



CONSTRUCTION SAFETY REPORT CARD 2021



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presented by

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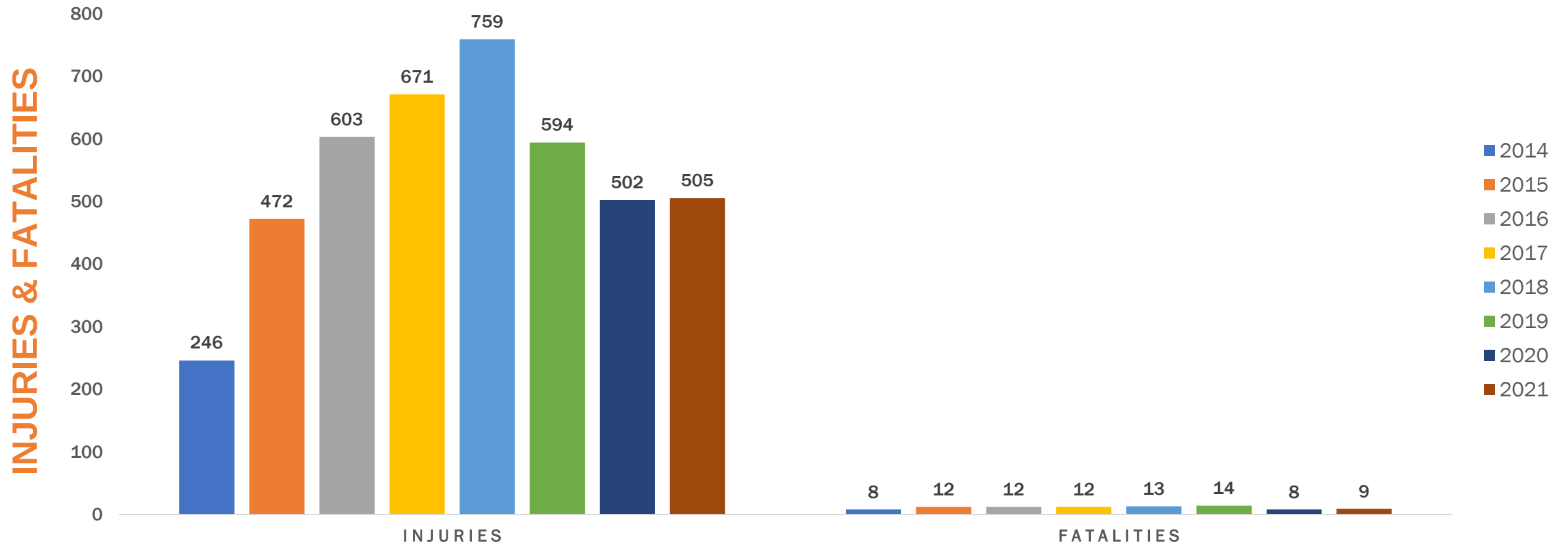
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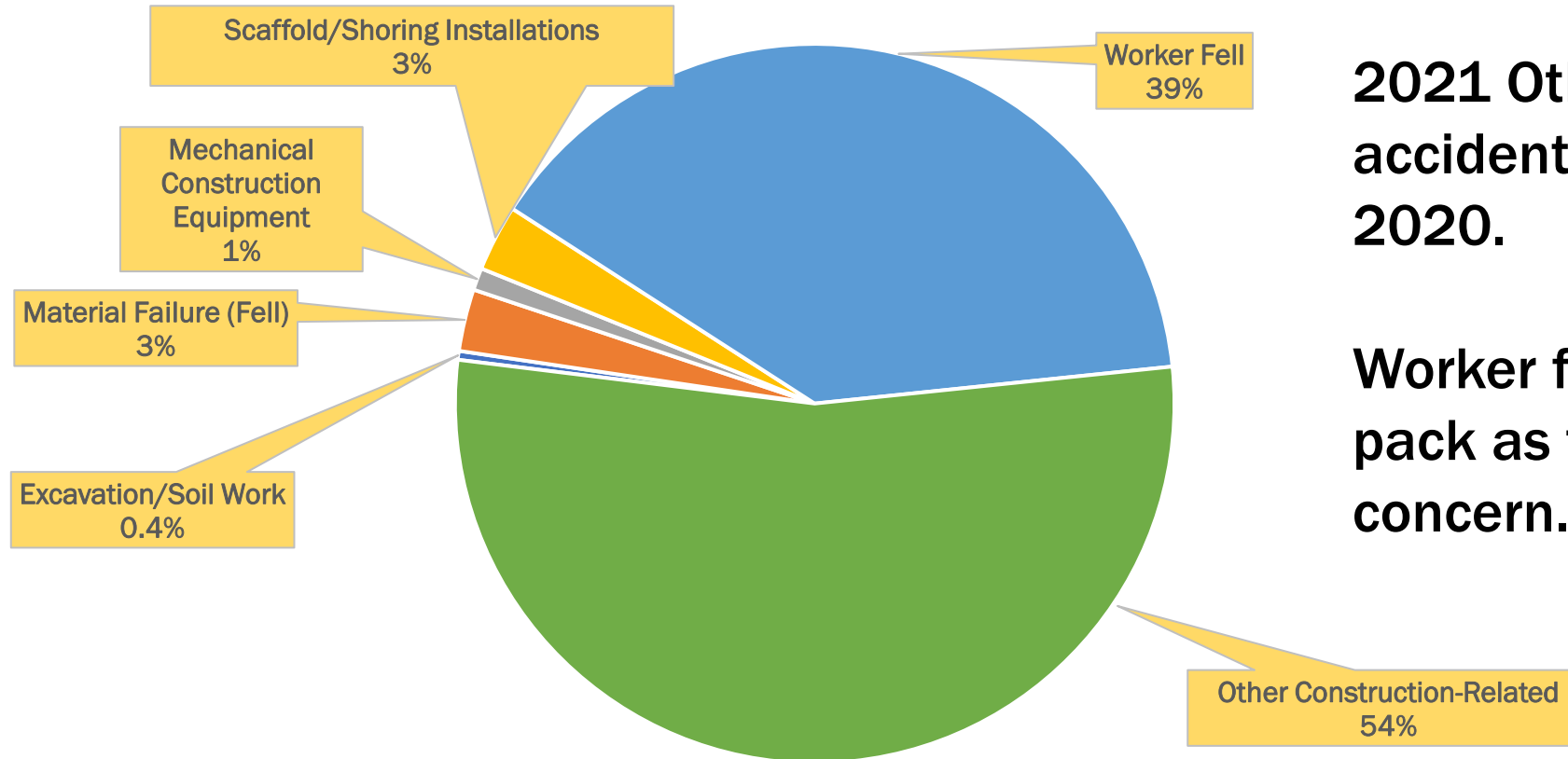
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ANNUAL CONSTRUCTION-RELATED INJURIES & FATALITIES



2021 CONSTRUCTION-RELATED ACCIDENTS BY CAUSE OF ACCIDENT



2021 Other Construction-Related accidents increased by **11%** over 2020.

Worker falls continue to lead the pack as the primary area of concern.

2/15/21: TRASH CHUTE



730 Fifth Avenue (Manhattan), a laborer sweeping the floor in the vicinity of a trash chute covered by plywood, stepped on the plywood which gave way and the worker fell to his death.

2/17/21: ROOF WORKER FALL



144 Dunham Street (Staten Island), a roofer was installing the roof on a new building was not tied-off and slipped off the roof and fell to his death

4/19/21: ELECTROCUTION

A photograph of an elevator machine room. The room contains various electrical components, including a large metal cabinet on the left and a transformer on the right. A yellow caution tape is strung across the room, indicating a restricted area. The floor is concrete, and there are some cables and equipment visible.

55 West 22 Street (Manhattan), an electrician installing a grounding cable to a transformer in the elevator machine room, tried to install the wire while the transformer was fully energized and shorted himself against the cabinet and died from his injuries.

4/23/21: FAÇADE WORK



1220 East 53 Street (Brooklyn), a laborer attempting to walk on a plank from a suspended scaffold to the sidewalk shed lost his balance, struck his head and died from his injuries.

5/19/21: INCOMPLETE ELEVATOR



20 Bruckner Boulevard (Bronx), two laborers moving construction debris from the 5th floor into an elevator car still under installation and suspended by a 2½ ton chain fall, loaded the car with concrete debris. The power pallet jack far exceeded the capacity of the car and caused the car to fall 5 stories, which left one worker with serious injuries and the other crushed to death.

5/22/21: SHAFT PROTECTION



45-18 Court Square(Queens), two laborers attempted to retrieve a ladder from a platform in a maintenance shaft with no guardrails installed on the platform, one of the workers fell backwards and died from his injuries.

5/27/21: DEMO SEQUENCING



1045 Flatbush Avenue (Brooklyn), the demo plan for a former bank with 30-foot ceilings called for the use of man baskets. The contractor did not supply proper equipment, so the workers stood on the roof with no tie-off and used jack hammers to break the roof sections. One panel cracked and dropped to the ground with the worker standing on the slab. He died from his injuries.

9/14/21: CONTROLLED ACCESS

The background image shows a construction site with a complex network of steel beams and safety netting. The scene is viewed from an elevated position, looking down at the structural elements. The netting is a light blue or white color, and the steel beams are dark and industrial. The overall atmosphere is one of a busy, high-rise construction environment.

310 Hudson Street (Manhattan), an iron worker attempted to place bolts into erected steel beams in a secured access zone. The worker, who was not tied-off, observed netting in the area and thought it was structurally engineered to handle load. While placing the bolts he stepped on the netting which gave way and he fell to his death.

11/1/21: IMPROPER SPACE



283 Third Avenue (Manhattan), a façade worker attempted to move around the roof of project. The worker unknowingly walked onto a piece of opaque plastic that covered an unprotected opening, fell to his death.

NEAR MISSES

This could have been really bad!

NEAR MISSES

The following slides identify a few incidents where workers lives were endangered, but a fatality was avoided. This is a reminder that major incidents are only a step away from a fatality.

2/12/21: MAINTENANCE



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1 Bell Slip (Brooklyn)

- A team of workers attempted to conduct maintenance on a tower crane. The workers were not properly trained and tried to remove the drive motor which serves as the brake for the crane boom.
- While removing the drive motor, the boom collapsed and slammed into the mast of the crane. No major injuries occurred but it took a week to resolve the securing of the crane.

2/25/21: DEMOLITION ROOF SLAB



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135-35 Northern Boulevard (Queens)

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3/31/21: STRIPPING OPERATION



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640 Columbia Street (Brooklyn)

- A laborer attempted to strip formwork from a section of a building. The worker was in a controlled access zone which required tie-off.
- The worker did not tie-off and while stripping the forms, stepped back and fell 20 feet. He survived his injuries.

4/27/21: EXCAVATOR MOVEMENT



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184 Nostrand Avenue (Brooklyn)

- An excavator operator moved soil on a site. As he positioned the excavator, his treads ran over a piece of re-bar which snapped off and flew across the site striking a worker on the chest.
- The worker struck in the chest required major medical assistance but survived his injuries.

4/30/21: SCAFFOLD DISASSEMBLY



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10 West 64th Street (Manhattan)

- A scaffold disassembly worker attempted to disassemble a supported scaffold. He stepped on a rotted plank, which snapped in half.
- The worker fell 30 feet and survived his injuries.

5/19/21: LOSS OF PRECAST



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1 Eagle Street (Brooklyn)

- A team of laborers attempted to place a precast façade section on the tenth floor of the building. The workers removed the rope holding the precast section in place before it was properly secured.
- The precast fell to the 7th floor setback where it crashed through the slab to the sixth floor. No major injuries were reported.

5/24/21: SPACING



5/24/21: SPACING

15 East 26th Street (Manhattan)

- A façade laborer attempted to sit and rest on a bicycle bracket on a supported scaffold.
- The laborer lost his balance and fell 30 feet. He survived his injuries.

7/30/21: DEMO SEQUENCE



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439 Lincoln Road (Brooklyn)

- A team of demolition laborers attempted the demo of a second-floor wall of a building. The workers stood on a newly placed deck consisting of cold form steel that was not properly installed and shored. Additionally, the workers had not shored and braced the upper wall and roof of the building before attempting to demo the wall.
- The roof collapsed through the second-floor deck trapping two workers. FDNY had to rescue the workers and all the workers survived their injuries.

9/14/21: SCAFFOLD ERECTION



9/14/21: SCAFFOLD ERECTION

220 East 65th Street (Manhattan)

- A scaffold assembly team attempted to assemble a sizeable sidewalk shed over an active garage entrance. The team failed to properly install the support beams, which failed, and the entire assembly collapsed down to the ground.
- No major injuries were reported.

2022 OUTLOOK

Not a great start . . .

As of April 30, 2022, there have been 5 significant incidents:

- **4** fatalities
- **1** critical injury

All five incidents are from falls. PLEASE, PLEASE, PLEASE, tie-off!!

THE BASICS

REMINDER: Someone is always responsible for safety on a construction site.

Every job requires site safety as an element of construction. The following personnel are designated as Safety Professionals for the projects:

- Contractor Licensee – 1, 2, and 3 family
- Construction Superintendent (CS) – 4 to 9
- Site Safety Coordinator (SSC) – 10 to 14
- Site Safety Manager (SSM) – 15 or more

COMPETENT PERSON

Someone is always responsible for safety on a site. In the absence of the main Site Safety Professional, there must be a **Competent Person** on site at all times.

- 1, 2, 3 Licensee – Competent Person
- Construction Super (CS) – Competent Person (*changes 1/1/26*)
- Construction Super major building – Alternate Construction Super (*November 2022*)
- Site Safety Coordinator (SSC) – Alternate SSC or SSM
- Site Safety Manager (SSM) – Alternate SSM

UPCOMING CHANGES IN THE LAW

- As of **June 1, 2022**, Construction Super will be limited to **5 jobs** reducing to 3 jobs in 2024 and will eventually be limited to **1 full time job in 2026**.
- **Major Buildings**, as defined, will change in 2025 and includes all buildings 7-stories or more requiring site safety plan submission to the Department.
- All major buildings will require a full-time Construction Super in addition to a Safety Professional effective **November 7, 2022**.

THE MOST IMPORTANT THING...

Use the following questions as a checklist to avoid receiving an **AUTOMATIC STOP WORK ORDER**:

- Do I have approved and stamped plans for what you are building on site?
- Does your staff know where the plans are?
- Are they current?
- Are the plans accessible?
- Are the plans readable?

REMINDER: Not having construction plans and site safety plans on a site will generate a FULL stop work order. Be sure the documents are on site and accessible.

RESEARCH

Since September of 2018 DOB's Construction Safety Compliance Unit issued **7,600** Stop Work Orders:

- DOB averages about **6,800** active large sites at any one time.
- **4,681** sites or **62%** were missing required documents
- **2,118 Full Stop Work Orders** received for **NO** construction plans or **NO** site safety plans
- **2,563 Partial Stop Work Orders** issued for no logs
- **3,856** additional violations were found on these sites



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