

# VCAT Safety Briefing February 2025

# Agenda:

## **Liz Mackey, OSHE Director**

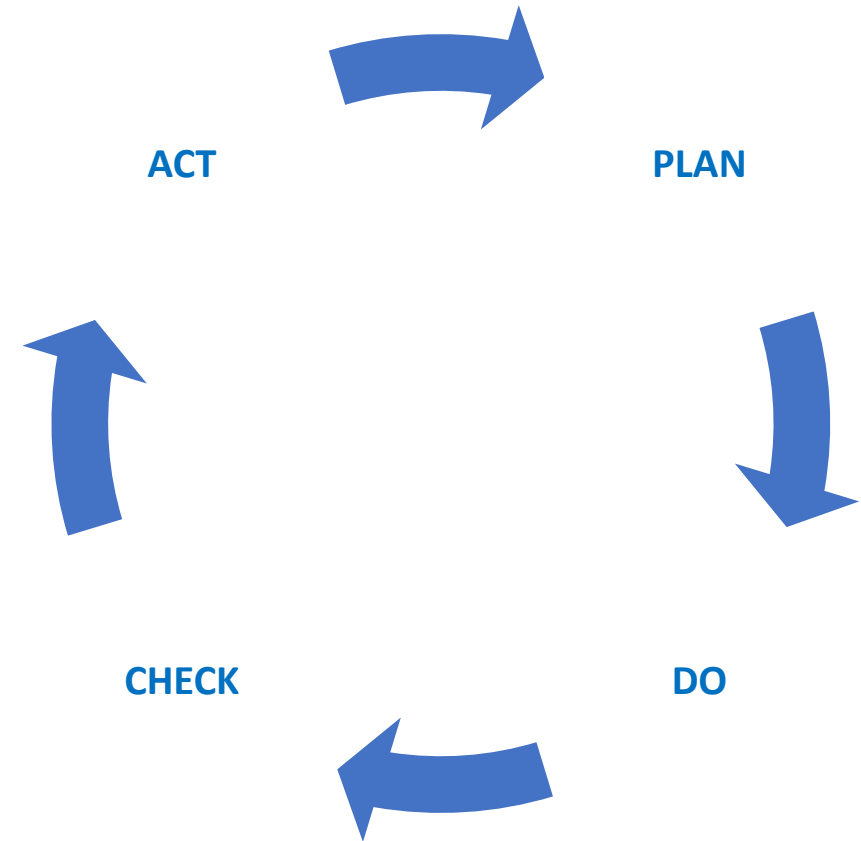
- NIST Safety Management System: Performance Indicators
- FY 2024 Goals, Objectives, Selected Accomplishments
- FY 2025 Goals and Actions Planned

## **Kate Beers, MML Director, and Melissa Midzor, CTL Director**

- OU Safety Implementation and Best Practices

# NIST Safety Management System (SMS)

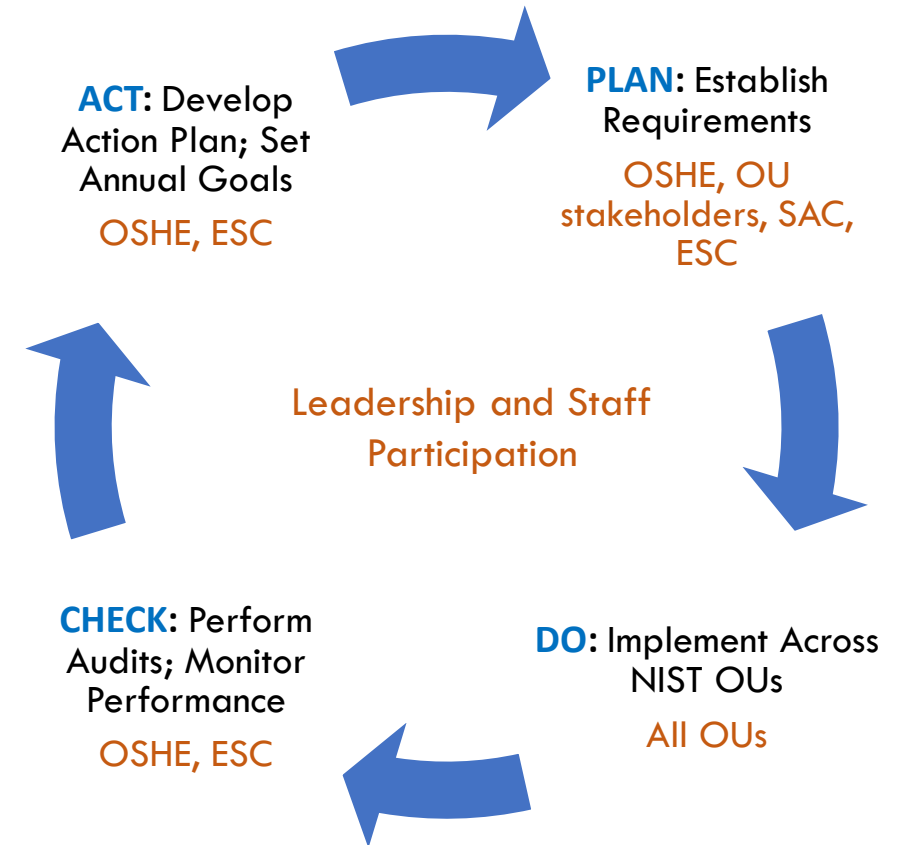
- NIST's Office of Safety Health and Environment (OSHE) protects staff from occupational injury and illness and ensures regulatory compliance
- OSHE is responsible for occupational safety and health, radiation safety, fire and life safety code, and environmental compliance
- NIST's Safety Management System is based on ISO 45001 which provides a framework for:
  - Integrating safety into all aspects of operations
  - Implementing a systems approach to safety using the Plan → Do → Check → Act model
  - Continual improvement



# SMS: Leadership and Staff Participation

NIST Leadership communicates commitment to safety through Policy Directives

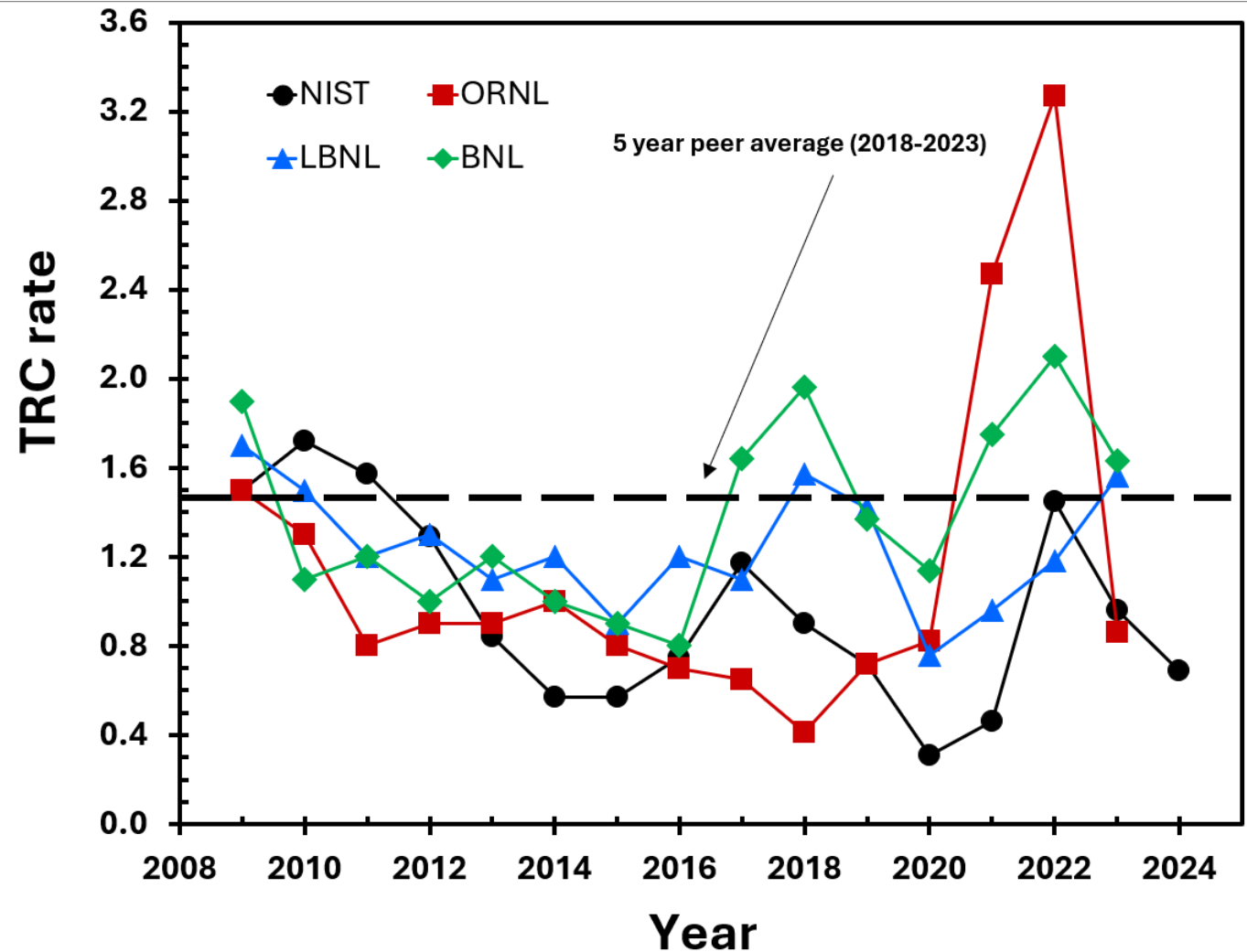
- **PLAN:** OSHE establishes safety requirements with input from stakeholders, safety committees, and executives
- **DO:** OU management, supervisors and staff are responsible for implementing requirements
- **CHECK:** OSHE staff, with participation from NIST management and staff, conduct inspections, audits, data analysis and assessments to evaluate safety performance
- **ACT:** OSHE and the Executive Safety Committee (ESC) monitor safety performance data, establish annual safety goals and targets for safety performance indicators (continuous improvement loop)



# Review of Safety Performance

## Performance Data and Indicators

1. Incident Data: Total reports, OSHA recordables, near misses, trends, common causes, benchmark against NAIS category, DOE labs
2. Corrective Actions: completion rate, timeliness of closure
3. Inspections: conducted, deficiencies recorded, common causes, number fixed, timeliness of completion
4. Training: course completions
5. Communications: open rates, web traffic, participation in surveys
6. Internal and external reviews: findings, recommendations



## FY 2024 Goals:

1. Complete and fully functional Safety Management System
2. Improve NIST safety culture
3. Strengthen OSHE roles and responsibilities
4. **A.) Establish numerical goals for safety performance metrics (VCAT recommendation) and B.) Provide better access to data**

[Safety Home](#) > [Committee](#)

## Executive Safety Committee (ESC)



UPDATE

The National Institute of Standards and Technology (NIST) Executive Safety Committee (ESC or Committee) serves as a customer and stakeholder-focused body for the discussion and vetting of NIST-level policies, procedures, and other issues related to safety, health, and environment and supports a variety of mechanisms for employee participation.

+ [Roster](#)

+ [Charter](#)

+ [Meetings](#)

+ [Fiscal Year Safety Goals](#)

# Goal 4A: Establish Goals for Key Performance Indicators

## FY 2024 Objective Achieved:

- In June 2024, the Executive Safety Committee established goals for 17 key safety performance indicators

## FY 2025 Follow-up Objectives:

- OSHE and the Executive Safety Committee monitor these data and take actions as necessary to improve performance within OUs
- New Metric: OUs track Management Observation visits
- New Planned Metric: Hazard reviews conducted, renewed, revised

Performance Indicators	Goals, June 2024
NIST General Safety Training + Safety Rules of Behavior; % completion	100%
Assigned NIST Program training; % completion	100%
<i>NEW PLANNED</i> Hazard reviews; numbers initiated, renewed, and updated	TBD in new App
Near Miss reporting; (% of total reports)	60%
Incident and Near Miss Severity; monitor number of events with the Potential for Serious Injury or Fatality [PSIF] per year	Observe
Timeliness of incident reports; average days; percent within 2 days	2 d (100%)
Timeliness of investigations; average days; percent within 20 days	20 days (95%)
Incident corrective actions open and overdue; % of total	≤5%
Workplace inspections performed (not including common spaces)	100%
Deficiencies from previous FYs; % closed	Close 100%
Deficiencies from current FY; % closed within 21 calendar days	Track for target 21 d
Deficiencies per inspection; ratio	Observe
Imminent danger deficiencies; number	0 open
<i>NEW</i> Management observations; numbers conducted	OUs track/report
Safety culture survey; % participation	NA for FY24
Safety communication; open rate	Maintain (65%)
Safety website traffic; users, page views	Maintain (12K; 500K)

# Goal 4B: Provide Better Access to Data and Metrics

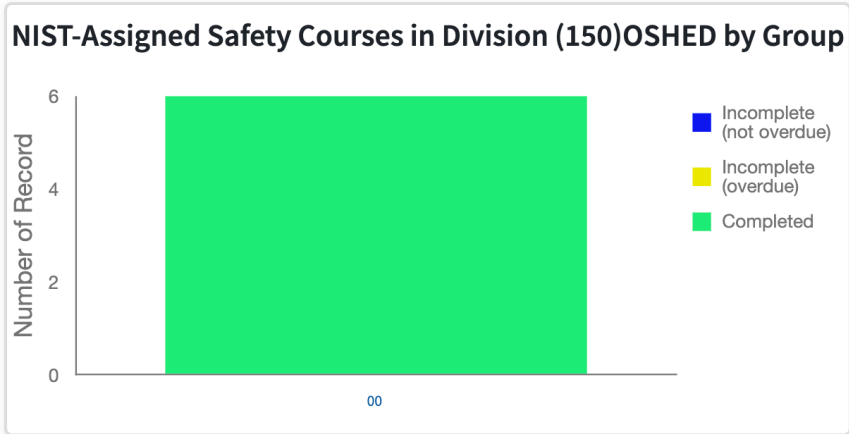
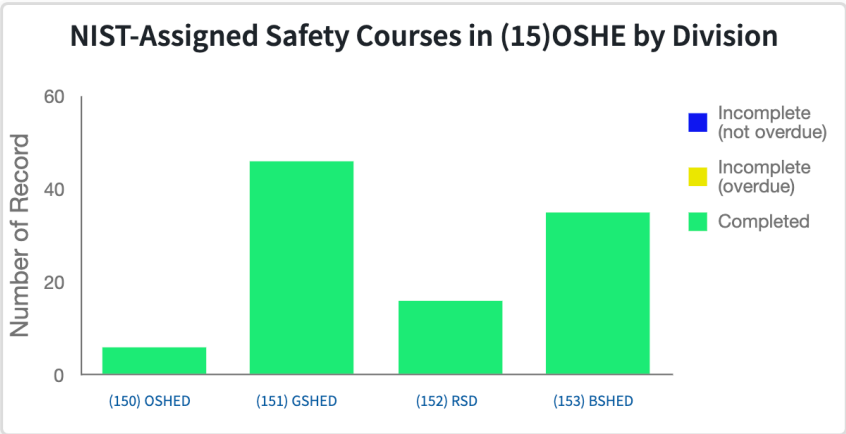
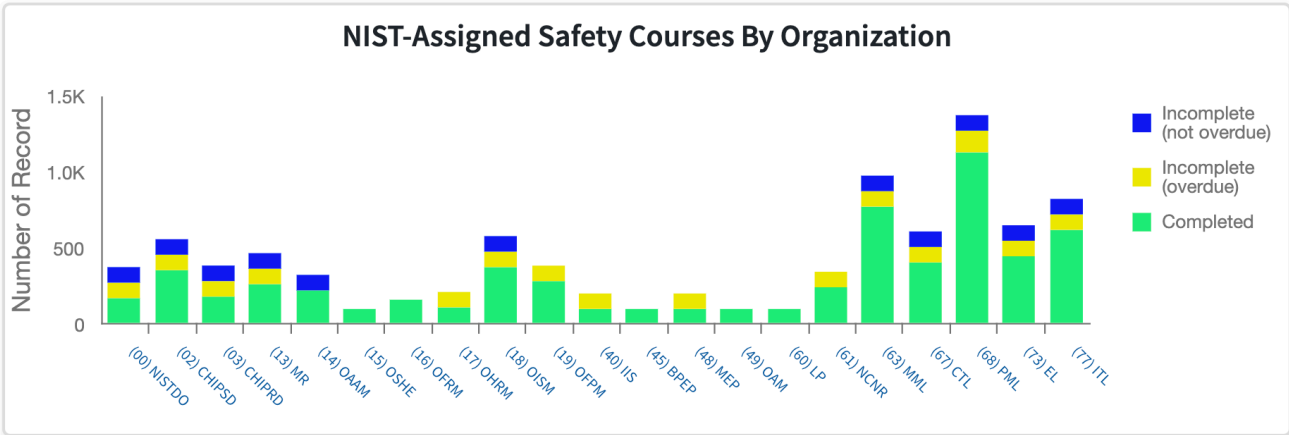
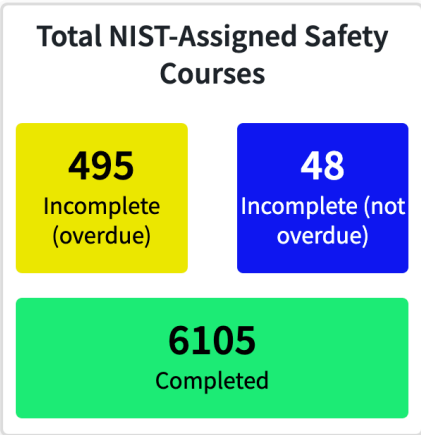
## FY 2024 Objectives

### Achieved:

- Dashboard launched to display training, incident investigation and corrective action data
- Dashboard allows NIST view, OU view with ability to drill down to divisions, groups and individuals
- SAC and usability review was highly favorable

### Objectives for FY 2025:

- Expand dashboard to workplace inspection and deficiency data



Data as of February 2, 2025; these include FY 2024 and FY 2025 data



# KPI Status January 30, 2025



Performance Indicators	Targets (June 2024)	FY24 Data	FY25 (Jan 30, 2025)
NIST General Safety Training + Safety Rules of Behavior; % completion	<b>100%</b>	89% (no change)	90%
Assigned NIST Program training; % completion	<b>100%</b>	90% (no change)	93%
Hazard reviews; numbers initiated, renewed, and updated	TBD in new App	TBD in new App	TBD in new App
Near Miss reporting; (% of total reports)	<b>60%</b>	30%	15 of 53 (28%)
Incident and Near Miss Severity; monitor number of events with the Potential for Serious Injury or Fatality [PSIF] per year	<b>Observe</b>	N=3, (2%)	N=1 (1/53)
Timeliness of incident reports; average days; percent within 2 days	<b>2 d (100%)</b>	1 d (average; same)	<1 d (average)
Timeliness of investigations; average days; percent within 20 days	20 days (95%)	60 days (average; up)	<20 d (average)
Incident corrective actions open and overdue; % of total	<b>≤5%</b>	6.7%	2.9% (improved)
Workplace inspections performed (not including common spaces)	<b>100%</b>	42% (decreased)	12%
Deficiencies from previous FYs; % closed	<b>(Follow up needed)</b>	97.5% (increased)	96%
Deficiencies from current FY; % closed within 21 calendar days	<b>Track for target 21 d</b>	28%	43% (improved)
Deficiencies per inspection; ratio	<b>Observe</b>	0.64 (decreased)	0.60
Imminent danger deficiencies; number	<b>0 open</b>	n=1 (decreased)	n=1 (same item)
Management observations; numbers conducted	<b>OUs track/report</b>	Not collected	TBD
Safety culture survey; % participation	<b>NA</b>	NA	Next survey Q1FY26
Safety communication; open rate	<b>Maintain</b>	66% (improved)	64%
Safety website traffic; users, page views	<b>Maintain</b>	12K users (down) 564K pageviews (up)	7.3K users 213K pageviews

# FY 2025 Goals and Objectives



Goals	Objectives
1. Fully Functional Safety Management System	<ul style="list-style-type: none"><li>a. Issue remaining six directives needed to complete the SMS (<a href="#">underway</a>)</li><li>b. Develop action plan to address gaps cited in pre-certification ISO 45001 audit (<a href="#">completed</a>)</li><li>c. Expand safety dashboard to include workplace inspection data (<a href="#">beta version in review</a>)</li><li>d. Communicate the value of a systems approach to safety (<a href="#">training update includes this</a>)</li></ul>
2. Improve the NIST Safety Culture	<ul style="list-style-type: none"><li>a. Continue to implement, monitor and communicate the status of safety culture improvement plan actions (<a href="#">~75% completion of items, 25% are longer-term actions</a>)</li><li>b. Implement Safety Culture Program and communicate actions taken to improve safety culture e.g., safety day, good catch programs, safety awards (<a href="#">discussed at ESC meetings</a>)</li><li>c. Formalize safety as part of the NIST Core Value, Excellence</li></ul>
3. Improve NIST Safety Performance	<ul style="list-style-type: none"><li>a. ESC monitors safety performance data and takes actions to achieve ESC goals (<a href="#">ongoing</a>)</li><li>b. ESC ensures all hazardous work is covered by HRs/JHAs within their OUs (<a href="#">ongoing</a>)</li><li>c. OUs conduct and document management observations with a focus on observing HR/JHA documented procedures and controls including PPE use (<a href="#">underway</a>)</li><li>d. OUs mitigate hazardous conditions identified during workplace inspections and prioritize serious deficiencies including electrical safety and fall hazards (<a href="#">tracked via KPIs</a>)</li></ul>
4. Ensure OSHE resources and staff are adequate to support implementation of the NIST SMS <i>(Additional hiring actions paused due to hiring and budget freezes)</i>	<ul style="list-style-type: none"><li>a. Specify OSHE roles and responsibilities in incident investigations and development and verification of corrective actions (<a href="#">under development</a>)</li><li>b. As feasible, hire:<ul style="list-style-type: none"><li>i.) additional embedded safety staff (<a href="#">paused</a>)</li><li>ii.) a risk management specialist to analyze and evaluate data, identify enterprise level risks and develop mitigation strategies (<a href="#">onboarded 1/27/25</a>)</li><li>iii.) an instructional design specialist to modernize training (<a href="#">paused</a>)</li></ul></li></ul>

# Laboratory Safety

## OU Director Discussion