

# Radio Projects Status

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# Radio Steering Committee

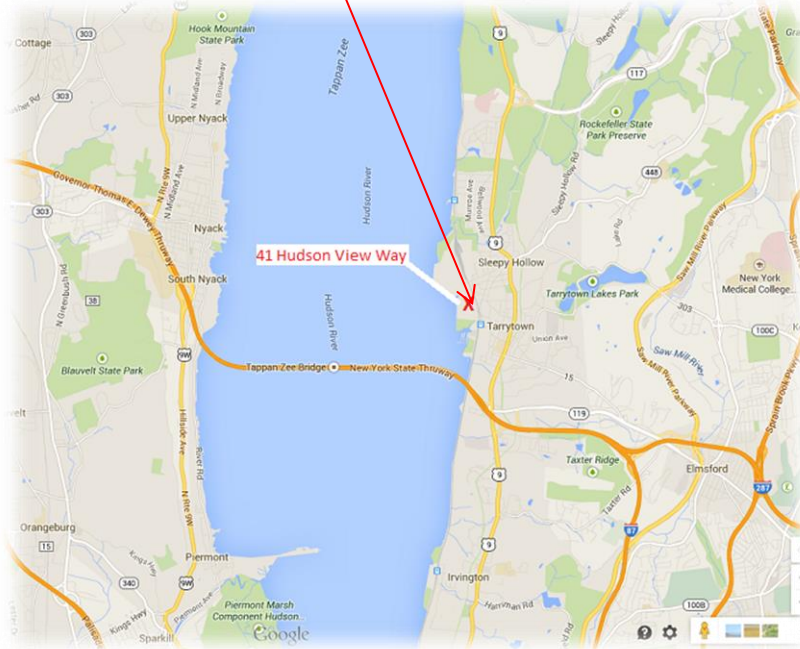
- \* Chaired by the Deputy County Executive.
- \* Commissioners from all involved County departments meet monthly.
- \* DOIT Radio Group is responsible for project management and directing all major radio projects:
  - \* Mt Avenue, Mt Kisco (DPS Radio System Extension)
  - \* Guard Hill (Near Completion)
  - \* SICG3 (Microwave & VTAC)
  - \* Radio systems replacement project
    - \* UHF Trunked System
    - \* VHF Low Band Paging System

# Current Projects

- \* Tappan Zee Interop System (Completed)
- \* Guard Hill Site Refurbish (Near completion)
- \* Statewide Interoperable Communication Grant Round 3
  - \* Microwave Network
  - \* Interoperable Radio System
- \* Paging System Replacement (Low Band)
- \* Trunked System Replacement

# Tappan Zee Bridge Interop System

## Interop system



- In service and successfully used for several incidents.
- Ability to patch VHF, UHF and 700/800 system users on National I/O channels.
- Activated by 60-Control when required.

# Guard Hill Refurbish



- \* Replaced aged tower, generator and internal electrical systems.
- \* Improved grounding infrastructure.
- \* Installed microwave and fiber. (Redundancy)
- \* Installed DES radios to replace those located at Northern Westchester Hospital Center.
- \* Installed remote receivers for County DPS.
- \* All radios are operational.
- \* Final punch list being completed.

# Guard Hill Radio Systems

## Existing

- \* Bedford Police Department
- \* Bedford DPW
- \* Katonah/Bedford VAC
- \* New York State DOT

## Added

- \* DES VHF Base Stations (previously at NWHC)
- \* VTAC
- \* UTAC
- \* DPS Remote Receivers (F1 & F3)

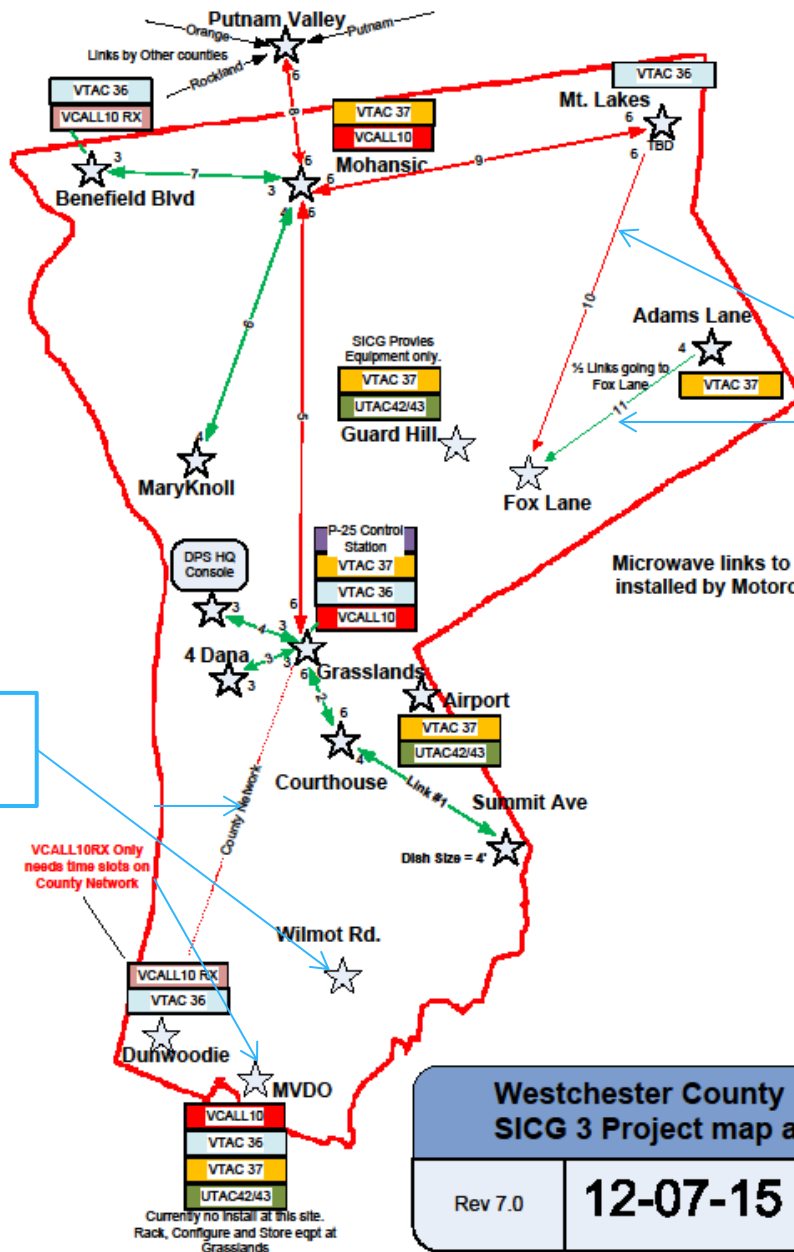


# Statewide Interoperable Communications Grant SICG Round 3

- Funding:
  - NYS Division of Homeland Security and Emergency Services (DHSES)
  - DES obtained award of \$5,991,125.
- Scope:
  - Implement a microwave network as backup to fiber network. (Allow for system redundancy)
    - Funding and time limitations prevented microwave installation at several sites.
  - Installed VTAC National Interoperability Channels. (multiple sites)
  - Establish microwave link with Westchester, Rockland, Putnam, and Orange Counties (Future system capabilities)
- Current Status:
  - Equipment installed at all many sites.
  - Microwave links and VTAC are active but not carrying traffic pending final acceptance testing.
  - Anticipated closeout is second quarter 2017.



Microwave links not installed  
pending new Dunwoodie Tower



Sites will be added  
when tower sites  
become available.

Microwave links not installed  
pending new Fox lane Tower





# New Radio System:

## Near Term Challenges

- \* Most County trunked radio infrastructure will reach end of life Dec. 2018 (Best effort service). Includes:
  - \* Fire/EMS/DOT UHF trunk system.
  - \* 60 Control dispatch/ paging system. (Consoles)
  - \* County Police dispatch and interop systems (F1/F3).
  - \* Transportation CAD/AVL system.
- \* T-Band (UHF) frequencies will be withdrawn in 2023.
  - \* Used in 11 metropolitan areas nationwide.
  - \* Current law says all public safety users must vacate these frequencies.

# New Radio System: Near Term Challenges

- \* VHF (Low Band) Paging system modernization and expansion.  
(Will not address other paging bands or independent systems)
- \* Limited availability of Low Band pagers and base station transmitters.
- \* Improve signal saturation locally.
- \* Working with a consultant to address frequencies.
- \* Countywide paging system not feasible. May best be served by creating multi battalion paging areas.

# Fire, EMS, DOT Radio System Replacement (BIT 32)

- \* Approved for \$30M Over 5 Years.
  - \* Fire/EMS/Transportation UHF Trunk System
  - \* 60 Control Dispatch/Fire Paging System (Low Band)
  - \* County Police Dispatch and Interop System (F1/F3)
  - \* Voice Portion of Transportation CAD/AVL System
- \* Federal Engineering Consultant Group retained.
  - \* Analyze County needs.
  - \* Prepare a migration plan.
  - \* Prepare a Request For Proposals.

# Replacement System

## Construction in Three Stages

- Stage 1 (2018-2019)
  - Replace existing systems with new P25 UHF equipment
  - Replace mobiles, portables and control stations
  - Utilize existing sites
  - Maintain same coverage
  - Implement new paging system (multi site / multi frequency).
- Stage 2 (2020-2023)
  - Add sites to achieve “on-street” portable coverage
  - Move County DPS to the trunk system
  - Move to 700 MHz if T-Band will be reallocated
  - Add additional paging sites if required.

# Replacement System

## Construction in Three Stages

- Stage 3 (2024-2028)
  - Continue to add sites to achieve “in-building” portable coverage
  - Invite local police departments on to the trunk system
  - Decommission legacy paging system
- Fire Ground Frequencies & Operations Remain Unchanged





# Next Steps

## Timeline:

- \* Prepare and issue RFP by August 2017
- \* Select vendor by June 2018
- \* Complete Stage 1 by December 2019

## Questions?