



**City of Dallas**

# **Update of the City's RDI for a Telecommunications Network and Streetlight Wi-Fi Pilot Projects**

**City Council Briefing  
June 2, 2021**

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# Presentation Overview



- Request for Developer Interest (RDI) for citywide fiber optic or wireless broadband network (WBN)
- Streetlight and Wi-Fi Pilot Projects
- Next Steps
- Discussion/Questions





# Request for Developer Interest (RDI) for Fiber Optic or Wireless Broadband Network (WBN)



# RDI for Fiber Optic/Wireless Broadband Network



- Since 2019, multiple departments have been working on solutions to create a City-owned fiber or wireless broadband network to serve multiple purposes such as smart city technologies and digital divide efforts such as the upcoming Digital Equity Plan.
- Public Works started piloting conduit installation in streets that were being fully reconstructed or alleys in the unimproved alley maintenance program.
- In early 2020, CableRunner installed telecommunications fiber in storm sewers between City Hall and the Canton St. Service Center and connected fiber to five traffic signals (pilot program and proof of concept).





# RDI for Fiber Optic/Wireless Broadband Network



- View from one of the cameras connected to CableRunner Fiber Network



# RDI for Fiber Optic/Wireless Broadband Network



- The pilot projects were completed to gain an understanding of methods that could be used to build a citywide fiber optic or WBN.
- A Request for Developer Interest (RDI) to build a fiber optic or WBN was advertised on July 30, 2020; proposals were due September 4, 2020.
- The team focused on RDI proposals that would provide the best value to the City and also provide opportunities for internet access in underserved and priority zone areas.
- With availability of CARES Act funding, in September 2020, it was determined to phase the RDI approach.





# RDI for Fiber Optic/Wireless Broadband Network



- RDI Phase I:
  - On October 13, 2020, City Council authorized \$2M of CARES Act funding to enter into an agreement with the selected developer to construct a WBN to provide Wi-Fi services.
  - Working with Neo Networks (selected developer for Phase I), 10 pilot wireless networks were constructed in December 2020 in areas with low access to the internet; networks have been optimized and Wi-Fi is available.
  - Pilot locations were selected based upon data showing lowest internet access and proximity to City facilities and digital divide collaborative projects between the City of Dallas and DISD.



# RDI for Fiber Optic/Wireless Broadband Network



- RDI Phase I locations:

CD	City Facility	Residential Blocks
1	Martin Weiss Recreation Center	Thibet St from Martindale to Westmoreland
3	Fire Station #52	Bridlewood from Cockrell Hill to Western Park
4	Beckley Saner Recreation Center	Seevers from Hobson to Elmore
4	Fire Station #23	Iowa from Corinth to Bruck
5	Pleasant Oaks Recreation Center	Greenmound from McCutcheon to McKim
5	Fire Station #32	Toland from Jim Miller to Elva
6	Arcadia Branch Library	N. Justin Ave. from Library to Goodman
6	Fire Station #50	Bluegrass from Keeneland to Furlong
8	Singing Hills Recreation Center	Gillarel Springs from Old Ox to Cul-de-Sac
8	Polk Wisdom Library	Deerwood from Library to S. Polk





# RDI for Fiber Optic/Wireless Broadband Network



- Map of RDI Phase I locations:





# RDI for Fiber Optic/Wireless Broadband Network



- RDI Phase I:
  - The 10 constructed networks provide Wi-Fi to up to 3,200 households.
  - Wireless networks comprised of approximately 70 poles with Wi-Fi equipment on them across the 10 pilot sites.
  - The networks are currently providing free Wi-Fi with no restrictions or data limits.



# RDI for Fiber Optic/Wireless Broadband Network



- RDI Phase II:
  - Concurrent with the RDI Phase I, staff was evaluating and identified the following potential partners as part of the RDI Phase II:
    - Neo Networks,
    - CableRunner,
    - Zayo,
    - AT&T.
  - RDI Phase II will focus on longer-term solutions with no to low cost to the City and opportunities for cost and revenue sharing.







# Streetlight Wi-Fi Pilot Projects



# Streetlight Wi-Fi Projects



- Streetlight Wi-Fi Pilot Projects:
  - \$2.8M in CARES Act funding was used to install telecommunications fiber from adjacent City facilities to new streetlights and Wi-Fi equipment on 10 blocks (150-300 homes) selected upon:
    - Areas with low access to the internet,
    - Areas needing streetlights as identified by the Mayor's Safety Task Force (Seven locations in identified areas),
    - One of 16 Strategic Lighting Zones that incorporates data from:
      - Market Value Analysis (MVA),
      - Areas of racial and ethnically concentrated poverty,
      - The City's Opportunity Zones,
      - Neighborhood Investment Zones,
      - DPD's target action grid.



# RDI for Fiber Optic/Wireless Broadband Network



- Streetlight Wi-Fi Pilot Project Locations:

CD	City Facility	Residential Blocks	Notes
3	Thurgood Marshall Recreation Center	Ariel from Mark Trail to Dove Creek	SLZ
4	Fire Station #38:	Cicero from Wilhurt to Ann Arbor	MTF, SLZ
4	Eloise Lundy Recreation Center:	Denley from Hutchins to Reverend CBT Smith	MTF, SLZ
5	Fire Station #5	Corvette from Bruton to Limestone	MTF, SLZ
5	Janie C. Turner Recreation Center	Ezekial from Elam to Hoode	MTF, SLZ
6	Mattie Nash Myrtle Davis Recreation Center	Bayside from Hampton to Puget	SLZ
7	Juanita J. Craft Senior Center	Frazier from Spring to Marshall	MTF, SLZ
7	Skyline Library	Symphony from Everglade to Snowbird	MTF, SLZ
8	Fire Station #40	Kirnwood from Cul-de-Sac to Cul-de-Sac	MTF, SLZ
8	Fire Station #54	Pinebrook from Bonnie View to Strawberry Trail	SLZ

**Table Notes:**

- All locations in areas with low access to the internet.*
- MTF = Mayor's Safety Task Force; SLZ = Strategic Lighting Zone,*

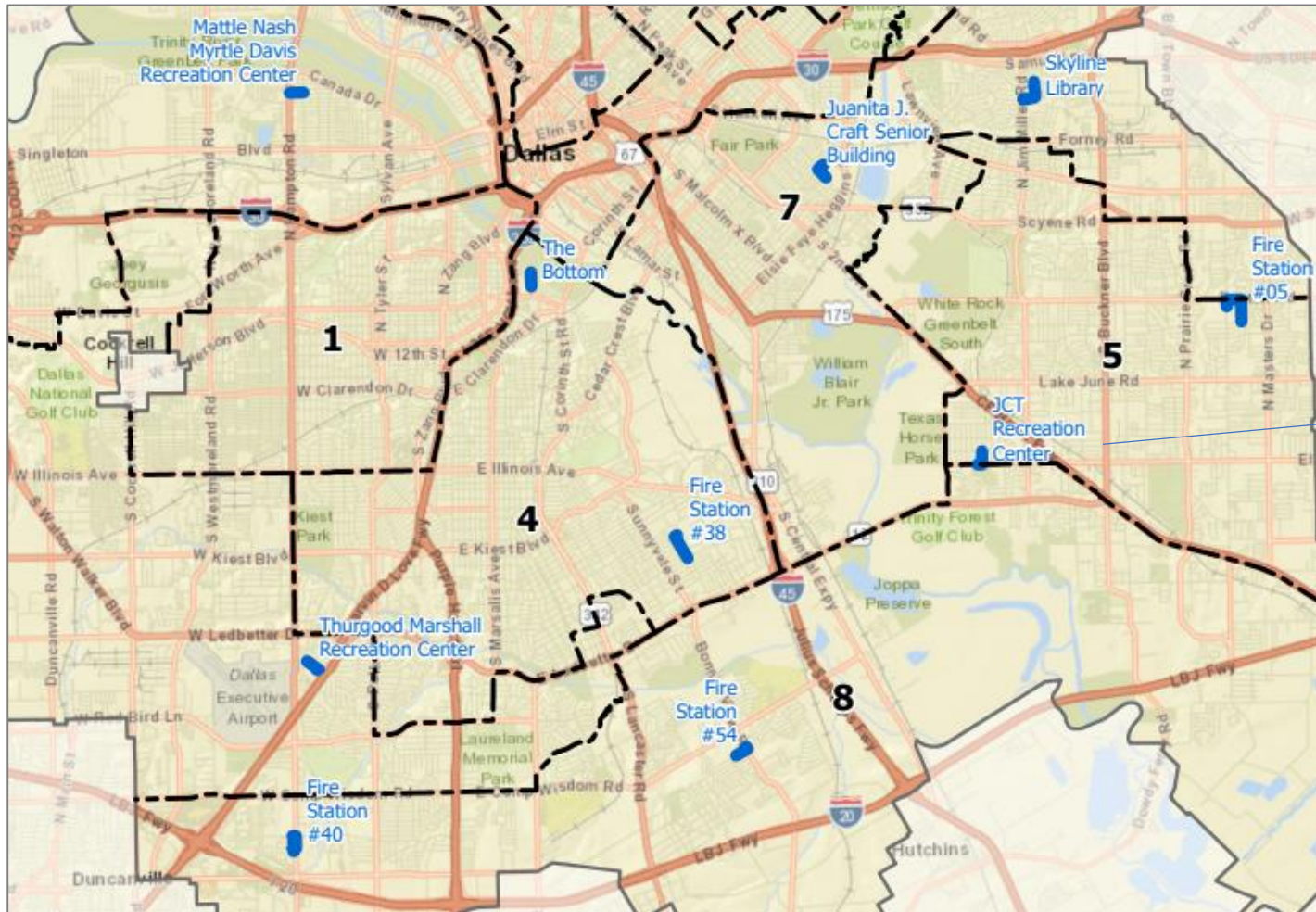




# RDI for Fiber Optic/Wireless Broadband Network



- Map of Streetlight Wi-Fi Pilot Project Locations:



*New streetlights and Wi-Fi equipment on Ezekial from Elam to Hoode*





# Streetlight Wi-Fi Projects



- Streetlight Wi-Fi Pilot Projects:
  - Address both digital divide and public safety initiatives through the installation of 100 new streetlights and wireless access points.
  - All streetlights are powered-up and free Wi-Fi is available at all locations.



*New streetlights and Wi-Fi equipment on Denley from Hutchins to Reverend CBT Smith*



# Streetlight Wi-Fi Projects



- Integrated Streetlight Wi-Fi Pilot Projects:
  - \$500K of CARES Act funding used to install telecommunications fiber and install Wi-Fi equipment on four integrated streetlight poles (Smartpoles):
    - Fiber from FS#15 to three smartpoles at Lake Cliff Park,
    - Fiber from OCMC to one smartpole at Jefferson and Crawford intersection.
  - Wi-Fi is now available at each location.



*Smartpole at Lake Cliff Park – 1114 N. Crawford St.*







# Next Steps



# Next Steps



- June-August 2021:
  - Speed and signal penetration tests will be conducted.
  - Continue RDI Phase II considerations:
    - Discussing with Neo Networks potential network funding, costs, and revenue scenarios,
    - Determine and discuss if opportunities exist to partner with Zayo and AT&T on fiber or wireless broadband network solutions.
    - Identify and discuss eligible locations for CableRunner to install additional fiber in storm sewers,
    - Any potential agreements will be brought to City Council and/or the appropriate Council Committee(s) for consideration.





# Discussion/Questions





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