

# What Are These Things and Why Are They Here?

CA Cities Annual Conference  
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Long Beach, California

Robert (Tripp) May  
Partner



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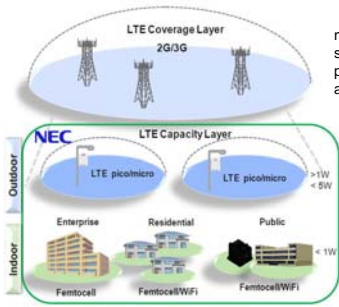
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## Network Densification and Het-Nets



macrocells provide coverage  
small cells and femtocells  
provide enhanced capacity  
and data throughput

het-nets  
(heterogeneous networks)  
allow users (both  
human and machine) to  
access core networks thru  
multiple cell layers and/or  
technologies based on the  
fastest connection



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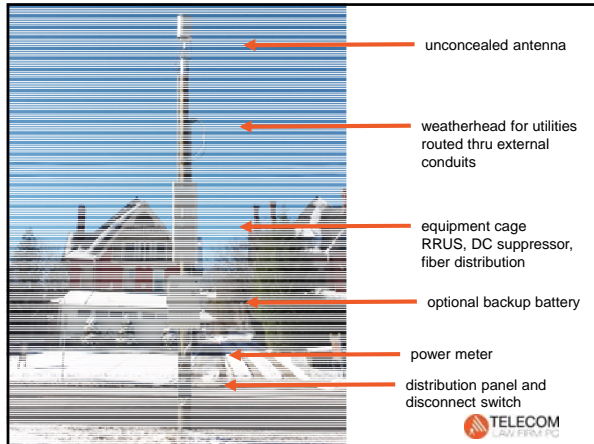
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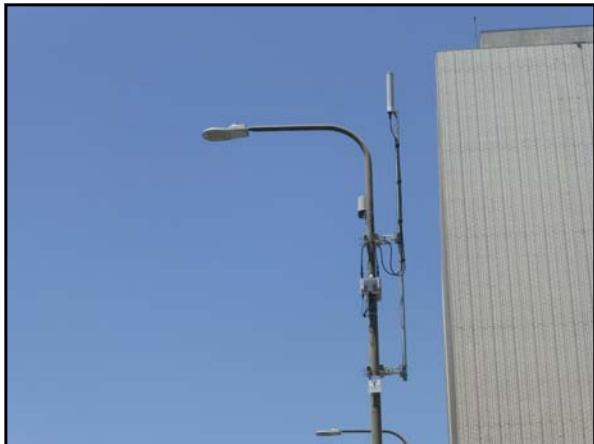
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## Strand-Mounted Antennas



deployed by cable companies (often w/o permits, pursuant to franchise)

mostly wi-fi but can support licensed (cellular) bands



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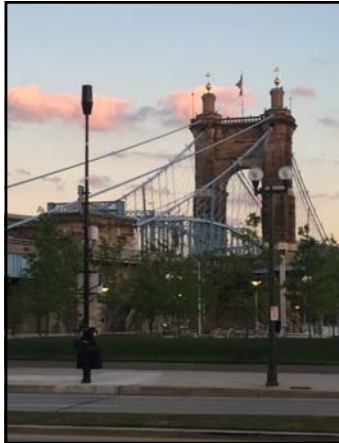
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### Cincinnati Case Study

- **diverse neighborhoods**
  - historic resources
  - narrow streets/sidewalks
- **significant economic development occurring**
  - revitalization
  - new businesses opening and moving to Cincinnati
  - rising property values
- **no ROW facilities regulations or oversight in place**
  - facilities "appear" overnight
  - haphazard installations
  - noisy equipment near residences and businesses
  - new poles placed in inconvenient locations



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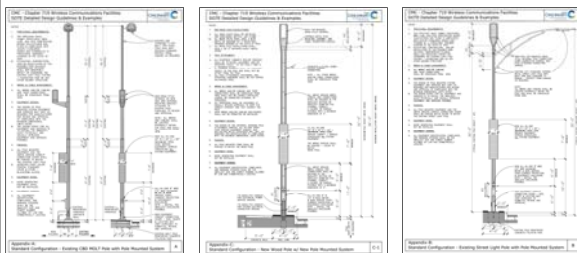
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## Collaborate with Stakeholders on a Standardized Design Menu



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## Evaluate Appropriate Locations for Various Designs

Location	Standard Wood Pole Configuration	Standard Metal Pole Configuration
Development Overlay Districts	RESTRICTED	MINOR REVIEW
Riverfront Residential / Recreation Districts	RESTRICTED	MINOR REVIEW
Historic Overlay Districts (including areas adjacent to historic landmarks)	RESTRICTED	STANDARD REVIEW
Park and Recreation Districts (primarily designed as open urban and active)	RESTRICTED	MINOR REVIEW
All Underground Utility Districts	RESTRICTED	MINOR REVIEW
Planned Development Districts	STANDARD REVIEW	STANDARD REVIEW
Interim Development Control Overlay Districts	STANDARD REVIEW	STANDARD REVIEW
Urban Design Overlay Districts	STANDARD REVIEW	STANDARD REVIEW
Single Family Residential Districts (including all R1 through R4 and T4-20P Trussing)	MINOR REVIEW	MINOR REVIEW
Residential Mixed and Multi-Family Districts (including all T4 trussing except T4-20P and T4-20P-20)	MINOR REVIEW	MINOR REVIEW
Office Districts (including T4-20P-20)	MINOR REVIEW	MINOR REVIEW
Institutional Residential Districts	MINOR REVIEW	MINOR REVIEW
Commercial Districts (including all C1 through C3)	MINOR REVIEW	MINOR REVIEW
Urban Mixed Districts	MINOR REVIEW	MINOR REVIEW
Manufacturing Districts	MINOR REVIEW	MINOR REVIEW
Riverfront Commercial Districts	MINOR REVIEW	MINOR REVIEW
Riverfront Manufacturing Districts	MINOR REVIEW	MINOR REVIEW
Park and Recreation Districts (primarily designed as open urban and active with specific exceptions)	MINOR REVIEW	MINOR REVIEW
Neighborhood Business Districts	STANDARD REVIEW	MINOR REVIEW

green zones mean that the City generally requires only an encroachment permit for a pre-approved design

yellow zones mean that the City will subject all projects to a zoning-type discretionary review

red zones mean that the City will not approve any design that involves a wood pole (existing or new)




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cobra arm light standard/cell site Under construction




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## Lessons Learned

- process incentives (and disincentives) work
- common ground can be found
- time-to-market and certainty in the process motivates the carriers to compromise
- engage stakeholders early and often




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