeroconnect.net">http://www.aeroconnect.net</a>	Company is B2B provider of networking solutions; not a broadband provider.
33	Affinity Network, Inc.	<a href="http://www.affinitynetworkinc.com/">http://www.affinitynetworkinc.com/</a>	Company is B2B provider of long distance and calling card services; not a broadband provider.
34	Affordable USAWide.Net, Inc.	<a href="http://www.usawide.net">http://www.usawide.net</a>	General reseller; non-facilities based; offers DSL and dial-up.
35	Air2LAN	n/a	Company was purchased by U.S. Wireless Online in February 2005; no longer in business.
36	AirChips Communication, LLC	<a href="http://www.airchips.com">http://www.airchips.com</a>	Company performs network consulting services and does not have broadband operations; not a broadband provider.
37	AIRDIS Telecom	<a href="http://www.airdis.com/">http://www.airdis.com/</a>	Company sells telecommunications equipment to business and does not have broadband operations; not a broadband provider.

38	Airewaves Broadband, LLC	<a href="http://www.airewaves.com">www.airewaves.com</a>	Airewaves is an Internet media download center; not a broadband provider.
39	Airimba Wireless, Inc.	<a href="http://airimba.com/">http://airimba.com/</a>	Provider supplies bulk level agreements to housing communities; B2B
40	Airmail247.com	<a href="http://airmail247.com/">http://airmail247.com/</a>	No viable information could be located on company; URL is not located; not a broadband provider.
41	Airo Networks, LLC	<a href="http://www.aironetworks.com">http://www.aironetworks.com</a>	No viable information could be located on company; URL is not located; not a broadband provider.
42	Airocom	<a href="http://www.airocom.net">http://www.airocom.net</a>	Acquired by NetWest Online.
43	Akeva	n/a	Reseller of Verizon Mobile Phones in mall kiosk; not a broadband provider.
44	Alec, Inc.	<a href="http://www.singlepipecom.com">http://www.singlepipecom.com</a>	Nonfacilities reseller of DSL services; however does not serve the state of Texas.
45	Allo Telecommunications, Inc.	<a href="http://tc.allophone.com/">http://tc.allophone.com/</a>	Nonfacilities reseller of business circuits.
46	Allumera	<a href="http://www.amirarif.com/">http://www.amirarif.com/</a>	Not a broadband provider.
47	Almega Cable	<a href="http://almega.com">http://almega.com</a>	Currently only supplies Internet connectivity to one anchor institution in Texas; no residential services.
48	AltiComm, Inc.	n/a	Based on Internet research and PUCT report the organization is nonfacilities-based or resells internet services.
49	Amarillo Cell Telco	<a href="http://www.cell1amarillo.com/">http://www.cell1amarillo.com/</a>	Acquired by Alltel.
50	American Dial Tone (Ganoco, Inc.)	n/a	Company offers dial-up services only.
51	American Fiber Network, Inc.	<a href="https://www.afnlt.com">https://www.afnlt.com</a>	Company performs network consulting services and does not have broadband operations; not a broadband provider.

52	Americans Conex, LLC	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
53	America's Tele- Network Corp	n/a	Company is no longer in business.
54	AmeriMex Communications Corp.	<a href="http://www.amerimex.biz/">http://www.amerimex.biz/</a>	Company sells international calling plans and does not provide broadband services; not a broadband provider.
55	AMERIPHONE NETWORK, LLC	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
56	Amigos - Tu Compania De Telefono	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
57	Amtel	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
58	An Elite State Telephone Company	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
59	Annox, Inc.	n/a	Company is no longer in business and is listed as inactive in the state of Texas.
60	Antioch Wireless Broadband	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
61	AP Telecommunications	<a href="http://www.academicplanet.com">http://www.academicplanet.com</a>	Company offers dial-up services only; not a broadband provider.
62	Apache Networks	<a href="http://www.apachenetworks.net">http://www.apachenetworks.net</a>	Company offers VOIP services only; not a broadband provider.
63	Apogee Telecom, Inc.	<a href="http://www.apogeenet.net">http://www.apogeenet.net</a>	Company does not provide direct residential service; design and build networks for institutions of higher learning; not a broadband provider.
64	Arrowheadnet.com	<a href="http://www.arrowheadnet.com/">http://www.arrowheadnet.com/</a>	Company offers web hosting services only; not a broadband provider.

65	Artisan Communications	<a href="http://www.artisan.tv">http://www.artisan.tv</a>	Company offers telephony services to business only; not a broadband provider.
66	ATC Outdoor DAS, LLC	n/a	Company offers radio services for business only; not a broadband provider.
67	A-Tech Telecom, Inc.	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
68	Ateck Internet Providers	<a href="http://www.atxip.net/">www.atxip.net/</a>	Information located on company shows no longer in business.
69	AURIC Marketing LLC	n/a	Company offers Pots and Private T-1 services; not a broadband provider.
70	Austin Bestline Company	<a href="http://www.bestline.net/">http://www.bestline.net/</a>	Reseller who provides Internet access to business only; B2B provider.
71	Austin Teleco Usa, Inc.	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
72	AzleTexas.Net	n/a	Information located on company shows not a broadband provider.
73	Backbone Communications, Inc.	<a href="http://www.backbonecommunications.com/">http://www.backbonecommunications.com/</a>	Not a broadband provider; assist with development of technology platforms for classroom environment.
74	bargainisp.net	<a href="http://www.bargainisp.net/">http://www.bargainisp.net/</a>	Not a broadband provider; web search engine.
75	Basicphone, Inc.	n/a	Information located on company shows no longer in business.
76	BCN TELECOM, Inc.	<a href="http://www.bcntele.com/">http://www.bcntele.com/</a>	General reseller; nonfacilities-based; business accounts only.
77	Bear Creek Copperfield ISP	n/a	Information located on company shows no longer in business.
78	Bear Technologies Corporation	<a href="http://www.beartech.com">http://www.beartech.com</a>	Company offers services to business subscribers only.
79	Bellerud Communications, LLC	<a href="http://www.bellerudcommunications.com/">http://www.bellerudcommunications.com/</a>	Company is not a Broadband provider; offers Telephone services to only.

80	Bellsouth BSE, Inc.	n/a	Assets were subsumed by Clearwire Corporation; inactive URL.
81	BelWave Communications	<a href="http://www.belwave.com">http://www.belwave.com</a>	Company offers services to business subscribers only.
82	Best Line Communications	<a href="http://www.bestline.net/">http://www.bestline.net/</a>	Company offers services to business subscribers only.
83	BetterWorld Telecom, LLC	<a href="http://betterworldtelecom.com">http://betterworldtelecom.com</a>	Company offers services to business subscribers only.
84	BioVLAN	<a href="http://www.biovlan.com">http://www.biovlan.com</a>	Company offers turnkey solutions and is not a broadband provider.
85	Birch Communications	<a href="http://www.birch.com/About/birchlinkfamily.aspx">http://www.birch.com/About/birchlinkfamily.aspx</a>	Company is a reseller of business services only.
86	Biztel, L.P.	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
87	Blonder Tongue Telephone, LLC	<a href="http://www.blondertongue.com/">http://www.blondertongue.com/</a>	Company offers equipment solutions and is not a broadband provider.
88	Blue Corner Communications, LLC	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
89	Blue Moon Solutions, Inc.	<a href="http://www.bmsol.com">http://www.bmsol.com</a>	No viable information could be located on company; URL is not located; not a broadband provider.
90	Blue Sky Telecommunications, LLC	<a href="http://www.blueskycommunications.net/contact-us">http://www.blueskycommunications.net/contact-us</a>	Company is not a Broadband provider; offers telephone services only.
91	Blue Wireless & Data, Inc.	<a href="http://www.bluewirelessdata.com/">http://www.bluewirelessdata.com/</a>	No viable information could be located on company; URL is not located; not a broadband provider.
92	Bluebonnet Internet	<a href="http://www.bluebonnet.net">http://www.bluebonnet.net</a>	Company is not a Broadband provider; offers telephone services only.
93	Bold Communications networks, LLC	<a href="http://www.boldwireless.net/">http://www.boldwireless.net/</a>	No viable information could be located on company; URL is not located; not a broadband provider.

94	Border Wireless	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
95	Bravo Net	<a href="http://www.bravo.net">http://www.bravo.net</a>	No viable information could be located on company; URL is not located; not a broadband provider.
96	Brazoria Dot Net	n/a	No viable information could be located on company; URL is not located; not a broadband provider.
97	Broadband National	<a href="http://www.broadbandnational.com">http://www.broadbandnational.com</a>	General reseller; nonfacilities-based.
98	Broadlink Telecom, LLC	<a href="http://www.broadlinktelecom.com/">http://www.broadlinktelecom.com/</a>	Company is a reseller of business services only.
99	Broadvox-CLEC, LLC	n/a	Not a broadband provider; direct conversation determined entity does not have a network for broadband services.
100	Broadweave Networks Of Texas, LLC	n/a	According to Texas PUCT CLEC report; phone services only.
101	Budget Prepay, Inc.	<a href="http://www.budgetphone.com">http://www.budgetphone.com</a>	According to Texas PUCT CLEC report they offer phone services only.
102	Business Telecom, Inc.	n/a	Now owned by Deltacom Inc. according to Texas PUCT CLEC report.
103	BYOTV Media Corporation	n/a	Not a broadband provider; specializes in broadcast video services.
104	Cable And Wireless Americas Operations, Inc.	<a href="http://www.cw.com">www.cw.com</a>	Not a broadband provider; Internet hosting service company.
105	CAC MediaNet, Inc.	n/a	Not a broadband provider.
106	Call One	<a href="http://www.callone.com">http://www.callone.com</a>	Not a broadband provider; business solutions services.
107	CallFree	n/a	Not a broadband provider; POTS and long-distance services only.
108	Camalott Communications	<a href="http://www.camalott.com">http://www.camalott.com</a>	Acquired by Texas Communications.

109	Camino-Net Internet Services	<a href="http://www.camino-net.com">http://www.camino-net.com</a>	Not a broadband provider; offers dial-up only.
110	Candice Clark Consulting	<a href="http://www.candiceclarke.com/">http://www.candiceclarke.com/</a>	Not a broadband provider; consulting firm.
111	Capital Telecommunications, Inc.	<a href="http://www.captel.com/">http://www.captel.com/</a>	Not a broadband provider; hardware provider for the deaf's telecommunication devices.
112	Casey & Gentz	<a href="http://www.phonelaw.com/">http://www.phonelaw.com/</a>	Not a broadband provider.
113	CAT Communications International, Inc.	<a href="http://www.ccitelcom.com/">http://www.ccitelcom.com/</a>	Not a state provider per representative of the company.
114	Cavalier Telephone LLC	<a href="http://www.cavtel.com/">http://www.cavtel.com/</a>	Company merged with PAETEC.
115	CCG Consulting, LLC	<a href="http://www.c-c-g.com/">http://www.c-c-g.com/</a>	Not a broadband provider; telecommunications consulting services.
116	CCIS.net	<a href="http://www.ccis.net">http://www.ccis.net</a>	Inactive; no longer in business.
117	Cdi Broadband	<a href="http://www.cdibroadband.com">http://www.cdibroadband.com</a>	Acquired by TierOne Converged Networks.
118	Celito Communications, Inc.	<a href="http://www.celito.net/">http://www.celito.net/</a>	This company does not offer service in Texas.
119	Cellular One of Amarillo	n/a	Acquired by Alltel.
120	Centel Communications	n/a	No URL; no FRN; non-responsive to outreach activity.
121	CenTex Web Access	n/a	This company is not a broadband provider.
122	Central Telecommunications	n/a	This company is not a broadband provider.
123	Centramedia Inc.	<a href="http://www.centramedia.com">http://www.centramedia.com</a>	Acquired by ERF Wireless.
124	Century Alpha	n/a	This company is not a broadband provider.
125	Chaparral Broadband	n/a	Not a broadband provider in Texas.
126	Christoval Communications	n/a	Not a broadband provider per a representative of the company.

127	CIR Wireless Net	n/a	Unable to locate any current information on this company; no active website.
128	City of Brownsville	n/a	Grant Awardee; not a broadband provider.
129	City of El Paso	n/a	Grant Awardee; not a broadband provider.
130	CityNet Texas, LLC	n/a	This company is not a broadband provider.
131	Clartouch.Com	n/a	Unable to locate any current information on this company; no active website.
132	Cleburne.com	n/a	Unable to locate any current information on this company; no active website.
133	Cletel Telephone Service, LLC	n/a	This company is no longer in business.
134	CloseCall America, Inc.	<a href="http://www.closecall.com/">http://www.closecall.com/</a>	General reseller; nonfacilities-based.
135	Cobalt Broadband	<a href="http://www.cobaltbroadband.com">http://www.cobaltbroadband.com</a>	Acquired by JAB Wireless.
136	Cobridge Communications	<a href="http://www.cobridge.net">http://www.cobridge.net</a>	Acquired by Time Warner.
137	Cognisurf	<a href="http://www.aboutus.org/CogNiSurf.com">http://www.aboutus.org/CogNiSurf.com</a>	Not a broadband provider.
138	CommCentral, Inc.	n/a	General reseller; nonfacilities-based; inactive URL.
139	Communication Lines, Inc.	n/a	Not a broadband provider; Texas PUCT CLEC report identifies POTS service only.
140	Communications Pearl, LLC	n/a	Reseller; nonfacilities-based.
141	Computer Network Technology Corporation	<a href="http://www.brocade.com">http://www.brocade.com</a>	Not a broadband provider; sells communication equipment to operators.
142	ComTech 21, LLC	<a href="http://www.comtech21.com">http://www.comtech21.com</a>	Representative stated their organization does not provide service in Texas.

143	Comtel Services	<a href="http://www.comtelservices.com/">http://www.comtelservices.com/</a>	Not a broadband provider; provides wiring solutions.
144	Connect Insured Telephone Company	n/a	Inactive; no longer in business; Internet research rendered no valid information.
145	ConnectSouth	n/a	Not a broadband provider; managed services only.
146	Constant Communications, Inc.	<a href="http://www.constant.com">www.constant.com</a>	Inactive; no longer in business; invalid contact information.
147	Contel of Texas, Inc.	n/a	Acquired by GTE in 1992.
148	Convergent Communications Services, Inc.	<a href="http://converg.com/">http://converg.com/</a>	This company is not a broadband provider.
149	Corban Networks	<a href="http://www.corbannetworks.com">http://www.corbannetworks.com</a>	Inactive; no longer in business; invalid contact information.
150	Cordia Communications Corporation	<a href="https://www.cordia.us/">https://www.cordia.us/</a>	Not a broadband provider; Texas PUCT CLEC report identifies POTS and long-distance services only.
151	Cost Plus	n/a	Not a broadband provider; Texas PUCT CLEC report identifies POTS and long-distance services only.
152	Cox Communications	n/a	Acquired by SuddenLink (Texas).
153	CP Telco, LLC	n/a	Not a broadband provider; no evidence of operations.
154	Crescent Broadband	n/a	Inactive; no longer in business; no active or valid information identified.
155	CrossConnect	n/a	Inactive; non-state provider.
156	Crosswind	<a href="http://www.crosswind.net">http://www.crosswind.net</a>	Acquired by ERF Wireless.
157	CS Wireless Systems, Inc.	n/a	Acquired by Clearwire Corporation.
158	Cuda Communications	n/a	Inactive; non-state provider.
159	Current Communications of Texas, LP	n/a	Not a broadband provider.
160	Curtis Blakely	n/a	Not a broadband provider; certified public accountant.

161	CVC CLEC, LLC	n/a	Inactive-Non state provider per representative of the company.
162	Cyberbay	<a href="http://www.cyberbay.com">http://www.cyberbay.com</a>	General reseller; nonfacilities-based.
163	CyberStation, Inc.	<a href="http://www.cst.net">http://www.cst.net</a>	Not a broadband provider.
164	Cybertel, LLC	<a href="http://www.westernbroadband.com">www.westernbroadband.com</a>	Inactive; no longer in business.
165	Cypress Communications Operating Company, LLC	n/a	Not a broadband provider; local and long distance services only.
166	DashLink	n/a	Inactive; no longer in business.
167	DATACentric Broadband	n/a	Inactive; no longer in business.
168	Del Rio LIVE!	n/a	Inactive; no longer in business.
169	DelRio.com	n/a	Inactive; no longer in business.
170	DeltaCom, Inc.	<a href="http://www.deltacom.com">http://www.deltacom.com</a>	Inactive; non-state provider.
171	Deltaforce	<a href="http://www.deltaforce.net">http://www.deltaforce.net</a>	Not a broadband provider; dial-up services only.
172	deluxehost.com	<a href="http://deluxe-host.com">http://deluxe-host.com</a>	Not a broadband provider; web design and hosting.
173	DFW Broadband	<a href="http://www.dfwbroadband.net">http://www.dfwbroadband.net</a>	Not a broadband provider; business to business service provider.
174	DGUI	<a href="http://www.dgui.com/">http://www.dgui.com/</a>	Inactive; no longer in business.
175	Dial National	<a href="http://www.dialnational.com/">http://www.dialnational.com/</a>	Inactive; no longer in business.
176	Dialer.net	<a href="http://www.dialer.net/internet_access/United_States.html">http://www.dialer.net/internet_access/United_States.html</a>	Not a broadband provider; international dial-up services
177	Diamond Telco-Your Home Telephone Store	n/a	Not a broadband provider; POTS services only.
178	Digital Communities	n/a	Not a broadband provider; coalition organization for WIMAX development.
179	Digitalpath Texas	<a href="http://www.1txbb.net">http://www.1txbb.net</a>	Acquired by First Texas Broadband.
180	Direct Telephone Company, Inc.	n/a	Not a broadband provider; POTS services only.
181	DO Communications	n/a	Inactive; no longer in business.

182	Dot11 Networks	n/a	Acquired by JAB Wireless.
183	DR Telecom, Inc.	n/a	This company is not a broadband provider.
184	East Texas Rural Net	n/a	Inactive; no longer in business.
185	East Texas WISP	<a href="http://www.etwisp.net">http://www.etwisp.net</a>	Inactive; no longer in business.
186	Easton Telecom Services, LLC	n/a	Not a broadband provider; POTS and long-distance services only.
187	Easy Cellular, Inc.	n/a	This company is not a broadband provider.
188	Eccentrix Technologies, LLC	<a href="http://www.eccwireless.com/">http://www.eccwireless.com/</a>	Acquired by another company.
189	EdnaOnline	n/a	This company is not a broadband provider.
190	e-GWS	n/a	This company is not a broadband provider.
191	ELC Internet Services, Inc.	<a href="http://www.elc.net">http://www.elc.net</a>	Acquired by The SPECnet, Inc.
192	Element Networks, LLC	<a href="http://txairmail.net/residential.html">http://txairmail.net/residential.html</a>	Acquired by Enet Internet Solutions.
193	Entelegant Solutions, Inc.	n/a	Not a broadband provider; business telephone services only.
194	Entex Telephone Cooperative	n/a	Inactive; no longer in business.
195	Ernest Communications, Inc.	<a href="http://www.ernetstelecom.com">http://www.ernetstelecom.com</a>	Not a state provider per a representative of the company.
196	Esodus Communications, Inc.	n/a	Inactive URL and no direct contact information available; no longer in business.
197	Essential.com, Inc.	n/a	Texas PUCT CLEC reseller; no services identified; not a broadband provider.
198	Everybody's Phone Company	<a href="http://www.everybodyspho.com/">http://www.everybodyspho.com/</a>	Provides pre-paid phone services; not a broadband provider.
199	EveryCall Communications	<a href="http://www.everycall.com/">http://www.everycall.com/</a>	Local and long-distance phone plans to residential and business; not a broadband provider.

200	Excel Telecommunications, Inc.	<a href="http://www.excel.com">www.excel.com</a>	Local and long distance phone plans to residential and business; not a broadband provider.
201	Exigo Office	<a href="http://www.exigo.com">www.exigo.com</a>	Not a broadband service provider; consulting firm.
202	Express Telephone Services, Inc.	n/a	Not a broadband service provider; POTS and long-distance resell only.
203	EZ Connect, Ltd.	n/a	Texas PUCT CLEC reseller; local and long distance; not a broadband provider.
204	EZ Phone, Inc.	n/a	No longer in business; telephone number disconnected; e-mail exchange error received.
205	EZ Talk Telecommunications	n/a	Texas PUCT CLEC report indicates bankruptcy; all contact information invalid; no longer in business.
206	Facilities Communications International	n/a	No longer in business; telephone number disconnected; e-mail exchange error received.
207	Familytel of Texas, LLC	n/a	Not a broadband provider; a company representative indicated the organization is a reseller of telephone services only.
208	Fast Dependable Access	<a href="http://www.fda.net/">http://www.fda.net/</a>	No longer in business; invalid URL.
209	Fastline ISP	<a href="http://www.fastlineisp.com">http://www.fastlineisp.com</a>	No longer in business; telephone number disconnected; inactive URL.
210	Fiesta Telephone Company, Ltd.	n/a	Texas PUCT CLEC reseller; local and long distance; not a broadband provider.
211	First World Communications	n/a	No longer in business; all contact information is inactive.
212	Flow Communications	n/a	Not a broadband provider; no Texas PUC filing
213	Fort Bend Telephone Company	n/a	Not a broadband provider; no Texas PUC filing

214	France Telecom Corporate Solutions, Inc.	n/a	Not a broadband provider; received a response from a company representative indicating the organization does not provide broadband services.
215	Freedom Communications USA, LLC	n/a	Received an initial response to outreach activity.
216	Frontera Telecommunications, Inc.	<a href="http://www.fronteratelecom.com">www.fronteratelecom.com</a>	Not a broadband provider per a representative of the company.
217	Frontier Broadband	<a href="http://www.frontierbroadband.com">http://www.frontierbroadband.com</a>	Acquired by ERF Wireless.
218	Gerdes Web Services	n/a	Inactive; no longer in business; contact information invalid.
219	Global Connection Inc. of America	<a href="http://connectwithglobal.com">http://connectwithglobal.com</a>	Not a broadband provider; provides local, long-distance, and dial-up Internet only.
220	Global Metro Networks Texas, LLC	n/a	No longer in business per Texas PUCT CLEC report-relinquished operations.
221	Globaltech 2000, Inc.	n/a	No longer in business; all contact information is inactive.
222	GO-COMM, Inc.	n/a	Acquired by Airband Communications.
223	Gordon Communications, Inc.	<a href="http://www.gordonone.com">http://www.gordonone.com</a>	Representative of the company indicated last mile connectivity is made available.
224	Grande River Technology Group	n/a	Not a broadband provider; Internet research identifies company as communication lines and tower construction company.
225	Granite Telecommunications, LLC	n/a	Not a broadband provider; representative indicated company is a regulatory consulting firm.
226	Great America Networks, Inc.	<a href="http://www.ganconference.com/">http://www.ganconference.com/</a>	General reseller; nonfacilities-based.
227	Great West Services, LTD	n/a	No longer in business per Texas PUCT CLEC report-relinquished operations.

228	Group Long Distance, Inc.	n/a	Not a broadband provider; long-distance service provider only.
229	GST Telecomm Texas, Inc.	n/a	Acquired by Time Warner.
230	H.S.I. Communications, LLC	n/a	No longer in business; contact information invalid.
231	Habla Comunicaciones, Inc.	n/a	Internet research identified company filed Chapter 7 bankruptcy; no longer in business.
232	Hamilton Telecommunications	<a href="http://www.hamilton.net">http://www.hamilton.net</a>	Spoke to a representative of the company; no resell activity in Texas.
233	HBF Group, Inc.	n/a	Not a broadband provider; acquired by West Corporation; a VoIP service provider.
234	Hello Depot	<a href="http://www.hellodepot.com">http://www.hellodepot.com</a>	General reseller; nonfacilities-based.
235	Home Wireless Company	n/a	No longer in business; no relative data found during Internet research.
236	Homefone Services, LLC	n/a	Not a broadband provider; phone services provider only.
237	Horizon Broadband	<a href="http://horizonbroadband.net">http://horizonbroadband.net</a>	Non-state broadband provider.
238	Horizon WiFi Texas	<a href="http://horizonwifi.com">http://horizonwifi.com</a>	Not a broadband provider; confirmed with a representative of the company.
239	Hubwest	<a href="http://www.hubwest.com">http://www.hubwest.com</a>	Not a broadband provider; dial-up and web hosting services only.
240	Hubwest Protected Networks LLC	<a href="http://www.hubwest.com">http://www.hubwest.com</a>	Not a broadband provider; dial-up and web hosting services only.
241	HyperHog.Net	<a href="http://www.bci1.com">http://www.bci1.com</a>	Speeds below FCC definition of broadband.
242	Hyperoam	n/a	No longer in business; inactive URL or viable data supporting operational status as active.
243	i9 Networks	n/a	No longer in business; inactive URL or viable data supporting operational status as active.

244	ICG ChoiceCom, LP	n/a	Reviewed Texas PUCT CLEC; recent transfer of ownership-June 2011; new contact identified.
245	I-Element, Inc.	n/a	Not a broadband provider; statement received from a representative of the company.
246	I-Link Communications, Inc.	n/a	Not a broadband provider; provider of webinar support and equipment.
247	Imbris, Inc.	<a href="http://www.imbris.com">http://www.imbris.com</a>	Inactive; non-state provider.
248	IMGISP.NET	<a href="http://www.imgisp.net/">http://www.imgisp.net/</a>	Not a broadband provider; search engine and buyers guide to ISP.
249	In Touch Communications	n/a	No longer in business; per Texas PUCT CLEC report.
250	Incredible Networks	<a href="http://www.incredible.gr">http://www.incredible.gr</a>	Not a broadband provider; provides WEB hosting services.
251	Inercom Communications Inc.	<a href="http://www.inercom.com">www.inercom.com</a>	Inactive; no longer in business; contact information invalid; URL for sale.
252	Inetworks Group, Inc.	<a href="http://www.inetworksgroup.com">http://www.inetworksgroup.com</a>	Received a refusal to participate from a representative of the company during the October 2011 outreach session; website identifies business type solutions; cannot interpret if the company is facilities-based.
253	Infotelecom, LLC	<a href="http://infotelecom.us">http://infotelecom.us</a>	Not a broadband provider per statement received from a representative of the company.
254	Innercity Fibernet, LLC	<a href="http://www.innercityfiber.net">http://www.innercityfiber.net</a>	Not a broadband provider per statement received from a representative of the company.
255	Integra Telecom	<a href="http://www.integratelecom.com">http://www.integratelecom.com</a>	Not a broadband provider per a statement from a company representative; non-facilities based long-distance service provider.
256	Integrated Communications Consultants, Inc.	<a href="http://www.cromaine.com">http://www.cromaine.com</a>	Based on website research, company is a telecommunications consulting firm.

257	Integrated Digital Solutions	<a href="http://www.integrateddds.com">http://www.integrateddds.com</a>	Not a broadband provider; website development service provider.
258	Integrity Online Brazos Valley	<a href="http://www.iolbv.com">http://www.iolbv.com</a>	Not a broadband provider; dial-up service offering only stated on website.
259	Interactiveinfo.com Inc.	<a href="http://www.rocketbroadband.com">http://www.rocketbroadband.com</a>	Inactive; non-state provider.
260	Interlink Wireless	n/a	Acquired by Internet America Wireless.
261	Internap Network Services Corporation	<a href="http://www.internap.com">http://www.internap.com</a>	Not a broadband provider; business to business solutions provider.
262	Internet Texas	<a href="http://www.itexas.net">http://www.itexas.net</a>	Acquired by ERF Wireless.
263	Internet Texoma, Inc.	<a href="http://www.texoma.net">http://www.texoma.net</a>	Not a broadband provider; website advertises speeds below FCC standard.
264	Ionex Telecommunications, Inc.	n/a	Acquired by Birch Communications.
265	IPNS	<a href="http://www.ipns.com">http://www.ipns.com</a>	Inactive; non-state provider.
266	iRadical	n/a	Not a broadband provider; Internet research rendered no organization information.
267	ISPartner.net	n/a	Not a broadband provider; Internet research rendered no organization information.
268	Jenco Speed Web	<a href="http://www.jencospeed.net">http://www.jencospeed.net</a>	Inactive; non-state provider.
269	John Staurulakis Incorporated	<a href="http://www.jsitel.com">http://www.jsitel.com</a>	Not a broadband provider; consultant services only.
270	Jones Broadcasting	<a href="http://www.jonesbroadcasting.com">http://www.jonesbroadcasting.com</a>	Not a broadband provider; consulting services only.
271	Kentucky Data Link, Inc.	<a href="http://www.kdlink.com">http://www.kdlink.com</a>	Acquired by Windstream; Connected Nation national team outreach.
272	Kentucky Universal Telecom, Inc.	n/a	Not a broadband provider; Texas PUCT CLEC report identifies residential POTS only.
273	KeyOn Communications, Inc.	<a href="http://www.keyon.com">http://www.keyon.com</a>	Acquired by JAB Wireless.
274	Koyote Internet	n/a	Acquired by eNet.

275	L&D Wireless	n/a	Inactive; no longer in business; per previous owner business operations was terminated.
276	Lake Country Internet	n/a	Inactive; no longer in business.
277	Lake Kiowa	n/a	Not a broadband provider; Internet research rendered no organization information.
278	LARIAT.NET	<a href="http://www.lariat.net/">http://www.lariat.net/</a>	Inactive; non-state provider.
279	LavonWeb.net	n/a	Acquired by TierOne Converged Networks.
280	LayerOne, Inc.	n/a	Not a broadband provider; acquired by Switch and Data-infrastructure and access management services.
281	LCSisp.com	<a href="http://www.lcsisp.com/index.cfm">http://www.lcsisp.com/index.cfm</a>	Not a broadband provider; dial-up service only.
282	LEC Unwired, LLC	n/a	No longer in business; Internet research identified operations transitions to other companies.
283	Legacy Long Distance International, Inc.	<a href="http://www.golegacy.com">http://www.golegacy.com</a>	Long distance, pay telephone, pager, and customer services only provider; not a broadband provider.
284	Lightning Connect	<a href="http://www.lightningconnect.net">http://www.lightningconnect.net</a>	No longer in business; invalid contact information and extensive Internet research declares no operations.
285	LightSpeed Wireless	n/a	Acquired by Blue Wireless and Data.
286	Linden Wireless	n/a	Inactive; no longer in business; inactive URL or valid contact information.
287	LinkAmerica.Net	<a href="http://www.linkamerica.net/">http://www.linkamerica.net/</a>	No longer in business; telecommunications refurbishing was primary business.
288	Lipan Telephone Company, Inc.	<a href="http://www.lipan.net">www.lipan.net</a>	Not a broadband provider; offers service below FCC standard.
289	Local Telecom Systems, Inc.	n/a	Not a broadband provider; local calling card services only.

290	Lone Star Communications	<a href="http://lonestarcom.com">http://lonestarcom.com</a>	General reseller; nonfacilities-based.
291	M.L.M. Telecommunications, Inc.	n/a	Inactive; no longer in business.
292	MainBoard	<a href="http://www.mainboard.cc/internet.htm">http://www.mainboard.cc/internet.htm</a>	General reseller; nonfacilities-based.
293	Maine Cable and Wireless	<a href="http://www.mainecableandwireless.com">http://www.mainecableandwireless.com</a>	Not a broadband provider; system integrator and solutions provider.
294	Managed Services, Inc.	n/a	Not a broadband provider based on limited information available on the Internet.
295	Marcin Company	n/a	Not a broadband provider.
296	Master Call Communications, Inc.	<a href="http://www.choosemcc.com">http://www.choosemcc.com</a>	General reseller; nonfacilities-based; resells long distance and phone cards; not a broadband provider.
297	McGraw Communications	<a href="http://www.mcgrawcom.net">http://www.mcgrawcom.net</a>	General reseller; nonfacilities-based; received a reply from a company representative indicating non-facility based reseller.
298	Mesh.Net	<a href="http://www.mesh.net">http://www.mesh.net</a>	Acquired by VRFuturenet.
299	METTEL (Metropolitan Telecommunications)	<a href="http://www.mettel.net">http://www.mettel.net</a>	General reseller; nonfacilities-based; received a reply from a company representative indicating nonfacilities-based reseller.
300	MidTech	n/a	Not a broadband provider; no relevant information obtained from Internet research to classify as an ISP.
301	Millennium One Communications, Inc.	n/a	No longer in business; telephone disconnect message and e-mail returns via Microsoft Exchange.
302	MiracleTel Telephone Service, LLC	<a href="http://www.miracletel.com">www.miracletel.com</a>	Inactive; no longer in business; invalid contact information.
303	Mobilelitie, LLC	<a href="http://www.mobilitie.com">http://www.mobilitie.com</a>	Not a broadband provider; manages and leases tower infrastructures.

304	Momentum Internet & Computer Services	<a href="http://www.moment.net">http://www.moment.net</a>	Acquired by ERF Wireless.
305	Momentum Online	n/a	Acquired by ERF Wireless.
306	Momentum Telecom, Inc.	<a href="https://www.momentumtel.com/">https://www.momentumtel.com/</a>	General reseller; nonfacilities-based; wholesaler and dial-up service provider.
307	Moviestar Telecom, Inc.	n/a	CLEC Report indicates long distance and local telephone service; no URL listing.
308	Mundo Telecom	<a href="http://www.mundotelecom.biz">http://www.mundotelecom.biz</a>	Inactive; no longer in business; Texas PUCT CLEC report identifies organization as being relinquished.
309	MXD	n/a	No services defined within CLEC report; telephone number disconnected; no response to e-mails.
310	N. Texas Wireless	n/a	Inactive; no longer in business; invalid contact information.
311	Nanomega.Com	<a href="http://www.nanomega.com">www.nanomega.com</a>	Inactive; no longer in business; invalid contact information.
312	National Clear Tone, LP	n/a	Inactive; no longer in business; invalid contact information.
313	National Discount Telecom, LLC	n/a	Inactive; no longer in business; invalid contact information.
314	Navigator Telecommunications, LLC	<a href="http://www.navtel.com">http://www.navtel.com</a>	Representative of the company stated the organization does not provide broadband residential services; not a broadband provider.
315	Nei Datacom	<a href="http://neidatacom.com">http://neidatacom.com</a>	Not a broadband provider; designs and constructs telecommunication infrastructure
316	Net Star Telecommunications	<a href="http://www.netstarwireless.com">http://www.netstarwireless.com</a>	Not a broadband provider; per a representative of the company only provides business to business solutions.
317	Net Talk.Com, Inc.	<a href="http://www.nettalk.com">http://www.nettalk.com</a>	General reseller; nonfacilities-based; VoIP and WiFi services offered.

318	NetAccess, Inc.	<a href="http://www.nas.net/">http://www.nas.net/</a>	Not a broadband provider; business portal provider.
319	NetSpeed Online	<a href="http://www.netspeed-online.net">www.netspeed-online.net</a>	Inactive; no longer in business; URL inactive; no valid contact information identified.
320	Netstreamlive	<a href="http://www.netsreamlive.com">http://www.netsreamlive.com</a>	Not a broadband provider; provides webcasting events via satellite for special events.
321	NetVoice	n/a	Not a broadband provider; a representative stated service offering is VoIP.
322	Neutral Tandem-Texas, LLC	<a href="http://www.neutraltandem.com/">http://www.neutraltandem.com/</a>	Not a broadband provider.
323	New Access Communications LLC	n/a	Not a broadband provider; provides POTS only.
324	New Edge Networks, Inc.	<a href="http://www.newedgenetworks.com/">http://www.newedgenetworks.com/</a>	Acquired by another provider.
325	NewGenWireless	<a href="http://www.newgenwireless.com">http://www.newgenwireless.com</a>	Not a broadband provider; provides cellular phone packages.
326	Newphone	<a href="http://www.newphone.com">http://www.newphone.com</a>	Not a broadband provider; phone services only per Texas PUCT CLEC report.
327	Nextg Networks of Illinois, Inc.	<a href="http://www.nextgnetworks.net">http://www.nextgnetworks.net</a>	Not a broadband provider; provider serves as an integrator; nonfacilities-based operations.
328	Nexus Communications, Inc.	<a href="http://www.tsihomephone.com/">http://www.tsihomephone.com/</a>	Not a broadband provider; telephone services provider only.
329	NoDial.net	n/a	No active website; no longer in business.
330	NoDial.net	n/a	Acquired by Internet America Wireless.
331	North Dallas Wireless	n/a	Not a broadband provider; cellular telephone services only.
332	North East Texas Wireless Initiative	n/a	Not a broadband provider; Internet research leads to a BLOG website.

333	North Texas UnWired	n/a	Inactive; no longer in business; Internet research concludes no business operations and inactive URL.
334	North Texas Web Services	<a href="http://www.ntws.net">http://www.ntws.net</a>	Acquired by eNet.
335	Northeast Texas Broadband, LLC	n/a	Acquired by eNet.
336	Northeast Texas Online	<a href="http://www.neato.net">http://www.neato.net</a>	Acquired by eNet.
337	Northwest ISP	<a href="http://www.northwestisp.com">http://www.northwestisp.com</a>	Inactive; no longer in business.
338	NSN Wireless, L.P.	<a href="http://www.nsn-wireless.net">http://www.nsn-wireless.net</a>	Not a broadband provider; business to business solutions provider.
339	Ntegrity Telecontent Services, Inc.	n/a	Not a broadband provider; content provider for MDU via other providers transport.
340	Ntera, Inc.	n/a	Inactive; no longer in business; invalid contact information and inactive URL.
341	Nucentrix Broadband Networks	n/a	Acquired by Clearwire Corporation.
342	Oklahoma ECG, L.L.C.	n/a	Not a broadband provider; POTS and long distance services only.
343	Omni Internet	<a href="http://www.omniglobal.net">www.omniglobal.net</a>	Acquired by West Central Net.
344	One Connect	<a href="http://www.oneconnect.ca">www.oneconnect.ca</a>	Not a broadband provider; business to business solutions provider.
345	One Ring Network	<a href="http://www.cvc.net/">http://www.cvc.net/</a>	Not a broadband provider; business to business solutions provider.
346	One Star Long Distance, Inc.	<a href="http://www.onestarld.com/">http://www.onestarld.com/</a>	Not a broadband provider; local and long-distance services only.
347	One-Call Telecom, Inc.	<a href="http://www.onecalltelecom.com/">http://www.onecalltelecom.com/</a>	General reseller; nonfacilities-based.
348	Open Range Internet	<a href="http://www.openrangecomm.com">www.openrangecomm.com</a>	Inactive; non-state provider.
349	Overarch Broadband	<a href="http://www.overarch.com">http://www.overarch.com</a>	Inactive; non-state provider.
350	Pacific Internet Exchange	<a href="http://www.pie.us/">http://www.pie.us/</a>	General reseller; nonfacilities-based.

351	Pac-West Telecomm Inc.	<a href="http://www.pacwest.com/">http://www.pacwest.com/</a>	Not a broadband provider; wholesale telephone services.
352	PAETEC Communications, Inc.	<a href="http://www.paetec.com/">http://www.paetec.com/</a>	Acquired by another company.
353	Paknet Limited	n/a	Inactive; non-state provider.
354	Pampa Cyber Net	<a href="http://www.pan-tex.net/">http://www.pan-tex.net/</a>	Not a broadband provider; database management services.
355	Panaband	<a href="http://www.panaband.com">www.panaband.com</a>	Inactive; no longer in business; invalid contact information and inactive URL.
356	Panoptos, LLC	n/a	Inactive; no longer in business; telephone number indicates disconnected service and no URL listing.
357	Partnership Broadband	<a href="http://www.partnershipwireless.com">http://www.partnershipwireless.com</a>	Acquired by JAB Wireless.
358	Peerless Network of Texas, LLC	<a href="http://www.peerlessnetwork.com">http://www.peerlessnetwork.com</a>	Non-state broadband provider.
359	Pelican Bay Internet	n/a	No information.
360	PELZER COMMUNICATIONS CORPORATION	<a href="http://www.pelzercom.com">www.pelzercom.com</a>	Inactive; no longer in business; assets are being sold per company representative.
361	Permian Basin Online	<a href="http://www.netwest.com">http://www.netwest.com</a>	Acquired by NetWest Online.
362	PhoneCo, L.P.	<a href="http://www.phoneco1.com">http://www.phoneco1.com</a>	Not a broadband provider.
363	Phone-Link, Inc.	n/a	No longer in business; disconnected telephone service and inactive URL located.
364	Pics.Net	<a href="http://www.pics.net">http://www.pics.net</a>	Subsidiary of WesTex Connect (corporate staff).
365	Piney Woods Wireless	<a href="http://www.pineywoodswireless.com/">www.pineywoodswireless.com/</a>	Inactive; no longer in business; a representative stated operations were terminated about 5 years ago.
366	Planet Online	<a href="http://www.planetonline.net/">http://www.planetonline.net/</a>	Not a broadband provider; web-hosting services
367	Posner Telecommunications Inc.	n/a	Not a broadband provider; a paging service company.
368	PRAIRIENET	<a href="http://www.prairienet.us/">http://www.prairienet.us/</a>	Acquired by JAB Wireless.

369	PremoWeb	<a href="http://www.premoweb.com/about_us/contact_us.html">http://www.premoweb.com/about_us/contact_us.html</a>	Not a broadband provider; national dial-up service.
370	PRIDE Network, Inc.	n/a	Subsidiary of NTS Communications.
371	PrismNet	<a href="http://www.prismnet.com/">www.prismnet.com/</a>	Not a broadband provider; statement of not providing broadband service received from a representative of the company.
372	Progressive Concepts, Inc.	<a href="http://www.progressive-concepts.com">http://www.progressive-concepts.com</a>	Not a broadband provider; equipment supplier for broadcast applications.
373	Pro-Sky	<a href="http://www.prosky.net/products/residential_wireless/index.html#">http://www.prosky.net/products/residential_wireless/index.html#</a>	Inactive; no longer in business; invalid contact information; inactive URL.
374	Provis Broadband	n/a	General reseller; nonfacilities-based; representative of the company indicated wireless assets were sold; selling other provider services only.
375	Purelyonline	<a href="http://www.purelyonline.com">www.purelyonline.com</a>	Inactive; no longer in business; Internet research identified status of organization.
376	PVCo.net, LLC	<a href="http://www.mypvco.com">http://www.mypvco.com</a>	Acquired by Jab Wireless.
377	QPQ Marketing, Inc.	n/a	Not a broadband provider; Texas PUCT CLEC report identifies residential POTS only.
378	Quality Telephone, Inc.	<a href="http://www.qtelephone.com">http://www.qtelephone.com</a>	Not a broadband provider; received a response from a company representative indicating the organization does not provide broadband services.
379	QuanTumNet ISP	<a href="http://www.qins.net">http://www.qins.net</a>	Inactive; no longer in business; invalid contact information and inactive URL.
380	Quick-Tel Communications, Inc.	<a href="http://www.quick-tel.com/">http://www.quick-tel.com/</a>	Not a broadband provider; a provider of business telecommunications equipment.
381	Qwest Communications Company, LLC	<a href="http://www.qwest.com/">http://www.qwest.com/</a>	Acquired by CenturyLink; Qwest had no operations in the state.

382	Qzip.Net	<a href="http://www.qzip.net">http://www.qzip.net</a>	Not a broadband provider; business solutions services.
383	R2R Connectivity	<a href="http://www.r2rconnect.net">www.r2rconnect.net</a>	Not a broadband provider; provides service below FCC standard.
384	Randy White Telecommunications, Inc.	<a href="http://www.rwttelecommunications.com">http://www.rwttelecommunications.com</a>	General reseller; nonfacilities-based.
385	Reach Direct, Inc.	n/a	Not a broadband provider.
386	Reconnect Plus, LLC	n/a	Inactive; no longer in business; invalid contact information and inactive URL.
387	Region 18 Education Service Center	n/a	Grant awardee.
388	Regional Wireless Networks	n/a	Not a broadband provider; Internet research found no relevant information.
389	Reliant Communications, Inc.	<a href="http://www.reliant-communications.com/">http://www.reliant-communications.com/</a>	General reseller; nonfacilities-based.
390	Renaissance Networks	<a href="http://www.renaissancenetworks.com/">http://www.renaissancenetworks.com/</a>	Small business technology consulting and investment company serving Albuquerque, New Mexico.
391	Rhino Communications	<a href="http://www.rhinocommunications.net">http://www.rhinocommunications.net</a>	Acquired by JAB Wireless.
392	RHO Wireless	<a href="http://www.rhowireless.com/Default.aspx">http://www.rhowireless.com/Default.aspx</a>	This company offers wireless and hardware/software small business solutions in the Dallas/Fort Worth area.
393	RioWave.net	<a href="http://www.svideo.com/wi.html">http://www.svideo.com/wi.html</a>	Company operates as Svideo offering hardware and wireless at speeds of 128Kbs up and 512Kbs down.
394	Rosebud Telephone	n/a	General reseller; nonfacilities-based; no URL listing.
395	Rx Technology	<a href="http://www.rx-tech.com">http://www.rx-tech.com</a>	Web host and reseller for south Texas businesses and government entities.
396	Sage Telecom, Inc.	<a href="http://www.sagetelecom.net/">http://www.sagetelecom.net/</a>	Not a broadband provider; dial-up services only.
397	Sanswire.Net	<a href="http://www.sanswire.com">http://www.sanswire.com</a>	This is a satellite surveillance company.

398	SATEXAS Communications Network, Inc.	<a href="http://www.satexas.com">http://www.satexas.com</a>	This company services businesses and is an IT consultant, not a qualified broadband provider.
399	SC TXLINK, LLC.	n/a	Confirmed with company that they do not provide broadband internet services of any kind.
400	Seneca Communications, LLC	<a href="http://senecacommunications.com">http://senecacommunications.com</a>	This company offers business internet solutions only.
401	Servisense.com, Inc.	n/a	Inactive; no longer in business; telephone number-disconnected status; inactive URL.
402	Signatel Telephone Corp	n/a	Company indicated they are facilities-based and reseller for residence and commercial and work through PUC to provide required information only.
403	Simply Cellular & Telephone Reconnections, LLC	n/a	Inactive; no longer in business; logged telephone number assigned to another business firm; inactive URL.
404	Simply Dialup A Metrogeek Company	<a href="http://www.simplydialup.com/">http://www.simplydialup.com/</a>	Company offers only dial-up services.
405	SkyvueUSA	<a href="http://www.skyvueusa.com">http://www.skyvueusa.com</a>	Acquired by ERF Wireless.
406	Sling Broadband	<a href="http://www.slingbroadband.com/">http://www.slingbroadband.com/</a>	Service provider in Broward and Dade County, Florida.
407	Smartcom Telephone, LLC	<a href="http://www.smartcomtelephone.com/">http://www.smartcomtelephone.com/</a>	Commercial broadband provider, does not service a residential market with broadband.
408	Smartresort Co, LLC	<a href="http://www.discoverbeyond.com">www.discoverbeyond.com</a> ; <a href="http://www.smartresort.com">http://www.smartresort.com</a> ;	General reseller; multi-state provider.
409	Soft Switch Communications Inc.	<a href="http://softswitchcom.com/">http://softswitchcom.com/</a>	This company is a business telecommunications service provider and is not a broadband service provider.
410	Solarity Communications LLC	n/a	Inactive; no longer in business; continuous busy signal with logged telephone number; inactive URL; e-mail, Microsoft delivery rejection.

411	South Texas Internet	<a href="http://www.stic.net/">http://www.stic.net/</a>	This company is a business telecommunications service provider and is not a broadband service provider.
412	Southwestern Bell Telephone, L.P.	n/a	Acquired by AT&T, Inc..
413	Southwestern Network Communications, Inc.	n/a	No longer operating; this company was a facilities-based reseller.
414	Speed Cell Communications	n/a	This company is no longer in business.
415	Speed Express Networks	<a href="http://speedexpress.net">http://speedexpress.net</a>	This company is no longer in business.
416	Spindlemedia	<a href="http://www.spindle.net">http://www.spindle.net</a>	This company offers no broadband services.
417	Sprint Broadband Direct	<a href="http://www.broadbandreports.com/shownews/Sprint-Broadband-Direct-Goes-Offline-July-31-94556">http://www.broadbandreports.com/shownews/Sprint-Broadband-Direct-Goes-Offline-July-31-94556</a>	This company is no longer in business.
418	Starlight Phone, Inc.	n/a	This company offers local phone service only.
419	Stealthwave, LLC	<a href="http://www.stealthwave.net">http://www.stealthwave.net</a>	This company's identified speeds do not meet FCC broadband specifications.
420	Stellar Communication, Inc.	<a href="http://stellarcommunications.info">http://stellarcommunications.info</a>	This company is no longer in business.
421	Stratos Global Services, Inc.	n/a	This company offers business internet solutions only.
422	Summit Communications	<a href="http://suminet.net">http://suminet.net</a>	Not a state provider for broadband services.
423	Sunray	n/a	This company is not a viable broadband provider, no service offerings found.
424	Sunset Cablevision	n/a	This company is no longer in business.
425	Superior Phone Company, Inc.	n/a	This company was acquired and now operate under D&B Payphone as payphone servicer.
426	Sure-Tel, Inc.	n/a	This company is no longer in business.

427	Surferz.Net	<a href="http://www.surferz.net/">http://www.surferz.net/</a>	This company offers dial-up service.
428	SurfsideTX.Net	<a href="http://www.surfsidetx.net">http://www.surfsidetx.net</a>	This company's identified speeds do not meet FCC broadband specifications.
429	SurfTX	n/a	This company is no longer in business.
430	Symtelco, LLC	<a href="http://symtelco.com">http://symtelco.com</a>	This company, formerly a consulting firm, is no longer in business.
431	T1 Shopper	<a href="http://www.t1shopper.com/">http://www.t1shopper.com/</a>	This company provides backhaul and is not a broadband provider.
432	T3 Wireless	<a href="http://www.t3wireless.com/">http://www.t3wireless.com/</a>	This company does not provide residential service, only B2B.
433	Tel West Network Services Corporation	<a href="http://www.telwestservices.com">http://www.telwestservices.com</a>	Acquired by TelePacific.
434	Telcentris Communications, LLC	<a href="http://www.telcentris.com">http://www.telcentris.com</a>	Business solutions provider only.
435	Telcove	n/a	This company offers business internet solutions only.
436	Telefamilia Communications, Inc.	<a href="http://www.atsi.net/">http://www.atsi.net/</a>	This company was acquired by ATSI Communications.
437	Telefonos De Tejas, Inc.	n/a	This company offers telephone service only.
438	Telenational Communications Inc.	<a href="http://www.telenational.net">http://www.telenational.net</a>	Not a broadband provider per a company representative.
439	Tele-One Communications, Inc.	<a href="http://www.tele-onecom.com/">http://www.tele-onecom.com/</a>	This company offers dial-up service.
440	TeleShare Wireless	<a href="http://www.teleshare.net/">http://www.teleshare.net/</a>	Acquired by Internet America Wireless.
441	Teligent Services, Inc.	<a href="http://www.teligent.com">http://www.teligent.com</a>	Not a broadband service provider; voice service only.
442	Telscape Communications, Inc.	<a href="http://www.telscape.com/">http://www.telscape.com/</a>	Not a broadband provider; consulting firm only per a representative of the company.
443	Telson Communications, Inc.	n/a	This company is no longer in business.

444	Terra Com Inc.	n/a	This company is an environmental consulting firm in Marianna, Florida.
445	Texas Air Net	n/a	This company operates as housing directory assistance.
446	Texas American	n/a	This company is no longer in business.
447	Texas Networking, Inc.	n/a	Texas PUCT report identifies no services available in Texas.
448	Texas One Internet	<a href="http://tex1.net">http://tex1.net</a>	Dial-up service provider; no broadband capabilities.
449	Texas Unwired Networks	n/a	Acquired by Internet America Wireless.
450	Texas Web Networks	n/a	This company is no longer in business.
451	THE PHONE PROS	<a href="http://www.phonepro.com/">http://www.phonepro.com/</a>	This company is no longer in business.
452	Tiagris Corporation	<a href="http://www.tiagris.net/">http://www.tiagris.net/</a>	This company is no longer in business.
453	Tieless Communications	<a href="http://tieless.net/">http://tieless.net/</a>	This company is no longer in business.
454	TIM RON ENTERPRISES, LLC.	n/a	Not a broadband provider; local and long distance service only.
455	TMC Communications	<a href="http://www.tmc.com/">http://www.tmc.com/</a>	Not a broadband provider; VoIP services.
456	TNCI, Inc.	<a href="http://www.tncii.com/">http://www.tncii.com/</a>	No residential services available; B2B provider.
457	TopGun Telecom	n/a	Acquired by Internet America Wireless.
458	TopMost Connects, Inc.	n/a	No longer in business; representative of the company stated the organization has been out of business for 5 or 6 years.
459	Total Access Networks, Inc.	<a href="http://www.totalaccess.net/">http://www.totalaccess.net/</a>	Not a wisp; website reflects it is a reseller.
460	Total Telephone Service Company	<a href="http://www.totaltelephone.com/">http://www.totaltelephone.com/</a>	This company offers voice services only.

461	Trinsic Communications, Inc.	<a href="http://www.trinsic.com/main.asp">http://www.trinsic.com/main.asp</a>	Not a broadband provider based on LinkedIn information; telephone number disconnected; no responses to e-mails.
462	TSISP.NET	<a href="http://www.tsisp.net">www.tsisp.net</a>	This company is no longer in business.
463	TSTAR Internet	<a href="http://www.tstar.net/wireless_service.htm">http://www.tstar.net/wireless_service.htm</a>	Acquired by ERF Wireless.
464	Twilight Communications	<a href="http://www.twilightcommunications.com">http://www.twilightcommunications.com</a>	Acquired by JAB Wireless.
465	TXK Communications, Inc.	n/a	Inactive; no longer in business; invalid contact information.
466	UCN, Inc.	<a href="http://www.incontact.com/">http://www.incontact.com/</a>	Not a broadband provider; long-distance and calling card services.
467	Unidial Communications	<a href="http://www.lightyear.net">www.lightyear.net</a>	This company was acquired by Lightyear.
468	UNIVERSAL TELEPHONE EXCHANGE, Inc.	n/a	This company is no longer in business.
469	University Corporation for Advanced Internet Development	n/a	This is a community anchor institution network.
470	UNUM Telecommunications, Inc.	<a href="http://www.utinet.net/">http://www.utinet.net/</a>	This company is no longer in business.
471	UrNet	<a href="http://www.urnet.net/">http://www.urnet.net/</a>	Acquired by Digital Passage.
472	US Cable Corporation	<a href="http://www.uscablegroup.com/">http://www.uscablegroup.com/</a>	Acquired by another company.
473	US LEC COMMUNICATIONS Inc.	<a href="http://www.paetec.com/">http://www.paetec.com/</a>	This company is a reseller of frame relay services and does not qualify as a broadband provider.
474	US Wireless Online	n/a	This company was purchased by iElement and is no longer in business.
475	USA Airnet, Inc.	<a href="http://www.usairnet.com">www.usairnet.com</a>	This company is no longer in business.
476	USA Online, Inc.	<a href="http://www.usaonline.net/">http://www.usaonline.net/</a>	This company was acquired by Whitehorse.

477	USA QUICK PHONE, Inc.	n/a	This company is no longer a general reseller of broadband.
478	USTelecom	<a href="http://www.ustelecom.org/Video_Blogs/Broadband-Now.html">http://www.ustelecom.org/Video_Blogs/Broadband-Now.html</a>	Inactive; no longer in business.
479	V3 Global, Inc.	n/a	This company is no longer a general reseller of broadband.
480	Valley Telecom Group, Inc.	<a href="http://www2.vtc.net/">http://www2.vtc.net/</a>	This company is a reseller of phone services only.
481	Vantage Systems	n/a	This is a software company.
482	VCI COMPANY	n/a	This company is a Comcast affiliate.
483	VCOM SOLUTIONS	<a href="http://www.vcomsolutions.com/">http://www.vcomsolutions.com/</a>	Not a broadband provider.
484	Vectren Communications Services, Inc.	<a href="http://www.vectren.com/">http://www.vectren.com/</a>	This company is a national gas company and not a qualified broadband provider.
485	Vertex Communications, Inc.	n/a	This company offers dial-up service.
486	Viteris, Inc.	n/a	Acquired by Internet America Wireless.
487	Viyu Communications	n/a	This company is no longer in business.
488	Voice Runner, Inc.	<a href="http://www.voicerunner.com/">http://www.voicerunner.com/</a>	This company is not a broadband provider.
489	VoicePac Prepaid, LLC	n/a	Not a broadband provider.
490	VOLO COMMUNICATIONS OF TEXAS, Inc.	<a href="http://www.volocommunications.com/">http://www.volocommunications.com/</a>	No longer in business.
491	VSS Wireless	n/a	This company is no longer in business.
492	Warp Speed Internet	n/a	Acquired by ERF Wireless.
493	Wave2Wave Communications Inc.	<a href="http://www.wave2wave.com">http://www.wave2wave.com</a>	This company does not have a footprint in TX and only operates in NY, CT, NJ, IL, and PA.
494	Waymark Communications	<a href="http://www.waymark.net/">http://www.waymark.net/</a>	Website research indicates a business to business service provider.
495	WCS Communications	n/a	General Reseller; non-facilities based; satellite services.

496	WDSL Net	n/a	This company is no longer in business.
497	Webatron Internet Solutions	<a href="http://www.webatron.net">http://www.webatron.net</a>	This company is no longer in business.
498	Webcheetah	n/a	This company is a web design firm.
499	WEST TELCOM, Inc.	n/a	This company operated in California and is no longer in business.
500	West Texas Internet Services	n/a	This company is no longer in business.
501	West Texas Online	n/a	This company is no longer in business.
502	WhiteHorse Communications	<a href="http://www.net">http://www.net</a>	This company offers dial-up service only.
503	Winstar Communications, LLC	<a href="http://gvcwinstar.net/">http://gvcwinstar.net/</a>	This company is no longer in business.
504	Wireless Frontier	n/a	This company is no longer in business.
505	Wireless Roanoke, Inc.	<a href="http://www.wirelessroanoke.com/">http://www.wirelessroanoke.com/</a>	This company is no longer in business.
506	Wireless TelCorp	<a href="http://www.wirelesstelcorp.com">http://www.wirelesstelcorp.com</a>	This company, formerly serving businesses, is no longer in business.
507	Wirestar, Inc.	<a href="http://www.wirestar.net/">http://www.wirestar.net/</a>	This company is not a broadband provider.
508	WireWeb	<a href="http://www.wireweb.net">http://www.wireweb.net</a>	Acquired by Internet America Wireless.
509	wisbin	<a href="http://www.wisbin.com/">http://www.wisbin.com/</a>	This company is no longer in business.
510	Wi-Speed	n/a	This company is no longer in business.
511	World Link Communications	n/a	This company offers dial-up service only.
512	WTX Communications	n/a	This company is no longer in business.
513	www.AmericanAngel.us	<a href="http://www.americanangel.us/">http://www.americanangel.us/</a>	This company is no longer in business.
514	Xanadoo, LLC	<a href="http://www.xanadoo.com">http://www.xanadoo.com</a>	This company is no longer in business; under bankruptcy filings.

515	Xramp Wireless	n/a	This company was acquired by Wireless Frontier.
516	Xspedius Management Co. Switched Services, L.L.C	n/a	This company and web-hosting was acquired by Time-Warner.
517	YEZOO.NET	<a href="http://www.yezoo.net/">http://www.yezoo.net/</a>	This company is no longer in business.
518	YFT.Net	<a href="http://www.yft.net">http://www.yft.net</a>	Acquired by AMA Technologies, Inc.
519	YLISP ( Your Local ISP)	<a href="http://www.itsyournet.com">http://www.itsyournet.com</a>	General reseller; multi-state provider.
520	YourT1Wifi.com	<a href="http://yourt1wifi.com/">http://yourt1wifi.com/</a>	This company does not service the Texas market and is an Idaho WISP.
521	ZOOM Internet Services, LLC	n/a	This company does not service the Texas market and is a Michigan WISP.

**APPENDIX A: ESTIMATION OF NON-PARTICIPATING PROVIDERS**

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**AMA TechTel**

**Anvil Communications**

**Broadwaves**

**CKS Wireless, Inc.**

**East Texas Broadband**

**East Texas Cable**

**GoZoe Wireless**

**NDemand, Inc.**

**Skynet Communications**

**Starnet Online Systems**

**Telecom Cable, LLC**

**TheSPECnet, Inc.**

**VRFuturenet**

**Zulu Internet, Inc.**

## AMA TechTel

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 broadband provider, regardless of whether the provider has chosen to support and participate in the SBI mapping initiative.

The following narrative provides detail regarding continued data collection activities related to AMA TechTel, a wireless Internet service provider (WISP), located in Amarillo, Texas with a service area around the Central Panhandle, including but not limited to, the city of Amarillo and multiple surrounding towns and rural areas. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation techniques that support the underlying data. As of April 2012 CN identified additional service areas during routine exploration and field validation activity in Abilene, Texas and surrounding rural areas. The narrative for the October 2012 activity is located at the end of this document (after Exhibit I) and titled *Results for October 2012 Submission*.

### **Background**

CN staff members have continued trying to obtain the participation of the provider with 33 instances of communication via telephone and e-mail sessions since September 9, 2009, through August 6, 2012. Communication reply received from a company representative on February 4, 2011, with a response of electing not to participate due to the nationwide providers' involvement in the mapping project. Additionally, a CN staff member visited the AMA TechTel office on October 4, 2011, to discuss the broadband mapping project in person with AMA TechTel staff but decision-making staff members were not available.

### **The Issue**

AMA TechTel, by its lack of responsiveness since September 9, 2009, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN began building a file based on research information and, as time progressed, enriched the file with information obtained through the public domain. For example, CN reviewed the provider's website (<http://www.amatechtel.com/>) and called the AMA TechTel office to determine the residential service plans offered to Residential as 1.1 Mbps download and 512 Kbps upload, which is well within the website speeds and OOKLA data sample (Over 2,800 total speed tests) in service plans (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) (**Exhibit C**) system yielded an FRN of 0008064941 and 0013822721 with contact information relative to the owner of the company. Also, to support field validation of access points, the FRN's were referenced to the FCC Universal Licensing System (ULS) to identify any licenses the provider may hold which could possibly enhance locating active access points for the service area. This process yielded license WQJC218 (**Exhibit D**), Radio Service: WQJC218 with 10 unique locations.

## Exhibit A: Service Plans

Services		
<p><b>High-Speed Internet Access</b></p> <p>512Kb up to 45Mb</p>	<p><b>Web Site Hosting</b></p> <p>Dedicated and Shared (virtual) hosting plans available</p>	<p><b>Collocation</b></p> <p>By collocating your servers in our Network Operating Center (NOC), you are free from the cost of expensive routers, hubs, switches and firewalls.</p>
<p><b>Network Administration</b></p> <p>Affordable network administration is provided by a company who knows networking. You can choose to pay by the hour or purchase discounted service plans.</p>	<p><b>Virtual Private Networking (VPN)</b></p> <p>Virtual Private Networking provides secures network access to home or remote business sites.</p>	<p><b>Internet &amp; Network Security</b></p> <p>We offer a security level that provides the IPSec 168 bit 3DES encryption needed to meet OCC and HIPAA requirements to</p>

test_date	download_k	upload_kbp	latency	server_nam	isp_name	client_cit	client_lat	client_lon	miles_betw	CNTY_FIPS	FULLNAME
40173	996	282	73	Clovis, NM	AMA Communications, LLC	Canyon	34.9511	-101.897	84.278	381	Randall County
40173	1020	291	73	Clovis, NM	AMA Communications, LLC	Canyon	34.9511	-101.897	84.278	381	Randall County
40174	909	343	63	Clovis, NM	AMA Communications, LLC	Canyon	34.9511	-101.897	84.278	381	Randall County
40252	1086	346	42	Clovis, NM	AMA Communications, LLC	Canyon	34.9511	-101.897	84.278	381	Randall County
40309	1467	682	88	Muleshoe, TX	AMA Communications, LLC	Canyon	34.9511	-101.897	68.9108	381	Randall County
40309	1461	697	88	Muleshoe, TX	AMA Communications, LLC	Canyon	34.9511	-101.897	68.9108	381	Randall County
40309	1467	697	88	Muleshoe, TX	AMA Communications, LLC	Canyon	34.9511	-101.897	68.9108	381	Randall County
40316	1374	471	104	Muleshoe, TX	AMA Communications, LLC	Canyon	34.9511	-101.897	68.9108	381	Randall County
40317	1358	460	113	Muleshoe, TX	AMA Communications, LLC	Canyon	34.9511	-101.897	68.9108	381	Randall County
40317	1275	468	104	Muleshoe, TX	AMA Communications, LLC	Canyon	34.9511	-101.897	68.9108	381	Randall County
40120	936	271	26	Dallas, TX	AMA Communications, LLC	Lubbock	33.5663	-101.883	299.241	303	Lubbock County
40316	1132	316	123	Muleshoe, TX	AMA Communications, LLC	Lubbock	33.5663	-101.883	66.7461	303	Lubbock County
40259	923	212	166	Muleshoe, TX	AMA Communications, LLC	Lubbock	33.5663	-101.883	66.7461	303	Lubbock County



### Exhibit C: Federal Registration Number

<b>FRN:</b>	0013822721
<b>Registration Date:</b>	07/29/2005 06:14:25 PM
<b>Last Updated:</b>	
<b>Business Name:</b>	AMA Communications
<b>Business Type:</b>	Private Sector , Limited Liability Corporation
<b>Contact Organization:</b>	AMA TechTel
<b>Contact Position:</b>	VP
<b>Contact Name:</b>	Mr. Douglas Campbell
<b>Contact Address:</b>	4909 Canyon Dr Amarillo, TX 79110-2329 United States
<b>Contact Email:</b>	dcampbell@amatechtel.com
<b>Contact Phone:</b>	(806) 242-3500 545
<b>Contact Fax:</b>	(806) 352-3327

<b>FRN:</b>	0008064941
<b>Registration Date:</b>	12/10/2002 03:34:18 PM
<b>Last Updated:</b>	08/31/2011 05:08:38 PM
<b>Business Name:</b>	AMA Communications, L.L.C.
<b>Business Type:</b>	Private Sector , Limited Liability Corporation
<b>Contact Organization:</b>	AMA Communications, L.L.C.
<b>Contact Position:</b>	Regulatory Compliance
<b>Contact Name:</b>	Mr. Dell Purdy
<b>Contact Address:</b>	4630 50th Street Amarillo, TX 79414 United States
<b>Contact Email:</b>	dpurdy@amatechtel.com
<b>Contact Phone:</b>	(806) 722-2247
<b>Contact Fax:</b>	

## Exhibit D: WQJC218 License Reference

[FCC Home](#) | [Search](#) | [Updates](#) | [E-Filing](#) | [Initiatives](#) | [For Con](#)

**Universal Licensing System**

FCC > [WTS](#) > [ALS](#) > [Online Systems](#) > License Search

3650-3700 MHz License - WQJC218 - AMA Communications, LLC

**Locations Summary**

[New Search](#) | [Refine Search](#) | [Printable Page](#) | [Reference Copy](#) | [Map License](#)

MAIN ADMIN LOCATIONS				
Call Sign	WQJC218		Radio Service	NN - 3650-3700 MHz
22 Total Locations		10 Locations per Summary Page		
1 2 3 [Next >>]				
Location	Latitude, Longitude		Transmitter Azimuth	
1 <a href="#">Panhandle</a>	35-20-26.8 N, 101-22-48.6 W		240.0 degrees	
2 <a href="#">WHITE DEER</a>	35-26-12.5 N, 101-10-14.3 W		185.0 degrees	
3 <a href="#">CLARENDON</a>	34-56-26.5 N, 100-53-24.0 W		130.0 degrees	
4 <a href="#">STINNETT</a>	35-50-45.1 N, 101-27-13.6 W		137.0 degrees	
5 <a href="#">MIAMI</a>	35-42-22.8 N, 100-38-43.6 W		153.0 degrees	
6 <a href="#">Gruver Tower</a>	36-16-02.7 N, 101-24-27.7 W		128.0 degrees	
7 <a href="#">Hart Tower</a>	34-23-12.2 N, 102-07-01.9 W		170.0 degrees	
8 <a href="#">LEFORS</a>	35-25-59.8 N, 100-47-53.6 W		327.0 degrees	
9 <a href="#">MAY</a>	31-58-01.2 N, 098-55-48.7 W		60.0 degrees	
10 <a href="#">MAY</a>	31-58-01.2 N, 098-55-48.7 W		180.0 degrees	
22 Total Locations		10 Locations per Summary Page		
1 2 3 [Next >>]				

Done Internet

[FCC Home](#) | [Search](#) | [Updates](#) | [E-Filing](#) | [Initiatives](#) | [For Con](#)

**Universal Licensing System**

FCC > [WTS](#) > [ALS](#) > [Online Systems](#) > License Search

3650-3700 MHz License - WQJC218 - AMA Communications, LLC

**Locations Summary**

[New Search](#) | [Refine Search](#) | [Printable Page](#) | [Reference Copy](#) | [Map License](#)

MAIN ADMIN LOCATIONS				
Call Sign	WQJC218		Radio Service	NN - 3650-3700 MHz
22 Total Locations		10 Locations per Summary Page		
[<<Previous] 1 2 3 [Next >>]				
Location	Latitude, Longitude		Transmitter Azimuth	
11 <a href="#">MAY</a>	31-58-01.2 N, 098-55-48.7 W		300.0 degrees	
12 <a href="#">CROSS PLAINS FD</a>	32-07-54.0 N, 099-09-34.0 W		90.0 degrees	
13 <a href="#">CROSS PLAINS</a>	32-07-54.0 N, 099-09-34.0 W		180.0 degrees	
14 <a href="#">CROSS PLAINS</a>	32-07-54.0 N, 099-09-34.0 W		270.0 degrees	
15 <a href="#">CROSS PLAINS FD</a>	32-07-34.6 N, 099-09-57.4 W		270.0 degrees	
16 <a href="#">RISING STAR</a>	32-05-47.0 N, 098-58-16.0 W		90.0 degrees	
17 <a href="#">RISING STAR</a>	32-05-47.0 N, 098-58-16.0 W		180.0 degrees	
18 <a href="#">RISING STAR</a>	32-05-47.0 N, 098-58-16.0 W		270.0 degrees	
19 <a href="#">BLACKWELL</a>	32-05-30.0 N, 100-18-54.0 W		165.0 degrees	
20 <a href="#">BLACKWELL</a>	32-05-30.0 N, 100-18-54.0 W		180.0 degrees	
22 Total Locations		10 Locations per Summary Page		
[<<Previous] 1 2 3 [Next >>]				

Internet

FCC Federal Communications Commission

FCC Home | Search | Updates | E-Filing | Initiatives | For C

### Universal Licensing System

FCC > ULS > ULS > Online Systems > License Search

3650-3700 MHz License - WQJC218 - AMA Communications, LLC

#### Locations Summary

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

**MAIN** **ADMIN** **LOCATIONS**

Call Sign	WQJC218	Radio Service	NN - 3650-3700 MHz
22 Total Locations 10 Locations per Summary Page			
[<<Previous] 1 2 3			
Location	Latitude, Longitude	Transmitter Azimuth	
21 <a href="#">BLACKWELL</a>	32-05-30.0 N, 100-18-54.0 W	195.0 degrees	
22 <a href="#">MCLEAN</a>	35-14-28.5 N, 100-36-36.8 W	135.0 degrees	
22 Total Locations 10 Locations per Summary Page			
[<<Previous] 1 2 3			

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[COSES](#) | [ULS Online Filing](#) | [License Search](#) | [Application Search](#) | [Archive License Search](#)  
[Privacy Statement](#) | [About ULS](#) | [ULS Home](#)

By Call Sign

FCC | Wireless | ULS | COSES

Internet

ULS License - 3650-3700 MHz License - WQJC218 - A...

ULS License

3650-3700 MHz License - WQJC218 - AMA Communications, LLC

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

**MAIN** **ADMIN** **LOCATIONS**

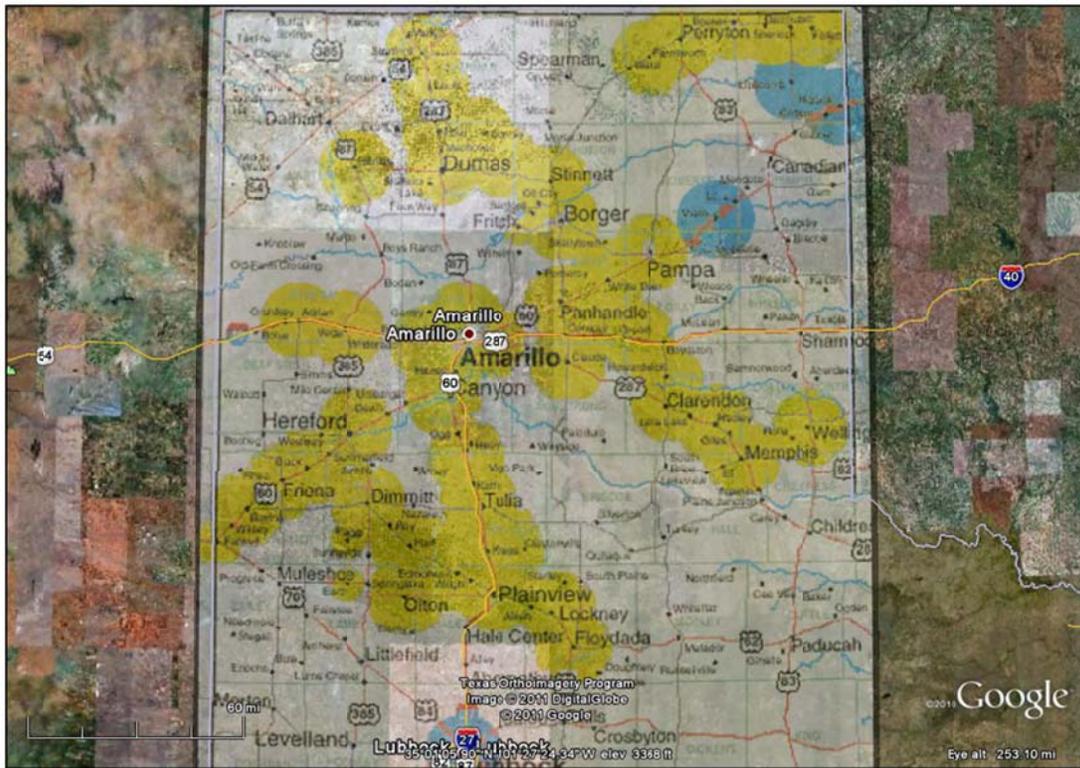
Call Sign	WQJC218	Radio Service	NN - 3650-3700 MHz
Status	Active	Auth Type	Regular
<b>Dates</b>			
Grant	07/22/2008	Expiration	07/22/2018
Effective	04/22/2011	Cancellation	
<b>Area of Operation: #</b>			
Operating Nationwide including Hawaii, Alaska, and US Territories.			
<b>Frequency Bands</b>			
003650.00000000-003700.00000000			
<b>Licensee</b>			
FRN	0013822721 <a href="#">(View Ownership Filing)</a>	Type	Corporation
<b>Licensee</b>			
AMA Communications, LLC 7201 I-40 W, Suite 200 Amarillo, TX 79106 ATTN Douglas Campbell		P:(806)322-2222 F:(806)322-2121 E:dcampbell@amitechtel.com	
<b>Contact</b>			
AMA COMMUNICATIONS, LLC 7201 I-40W, Suite 200 Amarillo, TX 79106 ATTN Douglas Campbell		P:(806)322-2222 F:(806)322-2121 E:dcampbell@amitechtel.com	
<b>Ownership and Qualifications</b>			

Internet 75%

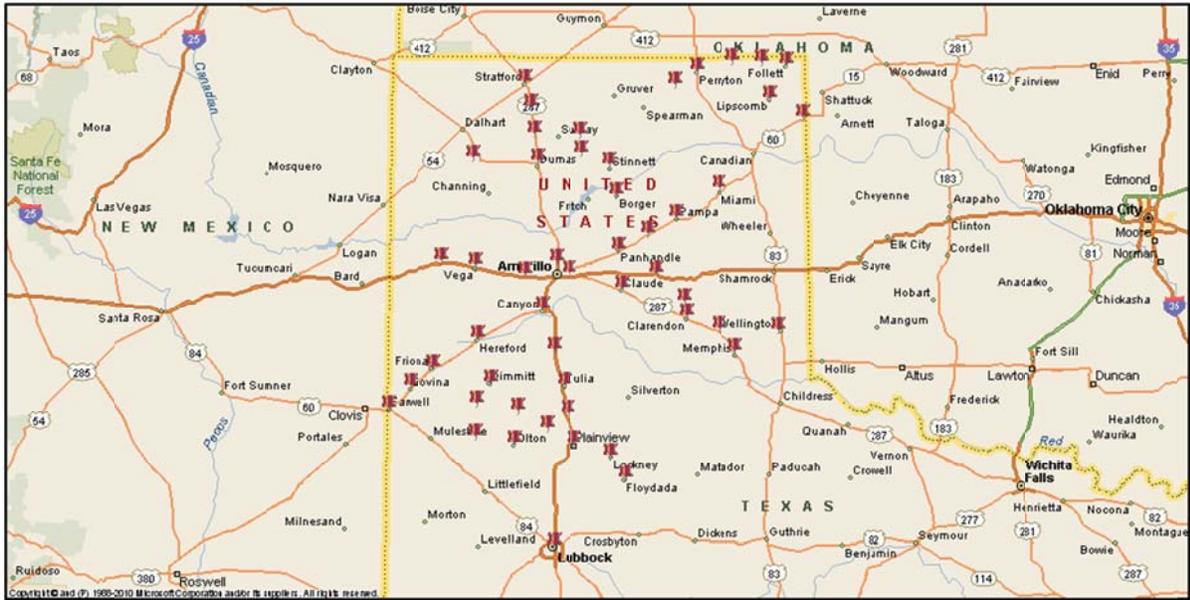
### Preliminary Identification of Provider's Coverage Area

Connected Nation extracted the AMA TechTel service area map from its website and the information through the FCC ULS database in reference to license WQJC218. The website service area 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 (2640 ft.) to establish a minimum search criteria of a given access point. The provider's service area depiction is represented by tower symbols as shown in **Exhibit B**. Using the coordinates (10 unique locations) available through the FCC ULS license search an accuracy validation of the image overlay was conducted to determine the feasibility of utilizing the tower symbols for identifying coordinates of the remaining 40 locations. The 10 licensed locations' coordinates were inputted into Google Earth and examined utilizing the zoom option of the aerial imagery. Six locations structures were identified within the provider's website defined coverage area. This provided a means of establishing coordinates for the 44 remaining access point locations. All 50 locations were entered into the Microsoft *Streets & Trips* mapping application (**Exhibit F**) to develop a route for the validation process.

**Exhibit E: Google Earth: AMA TechTel's Service Area Image Overlay**



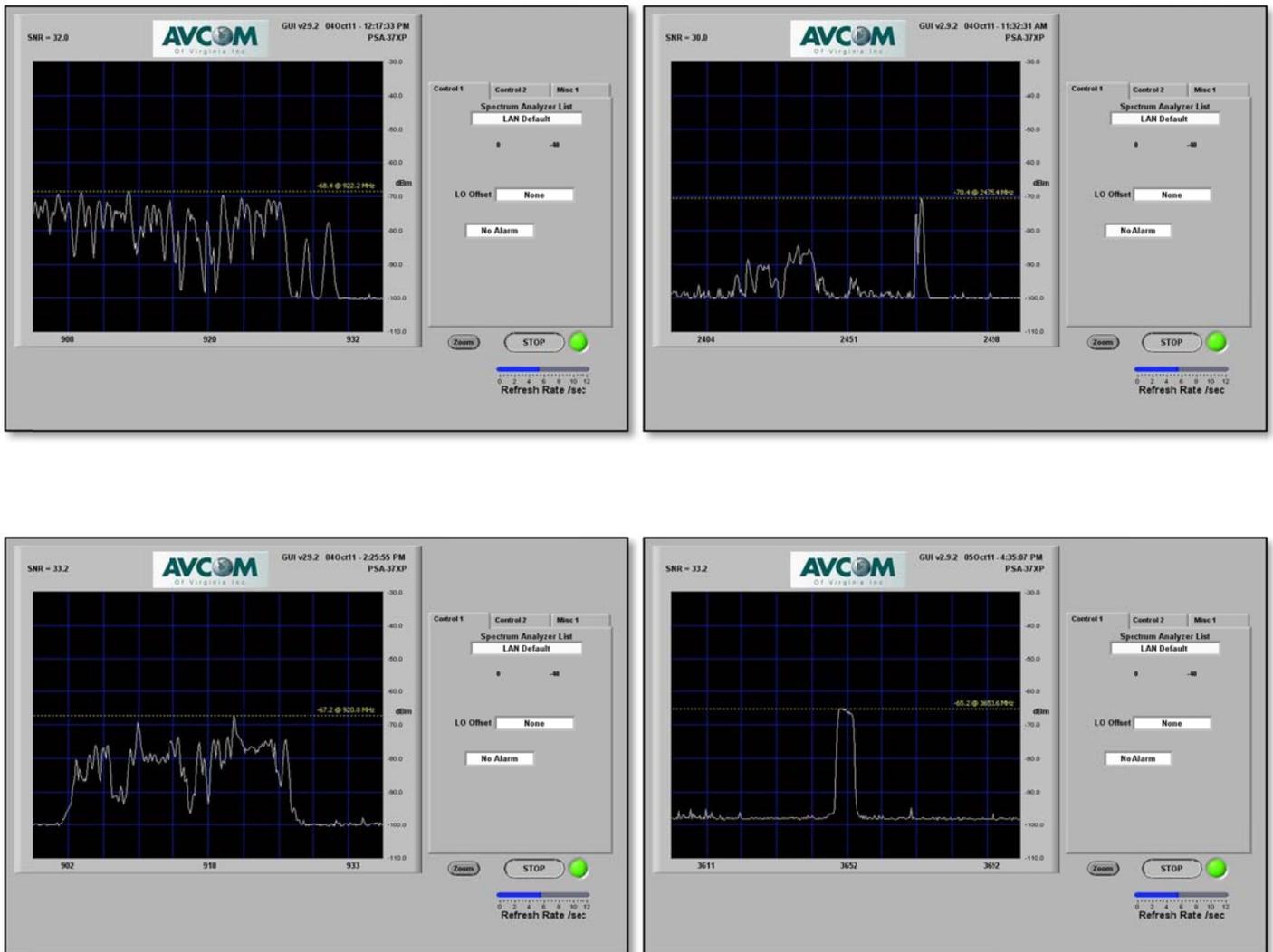
## Exhibit F: Validation Points for AP Structures



## Testing Techniques

Connected Nation staff developed a site validation route based on data established with the Google Earth image overlay and publicly available data through the FCC ULS database for AMA TechTel WQJC218 radio service. 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 sectored) and photographs were taken of the access points.

**Exhibit G: Field Data for AMA TechTel Hub Location**





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)	Comments: Tell us anything you feel is important for us to know about your system (e.g., foliage).
Lubbock	Rooftop	33.585520	-101.849920	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900 - 2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	200	Urban area
Farwell	Elevator	34.387820	-103.043420	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	130	Small trees 5%
Bovina	Elevator	34.523310	-102.887500	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Friona	Elevator	34.635050	-102.717690	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Adrain	Elevator	35.271730	-102.665370	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Earth, Lamp	Water Tower	34.233700	-102.409220	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	130	Small trees 5%
Flagg	Elevator Leg	34.425840	-102.410200	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	100	Small trees 1%
Oltan	Elevator Leg	34.189360	-102.140120	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	180	Small Trees 5%
Hart	Water Tower	34.386770	-102.116700	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	120	Small trees 5%
Dimmitt	Water Tower	34.547030	-102.306830	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	120	Small trees 5%
Hereford	Elevator	34.811465	-102.400090	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Edmonson	Elevator	34.283195	-101.901593	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 1%
Plaimview	Elevator	34.194420	-101.706450	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	200	Small trees 5%
Kress	Elevator	34.368290	-101.748610	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	120	Small trees 1%
Floydada	Elevator	33.986200	-101.331000	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Lockney	Elevator	34.117660	-101.440040	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	small trees 5%
Tulla	Elevator	34.534060	-101.777460	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900-2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Happy	Elevator	34.745530	-101.854480	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Canyon	Elevator	34.983140	-101.938020	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 10%
Claude	Elevator	35.112500	-101.361216	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Vega	Elevator	35.244530	-102.425120	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 1%
Bushland	Elevator	35.192220	-102.064260	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small trees 5%
Hartley	Water tower	35.883056	-102.451944	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	small trees 10%
Dumas	Elevator	35.862778	-101.978333	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	small trees 10%
Catus	Elevator	36.027500	-102.001667	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	150	Low foliage 1 % trees
Rural Stratford	Elevator	36.185833	-102.032222	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Low foliage 1 % trees
Stratford	Elevator	36.333333	-102.071389	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	120	Low foliage 1 % trees
N Amerilc	Tower 1212262	35.269167	-101.839167	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	150	Rural 15% Foliage
Amerillo	Elevator	35.203700	-101.742610	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	130	Low Foliage 5%
Panhandle	Elevator	35.340833	-101.380556	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	200	Low bliage 10 %
Stinnett	Tower	35.844722	-101.447222	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	Low foliage some terrain
Borger	Tower	35.664722	-101.397222	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	100	Urban area
Sumray	Elevator	36.023333	-101.663611	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	130	Low foliage 1% trees
Morton-Dumas Rura	Elevator	35.910276	-101.650666	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	180	Low foliage 1% trees
Howardwic	Pole	35.035370	-100.906330	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	60	Low foliage 5% trees
Claredon	Elevator	34.940730	-100.890790	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	Urban trees small
Hedley	Water tower	34.868560	-100.662710	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small town
Memphis	Water Tower	34.731940	-100.540150	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	120	Small town
Wellington	Tower	34.852640	-100.225980	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	200	Small town 20% foliage
White Deer	Elevator	35.436750	-101.170650	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small Town Low Foliage
Groom	Elevator	35.200100	-101.109090	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	180	Small Town Low foliage
Pampa	Elevator	35.528370	-100.965100	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	170	South Part of Town foliage 10%
Miami	Tower	35.703730	-100.652150	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3650	<input checked="" type="checkbox"/> V <input type="checkbox"/> H	100	North part of town
Farnsworth	Elevator	36.319940	-100.969550	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	Small town foliage 5%
Perrytown	Elevator	36.399900	-100.803740	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	180	Small town foliage 5%
Booker	Elevator	36.455890	-100.535690	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	Small town low foliage 5%
Liscomb	Tower	36.233490	-100.270500	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	70	Low tower on county land small town no homes
Darrouzeti	Elevator	36.442890	-100.327810	<input type="checkbox"/> Yes <input type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	140	Small town lowfoliage
Higgins	Water tower	36.117450	-100.028933	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	900	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	two locations on Tank opucipated
Follett	Elevator	36.430419	-100.142424	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2400	<input type="checkbox"/> V <input checked="" type="checkbox"/> H	160	Small town

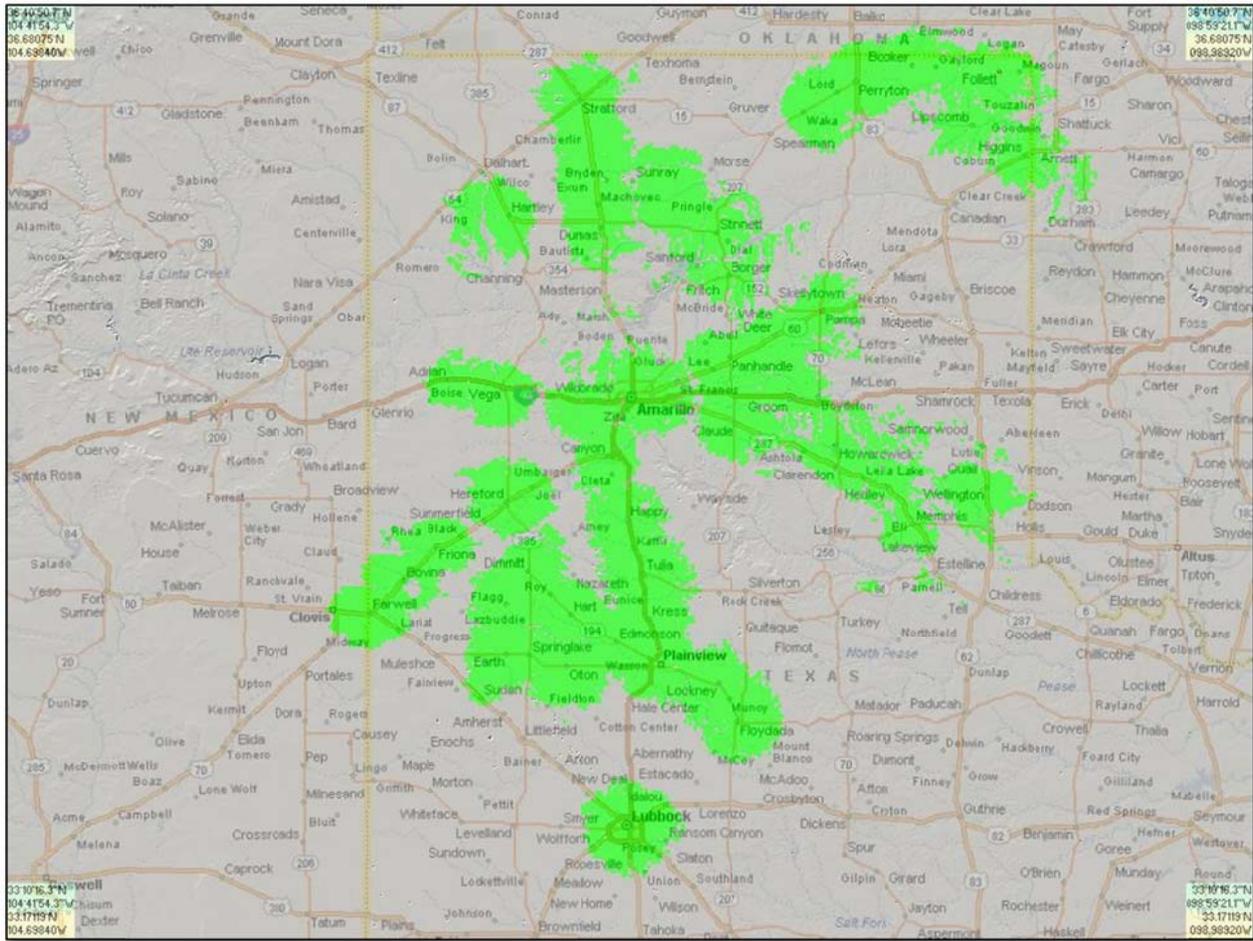
## Results and Submission for April 2012

Of the 50 locations visited during the validation point route, 50 access points were identified and relative information was logged into the AMA TechTel field validation notes file (**Exhibit H**). The field and the publicly available data were transferred to the Connected Nation Provider Information file. A composite propagation study was completed based on the field data (**Exhibit I**). Both documents were forwarded to AMA TechTel and advised the information will be submitted to Connected Texas and the NTIA broadband mapping project for processing if there are no discrepancies of the estimated coverage received from the provider within a 48-hour period.

### Exhibit H: Field Validation Notes

Test City	Test State	Location Description	(N) Lat Decimal	(-)(W) Long Decimal	Peak Freq	Peak Sig Strength	Spectrum Analyzer	Images	
Lubbock	TX	Rooftop	33.585520	-101.849920	900 - 2400	-68	Avcom PSA-37XP	Yes	Urban area
Farwell	TX	Elevator	34.387820	-103.043420	900	-70	Avcom PSA-37XP	Yes	Small trees 5%
Bovina	TX	Elevator	34.523310	-102.887500	2400	-68	Avcom PSA-37XP	Yes	Small trees 5%
Frona	TX	Elevator	34.635050	-102.717690	900	-70	Avcom PSA-37XP	Yes	Small trees 5%
Adrian	TX	Elevator	35.271730	-102.665370	900	-68	Avcom PSA-37XP	Yes	Small trees 5%
Earth	TX	Water Tower	34.233700	-102.409220	2400	-70	Avcom PSA-37XP	Yes	Small trees 5%
Flagg	TX	Elevator Leg	34.425840	-102.410200	900	-68	Avcom PSA-37XP	Yes	Small trees 1%
Olton	TX	Elevator Leg	34.189360	-102.140120	900	-70	Avcom PSA-37XP	Yes	Small Trees 5%
Hart	TX	Water Tower	34.386770	-102.116700	900	-68	Avcom PSA-37XP	Yes	Small trees 5%
Dimmitt	TX	Water Tower	34.547030	-102.306830	900	-70	Avcom PSA-37XP	Yes	Small trees 5%
Hereford	TX	Elevator	34.811465	-102.400090	900	-68	Avcom PSA-37XP	Yes	Small trees 5%
Edmonson	TX	Elevator	34.283195	-101.901593	900	-70	Avcom PSA-37XP	Yes	Small trees 1%
Planview	TX	Elevator	34.194420	-101.706450	2400	-74	Avcom PSA-37XP	Yes	Small trees 5%
Kress	TX	Elevator	34.368290	-101.748610	900	-70	Avcom PSA-37XP	Yes	Small trees 1%
Floydada	TX	Elevator	33.986200	-101.331000	900	-68	Avcom PSA-37XP	Yes	Small trees 5%
Lockney	TX	Elevator	34.117660	-101.440040	900	-70	Avcom PSA-37XP	Yes	small trees 5%
Tulia North	TX	Elevator	34.534060	-101.777460	900-2400	-74	Avcom PSA-37XP	Yes	Small trees 5%
Happy	TX	Elevator	34.745530	-101.854480	900	-68	Avcom PSA-37XP	Yes	Small trees 5%
Canyon	TX	Elevator	34.983140	-101.938020	900	-70	Avcom PSA-37XP	Yes	Small trees 10%
Claude	TX	Elevator	35.11249988	-101.3612162	900	-68	Avcom PSA-37XP	Yes	Small trees 5%
Vega	TX	Elevator	35.24453	-102.42512	900	-71	Avcom PSA-37XP	Yes	Small trees 1%
Bushland	TX	Elevator	35.19222	-102.06426	2400	-73	Avcom PSA-37XP	Yes	Small trees 5%
Hartley	TX	Water tower	35.88305556	-102.4519444	900	-68	Avcom PSA-37XP	Yes	small trees 10%
Dumas	TX	Elevator	35.86277778	-101.9783333	900	-70	Avcom PSA-37XP	Yes	small trees 10%
Cactus	TX	Elevator	36.0275	-102.0016667	900	-74	Avcom PSA-37XP	Yes	Low foliage 1 % trees
Rural Stafford	TX	Elevator	36.18583333	-102.0322222	900	-70	Avcom PSA-37XP	Yes	Low foliage 1 % trees
Stafford	TX	Elevator	36.33333333	-102.0713889	900	-68	Avcom PSA-37XP	Yes	Low foliage 1 % trees
Amerillo N	TX	Tower 1212262	35.26916667	-101.8391667	900	-70	Avcom PSA-37XP	Yes	Rural 15% Foliage
Amarillo E	TX	Elevator	35.2037	-101.74261	900	-74	Avcom PSA-37XP	Yes	Low Foliage 5%
Panhandle	TX	Elevator	35.34083333	-101.3805556	900	-68	Avcom PSA-37XP	Yes	Low foliage 10 %
Stinnett	TX	Tower	35.84472222	-101.4472222	900	-70	Avcom PSA-37XP	Yes	Low foliage some terrain
Borger	TX	Tower	35.66472222	-101.3972222	900	-68	Avcom PSA-37XP	Yes	Urban area
Sunray	TX	Elevator	36.02333333	-101.6636111	900	-68	Avcom PSA-37XP	Yes	Low foliage 1% trees
Dumas Rural	TX	Elevator	35.91027622	-101.650666	900	-70	Avcom PSA-37XP	Yes	Low foliage 1% trees
Howardwick	TX	Pole	35.03537	-100.90633	900	-68	Avcom PSA-37XP	Yes	Low foliage 5% trees
Claredon	TX	Elevator	34.94073	-100.89079	900	-68	Avcom PSA-37XP	Yes	Urban trees small
Hedley	TX	Water tower	34.86856	-100.66271	900	-70	Avcom PSA-37XP	Yes	Small town
Memphis	TX	Water Tower	34.73194	-100.54015	2400	-74	Avcom PSA-37XP	Yes	Small town
Wellington	TX	Tower	34.85264	-100.22598	900	-68	Avcom PSA-37XP	Yes	Small town 20% foliage
White Deer	TX	Elevator	35.43675	-101.17065	900	-70	Avcom PSA-37XP	Yes	Small Town Low Foliage
Groom	TX	Elevator	35.2001	-101.10909	900	-68	Avcom PSA-37XP	Yes	Small Town Low foliage
Pampa	TX	Elevator	35.52837	-100.9651	900	-70	Avcom PSA-37XP	Yes	South Part of Town foliage 10%
Miami Blue	TX	Tower	35.70373	-100.65215	3650	-74	Avcom PSA-37XP	Yes	North part of town
Farnsworth	TX	Elevator	36.31994	-100.96955	900	-71	Avcom PSA-37XP	Yes	Small town foliage 5%
Perrytown	TX	Elevator	36.3999	-100.80374	900	-68	Avcom PSA-37XP	Yes	Small town foliage 5%
Booker	TX	Elevator	36.45589	-100.53569	900	-70	Avcom PSA-37XP	Yes	Small town low foliage 5%
Liscomb Blue	TX	Tower	36.23349	-100.2705	2400	-68	Avcom PSA-37XP	Yes	Low tower small town no homes
Darrouzett	TX	Elevator	36.44289	-100.32781	900	-68	Avcom PSA-37XP	Yes	Small town lowfoliage
Higgins Blue	TX	Water tower	36.11745	-100.0289332	900	-70	Avcom PSA-37XP	Yes	Two locations on Tank occupied
Follett	TX	Elevator	36.43041903	-100.1424236	2400	-74	Avcom PSA-37XP	Yes	Small town

## Exhibit I: AMA TechTel Composite Coverage (April 2012)



### Results for October 2012 Submission

During a routine exploration and field validation routine on April 22, 2012 a CN staff member identified an AMA TechTel business office (**Exhibit J**) located in Rising Star, Texas. A brief visit with office personnel identified broadband Internet service being available in Rising Star, May, Cross Plains, and Blackwell, Texas; a brochure (**Exhibit K**) was provided identifying the rate and service level availability. The CN staff member reviewed the AMA TechTel 3.65 GHz license WQJC218 (**Exhibit D**) via the FCC ULS database to pinpoint registered site locations. The coordinates were obtained and entered into the *Streets & Trips* mapping application (**Exhibit L**) to develop a route for a site and radio frequency (RF) validation process. RF presence was obtained at each location (**Exhibit M**) and antenna arrays (**Exhibit N**) were validated based on the location registration. Propagation studies (**Exhibit O**) were completed based on field validation and utilization of radio and antenna parameters defined within the FCC ULS location record. Documents were forwarded to AMA TechTel and they were advised the information will be submitted to Connected Texas and the NTIA broadband mapping project for processing if there are no discrepancies of the estimated coverage received from the provider within a 48-hour period.

Exhibit J: AMA TechTel Business Office-Rising Star, Texas



Exhibit K: AMA TechTel Brochure



**AMA•TECHTEL**  
is proud to announce our new Digital Telephone Service Package. Our goal is to give you better, faster service and save you money each month!

**AMA•TECHTEL**  
will bundle the Digital Telephone Service and Wireless High-Speed Internet service. The package pricing includes all taxes and fees. Your bill will be \$50 a month flat.

**\$50/Month\*** and not a penny more  
(includes all taxes and fees)

**Free Professional Installation AND Free to switch = No conversion fees and No equipment costs.**

**Local Telephone Service – Includes 2 Lines**

- Keep Your Same Number • Unlimited Local Calling
- Keep Your Same Telephone Number AND Phone Book Listing
- 1,000 Minutes Included of Long-Distance **FREE**
- 9+ Calling Features On Each Line – Call Waiting, Caller ID, Call Waiting Caller ID, Call Forwarding, 3-Way Calling, Automatic Call Back, Automatic Recall And Selective Call Forwarding

**High-Speed Wireless Internet at 3Mb Down / 1 Mb Up**

- Up To 5 E-mail Address Accounts • Spam & Virus Filter Included
- Free Local Technical Support 24/7

**Additional Options** (still includes all taxes and fees)

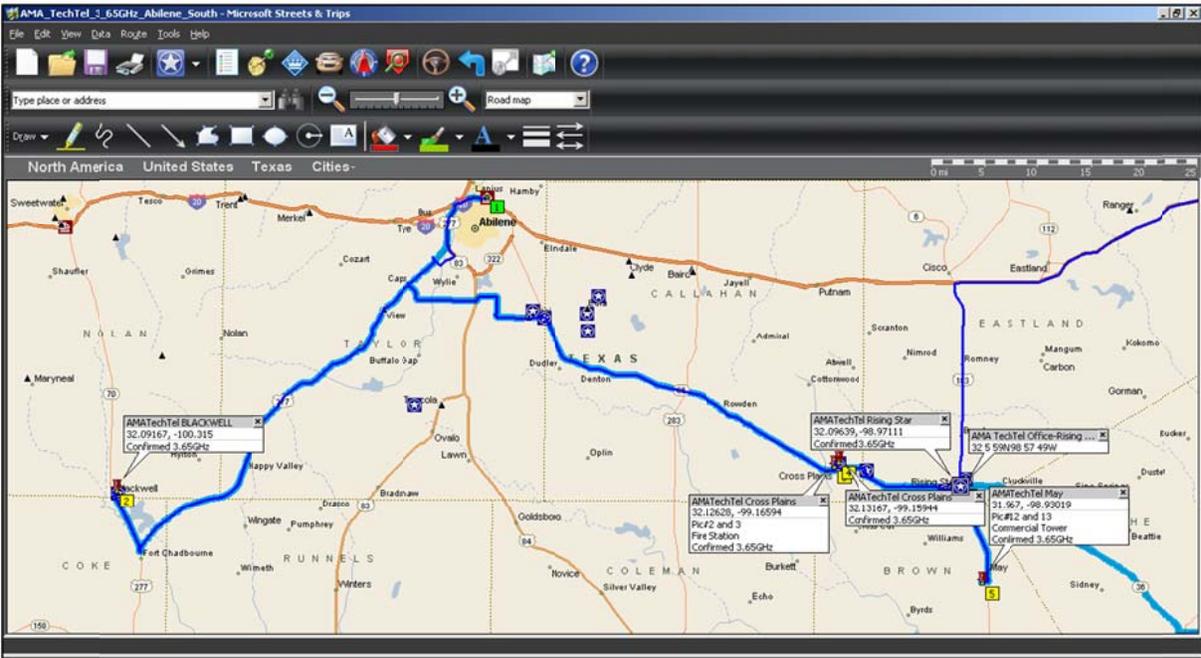
- Add Unlimited Long-Distance - \$20
- Add Voice Mail Account - \$5
- Phone Service Only (Same Package With No Internet Service) - \$40

\*This is a locked in price, not a teaser rate or introductory offer. This price does not increase in a few months.

**AMA TechTel Communications**  
402 N Main, Rising Star, Texas 76471

**Call Today! 254.641.0000**

## Exhibit L: AMA TechTel 3.65 GHz Location Route



## Exhibit M: AMA TechTel 3.65 GHz RF Testing Validation Sample - Rising Star

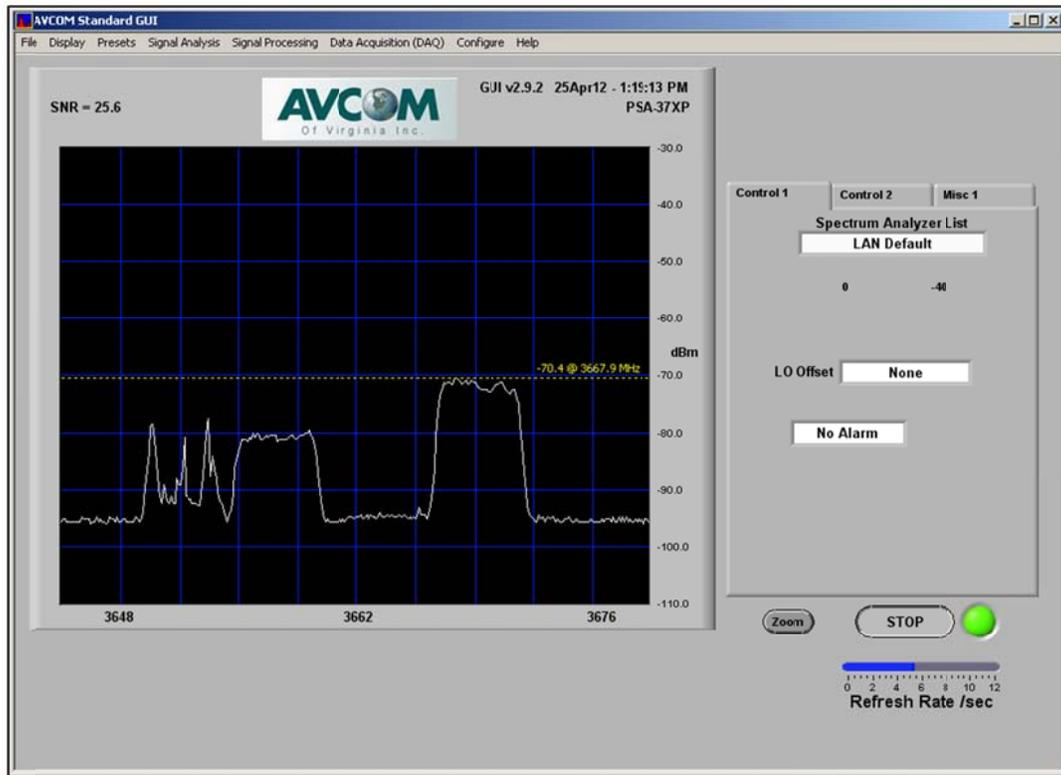
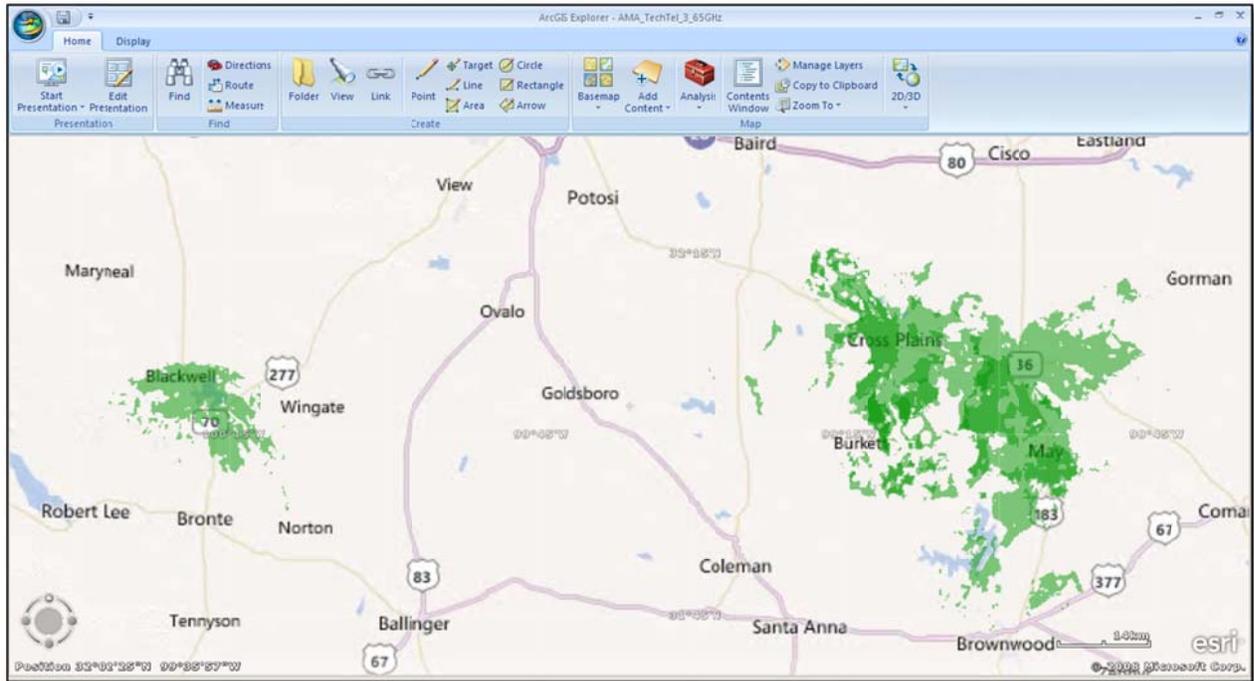


Exhibit N: AMA TechTel 3.65 GHz Antenna Validation Sample - Rising Star



Exhibit O: AMA TechTel 3.65 GHz Composite Propagation Study  
(Additional Coverage for October 2012 Submission)



## ANVIL COMMUNICATIONS

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

The following narrative provides detail regarding the recent data collection and coverage estimation activities related to Anvil Communications, a wireless Internet service provider (WISP) located in Wimberley, Texas, with a service area throughout most of Hays County, Texas. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation and/or estimation techniques that support the underlying data.

### **Background**

CN staff members have attempted to obtain the participation of the provider with 16 instances of communication via telephone, e-mail, and personal visits from September 9, 2009 to August 1, 2012. The provider has refused to participate on more than one occasion. Most recently, a CN technician visited the provider's office to discuss the program, but the provider again refused stating that the data collection process was "too intrusive."

### **The Issue**

Connected Nation has been unable to obtain this provider's broadband coverage information through typical outreach efforts. Anvil Communications has, since March 2010, repeatedly stated its refusal to participate in the Connected Texas broadband mapping initiative.

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

CN has built a file of research information based on information obtained through the public domain. For example, CN reviewed the provider's website ([www.anvilcom.com](http://www.anvilcom.com)) to determine the residential service plans and the service area of the provider's wireless network. Although the website does not advertise specific speeds or a designated coverage area, indications of both items were found through extensive research throughout the Internet. For example, the provider's website states that its Internet access speed "...varies from installation to installation depending on location..." (**Exhibit A**). Further research suggested that advertised download speeds have been as high as 3-4 Mbps, while a market analysis completed by the provider's host city specified a comparative download speed of "Up to 5 Mbps" for this provider.

Similarly, the provider's website does not specify a coverage or service area except for a reference to "central Texas"; however, Internet research led to an alphabetical listing in a WISP directory that specified certain geographic areas (**Exhibit B**).

A search for a Federal Registration Number (FRN) for the provider on the FCC COMmission REgistration System (CORES) using the company business name did not reveal a verifiable FRN. A similar search in the Texas business licensing system also did not identify Anvil Communications as an entity licensed to do business in the state. Finally, a search of the FCC's Universal Licensing System (ULS) for Hays County, Texas, did not identify any wireless licenses held by the provider.

## Exhibit A: Service Plans

The screenshot shows the Anvil Communications website. The header includes the company logo, name, and tagline "World Class Communications: Anytime, Anywhere". Navigation links for Home, Search, and Contact Us are present. A secondary navigation bar features icons for SALES, Call Me, Web Mail, and Pay Bill. A left sidebar contains menu items: About, Services, Support, and Technology. The main content area is titled "Service Pricing" and includes the following text:

answer any other technical questions you may have during your free site survey.

**Service Pricing**

High-Speed Internet service is \$49 per month regardless of how many computers or other Internet devices you have in your home or business. If a second installation is required on the same property to support out buildings, guest homes, etc., the monthly fee for the second installation is reduced to \$39 per month.

Anvil uses some of the newest and most advanced technology available for wireless broadband communications. This translates to both reliability and speed, with virtually all of our customers experiencing superior upload, and many getting superior download speeds compared with other DSL, cable, and wireless options.\*\* There is no access time limit or quota on the volume of data that can be processed by each customer.

\*\*Speed varies from installation to installation depending on location but overall, Anvil customers enjoy excellent speed and performance.

**Equipment Package**

New installations require the purchase of an equipment package including customer radio, cables, connectors, antenna, mast, and miscellaneous installation hardware. Anvil provides this equipment to customers at our cost and it's yours to keep, transfer or resell.

**Installation**

Anvil offers FREE installation with a 12 month service contract (a \$99 value, equipment not included). Additional connections, hubs, wireless routers, etc. may be purchased separately to accommodate additional computers and devices.

**Payment Plans**

Call us at 512-847-1180

On the right side of the page, there is a photograph of a tower-mounted antenna and a text box stating: "Anvil operates one of the most extensive wireless broadband internet networks in central Texas and our customers enjoy some of the most reliable, high performance service available."

## Exhibit B: Service Area

business subscribers. It offers multiple services, including high-speed Internet access, e-mail, Web hosting, virtual private networks, DSL, ISDN and unbundled VoIP and data.

July 16, 2003 - **Texas Tech University, on behalf of The Texas Tech University Office of Economic Development, has signed a partnership agreement with AMA•TechTel Communications to build and maintain a wireless broadband telecommunications backbone stretching from Amarillo to Hobbs, N.M.** The backbone will provide access to high-speed telecommunications to the rural communities along its route. The principal application for the backbone will be as a wide-area-network for delivery of content to be used in small business development, work force training and other adult and K-12 educational programs. The backbone could be expanded in the future to cover most of the West Texas/Eastern New Mexico region.

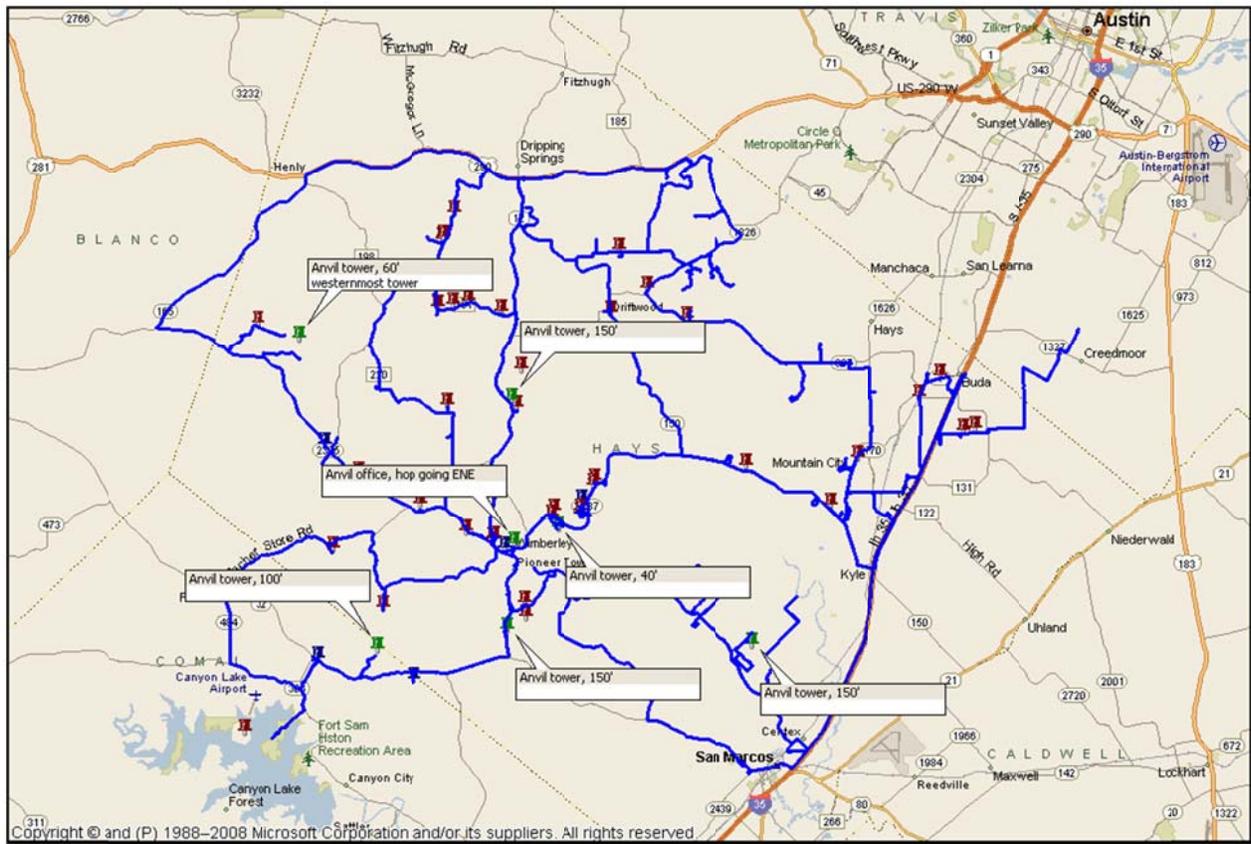
<p><b>Anvil Communications</b></p>	<p>WISP Broadband Wireless Internet Service Provider - Burnett Ranch, Dripping Springs, Kyle, Buda, Mountain City, Wimberley, TX / Wimberley Valley region of Texas</p> <p>Anvil's Broadband Service comes to you through our extensive radio network. It is a line-of-site radio based service, which means your antenna will need to be high enough to have an unobstructed view of one of the many repeater radios in the area. We will discuss your installation options during your free site survey. We currently provide service to most of the Wimberley Valley including the Junction to the South, West of Burnett Ranch, North to the Dripping Springs area, East to the Kyle, Buda, and Mountain City area.</p>
<p><b>Apache Networks</b></p>	<p>WISP Broadband Wireless Internet Service Provider - Headquartered in Mescalero, NM / Coverage areas in Artesia, Clovis, Hobbs, Roswell, Ruidoso Downs, New Mexico / El Paso, Texas</p>

### Preliminary Identification of Provider's Coverage Area

Because Connected Nation was unable to (a) extract a service area map from the provider's website and (b) identify licensing information through the FCC ULS database, alternate methods were required to identify and to confirm tower sites for the provider. A CN technician drove hundreds of miles throughout Hays County seeking wireless transceivers, triangulating the transmission paths of those receivers to pinpoint tower locations, conducting interviews with wireless Internet customers,

and performing directional frequency tests. Utilizing Microsoft *Street and Trips* software, the field research results are depicted in **Exhibit C**. Although the researched provider claims a service area of as much as one thousand square miles (Hays County covers 680 square miles), CN's conversations with the provider's office personnel determined that the provider (i) did not offer service north of Dripping Springs, and (ii) offered little practical service south of the county line. Further, Internet research suggested the westernmost tower was within Hays County lines. To the east, wireless Internet service is dominated by another provider, and Anvil's service area does not appear to extend eastward beyond the interstate highway (I-35).

### Exhibit C: Confirmed Tower Sites for Anvil Communications



In all, more than sixty (60) points of research were mapped and documented (with the pushpins in the exhibit above), with many serving as confirmation of the provider's tower locations. Where possible, the CN technician confirmed (through a third party) that the tower location was being utilized by Anvil. One example is the confirmation of the Anvil tower north of Wimberley offered by a neighboring land manager. In other instances, using Intel PROSet/WiFi Connection Utility, the presence of network signatures or nomenclatures identified the Anvil network on a tower as in **Exhibit D**. Photographs were also taken at each tower site of the equipment, the support structure, and the general location of the site (e.g., populated vs. rural).

It is important to note that certain tower locations are better characterized as relay points connecting disparate locations along river valleys that would otherwise not be able to receive service from a centralized tower due to terrain blockage.

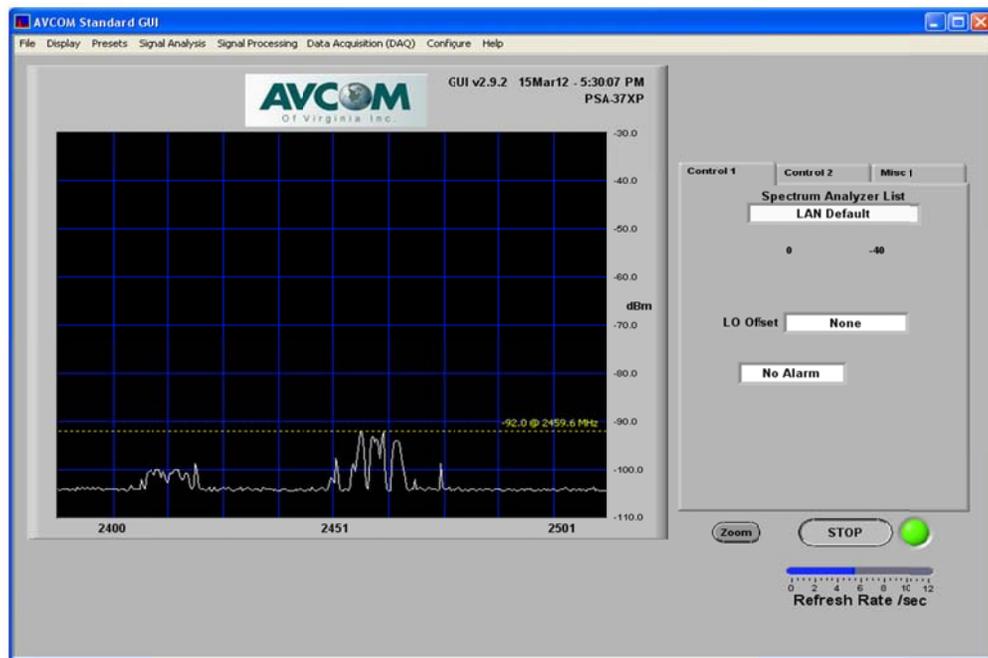
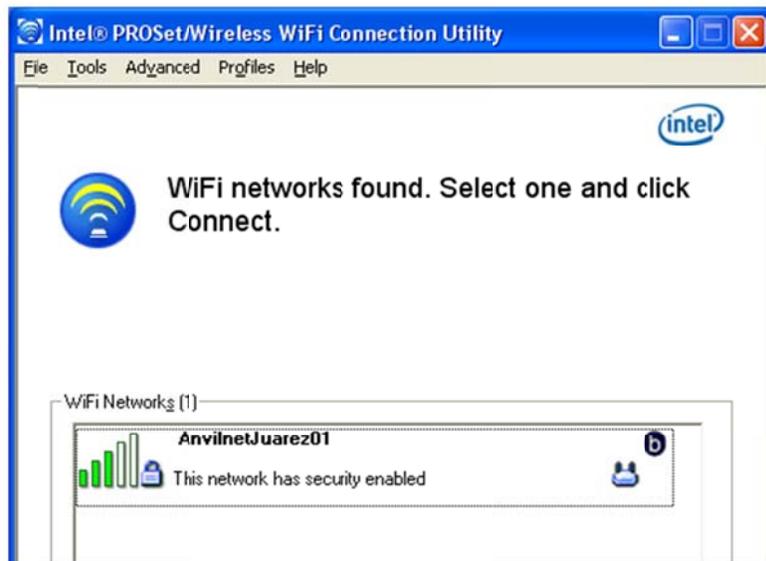
### Exhibit D: Network Nomenclature at El Rancho Cima Location



## Field Testing Techniques

Having confirmed tower locations comprising Anvil's service area, the CN technician then performed signal tests for the detection of active wireless frequencies typically utilized to provide WISP service. The CN technician 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. At each signal test location, the CN technician attempted to be isolated from unrelated Wi-Fi networks in the test area, facilitated spectrum readings from the AVCOM analyzer, and captured the results of the frequency tests as validation data for wireless tower transmissions (**Exhibit E**).

### Exhibit E: Frequency Test Data for Juarez (Westernmost) Tower Location



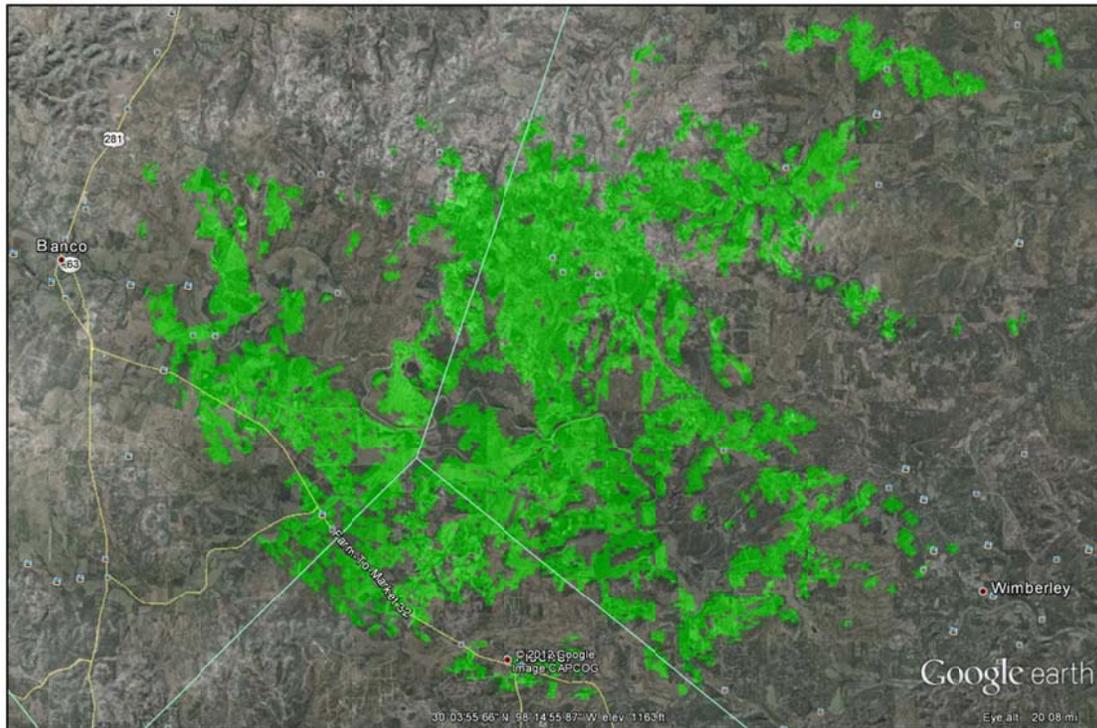
## Signal Propagation Maps

At each confirmed tower site, the CN technician estimated the antenna height, determined the GPS coordinates for the tower, and recorded this and other information into the standard Excel provider data collection format. With the objective of reasonably representing the provider's practical service area, the CN technician utilized the information for each tower site (**Exhibit F**), and prepared propagation maps (**Exhibit G**) based on that information.

### Exhibit F: Tower Research and Propagation Data

Wireless Provider Information											
Provider Name (Legal entity)		Anvil Communications									
DBA ("Doing Business As") Name											
FRN # (10-digit FCC Registration Number)		N/A									
Name of Location:	Status	Pop Center	Structure	Latitude	Longitude	Omni?	Radius	Frequency	Gain	Power	Elevation
Lone Man Mountain	Active	Wimberley	Tower	30.07029	-98.0882	Yes	10	2400	12	26	150
Office	Active	Wimberley	Tower	29.99915	-98.08984	Yes	8	2400	12	24	40
Arrowlake	Active	Valley	Rooftop	30.01347	-98.06773	No	6	2400	12	24	40
Deertrail	Active	San Marcos	Tower	29.94678	-97.94532	Yes	10	5800	12	24	150
Panorama	Active	Wimberley	Tower	29.95426	-98.09372	Yes	8	2400	12	24	150
El Rancho Cima	Active	Fischer	Tower	29.94377	-98.1717	No	8	2400	12	24	100
Juarez	Active	Burnet Ranch	Tower	30.10845	-98.22714	Yes	10	2400	12	26	60

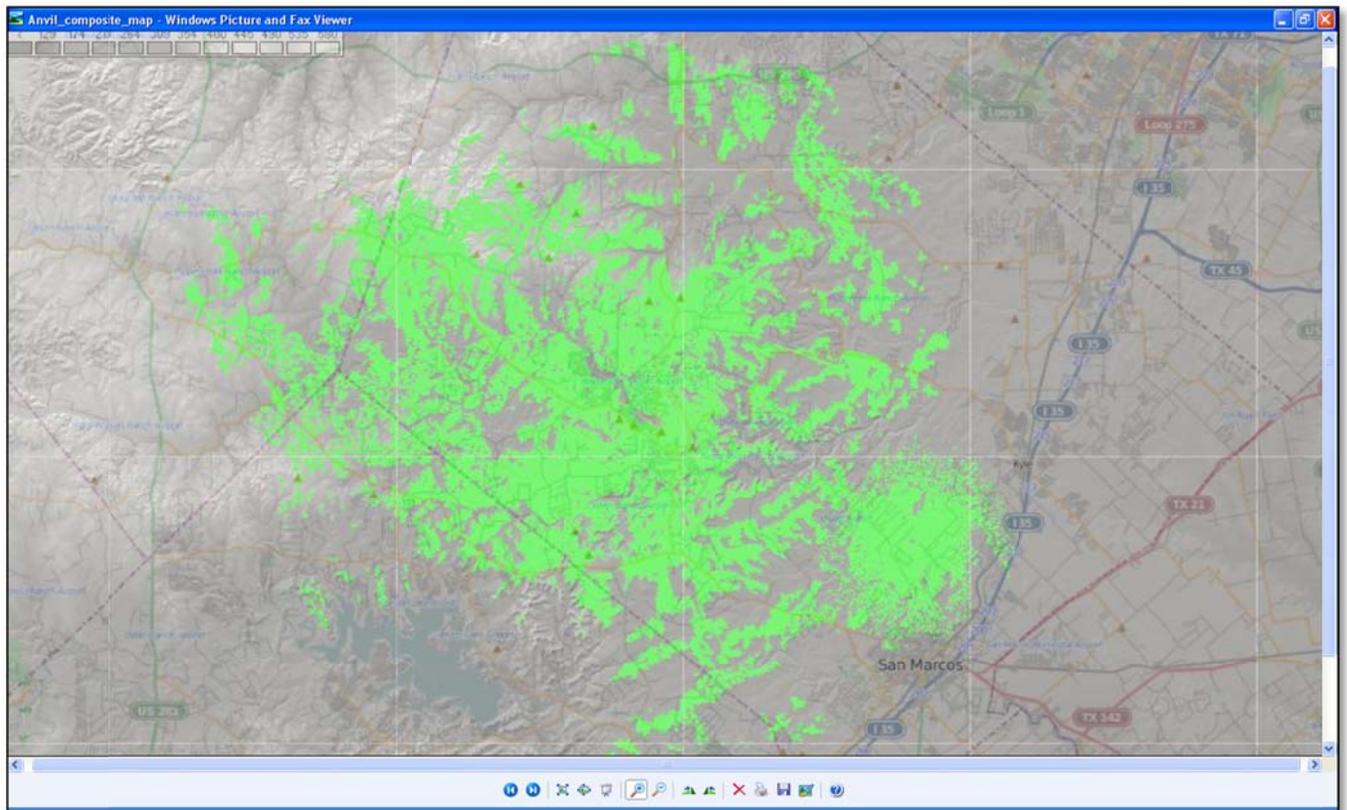
### Exhibit G: Propagation Map for the Juarez (Westernmost) Tower Location



### **Results and Submission for October 2012**

Seven tower locations for Anvil which were likely to be operational were visited and tested, as well as numerous additional sites in the search for customer premise equipment, frequencies utilized by potential competitors, and other verification data points. Testing determined that wireless signal was available for broadband service. A composite propagation analysis was completed (**Exhibit H**), which reasonably represents the estimated broadband coverage area based on all information identified as of August 1, 2012. The composite propagation map was forwarded to the provider for review and feedback prior to CN's inclusion of the coverage area in the Texas Broadband Map's October 2012 iteration; however, no response was received by August 15, 2012.

**Exhibit H: Anvil Communications Composite Coverage**



## BROADWAVES

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) mapping program.

For the, April 2012 mapping cycle, CN submitted an updated white paper detailing the determination of the coverage area for Broadwaves, a wireless Internet service provider (WISP), located in Brenham, Texas, with a service area in and around Washington County. This document accounts for updates to the coverage area for this October 2012 mapping cycle.

### Background

Subsequent to the accumulation of research related to the service area for Broadwaves as of June 30, 2011, the CN technician most familiar with this provider noted changes to the coverage information on the provider's website. At that time, the advertised coverage area included nine concentric circles representing the provider's wireless access points (**Exhibit A.1**). In early September 2011 the CN technician plotted the likely center points for each circle, and in October and November of 2011, performed field research at more than 30 locations in Washington County to determine the actual tower locations (**Exhibit B**). After conducting site verification and field data collection he used the data to create a coverage estimation map of Broadwaves (**Exhibit A.2**).

The CN technician spoke extensively with the owner of Broadwaves on October 26, 2011, in regard to the mapping project. The provider refused to offer assistance (e.g. tower locations) or other useful information. When asked if all the advertised tower sites were active, the provider indicated some of them were but would not specify which sites were inactive. Further, the provider stated that he did not want to be part of the state map, and remarked that the state should be told that the company was going out of business in a couple of months so as to eliminate the need to collect required information. Further conversation suggested that the company was not actively pursuing buyers for the business, and would not be terminating service in the near term.

Exhibit A.1: Broadwaves Advertised Coverage Subsequent to June 30, 2011

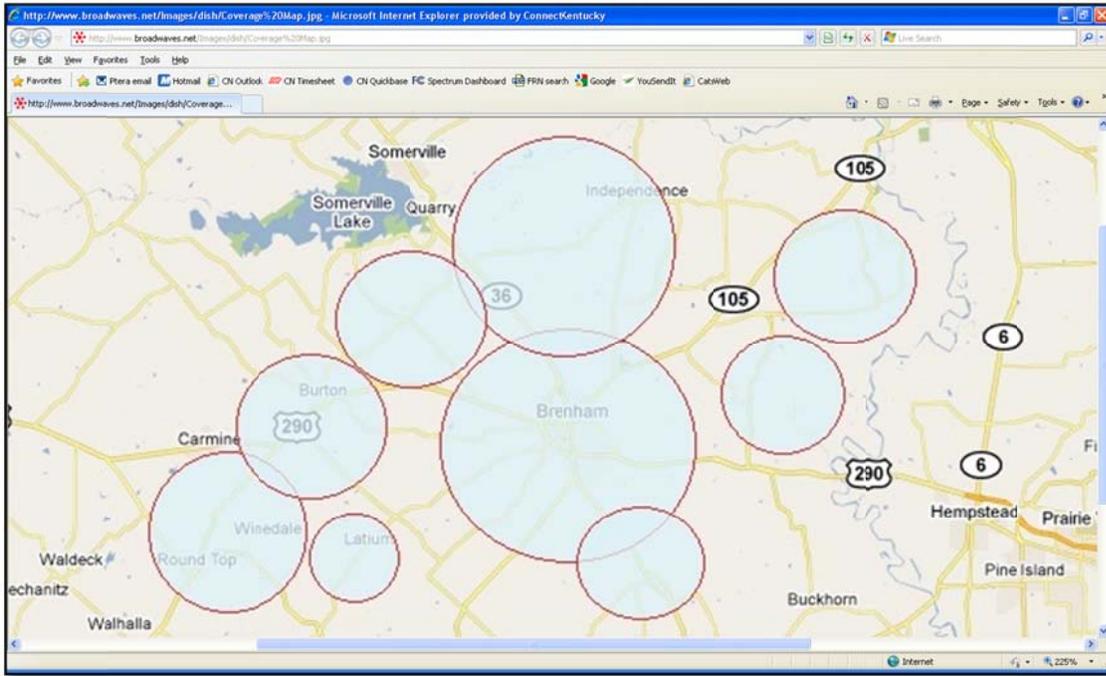
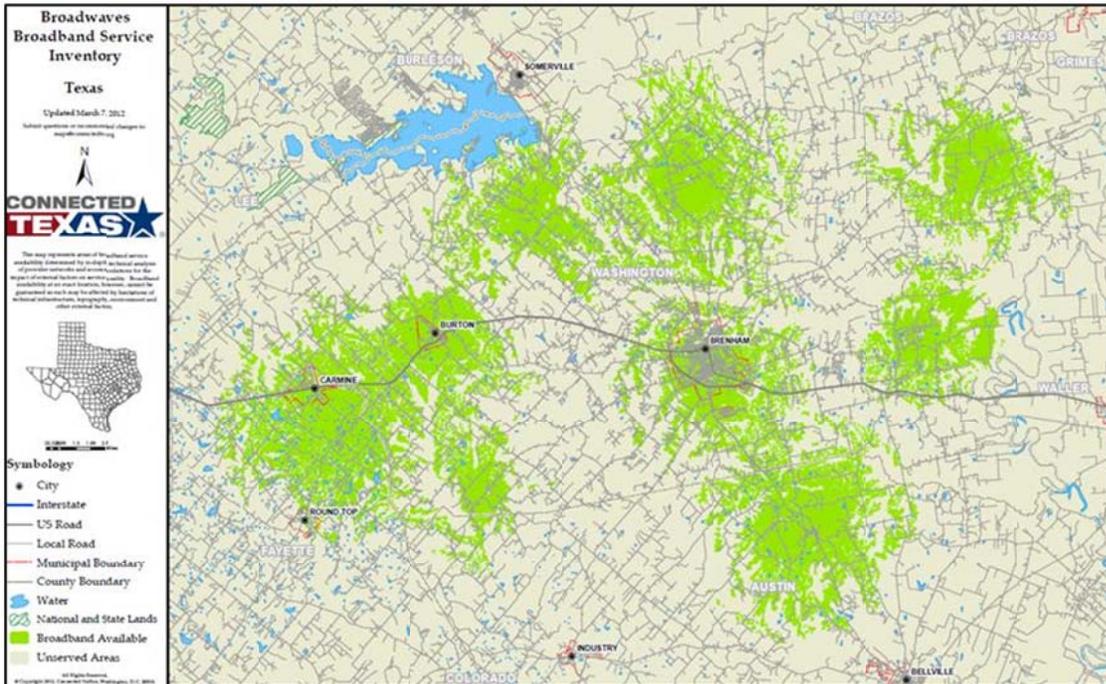
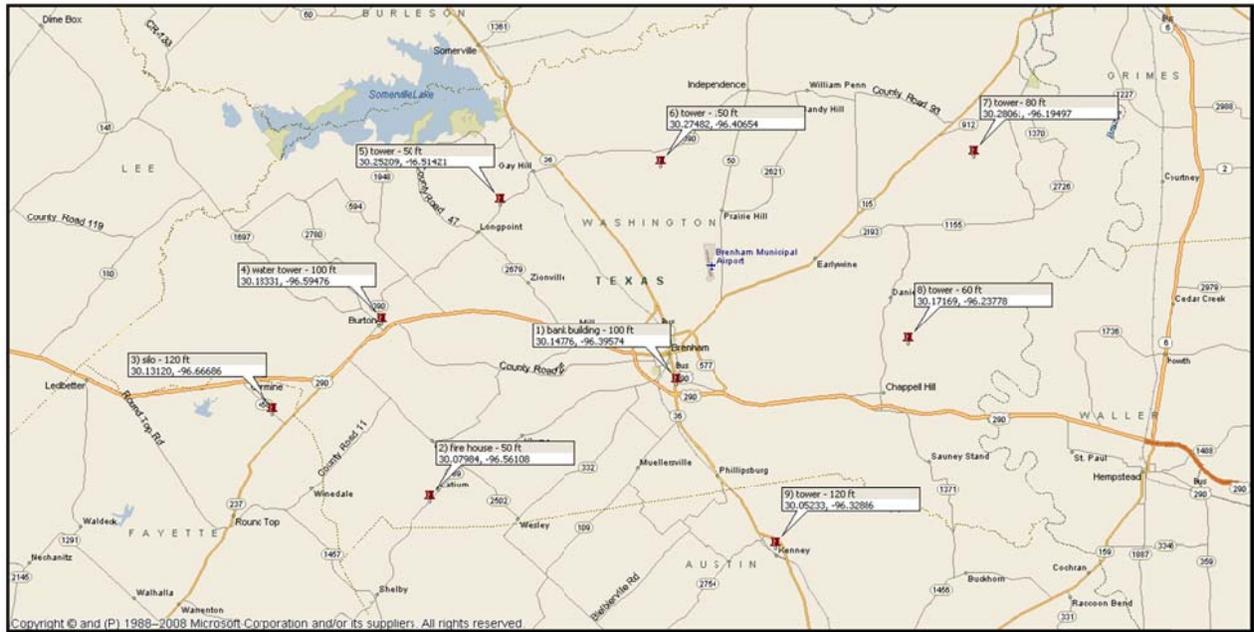


Exhibit A.2: Broadwaves Estimated Coverage for April 2012



## Exhibit B: Actual Tower Locations

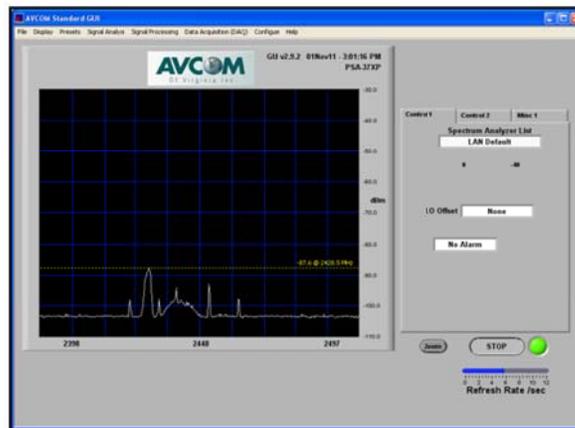


### Field Testing Techniques

Where possible, the CN technician confirmed (through a third party or by other independent means) that the tower location was actually being utilized by Broadwaves. Confirmation from a bank representative that Broadwaves' equipment was operational on the rooftop of the Brenham Bank, a customer in Kenney pointing out the tower on which Broadwaves provides service, and comparison of network nomenclatures between markets all support this known tower location. In other instances, the presence of identical wireless transmission gear (on multiple tower locations) added confidence to the identification of the likely Broadwaves tower sites. Photographs were taken at each tower site of the equipment and the support structure.

Having established the tower location for each circular coverage area represented on the Broadwaves website, the CN technician then performed signal tests for the detection of active wireless frequencies. The CN technician 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. At each signal test location, the CN technician attempted to be isolated from Wi-Fi networks in the test area, facilitated spectrum readings from the AVCOM analyzer and captured the results of the frequency tests as validation data for wireless tower transmissions. One such sample is illustrated below as **Exhibit C**.

## Exhibit C: Signal Test Results for the Washington Service Area



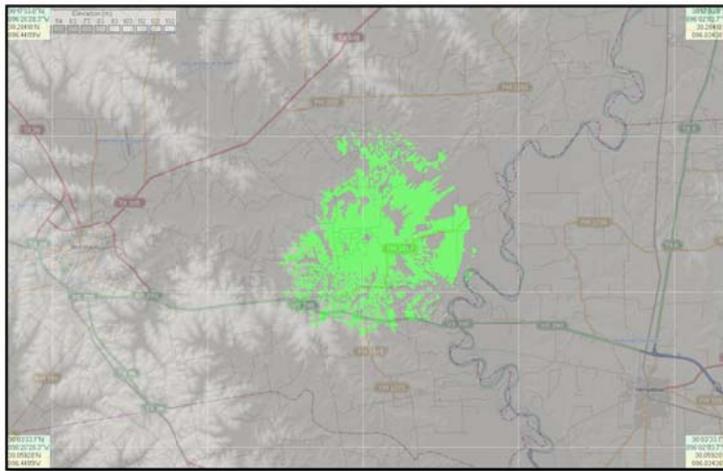
## Signal Propagation Maps

Upon making a reasonable confirmation that the tested tower site was a Broadwaves tower site, the CN technician estimated the antenna height, determined the GPS coordinates for the tower, and recorded this and other information into the standard Excel provider data collection format. With the objective of reasonably representing the provider's practical service area, the CN technician catalogued information for each tower site (**Exhibit D**), and prepared propagation maps (**Exhibit E**) based on that information as well as the provider's own advertised service area representations.

### Exhibit D: Tower Research and Propagation Data

Wireless Provider Information											
Provider Name (Legal entity)			Broadwaves								
DBA ("Doing Business As") Name			N/A								
FRN # (10-digit FCC Registration Number)			not found								
Name of Location	Status	Pop Center	Structure	Latitude	Longitude	Omni?	Radius	Frequency	Gain	Power	Elevation
Brenham	Active	Brenham	bank building	30.14776	-96.39574	Yes	10	2400	12	26	100
Latum	Active	Latum	side-mount tower	30.07984	-96.56108	Yes	5	2400	12	23	50
Carmine	Active	Carmine	silo	30.1312	-96.66686	Yes	10	2400	12	26	120
Burton	Active	Burton	water tower	30.18331	-96.59476	Yes	10	2400	12	26	100
Longpoint	Active	Longpoint	tower	30.25209	-96.51421	Yes	10	2400	12	26	50
Independence	Active	Independence	tower	30.27482	-96.40654	Yes	10	2400	12	26	150
Washington	Active	Washington	tower	30.28061	-96.19497	Yes	10	2400	12	26	80
Chappell Hill	Active	Chappell Hill	tower	30.17169	-96.23778	Yes	10	2400	12	23	60
Kenney	Active	Kenney	tower	30.05233	-96.32886	Yes	10	2400	12	26	120

### Exhibit E: Sample Propagation Map for the Chappell Hill Tower Location



**Legacy Results and Submission from April 2012**

After driving several hundred miles combing the highways, streets, and county roads of the provider’s overall service area, nine access points were identified, eight of which were confirmed independently, and one which was confirmed through common network nomenclature. The composite propagation study (Exhibit A.2) reasonably represented (at the time) the researched service area based on then current information. Additionally, the provider’s website listed maximum advertised downstream speeds and pricing structures represented herein as **Exhibit F**.

**Exhibit F: Broadwaves Speed Tiers & Pricing Structures**

No Contracts	
No Equipment Rental	No Hidden Fees
128 kbps	\$19.95
256 kbps	\$29.95
512 kbps	\$39.95
1 Mbps	\$49.95
1.5 Mbps	\$59.95
2 Mbps	\$69.95
2.5 Mbps	\$79.95
3 Mbps	\$89.95

For speeds above 3 Mbps please call 979-451-3332 for quote

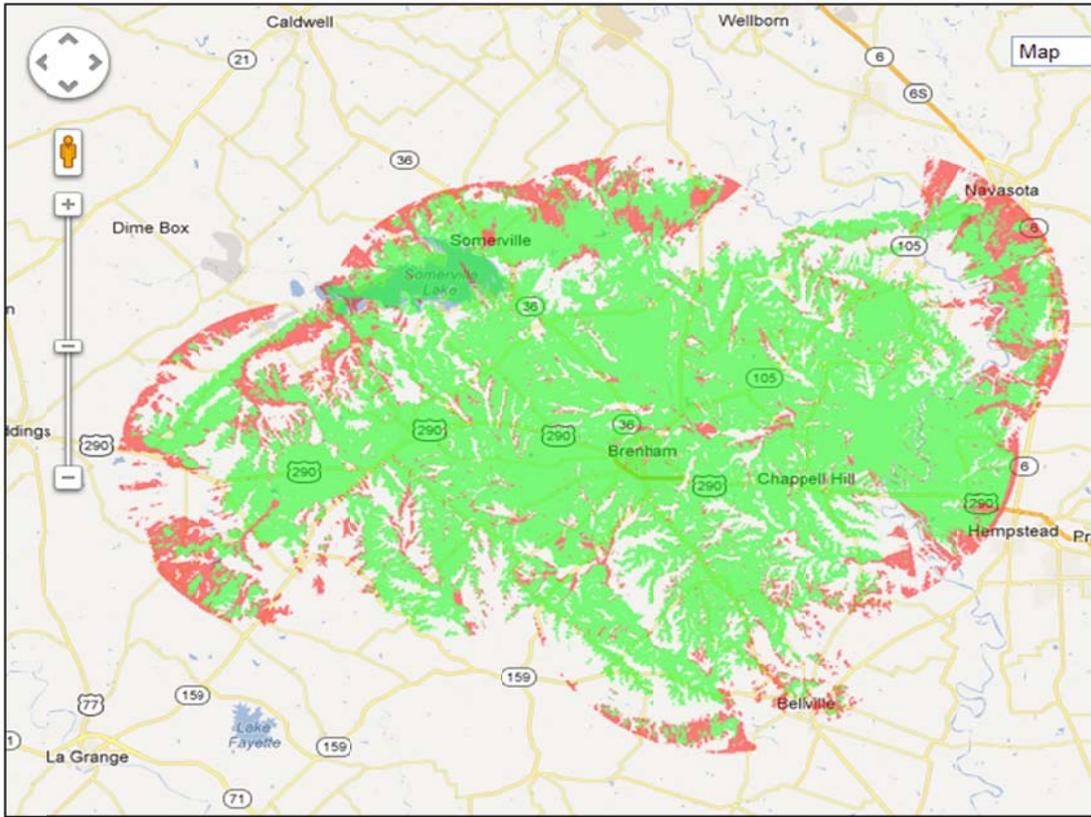
**Results and Submission for October 2012**

Recently, a review of the provider’s website revealed the addition of a wireless propagation-style coverage map (**Exhibit G**).

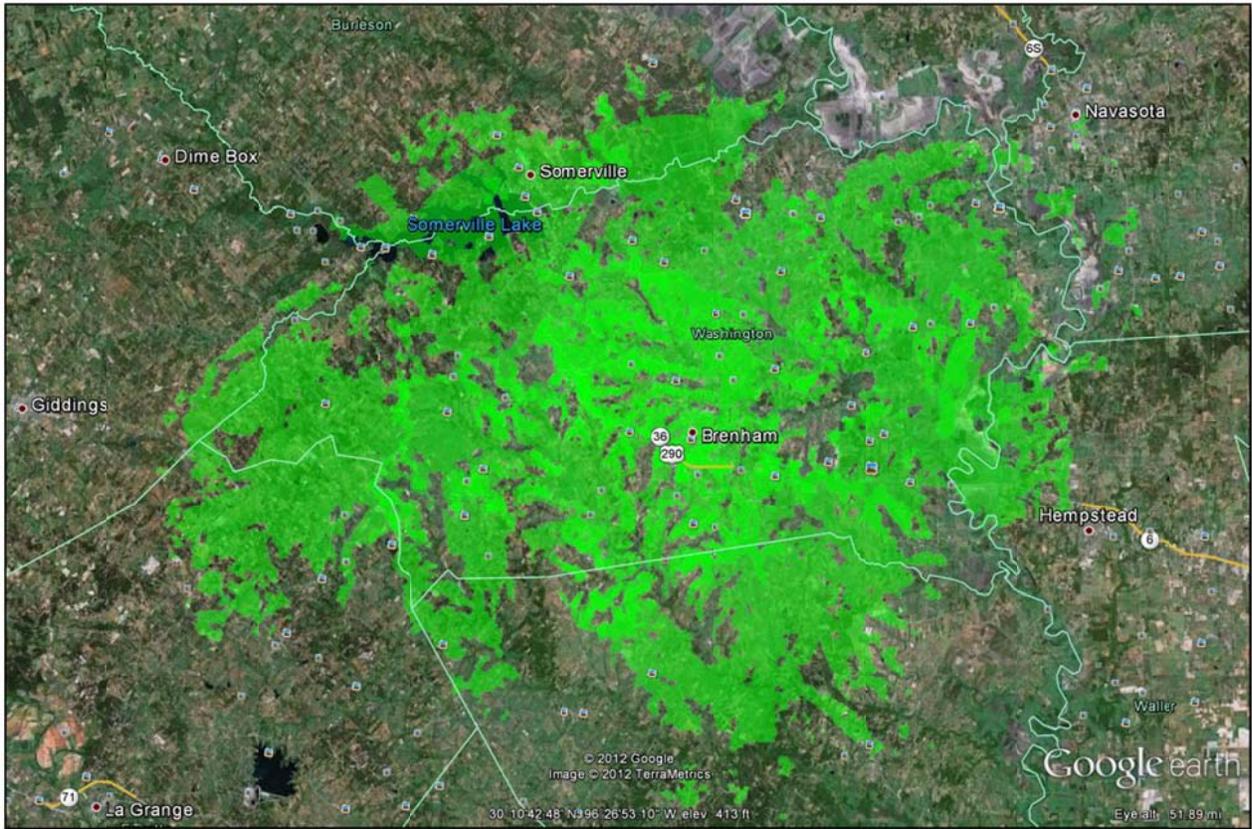
Between June 15 and August 15, 2012, at least three attempts were made to contact the provider and seek insight into the website map. The provider did not respond. Comparing Exhibits A.1 and G, the towers identified by CN for the April 2012 update are all represented in the provider’s latest coverage map, and an expanded coverage is theoretically possible assuming the use of directional antennas, lowered line loss, higher gain customer premise antennas, etc.

**Exhibit H** represents the provider’s coverage estimate for this October 2012 mapping update. The coverage map represents the green signal areas in the depiction from the provider’s website, based on propagation software parameters utilized by a CN engineer to reasonably replicate the website map. For the April 2013 update cycle, CN will perform field tests to validate the extended signal propagation as indicated by the provider’s website map.

Exhibit G: Broadwaves Website Coverage Map



## Exhibit H: Broadwaves October 2012 Coverage Map Update



## CKS WIRELESS, INC.

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 broadband provider, regardless of whether the provider has chosen to support and participate in the SBI mapping initiative.

The following narrative provides detail regarding the recent, and ongoing, data collection and coverage estimation activities related to CKS Wireless, Inc., a wireless Internet service provider (WISP), located in Jacksonville, Texas with a service area around Mount Selman, Ponta, Jacksonville, and Rusk, Texas. The narrative will include information regarding how and where CN obtained publicly available data and used on-the-ground validation techniques that support the underlying data.

### **October 2012 Submission Commentary**

Connected Nation created this coverage estimation document during the October 2011 submission period as a result of the ongoing non-participatory status of the provider. Since the inception of the SBI program, CN made 30 attempts to contact the provider (either by phone, e-mail or in person). On August 12, 2012, the estimated coverage map (**Exhibit I**), that had been produced during the October 2011 submission cycle, was once again presented to the provider requesting their review and comments. As of August 27, 2012, no replies were received from the provider.

CN has continued to closely monitor the provider's website to determine if any changes to the coverage area or maximum advertised speeds have occurred. To date, CN has been unable to locate evidence of any recent changes reported on the provider's website for infrastructure that was current as of June 30, 2012. To that end, CN is resubmitting this coverage estimation narrative, substantially in its original format, and will continue to monitor the provider's website as well as ensure ongoing outreach until either the expiration of the SBI grant or until such time as the provider voluntarily contributes data. Given the very recent update for tower locations (**Exhibit J**), CN engineers have flagged this provider's file and will conduct additional field validation and site verification activities in order to update this document for the April 2013 mapping cycle.

### **The Issue**

CKS Wireless, Inc. by its lack of responsiveness since May 13, 2010, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN has built a file based on research information and, as time progressed, enriched the file with information obtained through the public domain or through on-the-ground research and site verification. For example, CN reviewed the provider's website ([www.ckswireless.com](http://www.ckswireless.com)) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) the system yielded an FRN of 0006165625 (**Exhibit C**) with contact information relative to the owner of the company. Also, to support field validation of access points, the FRN was referenced to the FCC Universal Licensing System (ULS) to identify any licenses the

provider may hold which could possibly enhance locating active access points for the service area. This process yielded license WQJW906 (**Exhibit D**), Radio Service: NN-3650-3700MHz with 7 reported (5 unique) locations.

### Exhibit A: Service Plans

## service plans

SPEED	HOME	BUSINESS
• 384 kbps	<b>\$49.99/mo</b>	<b>\$79.99/mo</b>
• 512 kbps	<b>\$59.99/mo</b>	<b>\$89.99/mo</b>
• 768 kbps	<b>\$69.99/mo</b>	<b>\$99.99/mo</b>
• 1 mb	<b>\$79.99/mo</b>	<b>\$109.99/mo</b>
• 1.5 mb	<b>\$119.99/mo</b>	<b>\$164.99/mo</b>
• 2 mb	<b>\$159.99/mo</b>	<b>\$219.99/mo</b>
• 2.5 mb to 5 mb	<b>CALL FOR QUOTE</b>	<b>CALL FOR QUOTE</b>

EXISTING CUSTOMERS - Don't forget about our REFERRAL PROGRAM! For every new customer that you refer to us, we will credit your account with 1 FREE MONTH of INTERNET SERVICE!

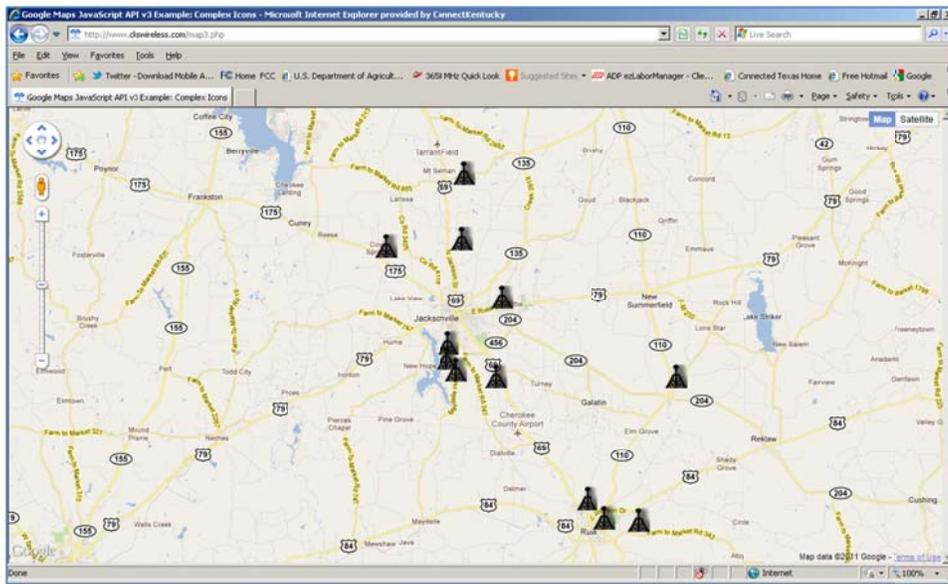
## installation prices

The price of installation varies, depending on the location of you home or business, and surrounding terrain. Exact price is determined at the time of the site survey, but is usually between \$150.00 and \$250.00. This is a one time, upfront cost for installation only, as CKS maintains ownership of the equipment.

Home About us Coverage Email Terms Employment

©cks wireless All right reserved.  
101 Nance Street (PO Box 2125), Jacksonville, Texas 75766

### Exhibit B: Service Area



### Exhibit C: Federal Registration Number

Registration Detail	
FRN:	0006165625
Registration Date:	01/15/2002 01:57:48 PM
Last Updated:	01/28/2009 02:19:35 PM
Business Name:	CKS Management, Inc.
Business Type:	Private Sector , Corporation
Contact Organization:	
Contact Position:	ASR Registrant
Contact Name:	Jon P Kelley
Contact Address:	101 Nance Street Jacksonville, TX 75766 United States
Contact Email:	jonpaul@cksmgmt.com
ContactPhone:	(903) 589-5369
ContactFax:	(903) 541-0889

### Exhibit D: WQJW906 License Reference

FCC Federal Communications Commission

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

#### Universal Licensing System

ECC > WTB > ULS > Online Systems > License Search

License Search

#### Search Results

Call Sign like **wqjw906**

Matches 1 - 1 (of 1)

Page 1

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1 WQJW906	CKS Wireless, Inc.	0006165625	NN	Active	01/29/2019

Legend: PA = Pending Application(s), TP = Termination Pending, L = Lease

FCC Federal Communications Commission

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

#### Universal Licensing System

ECC > WTB > ULS > Online Systems > License Search

3650-3700 MHz License - WQJW906 - CKS Wireless, Inc.

#### Locations Summary

7 Total Locations  
10 Locations per Summary Page

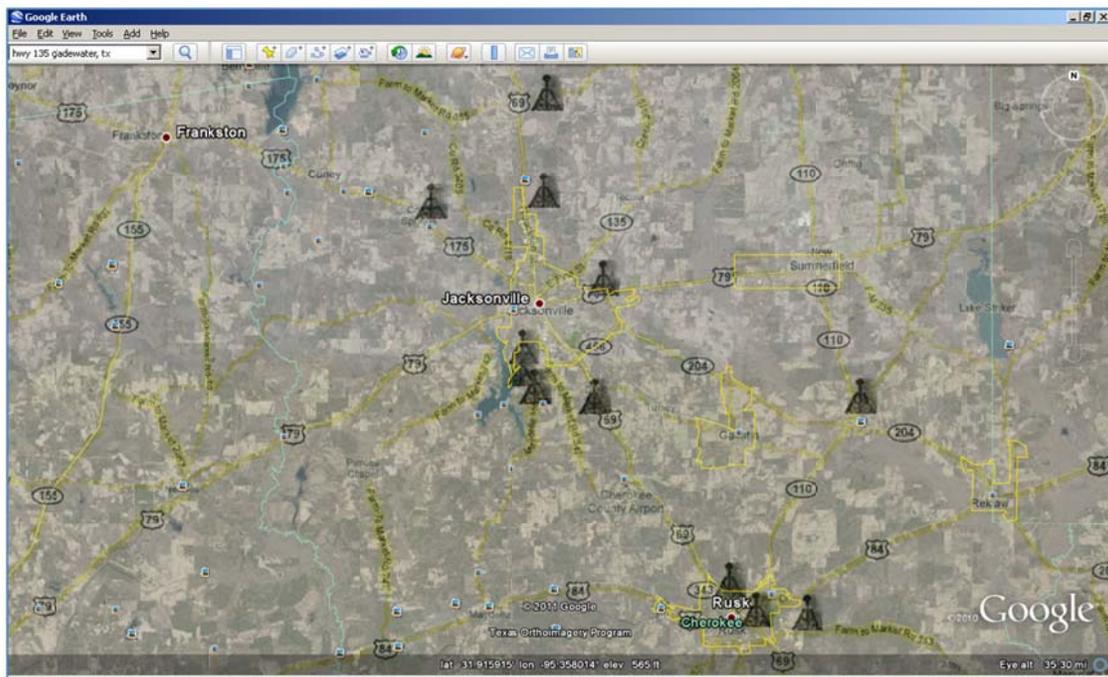
MAIN ADMIN LOCATIONS

Location	Latitude, Longitude	Transmitter Azimuth
1 CKS TOWER	31-58-03.7 N, 095-14-44.0 W	184.3 degrees
2 ABBINGTON LUMBER	31-52-46.8 N, 095-12-45.8 W	342.3 degrees
3 CKS TOWER	31-58-03.7 N, 095-14-44.7 W	325.2 degrees
4 North Jacksonville	32-00-49.0 N, 095-16-59.0 W	145.2 degrees
5 CT Water Tank	31-54-19.0 N, 095-15-04.0 W	4.3 degrees
6 Not Assigned	31-47-33.5 N, 095-07-07.5 W	271.5 degrees
7 KOA	31-47-33.5 N, 095-07-07.5 W	271.5 degrees

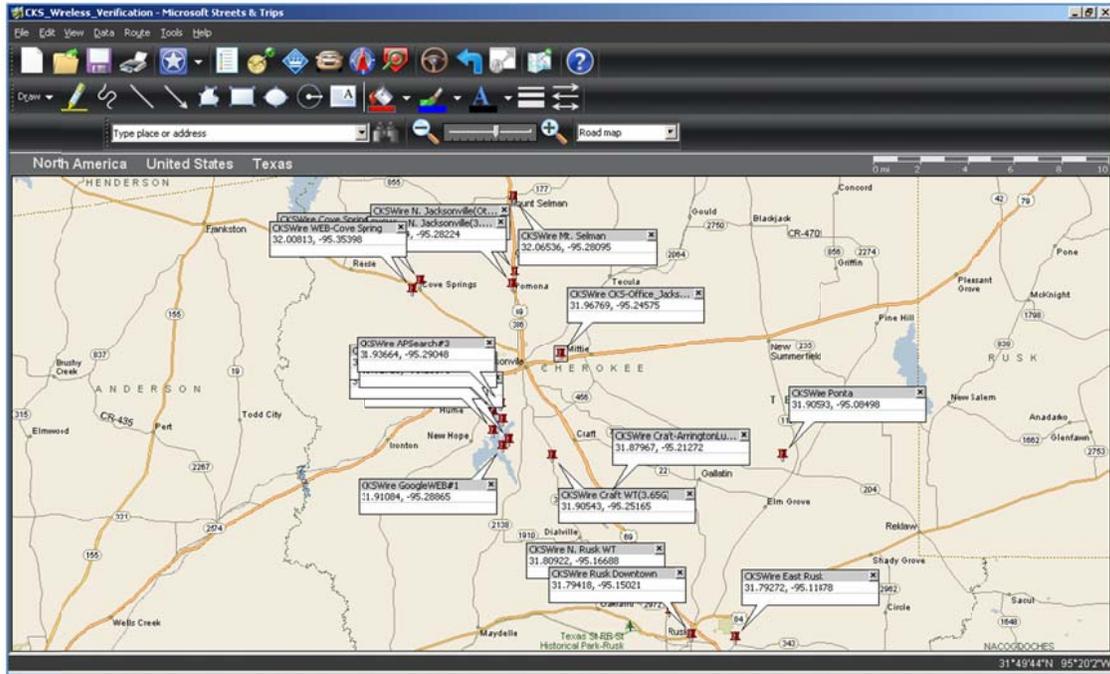
### Preliminary Identification of Provider's Coverage Area

Connected Nation extracted the CKS Wireless, Inc. service area map from its website and the information through the FCC ULS database in reference to license WQJW906. The website service area 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 .1 mile (528 ft.) to establish a minimum search criteria of a given access point. The provider's service area depiction is represented by tower symbols as shown in Exhibit B. Using the coordinates (5 unique locations) available through the FCC ULS license search an accuracy validation of the image overlay was conducted to determine the feasibility of utilizing the tower symbols for identifying coordinates of the remaining 7 locations. Coordinates were entered into Google Earth for the 5 unique 3650 MHz licensed locations and examined utilizing the zoom option of the aerial imagery. All five locations structures were identified. This provided a means of establishing coordinates for the remaining access point locations. All 12 locations were entered into the Microsoft *Streets & Trips* software program (**Exhibit F**) to develop a route for the validation process.

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



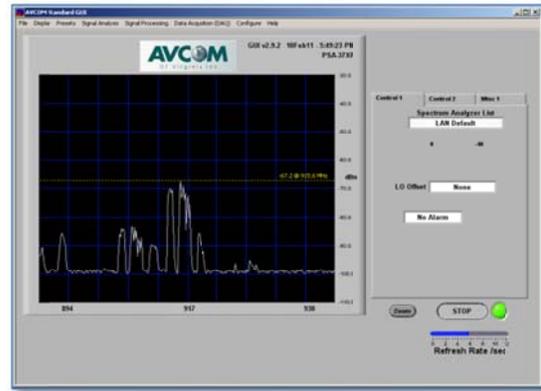
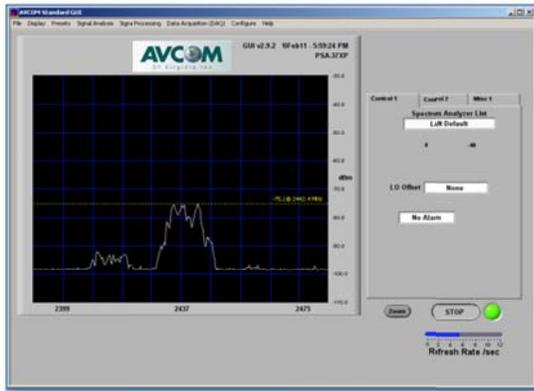
## Exhibit F: Validation Points for AP Structures



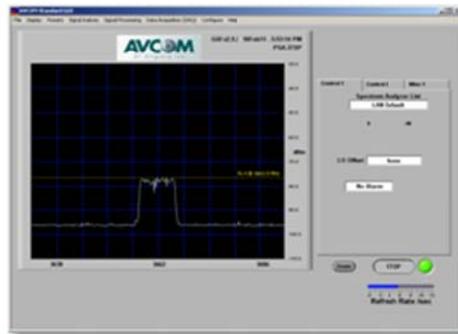
### Testing Techniques

Connected Nation staff developed a site validation route based on data established with the Google Earth image overlay and publicly available data through the FCC ULS database for CKS Wireless, Inc. 3650-3700MHz radio service. 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 sectored) and photographs were taken of the access points.

## Exhibit G: Field Data for CKS Wireless, Inc. Office/Hub Location



Provider	Location	Latitude	Longitude	Frequency Availability	Structure	Approximate Antenna Height	Notes
				900MHz 2.4GHz 3.65GHz 5.0GHz			
CKSWire	CKS-Office_Jacksonville(3.656)	31.967694	-85.245750	X	Tower	39 meters	3.65GHz azimuth 184 degrees, vertical polarity-39 meters (a smuch 325 degrees horizontal polarity-39 meters (a smuch 325 degrees
				X		100 ft.	Estimated height: Omni antenna.
				X		100 ft.	Estimated height: Sector antenna-120 degrees.



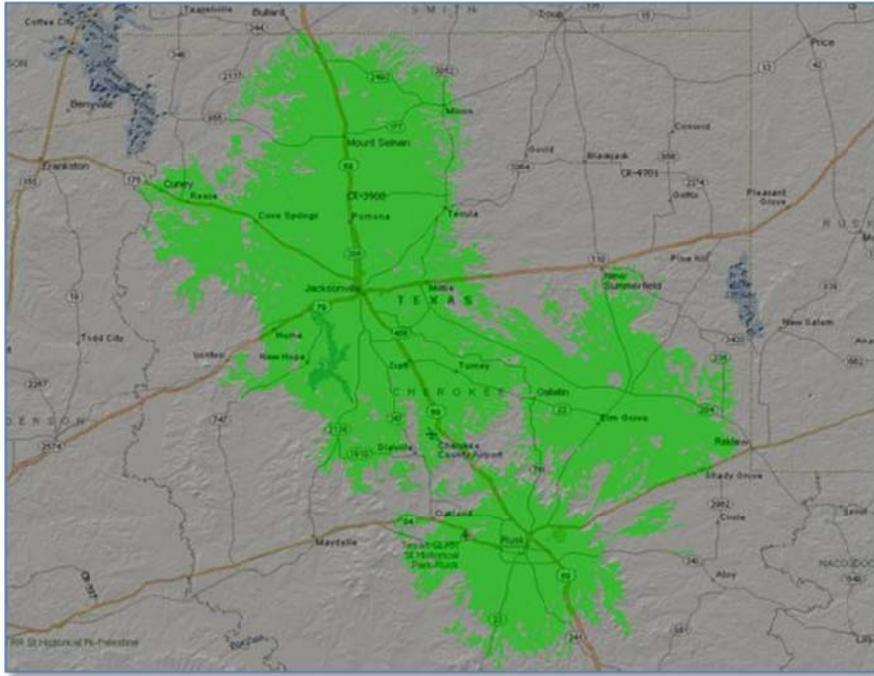
## Background Results and Submission for October 2012

Of the 18 locations visited during the validation point route, 12 access points were identified and relative information was logged into the CKS Wireless, Inc. field validation notes file (**Exhibit H**). The field and the publicly available data were transferred to the Connected Nation Provider Information file. A composite propagation study was completed based on the field data (**Exhibit I**). Both documents were forwarded to CKS Wireless, Inc. and advised the information will be submitted to Connected Texas and the NTIA broadband mapping project for processing if there are no discrepancies of the estimated coverage received from the provider within a 48-hour period. Despite that aforementioned call-to-action and the 3 additional contact attempts during this mapping cycle, the provider continues to be non-responsive.

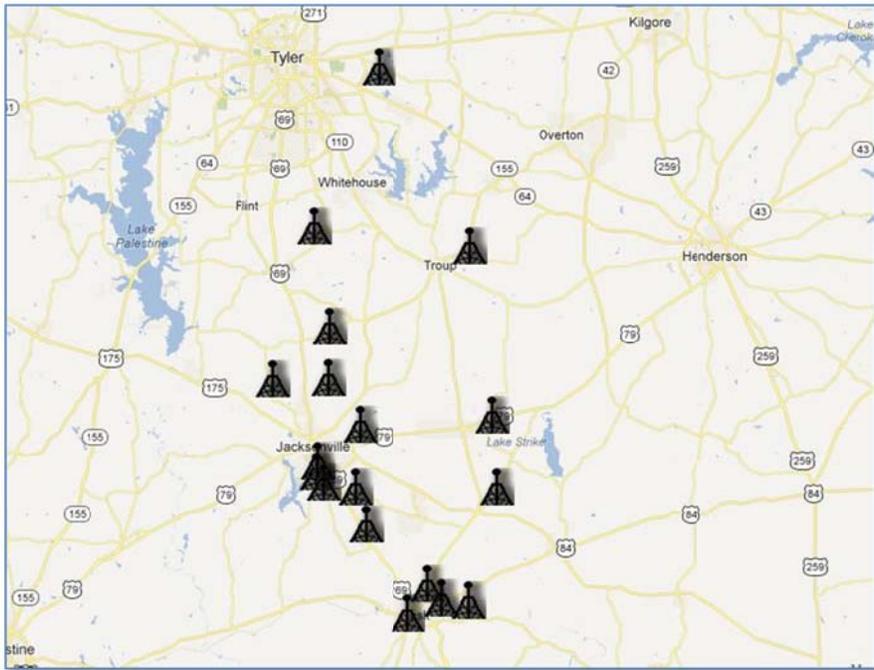
### Exhibit H: Field Validation Notes

Provider	Location	Latitude	Longitude	Frequency Availability				Structure	Approximate Antenna Height	Notes
				900MHz	2.4GHz	3.65GHz	5.0GHz			
CKSWire	Mt. Selman	32.065356	-95.280947	X				Tower	180 ft.	Estimated height.
CKSWire	N. Jacksonville(3.65G)	32.011444	-95.282236	X		X		Tower	115 meters 300 ft.	3.65GHz, azimuth 145 degrees, horizontal polarity-115 meters (serving as backhaul) Estimated height.
CKSWire	N. Jacksonville(Other)	32.018719	-95.279750							Mobile providers structure. No CKS assets.
CKSWire	Cove Spring WT	32.013108	-95.347769							Did not observe any antenna structures.
CKSWire	WEB-Cove Spring	32.008128	-95.353983	X				Rohn-Residential	90 ft.	Coordinates approximated; Rohn tower structure visible while driving. Could not locate a safe location to park to capture a picture.
CKSWire	CKS-Office_Jacksonville(3.65G)	31.967694	-95.245750	X		X		Tower	39 meters 120 ft. 120 ft.	3.65GHz, azimuth 184 degrees, vertical polarity-39 meters/azimuth 325 degrees, horizontal polarity-39 meters (serving as backhaul) Estimated height. Omni antenna. Estimated height. Sector array-120 degrees.
CKSWire	Craft WT(3.65G)	31.905431	-95.251653	X		X		Water Tank	160 meters 140 ft. 140 ft.	3.65GHz, azimuth 4 degrees, vertical polarity-160 meters Omni-approximate height. 2.4GHz sector array; approximate height. Serving as backhaul.
CKSWire	Craft-ArringtonLumber(3.65G)	31.879667	-95.212722			X		Pole	18 meters	3.65GHz, azimuth 342 degrees, vertical polarity-18 meters. The 3.65GHz serves as a business application for the lumber yard. The lumber yard operates a 2.4GHz WiFi system routed through the 3.65GHz access.
CKSWire	APSearch#1	31.914639	-95.284536							Search location.
CKSWire	SE LakeJack	31.910836	-95.288650	X				Rohn-Residential	90 feet	Identified; approximated coordinates-private land. Estimated height.
CKSWire	APSearch#2	31.927233	-95.28871111							Search location.
CKSWire	SW LakeJack	31.920053	-95.295992	X				Rohn-Residential	90 feet	Identified; approximated coordinates-private land. Estimated height.
CKSWire	APSearch#3	31.936639	-95.290475							Search location.
CKSWire	NW LakeJack	31.931175	-95.295992	X				Rohn-Residential	90 feet	Identified; approximated coordinates-private land. Estimated height.
CKSWire	N. Rusk WT	31.809217	-95.16687778	X					150 ft.	900MHz omni; approxmate height.
CKSWire	Rusk Downtown(Police and Fire Dept. Station)	31.794183	-95.15021389		X			Rohn	80 ft.	WEB site illustrates tower for coverage; photo identifies BH connectivity mounted on ROHN atop the fire department. Assuming 2.4GHz operation in the area. Height assumption 80 ft.
CKSWire	East Rusk-KOA(3.65GHz)	31.792722	-95.11878333			X		Tower	127 meters 120 ft.	3.65GHz, azimuth 271 degrees, horizontal polarity-127 meters (serving as backhaul) Sector array approximate height. Tower FCC ASR: 1058081
CKSWire	Ponta	31.905928	-95.084975		X			Tower	130 ft. 100 ft.	2.4GHz sector array; approximate height. 900MHz omni; approximate height. FCC ASR: 1024425

**Exhibit I: CKS Wireless, Inc. Composite Coverage**



**Exhibit J: New Wireless Transmit Site Locations**



## **EAST TEXAS BROADBAND**

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 broadband provider, regardless of whether the provider has chosen to support and participate in the SBI mapping initiative.

The following narrative provides detail regarding the recent data collection activities related to East Texas Broadband, a wireless Internet service provider (WISP), located in Palestine, Texas, with a service area around Palestine, Elkhart, and Elmwood, Texas. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation techniques that support the underlying data.

### **October 2012 Submission Commentary**

Connected Nation created this coverage estimation document during the October 2011 submission period as a result of the ongoing non-participatory status of the provider. In addition to the 7 instances of e-mail and/or telephone communication during the October 2011 and April 2012 submission periods (as previously reported), CN made 4 additional attempts to contact the provider during this mapping cycle. On August 12, 2012, the estimated coverage map (**Exhibit G**) which was produced during the October 2011 submission cycle was once again forwarded to the provider requesting review and comments. As of August 27, 2012, no replies were received from the provider.

CN has continued to closely monitor the provider's website to identify any changes in the coverage area or maximum advertised speeds but did not locate evidence of any recent changes. To that end, CN is resubmitting this coverage estimation narrative, substantially in its original format, and will continue to monitor the provider's website as well as ensure ongoing outreach until either the expiration of the SBI grant or until such time as the provider voluntarily contributes data.

### **The Issue**

East Texas Broadband, by its lack of responsiveness since February 4, 2011, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN has built a file based on research information and as time has progressed, enriched the file with information obtained through the public domain or by phone inquiry through the provider's customer support line. Additionally, CN staff spent substantial time in the field compiling data, verifying infrastructure, and generating this coverage estimation document. For example, CN reviewed the provider's website (<http://www.etbroadband.net>) to determine the residential service plans. However, the website did not identify the residential service plans. A telephone call was placed through customer support and the residential plans were quoted over the phone (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network was identified. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded no FRN for East Texas Broadband. Also, to support field validation of access points, the FCC Universal Licensing System (ULS) was utilized to identify any licenses the provider may

hold which could possibly enhance locating active access points for the service area. This process yielded no licensed frequencies associated to East Texas Broadband, indicating the provider's broadband delivery is by way of the unlicensed Wi-Fi frequencies band (900 MHz, 2.4 GHz, and 5 GHz).

**Exhibit A: Service Plans**

Speed Tier Offerings		Residential Service Price
Download	Upload	
512Kbps	256Kbps	\$24.95
1Mbps	512Kbps	\$39.95
2Mbps	1Mbps	\$54.95
3Mbps	1Mbps	\$69.95

**Exhibit B: Service Area**

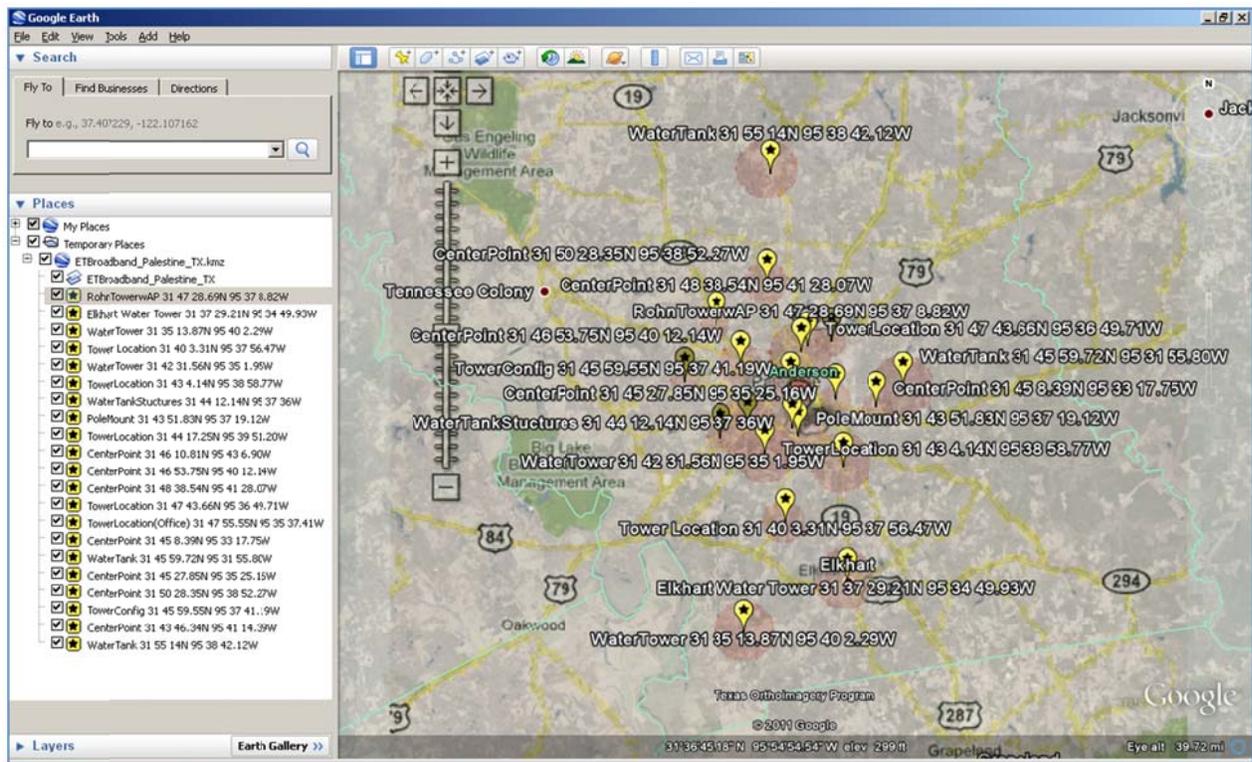
The screenshot displays the East Texas Broadband website interface. At the top left is the company logo, and at the top right is the phone number 903-723-3373. A navigation menu includes Home, Services, Coverage Area, Support, and Contact Us. The main content area is divided into three sections:
 

- Email Login:** A form with fields for Email Address (pre-filled with @etbroadband.net) and Password, and a Login button.
- Service Area Map:** A map of the region with red circles indicating service areas. Text above the map reads: "Here is a coverage map of the areas where high-speed wireless is available. If you have any questions, please contact us or fill out our site survey." Labels on the map include "Jus Engeling Wildlife Management Area" and "Big Lake Bottom Wildlife Management Area".
- Current Weather:** A weather widget for Palestine, TX, showing a 10-day forecast, a current temperature of 95°F, and conditions of "Partly Cloudy". It also lists "Feels Like: 98°F", "Humidity: 40%", and "Wind: NNE at 11 mph".

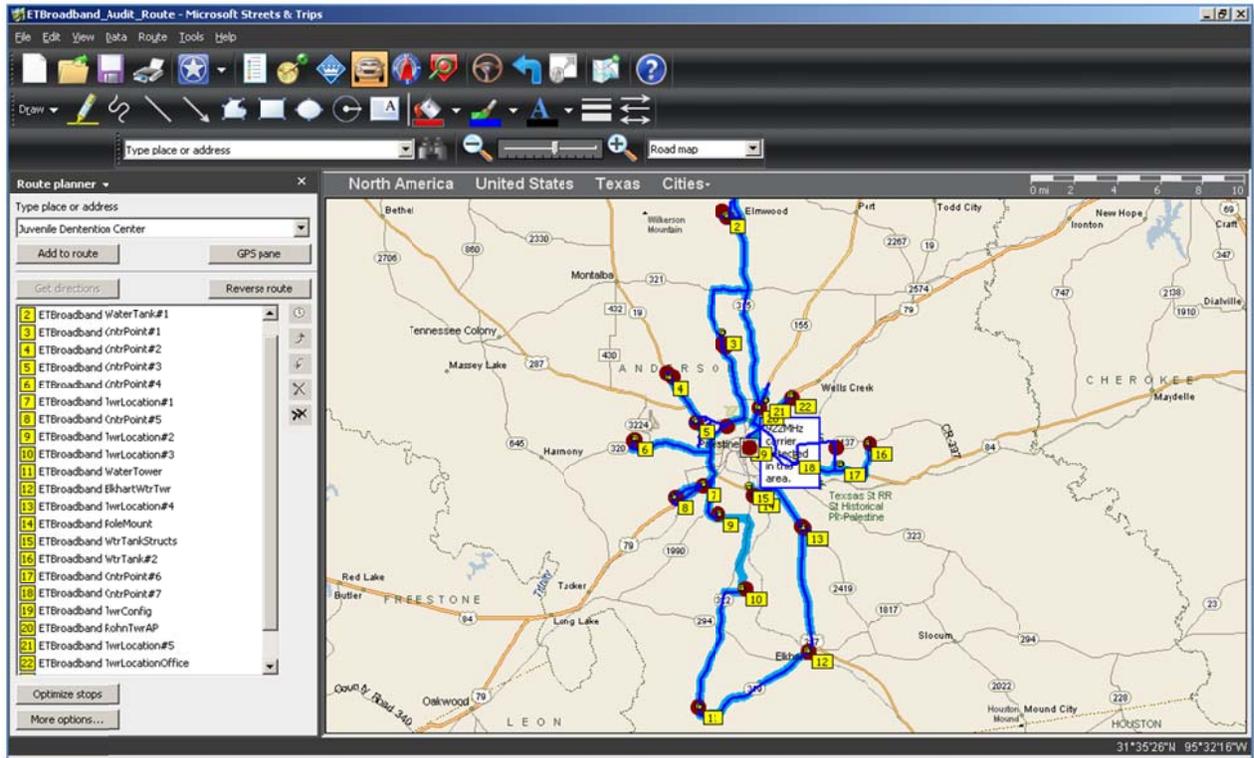
### Preliminary Identification of Provider's Coverage Area

Connected Nation extracted the East Texas Broadband service area map from its website. The website service area was utilized to create a Google Earth image overlay (**Exhibit C**). 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 .1 mile (528 ft.) to establish a minimum search criteria of a given access point. The provider's service area depiction is represented by circular type polygons as shown in Exhibit B. Based on the provider's website coverage depiction there are nineteen (19) locations identified as possible locations for access point structures. Utilizing Google Earth with the provider's coverage overlay (Exhibit C), coordinates were established of the circular polygons center points for route development. Further enhancement for possible structure identification was completed by a satellite aerial imagery and street level session with the Google Earth application. Possible structure locations were identified around the center points. This provided a means of establishing coordinates for the access point locations. Twenty-one (21) locations were entered into Microsoft *Streets & Trips* software program (**Exhibit D**) to develop a route for the validation process.

**Exhibit C: Google Earth - Provider's Service Area Image Overlay**



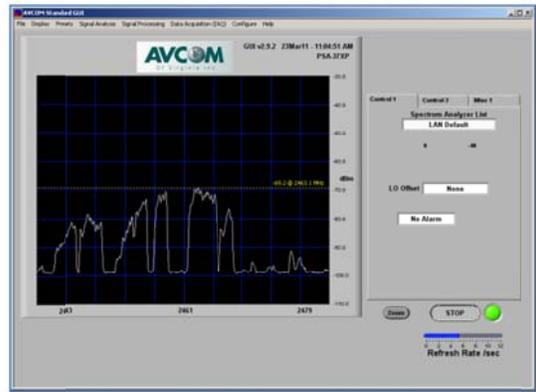
## Exhibit D: Validation Points for AP Structures



**Testing Techniques**

Connected Nation staff developed a site validation route based on data established with the Google Earth image overlay and publicly available data through East Texas Broadband’s 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 E**). 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, and antenna type (omnidirectional or sectored), and photographs were taken of the access points.

**Exhibit E: Sample Field Data for East Texas Broadband CR433-ROHN (CntrPoint#2) Location**



Provider	Location	Latitude	Longitude	Frequency Availability				Structure	Approximate Antenna Height	Notes
East Texas BB	CR433-ROHN (CntrPoint#2)	31.813611	-95.693056	900MHz	2.4GHz	3.65GHz	5.0GHz	Residential Rohn	80	

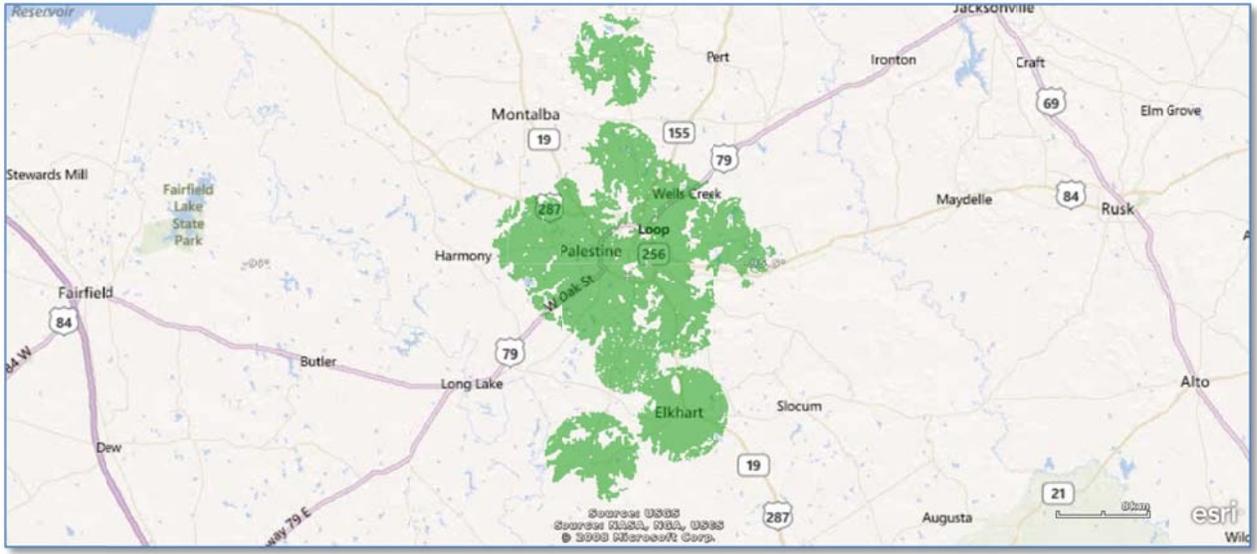
## Background Results and Submission for October 2012

Of the 21 locations visited during the validation point route, 17 access points were identified and relative information was logged into the East Texas Broadband field validation notes file (**Exhibit F**). The field and the publicly available data were transferred to the Connected Nation Provider Information file. A composite propagation study was completed based on the field data (**Exhibit G**). Both documents were forwarded to East Texas Broadband and advised the information will be submitted to Connected Texas and the NTIA broadband mapping project for processing if there are no discrepancies of the estimated coverage received from the provider within a 48-hour period. Despite that aforementioned call-to-action and the 4 additional contact attempts during this mapping cycle, the provider continues to be non-responsive.

### Exhibit F: Field Validation Notes

Provider	Location	Latitude	Longitude	Frequency Availability				Structure	Approximate Antenna Height	Notes
				900MHz	2.4GHz	3.65GHz	5.0GHz			
East Texas BB	Elmwood-WaterTank#1	31.920556	-95.645033	X				Water Tank	100	
East Texas BB	CR404 WT (CntrPoint#1)	31.831667	-95.645833	X				Water Tank	100	
East Texas BB	CR433-ROHN (CntrPoint#2)	31.813611	-95.693056		X			Residential Rohn	80	
East Texas BB	CR419-ROHN (CntrPoint#3)	31.780833	-95.670000	X				Residential Rohn	70	
East Texas BB	BroylesChapel-ROHN (CntrPoint#4)	31.769444	-95.718611	X				Residential Rohn	80	
East Texas BB	Hwy79SW-Lattice (TwrLocation#1)	31.738125	-95.664222	X				Lattice	120	
East Texas BB	Larkspur Ln-ROHN (CntrPoint#5)	31.729167	-95.685833	X				Residential Rohn	60	
East Texas BB	CR2012B-GuyedTwr (TwrLocation#2)	31.717817	-95.649658	X				Commercial Guyed	100	No FCC Registration sign posted at location.
East Texas BB	TwrLocation#3	31.667586	-95.632353							No WIFI RF detection observed. Used coordinates as a ETBB web coverage depiction point.
East Texas BB	Hwy322-WaterTower	31.587222	-95.667778	X				Water Tank	120	
East Texas BB	Elkhart-WaterTower	31.624781	-95.580536	X				Water Tower	150	
East Texas BB	PoleMount	31.731064	-95.621978							No WIFI RF detection observed.
East Texas BB	WtrTankStructs	31.736706	-95.626667							No WIFI RF detection observed.
East Texas BB	FM3266 WtrTwr (WtrTank#2)	31.766944	-95.531389	X				Water Tank	80	
East Texas BB	CntrPoint#6	31.752331	-95.554931							
East Texas BB	CntrPoint#7	31.757736	-95.590322							
East Texas BB	CntrPoint#6and#7 Approximation	31.756111	-95.597222	X					90	Identified a WIFI carrier at 922MHz; could not obtain a visual on AP structure due to heavy foliage in immediate area. Approximated lat/long to represent provider's ring map coverage for the location.
East Texas BB	N. Church-BldgROHN (TwrConfig)	31.763889	-95.626667		X			3 story w 40Ft. Rohn	80	
East Texas BB	Hwy155 (RohnTowerAP)	31.791303	-95.619117		X			Residential Rohn	100	
East Texas BB	TwrLocation#5	31.795461	-95.613808							No WIFI RF detection observed.
East Texas BB	Hwy79N_ROHN (TwrLocationOffice)	31.798764	-95.593725	X				Residential Rohn-G	120	
East Texas BB	WalstonSpringsWT (TwrLocation#4)	31.708767	-95.583875	X				Water Tower	80	
East Texas BB	ETBB Office	31.730833	-95.623333		X		5.1	Commercial Guyed	150	

## Exhibit G: East Texas Broadband Composite Coverage



## **EAST TEXAS CABLE**

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

The following narrative provides detail regarding the recent data collection activities related to East Texas Cable, a cable broadband Internet provider in Canton, Texas. The narrative will include information regarding how and where CN obtained publicly available data and the consumer-provided validation techniques that support the underlying data.

### **October 2012 Submission Commentary**

Connected Nation created this coverage estimation document during the October 2012 submission period as a result of the ongoing non-participatory status of the provider. In addition to the 6 instances of e-mail and/or telephone communication during the April 2012 submission period (as previously reported), CN made 4 additional attempts to contact the provider during this mapping cycle, yet the provider remained non-responsive.

CN has closely monitored the provider's website to identify any information related to maximum advertised speed tiers, coverage areas or other information that could be used as part of this coverage estimation document. CN presents, herein, its methodologies used for creating a coverage estimation of East Texas Cable.

### **The Issue**

East Texas Cable, by its lack of responsiveness since the inception of the State Broadband Initiative (SBI) program, has predicated its unwillingness to participate in the Texas broadband mapping program.

### **Identification of Provider's Legal Name, d.b.a., and FRN**

CN began building a file based on research information and, as time progressed, enriched the file with information obtained through the public domain. For example, CN reviewed the provider's website ([www.etcable.net](http://www.etcable.net)) to determine the residential service plans (**Exhibit A**). A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration System (CORES) system yielded an FRN of 0003782166 (**Exhibit B**).

Exhibit A: Residential Service Plan



**EAST TEXAS CABLE**  
*HIGH SPEED INTERNET*

## Broadband Internet Packages

BUNDLES
E-MAIL
PAY BILL
LINKS
CONTACT US
HOME
INTERNET
PHONE
CABLE

### Premium Cable

- †Digital Video Recorder (DVR)
- †Digital Cable
- †More channels
- †Video on Demand (VOD)



Speed	Monthly
512 kilobits per second*	\$25.95
1 Meg per second*	\$40.95
2.5 Meg per second*	\$50.95

\*Actual speeds will vary.

For customers that do not have cable service with East Texas Cable you will be required to carry a minimum of [Broadcast Basic](#). East Texas Cable will not allow broadband abuse.

Cable modem required. Use your own, or we can provide and install one for you. [Call for details](#).  
Check [Minimum computer requirements](#).

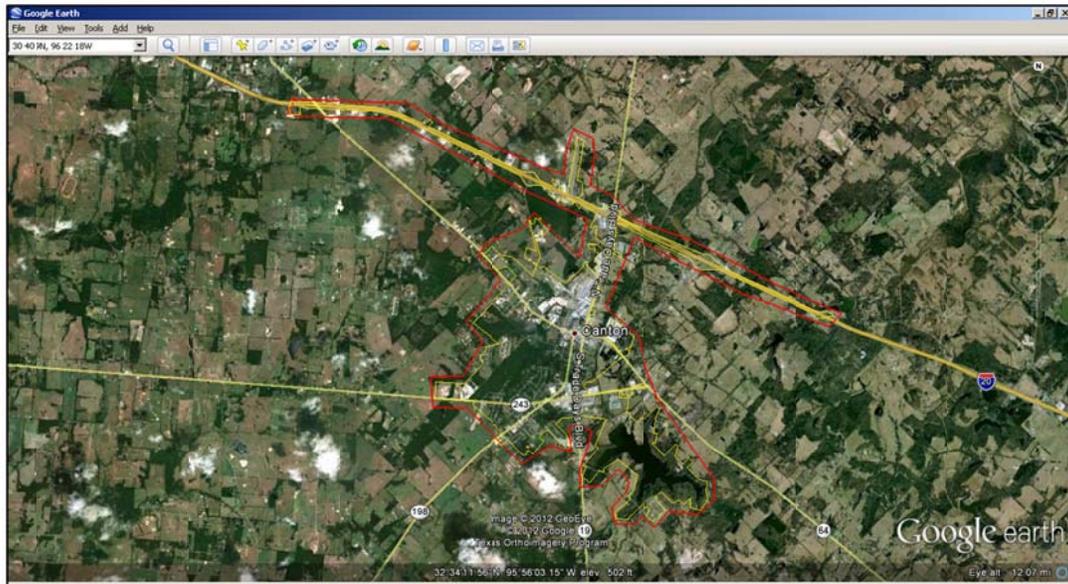
Exhibit B: FRN

Registration Detail	
FRN:	0003782166
Registration Date:	09/19/2000 12:44:43 PM
Last Updated:	04/01/2009 11:33:06 AM
Business Name:	east texas cable
Business Type:	Private Sector , Corporation
Contact Organization:	east texas cable
Contact Position:	Jim Roby / owner
Contact Name:	Mr Jim D Roby
Contact Address:	301 E. Hwy. 243 suite# 103 Canton, TX 75103 United States
Contact Email:	etcanton@aol.com
ContactPhone:	(903) 567-2260
ContactFax:	(903) 567-4048

### **Identification of Provider's Coverage Area**

Connected Nation identified the municipality boundary for Chandler, Texas via *Google Earth* application (**Exhibit C**). The identification of the municipality boundary was utilized to establish possible “end of line (termination points)” of the East Texas Cable network distribution along the thoroughfares (easements). Markers were established for these points (**Exhibit D**) to develop a route for the CN staff member to complete a field audit of the cable television delivery system for identifying components and the distribution routing of the East Texas Cable network.

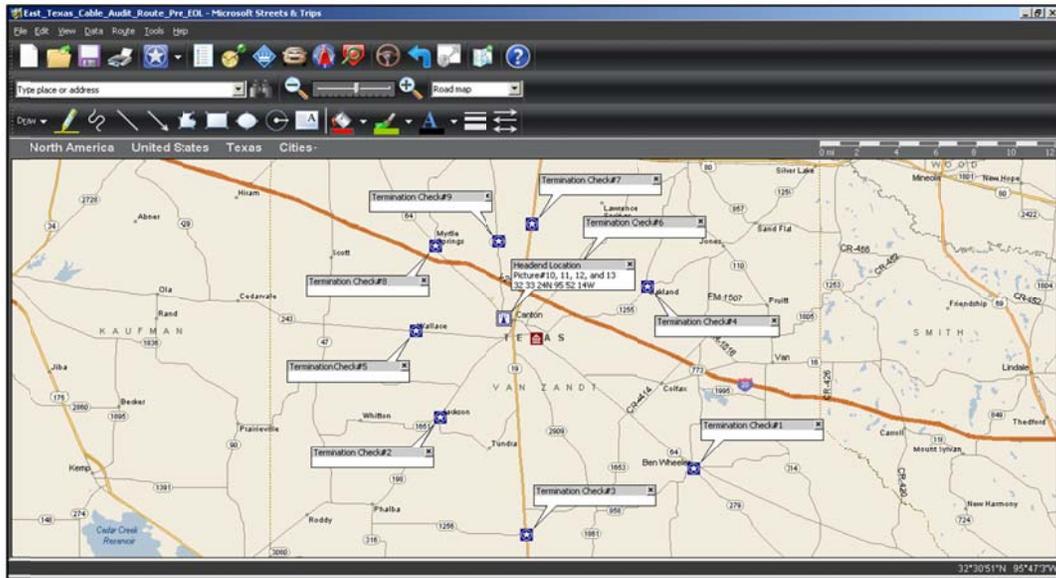
**Exhibit C: Boundary**



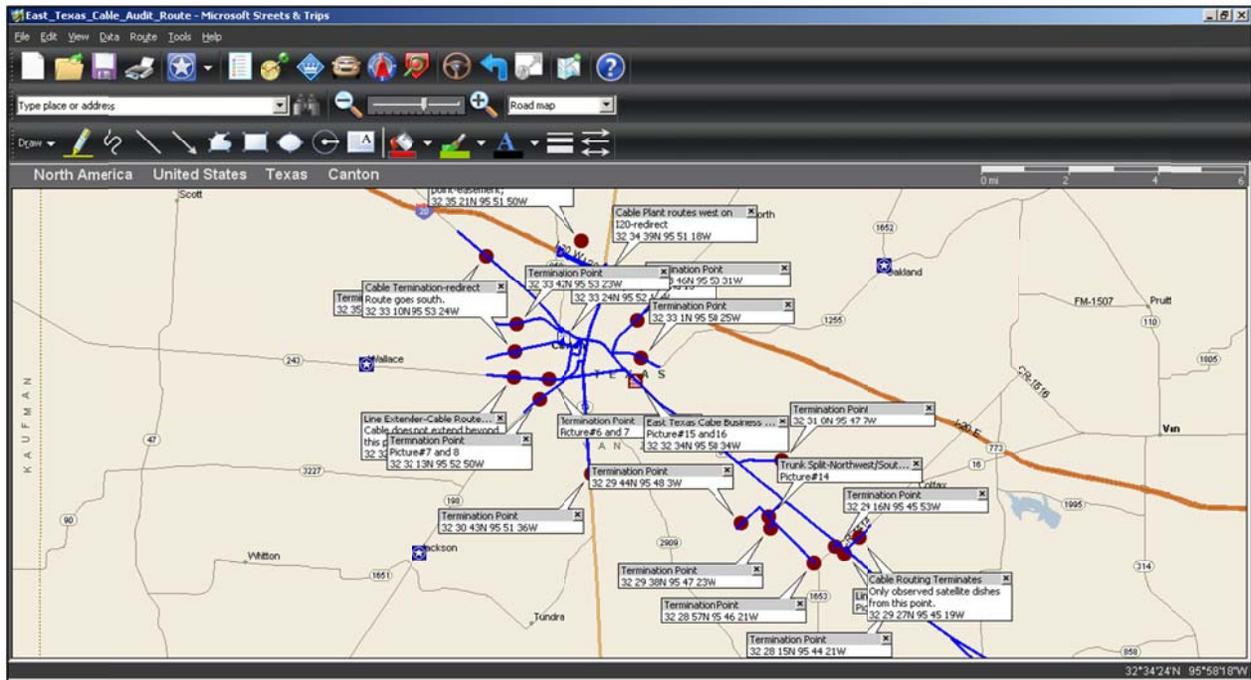
## Testing Techniques

Possible “end of line” reference points (**Exhibit D**) were pre-selected and entered into Microsoft *Streets & Trips* software. The goal was to drive through each thoroughfare and determine the existence (or lack thereof) of CATV plant and identify the end of line (termination points). As distribution components and assets of East Texas Cable were identified, markers were placed within *Streets & Trips* (**Exhibit E**) pinpointing the end of line (termination points) and identifying the area where service was likely to exist.

**Exhibit D: End of Line Reference Points**



**Exhibit E: Cable Components and Asset Locations**



Visual identification of the headend (**Exhibit F and G**) and the business office (**Exhibit H**) were relatively easy and straightforward.

**Exhibit F:**  
**Cable Headend Tower**



**Exhibit G:**  
**Cable Headend Satellite Dishes & Equipment Building**



**Exhibit H: East Texas Cable Business Office**



The Connected Nation staff member (former Sr. Field Engineer for a CATV supplier) had very little difficulty in identifying CATV line distribution components. The images below (**Exhibit I and J**) demonstrate that the Connected Nation staff member was able to obtain visuals to assist with an estimated coverage. The depictions are just a sample observed throughout the audit route.

**Exhibit I:**  
**Trunk Distribution Amplifier Aerial Plant**



**Exhibit J:**  
**End of Line – Termination Point**

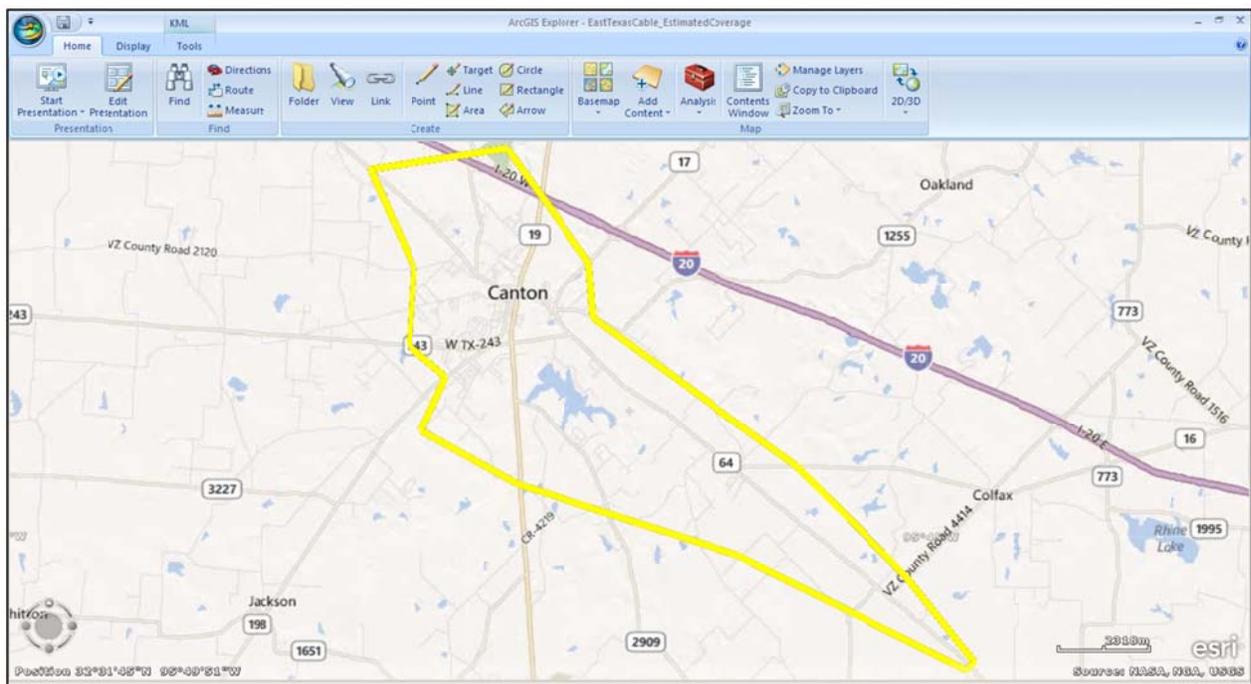


## **Results and Submission for October 2012**

As a result of the collection of publicly available information, and the on-the-ground validation efforts, Connected Nation is submitting this document in support of its coverage estimation for the cable modem broadband service area of East Texas Cable. Without provider participation and support of the SBI mapping initiative, CN proceeded with a logical, relevant and feasible methodology for collecting and validating the service area of this non-participating broadband provider.

**Exhibit K** depicts the estimated coverage area based on the results of data gathered through publically available sources combined with visual drive testing techniques.

**Exhibit K: Validation Results**



## GOZOE WIRELESS

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 broadband provider, regardless of whether the provider has chosen to support and participate in the SBI program.

The following narrative provides detail regarding the recent data collection and coverage estimation activities related to GoZoe Wireless, a wireless Internet service provider (WISP), located in Marshall, Texas, with a service area around Marshall, Texas, Harrison County. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation techniques that support the underlying data.

### **October 2012 Submission Commentary**

Connected Nation created this coverage estimation document during the April 2012 submission period (as a result of the ongoing non-participatory status of the provider). Fifteen total instances of e-mail and/or telephone communication have occurred leading up to this mapping cycle. On August 12, 2012, the estimated coverage map (**Exhibit I**), which was produced during the April 2012 submission cycle, was once again presented to the provider requesting review and comments. As of August 27, 2012, no replies were received from the provider.

CN has continued to closely monitor the provider's website to determine if any changes in the coverage area or maximum advertised speeds have occurred but did not locate evidence of any recent changes. To that end, CN is resubmitting this coverage estimation narrative, substantially in its original format, and will continue to monitor the provider's website as well as ensure ongoing outreach until either the expiration of the SBI grant or until such time as the provider voluntarily contributes data.

### **The Issue**

GoZoe Wireless, by its lack of responsiveness since October 17, 2011, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN began building a file based on research information and, as time progressed, enriched the file with information obtained through the public domain. For example, CN reviewed the provider's website (<http://www.gozoe.com/>) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded an FRN of 0019577873 (**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 license WQMG924 (**Exhibit D**), Radio Service: NN-3650-3700 MHz with 0 active locations.

## Exhibit A: Service Plans

Home About GoZoe Residential Business Hotspot Atlanta, Texas Get Support

Home

### Services

**MARSHALL PRICING**  
Installation - \$99.00  
Basic Equipment- \$150.00 Promotional Equipment Fee Waived

Monthly Packages

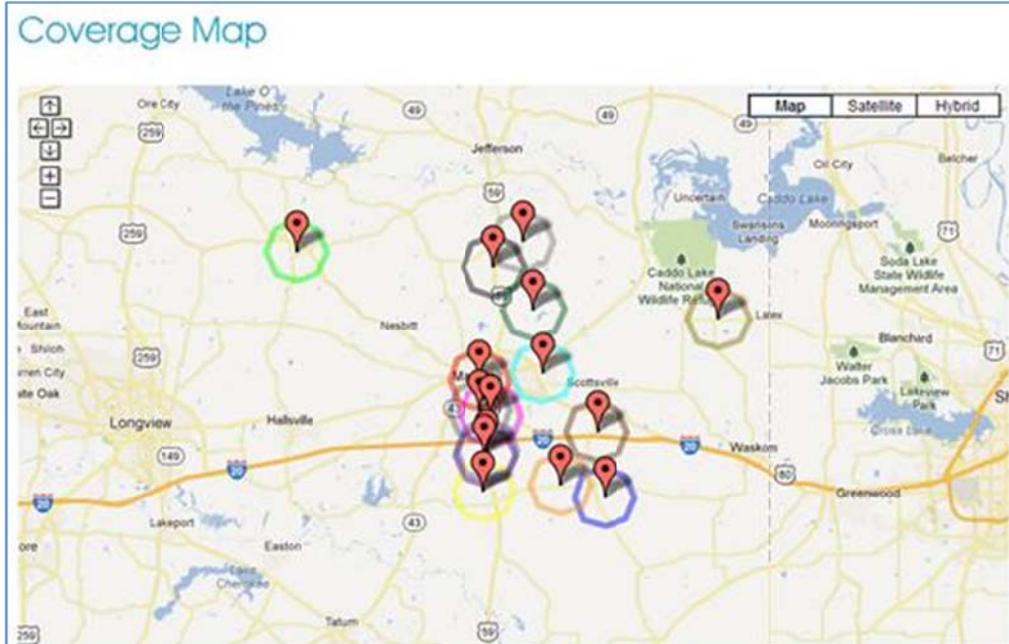
512k	\$49.95 - Best for basic surfing and email usage
1Mb	\$69.95 - Best for online video streaming, photo sharing, music downloads
1.5Mb	\$89.95 - Best for VPN, large file transfers, VOIP or other high usage apps
Wide Open	\$119.95 - Best for online gaming and movie downloads

**CHOOSING YOUR SPEED**  
You will want to choose your speed based on what you will be doing on the internet. If you are doing basic web surfing, email, or sending and receiving small files you should be happy with 512k. If you are doing file sharing, VPN, or large file transfers you will want to go with 1-1.5Mb. This is also best for downloading photos, music, and online videos. If you are going to be downloading movies or gaming online, our Wide Open package is the best for you. Wide open means you are not throttled, guaranteeing you a minimum of 1.5Mb and allowing you to burst up to 3Mb.

Residential

- Coverage
- Services
- Policies
- How does it work

## Exhibit B: Service Area



### Exhibit C: Federal Registration Number

Registration Detail	
FRN:	0019577873
Registration Date:	02/15/2010 05:51:00 PM
Last Updated:	08/03/2010 05:15:06 PM
Business Name:	Gozoe Wireless LLP
Business Type:	Private Sector , Partnership
Contact Organization:	Gozoe Wireless
Contact Position:	Partner
Contact Name:	Mr Ashton S Closner
Contact Address:	2660 East uthend Blvd S suite 113 Marshall, TX 75672 United States
Contact Email:	ashtecan@hotmail.com
ContactPhone:	(903) 935-0876
ContactFax:	(903) 935-0893

### Exhibit D: WQMG924 License Reference

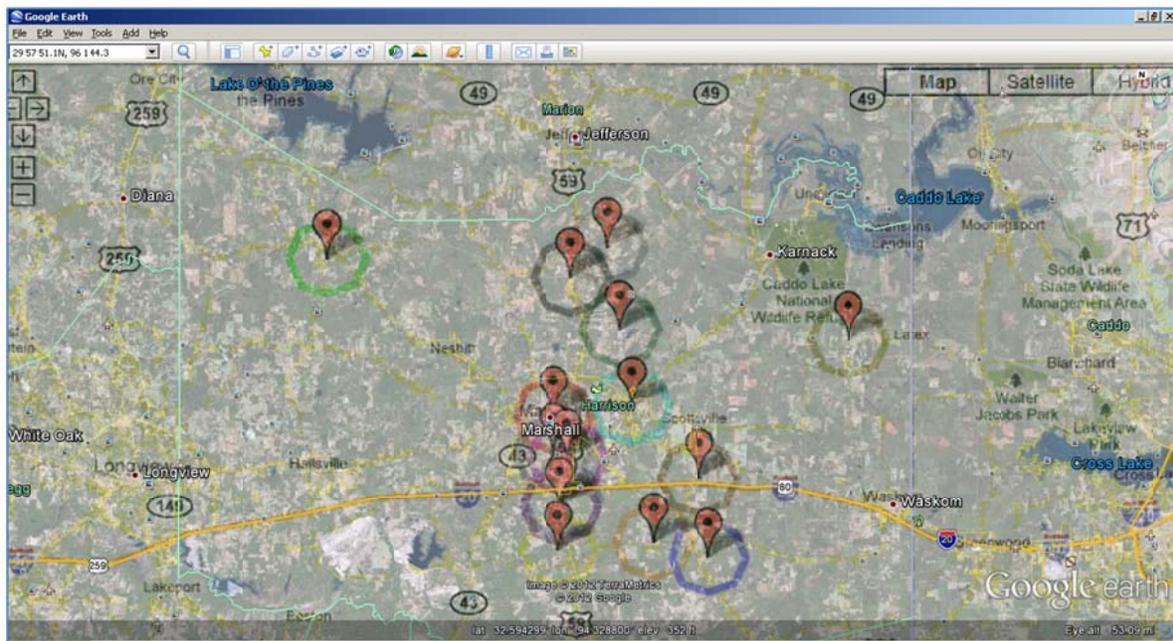
MAIN	ADMIN	LOCATIONS	
Call Sign	WQMG924	Radio Service	NN - 3650-3700 MHz
<b>Applications</b>			
Receipt Date	File Number and Type	Status	
08/11/2010	<a href="#">0004350814</a> RL - Register Link/Location	Dismissed	
08/11/2010	<a href="#">0004350798</a> RL - Register Link/Location	Dismissed	
08/04/2010	<a href="#">0004343599</a> NE - Renew	Granted	
<b>Automated Letters and Authorizations</b>			
08/05/2010	<a href="#">Authorization -- Licensee</a>		
<b>Comments</b>			
None			

MAIN	ADMIN	LOCATIONS	
Call Sign	WQMG924	Radio Service	NN - 3650-3700 MHz
<b>0 Total Locations</b> 10 Locations per Summary Page			
<b>No Locations</b>			
<b>0 Total Locations</b> 10 Locations per Summary Page			

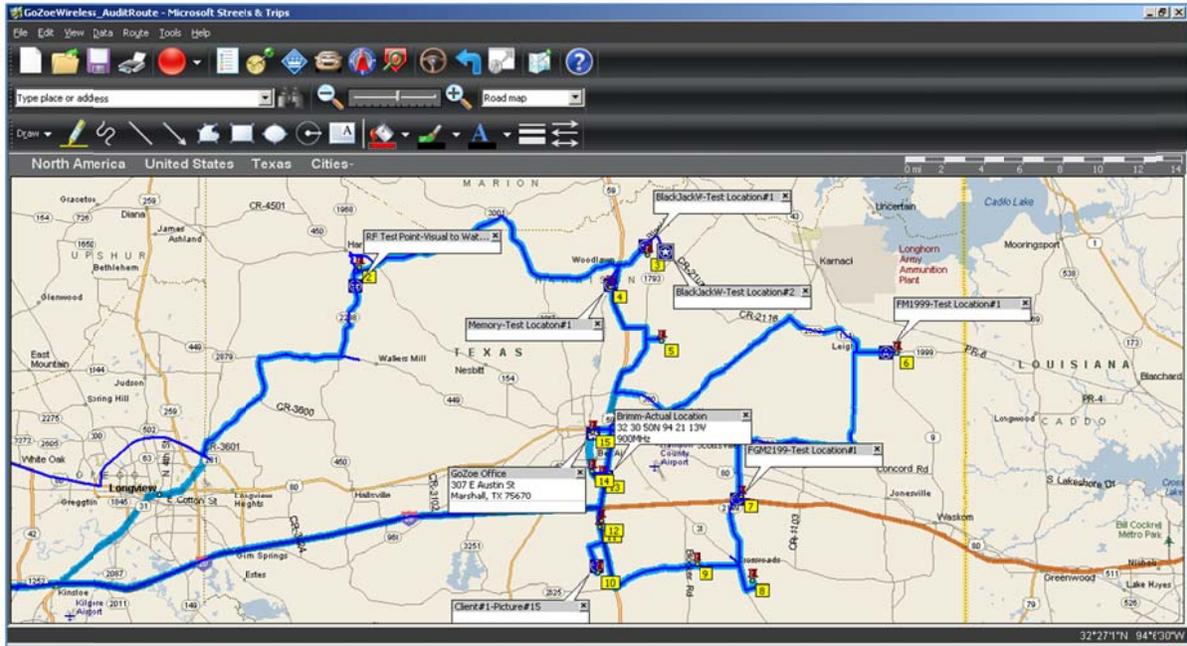
### Preliminary Identification of Provider's Coverage Area

CN extracted the GoZoe Wireless 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 .1 mile (528 ft.) to establish a minimum search criteria of a given wireless access point. The provider's service area depiction is represented by polygons as shown in **Exhibit B**. Using the Google Earth image 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 polygons. This process provided a means of establishing coordinates for 15 validation points to identify structures with operational wireless transmit equipment. All 15 locations were entered into Microsoft *Streets & Trips* (**Exhibit F**) to develop a route for the data collection and validation process.

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



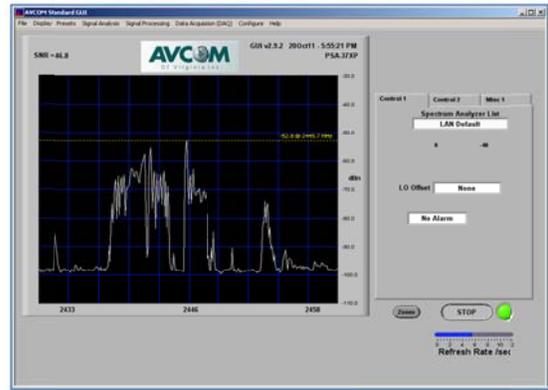
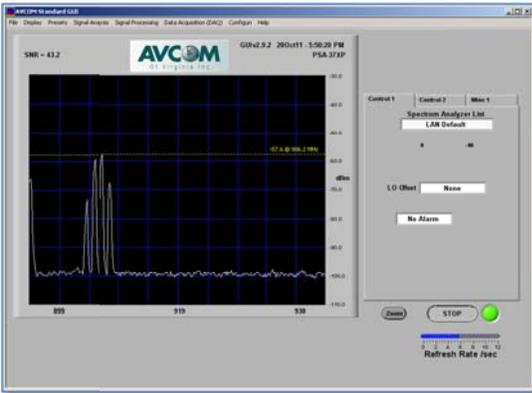
## Exhibit F: Validation Points for AP Structures



## Testing Techniques

CN staff developed a data collection and site validation route based on information derived from the Google Earth image overlay of GoZoe Wireless' 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 sectored) and photographs were taken of the access points.

**Exhibit G: Field Data for GoZoe Wireless Office/Hub Location**



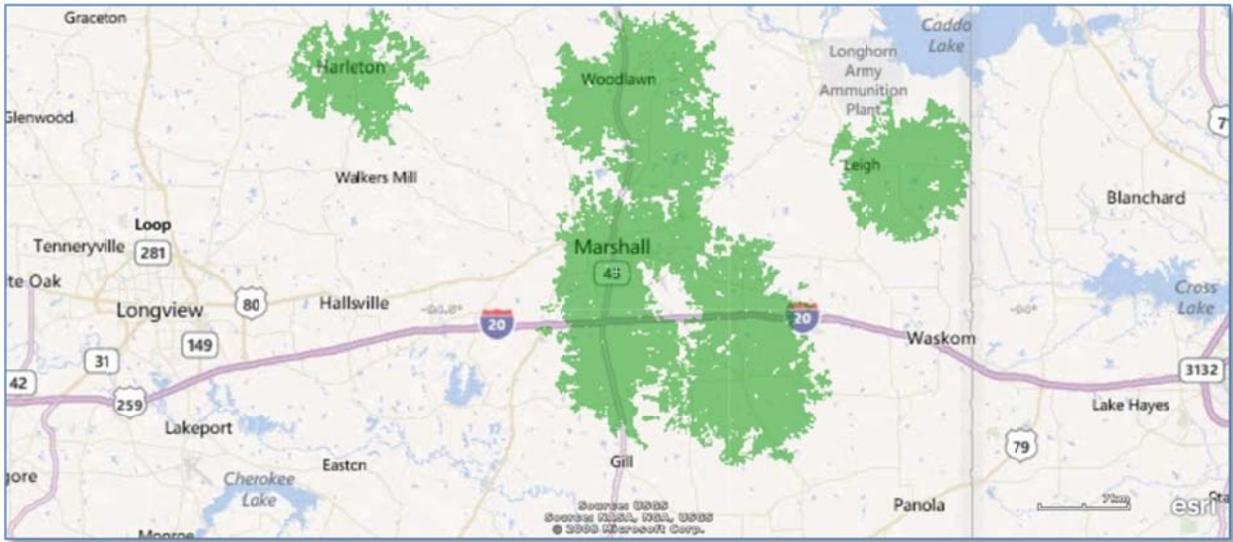
## Results and Submission for October 2012

Of the 15 locations visited during the coverage estimation and validation point route, 14 access points were identified and relative information was logged into the GoZoe field validation notes file (**Exhibit H**). The field 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 GoZoe Wireless as courtesy copies, and the provider was advised the estimated coverage information would be submitted to Connected Texas and to 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 believes the information to be an accurate estimation of the service area of GoZoe Wireless.

### Exhibit H: Field Validation Notes

Location	Latitude	Longitude	Frequency Availability		Structure	Approximate Antenna Height	Notes
			900MHz	2.4GHz			
AbbieLane	32.443889	-94.361017	X		Guyed Rohn	120 ft.	No visual on AP; estimated height and location (based on Google Earth overlay). RF presence; private property. Screen print of GE aerial imagery.
Hwy59-1	32.476792	-94.359497	X		Guyed Rohn	120 ft.	NAPA truck center; hub distribution point; multiple backhaul links.
Hwy59-2	32.481733	-94.358119	N/A	N/A	N/A	N/A	<b>No tower structure; only guy anchor posts; site decom.</b>
Hwy59-3	32.513619	-94.356717					
Hwy59-3 Revised Coords	32.513889	-94.353611	X		Guyed Rohn	120 ft.	<b>Sector antenna approximately 270 degrees azimuth; 180 degree panel. 5.3GHz backhaul (SSID capture).</b>
Washington	32.518367	-94.366317		X	Rohn	70 ft.	2.4GHz detected; backhaul antennas mounted on top.
Lafayette	32.546483	-94.365128	X	X	Rohn-Rooftop Mnt.	110 ft.	GoZoe hub and office location.
Commerce	32.553639	-94.296431	X		Rohn Guyed	100 ft.	Industrial park area; identified Tsunami access equipment operating at channels 2, 7, and 11.
Shadowood	32.613081	-94.306108	X		Guyed Rohn	120 ft.	Sector antenna arrays; 360 degree coverage.
Memory	32.652858	-94.350017	X			120 ft.	No visual on AP; estimated height and location (based on Google Earth overlay). RF presence; private property.
BlackJackW	32.675925	-94.318119	X			120 ft.	No visual on AP; estimated height and location (based on Google Earth overlay). RF presence; private property.
FM450/2208	32.666883	-94.568447	X		Water Tank	150 ft.	No access to site; private road.
FM1999	32.603986	-94.101294	X		Free Standing Comm	160 ft.	"old" AT&T comm site; SBA Site: TX 14398; FCC# 104897; operating 2.4GHz and 5.7GHz backhaul (SSID captures).
FM2199	32.499297	-94.236131	X		Guyed Rohn	110 ft.	Omni at 900MHz; 2.4GHz and 5.7GHz backhaul (SSID captures).
FM2625	32.449783	-94.275753	X		Guyed Rohn	100 ft.	<b>Sector at approximately 180 degrees azimuth; 180 degree panel</b>
FM31	32.437633	-94.226956	X			120 ft.	No visual on AP; estimated height and location (based on Google Earth overlay). RF presence; private property.

# Exhibit I: GoZoe Wireless Composite Coverage



## NDEMAND, INC.

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

The following narrative provides detail regarding the recent data collection activities related to NDemand, Inc., a wireless Internet service provider (WISP) located in Katy, Texas, with its service area in Nacogdoches County and Shelby County in eastern Texas. This narrative will include information regarding how and where CN obtained publicly available data, and the on-the-ground validation techniques that support the resulting broadband coverage estimate.

### **Background**

CN staff members have attempted to obtain the participation of the provider with at least 15 recorded instances of communication via telephone and e-mail from September 19, 2011, through August 8, 2012. During that period, three personal visits were also made to the provider's office in Katy, Texas.

### **The Issue**

NDemand, by its lack of responsiveness since September 19, 2011, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative. Connected Nation has been unable to obtain NDemand's broadband coverage information through typical outreach efforts, and the provider continues to show reluctance to participate in the Connected Texas broadband mapping initiative.

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

CN began building a file based on research information and, as time progressed, enriched the file with information obtained through the public domain. As a first step, CN reviewed the provider's website ([www.ndemand.com](http://www.ndemand.com)) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) advertised for the provider's wireless network.

## Exhibit A: Advertised Service Plans

Ndemand - HighSpeed Wireless & Dial-Up Internet Service - Microsoft Internet Explorer provided by ConnectKentucky

http://www.ndemand.com

File Edit View Favorites Tools Help

☆ Favorites ☆ Ptera CN email Quickbase timesheet FCC ULS 3650 Mhz Quick Look FCC FRN YouSendIt Login

Ndemand - HighSpeed Wireless & Dial-Up Internet Ser...

Email SPAM and Virus Filtering  
 Live US Based Support  
 Compatible With:  
 Windows 7, Vista & XP\*\*  
 Playstations/Xbox 360\*\*  
 Nintendo Wii/DS1\*\*

Ndemand's new HighSpeed Wireless Internet Service will allow you access to **EMAIL FASTER, GAMING FASTER, MUSIC FASTER, VIDEO FASTER and DOWNLOADING FASTER.**

**\$39.99** Per Month

Learn More

HighSpeed Wireless | Dial-Up

HighSpeed Wireless Internet Details

HighSpeed Basic	HighSpeed Bronze	HighSpeed Silver	HighSpeed Gold	HighSpeed Platinum
<b>\$39.99</b> /month	<b>\$49.99</b> /month	<b>\$59.99</b> /month	<b>\$69.99</b> /month	<b>\$99.99</b> /month
Speed: 768Kb Down 384Kb Up	Speed: 1.0Mb Down 512Kb Up	Speed: 1.5Mb Down 768Kb Up	Speed: 3.0Mb Down 1.0Mb Up	Speed: 5.0Mb Down 1.5Mb Up
Site Survey: <del>\$49.99</del> (NON-REFUNDABLE) <b>FREE for a limited time only ends 9/30/11</b>	Site Survey: <del>\$49.99</del> (NON-REFUNDABLE) <b>FREE for a limited time only ends 9/30/11</b>	Site Survey: <del>\$49.99</del> (NON-REFUNDABLE) <b>FREE for a limited time only ends 9/30/11</b>	Site Survey: <del>\$49.99</del> (NON-REFUNDABLE) <b>FREE for a limited time only ends 9/30/11</b>	Site Survey: <del>\$49.99</del> (NON-REFUNDABLE) <b>FREE for a limited time only ends 9/30/11</b>
*Basic Installation: \$149.99	*Basic Installation: \$149.99	*Basic Installation: \$99.99	*Basic Installation: \$99.99	*Basic Installation: \$49.99
Equipment: \$6.99/month				

**\$49.99 OFF**  
Standard Installation  
**FOR 30 DAYS!**  
All Plans

Internet 100%

## Exhibit B: Advertised Service Area

Ndemand - Coverage Area - Microsoft Internet Explorer provided by ConnectKentucky

http://www.ndemand.com/Coverage.aspx

File Edit View Favorites Tools Help

☆ Favorites ☆ Ptera CN email Quickbase timesheet FCC ULS 3650 Mhz Quick Look FCC FRN YouSendIt Login

Ndemand - Coverage Area

Coverage Areas

- Nacogdoches (East)
- Appleby
- Filze
- Timpson
- Tenaha
- Center
- Jericho
- Swift

HighSpeed Wireless Internet Service Coverage Area

Approximate Coverage Area for Nacogdoches (East)

Map showing coverage area for Nacogdoches (East), including locations like Central Heights, Redfield, Bonita Junction, City Recreation Complex, Pete Smith Athletic Complex, Nacogdoches, Eudenia, Steme Park, Orton Hill, and various bus stops.

Internet 100%

A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded an FRN of 0019660794 (**Exhibit C**) with company contact information. Also, to support field validation of access points, the FRN was referenced to the FCC Universal Licensing System (ULS) to identify any licenses the provider may hold which could assist in specifying active access points for the service area. This process yielded license WQLX343 (**Exhibit D**) utilizing frequencies at 3650-3700 MHz (FCC Radio Service Code “NN”), with 14 unique locations. Other licenses were also identified, however, these other licenses appeared to be specific to microwave backhaul usage rather than to last-mile residential wireless broadband service.

**Exhibit C: Federal Registration Number**

<b>Registration Detail</b>	
<b>FRN:</b>	0019660794
<b>Registration Date:</b>	03/15/2010 04:01:00 PM
<b>Last Updated:</b>	04/20/2012 09:47:04 AM
<b>Business Name:</b>	Ndemand, Inc
<b>Business Type:</b>	Private Sector , Corporation
<b>Contact Organization:</b>	Ndemand, Inc.
<b>Contact Position:</b>	President
<b>Contact Name:</b>	Mr Brian S Doyle
<b>Contact Address:</b>	20501 Katy Fwy Katy, TX 77450 United States
<b>Contact Email:</b>	bdoyle@ndemand.com
<b>ContactPhone:</b>	(713) 559-9650
<b>ContactFax:</b>	(713) 559-9700

Exhibit D: FCC License Information and Map for Call Sign WQLX343

Specified Search						
Name like <b>ndemand</b>						
Matches <b>1- 10</b> (of 12)						
						<input type="checkbox"/> PA = Pending Application(s) <input type="checkbox"/> TP = Termination Pending <input type="checkbox"/> L = Lease
Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date	
1	WQLX343	NDemand Wireless, LLC	0019660794	NN	Active	05/18/2020
2	WQM/611	Ndemand Wireless, LLC	0019660794	MG	Active	08/24/2020
3	WQM/612	Ndemand Wireless, LLC	0019660794	MG	Active	08/24/2020
4	WQM/613	Ndemand Wireless, LLC	0019660794	MG	Terminated	08/24/2020
5	WQM/614	Ndemand Wireless, LLC	0019660794	MG	Active	08/24/2020
6	WQM/615	Ndemand Wireless, LLC	0019660794	MG	Terminated	08/24/2020
7	WQM/616	Ndemand Wireless, LLC	0019660794	MG	Active	08/24/2020
8	WQMK574	Ndemand Wireless, LLC	0019660794	MG	Active	09/02/2020
9	WQMM325	Ndemand Wireless, LLC	0019660794	MG	Active	09/21/2020
10	WQMM352	Ndemand Wireless, LLC	0019660794	MG	Terminated	09/21/2020
Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date	

**FCC** Federal Communications Commission

**Universal Licensing System**

FCC > WTB > ULS > Online Systems > ULS-GIS

3650-3700 MHz License - WQLX343 - NDemand Wireless, LLC

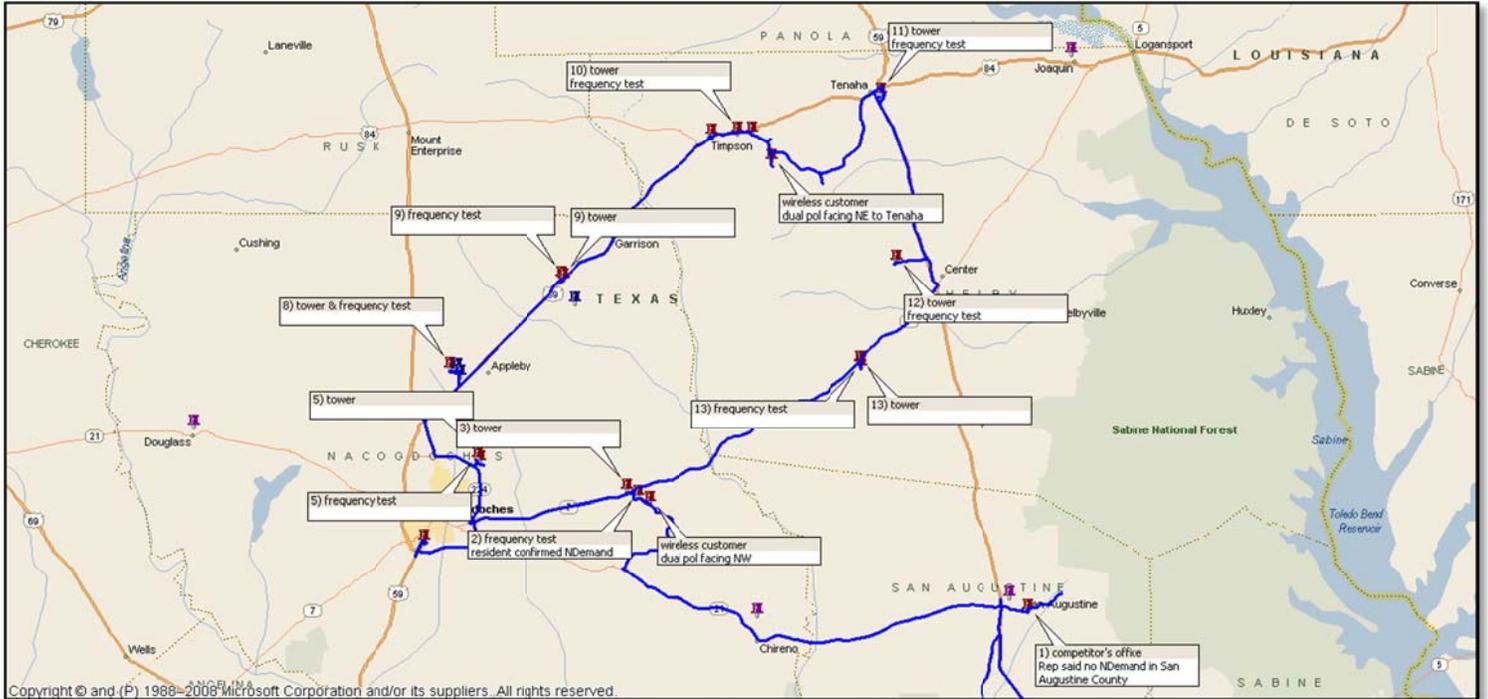
**ULS-GIS**

[New Search](#)
[Return to Results](#)
[Return to License](#)
[Printable Page](#)

### Preliminary Identification of Provider's Coverage Area

Utilizing location information contained in the license for WQLX343, images from the provider's website, and through other research (including a call to the provider's customer service telephone number), a CN staff member determined that no more than 8 of the license's 14 identified coordinates (shown above) were currently able to provide last-mile broadband service. Those 8 locations were compiled into a service area map for NDemand, and recorded in the Microsoft *Streets & Trips* mapping application (**Exhibit E**) to develop a route for the validation process.

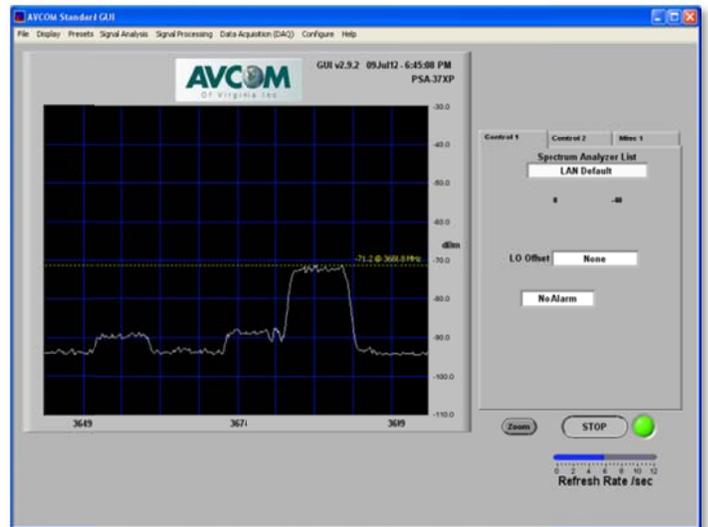
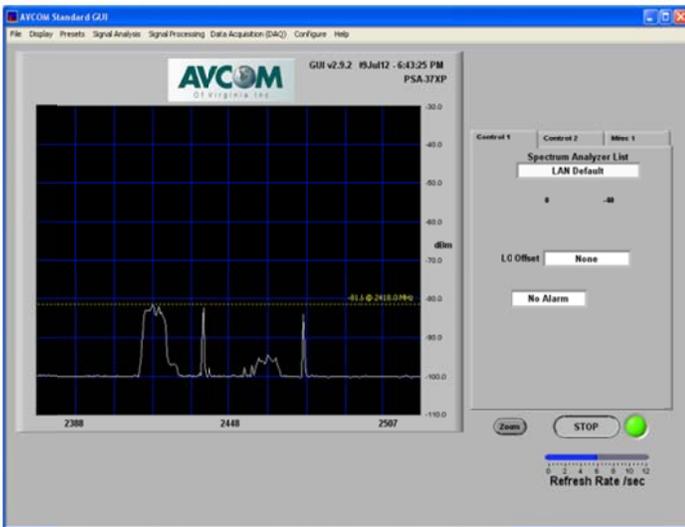
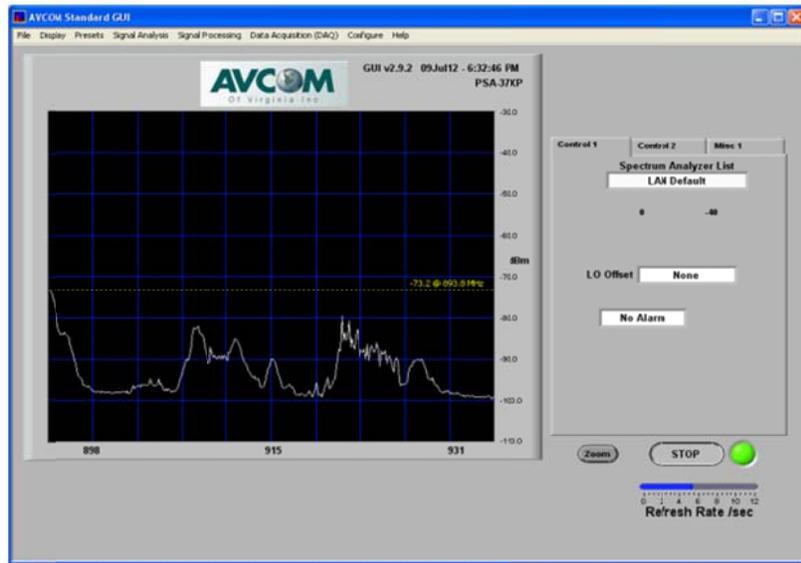
**Exhibit E: Validation Points for Tower Structures**



## Field Testing Techniques

Having recorded the licensed locations for each of the circular coverage areas represented on the NDemand website, a CN technician drove to each location and performed signal tests for the detection of active wireless frequencies typically utilized to provide WISP service. The CN technician 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. At each signal test location, the CN technician attempted to be isolated from Wi-Fi networks in the test area, facilitated spectrum readings from the AVCOM analyzer, and captured the results of the frequency tests as validation data for wireless tower transmissions (**Exhibit F**).

### Exhibit F: Signal Test Results for the Swift, Texas Tower Location



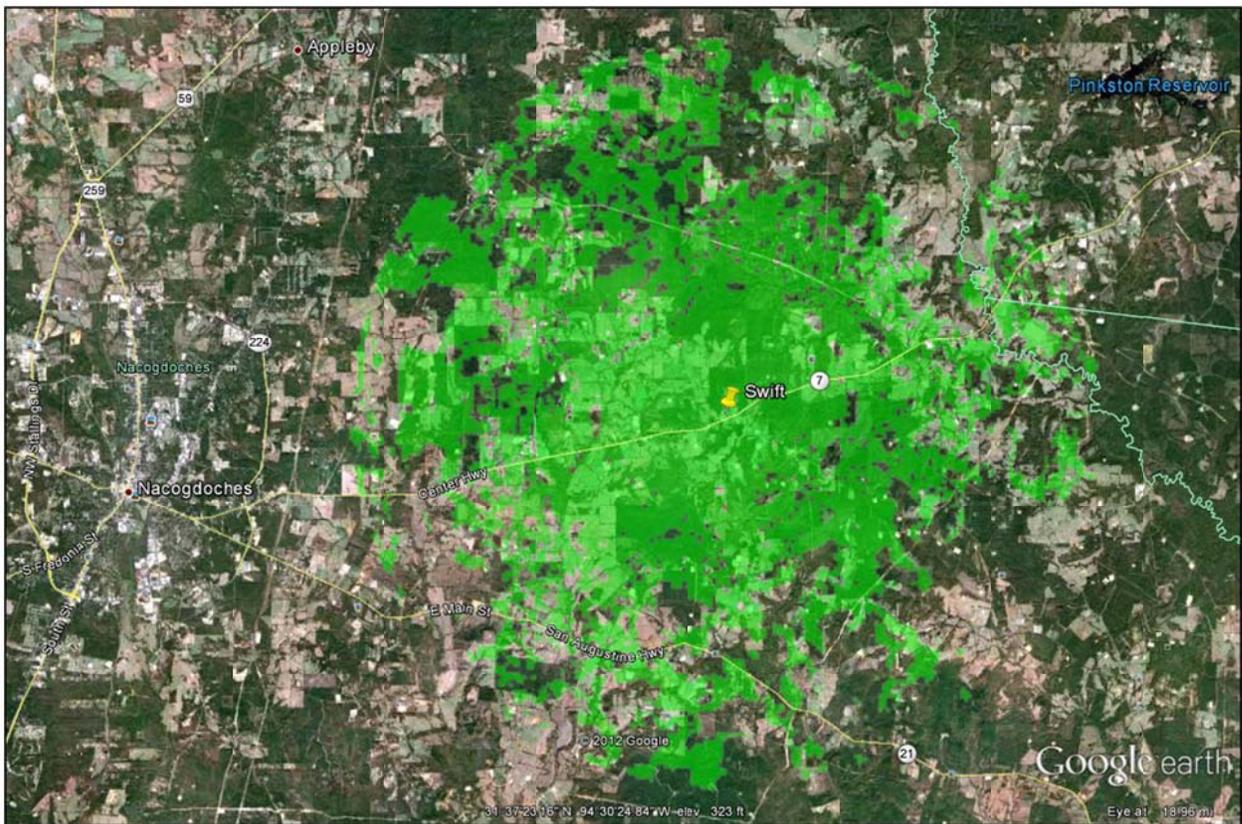
### Signal Propagation Maps

In order to prepare propagation maps for each tower location, the CN technician identified the antenna height from the license information, verified the GPS coordinates for the tower while on-site, and recorded this and other information for each location into the standard Excel provider data collection format (**Exhibit G**). With the objective of reasonably representing the provider’s practical service area, CN staff prepared propagation maps (**Exhibit H**) based on that information.

### Exhibit G: Tower Research and Propagation Data

Wireless Provider Information											
Provider Name (Legal entity)	Ndemand, Inc.										
DBA ("Doing Business As") Name	N/A										
FRN # (10-digit FCC Registration Number)	0019660794										
Name of Location	Status	Pop Center	Structure	Latitude	Longitude	Omni?	Radius	Frequency	Gain	Power	Elevation
Swift	Active	Swift	broadcast tower	31.62363	-94.47672	Yes	10	2400	10	24	180
Nacogdoches	Active	Nacogdoches	broadcast tower	31.64608	-94.61432	Yes	10	5800	10	24	180
Appleby	Active	Appleby	broadcast tower	31.72083	-94.64249	Yes	10	2400	10	24	200
Fitze	Active	Fitze	broadcast tower	31.79188	-94.53539	Yes	10	2400	10	24	200
Timpson	Active	Timpson	broadcast tower	31.90989	-94.37318	Yes	10	2400	10	24	200
Tenaha	Active	Tenaha	broadcast tower	31.94061	-94.23801	Yes	10	2400	10 <td 24	200	
Center	Active	Center	broadcast tower	31.80684	-94.22317	Yes	10	2400	10	24	250
Jericho	Active	Jericho	broadcast tower	31.72628	-94.25772	Yes	10	2400	10	24	250

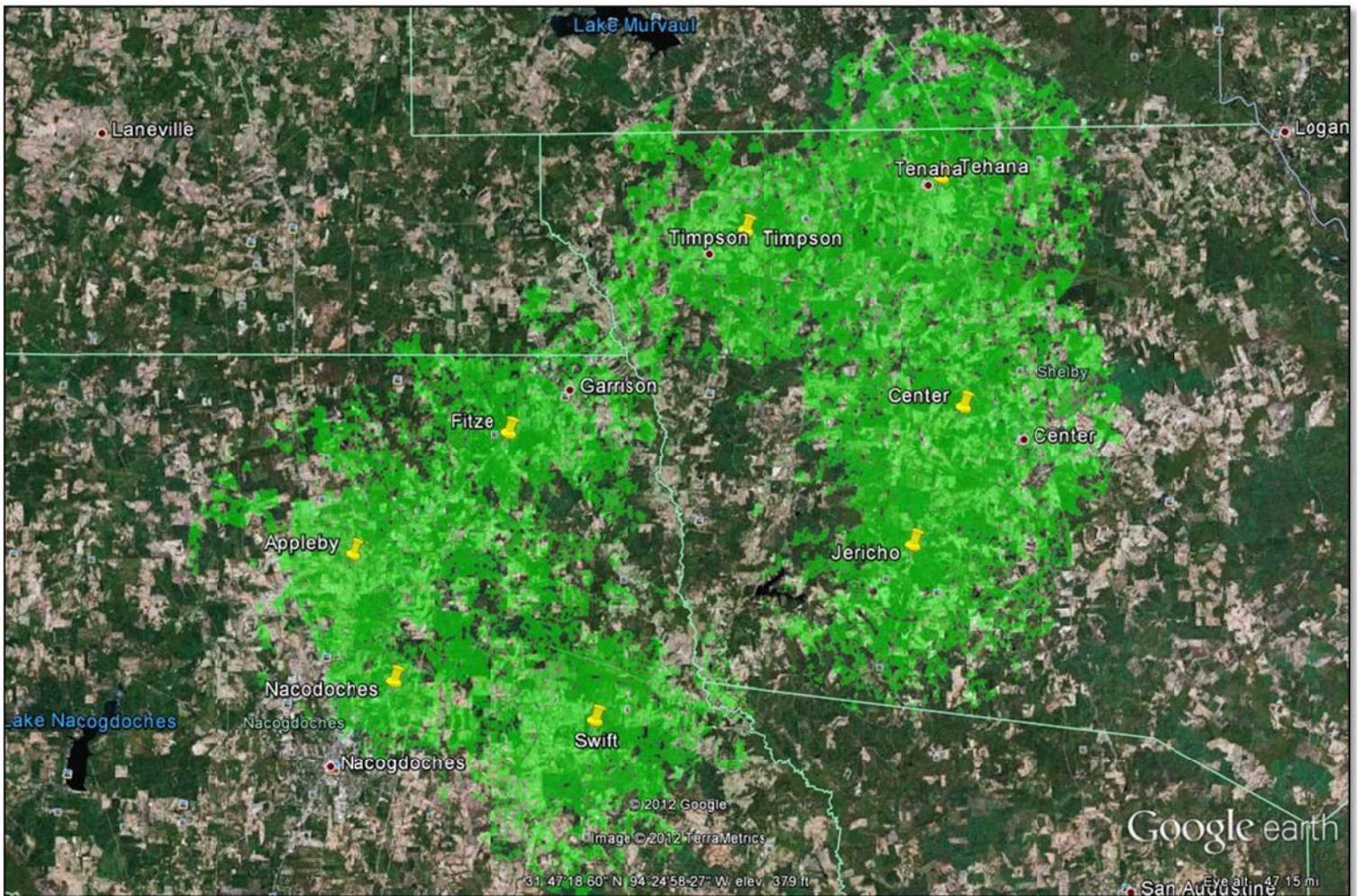
### Exhibit H: Propagation Map for the Swift, Texas Location



### **Results and Submission for October 2012**

All eight licensed tower locations for NDeMand which were likely to be operational were visited and tested, as well as numerous additional sites in the search for customer premise equipment, frequencies utilized by potential competitors, and other verification data points. Testing at each site determined that wireless signal was available for broadband service. A composite propagation analysis was completed (**Exhibit I**), which reasonably represents the estimated broadband coverage area based on all information identified as of July 10, 2012. The composite propagation map was forwarded to the provider for review and feedback prior to CN's including the coverage area in the Texas Broadband Map's October 2012 iteration; no response was received as of August 15, 2012.

**Exhibit I: NDeMand, Inc. Composite Coverage**



## SKYNET COMMUNICATIONS

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

The following narrative provides detail regarding the recent data collection and coverage estimation activities related to Skynet Communications (Skynet), a wireless Internet service provider (WISP) located in Fulshear, Texas, with its service area in the counties of Fort Bend, Wharton, and Brazoria. This 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 resulting broadband coverage estimate.

### **Background**

CN staff members have attempted to obtain the participation of the provider with at least 12 instances of communication via telephone, e-mail, and personal visits from November 24, 2011, through August 1, 2012. Although the provider indicated that the company would likely participate in the mapping project, the lead representative has been reluctant to take the final step of reviewing the propagation maps for edits.

### **The Issue**

Skynet, by its lack of active participation since November 24, 2011, has predicated its refusal to participate in the Connected Texas broadband mapping initiative. Connected Nation has been unable to obtain Skynet's broadband coverage information through typical outreach efforts, and the provider continues to show reluctance to participate in the Connected Texas broadband mapping initiative, even after being presented with a pre-populated datasheet and a complete set of propagation studies created after the field verification exercise.

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

CN discovered the presence of the provider through a wireless license search of the geographic area. Typical outreach efforts yielded little action on the part of the provider. Thus, CN began building a file based on information available from the public domain (website and other on-line) research. As a first step, CN reviewed the provider's website ([www.skynetwisp.com](http://www.skynetwisp.com)) to determine the residential service plans and the service area advertised for the provider's wireless network. The website did not identify any broadband service plans, and the displayed coverage area was a combination of active and proposed transmission sites (**Exhibit A**). A few weeks after the original website research was completed, a revised search of the website revealed a new coverage map (**Exhibit B**).

Exhibit A: Advertised Service Area, Original Version

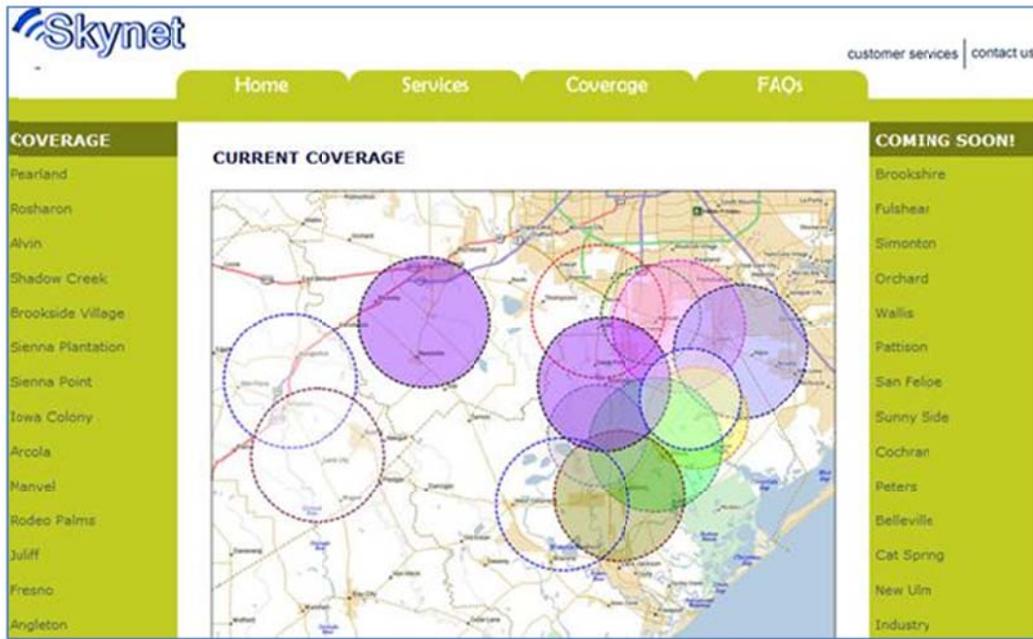
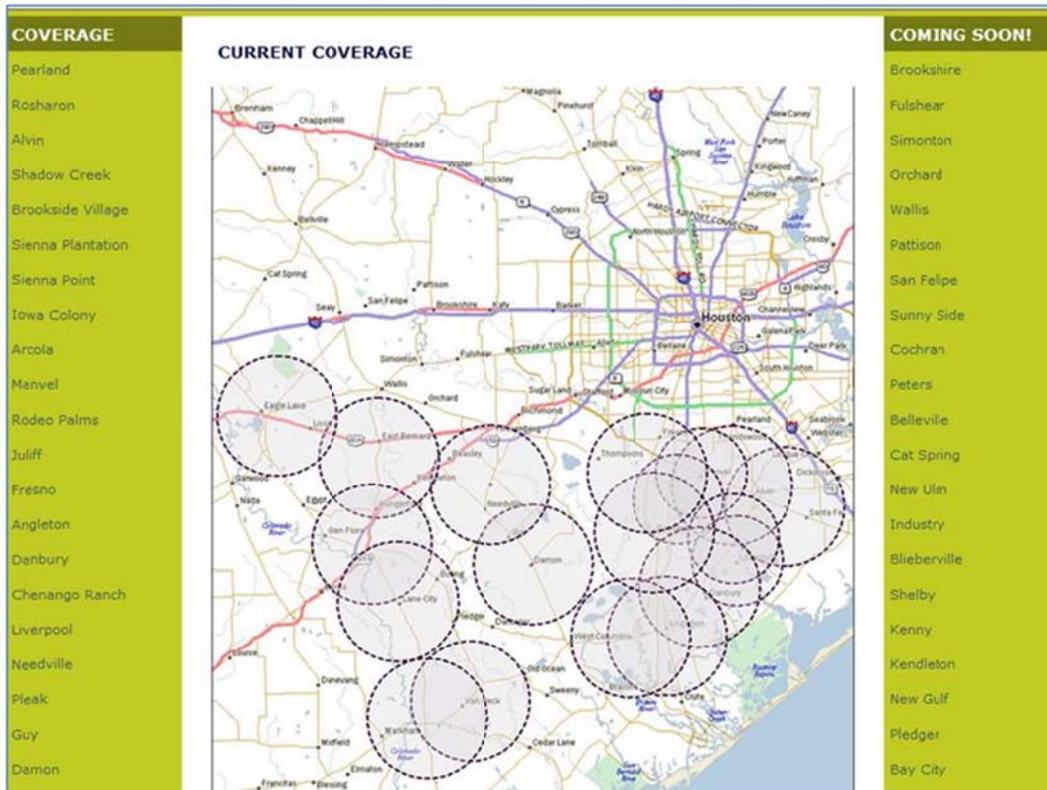


Exhibit B: Advertised Service Area, Latest Version



A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) yielded an FRN of 0018610774 (**Exhibit C**) with company contact information. The original license search was performed utilizing the FCC Universal Licensing System, which specified call sign WQMI310 (**Exhibit D**), utilizing frequencies at 3650-3700 MHz, with 317 unique locations. Other licenses were also specified, however, an analysis of all licensed locations revealed that WQMI310 provided the principal basis for the identification of operational tower locations.

### Exhibit C: Federal Registration Number

Registration Detail	
FRN:	0018610774
Registration Date:	03/18/2009 01:23:00 PM
Last Updated:	
Business Name:	Skynet Communications
Business Type:	Private Sector , Corporation
Contact Organization:	
Contact Position:	President
Contact Name:	Janie LeBlanc
Contact Address:	PO Box 219010 Houston, TX 77218-9010 United States
Contact Email:	Janie@skynethouston.com
ContactPhone:	(713) 545-0597
ContactFax:	

### Exhibit D: FCC WQMI310 License Information

License Search - Search Results - Microsoft Internet Explorer provided by ConnectKentucky

FCC Home | Search | Updates | E-filing | Initiatives | for Consumers | Find People

Universal Licensing System

License Search

Search Results

Specified Search  
FRN like 0018610774

Matches 1 - 8 (of 8)

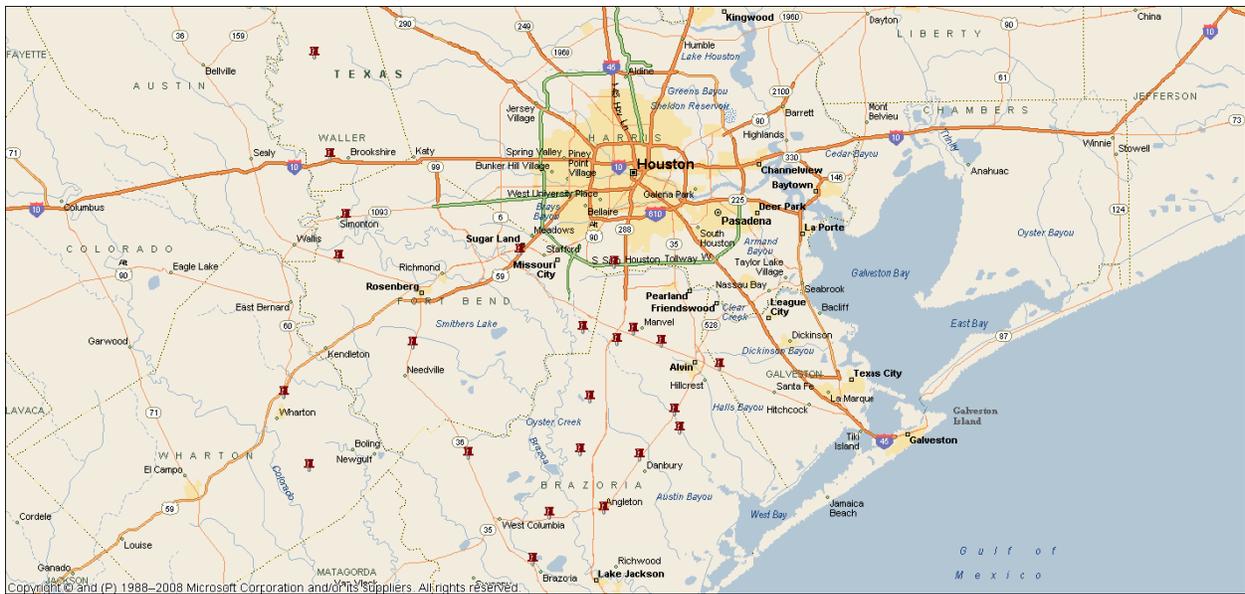
Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1 WQL5493	SKYNET COMMUNICATIONS	0018610774	MG	Active	04/14/2020
2 WQL5803	SKYNET COMMUNICATIONS	0018610774	MG	Active	04/16/2020
3 WQMI310	Skynet Communications	0018610774	NN	Active	08/13/2020
4 WQO2296	Skynet Communications	0018610774	MG	Active	03/09/2022
5 WQO2297	Skynet Communications	0018610774	MG	Active	03/09/2022
6 WQP1228	Skynet Communications	0018610774	MG	Active	05/24/2022
7 WQP1229	Skynet Communications	0018610774	MG	Active	05/24/2022
8 WQP1944	SKYNET COMMUNICATIONS	0018610774	MG	Active	06/08/2022

MAIN ADMIN LOCATIONS			
Call Sign	WQNI310	Radio Service	NN - 3650-3700 MHz
317 Total Locations 10 Locations per Summary Page			
1 2 3 4 5 6 7 8 9 10 [Next >>]			
Location	Latitude, Longitude	Transmitter Azimuth	
1 Rosharon	29-21-12.0 N, 095-27-40.0 W	0.0 degrees	
2 Pearland	29-35-33.0 N, 095-24-41.0 W	0.0 degrees	
3 Marvel	29-28-26.0 N, 095-22-16.0 W	0.0 degrees	
4 Liverpool	29-17-49.0 N, 095-16-38.0 W	0.0 degrees	
5 Lippman Hwy 36	29-26-56.0 N, 095-49-31.0 W	0.0 degrees	
6 Iowa Colony	29-27-21.0 N, 095-24-20.0 W	0.0 degrees	
7 Danbury	29-14-55.0 N, 095-21-33.0 W	0.0 degrees	
8 Arcola	29-28-37.0 N, 095-28-29.0 W	0.0 degrees	
9 Alvin	29-27-06.0 N, 095-18-51.0 W	0.0 degrees	
10 Alcoa	29-24-37.0 N, 095-11-43.0 W	0.0 degrees	
317 Total Locations 10 Locations per Summary Page			

**Preliminary Identification of Provider’s Coverage Area**

By comparing the coordinate information from Skynet’s wireless licenses and the website coverage maps of concentric circles, 23 possible tower locations were identified (red pushpins in Exhibit E) that required testing and verification.

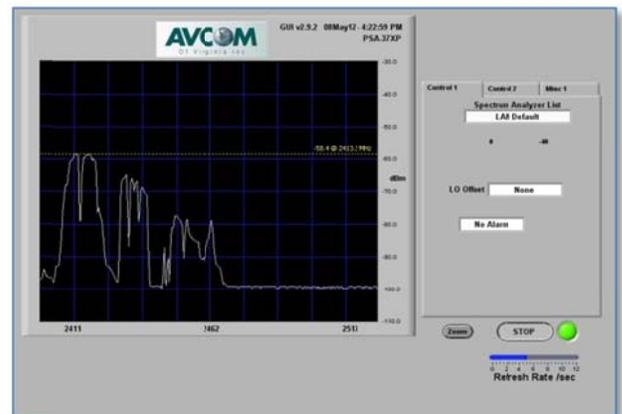
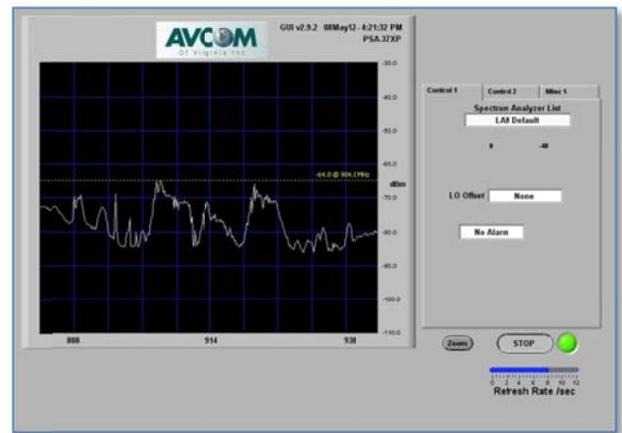
**Exhibit E: Validation Test Points for Tower Structures**



## Field Testing Techniques

Having recorded the licensed locations for each of the circular coverage areas represented on the Skynet website, as well as other possible tower locations, CN technicians and engineers drove to each location and performed signal tests for the detection of active wireless frequencies typically utilized to provide WISP service. The technicians and engineers were 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 900MHz, 2.4 GHz, 3.65 GHz, and 5 GHz frequency bands. At each signal test location, the CN technicians attempted to be isolated from Wi-Fi networks in the test area, facilitated spectrum readings from the AVCOM analyzer, and captured the results of the frequency tests as validation data for wireless tower transmissions (**Exhibit F**).

**Exhibit F: Signal Test Results for the Manvel, Texas Tower Location**



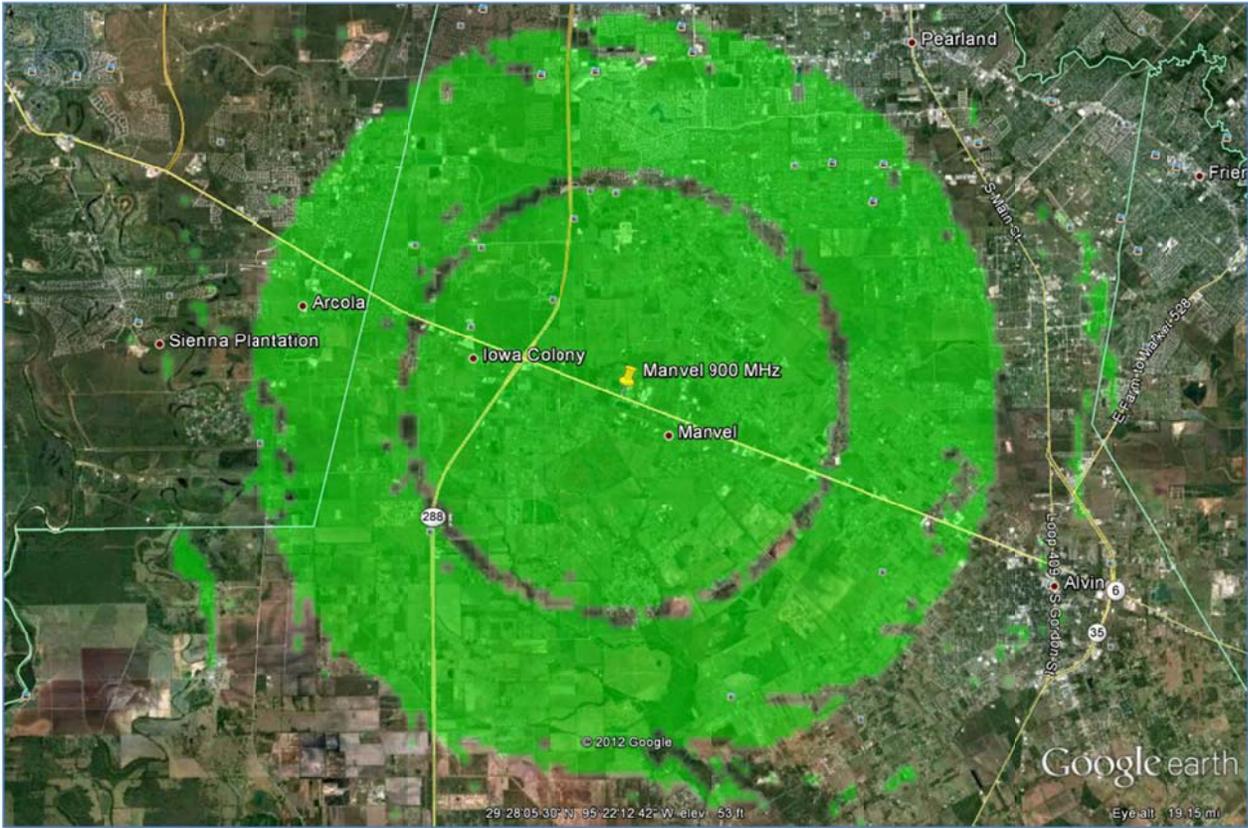
## Signal Propagation Maps

In order to prepare propagation maps for each tower location, the CN technicians and engineers identified the antenna height from the FCC ULS license information, verified the GPS coordinates for the tower while on-site, and recorded this and other information for each viable location into the standard Excel provider data collection format (**Exhibit G**). With the objective of reasonably representing the provider's practical service area, CN staff prepared propagation maps (**Exhibit H**) based on that information.

### Exhibit G: Tower Research and Propagation Data

Wireless Provider Information											
Provider Name (Legal entity)			Skynet Communications								
DBA ("Doing Business As") Name			N/A								
FRN # (10-digit FCC Registration Number)			0018610774								
Name of location	Status	Pop Center	Structure	Latitude	Longitude	Omni?	Radius	Frequency	Gain	Power	Elevation
Lane City	Active	Lane City	broadcast tower	29.22912	-96.03456	Yes	10	3650MHz	10	24	200
Gayle Estates	Active	Damon	broadcast tower	29.25250	-95.71081	Yes	10	2400MHz	10	24	200
Lippman	Active	Needville	broadcast tower	29.44888	-95.82527	Yes	10	900MHz	10	24	200
Arcola	Active	Arcola	broadcast tower	29.47694	-95.47471	Yes	10	900MHz	10	24	200
Rosharon	Active	Rosharon	broadcast tower	29.35333	-95.46109	Yes	10	900MHz	10	24	200
Chenango	Active	Chenango	broadcast tower	29.25922	-95.47886	Yes	10	900MHz	10	24	200
Bailey's Prairie	Inactive	Bailey's Prairie	broadcast tower	29.14610	-95.54472	N/A	N/A	none	N/A	N/A	N/A
Angleton	Active	Angleton	broadcast tower	29.15467	-95.43211	Yes	10	900MHz	10	24	200
Manvel	Active	Manvel	broadcast tower	29.47383	-95.37106	Yes	10	900MHz	10	24	200
Alvin	Active	Alvin	broadcast tower	29.45172	-95.31401	Yes	10	900MHz	10	24	200
Algoa	Active	Alvin	broadcast tower	29.41044	-95.19524	Yes	10	900MHz	10	24	200
Liverpool	Active	Liverpool	broadcast tower	29.29693	-95.27719	Yes	10	900MHz	10	24	200
Danbury	Active	Danbury	broadcast tower	29.24917	-95.35967	Yes	10	900MHz	10	24	200

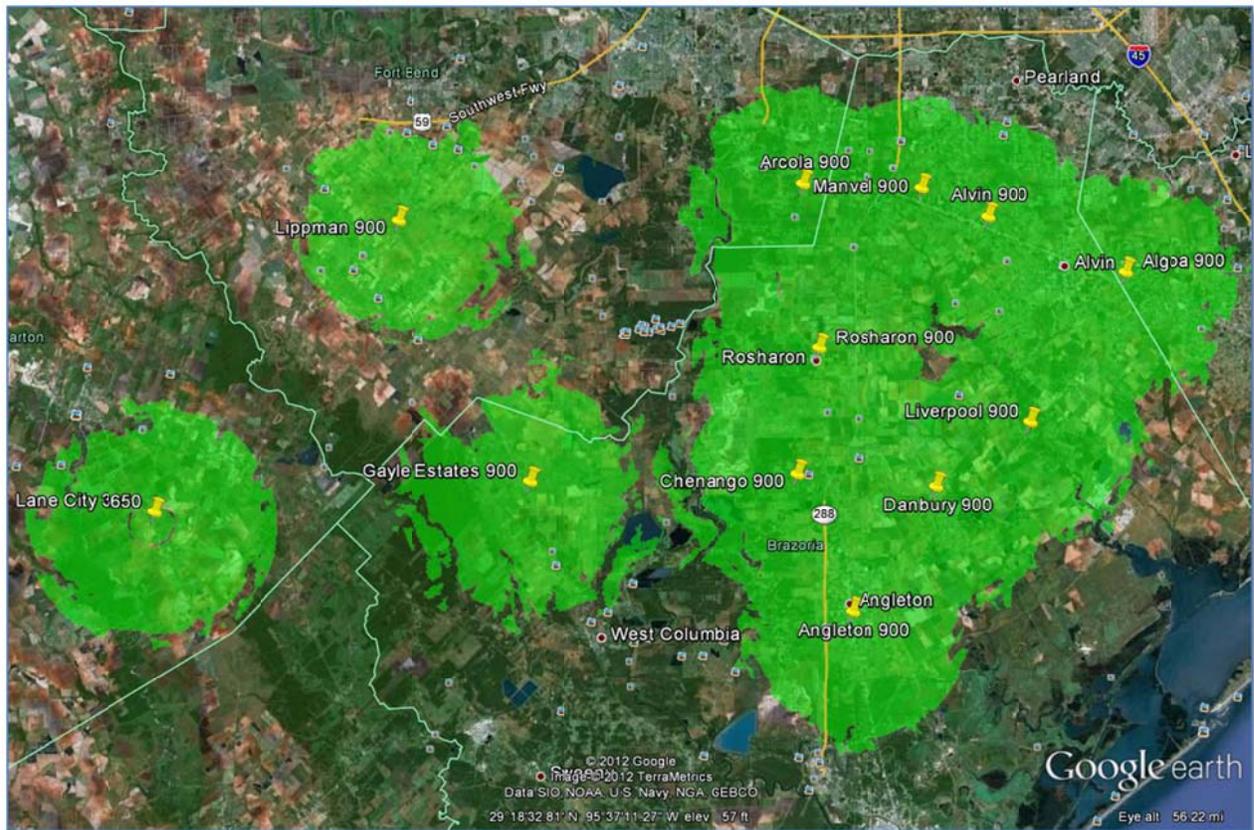
Exhibit H: Propagation Map for the Manvel, Texas Location



### **Results and Submission for October 2012**

Of the 23 original test locations for Skynet, 12 towers were determined to be operational based on two separate in-the-field site verification tests. These tests determined that wireless signal was indeed available for broadband service at each site. A composite propagation analysis was completed (**Exhibit I**), which reasonably represents the estimated broadband coverage area based on all information identified as of August 3, 2012. The provider's customer service department reports maximum advertised speeds of 10 Mbps (downstream) by 3 Mbps (upstream). The composite propagation map was forwarded to the provider for review and feedback prior to CN's inclusion of the coverage area in the Texas Broadband Map's October 2012 iteration; however, no definitive response was received by August 15, 2012.

**Exhibit I: Skynet Communications Composite Coverage**



## STARNET ONLINE SYSTEMS

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

The following narrative provides detail regarding the recent data collection and coverage estimation activities related to Starnet Online Systems (SOS), a wireless Internet service provider (WISP), located in Paris, Texas, with a primary service area of Lamar County. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground site verification and validation techniques that support the underlying data.

### **Background**

CN staff members have continued trying to obtain the participation of the provider with 24 instances of communication via telephone and e-mail sessions since September 10, 2009, through August 14, 2012. Only one communication reply was received from a company representative on May 6, 2011, with a response of electing not to participate. Since that date the provider has been non-responsive to multiple outreaches.

### **The Issue**

SOS, by its lack of responsiveness since May 6, 2011, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN has built a file based on research information from the public domain and, as time progressed, enriched the file with information obtained through the on-the-ground site verification and data collection exercises. For example, CN reviewed the provider's website ([www.1starnet.com](http://www.1starnet.com)) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded an FRN of 0016093411; the FRN reference to the SOS operations was correlated to a Dun and Bradstreet report (**Exhibit C**) with contact information relative to the owner of the company. Also, to support field validation of access points, the FRN was referenced to the FCC Universal Licensing System (ULS) to identify any licenses the provider may hold which could possibly enhance locating active access points for the service area. This process yielded license WQNG630 (**Exhibit D**), Radio Service: NN 3650-3700 MHz with 0 unique locations.

## Exhibit A: Service Plans

**Delivering everything the internet has to offer.**  
High speed internet. Dial-up, secure in home wireless.

### Fast and Reliable

Starnet's Wireless Internet provides rural consumers in Lamar and Red River counties of Texas with fixed wireless internet access. Your family can use the internet the way it should be: fast, always on without any download limits for a true unlimited internet access experience! Our wireless internet starts at the low price of \$37.95 per month and can be funded with other services to provide additional savings. You will also receive unparalleled friendly customer service from your locally owned and operated service provider. You are just a click away from being connected to the internet the way you should be. Just fill out the form on the right to get started today!

- ✓ Always On
- ✓ No Download Limits
- ✓ No Upload Limits
- ✓ Free Site Surveys
- ✓ No Contracts
- ✓ 24 X 7 Tech Support
- ✓ Up to 2mb only \$37.95
- ✓ Equip & Install as low as \$248.00
- ✓ Optional Equip Insurance \$4.50 Month
- ✓ Optional Wireless Router \$39.00

### Get Started Now

Fill out the form below, a Starnet Representative will contact you to setup an install date within two business days.

First Name:

Last Name:

Email Address:

Address:

City:

Zip Code:

Phone Number:

County:

Driving Directions to Location:

**Submit**

**Starnet Online Systems**  
Networking Solutions for the Office & Home

© Copyright Starnet Online Systems. All Rights Reserved  
Home | My Account | Business | Residential | About | Contact

## Exhibit B: Service Area Locations

Lamar County Internet Services - Microsoft Internet Explorer provided by ConnectKentucky

http://www.starnet.com/lamar-county-residential-services.asp

starnet online

**Delivering everything the internet has to offer.**  
High speed internet. Dial-up, secure in home wireless.

#### High Speed Internet

**Fast, Always On** Fixed Wireless Internet  
Our fixed wireless is fast, reliable and economical, with 24 hour technical support from personnel in the USA. Consumers in Lamar and Red River county have access to the speed that makes [fast.comcast](#) enjoyable.

Lamar County  
Paris, Tx  
Brookston, Tx  
Brookston, Tx  
Clarity, Tx  
Fayette, Tx  
Horseshoe, Tx  
Lamar Point, Tx  
Horseshoe, Tx  
Poundberry, Tx  
Reno, Tx  
Stokerson, Tx  
Summer, Tx

#### Dial-up

**Plans For Every Budget**  
To ensure that your individual needs are met, we offer a variety of dialup packages designed to match your budget and your frequency of [comcast](#) use. Each account includes our commercial class Pure email.

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#### Secure In Home Wireless

**Protect Your Personal Data**  
Tired of your neighbors using your internet connection or concerned about a hacker accessing your personal computer using your own wireless network? Starnet has an economical solution to fit your needs.

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“We've been doing business with Starnet for over five years and they have always delivered.”

**Starnet Online Systems**  
Networking Solutions for the Office & Home

© Copyright Starnet Online Systems. All Rights Reserved  
Home | My Account | Business | Residential | About | Contact | Wireless

Internet 75%

## Exhibit C: Federal Registration Number

Registration Detail	
FRN:	0016093411
Registration Date:	02/11/2007 05:37:00 PM
Last Updated:	
Business Name:	Ansteorra Inc.
Business Type:	Private Sector , Corporation
Contact Organization:	
Contact Position:	CEO
Contact Name:	Mr Larry L Rhea Sr.
Contact Address:	108 Lamar Avenue Paris, TX 75460 United States
Contact Email:	lrhea@1starnet.com
ContactPhone:	(903) 785-5533
ContactFax:	

**Ansteorra, Inc.** has a location in **Paris, TX**. Active officers include **Larry Rhea, Ben Poteet, Larry Rhea** and **Amv Story**. Ansteorra, Inc. filed as a Domestic For-Profit Corporation on Friday, September 28, 1997 in the state of **Texas** and is currently active. The company's line of business includes Telephone Communications.

Website: [www.ansteorra.com](http://www.ansteorra.com)  
 direct dial: (903) 785-5533  
 Category: Telephone Communications/Internet host services  
 A.K.A.: Ansteorra, Inc., Star - Net Online Systems, Star Net, Scar Net, Star.Net Online Systems;  
 Filings: [Domestic For-Profit Corporation \(TX - Active\)](#)

Sources: Dun & Bradstreet last refreshed 7/20/2012  
 Texas Secretary of State last refreshed 7/20/2012

**Officers at Ansteorra, Inc.**  
 Click on to the left of the name to see the Connection Visualizer.

- Larry Rhea** President at Ansteorra, Inc. General Manager, Chief Executive Officer and Owner at [Star-Net Online Systems](#) Director at [Vault Services, Inc.](#) [Hide other companies](#) Paris, TX

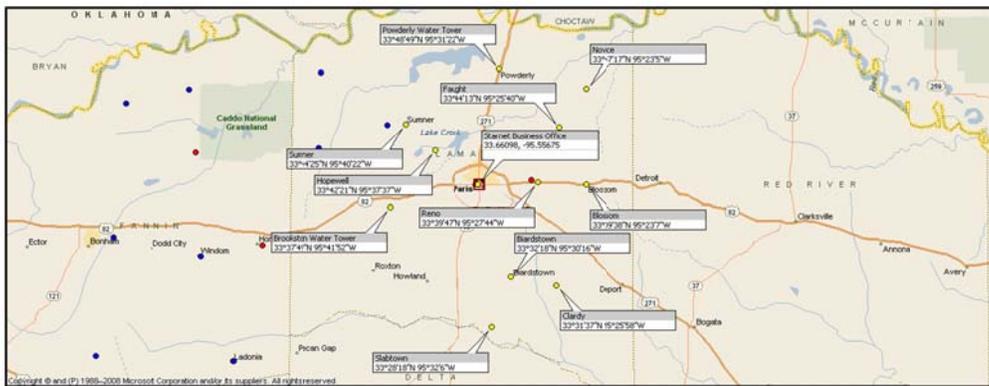
## Exhibit D: WQNG630 License Reference

Call Sign	WQNG630	Radio Service	NH - 3650-3700 MHz
Status	Active	Auth Type	Regular
<b>Dates</b>			
Grant	02/01/2011	Expiration	02/01/2021
Effective	02/01/2011	Cancellation	
<b>Area of Operation: N</b>			
Operating Nationwide including Hawaii, Alaska, and US Territories.			
<b>Frequency Bands</b>			
003650.00000000-003700.00000000			
<b>Licensee</b>			
FRN	0016093411 <a href="#">(View Ownership Filing)</a>	Type	Corporation
<b>Licensee</b> Ansteorra Inc. 108 Lamar Avenue Paris, TX 75460 ATTN: Larry Rhea Sr.		P: (903) 785-5533 E: lrhea@1starnet.com	
<b>Contact</b>			
Ansteorra Inc. 108 Lamar Avenue Paris, TX 75460 ATTN: Larry Rhea Sr.		P: (903) 785-5533 E: lrhea@1starnet.com	

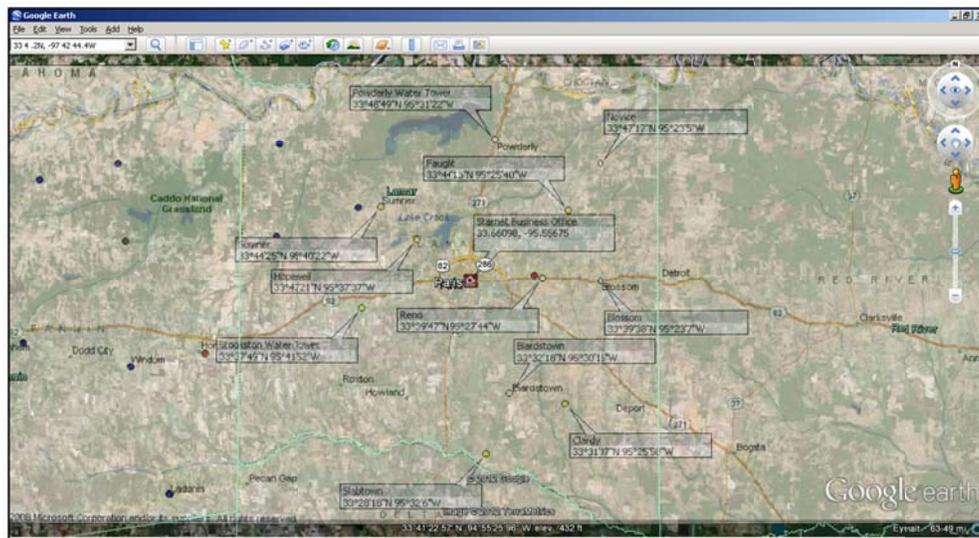
### Preliminary Identification of Provider's Coverage Area

Connected Nation extracted SOS's service locations from its website as identified in Exhibit B. The website service locations were utilized to develop a reference point (**Exhibit E**) for potential service areas. Using Google Earth an image overlay (**Exhibit F**) was developed. 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 was maintained at less than .1 mile (528 ft.) to establish minimum search criteria of a potential access point structure within the service area. The zoom option with Google Earth's aerial imagery was utilized to establish potential structures serving as access point mounts. The process only yielded 2 possible water towers within the service area. Combined with the water tower locations and Starnet Business Online Systems service locations a route was developed with the Microsoft *Streets & Trips* mapping application for the validation process as illustrated with Exhibit E.

**Exhibit E: Provider's Service Area Reference**



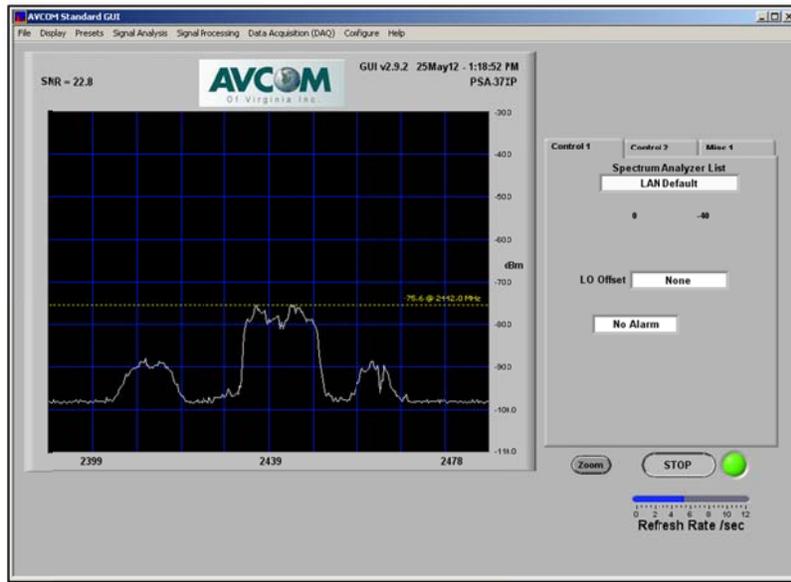
**Exhibit F: Google Earth: Provider's Service Area Reference Image Overlay for AP Structures**



**Testing Techniques**

Connected Nation staff then developed a site validation route based on data established with the Google Earth image overlay and publicly available data through SOS 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 Starnet Online Systems - Faught Location**



Provider	Location	Latitude	Longitude	Frequency Availability	Structure	Approximate Antenna Height	Notes
				900MHz 2.4GHz 3.65GHz 5.0GHz			
StarNet Online: Faught		33 44 55N	95 24 54W	X	Comm Tower	160ft.	Sectored 120 degrees (3); 2.4GHz; Confirmed
StarNet Online: Faught_AP Search Location		33°44'13"N	95°25'40"W				



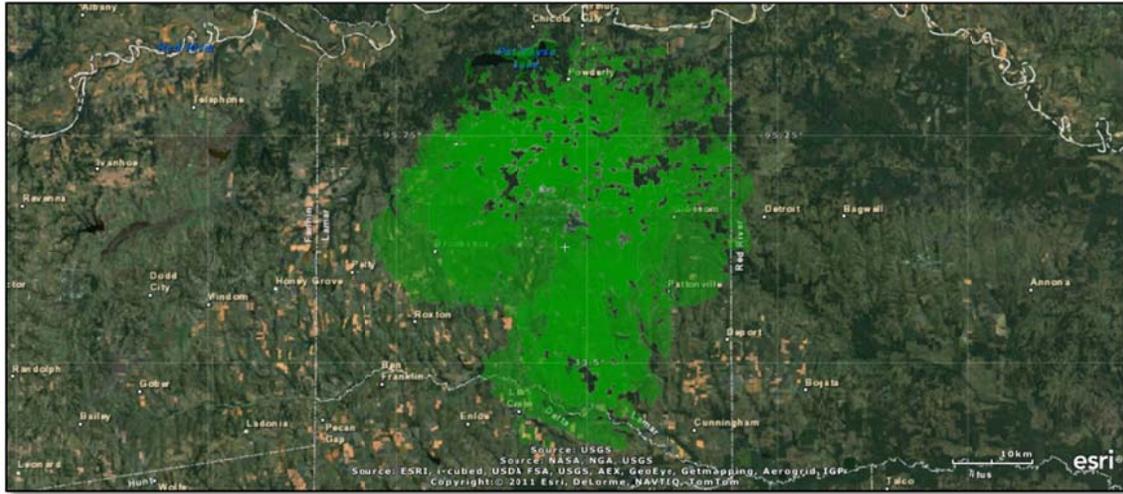
## Results and Submission for October 2012

Of the 12 locations targeted during the validation point route, 12 access points were identified and relative information was logged into the SOS field validation notes file (**Exhibit H**). The field data and the publicly available data were transferred to the Connected Nation Provider Information file. A composite propagation study was completed based on the composite data (**Exhibit I**). Both documents were forwarded to SOS and the provider was advised that the information would be submitted to Connected Texas and the NTIA broadband mapping project for processing if the provider did not respond within 48-hours with deletions, revisions or other datum related to this coverage estimation whitepaper. As of this report date, no response has been received from the provider.

**Exhibit H: Field Validation Notes**

Location	Latitude	Longitude	Frequency	Structure	Approximate Antenna Height	Notes
			2.4GHz			
Slabtown	33 28 45N	95 31 35W	X	Rohn	120ft.	Omni; 2.4GHz; Confirmed
Slabtown_AP Search Location	33°28'18"N	95°32'6"W				
Clardy	33 32 18N	95 28 29W	X	Rohn	80ft.	Omni; 2.4GHz; Confirmed
Clardy_AP Search Location	33°31'37"N	95°25'58"W				
Blardstown	33 32 18N	95 29 59W	X	Rohn	80ft.	Omni; 2.4GHz; Confirmed
Blardstown_AP Search Location	33°32'18"N	95°30'16"W				
Reno	33 40 25N	95 28 27W	X			Did not obtain a visual of AP structure; RF analysis isolated approximate location. SSID capture.
Reno_AP Search Location	33°39'47"N	95°27'44"W				
Blossom	33 39 35N	95 23 28W	X	Comm Tower	140ft.	Omni; 2.4GHz; Confirmed
Blossom_AP Search Location	33°39'38"N	95°23'7"W				
Faught	33 44 55N	95 24 54W	X	Comm Tower	160ft.	Sectorized 120 degrees (3); 2.4GHz; Confirmed
Faught_AP Search Location	33°44'13"N	95°25'40"W				
Powderly	33 47 1N	95 31 33W	X	Rohn	80ft.	Omni; 2.4GHz; Confirmed
Powderly_AP Search Location	33°48'49"N	95°31'22"W				
Caviness FD	33 45 30N	95 36 46W	X	Rohn	80ft.	Identified access point during field audit; in route to a website location call out.
Caviness_2AP	33 45 16N	95 34 56W	X			Identified access point during field audit; in route to a website location call out.
Hopewell	33 42 4N	95 38 34W	X	Rohn	80ft.	Omni; 2.4GHz; Confirmed
Hopewell_AP Search Location	33°42'21"N	95°37'37"W				
Brookston	33 38 31N	95 40 54W	X	Rohn	70ft.	Omni; 2.4GHz; Confirmed
Brookston_AP Search Location	33°37'49"N	95°41'52"W				
Paris	33 39 42N	95 33 26W	X	Bldg/Rohn	160ft.	Omni; 2.4GHz; Confirmed
Paris_AP Search Location	33 39 40N	95 33 19W				Business Office Location.
Summer_AP Search Location	33°44'25"N	95°40'22"W				No Structure Identified; nor RF detected for Starnet operations; No CPEs identified to determine possible serving AP.
Novice_AP Search Location	33°47'17"N	95°23'5"W				No AP Identified; customer CPEs oriented to Faught AP location.

## Exhibit I: Starnet Online Systems Composite Coverage



## TELECOM CABLE, LLC

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

The following narrative provides detail regarding the recent data collection activities related to Telecom Cable, LLC, a cable broadband Internet provider in Corrigan, Oyster Creek, and Weston Lakes, Texas. The narrative will include information regarding how and where CN obtained publicly available data and the consumer-provided validation techniques that support the underlying data.

### **October 2012 Submission Commentary**

Connected Nation created this coverage estimation document during the October 2012 submission period as a result of the ongoing non-participatory status of the provider. Since commencement of Texas' SBI program in 2010, CN engineers have conducted 8 rounds of personal telephone outreach and 10 attempts via e-mail, with 6 instances of e-mail and/or telephone communication occurring during the April 2012 and October 2012 mapping submission cycles. On August 2, 2012, a company representative responded to e-mail outreach and closed the response as follows "I reiterate my full intent to provide no information pertaining to any internet services our company provides or where we elect to offer them." CN has closely monitored the provider's website to identify any information related to maximum advertised speed tiers, coverage areas, or other information that could be used as part of this coverage estimation document.

### **The Issue**

Telecom Cable, through its unwillingness to participate since the inception of the SBI program, has clearly articulated its desire to remain a non-participant in regard to the Texas broadband mapping program.

### **Identification of Provider's Legal Name, d.b.a., and FRN**

CN began building a file based on research information and, as time progressed, enriched the file with information obtained through the public domain. For example, CN reviewed the State-Issued Certificate of Franchise Authority (SICFA) database purposed to facilitate the identification of local telecommunications providers serving municipalities within the State of Texas through the Texas Public Utility Commission (PUC) website ([www.puc.state.tx.us](http://www.puc.state.tx.us)), in order to further verify the provider's residential service area (**Exhibit A**). A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded an FRN of 0016605263 (**Exhibit B**).

## Exhibit A: Residential Service Plan

Docket/Project/Control Numbers	
<p>35742</p> <p><b>Type:</b> PROJECT</p> <p><b>Open Date:</b> 6/2/2008</p> <p><b>Close Date:</b> 6/24/2008</p> <p><b>Filings:</b> New</p> <p><b>Note:</b> SICFA Application - City Limits of Weston Lakes, Texas.</p>	<p>36738</p> <p><b>Type:</b> PROJECT</p> <p><b>Open Date:</b> 2/25/2009</p> <p><b>Close Date:</b> 3/19/2009</p> <p><b>Filings:</b> Service Area Change</p> <p><b>Note:</b> AMENDMENT - Service Area Addition - City Limits of Bruni, Encinal, Oilton and Stockdale, Texas.</p>
<p>37374</p> <p><b>Type:</b> PROJECT</p> <p><b>Open Date:</b> 8/20/2009</p> <p><b>Close Date:</b> 9/14/2009</p> <p><b>Filings:</b> Service Area Change</p> <p><b>Note:</b> AMENDMENT - Service Area ADDITION - City Limits of Oyster Creek and Freeport, Texas. Service Area DELETION - City Limits of Bruni, Encinal, Oilton and Stockdale, Texas.</p>	
<b>Cities</b>	
<p>City: Freeport</p> <p>Municipality: City of Freeport</p> <p>Notes:</p>	<p>City: Oyster Creek</p> <p>Municipality: City of Oyster Creek</p> <p>Notes:</p>
<p>City: Weston</p> <p>Municipality: City of Weston</p> <p>Notes:</p>	
<b>Counties</b>	
<p>County: Fort Bend</p> <p>Code: 079</p> <p>Notes: Weston Lakes Subdivision</p>	

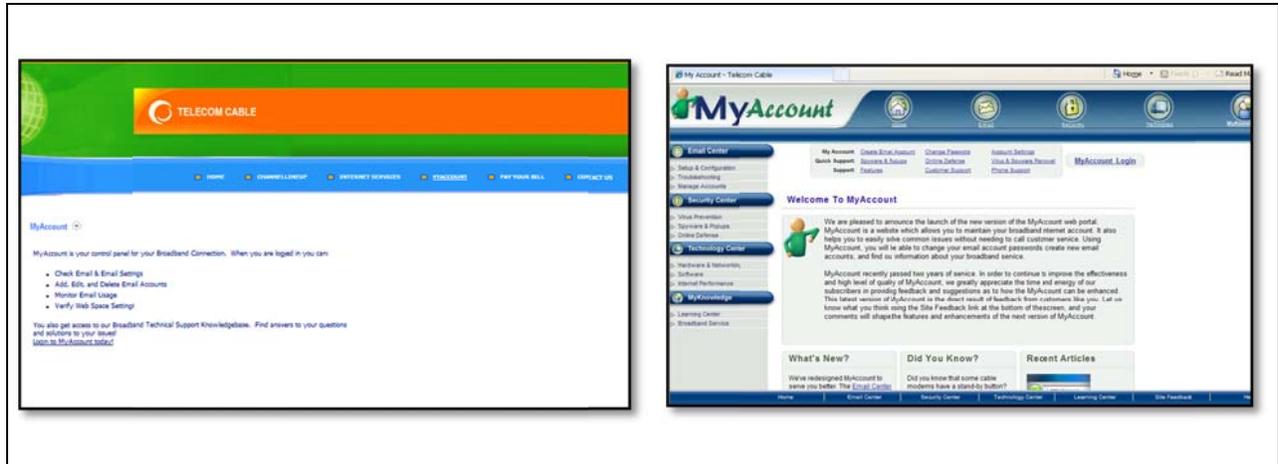
## Exhibit B: FRN

Registration Detail	
<b>FRN:</b>	0016605263
<b>Registration Date:</b>	06/15/2007 08:08:00 PM
<b>Last Updated:</b>	01/02/2012 11:36:07 AM
<b>Business Name:</b>	Telecom Cable LLC
<b>Business Type:</b>	Private Sector , Limited Liability Corporation
<b>Contact Organization:</b>	
<b>Contact Position:</b>	
<b>Contact Name:</b>	Mr Anthony Luna
<b>Contact Address:</b>	13121 Louetta Road Suite 1020 Houston, TX 77429 United States
<b>Contact Email:</b>	tonyluna1234@yahoo.com
<b>ContactPhone:</b>	(303) 881-8315
<b>ContactFax:</b>	(281) 257-1265

## Identification of Provider's Coverage Area

Upon review of the provider's website to determine residential service offerings (<http://www.telecomcable.net/>), the provider continues to exclude information pertaining to internet services or packages via the "internet services" link; however, the provider website does contain detailed information for cable television service areas, as well as a link to a member services portal, "MyAccount" (<http://myaccount.telecomcable.net/>), which allows broadband subscribers to access the tool as a "control panel for your Broadband Connection" (**Exhibit C**) after logging in.

### Exhibit C: Broadband Connection Portal



Connected Nation identified TVRO locations via *Google Earth* application for Corrigan, Weston Lakes, and Oyster Creek areas (**Exhibit D**). A boundary for Weston Lakes Community was identified, and access to the gated community was provided by on-site developer and HOA office, who also provided a neighborhood map for use with validation. A route was then established for the entire Weston Lakes community using an informed community map and TVRO location (**Exhibit E**).

### Exhibit D: Identified TVRO Locations

Using the *Google Earth* application, Connected Nation successfully identified Telecom Cable TVRO locations for Corrigan, Weston Lakes, and Oyster Creek areas.





Prior to field verification, Connected Nation identified the municipality boundary for Corrigan and Oyster Creek Areas via *Google Earth* application and established a route using TVRO locations as starting point. The identification of the community boundary was utilized to establish possible end of line (termination points) of the Telecom Cable network distribution along the thoroughfares (easements) during on-site validation within the community boundary as shown in Exhibit E.

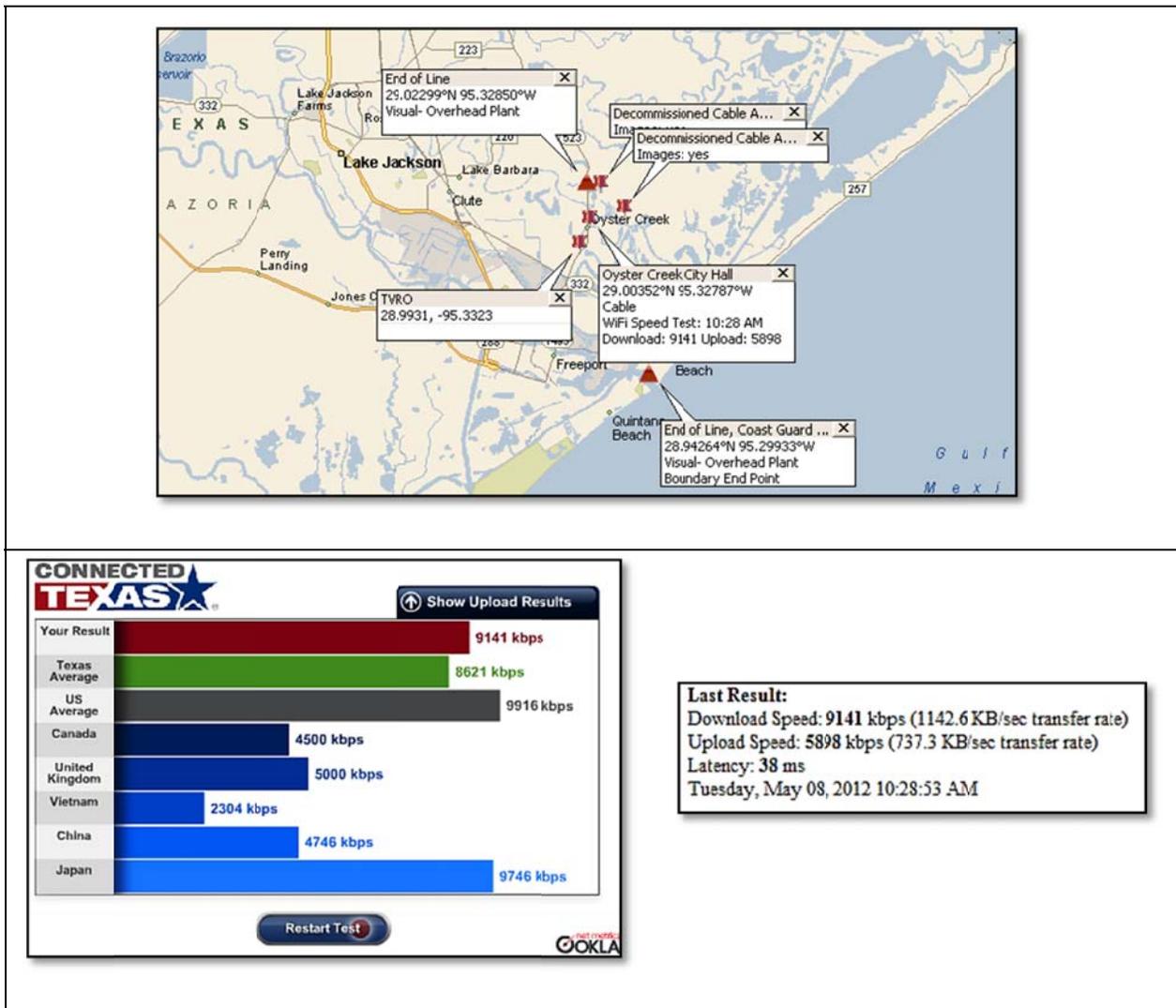
**Exhibit E: Boundary Identification**



## Testing Techniques

Possible TVRO reference points were pre-selected and entered into Microsoft *Streets & Trips* software and CN Engineers drove through each thoroughfare to determine the existence (or lack thereof) of CATV plant and visually identify the end of line (termination points). As distribution components and assets of Telecom Cable were identified, they were recorded into *Streets & Trips* with corresponding latitude/longitude coordinates, photographs, and Wi-Fi utility tests where applicable (**Exhibit F**).

**Exhibit F: Visually Verified Telecom Cable Assets**



Visual identification of the headends found in Oyster Creek, Weston Lakes, and Corrigan were simple to identify. Connected Nation engineers spoke with residents at City Hall in Oyster Creek and Corrigan, as well as the Weston Lakes Community Office to verify provider's presence in all three areas. The end of line (termination points) was identified by driving each street within the possible service area, while noting assets as previously mentioned, in tandem with creation of final

service area map. The images demonstrate that CN staff was able to obtain visuals to assist with coverage estimation. The depictions are just a sample observed throughout the audit route (Exhibits G & H).

### Exhibit G: TVRO, Headend Identification



Oyster Creek Headend Tower & TVRO



Weston Lakes Headend Tower & TVRO



Corrigan TVRO



Corrigan TVRO (2)

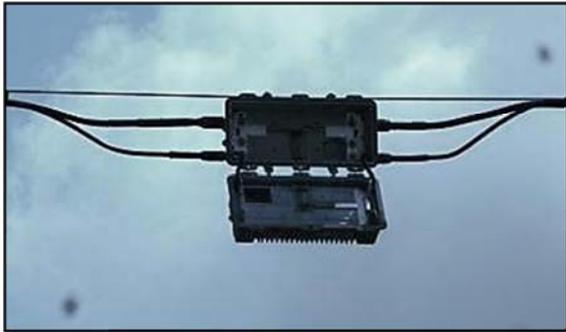
### Exhibit H: Cable Components and Asset Locations



Termination Point, Oyster Creek (Surfside)



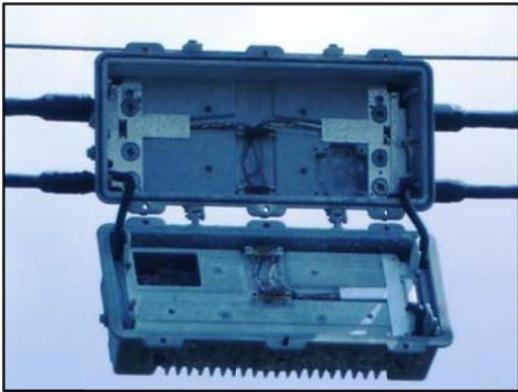
End of Line, Oyster Creek



Cable Amplifier, Oyster Creek



Cable Amplifier, Oyster Creek



Cable Amplifier, Oyster Creek



Cable Equipment, Corrigan

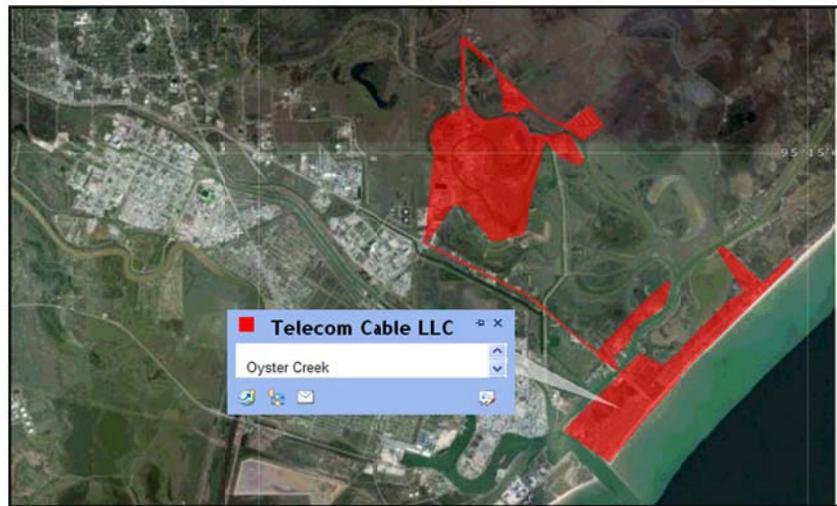
**Results and Submission for October 2012**

As a result of the collection of publicly available information, hands-on, and the on-the-ground validation efforts, Connected Nation is submitting this document in support of its coverage estimation for the cable modem broadband service area of Telecom Cable, LLC. In lieu of the valuable information gleaned from provider participation in the SBI mapping initiative, Connected Nation set out to obtain an exact replica of the provider's service area which qualifies as a fair and precise substitute in this instance.

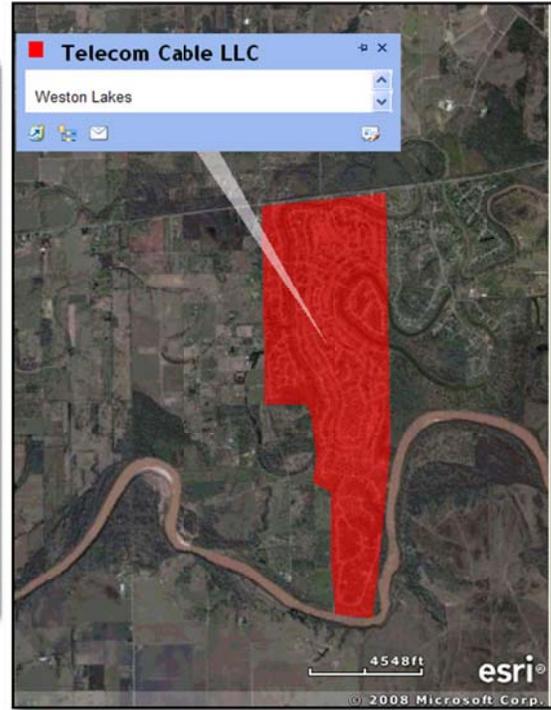
**Exhibit H (H1, H2, and H3)** (below) depicts the estimated coverage areas for Telecom Cable, LLC, based upon the results of data gathered through publically available sources, visual drive testing, and confirmation techniques.

### Exhibit H: Validation Results

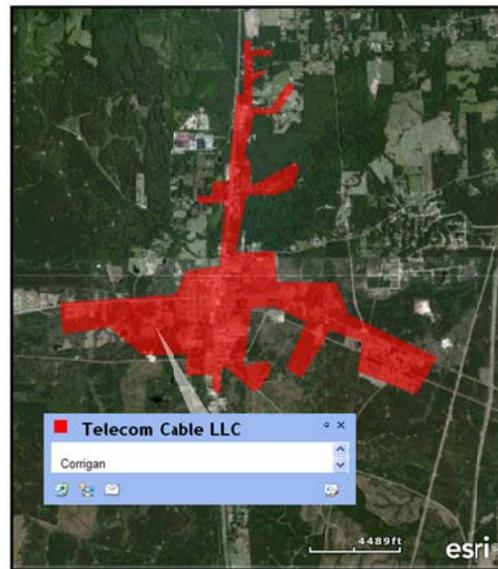
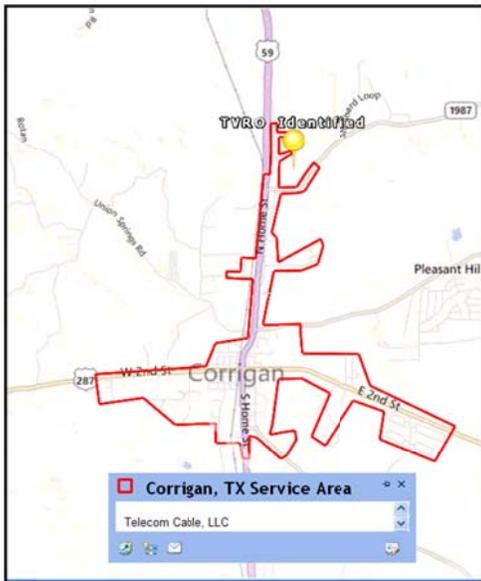
#### *H1: Oyster Creek Coverage Estimation*



### H2: Weston Lakes Coverage Estimation



### H3: Corrigan Coverage Estimation



## THE SPECNET, INC.

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

The following narrative provides detail regarding the recent data collection activities related to TheSPECnet, Inc., a wireless Internet service provider (WISP), located in Weimar, Texas, with a primary service area of Colorado County. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation techniques that support the underlying data.

### **Background**

CN staff members have continued trying to obtain the participation of the provider with 15 instances of communication via telephone and e-mail sessions since September 19, 2011, through August 15, 2012. Two communication sessions over the telephone were completed with the owner of the company describing the project goals and data requirements, with the first occurrence on September 22, 2011, and the second on June 22, 2012. With each contact session the owner indicated the project would be taken into consideration and discussed with his partner. All other communication sessions received no response.

### **The Issue**

TheSPECnet, Inc., by its lack of responsiveness since June 22, 2012, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN began building a file based on research information and, as time progressed, enriched the file with information obtained through the public domain. For example, CN reviewed the provider's website (<http://www.thespecnet.com>) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **C**ommission **R**egistration System (CORES) system yielded no FRN for the company by business name or last name of owner. Also, to support field validation, the FCC Universal Licensing System (ULS) was researched to identify any licenses the provider may hold which could possibly enhance locating active access points for the service area. This process yielded no license associations for the company.

## Exhibit A: Service Plans

HOME PAGE INFO CUSTOMER CENTER NEW CUSTOMERS CONTACT US FAQ



**TheSPECnet, Inc.**  
[Sales@thespecnet.com](mailto:Sales@thespecnet.com)  
[Service@thespecnet.com](mailto:Service@thespecnet.com)  
[879-732-6307](tel:879-732-6307)

### Pricing

Our Basic service with a 1.5 mbps cap is \$50.00 + tax. The tax is \$1.69.

Additional 1.5 mbps with a 3.0 mbps cap is an additional \$20.00 per month. \$50.00 + \$20.00 or \$70.00 for 3.0 mbps.

Installation is \$250.00. This includes everything needed to get you up and running, [with NO CONTRACT](#) and no extras.

We can also break the \$250.00 installation into 3 or 4 payments to lessen the burden of the installation charge. Some payment is required at installation time. We require some buy in from you.

## Exhibit B: Service Area

[http://www.thespecnet.com/Areas\\_of\\_Coverage.html](http://www.thespecnet.com/Areas_of_Coverage.html)

### Areas of Coverage

#### Areas of Coverage (Tower Locations)

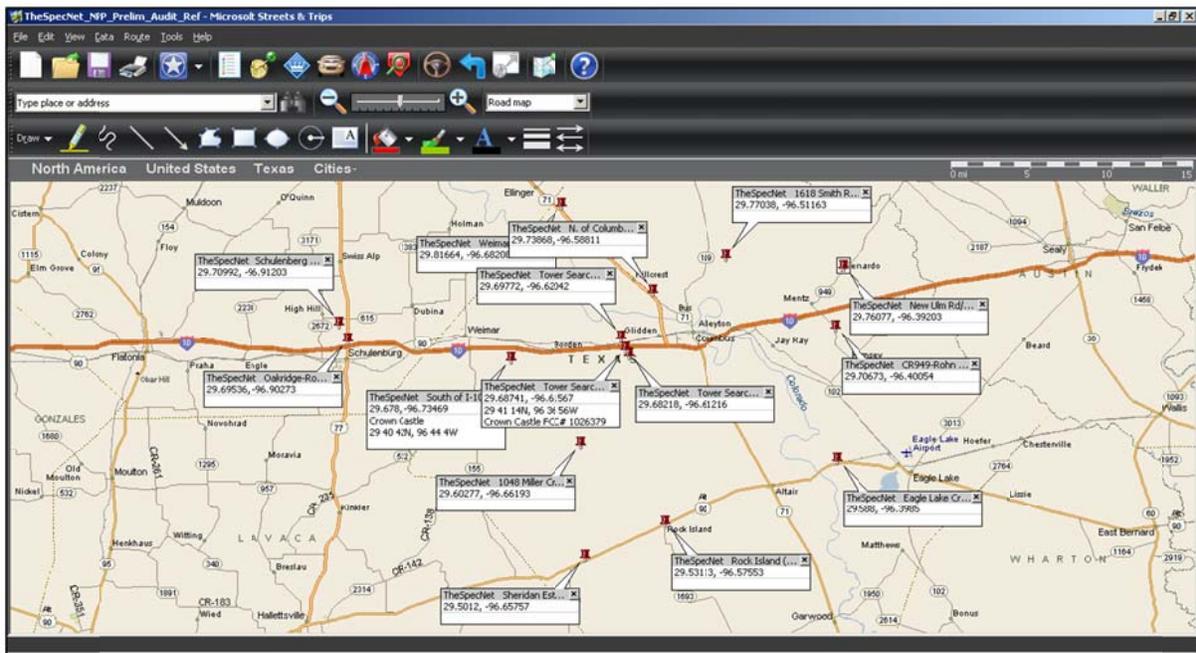
Please note, we reach out as far as 10 miles from some of these towers listed below. Our reach is dependant on tree lines, etc. We need a clear line of sight from our tower to the radio on your roof.

1. 2434 Tower - This tower is a Crown Castle commercial tower 492 ft. located on 2434 and Dee Allen. We are 320 ft. or 3/4 of the way up this tower
2. Oakridge Tower - This is a private road tower 100 ft.
3. Sheridan Tower - This is a private tower 90 ft. located on the south side of Lake Sherian in Sheridan Estates.
4. Rock Island Tower - This is a Rohn G25 private 100 ft. tower. This tower is very close to the water tower in Rock Island.
5. Daley Salvage Tower - This is a 200 Ft. Private Rohn G25.
6. Dr. Neal Tower - This is a Rohn G25 private 100 ft. tower located on Dr. Neal Dr. Close to the Falls.
6. Fayetteville Tower - This is a 195 ft. Rohn G24 private tower that covers Fayetteville with a reach of 8-10 miles.
7. CR 949 Tower - This is a private 90 ft. Rohn G24 located 1.5 miles on CR 949.
8. Jones Tower - This is a private 190 ft. Rohn G25 located north of Columbus 2-3 miles and west of Hwy 71. This tower will allow us to offload users on the 2434 tower. Traffic and user management.
9. Weimar Tower - This is a 490 ft. Crown Castle commercial tower located South of I 10 and East on CR 220. This tower will allow us to go head to head with wired/DSL customers in Wiemar and also provide us with better coverage in the Weimar area. This tower also allows us to hop (Backhaul) to the Schulenberg tower so we can provide services in Schulenberg.
10. Bernardo/949 tower is operational.
11. Weimar Tower - This is a 400 ft. tower owned by Crown Castle. We now provide service from this tower.
12. Eagle Lake - We are live in Eagle Lake with state of the art hardware and software solutions. We are a fully routed network which is a big deal. If you have HighuesNet, Wildblue or ELC or any other broadband Internet solution give us a chance, and if your not 100% satisfied with us, you can simply FIRE us, simple as that. Run our service side by side with your present broadband carrier and give us a chance to prove ourselves. Want to do on line banking do it with us, want to VPN in to your work, do it with us, you can do most everything with us because we have made a large capitol investment with both hardware and software. We are not penny wise and dollar foolish, this is one of the reasons we do not have you sign a contact.  
P.S. This is a 400 ft. commercial tower

## Preliminary Identification of Provider's Coverage Area

Connected Nation extracted TheSPECnet, Inc. service area locations from its website. Information that identified a tower management company (such as Crown Cast on number 1 – Areas of Coverage) were searched (through the FCC ASR database) to identify such commercial tower structures within the given area. The website service area descriptions were utilized as a search point criteria to assist in utilizing a Google Earth street level view to identify structures that may be serving as access points for TheSPECnet, Inc.'s network. Fifteen preliminary validation points were then established (**Exhibit C**) by utilizing the process. All 15 locations were entered into Microsoft *Streets & Trips* mapping application to develop a route for the validation process.

**Exhibit C: Validation Points for AP Structures**

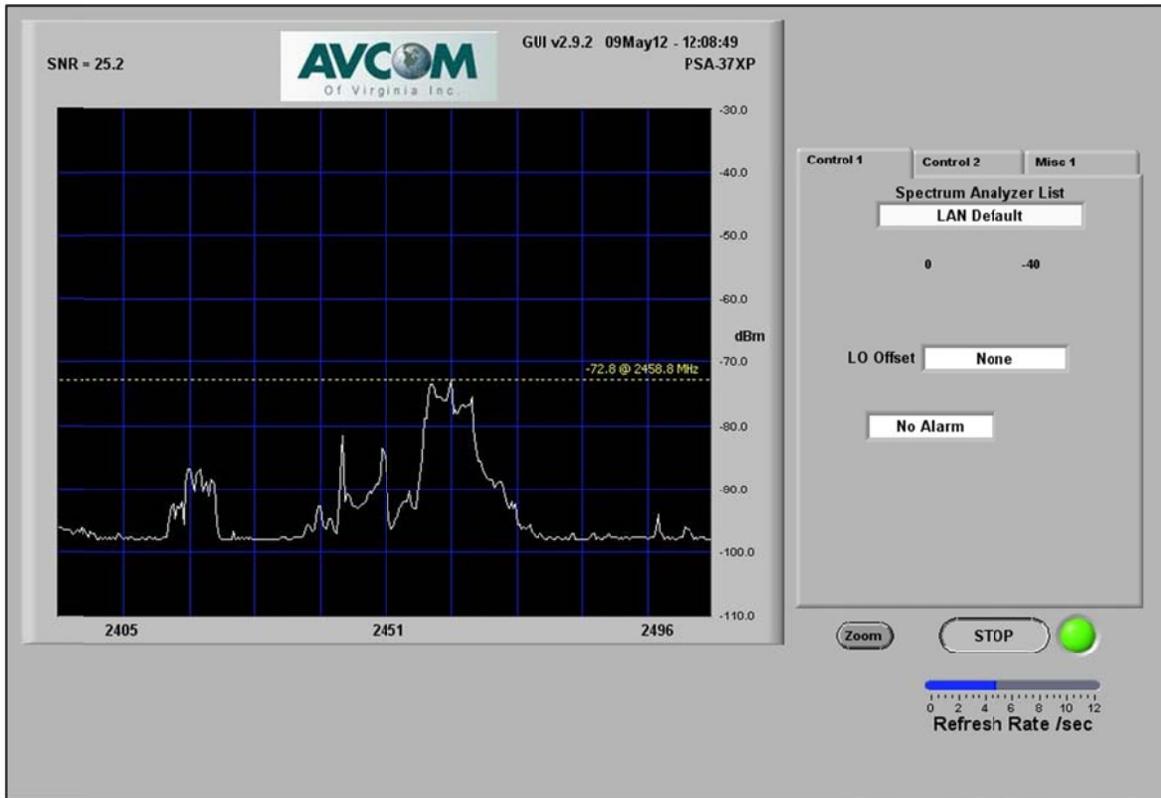


## Testing Techniques

Connected Nation staff developed a site validation route based on information obtained from TheSPECnet, Inc.'s website "Area of Coverage" page. 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 D**). 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 sectored); and photographs were taken of the access points.

## Exhibit D: Field Data for TheSPECnet, Inc. Daley Salvage Area

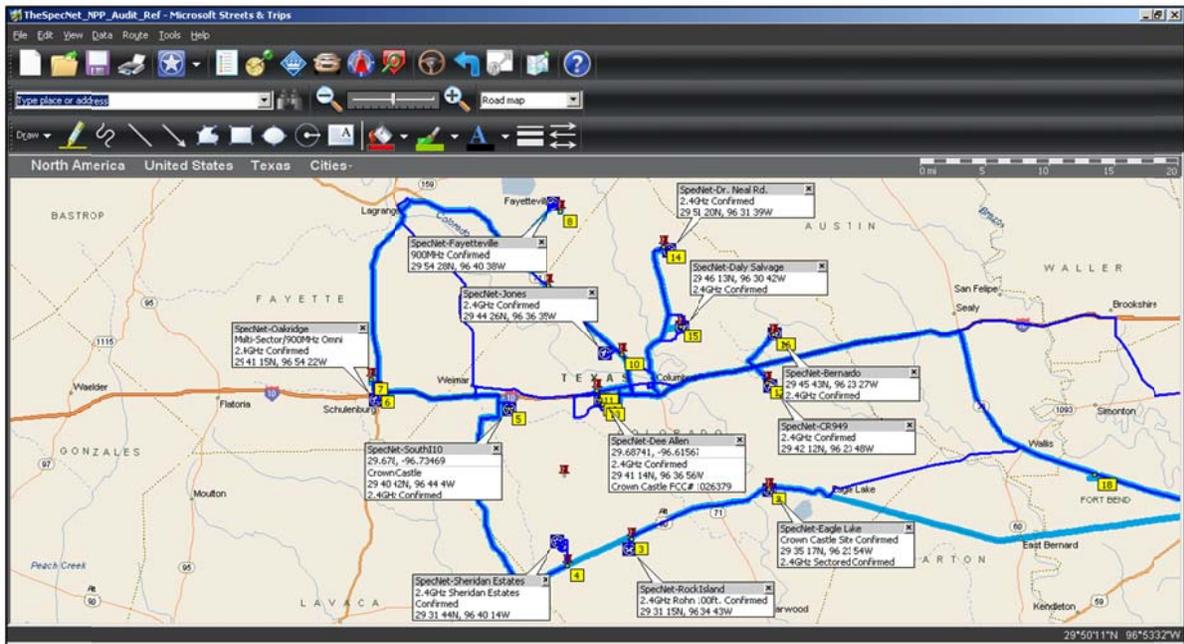
Provider	Location	Latitude	Longitude	Frequency Availability				Structure	Approximate Antenna Height	Notes
				900MHz	2.4GHz	3.65GHz	5.0GHz			
TheSPECnet	Daley Salvage	29 46 13N	96 30 42W		X			Rohn Guyed	180ft.	Actual AP location identified. 3 sectors-120 degree.
TheSPECnet	1618 Smith Rau Columbus, TX 78934-Search	29.770378	-96.511631							Used provider website description with preliminary Google Earth search.



## Results and Submission for October 2012

Of the 15 locations visited during the validation point route, 12 access points were identified (**Exhibit E**) and relative information was logged into TheSPECnet, Inc. field validation notes file (**Exhibit F**). The field (and the publicly available) data was transferred to the Connected Nation provider information file. A composite propagation study was completed based on the field data (**Exhibit G**). Both documents were forwarded to TheSPECnet, Inc. and they were advised that the information will be submitted to Connected Texas and the NTIA broadband mapping project for processing. The provider was asked to respond, within 48 hours, if there were discrepancies of the estimated coverage area, but no response was received.

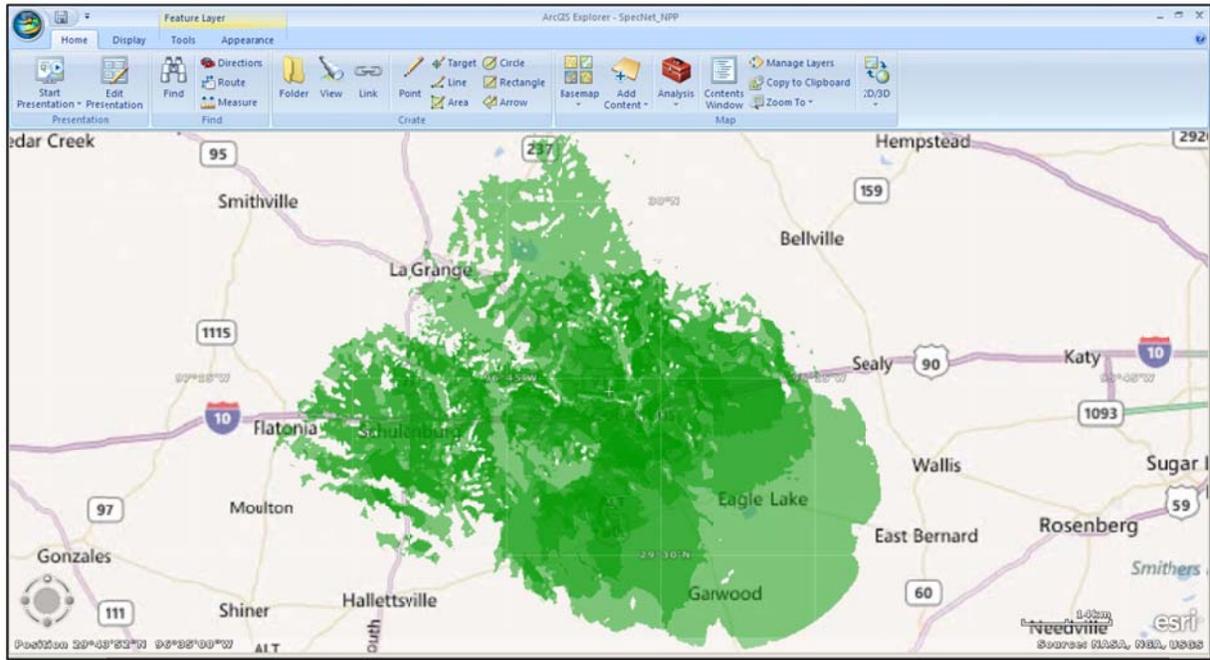
### Exhibit E: Access Points Confirmations



### Exhibit F: Field Validation Notes

Location	Latitude	Longitude	Frequency		Structure	Approximate Antenna Height	Notes
			900MHz	2.4GHz			
TheSpecNet	29 41 14N	96 36 56W		X	Comm Tower	320ft.	Actual AP location identified. Crown Castle site. FCC# 1026379; 3 sectors.
TheSpecNet	29.687406	-96.615675					Used provider website description with preliminary Google Earth search.
TheSpecNet	29.682178	-96.612164					Used provider website description with preliminary Google Earth search.
TheSpecNet	29.697722	-96.620417					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 41 15N	96 54 22W	X	X	Rohn Res Guye	100ft.	Actual AP location identified. Sectored antennas-120 degree. Omni
TheSpecNet	29.695358	-96.902733					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 31 44N	96 40 14W		X	Rohn Res Guye	90ft.	Actual AP location identified. Omni antenna.
TheSpecNet	29.501200	-96.657572					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 31 15N	96 34 43W		X	Rohn Res Guye	100ft.	Actual AP location identified. 3 sectors-120 degree.
TheSpecNet	29.531133	-96.575528					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 46 13N	96 30 42W		X	Rohn Guyed	180ft.	Actual AP location identified. 3 sectors-120 degree.
TheSpecNet	29.770378	-96.511631					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 51 20N	96 31 39W		X	Rohn Res Guye	100ft.	Actual AP location identified. 3 sectors-120 degree.
TheSpecNet	29.859347	-96.534339					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 54 28N	96 40 38W	X		Rohn Guyed	195ft.	Actual AP location identified. 3 sectors-120 degree.
TheSpecNet	29.898350	-96.667117					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 44 26N	96 36 35W		X	Rohn Guyed	190ft.	Actual AP location identified. 3 sectors-120 degree.
TheSpecNet	29.738675	-96.588111					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 40 42N	96 44 4W		X	Comm Tower	300ft.	Actual AP location identified. 3 sectors-120 degree. Crown Castle FCC# 1051634
TheSpecNet							
TheSpecNet	29.678000	-96.734694					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 42 12N	96 23 48W		X	Rohn Res Guye	90ft.	Actual AP location identified. 3 sectors-120 degree.
TheSpecNet	29.706940	-96.400520					Used provider website description with preliminary Google Earth search.
TheSpecNet	29 45 43N	96 23 27W		X	Rohn Guyed	80ft.	Actual AP location identified. Omni.
TheSpecNet	29.760767	-96.392028					Used provider website description with preliminary Google Earth search.
TheSpecNet	29.816639	-96.682083					Did not identify the infrastructure as called out with the provider's website description.
TheSpecNet	29 35 17N	96 23 54W		X	Comm Tower	320ft.	Actual AP location identified. 3 sectors-120 degree. Crown Castle FCC# 1058294
TheSpecNet	29.588000	-96.398500					Used provider website description with preliminary Google Earth search.

# Exhibit G: TheSPECnet, Inc. Composite Coverage



## VRFUTURENET

As part of its ongoing broadband mapping efforts, Connected Nation (CN) 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 SBI mapping initiative.

The following narrative provides detail regarding the recent data collection and site verification activities related to VRFuturenet, a wireless Internet service provider (WISP), located in Fort Worth, Texas with a service area in Tarrant, Parker, Wise, Palo Pinto, and Erath counties. 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 have continued trying to obtain the participation of the provider with 35 instances of communication via telephone and e-mail sessions since September 10, 2009, through September 2, 2012. Only one communication reply was received from a company representative on November 9, 2009, requesting that a CN staff member resend the participation documents (mapping program description, provider information file, and non-disclosure agreement). Since November 9, 2009, the provider has been non-responsive to all outreach activity. Additionally, a CN staff member visited VRFuturenet office on June 8, 2012, to discuss the broadband mapping project in person with staff. A company representative stated they see no benefit to the participation of the mapping project and the company's position will not change.

### **The Issue**

VRFuturenet, by its lack of responsiveness and cooperation since September 10, 2009, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN has built a file based on research information and, as time progressed, enriched the file with information obtained through the public domain and from on-the-ground data collection and site verification activities. For example, CN reviewed the provider's website ([www.vrfuturenet.com](http://www.vrfuturenet.com)) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) of the provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded an FRN of 0018547935 (**Exhibit C**) with contact information relative to the owner of the company. Also, to support field validation of access points, the FRN was cross-referenced against the FCC Universal Licensing System (ULS) database to identify any licenses the provider may hold. This process yielded license for Station WQKD375 (**Exhibit D**), Radio Service: NN 3650-3700 MHz with 0 unique locations.

## Exhibit A: Service Plans

VRFutureNet  
High Speed Internet

A Member of Cirra Networks

HOME | RATE PLANS | COVERAGE | WEBMAIL | CONTACT US

rate plans

residential wireless service				
Plan	24 month service plan		no service plan	
	Install	Monthly	Install	Monthly
Connect 10	\$299.99	\$39.99	\$399.99	\$44.99
Connect 20	\$249.99	\$49.99		\$54.99
Connect 30	\$199.99	\$59.99		\$64.99
Connect 40	\$149.99	\$69.99		\$74.99

small business/business standard wireless service

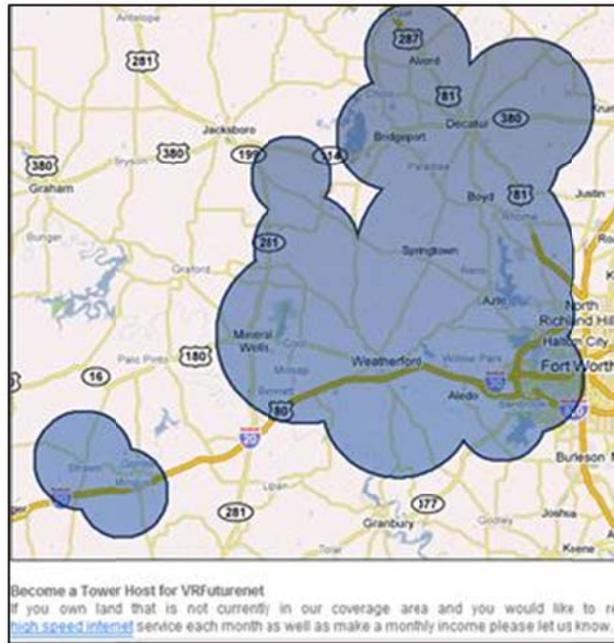
business professional wireless service

sign up now

### Plans speed offerings per phone call into customer service:

- Connect 10\_512/256Kbps
- Connect 20\_1Mbps/384Kbps
- Connect 30\_1.5Mbps/512Kbps
- Connect 40\_2Mbps/768Kbps

## Exhibit B: Service Area



## Exhibit C: Federal Registration Number

FCC Registration System - Microsoft Internet Explorer provided by ConnectKentucky

Address: <https://fjallfoss.fcc.gov/coresWeb>

Search: [Google] Sign In

Favorites: Suggested Sites Web Slice Gallery 3650 MHz Quick Look ADP ezLaborManager - Client...

FCC Registration System

[Close Window](#)

Registration Detail	
FRN:	0018547935
Registration Date:	02/26/2009 11:28:00 AM
Last Updated:	02/26/2009 12:15:17 PM
Business Name:	VRFuturenet
Business Type:	Private Sector , Partnership
Contact Organization:	VRFuturenet
Contact Position:	Partner
Contact Name:	Mr Scotty D Rice
Contact Address:	109 Thompson Rd Weatherford, TX 76087 United States
Contact Email:	scotty@vrffmail.com
ContactPhone:	(817) 771-1415
ContactFax:	

Done Internet 100%

## Exhibit D: WQKD375 License Reference

**License Search - Search Results** - Microsoft Internet Explorer provided by ConnectKentucky

http://wireless2.fcc.gov/UsApp/LicenseSearch/results.jsp?SESSIONID\_LL3SEARCH=3bc3Q84G5VTQ16cD9WfG7P1TnW4L244nqyv7759tY4c9H3-1335633619-2110126400

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

### Universal Licensing System

FCC > ULS > ULS > Online Systems > License Search

License Search  
**Search Results**

[New Search](#) | [Refine Search](#) | [Printable Page](#) | [Query Download](#) | [Map License](#)

**Specified Search**  
 FRN like 0018547935  
 Matches 1 - 1 (of 1)

Pending Application(s)  
 Termination Pending  
 Lease

Page 1

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1 WQKD375	VRFuturenet	0018547935	NN	Active	04/07/2019

Page 1

[ULS Help](#) | [ULS Glossary](#) | [FAQ](#) | [Online Help](#) | [Technical Support](#) | [Licensing Support](#)  
[ULS Online Systems](#) | [COBES](#) | [ULS Online Filing](#) | [License Search](#) | [Application Search](#) | [Archive License Search](#)

**ULS License - 3650-3700 MHz License - WQKD375 - VRFuturenet - Locations Summary** - Microsoft Internet Explorer provided by Conne

http://wireless2.fcc.gov/UsApp/LicenseSearch/locsum.jsp?key=5092642

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

### Universal Licensing System

FCC > ULS > ULS > Online Systems > License Search

3650-3700 MHz License - WQKD375 - VRFuturenet

**Locations Summary**

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

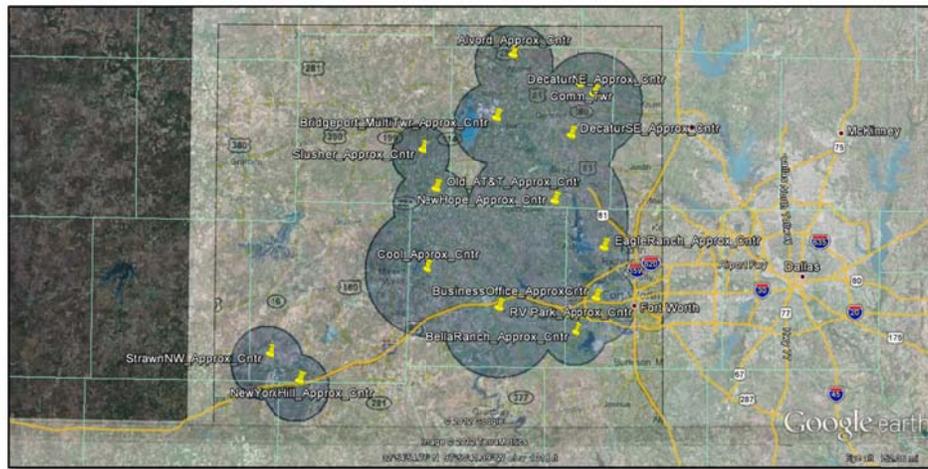
MAIN	ADMIN	LOCATIONS
Call Sign	WQKD375	Radio Service
		NW - 3650-3700 MHz
0 Total Locations 10 Locations per Summary Page		
No Locations		
0 Total Locations 10 Locations per Summary Page		

[ULS Help](#) | [ULS Glossary](#) | [FAQ](#) | [Online Help](#) | [Technical Support](#) | [Licensing Support](#)  
[ULS Online Systems](#) | [COBES](#) | [ULS Online Filing](#) | [License Search](#) | [Application Search](#) | [Archive License Search](#)  
[About ULS](#) | [Privacy Statement](#) | [About ULS](#) | [ULS Home](#)

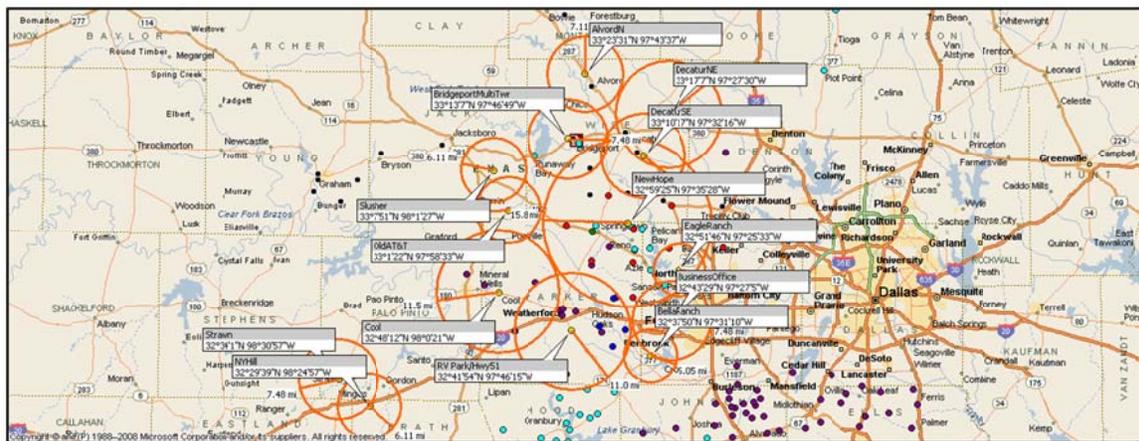
### Preliminary Identification of Provider's Coverage Area

Connected Nation extracted the VRFuturenet's service area map from the provider's website. The website service area 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 .1 mile (528 ft.) to establish a minimum search criterion of a potential wireless access point. The provider's service area depiction is represented by a composite of concentric circles as shown in Exhibit B. Estimated center points were established measuring from the outer radius of the circles as shown in Exhibit E. Using the approximated center points, the zoom function with the Google Earth application was utilized to identify structures that could possibly be serving as wireless transmit sites and/or access points. The information was logged and used as a reference for the field validation exercise necessary to conduct site verification or to locate and isolate transmit sites. Fourteen (14) locations were entered into Microsoft *Streets & Trips* mapping application (**Exhibit F**) to develop a route for the validation process. Also, the area is heavily served by other WISPs; therefore, all participating providers' "reported" access points were entered into Microsoft *Streets & Trips* to serve as a differentiator against potential VRFuturenet access points.

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



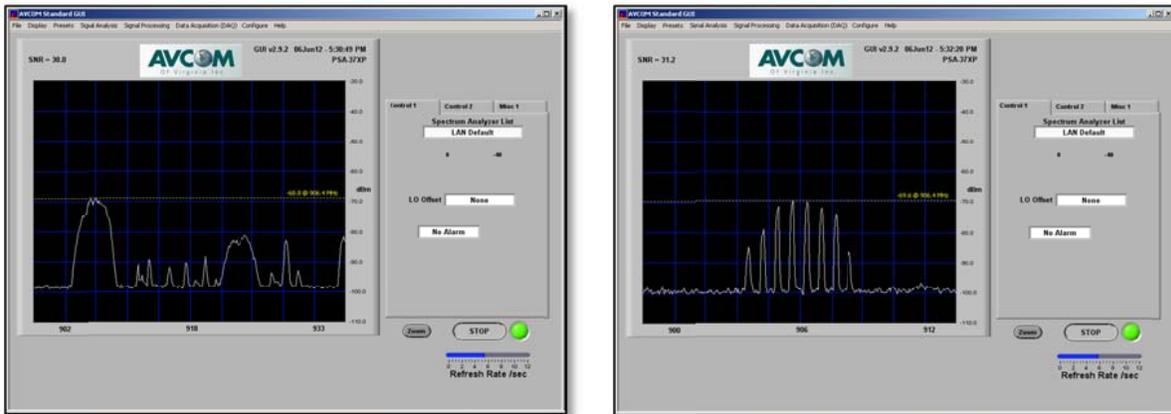
**Exhibit F: Validation Points for AP Structures**



## Testing Techniques

Connected Nation staff developed a site validation route based on data established with the Google Earth image overlay and publicly available data. 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 sectored) and photographs were taken of the access points.

**Exhibit G: Field Data for VRFuturenet Hwy 51 Site - 900 MHz Location**



Provider	Location	Latitude	Longitude	Frequency Availability				Structure	Approximate Antenna Height	Notes
VRFuturenet	VRF_Hwy51	32.39 49N	97.48 0W	X				Rohn	190 ft.	Sectored 900MHz with multiple backhaul antennas. Private property.
VRFuturenet	RVPark/Hwy51 Center Point	32°41'54"N	97°46'15"W							Google Earth View-no structure observed in immediate area.



## Results and Submission for October 2012

Of the 14 locations visited during the validation point and site verification route, 8 access points were positively identified and relative information was logged into the VRFuturenet field validation notes file (**Exhibit H**). The field and the publicly available data were transferred to the Connected Nation Provider Information file. A composite propagation study was completed based on the field data (**Exhibit I**). Both documents were forwarded to VRFuturenet and the provider was advised that the information would be submitted to Connected Texas and to the NTIA unless a response was received within 48 hours pointing out necessary edits, decommissioned tower sites, or other potential discrepancies of the estimated coverage area. No such response was received from VRFuturenet. Connected Nation staff will continue outreach to engage voluntary participation. In the interim the area will be revisited by Connected Nation engineering staff to obtain additional data to encompass the full extent of the publicly available coverage as identified on VRFuturenet's website.

**Exhibit H: Field Validation Notes**

Location	Latitude	Longitude	Frequency			Structure	Approximate Antenna Height	Notes
			900MHz	2.4GHz	5GHz			
VRF_NY Hill	32 29 55N	98 24 38W		X		Rohn on Bldg	120 ft.	SSID identified on channel 1; identified structure in distance (private property) via RF analysis with directional antenna.
NVHill Center Point	32°29'39"N	98°24'57"W						Google Earth View-no structure observed in immediate area.
VRF_Cool	32 47 35N	98 0 56W		X		Rohn	140 ft.	Omni antenna. SSID channel 4. Private property.
Cool Center Point	32°48'12"N	98°0'21"W						Google Earth View-no structure observed in immediate area.
VRF_Hwy51	32 39 49N	97 48 0W	X			Rohn	190 ft.	Secored 900MHz with multiple backhaul antennas. Private property.
RVPark/Hwy51 Center Point	32°41'54"N	97°46'15"W						Google Earth View-no structure observed in immediate area.
VRF_Bella Ranch	32 37 50N	97 31 10W		X				SSID identified on channel 9; assumed 120 ft. structure for propagation purpose. Could not get a fix on a tower due to unsafe conditions on highway.
Bella Ranch Center Point	32°37'50"N	97°31'10"W						Google Earth View-no structure observed in immediate area.
VRF_Bus Office	32 43 29N	97 27 5W		X		Rohn on Bldg	70 ft.	Omni antenna. VRFuturenet business/customer service office.
BusinessOffice Center point	32°43'29"N	97°27'5"W						Google Earth View-Rohn structure on roof.
VRF_Eagle Ranch	32 52 44N	97 25 34W		X		Water Tower	150 ft.	Omni antenna.
Eagle Ranch Center Point	32°51'46"N	97°25'33"W						Google Earth View-multiple structures observed in the area.
VRF_Decatur SE	33 10 7N	97 32 48W			X	Free Standing	130 ft.	Secored antennas. 5.6GHz
Decatur SE Center point	33°10'17"N	97°32'16"W						Google Earth View-towers distant from center point.
VRF_New Hope	32 58 23N	97 32 48W		X		Water Tank (tripod mnt)	60 ft.	Secored antennas.
New Hope Center point	32°58'25"N	97°35'28"W						Google Earth View-no structure observed in immediate area.
Old AT&T Center Point	33°1'22"N	97°58'33"W						No RF or structure association for VRFuturenet identified. Google Earth View-old AT&T microwave tower structure.
Slusher Center Point	33°7'51"N	98°1'27"W						No RF or structure association for VRFuturenet identified. Google Earth View-no structure observed in immediate area.
Bridgeport Center Point	33°13'7"N	97°46'49"W						No RF or structure association for VRFuturenet identified; Identified Digital Passage in proximity. Google Earth View-multiple towers in the area.
Alvord N Center Point	33°23'31"N	97°43'37"W						No RF or structure association for VRFuturenet identified; Identified Digital Passage in proximity. Google Earth View-no structure observed in immediate area.
Decatur NE Center Point	33°17'7"N	97°27'30"W						No RF or structure association for VRFuturenet identified. Identified Digital Passage in immediate area. Google Earth View-communications tower.
Strawn Center Point	32°34'1"N	98°30'57"W						No RF or structure association for VRFuturenet identified. Google Earth View-no structure observed in immediate area.



## ZULU INTERNET, INC.

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 broadband provider, regardless of whether the provider has chosen to support and participate in the SBI program.

The following narrative provides detail regarding the recent data collection and coverage estimation activities related to Zulu Internet, Inc., a wireless Internet service provider (WISP), located in Paris, Texas, with a service area within Fannin and Lamar counties. The narrative will include information regarding how and where CN obtained publicly available data and the on-the-ground validation techniques that support the underlying data.

### **October 2012 Submission Commentary**

Connected Nation created this coverage estimation document during the April 2012 submission period as a result of the ongoing non-participatory status of the provider. In addition to the 14 instances of e-mail and/or telephone communication leading up to the April 2012 submission period (as previously reported), CN made 4 additional attempts to contact the provider during this mapping cycle. On August 12, 2012, the estimated coverage map (**Exhibit I**) which was produced during the April 2012 submission cycle was forwarded to the provider requesting review and comments. As of August 27, 2012, no replies were received from the provider.

CN closely monitored the provider's website to identify any changes in the coverage area or maximum advertised speeds but did not locate evidence of any recent changes. To that end, CN is resubmitting this coverage estimation narrative, substantially in its original format, and will continue to monitor the provider's website as well as ensure ongoing outreach until either the expiration of the SBI grant or until such time as the provider voluntarily contributes data.

### **Background**

CN staff members have continued trying to obtain the participation of the provider with 18 instances of communication via telephone and e-mail sessions from May 26, 2011, through August 27, 2012. The owner of the company was non-responsive to all telephone and e-mail outreach activity. Additionally, a CN staff member attempted to arrange an office meeting with the owner of Zulu Internet, Inc. to discuss the project firsthand and assist with gathering data for the access points. There were no return replies to the requested meeting.

### **The Issue**

Zulu Internet, Inc., by its lack of responsiveness since May 26, 2011, has predicated its unwillingness to participate in the Connected Texas broadband mapping initiative.

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

CN has built a file based on research information and, as time progressed, enriched the file with information obtained through the public domain and on-the-ground verification activities. For example, CN reviewed the provider's website (<http://www.zuluinternet.com/index.html>) to determine the residential service plans (**Exhibit A**) and the service area (**Exhibit B**) of the

provider's wireless network. A search for a Federal Registration Number (FRN) on the FCC **CO**mmission **RE**gistration **S**ystem (CORES) system yielded the following FRNs of 0021125265 and 0021129457 (**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 license WQOR870, under FRN 0021125265 (**Exhibit D**), Radio Service: NN-3650-3700 MHz with 0 active locations.

**Exhibit A: Service Plans**

# Zulu Internet

Toll-Free (877) 903-2777

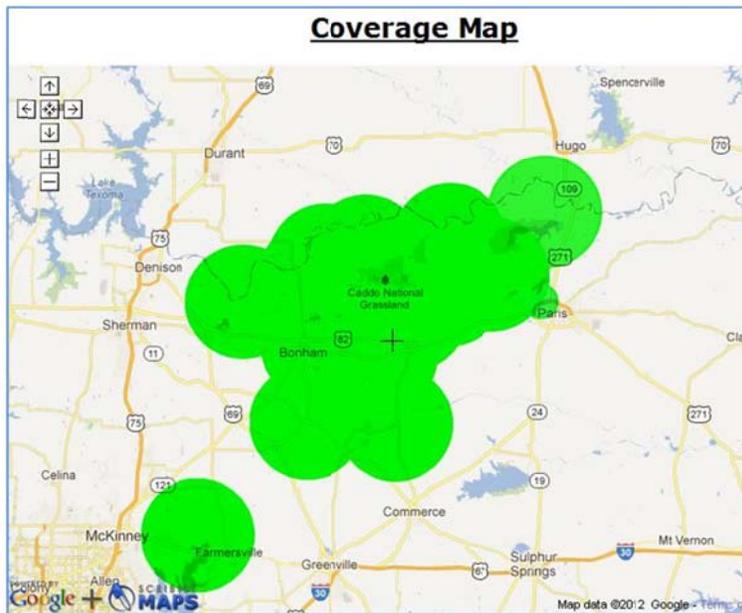
  

**Residential High-Speed Wireless Internet**

Speed	Basic J-Pole Installation & Equipment	Monthly Fee
1 Mbps	\$250.00	\$39.95
3 Mbps	\$250.00	\$59.95
6 Mbps	\$250.00	\$79.95
Add-On Options (not available separately)		Cost
Equipment Insurance		\$4.95/month
Wireless Router		\$35.00
50' Pole		\$150.00

**Business High-Speed Wireless Internet**

**Exhibit B: Service Area**



### Exhibit C: Federal Registration Numbers

Registration Detail	
FRN:	0021125265
Registration Date:	08/31/2011 11:54:00 PM
Last Updated:	02/08/2012 04:12:34 PM
Business Name:	Zulu Internet Inc
Business Type:	Private Sector , Corporation
Contact Organization:	
Contact Position:	General Manager
Contact Name:	Mr John N Harms
Contact Address:	2500 FM 79 STE3 Paris, TX 75460 United States
Contact Email:	
ContactPhone:	(903) 739-2777
ContactFax:	

Registration Detail	
FRN:	0021129457
Registration Date:	09/02/2011 03:34:00 PM
Last Updated:	
Business Name:	Zulu Internet Inc
Business Type:	Private Sector , Corporation
Contact Organization:	Zulu Internet Inc
Contact Position:	Director
Contact Name:	Mr John N Harms
Contact Address:	2500 Farm Road 79 Ste3 Paris, TX 75460 United States
Contact Email:	john@zuluinternet.com
ContactPhone:	(903) 739-2777
ContactFax:	(903) 739-2023

## Exhibit D: WQOR870 License Reference

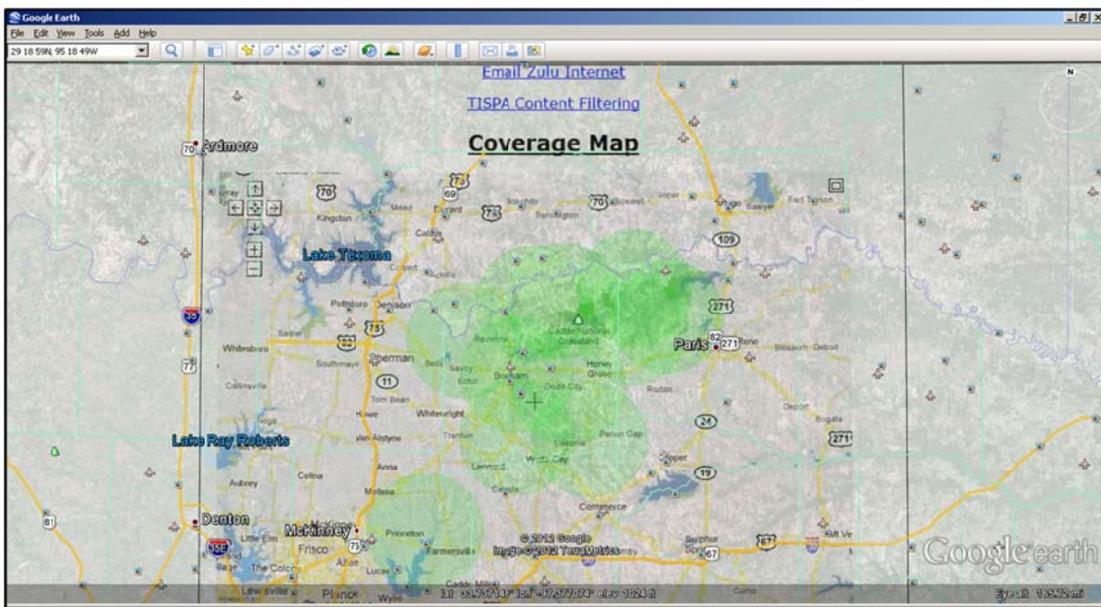
Specified Search					
FRN like <b>0021125265</b>					
Matches <b>1- 1</b> (of 1)					
					<small> <a href="#">PA</a> = Pending Application(s)  <a href="#">TP</a> = Termination Pending  <a href="#">L</a> = Lease                 </small>
Page 1					
Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1 <a href="#">WQOR870</a>	Zulu Internet Inc	0021125265	NN	Active	01/11/2022

Call Sign	WQOR870	Radio Service	NN - 3650-3700 MHz
<b>0</b> Total Locations	10 Locations per Summary Page		
<b>No Locations</b>			
<b>0</b> Total Locations	10 Locations per Summary Page		

### Preliminary Identification of Provider's Coverage Area

CN extracted the Zulu Internet, Inc. 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 .1 mile (528 ft.) to establish a minimum search criteria of a given wireless access point. The provider's service area depiction is represented by polygons 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 polygons. This process provided a means of establishing coordinates for 17 validation points to identify structures with operational equipment. All 17 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

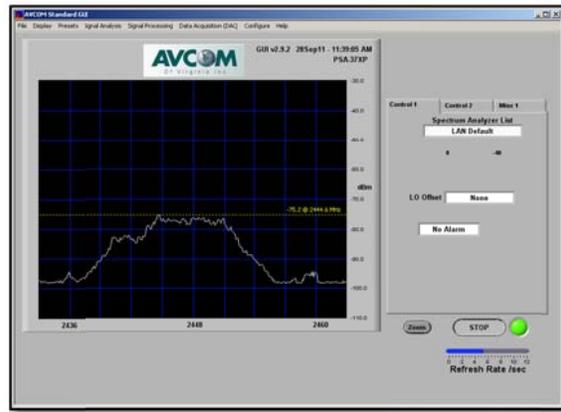
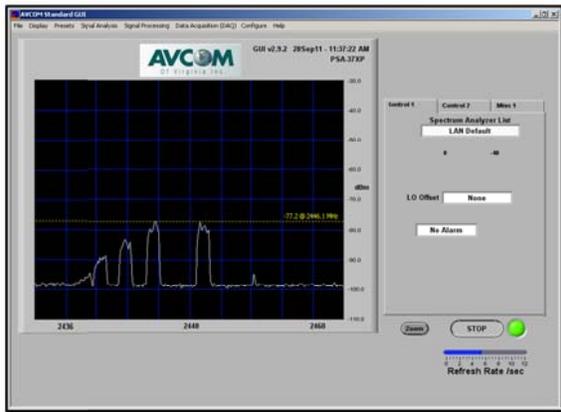




## Testing Techniques

CN staff developed a data collection and site validation route based on information derived from the Google Earth image overlay of Zulu Internet’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 sectored), and photographs were taken of the access points.

**Exhibit G: Field Data for Zulu Internet, Inc.’s Access Point/ Backhaul Hub Location**



Provider	Location	Latitude	Longitude	Frequency Availability	Structure	Approximate Antenna Height	Notes
				900MHz 2.4GHz 3.65GHz 5.0GHz			
	Ladonia Rohn Tower	33 25 35.96N	95 56 41.38W	X	Guyed Rohn	160ft.	Actual AP location identified. Serving AP with multiple BH.
ZuluInternet	Ladonia	33 25 35.96N	95 56 48.35W				GE-identified water tower structure. RF snapshot and site photos on file.

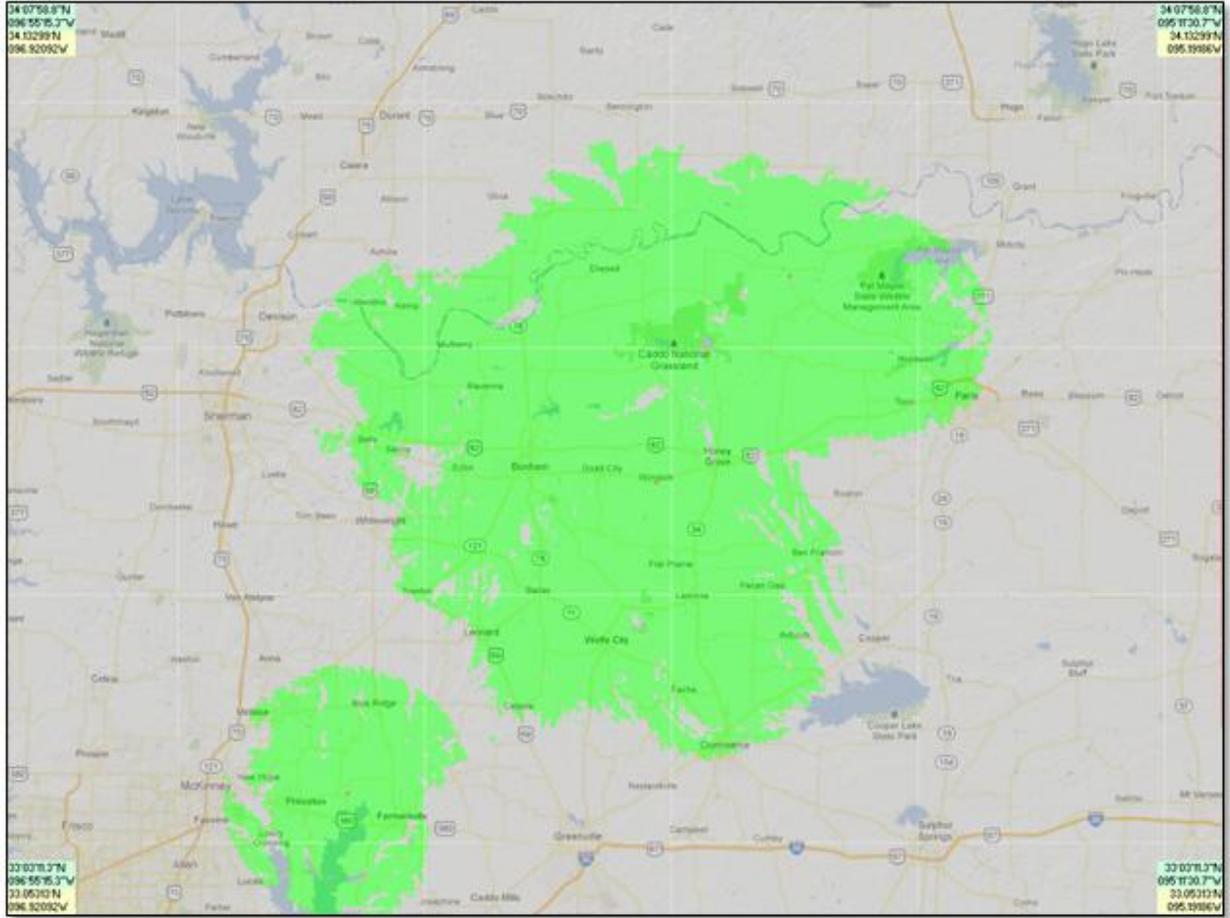
## Results and Submission for October 2012

Of the 17 locations previously visited during the coverage estimation and validation point route, 11 access points were identified and relative information was logged into the Zulu Internet, Inc. field validation notes file (**Exhibit H**). The field 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 Zulu Internet, Inc. as courtesy copies and the provider was advised that the estimated coverage information would be submitted to Connected Texas and to 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 believes the information to be an accurate estimation of the service area of Zulu Internet, Inc.

**Exhibit H: Field Validation Notes**

Location	Latitude	Longitude	Frequency		Structure	Approximate Antenna Height	Notes
			2.4GHz	5.0GHz			
Ladonia Rohn Tower	33 25 35.96N	95 56 41.38W	X		Guyed Rohn	160ft.	Actual AP location identified. Serving AP with multiple BH.
Ladonia	33 25 35.96N	95 56 48.35W					Identified water tower structure. RF snapshot and site photos on file.
Bailey Rohn Tower	33 25 57.45N	96 9 54.15	X		Guyed Rohn	120ft.	Actual AP location identified.
Bailey_Center Point	33 25 56.11N	96 9 56.94W					RF snapshot and site photos on file.
Bailey_Rohn Tower	33 25 57.66N	96 9 54.24W					Identified ROHN tower structure.
Telephone Rohn Tower	33 47 10N	96 1 5W	X		Guyed Rohn	160ft.	Actual AP location identified.
Telephone_Rohn Tower	33 46 46.82N	96 1 6.74W					Identified ROHN tower structure. RF snapshot and site photos on file.
Ivanhoe Comm Tower	33 46 2.05N	96 7 12.63W		5.7GHz	Comm Tower	110ft.	Actual AP location identified; tower FCC Reg#1272885
FM273/CR2245_Rayburn Schools	33 46 4.21N	96 6 13.42W					Identified 2 tower structures in the area. RF snapshot and site photos on file.
Ravenna Rohn Tower	33 40 54.18N	96 19 26.58W		5.7GHz	Guyed Rohn	160ft.	Actual AP location identified.
FM 1753_Texas Industries_Center Point	33 40 57.02N	96 19 58.78W					no identifiable structures.
FM 1753_Roving Point	33 41 15.97N	96 18 28.02W					RF snapshot and site photos on file.
Bonham Rohn Tower	33 35 23N	96 8 18W	X		Guyed Rohn	160ft.	AP location estimated; no close proximity access; private property. RF snapshot and site photos on file.
Bonham_Water Tower	33 36 33.67N	96 10 30.84W					Identified water tower.
Bonham_Center Point	33 36 11.66N	96 9 8.85W					near a Golf Club.
Bonham_Roving Point	33 35 23.28N	96 10 8.18W					
Princeton Comm Tower	33 11 47.8N	96 26 14.3W		5.7GHz	Comm Tower	180ft.	Actual AP location identified; tower FCC Reg#1237667
Princeton_Center Point	33 11 37.88N	96 26 22.95W					no identifiable structures.
Princeton_Roving Point	33 12 18.16N	96 26 3.84W					RF snapshot and site photos on file.
Windom Water Tower	33 33 54.61N	95 59 54.27W	X		Water Tower	150ft.	Actual AP location identified. RF snapshot and site photos on file.
Windom_Water Tower	33 33 54.61N	95 59 54.22W					Identified water tower structure.
Windom_Silo	33 33 54.59N	95 59 56.64W					Identified Silo structure.
FM38_CR35300 Rohn Tower	33 42 32.38N	95 48 35.91W		5.7GHz	Rohn Tower	160ft.	Actual AP location identified. RF snapshot and site photos on file.
FM 38_CR35300_Center Point	33 42 22.03N	95 48 40.73W					no identifiable structures.
FM 38_Silo	33 42 43.50N	95 49 15.80W					Identified Silo structure.
Globe_Water Tower	33 44 22.64N	95 42 7.67W		5.7GHz	Water Tower	150ft.	Identified AP structure during provider area validations and broadband inquiries. RF snapshot and site photos on file.
East Direct_ROHN Tower	33 48 34N	95 48 26W		5.2GHz	ROHN-Guide	160ft.	Identified AP structure during provider area validations and broadband inquiries. RF snapshot and site photos on file.

# Exhibit I: Zulu Internet, Inc. Composite Coverage



**APPENDIX B: BROADBAND PROVIDER LOG**

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## Broadband Provider Log

Complete	275
Non-Responsive/Refused	27
In Progress	3
Count of Datasets by Status	305
Total Unique Providers Represented	198

Provider Name	Platform	Status	NDA Execution Date	Notes
Speed of Light Broadband, Inc.	Fixed Wireless	Approval for Update Not Received - Data Still Submitted	11/3/2009	[AUG-29-12 Sarah Finne] Change: Network expansion (provider added 2 new towers to existing coverage).
Alenco Communications, Inc.	DSL	Data Added to Statewide Inventory	11/17/2009	[AUG-13-12 Sarah Finne] Change and Correction: Provider upgraded infrastructure and can now offer tier 5 download speeds in areas previously reported as tier 3, and Donie exchange should have been reported as FTTH only (therefore, this area has been removed from DSL coverage).
AT&T Communications of Texas, Inc.	DSL	Data Added to Statewide Inventory	12/16/2009	[AUG-30-12 Sarah Finne] Change/Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
AT&T Communications of Texas, Inc.	Mobile Wireless	Data Added to Statewide Inventory	12/16/2009	[AUG-22-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Big Bend Telephone Company, Inc.	Fixed Wireless	Data Added to Statewide Inventory	3/10/2010	[SEP-02-12 Sarah Finne] Change: Network expansion (provider added 12 new towers to existing coverage).
Burcham Solutions, LLC	Fixed Wireless	Data Added to Statewide Inventory	8/2/2012	[SEP-03-12 Sarah Finne] Correction: Burcham Solutions was previously non-responsive but provided data this round.
Cap Rock Telephone Cooperative, Inc.	DSL	Data Added to Statewide Inventory	3/4/2010	[AUG-31-12 Sarah Finne] Change: Network expansion (provider added an additional 3 remote terminals).
Central Texas Telephone Investments, LP	Fixed Wireless	Data Added to Statewide Inventory	4/22/2010	[AUG-30-12 Sarah Finne] Change: Network expansion (provider added 11 new towers to existing coverage).
CenturyLink	DSL	Data Added to Statewide Inventory	12/4/2009	[AUG-28-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Charter Communications, Inc.	Cable	Data Added to Statewide Inventory	12/15/2009	[AUG-29-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Cobridge Communications, LLC	Cable	Data Added to Statewide Inventory		[SEP-17-12 Ashley Hitt] Change: Fidelity acquired some of the former Cobridge service areas in early 2012; as of June 2012, the former Cobridge areas have been rebranded as Fidelity.
Coleman County Telephone Cooperative, Inc.	DSL	Data Added to Statewide Inventory	3/10/2010	[AUG-31-12 Sarah Finne] Change: Network expansion (provider added one new remote terminal).
Colorado Valley Telephone Cooperative, Inc.	Fixed Wireless	Data Added to Statewide Inventory	3/9/2010	[AUG-29-12 Sarah Finne] Change: Network expansion (provider added a tower to existing coverage).
Comcast Cable Communications, LLC	Cable	Data Added to Statewide Inventory	12/7/2009	[AUG-29-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Cumby Telephone Cooperative, Inc.	Fiber	Data Added to Statewide Inventory	3/5/2010	[AUG-30-12 Sarah Finne] Change: Network expansion.
Digital Passage, Inc.	Fixed Wireless	Data Added to Statewide Inventory		[AUG-30-12 Sarah Finne] Correction: Digital Passage was previously non-responsive but provided data this round.
Digitex.com	Fixed Wireless	Data Added to Statewide Inventory	5/25/2010	[SEP-05-12 Sarah Finne] Change and Correction: Provider installed new towers, and propagations were recreated for existing towers to more accurately portray provider footprint.
East Texas DSL	Fixed Wireless	Data Added to Statewide Inventory	5/25/2010	[AUG-29-12 Sarah Finne] Change: Network expansion (provider installed an additional fixed wireless tower).
Eastex Telephone Cooperative, Inc.	DSL	Data Added to Statewide Inventory	6/20/2011	[AUG-31-12 Sarah Finne] Change and Correction: Provider decommissioned some DSLAMs, added some new ones, and corrected the coordinates of some others.
Eastland Internet Inc	Fixed Wireless	Data Added to Statewide Inventory		[AUG-29-12 Sarah Finne] Correction: TXOL was previously non-responsive but provided data this round.

ERF Wireless	Fixed Wireless	Data Added to Statewide Inventory		[AUG-30-12 Sarah Finne] Change: Several towers were decommissioned and/or sold to other WISPs. New propagations were created to better represent current ERF service area.
Gtek Communications	Fixed Wireless	Data Added to Statewide Inventory	5/24/2010	[AUG-29-12 Sarah Finne] Change: Network expansion (provider added 4 fixed wireless towers to existing coverage).
Guadalupe Valley Communications Systems	DSL	Data Added to Statewide Inventory	11/23/2009	[SEP-07-12 Sarah Finne] Change: Network expansion.
Guadalupe Valley Communications Systems	Fiber	Data Added to Statewide Inventory	11/23/2009	[SEP-06-12 Sarah Finne] Change: Network expansion.
GVEC.net	Fixed Wireless	Data Added to Statewide Inventory	2/25/2010	[AUG-30-12 Sarah Finne] Change: Network expansion (provider added 3 new towers to existing coverage).
Hometown Computing	Fixed Wireless	Data Added to Statewide Inventory		[JUL-10-12 Amanda Bentley] Correction: Hometown Computing was previously non-responsive but provided data this round.
JAB Wireless, Inc.	Fixed Wireless	Data Added to Statewide Inventory	6/14/2010	[JUL-10-12 Dwayne Goodman] Change: JAB Wireless, Inc. acquired KeyOn Communications' assets and is now operating KeyOn's old fixed wireless towers.
James Cable LLC	Cable	Data Added to Statewide Inventory	1/11/2010	[AUG-31-12 Sarah Finne] Change: Provider decommissioned area south of Possum Kingdom Lake and increased the maximum download speeds in some areas to tier 6.
Leap Wireless International, Inc.	Mobile Wireless	Data Added to Statewide Inventory	4/6/2010	[AUG-13-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
LVWifi.com	Fixed Wireless	Data Added to Statewide Inventory		[AUG-27-12 Sarah Finne] Correction: Initial submission of provider's coverage, but they were in service previously.
MegaPath Inc.	DSL	Data Added to Statewide Inventory	2/15/2010	[AUG-30-12 Sarah Finne] Correction: Provider has proven they offer residential broadband services, therefore October 2012 is the initial submission for this provider.
MetroPCS Wireless, Inc.	Mobile Wireless	Data Added to Statewide Inventory	2/10/2012	[AUG-24-12 Amanda Bentley] Change: Network expansion and provider upgraded infrastructure and can now offer tier 4 download and upload speeds.
Mexus Communications	Fixed Wireless	Data Added to Statewide Inventory		[AUG-30-12 Sarah Finne] Correction: Mexus was previously non-responsive but provided data this round.
Millennium Telcom, LLC	Fixed Wireless	Data Added to Statewide Inventory	8/26/2010	[AUG-29-12 Sarah Finne] Change: Network expansion (provider added 4 additional fixed wireless towers to their existing coverage area).
Peoples Communication, Inc.	Fixed Wireless	Data Added to Statewide Inventory	3/4/2010	[AUG-30-12 Sarah Finne] Change: Provider launched new fixed wireless services (700 MHz LTE).
Poka Lambro Telephone Cooperative, Inc.	DSL	Data Added to Statewide Inventory	2/15/2010	[JUL-18-12 Amanda Bentley] Change: Network expansion (new DSLAMs added); provider also can now offer speed tier 7 and 8 download speeds.
Poka Lambro Telephone Cooperative, Inc.	Fiber	Data Added to Statewide Inventory	2/15/2010	[JUL-18-12 Amanda Bentley] Change: Network expansion.
Ridgewood Cable	Fixed Wireless	Data Added to Statewide Inventory		[SEP-05-12 Sarah Finne] Change and Correction: Provider added towers to existing coverage, and propagations were recreated for all existing towers using updated software.
Rock Solid Internet & Telephone	Fixed Wireless	Data Added to Statewide Inventory	2/14/2011	[AUG-30-12 Sarah Finne] Change: Network expansion (provider added 6 new towers to existing coverage).
Skynet Country, LLC	Fixed Wireless	Data Added to Statewide Inventory		[AUG-30-12 Sarah Finne] Change: Network expansion (provider added 6 new towers to existing coverage).
SOS Communications LLC	Fixed Wireless	Data Added to Statewide Inventory		[AUG-13-12 Sarah Finne] Correction: SOS Communications was previously non-responsive but provided data this round.
South Plains Telephone Cooperative, Inc.	Fiber	Data Added to Statewide Inventory	3/15/2010	[SEP-02-12 Sarah Finne] Change: Network expansion.
Southwest Texas Telephone Company	DSL	Data Added to Statewide Inventory	3/3/2010	[AUG-13-12 Amanda Bentley] Change: Network expansion.
Spacenet Inc.	Satellite	Data Added to Statewide Inventory		[SEP-05-12 Sarah Finne] Correction: Initial submission of provider's coverage, but they were in service previously.
Sprint Nextel Corporation	Mobile Wireless	Data Added to Statewide Inventory	1/14/2010	[JUL-19-12 Sarah Finne] Change and/or Correction: 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-24-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Texas CellNet, Inc.	Fixed Wireless	Data Added to Statewide Inventory	2/17/2011	[AUG-30-12 Sarah Finne] Change and/or Correction: Provider submitted entirely new dataset, with more precise coordinates, for the October 2012 submission.

Time Warner Cable LLC	Cable	Data Added to Statewide Inventory	12/21/2009	[AUG-29-12 Sarah Finne] Change and/or Correction: 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-13-12 Sarah Finne] Change: Provider submitted additional data with increased speed offerings.
Verizon Southwest, Inc.	DSL	Data Added to Statewide Inventory	12/14/2009	[AUG-28-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Verizon Southwest, Inc.	Fiber	Data Added to Statewide Inventory	12/14/2009	[AUG-28-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
Verizon Southwest, Inc.	Mobile Wireless	Data Added to Statewide Inventory	12/14/2009	[JUL-19-12 Sarah Finne] Change and/or Correction: 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-15-12 Sarah Finne] Change and/or Correction: Possible service expansion or corrections to previous dataset; entirely new dataset provided for October 2012 submission.
WEHCo Video, Inc.	Cable	Data Added to Statewide Inventory		[JUL-17-12 Amanda Bentley] Change: Network expansion.
West Texas Rural Telephone Cooperative, Inc.	DSL	Data Added to Statewide Inventory	3/31/2010	[AUG-30-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds in Friona and Bovina. Rural telephone area now upgraded to qualify as broadband, with download speeds of 6M, therefore network expansion since last submission.
XIT Telecommunications & Technology, Ltd.	DSL	Data Added to Statewide Inventory	3/2/2010	[AUG-07-12 Amanda Bentley] Change: 6 DSLAM locations were removed due to network being upgraded to FTTH.
XIT Telecommunications & Technology, Ltd.	Fiber	Data Added to Statewide Inventory	3/2/2010	[JUL-24-12 Amanda Bentley] Change: Network expansion.
Alenco Communications, Inc.	Backhaul	Backhaul Provider Only Processing Complete	11/17/2009	
Burcham Solutions, LLC	Backhaul	Backhaul Provider Only Processing Complete	8/2/2012	
Conterra Ultra Broadband, LLC	Backhaul	Backhaul Provider Only Processing Complete		
MegaPath Inc.	Backhaul	Backhaul Provider Only Processing Complete	2/15/2010	
Verizon Southwest, Inc.	Backhaul	Backhaul Provider Only Processing Complete	12/14/2009	
Alenco Communications, Inc.	Fiber	Speed Only Update; Data Processing Complete	11/17/2009	[AUG-13-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 4 download speeds in the exchange that was previously submitted as tier 3.
Baja Broadband Holding Company	Cable	Speed Only Update; Data Processing Complete		[SEP-10-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 10 download and tier 7 upload speeds in all four TX markets.
Colorado Valley Telephone Cooperative, Inc.	DSL	Speed Only Update; Data Processing Complete	3/9/2010	[AUG-29-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 5 download speeds.
Our-Town Internet Services, LLC	Fixed Wireless	Speed Only Update; Data Processing Complete	3/31/2010	[AUG-29-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 6 download speeds.
Valley Telephone Cooperative, Inc.	DSL	Speed Only Update; Data Processing Complete	11/24/2009	[AUG-13-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 5 download speeds.
West Texas Rural Telephone Cooperative, Inc.	Cable	Speed Only Update; Data Processing Complete	3/31/2010	[AUG-31-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds.
West Texas Rural Telephone Cooperative, Inc.	Fiber	Speed Only Update; Data Processing Complete	3/31/2010	[AUG-31-12 Sarah Finne] Change: Provider upgraded infrastructure and can now offer tier 7 download speeds.
CKS Wireless, Inc.	Fixed Wireless	No Update-Estimated Coverage Submitted for Non-Participating Provider		
East Texas Broadband	Fixed Wireless	No Update-Estimated Coverage Submitted for Non-Participating Provider		
GoZoe Wireless, LLP	Fixed Wireless	No Update-Estimated Coverage Submitted for Non-Participating Provider		
Zulu Internet, Inc.	Fixed Wireless	No Update-Estimated Coverage Submitted for Non-Participating Provider		
AMA TechTel	Fixed Wireless	Updated-Estimated Coverage Submitted for Non-Participating Provider		[SEP-11-12 Sarah Finne] Change: Updated-Estimated Coverage Submitted for Non-Participating Provider. Five new towers, found during field audit, added to existing estimated coverage.
Broadwaves	Fixed Wireless	Updated-Estimated Coverage Submitted for Non-Participating Provider		[SEP-11-12 Sarah Finne] Change: Updated-Estimated Coverage Submitted for Non-Participating Provider. New propagations created to conform with provider's new website depiction.
Anvil Communications	Fixed Wireless	Estimated Coverage Submitted for Non-Participating Provider		[AUG-29-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.
East Texas Cable	Cable	Estimated Coverage Submitted for Non-Participating Provider		[AUG-13-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.

NDemand, Inc.	Fixed Wireless	Estimated Coverage Submitted for Non-Participating Provider		[AUG-13-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.
Skynet Communications	Fixed Wireless	Estimated Coverage Submitted for Non-Participating Provider		[AUG-13-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.
Starnet Online Systems	Fixed Wireless	Estimated Coverage Submitted for Non-Participating Provider		[SEPT-07-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.
Telecom Cable, LLC	Cable	Estimated Coverage Submitted for Non-Participating Provider		[AUG-13-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.
TheSPECnet, Inc.	Fixed Wireless	Estimated Coverage Submitted for Non-Participating Provider		[AUG-27-12 Sarah Finne] Correction: Estimated Coverage Submitted for Non-Participating Provider.
VRFuturenet	Fixed Wireless	Estimated Coverage Submitted for Non-Participating Provider		[AUG-13-12 Sarah Finne] Correction: Estimated coverage submitted for non-participating provider.
Aledo Broadband	Backhaul	No Update to Provide	3/26/2010	
Aledo Broadband	Fixed Wireless	No Update to Provide	3/26/2010	
Alenco Communications, Inc.	Fixed Wireless	No Update to Provide	11/17/2009	
Allegiance Communications	Cable	No Update to Provide	2/4/2010	
Alpheus Communications, L.P.	Backhaul	No Update to Provide		
Argon Technologies	Fixed Wireless	No Update to Provide		
AT&T Communications of Texas, Inc.	Backhaul	No Update to Provide	12/16/2009	
AwesomeNet, Inc.	Fixed Wireless	No Update to Provide		
Basin 2 Way Radio, Inc.	Fixed Wireless	No Update to Provide	4/14/2010	
Bee Creek Communications	Fixed Wireless	No Update to Provide	5/21/2010	
Big Bend Telephone Company, Inc.	Backhaul	No Update to Provide	3/10/2010	
Big Bend Telephone Company, Inc.	DSL	No Update to Provide	3/10/2010	
Big Bend Telephone Company, Inc.	Fiber	No Update to Provide	3/10/2010	
Big Bend Telephone Company, Inc.	Satellite	No Update to Provide	3/10/2010	
Border to Border Communications, Inc.	DSL	No Update to Provide	2/20/2012	
Border to Border Communications, Inc.	Fiber	No Update to Provide	2/20/2012	
Border to Border Communications, Inc.	Fixed Wireless	No Update to Provide	2/20/2012	
Brazoria Telephone Company	Cable	No Update to Provide	6/17/2010	
Brazoria Telephone Company	DSL	No Update to Provide	6/17/2010	
Broadband Data Services of Texas, LLC	Fixed Wireless	No Update to Provide	4/29/2010	
Broadcomm.US	Fixed Wireless	No Update to Provide	3/9/2011	
Buffalo Cable TV	Cable	No Update to Provide		
Cable ONE Inc.	Cable	No Update to Provide	12/7/2009	
Cameron Telephone Company, LLC	Backhaul	No Update to Provide	3/18/2010	
Cameron Telephone Company, LLC	DSL	No Update to Provide	3/18/2010	
Cap Rock Telephone Cooperative, Inc.	Backhaul	No Update to Provide	3/4/2010	
Cap Rock Telephone Cooperative, Inc.	Fiber	No Update to Provide	3/4/2010	
Cap Rock Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	3/4/2010	
Celltex Networks, LLC	Fixed Wireless	No Update to Provide		
Central Texas Cable Partners, Inc.	Cable	No Update to Provide	2/22/2010	
Central Texas Telephone Cooperative, Inc.	DSL	No Update to Provide	3/2/2010	
Central Texas Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	3/2/2010	
CenturyLink	Backhaul	No Update to Provide	12/4/2009	
CenturyLink	Backhaul	No Update to Provide	12/4/2009	
Clearwire Corporation	Fixed Wireless	No Update to Provide	3/3/2010	
Clearwire Corporation	Mobile Wireless	No Update to Provide	3/3/2010	
Coleman County Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	3/10/2010	
Community Telephone Company, Inc.	Backhaul	No Update to Provide	3/10/2010	
Community Telephone Company, Inc.	DSL	No Update to Provide	3/10/2010	
Connexions Telcom	DSL	No Update to Provide	3/2/2011	
Connexions Telcom	Fiber	No Update to Provide	3/2/2011	
Consolidated Communications	DSL	No Update to Provide	11/30/2009	
Consolidated Communications	Fiber	No Update to Provide	11/30/2009	
Cumby Telephone Cooperative, Inc.	DSL	No Update to Provide	3/5/2010	
Dell Telephone Cooperative, Inc.	Backhaul	No Update to Provide	4/6/2010	
Dell Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	4/6/2010	
DigiComm Enterprises, LLC	Fixed Wireless	No Update to Provide	6/15/2010	
Digitex.com	Backhaul	No Update to Provide	5/25/2010	
East Texas WiFi	Fixed Wireless	No Update to Provide		
Electra Telephone Company	DSL	No Update to Provide	11/24/2009	
ENMR Telephone Cooperative, Inc.	Backhaul	No Update to Provide	4/22/2010	
ENMR Telephone Cooperative, Inc.	DSL	No Update to Provide	4/22/2010	
ENMR Telephone Cooperative, Inc.	Fiber	No Update to Provide	4/22/2010	
ETAN Industries	Cable	No Update to Provide		
ETEX Communications, LP	Backhaul	No Update to Provide	2/25/2010	
ETEX Communications, LP	DSL	No Update to Provide	2/25/2010	
ETEX Communications, LP	Fiber	No Update to Provide	2/25/2010	
ETS Cablevision Co., Inc.	Cable	No Update to Provide	10/30/2009	
ETS Cablevision Co., Inc.	Fiber	No Update to Provide	10/30/2009	
Farm to Market Broadband LP	Fixed Wireless	No Update to Provide	4/16/2010	
Five Area Telephone Cooperative, Inc.	DSL	No Update to Provide	3/8/2010	
Five Area Telephone Cooperative, Inc.	Fiber	No Update to Provide	3/8/2010	
Ganado Telephone Company, Inc.	DSL	No Update to Provide	11/16/2009	
GEUS	Cable	No Update to Provide		
Gilmer Cable Television Company, Inc.	Cable	No Update to Provide	6/18/2010	
Gower Computer Support, Inc.	Fixed Wireless	No Update to Provide	2/14/2011	
Grande Communications Networks LLC	Cable	No Update to Provide	3/31/2010	
Grayson CableRocket, LLC	Cable	No Update to Provide	6/15/2010	
Gtek Communications	Backhaul	No Update to Provide	5/24/2010	
Guadalupe Valley Communications Systems	Cable	No Update to Provide	11/23/2009	
GVEC.net	Backhaul	No Update to Provide	2/25/2010	
Helmsco, Inc.	Fixed Wireless	No Update to Provide	2/15/2010	
Hill Country Telephone Cooperative, Inc.	Backhaul	No Update to Provide	3/9/2011	
Hill Country Telephone Cooperative, Inc.	DSL	No Update to Provide	3/9/2011	
Hill Country Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	3/9/2011	
Hughes Network Systems, LLC	Satellite	No Update to Provide	2/5/2010	

IGN-LPG Enterprises LLC	Fixed Wireless	No Update to Provide	2/17/2011
Industry Telephone Company	DSL	No Update to Provide	11/6/2009
James Cable LLC	Fixed Wireless	No Update to Provide	1/11/2010
La Ward Telephone Exchange, Inc.	DSL	No Update to Provide	11/16/2009
Lake Livingston Telephone Company, Inc.	DSL	No Update to Provide	11/20/2009
Livingston Telephone Company, Inc.	Backhaul	No Update to Provide	2/25/2010
Livingston Telephone Company, Inc.	DSL	No Update to Provide	2/25/2010
Maverick Internet	Backhaul	No Update to Provide	6/4/2010
Maverick Internet	Fixed Wireless	No Update to Provide	6/4/2010
McDonald Group	Cable	No Update to Provide	3/5/2010
Mid-Plains Rural Tel. Co-op. Inc.	Backhaul	No Update to Provide	3/5/2010
Mid-Plains Rural Tel. Co-op. Inc.	DSL	No Update to Provide	3/5/2010
Mid-Plains Rural Tel. Co-op. Inc.	Fiber	No Update to Provide	3/5/2010
Millennium Telcom, LLC	Cable	No Update to Provide	8/26/2010
Millennium Telcom, LLC	DSL	No Update to Provide	8/26/2010
Millennium Telcom, LLC	Fiber	No Update to Provide	8/26/2010
NetWest Online, Inc.	Fixed Wireless	No Update to Provide	2/23/2010
Neu Ventures, Inc.	Backhaul	No Update to Provide	6/17/2010
Neu Ventures, Inc.	Cable	No Update to Provide	6/17/2010
Neu Ventures, Inc.	Fixed Wireless	No Update to Provide	6/17/2010
Nextlink Wireless, Inc.	Backhaul	No Update to Provide	2/12/2010
Nortex Communications	Backhaul	No Update to Provide	2/12/2010
Nortex Communications	Cable	No Update to Provide	2/12/2010
Nortex Communications	DSL	No Update to Provide	2/12/2010
Nortex Communications	Fiber	No Update to Provide	2/12/2010
Nortex Communications	Fixed Wireless	No Update to Provide	2/12/2010
North Texas Cellular, Inc.	DSL	No Update to Provide	3/22/2010
North Texas Telephone Company	DSL	No Update to Provide	11/30/2009
NTS Communications	DSL	No Update to Provide	
Panhandle Telephone Cooperative, Inc.	Backhaul	No Update to Provide	12/7/2009
Panhandle Telephone Cooperative, Inc.	Cable	No Update to Provide	12/7/2009
Panhandle Telephone Cooperative, Inc.	DSL	No Update to Provide	12/7/2009
Panhandle Telephone Cooperative, Inc.	Fiber	No Update to Provide	12/7/2009
Panhandle Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	12/7/2009
Panhandle Telephone Cooperative, Inc.	Mobile Wireless	No Update to Provide	12/7/2009
Pathwayz Communications, Inc.	DSL	No Update to Provide	12/9/2011
Pathwayz Communications, Inc.	Fixed Wireless	No Update to Provide	12/9/2011
Peoples Communication, Inc.	Backhaul	No Update to Provide	3/4/2010
Peoples Communication, Inc.	DSL	No Update to Provide	3/4/2010
Poka Lambro Telephone Cooperative, Inc.	Backhaul	No Update to Provide	2/15/2010
Poka Lambro Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	2/15/2010
Promptwireless, LLP	Fixed Wireless	No Update to Provide	4/27/2010
Pulsestream Internet Services, LLC	Backhaul	No Update to Provide	6/2/2011
RB3, LLC	Cable	No Update to Provide	10/23/2009
RB3, LLC	Fixed Wireless	No Update to Provide	10/23/2009
Rioplex Wireless LTD	Fixed Wireless	No Update to Provide	3/3/2010
Riviera Telephone Company, Inc.	Backhaul	No Update to Provide	3/11/2010
Riviera Telephone Company, Inc.	DSL	No Update to Provide	3/11/2010
RodZoo Wireless	Fixed Wireless	No Update to Provide	
Santa Rosa Telephone Cooperative, Inc.	Backhaul	No Update to Provide	3/9/2010
Santa Rosa Telephone Cooperative, Inc.	DSL	No Update to Provide	3/9/2010
Santa Rosa Telephone Cooperative, Inc.	Fiber	No Update to Provide	3/9/2010
Santa Rosa Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	3/9/2010
South Plains Telephone Cooperative, Inc.	Backhaul	No Update to Provide	3/15/2010
South Plains Telephone Cooperative, Inc.	DSL	No Update to Provide	3/15/2010
Southwest Arkansas Telephone Cooperative, Inc.	Backhaul	No Update to Provide	1/19/2010
Southwest Arkansas Telephone Cooperative, Inc.	DSL	No Update to Provide	1/19/2010
Southwest Texas Telephone Company	Backhaul	No Update to Provide	3/3/2010
Southwest Texas Telephone Company	Fiber	No Update to Provide	3/3/2010
Southwest Texas Telephone Company	Fixed Wireless	No Update to Provide	3/3/2010
Sprint Nextel Corporation	Backhaul	No Update to Provide	1/14/2010
Stelera Wireless, LLC	Mobile Wireless	No Update to Provide	
T-Mobile USA, Inc.	Backhaul	No Update to Provide	1/8/2010
Tatum Telephone Company	DSL	No Update to Provide	11/24/2009
Taylor Telephone Cooperative, Inc.	Backhaul	No Update to Provide	3/11/2010
Taylor Telephone Cooperative, Inc.	DSL	No Update to Provide	3/11/2010
Taylor Telephone Cooperative, Inc.	Fiber	No Update to Provide	3/11/2010
Texas Broadband, Inc.	Fixed Wireless	No Update to Provide	5/12/2010
Texas Wireless Internet	Fixed Wireless	No Update to Provide	5/14/2010
Texhoma Wireless, L.L.C.	Fixed Wireless	No Update to Provide	3/8/2011
Time Warner Cable LLC	Backhaul	No Update to Provide	12/21/2009
Totelcom Communications, LLC	DSL	No Update to Provide	11/30/2009
Totelcom Communications, LLC	Fixed Wireless	No Update to Provide	11/30/2009
tw telecom of texas, llc	Backhaul	No Update to Provide	3/10/2010
Valley Telephone Cooperative, Inc.	Backhaul	No Update to Provide	11/24/2009
Valley Telephone Cooperative, Inc.	Fiber	No Update to Provide	11/24/2009
Valley Telephone Cooperative, Inc.	Fixed Wireless	No Update to Provide	11/24/2009
Versalink Enterprises, LLC	Cable	No Update to Provide	5/11/2010
Web Fire Communications	DSL	No Update to Provide	
Wes-Tex Telecommunications, Ltd.	Backhaul	No Update to Provide	3/1/2010
Wes-Tex Telecommunications, Ltd.	Cable	No Update to Provide	3/1/2010
Wes-Tex Telecommunications, Ltd.	DSL	No Update to Provide	3/1/2010
Wes-Tex Telecommunications, Ltd.	Fixed Wireless	No Update to Provide	3/1/2010
West Texas Rural Telephone Cooperative, Inc.	Backhaul	No Update to Provide	3/31/2010
Wharton County Electric Cooperative, Inc.	Backhaul	No Update to Provide	4/15/2010
Wharton County Electric Cooperative, Inc.	Fixed Wireless	No Update to Provide	4/15/2010
Wireless Internet Corp	Fixed Wireless	No Update to Provide	11/11/2011
XO Communications, LLC	Backhaul	No Update to Provide	2/12/2010
Zeecon Wireless Internet, LLC	Fixed Wireless	No Update to Provide	
AirBand Communications, Inc.	Backhaul	No Update Provided - Use Last Submission Data	3/29/2010
Basin Broadband, Inc.	Fixed Wireless	No Update Provided - Use Last Submission Data	3/23/2010
Blossom Telephone Company, Inc.	DSL	No Update Provided - Use Last Submission Data	3/26/2010
Cequel Communications	Backhaul	No Update Provided - Use Last Submission Data	12/15/2009
Cequel Communications	Cable	No Update Provided - Use Last Submission Data	12/15/2009

Charter Communications, Inc.	Backhaul	No Update Provided - Use Last Submission Data	12/15/2009	
Cogent Communications, Inc.	Backhaul	No Update Provided - Use Last Submission Data		
CTX Unwired	Fixed Wireless	No Update Provided - Use Last Submission Data	2/14/2011	
Dell Telephone Cooperative, Inc.	DSL	No Update Provided - Use Last Submission Data	4/6/2010	
Dell Telephone Cooperative, Inc.	Fiber	No Update Provided - Use Last Submission Data	4/6/2010	
ECTISP, Inc.	Fixed Wireless	No Update Provided - Use Last Submission Data		
Enet Internet Services, LLC	Fixed Wireless	No Update Provided - Use Last Submission Data		
Greasy Bend Ventures, Inc.	Fixed Wireless	No Update Provided - Use Last Submission Data	8/16/2010	
Level 3 Communications, LLC	Backhaul	No Update Provided - Use Last Submission Data	12/14/2009	
North Texas Broadband, LLC	Cable	No Update Provided - Use Last Submission Data	3/1/2010	
Northland Communications	Cable	No Update Provided - Use Last Submission Data	8/19/2010	
NTS Communications	Fiber	No Update Provided - Use Last Submission Data		
SmartBurst, LLC	Fixed Wireless	No Update Provided - Use Last Submission Data	8/4/2010	
Smithville System	Fixed Wireless	No Update Provided - Use Last Submission Data	6/17/2010	
TGN Cable	Cable	No Update Provided - Use Last Submission Data	5/20/2010	
Tier One Converged Networks, Inc.	Fixed Wireless	No Update Provided - Use Last Submission Data	3/24/2010	
TISD, Inc.	Fixed Wireless	No Update Provided - Use Last Submission Data	4/19/2010	
Windjammer Communications LLC	Cable	No Update Provided - Use Last Submission Data	11/16/2009	
Windstream Communications	Backhaul	No Update Provided - Use Last Submission Data	1/19/2010	
Windstream Communications	DSL	No Update Provided - Use Last Submission Data	1/19/2010	
Zayo Bandwidth, LLC	Backhaul	No Update Provided - Use Last Submission Data		
Zito Midwest, LLC	Cable	No Update Provided - Use Last Submission Data	2/17/2011	
South Texas Internet	Fixed Wireless	Solicited Initial Data		
WesTex Connect Internet	Fixed Wireless	Solicited Initial Data		
Windstream Communications	DSL	Solicited Initial Data	1/19/2010	
281 Communications, Inc.	Fixed Wireless	Refused to Participate		[AUG-07-12 Dwayne Goodman] Provider has requested not to be contacted anymore in regard to the Connected Texas mapping project.
Buford Media Group	Cable	Refused to Participate		[JUN-28-12 Daryl Coffey] A company representative stated that the provider would not be submitting data at this time.
Gecko Inter.net	Fixed Wireless	Refused to Participate		[JUL-31-12 Dwayne Goodman] An e-mail was received from a company representative declining to participate.
Hill Country Networks	Fixed Wireless	Refused to Participate		[AUG-07-12 Daryl Coffey] A company representative said that he will not provide us with tower information.
Reliance Globalcom Services, Inc.	Backhaul	Refused to Participate		[JUN-08-12 Wes Kerr] a company representative responded "no thank you" when asked if they would be participating this round.
Western Broadband	Fixed Wireless	Refused to Participate		[AUG-09-12 Dwayne Goodman] Owner of the company conveyed no interest in participating in the broadband mapping project.
Americatel Corporation	Backhaul	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 3 contact attempts were made this period.
Centrovision	Cable	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 5 contact attempts were made this period.
CIT - Campbell Information Technology	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 4 contact attempts were made this period.
Cybercom Corporation	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 5 contact attempts were made this period.
Fiberlight LLC	Backhaul	Non-Responsive to Multiple Attempts	4/20/2010	In addition to numerous contact attempts made during past mapping submission periods, 3 contact attempts were made this period.
FiberTower Corporation	Backhaul	Non-Responsive to Multiple Attempts		4 contact attempts were made this period between May 2, 2012 and August 7, 2012.
Harris Broadband L.P.	Fiber	Non-Responsive to Multiple Attempts	5/7/2012	6 contact attempts were made this period between May 7, 2012 and August 9, 2012.
I20 Access	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during the last mapping submission period, 2 contact attempts were made this period.
Internet America Wireless Internet Access	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 4 contact attempts were made this period.
Local Choice Internet	Fixed Wireless	Non-Responsive to Multiple Attempts		7 contact attempts were made this period between July 6, 2012 and August 14, 2012.
LSCWeb.Com	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 3 contact attempts were made this period.
Medicine Park Telephone Company	Backhaul	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 3 contact attempts were made this period.
New Source Broadband	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during the last mapping submission period, 4 contact attempts were made this period.
Phoenix Broadband, LLC	Fixed Wireless	Non-Responsive to Multiple Attempts		6 contact attempts were made this period between July 3, 2012 and August 14, 2012.

Phonoscope Enterprises Group, LLC	Backhaul	Non-Responsive to Multiple Attempts	5/20/2010	In addition to numerous contact attempts made during past mapping submission periods, 4 contact attempts were made this period.
Sterling Cable	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 4 contact attempts were made this period.
Sterling Cable	Cable	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 4 contact attempts were made this period.
Terral Telephone Company	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 4 contact attempts were made this period.
Texas Communications	Fixed Wireless	Non-Responsive to Multiple Attempts		In addition to numerous contact attempts made during past mapping submission periods, 6 contact attempts were made this period.
VOWNet	Fixed Wireless	Non-Responsive to Multiple Attempts		11 contact attempts were made this period between May 25, 2012 and August 14, 2012.
Indian Creek Internet Services	Fixed Wireless	Slated Field Audit for Estimated Coverage Analysis		