States eye new investments, programs and statutory changes that could improve connectivity in Midwest

by Tim Anderson (tanderson@csg.org)

Across the Midwest, state legislators have heard stories about the promise of high-speed broadband, and the problems of having inadequate or no connections at all.

In her home state, Sen. Jennifer Shilling says, family-owned dairies in rural Wisconsin have been able to expand product sales well beyond state and even national borders — thanks to having a strong Internet presence.

But at the same time, she has talked to emergency responders in rural parts of her district who couldn’t find a nearby Internet connection reliable enough to simply complete a state-mandated certification course.

Minnesota Democratic Sen. Matt Schmit says, “now it’s time to do something.”

The governor’s goal is to move Iowa from near the bottom of Midwestern states on TechNet’s “State Broadband Index” to the top (see map on this page for the state rankings).

That’s the needle that we have to move, ” says Amy Kuhlens, program manager for Connect Iowa.

As a starting point, Kuhlens and other members of an Iowa committee have proposed six recommendations for legislative consideration in 2014. Their ideas include new state tax incentives, loans, grants and regulatory reforms to promote a build-out of broadband by providers. The committee also says the state should provide support for new programs that promote digital literacy and greater broadband adoption.

Iowa is not alone. Broadband policy is being discussed in many other states as well, with policymakers looking to remove the obstacles standing in the way of broader access and adoption.

‘Better than a lot of people think’

On some measures, states and the nation as a whole have made significant strides on broadband deployment. Kansas Republican Sen. Pat Apple credits improved access in his state in part to the proliferation of wireless technology. Meanwhile, even in some of Kansas’ sparsely populated areas, fiber-to-home projects have been completed, he says.

Nationwide, a vast majority of Americans (96.3 percent) now have access to wired broadband, and U.S. adoption of 4G LTE mobile broadband is greater than in any other country in the world.

“We’re actually doing better than a lot of people think,” says Robert Atkinson, president of the Information Technology & Innovation Foundation and co-author of a February 2013 study that compared the state of U.S. broadband with the rest of the world.

Broadband speeds are improving, he adds, and the cost for consumers compares favorably with that of most other countries.

Four years ago, the Minnesota Legislature set a goal of having universal broadband by 2015, with every business and household
Despite progress, states have long way to go on broadband access and adoption

As part of a larger state economic development program, Illinois is awarding up to $4 million in prize funding for the most-promising ultra-high-speed broadband deployment projects. Launched in 2012, the GigaGala Community Challenge is open to public and private organizations; each project must connect at least 1,000 end users to gigabit broadband speeds.

The northern Indiana town of Fort Wayne was one of the first communities in the Midwest to have citywide fiber-optic broadband service. How did Fort Wayne do it? As Robert Atkinson, president of the Information & Technology Foundation, explains in its most recent report to the U.S. Congress on broadband technology, the U.S. Department of Commerce’s Integrated Information & Telecommunications Association of Municipal Utilities, its state has more municipal broadband providers (28 cities) than any other state in the nation. The idea of communities building their own fiber-optic networks is spreading across the country, says Christopher Mitchell of the Institute for Self Reliance. “We are seeing a dramatic upsurge, but it’s starting from a small base,” he notes. The estimated cost of building such a communitywide network? About $1,000 per person, Mitchell says.

In early 2011, the Kansas town of Kansas City got news that it would become Google’s first “fiberhood.” More than 1,000 U.S. cities had sought to become the first place where Google brought fiber-optic connections to an entire community — with Internet speeds of 1 gigabit per second, 100 times faster than what most Americans have today in their homes. It has since expanded to Kansas City, Mo. A Robust Innovations Team was then created to ensure that the entire metropolitan area makes the most of this unique opportunity.

In 2012, the Michigan county of Chippewa became the nation’s first “connected community” as a program run by Connected Nation, a nonprofit group that works in states to expand broadband access and use. To receive the “connected community” designation, a community technology plan must be adopted that includes strategies to expand digital literacy and awareness about the benefits of broadband, assist businesses with websites, and improve the online presence of local governments. These types of strategies can help ensure broadband demand is sufficient to warrant infrastructure investments by providers. At least five other Michigan communities have since been certified as “connected,” thanks in part to the assistance of the state Public Service Commission. Michigan has more “connected communities” than any other state.

Need for more speed: A look at notable broadband advances and policy innovations in the Midwest

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Seconds later, the student asked the question.

“That story could not occur in 76 percent to 80 percent of the classrooms in the United States,” Levin says, “because they lack sufficient broadband.” And as a result, the potential for delivering personalized instruction with world-class, remote educational resources is simply out of reach.

Twenty years from now, K-12 education and health care are going to be significantly transformed by the broadband platform,” he says. “The sooner you accelerate that process, the better off your state will be.”

In search of ‘widespread adoption’

Of course, some students and families also have inadequate broadband access in the home, or none at all. This is sometimes due to a failure of access (especially in rural areas), but other times due to a lack of adoption.

“Even with faster speeds, infrastructure alone is not enough,” notes Karen Mossberger, co-author of “Digital Cities: The Internet and the Geography of Opportunity.”

There needs to be widespread and inclusive adoption of the technology.

Mossberger, in particular, has studied disparities in adoption rates in Chicago and the Cleveland area. She found that “the geography of broadband adoption is pretty much the same as the geography of poverty.”

Factors such as costs and the lack of digital literacy

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<thead>
<tr>
<th>State</th>
<th>% that have adopted broadband</th>
<th>% that own computers</th>
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<tbody>
<tr>
<td>Illinois</td>
<td>70.8%</td>
<td>76.3%</td>
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<tr>
<td>Indiana</td>
<td>64.6%</td>
<td>70.9%</td>
</tr>
<tr>
<td>Iowa</td>
<td>68.1%</td>
<td>76.0%</td>
</tr>
<tr>
<td>Kansas</td>
<td>72.1%</td>
<td>78.3%</td>
</tr>
<tr>
<td>Michigan</td>
<td>68.7%</td>
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<td>Minnesota</td>
<td>76.0%</td>
<td>81.4%</td>
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<td>Nebraska</td>
<td>69.1%</td>
<td>77.3%</td>
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<td>North Dakota</td>
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<td>Ohio</td>
<td>66.1%</td>
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<tr>
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<td>United States</td>
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Source: “Exploring the Digital Divide: America’s Computing Outlier Experience” (June 2013)
hinder adoption rates, which in turn affect the ability of individuals and even entire neighborhoods to prosper. “It’s nearly impossible to search for a job without going online,” Mossberger notes.

Atkinson says one critical factor impeding adoption is the lack of computers in many U.S. homes; compared to northern European countries, for example, the United States has a low rate of households that own computers.

Policy ideas, options for states
States are in a position to at least play a role in addressing many of the issues surrounding broadband speed, access and adoption.

In Minnesota, the Governor’s Task Force on Broadband has issued a new set of recommendations for legislative consideration in 2014.

They include eliminating a tax on telecommunications equipment (to promote more investments by providers) and providing direct loans, loan guarantees or other financial incentives to expand broadband access. Such state intervention is needed, the task force says, to “help bridge the gap between what is financially feasible and the actual costs of providing broadband” in some of the state’s sparsely populated areas.

On the adoption/user side, the task force proposes creation of a state fund that would help pay for connectivity services for low-income populations.

Our argument is that these are short-term investments that can make a big impact economically and in the quality of life of Minnesotans,” Anderson Kellher says.

Sen. Schmit, too, hopes the Minnesota Legislature will begin considering broadband as part of future bonding plans, included alongside the state’s other public infrastructure priorities such as roads and bridges.

He adds that the state needs to revisit some of its antiquated telecommunications laws; near the top of that list is the removal of a decades-old statute that requires a local referendum and approval by 65 percent of local voters for a city to provide municipal phone service. This law has led to confusion about whether it applies to publicly owned broadband.

More and more municipalities around the country are, in fact, considering or moving ahead with plans to build their own communitywide fiber optic networks, says Christopher Mitchell of the Institute for Self Reliance.

“They don’t see the cable and DSL networks as capable of supporting the job growth that the region is trying to foster,” Mitchell says in explaining the trend.

“We’re getting to the point where having fiber in a large part of the community goes from being a first-mover advantage, like where Kansas City is (due to Google Fiber; see bottom of page 6), to it being a matter of needing fiber just to tread water [in the global economy].

“We’re not there yet, but we’re moving in that direction.”

According to Mitchell, 19 states — including Michigan, Minnesota, Nebraska, Nevada and Wisconsin in the Midwest — have some barriers to municipal-owned fiber networks.

Levin urges states to remove those barriers.

“My view is you don’t want to take anything off the table,” he says.

“It is the rare case when cities want to build their own networks. But they can lay a lot of the infrastructure that lowers the cost of deploying fiber, which is good. And cities should have the right to do what’s in their interest, especially when we know there are cases where the market stalls out.”

But Atkinson believes publicly owned networks should be far from the first option pursued by municipalities or encouraged by states. The first steps, he says, should instead be removing regulatory hurdles for private providers and trying to establish public-private partnerships to improve broadband deployment and speeds.

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