

Network Topology in the Wireless Age

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Venture Café Philadelphia
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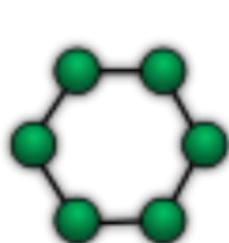
Network topology

... or is it type-ology?

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How elements of a communication network are arranged



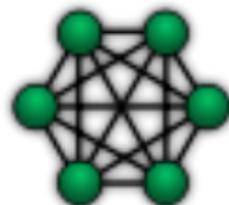
Ring



Mesh



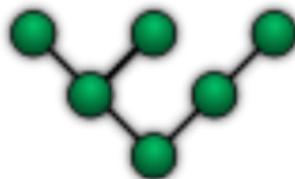
Star



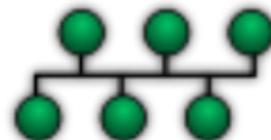
Fully Connected



Line



Tree



Bus

The tow trucks case study

The tow trucks case study



What the US looks like

`https://www.census.gov/data-tools/demo/metro-micro/
thematic_maps.html`



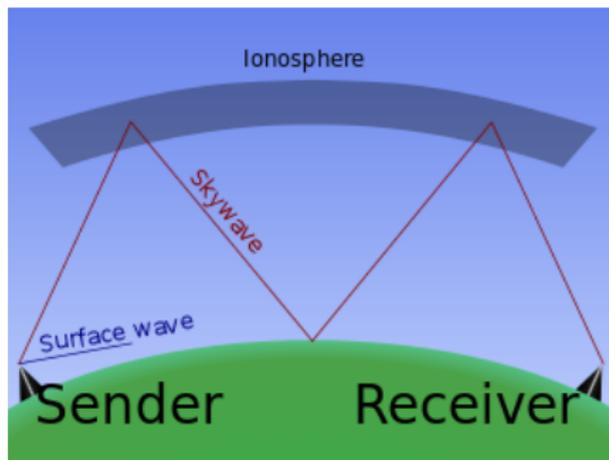
Chris Lawrence from Flickr



Tony Webster from Flickr

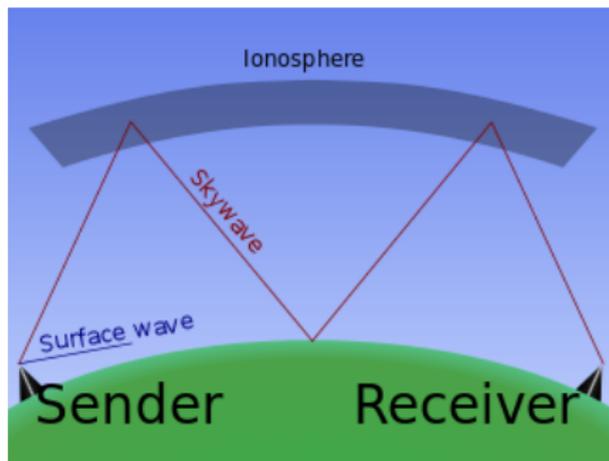
Propagation

Propagation

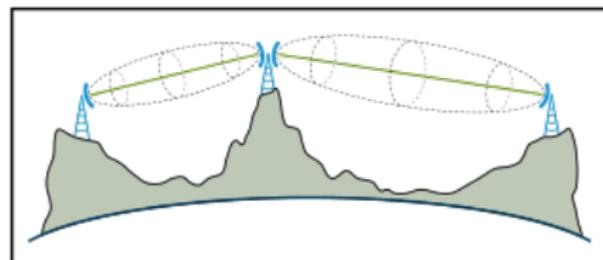


Sebastian Janke from Wikimedia Commons

Propagation



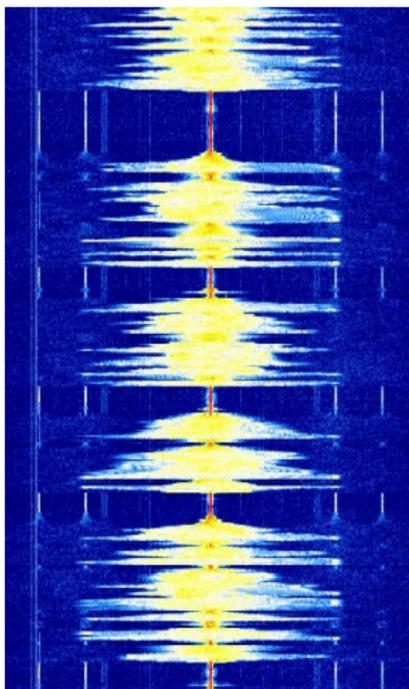
Sebastian Janke from Wikimedia Commons



Micogen from Wikimedia Commons

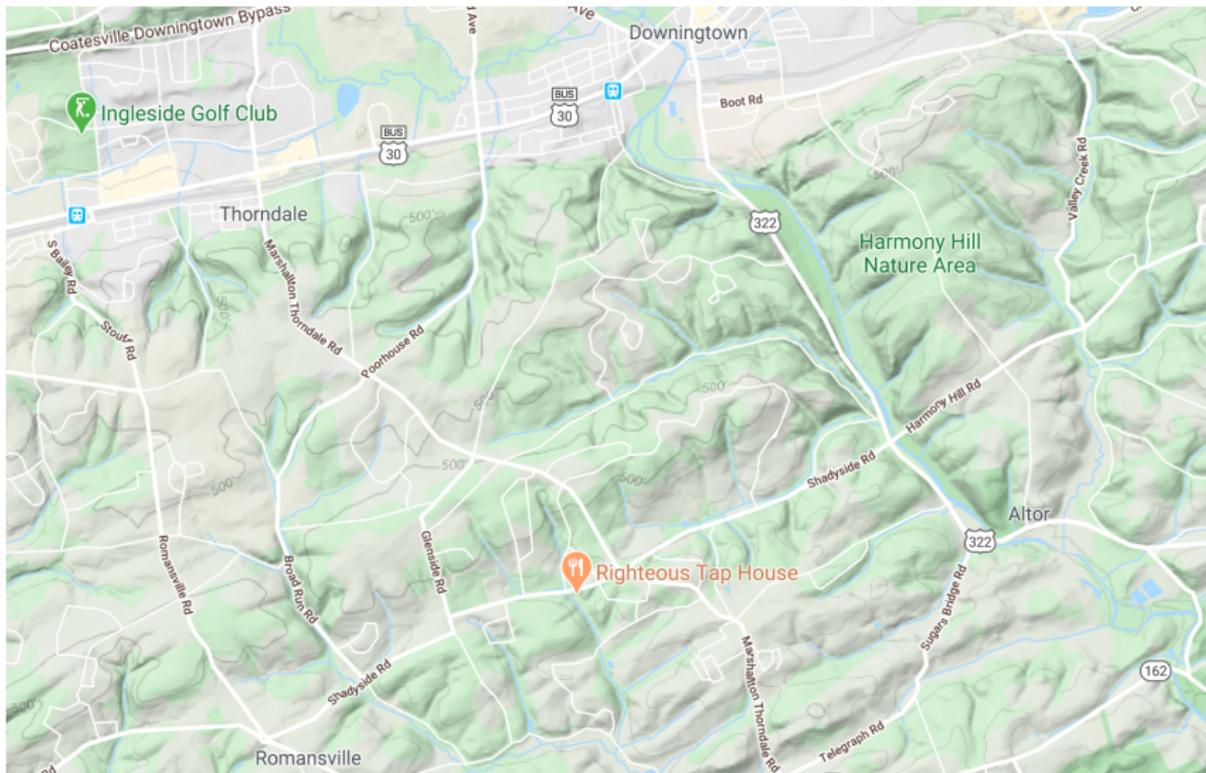
Frequency allocations and bandwidth

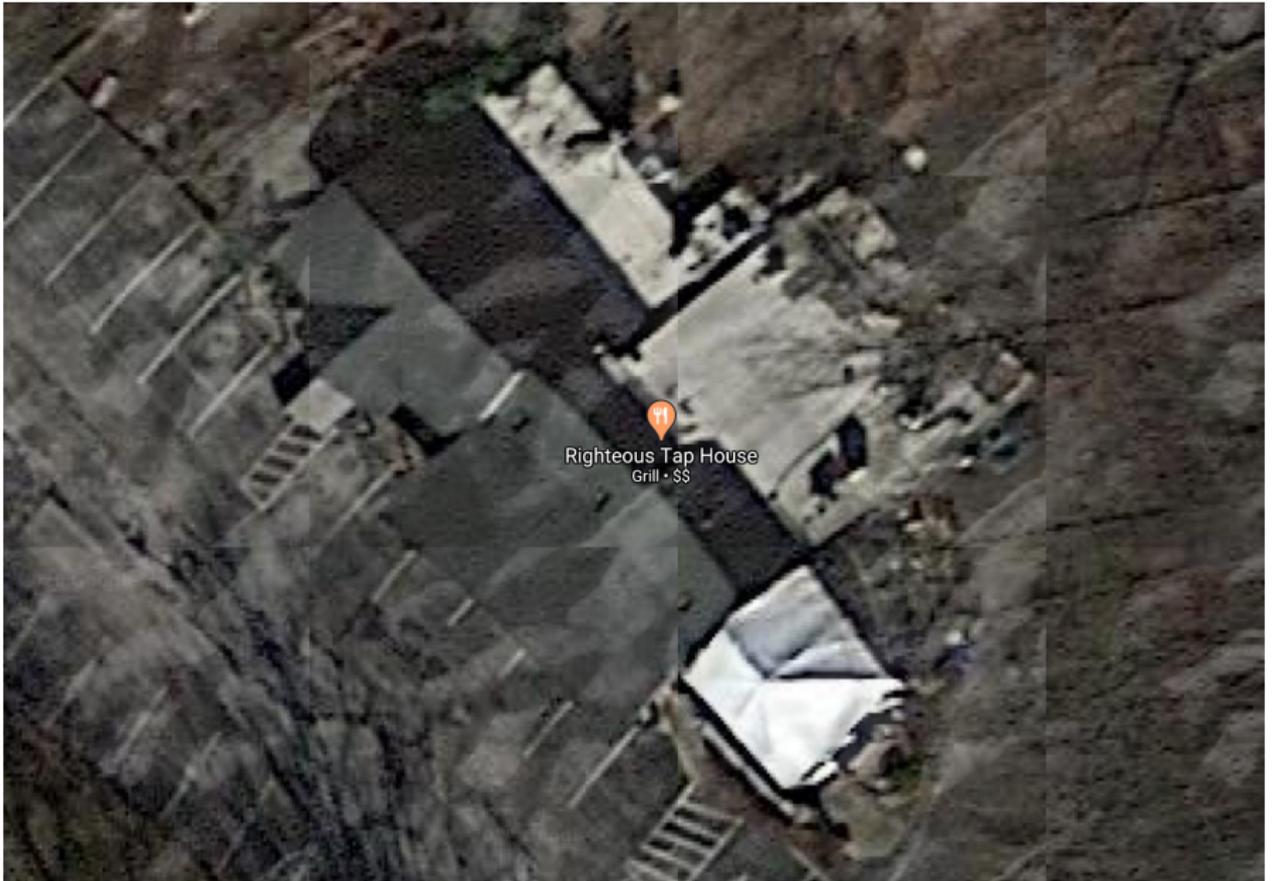
<https://www.ntia.doc.gov/page/2011/united-states-frequency-allocation-chart>



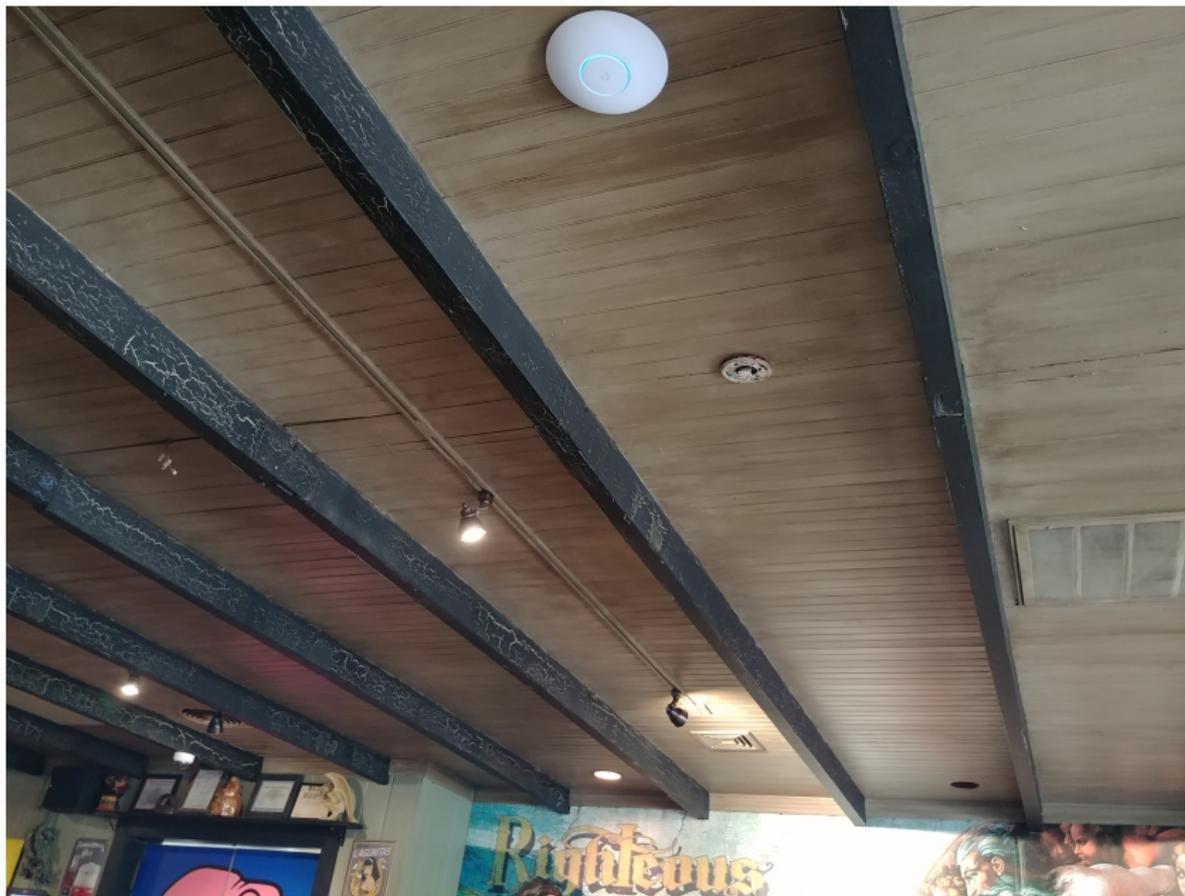
FM Broadcast Radio – Signal Identification Wiki

Case study: Righteous Tap House









Considerations and next steps

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- Follow user experience principles and processes
- Don't expect 100% reliability
- Mind the tradeoffs

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- Follow user experience principles and processes
- Don't expect 100% reliability
- Mind the tradeoffs
- Experiment! Play radio!



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Thanks!

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