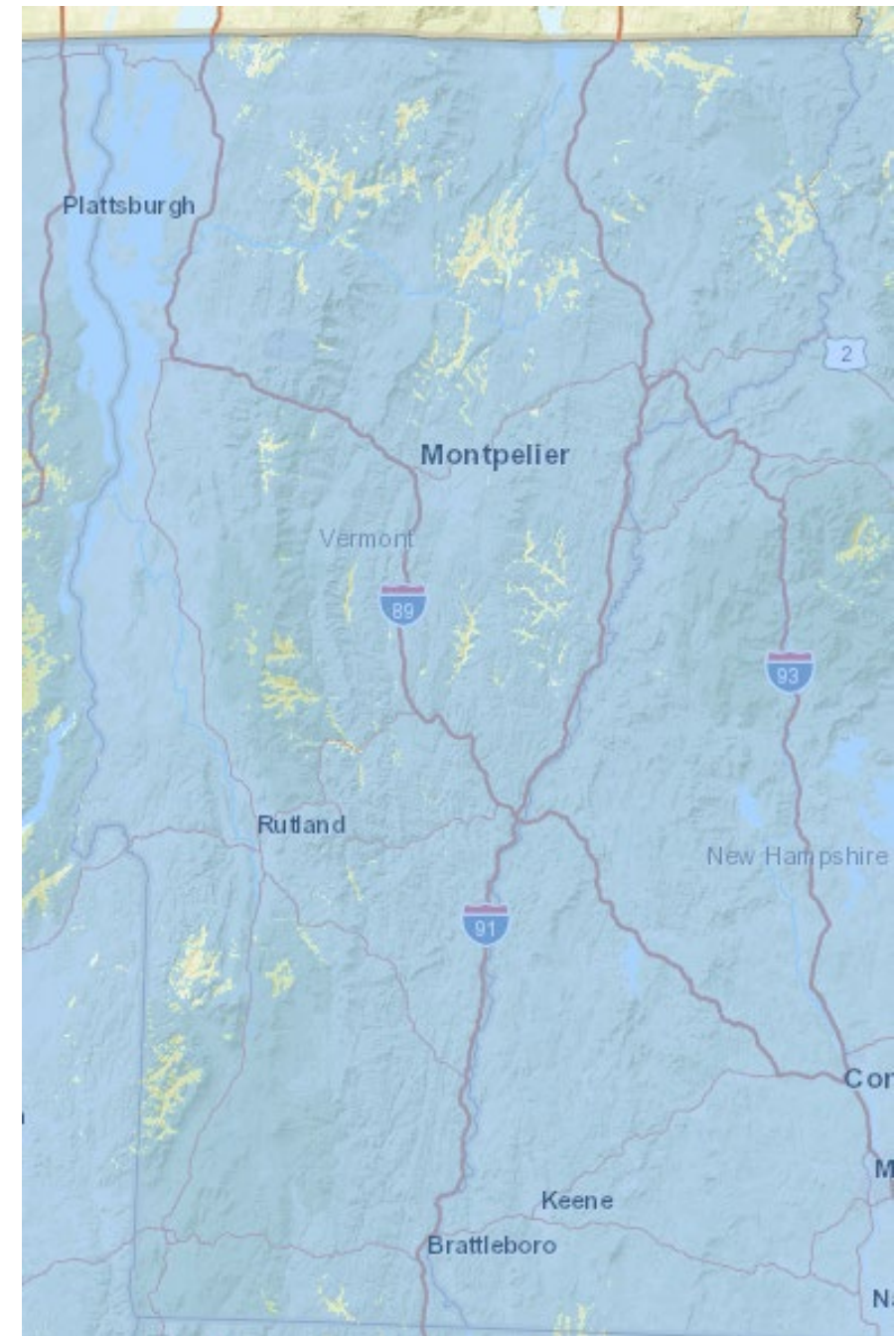# Mobile Wireless Drive Test

A joint project of the Vermont Agency of Transportation

and the Vermont Department of Public Service
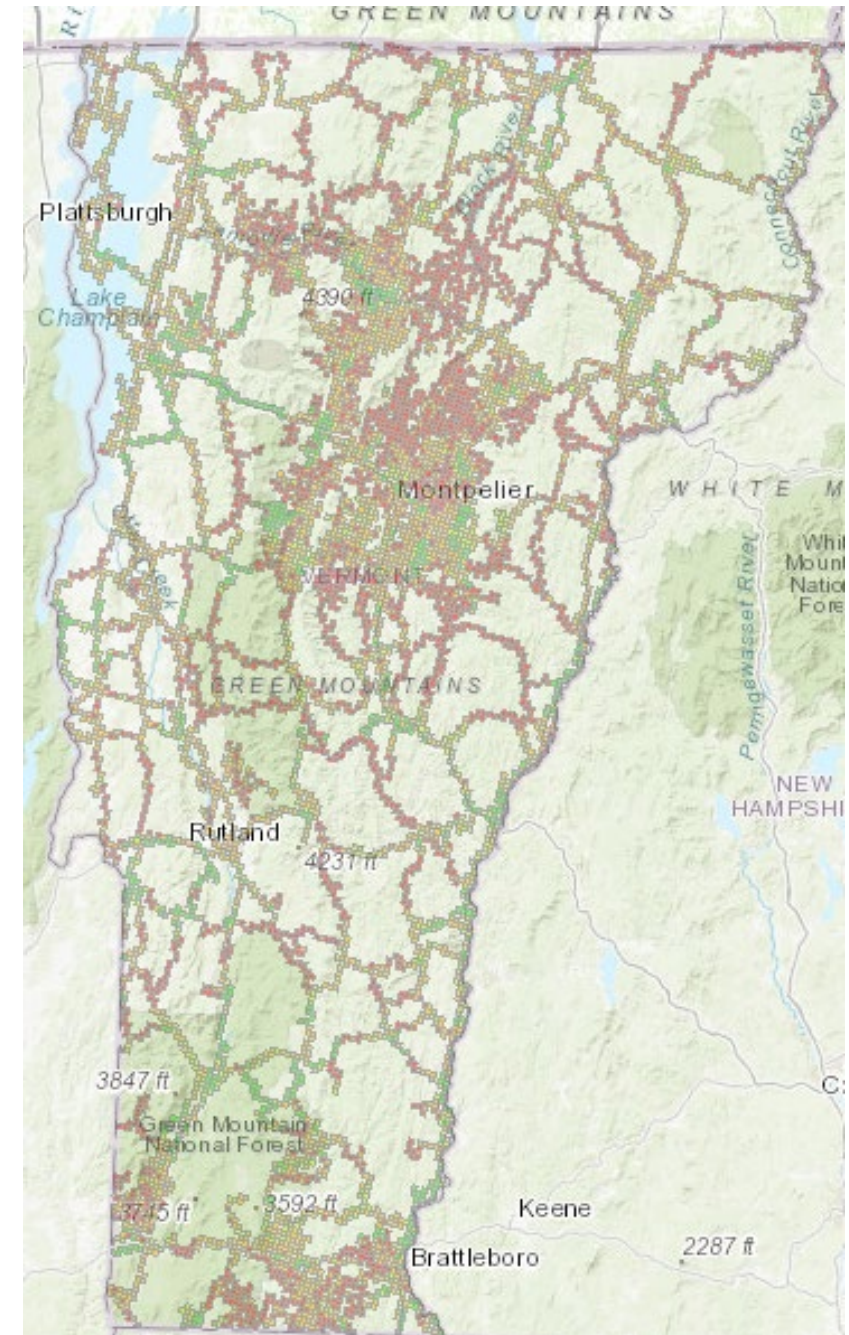
with support from Ookla

Mobile Wireless Coverage

Access to mobile wireless service is increasingly important. The FCC publishes maps provided by operators. This map depicts reported voice coverage for AT&T. Many consumers contend that these maps do not reflect the coverage they experience.

2018 Drive Test

A drive test provides an objective assessment through thousands of voice calls and download speed tests. The PSD conducted a drive test in 2018 independently using a free app for an FCC challenge process.
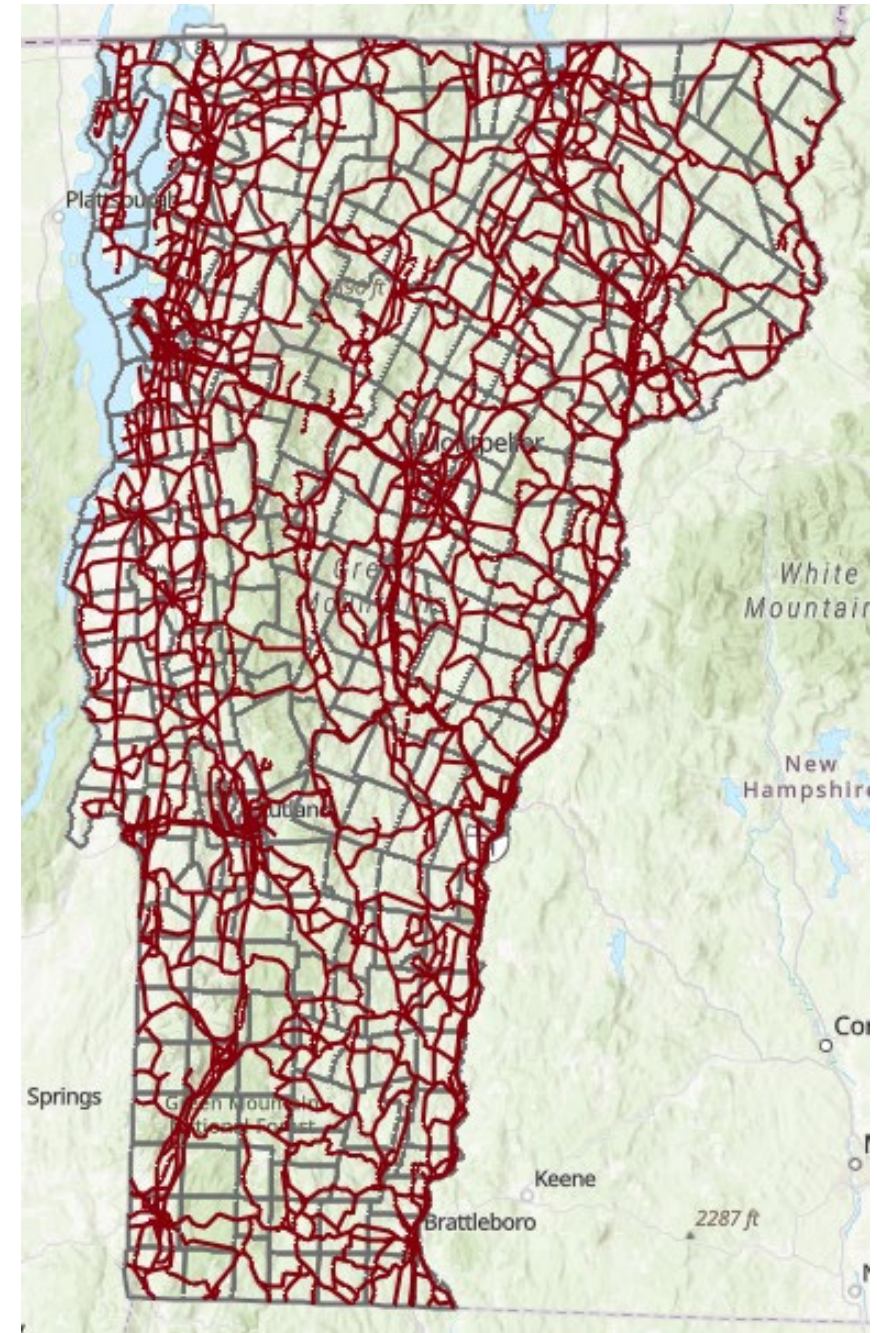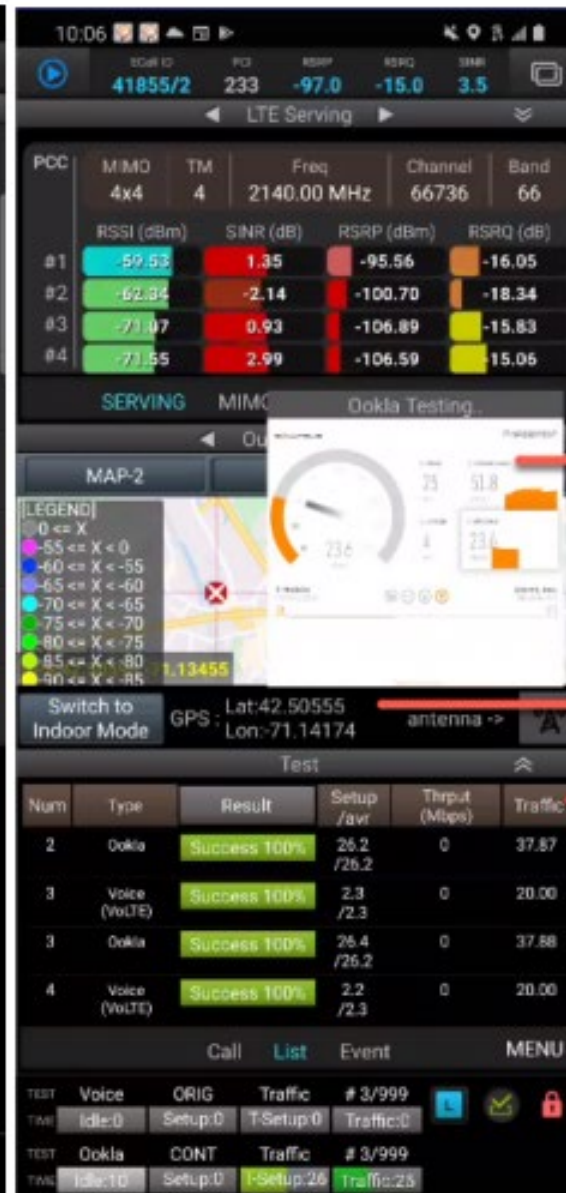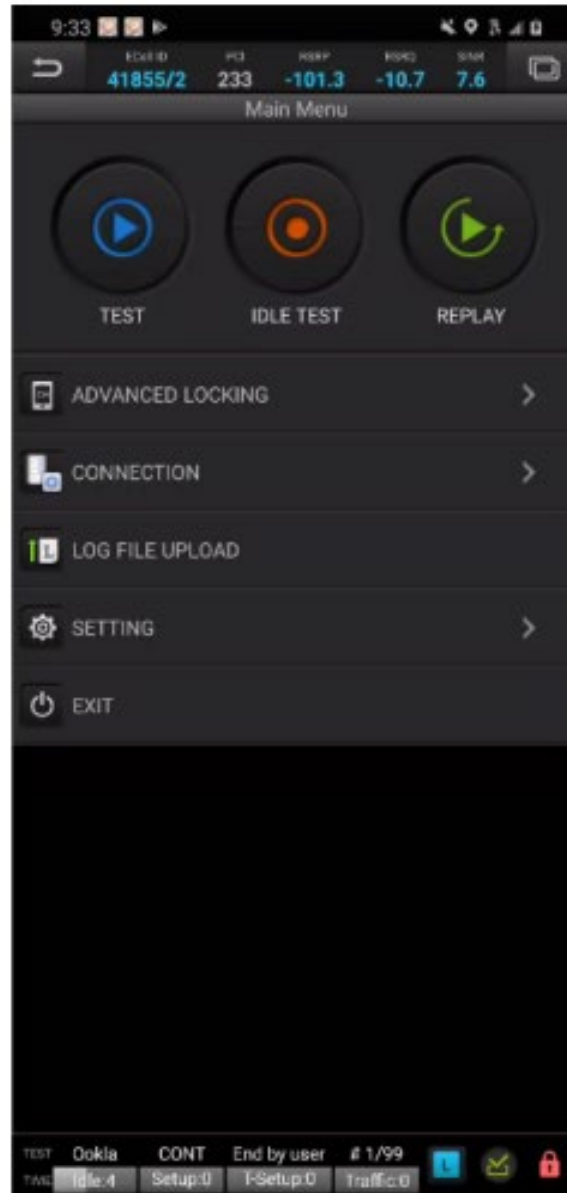
Drive Test Routes

VTrans personnel will drive all state-maintained roads, as well as all Town Class 2 roads and many other roads requested by residents.

Mileage by district				
Dist	Name	Primary	Additional	Total
1	Bennington	439.0	118.6	557.6
2	Dummerston	624.0	104.4	728.4
3	Mendon	531.0	120.6	651.6
4	WRJ	561.0	134.4	695.4
5	Colcheester	830.0	110.8	940.8
6	Berlin	558.0	92.3	650.3
7	St Johnsbury	740.0	138.9	878.9
8	St Albans	583.0	156.9	739.9
9	Derby	459.0	129.5	588.5
	blank		6.9	6.9
	Total	5325.0	1113.3	6438.3

Ookla

The project employs Ookla Wind®, a handset-based, wireless testing and monitoring solution installed on handsets for each of the six facilities-based providers in Vermont.

Band class

Signal strength, quality, signal-to-interference and noise ratio

Integrated Ookla Speedtest Download, Upload, and Ping (Latency)

GPS coordinates (location)
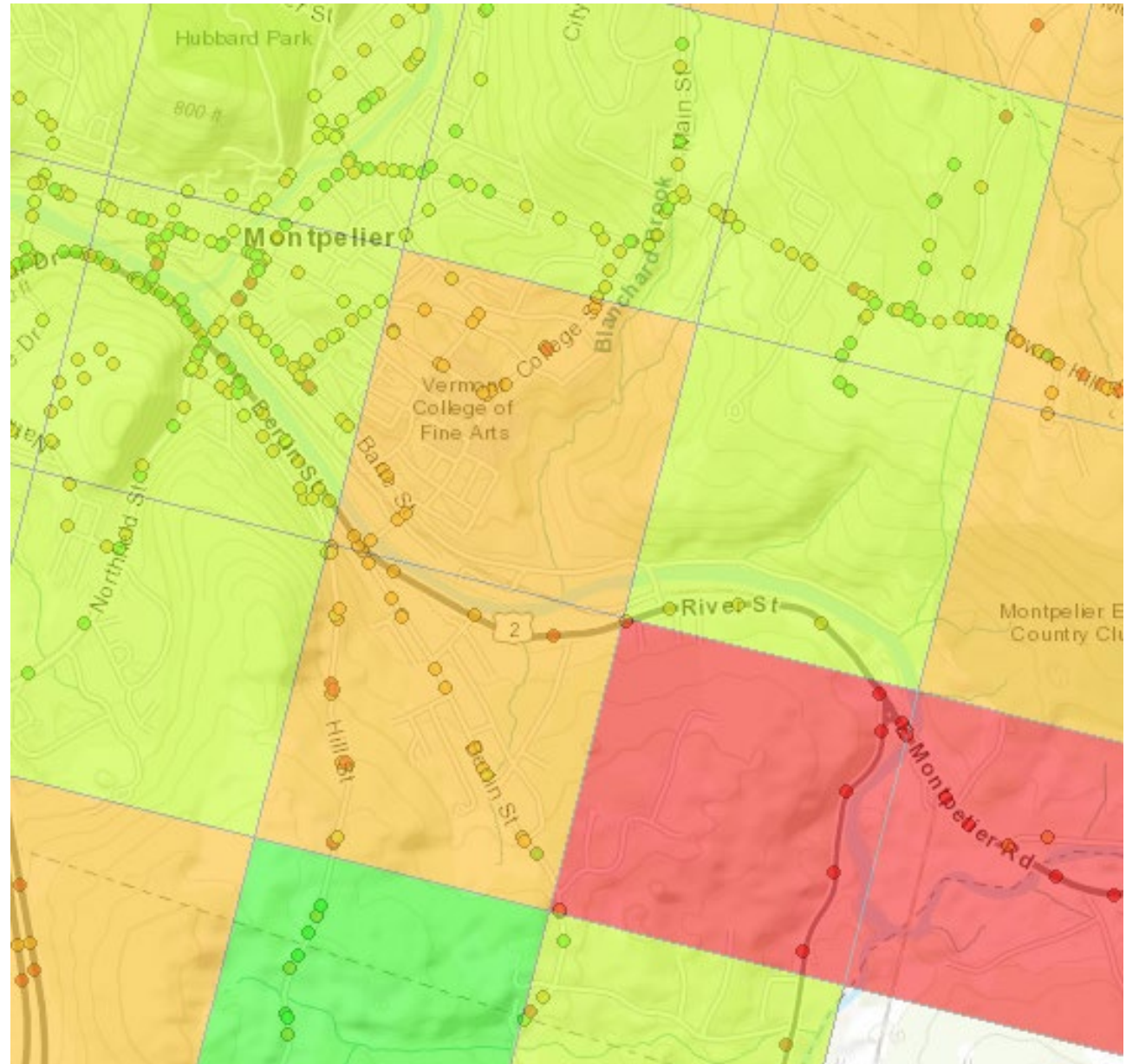
Voice and Speedtest call Success/Fail indication

Data

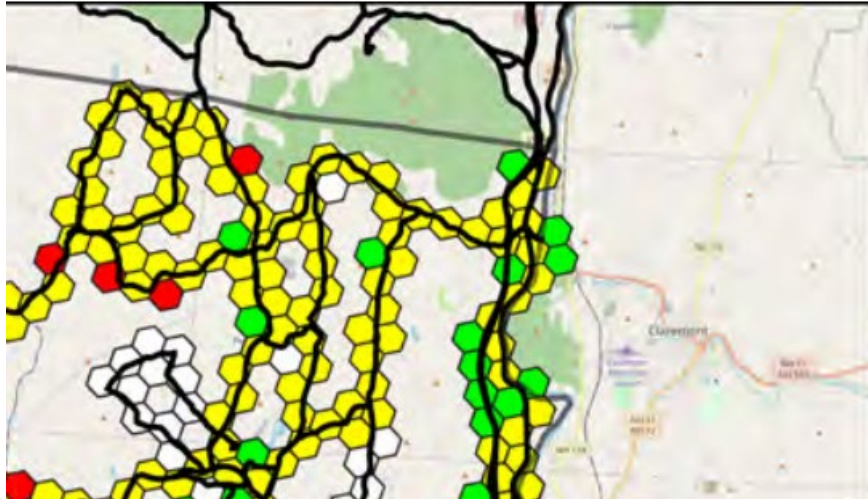Ookla will provide point-based results for each voice and Speedtest.

Polygons provide a geographic representation of coverage that is easier to grasp than the individual points.

Ookla will also provide H3 polygons to depict the average voice and data service identified in each tested hexagon.

The data will be published on the state geodata portal for the public to use for further analysis.
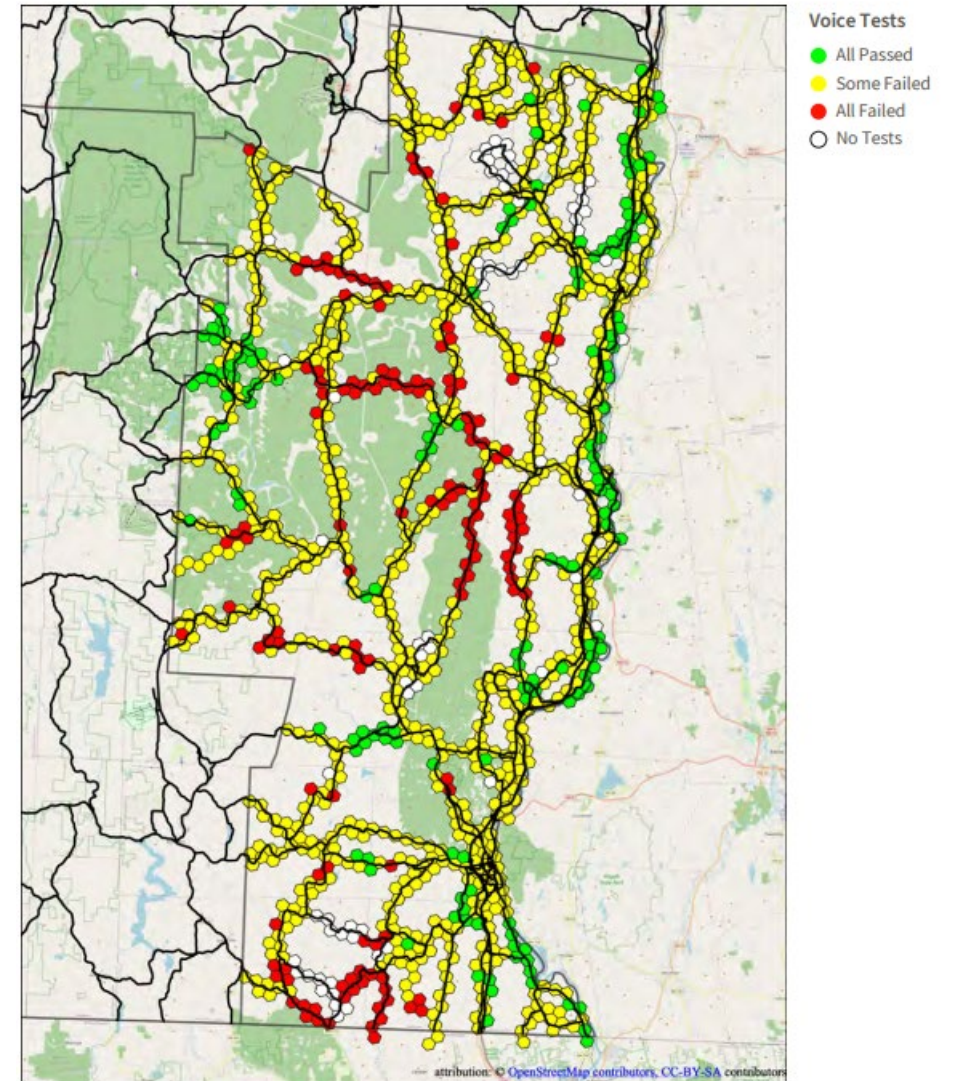
Preliminary Results

Voice Call Performance in Dummerston District, Vermont
Ookla Wind™ Data | Q3 2022

Voice Tests
- 🟢 All Passed
- 🟡 Some Failed
- 🔴 All Failed
- ⚪ No Tests

Ookla Wind® is a handset-based testing and monitoring solution that provides comprehensive wireless network measurements with real-time data processing and visualization.

Conclusions

The drive test is expected to provide an objective assessment that will be useful for numerous applications.

Acknowledgments