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OVERVIEW

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December 2021

# Cell Coverage Mapping

- Cell Coverage Mapping, LLC (CCM) is a data-analytics company created by Wireless Realty Advisors in 2020 focused on wireless service coverage issues <u>www.cellcoveragemapping.com</u>
- Wireless Realty Advisors (WRA) is a Massachusetts based wireless infrastructure development company
- The CCM web-based platform collects wireless consumer data and overlays with WRA existing site database containing over 180,000 cell tower sites across the United States
- The CCM platform can be directed to any geographic location and allows people to identify as many "dead zones" on a blank map that they wish to submit
- CCM is partnering with municipalities across the northeast to sponsor the survey and map out cell service issues within each community
- Municipal sponsorship of the survey produces significant amounts of data with click-through rates over 90% on the website
- WRA evaluates complaint clusters and identifies opportunities for new site infrastructure to cover dead zone areas

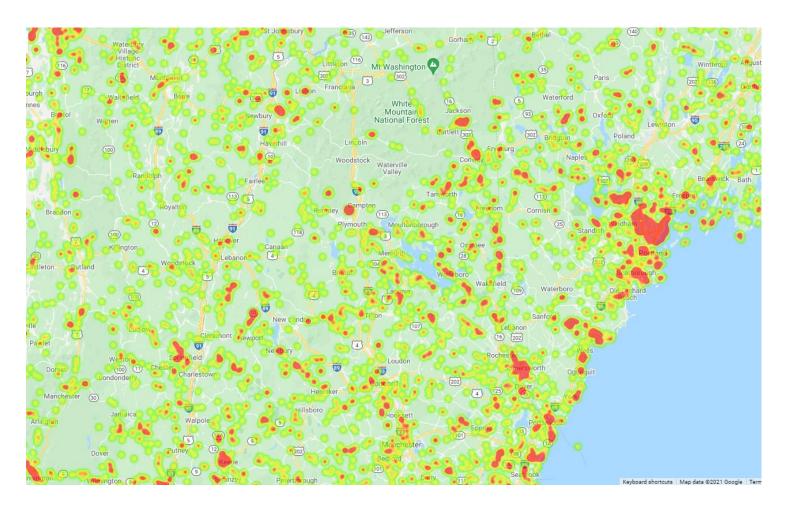


## CCM Campaigns and Reports

- Municipalities gain a compelling and comprehensive map of dead zones based directly on feedback from the community. <u>This is where your residents want and</u> <u>need coverage.</u>
- The platform consists of an on-line survey driven by various marketing and social media campaigns which aggregates consumer complaints. Data collected includes:
  - Carrier service provider
  - Type of coverage issue no service, no data or dropped call
  - Phone type
- Campaign can be adjusted to target specific zip codes and geographic areas
- Reports incorporate CCM data and WRA expert real estate and marketing analysis to evaluate opportunities to cover under served areas of the community
- Additional data layers include existing wireless installations (gap analysis), RF Supporting Data (Crowd Sourced or Drive Test), and Fiber Availability



### New England Heat Map

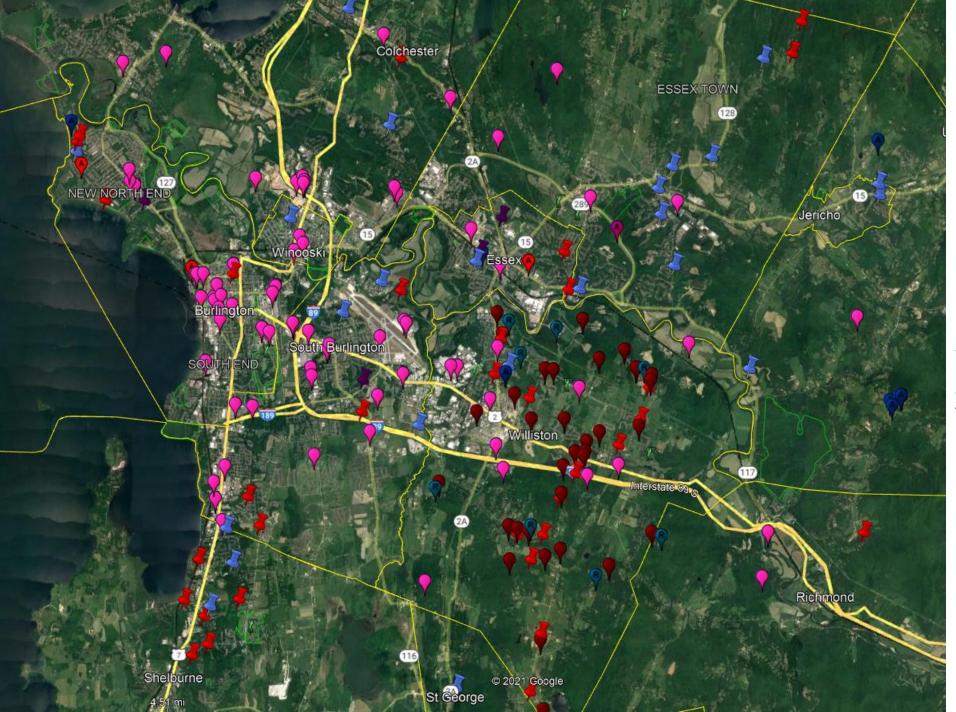


Heat map showing data clustering in northern New England

Base mapping campaigns conducted in 2020 and 2021 – driven by social media advertising & direct marketing

Red clusters show density of customer complaints received through the CCM platform





#### Burlington Vermont Area – Base Mapping

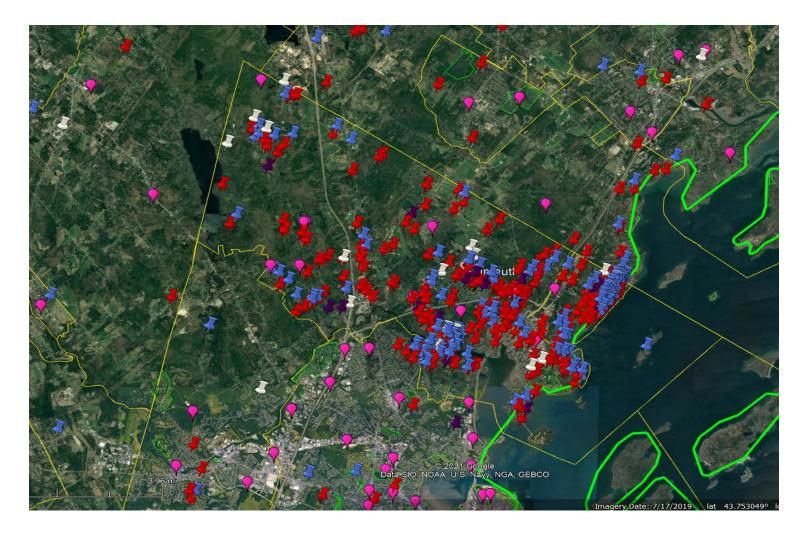
Pink pins are existing sites

Colored Pins are carrier specific customer data points. Push pins are 2020 base mapping. Round data pins are 2021 Summer base mapping and micro campaigns.

VZW – Red AT&T – Blue T-Mobile – Purple US Cellular - White



### Municipal Partnership Campaign - 2021



Over 500 submissions gathered over 3 weeks in targeted municipality

Town distributed survey link through its existing communication channels in the community

Click-through rate over 90% when sponsored by a municipality

Broken down by service provider

Pink pins are existing antenna sites

Clustering of data represents coverage needs and market opportunity



#### THANK YOU

If you're interested in discussing sponsoring a CCM survey, or getting an in-depth look at the CCM data and analysis process, please contact Brad Gorham at (978) 376-5427 or <u>BradG@wirelessra.com</u>