



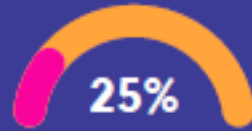
City of Dallas

Bridging the Digital Divide in Dallas

Genesis D. Gavino
Chief of Staff and Resilience Officer
City Manager's Office

Why This Work Matters: The Digital Divide

Challenges



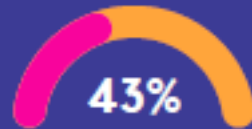
Speed – Up to 25% of customers experience internet speeds slower than the federal standard.



Availability – More than 215,000 people live in areas where no fiber is available (around 16% of Dallas residents). Many of these households are in socially and economically marginalized areas.



Cost – Up to half respondents without home internet cited high cost as the main reason for not purchasing the service, though 83% are willing to pay \$30 per month. The average reported payment for internet service in Dallas is \$65 per month.



Tech Skills – 43% of respondents would like to become more confident in using technology, and 29% would like to attend training.



Devices – Only two-thirds of low-income households (earning less than \$25,000 per year) have both internet access and a computer.

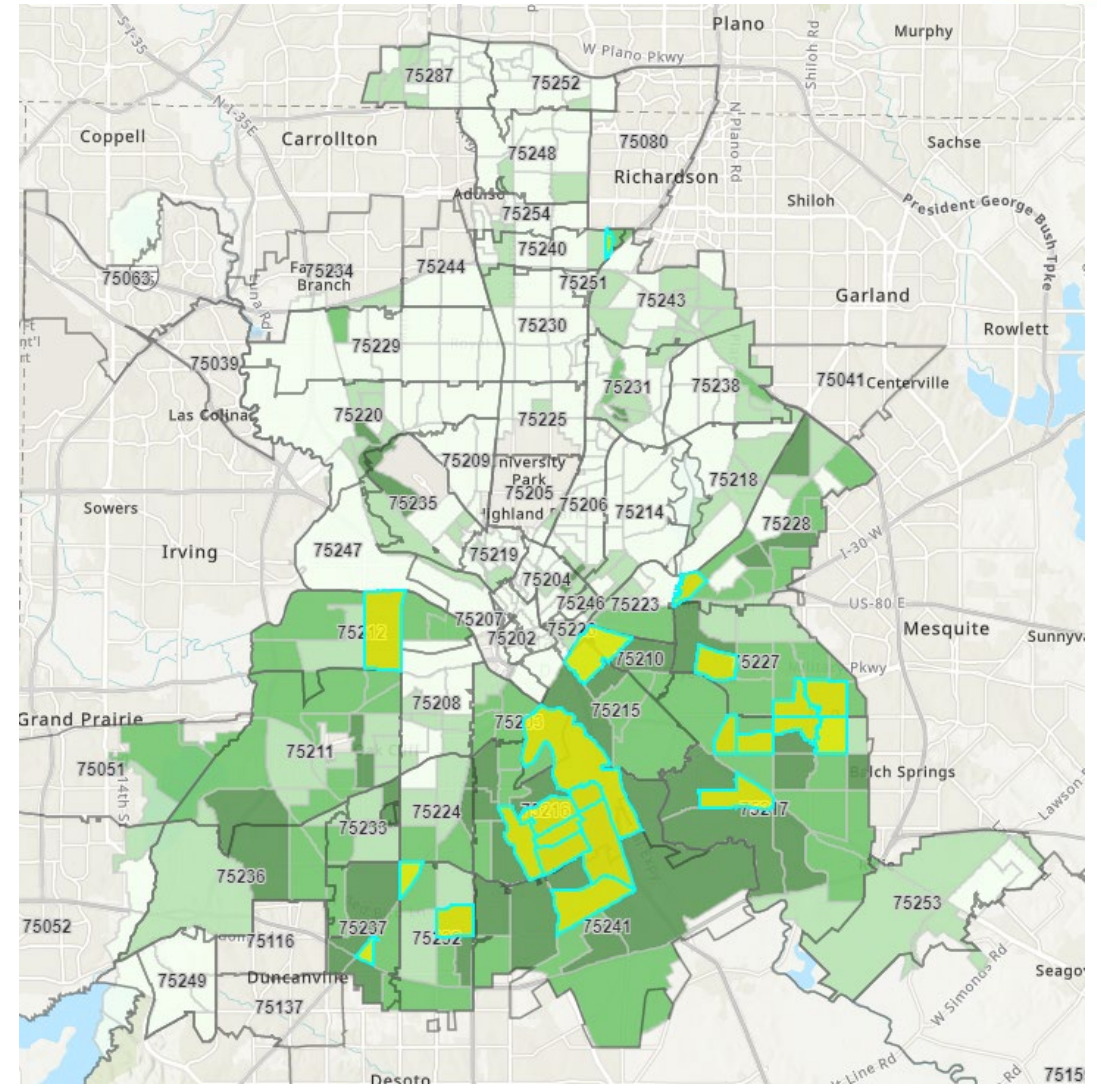
Digital Divide Landscape



Name	Zipcode	District	Total HH	%	#
Census Tract 87.01	75216	4	2016	57.1	1152
Census Tract 88.02	75216	4	1762	56.1	989
Census Tract 87.04	75216	4	1691	53.9	912
Census Tract 91.03	75217	5	1033	52.6	543
Census Tract 86.04	75216	4	1160	50.8	589
Census Tract 57	75216	4	1958	47.1	923
Census Tract 91.05	75217	5	1050	45	473
Census Tract 92.04	75217	5	815	44.9	366
Census Tract 111.03	75232	3	1210	43.8	530
Census Tract 211	75216	4	1793	43.7	783
Census Tract 114.01	75241	8	1809	43.3	783
Census Tract 192.12	75240	11	1087	43.2	470
Census Tract 87.03	75216	4	1020	42.7	436
Census Tract 122.08	75228	9	1093	41.8	457
Census Tract 205	75212	6	2086	41.4	864
Census Tract 93.04	75217	8	2543	41	1042
Census Tract 84.01	75227	5	1673	40.9	684
Census Tract 90.02	75227	5	1388	40.6	563
Census Tract 120	75227	5	3147	40.5	1274
Census Tract 109.05	75237	8	1460	39.8	581

Source:

<https://dallasgis.maps.arcgis.com/apps/webappviewer/index.html?id=3076076c348e4617859b213687147dc7>

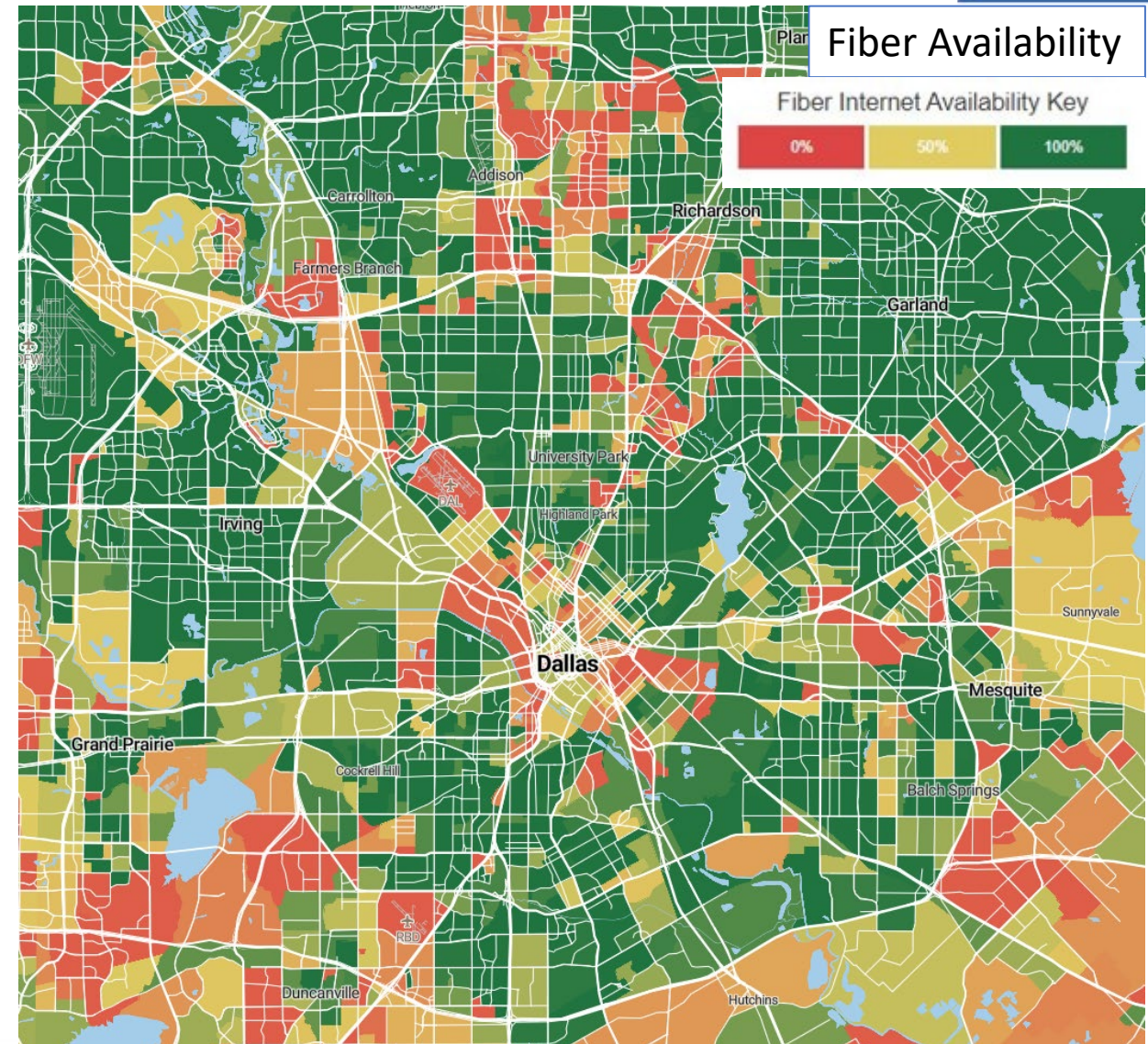


Digital Divide Landscape: Fiber Availability



		Internet Providers in Dallas, TX	
Provider Name	Type of Service	Availability	Avg. Speed
AT&T	DSL	68.2%	64 Mbps
AT&T	Fiber	38.9%	999 Mbps
Spectrum	Cable	87.5%	940 Mbps
Frontier	DSL	22.0%	7 Mbps
Frontier	Fiber	21.2%	115 Mbps
Suddenlink	Cable	4.2%	818 Mbps
CenturyLink	DSL	2.4%	27 Mbps
Astound	Cable	2.2%	854 Mbps
Ultra Home	Fixed Wireless	41.8%	25 Mbps
NextLink	Fixed Wireless	34.6%	69 Mbps
Cirra	Fixed Wireless	29.3%	105 Mbps
Rise Broadband	Fixed Wireless	28.7%	35 Mbps

Source: <https://bestneighborhood.org/fiber-tv-and-internet-dallas-tx/>



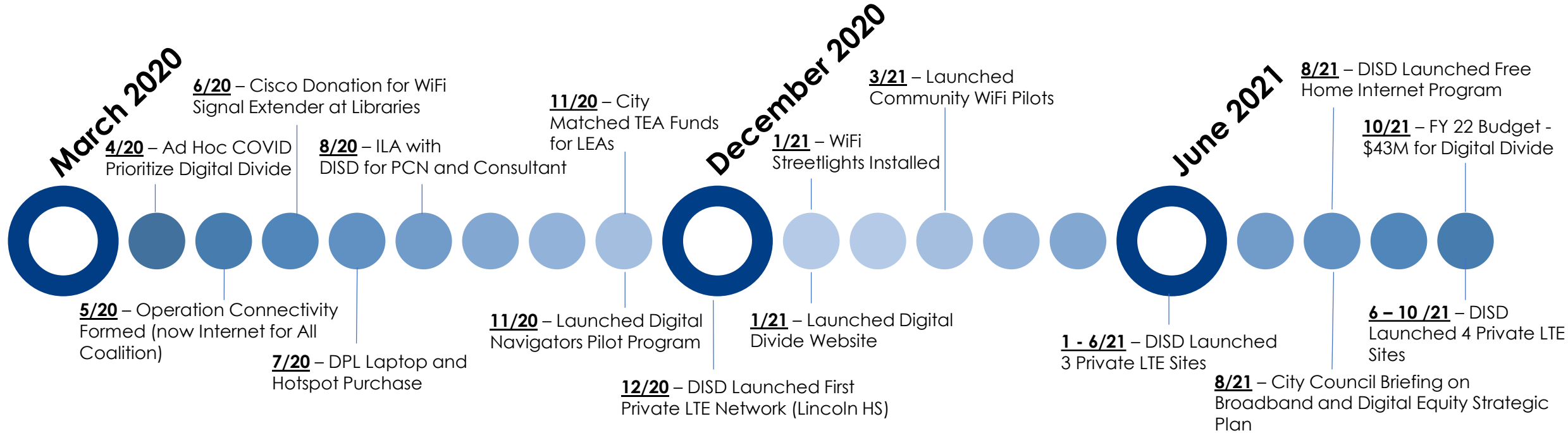
Community Partnership Joint Vision



All households in Dallas will have
highspeed, reliable internet and
access to devices in their homes.



Digital Divide Actions During COVID-19



Short Term

- WiFi Hotspots and Hardware Purchase
- Signal Extender Projects at Library locations
- Digital Navigators
- TEA Matching Funds Support for LEAs

Medium Term

- Broadband and Digital Equity Strategic Plan
- Private Wireless Networks
- Community WiFi Pilots
- Street Light Pilot Project

Long Term

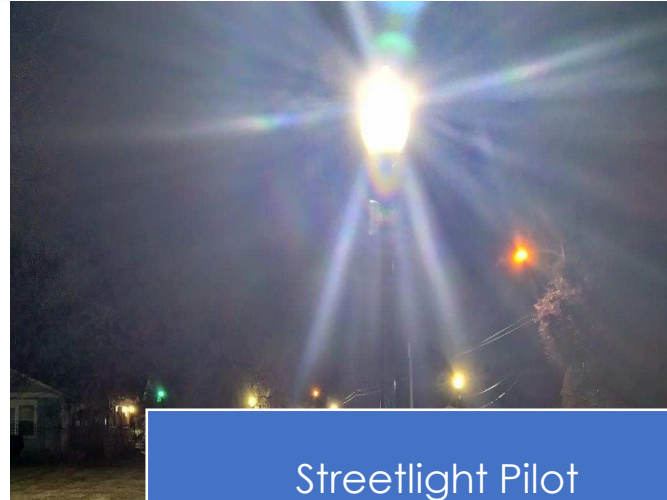
- Implementation of Plan Recommendations
- Smart City Integration
- Leverage Additional Funds



Digital Divide Actions During COVID-19



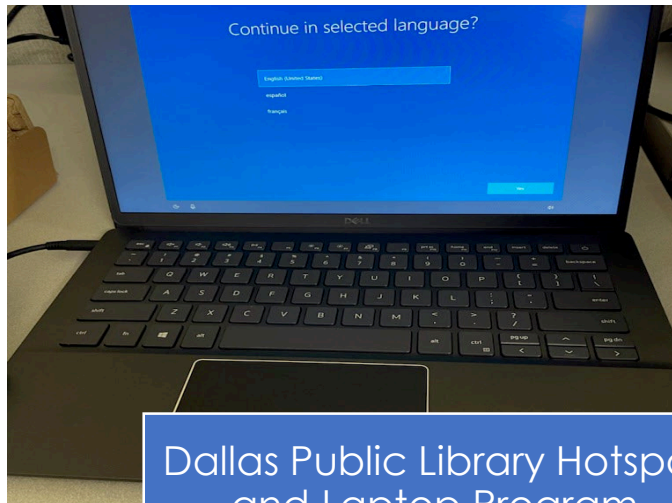
Digital Navigators Program



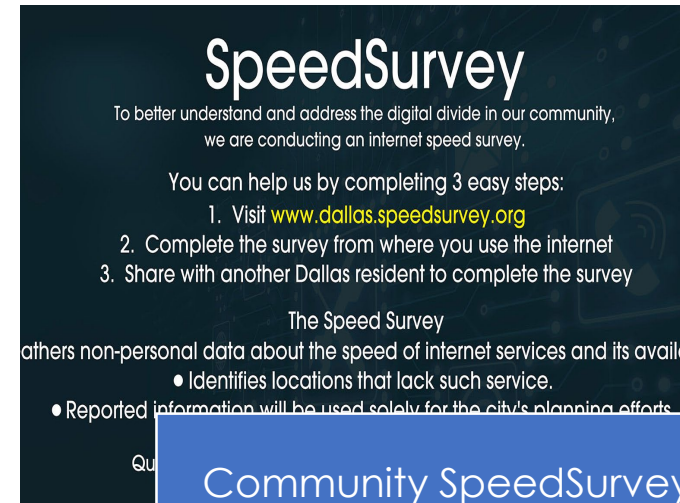
Streetlight Pilot



Community WiFi Pilot



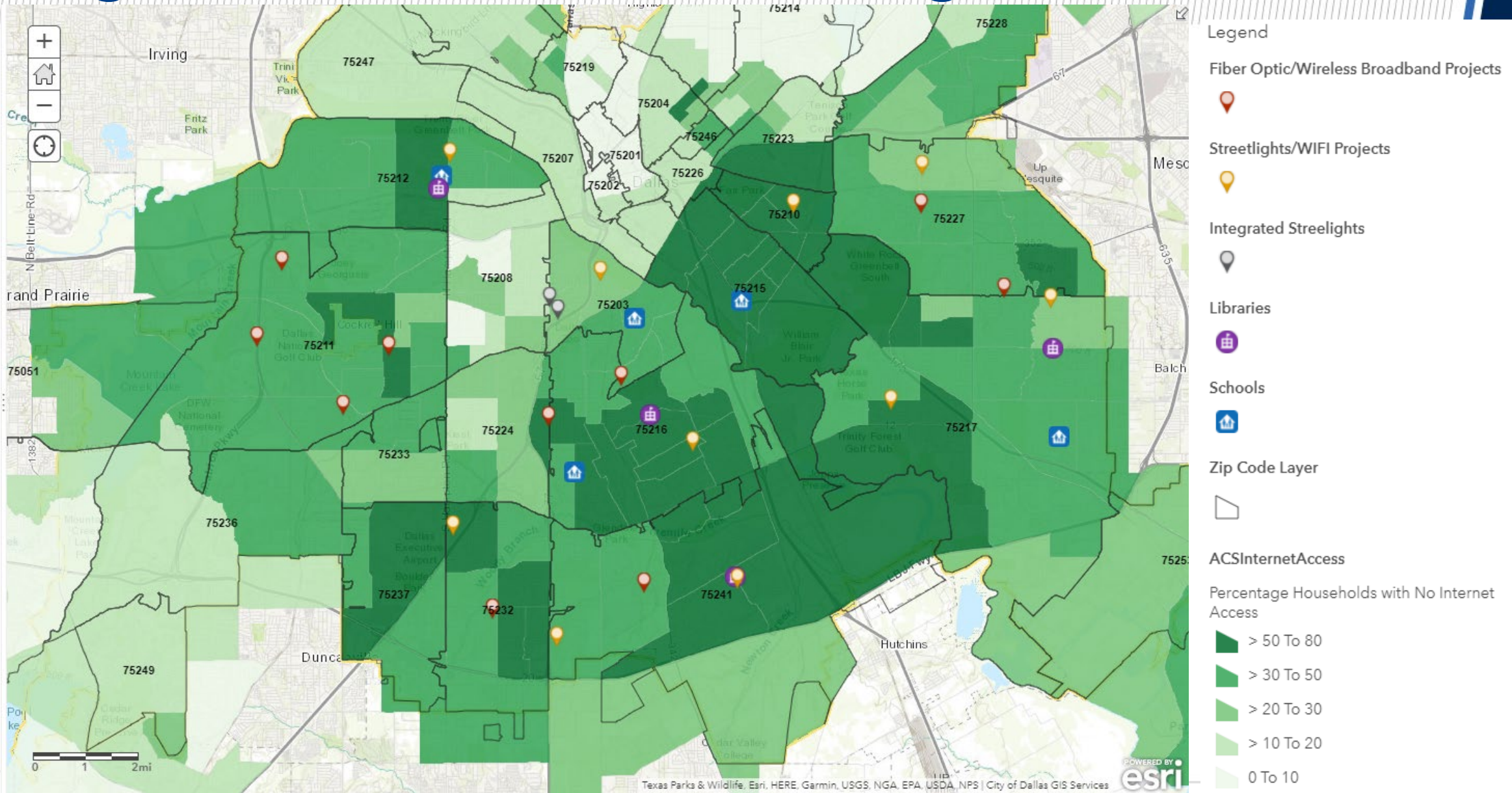
Dallas Public Library Hotspot and Laptop Program



Community SpeedSurvey



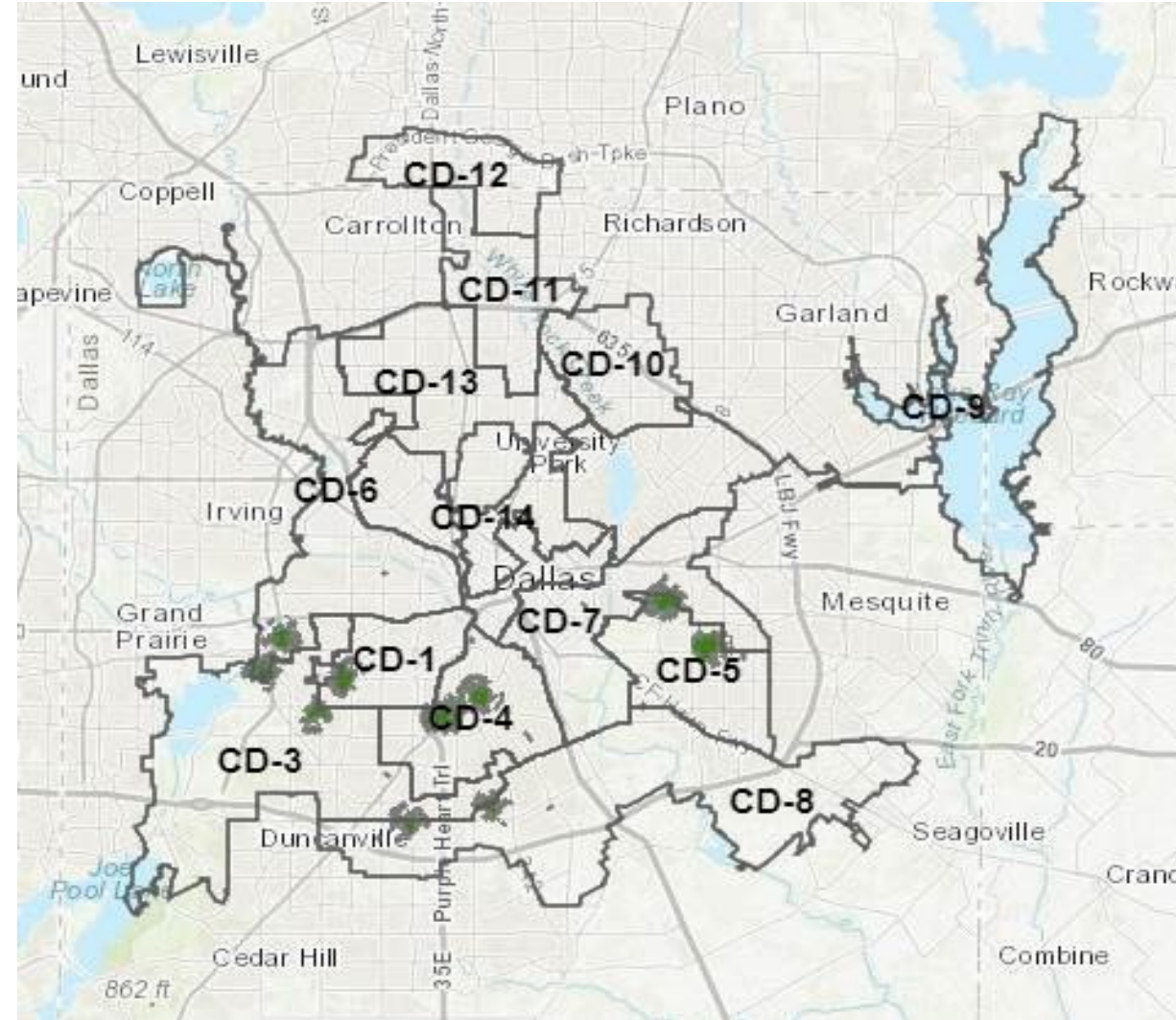
Digital Divide Actions during COVID-19



Digital Sustainability – Transportation & Public Works



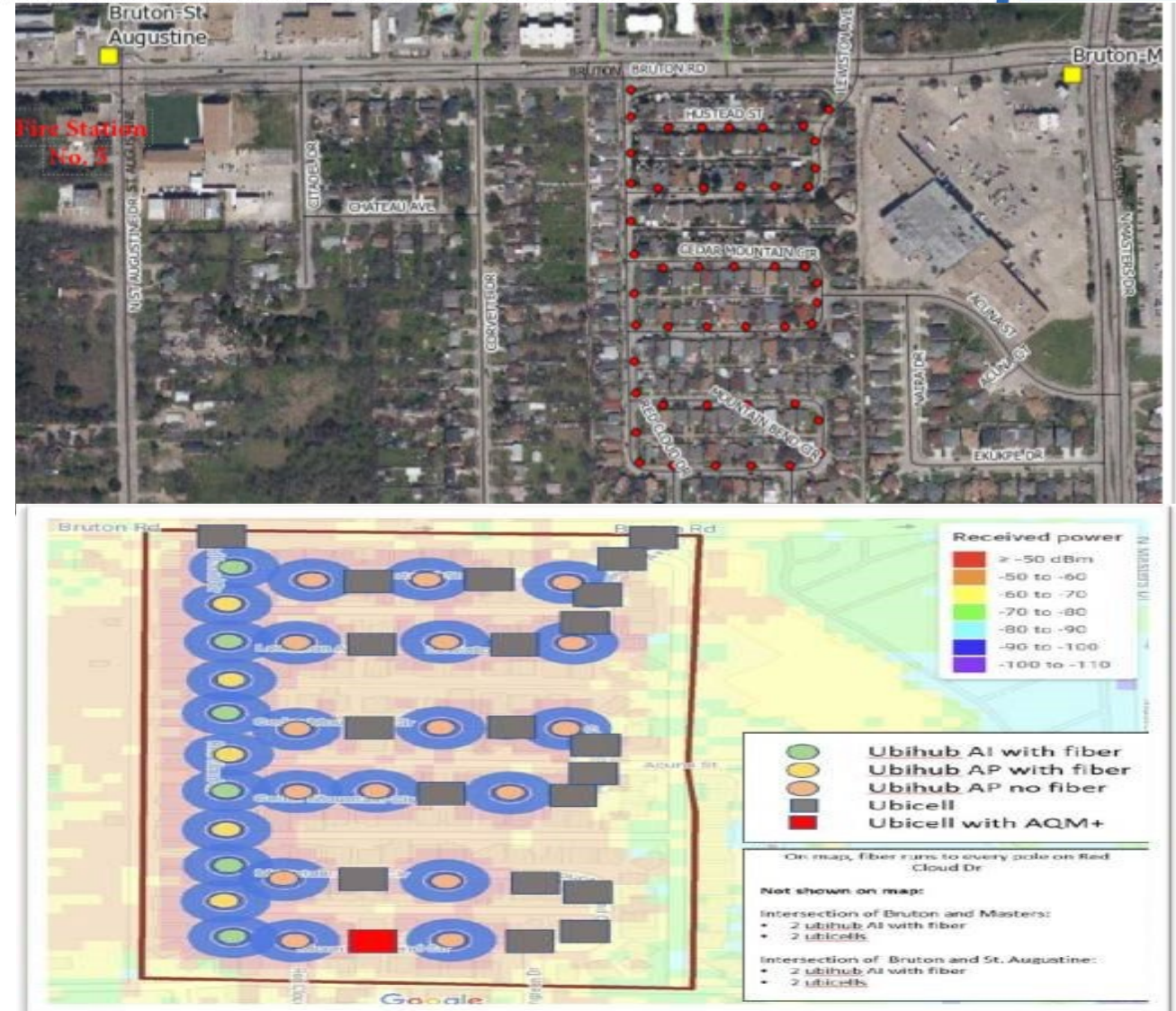
- 10 City of Dallas sites to which the City's network has been extended to provide free City Wi-Fi
 - Initially provisioned by Neo Networks now managed by the City's ITS department
- All new traffic signals have provisions for fiber optic connections
- Developed an interim standard for placement of fiber optic conduits within city ROW
- Interdepartmental coordination of fiber optic deployment





Red Cloud Neighborhood Project

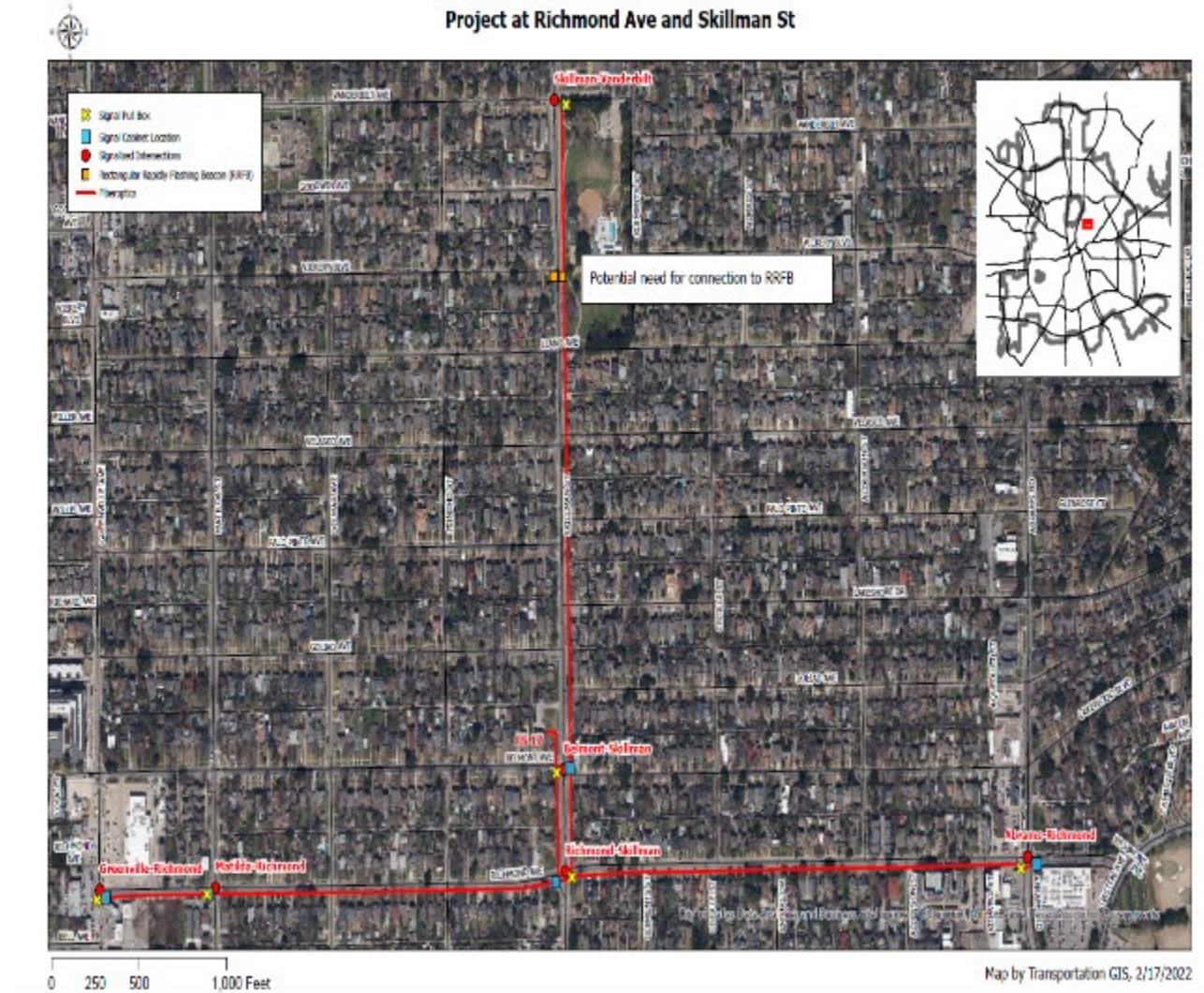
- Upgrading and installing streetlights which include multi-function devices that provides free City WiFi
- Construction currently in progress





Richmond Avenue and Tietze Park Projects

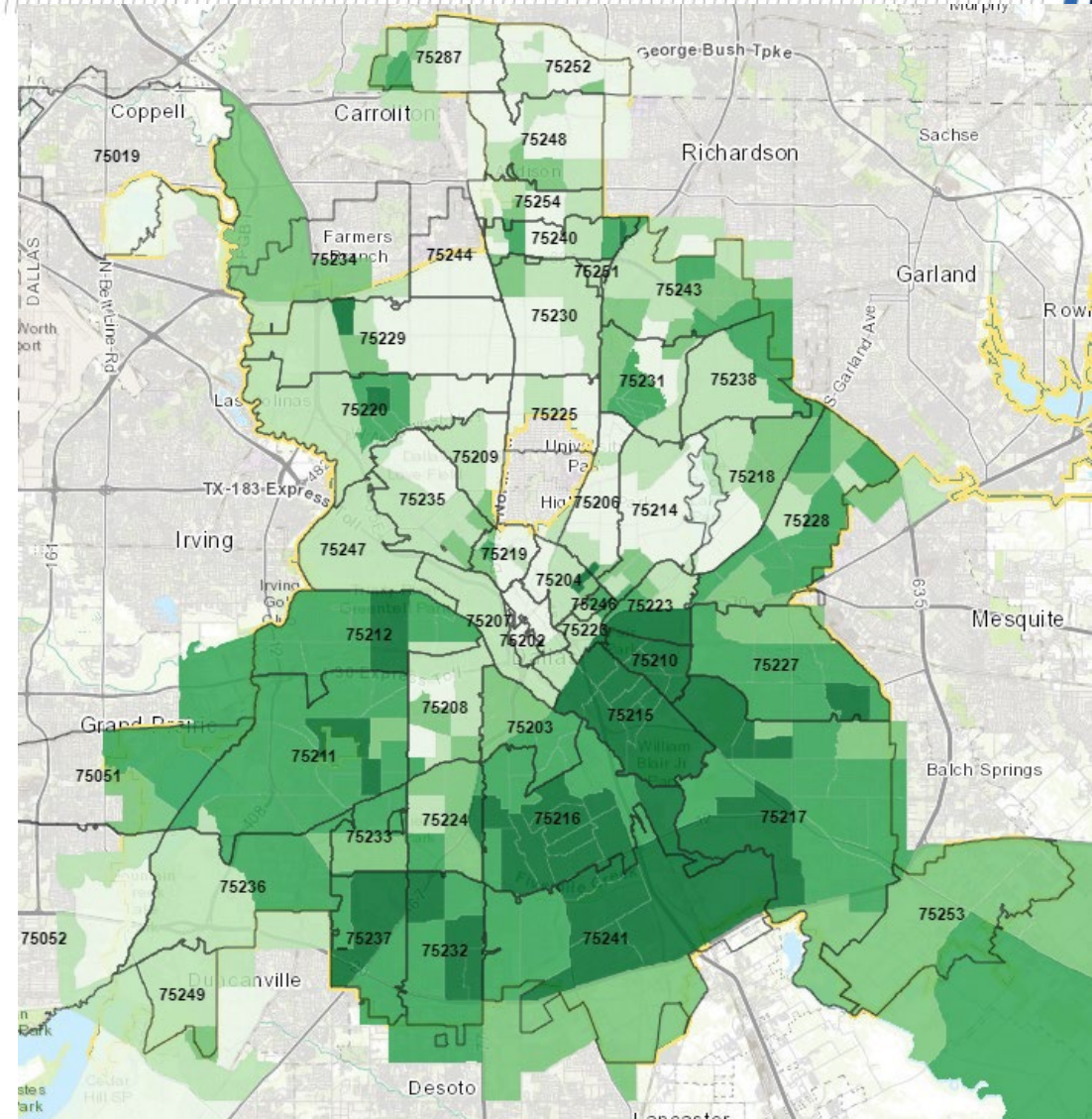
- Installation of fiber from Fire Stations #5 & #17 to traffic signals/streetlights along the routes in each area.
- City will install multi-function devices which include:
 - Access points providing free City Wi-Fi
 - High-resolution cameras
 - Gun shot detection
 - Lighting controls
 - Air quality monitoring



Digital Sustainability – Library, Parks & Recreation



- Four libraries designated to which free City Wi-Fi was extended to their parking lots
- Hardware devices available for check-out to the public with City support 3,000 Hotspots and 1,500 Laptop Bundles
- \$3 million designated to extend free City Wi-Fi to PKR parks and facilities
- Prioritized list of PKR parks and facilities identified and project underway to deploy City Wi-Fi
- Locations to which free City Wi-Fi is being extended based upon identified areas of need



Broadband and Digital Equity Strategic Plan



- **Recommendation 1: City Fiber Back Bone**
 - Begin by building 200+ miles of fiber
 - Focus on areas of the city that are least serviced by broadband and those with the greatest need for connecting City services
 - City infrastructure connectivity (traffic cameras, traffic signal controllers, data centers)
- **Recommendation 2: Fixed Wireless Infrastructure**
 - Expand fixed wireless infrastructure for city residents in areas with less existing broadband infrastructure
 - Shared infrastructure
- **Recommendation 3: Digital Equity Initiatives**
 - Expand the Digital Navigators program to help families enroll in ISPs' low-cost programs & federal subsidy programs
 - Fund the expansion of digital skills training offered through the Digital Navigators program

bit.ly/dallasdigitaldivide



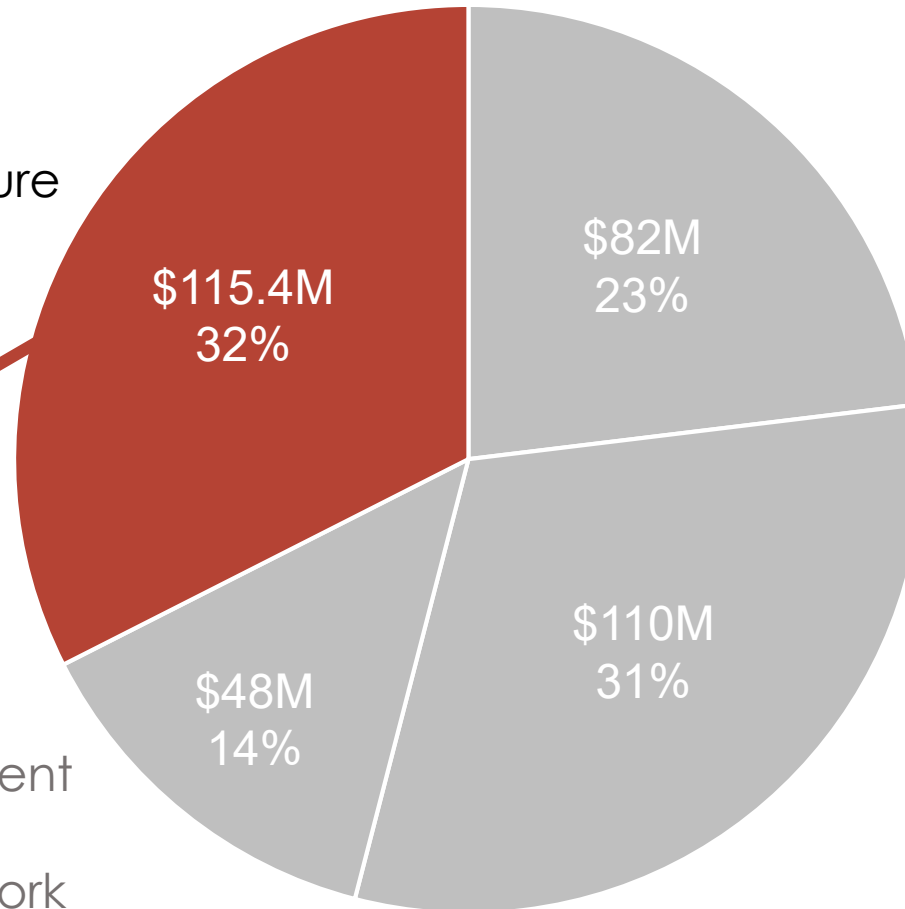
ARPA Funding Proposed Spending Framework

\$355.4M Allocation



Infrastructure
Invest in the future

\$43M – Bridge the Digital Divide
- \$3M – WiFi at PKR Facilities
- \$40M – Other Projects



Health & Safety
Keep employees and the public safe

Fiscal Recovery & Sustainability
Replace lost revenue

Economic Development
Get residents and businesses back to work



Does not include an additional \$22.4M for health and safety for residents experiencing homelessness

Prioritizing Funds for Long-Term Sustainability



Short Term

6 months
to 1 year

Tier 1: Immediate Relief

Meet immediate public health and safety needs and support people in crisis

Tier 2: Budget Sustainability

Replace lost revenue and take actions to further fiscal sustainability

Tier 3: Service Delivery

Analyze and prioritize programs and services

Tier 4: Regional Partnerships

Pursue local solutions at scale and leverage partnerships to optimize resources regionally

Tier 5: Big Swings

Fuel results through bold resource investments; spend to save more

Long Term

1 to 3 years



Infrastructure Investment and Jobs Act



- \$1.2T bill passed by Congress and signed into law by President Biden on November 15, 2021
- Largest ever investments in high-speed internet, rail and transit, clean energy, and water
- Roughly \$65B invested in high-speed internet efforts through 7 federal programs:
 - Administered by National Telecommunications and Information Administration (NTIA)
 - Broadband, Equity, Access, and Deployment (BEAD) Program (\$42.45B)
 - Digital Equity Planning, Capacity, and Competitive Grants (\$2.75B)
 - Tribal Broadband Connectivity Program (\$2.00B)
 - Middle Mile Broadband Infrastructure Program (\$1.0B)
 - Administered by other federal Agencies
 - Affordable Connectivity Program (\$14.2B)
 - Rural Broadband Programs at the Department of Agriculture (\$2.0B)
 - Private Activity Bonds (\$.06B)



Bridging the Digital Divide, Together



Internet Service

Providers/Telecomm

- Support communications to amplify ACP
- Engage with all sectors to collaborate



Private Sector

- Advocate for community needs and interests
- Support community organizations through funding opportunities

Anchor Institutions

- Apply for and/or partner on BEAD and Digital Equity applications
- Identify opportunities for collaboration across sectors



Local government

- Leverage federal and state funding opportunities in partnership with private sector, community organizations, and non-profits

Community Orgs/ NPOs

- Participate in federal, state, and local funding opportunities
- Identify and communicate trends and needs in the community



Residents

- Engage and participate in federal and local programs
- Provide feedback and comments on efficiency of programs offered





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