Approved: March 9, 2011

MINUTES OF THE SENATE UTILITIES COMMITTEE

The meeting was called to order by Chairman Pat Apple at 1:30 p.m. on March 2, 2011, in Room 548-S of the State Capitol.

All members were present except:

Senator Emler, excused Senator Love, excused

Committee staff present:

Matt Sterling, Office of the Revisor of Statutes Cindy Lash, Kansas Legislative Research Department Heather O'Hara, Kansas Legislative Research Department Ann McMorris, Committee Assistant

Conferees appearing before the Committee:

J. Brent Legg, Vice President, State Development, Connected Nation Adam Highley, PMP, Program Manager, Connected Nation

Others attending: See attached list.

Presentation on The Connect Kansas Broadband Initiative

Mr. Brent Legg presented a power point presentation which set forth their mission which is to generate and support economic development by launching public/private partnerships that focus on: 1) expanding broadband availability and 2) increasing the adoption of broadband and related technology. Connect Kansas has six objectives for the Mapping Initiative. Mr. Legg explained the data collection process; Kansas availability statistics and demonstrated the interactive map program. (Attachment 1)

The meeting was adjourned at 2:20 p.m.

Respectfully submitted, Ann McMorris, Committee Assistant

Attachments - 1

SENATE UTILITIES COMMITTEE GUEST LIST MARCH 2, 2011

NAME	REPRESENTING
Brent Legg	Connect KANSAS
Adam Hishley	Connect KANSAS
Spirly Helin	KRITC
Conay Mohn	Commerce
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mike Recat	Sprint
Melissa Ward	hein law Fim
11m Gart Ner	DTE),
John Jacx	CARyLale
Toy DAY	KCC
Nelson Krueger	US Cellulan
Dina Fisher	VERIZON



The Connect Kansas Broadband Initiative

Presentation to the Kansas State Senate Standing Committee on Utilities

> Topeka, KS March 2, 2011

Brent Legg
Director, Stakeholder Relations & Development
blegg@connectednation.org

Adam Highley
Project Manager
ahighley@connectednation.org



www.connectkansas.org



Who We Are and Why We Exist...

Connect Kansas is a subsidiary non-profit of Connected Nation, a national 501(c)(3) organization with primary offices in Washington, DC and Bowling Green, KY. Connected Nation's mission is to generate and support economic development by launching public/private partnerships that focus on:

- 1) expanding broadband availability and
- 2) increasing the adoption of broadband and related technology

Connect Kansas was established to serve as the state's partner in accomplishing these goals.

Under NTIA's State Broadband Data & Development (SBDD) grant program, Connect Kansas was awarded an initial \$1.9m grant in November 2009 to cover the project's work for the first two years (2010 and 2011). The SBDD grant program is separate and is governed by different rules than NTIA's BTOP and USDA's BIP broadband infrastructure grant programs.



Objectives for the Mapping Initiative

- To form strong working relationships with all of Kansas' broadband providers and support an environment of public/private collaboration on broadband issues among all stakeholders
- To create, maintain, and validate Kansas' first detailed maps of broadband coverage
- To utilize the resulting maps to accurately pinpoint any remaining gaps in broadband availability
- To assess the level of connectivity currently provided to Kansas'
 "community anchor institutions" (i.e., schools, libraries, hospitals,
 etc.)
- To assess broadband use among Kansas' businesses and residents, and identify barriers to broadband adoption
- 6a. To contribute accurate data from the State of Kansas for inclusion in the national broadband map



Data Collection Process

- Availability data is collected from each Kansas provider. Each provider has an opportunity to approve the generated map of their service area before the information is applied to the aggregated statewide map.
- Per the federal grant program guidelines, data is submitted every six months to the FCC and NTIA at the Census Block level of detail. The next map update will occur on April 1, 2011
- The maps will be continuously updated through at least December 2014 with the approved SBDD funds.
- Connected Nation's Engineering and Research Divisions are undertaking an ongoing process of validating the coverage information reflected on the maps.
 - On-the-ground field validation of infrastructure (for 100% of broadband providers)
 - 2. Survey research to "spot-check" coverage
 - 3. Public feedback via www.connectkansas.org



Kansas Availability Statistics

Number of Providers on Map: 74 (excluding satellite provider) Number of Providers Submitted to NTIA: 77 (includes middle mile transport providers) Broadband Definition: At least 768 kbps download/200 kbps upload (FCC Minimum)

- Excluding Mobile Broadband
 Households Served: 1,008,367
 Households Unserved: 29,524
 Percentage Served: 97.16%
 Geographic Availability: 74.21%

- Rural Served Households: 445,614 Rural Unserved Households: 28,032 Rural Percentage Served: 94.08%

- All Service Platforms

 Households Served: 1,035,027

 Households Unserved: 2,864

 Percentage Served: 99.72%

 Rural Households Served: 470,875

 Rural Households Unserved: 2,771

 Rural Percentage Served: 99.41%

Mapping data also can examine availability of different speeds and platforms.



Kansas Availability Statistics

Estimate of Broadband Service Availability in the State of Kansas

By Speed Tier Among Fixed Platforms

Download Speed Tier	Unserved Households	Served Households	Percent of Households By Speed Tier
At Least 768 Kbps	29,524	1,008,367	97.16%
At Least 1.5 Mbps	38,708	999,183	96.27%
At Least 3 Mbps	75,401	962,490	92.74%
At Least 6 Mbps	122,749	915,142	88.17%
At Least 10 Mbps	186,407	851,484	82.04%
At Least 25 Mbps	550,548	487,343	46.96%
At Least 50 Mbps	553,313	484,578	46.69%
At Least 100 Mbps	1,005,796	32,095	3.09%



BroadbandStat Interactive Map: The Nexus Between Mapping and Planning

- The BroadbandStat interactive mapping application represents the nexus between mapping current broadband availability and planning for the future.
- BroadbandStat is a powerful, yet user-friendly and customizable tool that will allow state leaders & the public to:
 - Search for and identify broadband service at a specific address, including available speeds and service providers
 - Understand & track broadband deployment over time
 - Analyze and prioritize unserved and underserved areas using population and household density information
 - Track ARRA-funded broadband projects
 - Build and evaluate scenarios to help prioritize future broadband infrastructure proposals
 - Track broadband adoption rates and barriers to broadband adoption, community by community, across the state.



Kansas BroadbandStat Interactive Map Demonstration

We will cover:

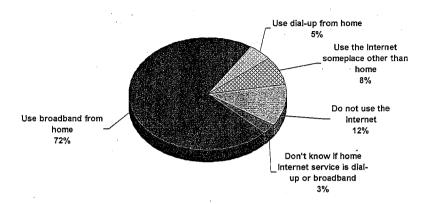
- Map features & tools
- Broadband availability by provider type:
- Analysis of unserved areas (availability gaps)
- Community Anchor Institution (CAI) information

1-4



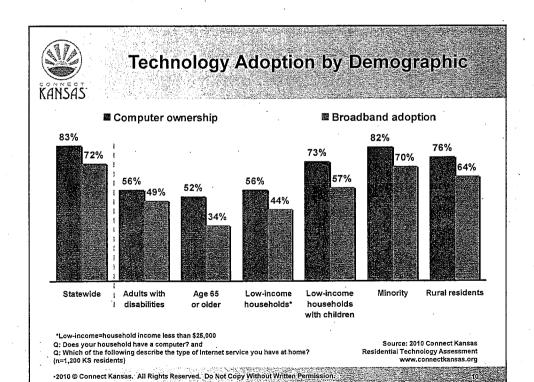
Kansas Technology **Adoption Summary**

Percent of all Kansas residents



- Q: Do you have an internet connection at home?,
 Q: Do you have access to the internet from any locations outside of your own home?,
- and Q: Which of the following describe the type of internet service you have at home?
- (n=1,200 KS residents)
 -2010 © Connect Kansas. All Rights Reserved. Do Not Copy Without Written Permission

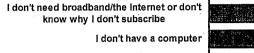
Source: 2010 Connect Kansas Residential Technology Assessment www.connectkansas.org





Barriers to Broadband Adoption

Percent of Kansas residents with no home broadband service*



Broadband is too expensive

Broadband is not available where I live

I access broadband someplace else

Concerns about fraud or identity theft

I don't know enough about broadband

Available broadband service is not fast enough 11%

*Percentages do not add up to 100% because individuals could give multiple responses. Q: Why don't you subscribe to broadband at home? (n=348 KS residents who do not have home broadband service)

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Source: 2010 Connect Kansas Residential Technology Assessment www.connectkansas.org



Broadband Download Speeds

Download speeds among Kansas broadband subscribers

Over 10.0 Mbps 7%
About 10.0 Mbps 2%

About 6.0 Mbps 7%

About 1.5 Mbps 9%

About 768 Kbps 5%

Less than 768 Kbps

About 3.0 Mbps

Don't know

Kansas broadband subscribers who know their download speeds report an average speed of 5.7 Mbps.

59%

Q: To the best of your knowledge, what is the approximate download speed or bandwidth provided by your internet service provider? (n=852 KS residents with home broadband service)

Source: 2010 Connect Kansas Residential Technology Assessment

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Next Steps

- In late September 2010, Connect Kansas was awarded a supplemental grant of approximately \$4.3m to maintain the broadband maps and continue data validation and research activities in years 2012, 2013, and 2014
- The ongoing maintenance of the map is important to protecting Kansas' interests as the FCC and Congress consider federal Universal Service Fund (USF) Reform.
- Additionally, the supplemental grant award will allow Connect Kansas to work closely with Governor Brownback's administration to launch program activities beyond mapping and research that focus on closing the state's remaining broadband coverage gaps and addressing issues that the Governor has identified as key to improving the state's economy.



Estimated Availability of Broadband Service by County Terrestrial Broadband (Excluding Mobile)

			≥ 768 Kbps Download/	≥ 3Mbps Download
			200 Kbps Upload Speeds	Speeds
County	Household Density	Number of Households	Percentage of House	eholds Served
Allen	11.48	5,775	95.93%	82.70%
Anderson	5.53	3,221	93.03%	72.70%
Atchison	14.51	6,275	96.66%	94.18%
Barber	1.97	2,235	95.62%	91.37%
Barton	12.74	11,393	97.55%	97.27%
Bourbon	9.67	6,161	93.04%	68.09%
Brown	7.57	4,318	95.83%	77.57%
Butler	15.08	21,527	92.48%	80.95%
Chase	1.61	1,246	71.75%	56.44%
Chautauqua	2.8	1,796	66.60%	64.61%
Cherokee	15.12	8,875	96.71%	73.81%
Cheyenne	1.33	1,360	83.85%	56.06%
Clark	1 1	979	98.99%	90.04%
Clay	5.62	3,617	98.87%	91.61%
Cloud	5.82	4,163	97.39%	93.90%
Coffey	5.54	3,489	89.54%	77.90%
Comanche	1.11	872	97.90%	80.74%
Cowley	12.47	14,039	97.93%	92.83%
Crawford	26.15	15,504	99.55%	85.17%
Decatur	1.67	1,494	79.39%	79.37%
Dickinson.	9.32	7,903	98.50%	94.63%
Doniphan	8.09	3,173	89.38%	81.31%
Douglas	84.24	38,486	99.03%	97.91%
Edwards	2.34	1,455	96.35%	77.82%
Elk	2.18	1,412	81.56%	80.17%
Ellis	12.44	11,193	99.17%	97.45%
Ellsworth	3.47	2,481	91.17%	84.41%
Finney	9.95	12,948	99.57%	95.97%
Ford	9.88	10,852	99.93%	93.52%
Franklin	16.47	9,452	86.69%	80.77%
Geary	27.19	10,458	98.45%	- 98.00%
Gove	1.16	1,245	89.67%	86.88%
Graham	1.41	1,263	60.58%	60.39%
Grant	4.77	2,742	99.97%	99.87%
Gray	2.35	2,045	99.97%	99.53%
Greeley	0.77	602	93.27%	85.44%
Greenwood	2.84	3,234	73.48%	67.77%

en komunista da series de la comunicación de la com			≥ 768 Kbps Download/	≥ 3Mbps Download
		THE ALTERNATION OF THE TRANSPORT	200 Kbps Upload Speeds	Speeds
County :	Household Density	Number of Households	Percentage of House	eholds Served
Hamilton	1.06	1,054	99.99%	99.99%
Harper	3.46	2,773	99.61%	98.46%
Harvey	23.33	12,581	99.81%	95.75%
Haskell	2.57	1,481	99.69%	91.84%
Hodgeman	0.93	796	97.77%	76.36%
Jackson	7.21	4,727	93.68%	72.57%
Jefferson	12.74	6,830	90.82%	80.38%
Jewell	1.86	1,695	93.69%	89.45%
Johnson	366.14	174,570	99.77%	99.48%
Kearny	1.77	1,542	99.88%	98.96%
Kingman	3.9	3,371	96.98%	91.65%
Kiowa	1.89	1,365	96.88%	95.17%
Labette	14.17	9,194	97.72%	77.76%
Lane	1.27	910	99.14%	99.02%
Leavenworth	49.8	23,071	89.83%	87.85%
Lincoln	/ 2.13	1,529	95.81%	93.78%
Linn	6.36	3,807	84.33%	23.62%
Logan	1.16	1,243	96.88%	88.45%
Lyon	16.09	13,691	92.15%	82.46%
McPherson	12.45	11,205	99.40%	86.50%
Marion	5.42	5,114	98.16%	68.76%
Marshall	4.94	4,458	97.99%	70.66%
Meade	1.77	1,728	95.53%	78.82%
Miami	17.97	10,365	88.97%	80.10%
Mitchell	4.07	2,850	97.36%	97.28%
Montgomery	23.1	14,903	94.19%	86.73%
Morris	3.64	2,539	98.35%	97.21%
Morton	1.79	1,306	99.87%	99.87%
Nemaha	5.51	3,959	93.99%	59.11%
Neosho	11.79	6,739	94.62%	72.26%
Ness	1.41	1,516	100.00%	100.00%
Norton	2.58	2,266	75.31%	75.31%
Osage	9.23	6,490	90.59%	89.69%
Osborne	2.17	1,940	99.72%	99.72%
Ottawa	3.37	2,430	98.61%	97.51%
Pawnee	3.63	2,739	98.99%	84.32%
Phillips	2.82	2,496	75.36%	75.36%
Pottawatomie	8.02	6,771	96.69%	92.01%
Pratt	5.39	3,963	91.86%	89.53%
Rawlins	1.19	1,269	75.63%	75.54%

			≥ 768 Kbps Download/ 200 Kbps Upload Speeds	≥ 3Mbps Download Speeds
County	Household	Number of	Percentage of House	sholds Served
County	Density	Households	ercentage of nouse	
Reno	20.33	25,498	99.10%	97.93%
Republic	3.57	2,557	97.12%	79.89%
Rice	5.57	4,050	97.07%	89.06%
Riley	36.32	22,137	96.08%	95.67%
Rooks	2.66	2,362	77.70%	73.61%
Rush	2.16	1,548	98.64%	97.10%
Russell	3.63	3,207	99.97%	99.97%
Saline	29.79	21,436	99.79%	99.15%
Scott	2.85	2,045	99.09%	95.71%
Sedgwick	176.55	176,444	99.40%	97.16%
Seward	11.6	7,419	89.71%	88.86%
Shawnee	125.35	68,920	98.90%	98.50%
Sheridan	1.25	1,124	78.59%	78.19%
Sherman	2.61	2,758	97.29%	88.37%
Smith	2.18	1,953	88.52%	88.46%
Stafford	2.54	2,010	76.10%	67.93%
Stanton	1.26	858	100.00%	100.00%
Stevens	2.73	1,988	98.05%	98.05%
Sumner	8.37	9,888	99.80%	99.30%
Thomas	3	3,226	97.78%	88.15%
Trego	1.59	1,412	92.35%	92.21%
Wabaunsee	3.3	2,633	87.35%	79.72%
Wallace	0.74	674	81.19%	71.05%
Washington	2.98	2,673	99.57%	40.89%
Wichita	1.35	967	92.54%	77.69%
Wilson	7.32	4,203	91.44%	80.02%
Woodson	3.28	1,642	86.27%	71.91%
Wyandotte	394.35	59,700	99.14%	99.00%
State Total	12.69	1,037,891	97.16%	92.74%