CROWN CASTLE

Your community's network upgrade

An introduction to our infrastructure in Malden

AUGUST 2024

The pathway to possible.

We enable the services that enhance **quality of life**, **education**, and **public safety.**

50%

of households rely exclusively on their cell phones.

77%

of mobile data traffic is projected to be online video streaming.

80%

of 911 calls are placed from wireless phones.

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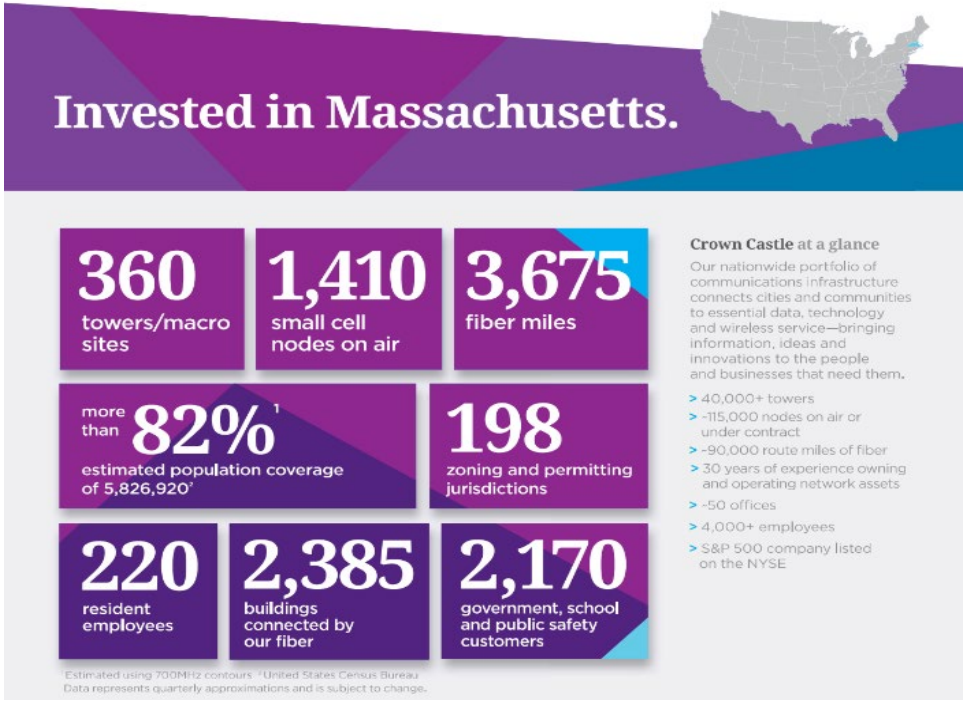
Our reach: approximately 115,000 small cell nodes supported by approximately 90,000 route miles of fiber



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Public demand for mobile data is growing.

Mobile devices

Wearable devices

Machine-to-machine connections

MAPC Digital Equity Report: **"Over 70% of respondents have had to cancel their internet subscription because it was too expensive."** For many, "a home internet subscription may be one of the expenses that a household with limited income is forced to do without."

Leaders meet at Malden Public Library to discuss benefits of Wi-Fi hotspots

MAPC's Digital Equity Report identifies the key problem.

"Digital access doesn't just happen—it is enabled by infrastructure systems that provide connections to the internet."

Roughly one-third of people lacking a home internet subscription connect via cellular data or wireless hotspot. Yet, currently, these have **"limited cell reception, and limited speeds."**

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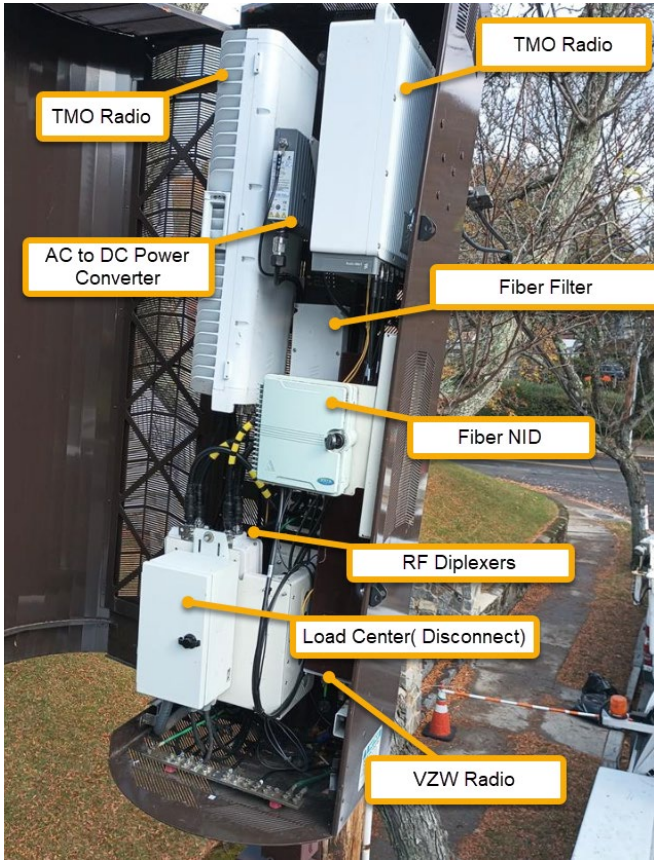
Components of small cell **solutions**

Antenna

Shroud

Disconnect
Meter

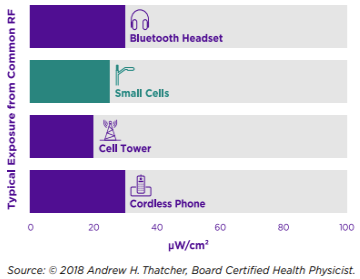
What's inside the shroud?



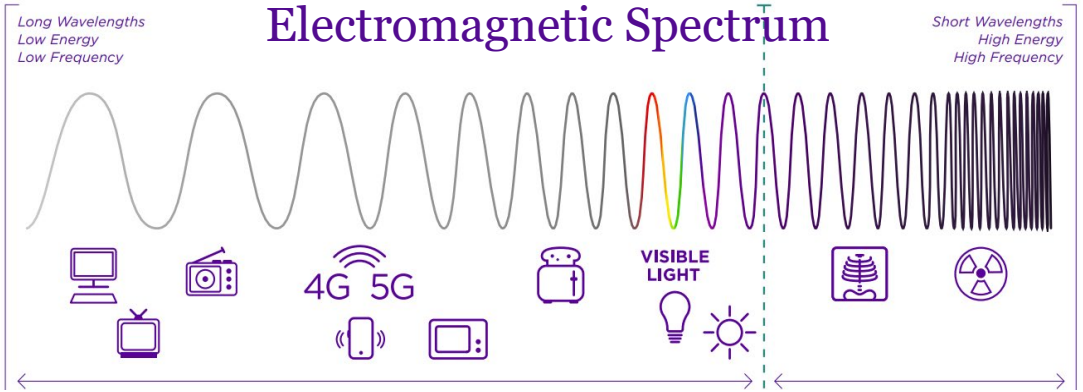
Committed to FCC Regulatory Requirements

Low power minimizes exposure.

We're constantly surrounded by electromagnetic energy. Whether you're talking about 5G, 4G or your Bluetooth headset, the physics are the same, and the body's response is essentially identical. You can see in this chart how emission levels from small cells compare to other common radio frequencies (RF)—all many times below what the FCC considers safe.



Source: © 2018 Andrew H. Thatcher, Board Certified Health Physicist.



Installations are categorized far below the FCC-mandated levels

Equipment meets ANSI standards

Installations will not interfere with other devices

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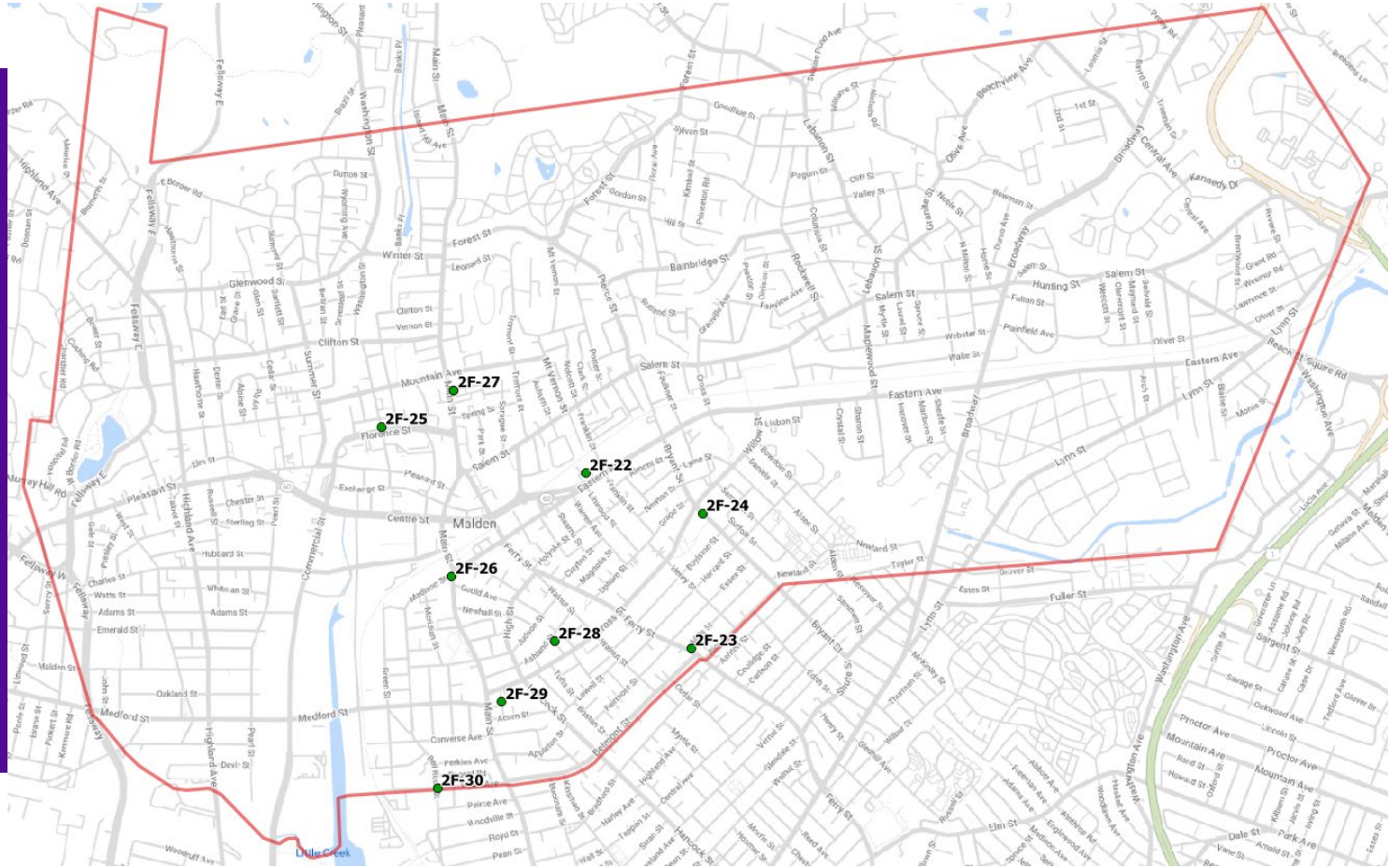
Long History in Malden

Current Status: Our small cells have been an integral part of the local wireless infrastructure for over 15 years, providing essential services to the residents of Malden—from first responders to students trying to do their homework.

Our nodes are ***not*** new but rather fully permitted, well-established parts of the community's digital infrastructure.



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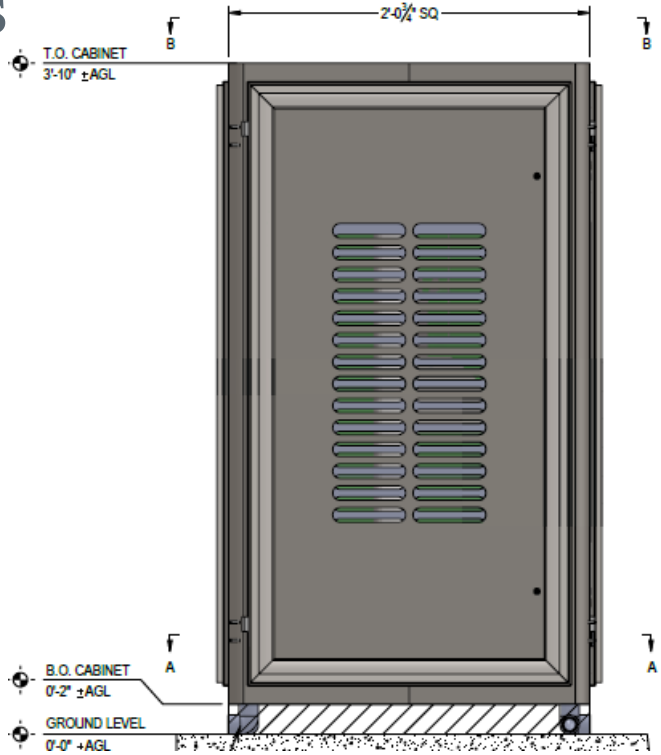
Amendments to Malden Ordinances



Proposal: Add designs for metal streetlights

- Beneficial for new installations
- Allows for more options when selecting site locations
- Set precedents that fit into the character of your neighborhoods
- Not compatible with current installations

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ODAS_2F-22 – 290 Eastern Ave

- Currently set back from the road & concealed by trees
- Not in a residential area

Current

Proposed

No streetlight within 100’ of coverage area

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ODAS_2F-23 – 10 Mills St

- Current site is outside a parking lot
- Upgrade will bring no change to antenna and minimal change to shroud

Current

Proposed

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ODAS_2F-23 – 10 Mills St – Nearby Streetlight Locations

1. Potential ADA issues with proximity to sidewalk ramp

2. Site would extend onto curb cut

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ODAS_2F-25 – 48 Washington St

- Located in a long line of existing utility poles, with transformers and other equipment on poles

Current

Proposed

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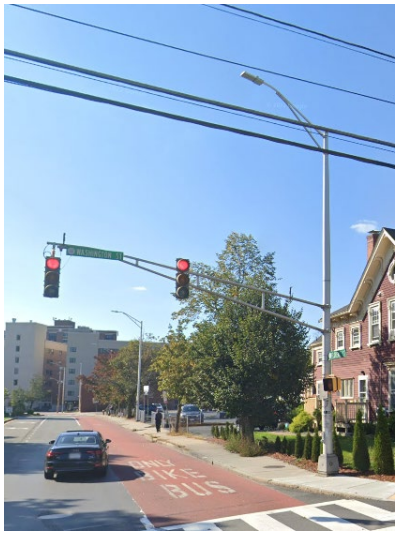
ODAS_2f-25 – 48 Washington St – Nearby Streetlight Locations

1. Not enough ADA clearance & potential issues with entrance to building

2. Unable to collocate on traffic signal pole



3. Unable to collocate on traffic signal pole

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ODAS_2F-26 – 244 Main St

- Located in a business district

Current

Proposed

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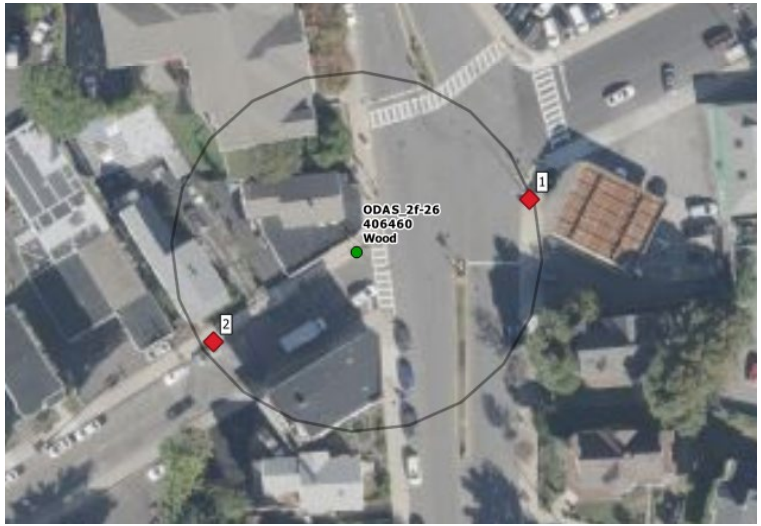
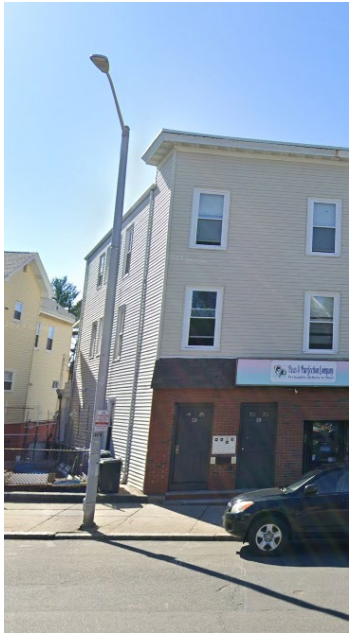
ODAS_2F-26 – 244 Main St – Nearby Streetlight Locations



1. Too many existing nearby ground structures to allow for safe deployment

2. Very close to residential window



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ODAS_2F-27 – 621 Main St

- Exiting site on corner and not directly in line of site from residents' windows

Current

Proposed

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ODAS_2F-27 – 621 Main St – Nearby Streetlight Locations

1. Directly outside entrance to building – potential pedestrian impedance

2. Not enough ADA clearance on sidewalk

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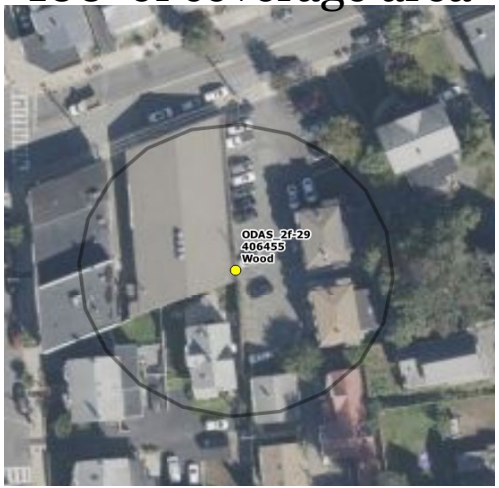
ODAS_2F-29 – 14-16 Greenwood Ct

- Currently located in a parking lot (discreet location) away from the street.

Current

Proposed

No streetlight within 100’ of coverage area



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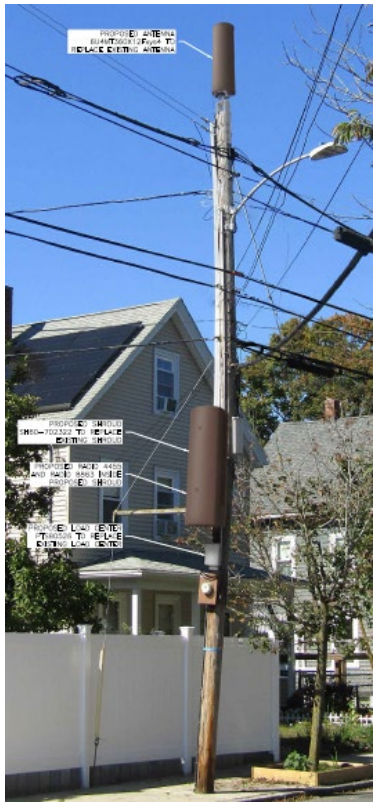
ODAS_2F-30 – 101 Bell Rock

- Pole currently surrounding by large poles containing transformers, primary wires, etc.

Current

Proposed



No streetlight within 100’ of coverage area

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