

Vandalism in Arizona shows the Internet's vulnerability

February 26 2015, by Felicia Fonseca



Zak Holland opens up a computer at a store on the Northern Arizona University campus in Flagstaff, Ariz., Wednesday, Feb. 25, 2015. Much of the region was experiencing an Internet and phone outage that was linked to vandalism of a fiber-optic line. (AP Photo/Felicia Fonseca)

(AP)—Computers, cellphones and landlines in Arizona were knocked out of service for hours, ATMs stopped working, 911 systems were

disrupted and businesses were unable to process credit card transactions—all because vandals sliced through a fiber-optic Internet cable buried in the rocky desert.

The Internet outage did more than underscore just how dependent modern society has become on high technology. It raised questions about the vulnerability of the nation's Internet infrastructure.

Alex Juarez, a spokesman for Internet service provider CenturyLink, said the problem was first reported around noon Wednesday, with customer complaints pouring in from an area extending from the northern edges of Phoenix to cities like Flagstaff, Prescott, Page and Sedona. Service began coming back within a few hours and was reported fully restored by about 3 a.m. Thursday.

CenturyLink blamed vandalism, and police are investigating.

The severed CenturyLink-owned cable—actually, a set of cables bundled together in a black conduit a few inches in diameter—was buried several feet under the rocky soil in a dry wash, about a quarter-mile from the nearest houses.

Investigators believe the vandals were looking for copper wire—which can fetch high prices as scrap—but didn't find any after cutting all the way through the cable, probably with power tools, Phoenix police spokesman Officer James Holmes said.

"Your average house saw and wire cutters wouldn't do it," Holmes said. He said the damage was estimated at \$6,000.

As the outage spread, CenturyLink technicians began the long, tedious process of inspecting the line mile by mile. They eventually located the cut in the cable and spliced it back together.

CenturyLink gave no estimate of how many people were affected, but the outage was far-reaching because other cellphone, TV and Internet providers use the cable, too, under leasing arrangements with the company.

Such networks often have built-in redundancies that allow data to be rerouted if a cable is cut or damaged. But there was no such backup in this case.



A sign posted outside a Baskin-Robbins ice cream store in Flagstaff, Ariz., Wednesday, Feb. 25, 2015, advises customers that only cash or checks will be accepted due to an Internet and phone outage. (AP Photo/Felicia Fonseca)

Mark Goldstein, secretary for the Arizona Telecommunications and Information Council, said the problem is that large swaths of the outage area are a mishmash of federal lands under the control of different agencies.

"You can't just like go through the mountains and bury fiber. Part of the problems have to do with land ownership in Arizona. So much land is Bureau of Land Management, the National Park Service or tribal," Goldstein said.

Joseph Hobbs, who does contract work in telecommunications in the Phoenix area and is on the board of the Arizona Telecommunications and Information Council, said that creating backup systems and electronic monitoring to instantly detect breaches in the fiber-optic cables could be costly but could prevent widespread outages and shorten to less than a second the time it takes to restore service.

The cable that was severed isn't hard to spot because the trenching machines used to bury it leave a scar on the landscape, he said.

"I could take a couple of shovels, and one or two people, a six-pack of beer, find a place that's hidden with not much traffic, and I could have a little party," Hobbs said. "It would be a trivial task to dig up one of these cables. They're not guarded, and they're not protected."

Hobbs said CenturyLink should be discussing why the lines weren't backed up and whether there are enough alternative routes for data. "People should be embarrassed that this has happened and that they hadn't planned for a better outcome," he said.

Juarez, the CenturyLink spokesman, said the conduit along Interstate 17 is the only one serving northern Arizona. The company is working to complete a backup line by the end of the year for a portion of the

affected area, including Prescott, he said.

"We're always looking for places where we can have that," he said.



A sign posted outside the Wells Fargo bank in Flagstaff, Ariz., Wednesday, Feb. 25, 2015, warns customers that deposits might not be posted to their accounts immediately because of an Internet and phone outage. (AP Photo/Felicia Fonseca)

The details of the vandalism came to light on the same day the Federal Communications Commission in Washington voted to impose stricter regulation over Internet service providers like Comcast, Verizon, AT&T, Sprint and T-Mobile.

The plan, which puts the Internet in the same regulatory camp as the telephone, requires Internet service providers to act in the "public interest" and bans business practices that are "unjust or unreasonable."

Police investigating the vandalism in Arizona asked local residents to come forward if they saw anyone walking or driving in the area around the time service went out.

Any charges resulting would not be limited to vandalism, Holmes said.

"It's endangerment," Holmes said. "When you think about that, if someone has an emergency and the only means they have of contacting or getting assistance is through their cellphone, that's just not a good thing."

During the outage, Flagstaff's 69,000 residents struggled to go about their daily business. Students at Northern Arizona University were worried about finishing assignments without the Internet, bank customers couldn't withdraw money from cash machines, and City Hall employees were unable to make or receive calls.

The city relied on the Arizona Department of Public Safety for help in dispatching police and firefighters. In Prescott Valley, about 75 miles north of Phoenix, authorities said 911 service was supplemented with hand-held radios and alternate phone numbers.

Weather reports from the region weren't able to reach anyone. During the evening newscasts, Phoenix TV stations showed blank spaces on their weather maps where local temperatures normally would appear.

© 2015 The Associated Press. All rights reserved.

Citation: Vandalism in Arizona shows the Internet's vulnerability (2015, February 26) retrieved

11 May 2024 from <https://phys.org/news/2015-02-outage-halts-internet-cell-northern.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.