

**Testimony of  
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President  
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**Submitted to the  
Subcommittee on Telecommunications and the Internet of the  
House Energy and Commerce Committee**

**Hearing on  
H.R. \_\_\_\_, a Discussion Draft Addressing Broadband Mapping and Data Collection  
May 17, 2007**

**Summary**

The United States has fallen to 16<sup>th</sup> in the world in broadband adoption. Americans pay more for slower connection speeds than people in other countries. Too many Americans, especially those in rural areas or low-income households, aren't connected.

The discussion draft of the Broadband Census of America Act is a good step forward toward filling the gaps in federal broadband data collection so we can craft good policy solutions to ensure that every American home and business has access to affordable, world-class Internet.

CWA supports upgrading the current FCC definition of "high speed" to not less than 2 megabits per second (mbps) download and not less than 1 mbps upload. The definition should evolve as technology improves.

CWA supports requiring the FCC to collect and evaluate broadband deployment data at a more granular level, down to the zip code of 9 digits.

CWA supports federal efforts to create a broadband map of the nation that is accessible to the public, with adequate provisions to protect the privacy of proprietary information.

CWA supports a program of grants to states for broadband mapping. CWA believes the draft bill could be improved by broadening the grant program to include technical assistance to local community teams. The successful Connect Kentucky program that created the first broadband map in the nation facilitated the technology planning teams in the development of broadband plans. As a result, private carriers accelerated build-out of their networks.

CWA supports requiring the FCC to survey broadband price, speed, and availability.

CWA conducted its own Speed Test on its website ([www.speedmatters.org](http://www.speedmatters.org)). About 70,000 people took the test. The results are troubling. Average download speed was 1.9 megabits per second. This compares to average download speeds of 61 mbps in Japan, 45 mbps in South Korea, 18 mbps in Sweden, 17 mbps in France, and 7 mbps in Canada. Average upload speed was 371 kilobits per second, also far below our international competitors.

Good morning, Mr. Chairman and Members of the House Subcommittee on Telecommunications and the Internet. Thank you for the opportunity to testify today.

I am Larry Cohen, President of the Communications Workers of America. CWA represents more than 700,000 workers employed in telecommunications, the media, public sector, manufacturing, health care, and airlines.

The purpose of this hearing is to discuss broadband mapping and data collection. Good data is the foundation of good policy. We desperately need a national Internet policy to reverse the fact that our nation – the country that invented the Internet – has fallen to 16<sup>th</sup> in the world in broadband adoption.<sup>1</sup>

Equally disturbing, Americans pay more for slower connection speeds than people in many other countries. In Japan, 80 percent of households can connect to a fiber network at a speed of 100 megabits per second. This is 30 times the average speed of a U.S. cable modem or DSL connection, at roughly the same cost.

The United States is stuck with a 20<sup>th</sup> century Internet. Too many Americans – especially those in rural areas or low-income households -- aren't connected at all.

Unfortunately, we don't know the full extent of our problem because our data is so poor. We don't know where high-speed networks are deployed, how many households and small

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<sup>1</sup> International Telecommunications Union, 2006.

businesses connect to the Internet, at what speed, and how much they pay. Without this information, we can't craft good policy solutions. So we continue to fall farther behind.

The Discussion draft of the Broadband Census of America Act is a good step forward to fill this information void.

The draft bill would require the FCC to upgrade its definition of "high speed" to not less than 2 megabits per second download and not less than 1 megabit per second upload, a standard used in many other countries. CWA supports this provision. The FCC hasn't changed its definition of high-speed in nine years, a lifetime in the Internet. Under the FCC's current definition of 200 kilobits per second in one direction, it would take 17 hours to download a movie.

Mr. Chairman, CWA has a few recommendations to improve this section. First, the FCC should be instructed to revise the definition periodically as technology evolves. Second, the FCC should continue to collect data at all speed levels to measure progress over time. Finally, some have suggested establishing a new definition of second generation broadband pegged to a data rate that would reliably transmit full-motion, high-definition video. This is worth considering.

CWA also supports language in the draft bill requiring the FCC to collect and evaluate broadband deployment data at a much more granular level, down to the zip code of 9 digits. As the GAO has pointed out, the FCC's current 5-digit zip code methodology is woefully

inadequate. In rural areas, a 5-digit zip code can cover many miles. Moreover, the FCC's methodology tells us almost nothing about where infrastructure is deployed.

As a remedy, the draft bill instructs the National Telecommunications and Information Administration to create a detailed broadband map of the nation. The interactive map would be publicly available on the Web. CWA strongly supports federal efforts to create a broadband map that is accessible to the public. The map will help show policymakers and the private sector where there are deployment gaps, and will measure progress toward national goals. In gathering this data, the privacy of proprietary information must be protected.

The draft bill establishes a program of grants to states and communities for broadband mapping. This section of the bill appears to be modeled, in part, on the successful Connect Kentucky program which developed the first broadband map of any state in the nation.

However, the ConnectKentucky program went far beyond broadband mapping. Connect Kentucky facilitated the development of grassroots technology planning teams in every county in the state. These e-technology teams, composed of business, schools, libraries, health care, higher education, local government, labor, and other community-based organizations, developed local technology plans to demonstrate market demand for high-speed Internet services. As a result, private providers found it economic to build-out their broadband networks. For example, BellSouth, the largest provider in the state, accelerated its DSL deployment, and broadband subscription went up 17 percentage points. The investment created good jobs for telecommunications employees.

Mr. Chairman, the current language in the draft bill limits the state grants to broadband mapping. This omits an important piece of the Connect Kentucky program. CWA strongly urges the Subcommittee to expand the purpose of the grants to include technical assistance and support to local community teams, and support for programs to improve computer ownership and Internet access for unserved and underserved populations.

CWA also supports provisions in the draft bill to require the FCC to survey the price, speed, and availability of broadband services in urban, rural, and suburban areas and among different classes of customers. This information will help policymakers determine whether Internet services are affordable, which communities are being left behind, and where to target policy solutions.

Over the past few months, CWA has posted a speed test on our website (<http://www.speedmatters.org>). About 70,000 people across the country have taken the test to check the actual download and upload speeds of their Internet connection. While we don't claim that the results are scientific, we do believe this is the first national survey of Internet upload and download speeds. The results are deeply troubling.

As you can see from the chart, the average download speed was 1.9 megabits per second. At this rate, it would take an hour and a half to download a movie. This average U.S. download speed compares to 61 megabits per second in Japan, 45 megabits per second in South Korea, 18

megabits per second in Sweden, 17 megabits per second in France, and 7 megabits per second in Canada.<sup>2</sup>

The average upload speed was only 371 kilobits per second, not nearly enough to send quality medical information over the Internet. This, too, pales in comparison to our international competitors. (A copy of average speeds in each state is attached to my testimony.)

I should point out that most people who took our speed test use either DSL or a cable modem. Very few people with dial-up took the test because it took too long.<sup>3</sup> So, the results of our speed test are biased and measure only what we in the U.S. call “high speed.”

Mr. Chairman, Speed Matters on the Internet. It determines what is possible; whether we will have the 21<sup>st</sup> century networks we need to grow jobs and our economy, and whether we will be able to support innovations in telemedicine, education, public safety, and public services to improve our lives and communities. High speed Internet could even help address the global warming crisis by allowing people to get things done without getting into their car.

It's long past time to adopt policies to ensure that every American home and business has access to affordable, world-class Internet services. Good data collection is the first step to get us there.

Thank you.

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<sup>2</sup> Information Technology and Innovation Foundation, “Assessing Broadband in America,” April 2007.

<sup>3</sup> 40 percent of Internet users use dial-up. Pew Internet & American Life, “Home Broadband Adoption: 2006.”

**CWA SpeedMatters.org Speed Test Results**  
Average Speed in kilobits per second (kbps)



State	Number of Tests	Average Download Speed (kbps)	Average Upload Speed (kbps)
<b>UNITED STATES</b>	<b>67,401</b>	<b>1973 kbps</b>	<b>371 kbps</b>
ALASKA	142	545	206
ALABAMA	697	1,777	306
ARKANSAS	437	1,326	321
ARIZONA	1,741	1,635	557
CALIFORNIA	7,761	1,520	362
COLORADO	1,215	1,354	489
CONNECTICUT	698	2,244	370
DC	581	1,372	724
DELAWARE	207	2,657	365
FLORIDA	3,255	2,368	368
GEORGIA	1,627	2,714	347
GUAM	2	39	236
HAWAII	178	1,965	365
IOWA	619	1,262	489
IDAHO	251	1,323	367
ILLINOIS	2,168	2,184	365
INDIANA	1,507	1,955	434
KANSAS	894	4,167	470
KENTUCKY	990	1,607	363
LOUISIANA	738	2,751	378
MASSACHUSETTS	1,321	3,004	369
MARYLAND	1,309	2,589	381
MAINE	306	1,534	368
MICHIGAN	2,362	2,042	364
MINNESOTA	1,022	1,771	376
MISSOURI	1,719	1,432	327
MISSISSIPPI	240	1,620	324
MONTANA	168	1,312	389
NORTH CAROLINA	1,233	2,225	365
NORTH DAKOTA	114	1,308	458
NEBRASKA	358	1,994	491
NEW HAMPSHIRE	435	2,700	368
NEW JERSEY	1,921	3,680	670
NEW MEXICO	500	1,716	429
NEVADA	559	1,617	436
NEW YORK	5,803	3,436	652
OHIO	3,104	1,359	368
OKLAHOMA	776	1,689	433
OREGON	1,058	2,390	436
PENNSYLVANIA	3,186	1,567	362
PUERTO RICO	48	261	125
RHODE ISLAND	145	5,011	1,739
SOUTH CAROLINA	502	2,338	332
SOUTH DAKOTA	107	825	245
TENNESSEE	1,036	2,035	359
TEXAS	4,056	1,509	369
UTAH	359	1,323	499
VIRGINIA	1,498	2,394	560
VIRGIN ISLANDS	3	767	358
VERMONT	180	2,005	366
WASHINGTON	1,728	2,176	362
WISCONSIN	1,466	1,551	326
WEST VIRGINIA	379	1,117	288
WYOMING	212	1,246	485
UNKNOWN LOCATION	2,463	1,482	387

Most participants had DSL or cable modem connections.

**To take the Speed Test, go to <http://www.speedmatters.org>**