Mississippi
Wireless Communication Commission

5 Year
Strategic Plan

FY 2027–FY 2031

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MISSION STATEMENT

The Mississippi Wireless Communication Commission's (MS WCC) mission is to implement and maintain a statewide wireless interoperable communications system to serve wireless users in government and private who serve to protect the public's safety and to ensure effective mission critical communication services are available in emergency situations.

PHILOSOPHY OF THE COMMISSION

The MS WCC is committed to ensuring the operability, interoperability, and continuity of communications throughout the state of Mississippi by providing the strategic framework for integrating local, state, tribal, federal and non-governmental organizations supporting all public safety day-to-day, emergency, disaster, and recovery communications.

Maintain and Sustain: With the successful implementation of a statewide communication system in 2013, MS WCC has continued to focus on maintaining and sustaining the infrastructure, technology, and services that support mission-critical communication for state, federal, local, Choctaw Nation, and non-governmental subscribers and the more than $500M invested in it.

Promote and Expand: Promoting and expanding the ability to provide better and faster communication, in day-to-day and emergency communications, directly impacts the average response time by multi-jurisdictions when protecting the public's safety.

Secure and Pursue: Providing security for the current system and pursuing new and innovative technology for the future to protect the public's safety as the ecosystem advances far beyond using two-way radios in vehicles (mobile) and portable (hand-held two-way radio) coverage and integrating emerging technologies to advance interoperability

MS WCC RELEVANT STATEWIDE GOALS AND BENCHMARKS

Public Safety and Order

Statewide Goal: To protect the public's safety, including providing timely and appropriate responses to emergencies and disasters and to operate a fair and effective system of justice

Statewide Relevant Benchmark: Emergency Preparedness

Average emergency response time to natural and manmade disasters.

MS WCC Relevant Benchmarks:

- Mobile interoperable communication coverage across the state will equal 97% or higher
- The availability of a statewide interoperable communication system to public safety personnel will be equal to or greater than 99.999%
- Public safety subscribers utilizing the MS Wireless Information Network (MSWIN) will increase by 5% annually.
- Public safety subscribers utilizing the MS Wireless Information Network (MSWIN) push-to-talks (PTTs) will increase by 5% annually.

MS Wireless Communication Commission's Relevance: The ability for Public Safety personnel to communicate is key to the average response time. MS WCC's statewide system assists more than 67K public safety subscribers across the state with the ability to provide a timely and appropriate response to emergencies and disasters with 97% mobile coverage and availability of 99.999%. MS WCC designed, developed, implemented and now maintains a statewide interoperable land mobile radio (LMR) communication system, MSWIN, used by local sheriff offices, police departments, fire departments, state agencies, federal agencies, the Choctaw Nation, and non-governmental organizations (NGOs) to provide the communication system allowing interoperability for everyday communication and emergency communication. Increasing the number of subscribers and the number of push-to-talks (PTTS) leads to better communication and improved average response time.

Infrastructure

Statewide Goal: To ensure the construction and maintenance of infrastructure (including roadways, waterways, railways, airports, water and sewer systems, pipelines, electricity lines, broadband connections, public buildings) adequate to meet the needs of citizens and the business community and to foster economic growth

MS WCC Relevant Benchmark:

- Number of statewide communication sites in operation
- Statewide sites (MSWIN) in development

MS Wireless Communication Commission's Relevance: The statewide interoperable land mobile radio (LMR) communication system consists of more than 160 communication sites, the majority of which consist of 300-to-600-foot tower infrastructure across the state. MS WCC oversaw the construction of these sites and now maintains them. MS WCC reviews and recommends infrastructure needs to the legislature for adequate public safety communication coverage to meet the needs of the citizens and business communities.

Health

Statewide Goal: To protect Mississippians from risks to public health and to provide them with health-related information and access to quality healthcare necessary to increase the length and quality of their lives

MS WCC Relevant Benchmark:

- Public Safety subscribers utilizing the statewide system (MSWIN)
- Public Safety subscribers utilizing the statewide system (MSWIN) push-to-talks (PTTs) annually.

MS Wireless Communication Commission's Relevance: The number of users on the MSWIN system and the number of push-to-talks measure public safety providers responses and interactions with the state's public citizens for the protection from risks to public health and access to quality healthcare. MSWIN is utilized statewide by MED-COM (paramedics & emergency medical technicians serving healthcare providers), some NGO ambulance services providers, and hospitals. The ability to communicate between the first responder and the medical provider through voice and data protects Mississippians and provides them with information and access to quality healthcare necessary to increase the length and quality of their lives.

Government and Citizens

Statewide Goal: To create an efficient government and an informed and engaged citizenry that helps to address social problems through the payment of taxes, the election of capable leaders at all levels of government, and participation in charitable organizations through contributions and volunteerism.

Statewide Relevant Benchmark: Government Efficiency

Administrative efficiency: Expenditures on state government administrative activities as a percentage of total operational expenditures

MS WCC Relevant Benchmarks:

- Fiscal Year Total Expenditures (actuals)
- Fiscal Year Administrative Expenses (actuals)

- Administrative costs of MSWIN as percentage of total operating expenditures (statewide benchmark)
- The WCC annual operating cost per Mississippian ≤ $4.23 per person
- Statewide site (MSWIN) construction projects managed in accordance with both time schedule and within budget (%)

MS Wireless Communication Commission's Relevance: MS WCC operates on an annual appropriation provided by the legislature. Managing the directives and goals within a budget helps create an efficient government structure.

OVERVIEW OF THE COMMISSION'S FIVE-YEAR STRATEGIC PLAN

Mississippi continues to be a forerunner in mission-critical interoperable communication when compared with other states across the nation resulting from the strong governance structure established by the legislature designed to ensure a strong coordination with users at all levels of government. While more remains to achieve Mississippi's statewide goals for emergency communications, this work is only part of a continuous cycle as Mississippi will always need to adjust to developing technologies, operational tactics and challenges to support communications for emergency responders.

MS WCC's five-year strategic plan focuses on providing and safeguarding reliable, secure, and interoperable communication for mission-critical operations to the public safety community resulting in the protection and safety of the citizens of Mississippi as written in the MS Code of 1972. Section 25-53-171 further directs MS WCC to rapidly restore communication during natural and/or man-made disasters to ensure law enforcement and essential health and safety personnel can communicate during these emergencies.

Key aspects of the plan include infrastructure stability, technology, funding, efficient system administration, and subscribers/users of MSWIN, the MS Wireless Information Network. These strategic facets gathered together address 160 towers, 97% statewide mobile radio coverage and portable coverage in critical buildings, 12M push-to-talks (PTTs) a month, over 67K subscribers/ users including local, state, federal, the Choctaw Nation, and non-governmental organizations expecting reliable communication coverage every day, all day, and especially during emergencies or disasters.

WCC External/Internal Assessment

Even today, the public safety community recognizes that LMR (Land Mobile Radio) is the primary tool providing mission-critical voice, interoperability, and reliability for the public's safety. With that

said, the MSWIN network maintained by MS WCC will continue to be a mission-critical communication tool for the future, serving all the Mississippi first responders in the public safety community. Continued funding by the Legislature is imperative to support those who serve as first responders across the State and for the protection of their citizens.

The following provides an assessment of the internal and external factors through a **SWOT** analysis to detail the strengths, weaknesses, opportunities and threats to the MS Wireless Communication Commission.

Strengths

Governance: Mississippi has achieved significant steps far ahead of other states with its strong governance structure. Governance, as sited by the SAFECOM[1] Interoperability Continuum is one of the five critical success elements that must be addressed to achieve successful interoperable communication. Communications interoperability cannot be resolved by any one entity, but rather a partnership among emergency response organizations from all levels of government. MS WCC was created for this purpose and is comprised of a variety of sixteen state and local agencies representing various emergency communications disciplines in the state. The structure of the WCC was established to ensure all disciplines share their expertise, support decision-making, and create unity through interoperable communications. Only one agency represented on the Commission is not a user of the system.

Through governance, MS WCC created committees and standard operating procedures (SOPs). One committee, the Procurement Review Committee administers the regulations established for the acquisition and use of wireless communication (voice and data) devices including, but not limited to two-way radios & accessories, cellular telephones, pagers, personal digital assistant devices, and point-to-point high-speed data communications across physical locations using wireless access points as presented to the Commission by governing authorities, state agencies, and institutions of higher learning. This Committee has reviewed over $200M in requests to ensure the interoperability of wireless devices and equipment for state and local government.

Technology: The MS WCC's statewide communication system, MSWIN, is a robust 700-megahertz, Project 25 (P25)/Phase 2, Land Mobile Radio (LMR) trunked emergency communications network with microwave telecommunications backbone (TBN) and a platform that employs Internet Protocol (IP) wide area network (WAN) system architecture. MSWIN consists of three interconnected regional subsystems, zones that operate as a seamless statewide network. In addition to this system architecture, MS WCC implemented Dynamic System Resiliency (DSR)

[1] SAFECOM is managed by the Cybersecurity and Infrastructure Security Agency (CISA). Through collaboration with emergency responders and elected officials across all levels of government, SAFECOM works to improve emergency response providers' inter-jurisdictional and interdisciplinary emergency communications interoperability across local, regional, tribal, state, territorial, international borders, and with federal government entities.

through which a zone is automatically backed up by a non-geographically contiguous zone. The telecommunications backbone portion of MSWIN is a multi-loop configured monitored hot-standby Multiprotocol Label Switching (MPLS) microwave radio system.
The MSWIN system has room for growth with a capacity of 240K subscribers/users and currently supports 67K. A system refresh was just completed June 30, 2025, refreshing the microwave system, including moving from layer 2 to layer 3 networking, AC and DC Power Plant, Network/Radio upgrades, and software upgrade 2024.1.

This technology provides Mississippi public safety providers with instant, highly reliable, interoperable, and seamless voice and data communication across the entire state. MSWIN enables quick and single button push to talk (PTT) technology for unhindered communication between public safety users.

In addition, Mississippi has the technology to interop with other states with just a few system keystrokes. This architecture is critical during large events enabling greater collaboration and interoperability for events crossing state lines. MS WCC staff have successfully tested this technology with Louisiana, Tennessee and Alabama.

Interoperability: Interoperability is an important issue for law enforcement, fire fighters, emergency medical services, and other public safety and health agencies providing them with the ability to share information via voice and data communications systems on demand, in real time, regardless of the specific vendor or technology used.

Emergency responders' ability to communicate multi-jurisdictionally, directly impacts the average emergency response time to natural and man-made disasters. Specifically, MS WCC created 40 special event talk groups to ensure interoperability between local, state, federal, and tribal entities. The WCC continues to increase interoperability among emergency responders by allowing public safety non-governmental organizations (NGOs) access to the MSWIN system per Federal Communications Commission (FCC) rule. For example, the ability to communicate with emergency medical services (ambulances) and electric power associations (EPAs) during emergencies is critical to saving lives and property.

Usage: Statewide usage of the MSWIN system is measured by the number of Push-To-Talks (PTT's) which continued to increase during FY 2025. MSWIN users logged anywhere from 10M to 12.7M push to talks each month. MSWIN push-to-talks in 2025 were 6.5M over the 2024 push-to-talks, creating a 5.2% increase for the year. During the past year, more than 4,000 subscribers/users were added to the system and the creation of over 100 new talk groups for the existing and new users on the system.

Reliability: The highest degree of reliability, as provided by MSWIN, delivers instantaneous connectivity and access when lives are on the line. The ability to communicate between responders

during emergency and everyday situations is measured in part by the percentage of "busies" across the network. MSWIN enables quick and single button Push-to-Talks (PTT) technology for unhindered communication.

Reliability is measured when PTTs are hindered resulting in a "busy". A "busy" occurs when a user presses the PTT button on a radio but is unable to initiate a voice transmission because all channels assigned to the tower site are being utilized by other users. MS WCC measures this data. During FY 2025, the total number of PTTs were more than 134M with less than 6K "busies," resulting in an annual busy rate of .004% of the time with an availability rate of 99.999%, known as the five 9's in the industry as the "gold standard". Ensuring operable and interoperable communications among responders during all threats and hazards is paramount to the safety and security of the citizens of Mississippi.

Statewide Coverage: In 2013, the statewide system was tested and met the requirements of 97% mobile coverage and portable coverage in critical buildings including courthouses. Since 2013, eleven sites have been added, increasing the coverage for both mobile and portable. The most recent additions during FY2025 were in Oktibbeha County, Tate County, Tippah County, and Pearl River County.

Infrastructure: The infrastructure that supports MSWIN is built for redundancy. From the dual tower top antennas, the triple power supplies (shore power, propane generator, and uninterrupted power supply), ice bridge, steel reinforced concrete shelters, and towers built to withstand windspeeds of 140 mph, the need to protect the public's safety was the driving force behind the design of MSWIN.

Deployable Assets: MS WCC has deployable assets that can be used to implement or enhance communications in an area affected by a disaster. MS WCC has four radio repeater sites on wheels (SOWs) that can be used to restore the wide area functionality of the network infrastructure anywhere in the state when it is damaged or destroyed. These transportable sites have the same functionality as a permanent radio repeater site. A tower truck was recently added to the system at no cost to the State.

MS WCC also maintains a cache of mobile and portable radios with battery backups that can be deployed in the event of an emergency. Portable waterproof "to go" boxes with radios and radio accessories are provided when requested by users.

In addition, the MS WCC has a propane tank and generator on wheels should the need arise at any given site for additional fuel and/or power. MS WCC utilizes a local propane company with equipment to reach tower sites should roads become impassable.

Staff: While MS WCC has a small staff of 8 employees, they are committed to ensuring the system is operational 24/7/365 to support public safety personnel who are protecting the public's safety. Staff have in-depth technical knowledge of the state's communications systems, national standards of communication, mechanical, and technical knowledge of the inner working parts of the system. Partnerships have been developed with locals, state agencies, federal agencies, the Choctaw Nation, NGOs, and vendors that have served the MS WCC well.

Weaknesses

Infrastructure: While infrastructure is a strength, it is also a weakness due to the age of the system. As of June 2025, MSWIN consists of 160[2] MSWIN towers located throughout the state, including 86 state-owned towers, 67 leased towers, and 7 co-locations. Regarding the tower structures, most leased towers were completed in 2008 and 2009, and the 86 state-owned towers were completed from 2011 forward. The tower structures will need repairs from time to time but are still solid. The environmental equipment owned by the state (generators, HVACs, UPS') at each site is beginning to require more and more repairs. This equipment supports the reliability and sustainability of the sites, especially during emergencies when you expect to lose shore power and will need to rely on generators and/or a UPS. MS WCC will continue to seek funding for the MSWIN system, including equipment and enhancements to sustain and improve mission-critical voice and data communications among public safety responders.

Training and Exercises: Many times, training is at the bottom of the list. Scenario-based practices used to enhance communications interoperability, familiarize the public safety community with equipment and procedures, and ensure participation with personnel outside of individual organizations.

MS WCC staff, during FY2025, developed a classroom presentation known as MSWIN 101 that has been presented at various conferences during the fiscal year 2025 including the Mississippians for Emergency Medical Services 2024 Conference, 2024 Mississippi 911 Conference, the Mississippi College Public Health Capstone Class, 2025 Partners in Preparedness (PIP) Conference, MS Law Enforcement Officers' Training Academy, and the 2025 Mississippi Fire Chief's/Firefighter's Conference. The University of Mississippi Medical Center's Mississippi MedCom continued providing First Hands and First Voice classes to first responders. Individualized and group training to various locals has been provided.

While MS WCC has greatly improved the training and exercises in the previous two years, more opportunities in single agency, multi-agency, and multi-disciplined training environments are in the works. Increasing training and exercise will improve interoperable communication across the state.

[2] Of the 160 tower sites, 148 sites were built to WCC specifications for the MSWIN System. In addition to these sites, the WCC has either co-located or leased sites for added MSWIN equipment to enhance portable coverage.

Opportunities

New technology: Next-generation LMR (Land Mobile Radio) solutions are emerging to facilitate integrated technology, enabling seamless voice and data communication across diverse networks. Integrating LMR and IoT (Internet of Things) technology can create more powerful and versatile communication systems that combine the best of both worlds- LMR as reliable, instant, and rugged and IoT with its wide range of data-drive applications enabling features like location tracking, remote monitoring, and advanced data analytics.

This integration of LMR with broadband technologies, such as LTE, is gaining traction to provide both voice and data services and thus leverages the strengths of each technology. This convergence allows for the transmission of high-speed data, video, and other multimedia content alongside traditional voice communication, further enhancing situational awareness and operational capabilities. These hybrid solutions combine the reliability of LMR with the speed and data capabilities of broadband networks—such as radios that will roam, when needed, from LMR to LTE to Wi-fi.

Beyond 5G, other technologies like satellite communication are being integrated into LMR systems to expand coverage and enhance communication capabilities in remote areas. The integration of 5G technology is enabling faster data transmission and supporting advanced applications like real-time video streaming and data analytics within LMR systems. This technology allows PTT over broadband (cellular) networks, aiming to bridge the gap between LMR and 5G for voice communication.
MS WCC will continue to explore this potential to create a unified communication ecosystem where LMR and 5G work together to provide reliable, high bandwidth communication for public safety and other mission-critical applications that will protect the public's safety.

Threats

Funding: The high cost of advanced LMR systems and the complexity involved in their installation and maintenance must be addressed. Investments in new technologies and infrastructure are necessary to improve efficiency and maintain mission-critical voice communications, but this comes with a cost. Future funding needs and decisions will impact the ability of public safety responders to communicate effectively during day-to-day incidents, emergencies, and natural and made-made disasters. Without continued investment in MSWIN, capabilities will be compromised during response operations for the more than 67K subscribers/users who depend on this system across Mississippi. The current Motorola LMR system technology is changing with an expected replacement date in 2032. Funding will be a hurdle for the State.

System Security: Threat actors are targeting LMR systems through vulnerabilities like misconfigured VPN connections, credential abuse, and exploiting weaknesses in legacy systems. The growing reliance on IP-based networks and integrations with other systems increases the

attack surface for LMR systems. Cybersecurity defenses are crucial to ensure the available, integrity, and confidentiality of LMR communications

MS Wireless Communication Commission's Goals, Objectives, Strategies, and Measures by Program for FY 2027– FY 2031

Program 1: The MS Wireless Communication Commission statewide interoperable communication system

Goal A: Develop, Implement, Maintain, and Sustain a statewide interoperable land mobile radio (LMR) communication system, assisting public safety personnel tasked with *protecting the public's safety, including providing timely and appropriate responses to emergencies and disasters and everyday communication.*

Objective A: 1: The WCC will provide a statewide mission critical mobile interoperable communication system

Outcome: Mobile interoperable communication coverage across the state ≥ 97%

A.1.1. Strategy: Provide & maintain communication sites supporting the statewide communication system

Output: Number of statewide communication sites in operation

A.1.2. Strategy: Engage with legislators, stakeholders, and others to continue developing a statewide communication system for increased coverage

Output: Statewide sites (MSWIN) in development

Goal B: Promote and expand the statewide communication system that enables public safety personnel in Mississippi *to protect the public's safety, including providing timely and appropriate responses to emergencies and disasters.*

Objective B:1: The WCC will continue to engage the state's public safety community promoting the dependability of the statewide communication system

Outcome: The availability of a statewide interoperable communication system to public safety personnel will be equal to or greater than 99.999%

Outcome: Public safety subscribers utilizing (joining) the MS Wireless Information Network (MSWIN) will increase by 5% annually.

Outcome: Public safety subscribers utilizing the MS Wireless Information Network (MSWIN) push to talks (PTTs) will increase by 5% annually.

B.1.1. Strategy: Engage with locals, state agencies, federal agencies, the Choctaw Nation, and Non-Governmental Organizations (NGOs) to JOIN the statewide communication system

Output: Number of Public Safety subscribers utilizing (joining) the statewide system (MSWIN)

B.1.2. Strategy: Engage with locals, state agencies, federal agencies, the Choctaw Nation, and Non-Governmental Organizations (NGOs) to UTILIZE the statewide communication system

Output: Number of Public Safety subscribers utilizing the statewide system (MSWIN) push-to-talks (PTTs) annually.

Explanatory: The 'gold standard' for an LMR system is 99.999% reliability. The addition of public safety personnel joining and utilizing the MS Wireless Information Network (MSWIN), the better communication is across the state with multi-jurisdictions for everyday communication and provide the tool to improve emergency response time to natural and man-made disasters. The more subscribers/users and push-to-talks reflect increased communication of those responders to public safety needs.

Goal C: Secure and pursue opportunities to minimize expenses and risks while maximizing the value of the statewide communication system that enables public safety personnel *to protect the public's safety, including providing timely and appropriate responses to emergencies and disasters.*

Objective C: 1: MS WCC will minimize the expenses of the statewide communication system

Outcome: The WCC annual operating cost per Mississippian ≤ $4.23 per person

C.1.1. Strategy: MS WCC will track administrative and total expenditures of the statewide Communication system.

Output: Fiscal Year Total Expenditures (actuals)
Output: Fiscal Year Administrative Expenses (actuals)

C.1.2. Strategy: MS WCC will keep the administrative costs of MS WCC's expenses at or below 10% of total operating costs and construction projects within budget.

Efficiency: Administrative costs of MSWIN as percentage of total operating expenditures (statewide benchmark)
Efficiency: Statewide sites (MSWIN) construction projects managed in accordance with both time schedule and within budget (%)

Objective C.2. MS WCC will secure and pursue opportunities to minimize risks while maximizing the value of the statewide communication system.

Explanatory: Securing funding, curtailing expenses, and minimizing risks while pursuing the maximum value of the statewide communication system is a challenge. State appropriations are scarce, expenses for technology increase, and threats from the cyber community abound.

Wireless Communication Commission

Performance Measures - WCC Strategic Plan and Budget

FY27 Budget and Strategic Plan FY27 - FY31

	BUDGET DATA			STRATEGIC PLAN DATA			
	Actuals	Actuals	Estimated	Projected	Projected	Projected	Projected	Projected
	FY24	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**
§ Output: MSWIN sites in operation (# of sites)[1]	156	160	160	160	163	163	163	163
§ Output: MSWIN sites development (# of sites)	4	4	0	3	0	0	0	0
§ Output: Public Safety subscribers utilizing MSWIN (# of subscribers)	62,509	66,733	70,070	73,573	77,252	81,114	85,170	89,429
§ Output: MSWIN public safety subscriber push to talks (# of PTTs)	126,837,037	133,392,474	140,062,098	147,065,203	154,418,463	162,139,386	170,246,355	178,758,673
§ Output: Fiscal Year Total Expenditures	$11,352,814	$11,968,985	$11,921,851	$ 12,178,692	$ 12,416,692	$ 12,654,692	$12,892,692	$ 13,130,692
§ Output: Fiscal Year Administrative Expenses	$839,090	$878,629	$895,141	$895,141	$ 895,141	$ 895,141	$ 895,141	$ 895,141
§ Efficiency: MSWIN construction project managed in accordance with both time schedule and within budget (%)	100%	100%	100%	100%	100%	100%	100%	200%
§ Efficiency: MSWIN annual operating cost per MS ≤ $4.23 per person	$3.80	$4.00	$3.99	$4.02	$4.02	$4.02	$4.02	$5.02
§ Efficiency: Administrative costs of MSWIN ≤ 10 % of total operating expenses	7.4%	7.3%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
§ Outcome: MSWIN availability to public safety subscribers >99%	99%	99%	99%	99%	99%	99%	99%	99%
§ Outcome: Public safety subscribers utilizing MSWIN – increase by 5% annually	6.8%	6.8%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
§ Outcome: MSWIN subscribers PTTs increase by 5% annually **	5.5%	5.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
§ Outcome: Mobile Coverage across state equals 97%	97%	97%	97%	97%	97%	97%	97%	197%

[1]These sites were built specifically for the MSWIN system. In addition to these sites, the WCC has co-located MSWIN equipment on sites across the state to enhance portable

System Efficiency	
Output: Push-to-Talks Annualized	133,392,474
Output: Total "busies" Annualized	5,353
Efficiency: Total % of "busies" Annualized	0.00401297