



# CIOSI – Monopoles

Follow-up to 11/23/2021 Workshop

March 8, 2022 Council Workshop





# Background

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- August 24, 2021 Work Study Session (WSS) – Council Item of Special Interest (CIOSI) requested by Councilmember Tolmachoff
- November 23, 2021 WSS – Report to Council



# Direction

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- Provide relevant cellular system information
- Provide background of city's jurisdictional authority
- Provide site specific information for Monopole installations on city property



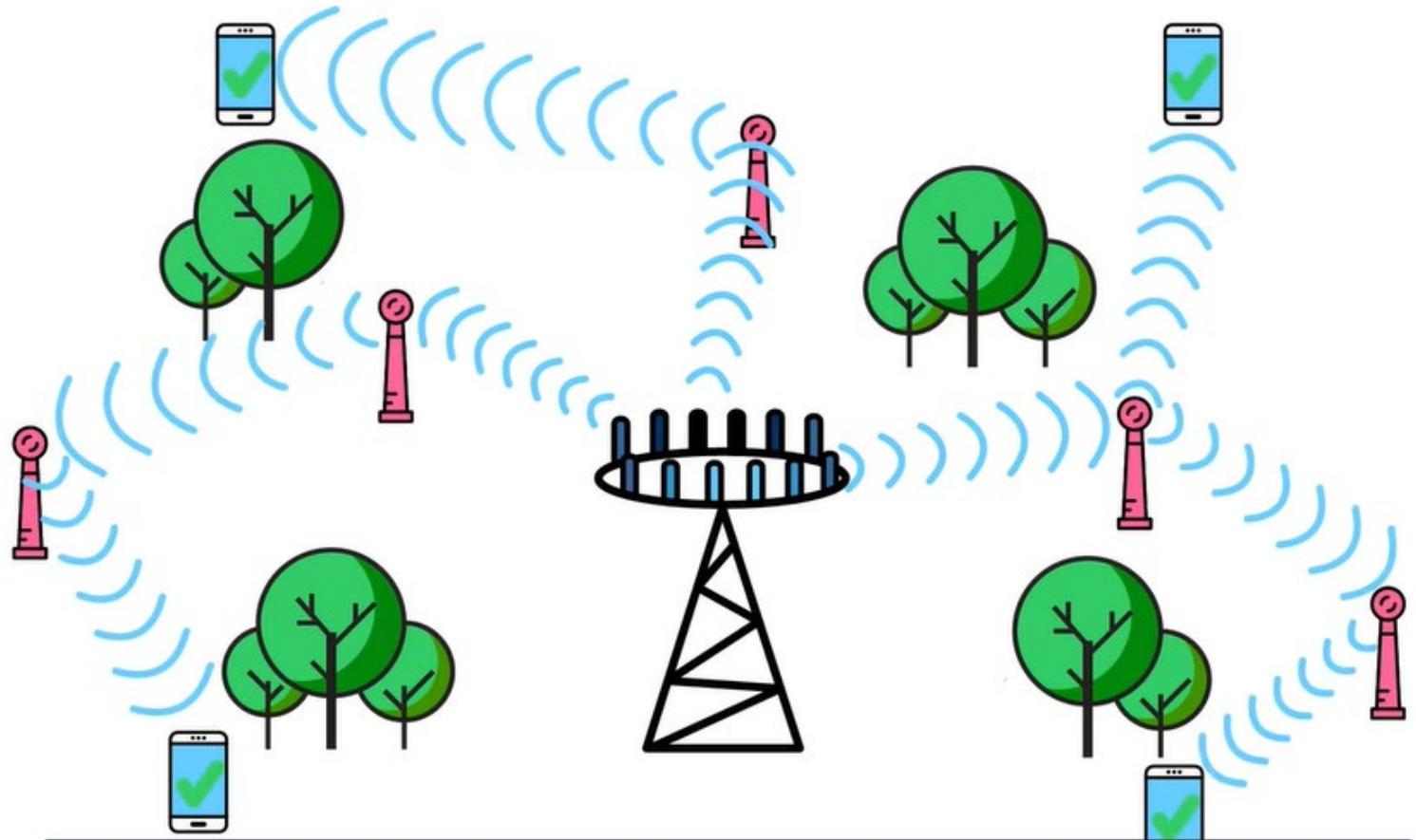
# How wireless technology works

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- Well, there are wires, “Fiber Optics”
- Fiber “Backhauls” data so it can be processed and used
- Large Cell Towers and now “Small Cell Towers” serve as both the receiving and delivery points for data that serves our smart devices



# Cellular needs line of site





# The Marketplace



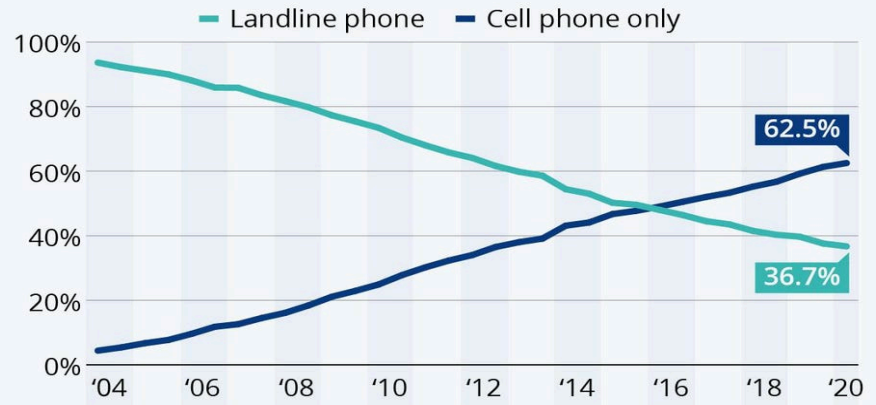


# Technology Trends

- Landlines by 2025 will be nearing obsolete
- Analog technology that powers landlines is being phased out to Voice over Internet Protocol (VoIP) and cellular.

## Landline Phones Are a Dying Breed

% of U.S. adults living in households with/without a working landline telephone\*



\* based on the CDC's biannual National Health Interview Survey of 15,000+ U.S. households

Source: CDC



statista



# Regulatory Authority

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- Cellular technology is regulated commercially by the FCC
- States have some authority to regulate: ARS Title 9
- Cities have limited authority to regulate ROW & PUE; Aesthetic, Setback, Clearance. Reasonable and customary is the standard.
- Cities have more authority to regulate on “City Property”
- Use of the ROW and PUE – Glendale Municipal Code (GMC) Chapter 10
- Zoning – GMC Article 7.600



# Regulatory Authority

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- The city does not have the authority to deny access, we can require reasonable accommodations in alignment and aesthetics.
- The city does not have to allow carriers to attach to city light poles, however, the carrier is allowed to install their own pole.
- No jurisdiction may consider the environmental effects of RF's if the installation meets the FCC regulations. (Telecommunications Act of 1996 – Section 704)



# Regulatory Authority - Health & Safety

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- Federal Communications Commission (FCC) regulates the Telecom industry; other Federal agencies monitor, research or regulate issues related to human exposure to RF radiation.
  - Food and Drug Administration (FDA)
  - Environmental Protection Agency (EPA)
  - Occupational Safety and Health Administration (OSHA)
  - National Institute for Occupational Safety and Health (NIOSH)
  - National Telecommunications and Information Administration (NTIA)
  - Department of Defense (DOD)



# Regional Wireless Cooperative Network

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- Members

- Glendale, Avondale, Goodyear, Peoria, Phoenix, Sun City Fire District, Sun City West Fire District, Guadalupe, Maricopa, El Mirage, Tempe, Chandler, Surprise and the Daisy Mtn Fire District

- Agreement

- Using their best efforts, through cooperation and pooling of common resources, for the mutual benefit of all Parties, to use, own, operate, maintain and improve a regional radio communications network.



# Monopoles - by the numbers

## Cell Towers within the City of Glendale Private Cell Sites



GIS

### Large Cell Sites

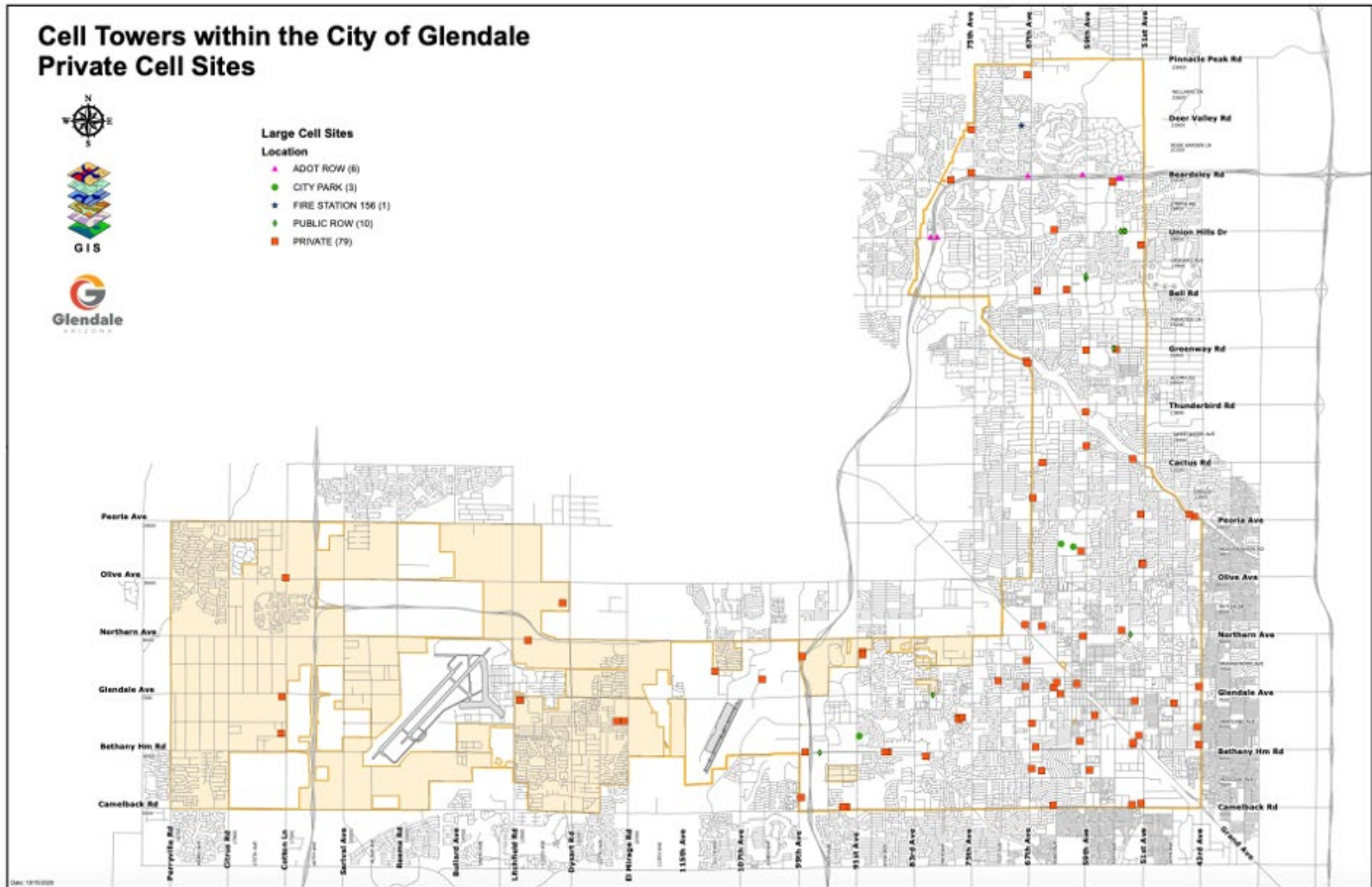
#### Location

- ▲ ADOT ROW (6)
- CITY PARK (3)
- ★ FIRE STATION 156 (1)
- ◆ PUBLIC ROW (10)
- PRIVATE (79)





# Cellular Monopoles in Glendale





# City Property - Pyramid Peak WTP



| Installed | Owner   | Term                       | End of Term(s) | Current Annual Revenue |
|-----------|---|----------------------------|----------------|------------------------|
| 2018      | Glendale, Avondale, Goodyear, Peoria, Phoenix, Sun City Fire District, Sun City West Fire District, Guadalupe, Maricopa, El Mirage, Tempe, Chandler, Surprise and the Daisy Mtn Fire District | 10 year & 3/5yr extensions | 2028           | \$40,000               |



# City Property – Pyramid Peak WTP



| Installed | Owner   | Term                       | End of Current Term | Current Annual Revenue   |
|-----------|---------|----------------------------|---------------------|--------------------------|
| 2015      | Verizon | 10 year & 3/5yr extensions | 2025                | \$43,212<br>3% escalator |



# City Property – FS 156



| Installed | Owner    | Term                      | End of Current Term | Current Annual Revenue   |
|-----------|----------|---------------------------|---------------------|--------------------------|
| 2013      | T-Mobile | 5 year & 5/5yr extensions | 2023                | \$52,303<br>3% escalator |



# City Property – Sahuaro Ranch



| Installed | Owner    | Term                      | End of Current Term | Current Annual Revenue   |
|-----------|----------|---------------------------|---------------------|--------------------------|
| 2017      | T-Mobile | 5 year & 4/5yr extensions | 2027                | \$40,732<br>3% escalator |







# Small Cells- by the numbers

## Cell Towers within the City of Glendale Public / Private



GIS

### Cell Sites

-  PUBLIC ROW (196)
-  CITY LAND (5)
-  PRIVATE (94)
-  ADOT ROW (7)



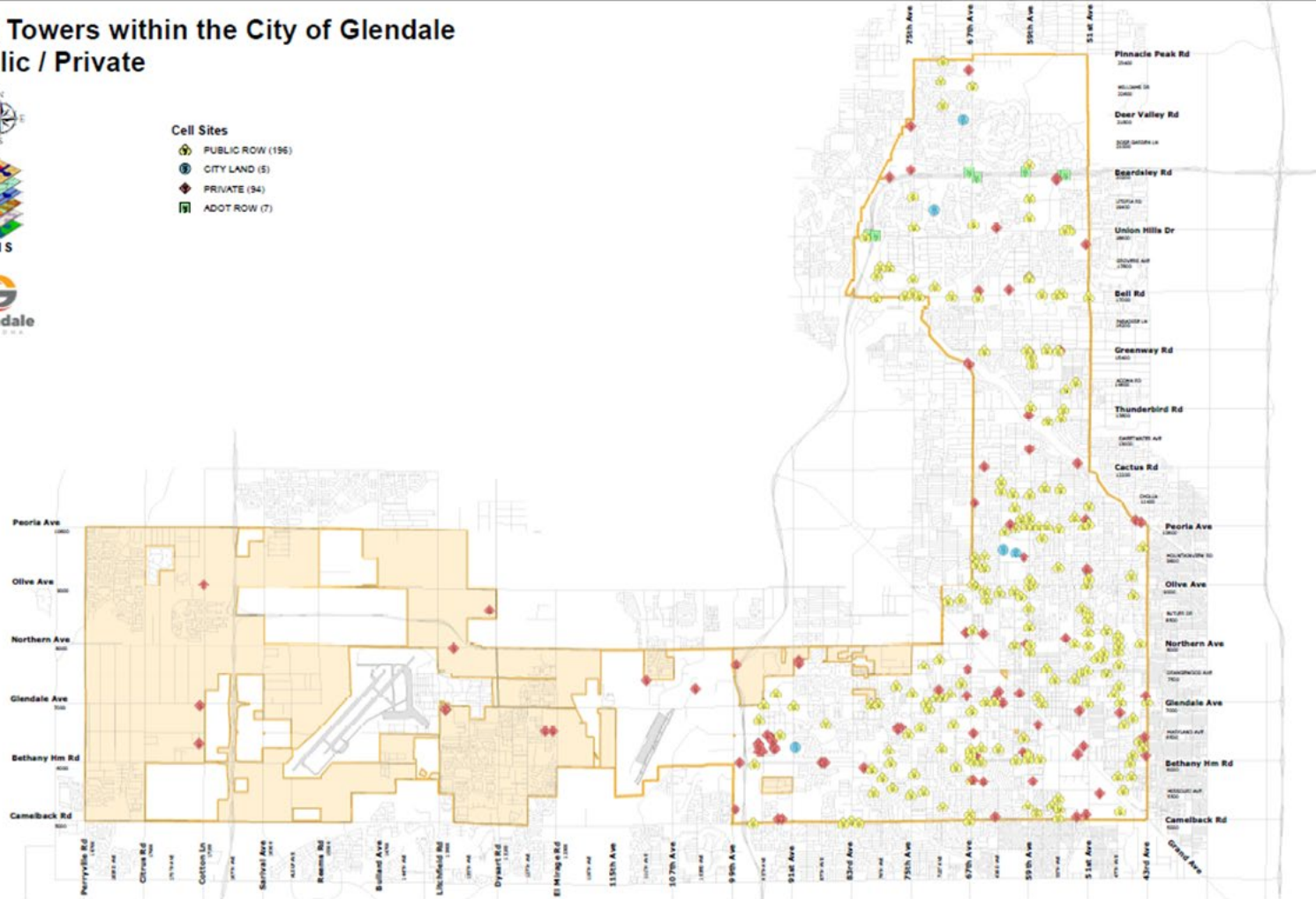


# Small Cell Poles

## Cell Towers within the City of Glendale Public / Private



- Cell Sites**
- PUBLIC ROW (196)
  - CITY LAND (5)
  - PRIVATE (34)
  - ADOT ROW (7)



Date: 10/14/2023



# Recommendations

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- Regulatory

- Continue with all agreements as consummated
- Support Pre-notification consistent with work in the ROW permitting practices

- Legislative

- Support our legislative goals of strengthening local determination
- Encourage the Federal government to evaluate and update their scientific / public health and safety guidelines



# Attachments

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# City Property-ROW – 53<sup>rd</sup> & Union Hills



| Installed | Owner   | Term                      | End of Current Term | Current Annual Revenue   |
|-----------|---------|---------------------------|---------------------|--------------------------|
| 2015      | Verizon | 5 year & 4/5yr extensions | 2025                | \$17,980<br>3% escalator |



# City Property ROW – 17260 N. 59<sup>th</sup> Ave



| Installed | Owner    | Term                       | End of Current Term | Current Annual Revenue   |
|-----------|----------|----------------------------|---------------------|--------------------------|
| 2013      | T-Mobile | 5year & 4 - 5yr extensions | 2023                | \$19,647<br>3% escalator |



# City Property ROW – 17260 N. 59<sup>th</sup> Ave



| Installed | Owner  | Term                        | End of Current Term | Current Annual Revenue   |
|-----------|--------|-----------------------------|---------------------|--------------------------|
| 2013      | Sprint | 5 year & 4 - 5yr extensions | 2023                | \$23,577<br>3% escalator |

# City Property ROW 91<sup>st</sup> Ave & Rose Lane



| Installed | Owner   | Term                        | End of Current Term | Current Annual Revenue   |
|-----------|---------|-----------------------------|---------------------|--------------------------|
| 2008      | Verizon | 5 year & 4 - 5yr extensions | 2023                | \$42,819<br>5% escalator |



# City Property ROW – 81<sup>st</sup> Ave & Glendale



| Installed | Owner | Term                        | End of Current Term | Current Annual Revenue   |
|-----------|-------|-----------------------------|---------------------|--------------------------|
| 2013      | AT&T  | 5 year & 4 - 5yr extensions | 2023                | \$19,647<br>3% escalator |



# City Property ROW 53<sup>rd</sup> Ave & Northern



| Installed | Owner    | Term                        | End of Current Term | Current Annual Revenue   |
|-----------|----------|-----------------------------|---------------------|--------------------------|
| 2012      | T Mobile | 5 year & 4 - 5yr extensions | 2022                | \$20,237<br>3% escalator |



# Private Property- 54<sup>th</sup> Ave Northern





# City Property - Sahuaro Ranch Park



| Installed | Owner   | Term                                  | End of Current Term | Current Annual Revenue    |
|-----------|---------|---------------------------------------|---------------------|---------------------------|
| 1998      | Verizon | 10 year & 2 Automatic 10yr extensions | 2027                | \$56,142<br>CPI escalator |



# City Property -ROW – 55<sup>th</sup> & Greenway



| Installed | Owner | Term                       | End of Current Term | Current Annual Revenue   |
|-----------|-------|----------------------------|---------------------|--------------------------|
| 2013      | AT&T  | 10 year & 4/5yr extensions | 2023                | \$19,647<br>3% escalator |



# City Property ROW – 17260 N. 59<sup>th</sup> Ave



| Installed | Owner    | Term                        | End of Current Term | Current Annual Revenue   |
|-----------|----------|-----------------------------|---------------------|--------------------------|
| 2013      | T-Mobile | 5 year & 4 - 5yr extensions | 2023                | \$19,647<br>3% escalator |



# City Property- ROW 54<sup>th</sup> & Union Hills



| Installed | Owner  | Term                        | End of Current Term | Current Annual Revenue   |
|-----------|--------|-----------------------------|---------------------|--------------------------|
| 2013      | AT & T | 5 year & 4 - 5yr extensions | 2023                | \$19,647<br>3% escalator |



# Revenue Summary

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- Four international providers represented in Glendale
- Age of installations ranges from 1998 – 2021
- Average terms are typically multiple 5-year agreements
- Most have an annual escalator OF 3%
- Total Annual Revenue =\$435,827

# Private Property-59<sup>th</sup> Avenue (FS 157)





# Private Property- 67<sup>th</sup> Ave



Private Church Property 3/4 mile n/of F.S. 156