

## OKLAHOMA BROADBAND MAPPING PROJECT PLANNING GRANT

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Oklahoma requests a \$500,000 planning grant from NTIA to create a strategic plan for the effective and efficient deployment of broadband to underserved and unserved areas. Planning funds will greatly enhance Oklahoma's ability to create a strategy based upon data, to help prioritize the allocation of resources by decision makers, and to engage citizens throughout Oklahoma in identifying opportunities for broadband service expansion. Planning funds will also be used to prepare a statewide broadband application through the BIP/BTOP process.

Oklahoma's communities, especially rural communities, cannot grow and thrive without access to broadband. Development of broadband infrastructure represents a tremendously important opportunity for raising the standard of living for Oklahoma citizens. A statewide strategic plan to expand broadband creates excitement about the possibilities for improved access to education, to healthcare, to public safety services and to expanded employment opportunities.

Oklahoma's Department of Commerce reports that "communities or regions with broadband are better positioned to compete for new companies that create jobs, add to community life, and enable existing businesses to improve their processes and their ability to connect with new customers in a global market. In terms of Oklahoma's rural communities, access to broadband is the 21<sup>st</sup> Century equivalent of America's New Deal rural electrification program." The Governor, legislative leadership, state and local Chambers of Commerce, educational leaders and communities across the state understand the need to expand broadband, its value for the delivery of services, and the impact it has for all communities in growing the economy.

A Broadband Advisory Committee consisting of the Secretary of State, Oklahoma Department of Transportation, Oklahoma Regents for Higher Education, Office of State Finance, Oklahoma Office of Geographic Information, Oklahoma Geographic Information Council and the University of Oklahoma's Center for Spatial Analysis will provide oversight to the planning process. Working groups comprised of broadband providers, state, local and tribal government representatives, libraries, community health agencies, early childhood councils, common and higher education, and career technical training among others will be part of the process to develop goals, objectives and priorities as part of a planning process. Specific duties will include:

- 1) Analyze mapping data.
- 2) Define the challenges and opportunities to adoption of broadband.
- 3) Collect consumer data concerning the use of broadband in underserved and unserved areas, including information technology capabilities.
- 4) Identify priorities and strategies for expanding broadband in the underserved and unserved areas.
- 5) Develop a consumer education and awareness initiative to increase the adoption and utilization of broadband throughout Oklahoma.

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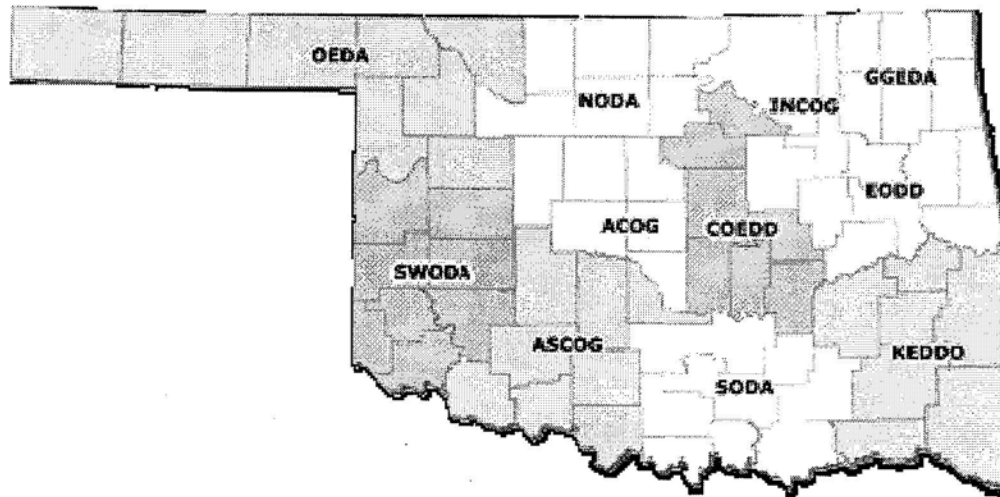
Oklahoma is requesting \$500,000 for planning purposes:

Personnel	\$150,000
Fringe Benefits	50,000
Consumer Data Collection	100,000
Training and related costs	50,000
Broadband Consumer education	50,000
Supplies	10,000
Preparation of BIP/BTOP Grant Application	<u>90,000</u>
	<u>\$500,000</u>

Key to the planning process will be qualified personnel for developing consumer data, coordinating the activities of the partners through the planning process, and creating an education and awareness program. Given the unique opportunities a planning grant provides, individuals with research, writing and analytical skills will be sought to manage and implement the related planning activities under the supervision of the Advisory Committee.

Consumer data will provide a foundation for the development of strategies to support enhanced broadband adoption rates throughout Oklahoma. A consumer education initiative which focuses on improved and expanded broadband access creates opportunities for citizens to access technology through schools, libraries, hospitals and other key community-based facilities. A Planning Grant will greatly enhance Oklahoma's ability to ensure the state's goals of statewide access to broadband will be a process that is data driven, reflective of citizen participation, and supportive of education, health care, public safety and economic development.

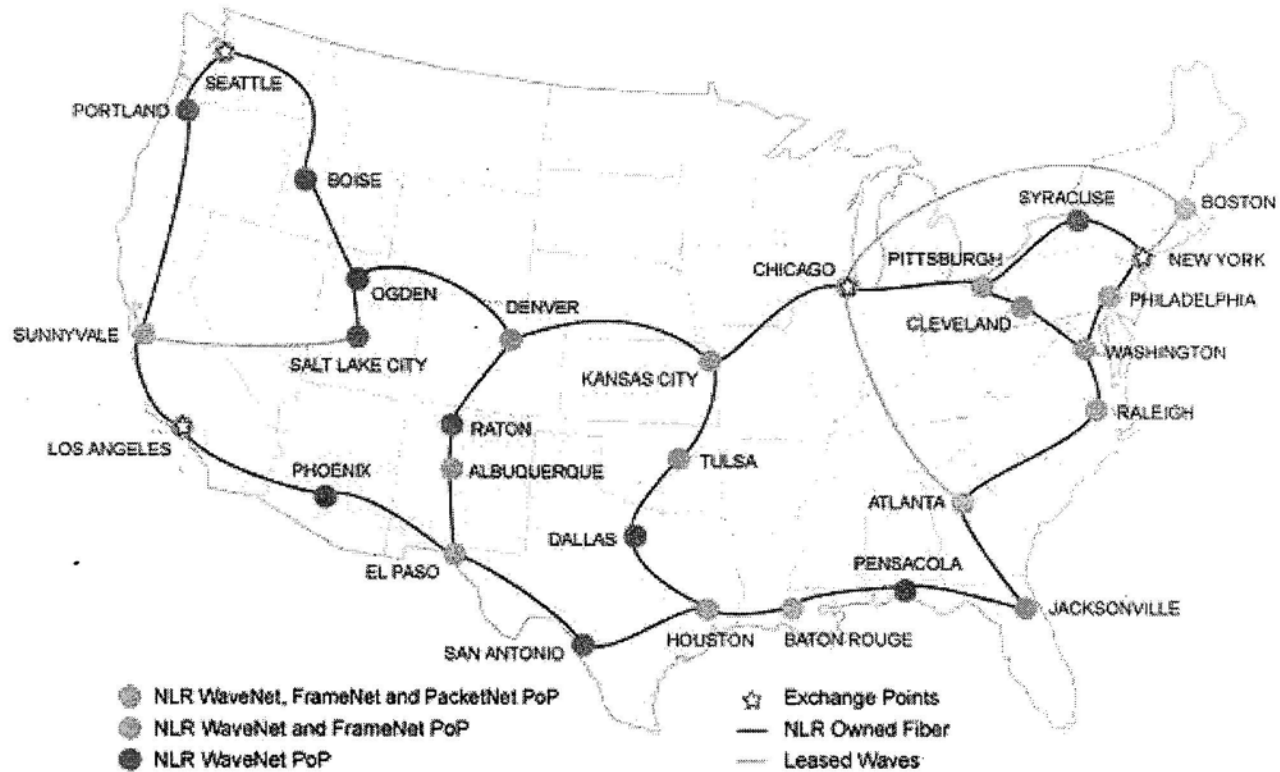
The Planning Grant also seeks dollars for technical assistance in the preparation of BIP/BTOP grant application. Key to this function will be the coordination of the data, mapping information, strategic focus and user interests. Leadership from the public and private sectors are working in a collaborative way to combine resources for the expansion of broadband services. Technical assistance in grant preparation is essential to furthering the state's goals.



*GeoCIP® Program Partners include all Oklahoma Councils of Government(CoGs)*

# State of Oklahoma - Communication Map

# NLR Services Map



	Total	Year One	Year Two	Year Three	Year Four	Year Five
<b>Personnel</b>	<b>\$774,408</b>	<b>\$183,004</b>	<b>\$147,851</b>	<b>\$147,851</b>	<b>\$147,851</b>	<b>\$147,851</b>
1.5-month support for May Yuan the first year						\$20,584
100% FTE project manager						\$45,000
20% FTE of database coordinator and two GIS analysts						\$32,400
20% FTE of IT support the first year						\$11,600
15% FTE of project secretarial support the first year						\$6,750
50% FTE of two graduate research assistants						\$40,000
50% FTE of two undergraduate research assistants						\$26,400

Dr. May Yuan, as the principal investigator at OUCSA, will be responsible for directing and supervising the proposed data verification, validation, maintenance, and updates. In the first year, she needs substantial time to set up the project plan and establish a foundation for project management. In the subsequent years, support for Yuan will reduce to 0.5 month per year.

A full-time project manager is essential for the CSA components of the project: (1) data verification and validation; and (2) data maintenance and updates. The full-time manager will assure steady project progress, communicate with the selected vendor, and timely reporting and semi-annual data updates to NTIA. The project manager will communicate routinely with the State and other state and local stakeholders of the broadband project to keep all informed about the progress of CSA efforts.

20% FTE database and GIS analysts will perform compilation of existing geospatial data from CSA, state agencies, CoGs, and local communities to the selected vendor. They will be responsible for data maintenance and updates.

Support for 20% FTE of IT and 15% FTE of secretarial assistance is to set up computing facilities and management structure for the project team. This request is only for the first year to establish the project workforce.

Two graduate research assistants and two undergraduate research assistants will be supervised by Dr. Yuan and the project manager and will be primarily responsible for data verification, data validation, and surveys. They will perform the proposed sampling schemes and statistical approaches to assess data quality and accuracy. They will work with CSA data maintenance team to correct data errors found in the validation processes.

	<b>Total</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>
<b>Fringe Benefits</b>	<b>\$191,112</b>	<b>\$49,752</b>	<b>\$35,340</b>	<b>\$35,340</b>	<b>\$35,340</b>	<b>\$35,340</b>

4.4% for graduate research assistants  
 0.7% for undergraduate research assistants  
 41% for all others

	<b>Total</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>
<b>Travel</b>	<b>\$4,000</b>	<b>\$800</b>	<b>\$800</b>	<b>\$800</b>	<b>\$800</b>	<b>\$800</b>

Travel budget is to support field surveys and visits to local communities to acquire data for validation. While most data for validation will be obtained from surveys and existing parcel data, some situations may need a visit to the field to take GPS points or talk to officers at municipalities. The travel budget is to cover mileage, gas, meals, and if necessary lodging for 2-4 trips per year.

	<b>Total</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>
<b>Supplies</b>	<b>\$46,085</b>	<b>\$9,217</b>	<b>\$9,217</b>	<b>\$9,217</b>	<b>\$9,217</b>	<b>\$9,217</b>

The budget for supplies is to cover survey costs and communication costs. The state consists of 171,484 census blocks. The proposed project aims at surveying at least 30% of the blocks. The budget estimate is for a quarter of the 30% census blocks per year at an estimate cost of 20 cents per block for block surveys (\$2,572 per year) and of 40 cents per blocks for address surveys (\$5145 per year).

Communication budget is to cover phone and mailing cost for the surveys with an estimate of \$25 per month per year for five project members (the project manager and the four research assistants) for an annual budget of \$1500.

	<b>Total</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>
<b>Other</b>	<b>\$45,000</b>	<b>\$9,000</b>	<b>\$9,000</b>	<b>\$9,000</b>	<b>\$9,000</b>	<b>\$9,000</b>

The other costs include computer services and graduate tuition remission. Computer services include fees for server usage and computing infrastructure maintenance at \$250 per month for 12 months for all project team members. Graduate Research Assistants are awarded with tuition

	<b>Total</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>
<b>Indirect Charges</b>	<b>\$515,302</b>	<b>\$122,886</b>	<b>\$98,104</b>	<b>\$98,104</b>	<b>\$98,104</b>	<b>\$98,104</b>

The University of Oklahoma's Indirect Cost (F&A) rate is 50% (MTDC) as set by DHHS on 07/09/08 for on-campus projects. The MTDC base excludes equipment costing \$5000 or more and tuition remission.

<b>Total</b>	<b>\$1,575,907</b>	<b>\$374,659</b>	<b>\$300,312</b>	<b>\$300,312</b>	<b>\$300,312</b>	<b>\$300,312</b>
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## OU 911 Information

Data Type	County	Date Modified
911 Points	Canadian, Partial	Aug-07
911 Points	Choctaw	May-06
911 Roads	Carter	Sep-06
911 Roads	Cherokee	Jan-07
911 Roads	Greer	Mar-09
911 Roads	Haskell, Only major roads	Jun-08
911 Roads	Jackson	Jan-03
911 Roads	Lincoln	Jun-07
911 Roads	Payne, Partial	Jul-04
911 Roads	Pontotoc	May-06
911 Roads	Wagoner	Jun-07
911 Roads & Points	Bryan	Mar-04
911 Roads & Points	Comanche	May-03
911 Roads & Points	Delaware, Partial	Apr-04
911 Roads & Points	Grady	Jan-03
911 Roads & Points	Johnston	Jan-03
911 Roads & Points	Mayes	Jun-03
911 Roads & Points	Pottawatomie, Partial points	Feb-08
911 Roads & Points	Sequoyah, Partial	Feb-08
911 Roads & Points	Woods	Oct-05
ACOG Roads	Canadian	Jul-05
ACOG Roads	Cleveland	Oct-06
ACOG Roads	Grady, Partial	
ACOG Roads	Logan	
ACOG Roads	McClain	Nov-02
ACOG Roads	Oklahoma	Feb-08



Subject	Statewide Imagery Data Layers	Resolution	Color Depth	Leaf Cover	Coordinate System & Datum		Format	Date	Metadata (Yes/No/Link)	State/Local Gov't Cost
					OGI Imagery	OGI Data				(\$)
Imagery	Digital Orthophotography QuarterQuads	1 meter	Grayscale	Off	UTM, NAD83		*.bil, *.sid	1995	Yes	1,140,723.89
Imagery	Digital Orthophotography Quads	1 meter	Grayscale	Off	US Albers		*.sid	1995	Yes	
Imagery	2003 NAIP County Mosaics-USDA	1 meter	Color	On	UTM, NAD83		*.sid	2003	Yes	Some COG's and County Assessors \$
Imagery	2004 NAIP County Mosaics-USDA	2 meter	Color	On	UTM, NAD83		*.sid	2004	Yes	
Imagery	2005 NAIP County Mosaics-USDA	2 meter	Color	On	UTM, NAD83		*.sid	2005	Yes	
Imagery	2006 NAIP County Mosaics-USDA	2 meter	Color	On	UTM, NAD83		*.sid	2006	Yes	
Imagery	2008 NAIP County Mosaics-USDA	1 meter	Color	On	UTM, NAD83		*.sid	2008	Yes	
Imagery	USGS 24K Quads-DRG-County Mosaics-USDA	2.4 meter	Color	na	UTM, NAD83		*.sid	2002	Yes	
Imagery	USGS 24K Quads-DRG	2.4 meter	Color	na	UTM		*.tif	varies	Yes	
Imagery	USGS 24K Quads-DRG	2.4 meter	Color	na	US Albers, NAAD83		*.tif	varies	Yes	
Imagery	USGS 100K Quads-DRG	10.2 meter	Color	na	UTM		*.tif	varies	Yes	
Imagery	USGS 250K Quads-DRG	25.4 meter	Color	na	UTM		*.tif	varies	Yes	

Subject	Regional Imagery Data Layers	Resolution	Color Depth	Leaf Cover	Coordinate System & Datum		Format	Date	Metadata (Yes/No/Link)	State/Local Gov't Cost
					UTM, Z 14,15; USNG, NAD83	UTM, Z 14,15, NAD83				(\$)
Imagery	Tulsa Urban Area-2007	0.3 meter	color	off	UTM, Z 14,15; USNG, NAD83		*.tif; Geotiff	Mar-07	Yes	
Imagery	Tulsa Urban Area-2005-only pts Rogers, Wagoner, Creek, Osage	1 foot	Grayscale	off	UTM, Z 14,15, NAD83		*.tif	Mar-05	Yes	Local \$ ?
Imagery	Tulsa Urban Area-2006-Tulsa, pts Creek, Wagoner	1 foot	color/Greyscale	off	UTM, Z 14,15, NAD83		*.tif	Jan-06	Yes	Local \$ ?
Imagery	OKC Urban Area-2008-pts. Oklahoma, Cleveland, Logan, Canadian Counties	1 foot	color	off	UTM, Z 14,NAD83, OK State Plane N & S, usft, NAD83		*.tif,Geotiff	8-Mar	Yes	

Subject	County Parcel Data Layers	Last update or Frequency	Metadata (Yes/No/Link)	State/Local Gov't Cost	Coordinate System & Datum	
					Lat/Long, WGS 84	Lat/Long, WGS 84
Cadastral	Logan County	Jan-09	Yes	Local \$ ?	Lat/Long, WGS 84	
Cadastral	Oklahoma County	Jan-09	Yes	Local \$ ?	Lat/Long, WGS 84	
Cadastral	Cleveland County	Jan-09	Yes	Local \$ ?	Lat/Long, WGS 84	

Subject	Statewide Data Layers	Last update or Frequency	Metadata (Yes/No/Link)	State/Local Gov't Cost	Coordinate System & Datum	
					Lat/Long, WGS 84	Lat/Long, WGS 84
Administrative	Hospitals	7/1/2008	Yes		Lat/Long, WGS 84	
Administrative	EMS (Emergency Medical Services)	7/23/2008	Yes		Lat/Long, WGS 84	
Administrative	Fire Stations	7/29/2008	Yes		Lat/Long, WGS 84	

These two dataset's provided by Homeland Security Information Program (HSIP) through Technographics. OK Dept of Health is doing QA/QC. Est. release=3 weeks

From HSIP.

State's Current Investment in Aerial Imagery \$1,140,723.89

Buffalo	OEDA	parcs building	Park Building	12/5/05
Antlers	KEDDO	police building	Police Station	7/6/06
Beaver	OEDA	police building	Police Station	7/6/06
Billings	NODA	police building	Police Station	9/2/02
Canton	NODA	police building	Police Station	4/4/04
Clayton	KEDDO	police building	Police Station	4/4/04
Colbert	SODA	police building	Police Station	9/7/07
Haileyville	KEDDO	police building	Police Station	7/6/06
Henryetta	EODD	police building	Police Station	7/6/06
Hulbert	EODD	police building	Police Station	7/6/06
Keyes	OEDA	police building	Police Station	7/7/07
Kingfisher	NODA	police building	Police Station	2/9/09
Maud	COEDD	police building	Police Station	7/6/06
Muldrow	EODD	police building	Police Station	7/6/06
Okarche	NODA	police building	Police Station	3/2/02
Perry	NODA	police building	Police Station	4/5/05
Red Oak	KEDDO	police building	Police Station	7/6/06
Roland	EODD	police building	Police Station	4/4/04
Stringtown	SODA	police building	Police Station	1/6/06
Wagoner	EODD	police building	Police Station	7/6/09
Wagoner	EODD	police building	Police Station	7/6/06
Watonga	NODA	police building	Police Station	10/6/06
WestVille	EODD	police building	Police Station	7/6/06
Waynoka	OEDA	police station	Police Station	12/1/01
Canton	NODA	public building	Public Building	4/4/04
Okeene	NODA	public building	Public Building	3/4/04
Canton	NODA	public facility	Public Facility	4/4/04
Kingfisher	NODA	public library	Library	2/9/09
Leedey	OEDA	public safety building	Public Safety Building	7/6/06
Lexington	ACOG	public safety building	Public Safety Building	2/5/05
Luther	ACOG	public safety building	Public Safety Building	11/6/06
Marshall	ACOG	public safety building	Public Safety Building	3/6/06
Mulhall	ACOG	public safety building	Public Safety Building	3/6/06
Murray County	SODA	public safety building	Public Safety Building	6/8/08
Tyrone	OEDA	public safety building	Public Safety Building	12/5/05
Wynnewood	SODA	public safety building	Public Safety Building	8/7/07
Watonga	NODA	recreation center	Recreation Center	8/6/06
Meridian	ACOG	school building	School Building	5/3/03
Billings	NODA	school building	School Building	9/2/02
Goltry	NODA	school building	School Building	5/5/05
Okarche	NODA	school building	School Building	12/1/01
Perry	NODA	sewer building	Wastewater Building	4/5/05

Pittsburg	KEDDO	sewer building	Wastewater Building	7/6/06
Soper	KEDDO	sewer building	Wastewater Building	7/6/06
Waynoka	OEDA	sewer building	Wastewater Building	12/1/01
Hulbert	EODD	street services building	Street Services Building	7/6/06
Calumet	ACOG	town building	City Building	6/5/05
Langston	ACOG	town hall	City Administrative Building	12/3/03
Goltry	NODA	town hall and school	City Administrative Building and Sc	5/5/05
Aline	NODA	town hall building	City Administrative Building	12/7/07
Calumet	ACOG	utility building	Utility Building	6/5/05
Coyle	ACOG	utility building	Utility Building	6/5/05
Coyle	ACOG	utility building	Utility Building	6/5/05
Lexington	ACOG	utility building	Utility Building	2/5/05
Marshall	ACOG	utility building	Utility Building	3/6/06
Maud	COEDD	utility building	Utility Building	7/6/06
Luther	ACOG	utility building	Utility Building	11/6/06
Colbert	SODA	waste water facility	Wastewater Facility	8/7/07
Dougherty	SODA	waste water facility	Wastewater Facility	4/8/08
Bokchito	SODA	wastewater facility	Wastewater Facility	7/6/06
Fort Towson	KEDDO	water building	Water Building	7/6/06
Granite	SWODA	water building	Water Building	7/6/06
Mangum	SWODA	water building	Water Building	7/6/06
Marshall	ACOG	water building	Water Building	4/3/03
Meridian	ACOG	water building	Water Building	4/3/03
Mooreland	OEDA	water building	Water Building	6/8/08
Muldrow	EODD	water building	Water Building	7/6/06
Ravia	SODA	water building	Water Building	7/8/08
Soper	KEDDO	water building	Water Building	7/6/06
Stroud	COEDD	water building	Water Building	8/1/01
Valliant	KEDDO	water facility	Water Facility	7/6/06
Henryetta	EODD	water office and maintenance	Water Office and Maintenace Build	7/6/06
Depew	INCOG	water supply building	Water Supply Building	4/6/06
Burlington	NODA	water system building	Water Building	12/5/05
Meno	NODA	water system building	Water Building	9/6/06
Fort Towson	KEDDO	water treatment facility	Wastewater Facility	7/6/06
Henryetta	EODD	water treatment location	Water Treatment Plant	7/6/06
Henryetta	EODD	water treatment plant	Water Treatment Plant	7/6/06
Langston	ACOG	water treatment plant	Water Treatment Plant	12/3/03