Implementation Update on Broadband and Digital Equity Strategic Plan

City Council Briefing
June 1, 2022

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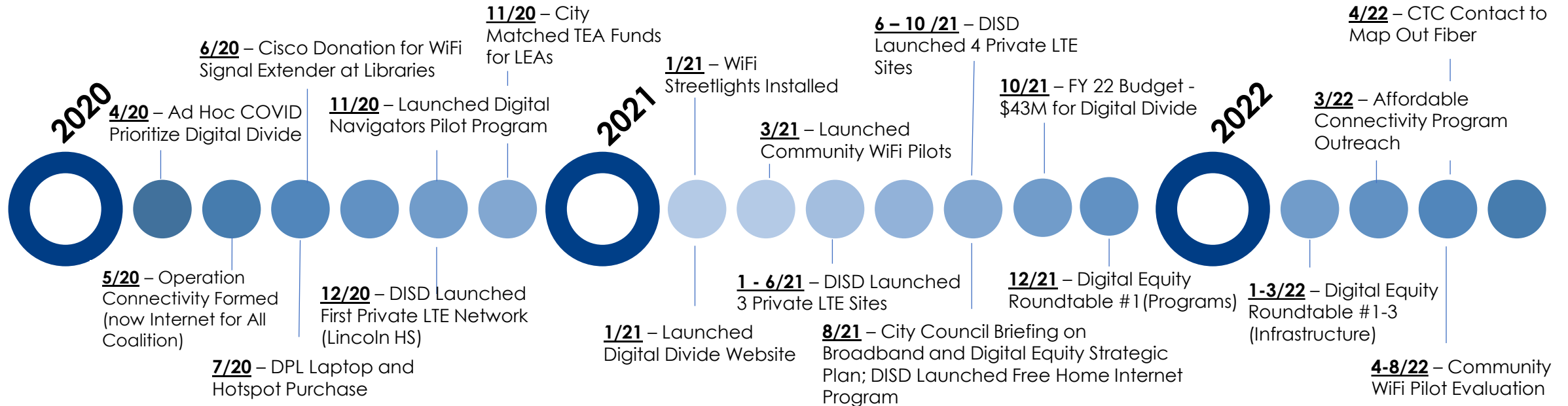Information and Technology Services

Agenda

- Background and Overview
  - Digital Divide Actions
  - ARPA Funding
- Plan Recommendations
  - Middle Mile Network/Fiber Backbone
  - Fixed Wireless Network
  - Digital Equity Programs
- Additional Digital Divide Efforts
- Federal Funding Opportunities
- Next Steps

Digital Divide Actions

2020

4/20 – Ad Hoc COVID Prioritize Digital Divide

6/20 – Cisco Donation for WiFi Signal Extender at Libraries

11/20 – Launched Digital Navigators Pilot Program

11/20 – City Matched TEA Funds for LEAs

5/20 – Operation Connectivity Formed (now Internet for All Coalition)

7/20 – DPL Laptop and Hotspot Purchase

12/20 – DISD Launched First Private LTE Network (Lincoln HS)

2021

1/21 – WiFi Streetlights Installed

3/21 – Launched Community WiFi Pilots

1/21 – Launched Digital Divide Website

1 - 6/21 – DISD Launched 3 Private LTE Sites

6 – 10 /21 – DISD Launched 4 Private LTE Sites

10/21 – FY 22 Budget - $43M for Digital Divide

8/21 – City Council Briefing on Broadband and Digital Equity Strategic Plan; DISD Launched Free Home Internet Program

12/21 – Digital Equity Roundtable #1 (Programs)

2022

4/22 – CTC Contact to Map Out Fiber

3/22 – Affordable Connectivity Program Outreach

1-3/22 – Digital Equity Roundtable #1-3 (Infrastructure)

4-8/22 – Community WiFi Pilot Evaluation

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
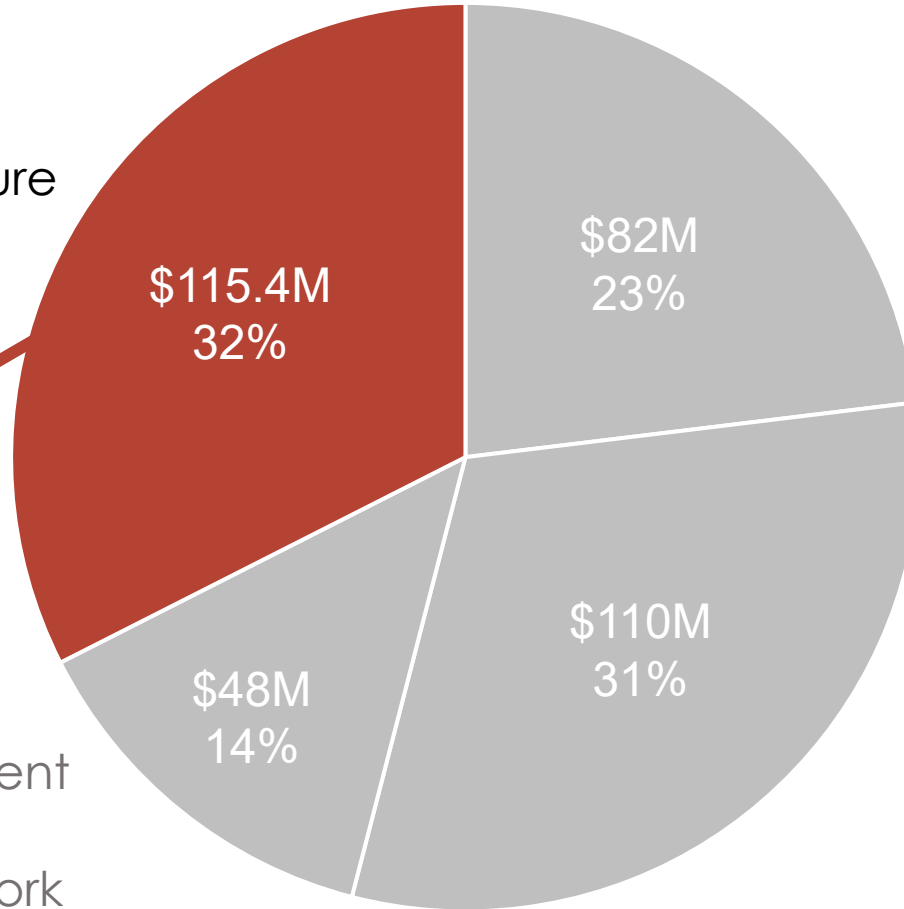- Smart City Integration
- Leverage Additional Funds

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

$82M
23%

$115.4M
32%

$110M
31%

$48M
14%

Economic Development
Get residents and businesses back to work

Fiscal Recovery & Sustainability
Replace lost revenue

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

11

Prioritizing Funds for Long-Term Sustainability

Short Term
6 months to 1 year

Long Term
1 to 3 years

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

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 with DISD
- **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
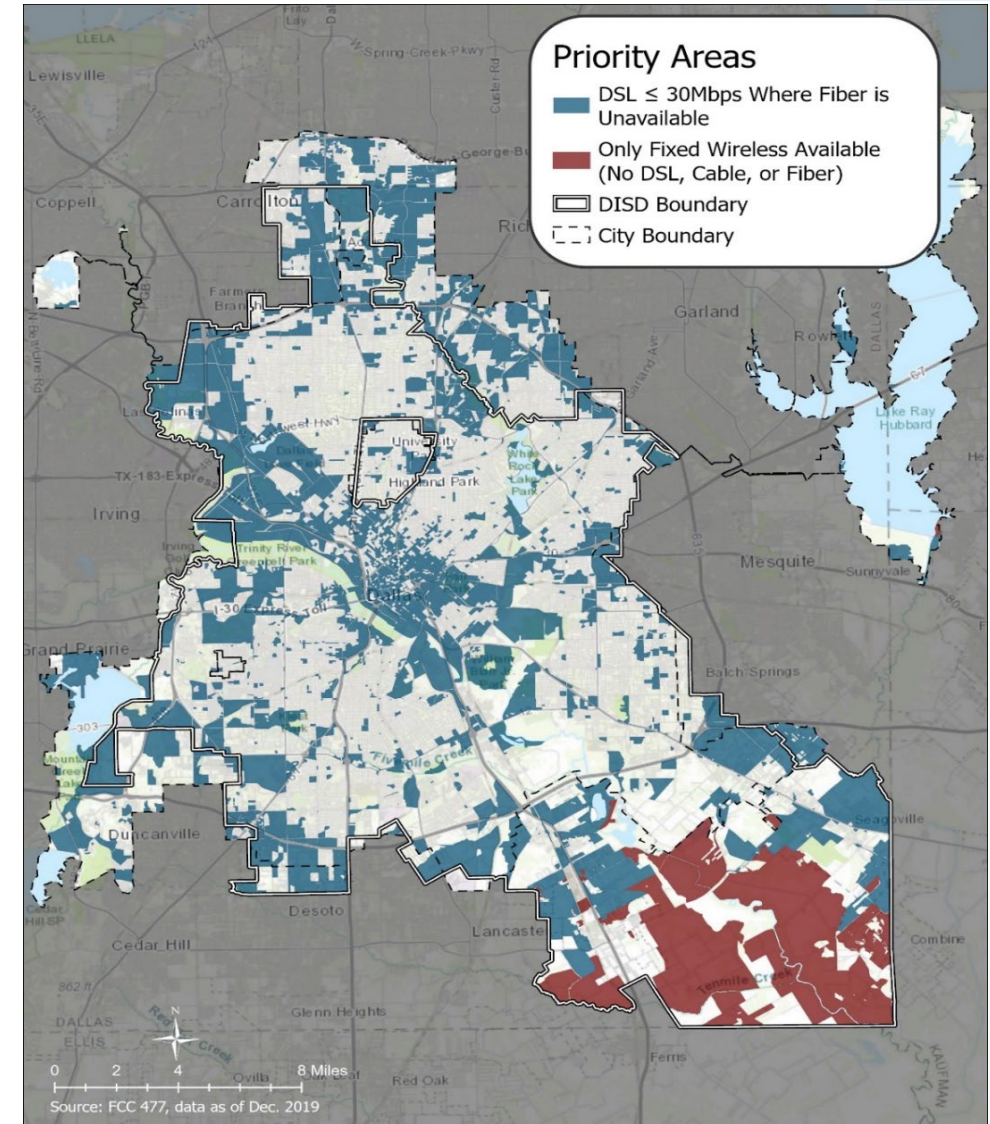
bit.ly/dallasdigitaldivide

- 3 Digital Infrastructure Roundtables Held
  - Virtual sessions on Jan 11th, February 11th and March 4th
  - Participants included internet service providers (ISPs), telecom infrastructure vendors, labor unions, non-profit organizations, representatives from federal/local entities, along with City employees
  - Attendance for each session exceeded 75 individuals
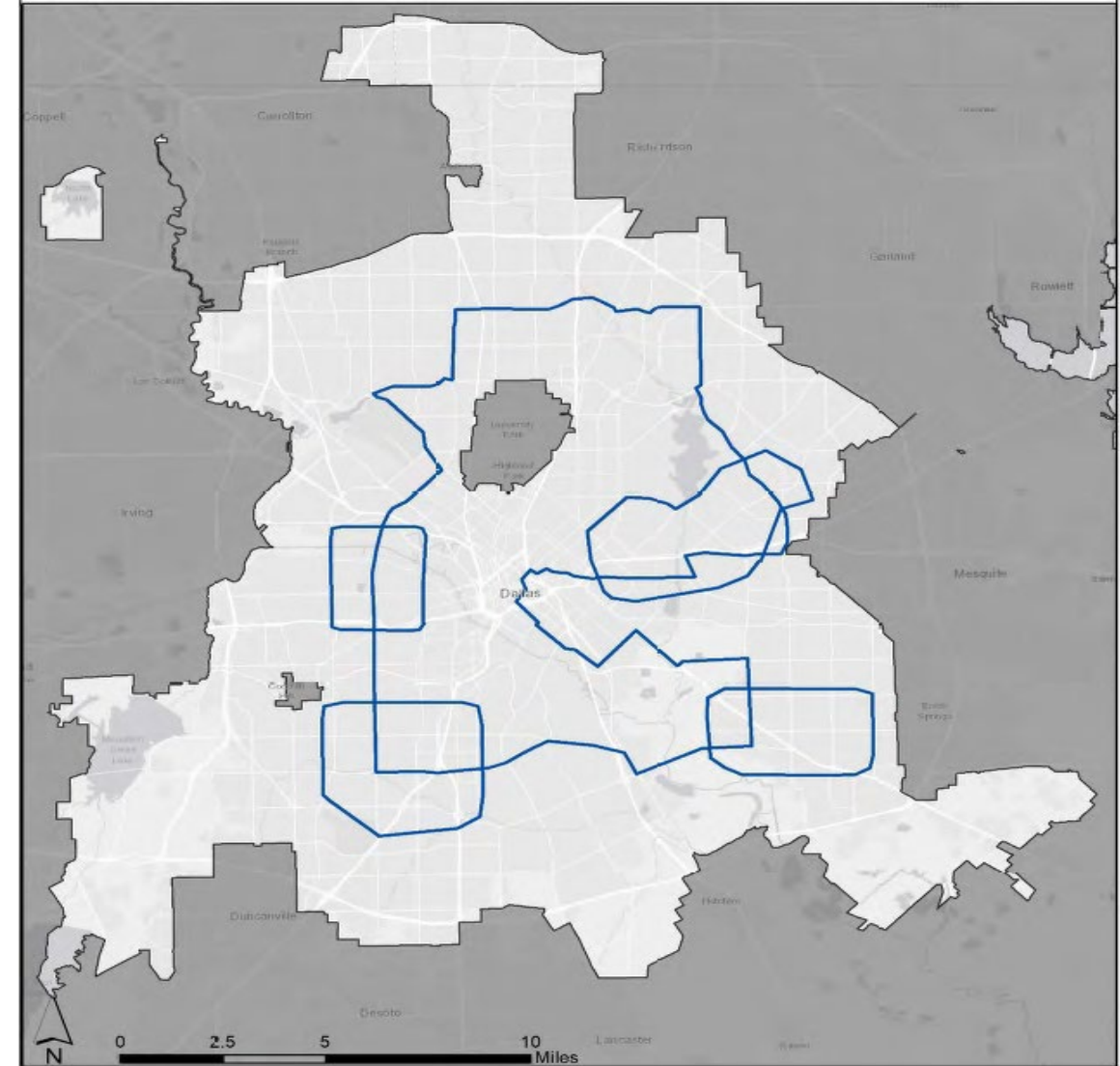
Recommendation 1: Fiber Back Bone

- CTC/City of Dallas Contract
  - Fully executed on 4/25/2022 ; $380,000.00
  - Task 1: Facilitate network planning process leading to a strategic plan
  - Task 2: Prepare a request for information (RFI) to identify potential vendors and solicit input on the City's plan
  - Task 3: Prepare a request for proposal (RFP)
  - Task 4: Perform required levels of project design and oversight

Priority Areas
- DSL ≤ 30Mbps Where Fiber is Unavailable
- Only Fixed Wireless Available (No DSL, Cable, or Fiber)
- DISD Boundary
- City Boundary

Source: FCC 477, data as of Dec. 2019

Recommendation 2: Fixed Wireless Network

CTC/Dallas ISD Contract; City/Dallas ISD ILA

- Fully executed on 5/10/22 ; $250,000.00
- Task 1: Conduct technical performance testing of DISD wireless broadband plots
- Task 2: Develop technical elements of procurement of a citywide fixed wireless network
- Task 3: Oversight of implementation of citywide fixed wireless network
- Task 4: Conduct technical performance testing of city wireless broadband pilot
- Task 5: Develop technical elements of procurement of an expanded City Wi-Fi network
- Task 6: Oversight of implementation of City Wi-Fi network

Collaboration to leverage different fixed wireless technologies to ensure efficient coverage for the underserved areas for City of Dallas and Dallas County

Recommendation 3: Digital Equity Initiatives

- Digital Equity Program Roundtable
  - Held on December 10, 2021; total of 50 attendees
  - Provide overview of City's efforts
  - Understand existing services and identify opportunities for growth
  - Utilize feedback to develop Digital Navigators solicitation
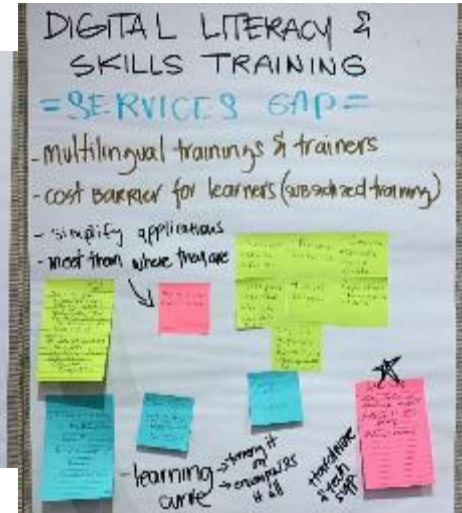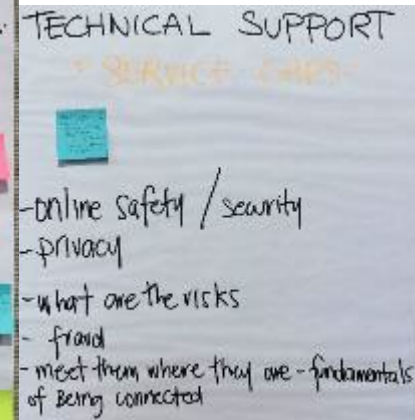
Recommendation 3: Digital Equity Initiatives

- Digital Navigators Program
  - **Access** – broadband infrastructure and reliable high-speed broadband plans available for purchase.
  - **Affordability** – broadband service that is not only available but can be obtained at reasonable prices by all.
  - **Devices** – residents own or have access to well-functioning, up-to-date computers and have capacity to maintain and replace these devices if needed
  - **Skills** - residents are able to make full use of computers and online resources, and thus are able to use these tools to communicate, work, learn, attend medical appointments, and accomplish other desired tasks all while avoiding online risks and harms.
- Align with Dallas Public Library enhanced library card and other City offerings and programs

Additional Digital Divide Efforts

# 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
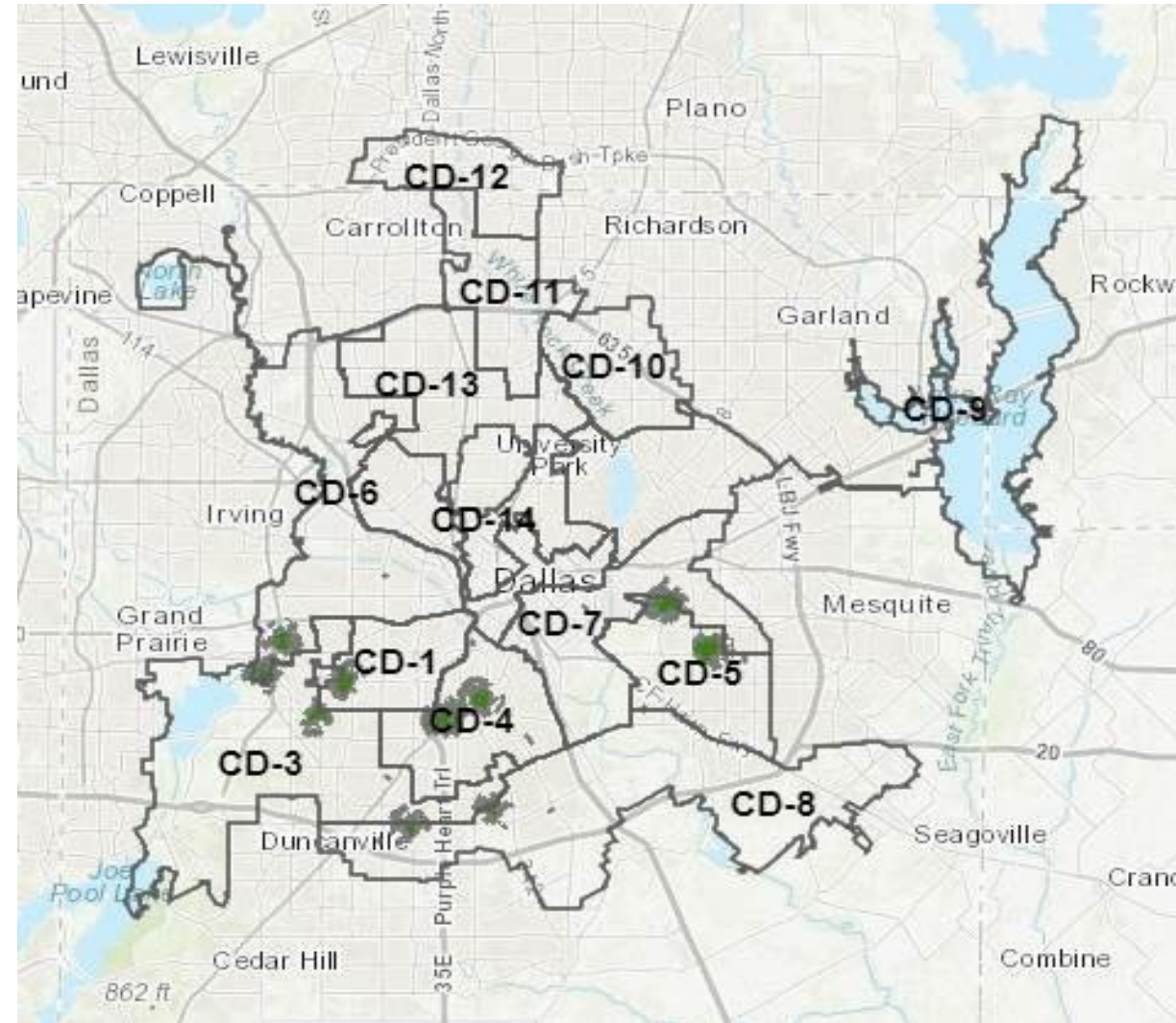
Red Cloud Neighborhood Project

- Upgrading and installing streetlights which include multi-function devices that provides free City WiFi

- Construction currently in progress
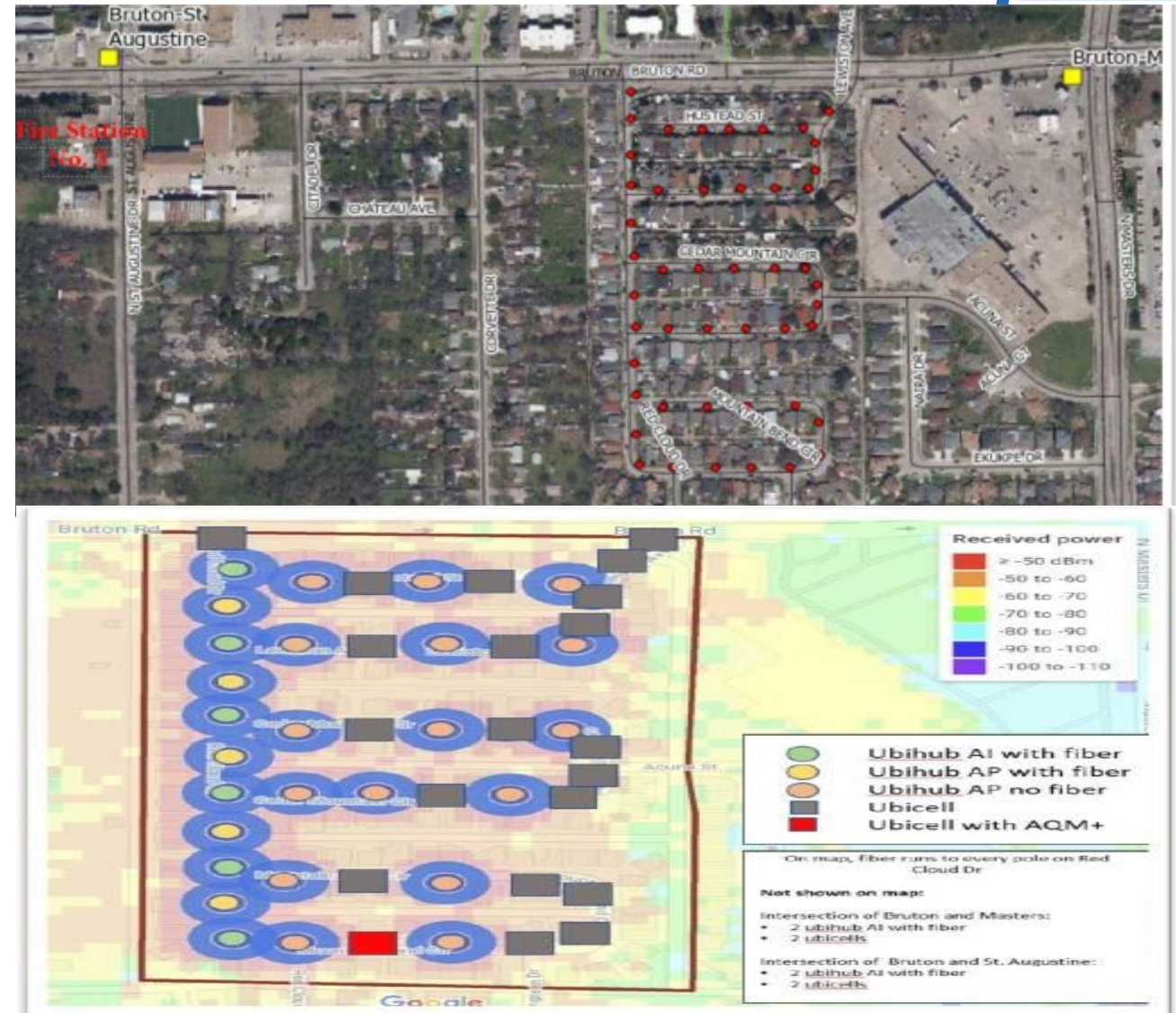
Richmond Avenue and Tietze Park Projects

- 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

Project at Richmond Ave and Skillman St

Map by Transportation GIS, 2/17/2022
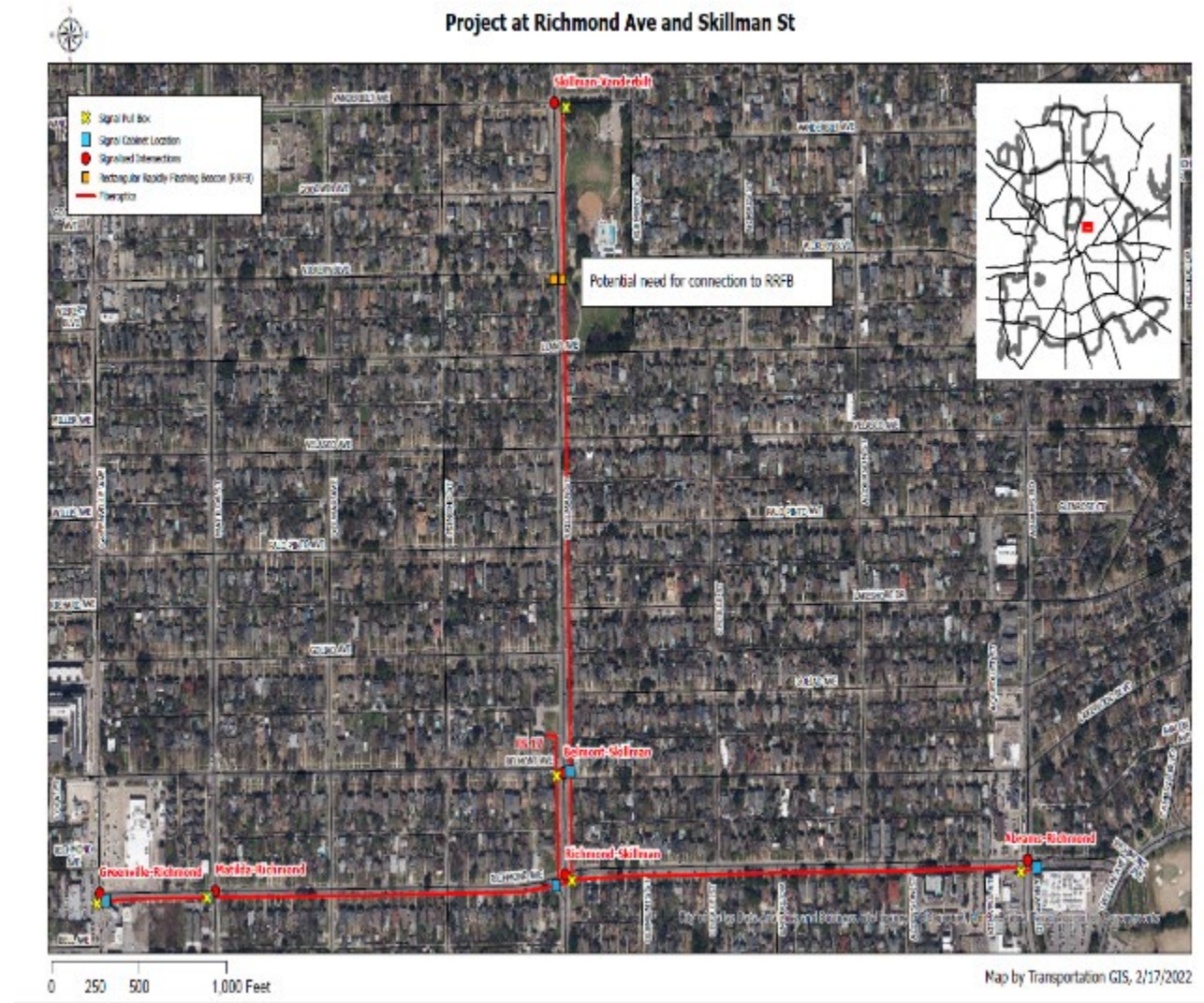
Digital Sustainability – Library, Parks & Recreation

- 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
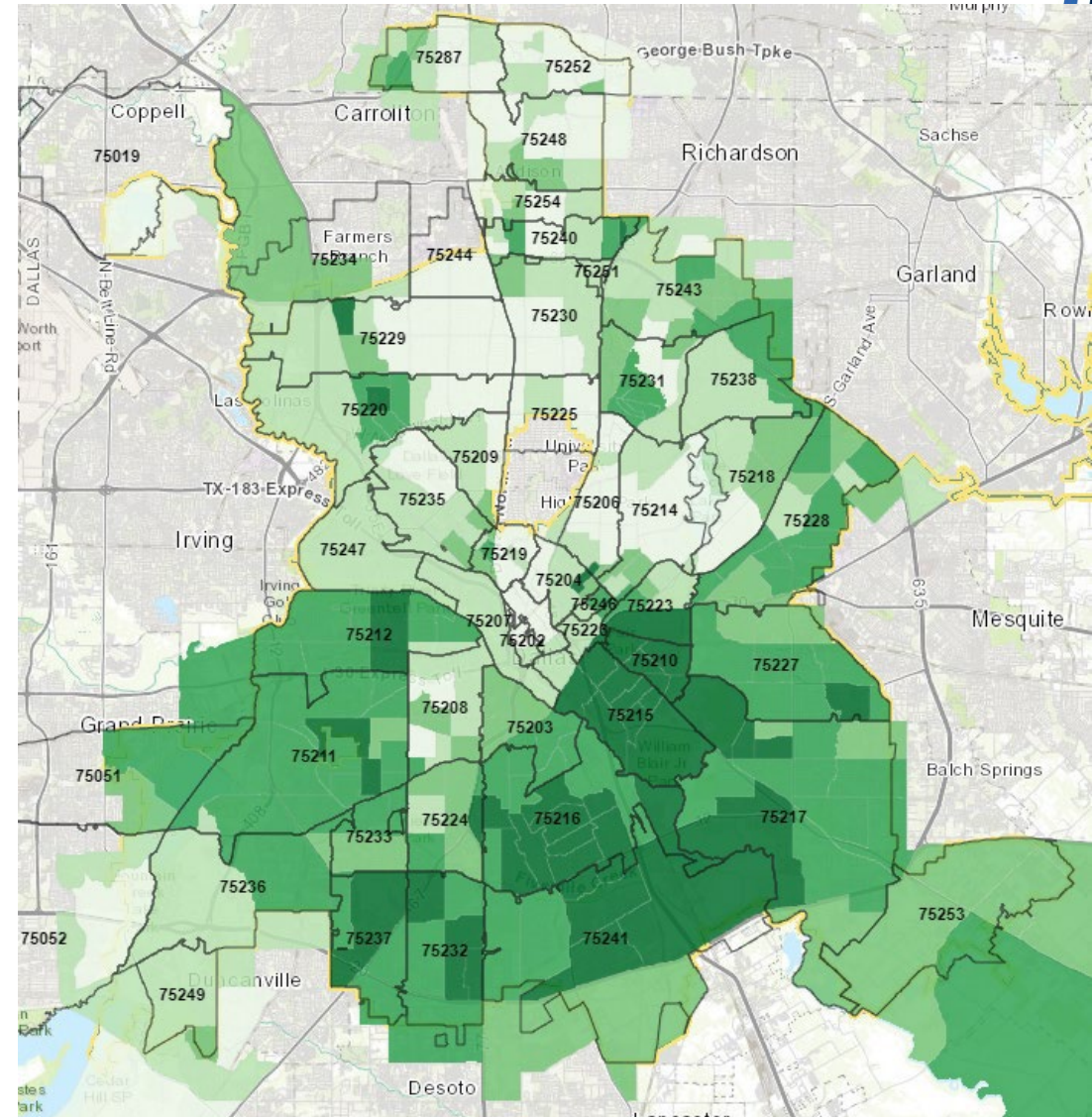
Texas Metro City/County Broadband Collaborative

- Coalition of metro cities and counties across Texas working together to advocate for our common interests at the state and federal level and share best practices and lessons learned.
- Recent activity:
  - Comments to NTIA related to BEAD and Middle Mile Grant Programs
  - Comments to FCC related to Digital Discrimination Rulemaking
  - Comments to Texas State Affairs Committee related to HB 5
  - Comments to State Broadband Office in the development of the State Broadband Plan

Federal Funding Opportunities

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)

Broadband, Equity, Access and Deployment Program

- Funding Pool: $42.45B
- A program to get all Americans online by funding partnerships between states or territories, communities, and stakeholders to build infrastructure where we need it to increase adoption of high-speed internet
- Eligible uses of funds:
  - Planning for deployment of internet
  - Deploying or upgrading internet
  - Installing internet in multi-tenant buildings
  - Implementing adoption and digital equity programs
  - Workforce and job training
- Notice of Funding Opportunity – currently open, closes 7/18/2022
  - **<u>Local government not eligible to apply</u>**

Digital Equity Act Program

- Funding Pool: $2.75B
  - State Planning - $0.60B
  - State Capacity - $1.44B
  - **Competitive - $1.25B**
- Three programs that provide funding to promote digital inclusion and advance equity for all. They aim to ensure that all communities can access and use affordable, reliable, high-speed internet to meet their needs and to improve their lives
- Eligible uses of funds:
  - Develop digital equity plans; state must develop a plan to be eligible for state capacity grants
  - Implementing digital equity plans and related activities
  - Making awards to other entities to help make digital equity plans
  - Providing digital literacy and digital skills education
  - Improving accessibility and inclusivity of public resources
  - Facilitating the adoption of high-speed internet
- Notice of Funding Opportunity – State Planning Program currently open, closes 7/12/2022
  - **<u>Local government not eligible to apply</u>**

Middle Mile Grant Program

- Funding Pool: $1B

- A program to expand middle mile infrastructure, to reduce the cost of connecting unserved and underserved areas.

- Eligible uses of funds:

  - Construction, improvement, or acquisition of facilities and equipment
  - Engineering design, permitting, and work related to projects
  - Personnel costs, including salaries and benefits
  - Other costs necessary for program's activities

- Notice of Funding Opportunity – Opens 6/21/2022, closes 9/30/2022

  - **Local government eligible to apply**

Affordable Connectivity Program

- Funding Pool: $14.2B

- Program to help low-income families pay for internet service. Families can get up to $30 per month, or $75 per month if they live on qualifying Tribal Lands. And they can get $100 to help pay for a desktop, laptop, or tablet computer.

- Two-Step Process:

  - Submit an application to www.AffordableConnectivity.gov or by mail.

  - Apply to internet service provider and select a plan to have the discount applied to the bill.

Affordable Connectivity Program
Helping Households Connect

Bridging the Digital Divide, Together

Internet Service Providers/Telecomm
- Support communications to amplify ACP
- Engage with all sectors to collaborate

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

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

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

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

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

Next Steps

- Utilize ARPA funding allocation to implement recommendations
  - Fiber Back Bone
  - Fixed Wireless Network
  - Digital Equity Programs
- Coordinate and align investment opportunities with external partners and stakeholders
- Target additional federal, state and private funding

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