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What are internet deserts?

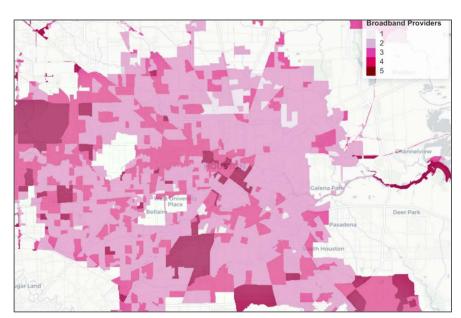
An **internet desert** is an area that lacks affordable, reliable, high speed internet access.

In general, people have access to technology, such as computers and phones. They need high-speed access to the internet.

There is no market incentive for companies to reach these low income families. As a result, there is very little competition among consumer-facing broadband providers.

According to the FCC, almost two-thirds of Houston has 2 or fewer broadband providers.

The lack of competition means that prices stay the same or go up, making high speed internet less affordable.



Heatmap of broadband providers, January 2018. Data: FCC. Map: January Advisors.



What contributes to internet deserts?

- Lack of market demand at current prices means poorer neighborhoods are among the last to get technology innovations.
- Lack of competition among broadband providers means there is no incentive to compete on price or accessibility.
- The FCC's recent elimination of the lifeline program, which provided a \$20/month subsidy for home broadband.
- Lack of clarity about the law and high cost utility pole regulation effectively eliminate startups and municipal-run broadband.



What about 5G?

- Verizon has installed its 5G network throughout Houston, prioritizing Complete Communities neighborhoods.
- Currently, 5G is only available for home internet. So a subscriber has to live in a 5G service area.
- 5G might not have the same level of accessibility as fiber: 5G requires a
 direct line of sight to the tower (eliminating customers with trees or
 buildings in the way), while fiber is wired up to every home in the
 neighborhood.
- 5G is a big step forward but only a small part of the overall solution.

Broadband internet is still out of reach for many

- Verizon 5G home internet regular rate is \$70 per month, or \$50 per month if you are an existing Verizon Wireless subscriber.
- Comparable AT&T and Comcast home internet regular rates are \$60 per month.
- The introduction of a new network does not help affordability yet.
- Some providers offer low-cost internet packages, but they are not high speed (~15 Mbps).

What can the City of Houston do?

 Conduct a study to understand how low income families access the internet in the City of Houston (per CM Edwards budget amendment below).

The City of Houston (1) shall commission a survey and detailed report of Houstonians' home Internet usage or lack thereof to identify "Internet Deserts"; and (2) shall issue an RFP to identify one or more Internet service providers that are willing to commit to deploying advanced wireline and wireless that can provide high-speed Internet to residences and businesses at low and no-cost in areas that may lack access to connectivity, including but not limited to those communities in the Complete Communities Initiative

- Establish a public/private partnership grant program to make home internet more affordable to those who need it.
- Negotiate with broadband providers to establish plans for low income Houstonians that provide comparable speeds to their market-rate plans.
- Add broadband compatibility provisions to single and multi-family building codes, similar to HUD.

