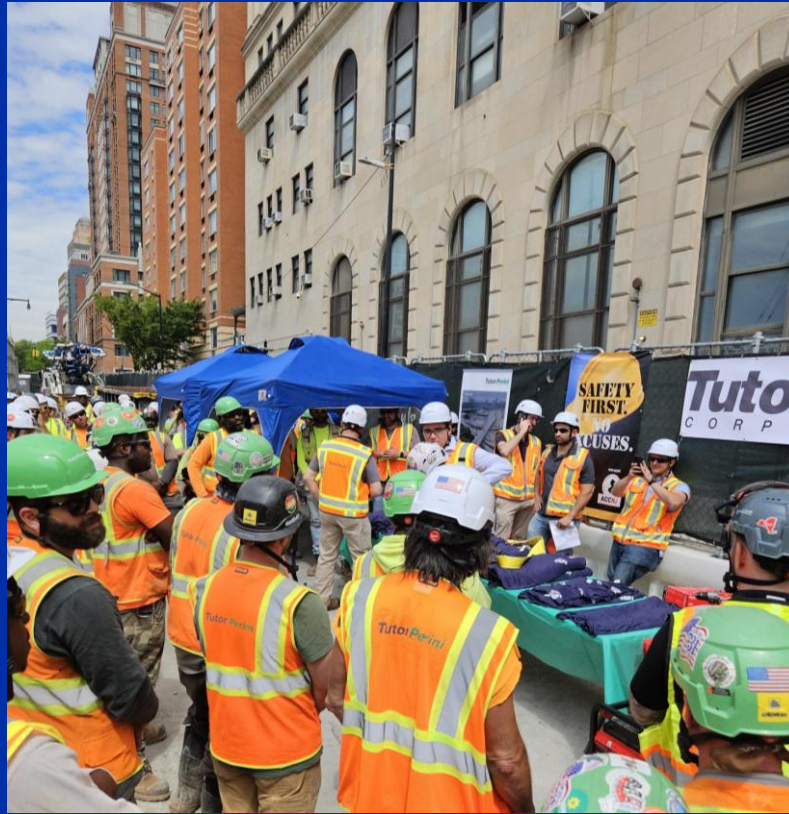

SAFETY SUMMIT 2026

AGENDA

- Opening Remarks
- Safety Performance Data
- Damage Prevention
- Contractors' Perspective on Safety
- What's New In DDC Safety & Site Support
 - Performance Engineering Materials
 - Safety Updates
- Q&A



Opening Remarks



SAFETY PERFORMANCE DATA

CONSTRUCTION INDUSTRY SAFETY DATA

1 in 5

Workplace Fatalities



Construction accounts for nearly 20% of all U.S. workplace fatalities — the most dangerous industry in the country.

1,032

Fatalities in 2024



Preliminary data shows construction & extraction suffered 1,032 deaths — 370 due to falls, slips, and trips.

38.4%

Falls-Related Deaths



Falls from height remain the leading cause, representing over 35% of all construction fatalities (BLS, 2022).

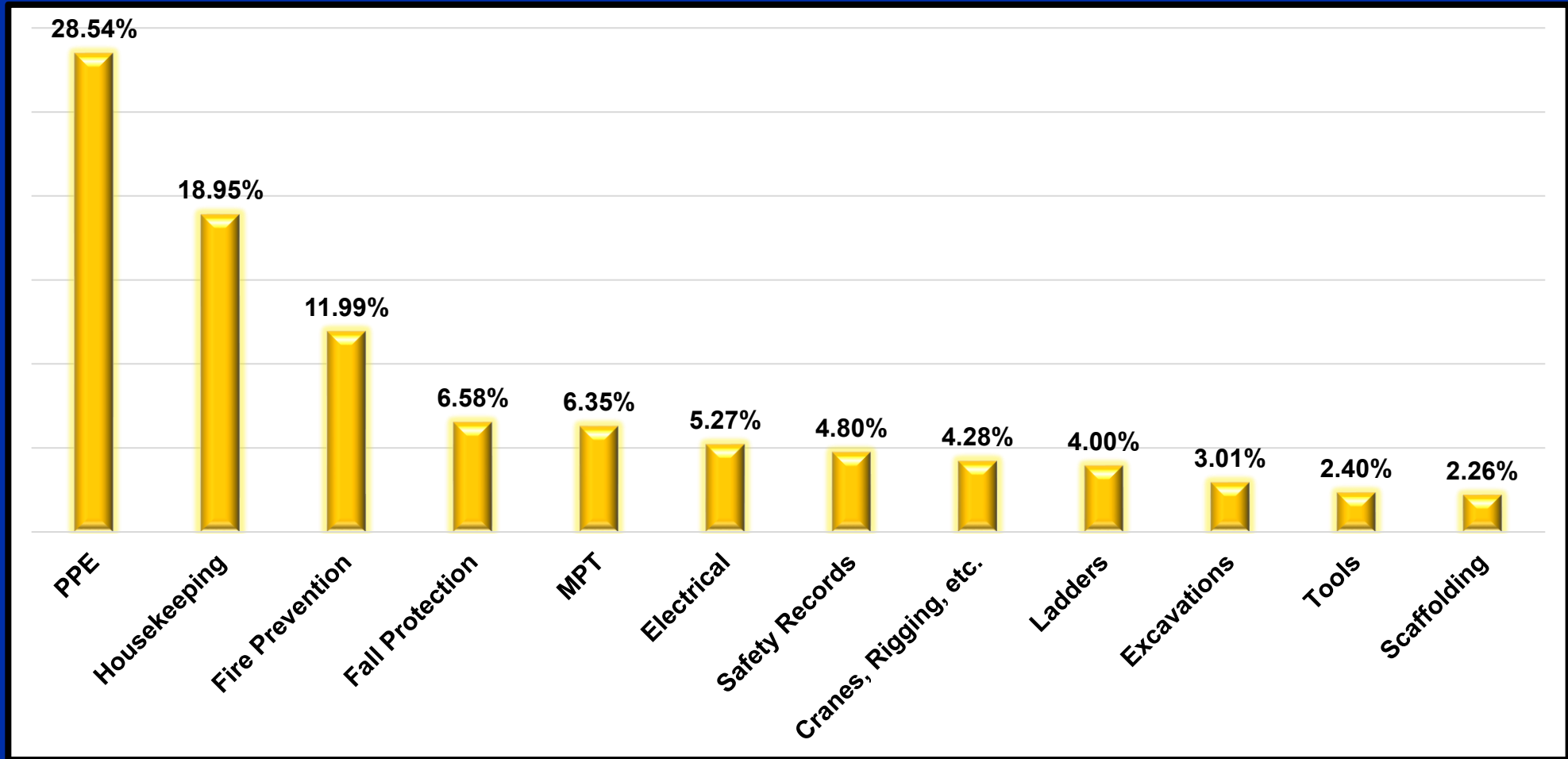
15 Years

OSHA's #1 Violation

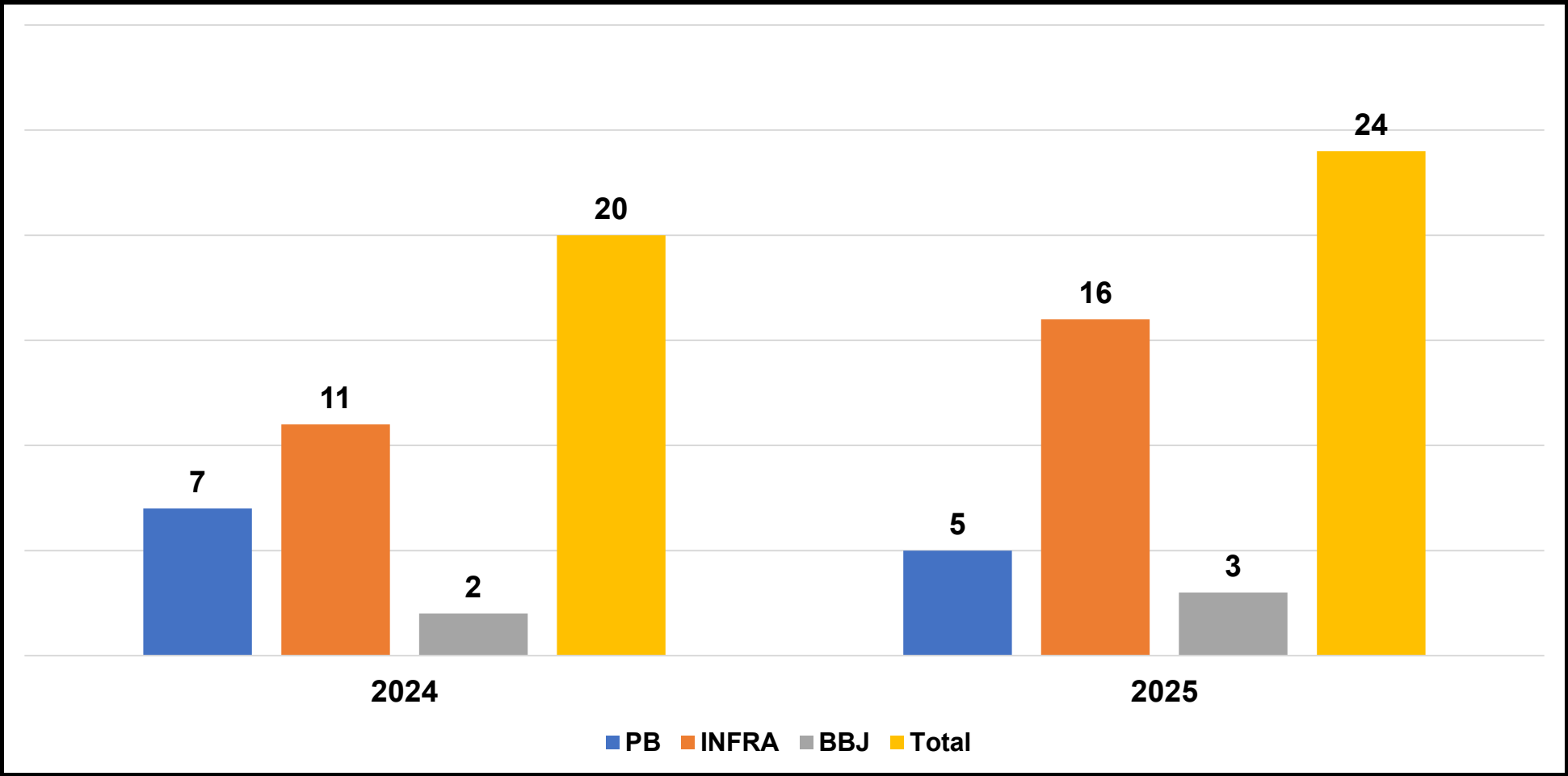


Fall Protection topped OSHA's most-cited list for the 15th consecutive year — 5,914 citations issued in FY 2025.

2025 DDC SAFETY DEVIATIONS DISTRIBUTION




DDC ACCIDENTS 2024 vs 2025



DDC FREQUENT ACCIDENT CATEGORIES

1



Struck-By

2




**Tools &
Equipment**

3



Falls

4



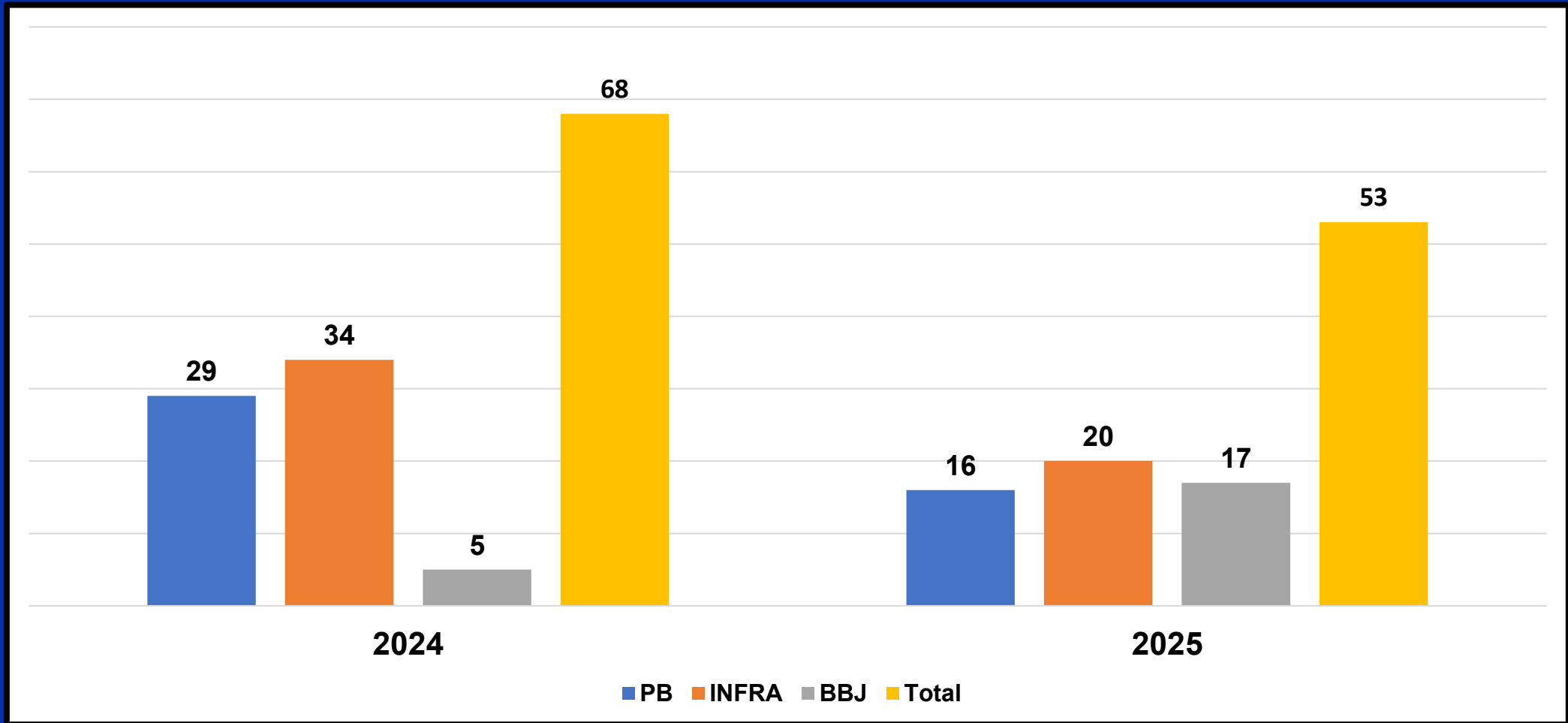
**Caught-In /
Between**

5



**Sprain /
Strain**

DDC INCIDENTS (MINOR INJURIES) 2024-2025



DDC TOP INCIDENT CATEGORIES — MINOR INJURIES

1

Struck By

Unsecured materials, tool drops, and inattentive equipment operators.

2

Slips & Trips

Wet surfaces, debris, uneven terrain, and poor housekeeping.

3

Sprain / Strain

Overexertion during manual material handling — persistent and preventable.

4

Falls

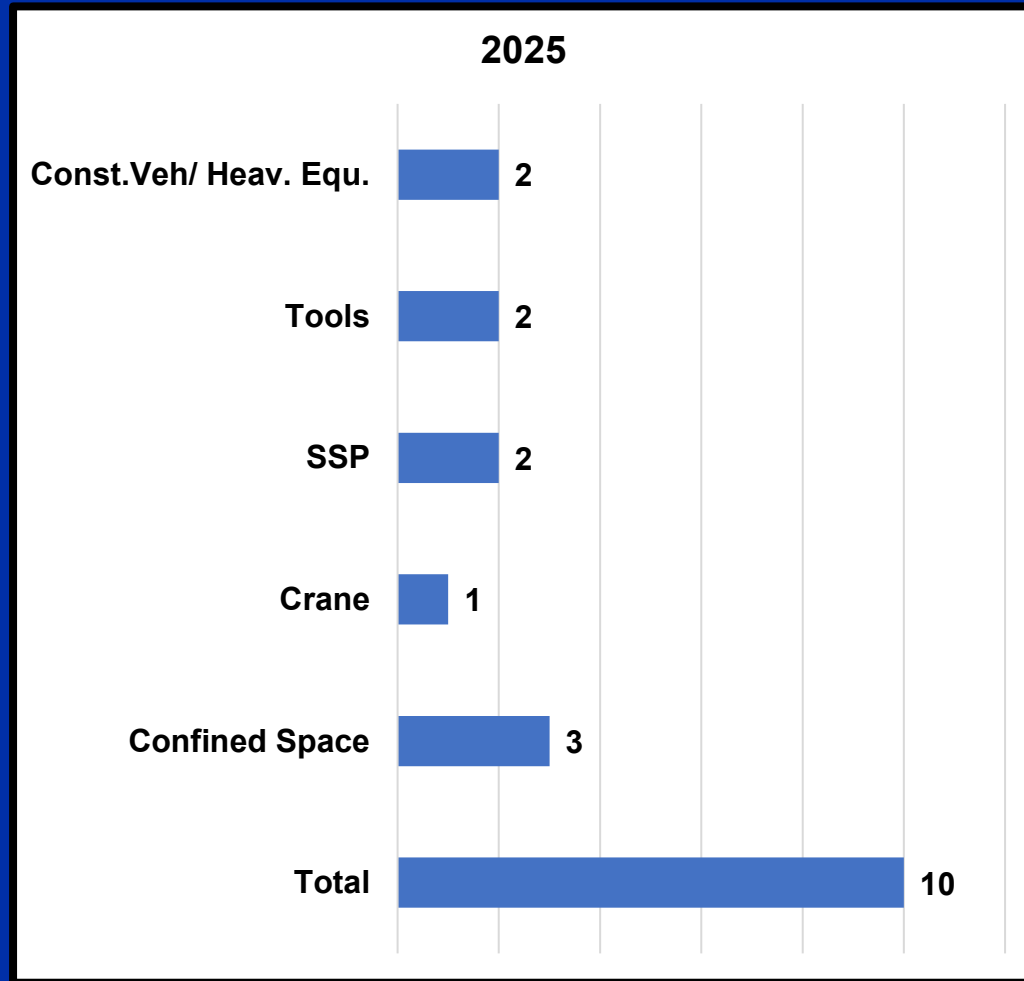
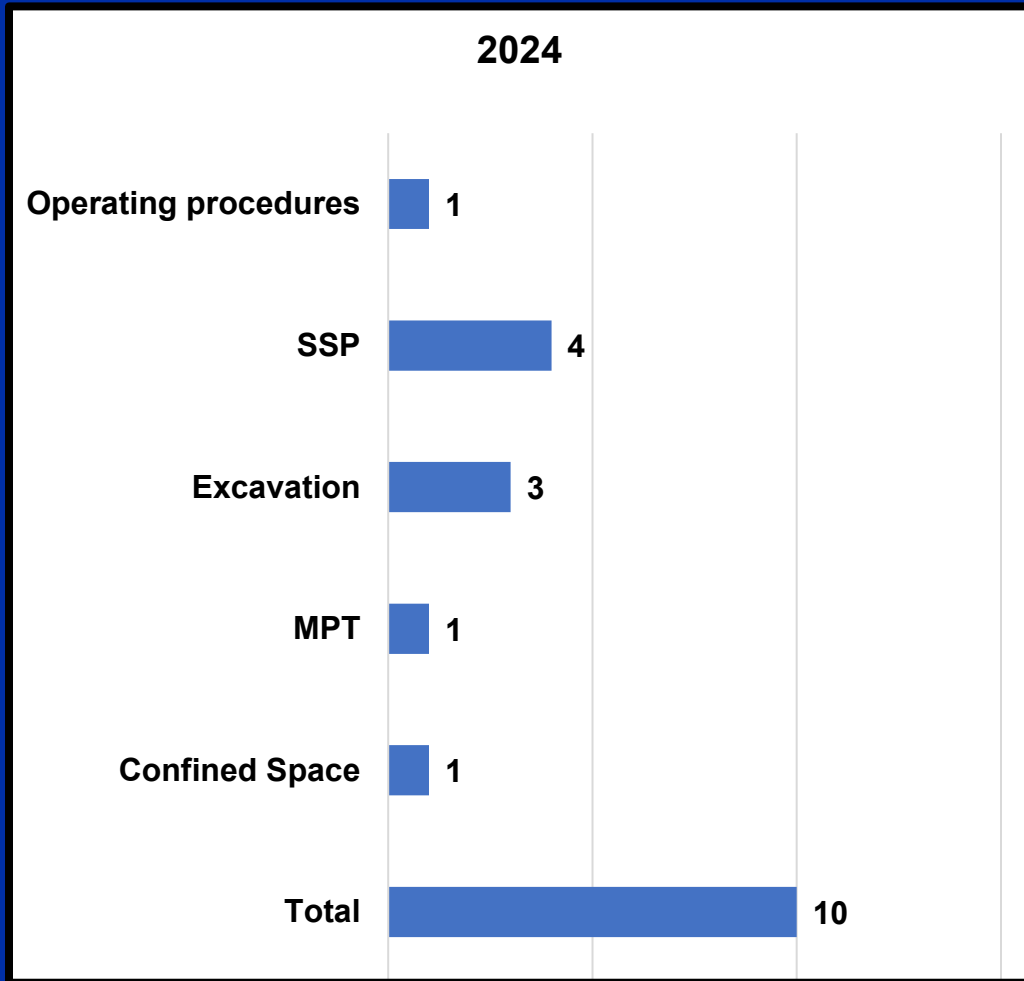
Even minor falls from low heights cause injury; fall protection is essential.

5

Caught In-Between

Pinch points during equipment operation and material staging.

DDC SWOs BY CATEGORY 2024 vs 2025





DDC CONTRACTOR SAFETY PERFORMANCE EVALUATION

EVALUATION PROCESS — 3 PHASES

Metrics

Structured checklists and compliance criteria

Data Collection

Field safety audits, Site Safety Plan reviews, and accident/incident investigations.

Evaluation Reports

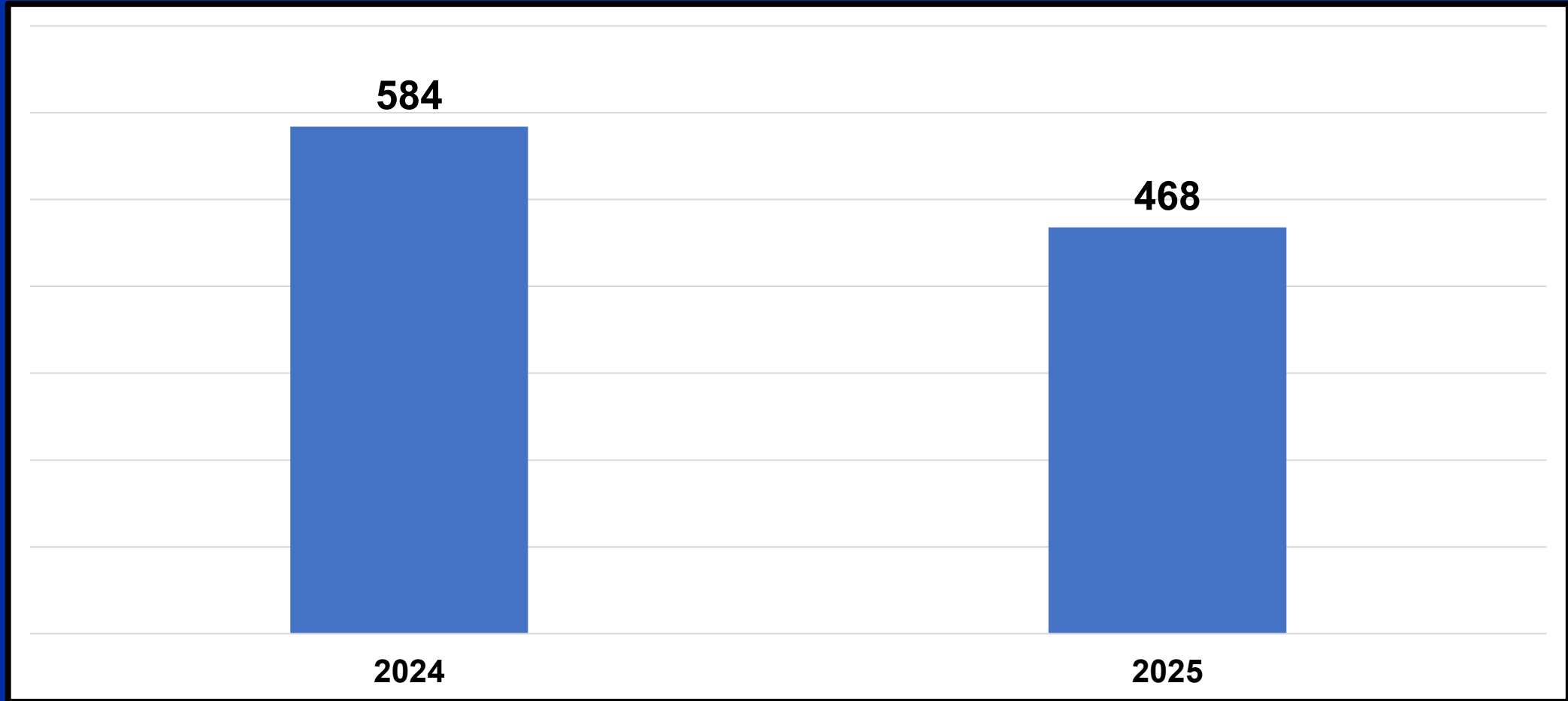
Shared with project staff and reflected in contractors' periodic and final evaluations.



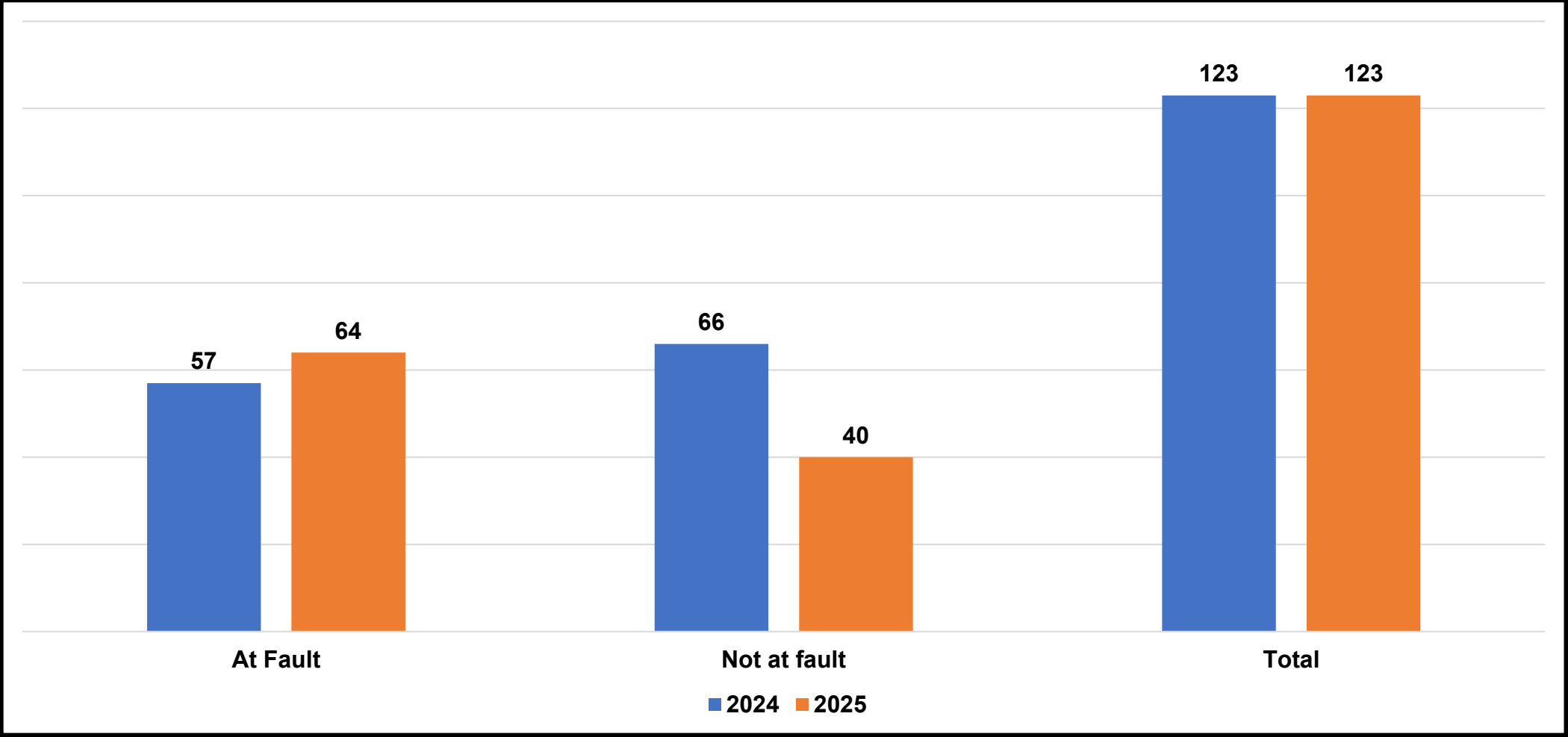
PASSPort Rating

Provide feedback to contractors and used by City Agencies in making future award decisions

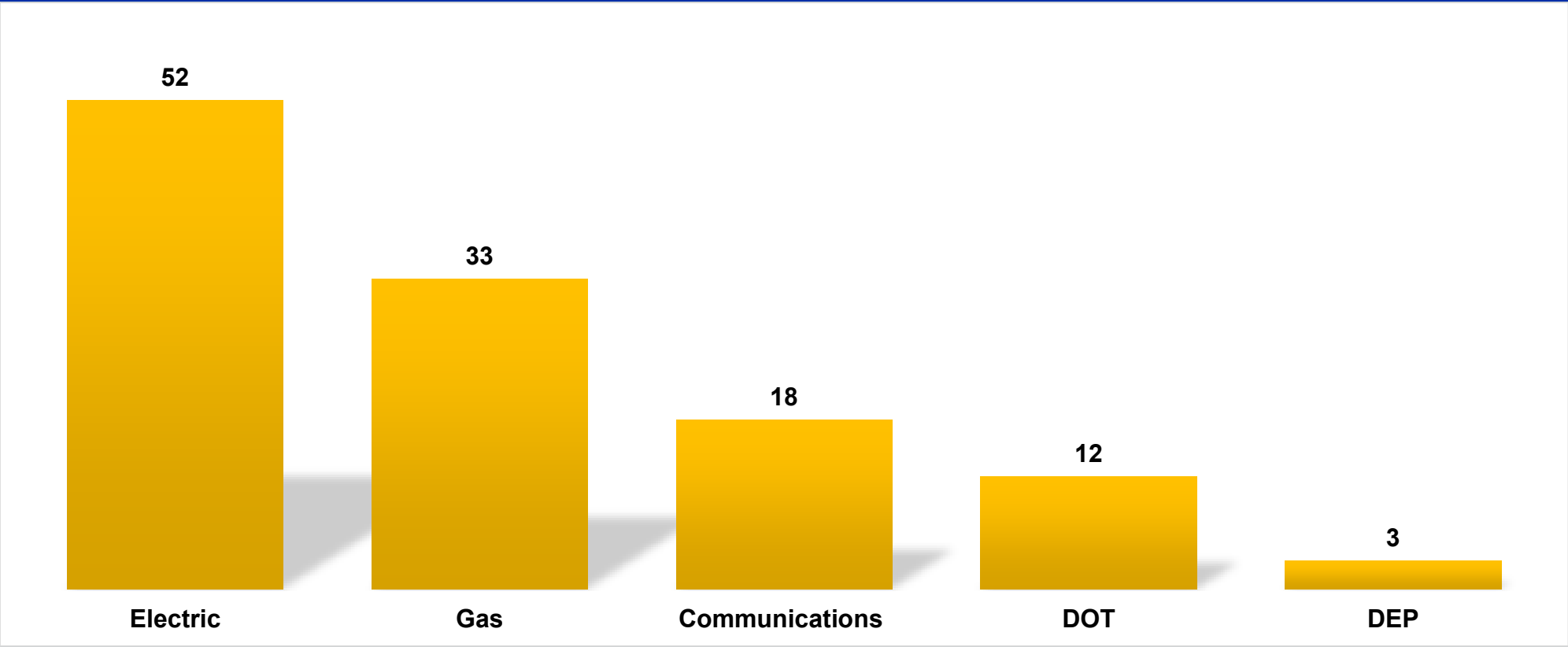
DDC SITE SAFETY PLAN REVIEWS 2024 vs 2025



DDC UTILITY DAMAGES 2024 vs 2025



DDC DAMAGES BY AFFECTED UTILITY 2025



nationalgrid

Damage Prevention

Program Overview and Summary

nationalgrid

Bob Terjesen
Matthew Campbell

March 25, 2026



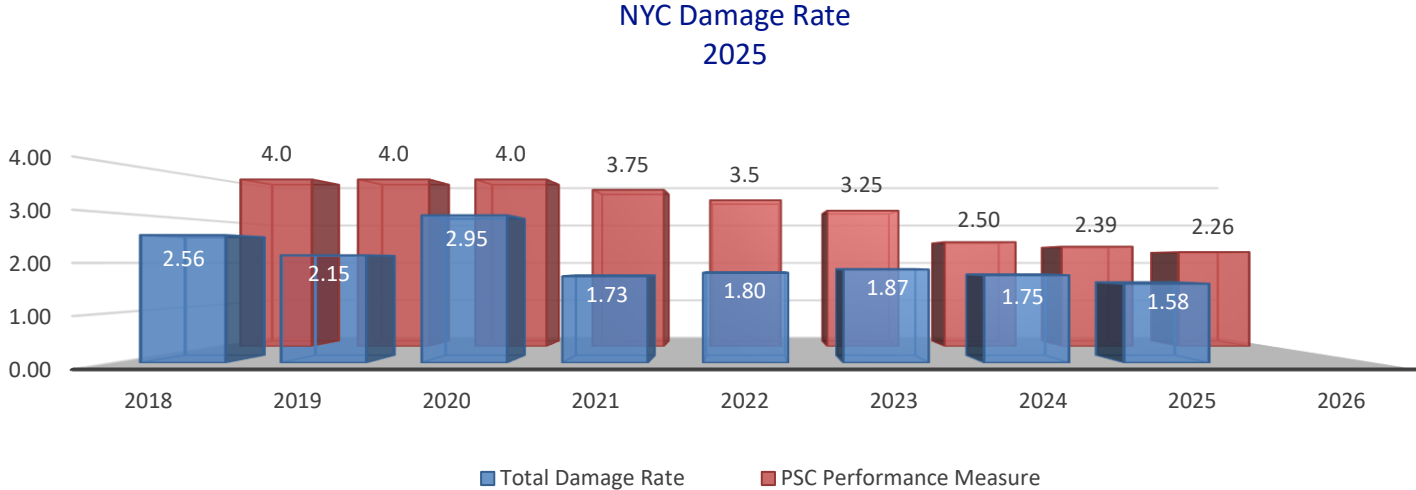
National Grid NYC

Damage Prevention Performance: 2018–2025

Sustained, Measurable Improvement in both Damages and Damage Rate

- **Total damages reduced by ~49%** from **328** (2018) to **166** (2025), despite increased excavation activity.
- **Total damage rate improved by ~38%**, declining from **2.56** (2018) to **1.58** (2025).
- Performance consistently improved even as **PSC performance thresholds tightened annually**.
- Mismark damage rates also declined materially, reinforcing improvements in locate quality and accuracy.

Key takeaway: National Grid NYC has transformed our damage prevention performance over seven years while operating under increasingly stringent regulatory benchmarks.



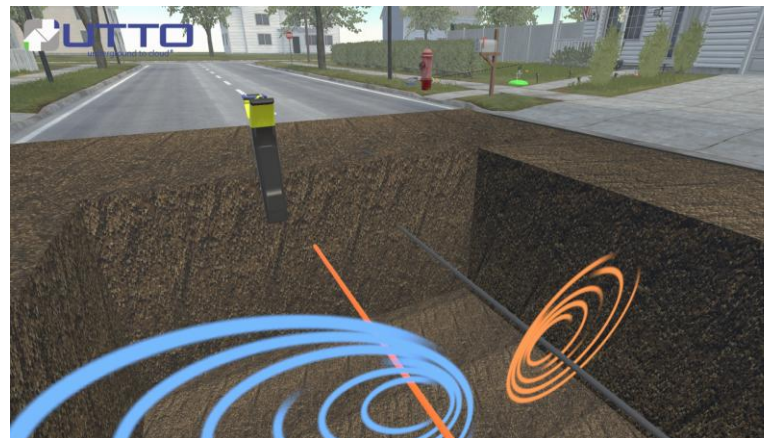
National Grid NYC

What initiatives helped us achieve this performance?

Early Adoption of Predictive, Risk-Based and QA-Driven Programs

- **Implementation of Urbint** in 2020 enabled **risk-based ticket prioritization**, proactive mitigations of **high-risk excavation activity**, and more **efficient field deployment**.
- **UTTO Locate Assurance**, also launched in 2020, **improved locate quality** verification and strengthened accountability.
- Expanded **811 awareness efforts** enhanced ticket quality, compliance, and excavator understanding of safe digging expectations.
- Together, analytics, locating operations, and education created a **closed-loop damage prevention model**.

Key takeaway: Data-driven prioritization + locate QA + education formed the foundation for NYC's PRA-level performance.



National Grid NYC

Targeting the next risk drivers in 2026 to sustain & advance performance

Maps & records improvement

- Deploying **vLocate Mapper** to capture **as-built subsurface data** during locates.
- Use **4M Analytics** to **enhance asset visibility** and **reduce uncertainty**.

Locate operations evolution

- Refine processes following the **NYC vendor transition to Premier IE**, emphasizing **consistency, training, and QA maturity**.

100% locate QA through Vision AI

- Use **Vision AI** to review all locate videos, **enabling full-coverage QA** and **early detection of mismarks, gaps, and process deviations**.

Future-focused prevention

- Shift from reactive performance management to **predictive practices** that continuously **improve locate accuracy**.

Key takeaway: The next phase of NYC success depends on digitizing subsurface records, scaling QA to 100%, and embedding intelligence directly into locating workflows.

National Grid NYC

Targeting the next risk drivers in 2026 to sustain & advance performance

National Grid Utility Workshop Build Better Together Roadshow

- **Time/ Date:** 10AM-4PM, 6/24/2026
- **Location:** Brooklyn, NY
- **Host:** National Grid
- **Sessions:** Keynote, 3 Panels, Lunch, Onsite Activation
- **Post Event:** TBD
- **Attendees:** 250

National Grid, AEC Contractors, New York Utilities, Municipalities & Counties, and NYSDOT, NY 811 and more

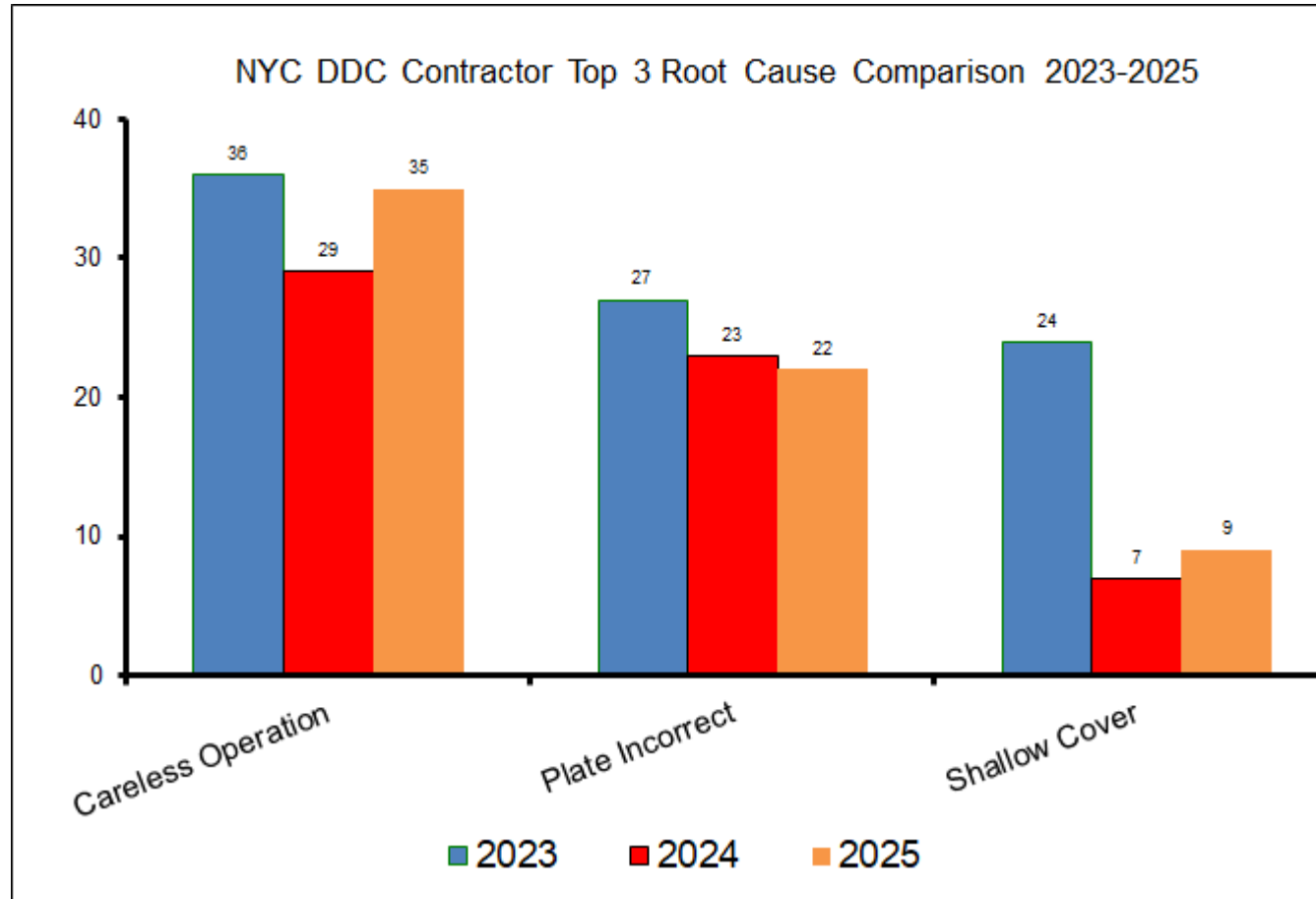
SPONSORS





conEdison

3 Year Damage Comparison



Collaborative Synergy

- Ensure calling 811 before commencing excavation for actual work locations
 - 60% of relocations in NYC are called in by NYC Contractors
 - Avoid calling in for completed locations that are complete and restored
- Verify all Utility Operator Response via call center Automated Positive Response (APR)
 - Utilities are addressing backlog from significant storms
 - Pre Construction Inspections locations prior to sending excavator crews
- Consider utilizing New York 811's "Dynamic Start Date" call in program.
 - Allows to stager and plan your excavation projects effectively
 - Coordination for Utility mark outs

Con Edison Oversight

- Con Edison is a partner in the project
- Provides Con Ed Inspector coverage
- Three-way communication – especially with job/location changes
- Job briefs/walk downs
- Milestones/Incentives
- Risk outweighs incentives

Public Improvement Initiatives

2025 - 2026

- Special care removal of all curbs and sidewalks
 - Proactively avoid damages on shallow facilities
- System alerts – High and Medium Subsurface risk alerts
 - Share High alerts with the various agencies expand to Medium
- Summer Season – Electric system peak loads
 - Additional precautions when working around primary facilities
 - Expand to Winter Season - Gas and Steam system peak loads
- Damage prevention discussions during Pre award meetings with NYC DDC
 - Discussions in advance about facility protection and safe work practices
- STKY – “Stuff That Will Kill You”
 - Part of every briefing
 - Interactive conversation with all stakeholders

STKY – “Stuff That Will Kill You”





CONTRACTORS' PERSPECTIVE ON SAFETY

Gilbane Safety Practices and Arrowsight Video Monitoring

Ensuring workplace security through advanced monitoring systems

Purpose of the Safety Presentation and Introductions

Safety Philosophy and Expectations

Gilbane's safety philosophy emphasizes shared responsibility and consistent expectations for all site workers and supervisors.

Role of Arrowsight Monitoring

Arrowsight video monitoring supports positive behavior change through real-time observation and incident prevention.

Shared Ownership and Transparency

The session promotes transparency, consistency, and shared ownership of safety outcomes among all jobsite partners.

Positive and Corrective Feedback

Safety observations are tools for learning, recognizing good behavior, and encouraging continuous improvement without punishment.





Gilbane Safety Culture

Gilbane's Safety Philosophy and Core Values



Safety as Core Value

Safety is a core, non-negotiable value prioritized over schedule or cost pressures on every jobsite.

Authority to Stop Work

Every individual has the responsibility and authority to stop work if unsafe conditions are identified.

Proactive Risk Identification

Daily planning and open communication help identify risks early through pre-task planning meetings.

Continuous Safety Improvement

Learning from incidents and near misses supports ongoing improvements and reduces repeat accidents.

Key Safety Practices Expected on Gilbane Jobsites

Personal Protective Equipment

Proper use of PPE, including hard hats, vests, glasses, gloves, is mandatory to prevent injuries on site.

Fall Protection Measures

Fall protection involves harnesses, secure anchorage, guardrails, and safe ladder use to prevent falls from heights.

Housekeeping and Hazard Prevention

Maintaining a clean site with organized materials reduces slip, trip, and struck-by hazards effectively.

Pre-task Planning and Awareness

Daily pre-task planning helps identify hazards and controls, promoting safety and awareness before work starts.



What Arrowsight Is and How It Works

Continuous Remote Monitoring

Arrowsight provides live video monitoring of jobsite activities, enabling continuous remote safety observation.

AI-Assisted Safety Analysis

AI tools identify behavioral patterns focusing on safety, not individual tracking, for real-time feedback.

Proactive Intervention and Feedback

The system enables timely notifications and interventions for unsafe conditions preventing incidents.

Balanced Safety Reinforcement

Arrowsight records both unsafe behaviors and positive safety practices to support learning and accountability.



Common Safety Infractions Captured on Video

PPE Violations

Missing eye protection, improperly worn hard hats, and lack of high-visibility apparel are common PPE infractions.

Unsafe Work at Heights

Unsafe conditions include missing guardrails, improper ladder use, and incomplete fall protection systems.

Near Miss Incidents

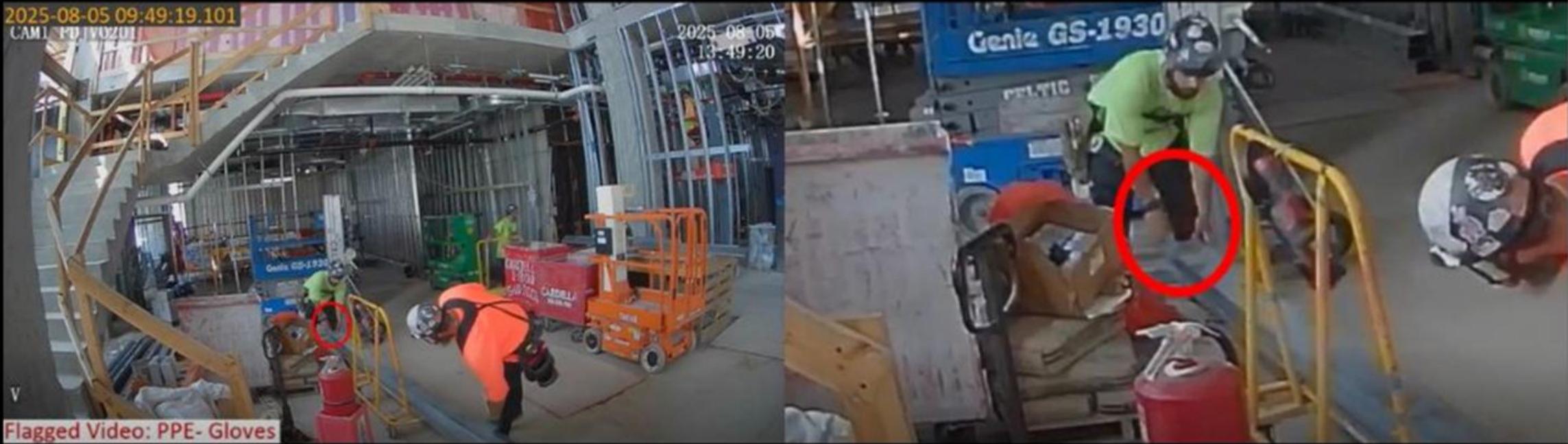
Near misses occur when workers are exposed to hazards like moving equipment or falling objects without injury.

Live Load Exposure

Monitoring ensures workers stay clear of suspended or moving loads to prevent accidents.



Safety Infractions Identified



Safety Infractions Identified

2025-06-10 07:51:18.200
CAM2 PDJV0211

2025-06-10 11:51:19 211



PROPER TIE OFF

Positive Safety Behaviors



0-13

0-21

Positive Safety Behaviors

Examples of Good Safety Practices Captured



Proper Use of PPE

Consistent and correct use of PPE like fitted harnesses and secured lanyards ensures worker safety at heights.

Effective Fall Protection

Complete guardrail systems and correct anchor points provide reliable fall protection setups on site.

Safe Material Handling

Maintaining exclusion zones and clear communication during lifts ensures safe material handling practices are followed.

Situational Awareness

Workers actively watching for hazards and keeping safe distances demonstrate strong situational awareness.

How Gilbane Uses Arrowsight Insights

Data-Driven Safety Coaching

Gilbane leverages video data to coach workers and improve safety, not discipline, fostering a positive safety culture.

Trend Analysis for Risk Identification

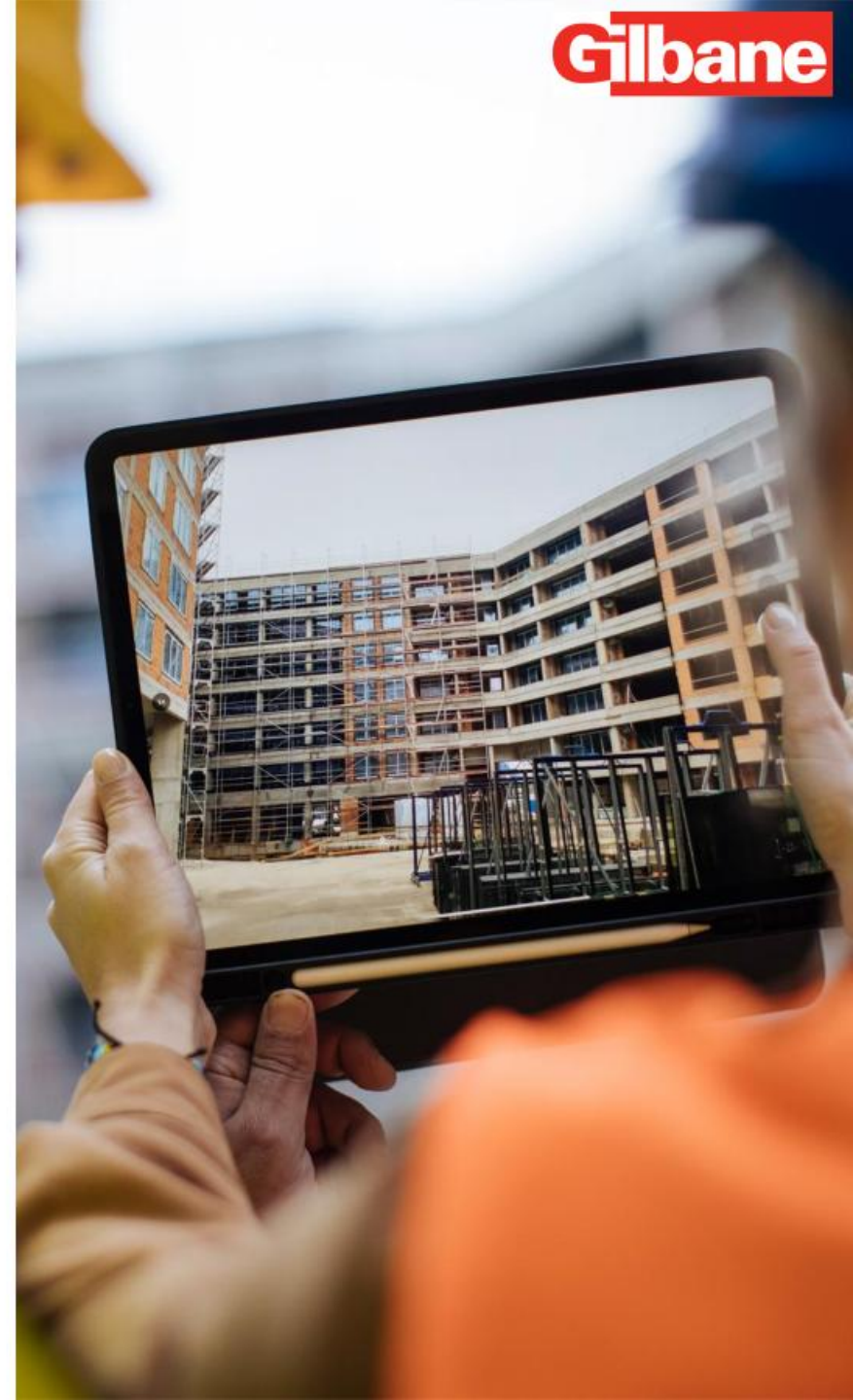
Video observations identify recurring PPE issues and hazard exposures, guiding targeted training and toolbox talks.

Early Intervention & Positive Reinforcement

Early interventions correct unsafe behaviors before incidents, while positive observations recognize safe practices.

Comprehensive Safety Performance View

Combining Arrowsight data with observations and feedback creates a detailed picture of jobsite safety for continuous improvement.



Shared Responsibility and Final Takeaways

Collective Safety Responsibility

Safety depends on everyone taking ownership and watching out for each other on the jobsite.

Technology Enhancing Safety

Tools like Arrowsight improve visibility, accountability, and learning without replacing human responsibility.

Balanced Safety Approach

Recognizing unsafe conditions and positive behaviors creates a fair and effective safety culture.

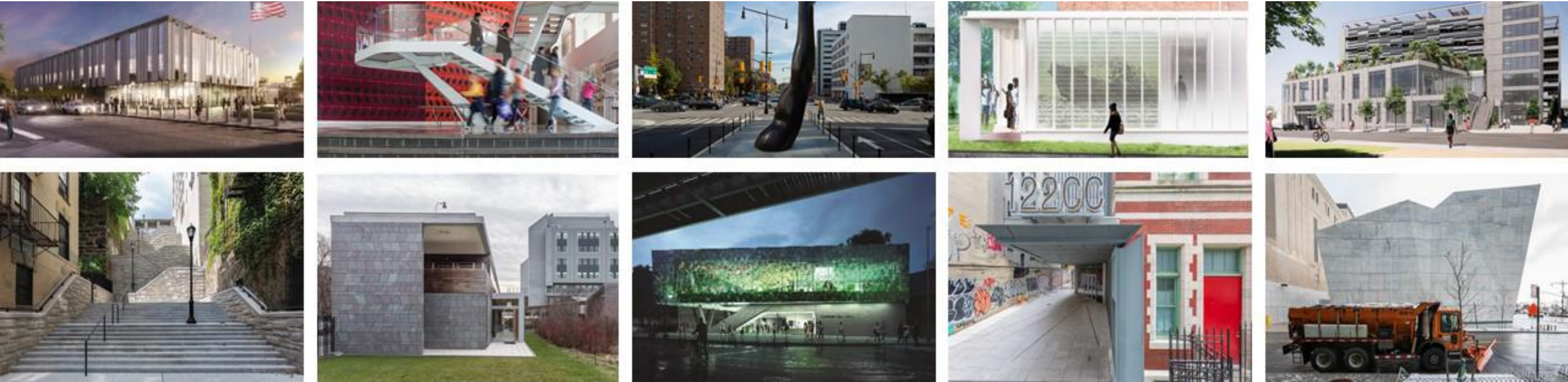
Goal of Zero Harm

The ultimate goal is for every worker to return home safely at the end of each day.





WHAT'S NEW IN DDC SAFETY & SITE SUPPORT?



PERFORMANCE ENGINEERED MATERIALS (PEM)

Collection and Validation of Data for Future DDC Concrete and Asphalt Specifications



Office of Quality Assurance, Safety & Site Support Division

PRESCRIPTIVE

vs.

PEM

-
- Specifications set limits on the type and amounts of materials to be used on a certain mix design.
 - Traditional, limited measures like slump, air content, temperature (for concrete); and air voids %, Marshall Stability (for asphalt).
- Specifications define, measure and verify required material properties rather than describing exact components of methods.
 - Focus on long-term performance with tests such as SAM number, surface resistivity (for concrete); and Hamburg Wheel-Track, Indirect Tensile Cracking (for asphalt).

PEM FOR CONCRETE

- Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration (AASHTO T-385)
- Super Air Meter (SAM) Number (AASHTO TP 118)
- Freeze-Thaw Durability (ASTM C666 / AASHTO T395)
- Shrinkage (AASHTO R101)



PEM FOR CONCRETE – SURFACE RESISTIVITY STUDY

First Phase (Field Cured) Findings:

- Some producers consistently showed low penetrability across different mix types.
- Other producers consistently showed high penetrability across different mix types.
- Air-entrained mixes generally performed better than non–air-entrained mixes.
- Mixes with Supplementary Cementitious Material (SCM), specifically slag, performed better than mixes without SCM.
- Different curing methods (field vs. lab)

PEM FOR CONCRETE – SURFACE RESISTIVITY STUDY

Second Phase (Laboratory Cured) Findings:

T-358 Chloride Ion Penetration Kholms-cm (6"x12")	
High	<9.5
Moderate	9.5-16.5
Low	16.5-29
Very Low	29-199
Negligible	>199

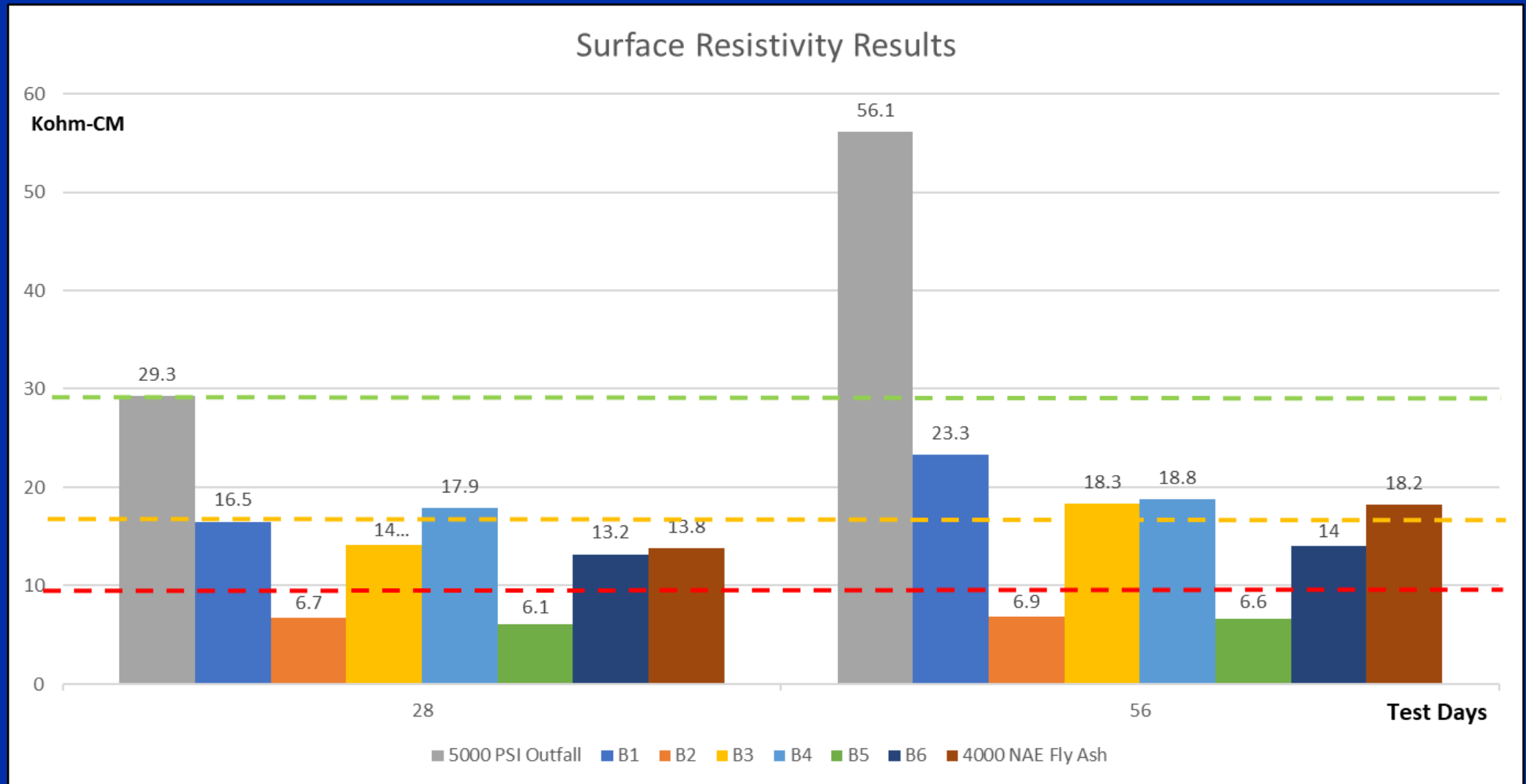
- All samples cured in lab; tested at 28 days or 56 days.
- Performance trends matched Phase 1
- Majority from B-32 AE mixes (sidewalk) ; producer comparisons made
- Analysis focused on parameters influencing surface resistivity

PEM FOR CONCRETE - DATA

- OQA tested more than **275** concrete samples.
- Samples collected from **25+ projects** and **11 producers**.
- All standard mixes were tested: B-32 AE, A-40 AE, HE AE, 4000 NAE, 4000 Outfall.
- Samples tested at **28 or 56 days**.

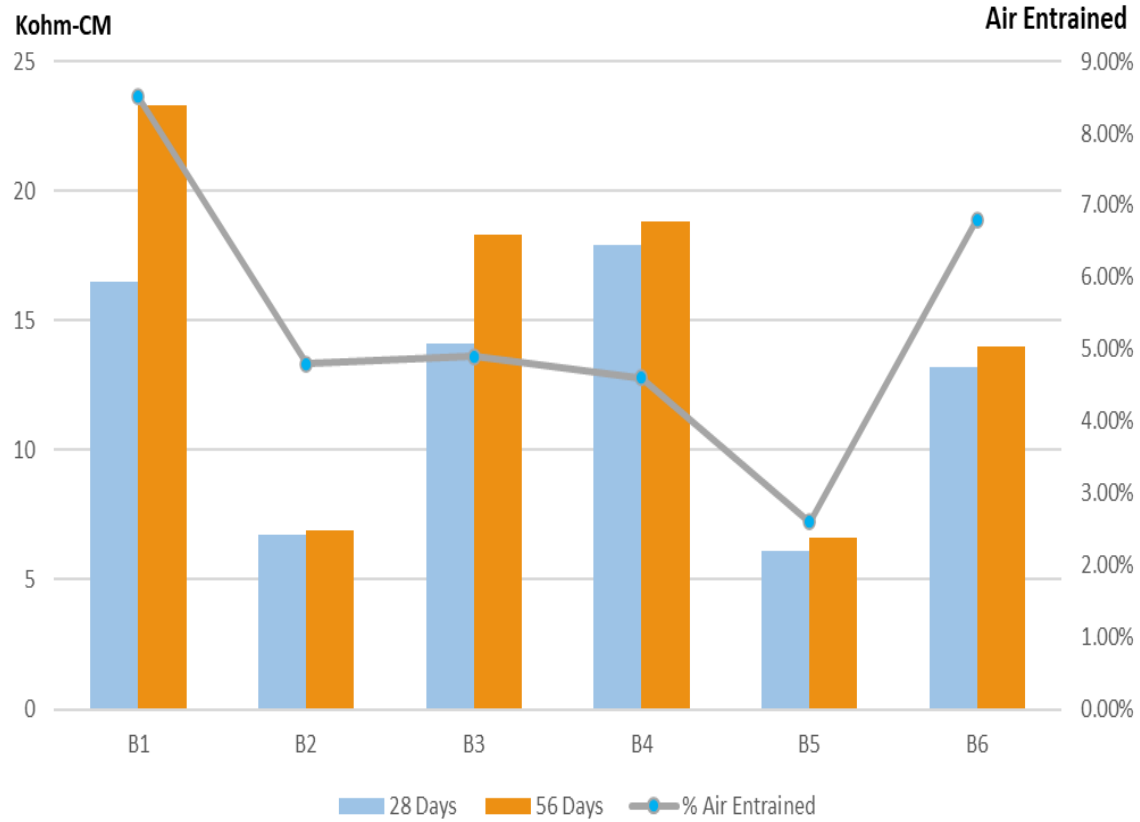


PEM FOR CONCRETE - LABORATORY-CURED SAMPLES

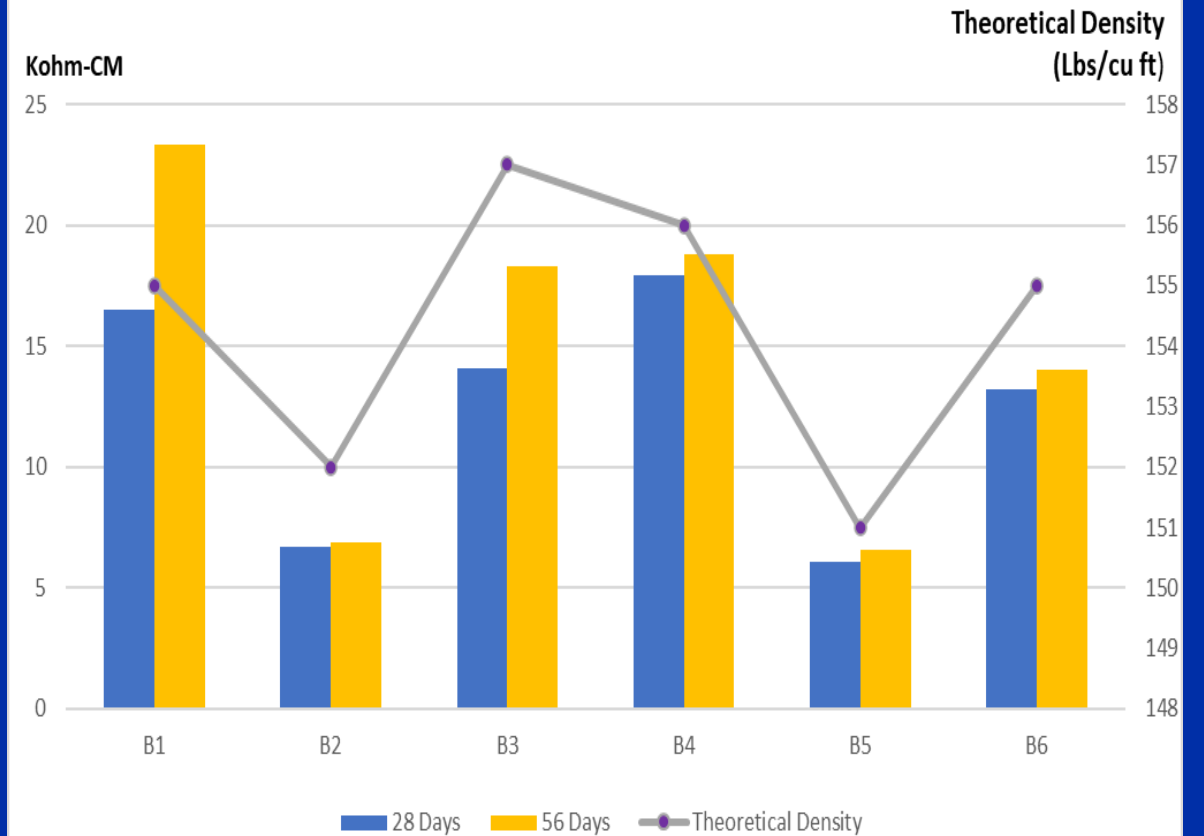


PEM – B32 AE CONCRETE MIX

Surface Resistivity vs % Air Entrained



Surface Resistivity vs Theoretical Density



PEM FOR ASPHALT

- DDC issued a draft protocol for pilot infrastructure projects using the PEM approach.
- Several PEM-compliant mix designs approved by OQA.
- Performance tests include:
 - **Hamburg Wheel-Track (AASHTO T-324)**
 - **High-Temperature Indirect Tensile Strength (ASTM D6931)**
 - **SCB Flexibility Index (AASHTO T-393)**
 - **Indirect Cracking Toleracne at Intermediate Temperature (ASTM D8225)**
- Testing frequency varies by production volume and schedule
- OQA will collect producer-reported data to refine acceptance criteria.

SAFETY UPDATES



DDC CONTRACT SAFETY REQUIREMENTS

Revision Date: September 2025

Major Changes:

- Introduced new project delivery types: Design-Build and CM-Build.
- Clarified roles and responsibilities across all project participants.
- Added strengthened provisions for multi-employer worksites.
- Updated Site Safety Plan (SSP) requirements, including SSP submission timing and the Construction Manager's role in the review process.
- Formalized the Contractor Safety Performance evaluation process.



CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
CONTRACT SAFETY REQUIREMENTS

1. POLICY ON SITE SAFETY
2. PURPOSE
3. DEFINITIONS
4. RESPONSIBILITIES
5. SAFETY QUESTIONNAIRE
6. SITE SAFETY PLAN
7. KICK-OFF/PRE-CONSTRUCTION MEETINGS
8. SAFETY COMPLIANCE DURING WORK IN PROGRESS
9. SAFETY PERFORMANCE EVALUATION

SITE SAFETY PLAN UPDATES

Revised Templates

- Multiemployer Sites Accident Prevention & Safety Compliance.

New Sections

- Activity-Specific Safety Procedures & Subcontractors Safety Plans.
- Aerial Lifts & Scissor Lifts.



SITE SAFETY PLAN SUBMISSION, REVIEW AND APPROVAL POLICY

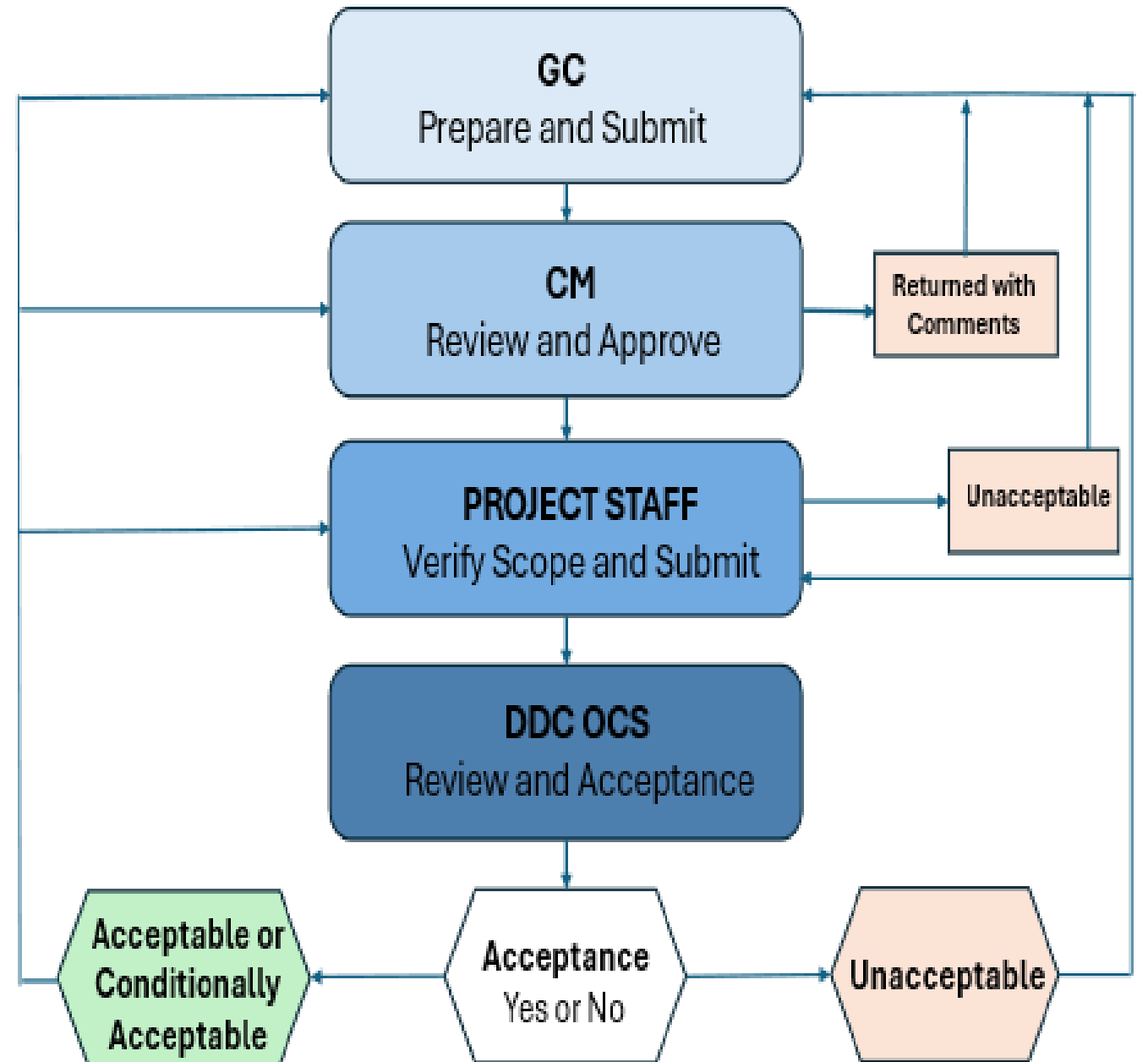
Effective August 27, 2025

- **Responsibilities:**
 - Construction Manager (CM): CM/REI/PMCM
 - General Contractor (GC): Contractor/Design-Builder/CM-Builder
 - DDC: Office of Construction Safety (OCS)
- **Site Safety Plan (SSP) initial submission:**
 - Design-Build & CM-Build projects due at least 60 days prior to construction start
 - Other project types: within 45 days from the Notice of Intent to Award Date
 - Requires CM's approval and DDC OCS acceptance
- **Activity-specific safety procedures and Subcontractors' safety plans**
 - Requires CM approval and DDC OCS acceptance, if directed
- **Recordkeeping**
 - CM Review and Approval Logs



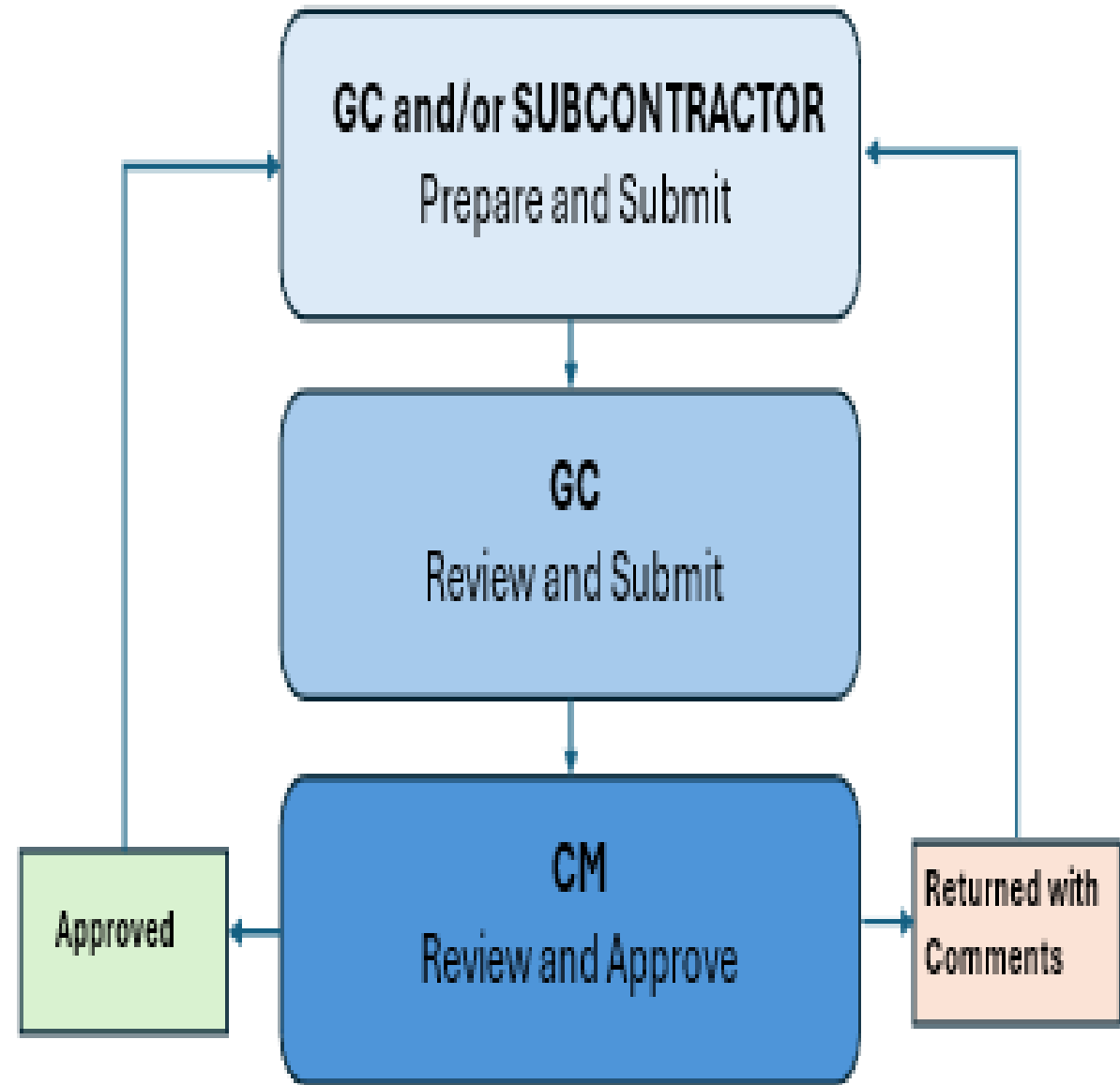
PRE-CONSTRUCTION PHASE

Site Safety Plans Initial Submission



CONSTRUCTION PHASES

Subcontractor Safety Plans and Activity-Specific Safety Procedures



OSHA



OSHA HAZARD COMMUNICATION PROGRAM

Safety Data Sheet (SDS) Updates

Compliance Requirement

- Updated SDS for chemical substances
- Updated SDS for chemical mixtures

Compliance Date Deadlines

May 19, 2026

November 19, 2027

Employer responsibilities:

- Maintain updated SDS documentation
- Ensure worker access to SDS
- Update hazard communication training if chemical information changes



HEAT INJURY AND ILLNESS PREVENTION STANDARD

Upcoming

Written Heat-Safety Program:

- **Monitoring heat conditions** using temperature, heat index.
- **Preventive controls** (shade, water access, rest breaks, and acclimatization.)
- **Emergency procedures** for heat-related symptoms and medical events.
- **Training for workers and supervisors** on heat-stress recognition and response.
- **Documentation and recordkeeping** to demonstrate compliance.



NEW YORK CITY BUILDING CODE

NYC SIDEWALK SHED PERMIT UPDATES

Effective Date: July 1, 2025

Key Changes

- Minimum Height Increase: **From 8 ft → 12 ft**
- Improved Lighting
- Shorter Permit Duration: **From 1 year → 90 days**
- Permit Renewals: Proof of facade repair progress



SIDEWALK SHEDS & FENCES DESIGN (LL47 of 2025)

Effective August 15, 2025

- Projects submitted before Aug. 15, 2025 that met prior color rules require no action.

Acceptable Colors: Hunter green, metallic gray, white, or (for existing buildings) colors matching the facade, trim, cornice, or visible sloped roof.

Application Requirements: Any compliant color treatment allowed.

Sheds: One uniform color; metallic elements may stay metallic gray; parapet mesh may be black.

Fences: One uniform color; applies to all publicly visible surfaces.

Combined sites: Shed and fence must match.

CONSTRUCTION SUPERINTENDENT RULE UPDATE

- **Effective January 1, 2026**
- **New Requirement**
 - Construction Superintendents may supervise **only one active construction project**.
 - Previously allowed: supervision of **up to three** non-major projects.
- **Transition Period**
 - Projects assigned **before Dec. 31, 2025** may continue temporarily.
 - **Full compliance required by Jan. 1, 2027.**



Q & A

1	What's the biggest obstacle to safety at the Agency/organization?
2	Why does the city requirements aren't the same as private work requirements in regard to MPT?
3	Training: Will there be a Safety Seminar administered by DDC? How does a company get involved in providing SST Training and other construction related safety training to the DDC construction staff? Will NYCDDC be setting up any classes for consultants safety inspectors and or safety managers in the future? What part of safety protocols are you providing in this seminar?
4	New Technology: What new safety initiatives or technologies is DDC planning to implement to reduce job site incidents on upcoming projects? Does DDC plan to use AI in safety?
5	Under the assumption that toolbox talks are repetitious, we noticed that some contractors' personnel take them lightly and just come around to sign in. What measures can be taken to reinforce and remedy this situation?
6	Site Safety Plans: Does Resident Engineer have access to review and comments contractor's HASP submittal ? With regards to maintaining proper field safety logs, does DDC have a specific log sheet or format to use? The HASP with the JHAs (according to a site-specific safety plan) is approved prior to start of construction that is submitted by the contractor directly into the DDC portal. Would it be possible to obtain the Resident Engineer's site/project specific constructability review prior to the plan receiving final approval by DDC QA? Thank you. Has the Safety plan approval team staffing been increased to improve review time? How does DDC plan to handle the safety reviews for CM Build where CMs hold the contracts and enforce all the safety? 30 day review cycles and the DDC Anywhere portal are not nimble enough or fast enough for CM Build or emergency projects? When contractor HASP online to DDC, RE and Project Executive should have access for review and comments.

Q & A

7	PPE: What's your take on the use of liners under hard hats? Are dust masks acceptable as PPE when removing masonry mortar joints? Please provide examples of construction operations when respirators are required?
8	DDC Safety Protocols: Are there any location-specific safety protocols or recent updates we should be aware of? WILL DDC BE UPDATING THE SAFETY REQUIREMENTS FOR CONSTRUCTION CONTRACTS DOCUMENT ? What site-specific safety protocols and reporting requirements does DDC expect contractors and construction management teams to follow to ensure compliance with DDC safety standards throughout the project? What specific safety protocols and oversight measures does DDC require contractors to follow to prevent on-site accidents and ensure worker and public safety during construction projects? What controls are in place to maintain safe work sequencing, worker density, and documented compliance with NYC Department of Design and Construction safety requirements on this site?
9	With increased global security concerns, what emergency preparedness measures does DDC have in place for active construction projects, and how are consultants and contractors expected to respond in the event of a citywide emergency?
10	Do RE's have the authority to stop all work when a serious safety related situation is observed?
11	Is it required for the DDC Site Safety Inspector to have an exit interview after an inspection is performed? And are they supposed to state any violations found?

Q & A

12	What are the main DDC safety signs required to be posted on a construction site?
13	From a safety culture perspective, what steps can agencies take to further strengthen constructor ownership of safety on our projects? At times, it can feel like consultants and agency staff are spending significant effort following up on safety compliance rather than constructors proactively driving it. Are there strategies or tools being considered to help reinforce contractor accountability and encourage a more proactive safety culture across all project partners?
14	What are the requirements for a DDC Site Safety Manager? WHAT QUALIFICATIONS ARE REQUIRED BY DDC FROM SAFETY PERSONNEL AT DDC WORKSITE? Will the DDC require inclusion of a full-time safety manager on CM or PMC teams to enhance worksite safety and compliance on projects that mandate a full-time contractor safety professional?
15	Accidents/Emergency: what is the first step in an emergency? What are the series of the steps need to be taken to reduce or avoid accidents in work zones? What is the proper procedure for reporting a safety hazard at the workplace? What was the most near miss observed on all DDC projects?
16	How's DDC propose to monitor the Construction Noise now required by NYCDEP new regulations?

THANK YOU!

