

National Transportation Safety Board

Office of Railroad, Pipeline and Hazardous Materials

Washington, DC 20594



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OPERATIONS

Group Chair's Factual Report

December 13, 2022

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A. ACCIDENT

Type: CTA Employee Fatality
Date and Time: July 16, 2022
Time: 1:52 a.m. CDT
7:52 a.m. UTC
Location: Chicago, Illinois
Carrier: CTA
Train: Brown line

B. OPERATIONS GROUP

Group Chair / IIC Michael Bachmeier
NTSB Office of Railroad, Pipeline and Hazardous Materials

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CTA

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Illinois Department of Transportation (IDOT)

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Amalgamated Transit Union (ATU) Local 308

C. SUMMARY

On July 16, 2022, about 1:52 a.m. local time, southbound Chicago Transit Authority (CTA) brown line passenger train 3285 struck a CTA customer service

assistant (CSA) at the La Salle/Van Buren station in Chicago, Illinois. Review of platform surveillance video by National Transportation Safety Board (NTSB) investigators showed that the CSA descended the stairs from the west end of the inner loop platform to access the tracks and fell onto the outer loop high voltage rail. Review of the surveillance video showed the customer service assistant laid motionless on the track for about 3 minutes whereupon he was struck by train 3285. Train 3285 then travelled about 430 feet before it stopped at the berth marker.¹ At the time of the accident, conditions were dark, and the weather was 71°F with light rain.

D. DETAILS OF THE INVESTIGATION

1.0 Description of CTA Operations

The Chicago Transit Authority (CTA) operates the second largest public transportation system in the United States, covering the City of Chicago and 35 surrounding suburbs. The agency provides 83% of public transit trips in the six-county Chicago region, providing approximately 1.7 million rides on an average weekday.

CTA's governing arm is the Chicago Transit Board, which consists of seven members, four appointed by the Mayor of Chicago and three by the Governor of Illinois. The CTA is an independent governmental organization created by State of Illinois legislation in 1945. CTA began operations in 1947 after acquiring the properties of the Chicago Rapid Transit Company and the Chicago Surface Lines. In 1952, CTA became the sole operator of Chicago transit when it purchased the Chicago Motor Coach system. Scope of Transit Services

The CTA is the second largest public transportation system in North America. It is a multi-modal transit system that operates rail transit services. On the rapid transit system, CTA's 1,472 rail cars operate eight routes and 224.1 miles of track. CTA trains make about 2,318 trips each day and serve 145 stations.

CTA provides around-the-clock service on certain routes. During late night and early morning hours, major rail lines and some of CTA's bus routes offer "Night Owl" service, much of it with connecting schedules and routing.

The Brown Line operates between Kimball Terminal (4800 North/3400 West) and the eight Loop elevated stations, via the Ravenswood Connector, Monday through Saturday from approximately 0400 hours to 0130 hours and Sunday from approximately 0500 hours to 0130 hours. When Loop service is discontinued, a

¹ A *berth marker* indicates the point at which the lead railcar of the train should stop to ensure that the train doors are aligned with the platform.

His normal work schedule is Monday through Friday with Saturday and Sunday as rest days. The CSA typically signs on at 10:00 p.m. and takes a 20-minute break around 2:00 a.m. for 20 minutes and then signs off at 6:00 a.m.

A CSA's general duties and responsibilities include opening and closing the stations, monitoring the station, maintaining kiosk security, assisting customers, providing customer service, responding to assistance requests, and emergency assistance.

The defect log and customer service daily activity report (CADAR) from the CSA's office were reviewed. The working group did not note anything from his shift that would have required him to enter the ROW.

3.0 CTA Security Camera Footage

As part of the investigation, the investigative team viewed the CCTV footage on Sunday, July 17, 2022, at CTA headquarters. The platform camera is mounted on the South (Outer) platform, oriented west. Below is the timeline from the group's viewing of the security camera footage taken on July 16, 2022:

- 1:46:42 am - customer service assistant (CSA) comes into view, wearing his orange and yellow safety vest
- 1:46:59 - CSA reaches barrier to steps
- 1:47:02 - CSA begins descending stairs
- 1:47:11 - CSA reaches bottom of stairs
- 1:47:41 - CSA stops first attempt to cross and returns to field side, off the right of way
- 1:48:06 - CSA moves closer to the platform stair and starts second attempt to cross
- 1:49:04 - CSA falls in proximity of third rail
- 1:49:10 - CSA starts crawling
- 1:49:24 - CSA becomes still
- 1:52:22 - Train 3285, Run 435, traveling east - impacts CSA
- 1:52:27 - Train 3285 comes to a stop; operator looks out all windows
- 1:52:40 - Train 3285 starts moving
- 1:52:48 - Train stops
- 1:52:51 - Train starts moving
- 1:53:07 - Train stops
- 1:53:16 - Train starts moving
- 1:53:23 - Train stops
- 1:53:26 - Train starts moving
- 1:53:34 - Train stops

- 1:53:38 - Train starts moving
- 1:53:44 - Train stops at the 8 Car Marker

The CSA had difficulty initiating and crossing over the ROW and stumbles multiple times in his first attempt to cross between 1:47:11 and 1:47:41 in the video.

At 1:48:06, the CSA moves closer to the platform and uses it to aid his balance and starts second attempt to cross the ROW.

At 1:49:04, the CSA falls across the foot walk, which is between the inner and outer running rails. What caused the fall is unknown. It appears that the CSA lost his footing on the gauge side of the running rail in the vicinity of the electrified third rail. The CSA is on the center foot walk, between two electrified third rails.

At 1:49:10, the CSA is moving, either to correct his fall or to re-right himself, or he is already in contact with the third rail on the outer loop side.

At 1:49:24 CSA becomes still.

At 1:52:22, CTA train 3285, run 435, traveling east and impacts the CSA on the outer loop on gauge side running rail and the third rail. At 1:52:27, train 3285 comes to a stop; operator looks out all windows and again at 1:52:40, train 3285 starts moving. Eight seconds later the train stops. Over the next 53 seconds, train 3285 starts and stops four (4) additional times until stopping at the 8 Car Birth Marker at 1:53:44.

In examining the distance, train 3285 traveled approximately 430 feet from the point it first contacted the CSA until it came to a final stop at the 8 Car Marker.

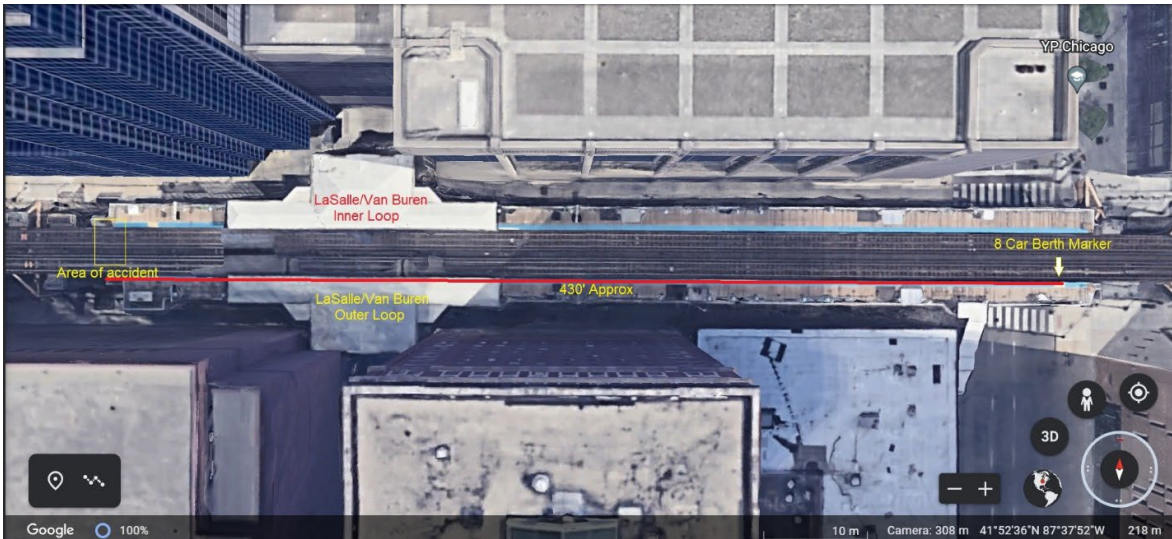


Figure 2: Photo showing distance from area of accident to 8 car berth marker.

4.0 On Scene Site Visit

On Sunday, July 17, 2022, the working group visited the location of the accident. The accident occurred at the LaSalle/Van Buren Station. The station services the Brown Line 'L,' which operates rapid transit service, daily, from Kimball to the loop.

Investigators observed "Danger - Keep of Tracks - High Voltage" signs throughout the station (see images below).

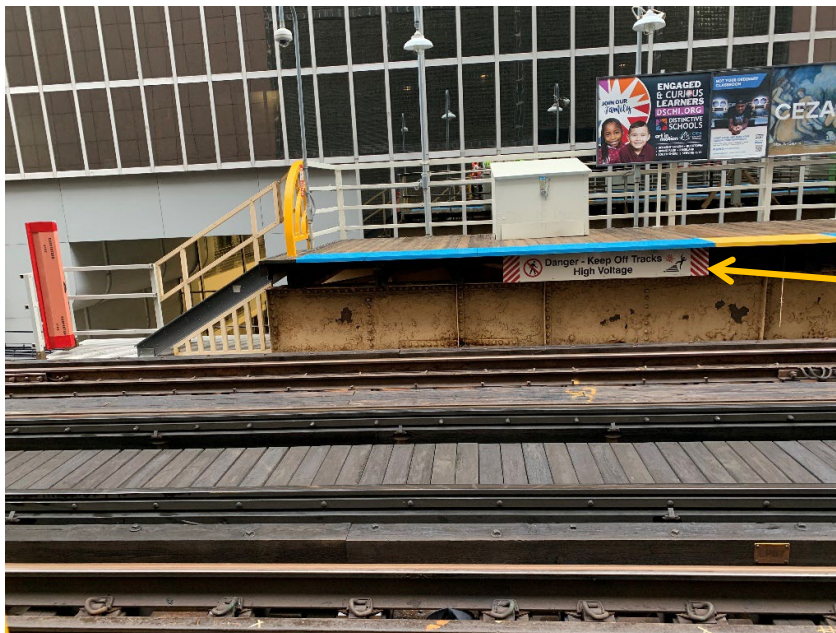


Figure3: Photo showing high voltage on side of platform



Figure 4: Photo showing no one permitted on tracks

The accident occurred on the west end of station on the right of way. At the end of the platform there is a barrier and steps down to the right of way. The two third rails are located between the tracks. There is a wooden walkway between the third rails. The walkway is not a place of safety, as it is not adequately wide for a person standing on it to be in the clear of passing trains.

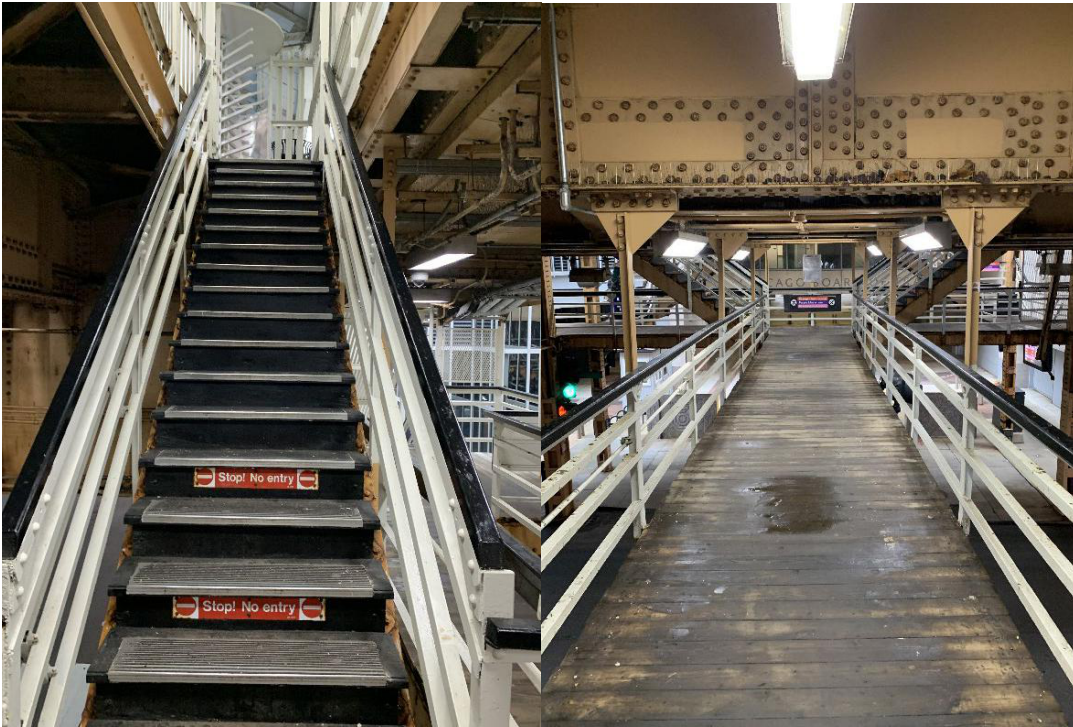


Figure 5 and 6: Photos show the steps up to platform from the mezzanine level and mezzanine level walkway between the outer and inner loop above street level.



Figure 7: Photo shows the area of the accident.

5.0 Applicable Rules

The Safety on Rapid Transit Tracks Standard Operating Procedure (SOP) and Calling On & Off of the ROW SOP contains the communication needed before entering or working adjacent to the ROW. Each group shall have a pre-entry safety discussion covering evacuation procedures and safety precautions. The group must have a CTA two-way radio. One person of the group must be designated as the primary contact with the controller for calling on or off the ROW.

On the proper route channel they will notify the controller of: who you are; the number of people in your group; the area where the group will be on the ROW; including the direction of the track upon which the work will be performed; an estimate of how long the group expects to be on the ROW at the location; and your radio call number, if applicable.

To ensure that the controller knows exactly where the group will be, and unless the work area is within the limits of a station, the work area must only be between two adjacent stations and must be stated as between those two adjacent stations.

Upon completion of the assignment, notify the controller that work is complete and to call off the ROW.

The SOP's states that whenever working on or adjacent to the rail system ROW, all members of the group must; wear approved CTA high-visibility fluorescent safety vests, proper footwear, eyeglasses, and protective headwear, if required. It also states that you will carry and use a flashlight in times or places of reduced visibility. It also states the you be alert, conscious of hazards presented by the third rail and trains and to consider the 600 volt third rail to be energized at all times.

6.0 Oversight

6.1 External - FTA

An agency within the U.S. Department of Transportation (DOT), FTA is headed by an administrator appointed by the President of the United States. FTA is one of DOT's 10 modes of transportation and is run by a headquarters in Washington, D.C. as well as 10 regional offices that assist transit agencies in all states and U.S. territories. The FTA has an Office of Safety in Washington D.C. that conducts triennial audits of a State Safety Oversight (SS) Organization's compliance with Federal requirements.

FTA is required to implement and maintain a national public transportation safety program to improve the safety of all public transportation systems that receive federal funding. The safety program includes:

- 1) The National Public Transportation Safety Plan, detailing safety performance criteria and minimum transit safety standards.
- 2) The Safety Certification Training Program, a safety training regime for personnel who conduct transit safety audits.
- 3) The Public Transportation Agency Safety Plan, a requirement for each transit agency to detail what it will do to ensure the safety of its system.
- 4) The State Safety Oversight Program, which establishes independent state-based rail transit safety oversight agencies, with enforcement authority to compel the rail public transit agency to complete necessary safety actions.

6.2 External -Illinois Department of Transportation (IDOT) - State Safety Oversight

Under FTA's State Safety Oversight Rule, the Illinois Department of Transportation (IDOT) was certified in August of 2018 as the State Safety Oversight Agency charged with providing Federally required safety oversight of the CTA rail transit system. The Rail Oversight Team is the federally designated state safety oversight (SSO) agency of the CTA, designated by the Federal Transit Administration (FTA).

According to IDOT, they annually review, test, and approve the Agency Safety Plan created by the CTA, along with monitoring of the CTA's compliance with the Division's System Safety Program Standard.

IDOT performs random inspections of CTA light and heavy rail subway cars and operation facilities which include all carhouses. Division staff review and participate in internal safety audits to further enhance compliance and safety plans. IDOT conducts external safety audits which are designed to monitor compliance with program requirements. The Rail Team is made up of two full time employees, a Chief Rail Transit Safety Oversight Manager, and a Rail Transit Safety Coordinator. Additionally, a Program Manager or designee oversees the office and reports to the Director of the Office of Intermodal Project Implementation.

6.3 Internal - CTA's Agency Safety Plan

Safety is a core value of the Chicago Transit Authority (CTA), and managing safety is a core business function of the Authority. CTA is committed to developing, implementing, maintaining, and continuously improving processes in order to ensure the safety of its customers, employees, and the public. This document is the Chicago Transit Authority Agency Safety Plan (ASP) for its Rail System.

According to CTA, the purpose of an Agency Safety Plan is to establish the means by which the CTA manages its safety program, which is through the implementation of a Safety Management System (SMS).

6.3.1 CSA Observations per General Bulletin G04-21

Managers, supervisors, and other management personnel are responsible for following the requirements regarding observation frequency, documentation, and follow-up.

The observation requirements for operating and non-operating employees are based on certification and the classification that they pick. Customer Service

Representatives and Customer Service Assistants must be observed performing job duties of their classification. The minimum required observation frequency is one time per pick and two times per year.

The review of the observations provided by CTA for the last 5 years showed the CSA employee didn't have an observation in 2019 nor 2021. The CSA had 5 observations over this five-year span.

CTA had completed 14 observations checks from July 2020 through July 2022 at the LaSalle/Van Buren station on other CSA/CSR employees.

NOTE: CTA noted that they did suffer resource challenges and other work-related issues due to the pandemic related to these observations.

Submitted by:

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