



Building The Path to NG911:Super Highway or Gravel Road





Changes

NEXT EXIT ↗

This Generation 911 In NC

1968 – Basic 911 was created

1988 – E911 Deployed In One County NC

1998 – 95 of 100 Counties Had E911

2008 – 100 Counties Had WE-911

2013 – NG-911 Committee Formed



This Generation 911 In NC

2013 – NG-911 Committee Formed

The first order of business was to determine the Committee's definition of NG911.

One member wants to see a network built that will allow other PSAPs to be interoperable with his. He likes the idea of being able to share all types of data.



This Generation 911 In NC

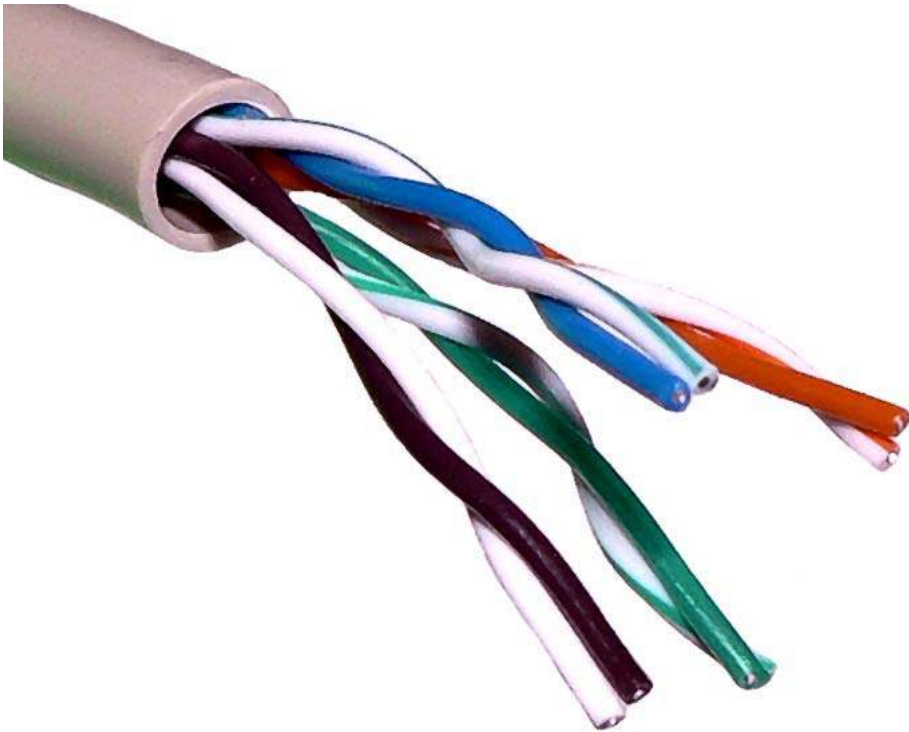
2013 – NG-911 Committee Formed

Another member stated the problem he is trying to solve is to be able to move voice and data to other PSAPs that are served by different telephone company providers. Right now, he cannot move the voice and data from a 911 call to his next door neighbor









So Why NG-911?

Since the various technologies used today to access 911 have or will soon be utilizing an IP network, the 911 system must follow suit in order to ensure compatibility with the public



The 911 Industry Alliance 2008 Study
on the Health of the United States 911
Emergency Network: A Call to Action on
911, pp. 38-39, December, 8, 2007



So Why NG-911?

It will become increasingly expensive and difficult to maintain traditional circuit-switched infrastructures because the technology is being abandoned across commercial communications



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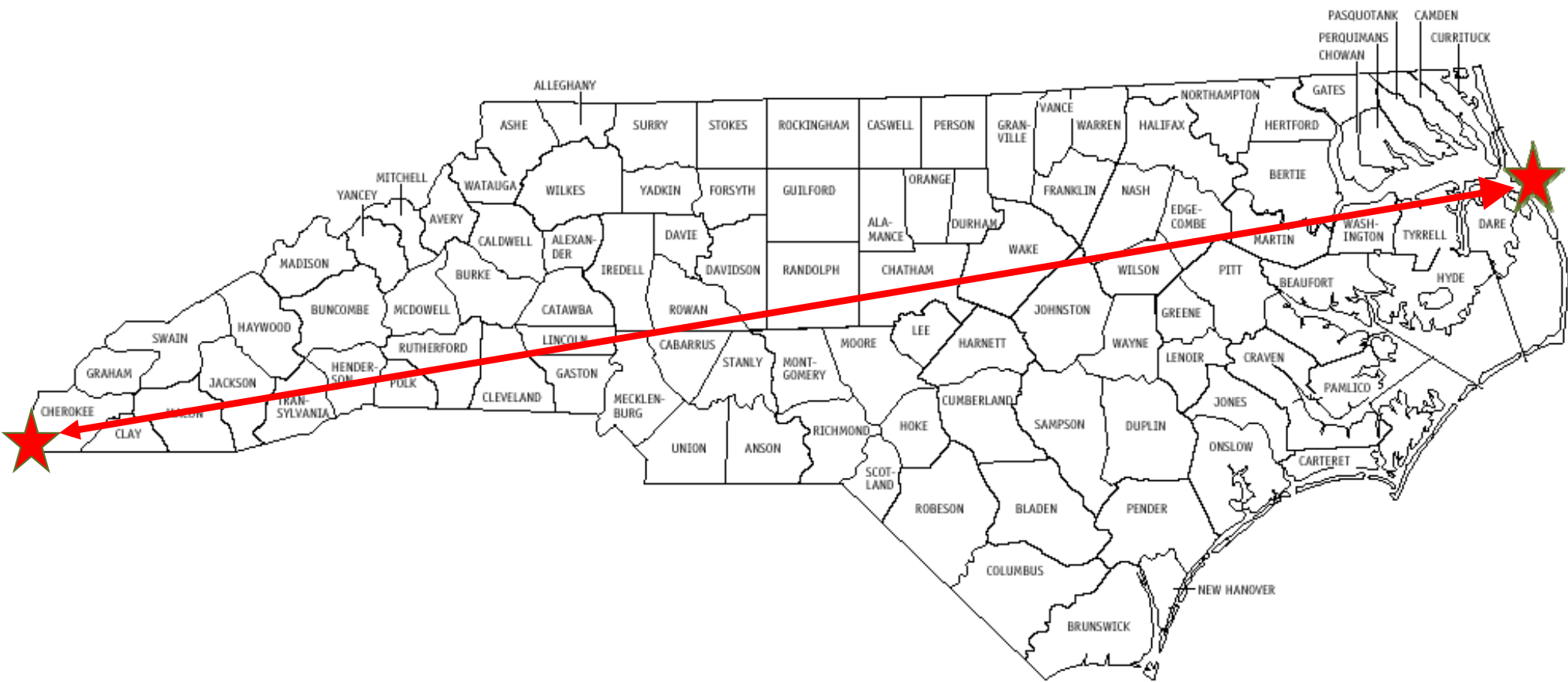
So Why NG-911?

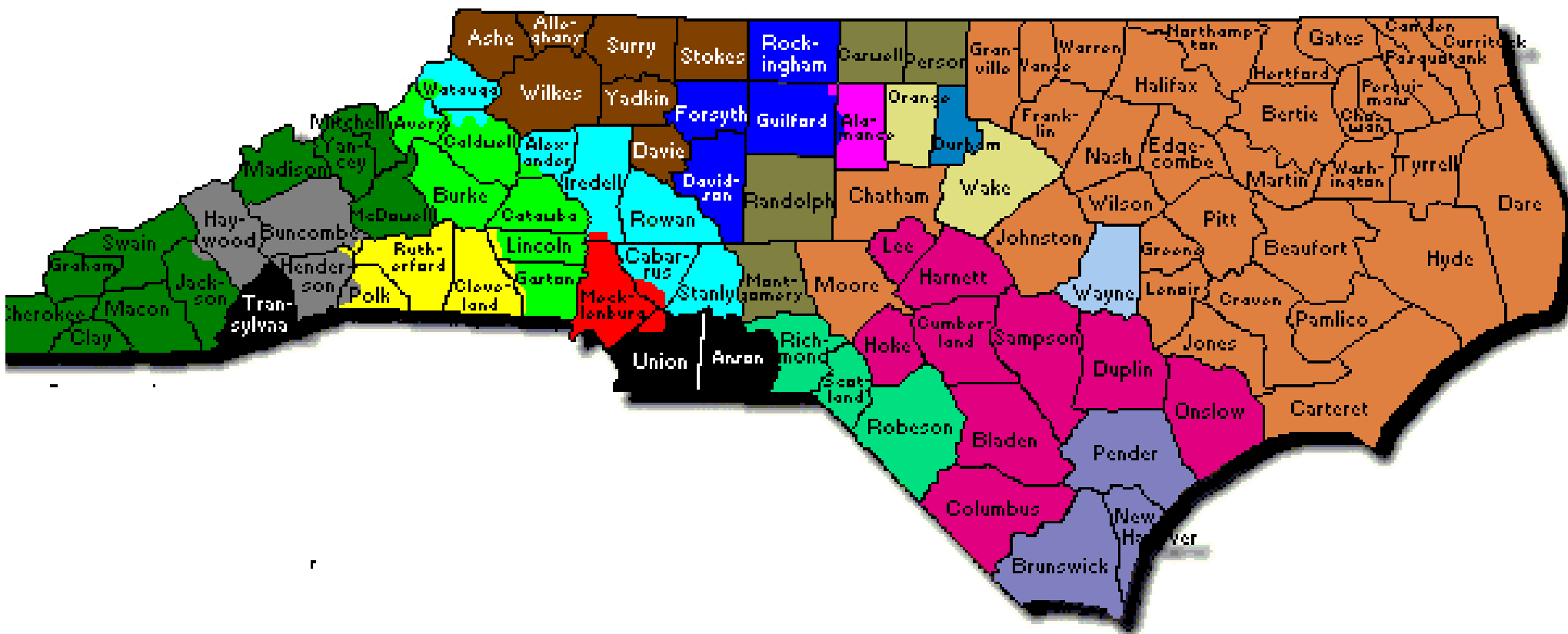
The decentralized control provided by a digital technology, IP-based, open network allows network packets to be rerouted around network failures creating greater reliability and redundancy



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Information Technology



NG911 – Are we there yet?

If a given IP-based system is not capable of all initial NG9-1-1 features and functions, it can certainly be considered to be on the path to full NG9-1-1, **but is still pre-NG9-1-1 in nature**

Roger Hixson 09/2008



§ 143B-1406(f)

(5) By July 1, 2016, a PSAP must have a plan and means for 911 call-taking in the event 911 calls cannot be received and processed in the primary PSAP. If a PSAP has made substantial progress toward implementation of the plan and means, the 911 Board may grant the PSAP an extension until July 1, 2017, to complete implementation of the plan and means. The plan must identify the alternative capability of taking the redirected 911 calls. This subdivision does not require a PSAP to construct an alternative facility to serve as a back-up PSAP.



(b) Allocation of Revenues. -- The 911 Board may deduct and retain for its administrative expenses a percentage of the total service charges remitted to it under G.S. 143B-1403 for deposit in the 911 Fund. The percentage may not exceed two percent (2%). The percentage is one percent (1%) unless the 911 Board sets the percentage at a different amount. The 911 Board must monitor the amount of funds required to meet its financial commitment to provide technical assistance to primary PSAPs and set the rate at an amount that enables the 911 Board to meet this commitment. The 911 Board must allocate ten percent (10%) of the total service charges to the Next Generation 911 Reserve Fund to be administered as provided in G.S. 143B-1407.



So What Is Next Generation 911 In North Carolina?

Information snapshot

- The 10,146,788 people living in the State generate approximately 7,577,065 911 calls every year, or about 0.75 calls per person per year
- 74.5% of the total calls were delivered over wireless, 7.8% were Voice over IP (VoIP) and 17.7% were from landline



So What Is Next Generation 911 In North Carolina?

Information snapshot

- The State is comprised of 880 911 answering positions in the State, about one for every 11,300 persons
- The present answering equipment is fairly current and up-to-date with legacy 911 practice



So What Is Next Generation 911 In North Carolina?

Information snapshot

- Disparate 911 equipment, networks and processes at the county level can discourage sharing of systems and resources
- The radio systems in the State consist of disparate networks (different frequency bands and different non-compatible technologies), making interoperability on the dispatch side of 911 (calls forwarded) challenging, and most PSAPs cannot dispatch other PSAPs first responders



So What Is Next Generation 911 In North Carolina?

Information snapshot

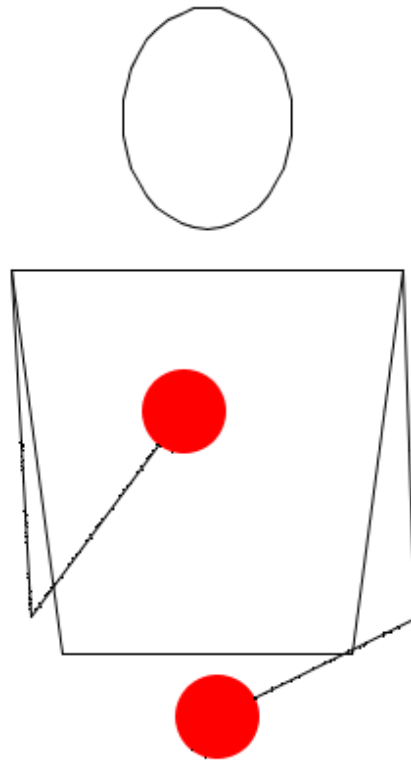
- A more effective and efficient method for allowing PSAPs to back each other up in an emergency is imperative

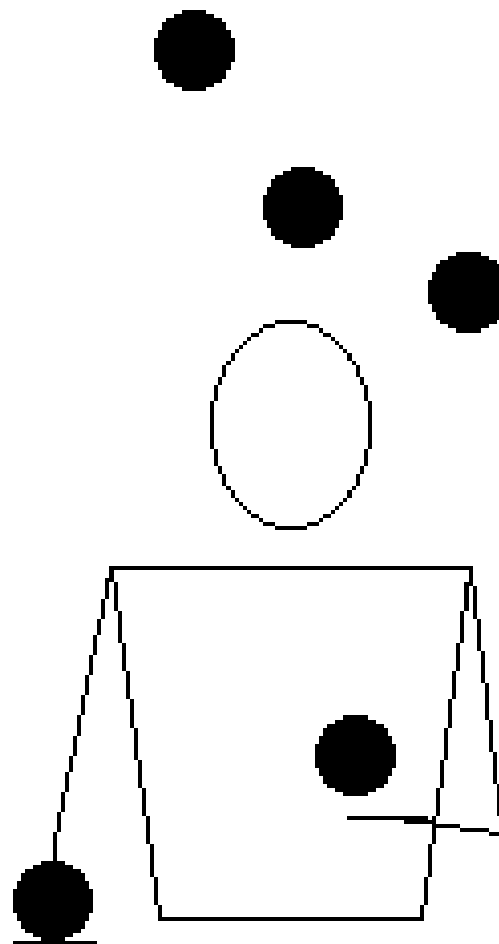


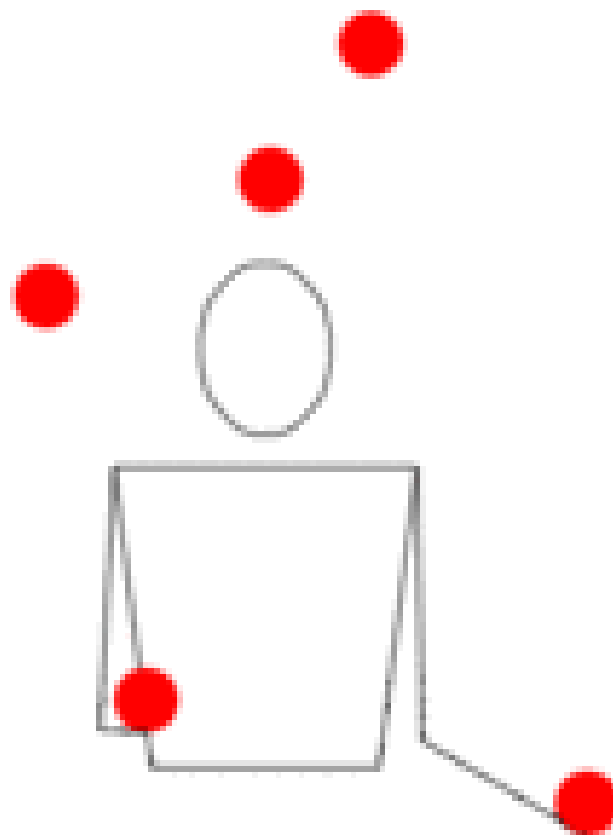
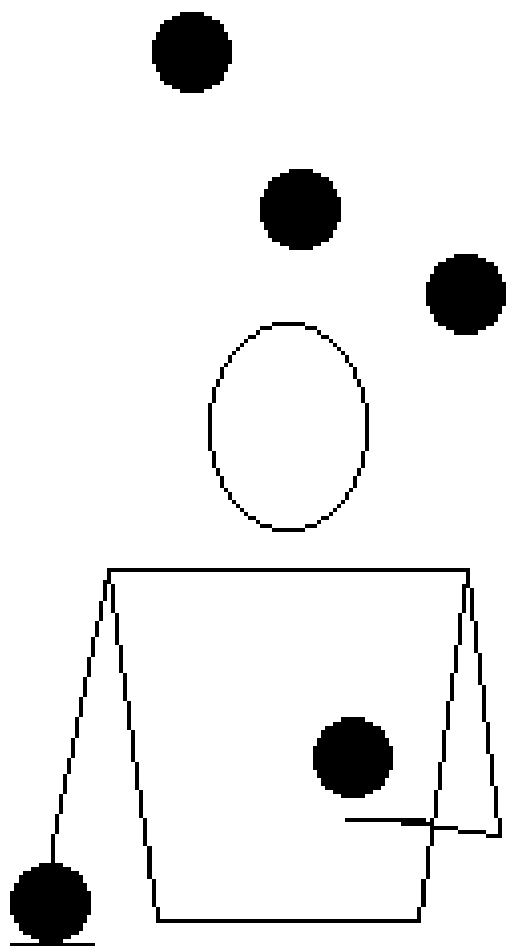
So What Is Next Generation 911 In North Carolina?

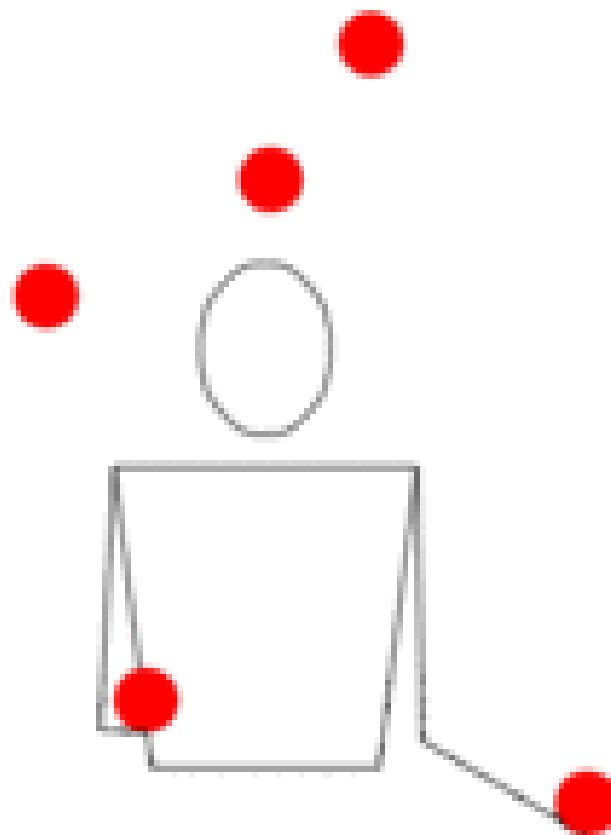
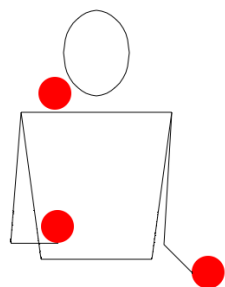
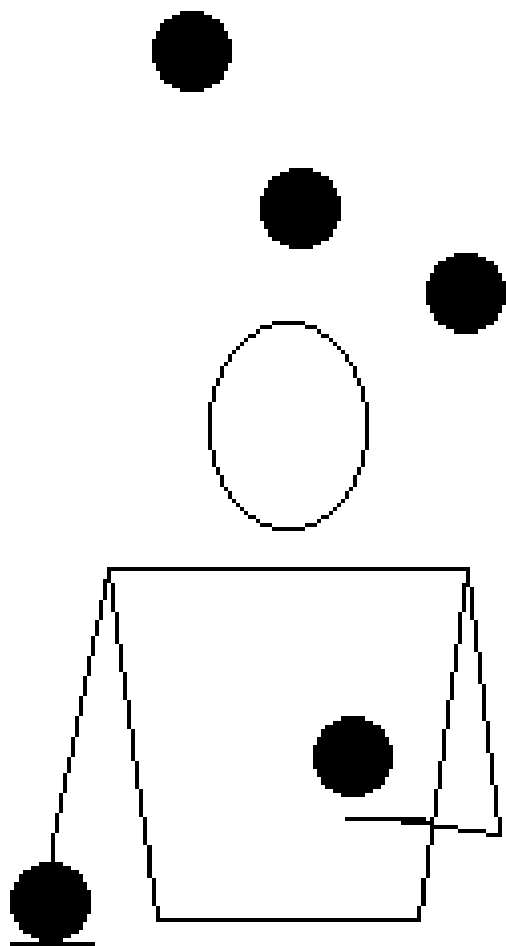
- Primary goals
 - Affordable network
 - PSAP's retain control for their systems
 - Scalable
 - Diversity
 - Redundancy
 - Legacy integration







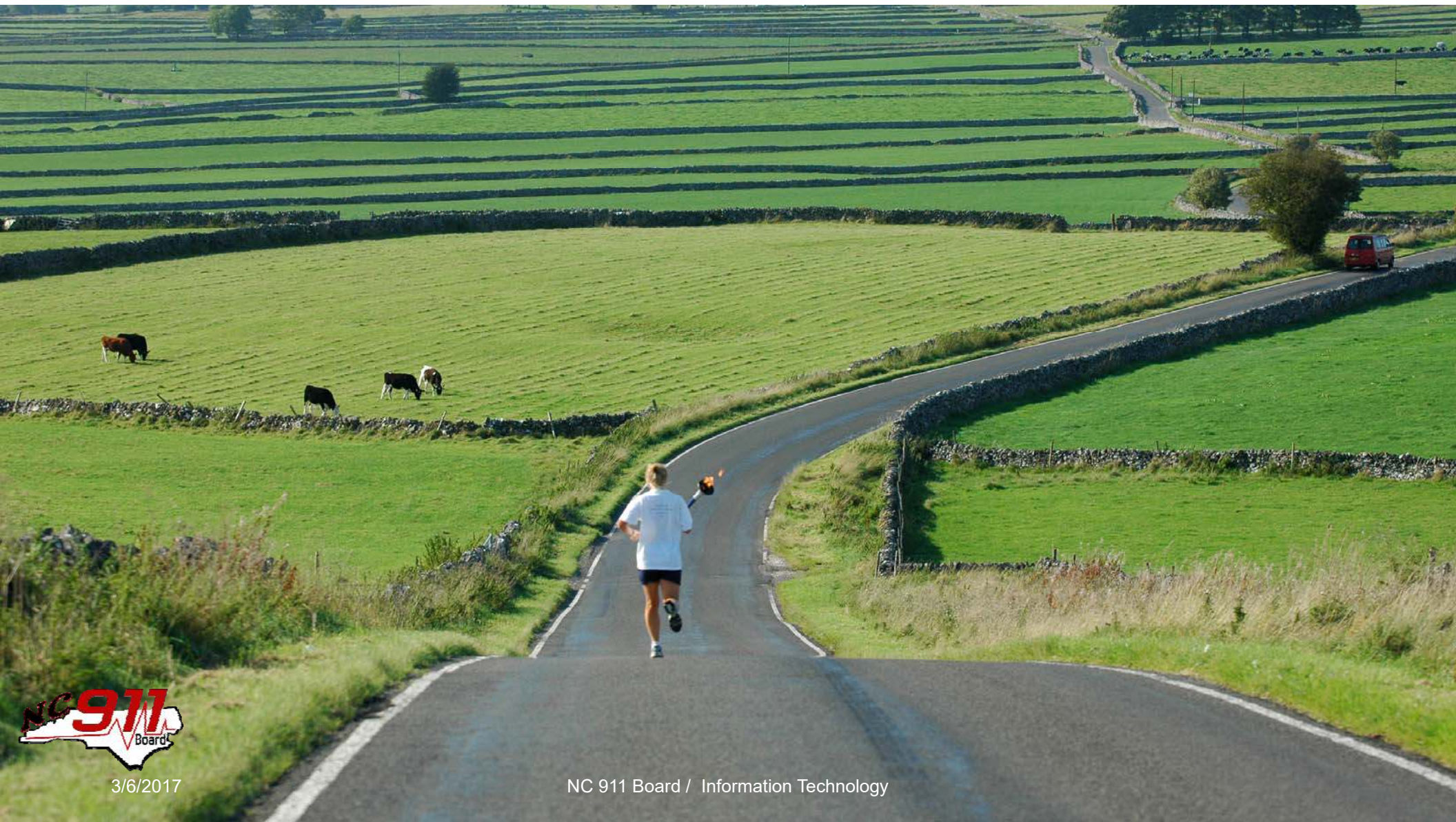




"The way to get started is to quit talking and begin doing."

-WALT DISNEY





3/6/2017

NC 911 Board / Information Technology

The Very Long Road

Request for Information (RFI)	<i>2014</i>
Request for Proposal (RFP) Technical Support	<i>2015</i>
Review other State's Implementations	<i>2015 / Ongoing</i>
Concept of Operations	<i>2015</i>
Cost Analysis	<i>2016</i>



Conceptual Designs

ESInet

2016

Hosted Call Handling CPE

2016

Network Management Assistance Center

2016

CAD Interoperability

?

Radio Interoperability

?

GIS

2017



Requests for Proposals

RFP #1 ESInet & Hosted Call Handling CPE *In Process*

RFP#2 Network Management Assistance Ctr *In Process*

RFP#3 GIS Normalization *Under Construction*



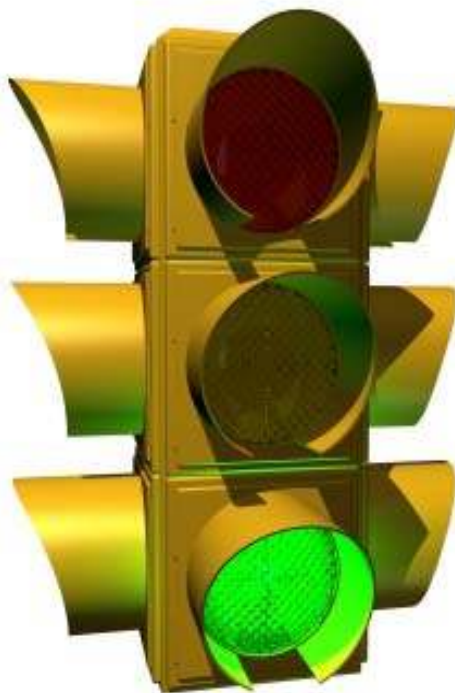
The Road Ahead

First PSAP on the ESIInet 2018

Last PSAP on the ESIInet 2020



Just the Beginning





Questions

Richard Taylor
Dave Corn

Richard.taylor@nc.gov
David.Corn@nc.gov

