

# Memorandum



CITY OF DALLAS

DATE October 30, 2015

TO Honorable Mayor and Members of the City Council

SUBJECT Small Cell & Distributed Antenna Systems License Agreements with the City of Dallas

On November 3, 2015, you will be briefed on Small Cell & Distributed Antenna Systems License Agreements with the City of Dallas. The briefing materials are attached for your review.

Please let me know if you have any questions or need additional information.

A handwritten signature in black ink, appearing to read 'Jill Jordan'.

Jill A. Jordan, P. E.  
Assistant City Manager

## Attachment

c: Honorable Mayor and Members of the City Council  
A.C. González, City Manager  
Warren M.S. Ernst, City Attorney  
Craig D. Kinton, City Auditor  
Rosa A. Rios, City Secretary  
Daniel F. Solis, Administrative Judge  
Ryan S. Evans, First Assistant City Manager

Eric D. Campbell, Assistant City Manager  
Mark McDaniel, Assistant City Manager  
Joey Zapata, Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Sana Syed, Public Information Officer  
Elsa Cantu, Assistant to the City Manager – Mayor & Council

# Small Cell & Distributed Antenna Systems License Agreements with the City of Dallas

City Council Briefing  
November 3, 2015

Presented by  
PBW, SDC, CAO

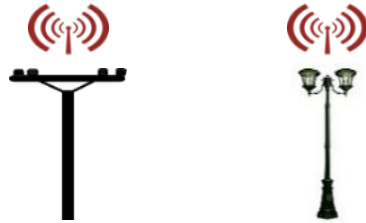


# Purpose

Establish a policy for the installation of Small Cell & Distributed Antenna Systems (DAS) within the City's right-of-ways

- Review of established regulatory authority
  - Legal Framework Chapter 283
  - Compensation for use of Public right-of-way
- Develop Installation guidelines
  - Types of installations
  - Allowable locations
  - Aesthetics
- Establish terms for the policy
  - Application fee (initial one time)
  - Right-of-way usage fees
  - Terms of license

# This Briefing is About Small Cells and DAS



- Mobile phone voice and data relays placed strategically to add capacity, increase data speeds and enhance area coverage
- Small cells usually are operated by and serve one provider, such as AT&T or Verizon
- DAS may service one or multiple providers from the same device
- Small cells and DAS antennas are similar in terms of their impact upon the City's rights-of-way. For the purpose of this briefing, they will be treated similarly and referred to as "antennas." What can change that impact is a need to install new fiber to connect antennas in right-of-way

# Why is This Issue Coming Up Now ?

- There is increasing use of wireless voice and data communications by consumers and an increasing demand for providing quality wireless capacity and coverage by providers
- Wireless voice and data providers must make a business decision to add the necessary infrastructure themselves (usually small cells) or lease that infrastructures from others (usually DAS)
- The City has received a sharp increase in requests for the placement of antennas in the public right-of-way (both small cells and DAS)
- No formal policies exists for handling these requests and they are currently being handled on a case by case basis

# Timeline of Small Cell and DAS Submittals

Dec 2014 and Apr 2015	AT&T submits applications for 95 sites in Dec. and Crown Castle submits applications for 13 sites in Apr. for antennas in City's CBD right-of-way. Both submittals do not contain engineering plans
May 2015	Crown Castle provides engineering plans for 12 of the 13 antennas
July 2015	Crown Castle provides engineering plans for 26 additional antennas
Aug 2015	<ul style="list-style-type: none"> <li>• Crown Castle amends previous licenses requests, many with new locations and 11 antennas to be placed on existing city of Dallas street light poles</li> <li>• Crown Castle first includes the planned location for their fiber cable</li> </ul>
Feb 2015 – current	<ul style="list-style-type: none"> <li>• The City continues to meet with other small cell and DAS providers to assess the industry's requirements</li> <li>• The City engages a consultant to conduct a review of how other cities are handling similar requests and on the terms and conditions for licenses granted</li> <li>• The City engages with the city's of Houston and San Antonio to discuss how each respective city is handling small cells</li> </ul>
Sept 2015	Staff updates Quality of Life Committee on small cell and DAS status
Oct 2015	Staff updates Quality of Life Committee on process and City's legal authority for small cell and DAS

# Current Status

- Temporary licenses are being processed with the understanding that they are subject to a change by a Council approved ordinance amendment
- A one time application fee of \$750 is charged for submittals per ordinance (*Chapter 43, §112*) Only one \$750 fee, even if 95 sites are involved
- License fees are applied to the temporary licenses agreements by a long standing ordinance (*Chapter 43, §115 Annual Fee for Use Public Right-of-Way*)
- Installations also require a separate electrical permit fee (minimum of \$100 for up to \$6,000 work)

# Current Status

- Physical site placement considerations are handled on a case by case basis using temporarily established guidelines
- In October 2015 one DAS provider (Crown Castle) was notified of the applicable subsurface use of right-of-way fee after they introduced the fiber cable plan for the first time in August 2015
- There are 121 sites pending approval with an additional 600 anticipated



# Legal Framework

- All users of the public right of way (ROW) must be granted the privilege of occupying the ROW and pay for that privilege.
- Three ways to be granted authority to place facilities in the ROW
  - Franchise (e.g. Oncor, Atmos)
  - ROW license (e.g. telecom companies who don't provide Local Exchange or voice service, AT&T Long Distance pays license fee)
  - Statutory authorization (e.g. SWBT dba AT&T ; Time-Warner Cable; AT&T dba U-Verse)

# Statutory Authorization

- Local Government Code Chapter 283
  - Applies to Local Exchange Carriers and providers of voice service
  - E.g. Southwestern Bell Telephone Co dba AT&T; Time Warner Telecom
- Texas Utilities Code Chapter 66
  - Replaces former cable franchise and authorizes cable and video service in return for a 5% of gross revenues ROW fee paid to the City
  - E.g. Time Warner Cable; AT&T U-Verse

# Local Gov't Code Chapter 283

- Enacted in 1999
- Applies only to Local Exchange Carriers (LECs) and providers of voice services
- Does not apply to long distance providers, cable companies, or wireless providers
- Changed compensation method for LECs from traditional franchise fee (a percentage of gross revenue) to an access line fee.

# How Chapter 283 Works

- Cities no longer issue franchise for LECs
- **ROW compensation for LECs is determined by the type and number of access lines provided to end use customers**
- The rest of a LEC's network is paid for by the fees assessed at the end use customer level
- Uses of the ROW that do not have end use customers, can not be compensated under Chapter 283 because there is no way to calculate the compensation due

# How Chapter 283 Works

- Chapter 283 replaced the franchising of LECs and was never intended to cover uses that were not franchised before Chapter 283, like long distance and wireless services
- Those uses have always been outside the purview of Chapter 283, including its access line compensation method

# How Chapter 283 Works

- The Public Utility Commission of Texas (PUCT) is charged with developing rules to implement Chapter 283
- PUCT specifically excluded **long distance providers**, and **wireless providers** from the application of Chapter 283

# Chapter 283 and Wireless Facilities

- Wireless infrastructure companies, e.g. Crown Castle, are arguing that Chapter 283 grants them permission to be in the ROW to install any facility they need to provide service and that the only compensation cities may lawfully charge is the access line fee provided by Chapter 283.
- As a consequence, they argue they do not need a license or a franchise

# Chapter 283 and Wireless Facilities

- Problems with the Wireless infrastructure companies' argument
  - They don't offer service to end use customers, so they have no access lines as defined by the PUCT and Chapter 283, so **they would pay nothing** if Chapter 283 dictated the compensation to be paid
  - These wireless infrastructure companies have sought and **obtained certificates for service they do not provide so they can claim the benefit of Chapter 283 when it does not apply to their business**



# Chapter 283 and Wireless Facilities

- When Crown Castle (as NextG Illinois) applied for their certificate under Chapter 283, the PUCT questioned why they were applying for **a certificate they didn't need**, since they **weren't providing any service that required a certificate**

# Compensation for Use of ROW

- When Chapter 283 doesn't apply, two other methods of compensation are available
  - License calculated on a square foot of ROW used basis
  - Traditional franchise as provided for by the Dallas City Charter with a percentage of gross revenue or comparable fee

# Compensation for Use of ROW

- License calculated on a square foot of ROW used basis
  - Current fee calculation has been in effect for decades
  - License covers all facilities not authorized by either a franchise or statutory authority, including fiber optic lines not authorized by Chapter 283

# Compensation for Use of ROW

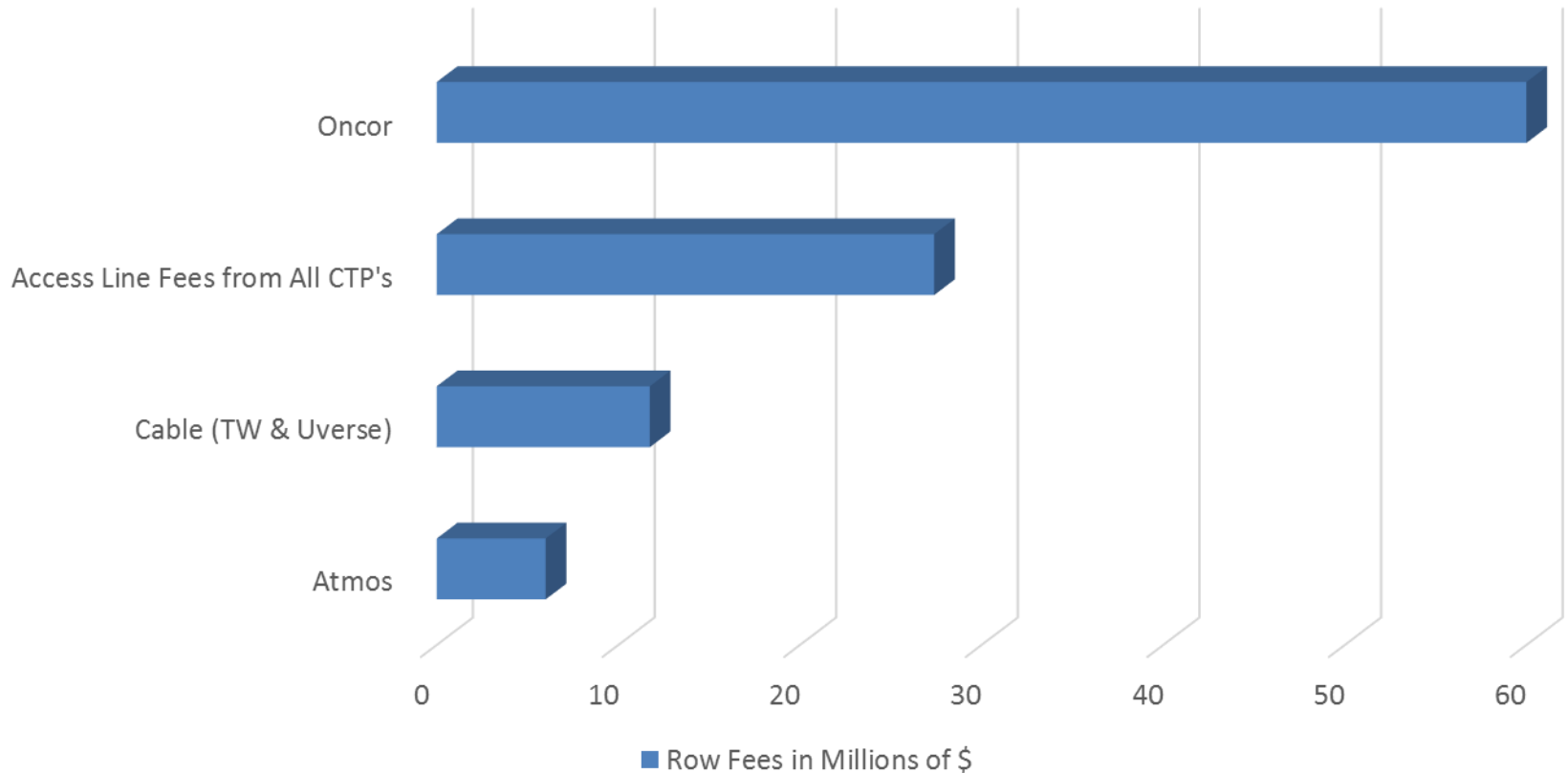
- Traditional franchise as provided for by the Dallas City Charter with a percentage of gross revenue or comparable fee
  - Crown Castle has stated they are interested in pursuing a franchise with the City of Dallas but has not yet responded to recent email offering to begin discussions

# Everyone Pays To Use The Public Right of Way

- The Texas Constitution has very strong anti-gift provisions to prevent giving away public property or money for private use
- As a result, all users of the ROW must pay for that privilege

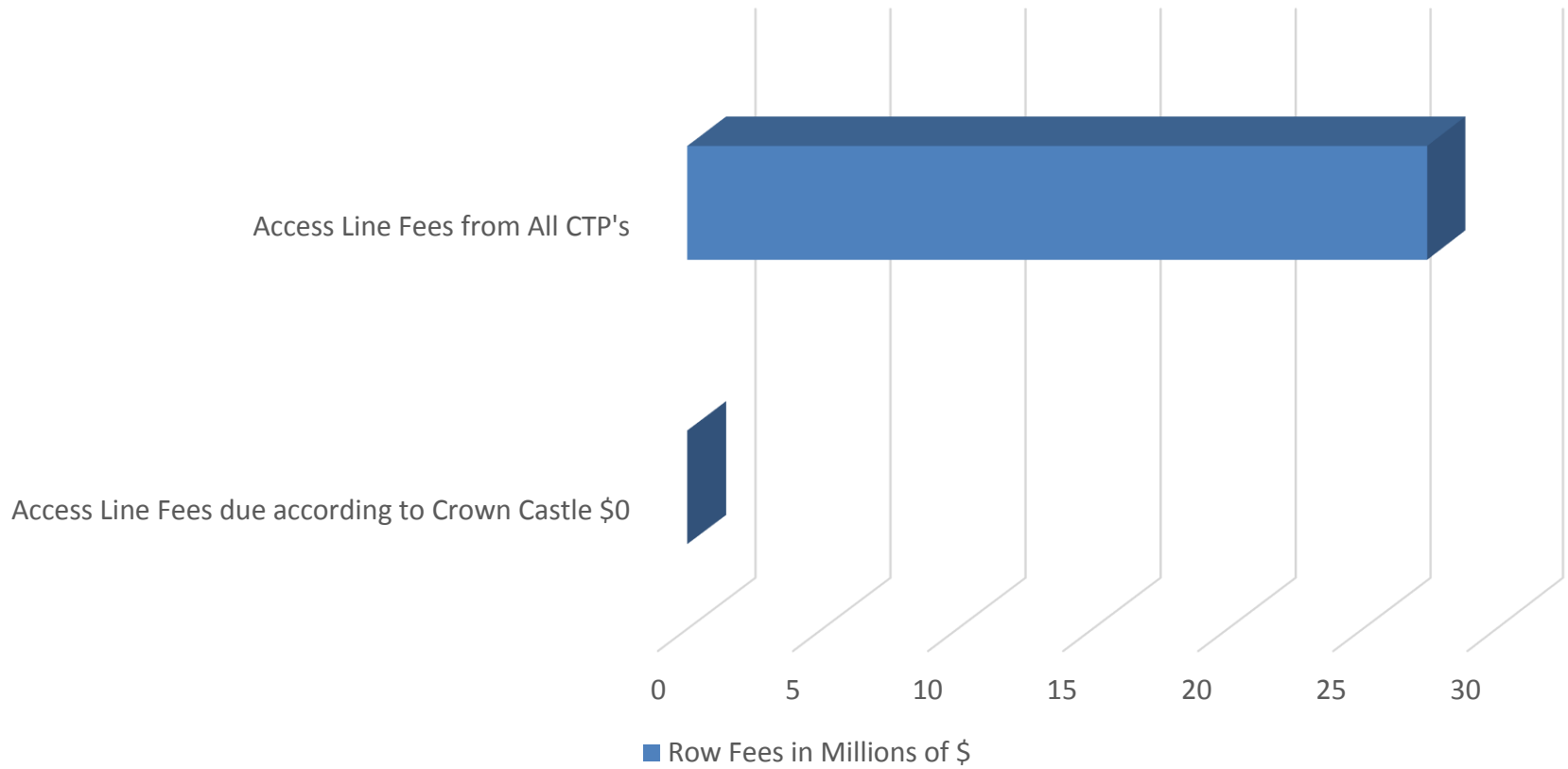
# Everyone Pays To Use The Public Right of Way

Annual ROW Fees by Utilities



# Everyone Pays To Use The Public Right of Way

Annual ROW Fees by CTPs



# What are other Texas Cities Doing?

- San Antonio

- One Master License with Verizon for Small Cell only, not DAS
- No new fiber being installed
- City can require stealthing of any site
- City can unilaterally take down any site that interferes with Public Safety radio
- \$1,500 per site
- Process took approximately 14 mo. to complete



# What are other Texas Cities Doing?

- Houston
  - Staff working on a comprehensive process that will address all Small Cell and DAS users
  - Is requiring a license agreement and license fees for both antenna sites in the ROW and new fiber connecting those antenna sites
  - Proposing an average of \$2,500 annually for antenna license in addition to fiber license
  - Process has been ongoing for almost a year, wireless infrastructure providers refusing to agree to a license for antennas or the connecting fiber

# Considerations for the Physical Placement Small Cells and DAS

## Places where small cells can be placed:

- Power poles

- Buildings and Facilities

- Street and pedestrian light poles



# Considerations for the Physical Placement Small Cells and DAS

## Location, size and appearance:

- Location
  - Non-obstructive to pedestrians
  - Non-obstructive to vehicular traffic sights
  - Not interfere with ADA clearance requirements
  - Must exceed any vehicle height requirements
- Size
  - Dimensions not too excessive
- Appearance
  - Should not be unsightly
  - Consistent with surroundings
  - Similar in style and look of other or replaced street light poles
  - Enclosed in visually sensitive area (Bishop Arts, CBD Fair Park)



# Proposed DAS installations in the CBD

Remote Site Locations				
Remote Site Item #	Pole Owner	POLE TYPE	Street Address	Side on Street
1	Oncor	Shoe Box	300 Reunion Blvd	East of Hyatt Regency Hotel Drive
2	Public (City)	Globe	208 N Market St	East of N Market St
3	Oncor	Shoe Box	650 S Griffin St	West of S Griffin St
4	Oncor	DBL Shoe Box	311 Reunion Blvd	South of Reunion Blvd E
5	Oncor	Shoe Box	201 Reunion Blvd	West of Reunion Blvd W
6	Oncor	Globe	701 Commerce St	West of S Market St
7	Oncor	Shoe Box	380 North Griffin Street	East of N Griffin St
8	AT&T	Wood	907 San Jacinto St	North of San Jacinto St
9	Public (City)	Nyhaven	311 South Akard St	North of S Akard St
10	Oncor	Shoe Box	525 S Griffin St	South of Young St
11	Public (City)	Nyhaven	326 North Field St	West of North Field St
12	Oncor	DBL Shoe Box	633 South Akard St	East of South Arkard St
13	Oncor	Wood	1515 Young St	On median of Young St
14	Public (City)	Nyhaven	421 South Akard Street	West of South Akard Street
15	Oncor	Shoe Box	311 South Lamar St	North of Wood St
16	Public (City)	Nyhaven	412 South Harwood St	Northeast of South Harwood St
17	AT&T	Wood	1701 Cadiz St	North of Cadiz St
18	Oncor	Shoe Box	739 S Ervay Street	Northeast of S Ervay Street
19	Oncor	Shoe Box	1627 Pacific Avenue	South of Pacific Avenue

# Proposed DAS installations in the CBD

Remote Site Locations				
Remote Site Item #	Pole Owner	POLE TYPE	Street Address	Side on Street
20	Public (City)	Nyhaven	1920 Main St	East of S St Paul St
21	Oncor	DBL Shoe Box	315 S Cesar Chavez Blvd	median of S Cesar Chavez Blvd
22	Oncor	Shoe Box	2111 Marilla St	NW of Marilla St and S Pearl Expy
23	Oncor	DBL Shoe Box	2127 Farmers Road	North of Farmers Road
24	Public (City)	Nyhaven	2001 Bryan St	At intersection of N Harwood and Bryan St
25	Public (City)	Nyhaven	525 North Ervay Street	Southwest of North Ervay St
26	Oncor	Shoe Box	2121 San Jacinto St	West of N Pearl St
27	Oncor	Wood	1000 Munger Ave	North of Munger St
28	Public (City)	Pegasus	1618 Main St	South of Main St
29	Public (City)	Nyhaven	1401 Elm St	Intersection of Elm & N Arkard St
30	Oncor	Wood	1704 North Griffin St	South of Ross Ave
31	Oncor	Wood	1800 Field St	West of N Field St
32	Oncor	Shoe Box	1745 N Harwood Street	West of N Harwood St
33	Public (City)	Nyhaven	716 N Harwood St	West of N Harwood St
34	Oncor	Shoe Box	800 North Olive Street	East of North Olive St
35	Oncor	Wood	2400 Ross Ave	West of Leonard St
36	Art District	Round top	2400 Flora St	South of Flora St
37	Oncor	Shoe Box	2110 Live Oak St	South of North pearl St
38	Oncor	Wood	1105 South Harwood St	South of St Louis St

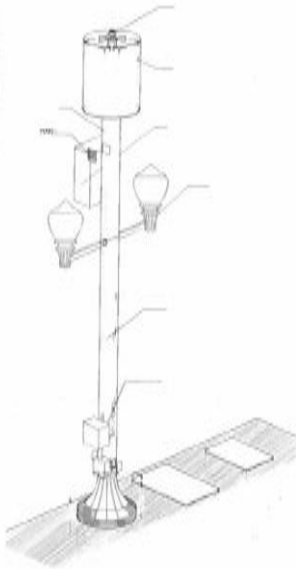
# Proposed AT&T Small Cell sites

- 95 locations
- All in alleys
- All in North Dallas
- None require new fiber
- Antennas are not enclosed

# Visual Sample of Proposed DAS in the CBD



Current look



Per specifications



Proposed look

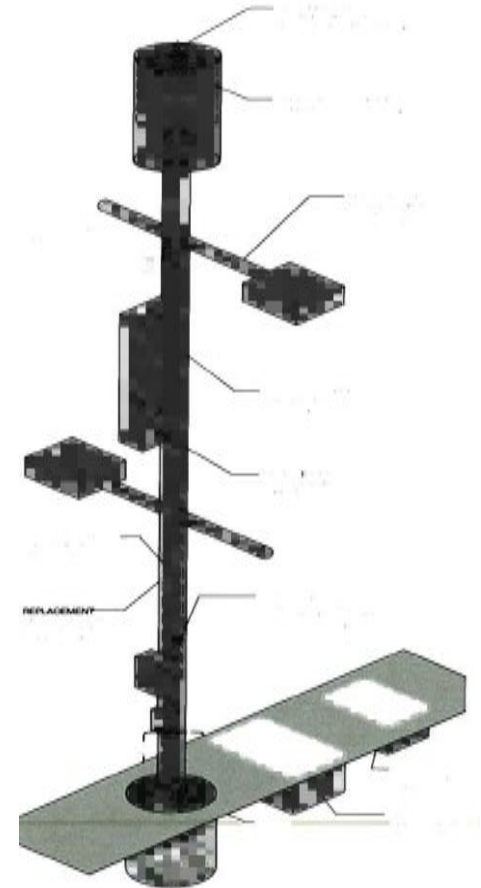
Streetlight DAL – 02  
East on Market St. south  
of Pacific

# Visual Sample of Proposed DAS in the CBD



Current look

Streetlight DAL – 28  
Southside on Main west  
of Ervay



Proposed look  
Per specifications

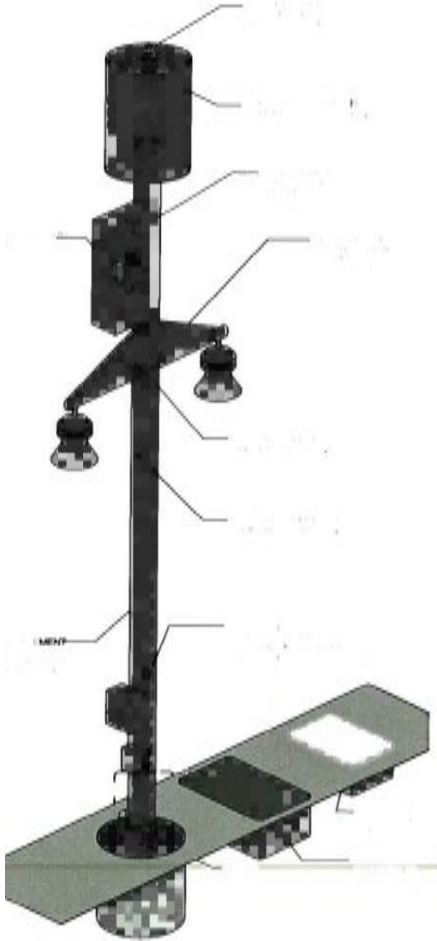


# Visual Sample of Proposed DAS in the CBD



Current look

Streetlight DAL – 11  
Southwest corner of Field and Pacific



Proposed look  
Per specifications

# Using Street and Pedestrian Street Light Poles

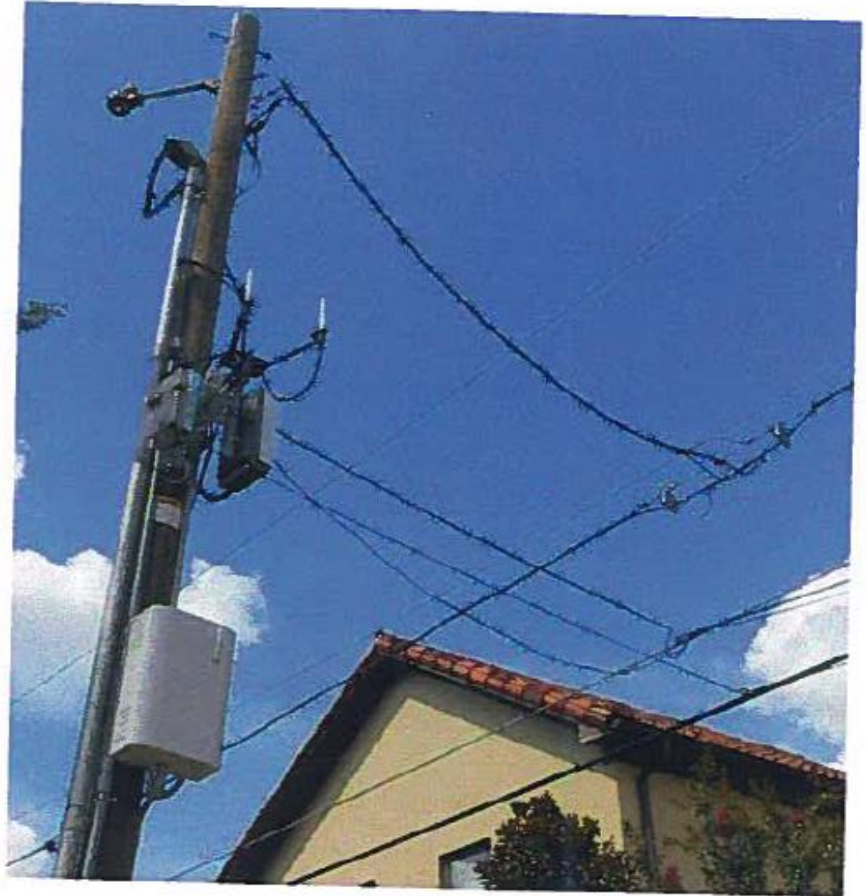


- Street and pedestrian light poles in certain areas are custom poles financed by a Public Improvement District or paid for by an adjacent developer
- Some owned and maintained by Oncor, some by the City
- These poles help provide an identity to an area and any modifications must be consistent with the existing poles

# Visual Sample of Proposed small cell in Alley



Typical Alley Installation



# Visual Sample of a Pole for Antenna Only Use



# Single Cell and DAS Installation Considerations

- Are street light and pedestrian pole replacements acceptable? (style, size)
- Are additional poles allowable/recommended? (style, size, spacing)
- Are street light and pedestrian pole attachments acceptable? (full enclosures, visible antennas and size of antennas)
- Should we have different requirements in different areas such as in the CBD, Fair Park or an alley? (pole styles, antenna enclosures, sizes)

# Other Installation Policy Considerations

- Treatment and locations for ground-mounted components
- Placement, size and color of obstruction and protrusions
- Number, spacing, location, placement and dimensions of pole-mounted components
- Plans and drawings requirements
- Local, State and Federal requirements
- City's process for granting approvals
- Agreement requirements with private facilities
- Maintenance and removal requirements

\* Detailed staff policy recommendations can be found in the attached appendix

# Fees and Term Considerations

- **Appropriate Fees:**
  - One time initial standard application fees to be used to recover the cost of processing the application for a license
  - Use of right-of-way fee and terms to recover the rental value for the use of public property by a private entity. This includes:
    - The site of the antenna itself
    - The portion of the ROW used to install new fiber to serve that antenna

# Fees and Terms Options

Option	Type of Fees Right-of-Way Usage	Terms	Considerations
<p><b>1</b> ROW Licenses</p>	<ul style="list-style-type: none"> <li>• Fixed right-of-way use license fee per location</li> <li>• If new fiber, fiber cable fee based on square footage charge</li> <li>• Available sites assigned on a first come /first served bases</li> </ul>	<ul style="list-style-type: none"> <li>• Temporary Licenses fees assessed annually subject to adjustments issued by staff</li> <li>• Council approved licenses for multi-year right-of-way usage</li> </ul>	<ul style="list-style-type: none"> <li>• Council approved licenses provide consistency and allow providers to better plan network</li> <li>• Requires staff effort to establish fair market fee rate and update those rates for renewals</li> <li>• May not optimize potential fees collected</li> <li>• Single license would authorize both antenna site and any new fiber with separate fees for each</li> <li>• Longer terms with renewable options provide predictability and security to the cell service providers</li> <li>• Annual 4% or similar adjustment to rates as is typical in antenna rental agreements</li> </ul>
<p><b>2</b> Bid</p>	<ul style="list-style-type: none"> <li>• Bid out prime locations such as CBD, Arts District, Uptown, etc.</li> <li>• Awarded to bidder providing most favorable terms</li> </ul>	<ul style="list-style-type: none"> <li>• multi year term</li> </ul>	<ul style="list-style-type: none"> <li>• Should optimize potential fees collected</li> <li>• City would need input from wireless service providers regarding their buildout plans to best match their need to area up for auction</li> <li>• Requires the establishment of a process not shared by other cities</li> <li>• Winner would be required to make service available to all service providers to provide for best coverage for all customers, no matter their provider</li> <li>• Bidding may be done for an area during the design phase of the City's bond projects for Complete Streets or other public gathering areas so that the correct size of poles is determined before construction</li> </ul>



# Fees and Terms Options

Option	Type of Fees Right-of-Way Usage	Terms	Considerations
<p><b>3</b> Franchise</p>	<ul style="list-style-type: none"> <li>• Award a franchise to provide wireless infrastructure capacity using City ROW</li> <li>• In lieu of license fees</li> <li>• Are not exclusive so more than one could be issued</li> <li>• Compensation for the use of the right-of-way based on a percentage of gross revenues</li> </ul>	<ul style="list-style-type: none"> <li>• Duration of the franchise agreement</li> </ul>	<ul style="list-style-type: none"> <li>• Income generated is determined by franchise holder's revenue, so it is not certain</li> <li>• Because if is tied to revenue paid to franchise holder, it is always affordable</li> <li>• It costs less when revenues are low and more when revenues are high, matching the value to the business of the use of the ROW</li> <li>• We will need to have a reliable picture of a company's likely gross revenue to determine if gross revenue approach is beneficial to the City</li> <li>• Companies have expressed interest in the approach and have used it in other cities</li> <li>• Gross revenue fees in other cities have been very low, so may not capture full value of ROW usage</li> <li>• Antenna license fee still applies</li> </ul>

# Fees and Terms Options Continued

Option	Type of Fees Right-of-Way Usage	Terms	Considerations
4 Premium location	<ul style="list-style-type: none"> <li>Assess a 20 percent premium surcharge to antenna site license based on premium locations</li> </ul>	Surcharges locations: <ul style="list-style-type: none"> <li>CBD</li> <li>Uptown</li> <li>Bishop Arts</li> <li>Other</li> </ul>	<ul style="list-style-type: none"> <li>Will require boundary identification</li> <li>May help to optimize potential fees collected</li> </ul>
5 City owned infrastructure	<ul style="list-style-type: none"> <li>The COD builds its own fiber cabling system and leases its infrastructure through third party communication providers</li> <li>The COD installs and leases its antennas through third party communication providers</li> </ul>	Not applicable	<ul style="list-style-type: none"> <li>Ensures more control of the City's right-of-way</li> <li>Reduces the amount of streets cuts to install fiber cable</li> <li>Avoids duplication of facilities and effort</li> <li>May maximize earning potential</li> <li>May optimize usage of City equipment such as traffic signals and surveillance cameras</li> <li>Would need to include provisions insuring all wireless service providers were able to use infrastructure</li> </ul>

Options are not mutually exclusive and can be combined

- No matter which of the first four options is selected, the initial application fee of \$750 is recommended to be charged, but per site and not credited towards first year license fee

# Staff Recommended Policy and Fees

- Allow modified street and pedestrian light pole replacements as long as they are consistent in appearance with existing poles. Installation and maintenance of the replacement poles is at the applicant's expense. Failure to maintain is grounds for revocation of the license
- Allow the installation of new similar looking exclusive antenna poles
- Allow a maximum of two (2) retrofitted or exclusive antenna poles per block (area between street and surrounding street intersections)
- Antenna hardware must be enclosed (stealth) for all sites along city streets, public plazas, city parks, and other public gathering locations. Non-enclosed antennas could be placed on pole mounted installations in alleys. Additional installation guidelines found in the appendix
- Applicant to be responsible for maintenance and operation and all associated costs

# Staff Recommended Policy and Fees

- Implement the following Installation and license fees:
  - Charge the one time standard application fee of \$750 per site
  - Require a license fee for the antenna site in the City's right-of-way based upon:
    - An increase from the current minimum charge of \$1000 per site to a \$2,500 per year per antenna site.
  - For those applicants who do not have an existing authority to be in the ROW, require a license fee for placement of fiber service to antenna sites based upon:
    - Assess the formula calculation of (area for fiber installation X market value of land being used X .30 X .12) per year
    - Area is 3 feet or width of trench, whichever is greater, times linear feet of fiber installation

# Staff Recommended Policy and Fees

Continue to allow applicants the choice of applying for licenses that are either:

- A “Temporary” license that can be issued by staff and that must be renewed annually or
- A “Long Term” license that must be approved by Council. These licenses can be written so that they include such features as:
  - 5-Year renewable term
  - An annual escalation clause
  - A clause allowing the City to terminate the license for cause and/or convenience
  - A clause requiring the applicant to relocate their equipment at their cost should the City need to improve or rebuild or maintain the facility on which the antennas are located
- Task staff to seek ways to incentivize the industry in reducing the number of street cuts in the right-of-ways

# Next Steps

- Receive Council input to finalize draft ordinance
- Schedule ordinance for City Council adoption in December

# Questions & Comments

# Appendix



# Installation Policy Recommendations

- A Right-of-Way License Agreement must be obtained through the City of Dallas Sustainable Development and Construction (SD&C). SD&C will coordinate all required reviews and inspections
- Provide detailed engineering drawings for each antenna site and fiber corridors, showing all components for that installation and existing site conditions, including:
  - All existing utility facilities and streetscape features above ground
  - Any underground utilities for any site in which new foundations for ground mounted equipment or underground components are proposed
  - All components required for the facility must be included in the detailed plans and dimensions must be shown for all components and clearances

# Installation Policy Recommendations

- Ground mounted components:
  - May not obstruct any traffic signage or signals
  - Must comply with all other federal and state statutes and local ordinances and regulations of the City such as electrical codes, minimum sidewalk standards, and visibility regulations
  - May be prohibited in areas of high traffic volumes (pedestrian, vehicular, etc.), alternatives will be considered
  - Must be disguised to blend with the surrounding environment
- All components must be positioned as to ensure that:
  - All intersection and driveway visibility requirements are achieved
  - The areas above and along alleyways and roadways are not encroached upon so that trucks can safely pass by the antenna site

# Installation Policy Recommendations

- Provide agreement letters from facility owners that any components of the system will connect to or be mounted on. Provide a letter of agreement that states that all components will be maintained in conformance with current requirements, will be relocated to accommodate any future City infrastructure improvements or changes, and will be removed if taken out of service or at the expiration of the license agreement
- For antenna sites along city streets, parks, plazas or public gathering spaces, the antenna equipment must be shrouded or stealth techniques used such that the external view of the equipment must provide an “enclosed” look free of protrusions and colored to “blend” into the existing area for all components of the antenna facility
- For pole mounted antenna sites located in alleys, this shrouding is not required but is encouraged
- Each antenna site must have identifying marks on the equipment to identify the owner and a unique number to identify the unit. These marks must be as non-intrusive as possible, while still being able to be easily read from the ground
- The maximum dimension measured for the pole-mounted components of the unit shall not exceed 20-inches wide and 40-inches tall with an added 8-inches for other protruding objects

# Installation Policy Recommendations

- Pole mounted components must be at least 12' above ground level, although this may be waived by written consent of the Public Works Director for those exceptions where the 12 foot level poses a safety hazard to utility workers who may have to work on that specific pole. Electrical meter bases can be less than 12' above the ground so long as they comply with Electrical Codes, but must be positioned as not to encroach into a walkway or ADA Path. The grounding rod and connection point must be configured to assure that it does not encroach into a walkway or ADA Path, nor shall it pose a tripping hazard
- Pole-mounted components must not encumber more than  $\frac{1}{2}$  the circumference of the pole at any location on the pole and only one antenna installation shall be permitted on any pole
- Damaged or deteriorated components must be corrected within 48 hours of notification. If units are taken out of service, the components must be removed within 5 business days of being taken out of service