

EAST HADDAM RADIO PROJECT

EMERGENCY MANAGEMENT

SUB-COMMITTEE

BOARD OF FINANCE

PRESENTATION

April 22, 2015

EAST HADDAM RADIO PROJECT

- Sub-Committee Members
 - Craig Mansfield – Emergency Management
 - Joe Szczech – Emergency Management
 - Emmett Lyman – Board of Selectmen
 - Robert Bennett – Board of Finance
 - Bruce Dutch – Board of Finance
 - Kevin Cavallo – East Haddam Ambulance
 - Shawn Daigle – East Haddam Fire Department
 - Ray Swol – East Haddam Fire Department
 - Rich Toolan – East Haddam Public Works

EAST HADDAM RADIO PROJECT

Project Timeline

- Project discussions began after the severe challenges faced during Hurricane Irene
- Committee began meeting in early 2012
- A review of surrounding town systems was completed
- April 2012 committee sent out an RFP for interested vendors to assist with project
- Three vendors were interviewed and Tactical Communications selected
- August 2014 provided BOS/BOF with update and anticipated cost of system

EAST HADDAM RADIO PROJECT

Issues with current system:

- Daily dispatch and communication issues with Fire and EMS calls not being received by responders – PUBLIC SAFETY ISSUE
- EXTREMELY limited communications between members, dispatch center when responding to calls – SAFETY ISSUE
- Difficulty with mutual aid with other towns because most have switched away from Low band (Band EH currently uses)

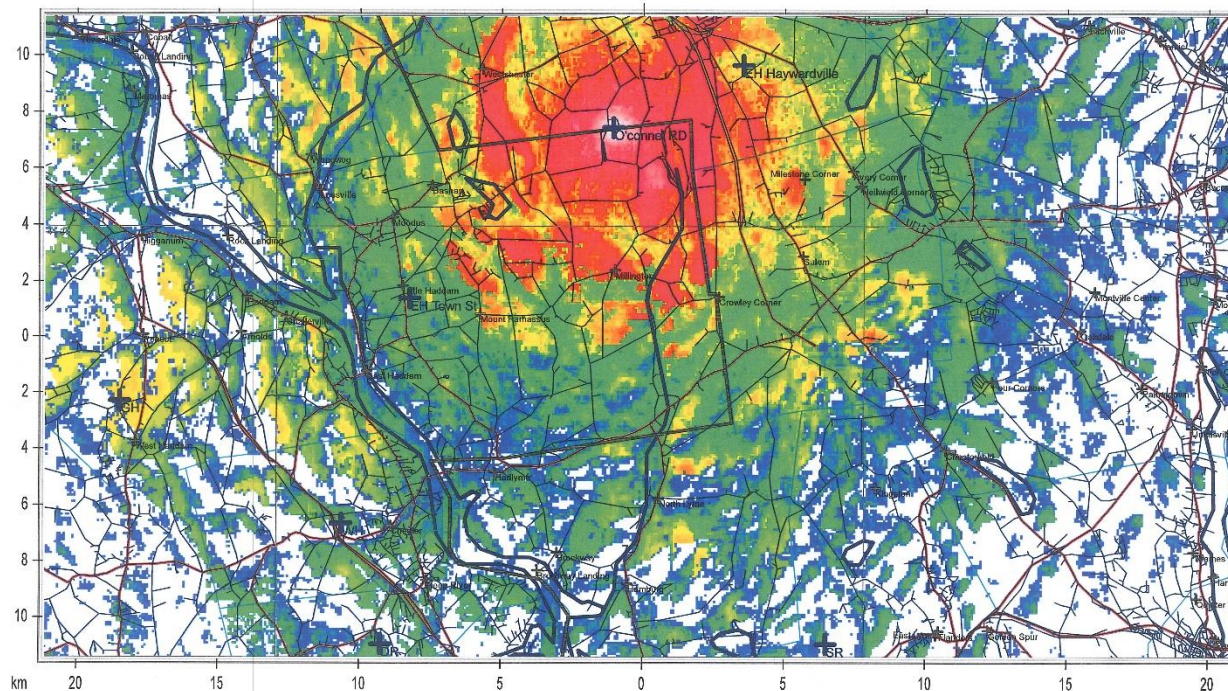
Current Radio System Coverage

Tactical Communications, Inc.

East Haddam 46.18 Coverage

Monday, April 06, 2015

KX 46.18 110 Watts



Red and Yellow - Reliable Pager/Portable and Mobile Coverage
Green - Reliable Mobile, probable Portable and spotty Pager Coverage
Blue - Marginal Mobile, unreliable Portable and Pager Coverage
White - Minimal or No coverage

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- Initial RFP System requirements:
 - Designed to provide radio coverage and support interoperability between the following groups:
 - East Haddam Fire Department/Fire Police
 - East Haddam Ambulance
 - East Haddam Public Works
 - East Haddam Police
 - East Haddam Schools
 - East Haddam Emg Mgt/Town Government

EAST HADDAM RADIO PROJECT

- Initial RFP requirements (continued):
 - System design of 100% mobile coverage and 95% portable coverage throughout town
 - Provide coverage to Ambulance when transporting to local area hospitals
 - Provided interoperability with our surrounding towns for mutual aid
 - Connectivity to local dispatch center (KX)
 - Ability to partner with the State of CT Department of Public Safety

EAST HADDAM RADIO PROJECT

- Initial findings
 - East Haddam terrain makes any system design a challenge and we will ultimately need a multi-site system to meet coverage requirements in RFP
 - (several sites in town looked at to get best coverage for least \$)
 - Based on the initial RFP coverage requirements the system construction would be financially impossible for the town to support. (\$4-\$5 Million est.)
 - Finding suitable frequencies to support the system would also be very difficult
 - Project will need to be multi-phased over several years for town to support.

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Revised Scope / Current Project Direction

- Committee agreed that meeting initial coverage requirements would be cost prohibitive.
- Continue to use low band system (EMS out of town/backup)
- Group hired a consultant to coordinate frequency licensing. (Town was licensed on 4 freq's at two sites)
- Work within 4 frequencies licensed to town, plus school frequency.
- Migrate from current system to a multi-site system over a three year time period.
- Provide interoperability with area mutual aid towns.

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- Similar Area Systems and Cost
 - Guilford (49 Sq. miles) – \$2.5 Million
 - Old Saybrook (15 Sq. miles) - \$2.8 Million
 - Waterford (32 Sq. miles) - \$7.5 Million
 - Groton (45 Sq. miles) - \$1 Million
(1 channel upgrade to existing system)
 - Clinton (19 Sq. miles) - \$3.4 Million
 - New London (11 Sq. miles)- \$2.5 Million
(add on to existing system)
 - **East Haddam (57 Sq. Miles)** - \$2.1 Million Proposed

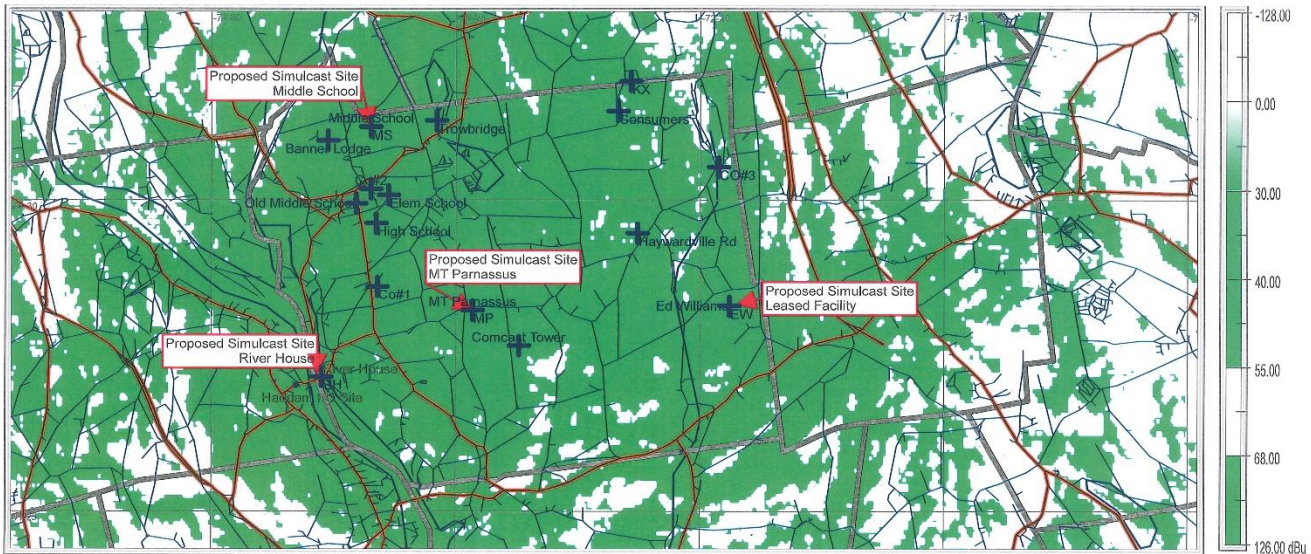
EAST HADDAM RADIO PROJECT

Tactical Communications

Town of East Haddam UHF Simulcast

Revised March 3, 2014

4-site simulcast. Talk-Out Predicted Coverage with Proposed Sites: RH, MP, MS, EW



Mobile Service Area 30 dBu Minimum Threshold

Map Scale: 1:148315 1" = 2.34 mi V/H Size: 9.79 x 20.86 mi

Preliminary

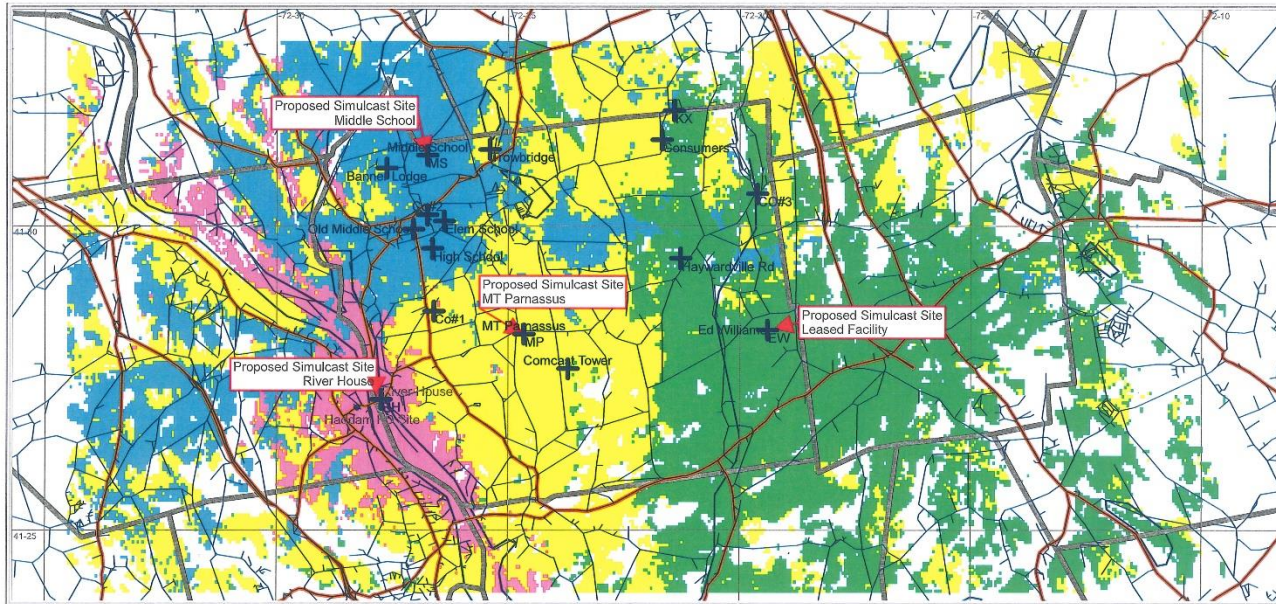
EAST HADDAM RADIO PROJECT

Tactical Communications

Town of East Haddam UHF Simulcast

Revised March 3, 2014

4-site simulcast. Talk-Out Predicted Most Likely Server with Proposed Sites: RH, MP, MS, EW



Mobile Service Area 30 dBu Minimum Threshold

Map Scale: 1:148315 1" = 2.34 mi V/H Size: 11.06 x 23.58 mi

Preliminary

EAST HADDAM RADIO PROJECT

Current Status of Project

- Town has limited amount of time to get first two sites online based on FCC rules
 - (08/15 for two freq and 11/15 for two freq)
- Money is needed to purchase equipment for these two sites immediately.

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- Immediate needs (2015)
 - Continue working with DPS to complete construction of Mt Parnassus Site and installation of all town purchased equipment. (MAJOR COST SAVINGS-estimate \$40K/year)
 - Construct and bring River area site online
 - Finalize System Design for additional sites (phase 2/3) using available resources where possible

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- Long term (2016-2017)
 - This project will be multi-year/phased (total of 2-3 years)
 - Build out two additional sites to provide adequate coverage throughout town
 - Town needs to make a multi-year funding commitment to this project or project will not succeed

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- Funding Currently Required:
 - River House Site cost - \$80,000
 - Estimated MT Parnassus Site \$620,000
 - This includes equipment cost to link with two site
- Additional Funding Required:
 - Estimated \$700K for each of next 2 years in Capital Cost
(total project cost estimated at \$2.1 Million)
 - Ongoing maintenance, fiber/phone line cost (\$TBD / year) – working to use in place infrastructure where ever possible to reduce ongoing cost

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QUESTIONS?