

Local Communications Facilities & The CMP

Policy & Implementation Committee
April 28, 2017



Overview

Why are we discussing this now?

- Pinelands Area Counties EMS
- Verizon Wireless/Tilson
- Mobilitie

Discussion on these developments to follow the review



Why is it beneficial to review?

- Complex
- History matters

A photograph of a street scene with a yellow banner overlaid containing the word "Background". The background shows a street with utility poles, buildings, and American flags. A sign for "Homestead" is visible on a building. The banner is a horizontal yellow rectangle with the word "Background" written in a yellow, serif font.

Background

CMP Height Regulations 1981-1995

Purpose:

- **Protect the significant scenic resources of the Pinelands Area**

Height Limits:

- **Regional Growth Area, Pinelands Towns = No limit**
- **Everywhere else = 35 foot limit**
 - Some exemptions included
 - ...But not communications towers
 - 89% of the Pinelands Area



New Technology (c. 1994)



1995 CMP Amendment

1994 - 2nd Plan Review implementation

- Cellular industry representatives raise concerns with height limitations
- Pinelands Commission recognized legitimate need/federal regulations
- Balance network coverage & protecting scenic resources

1994 - Plan Review Committee

- Deliberate over revised regulations – multiple meetings

1995 - Rules adopted, effective August 21, 1995

- Local Communications Facilities (LCF)

May be first ever regional tower siting program



LCF Regulations

Key principles

RGA and Pinelands Towns no height limits

Everywhere else – LCF can build up to 200 feet, provided that:

- Demonstrate need
- Colocation on existing suitable structures
- Design towers to accommodate other providers
- Siting standards for new towers
- Comprehensive planning
 - Applications for individual applications after

Comprehensive Planning

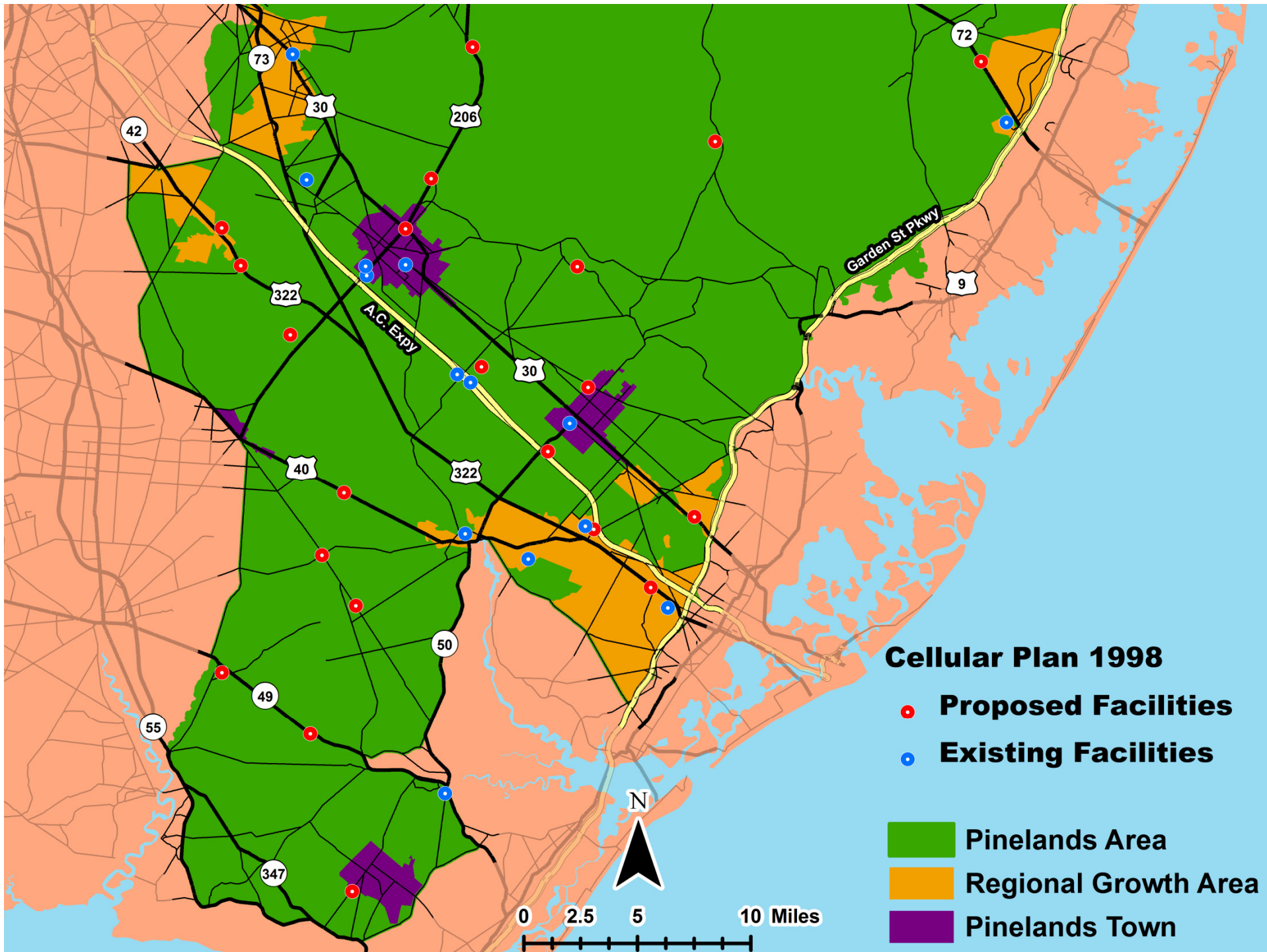
Plan submitted by providers of like service

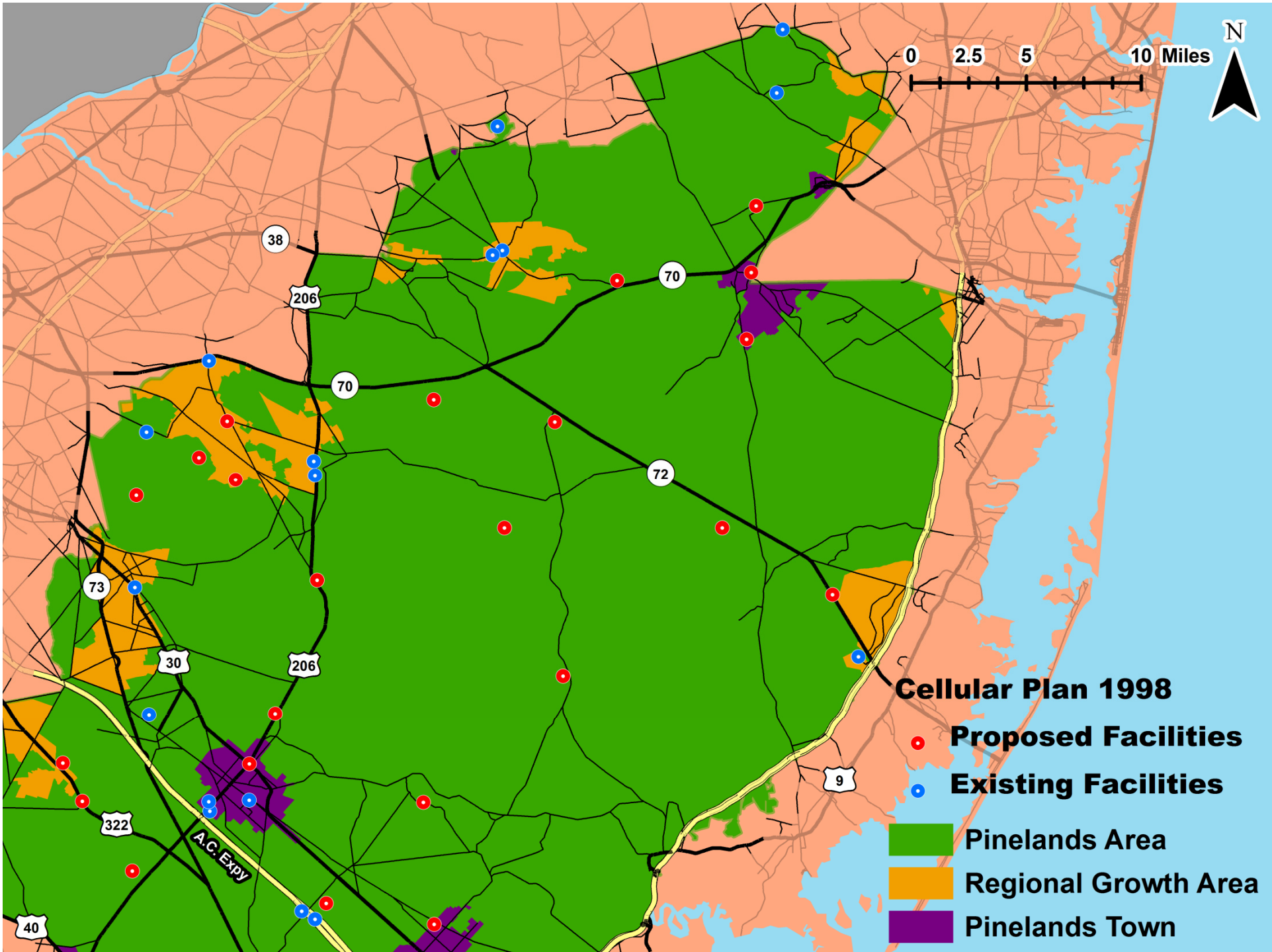
- 5 and 10 year plan horizons
- Approximate location of all facilities
- Demonstrate least number of facilities necessary in:
 - PAD, FA, SAPA, select Villages
- Demonstrate likely consistency with LCF regulations

Requires certification from Commission

Amendments

- Builds upon planned network array of previous plans to ensure least number in PAD, FA, SAPA, and some Villages





Individual Applications

RGA and Pinelands Towns

- CMP environmental standards

Everywhere else – must be consistent with

- CMP environmental standards
- CMP LCF standards
- approved plan
- approved siting policy

Siting policy

- Provides flexibility in final siting
- Ensures least number in PAD, FA, SAPA, and select Villages
- Search area – based on technical considerations (typically 1 mile)
 - Hierarchy of preferred management areas



Implementation

Summary of Comprehensive Plans

Plan	Certified	Participants
Cellular Plan	9/11/1998	Bell Atlantic Mobile; Comcast/Cellular One; Nextel
PCS Plan	1/14/2000	Sprint; Omnipoint
AT&T Plan	12/12/2003	AT&T
T-Mobile Plan	11/10/2011	T-Mobile
Sprint Plan	11/8/2013	Sprint
County Public Safety Tower Plan	5/11/2012	Pinelands Counties

Original Provider	Succeeded by
Bell Atlantic Mobile	Verizon
Comcast	Cingular Wireless -> AT&T
Nextel	Sprint
Omnipoint	T-Mobile

Summary of Build-Out

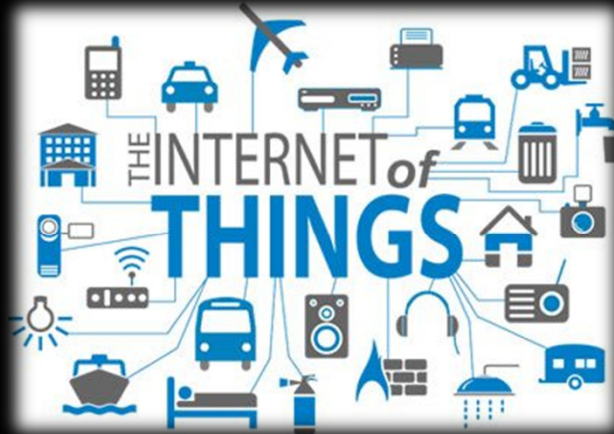
LCF Planned Locations	On-Air	Not On-Air	Total
Commercial Wireless Carriers	105	58	167
RGA/Town	52	20	72
RDA/APA/MF/Select Villages	25	15	40
PAD/FA/SAPA/Select Villages	29	23	52
County Public Safety Tower Plan	25	21	46
RGA/Town	12	5	17
RDA/APA/MF/Select Villages	7	10	17
PAD/FA/SAPA/Select Villages	6	6	12

***Not all “on-air” locations are new towers**

****Planned locations typically have multiple carriers**



New Technology (c. 2017)



4G LTE





Recent Developments

County Public Safety Tower Plan

Siting Policy Amendment

- Expand search area - 3 mile radius
- Consider developed, publically-owned lands

Timeline

- Official submittal late May
- June P&I Review
- July Commission Review

Verizon Wireless/Tilson

Small Network Node Deployment

- Also known as oDAS
- Weaker signal range than towers (500 - 1,000 feet)
- Complementary not substitute for towers
- Improves network capacity

- Public R-O-Ws on Utility Poles
- Minimal issues for Pinelands Commission
- Municipalities and Counties?

Verizon Wireless Small Network Node



Existing Utility Pole Under 35 ft?



New Utility Pole

Mobilitie

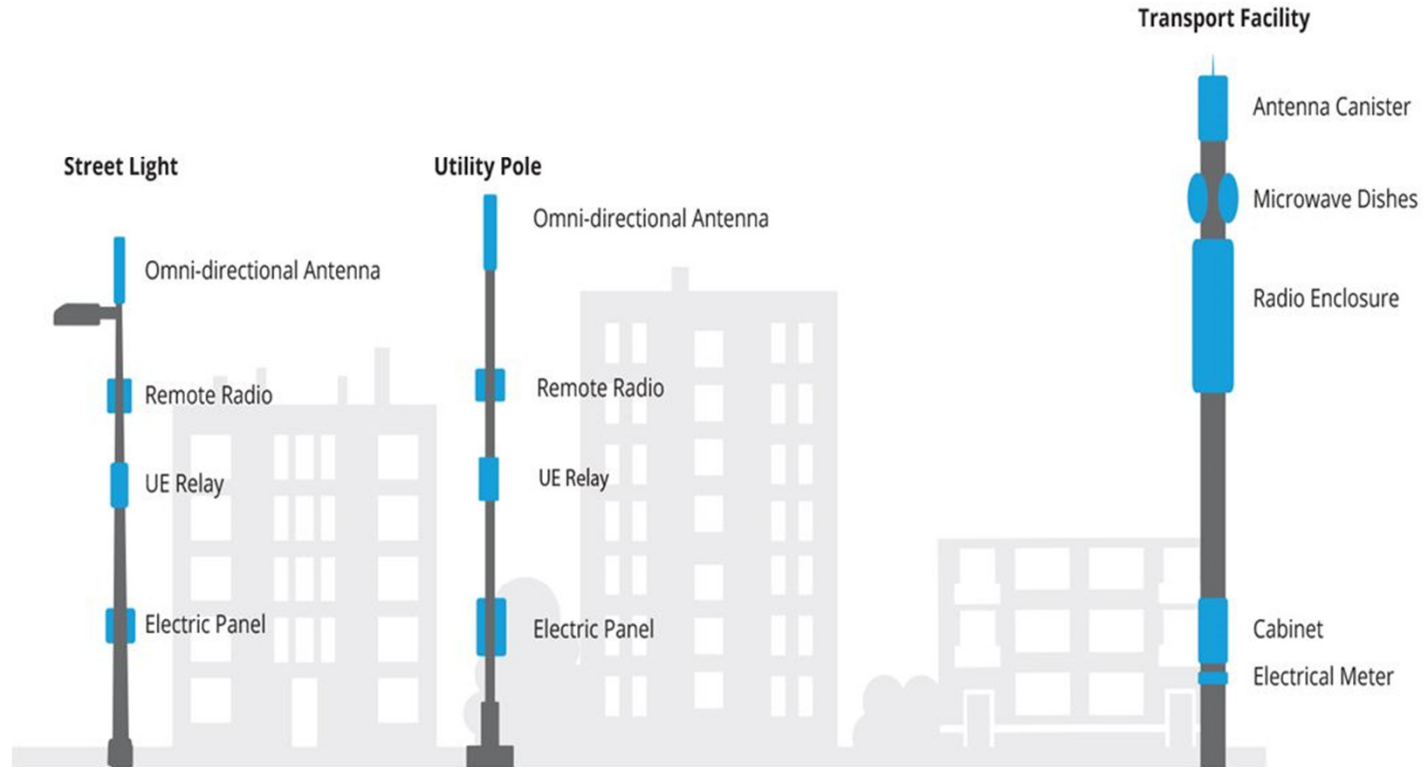
Neutral Host Provider

Working with Sprint in N.J.

Small Cell and Transport Facility Deployment

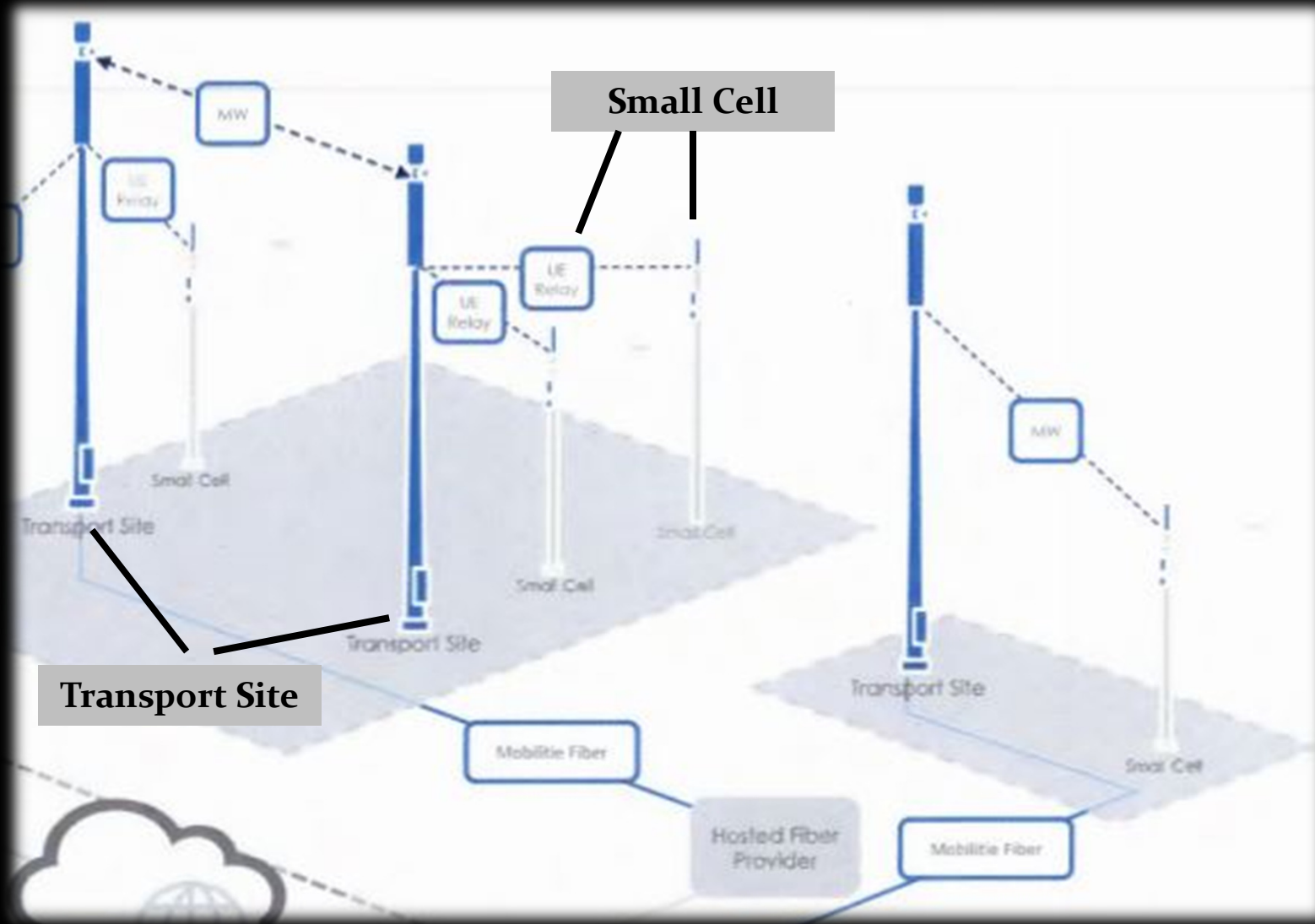
- **Small Cell Facility (weak range; capacity)**
 - Public R-O-Ws on utility poles
- **Transport Facility (stronger range; coverage)**
 - Public R-O-Ws

Mobilitie Facilities



Small Cell Facilities
35'-75'

Transport Facility
125'



Small Cell

Transport Site

Mobile Fiber

Hosted Fiber Provider

Mobile Fiber

Transport Facility



Small Cell Facility



Summary

Public Safety Tower Plan

- **Siting Policy Amendment in development**
- **June P&I review**

Verizon Small Network Node Deployment

- **Awaiting more information from Verizon**
- **Working with municipalities regarding ordinances**

Mobility Small Cell and Transport Facility Deployment

- **Applications are beginning to come in**
- **Potential plan amendments if not aligned with approved plans**