

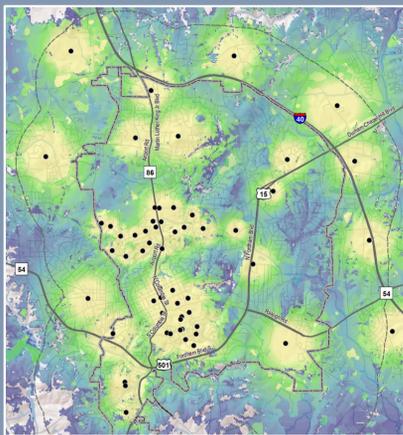
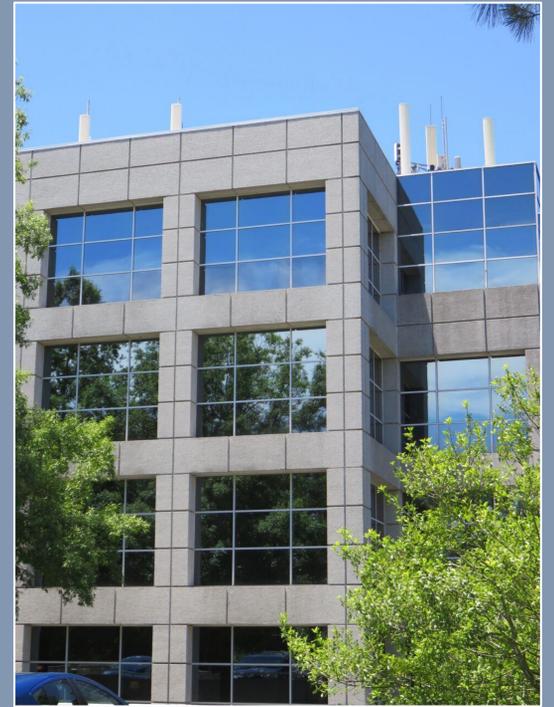


## Wireless Telecommunications Initiative

# STATION 1: Purpose of the Project

### What is the WTI?

- Wireless telecommunications and associated infrastructure is essential to our community.
- A collaborative process between the public and other stakeholders.
- Positioning the Town for the deployment of new wireless infrastructure, while minimizing the impacts on the community.



### What will the project produce?

- A Wireless Master Plan and Ordinance, to provide Chapel Hill the necessary framework to manage the Town's wireless telecommunications infrastructure.

### Why should I be involved?

- An opportunity for stakeholders to provide input and ideas, including the public, elected officials, advisory board members, and industry, utility, and transportation representatives.
- Obtaining comment, through a survey and public meetings, will inform the process for developing the Master Plan and Ordinance.





## Wireless Telecommunications Initiative

## STATION 2: Current State of the Technology

### Mobile Evolution



1G → 2G → 3G → 4G → 4G-gigabit

- Current wireless networks are a combination of 3G and 4G, the fastest being 4G LTE.
- More bandwidth is anticipated with the proposed 4G-gigabit and future 5G network.

### Quick Facts

- 
- Data use grew 3x between 2013-2015 and will continue on a sharp upward trend
  - 61% of mobile traffic is now from video, a trend expected to increase to 77% by 2020.
  - In 2007, 15% of U.S. households had a wireless phone. Today, 51% of U.S. households are wireless-only.
  - North America has the highest smartphone data usage in the world.

### Your Thoughts?

- What are the potential impacts of industry plans to meet increasing data demands?
- Are there upsides and downsides related to these changes?



# Wireless Telecommunications Initiative

## STATION 3: Key Facility Types

### Small Cell Facilities



### Macro Facilities



### Size

- The visual impact of wireless facilities is often related to height. Small cell poles are smaller than macro-towers, but with more frequent placement.

Small Cell poles are typically 40' to 50' tall



Macro-towers may be from 100' to 400' tall

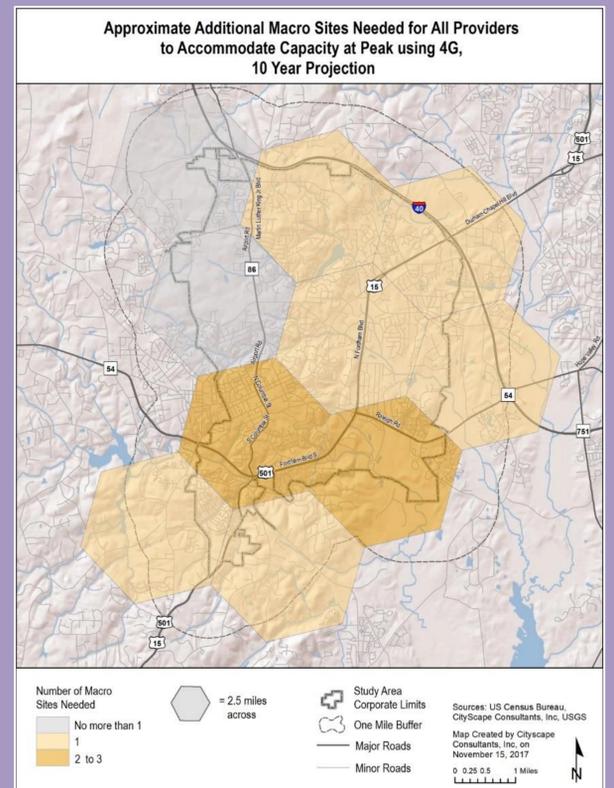
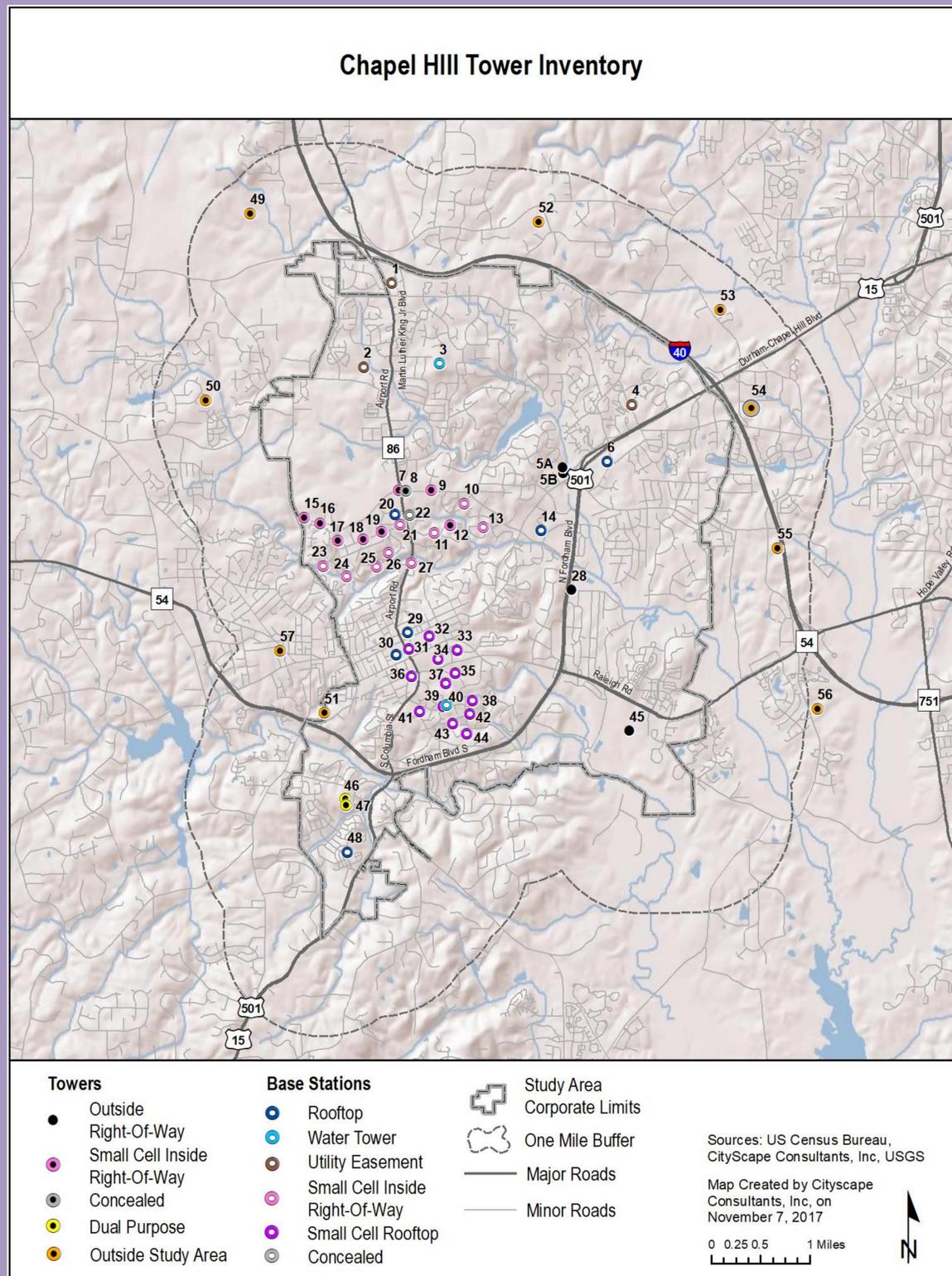




# Wireless Telecommunications Initiative

## STATION 4: Looking Ahead

### Existing Facilities in Chapel Hill



- Chapel Hill's unique terrain provides planning challenges for community-wide service, as seen in this CityScape's projected need for macro towers and base stations.

### What's next?

Drafting Telecomm Master Plan & Ordinance

Planning Comm. Meeting  
 Mid-Winter 2018

Council Public Hearing  
 Spring 2018