



SAFETY MANAGEMENT SYSTEM



Charlotte Area Transit System Safety Management System (SMS) & Agency Safety Plan (ASP) Implementation



Safety is for Everyone, Everyday!

1





SAFETY MANAGEMENT SYSTEM

MAP-21 Summary

- Moving Ahead for Progress in the 21st Century (MAP-21)
- Effective date: October 1, 2012
- Gave FTA new authority for Public Transportation Safety
- Established New Regulations (672, 673, **674**)
- Requires that the SSO **have the authority, staff, training, and expertise** to enforce Federal and State safety laws
- Directs **FTA to certify whether each SSO is adequate and meets the requirements**
- Directs FTA to distribute funding to support SSO work. **FTA can fund up to 80% of the SSO Program, with a 20% required local match**





SAFETY MANAGEMENT SYSTEM

SMS Overview

- On July 19, 2018, FTA published 49 CFR Part 673, entitled Public Transportation Agency Safety Plan (PTASP)
- SMS is a comprehensive, collaborative approach that brings management and employees together to build on the transit industry's existing safety foundation (System Safety) to:
 - ✓ Control safety risk better
 - ✓ Detect and correct safety problems earlier
 - ✓ Share and analyze safety data more effectively
 - ✓ Measure safety performance more carefully





SAFETY MANAGEMENT SYSTEM

Why SMS?

- Deepen the industry's commitment to the safety of passengers and employees
- Provides the framework for a stronger culture for employees to work together to solve safety problems
- Strengthen transit agencies' core competencies
- Helps transit agencies eliminate or reduce conditions that cause negative events
- Scalable and adaptable—has worked well in other industries facing challenges like our own





SAFETY MANAGEMENT SYSTEM

Key Features of SMS

- **Risk Analysis** – proactive to enhanced service safety performance
- **Positive Safety Culture** – supports safety communication and reporting
- **Partnership and Knowledge Sharing** – Intra-/inter-agency and state, local, federal government
- **Accountability** – Accountable Executive: allocate resources/employees: delivering positive safety results
- **Collaboration** – management and labor working together to ensure agreement on safety priorities





SAFETY MANAGEMENT SYSTEM

Key Features of SMS

- **Decision-Making** – structured and strategic for safety resource allocation
- **Safety Assurance** – to increase confidence in safety risk controls established
- **Safety Promotion** – communication and agency-wide buy in, training
- **Scalable and Flexible** – based on the size of the agency and complexity of services delivered





SAFETY MANAGEMENT SYSTEM



Safety is for Everyone, Everyday!



SAFETY MANAGEMENT SYSTEM

Four-step Safety Management Process

In practice, an SMS uses a four-step Safety Management Process:

- **Step 1: Identify safety concerns**
- **Step 2: Assess safety risk**
- **Step 3: Mitigate safety risk**
- **Step 4: Monitor safety performance**





SAFETY MANAGEMENT SYSTEM

PTASP and SMS

- 49 CFR 673 requires all transit agencies to create a Public Transportation Agency Safety Plan (PTASP)
 - NCDOT State Safety Oversight (SSO) approved CATS PTASP on June 3, 2020
- System Safety relies on auditing, inspections, and training to elicit compliance with the system; as it was designed to be used.
- This has led the industry to focus on “who broke a rule” or “what mechanical part failed”.
- Determining “who” or “what” failed does not determine “why” a hazard exists nor prevent repeat of negative events.
- Further analysis is needed to truly determine root-cause of negative outcomes and underlying circumstances. The same can be said of the existence of all unsafe conditions.





SAFETY MANAGEMENT SYSTEM

SMS Components of an Agency Safety Plan



- **Safety Management Policy**
 - Safety Objective and Performance Targets
 - Confidential Employee Reporting Program
 - Organizational Accountabilities and Safety Responsibilities
- **Safety Assurance**
 - Safety Performance Monitoring and Measurement
 - Management of Change
 - Continuous Improvement
- **Safety Risk Management**
 - Hazard Identification and Analysis
 - Safety Risk Evaluation and Mitigation
- **Safety Promotion**
 - Safety Communication
 - Competencies and Training





SAFETY MANAGEMENT SYSTEM

Utilizing SMS, transit agencies now have additional management tools to effectively manage safety:

Safety Performance Monitoring and Measurement

- Accident/injury investigations
- Compliance audits
- Internal inspections
- Customer complaints
- Safety certification/system modification requirements
- Employee Reporting Systems
- Monitor service delivery activities- operational & maintenance data

Management of Change

- Conduct safety surveys
- Assess impacts of changes
- Effectiveness of risk mitigations
- Assess employee safety reporting program

Continuous Improvement

- Evaluating the SMS
- Measuring SMS Performance





SAFETY MANAGEMENT SYSTEM

Elevated Safety Management

The PTASP regulation, 49 CFR Part 673, includes the requirement to implement SMS; leading to the RTA's need to assign safety management tasks and responsibilities to each agency department (not just the Safety Department)

The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the Accountable Executive





SAFETY MANAGEMENT SYSTEM

Roles and Responsibilities

- The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's Safety Management System (SMS):
 - 1) Accountable Executive – John Lewis, Chief Executive Officer
 - 2) Chief Safety Officer & SMS Manager – David Moskowitz, General Manager of Safety & Security
 - 3) Agency Leadership and Executive Management – CATS Leadership Team
 - 4) Key staff – CATS employees





SAFETY MANAGEMENT SYSTEM

Accountable Executive – Champion for Safety

- Role – Serves as the Champion for Safety with ultimate accountability for SMS implementation
- Responsibilities:
 - Designate a Chief Safety Officer/SMS Executive
 - Allocate resources to develop and maintain the Agency Safety Plan and TAM plan
 - Approve the SMS implementation strategy
 - Support communication of SMS information
 - Present the Agency Safety Plan for Board approval





SAFETY MANAGEMENT SYSTEM

Accountable Executive & CSO: Creating the Right Culture

- Regardless of agency size and structure, key attributes of a SMS includes:
 - Clear lines for safety communication
 - Accountability for safety performance at the highest level and throughout the agency
 - Formal definitions for the management levels that have authority to make decisions regarding safety risk tolerability
 - Acknowledgment that front-line employees are critical to SMS success through their role in reporting safety hazards





SAFETY MANAGEMENT SYSTEM

Chief Safety Officer

- Chief Safety Officer (CSO) means an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. § 673.5





SAFETY MANAGEMENT SYSTEM

Chief Safety Officer

Why is the CSO/SMS Executive accountable for SMS implementation?

- SMS implementation is an interdisciplinary management system
- Communicates directly with the Accountable Executive and agency leadership on SMS implementation needs
- As an executive level position, the CSO/SMS Executive has the power to procure technical and staffing resources





SAFETY MANAGEMENT SYSTEM

Agency Leadership and Executive Management Chief Executive Officers, Senior Operational Leaders, etc.

- Role – Ensure incorporation of safety management practices in the agency's operational areas
- Responsibilities:
 - Designate representatives from the agency, such as operations, maintenance and other revenue service and administrative support functions to serve as Key Staff
 - Encourage SMS training for staff
 - Take ownership of safety management processes and activities as they are implemented





SAFETY MANAGEMENT SYSTEM

Key Staff

- A transit agency may designate key staff, groups of staff, or committees to support the Accountable Executive, Chief Safety Officer, or SMS Executive in developing, implementing, and operating the agency's SMS. § 673.23 (d)(4)
- Role – Serve as subject matter experts representing their departments during SMS implementation
- Responsibilities:
 - Provide expertise on how to adapt existing departmental practices to work in concert with SMS
 - Identify departmental data and information resources to support SMS decision making
 - Meets and updates the CSO/SMS Executive





SAFETY MANAGEMENT SYSTEM

Key Staff - Subject Matter Experts

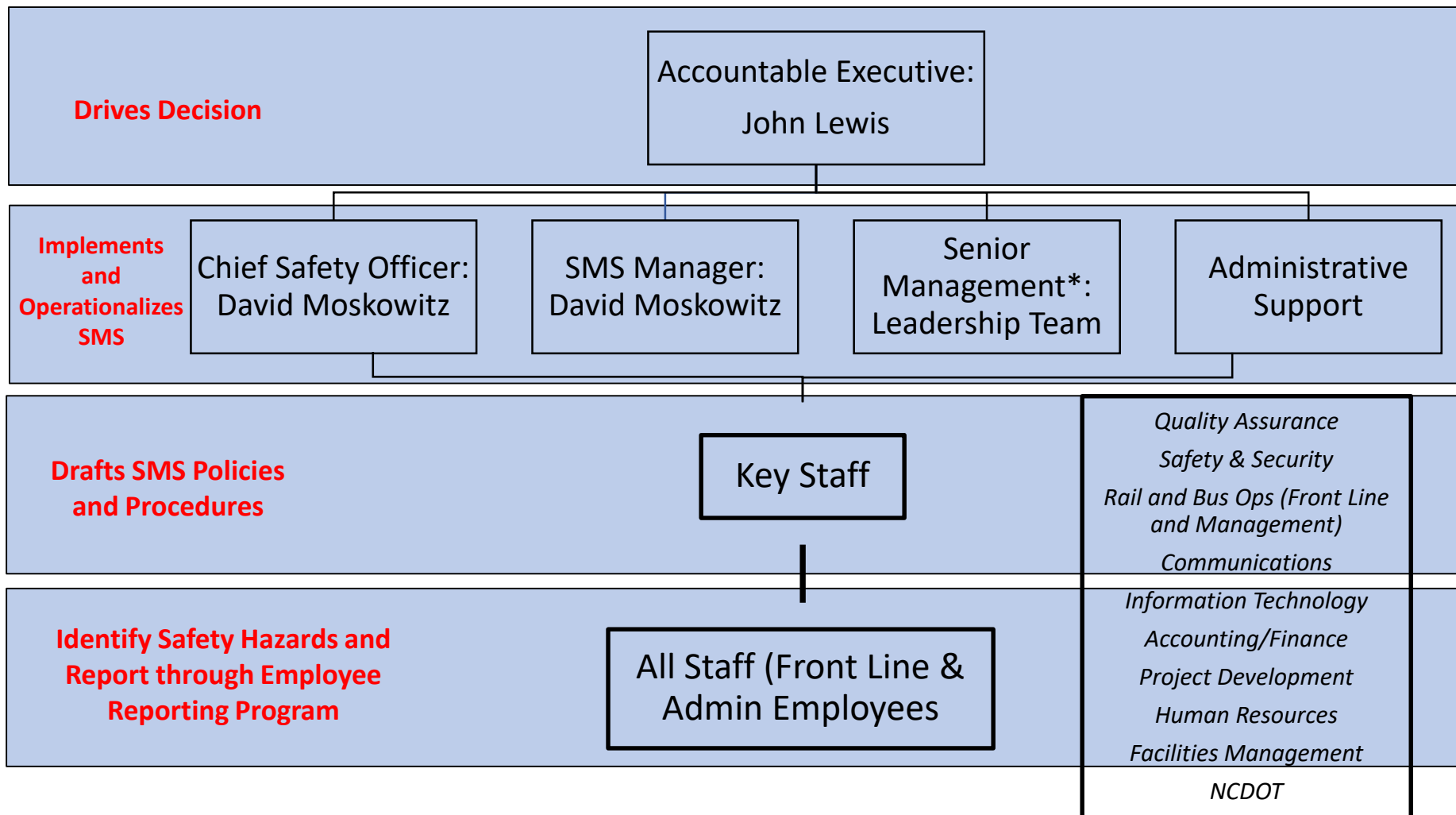
Why are Key Staff important for SMS implementation?

- SMS is a multi-disciplinary endeavor
- Key Staff may be organized into an SMS Implementation Team with regular meetings and work sessions
- These individuals are familiar with their department's processes and practices and can voice ideas, concerns, and solutions for SMS implementation that works in concert with their practices and duties





SAFETY MANAGEMENT SYSTEM



*Includes Executive leaders, from all agency functions or departments, that support revenue service operations.





SAFETY MANAGEMENT SYSTEM

CATS ASP IMPLEMENTATION



Agency Safety Plan

April 2020
Revision 0

With QA Bulletin 20-01

CHARLOTTE AREA TRANSIT SYSTEM
Charlotte-Mecklenburg Government Center (CMGC)
600 East Fourth Street
Charlotte, NC 28202

Printed copies of this document are uncontrolled copies.



Safety is for Everyone, Everyday!





SAFETY MANAGEMENT SYSTEM

SMS Authorities, Accountabilities, and Responsibilities

- Following 49 CFR 673 CATS expanded the safety plan to include required key elements such as:
 - Leadership commitment to implement SMS/ASP at agency
 - Anonymous reporting system
 - Assurances to employees of no retaliation for reporting safety concerns
 - Ensuring all staff and contractors followed the approved Agency Safety Plan
- Leadership identified key staff to serve as Accountable Executive, Chief Safety Officer, SMS Manager and SMS Workgroup





SAFETY MANAGEMENT SYSTEM

SMS Authorities, Accountabilities, and Responsibilities (cont.)

- How it was taken from the ASP and put into action:
 - NCDOT Approved CATS ASP in June 2020
 - Updated CATS Rail Safety Policy
 - Posted copy of safety policy signed by all CATS Leadership
 - Posted Roles and Responsibilities of Employees and Management in Key Areas
 - NCDOT Approved Phase 1 of the Implementation Plan in December 2020
 - CATS Implementation Plan





SAFETY MANAGEMENT SYSTEM

Posters Hanging Around Facilities



Employees Roles and Responsibilities

SMS Role

1. Keeping SAFETY FIRST
2. Work safely and wear PPE
3. Be compliant with procedures & regulations
4. Support implementation of the SMS
5. Participate in SMS training
6. Report to Supervisor any safety hazards, concerns or suggestions

Personal Safety Responsibilities

1. I am accountable for my own safety & the safety of those around me
2. I follow procedures, wear PPE, & promptly report safety hazards
3. I am attentive for my safety by not being complacent & watching for fatigue & stress
4. I practice good housekeeping in my workplace

Unacceptable Workplace Behaviors

1. Willful safety violations
2. Reckless & neglectful acts
3. Disabling safety devices
4. Criminal Activity
5. Alcohol or drug use



Safety is for Everyone, Everyday!



Charlotte Area Transit System Safety Management Policy

The Charlotte Area Transit System (CATS) was organized with the mission to provide safe, secure, reliable and effective rail, bus and paratransit transportation services to our customers. Accordingly, safety is a primary concern that affects all levels of CATS activities including operations, maintenance, and administrative functions of the organization.

All employees and contractors of CATS are expected to conduct their duties safely, aimed at preventing, controlling and minimizing undesired events, such as customer or employee injury, equipment or property damage, or degradation to system safety in any CATS function. Employees and customers are CATS' most important assets, and their safety and security are among CATS' greatest responsibilities.

While the minimizing of unsafe conditions and the prevention of accidents in CATS' transportation system and facilities are the responsibility of each employee, they are first and foremost the responsibility of CATS Management. A safety reporting program will be established as a viable tool for employees to voice their safety concerns. No disciplinary action will be taken against any employee who communicates a safety concern through the CATS safety reporting program unless such disclosure indicates the following: an illegal act, gross misconduct and/or negligence, or a deliberate or willful disregard of CATS rules, policies, and procedures.

CATS Management is committed to developing a Safety Management System (SMS) and will develop programs to promote the safety and security of all employees and customers. We are fully committed to providing a safe work environment and safe vehicles, systems, and facilities. To that end, CATS' General Manager of Safety and Security is empowered and authorized to administer a comprehensive, Integrated Agency Safety Plan.

CATS will distribute this Safety Management Policy Statement to each employee and will review it with employees during employee safety meetings and toolbox talks with supervisors. CATS commitment to developing our SMS is supported by the following safety objectives:

- Support the implementation of an effective SMS by providing appropriate resources to support an organizational culture that fosters safe operational policies, encourages effective safety reporting and communication, and actively manages safety with the same attention to results as that given to the other management systems of CATS.
- Integrate the management of safety as an explicit responsibility of CATS managers and employees.
- Clearly define for all managers, employees and contractors their accountabilities and responsibilities for the delivery of safe transit services and the performance of our safety management system.
- Establish and operate a safety reporting program as a fundamental tool in support of CATS hazard identification and safety risk evaluation activities to eliminate or mitigate the safety risks of the consequences of hazards resulting from our operations or activities to a point that is as low as reasonably practical.
- Comply with and, wherever possible, exceed any applicable legislative and regulatory requirements and standards.
- Ensure that sufficiently trained and skilled personnel are available and assigned to implement CATS safety management processes and activities.
- Ensure that all staff are formally provided with adequate and appropriate safety management information, are competent in safety management system activities, and are assigned only safety related tasks commensurate with their skills.
- Establish and measure our safety performance against realistic safety performance indicators and safety performance targets.
- Continually improve our safety performance through management processes that ensure relevant safety action is taken in a timely fashion and is effective when carried out.
- Ensure contracted services are ordered and delivered in compliance with our safety performance standards.



Safety is for Everyone, Everyday!



Managers' Roles and Responsibilities

- Support the implementation of an effective Safety Management System by providing appropriate resources to support an organizational culture that fosters safe operational policies, encourages effective safety reporting and communication, and actively manages safety with the same attention to results as that given to the other management systems of CATS.
- Integrate the management of safety as an explicit responsibility of CATS managers and employees.
- Clearly define for all managers, employees and contractors their accountabilities and responsibilities for the delivery of safe transit services and the performance of our safety management system.
- Establish and operate a safety reporting program as a fundamental tool in support of CATS hazard identification and safety risk evaluation activities to eliminate or mitigate the safety risks of the consequences of hazards resulting from our operations or activities to a point that is as low as reasonably practical.
- Comply with and, wherever possible, exceed any applicable legislative and regulatory requirements and standards.
- Ensure that sufficiently trained and skilled personnel are available and assigned to implement CATS safety management processes and activities.
- Ensure that all staff are formally provided with adequate and appropriate safety management information, are competent in safety management system activities, and are assigned only safety related tasks commensurate with their skills.
- Establish and measure our safety performance against realistic safety performance indicators and safety performance targets.
- Continually improve our safety performance through management processes that ensure relevant safety action is taken in a timely fashion and is effective when carried out.
- Ensure contracted services are ordered and delivered in compliance with our safety performance standards.



Safety is for Everyone, Everyday!



Safety is for Everyone, Everyday!





SAFETY MANAGEMENT SYSTEM

SMS Authorities, Accountabilities, and Responsibilities (cont.)

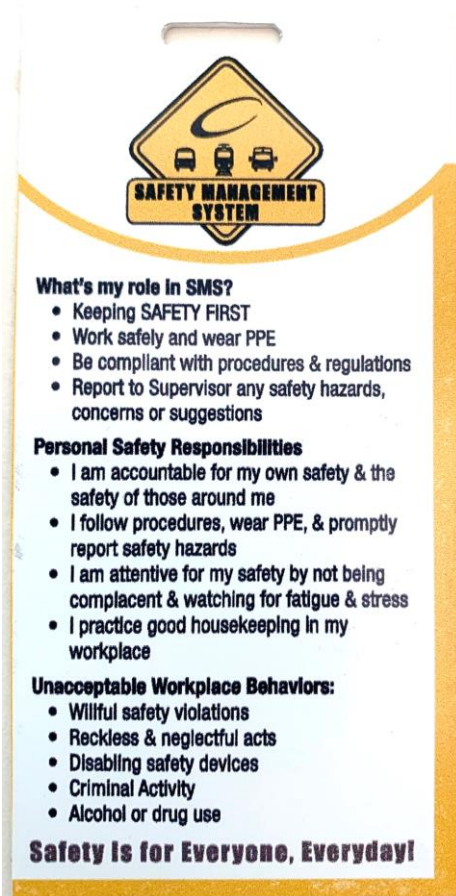
- SMS Training for Managers and Frontline employees are being developed
- Drafted New Risk Registry and Safety Hazard Logs
- Rail Operations and Maintenance Staff were all provided with refresher training on their safety roles and responsibilities and reviewed the updated agency safety policy





SAFETY MANAGEMENT SYSTEM

SMS Authorities, Accountabilities, and Responsibilities (cont.)



What's my role in SMS?

- Keeping SAFETY FIRST
- Work safely and wear PPE
- Be compliant with procedures & regulations
- Report to Supervisor any safety hazards, concerns or suggestions

Personal Safety Responsibilities

- I am accountable for my own safety & the safety of those around me
- I follow procedures, wear PPE, & promptly report safety hazards
- I am attentive for my safety by not being complacent & watching for fatigue & stress
- I practice good housekeeping in my workplace

Unacceptable Workplace Behaviors:

- Willful safety violations
- Reckless & neglectful acts
- Disabling safety devices
- Criminal Activity
- Alcohol or drug use

Safety is for Everyone, Everyday!

- Staff was also provided with Safety Card that has the following information:
 - The various methods to report safety concerns
 - SMS Role of the Employee
 - Personal Safety Responsibilities
 - Unacceptable Workplace Behaviors



Safety Reporting Options:

- Notify Lead/Supervisor or Management
- Safety Email: reportsafety@cl.charlotte.nc.us
- Anonymous reporting
 - Safety Hotline at : 1-844-566-4040
 - Go to CATS CNET Page and Click on the Anonymous Reporting Link.

What Can I Report

- Accidents/Incidents
- Hazards & potential hazards
- Safety issues and concerns
- Possible solutions and safety improvements
- Close calls or near misses

Report Specific Information:

- Date, time, location & equipment number
- Description of issue/event
- Safety concern or issue
- Possible solutions or suggested improvements



Safety is for Everyone, Everyday!





SAFETY MANAGEMENT SYSTEM

Lessons Learned



- Understanding the various roles and responsibilities of frontline, management and leadership positions in the SMS Culture
- Shifting the agency safety culture into the Safety Management Systems (SMS) structure/culture
- Identifying the SMS specific staff and resources needed to successfully implement SMS at CATS
 - Hiring more safety staff
 - Upgrading software programs to document, manage, track and analyze all of the safety data that needs to be collected and analyzed





SAFETY MANAGEMENT SYSTEM

Next Steps

- Annual Review of Agency Safety Plan (ASP)
- Review and update implementation plan
- Periodically review and update audit schedule
- Gap Analysis to identify safety areas of improvement
- Identify additional resources to implement and support SMS





SAFETY MANAGEMENT SYSTEM

Next Steps (cont.)

- Identify safety goals and safety data elements to track
- Identify Safety Report items for leadership, MTC and employees
- Develop training plan to educate employees on SMS
 - Executive Team
 - Managers/Supervisors
 - Office Staff
 - Frontline Workers
- Develop training plan to educate elected officials and other city departments/partners





SAFETY MANAGEMENT SYSTEM

Contact Information

**David Moskowitz, WSO-CSE, TSSP
General Manager Office of Safety & Security
CATS Chief Safety Officer**

Mobile: 704-614-4676

david.moskowitz@charlottenc.gov

