AURORA INSTITUTE

SYMPOSIUM BREAKOUT SESSION
WEDNESDAY, OCTOBER 27, 2021 | 1:15-1:35 PM ET

Connect2Learn: Identifying Dimensions of Digital Inequity and Responding with a Multi-Layered Approach that Responds to Students' Needs and Alters the Community's Digital Ecosystem

PRESENTERS:

- Philip Neufeld, Fresno Unified School District

Connect2Learn: **Why?**

Students live-in and graduate into a world that is **digitally infused**, rapidly changing …

Better preparing students for **#AsYetImagined**

Rich learning in & **beyond** school,
across students' **daily journey**

Connect2Learn: **Dimensions** of **Digital Inclusion**

affordable, quality **internet access**, working **device** and apps, responsive **supports**, *know-why* and *know-how* to **successfully navigate *digital services***

Connect2Learn: **Progress Prior** to **Pandemic**

Personalized Learning Initiative (PLi)

Necessary Conditions

- student computers in classrooms
- working Wi-Fi
- tech supports
- PL = Affective, Experiential, Actionable, PLCs

Connect2Learn: **Response** to **Pandemic**

PL to support shifts to remote learning

Shift to 1x1 laptops

Broadband and Hotspots

Tech Supports

Shift to Digital *Schooling*

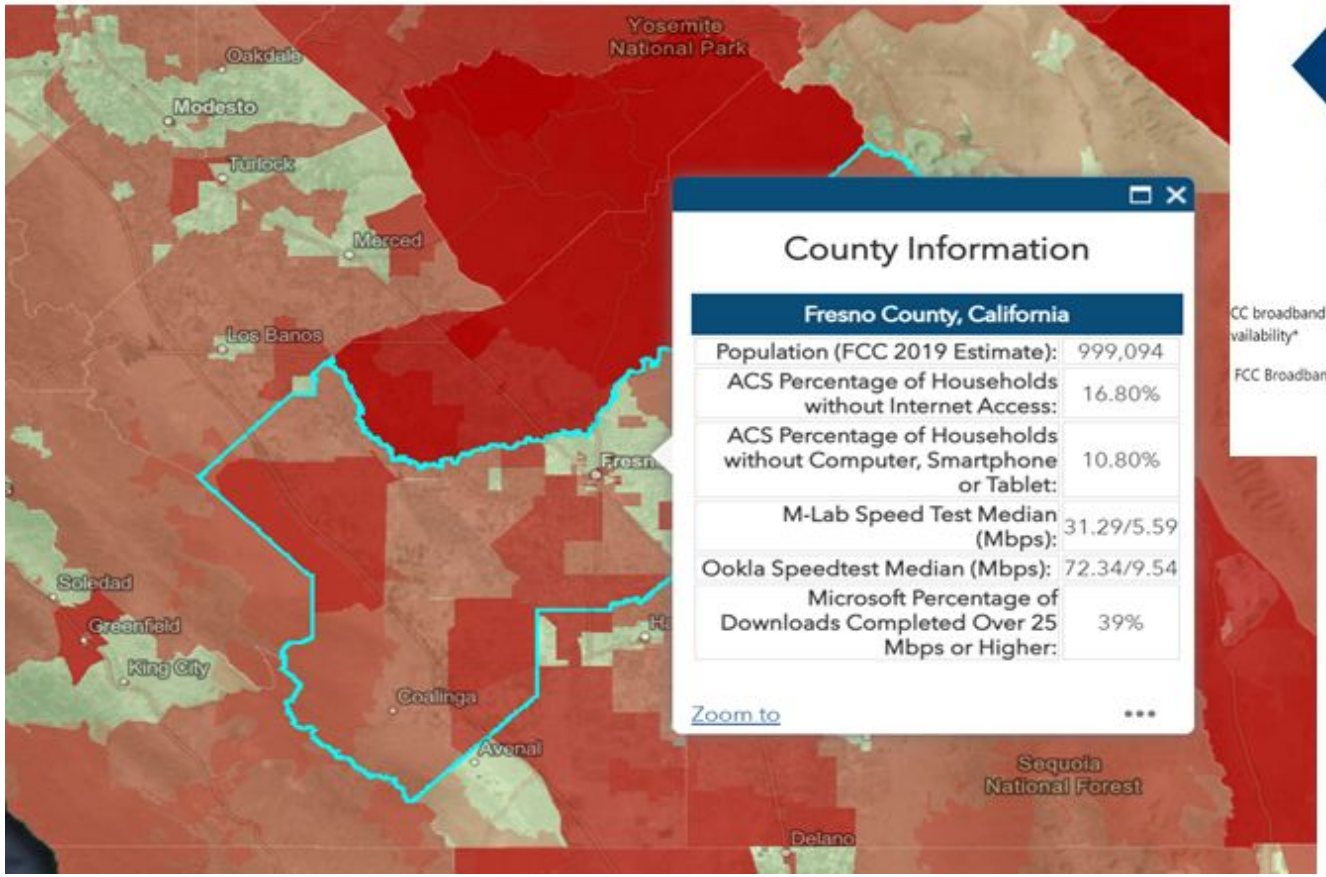
Connect2Learn: Problem

Pandemic ripped blinders off our eyes regarding **inequitable internet access**.

Quality of *neighborhood networks* **varied**. Hotspots don't work well without cell towers.

Current regulatory **conditions** & carrier business models **won't solve** for access.

Connect2Learn: Inequitable Access to Internet



Microsoft

Maps showing FCC fixed broadband availability and broadband usage based on Microsoft data updated as of October 2020
California

FCC indicates broadband is not available to ~4K people

CC broadband vailability* 0% >0 to 20% >20% to 40% >40% to 60% >60% to 80% >80% to 100%

FCC Broadband has or "could" provide greater than or equal to 25 Mbps / 3 Mbps

Microsoft data indicates ~478K people do not use the internet at broadband speeds

Broadband usage** 0% >0 to 20% >20% to 40% >40% to 60% >60% to 80% >80% to 100%

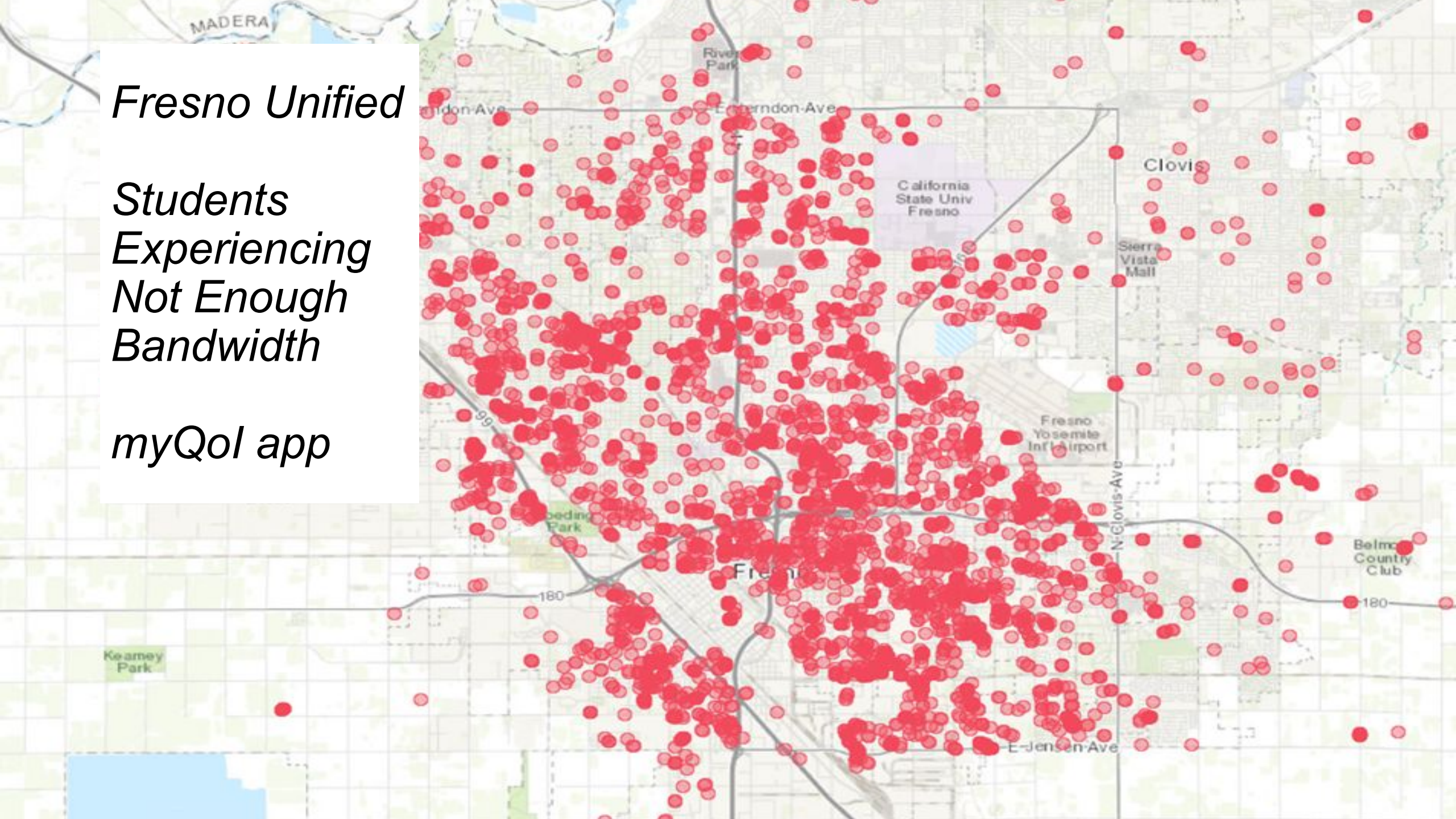
** Broadband speeds greater than or equal to 25 Mbps

Sources: FCC Fourteenth Broadband report based on form 477 data from December 2019 and Microsoft data from October 2020
To assist with additional broadband mapping analysis data has been made downloadable here. Learn more in this GitHub repository.

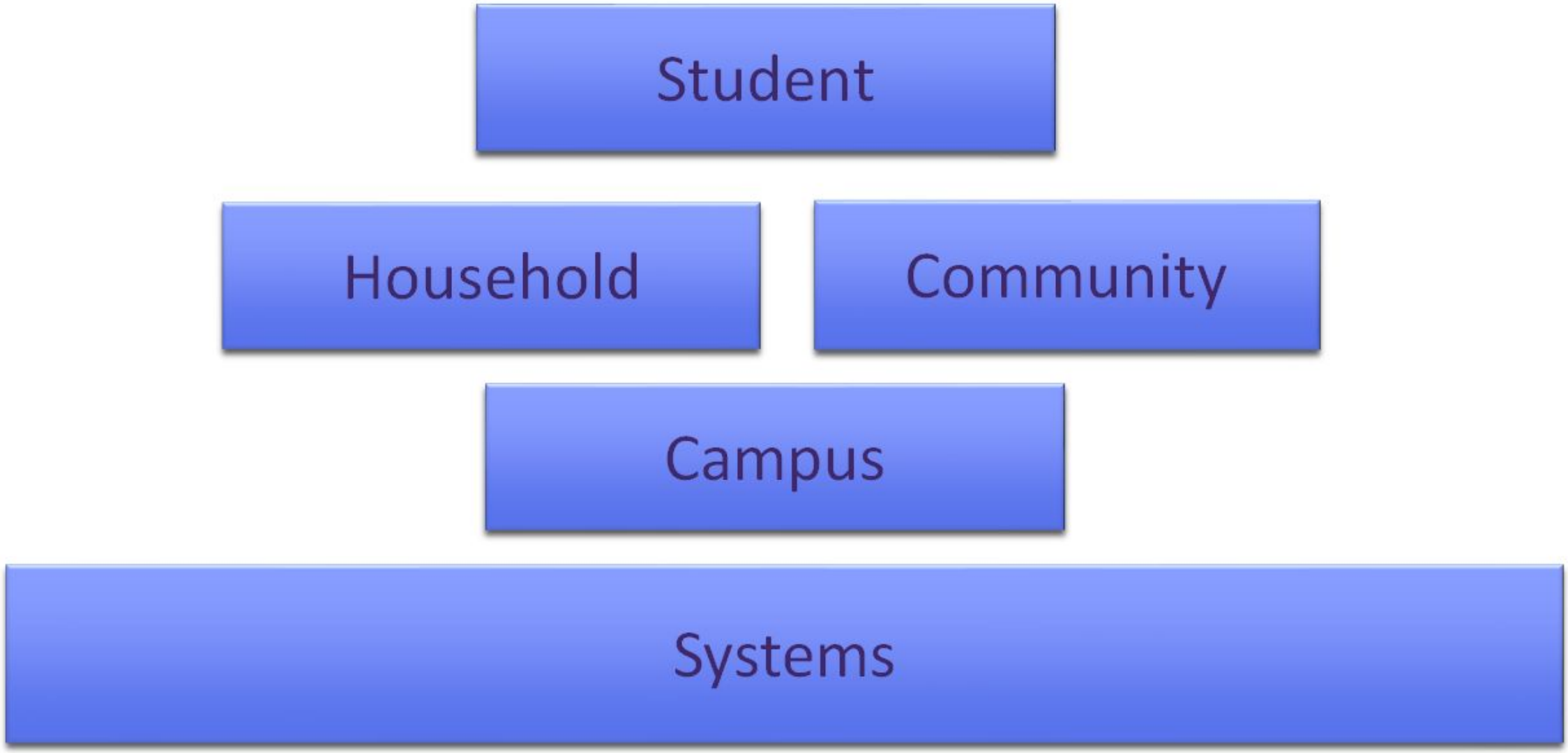
Fresno Unified

Students Experiencing Not Enough Bandwidth

myQol app



Dimensions of Inequity



Dimensions of Inequity

Personal Level

- Internet access throughout a person's daily journey.
- Working devices; usable, useful apps; accessible sites.
- Digital literacy as know-why & know-how to use safely & securely.
- Targeted supports for internet, devices, apps, and use of services.

Household Level includes affordable, quality broadband.

Community Level includes access in community centers & anchor institutions.

as well as understanding about services, resources, supports, and advocacy.

Systems Level

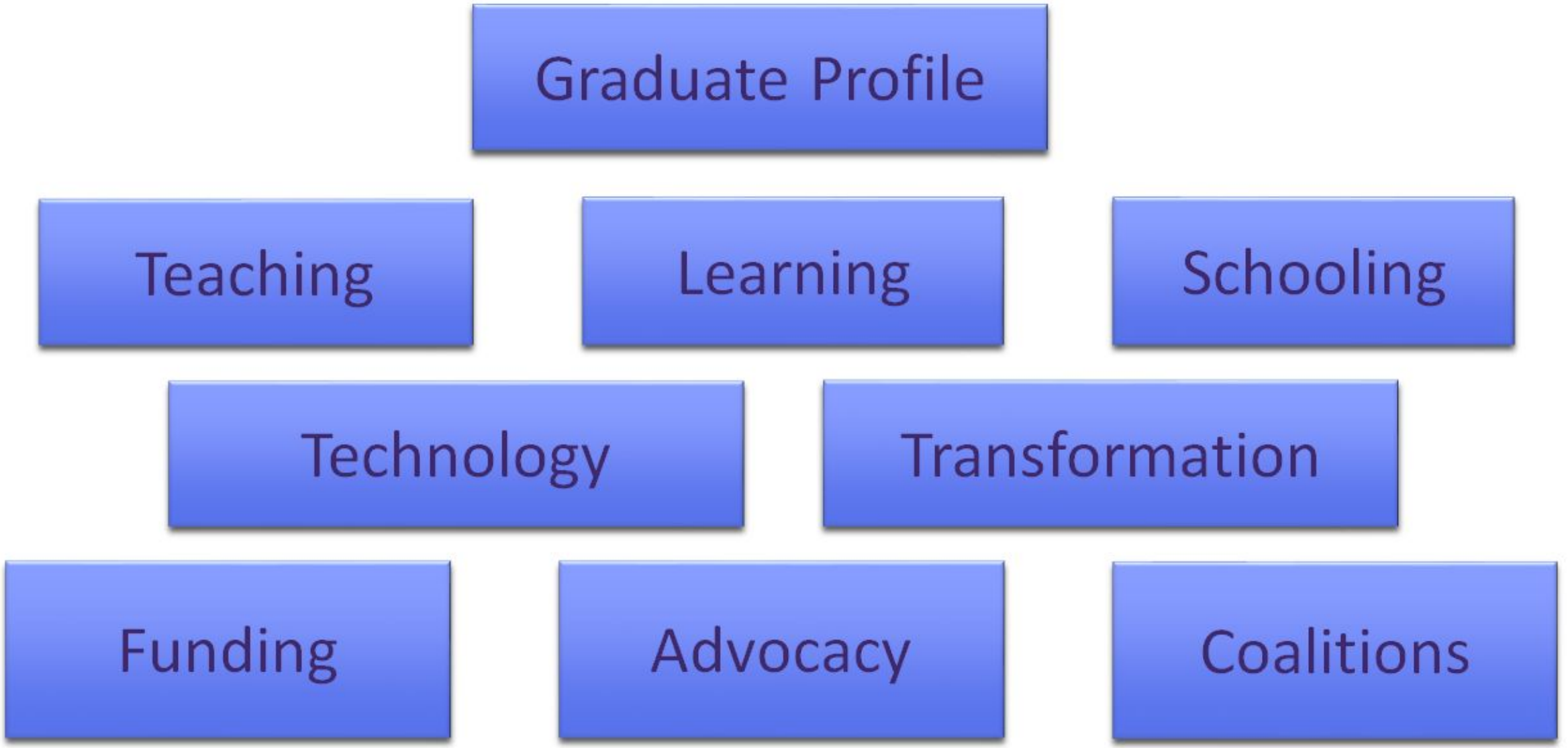
- **Infrastructure** like shared open-access middle mile and last-mile.
- ***Mapping*** of existing and planned infrastructure, buildings, etc.
- **Data** on *quality of internet connections* to target **investments** and **advocacy**.
- ***Improvements*** *to* public policies and practices.

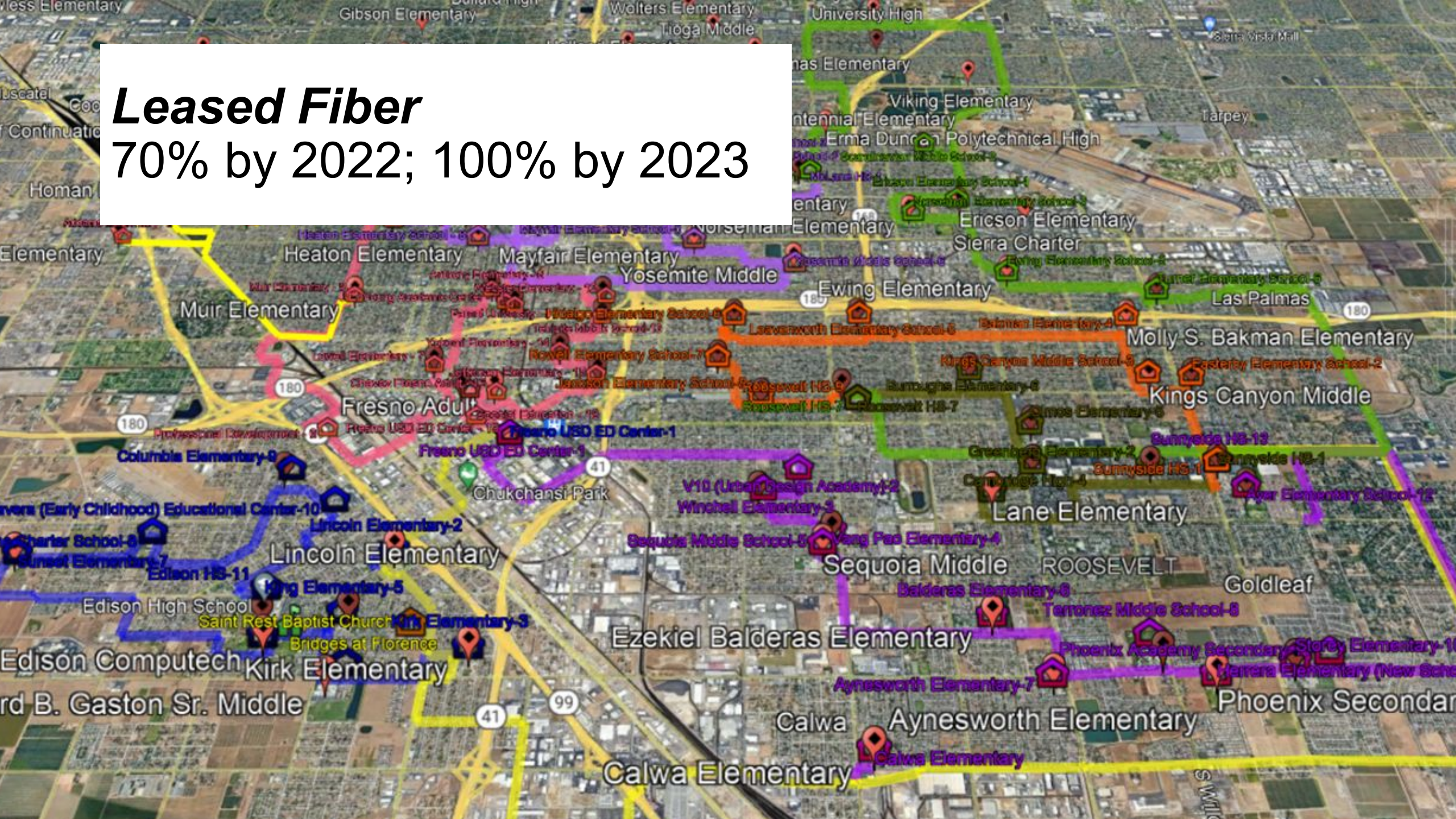
Reflect on Dimensions of Digital Inequity

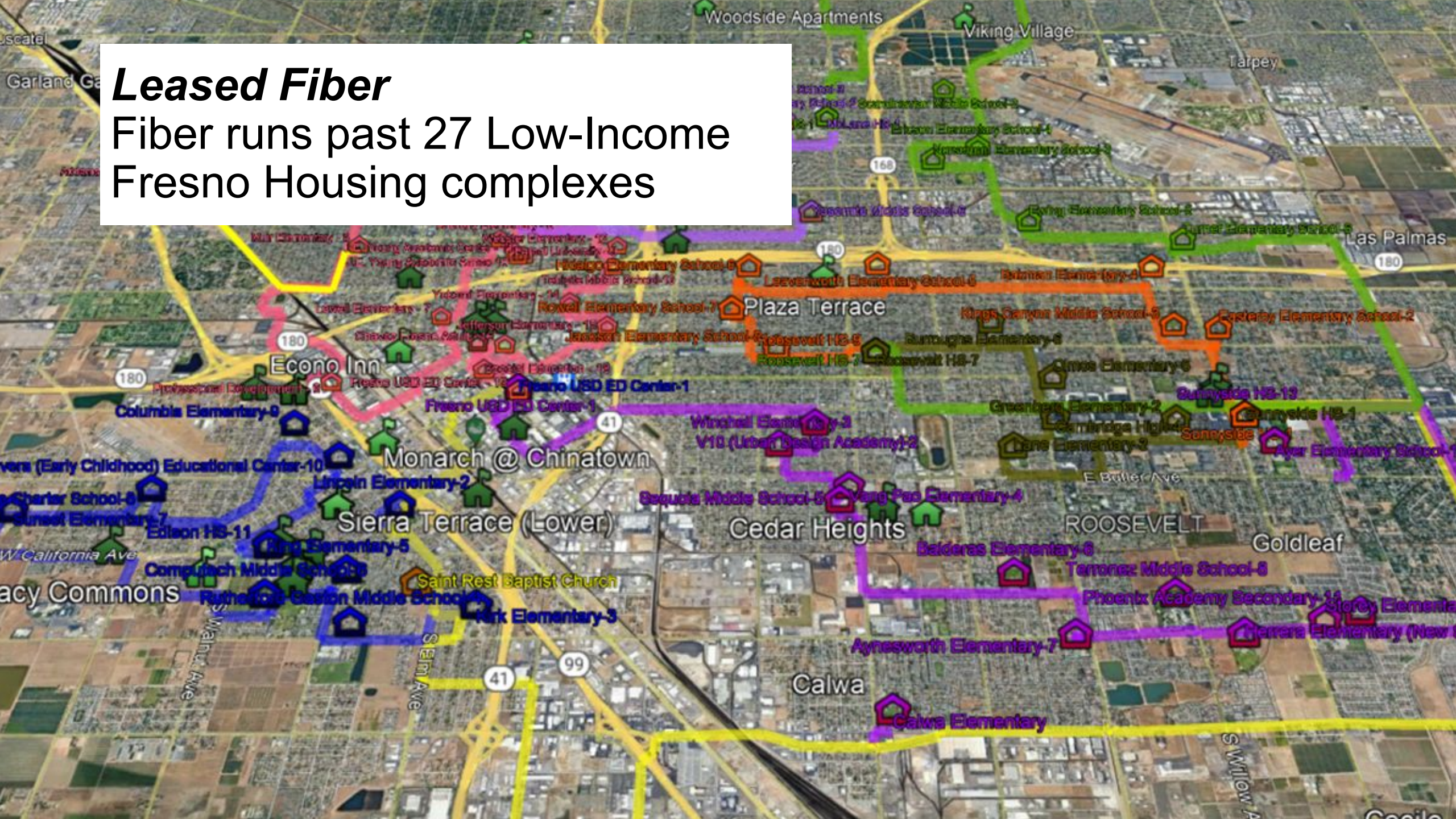
How did these dimensions show up in your community?

What other aspects did you observe?

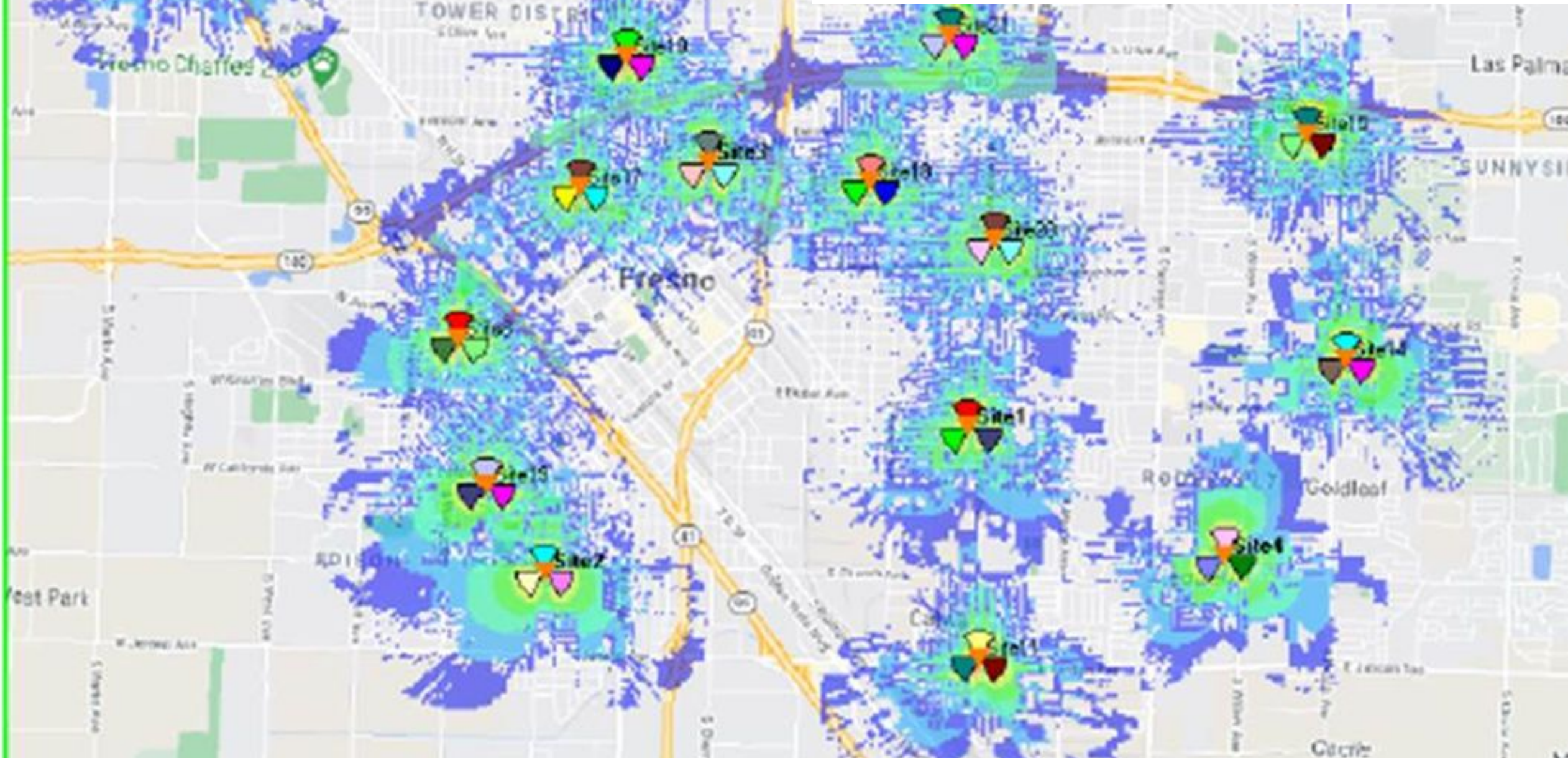
Layers of Response




Leased Fiber
70% by 2022; 100% by 2023
Gibson Elementary
Wolters Elementary
Tioga Middle
University High
Viking Elementary
Erma Duncan Polytechnical High
Ericson Elementary
Sierra Charter
Heaton Elementary
Mayfair Elementary
Yosemite Middle
Ewing Elementary
Las Palmas
Muir Elementary
Molly S. Bakman Elementary
Kings Canyon Middle
Fresno Adult
Fresno USD ED Center-1
Columbia Elementary-9
Chukchansi Park
Lane Elementary
Lincoln Elementary-2
Lincoln Elementary
Sequoia Middle
ROOSEVELT
Goldleaf
Edison HS-11
Edison High School
Saint Rest Baptist Church
Kirk Elementary-3
Kirk Elementary
Ezekiel Balderas Elementary
Edison Computech
rd B. Gaston Sr. Middle
Aynesworth Elementary
Calwa
Calwa Elementary
Phoenix Secondar
180
41
99


Leased Fiber
Fiber runs past 27 Low-Income Fresno Housing complexes
Woodside Apartments
Viking Village
Tarpey
Las Palmas
Plaza Terrace
Econo Inn
Monarch @ Chinatown
Sierra Terrace (Lower)
Cedar Heights
ROOSEVELT
Goldleaf
Calwa
Columbia Elementary-9
Lincoln Elementary-2
Edison HS-11
King Elementary-5
Computech Middle School-8
Saint Rest Baptist Church
Kirk Elementary-3
Sequoia Middle School-5
Balderas Elementary-6
Terronez Middle School-8
Phoenix Academy Secondary-11
Aynesworth Elementary-7
Calwa Elementary
E Butler Ave
W California Ave
S Walnut Ave
S Elm Ave
S Willow Ave
180
41
99

Last mile = Connect2Learn
Private LTE network



FRESNO COALITION FOR DIGITAL INCLUSION

CROSS-SECTOR COLLABORATIVE OF ANCHOR INSTITUTIONS & COMMUNITY-BASED ORGANIZATIONS WORKING TO IMPROVE DIGITAL INCLUSION FOR THE UNDERSERVED.

Education

Healthcare

Employment

Anchors

Agencies

CBOs

Regional Benefits

INTERNET ACCESS AS A BASIC NECESSITY FOR ALL

Reflect on Layers of Response

What layers of response support students digital inclusion?

What layers of response alter the community's digital ecosystem?

Reflect on Shared Resilience and Adaptability

Honor and re-imagine students' resilience

Honor and re-imagine community adaptability

We re-imagine
to become ready
to respond
in #AsYetImagined futures

AURORA INSTITUTE

Symposium

OCTOBER 25-27, 2021 | VIRTUAL

"Leading Competency-Based Education Redesign"

Thank you for joining us!

Share Your Thoughts.

Participate in our one-minute poll (link in chat box).