## BROADBAND EXPANSION GRANT APPLICATION

### For Fiscal Year 2018

Late applications will be rejected. Applications MUST be date and time stamped by the Commission's Electronic Regulatory Filing (ERF) system on or before the date and time that the application is due. Applications dated and time stamped in another office will be rejected. Applications are public unless otherwise specified. All applications will be posted on ERF under the docket number stated below and available for public inspection immediately upon filing.

The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2018 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the state.

Applicant (Name and Address) and Names of all Application Partners  Black Earth Telephone Company, LLC d/b/a TDS Telecom Town of Vermont Project 525 Junction Road Madison, WI 53717			Applications MUST be UPLOADED to ERF by going to the Commission's website, http://psc.wi.gov/apps35/ERF_upload/content/mymenu.asp x; select 'Public' or 'Confidential' under 'Upload Documents,' as appropriate; and select 'Existing Docket.'  The docket number for applications for FY 2018 Broadband Expansion Grants is: 5-BF-2018. The docket caption is: FY 2018 Broadband Expansion Grants.		
Federal Employer Identification No. 39-0168130			Applications are due and must be uploaded no later than: June 30 at 4:00pm (16:00) Central Time		
Contact Name	Title		Name (Contact for further information)		
Jean M. Pauk	State Go Manage	overnment Affairs r	Dennis Klaila, Analys Wisconsin	ennis Klaila, Analyst, Public Service Commission of Visconsin	
Telephone Number	E-mail A	ddress	Phone E-mail Address		
608-664-4152	jean.pau	uk@tdstelecom.com	608-267-9780	Dennis.klaila@wisconsin.gov	
Amount of Broadband Grant Request \$291,500 \$291,500		Funds Pledged	Total Cost of Proposed Project \$583,000		
Is the Applicant Certified as a Broadb Community? (yes/no) No	and Forw	ard! Community, or doe	es the grant project prop	ose to serve a Broadband Forward!	
Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.) DSL			Proposed Download and Upload Transmission Speed 25/3 to 75% and 10/1 to 25% of locations		
Expected Number of Business Locations that will be Served 21			Expected Number of Residential Locations that will be Served 286		

#### Table of Contents:

- 1. Application
- 2. Exhibit A Letters of Support
  - a. Congressman Mark Pocan
  - b. Town of Vermont Chair
- 3. Exhibit B Broadband Eligible Areas Map with Project Locations
- 4. Exhibit C TDS Wisconsin Fact Sheet

#### 3.2.1.1 Applicant identification and contact information

a. Black Earth Telephone Company, LLC (Black Earth Tel), a subsidiary of TDS Telecommunications Corporation (TDS Telecom), located in south central Wisconsin and serves Black Earth and surrounding areas, including the Town of Vermont.

Contact information for the grant application:
Jean Pauk
TDS Telecom
525 Junction Road
Madison, WI 53717
608-664-4152
jean.pauk@tdstelecom.com

- b. This application does not propose a public-private partnership. However, the Town of Vermont supports this application and has indicated it stands ready to work with TDS to facilitate broadband deployment. See attached letters of support in *Exhibit A* from the Town of Vermont Chair and Congressman Mark Pocan.
- c. Black Earth Tel is certified as Telecommunications Utility under Wis. Stat. §§ 196.01(10) and 196.50(2)(j)1.b and is authorized to provide telecommunications service throughout the state (see Final Decision in Docket 540-NC-100, dated September 16, 2011). Black Earth Tel has also been designated as an eligible telecommunications carrier (ETC) in all areas where it provides service. Black Earth Tel is therefore an eligible applicant per Wis. Stat. § 196.504(1)(a)2.

Black Earth Tel is a subsidiary of TDS Telecom, which is a subsidiary of Telephone and Data Systems, Inc. (TDS), and is operated by TDS Telecom's senior management team. Black Earth Tel is backed by TDS and TDS Telecom's managerial, technical, and financial strength.

As the 7th largest wireline telephone company in the United States, TDS provides 1.2 million connections to high-speed Internet, phone, and TV entertainment services in nearly 900 rural, suburban, and metropolitan communities. For residential customers, TDS deploys 1Gig Internet access, IPTV service, cable TV options, and traditional wireline services. TDS Telecommunications Corp., headquartered in Madison, Wis., employs more than 3,400 people.

Telephone and Data Systems, Inc., a Fortune 500® company, provides wireless; cable and wireline broadband, TV and voice; and hosted and managed services to approximately six million customers nationwide through its businesses U.S. Cellular, TDS Telecom, OneNeck® IT Solutions LLC, and TDS Broadband Service LLC. Founded in 1969 and headquartered in Chicago, Telephone and Data Systems employs 10,300 people.

TDS Telecom has a long history of building and maintaining robust voice and data networks in its service areas. Moreover, TDS Telecom has deployed high speed broadband networks capable of serving approximately 97 percent of its existing customers within these high cost areas, and has successfully maintained these broadband networks over many years.

#### 3.2.1.2 Description of the project

- a. TDS Telecom is requesting grant funding under the Broadband Expansion grant program to deploy broadband service to 307 locations primarily located in the Town of Vermont. Black Earth Tel's service exchange is approximately 17 miles northwest of Madison. The Town of Vermont is southwest of the Village of Black Earth. A map depicting the project is attached as *Exhibit B*. The underlying data and shapefile are available from TDS upon request.
- b. The Broadband Expansion grant map on the PSC's website indicates the census blocks in the Town of Vermont are eligible for the broadband expansion grants (see *Exhibit B*). Based on the anecdotal customer information TDS Telecom has received directly from customers, the Town of Vermont is underserved without access to broadband service at speeds of 25 Mbps down and 3 Mbps up. Even though wireless providers may be providing some level of broadband service in these census blocks, it is inadequate to meet customer needs and does not meet the FCC or state definition of advanced service with speeds of at least 25 Mbps down and 3 Mbps up. Though TDS Telecom makes broadband services available throughout its service areas in Wisconsin to 98% of locations, pockets of our service areas like the Town of Vermont remain underserved because of the cost-prohibitive nature of serving the areas due to low customer density, low take-rates, and high cost of deploying such a network far from the central office over difficult terrain.
- c. This project will enable wireline broadband service for 307 locations that either do not have access to wireline broadband service or have limited speeds available. As envisioned, this project would provide broadband service to customers in rural areas where such wireline access is not currently available. By building this network, additional locations in the Town of Vermont and in areas adjacent to the Town will be connected and will reap the benefits of increased employment, enhanced access to medical and public safety facilities, increased access to educational opportunities, and most importantly, the ability to become full participants in the broadband world of tomorrow. 75% of eligible locations will be able to receive speeds up to 25 Mbps downstream and 3 Mbps upstream, while the remaining locations will be able to receive 10 Mbps downstream and 1 Mbps upstream. Award of this grant application will enable

high-speed broadband to be deployed throughout the Town of Vermont more quickly than currently planned.

- d. The project will upgrade "last mile" facilities. This grant application seeks to make wireline broadband service available to the identified locations utilizing VDSL2+ technology, extending fiber to existing DSLAMs and installing new fiber-fed DSLAMs within the network to shorten loop lengths to customers. Each DSLAM will be fitted with access equipment to provide the speeds required in the FCC's Rate of Return Reform Order (March 30, 2016).
- e. The project is engineered with subscriber loop lengths of less than 10,000 feet which will allow download speeds of up to 25 Mbps and upload speeds of 3 Mbps. VDSL2+ allows for dedicated bandwidth to be provisioned to each subscriber in the last mile of the network. Upon completion of this project, Black Earth Tel will meet the requirements specified in the FCC's Rate of Return Reform Order to provide wireline broadband speeds of 25Mbps/3Mbps to 75% of the locations and 10 Mbps/1Mbps speeds to 25% of the locations.
- f. Black Earth Tel, as a subsidiary of TDS Telecom, has the certified contractors and internal employees needed to plan and construct this project upon receipt of funding. The network engineering, construction and service deployment, therefore, can commence immediately upon receipt of funding and would be constructed within the required timeframe.

TDS Telecom will complete the proposed project within 24 months of a grant award. All project dates are tentative and subject to change due to events beyond our control such as weather delays, Acts of God, and supplier delays. Assuming awards are granted in August and acceptance occurs in September, the proposed schedule is as follows:

- OSP Engineering start 9/2017; complete 1/2018
- Electronics Engineering start 10/2017; complete 12/2017
- ROW/Permitting start 10/2017; complete 6/2018
- OSP Construction start 4/2018; complete 1/2019
- Electronics Construction start 9/2017; complete 2/2018
- ISP Backhaul start 5/2018; complete 2/2019
- Market Readiness start 3/2019; complete 8/2019
- Project Completed 8/2019

### 3.2.1.3 Itemized statement of funding

a. Itemized statement of investment and construction costs:

Inside Plant		
(12) DSLAMs equipped with VDSL2+ and outdoor enclosures	\$	209,950
Tax and shipping	\$	37,050
Access equipment subtotal	\$	247,000
Outside Plant		
Engineering	\$	33,600
Installation and Construction	\$	285,600
Permits	\$	16,800
Outside Plant subtotal	<u>\$</u>	336,000
Project Total	\$	583,000

The total construction costs for this project are \$583,000. The project will build 17.51 miles of fiber, install 8 new DSLAMs and retrofit 4 existing DSLAMs with new electronics, and upgrade DC power at all DSLAMs. TDS Telecom will own all facilities involved in this project.

- b. As shown above, all requested funding is for the procurement and installation of equipment and plant. Grant funds will not be used for any other purpose except for building the project.
- c. Summary showing grant and matching funds:

	Total Costs	Grant Amount	TDS Matching Amount
Inside Plant			
(12) DSLAMs equipped with VDSL2+ and outdoor enclosures	\$209,950	\$104,975	\$104,975
Tax and shipping	<u>\$37,050</u>	\$18,525	\$18,525
Access equipment subtotal	\$247,000	\$123,500	\$123,500
Outside Plant			
Engineering	\$33,600	\$16,800	\$16,800
Installation and Construction	\$285,600	\$142,800	\$142,800
Permits	\$16,800	\$8,400	\$8,400
Outside Plant subtotal	<u>\$336,000</u>	<u>\$168,000</u>	<u>\$168,000</u>
Project Total	\$583,000	\$291,500	\$291,500

d. As shown above, all of the grant funding will be used to construct the broadband infrastructure described in this proposal pursuant to acceptable costs detailed in 3.2.1.3.

#### 3.2.1.4 Priority factors supporting the application

- a. TDS Telecom is requesting 50% funding for this project (\$291,500). The remaining 50% funding (\$291,500) will be provided in matching funds from TDS.
- b. This application does not propose a public-private partnership.
- c. <u>List of Broadband Providers serving the area</u>: The State Broadband Map indicates Verizon Wireless, US Cellular, Sprint, and AT&T Mobility are broadband providers in the area.
- d. The Town of Vermont is part of Black Earth Tel. Black Earth is located in south central Wisconsin, 17 miles northwest of Madison. The Town of Vermont is south of the Village of Black Earth. The project will provide broadband service to 307 locations that are unable to obtain wireline broadband service from other providers. There are 21 business locations and 286 residential locations included in the project.

TDS Telecom is aware of the desire by Town of Vermont residents for increased broadband speeds and has spoken with local Town officials as well as U.S. Representative Mark Pocan, who lives in the Town, about the challenges to deploy higher speeds to them. Clearly, the availability of broadband services to the rural areas of Black Earth Tel's service territory will provide these locations with many new opportunities and the potential for economic growth similar to that currently being experienced in other areas of the territory that already enjoy broadband service. More specifically, this project will bring broadband service to these rural areas providing them access to distance learning, services provided by libraries, social services and health services agencies, and enable residents to telecommute to their jobs.

- e. The project proposes to deploy fiber-fed DSLAMs to provide wireline broadband to all existing locations in the Town of Vermont that are underserved today. The project will enable potential future expansion to locations outside the Town of Vermont. Additional future speed upgrades will also be possible for areas that may initially be deployed at 10Mbps/1Mbps download and upload speeds.
- f. The project area is predominantly rural residences. However, when high-speed broadband becomes available, the rural businesses in this area will be able to expand their markets more easily across the state, country or the world. In markets where high-speed broadband is available, TDS has observed that high-speed broadband eliminates the logistical constraints of regionally-based business models, allowing businesses in rural, isolated areas to compete with their big-city counterparts.

#### 3.2.1.5 Other information supporting the application

a. As the franchised ILEC provider for Black Earth and the Town of Vermont, Black Earth Tel already is delivering telecommunications services to most of the premises within its service territory. It has also already built a broadband network that currently is capable of providing broadband service to 97% of these premises in the core communities within the service area. As a result, numerous premises and critical community facilities that reside within Black Earth Tel's territory already have access to broadband service at some level. Yet the surrounding, more sparsely populated rural areas lack broadband access due to the high cost to build such a network in those areas.

Since the last grant application TDS submitted in June 2016, federal funding to support broadband deployment was announced by the FCC. In January 2017, TDS elected to receive approximately \$75.1M annually for 10 years to increase broadband access in 25 states from the FCC's Alternative Connect America Cost Model, under the Connect America Fund (CAF) program. TDS will leverage these funds over the next 10 years to support the buildout of rural broadband networks to nearly 160,000 locations across the country. In Wisconsin, TDS will receive \$18.8M annually for 10 years to serve over 35,000 locations. Broadband deployment milestones under the program begin in year 4 (2021).

Receipt of a State Broadband Expansion grant for the Town of Vermont will complement and accelerate broadband deployment to ACAM-eligible and ineligible locations in Black Earth and will require TDS to complete network upgrades for some locations in the Town of Vermont 2 years sooner than it would under ACAM. Furthermore, a Wisconsin Broadband Expansion grant will provide the necessary funding to support buildout to ineligible ACAM locations in the Town of Vermont cost effectively by allowing TDS to build to these locations at the same time as we are building to the ACAM-eligible locations.

TDS Telecom has extensive experience in deploying networks to rural customers. It has the institutional capability to ensure that the network is designed and deployed as efficiently as possible in order to maximize consumer benefits. TDS Telecom's Senior Management is fully capable of building, operating, and maintaining the network infrastructure proposed in this application, as a natural extension of its existing service history. They have a solid performance record in delivering advanced communications solutions to a wide and diverse customer base of rural areas, including 108 subsidiaries (including 21 in the state of Wisconsin) that are incumbent, exclusively rural local exchange carriers (ILECs) serving 1.2 million commercial and residential customers in nearly 900 rural, suburban, and metropolitan communities across the United States. For

the past decade, all of the senior TDS Telecom Management team has worked together to build multiple broadband networks similar to, or exceeding the size, scope and complexity of the project submitted in this application.

TDS Telecom received 11 federal grants as part of the Rural Utilities Service Broadband Initiative Program as funded by the ARRA of 2009 to deploy facilities and equipment to improve its broadband service in portions of its exchange service areas in Wisconsin. The total cost for these projects was \$33.4M. TDS Telecom has successfully completed all 11 Wisconsin projects as of July 2014, enabling nearly 9,000 additional locations with high speed broadband access. Nationwide, TDS Telecom has completed all 44 projects for which it received grants, which will enable high speed broadband access to nearly 32,000 locations.

TDS Telecom also has previous experience with the State Broadband Expansion Grant program. It has submitted multiple applications since the program began. In May 2014, TDS Telecom received a broadband grant for \$100,000 for Central State Telephone Company in Docket 5-GF-237. TDS Telecom completed the project in May 2015, within the required timeframe and under the projected cost. Completion of the project enabled service to potentially 270 additional locations. TDS Telecom also received a broadband grant in August 2016 for \$156,500 for Black Earth Telephone Company to complete upgrades in the Town of Berry. Work on this project is currently underway and will be completed on or before the September 2018 deadline.

TDS Telecom has invested over \$324M in Wisconsin facilities and equipment for broadband deployment (see *Exhibit C* TDS Wisconsin Fact Sheet) since 2012. As technology has evolved to enable broadband deployment, TDS Telecom has continued to deploy broadband technologies further out into its network where the economics justify such investment.

- b. This project will not duplicate existing broadband infrastructure. TDS Telecom is the only wireline provider serving this area and is upgrading and adding to its existing network.
- c. Upon completion of the network improvements, broadband access will allow patients to link to medical providers for direct consultation, remove geographical barriers and allow people to receive the medical care they need when it's needed. Access to the internet will allow users a way to get basic information about health matters and provide valuable medical advice. Expanding fast and affordable broadband will also allow users to reach the help they require in an emergency. A robust broadband network will enable police, fire and emergency medical personnel to react to crises more quickly while facilitating cooperation between multiple safety agencies. This will allow public safety workers

access to online resources, connect to network-enabled devices, and rapidly transfer critical video and data files during crises situations.

d. High speed internet enhances every level of education from kindergarten through high school to college and graduate school. Advances in information and communication technology means that education is no longer confined to the classroom. The proposed project will allow for the use of broadband-enabled educational tools for remote collaboration among students on projects, videoconferences with teachers and access to a wealth of information at home a student may need to research and write a paper or complete an assignment. Distance learning utilizing a broadband connection allows adults to gain vital skills training to secure employment and move beyond entry-level jobs with flexibility, whether it be through obtaining a college degree online or completing an online worker training program.

### **EXHIBIT A – LETTERS OF SUPPORT**

- 1. U.S. Congressman Mark Pocan
- 2. Town of Vermont Chair

### MARK POCAN 2ND DISTRICT, WISCONSIN

COMMITTEE ON APPROPRIATIONS

ASSISTANT WHIP



10 East Doty Street, Suite 405 Madison, WI 53703 (608) 258-9800

1421 Longworth House Office Building Washington, DC 20515 (202) 225-2906

POCAN HOUSE GOV

### UNITED STATES HOUSE OF REPRESENTATIVES

June 9, 2017

Public Service Commission of Wisconsin 610 N. Whitney Way PO Box 7854 Madison, WI 53707

To Whom It May Concern:

I write in support of the Broadband Expansion Grant Application submitted by TDS Telecom on behalf of the Black Earth Telephone Company to benefit the Town of Vermont located in southwestern Dane County in my congressional district. As both the representative in Congress for Wisconsin's Second District and a Co-chair of the bipartisan Rural Broadband Caucus, I strongly support an array of policy solutions and programs that will expand broadband access for underserved communities across the State of Wisconsin.

Earlier this year, TDS accepted Alternative Connect America Funding Model Support from the FCC. In Wisconsin, TDS will receive \$18.8M annually to serve over 35,000 locations, including locations in Black Earth. A Broadband Expansion Grant from the State will complement and accelerate broadband development to both ACAM eligible and ineligible locations in Black Earth. TDS will be able to complete network upgrades sooner than with ACAM funding alone.

This proposal will cover 327 households in the Town of Vermont that either have no access to wireline broadband service or receive limited speeds, often no greater than 1.5Mbps. By building this network, rural Town of Vermont residents will reap the benefits of increased employment and educational opportunity, as well as enhanced access to medical facilities and public safety infrastructure. A robust network will further enable economic development in this rural portion of Dane County.

Throughout my time in Congress, I have fought for the expansion of broadband service in rural areas throughout the 2<sup>nd</sup> Congressional District. A funding award from the PSC will allow TDS to rapidly deploy upgrades to its wireline broadband network in the Town of Vermont. I ask that this application receive fullest and fair consideration. Please do not hesitate to contact me with any questions. Thank you for your attention to this request.

Sincerely,

Mark Pocan Member of Congress



WEBSITE: WWW.VERMONTFOWNSHIP.COM

May 1, 2017

Public Service Commission of Wisconsin 610 N. Whitney Way PO Box 7854 Madison, WI 53707

Dear PSC Broadband Expansion Grant Review Team,

I am writing today in support of the Broadband Expansion Grant Application that TDS Telecom is submitting on behalf of Black Earth Telephone Company for the Town of Vermont in the southwestern portion of Dane County.

The proposed project includes 326 households in the Town of Vermont and will significantly improve broadband speeds available to the residents of the Town, many of whom currently cannot receive landline broadband speeds greater than 1.5Mbps.

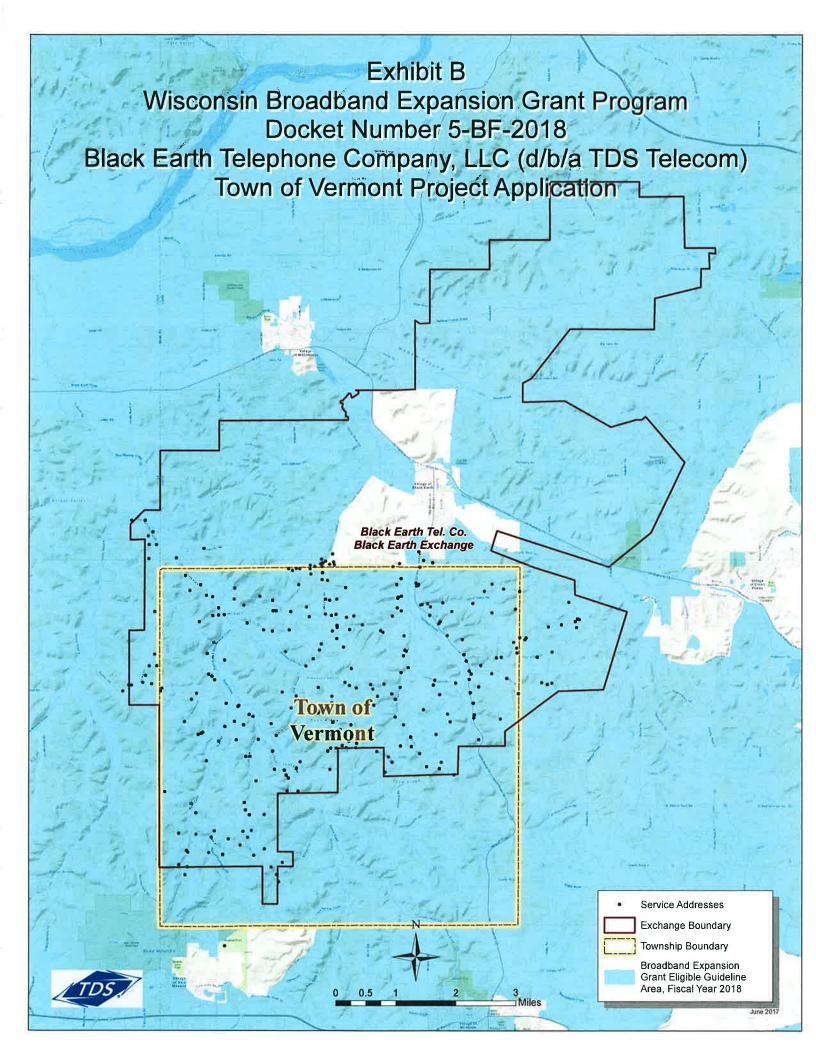
Although the Town does not have any funding available to contribute to the project, it stands ready to facilitate TDS' broadband deployment in any way that it can.

Thank you for your consideration of TDS' Grant Application. The Town heartily supports the application and encourages your approval. Receipt of grant award funding will allow TDS to deploy upgrades to its wireline broadband network throughout the Town of Vermont in a timely manner. A robust network will further enable economic development in this rural portion of Dane County.

Sincerely,

Karen Carlock

Town of Vermont Chair



### **EXHIBIT C – TDS WISCONSIN FACT SHEET**

### Wisconsin





TDS® has been doing business in Wisconsin since 1967 and owns 21 telephone companies:

- · Badger Telecom, LLC (1988)
- Black Earth Telephone Company, LLC (1968)
- Bonduel Telephone Company, LLC (1969)
- · Burlington, Brighton & Wheatland Telephone Company (1969)
- Central State Telephone Company, LLC (1967)
- Dickeyville Telephone Company, LLC (2001)
- EastCoast Telecom of Wisconsin, LLC (1989)
- The Farmers Telephone Company, LLC (2001)
- Grantland Telecom, LLC (1989)
- Mid-Plains Telephone, LLC (2001)
- · Midway Telephone Company, LLC (1968)

- Mosinee Telephone Company (2008)
- Mt. Vernon Telephone Company, LLC (1968)
- Riverside Telecom, LLC (1989)
- · Scandinavia Telephone Company, LLC (1969)
- Southeast Telephone Company of Wisconsin, LLC (2000)
- Stockbridge & Sherwood Telephone Company, LLC (1967)
- Tenney Telephone Company, LLC (1987)
- UTELCO, LLC (1996)
- The State Long Distance Telephone Company, LLC (2008)
- · Waunakee Telephone Company, LLC (1968)

TDS is leveraging Alternative Connect America funds to expand and improve broadband service to customers in Wisconsin.

TDS' competitive company, TDS Metrocom<sup>®</sup>, operates in many Wisconsin cities (see below). In addition, TDS manages the operations of OneNeck® IT Solutions. OneNeck provides a full suite of hosted and managed services and operates a 60,000 square foot top-tier data center in Fitchburg.

#### The numbers

•	Equivalent access lines	288,960
	Telecom	173,845
	Metrocom	115,115
•	Telecom broadband subscribers	57,826
•	Telecom video subscribers	13,001
•	Number of employees	1,444
•	2016 Wisconsin taxes*	\$18.2 <b>M</b>
•	2016 Capital investment	\$70.2M
•	2012-2016 Capital investment	\$324.56M
•	Connect America Fund locations	35,379

<sup>\*</sup>Combined franchise, property and sales tax for TDS, and OneNeck

#### Products available

TDS offers a range of products to residential and business customers in Wisconsin, including:

Voice services, including advanced calling features

Milwaukee

**New Berlin** 

Oshkosh

Stoughton

Waukesha

Sun Prairie\*\*

Racine

- **High-speed Internet**
- Business phone services
- ManagedIP and managedUC VoIP systems
- TDS TV<sup>®</sup> (in select communities)
- Satellite TV

#### Communities served

Black Earth\*\*

Cross Plains\*\*

Alma

Bonduel

Cleveland

Dickeyville

Fennimore\*\*

Elkhorn\*\*

Iola

TDS Tel	ec	om
---------	----	----

	TDS Met	rocom
Sherwood	Appleton	Milv
New Munster	Beloit	Nev
Verona**	Fond du Lac	Osl
Vesper	Green Bay	Rad
Valders	Janesville	Sto
Waunakee**	Kenosha	Sur
Waterford**	Madison	Wa
Wind Lake**		
	New Munster Verona** Vesper Valders Waunakee** Waterford**	New Munster Verona** Vesper Valders Vaunakee** Waterford**  Beloit Fond du Lac Green Bay Janesville Kenosha Madison

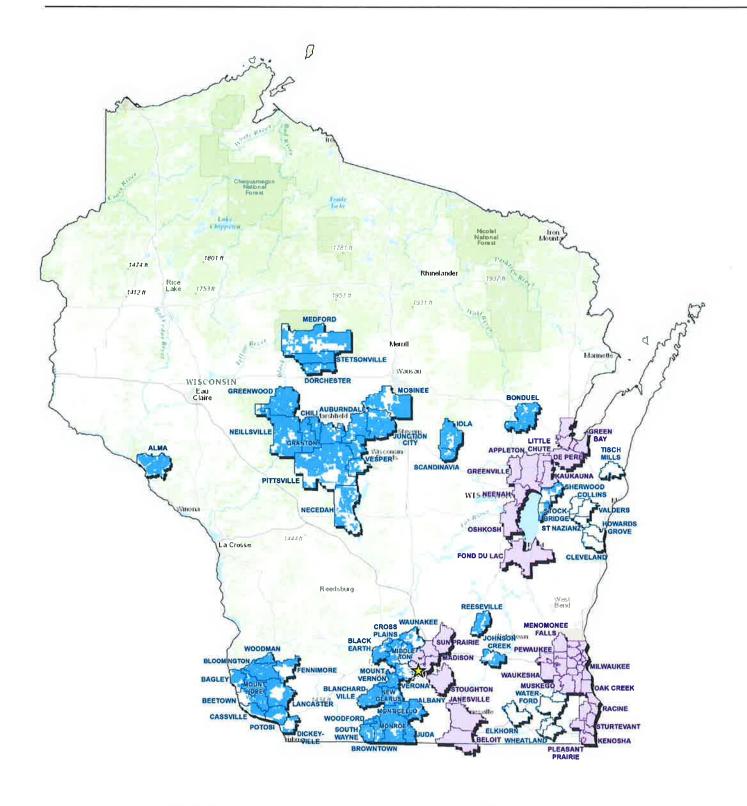
<sup>\*</sup> Indicates TDS TV availability

<sup>\*\*</sup> Indicates TDS TV and 1Gig availability

## Wisconsin







### **TDS Telecommunications Corp. In Wisconsin**

CLEC Company A OneNeck Data Center ☐ ILEC Company

ACAM Eligible Block

### Wisconsin





#### **About TDS**

TDS Telecommunications Corporation (TDS Telecom/TDS®), a wholly owned subsidiary of Telephone and Data Systems, Inc., is the seventh largest local exchange telephone company in the U.S. and a growing force in the cable industry. TDS provides 1.2 million connections to high-speed internet, phone, and TV entertainment services in nearly 900 rural, suburban, and metropolitan communities. For residential customers, TDS deploys 1Gig internet access, IPTV service, cable TV options, and traditional wireline services. The company offers businesses advanced solutions, including: VoIP (managedIP Hosted voice), high-speed internet, fiber optics, data networking, and hosted-managed services. Visit tdstelecom.com or tdsbusiness.com.

Headquartered in Madison, Wis., TDS Telecom operates OneNeck IT Solutions LLC and BendBroadband, which is part of TDS Broadband Service LLC. Combined, the company employs more than 3,400 people.

Telephone and Data Systems, Inc. [NYSE: TDS], a Fortune 500<sup>®</sup> company, provides wireless; cable and wireline broadband, TV and voice; and hosted and managed services to approximately six million customers nationwide through its businesses U.S. Cellular, TDS Telecom, OneNeck IT Solutions LLC, and TDS Broadband Service LLC. Founded in 1969 and headquartered in Chicago, Telephone and Data Systems, Inc. employs 10,300 people. Visit **tdsinc.com**.