

Memorandum



CITY OF DALLAS

DATE May 10, 2019

TO Honorable Members of the Mobility Solutions, Infrastructure and Sustainability Committee

SUBJECT **Deployment Update of Small Cell Network Nodes**

On Monday, May 13, 2019, Robert Perez, Interim Director of the Department of Public Works, will brief the Mobility Solutions, Infrastructure and Sustainability Committee on the Small Cell Deployment progress. The briefing materials are attached for your review.

Please feel free to contact me if you have any questions or concerns.

A handwritten signature in blue ink, appearing to read 'Majed Al-Ghafry'.

Majed Al-Ghafry, P.E.
Assistant City Manager

[Attachment]

c: T.C. Broadnax, City Manager
Chris Caso, City Attorney (Interim)
Mark Swann, City Auditor
Billieae Johnson, City Secretary
Preston Robinson, Administrative Judge
Kimberly Bizzor Tolbert, Chief of Staff to the City Manager
Jon Fortune, Assistant City Manager

Joey Zapata, Assistant City Manager
Nadia Chandler Hardy, Assistant City Manager and Chief Resilience Officer
Michael Mendoza, Chief of Economic Development and Neighborhood Services
M. Elizabeth Reich, Chief Financial Officer
Laila Aleqresh, Chief Innovation Officer
Directors and Assistant Directors

Deployment Update of Small Cell Network Nodes

**Mobility Solutions,
Infrastructure, & Sustainability
Committee**

May 13, 2019

**Robert M. Perez, Interim Director
Department of Public Works**



Presentation Overview

- Background/History
- Operational Impacts
- Next Steps

Background/History

- What is a Small Cell Network Node?
 - Equipment at fixed locations that enables wireless communication between user equipment and a communications network
 - Small Cells Nodes are used to increase wireless coverage or network capacity
 - Supports both 4G and 5G deployments
- Entities currently deploying small cell equipment in Dallas include AT&T, Verizon, Crown Castle, Sprint, Extenet, and T-Mobile

Background/History

- Texas State Senate Bill (SB) 1004 became effective September 1, 2017
 - Regulated Texas cities on:
 - Fees to providers for access to right-of-way
 - Timelines for review and approval of applications for small cell equipment in the right-of-way
 - Set restrictions on what municipalities may require

Operational Impacts

- As a result of SB 1004, City staff developed a “Small Cell Design Manual” which became effective on September 1, 2017
- Processes to review, install, and invoice for small cell equipment spans multiple departments
 - Developed a core review team to streamline deployment
 - Permitting process inclusive of Oncor

Operational Impacts

- As of April 30, 2019, the City approved 966 applications for small cell sites

Applicant	Permits Issued	Applications Incomplete	Applications Denied	Applicant Totals
AT&T Mobility	338	140	4	482
Crown Castle NG LLC	96	12	0	108
Dallas MTA, LP d/b/a Verizon	138	13	0	151
ExteNet Systems, Inc	231	15	2	248
Mobilitie, LLC	162	27	9	198
T-Mobile	1	1	0	2
Status Total	966	208	15	1,189

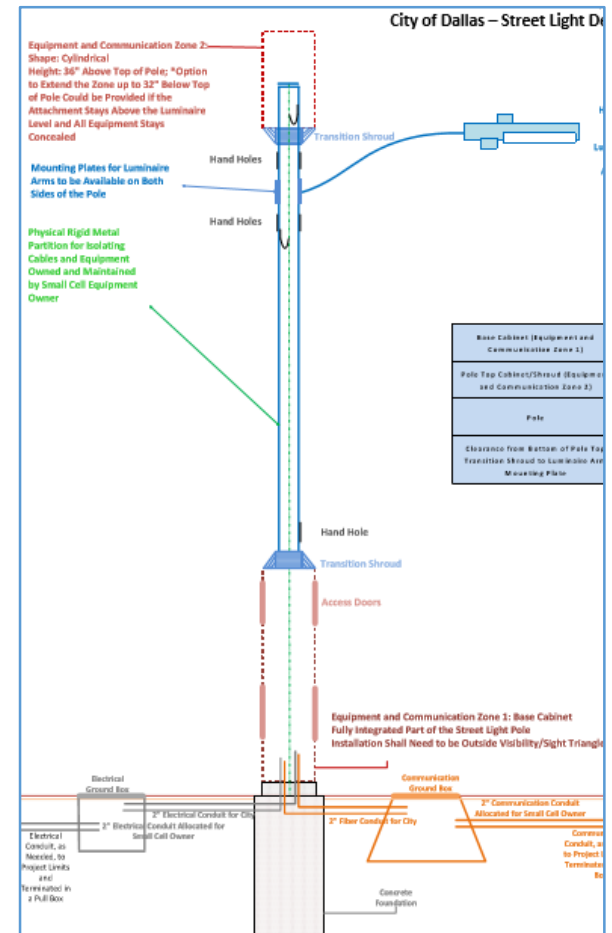
Operational Impacts

- Majority of deployments have been on utility poles
 - 670 on utility poles
 - 89 stand alone poles
- Initial approvals for stand alone poles per Design Manual (1st Edition)
- Challenge with deployment in Historic Districts



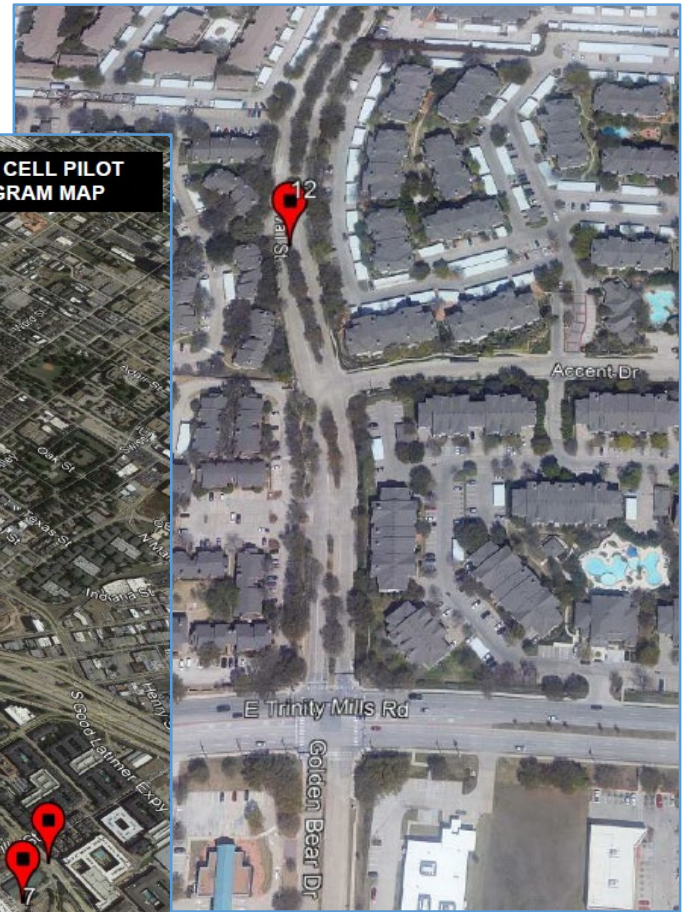
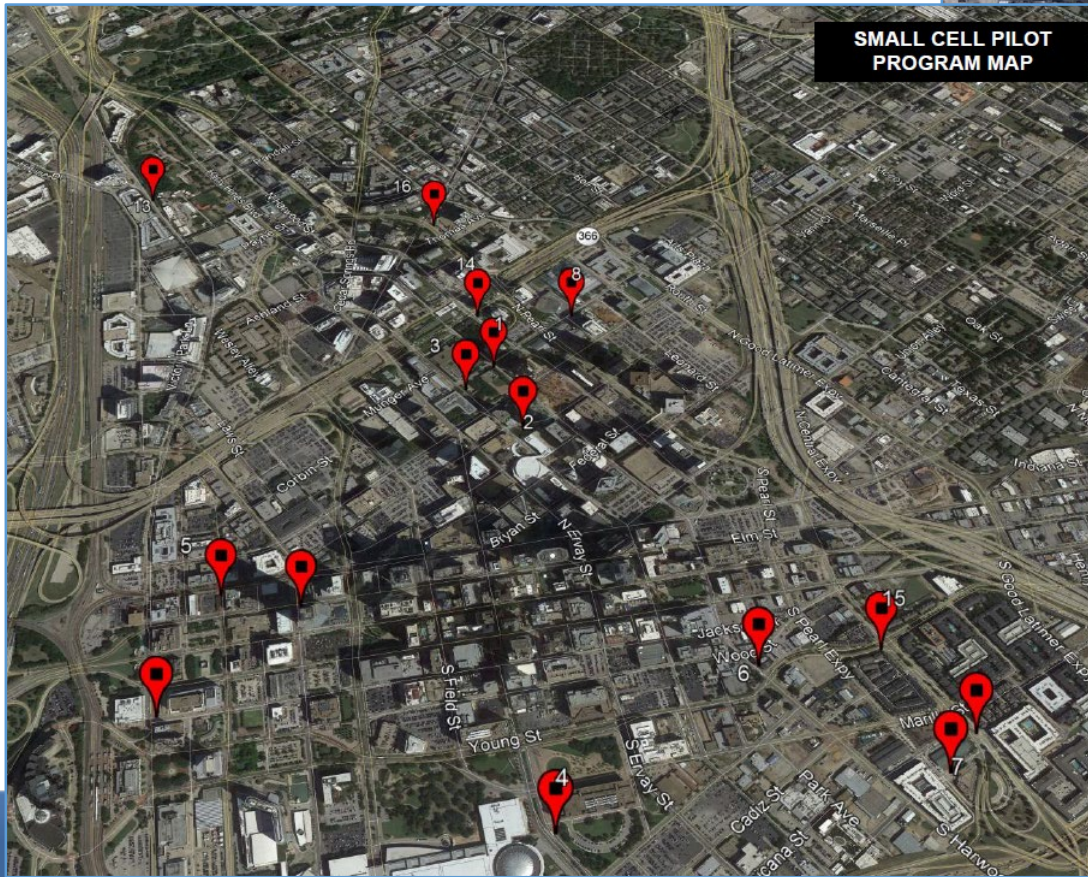
Operational Impacts

- New Initiatives
 - LED Street Light Pole
 - “Smart pole”
 - Replace existing/install new LED light poles
 - Encases all small cell equipment
 - Capable of adding cameras



Operational Impacts

Locations of Smart Pole Pilots



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Operational Impacts

- Examples of Smart Pole Pilots



Operational Impacts

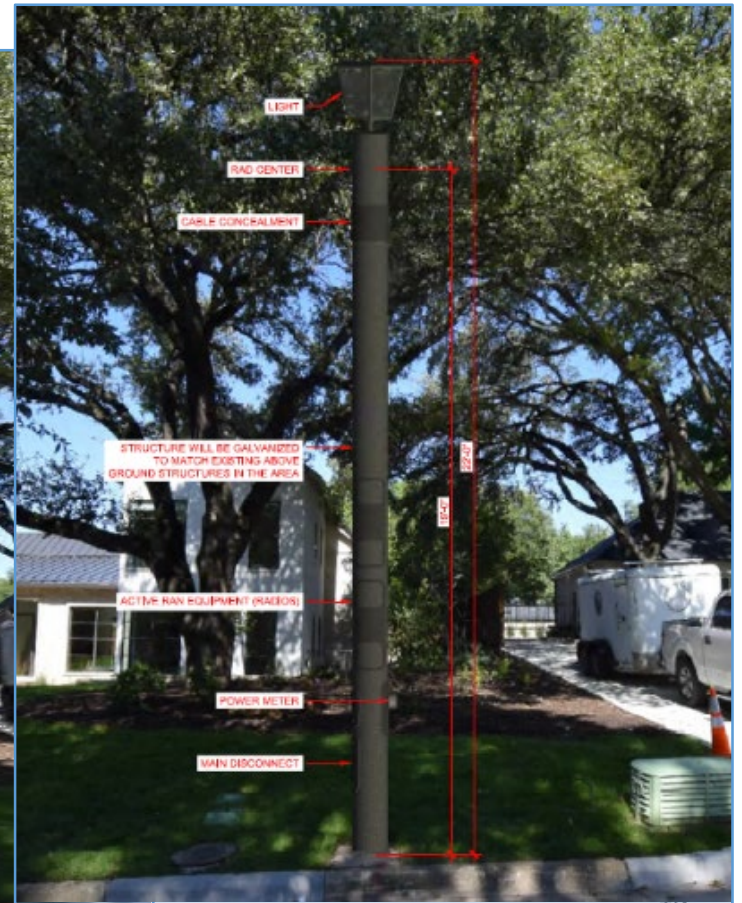
- Examples of Smart Pole Pilots



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Operational Impacts

- Residential Smart Pole Pilots
(photo simulation)



Operational Impacts

- New Initiatives
 - Micro Trenching Technology
 - Shallow and narrow trench which allows for less-intrusive deployment
 - Can complete about 500 ft. per day



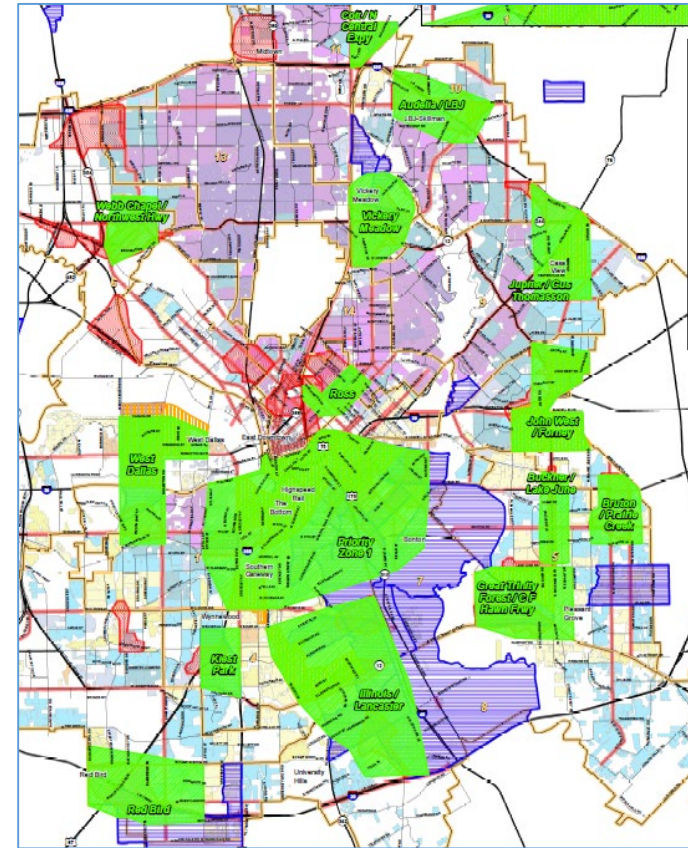
Next Steps

- Continue monitoring pilot program initiatives
 - Will add final specifications to Small Cell Design Manual
- Work with Park and Recreation Department to deploy small cell technology in and around parks
 - Briefed the Park and Recreation Board on February 14, 2019
 - Positive feedback received and indication to staff to explore options for technology

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Next Steps

- Work with Department of Transportation and small cell providers to place “smart poles” in 14 Strategic Lighting Zones
- Work with Communication and Information Services, the City Attorney’s Office, and other departments in the coming months to issue RFP to continue buildout of City’s fiber network



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Next Steps

- Continue participation in challenges to unlawful attempts by the FCC to regulate use and compensation of Local right-of-way
- Continue participation in challenge to SB 1004 fees

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