

Orange County Countywide Radio Communications



Project Kickoff Meeting
November 7, 2016

Federal Engineering, Inc.
"Unleashing the Power of Technology"



Agenda

- Introductions
- Kickoff Meeting and Interview Schedule
- Project Objectives and Orange County expectations
- Project Scope
- Milestone/Deliverable Timeline
- Next Steps
- Discussion

Introductions



- Federal Engineering
 - Cliff Brown, Sr. Consultant, Project Manager
 - Brandon Badua, Sr. Consultant
 - Adam Nelson, Sr. Consultant
 - Travis LePage, Director
 - Scott Wiggins, Assistant Vice President

- Orange County



Kick-Off Meeting and Interview Schedule



- November 7, 2016
 - Kickoff meeting – 6pm
- November 8, 2016
 - Law enforcement
 - Vol. Fire (evening)
- November 9, 2016
 - Fire
 - Vol. Fire (evening)
- November 10, 2016
 - Fire, Schools, dispatch site visit
 - Vol. Fire (evening)
- November 11, 2016
 - Vol. Fire, Owasa, Animal Control
 - Solid Waste, Public Works



Project Objectives

- Review existing system to determine if sites and/or equipment can be used in a replacement system
- Define user needs and requirements for the replacement system
- Develop alternatives for replacement system
 - Coverage, capacity, interoperability
 - Backhaul, migration, training, budgetary estimates
 - RF coverage workshop

Project Objectives (cont'd)

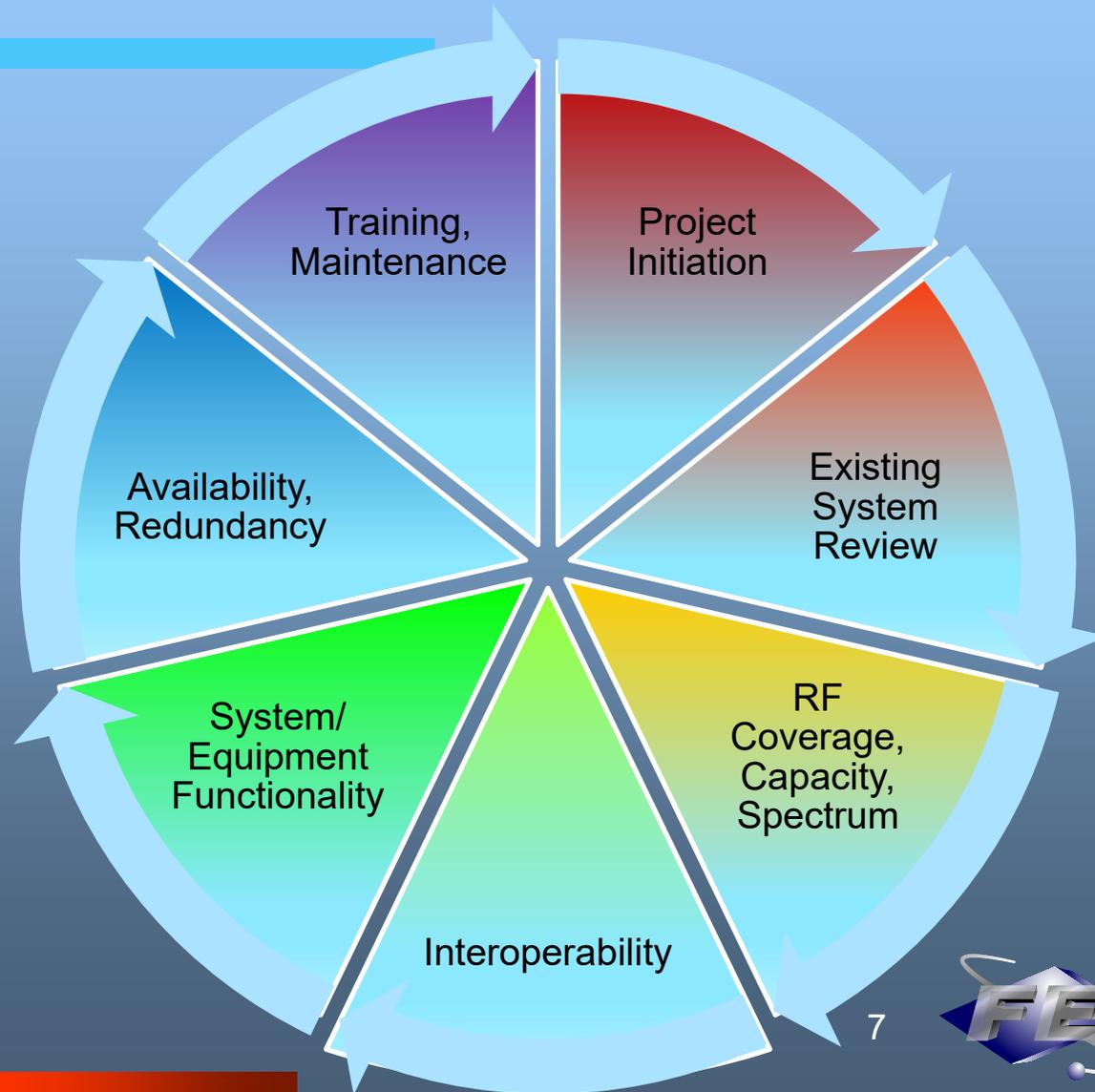


- Select system solution that best meets Orange County requirements (technical, budgetary, schedule)
- Procure replacement system, via competitive RFP process



Project Scope – Phase 1

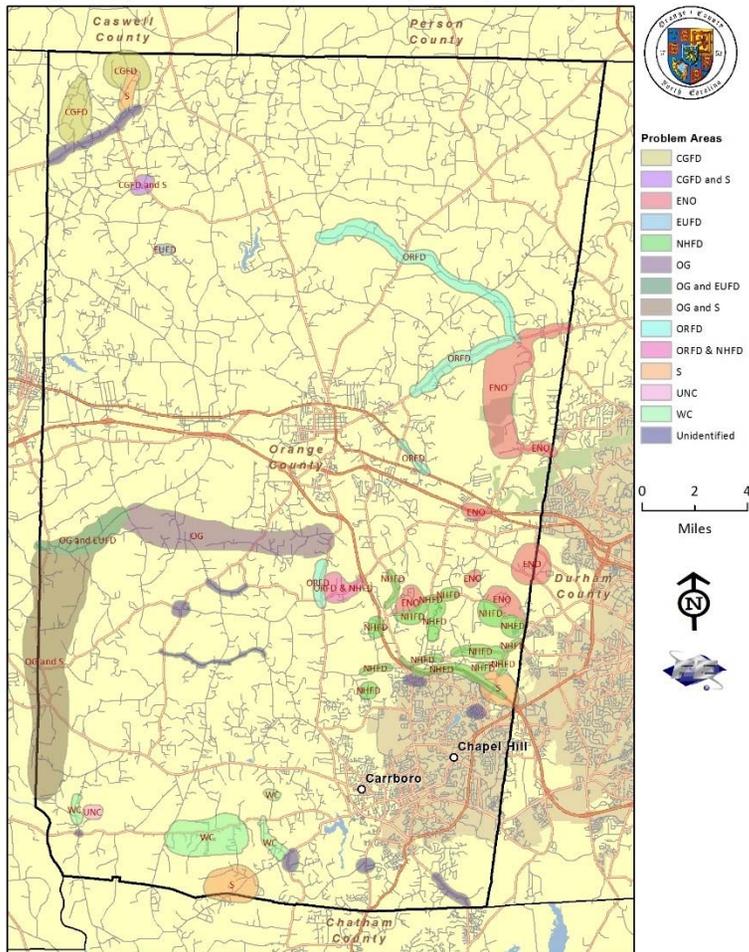
Needs
Analysis
and
Alternatives
Analysis



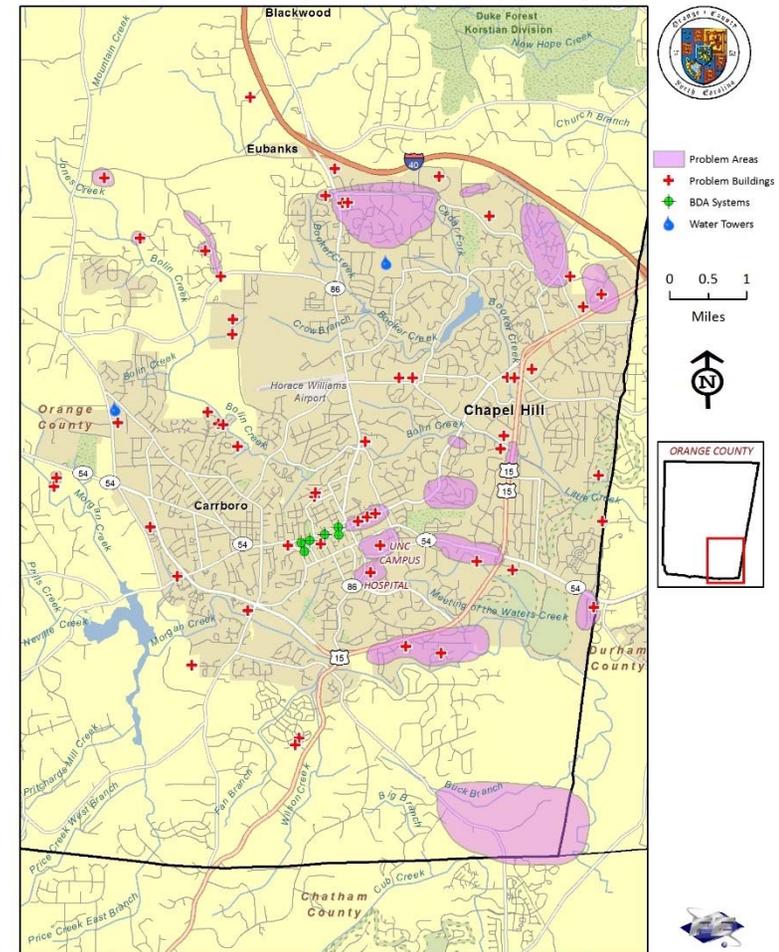
Previous Study Coverage Problem Areas



Orange County, NC - Poor Coverage Areas as Reported by Agencies, Map 1



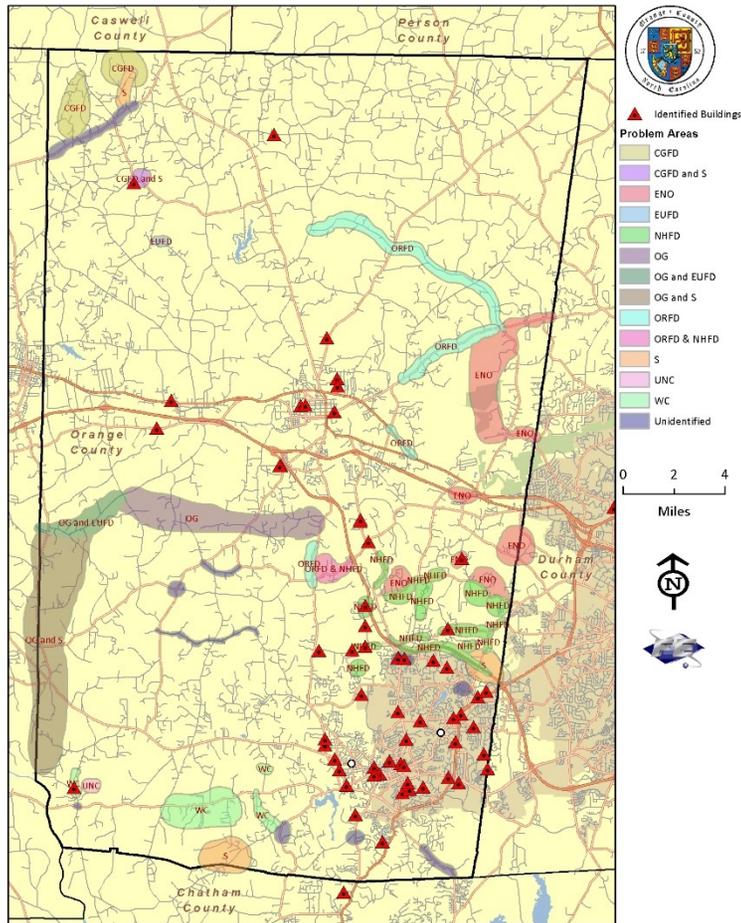
Orange County, NC - Poor Coverage Areas as Reported by Agencies, Map 2



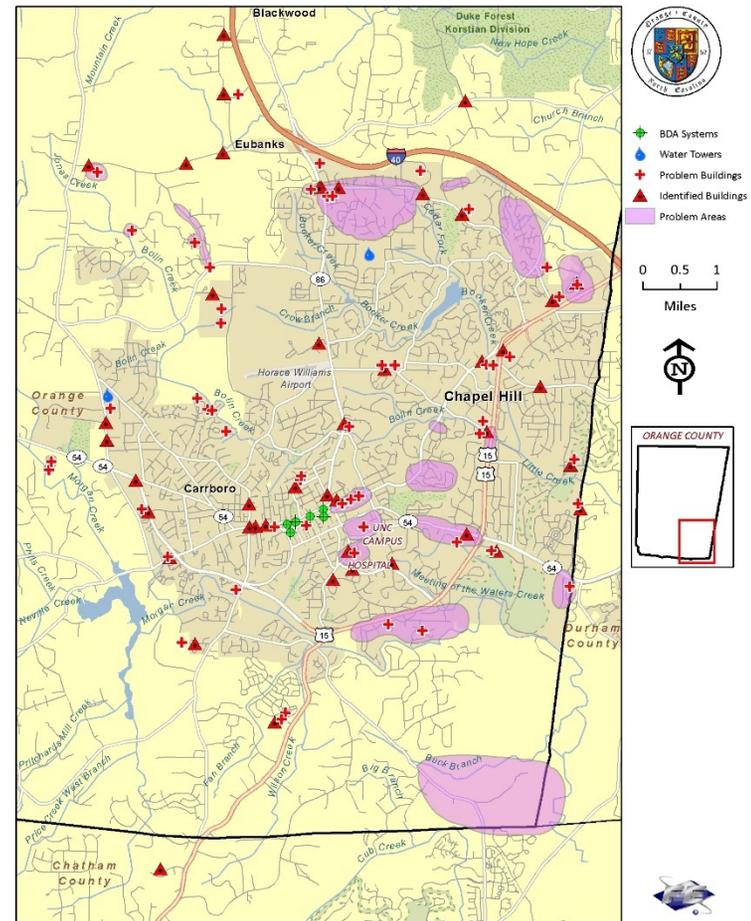
Previous Study – Critical Buildings



Orange County, NC - Poor Coverage Areas and Reported Buildings, Map 1



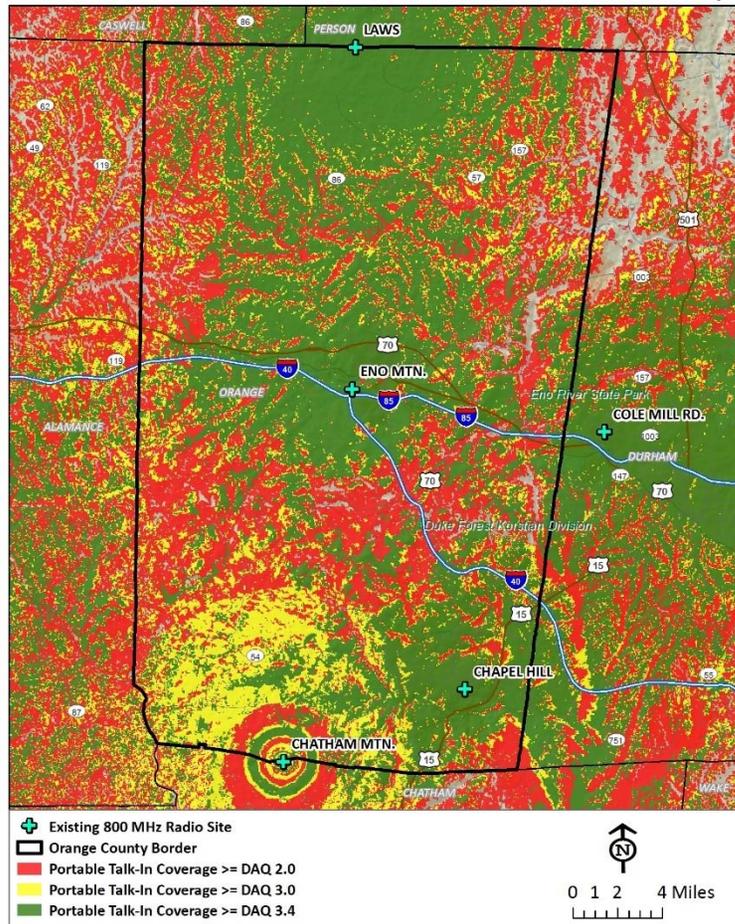
Orange County, NC - Poor Coverage Areas and Reported Buildings, Map 2



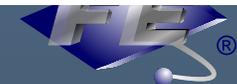
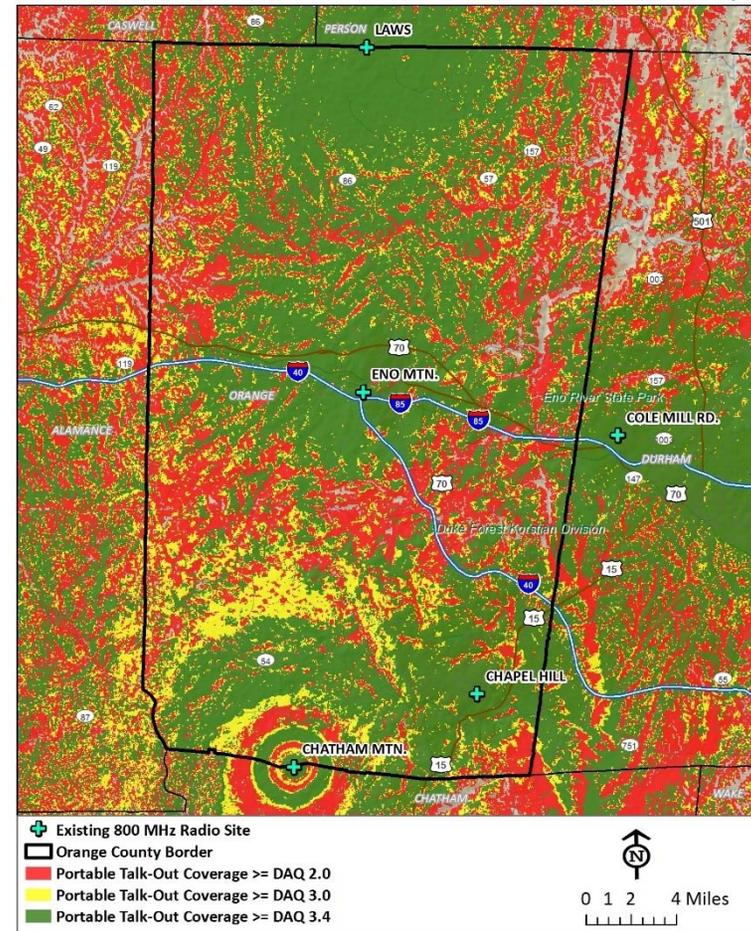
Previous Study – VIPER Coverage



Orange County, NC - Existing VIPER Coverage
800 MHz Analog Coverage; Portable Talk-In (Radio to Repeater) at Various Quality Levels



Orange County, NC - Existing VIPER Coverage
800 MHz Analog Coverage; Portable Talk-Out (Repeater to Radio) at Various Quality Levels



Project Scope – Phase 1

Alternatives analysis

- Identify solutions that meet coverage, capacity, and functional requirements – conduct interactive RF coverage workshop
- Conduct spectrum planning, define simulcast vs. multicast, investigate system sharing
- Define interoperability, training, ongoing maintenance, high-level migration plans
- Develop estimated costs for alternatives

Project Scope – Phase 1



Alternatives analysis (cont'd)

- Define multiple procurement scopes (ownership, which agency procures subscribers) for review
- Present Needs and Alternatives to Orange County – draft report (*Radio System Alternatives Report*)
- Select system solution (Orange County)
- Incorporate Orange County comments and submit final version of report



Project Scope – Phase 1



Recommendations Report

- Based on Orange County selected solution
- Draft report presented to Orange County team and committee
- Revised based on Orange County input
- Report will form the basis for RFP development



Project Scope – Phase 2

RFP development

- Based on functional requirements and approved Recommendations Report
- RF coverage (outdoor and in-building), capacity
- System availability, no single point of failure, failure modes
- Interoperability requirements

Project Scope – Phase 2



RFP development (cont'd)

- Training, warranty, and maintenance
- Orange County terms and conditions
- Proposal evaluation criteria and weighting
- Draft for Orange County review
- Final version for release/advertisement



Project Scope – Phase 2



Procurement Support

- Pre-Bid Meeting
- Vendor questions and answers
- Addenda to RFP (technical)
- Review of vendor Proposals
- Clarifications from vendors as required
- Vendor proposal scoring by Orange County
- BAFO presentation support
- Negotiation assistance



Project Milestone Timeline



| Estimated Date | Project Milestone/Deliverable |
|---|---|
| October 10, 2016 | Contract Award |
| October 18, 2016 | Request for Information (submitted) |
| November 7-11, 2016 | Kickoff Meeting, Interviews, Site Surveys |
| February 6, 2017 February 8-9, 2016 February 16, 2017 | System Alternatives Draft Report, Presentation of Draft Report System Alternatives Final Report |
| March 3, 2017 March 7, 2017 March 17, 2017 | Recommendations Draft Report Presentation of Draft Recommendations Recommendations Final Report |
| April 17, 2017 May 1, 2017 | RFP Draft Submitted RFP Final Submitted |
| July 17, 2017 | Procurement Support Complete (Proposals due) |
| August 29, 2017 | Proposal Reviews/Negotiation Complete, Contract Award |

Next Steps

- Interviews – this week
 - Fill out the Questionnaire for use at interviews
 - Be ready to discuss existing system and future needs
- Collect contact information for interoperability, and possible system-sharing partners
- Define and discuss potential system alternatives
- Prepare RF coverage predictions, and conduct RF workshop

Discussion