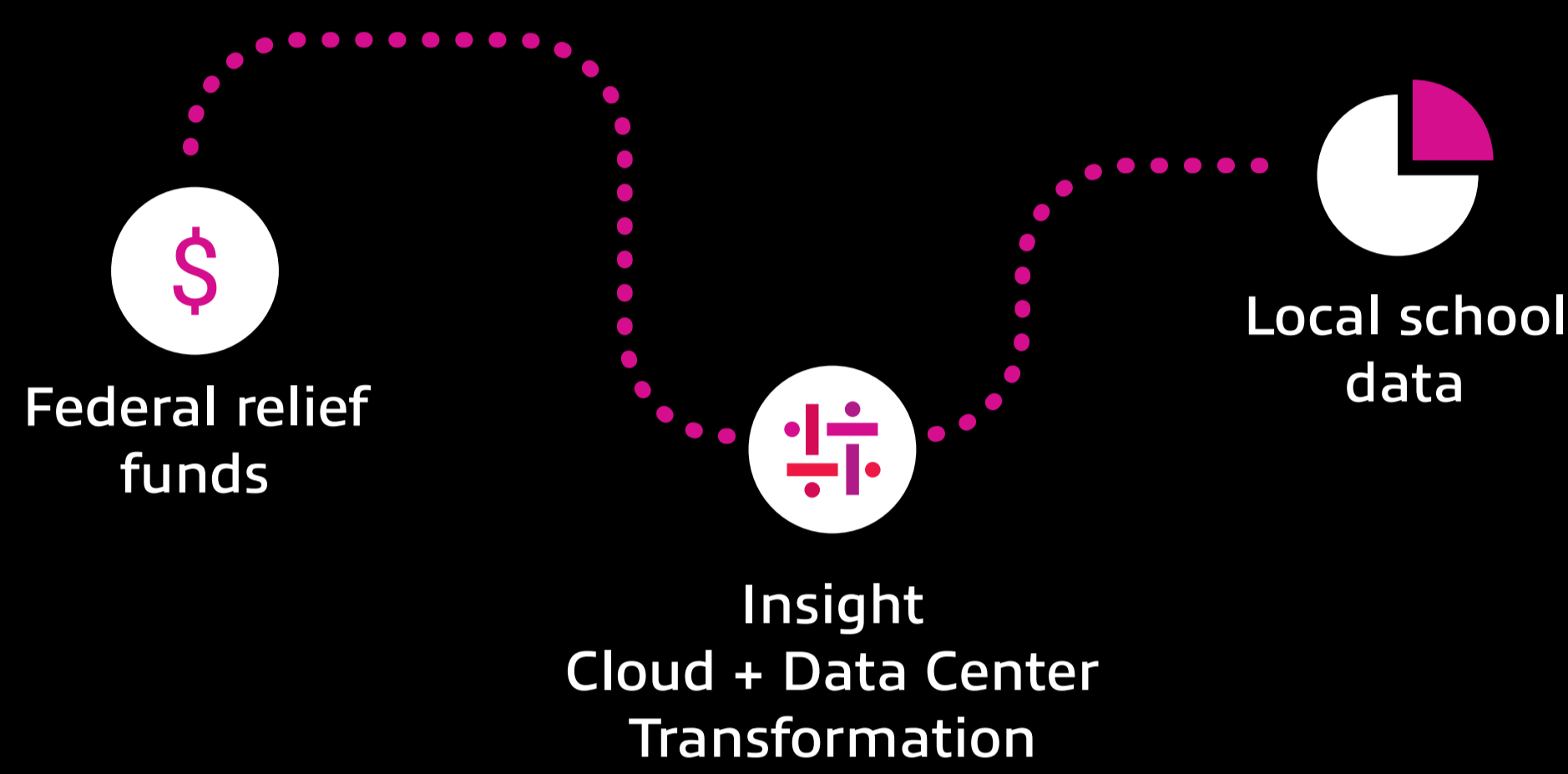


# Creating Connectivity in Hidalgo County With a Wireless Mesh Network

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

<b>HIDALGO COUNTY:</b>	<b>850,000+</b> people	<b>12+</b> school districts	<b>SEVERAL</b> colleges	<b>1 in 3 FAMILIES</b> living below the poverty line
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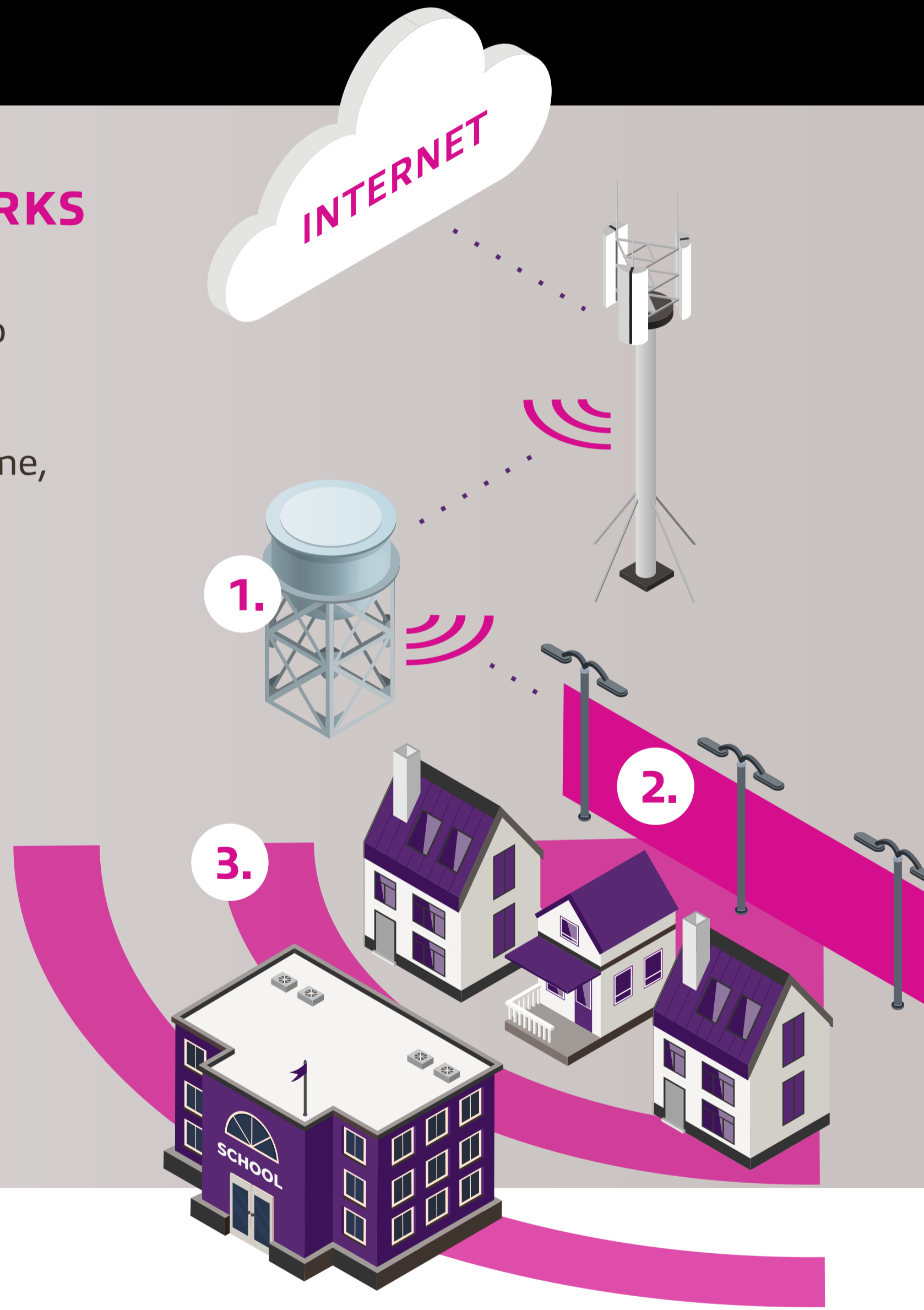
## CONNECTING THE DOTS

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.



<b>BROAD, FREE INTERNET ACCESS TO SUPPORT EDUCATION AND REMOTE WORK</b>	Free public Wi-Fi access to <b>30,000+</b> 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

## CREATE CONNECTIVITY.

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