

# 1<sup>ST</sup> Response Communication



A project that touches every life  
in Kosciusko County

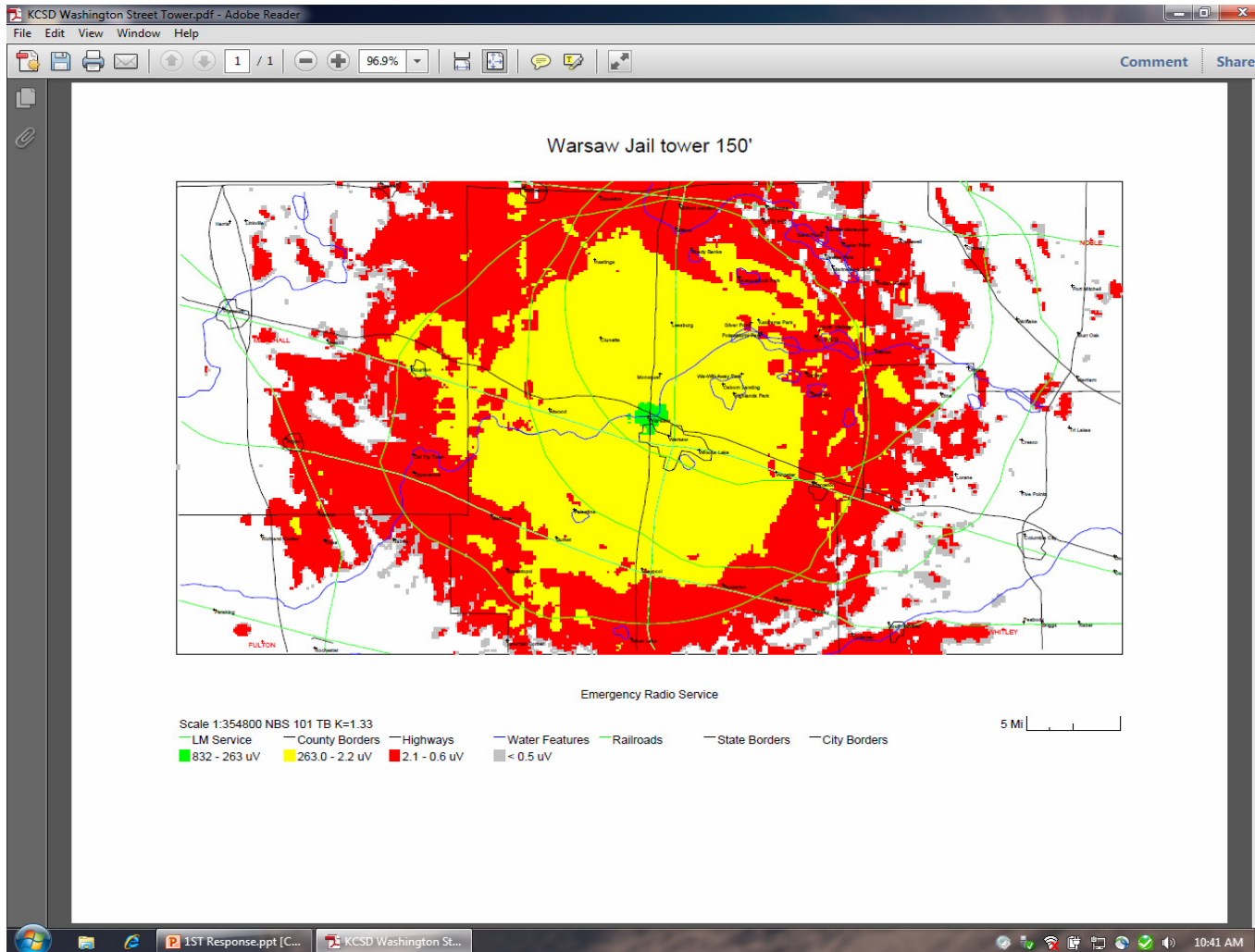


For  
Kosciusko County  
Emergency Services

## *Current Problem:*

- The FCC has mandated narrow-banding on all VHF/UHF users. With this push to narrow-banding, range and clear signal have been lost. Every agency in the county has had some degree of trouble.
- We have approximately **350** Firemen, **100** Medics, **150** Police Officers. **600** First Responders are at the ready to make a difference in any situation that may occur. Professional and volunteer responders make a huge difference on-scene with clear communications.
- From Rock Lake in the far southwest portion of Kosciusko county to Wawasee in the northeast and all points in between, the message to the First Responder must be heard clearly.
- The FCC has mandated further that there will be another split band push to digital. This system allows for a seamless transition to digital.
- None of these mandates has any formal governmental funding.

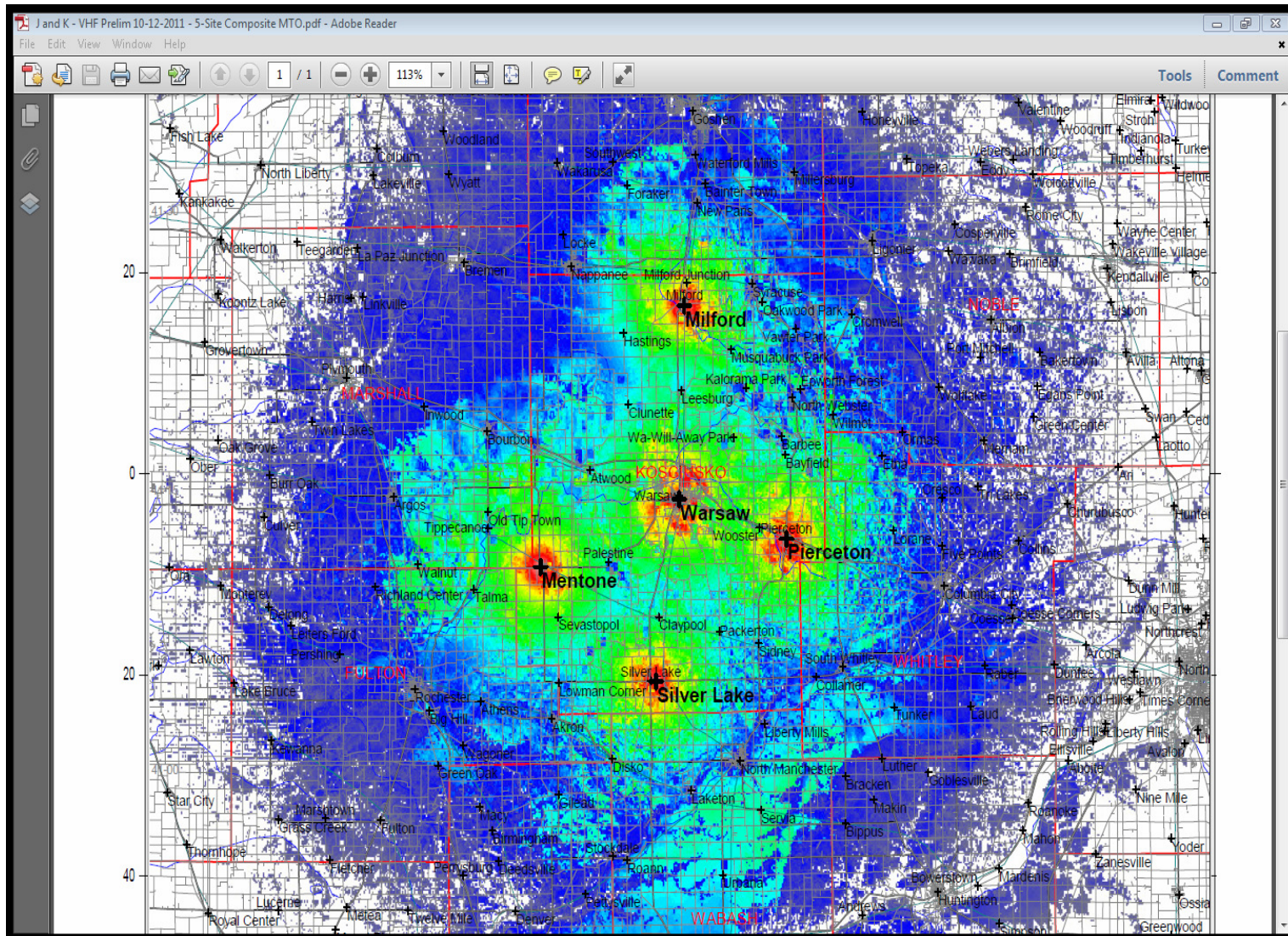
# Current Coverage



## *The Solution*

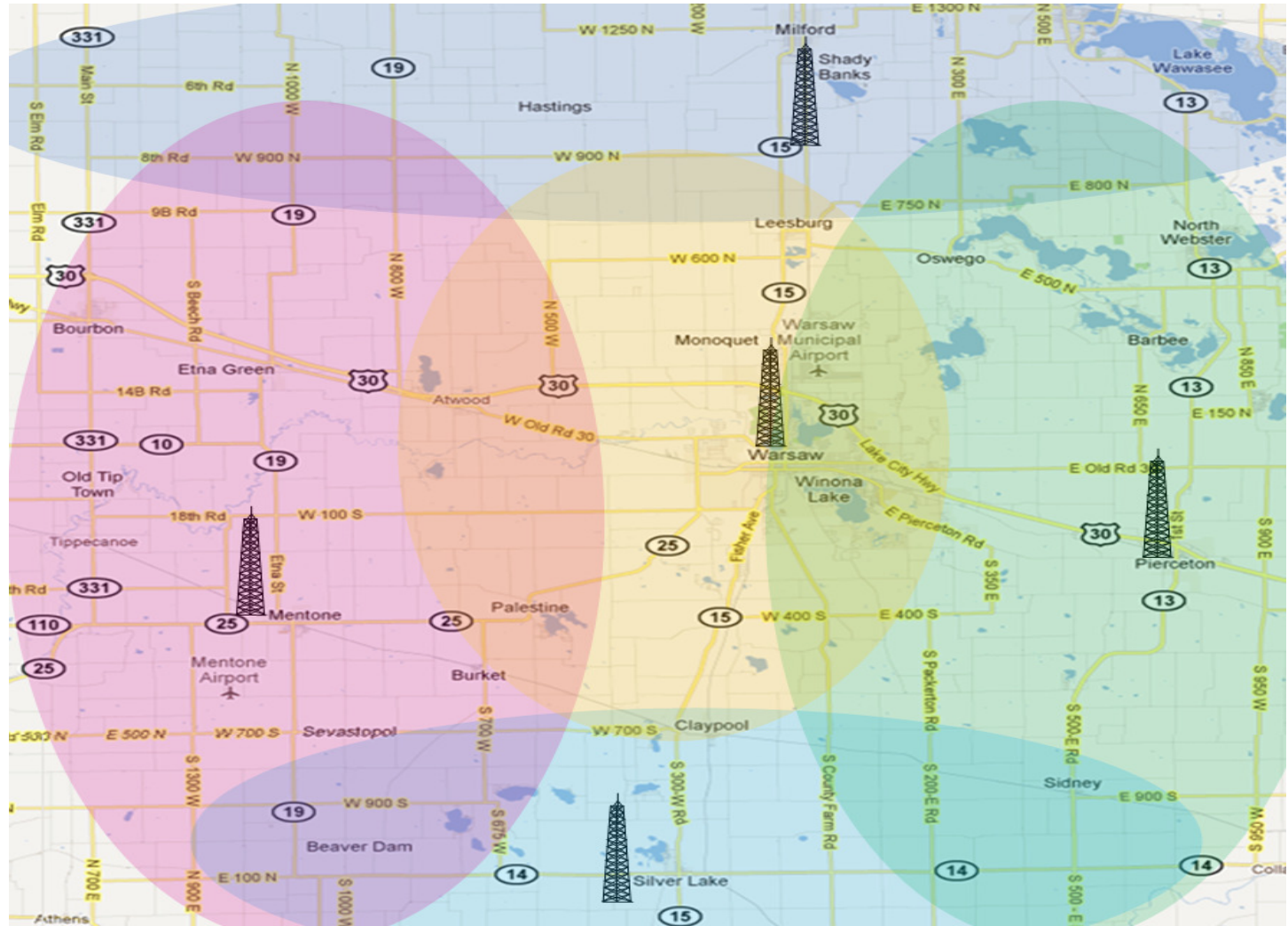
- Cell phones will not touch 350 firefighters simultaneously.
- County-wide Simulcast system; total coverage.
- Redundant linkages between all towers
- Spectrally efficient – one channel, county-wide free roaming.
- System operates on a redundant microwave [4.9mhz], eliminating phone lines.
- We must be ready for VHF/UHF now. With reprogramming of the equipment we already have, we can be ready.

# Total Simulcast Coverage

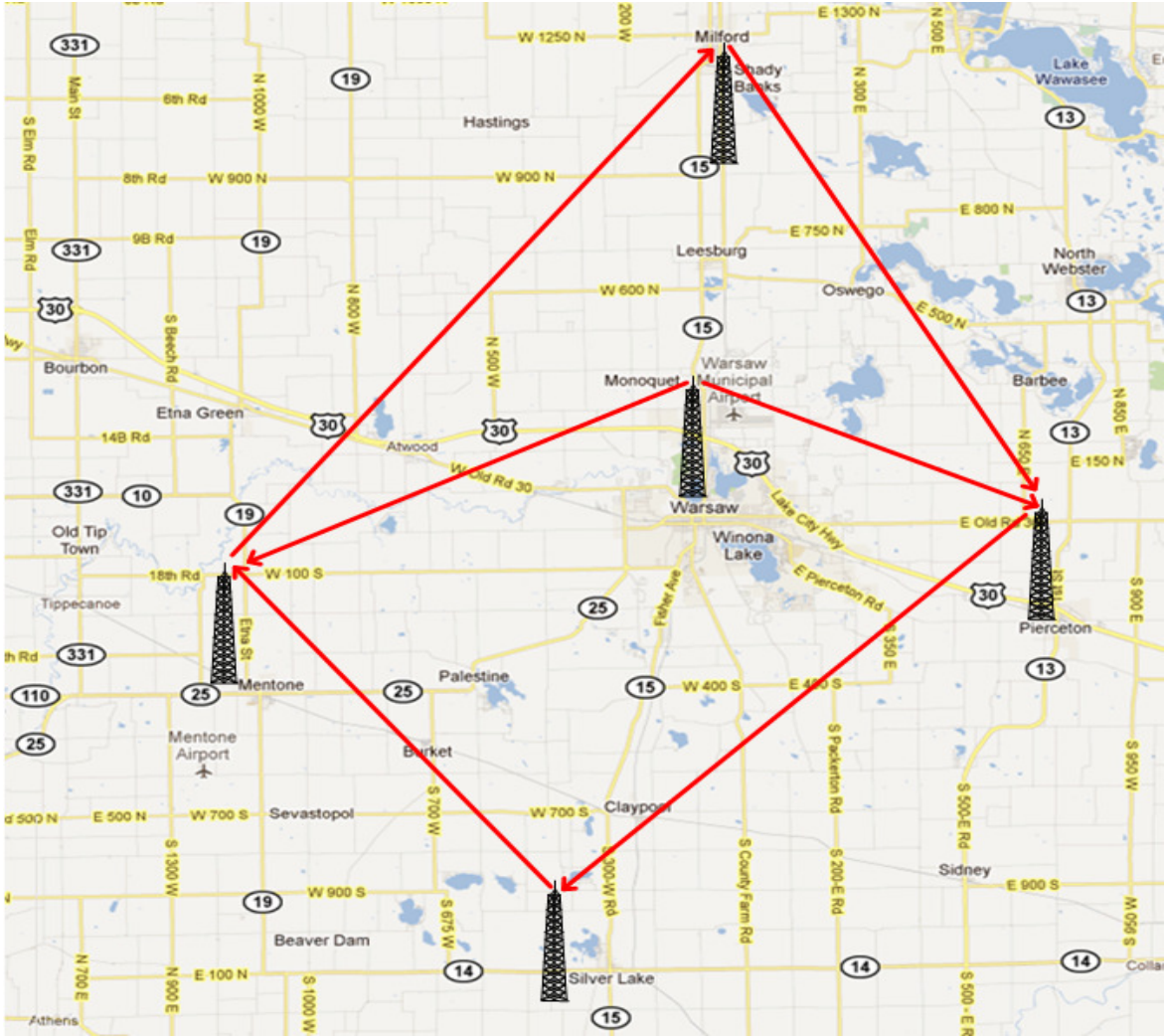


# County Wide

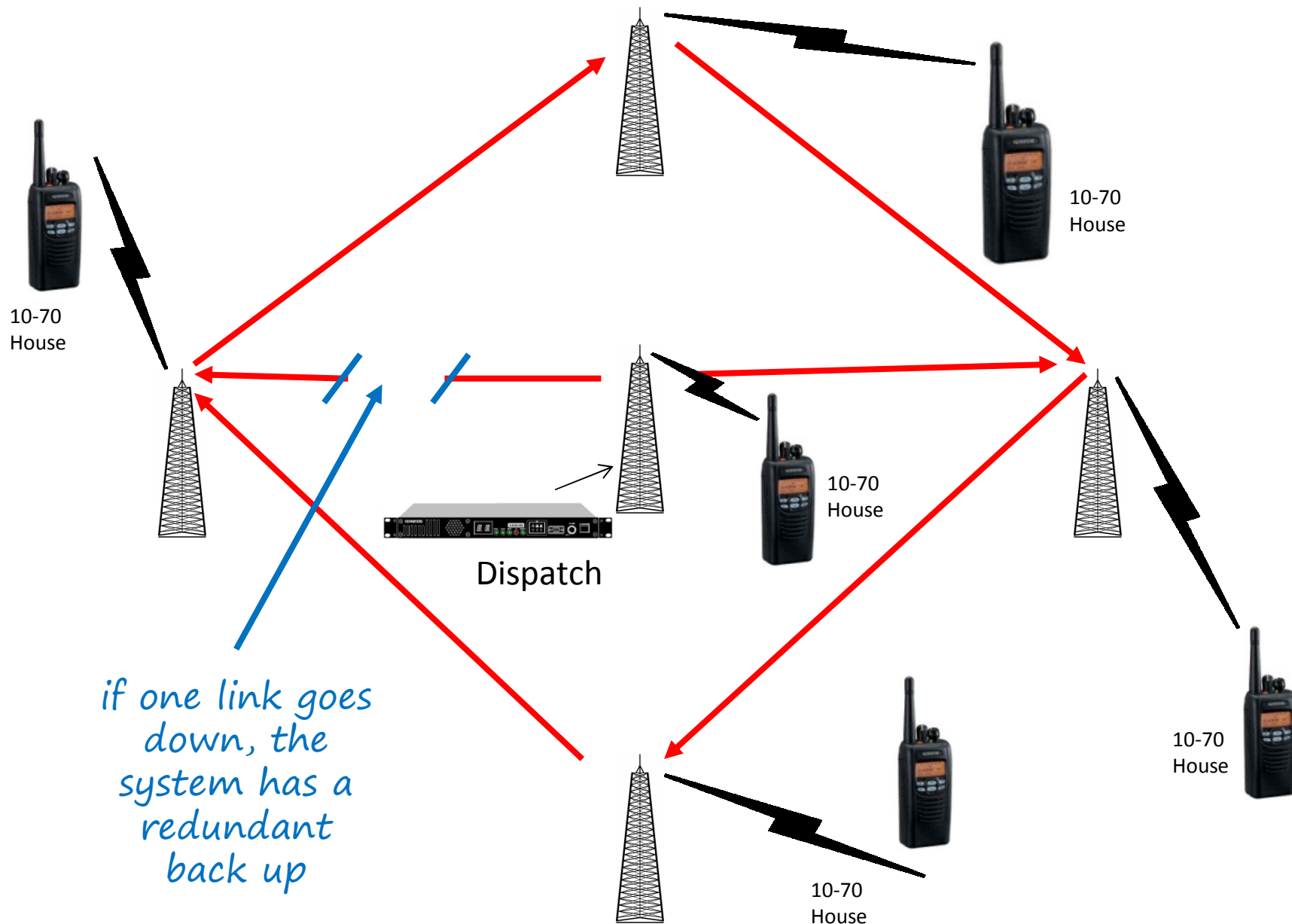
C  
O  
V  
E  
R  
A  
G  
E



# Redundant Links



# MILFORD HAS A HOUSE FIRE BEING DISPATCHED





## *System Summary*

- System is designed to handle multiple agencies simultaneously. (Fire, Sheriff, Warsaw Police, EMS, et. al.)
- Reaching to the future, this system meets the needs for 20-30 years with Analog and Digital capability. It easily migrates to 6.25 KHz digital for future mandates.
- Dispatch will transmit on all towers at the same time. (Everyone in the county will hear all pages)
- All transmissions will be sent from every tower.
- Each agency would have their own frequency; changing channels while moving through the county is not necessary.
- The 4.9MHz (microwave) links are protected for public safety.
- Links are redundant – if one tower goes down, the system functions at reduced capacity, yet still covers much of the county.
- Links have 25 M full duplex (lots of data can be passed).

## Funding

- A system this sophisticated with the coverage needed comes with a large price tag.
- Proposed system has been reviewed by three independent engineers ensuring it meets our unique needs while considering the unique topography and natural barriers of Kosciusko County.
- We have a team working on funding from Grants, Donations and Lease financing.
- Proposed system will have low ongoing costs. No monthly tower costs or phone line bills. Estimated annual insurance of \$3,000 and estimated annual maintenance of \$3,500.

## *Special Thanks – for your guidance and input*

- Ed Rock
- 9-1-1 Board
- Rocky Goshert
- Aaron Rovenstine
- Suzie Light
- Stephanie Overby
- Rich Haddad
- Buried Treasure whitepaper team, KLA - 2005
  - Pat Coy
  - Holly Swoverland
  - Rene Weaver
- Adam & Ted Hurley
- Bill Holder
- Ron Truex
- Ron Robinson
- Fire Chiefs of Kosciusko County