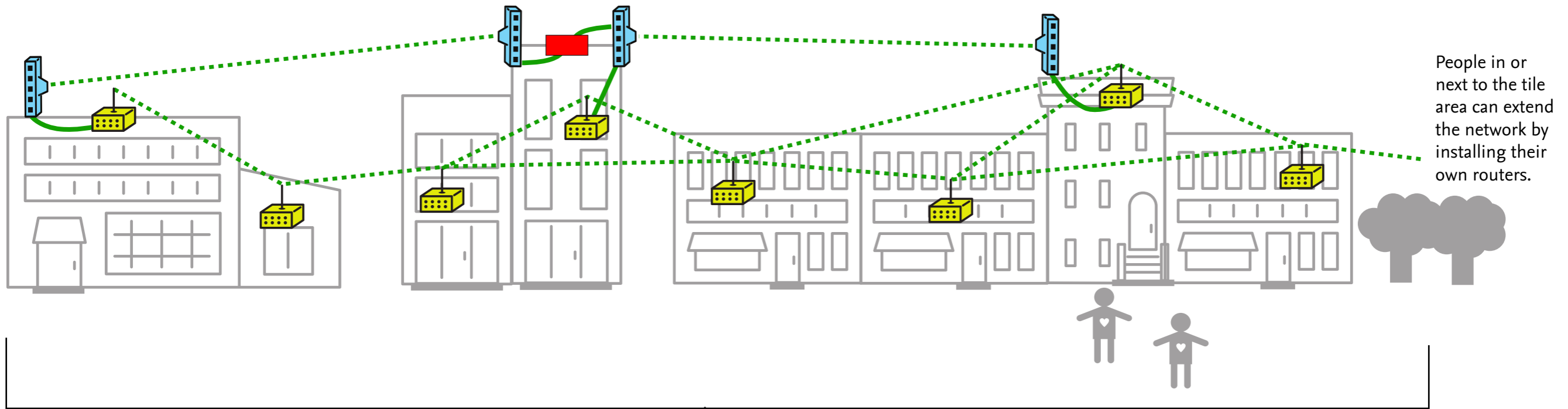


Modular mesh wireless tile



1/2 to 3/4 mile



(1 unit) Internet Gateway

Connection to the global Internet or point of presence (point-to-point wireless or fiber-optic backhaul, white space device, etc.)



(5 to 10 units) Gateway distribution layer

Point-to-point or -multipoint directional mesh wireless nodes.



(25 to 100 units) User-facing access points

Omnidirectional mesh wireless nodes mounted on lightpoles, building exteriors, rooftops, or windows.



Wired connection



Wireless connection

The bandwidth delivered to the end user can be up to 50 Mbps, but is dependent on available bandwidth at the gateway connection. There are various models for determining how many users can share a given connection. Each user-facing access point can support up to 25 simultaneous connections, but speed will depend on available bandwidth at the gateway, interference, and other factors. Engineering study is required to determine the technical feasibility of each tile. Community participation is key in determining rooftop anchor sites and pilot "early adopter" candidates.

Hardware = approximately \$25,000

Installation labor = approximately \$75,000 to \$150,000