TUKWILA, WA Mayor Allan Ekberg

WI-FI ACCESS FOR UNDERPRIVILEGED YOUTH

Three Novembers ago, when Allan Ekberg was campaigning to become Tukwila's 20th mayor, he discovered a startling fact: Foster High School, his alma mater, where 70 percent of students qualify for free or reduced-rate lunch, had landed a grant to distribute Chromebook laptops to students, but many of those students' parents could not afford basic internet service at home. The result: Those laptops sat unused in backpacks, or students were camping outside the local County library, tapping into the library's hot spot to complete online homework assignments.

As Mayor, Ekberg acted to include these youths, and their families, in the Internet age. When he hired Joseph Todd as the City's technology and innovative services director and CIO, he tasked him with a priority goal: to bridge Tukwila's "digital divide" and get Internet access to underprivileged families.

Recognizing that some families cannot afford even discounted Internet service provider rates, the initial objective was to bring no-cost Wi-Fi to specific areas of the City. Discussions with Wi-Fi service providers revealed that this was not an option. In looking for other options, the CIO recognized that the City-owned fiber lines in the ground were the key: Hot spots could be enabled via the existing high-speed network, by tapping into those City-owned lines.

When CIO Todd approached one of the nation's biggest telecommunications companies with a proposal for a public-private partnership that would provide free internet access to Tukwila's neediest residents, he was rebuffed. He then approached the City's own Internet service provider, the Zayo Group, with an innovative horse trade: In return for a partial waiver of restrictions that required telecom providers to bury fiber optic conduit, Zayo would allow the City to divert some of its contracted bandwidth to its underserved population, free of charge.

The challenge was to find a way to divert broadband from Zayo's fiber optic network, which did not run through the neighborhood that needed it most, to reach its underserved citizens. The solution was found when the CIO learned about LinkNYC, a New York City project that was converting 7,500 decommissioned phone booths into local hot spots broadcasting free public Wi-Fi, funded by digital advertising on the system. Ruckus, a company providing the broadband broadcasting hardware at the heart of LinkNYC, agreed to sell Tukwila, virtually at cost, the equipment it needed—nine devices that the City's Public Works Department installed on light poles in the mostly low-income neighborhood West of the local high school. The first phase of the City's public Wi-Fi network, which cost \$16,000, went live in the first quarter of 2018 with a second-phase rollout due in 2019.

In the majority of the City's apartments, youth and their families now have access to no-cost Wi-Fi. The access is metered and streaming of certain sites, mostly entertainment venues, is blocked to allow speeds to remain high for school research work. For the free services, now being provided to an average of 250 to 300 users a month, average user download speeds are well above 25 Mbps. The goal over the next two years is to expand service to reach over 5,000 deserving residents.

In a follow-on innovative partnership with the Tukwila School District, students who live outside the area covered by the City's Wi-Fi cloud will be able to check out wireless routers from the library, just like books.

Additional information is available from Joseph Todd, CIO, City of Tukwila, at Joseph.Todd@TukwilaWA.gov or 206-454-7575.