

PennDOT

Transportation Engineering & Safety Conference December 8, 2017

About Mobilitie, LLC

Indoor and outdoor neutral host Distributed Antenna Systems, designed to provide optimal coverage and capacity for all wireless carriers, at even the largest and most challenging venues



SMALL CELLS

Indoor and outdoor Small Cell networks, based on Femtocell, Picocell and Microcell technologies with combined radio heads, providing improved 4G LTE and Wi-Fi connectivity OUR SOLUTIONS

COMMUNICATION TOWERS

Multi-carrier communication towers and rooftop builds to enable improved wireless service for carriers, spanning their nationwide macro networks, based on our industry leading Lease-to-Suit® model



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High-density Wi-Fi networks that not only provide seamless Internet access for all mobile devices, but also deliver a customized and rich platform of powerful customer communication tools such as location-based services, video broadcast and CRM applications

COLOCATION MANAGEMENT

Comprehensive management of the entire colocation process, including site marketing, lease processing, installation supervision and ongoing lease administration PROFESSIONAL SERVICES

Mobilitie's tier-1 team of industry experts assist wireless carriers and real estate owners in addressing their wireless service challenges, ensuring the right solutions are successfully deployed. We specialize in scalable solutions for complex deployments, built to accommodate exponentially increasing mobile datademands



Mobile data trends and demand drivers

Smartphones generate 102x more data traffic

PER MONTH THAN A BASIC HANDSET

500% INCREASE EXPECTANCY OF MOBILE DATA FROM 2016 TO 2021

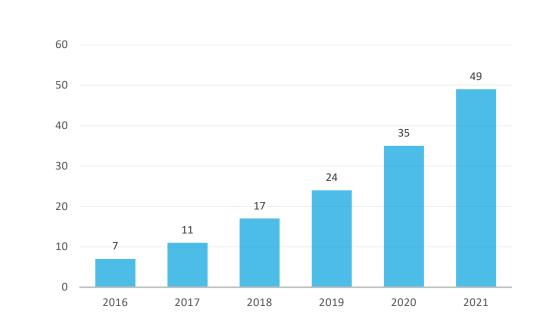
NEW DEVICES

52.4 MILLION ADDED TO THE MOBILE NETWORK

4.6 MILLION

CONNECTED WEARABLE DEVICES

64% OF MOBILE DATA IS VIDEO



MOBILE DATA TRAFFIC (EB/MONTH)

U.S. MOBILE DATA IN 2016

88% OF THE POPULATION ACCOUNTED FOR MOBILE USAGE **49%** OF THE HOUSEHOLDS WERE WIRELESS ONLY



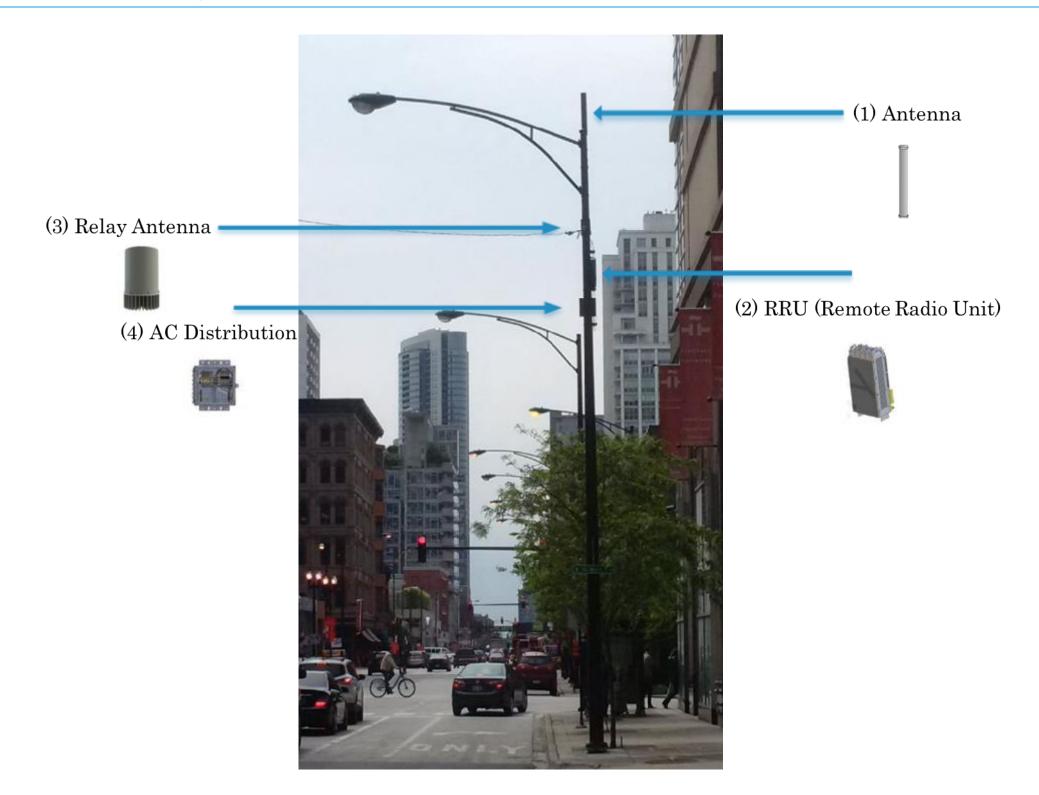
Source: Cisco VNI Mobile, 2017

The traditional solution



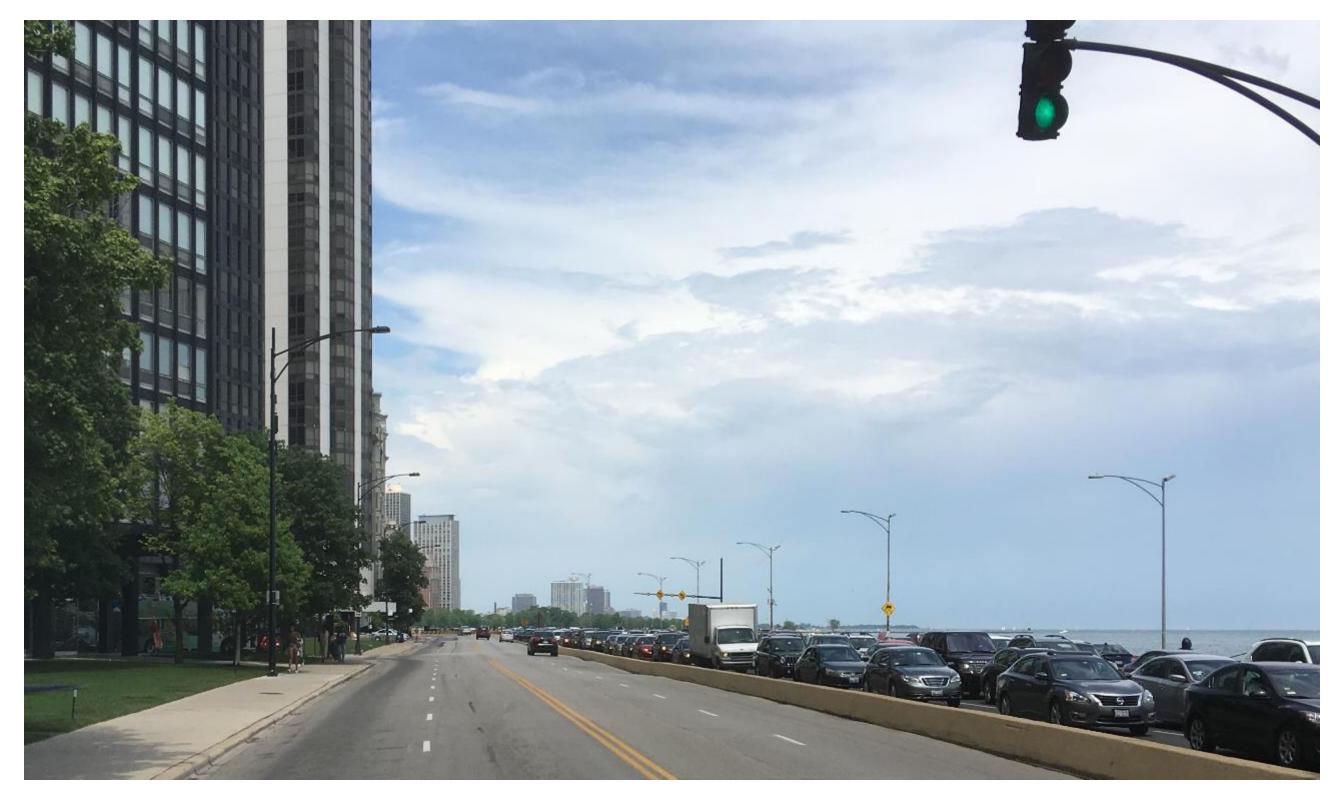


Small cell facility installation





Street light attachment





Cabinetized shroud attachment





Concrete light pole attachment



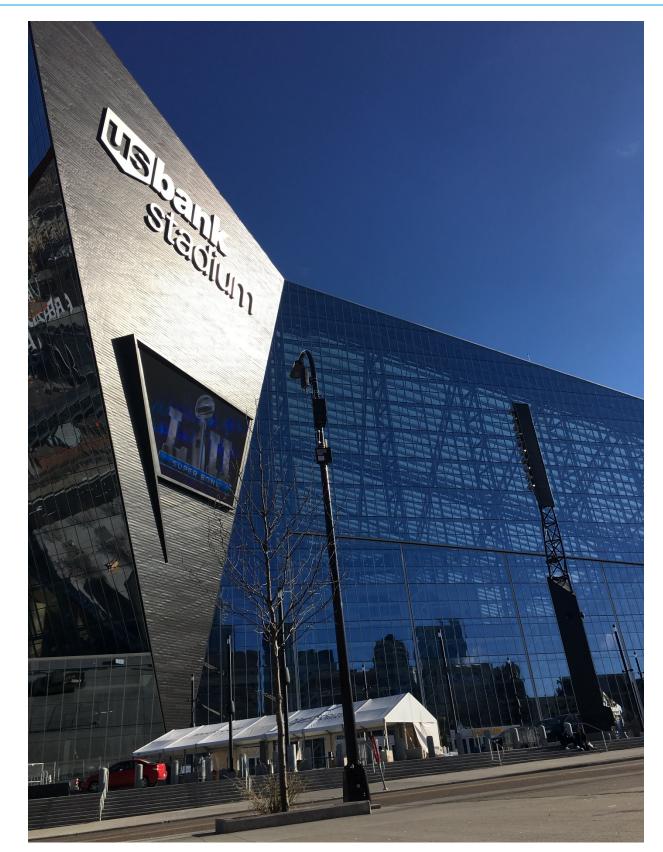


Utility pole attachment





High density areas





High end commercial





Mobilitie siting policy

In general, Mobilitie's siting policy strives to conform the deployment of facilities as follows:

- First, identify attachments to City-owned infrastructure (including replacements) or a utility company's infrastructure, where available.
- When applicable, work with the City to determine an acceptable process to deploy any new poles where no suitable attachment candidate is available.
- Concentrate siting of any new poles within public rights-of-way in industrial and commercial areas, where possible.
- Seek to aesthetically blend with the surrounding area and match material, color, and structural standards to ease the design approval.



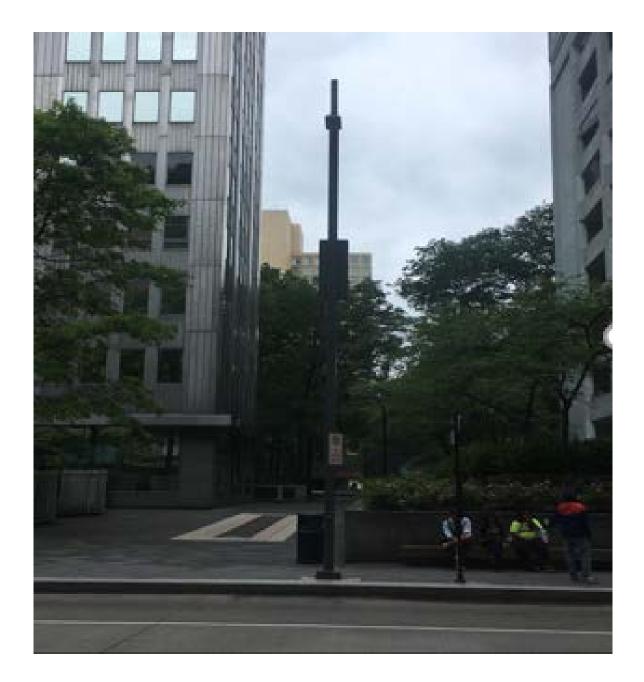
Utility partnerships

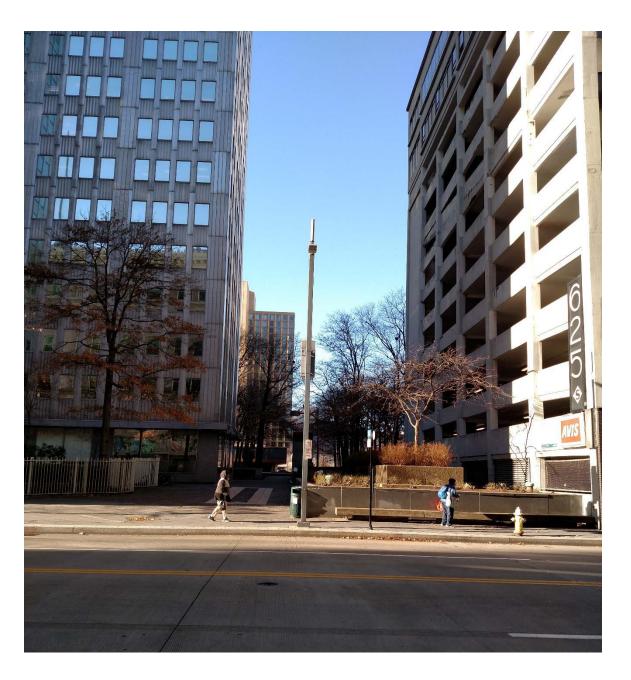
- First Energy & all Subsidiaries (WPP, PennElec & AEP)
- Duquesne Light Company
- Verizon
- Penn Power&Light





Pittsburgh





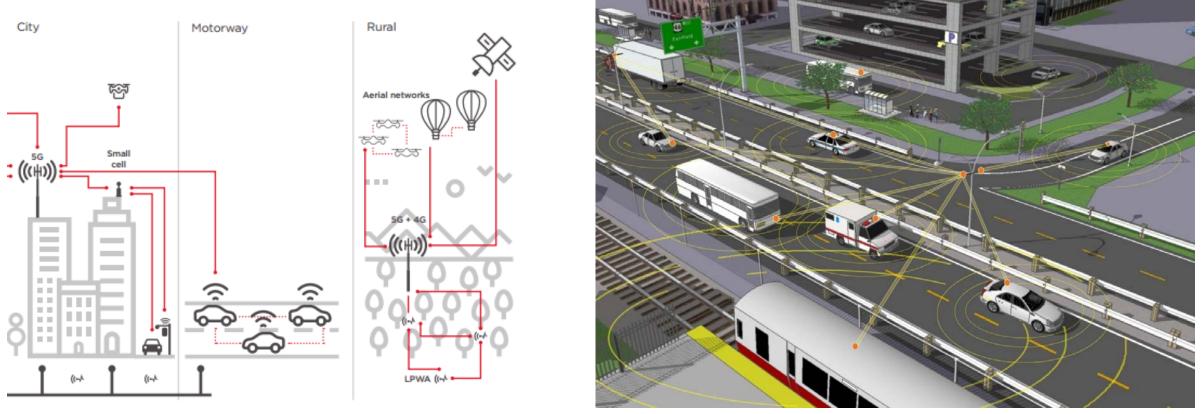
On-air installation

Mock installation



5G roads and highways connectivity

- Connectors and access ways from big cities to small towns and everywhere in between.
- Automated vehicles, road safety and traffic efficiency, digitalization of logistics and commercial transportation, etc.
- The industry, highway agencies, and municipalities must work together to deploy infrastructure and technologies that can be accessed and utilized.





DOT policy and procedure

- Agreement execution of a Master License Agreement, Franchise Agreement or Site License Agreement through Central office, District then provides additional approval.
- Central permitting process Central office sets permitting process and distributes process to each district.
- Decentralized permitting process each District has individual permitting process.
- AASHTO compliant.



PennDOT

- Central office sets policy, permitting through District offices.
- Submit our Highway Occupancy Permit applications through ePermitting database.





Thank you



WIRELESS COVERAGE SOLUTIONS