

Creating Connectivity in Hidalgo County With a Wireless Mesh Network

How Hidalgo County and Insight used federal aid and a three-layer mesh network to bring free public Wi-Fi to more than 30,000 students and teleworkers

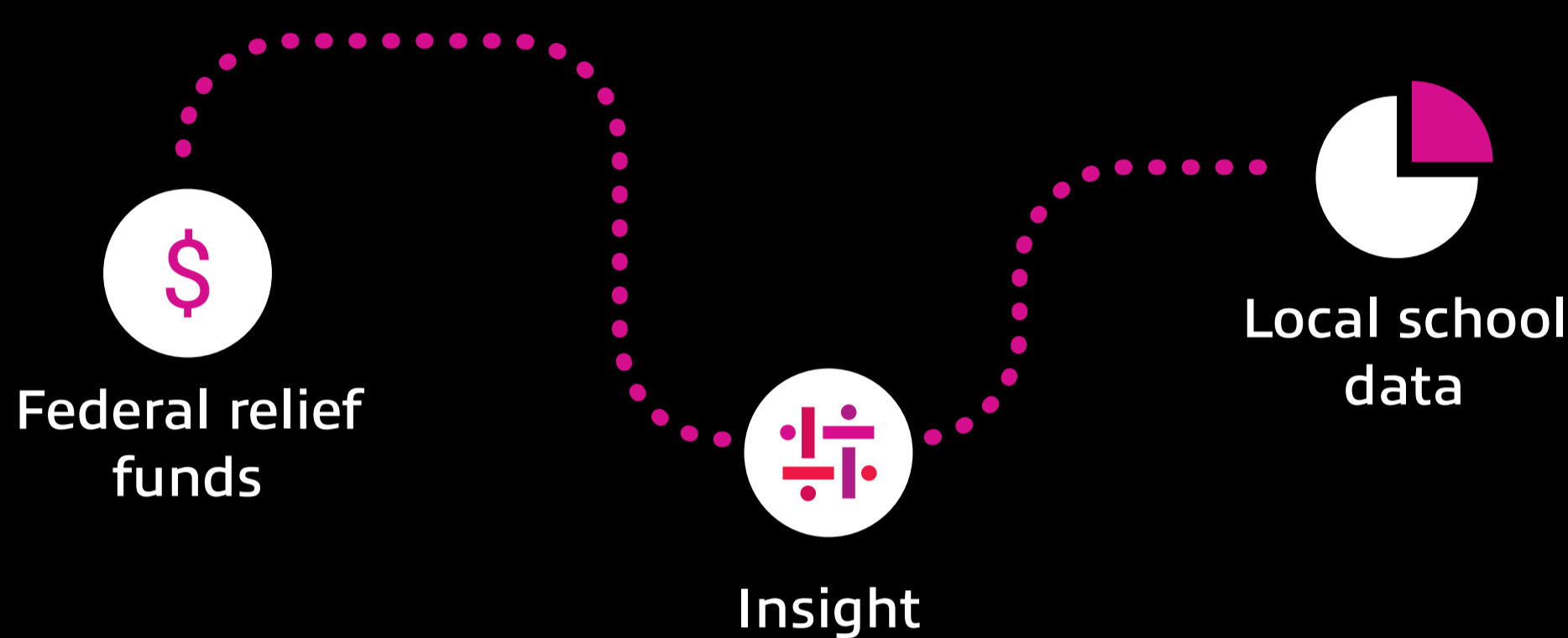
HIDALGO COUNTY:

850,000+
people

12+
school districts

SEVERAL
colleges

1 in 3 FAMILIES
living below the poverty line



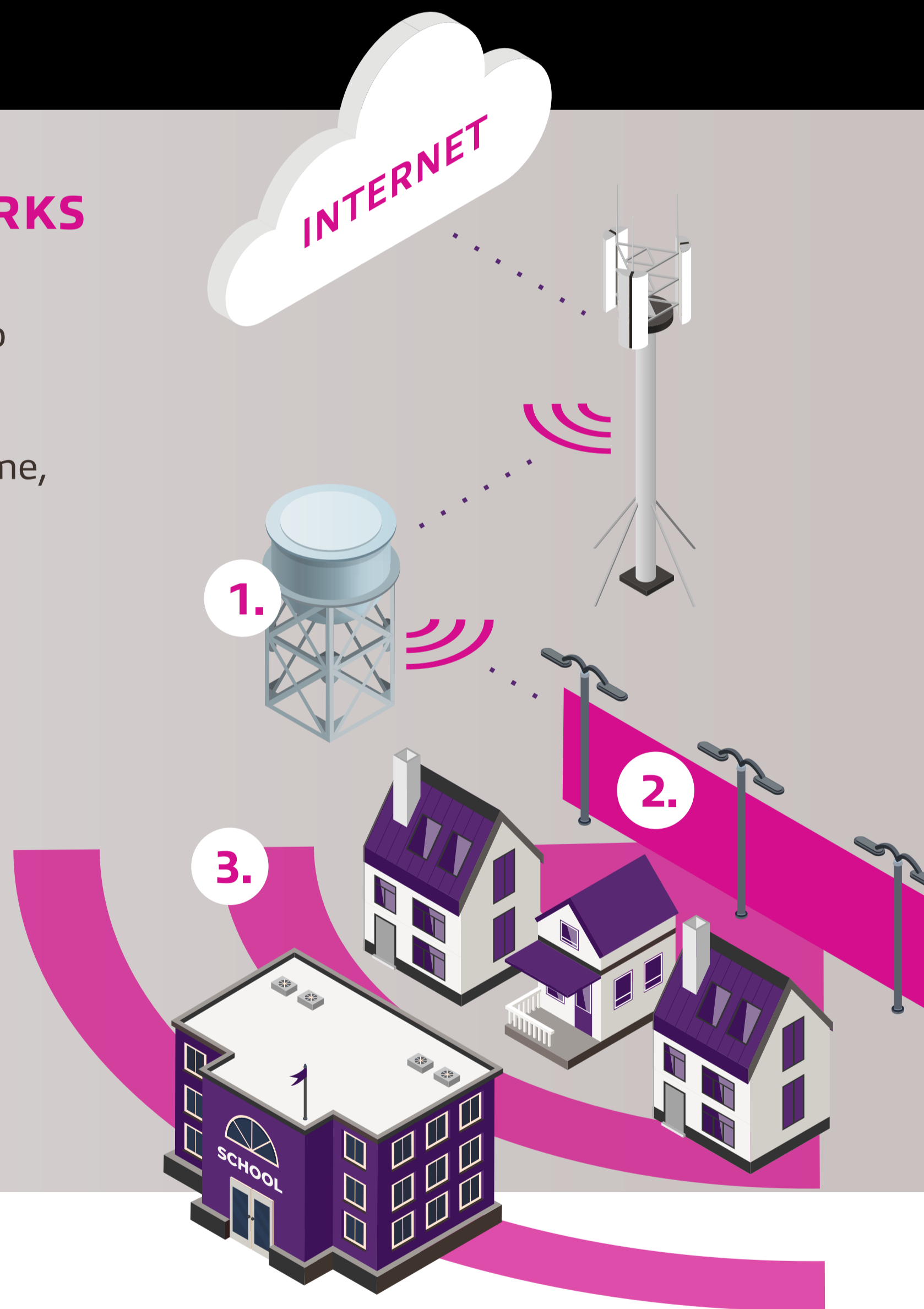
CONNECTING THE DOTS

To deliver a solution, Hidalgo County leveraged three crucial resources to plan and implement a large-scale project to deliver broadband connectivity to the communities where it was needed most using a three-layer wireless mesh network solution.

WIRELESS MESH NETWORK: HOW IT WORKS

A wireless mesh network uses individual nodes across a geographic area to carry wireless signals from one point to another. Our mesh network operates in three layers, harnessing the signal from an internet provider and using gateways and access points to connect user devices at home, school, or work.

- 1. Gateways** — Gateways are installed using towers and existing infrastructure such as water tanks and telephone poles. These take the internet signal and deliver it to mesh access points.
- 2. Wi-Fi access points** — Mesh access points are installed evenly across the neighborhood to distribute the signal across a wide area.
- 3. Endpoints** — Whether in-home or at school or work, the endpoint devices receive the signal from the mesh access points, creating connectivity.



BROAD, FREE INTERNET ACCESS TO SUPPORT EDUCATION AND REMOTE WORK

Free public Wi-Fi access to **30,000+** students and remote workers

Secure, wireless network design

Cost-effective solution leveraging existing infrastructure

Eliminates aspects of the growing digital divide at an important time



Well-maintained and optimized network through an expert support team

CREATE CONNECTIVITY.

Contact us to learn more about designing, implementing, and maintaining public community broadband services.