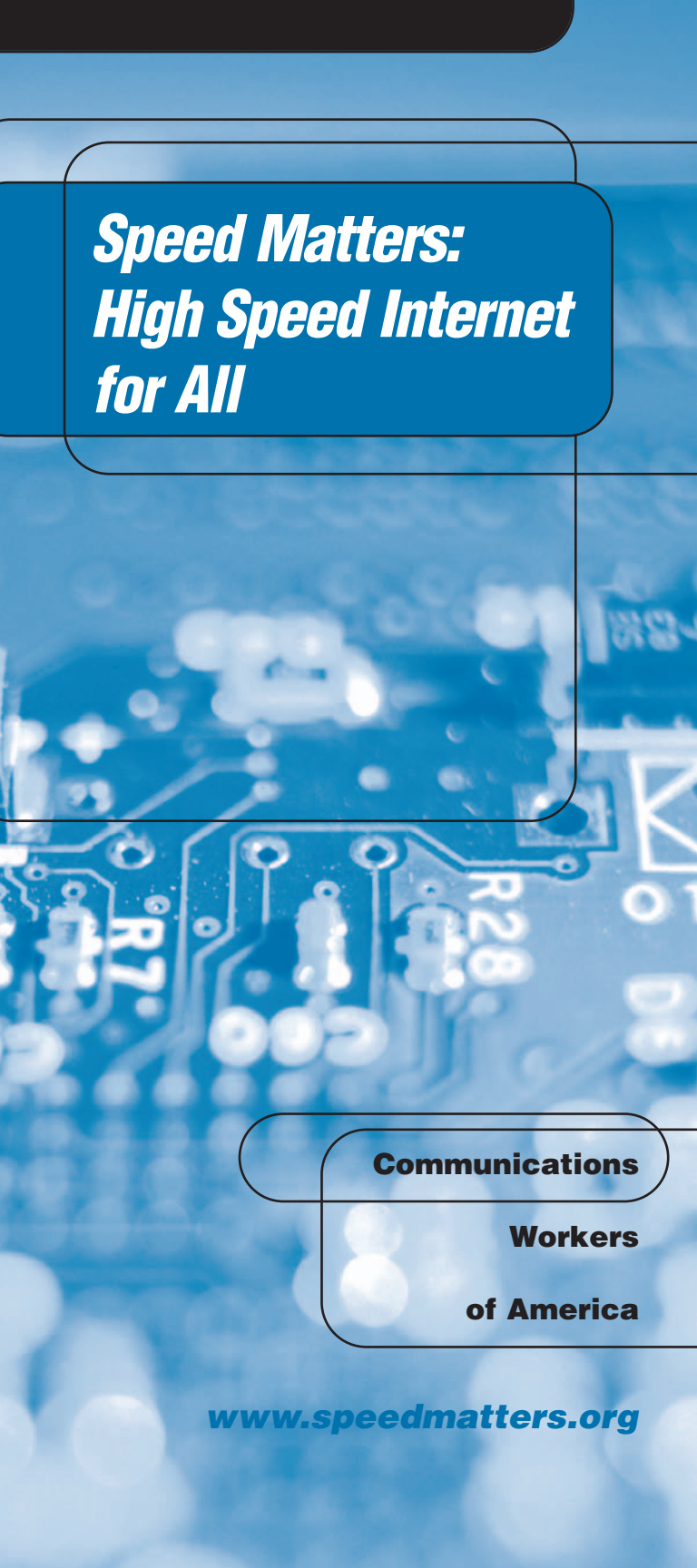
Speed Matters: High Speed Internet for All



Communications Workers of America

www.speedmatters.org

The emergence of a new communications system — one based on high speed interactive networks designed for voice, data, and video communications — opens up tremendous opportunities for improving the quality of our economic, civic, and personal lives. A true high speed digital network offers advantages far beyond increased entertainment choices; it will accelerate business development and innovations in telemedicine, interactive distance learning, and e-government. As with the Internet itself, it is difficult to predict the advances that a true high speed network will inspire.

The United States has been slow to develop truly high speed networks. Other countries have overtaken the U.S. both in the speeds that are being provided and the percentage of people who have access to high speed networks. In fact, the U.S. has fallen to 16th in the world in terms of high speed Internet access.

It's time for the United States to adopt a telecommunications policy for the 21st century.

What is High Speed Internet and Why Is It Necessary?

High speed Internet is interactive, always-on, two-way communications provided by a host of different technologies including telephone lines, cable modems, fixed and terrestrial wireless, and fiber optics to the home. It is not just faster Internet. It is a connection platform, a gateway to a host of information, services and applications not available or attainable at slower speeds.

In the U.S., the Federal Communications Commission defines high speed as 200 kilobits per second (kbps) downstream. Basic dial-up connections of 56 kbps or DSL connections of 200 kbps cannot enable basic applications such as streaming video. Interactive features such as videoconferencing, an important application for global business, require 6 megabits per second (mbps). To facilitate the deployment of high speed Internet and to take advantage of these new applications, some countries have established goals of 100 mbps both in terms of download and upload speeds. In contrast, where "high speed" connections are available in the U.S., speeds most often range from 1 to 3 mbps download and 50-384 kbps upload.

Speed defines what is possible. Speed determines the amount of information that can be transmitted in a given time, the quality of the transmission and the timeliness of the transmission. Speed determines the type of transmission possible: two-way, voice, data, audio, video. In short, Speed Matters.

Benefits from truly high speed Internet networks include:

- **Economic Growth & Quality Jobs.** New, high speed Internet applications create jobs and opportunities for innovation, growth, and e-commerce. Technology allows businesses based in rural and remote communities to compete in the global economy.

■ **Telemedicine and Independent Living.** High speed Internet allows instantaneous, interactive contact between health professionals and patients permitting remote monitoring, efficient chronic disease management, and more effective responses to emergencies. High speed Internet can help senior citizens and people with disabilities live independently, improve their quality of life and reduce costs of care.

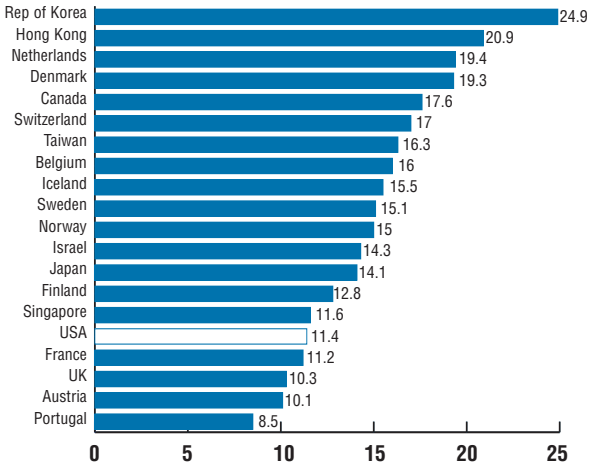
■ **Education & Integrated Learning.** Two-way high speed communication and videoconferencing allows students and teachers to minimize the obstacles of distance and maximize the potential of simultaneous voice, data, and video sharing.

■ **E-Government, Civic Participation and Public Safety.** Advanced high speed networks will allow citizens to increase participation in civic life, beyond simply downloading forms or researching programs. Government meetings could be opened to many more citizens using two-way video technology. High speed networks enable police, fire and emergency personnel to coordinate and respond more quickly to crises.

The U.S. Falls Behind as Current Policies Fail

The United States — the country that invented the Internet — has fallen behind many countries in terms of high speed Internet adoption and deployment. Our reliance on market forces, deregulation, and inadequate governmental programs has not served us well. We invest relatively less on communications; we are charged more for slower speeds; millions encounter a significant digital divide based on income and geography, and unionized jobs with good wages and benefits are being replaced by low-wage jobs with less training and higher turnover.

Broadband Subscribers Per 100 Inhabitants



Source: International Telecommunications Union, January, 2005

■ **The International Divide.** From 2002 to 2005, the U.S. fell from 11th to 16th in the world in terms of the percentage of residents with high speed Internet subscriptions, now ranking behind such countries as Japan, South Korea, Sweden and Singapore.

■ **The Speed & Price Gap.** In the U.S., DSL generally reaches speeds of up to 1.5 - 3.0 mbps at a price averaging $30-$50 per month while cable modems generally reach speeds of 3-5 mbps for $40-$50 per month. In Japan, an average connection with a speed of 26 mbps costs about $22 per month.

■ **The Investment Gap.** The U.S. invests relatively less than other nations in telecommunications as a percentage of Gross Domestic Product.

■ **The Digital Divide.** Millions of Americans — especially in rural and low-income urban areas — do not have access to high speed Internet because it does not yet pay for providers to invest in these areas. For example, only 17% of adults in rural areas subscribe to high speed Internet compared to 31% in urban and 30% in suburban areas. There is also a

divide based on income. More than 62% of households with incomes over $100,000 subscribe to high speed Internet at home while just 12% of households with incomes below $30,000 subscribe.

The U.S. Needs a National Policy to Guarantee High Speed Internet for All

CWA believes that the goal of U.S. communications policy should be to connect each to all — the more people connected to a network, the greater the value of the network itself and the services it enables.

Almost every other developed country has a cohesive and comprehensive national strategy to stimulate the deployment of high speed broadband by establishing specific goals and policies. In the U.S. there is no organized or systematic plan. This policy vacuum threatens America's ability to maintain its leadership in high technology and applications.

To assure economic growth, the U.S. must reverse current trends and set a national policy.

Policies to Get Us There

Ensure Affordable Access by accelerating deployment. This will reduce broadband prices by increasing competition and creating economies of scale; we also must address affordability for low-income consumers.

Create Public-Private Partnerships to track high-speed deployment, identify underserved communities and address gaps in investment and consumer demand.

Stimulate Investment through tax incentives, loans, and/or direct subsidies.

Stimulate Demand to overcome barriers based on cost, geography, and disabilities.

Speed Matters: Five Key Principles

Speed and Universality Matter for Internet Access. High-tech innovation, job growth, telemedicine, distance learning, rural development, public safety and e-government require truly high speed, universal networks.

The U.S. "High Speed" Definition is Too Slow. The FCC defines "high speed" as 200 kilobits per second (kbps) downstream. Government policies should immediately set "high speed" definition at 2 megabits per second (mbps) downstream, 1 upstream.

A National High Speed Internet for All Policy is Critical. The U.S. must adopt policies for universal access and set deployment timetables: 10 mbps down, 1 mbps up by 2010, with new benchmarks set for succeeding years.

The U.S. Must Preserve an Open Internet. High speed, high capacity networks will eliminate bandwidth scarcity and will promote an open Internet. Consumers are entitled to an open Internet allowing them to go where they want when they want. Nothing should be done to degrade or block access to any websites. Reserving proprietary video bandwidth is essential to finance the build-out of high speed networks.

Consumer and Worker Protections Must Be Safeguarded. Public policies should support growth of good, career jobs as a key to quality service. Government should require public reporting of deployment, actual speed and price.

Speed Matters

Time is of the essence. The U.S. has a lot of ground to cover to remain competitive with other economies that have already adopted policies that will facilitate job growth, business advancement, and individual achievement through access to information and markets. Policy makers must act now to implement policies that will guarantee every American access to all the promises of the information age.

Please visit www.speedmatters.org for additional information and resources on this critical issue.

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