

# Memorandum



CITY OF DALLAS

DATE October 19, 2018

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

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

On Monday, October 22, 2018, Robert Perez, Interim Director of the Department of Public Works, will brief the Mobility Solutions, Infrastructure and Sustainability Committee on the deployment of small cell network nodes. 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**  
Assistant City Manager

[Attachment]

c: Honorable Mayor and Members of the City Council  
T.C. Broadnax, City Manager  
Chris Caso, City Attorney (I)  
Carol Smith, City Auditor (I)  
Biliera 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  
M. Elizabeth Reich, Chief Financial Officer  
Directors and Assistant Directors

# Deployment Update of Small Cell Network Nodes

**Mobility Solutions,  
Infrastructure &  
Sustainability Committee  
October 22, 2018**

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



# 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
  - Support both 4G and 5G deployments
- Entities currently deploying small cell equipment in Dallas include AT&T, Verizon, Crown Castle, Sprint, Extenet, and T-Mobile

3

# 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

# 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

5

# Operational Impacts

- As of September 30, 2018, COD approved 464 applications for small cell sites

Applicant	Applications Received	Applications Approved	Applications Under Review	Applications Incomplete	Applications Denied
AT&T Mobility	317	232	9	74	2
Crown Castle NG LLC	42	37	3	2	0
ExteNet Systems, Inc	98	80	12	6	0
Mobilitie, LLC	111	84	0	27	0
T-Mobile	2	1	0	1	0
Verizon Wireless	49	30	0	19	0
<b>Grand Total</b>	<b>619</b>	<b>464</b>	<b>24</b>	<b>129</b>	<b>2</b>

# Operational Impacts

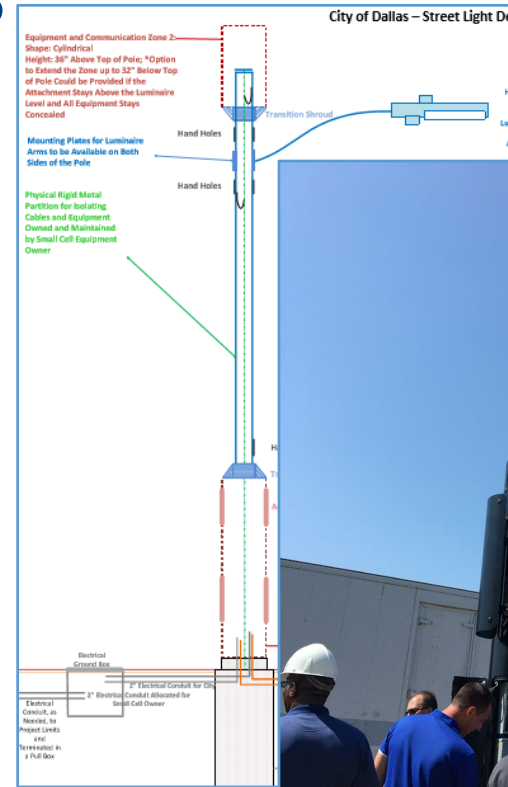
- Majority of approved deployments have been on utility poles
  - 393 on utility poles
  - 71 stand alone poles
- Initial approvals for stand alone poles per Design Manual (1<sup>st</sup> Edition)
- Challenge with deployment in Historic Districts





# 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

- 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
- Working with Parks Department to deploy “smart pole” in Parks ROW
  - Safety benefits include lighting, increased cellular/data coverage, and addition of potential cameras
- Monitor and participate in potential Federal legislation that may regulate use of State and Local ROW

10

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