



# A SAFER, BETTER CONNECTED CITY OF CHATTANOOGA AND HAMILTON COUNTY

CHATTANOOGA & HAMILTON SEE IMPROVED INTEROPERABILITY, SAFETY, AND COST-SAVINGS THROUGH A REGIONAL UPGRADE TO ASTRO® 25 AND PARTNERSHIP WITH THE STATEWIDE SYSTEM.

## THE CHALLENGE

The City of Chattanooga & Hamilton County had a decision to make. Their analog radio system was nearly 20 years old and rapidly approaching the end of its life cycle.

Their outdated systems left much to be desired when it came to mission critical communications. Interoperability with agencies beyond county lines was frustratingly difficult. Both Chattanooga and Hamilton County had functioned as virtual “islands”, as agencies outside the County operated on a hodgepodge of different systems that lacked the interoperability and capacity users needed. At times, communication between agencies was near impossible.

They needed an upgrade—one that would provide increased coverage and interoperability for the counties surrounding the state’s nuclear facilities.



### SOLUTION

- Upgrade to ASTRO® 25 system
- Joining the statewide Tennessee Advanced Communications Network (TACN)

### PARTNERS

- State of Tennessee
- Anderson County
- Bradley County
- Blount County
- Knox County
- Loudon County
- Meigs County
- McMinn County
- Rhea County
- Roane County
- Catoosa County GA
- Dade County GA
- Walker County GA
- Whitfield County GA

### KEY BENEFITS

- Vastly improved coverage and reliability
- Better managed interoperability between counties
- Increased intra-operability between agencies within counties
- Reduced equipment and maintenance costs
- More manageable system performance
- Significant improvements in officer safety in the region



## THE SOLUTION

### INVESTING IN A P25 NETWORK FOR THE REGION

Recognizing how critical clear communications and interoperability with other agencies was to the well-being of first responders and citizens, the city of Chattanooga and Hamilton County decided to partner with Motorola Solutions to rectify the situation.

With the help of federal grants obtained by the State of Tennessee, the region built out a communications system called the "Tennessee Valley Regional Communications System (TVRCS)." This new system would provide the capacity and interoperability Chattanooga, Hamilton, and the surrounding cities and counties needed to protect high-risk areas in Southeastern Tennessee. Soon thereafter, the State of Tennessee invested in a statewide system that both Chattanooga and Hamilton joined, which included ten additional counties in Tennessee and four counties in Georgia.

The result was a system with vastly improved coverage, reliability, and interoperability that crossed county and state lines. Subscribers gained the cutting-edge opportunities of today's APX radios. Text messaging, GPS tracking, smart battery management, and louder, clearer audio were just a few of the new advantages offered by the APX mobiles and portables purchased.

“From the Governors’ office to Highway Patrol, everyone had situational awareness to prevent copycats on other bases....in case this was bigger than just one guy”

**Patrick C. Rollins**  
System Manager / Regional Interoperability Coordinator  
TVRCS Mobile Communications Services  
City of Chattanooga

# THE RESULTS

INCREASED SAFETY, QUICKENED RESPONSE AND GREATER EFFICIENCY WITH REDUCED COSTS



## INCREASED INTEROPERABILITY

With an ASTRO 25 system, users in the Tennessee Valley Region can access and share information in collaboration with valuable resources across county and state lines, more quickly and efficiently—even when those resources are using non-radio devices such as smartphones, landlines, and desktop computers.

The benefits of this new level of interoperability were thrust into the spotlight in 2015, when a lone terrorist targeted a military base in Chattanooga. Prior to adopting the digital system, inter-agency communication would have been disjointed at best, restricted to cell phones and landlines. On the ASTRO 25 system, state and local officials were able to monitor the situation in real-time. Amidst the chaos, everyone from the Governor's office the Highway Patrol had the situational awareness they needed to direct strike teams, ensure this was not a multi-prong attack, and discourage copycat attacks in the moments that followed.



## A MORE COST-EFFECTIVE SYSTEM

Another one of the many benefits of a shared system is the distribution of costs. By sharing master sites spread throughout the state, each city and county onboard can now reduce equipment expenses. Additionally, the shouldering of maintenance and programming functions by the state further reduced costs at the agency level—a move that also allowed for better-managed system performance, and improved system and subscriber reliability. Ultimately, this resulted in a lowered total cost of ownership at every level.



## MORE MANAGEABLE CAPACITY

In the event of a large-scale incident or disaster, Chattanooga and Hamilton County's first responders now have the flexibility for more capacity when they need it. Thanks to advanced channel management technology and systems engineering, the new P25 system allows for increased load to ensure the most urgent communications will get through.

When tornadoes crisscrossed the state in 2011, the system was still in the early stages of adoption. However, users of different agencies were able to deal with the sudden increased demand for capacity more effectively than would have been possible a few years prior.



## LOUDER, CLEARER AUDIO

On the P25 digital LMR system, first responders have seen significant improvement in audio quality. The advanced devices used on the system allow personnel to communicate clearly wherever they are—regardless of environment—potentially saving lives.




## IMPROVED OFFICER SAFETY

With better reliability, system performance, and interoperability between agencies, the city of Chattanooga and Hamilton County have made significant improvements in officer safety in the region. Officers are now able to provide backup and get help if needed from not only their own agency but other State and local agencies as well.







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For more information For more information on the Tennessee Advanced Communications Network, visit us at [motorolasolutions.com/tennessee](http://motorolasolutions.com/tennessee) or to learn more about ASTRO 25, please visit [motorolasolutions.com/astro25](http://motorolasolutions.com/astro25)



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