

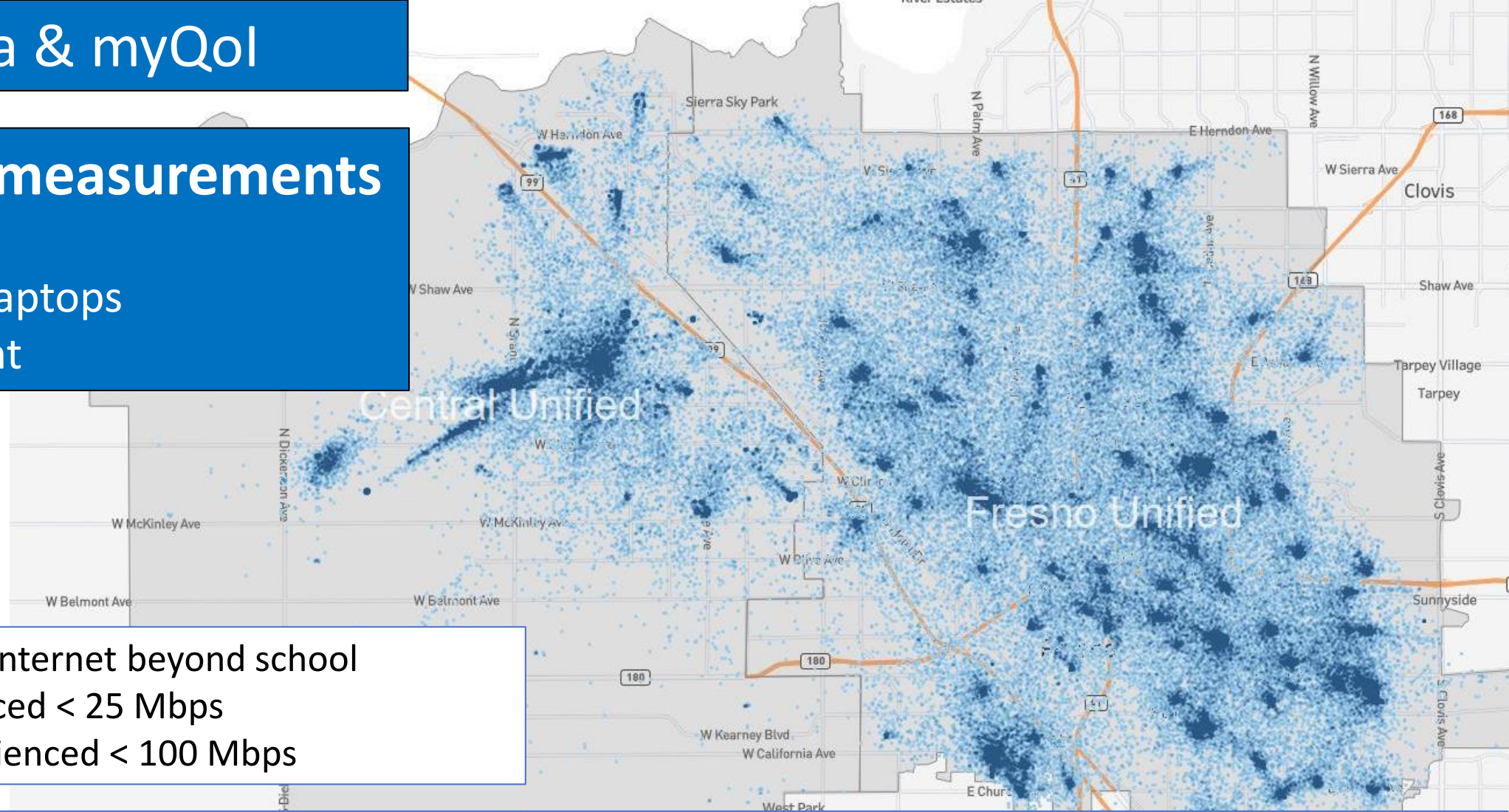
Mapping Data & myQoI

14,000,000+ measurements

Fresno Unified.

70,000+ student laptops

July 2021 – current



- Not Connected: no internet beyond school
- Unserved: experienced < 25 Mbps
- Underserved: experienced < 100 Mbps

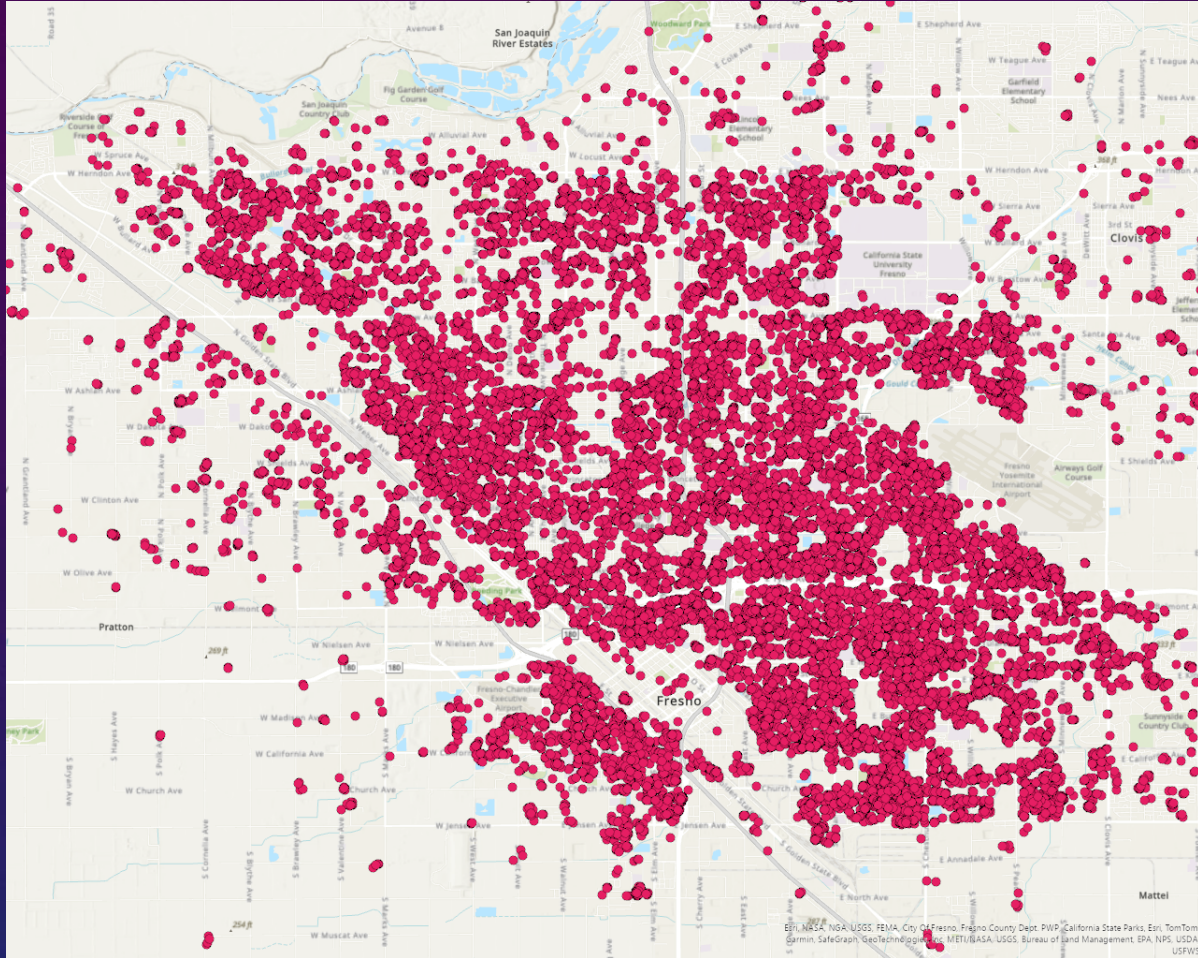
myQoI 1) installed on district-issued laptops, 2) measures location, speeds, carrier, 3) at 9:30 am, 3:00 pm and 7:00 pm. For underserved and unserved, analytics counts students that experienced low quality for more than 20% of the time.

Windows myQoI: <https://github.com/FresnoUnified/myQoI>

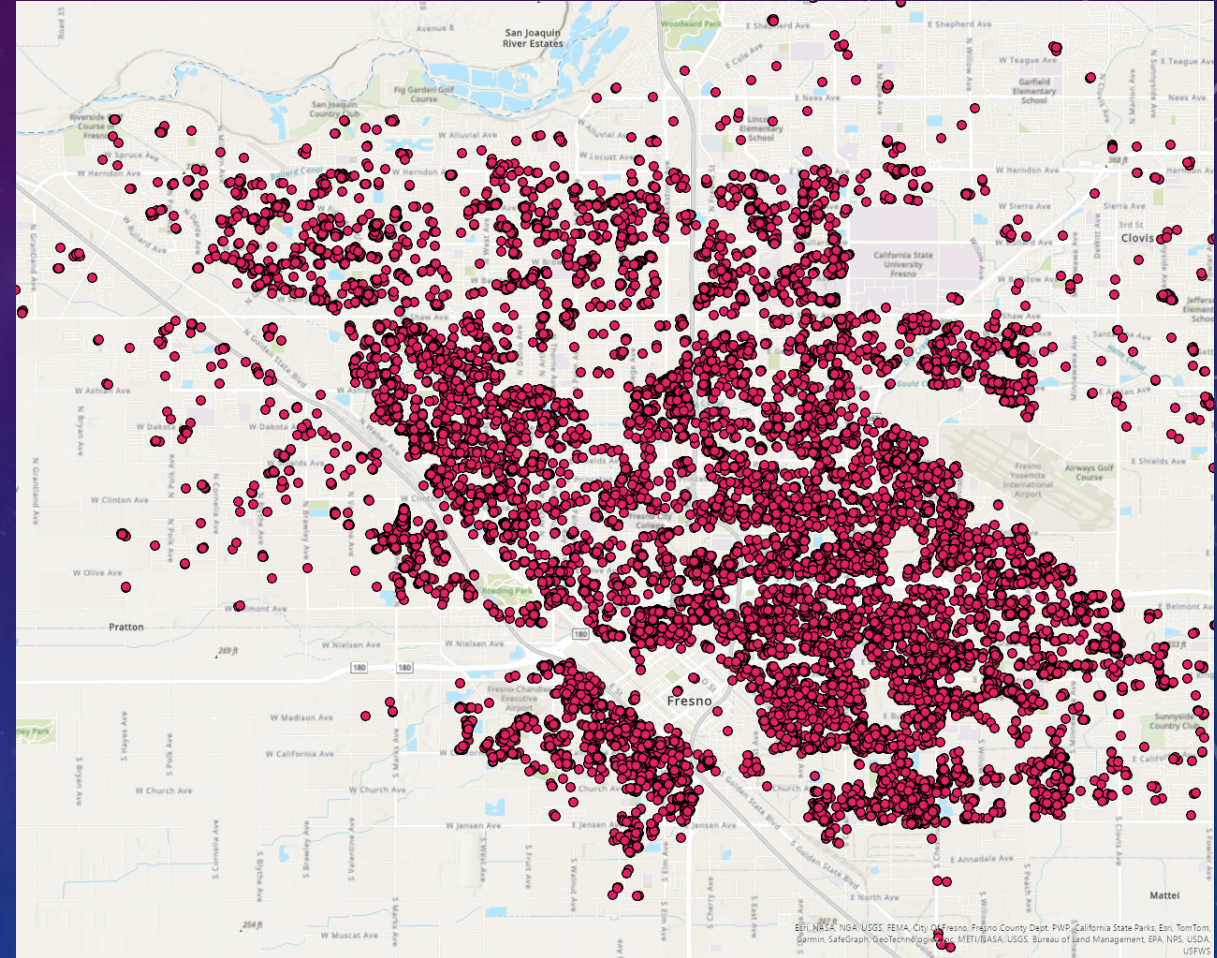
Chromebook myQoI: <https://github.com/future-state/myQoI>

Functional Requirements github.com/FresnoUnified/myQoI/blob/master/Draft%20-%20myQoI%20Functional%20Requirements.pdf

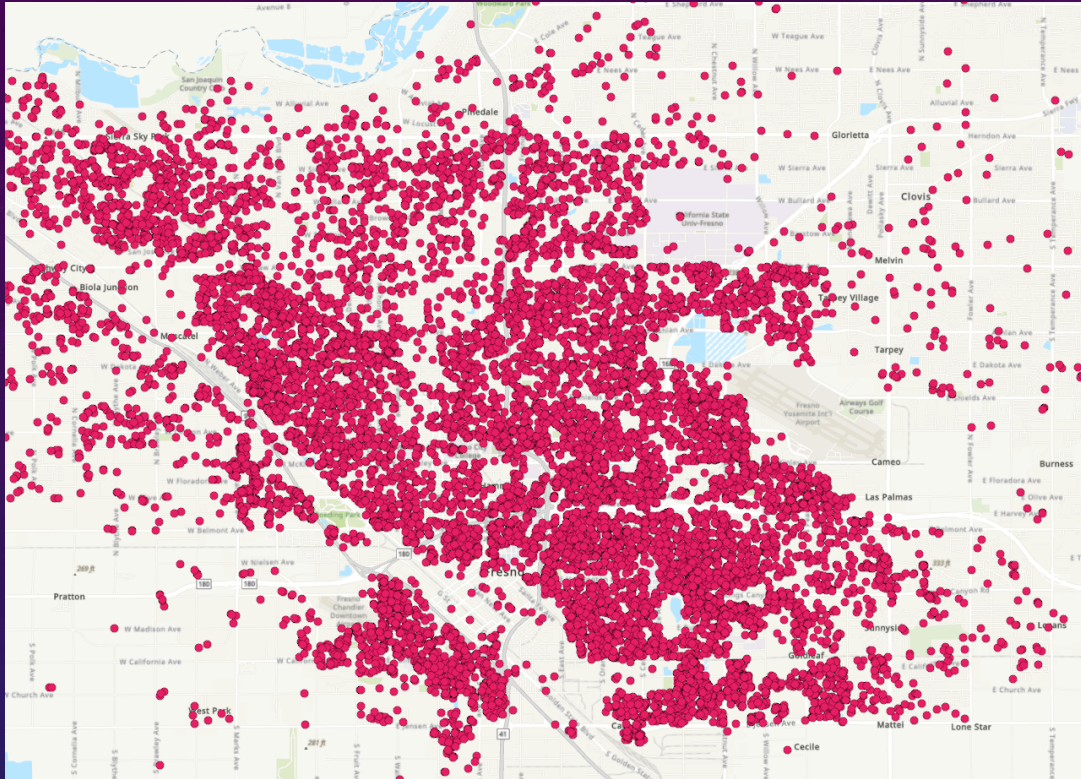
Fresno Unified myQoI Unserved



MyQoI Unserved on Comcast

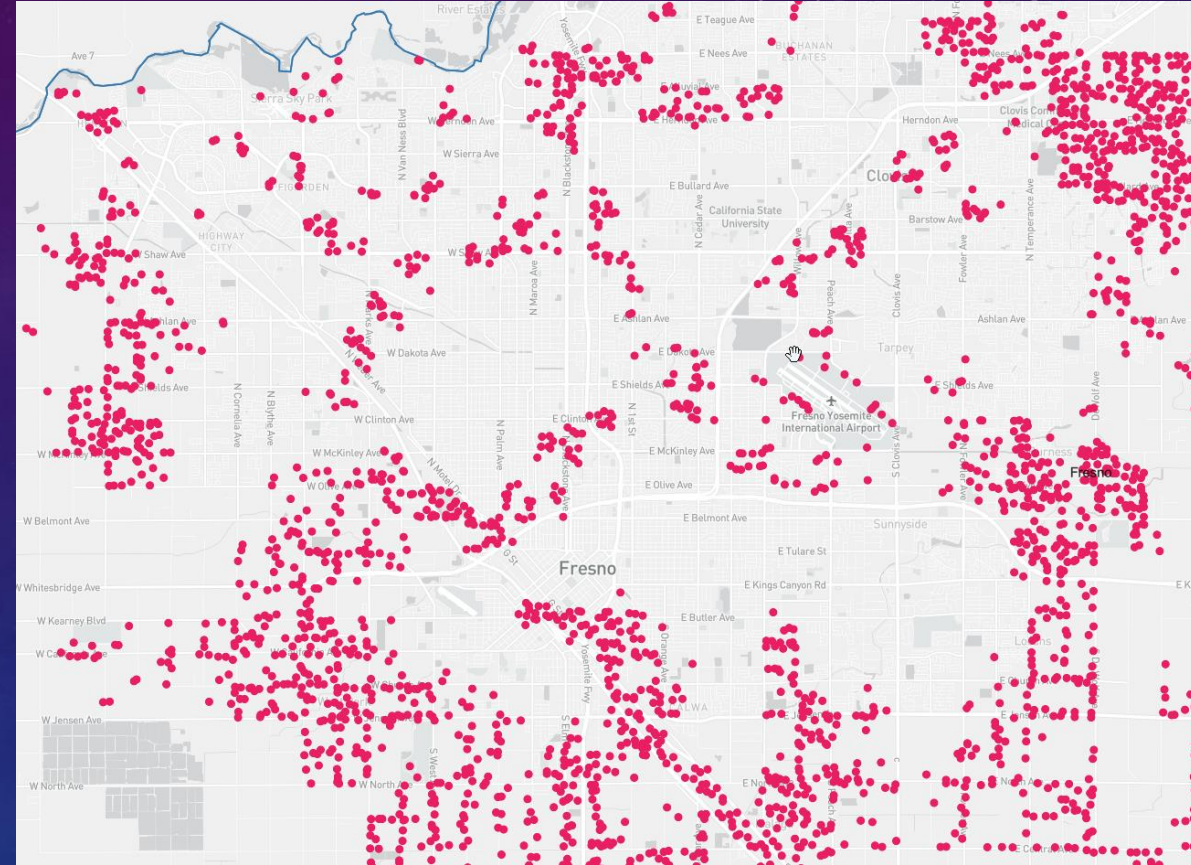


Fresno County MyQoI unserved locations



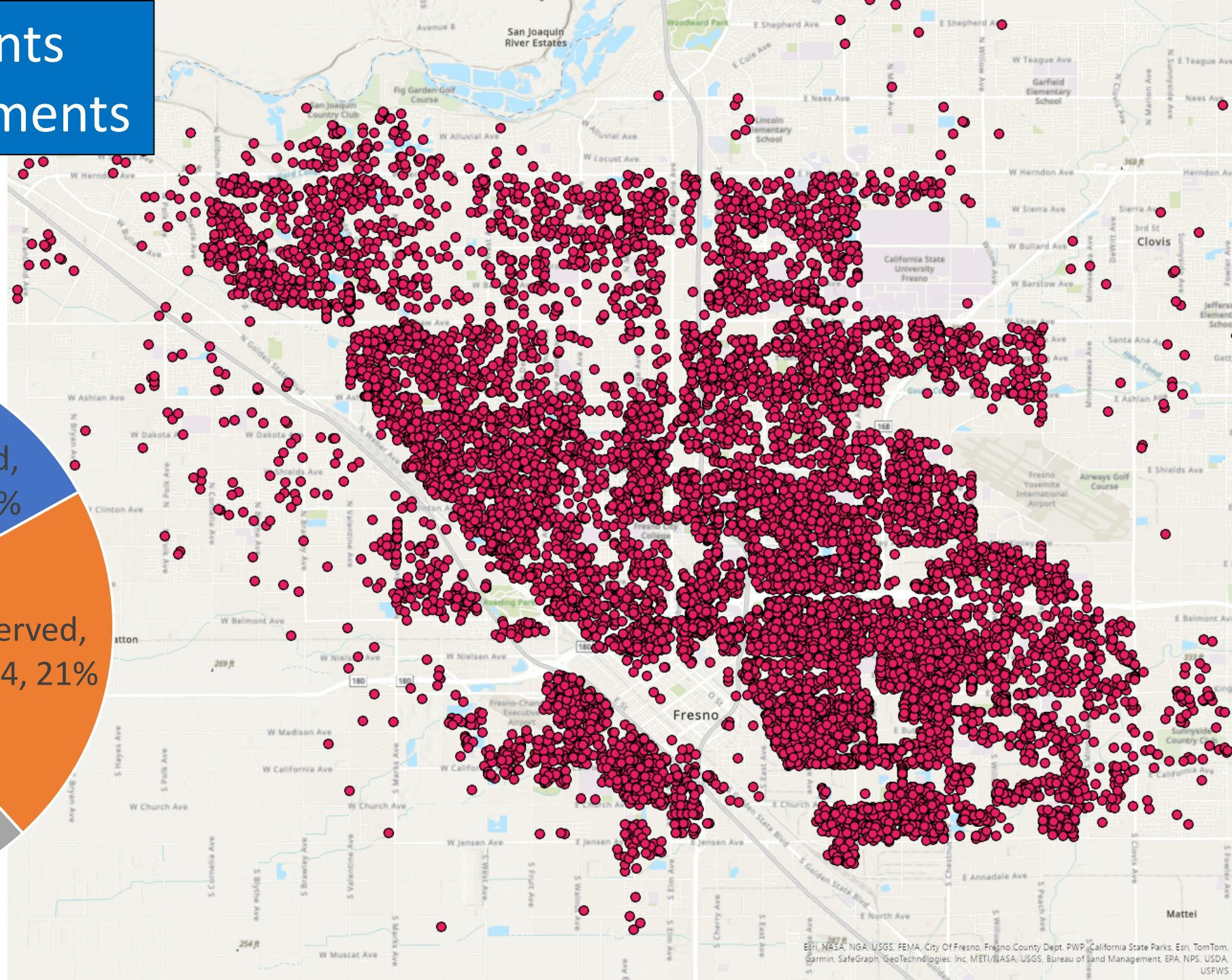
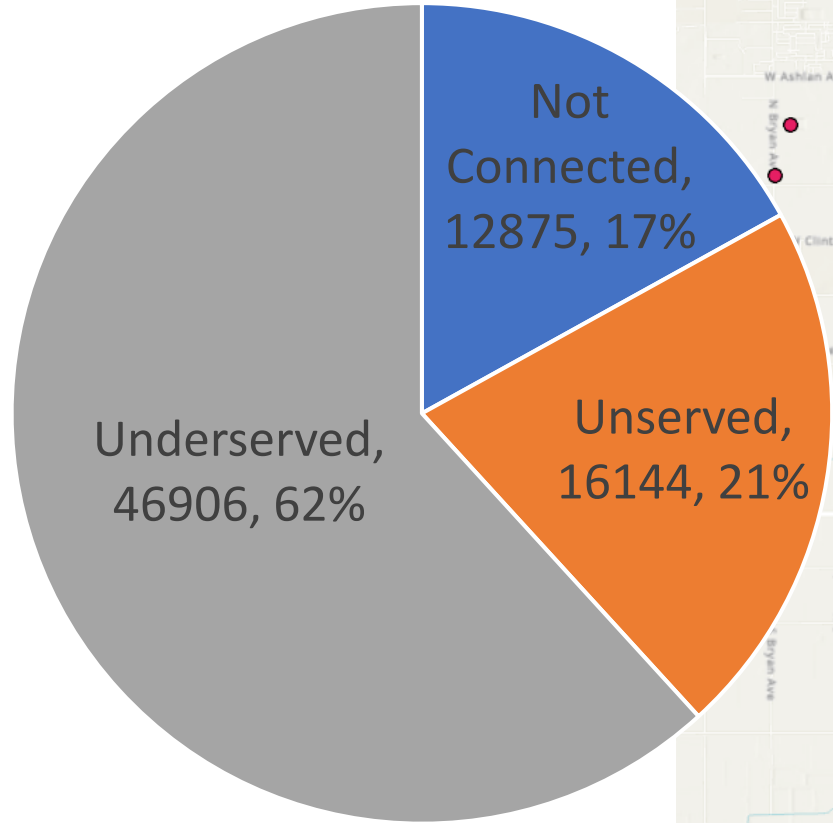
Data Source	Unserved	Unserved Residents
CPUC 2022	3%	9300
Census 2020	17%	174,000
MyQoI 2023	27%	265,820
Microsoft 2020	47.8%	470,601

CPUC unserved locations (from FFA map)



Fresno County Population (2020)	1,009,503
Population in urban areas	757,127 (75%)

Unconnected Students No myQol measurements



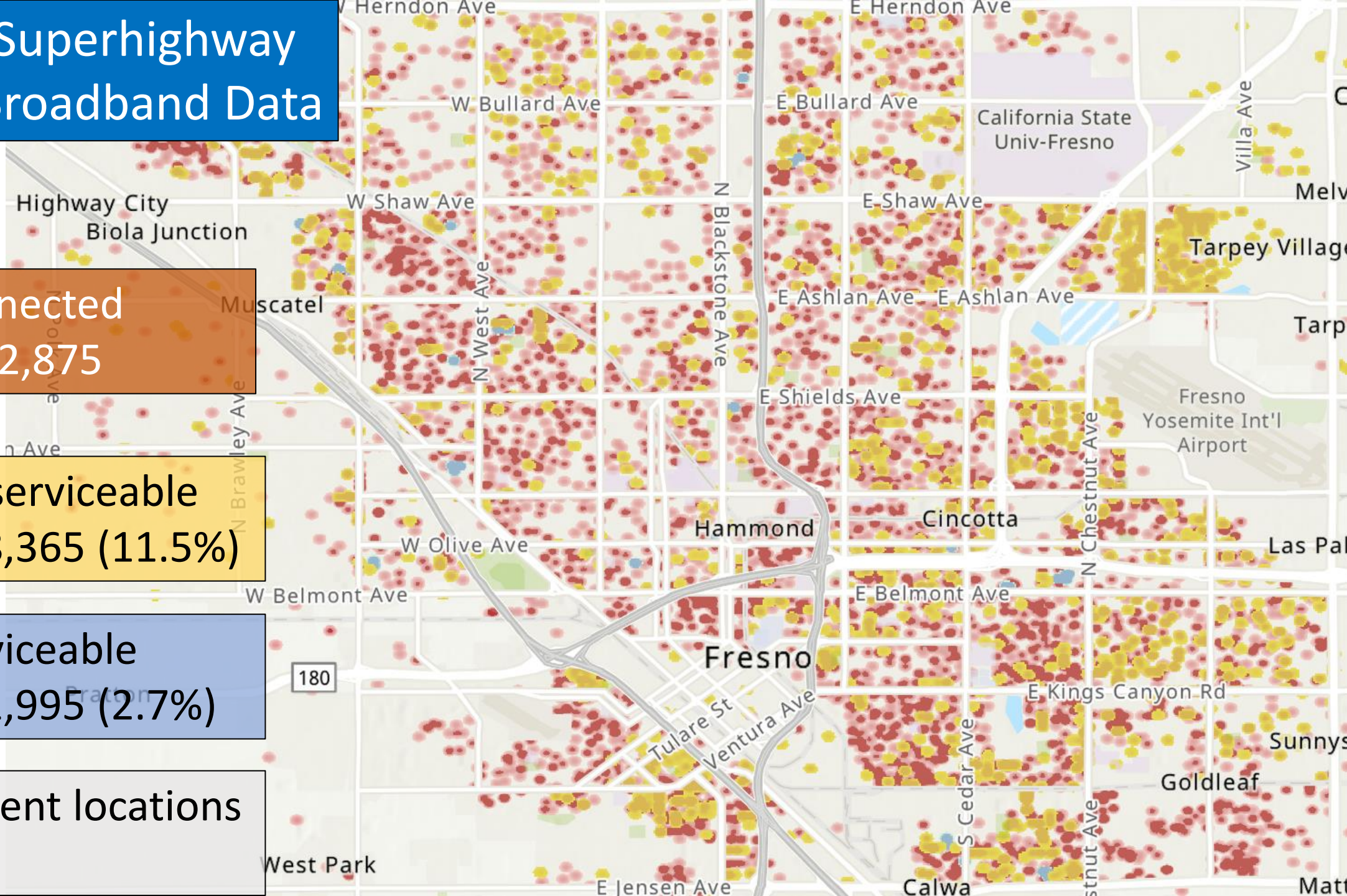
Education Superhighway Bridge to Broadband Data

FUSD unconnected
students = 12,875

Comcast unserviceable
locations = 8,365 (11.5%)

AT&T unserviceable
locations = 1,995 (2.7%)

Unique Student locations
= 72,907

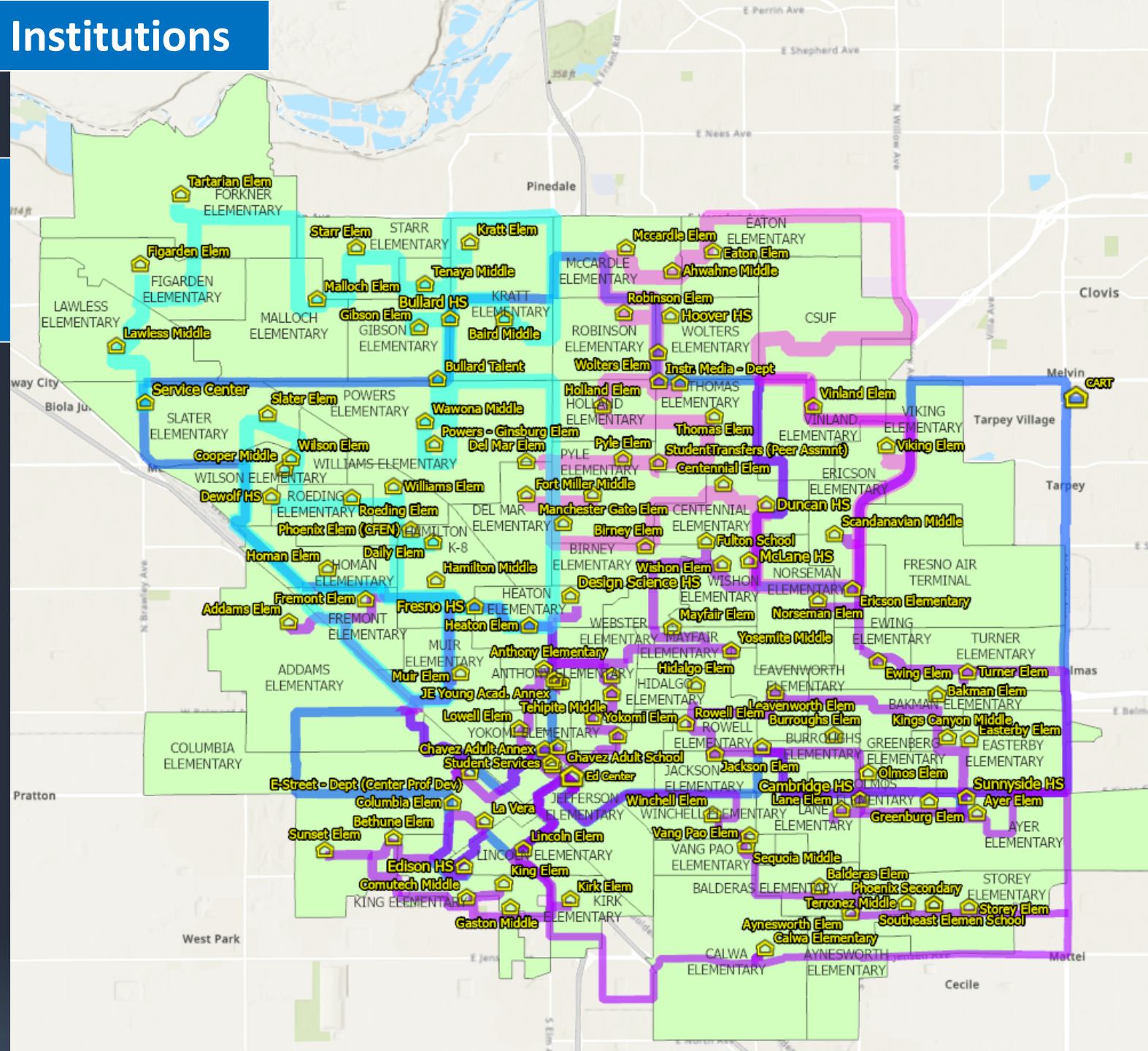


To and Through Community Anchor Institutions

Improving former fiber desert
Fresno Unified (connects 114 sites)
VAST Networks

- Images shows
Fresno Unified School District
Leased Fiber Network
- 20x to 100x speeds of 2019
 - \$40M savings over 20 years
 - Increase uptime (resilient rings)

Bid difficulties with incumbent
carriers required a *proforma
contract* and airtight bid to ensure
competitive bid for leased fiber



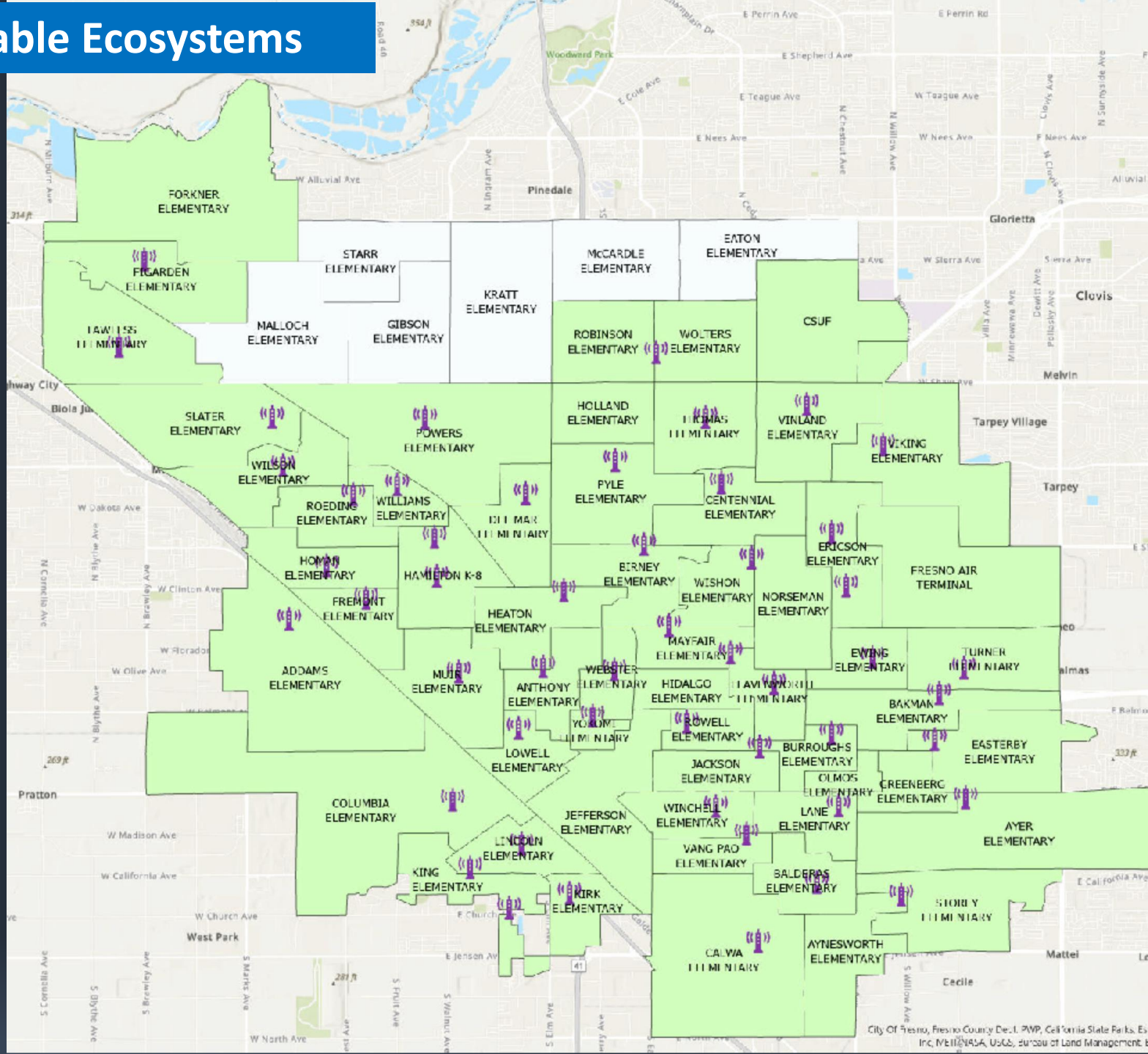
Investing Locally for Resilient Equitable Ecosystems

Images shows
Fresno Unified School District
Private LTE Cellular Network

Phase I: 15 schools-as-towers
Phase II: 35 60' poles
80% of district covered by 2025

Challenges:

- Engineering
- State approval
- Adoption





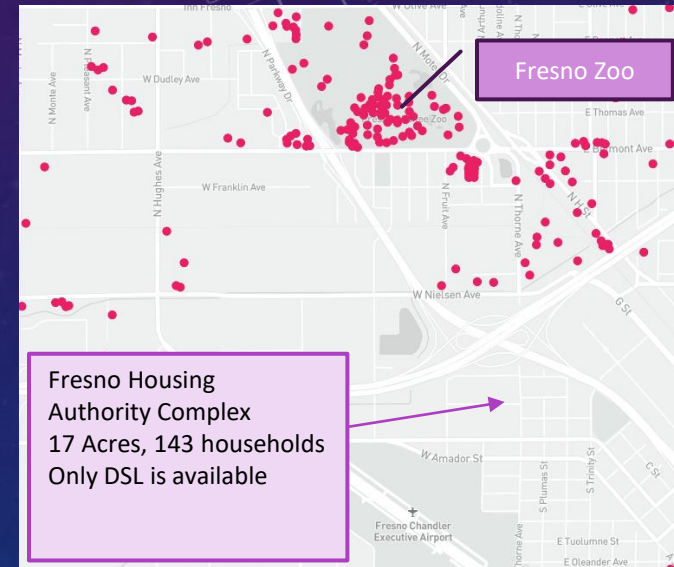
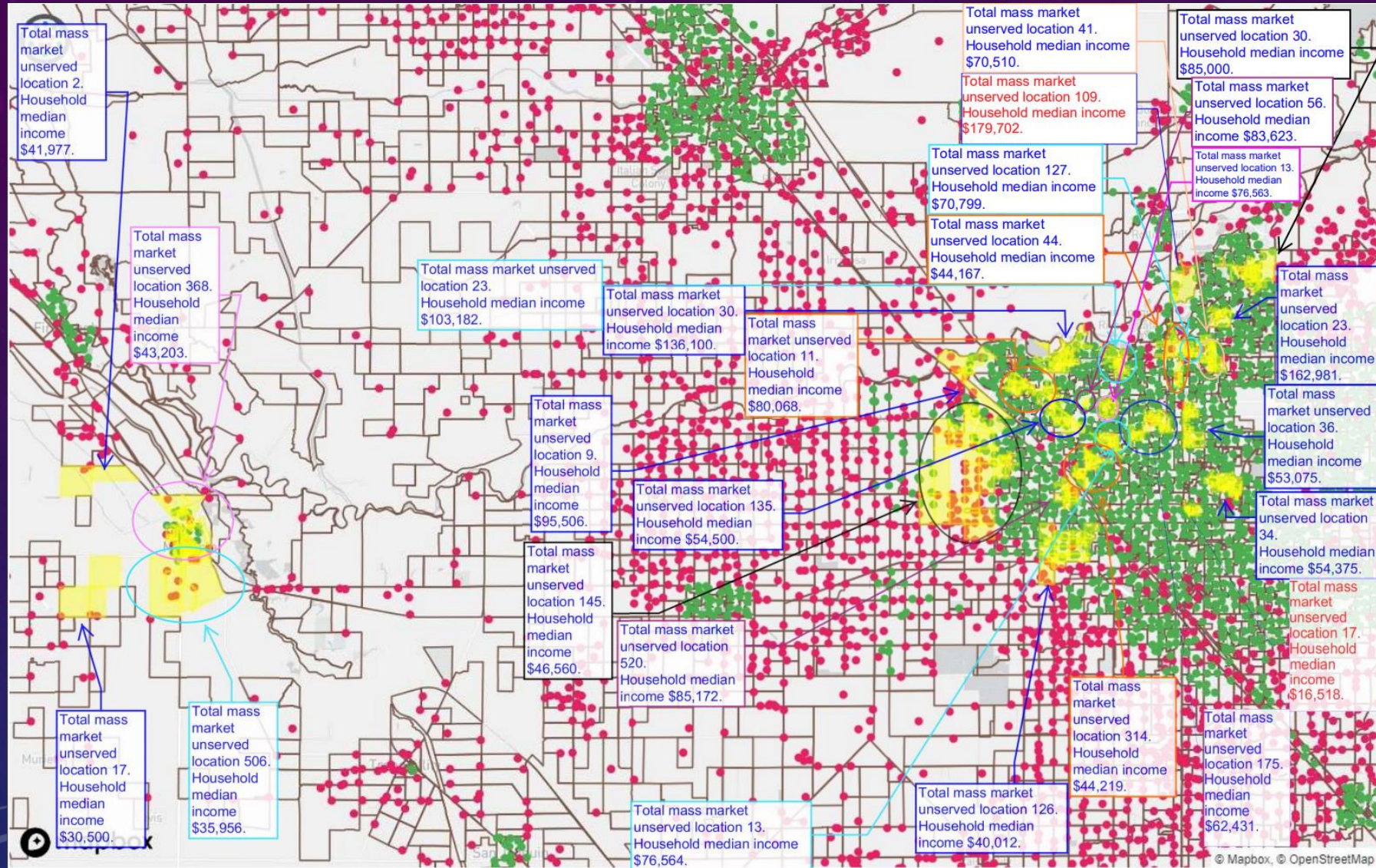
FRESNO COALITION

FOR DIGITAL INCLUSION

- CONVENED IN SUMMER 2021
- CROSS-SECTOR COLLABORATIVE WORKING WITH AND FOR DIGITALLY UNDERSERVED
- MEMBERS COME FROM ~30 ANCHOR INSTITUTIONS AND CBOS
- VOLUNTEER ORGANIZATION -- MOST WORKING “OFF THE SIDE OF MEMBER’S DESKS”
- FORMALIZED AS A 501C3 NON-PROFIT IN SUMMER 2023
- EXPANDING TO REPRESENT FRESNO, MADERA, KINGS, AND TULARE COUNTIES
- JOINED WITH CADE IN 2024

FFA Application: AT&T Fresno 1C

- Very large project area
- Significant area overlap between applications
- Micro-projects blend areas of poverty with areas of affluence, effectively gaming the FFA points rubric



'unserved' area included in project is Fresno Zoo's Giraffe feeding area. Residents directly adjacent to this unneeded project are shown as served, but are unserved, are not included in project