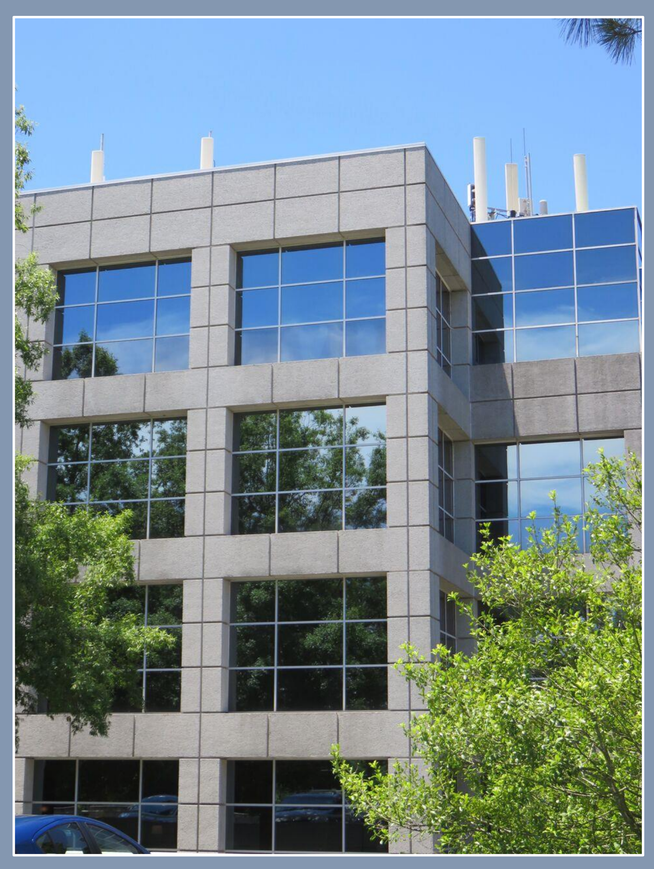
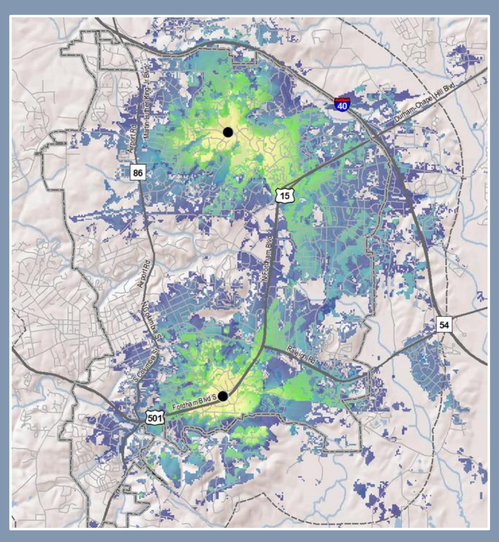
Wireless Telecommunications Initiative

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.

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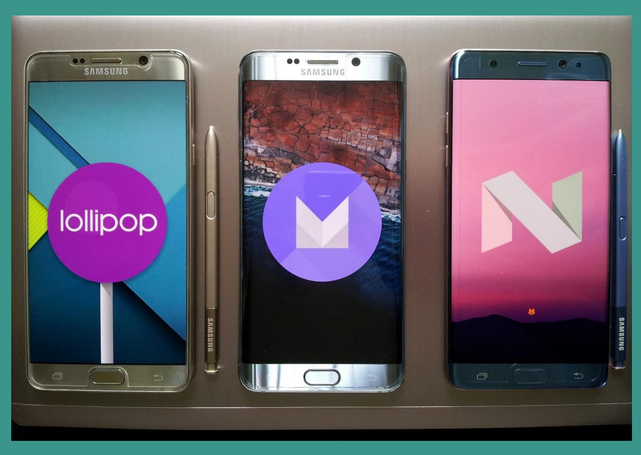
STATION 2: Current State of the Technology

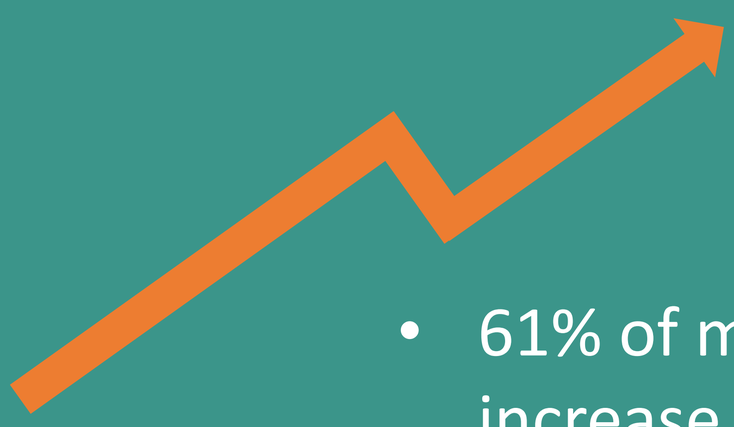
Mobile Evolution



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 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? What are they?

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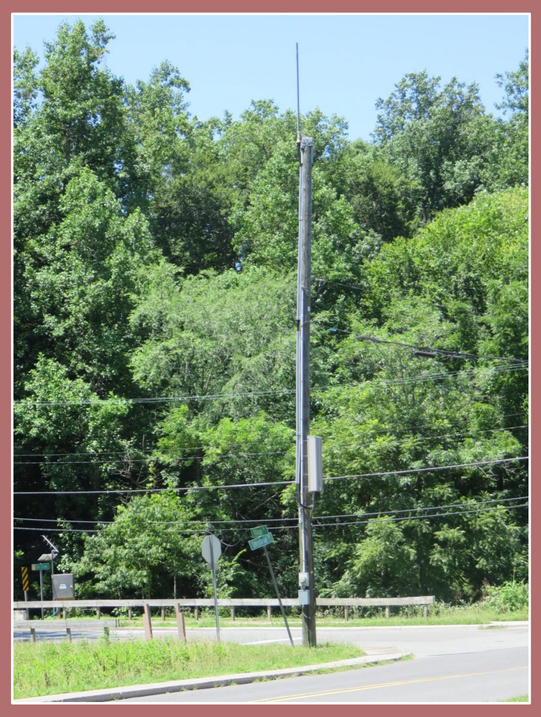
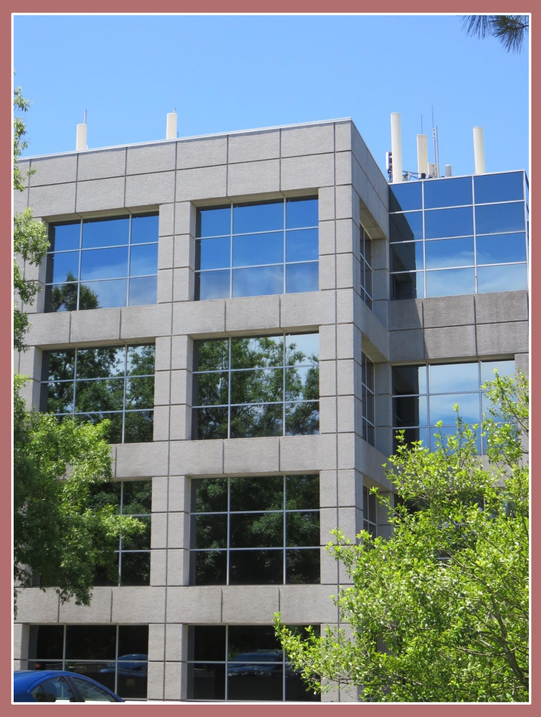
STATION 3:
Key Facility Types

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 150’ to 400’ tall

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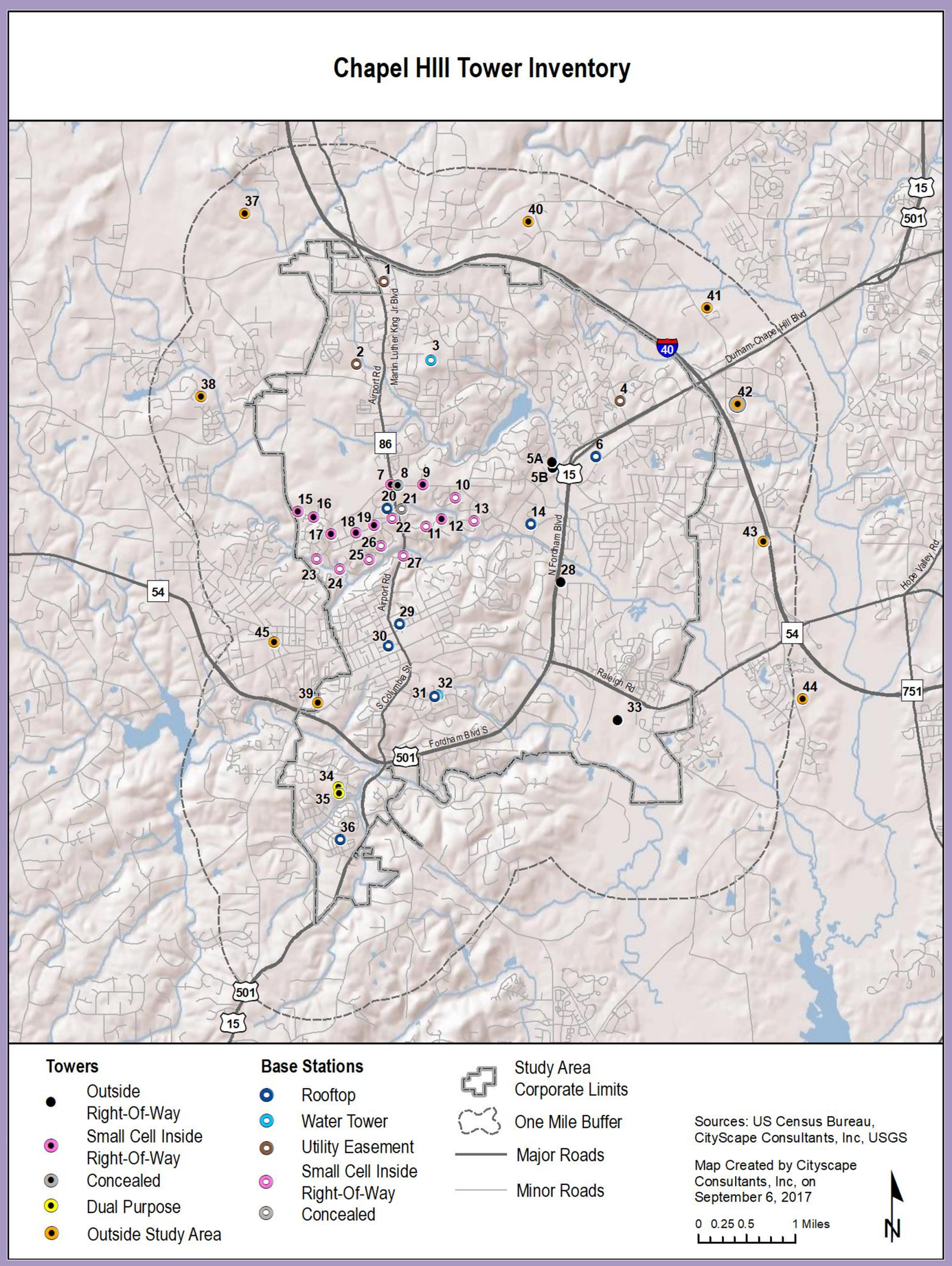
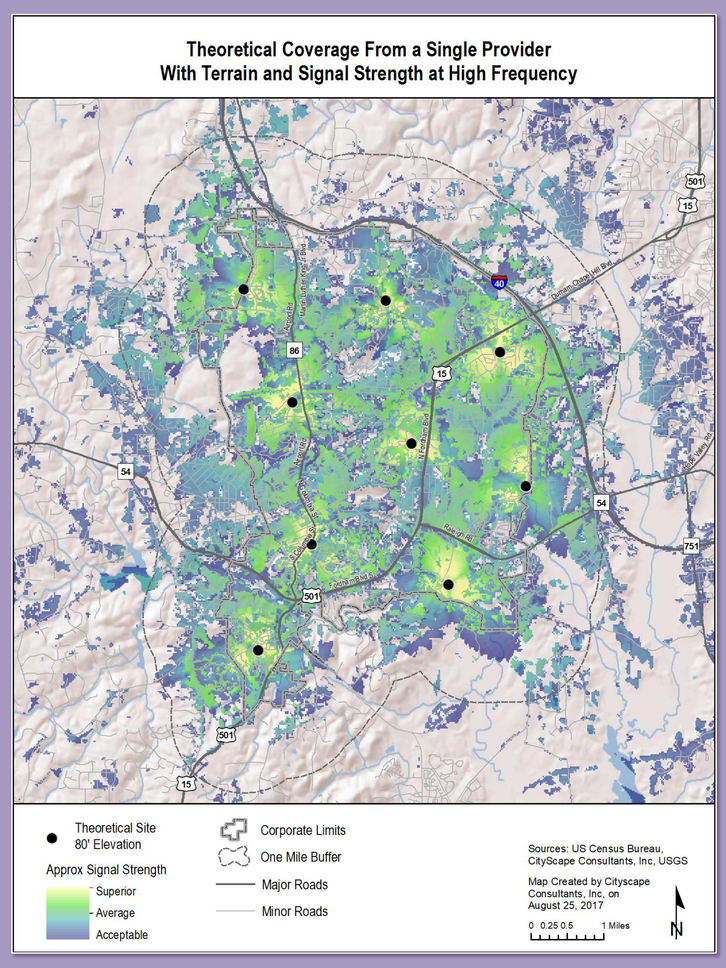
STATION 4:
Looking Ahead

Existing Facilities in Chapel Hill





- The unique terrain of Chapel Hill provides challenges when planning for community-wide service, as seen in this theoretical signal map by CityScape.

What's next?

- As we proceed with the WTI, we need your continued input to inform the public process and achieve the best outcomes.
- Interested in participating in a focus group as a resident or industry professional? Email us at telecomm@townofchapelhill.org