

Amazon Sidewalk to boost neighborhood connectivity

September 22 2020, by Peter Grad



Credit: Amazon

Former presidential contender Hillary Clinton authored a book titled, "It

Takes a Village," about communities working together for the wellbeing of one another.

If Amazon were to write a book following an announcement of a new service this week, it could well title it, "It Takes a Sidewalk."

Not content with selling books, home furnishings, electronics, cars, drugs, drones, chia pet gremlins, inflatable sloth floats and Nicholas Cage pillowcases, Amazon seeks to broaden its reach even further, this time into neighborhood networks.

Amazon announced Monday that it is preparing to unveil Sidewalks, a network program that will allow users to extend connectivity to [smart devices](#) that need to reach outside the confines of the home. Sidewalks can extend connectivity by tapping into unused [bandwidth](#) from neighboring networks, using Bluetooth Low Energy on the recently-opened 900 MHz spectrum and other frequencies.

For instance, if a family sets up a wireless music system in the backyard, it may be out of reach of their home network. Sidewalk would pick up a small portion of nearby bandwidth and enable a connection.

Sidewalk will work with a range of devices. So far, Amazon Echo, Ring surveillance cameras and Tile digital trackers are compatible. A Sidewalk Bridge unit is required to establish a connection. There is no charge for the service.

The functionality extends far from the home. If you lose your house keys connected to a Tile tracker, the neighborhood Sidewalk network will allow you to detect them far beyond the confines of your home.

Participation by owners of sidewalk-compatible [device](#) is voluntary. Those opting in don't have to worry about people stealing excessive

bandwidth because Sidewalk caps borrowed bandwidth at 500 Mb and sets strict upload limits.

Perhaps Sidewalk's greatest obstacle will be overcoming people's concerns about privacy. An Amazon [white paper](#) posted on its blog Monday says the issue of privacy is "foundational."

"For customers who choose to pool their bandwidth with neighbors, we ensure owners of other devices cannot view data sent from your devices," Amazon said. "The Sidewalk network uses three layers of encryption to keep data shared over the network safe, and the same strong encryption standards are required for all applications and devices that use the [network](#)."

Amazon further said that all routing information will be purged every 24 hours, device IDs will be rotated on a regular basis and other cryptographic means will be used to ensure privacy.

Sidewalk can be useful in situations where a home loses power—security devices will remain functional on borrowed bandwidth. It may also be used to find lost pets or track stolen items.

Amazon also announced that it will undertake a pilot program using Sidewalk networking with the Red Cross to track blood collection supplies between distribution centers and donation sites.

Sidewalk is expected to become operational by the end of this year. Owners of Ring Floodlight and Spotlight Cams will receive email notifications explaining how to participate and set control preferences.

More information: blog.aboutamazon.com/devices/a...ay-to-stay-connected

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