

October 1, 2018

The Honorable Hugh K. Leatherman, Sr.  
Chairman, Senate Finance Committee  
111 Gressette Building  
Columbia, South Carolina 29201

The Honorable W. Brian White  
Chairman, House Ways and Means Committee  
525 Blatt Building  
Columbia, South Carolina 29201

Dear Chairman Leatherman and Chairman White:

Pursuant to Proviso 93.19 – D500 (DOA) of the 2017-2018 Appropriations Act, I have enclosed information regarding First Responder Interoperability with the statewide Palmetto 800 Network and Private County 800 MHz radio systems. As directed by the proviso, the report identifies all State Agencies and Local Governments participating in the statewide 800 MHz radio interoperability project.

If you have questions regarding this report, please feel free to contact me.

Sincerely,

Marcia Adams

Enclosure

First  
Responder  
Interoperability  
Report  
2017-2018

Presented to:

Senate Finance Committee  
Hugh K. Leatherman, Sr., Chairman

House Ways and Means Committee  
W. Brian White, Chairman

**State of South Carolina**  
**First Responder Interoperability Report**  
**FY 2017-2018**

As required under Legislative Proviso Part 1B Section 93 - D500 - S. C. Department of Administration, 93.19 (DOA: First Responder Interoperability), the South Carolina Department of Administration is directed to administer and coordinate first responder interoperability operations for the statewide Palmetto 800 MHz radio system to better coordinate public safety disaster responses and communications.

First Responder Interoperability Proviso 2017-2018 funds provided a 6% match to assist State and Local First Responders participating in the Palmetto 800 Statewide Radio Network. The Fund also provided 6% in matching funds for eligible equipment purchases to First Responder agencies that operate on existing city or county owned private 800 MHz radio systems.

The S. C. Department of Administration as required by the proviso shall provide an annual report on the status of the integration of the statewide Palmetto 800 radio network which shall include, but not be limited to, a list of entities which are not integrated into the system as of the end of the fiscal year and the reason why they are not integrated.

**Significant System Activities:**

*Division of Technology Operations (DTO)* – Federal Grant reductions, and increased expenses continue to limit expansion of the Palmetto 800 system into rural counties of the state. Increased cost in insurance, operations and maintenance of the State’s cache of emergency communications equipment and portable towers also limits funds for expansion of the statewide radio system. DTO was able to secure funds for one (1) additional building at the Harbison site in Richland County and one (1) additional airborne repeater to support hurricane evacuations.

*Lancaster County* – Lancaster County completed its transition to the Palmetto 800 statewide radio system in October of 2017. This migration included all public safety agencies Fire, Law Enforcement, EMS and Emergency Management.

*Greenwood County* – Greenwood County completed its transition to the Palmetto 800 statewide radio system in October of 2017. This migration included all public safety agencies Fire, Law Enforcement, EMS and Emergency Management.

*Newberry County* – Newberry County continues its transition to the Palmetto 800 statewide radio system. The transition was delayed when several towers were found to have structural issues. These are being corrected. The new schedule for the transition is the first quarter of 2019. This migration includes all public safety agencies in Fire, Law Enforcement, EMS and Emergency Management.

*Greenville County* – Greenville County council did approve transitioning to the Palmetto 800 statewide radio system for all public safety agencies, (Fire, Law Enforcement, EMS and Emergency Management). Greenville County’s transition is scheduled to be completed this year.

*Berkeley County* – Berkeley County council voted to partner with the Palmetto 800 statewide radio system. A number of new tower sites are included for Berkeley County and the transition is currently scheduled for the first quarter of 2019. The Berkeley County Sheriff's Office has already moved to the Palmetto 800 statewide radio system.

*Palmetto 800 User Update* - The public/private partnership of the Palmetto 800 Network and its interoperability capabilities continues to be a model across the United States. The system currently has over 34,430 primary radio users, 10,000 shared interoperability users and 10,500 users that share the Palmetto 800 Core (Charleston, Beaufort and Florence Counties).

*Complete Network Refresh* - In 2017 the Palmetto 800 network upgraded the entire network to a P25 all digital system with new transmitter and receiver equipment. P25 is the national public safety standard for first responder communications.

Events supported by DTO's public safety communications section this year include;

- Hurricane Irma September 2017 - State cache radios and satellite data/VoIP phones were deployed to support the National Disaster Medical System (NDMS) at the Columbia Metropolitan Airport for patients being evacuated from Puerto Rico and the US Virgin Islands.
- January 2018 Winter Storm – Upstate, SC
- Carolina and Clemson home football games and special events
- Carolina Cup, Camden, SC
- War Memorial Display, Camden, SC
- Fall for Greenville, Greenville, SC
- Dixie Little League World Series, Lexington, SC
- Darlington Motor Speedway Race, Darlington, SC
- Assault on the Carolinas Bike Race, Oconee, Pickens and, Greenville counties
- Various Search and Rescue Operations across the State
- SC Special Olympics, Greenville, SC
- Cooper River Bridge Run, Charleston, SC
- North Myrtle Beach/Myrtle Beach Bike Week, Myrtle Beach SC
- Okra Strut, Irmo, SC
- Frog Jump Festival – Springfield, SC
- Peanut Festival, Pelion, SC
- Striped Bass Festival, Manning, SC
- Poultry Festival, Batesburg-Leesville, SC
- Chitlin Strut, Sally, SC

The mission of DTO's Public Safety Communications section is to ensure communications interoperability and coordination between the law enforcement, fire and EMS responders working events across South Carolina.

*Communications Strike Team* – Hurricane Katrina and the Graniteville Train wreck in 2005 helped South Carolina realize there was a significant need for a highly trained communications response team to support public safety communications during disasters, large emergencies and significant events. The South Carolina Communications Strike

Team is made up of state and local government communications experts from across South Carolina. DTO coordinates the Strike Team and a strategic public safety communications cache which backfills communications needs using satellite resources, mobile towers, and cache radios across the state.

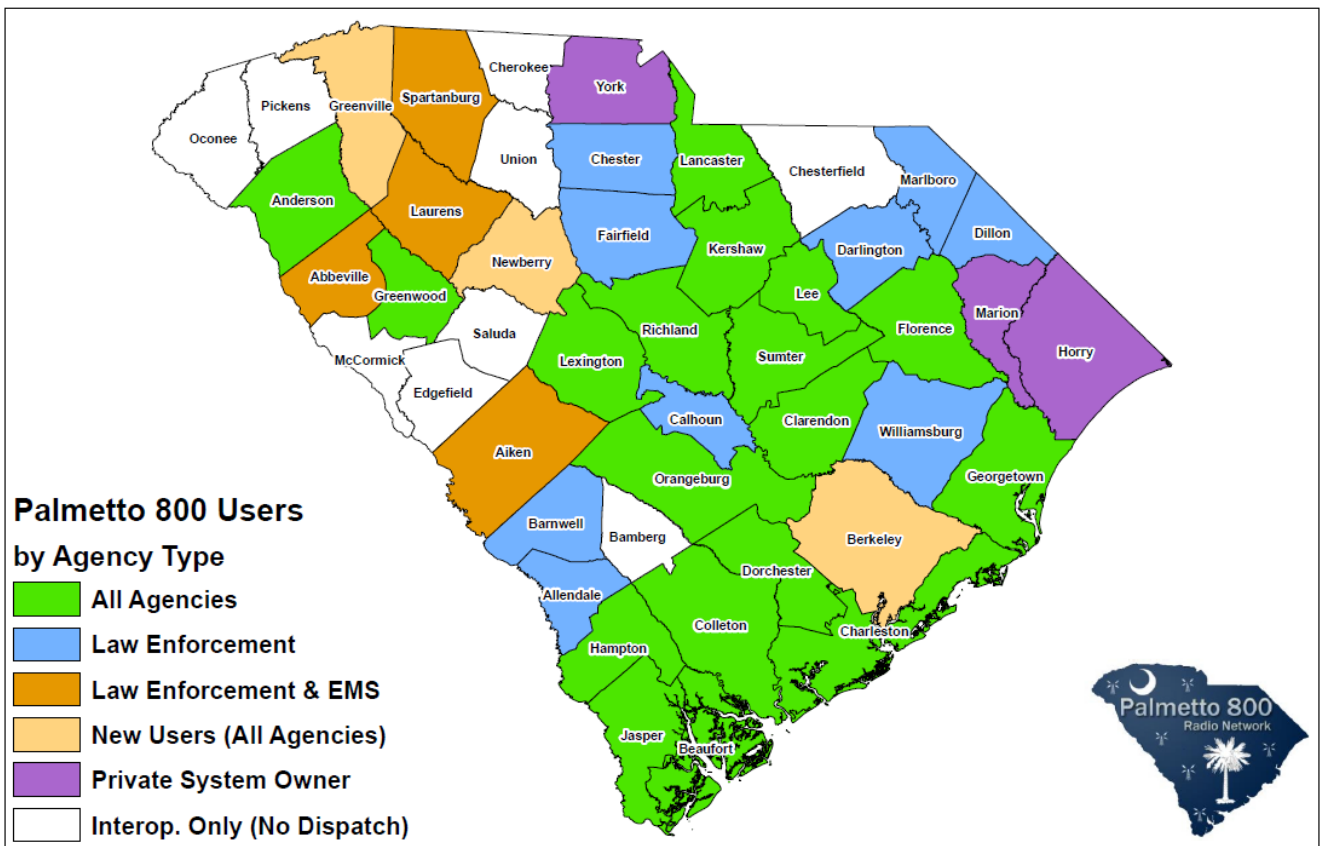
**PAlmetto Tactical COmmunications Network – (PATCON) – To enhance South Carolina’s public safety communications capabilities, interoperability and to add statewide communications redundancy, the DTO has continued to build out a statewide conventional interoperable repeater network that overlays the state. This system is FREE to all public safety agencies in South Carolina. Today, the PATCON system has installed interoperable repeaters in every county in South Carolina. This network is comprised of 120 standalone transmitter sites providing additional interoperability, back-up and capacity resources to the Palmetto 800 statewide network.**

*NC Viper & Charlotte, NC System Interoperability* – Charlotte, NC and the State of North Carolina (VIPER System) have P25 radio systems that are compatible with the South Carolina Palmetto 800 network. State agencies and local government fire, EMS and law enforcement agencies respond across state lines on almost a daily basis for mutual aid or while trying to locate emergency calls. DTO would like to interconnect the Palmetto 800 system to the Charlotte and NC VIPER systems to enhance interoperability. This will significantly enhance communications across state lines during disasters, emergencies, law enforcement chases, fire and EMS response. This connectivity requires both one-time and recurring costs to connect the systems together. The ISSI technology that interconnects the two states’ systems enhances interoperability, while reducing the manhours of device programming required to manually achieve interoperability.

## **First Responder Interoperability Report**

The following is a list of State and Local Government Palmetto 800 network radio users. The Palmetto 800 Network and the private county 800 MHz systems have exchanged radio system IDs to enhance statewide interoperability. The Palmetto 800 has exchanged system ID’s with the North Carolina Highway Patrol, the City of Charlotte, Brunswick County, North Carolina, and with both Augusta and Savannah, Georgia to enhance public safety interoperability.

*(See the next page to view the map and begin the county by county report)*



## State Agency Interoperability

State Agency	800 MHz Interoperability	Comments
<b>Adjutant General</b>	National Guard has Palmetto 800 network radios for interoperability	The agency has 100 radios, but would like to have additional 800 MHz radios to support State emergencies
<b>Department of Administration</b>	Fully Palmetto 800 network	Maintains and deploys the state strategic cache of communications radio and response equipment for public safety agencies statewide
<b>Citadel</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Clemson University</b>	Limited interoperability	Uses local VHF and UHF radio system
<b>Coastal Carolina</b>	Limited interoperability	Coastal Carolina utilizes the Horry County's private 800 system. They have interoperability with local and state law enforcement
<b>Corrections</b>	Limited interoperability	Utilizes a local VHF system in prisons. DOC has Palmetto 800 radios for other operations and interoperability.
<b>Emergency Management Department (EMD)</b>	Fully Palmetto 800 network	Maintains their own low band redundant system
<b>Fire Marshal, State/LLR</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Forestry Commission</b>	All law enforcement officers have Palmetto 800 network	Non-law enforcement firefighting units still utilize the Forestry VHF radio system.

<b>Gray, Wil Lou Opportunity School</b>	Law enforcement is fully Palmetto 800 network	Fully Palmetto 800
<b>Health and Environmental Control (DHEC)</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Highway Patrol (DPS) State Transport Police Bureau of Protective Services</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>House Sergeant-at-Arms</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Juvenile Justice, Dept. of (DJJ)</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Law Enforcement Division (SLED)</b>	Fully Palmetto 800 network	Maintains and utilizes VHF system for redundancy.
<b>Medical University of South Carolina</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Mental Health, Department</b>	Law Enforcement is fully Palmetto 800 network	Fully Palmetto 800
<b>Natural Resources</b>	Limited Participation, utilize VHF radio system	DNR purchased an additional 100 Palmetto 800 radios this year. Cost and user fees given as a reason for not fully participating.
<b>Ports Authority</b>	Fully Palmetto 800 network	Interoperable with State Palmetto 800 system, utilizing the Charleston County P25 system.
<b>Probation, Parole and Pardon Services (PPP)</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Public Safety, Dept. see(DPS)</b>	Fully Palmetto 800 network	Fully Palmetto 800



<b>Revenue, Dept of</b>	Fully Palmetto 800 network	Enforcement officers only
<b>Santee Cooper</b>	Limited Interoperability Law Enforcement Only	Santee Cooper has an independent radio system not compatible with Palmetto 800 System. Santee Cooper Law Enforcement officers have 800 MHz radios for interoperability.
<b>SC State University</b>	Police are fully Palmetto 800 Network	Fully Palmetto 800
<b>Senate Sergeant-at-Arms</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>Transportation Department (DOT)</b>	Senior Staff, engineers and SHEP have Palmetto 800 network radios	Dispatch, SHEP and engineers involved in supporting hurricane evacuations and recovery have 800 MHz radios. Road work crews still are utilizing low band system.
<b>Transport Police (STP)(Also see DPS)</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>University of South Carolina</b>	Fully Palmetto 800 network	Fully Palmetto 800
<b>University of South Carolina Upstate</b>	Fully Palmetto 800 network	Fully Palmetto 800

## Local Government Interoperability by County

**Note:** *All County 911/Dispatch Centers and County Emergency Operations Centers (EOCs) have been provided with 800 MHz radios for interoperability between local government and state agency dispatch centers.*

<b>County</b>	<b>800 MHz Interoperability</b>	<b>Comments</b>
<b>Abbeville</b>	Has Palmetto 800 network radios for interoperability	All agencies have Palmetto 800 radios for interoperability.
<b>Aiken</b>	County Sheriff and EMS are fully Palmetto 800 network. All police are fully 800 MHz departments	County fire is on UHF, all others are fully Palmetto 800.
<b>Allendale</b>	County Sheriff and most police departments have Palmetto 800 network	County fire is on VHF, Sheriff and most law enforcement agencies have 800 MHz radios for interoperability or primary use.
<b>Anderson</b>	Fully Palmetto 800 network	Fully Palmetto 800.
<b>Bamberg</b>	Sheriff, EMS & Fire Departments have Palmetto 800 network radios for Interoperability	All public safety agencies have 800 MHz radios provided through grants for interoperability. Agencies utilize VHF and UHF for primary dispatch.
<b>Barnwell</b>	Sheriff & EMS have Palmetto 800 network radios, Fire has some 800 MHz radios for interoperability	Barnwell Co. purchased additional Palmetto 800 radios last year.
<b>Beaufort</b>	Own their own network.	Private 800 MHz System connected to the Palmetto 800 P25 Core for interoperability.

<b>Berkeley</b>	Sheriff, Police and EMS have Palmetto 800 network radios	Berkeley is working to fully transition to the Palmetto 800 network this budget year.
<b>Calhoun</b>	Sheriff's Dept. is fully 800 MHz radios	Sheriff's Department, St. Matthews PD and some FD's have radios for interoperability with 800 MHz radios, but have limited participation in Palmetto 800 due to equipment cost and user fees.
<b>Charleston</b>	Fully 800 MHz	Private 800 MHz system connected to the Palmetto 800 Core for full interoperability.
<b>Cherokee</b>	Limited Interoperability	Sheriff's Department, Gaffney PD and some Fire Depts. have 800 MHz radios. Limited participation due to equipment cost and user fees.
<b>Chester</b>	Sheriff Dept. is fully Palmetto 800	Police Departments have 800 MHz for interoperability, but not all equipment is activated. EMS and Fire are not participating due to equipment cost and user fees.
<b>Chesterfield</b>	Sheriff and Police departments have Palmetto 800 network radios for interoperability	Primary dispatch is VHF and UHF for law enforcement. Fire and EMS are not participating due to cost.
<b>Clarendon</b>	All agencies are fully Palmetto 800 network	Fully Palmetto 800 county wide.
<b>Colleton</b>	All agencies are Palmetto 800 network	Fully Palmetto 800 county wide.
<b>Darlington</b>	Sheriff, Police and Hartsville FD are utilizing Palmetto 800 network.	County Fire & EMS do not participate due to equipment cost and recurring cost. Darlington County Fire Department has several 800 MHz radios for interoperability.
<b>Dillon</b>	Sheriff & Police are utilizing Palmetto 800 network	Fire & EMS not participating due to equipment cost and recurring cost.

<b>Dorchester</b>	All agencies fully Palmetto 800 network	Fire on VHF and Palmetto 800, all others are fully Palmetto 800.
<b>Edgefield</b>	Limited Interoperability	Edgefield Sheriff, Police and EMS have some 800 MHz radios for interoperability. Cost is given as the reason they are not participating.
<b>Fairfield</b>	Sheriff & Police are fully Palmetto 800 network	Fire & EMS have limited number of 800 MHz radios for interoperability. Equipment cost, and coverage given as the reason they are not fully participating. Fairfield opted to utilize a commercial business system for Fire and EMS.
<b>Florence</b>	All Agencies 800 MHz	County 800 MHz system and Palmetto 800 system merged in July of 2017. They are fully participating.
<b>Greenville</b>	Greenville City fully Palmetto 800 network, Sheriff has 82 Palmetto 800 radios active for interoperability	Greenville County plans to go fully Palmetto 800 this budget year. Greenville City Police and Fire Department are fully Palmetto 800. Simpsonville and Travelers Rest Police are Palmetto 800 users. Most municipal Police Departments have 800 MHz radios for interoperability.
<b>Georgetown</b>	All Agencies are fully Palmetto 800 network	Fully Palmetto 800.
<b>Greenwood</b>	All Agencies are fully Palmetto 800 network	Fully Palmetto 800.
<b>Hampton</b>	Hampton County is fully Palmetto 800 network	Fully Palmetto 800.
<b>Horry</b>	All Agencies are fully 800 MHz on the county's own system.	Private County 800 System. Horry County decided to install an independent radio system.
<b>Jasper</b>	All agencies are Palmetto 800 network	Fully Palmetto 800

<b>Kershaw</b>	All agencies are fully Palmetto 800 network	Fully Palmetto 800
<b>Lancaster</b>	All agencies are fully Palmetto 800 network	Fully Palmetto 800
<b>Laurens</b>	Sheriff, Police and EMS are fully Palmetto 800 network	Fire is not participating due to equipment cost and recurring cost.
<b>Lee</b>	Sheriff and Police are fully Palmetto 800 network	EMS and Fire continue migrating to the Palmetto 800 MHz radio system.
<b>Lexington</b>	All agencies are fully Palmetto 800 MHz	Fully Palmetto 800. Batesburg-Leesville PD is utilizing UHF but has some 800 radios for interoperability.
<b>Marion</b>	All agencies are 800 MHz on the county system.	Private County 800 MHz system. Marion is holding a penny tax referendum in November. Part of those funds will be used to switch to the Palmetto 800 network.
<b>Marlboro</b>	Sheriff and Police have Palmetto 800 network for interoperability	EMS and Fire have some 800 MHz radios for interoperability. They would like some additional radios.
<b>McCormick</b>	Limited Interoperability	All law enforcement and EMS services have a few 800 MHz radios for interoperability. Fire Service not participating due to cost.
<b>Newberry</b>	Sheriff, Police and EMS have Palmetto 800 network radios for interoperability	Newberry Sheriff, Police, EMS and Fire plan to moving to the Palmetto 800 network this budget year.
<b>Oconee</b>	Limited Interoperability	All Law Enforcement and EMS services have some 800 MHz radios for interoperability. Primary dispatch is UHF for all Oconee agencies.

<b>Orangeburg</b>	All agencies fully Palmetto 800 MHz	Fully Palmetto 800.
<b>Pickens</b>	Limited Interoperability	Sheriff, Police, EMS and a few Fire have 800 MHz radios for interoperability. Not participating due to cost and coverage.
<b>Richland</b>	All agencies fully Palmetto 800 MHz	Fully Palmetto 800.
<b>Saluda</b>	Limited interoperability	Sheriff, 911 Center & County EMD have active 800 MHz equipment. Police have non-active equipment due to recurring fees.
<b>Spartanburg</b>	Sheriff, Police & EMS fully Palmetto 800 network	Spartanburg City Police & Fire and county fire do not participate in the Palmetto 800 MHz system. Some agencies have Palmetto 800 radios for interoperability. Recurring cost given as the primary reason for not participating.
<b>Sumter</b>	All Agencies are fully Palmetto 800	Fully Palmetto 800
<b>Union</b>	Limited Interoperability	Sheriff's Office, Police and EMS have some 800 MHz radios for interoperability. Cost, fees and need for better coverage given as reasons for not fully participating. County would like to switch to the Palmetto 800 if funding becomes available.
<b>Williamsburg</b>	Sheriff, Police and EMS are fully Palmetto 800 network	Fire has 800 MHz equipment for interoperability. County Fire needs additional funding to fully participate.
<b>York</b>	All Agencies are fully P25 800 MHz on the county's system.	Private County P25 800 MHz system. Interoperability through ID exchange.