

Microwave Network

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Microwave Network

A Brief History of Time...

- Before 2006
 - City network mixed technology, unreliable
- 2006-2007
 - 10-year contract with NPG
 - connect 23 city sites via fiber
 - Project completed August 2007
- 2008 and beyond
 - The Great Recession
 - NPG Cable purchased by Suddenlink Communication

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A Brief History of Time...

- Fast forward to 2015
 - Original contract terminates in 2017
 - Suddenlink proposal for renewal
 - Reduces speed by 80%
 - Increases price by 44%
 - 5-year contract

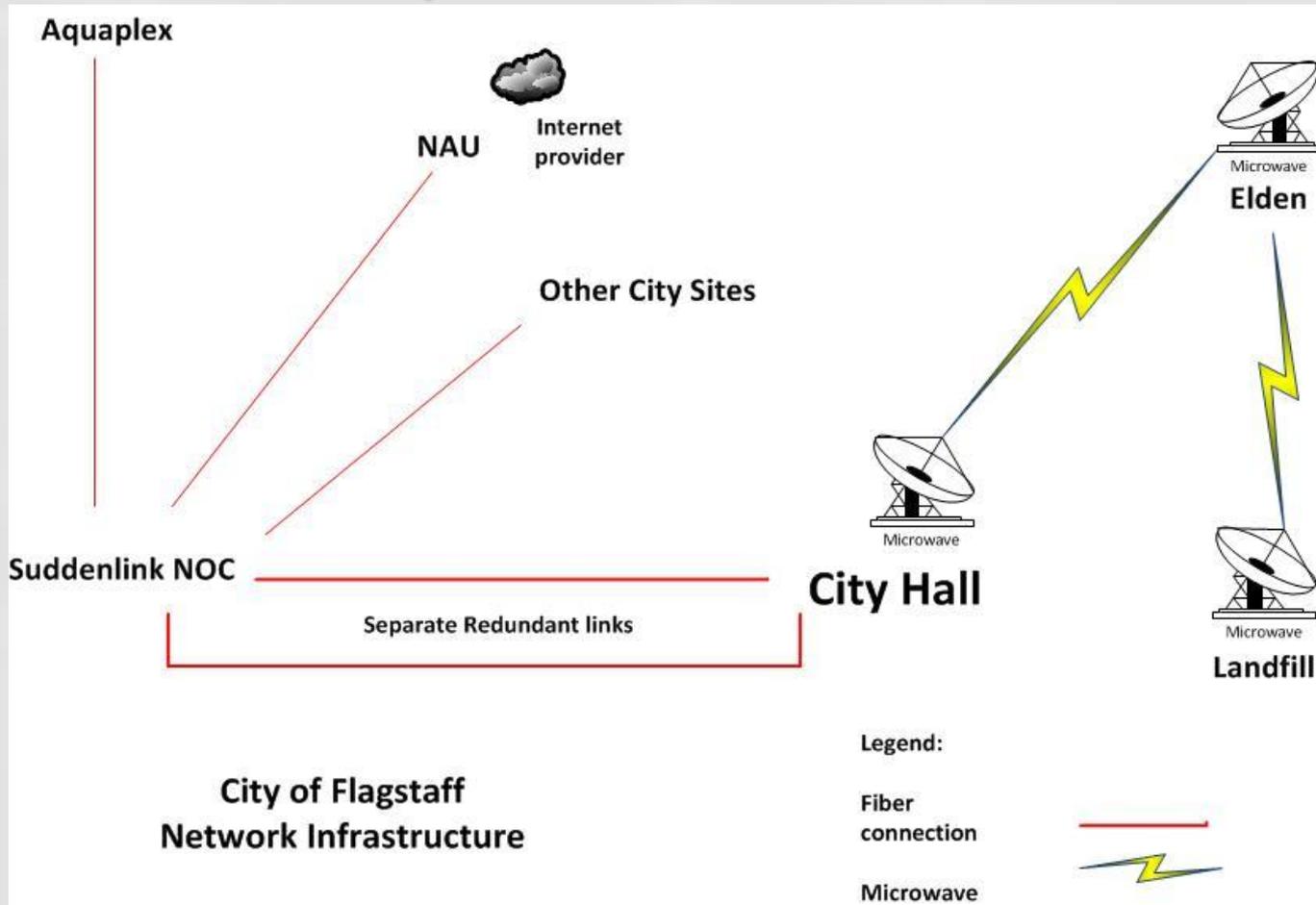
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A Brief History of Time...

- FY16 budget process
 - Council goal – city staff
 - More one-time funds than on-going funds available
 - Microwave concept is conceived
 - Added to budget for council approval

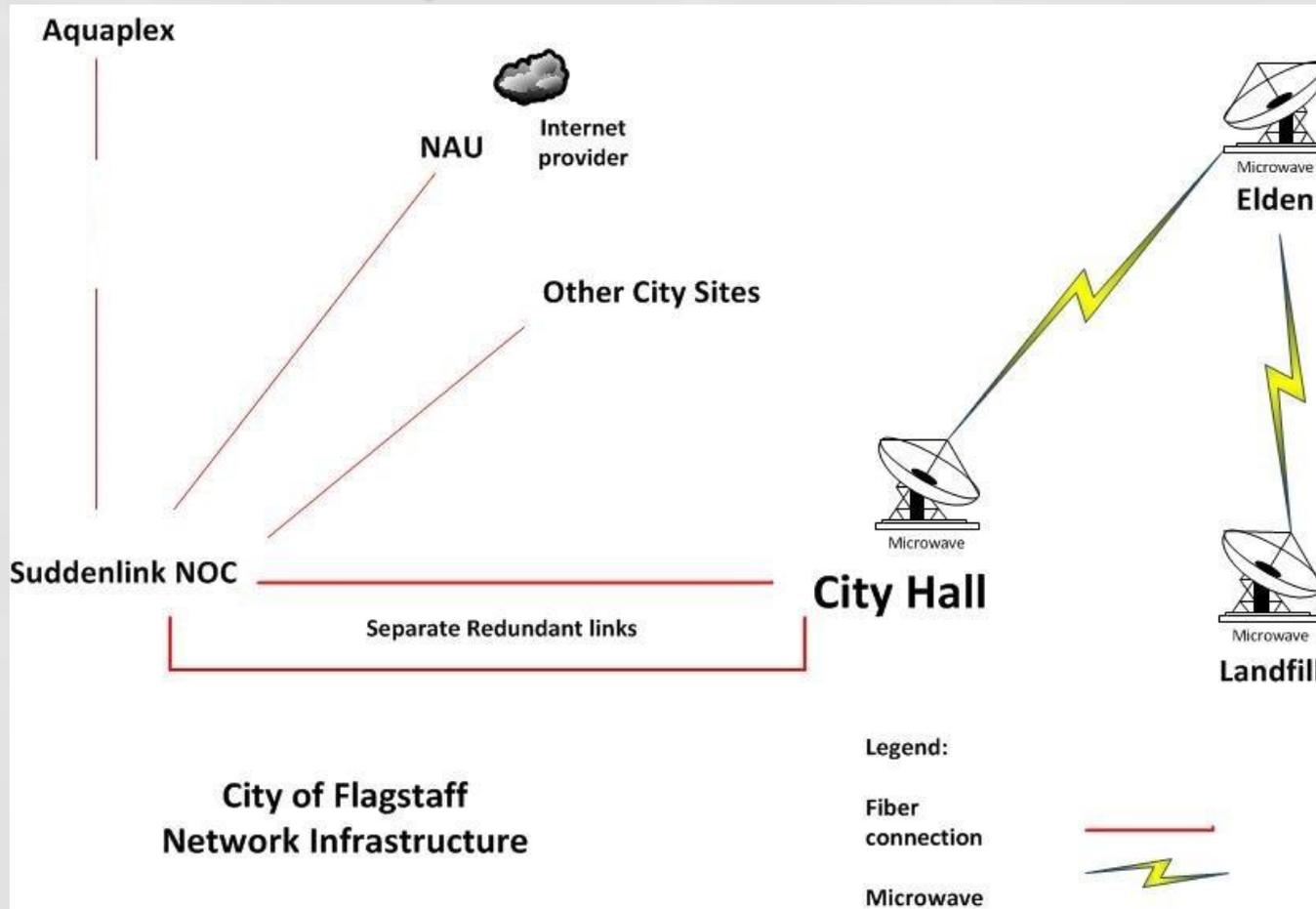
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What we currently have...



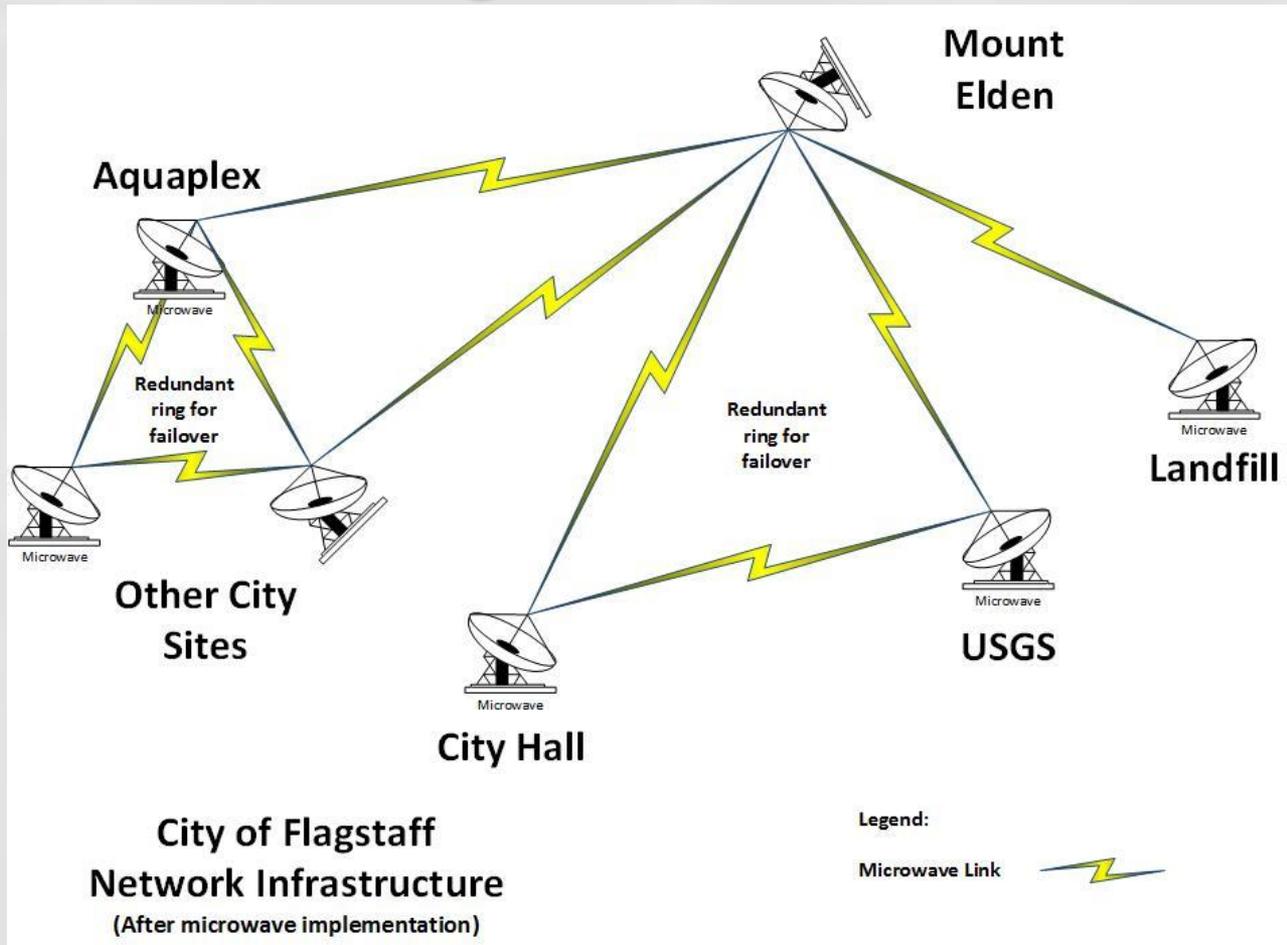
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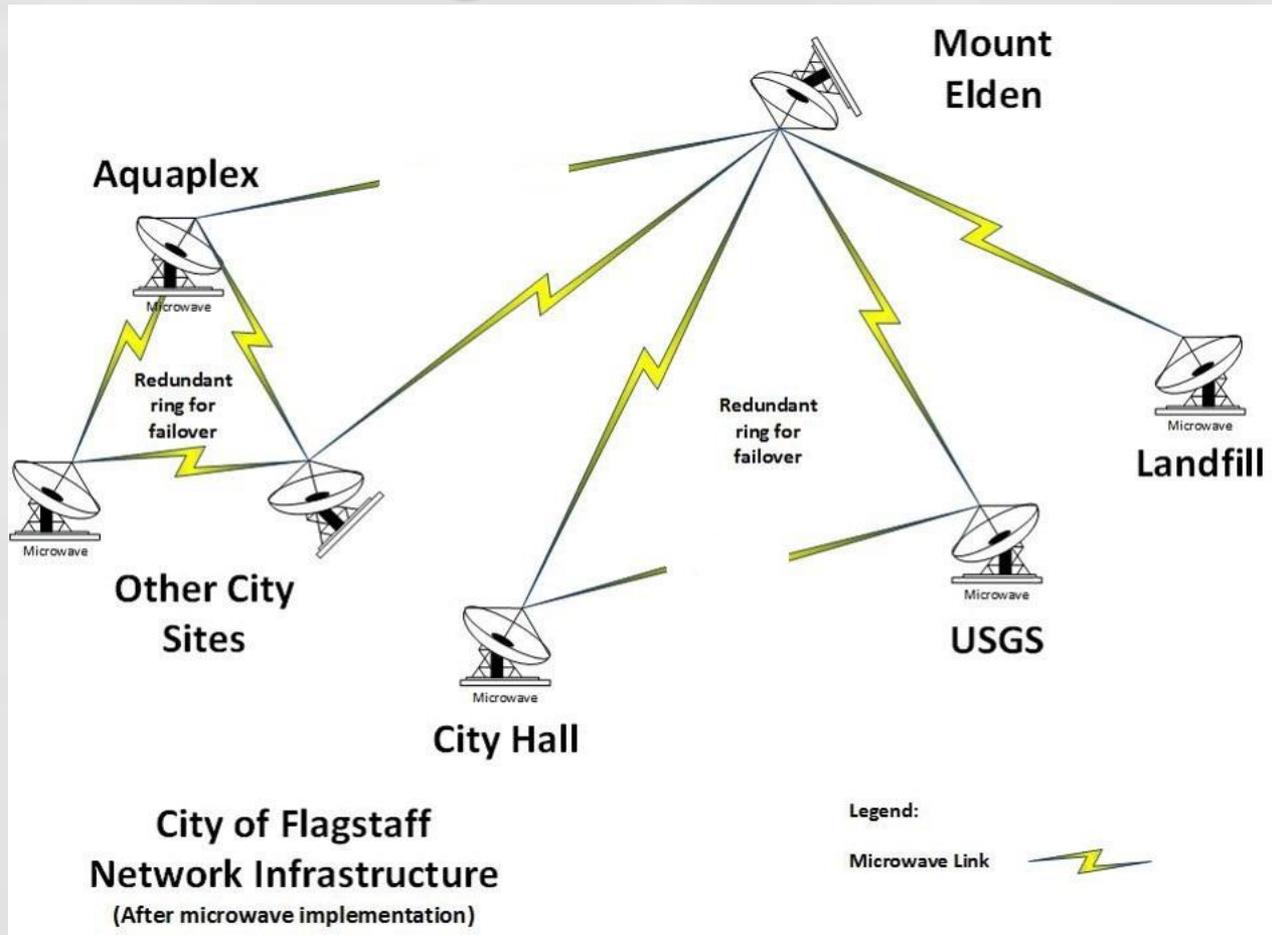
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Where we want to go...



Microwave Network

Where we want to go...



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Benefits...

- \$54,000 less in annual expenditure
- Network is owned by the city, along with associated microwave frequencies
- Will tie into the microwaves already in place by utilities
- Future microwaves built to monitor city wells will also tie into this network

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Benefits...

- Microwave is a proven technology with an approximate 20-year life span
- City's experience with microwave connection to landfill has been outstanding
- The network can be easily expanded for future City buildings such as the public works yard and the new courthouse.

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Costs and Savings...

15 year projections	One time	Ongoing	Total	Savings
Fiber	\$7,200	\$1,335,269	\$1,342,469	
Microwave	\$650,000	\$154,545	\$804,545	\$537,924

Microwave Network Towers



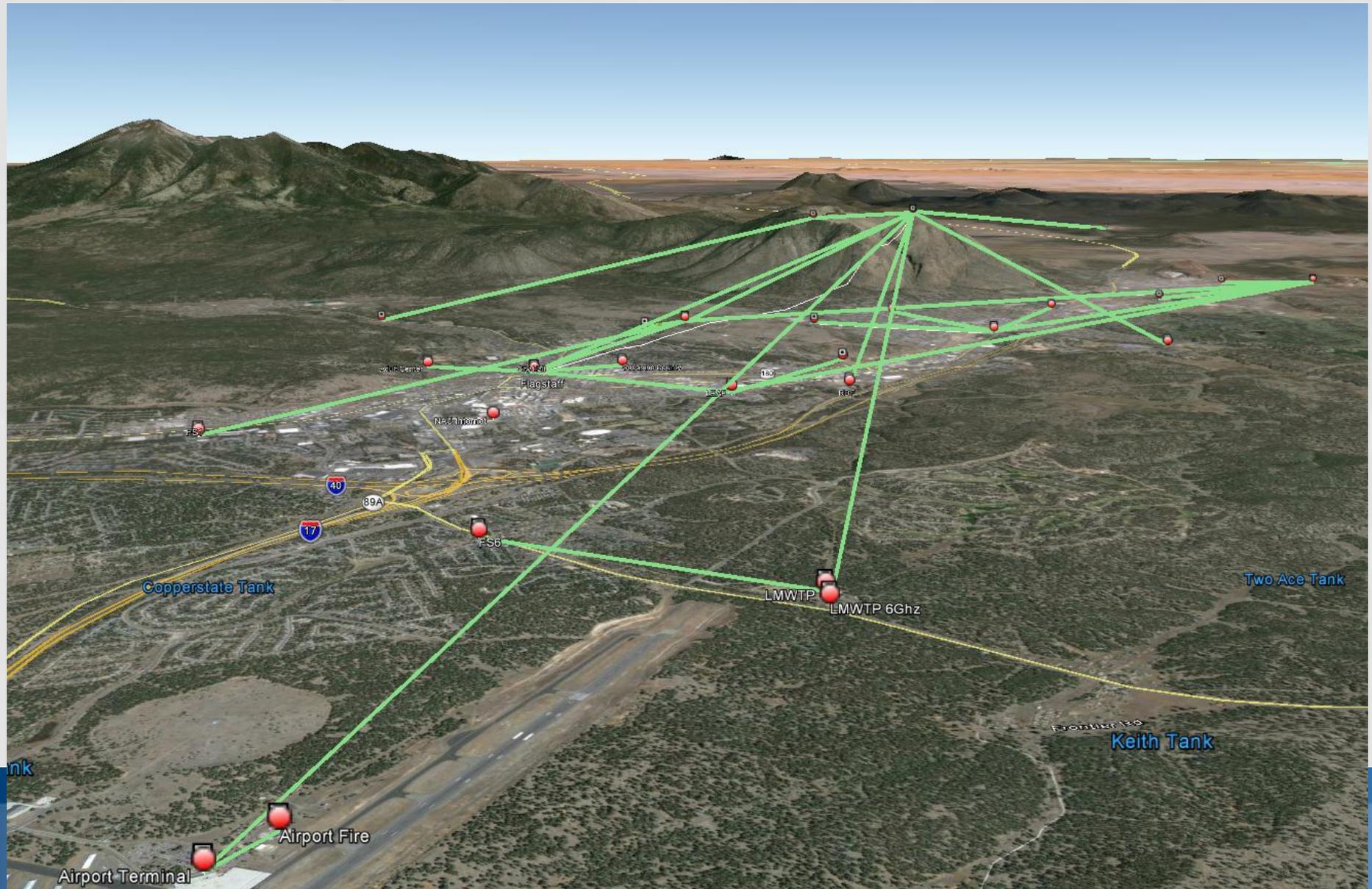
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Microwave Network Towers



Microwave Network Connected Flagstaff - Network Overview



Microwave Network

- John Lindsey and Kelly Cullen from Niles Radio are here

Questions?