



WMSC Commissioner Brief: W-0172 – Improper Roadway Worker Protection – Shaw-Howard U Station – February 17, 2022

Prepared for Washington Metrorail Safety Commission meeting on June 28, 2022

Safety event summary:

A Metro Transit Police Department (MTPD) Officer fouled Track 2 at Shaw-Howard U Station without requesting permission and Foul Time protection from the Rail Operations Control Center (ROCC) while attempting to retrieve a rider's cellphone that had fallen onto the track bed. Foul Time is a type of roadway worker protection (RWP) that is intended to allow personnel to traverse an area with no train traffic by preventing any trains from entering the area until the personnel report that they have cleared that area and reached a safe location.

MTPD Officer #1 contacted the MTPD Security Operations Control Center (SOCC) and then a ROCC Rail Operations Manager was contacted to report a rider dropped their cellphone on Track 2 at the station. A Radio Rail Traffic Controller (RTC) dispatched an Office of Rail Transportation (RTRA) Supervisor to the station to retrieve the cellphone from the roadway.

Instead of waiting for the RTRA Supervisor to arrive, MTPD Officer #2 attempted to retrieve the cellphone using a non-conductive grabber device, causing them to foul the track. Fouling the track, whether it be by entering the roadway or extending an object onto the roadway, is prohibited unless it is absolutely necessary according to WMATA's RWP Cardinal Rule 5, which states, "There shall be no fouling of the Authority's Roadway unless it is ABSOLUTELY necessary to perform your job". Failure to comply with established cardinal rules can result in death or serious injury. In this instant, Foul Time needed to be requested prior to using the grabber and granted by the ROCC, however, MTPD Officers are not trained to retrieve items from the roadway or request foul time. Requesting Foul Time is not covered in the curriculum taught to MTPD Officers as a part of their training.

The Train Operation of Train 306 contacted the ROCC as the train entered Shaw-Howard U Station on Track 1 to report having no speed commands. CCTV footage showed that the platform lights were not working properly and did not flash as the train entered the station. The flashing platform lights indicate a train is approaching or arriving and is an important warning for hearing impaired riders as well as those that may be distracted. While the train was stopped just short of the 8-car marker, MTPD Officer #2 continued to foul the track, using the grabber to try to retrieve the phone. When asked by the ROCC Rail Traffic Controller (RTC) if they had serviced the platform, the Train Operator advised that an MTPD Officer stopped the train before it could reach the 8-car marker and that MTPD Officer #2 was using an object to try to retrieve something from the roadway. MTPD Officer #2 stopped their attempt to retrieve the phone and waved the train forward. The train was granted a block to the 8-car marker by the ROCC, serviced the station and departed. MTPD Officer #1 attempted to retrieve the phone with the grabber as well to no avail.

An RTRA Supervisor arrived at the station, requested and was granted Foul Time by the ROCC, entered the roadway and retrieved the rider's cellphone.

This event occurred at 2:18 p.m. and was not reported to the WMSC until 5:32 p.m., outside of the two-hour notification window required by the WMSC Program Standard.

Probable Cause:



The probable cause of this improper roadway worker protection event was that the MTPD Officers fouled the track without permission from ROCC during a non-emergency situation because they were not trained on the need or procedure for requesting Foul Time.

Corrective Actions:

Metrorail has committed to reviewing MTPD RWP training materials at least annually to ensure rule updates are reflected.

Metrorail's Operations Management Services (OPMS) training leadership is evaluating and approving Office of Emergency Management (OEM) instructors using an approval process that mirrors SAFE's contractor RWP instructors to ensure RWP materials are presented regardless of instruction group

MTPD's Mandatory In-Service Training will include reviews of ROCC Emergency SOPs, including Foul Time.

Metrorail is required to address Finding 3 of the WMSC's 2022 audit of the Emergency Management and Fire Life Safety Programs through an open CAP (C064), which found that MTPD personnel routinely enter the roadway despite not having RWP qualifications required by Metrorail rules and procedures. This CAP includes completion of a gap analysis to determine the appropriate level of RWP training and necessary qualifications of all MTPD personnel who may enter the roadway.

WMSC staff observations:

MTPD Officers are not required to take the RWP Level 2 or 4 training that is required of all other persons entering the roadway. Instead, officers are provided MTPD specific RWP training as part of their officer training, which does not include the process for requesting Foul Time from the ROCC. This is being addressed in the CAP mentioned above.



Washington Metro Area Transit Authority
Department of Safety and Environmental
Management (SAFE)
FINAL REPORT OF INVESTIGATION A&I – E22105

Date of Event:	02/17/2022
Type of Event:	Improper Roadway Worker Protection
Incident Time:	14:17 hours
Location:	Shaw-Howard U Station, Track 1
Time and How received by SAFE:	14:18 hours MAC Desk
WMSC Notification Time:	17:32 hours
Responding Safety Officers:	WMATA SAFE: No WMSC: No Other: N/A
Rail Vehicle:	6130/31x6075/74x6052/53
Injuries:	None
Damage:	None
Emergency Responders:	None
SMS I/A Number	20220217#98496

Shaw – Howard U Station – Improper RWP

**February 17, 2022
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Abbreviations and Acronyms

ARS	Audio Recording System
CAP	Corrective Action Plan
CCTV	Closed Circuit Television
FT	Foul Time
MSRPH	Metrorail Safety Rules and Procedures Handbook
MTPD	Metro Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
ROCC	Rail Operations Control Center
SAFE	Department of Safety and Environmental Management
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Executive Summary

On Thursday, February 17, 2022 at 14:11 hours, Closed Circuit Television (CCTV) video captured an unidentified customer alighting from Train ID 303, Track 2, at Shaw - Howard U Station. Shortly after the unidentified customer alighted from Train ID 303, they walked along the edge of the platform on the Track 1 side and dropped their phone in the roadway. Metro Transit Police Department (MTPD) Officer #1 was on the platform and walked over to assist the customer. MTPD Officer #1 contacted their Dispatch to report that the customer dropped their phone into the roadway. At approximately 14:15 hours, MTPD Officer #1 contacted a Rail Operations Central Control (ROCC) Rail Operations Manager to inform them that a customer dropped their cellphone in the roadway. Shortly after, a Radio Rail Traffic Controller (RTC) instructed an Office of Rail Transportation (RTRA) Supervisor to respond to Shaw – Howard U Station because there was an item in the roadway.

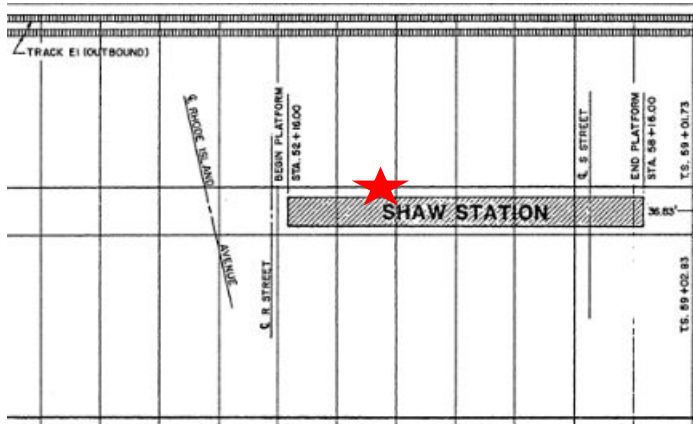
At approximately 14:17 hours, MTPD Officer #2 fouled the track by using a non-conductive grabber device to retrieve the cellphone. As Train ID 306, Track 1, entered Shaw – Howard U Station, the Train Operator contacted the ROCC to inform them they did not have any speed commands. While Train ID 306 was stopped, MTPD Officer #2 attempted several times to retrieve the cellphone from the roadway using the grabber but was unsuccessful. The two MTPD Officers waved to the Train Operator to move the train forward. Once Train ID 306 serviced and cleared the station, MTPD Officer #1 attempted to retrieve the cellphone using the grabber, but they were unsuccessful. The RTRA Supervisor arrived on the scene and contacted the ROCC to request Foul Time (FT) to retrieve the customer's cellphone from the roadway. The RTRA Supervisor retrieved the cellphone and delivered it back to the customer. There were no injuries or property damage as a result of this event.

The probable cause of the Improper Roadway Worker Protection event was lack of awareness on behalf of the MTPD officers, which resulted in non-compliance with established RWP Roadway Safety procedures. The MTPD Officer reported the dropped property in the roadway but failed to establish required protections before attempting to retrieve the property from the roadway.

Incident Site

Shaw-Howard U Station, Track 1

Field Sketch/Schematics



The red stars indicate the approximate location where the customer dropped their cellphone into the roadway.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is to collect and analyze available facts, determine the probable cause(s) of the incident, identify contributing factors, and make recommendations to prevent a recurrence.

Investigative Methods

The investigative methodologies included the following:

- Site Assessment through document review.
- Interviews – The officers involved in the event were interviewed by their immediate supervisor.
- Informal Interviews – Collected through conversations with individuals during the investigation to provide background and supporting information.
- Documentation Review – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
 - Metrorail Safety Rules and Procedures Handbook (MSRPH)
 - National Oceanic and Atmospheric Administration (NOAA) data
 - MTPD Supervisor's Report
 - MTPD Officers' Written Statements

- System Data Recording Review – A collection of information in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback includes Ops. 3, Yellow/Green-12061 Telephone, MTPD 1X Radio
 - Closed Circuit Television (CCTV)
 - ROCS Spots Report

Investigation

On Thursday, February 17, 2022 at 14:11 hours, CCTV video captured a customer alighting from Train ID 303, Track 2, at Shaw - Howard U Station. Shortly after the customer alighted from Train ID 303, they walked along the edge of the platform on the Track 1 side and dropped their phone in the roadway. MTPD Officer #1 was on the platform and walked over to assist the customer. MTPD Officer #1 contacted their Dispatch to report that the customer dropped their phone into the roadway. At approximately 14:15 hours, MTPD Officer #1 contacted a ROCC Rail Operations Supervisor to inform them that a customer had dropped their cellphone in the roadway. Shortly after, a Radio RTC instructed an Office of Rail Transportation (RTRA) Supervisor to respond to Shaw – Howard U Station because an item was in the roadway. At approximately 14:17 hours, MTPD Officer #2 fouled the track by using a non-conductive grabber device to retrieve the cellphone. As Train ID 306, Track 1, entered Shaw – Howard U Station, the Train Operator contacted the ROCC to inform them they did not have any speed commands. While Train ID 306 was stopped, MTPD Officer #2 attempted several times to retrieve the cellphone from the roadway using the grabber but was unsuccessful. The two MTPD Officers waved the Train Operator to move the train forward. Once Train ID 306 serviced and cleared the station, MTPD Officer #1 attempted to retrieve the cellphone using the grabber, but they were unsuccessful. MTPD Officers RWP training does not cover requesting FT or when FT is required. MTPD Officers do not request FT unless an Incident Command is established. The RTRA Supervisor arrived on scene and contacted the ROCC to request FT to retrieve the customer's cellphone from the roadway. The RTRA Supervisor retrieved the cellphone and delivered it back to customer. There were no injuries or property damage as a result of this event.

Chronological Event Timeline

Time	Description
14:11:17 hours	Customer arrived at Shaw-Howard U Station via Train ID 303, Track 2. [CCTV & ROCS Spot Report]
14:11:45 hours	The customer was walking near the edge of the platform of Track 1 and dropped their cellphone in the roadway. [CCTV]
14:12:00 hours	MTPD Officer #1 walks over to customer, talks to them, and then makes a phone call. [CCTV]
14:13:19 hours	<u>MTPD Officer #1</u> : Contacted their Dispatch to inform them that a customer dropped their phone in the roadway and talked to the Station Manager to see if they can get someone to get the phone. [MTPD-Radio]
14:15:36 hours	<u>MTPD Officer #1</u> : Contacted a Rail Operations Manager to inform them that a customer dropped a cellphone on Track 1, at Shaw-Howard U Station. [12060-Phone]
14:15:52 hours	<u>MTPD Officer #1</u> : Contacted their Dispatch to inform them that they spoke to the Station Manager and a RTRA Supervisor was en route so they were going to stand by until the issue was resolved. [MTPD Radio]
14:16:10 hours	<u>Radio RTC</u> : Instructed a RTRA Supervisor to head to Shaw-Howard U Station for a report of an item on the roadway, Track 1. [Ops. 3]
14:16:40 hours	MTPD Officer #2 arrives with a non-conductive grabber. [CCTV]
14:16:43 hours	<u>RTRA Supervisor</u> : Gave 100% repeat back. [Ops. 3]
14:17:02 hours	MTPD Officer #2 fouled the track for the first time attempting to retrieve the cellphone. [CCTV]
14:17:29 hours	Train enters Shaw – Howard U Station. [CCTV & ROCS Spot Report]
14:17:44 hours	<u>Train ID 306 Train Operator</u> : Contacted the Radio RTC to inform them they did not have speed commands at Shaw-Howard Station, Track 1. [Ops. 3]
14:17:49 hours	Train ID 306 comes to a stop short of the 8-car marker. [CCTV]
14:17:52 hours	<u>Radio RTC</u> : Asked the Train Operator if they serviced the platform. [Ops. 3]
14:17:58 hours	MTPD Officer #2 was making several attempts to retrieve the cellphone from the roadway with the grabber. [CCTV]
14:18:11 hours	MTPD Officer #1 was talking to Train ID 306 Train Operator. [CCTV]
14:18:13 hours	<u>Train ID 306 Train Operator</u> : Informed the Radio RTC that a MTPD officer stopped them and could not get to the 8-car marker. [Ops. 3]
14:18:24 hours	<u>Radio RTC</u> : Asked the train operator if they needed a block to the 8-car marker? [Ops. 3]
14:18:30 hours	<u>Train ID 306 Train Operator</u> : "Negative, transit has something like a stick or something trying to get something from the roadway." [Ops. 3]
14:18:39 hours	<u>Radio RTC</u> : "So transit stopped you from properly berthing at this time, is that what you are saying, over?" [Ops. 3]
14:18:43 hours	MTPD Officer #2 stopped attempting to retrieve the cellphone and signaled Train ID 306 Train Operator to move forward. [CCTV]
14:18:46 hours	<u>Train ID 306 Train Operator</u> : "No, they signal me they want me to go to the 8 car-marker. Can I have a permissive block to the 8-car marker, over?" [Ops. 3]
14:19:04 hours	Radio RTC: Granted the train operator a permissive block to the 8-car marker at Shaw-Howard U station, Track 1. [Ops. 3]
14:19:20	Train starts moving to 8-car marker. [CCTV]
14:19:21 hours	<u>Train ID 306 Train Operator</u> : Gave 100% repeat back. [Ops. 3]
14:20:34 hours	<u>Train ID 306</u> cleared the platform. [ROC Spots Report]

14:20:48 hours	MTPD Officer #1 fouls the track attempting to retrieve the cellphone. [CCTV]
14:21:33 hours	RTRA Supervisor approaches and talks to MTPD Officers. [CCTV]
14:21:48 hours	<u>RTRA Supervisor</u> : Contacted the Radio RTC to request FT to enter the roadway at Shaw - Howard U Station, Track 1, for the purpose of retrieving a cellphone from the roadway. [Ops. 3]
14:23:39 hours	<u>Radio RTC</u> : Granted the RTRA Supervisor FT to enter roadway for the purpose of retrieving a cellphone and instructed the RTRA Supervisor to let them know when they relinquished FT. [Ops. 3]
14:23:45 hours	RTRA Supervisor: Gave 100% repeat back. [Ops. 3]
14:24:30 hours	RTRA Supervisor retrieved the cellphone from the roadway and handed it to the customer. [CCTV]
14:25:12 hours	<u>RTRA Supervisor</u> : Contacted the Radio RTC to inform them they were relinquishing their FT. [Ops. 3]
14:25 hours	<u>Radio RTC</u> : Gave 100% repeat back and gave the clearing time. [Ops. 3]

***Note: Times above may vary from other system's timelines based on clock settings.*

ROCS Spots Report

Select Platform: and/or Select ID: Leave blank to remove criteria
and/or Select 4-digit car number: Leave blank to remove criteria
Select Date: Select Times (0-24HRS): From To

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
506	E02-2	6	43							14:00:13	14:01:35	6053-6052.6074-6075.6131-6130	-
303	E02-2	6	31							14:10:36	14:12:00	6098-6099.6002-6003.6117-6116	-
501	E02-2	0	43							14:19:52	14:21:08	3212-3213.3148-3149.3093-3092	-
304	E02-2	6	31							14:28:42	14:29:58	3243-3242.3158-3159.3240-3241	-
502	E02-2	6	43							14:41:30	14:43:39	3187-3186.3034-3035.3068-3069	-
305	E02-2	6	31							14:50:13	14:51:39	3220-3221.3259-3258.2075-2074	-

**This image shows the train that the customer arrived at Shaw – Howard Station on Train ID 303.*

Select Platform: and/or Select ID: Leave blank to remove criteria
 and/or Select 4-digit car number: Leave blank to remove criteria
 Select Date: Select Times (0-24HRS): From To

Generate Report

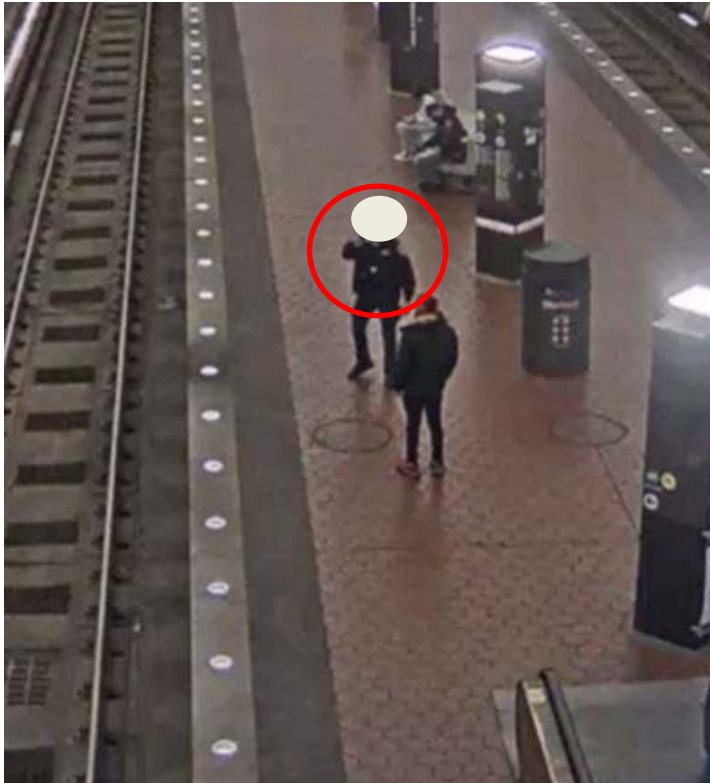
ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
503	E02-1	6	44							14:08:08	14:09:22	3052-3053.3209-3208.2004-2005	-
306	E02-1	6	24							14:17:34	14:20:34	3161-3160.3152-3153.3143-3142	-
504	E02-1	6	44							14:26:33	14:27:42	2012-2013.2025-2024.3139-3138	-
301	E02-1	6	24							14:39:27	14:40:47	6046-6047.6004-6005.6072-6073	-
505	E02-1	6	44							14:46:34	14:47:44	6164-6165.6076-6077.6000-6001	-
302	E02-1	6	24							14:57:02	14:58:23	2042-2043.3288-3289.2046-2047	-

*This image shows the train that entered Shaw – Howard Station while the MTPD officer fouled the track.

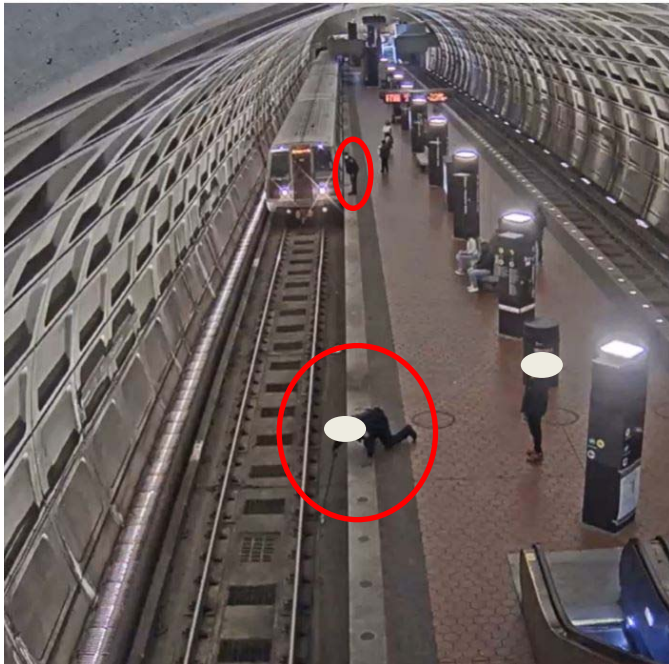
Closed Circuit Television (CCTV) Playback



This image shows the customer's cellphone falling into the roadway, Track 1.



This image shows MTPD Officer #1 contacting the ROCC about the customer dropping their phone in the roadway.



This image shows MTPD Officer #1 talking to the Train Operator while MTPD Officer #2 attempted to retrieve the customer's cellphone using the non-conductive grabber.



This image shows the RTRA Supervisor handing the customer their cellphone after retrieving it from the roadway under Foul Time Protection.

Weather

On February 17, 2021, at the time of the incident, NOAA recorded the temperature as 64° F, with clear skies throughout the afternoon. The event occurred in a tunneled section of the rail system. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Washington, DC.)

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that both MTPD Officers were not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

- MTPD Officer #1 contacted the ROCC to inform them of the situation but never requested foul time to retrieve the cellphone.
- MTPD Officers fouled the roadway after contacting the Security Operations Control Center and the Station Manager.
- MTPD Officers failed to verify train movement was halted before attempting to retrieve the cellphone from the roadway.
- MTPD Officers violated RWP Cardinal Rule #5: There shall be no fouling of the Authority's Roadway unless it is ABSOLUTELY necessary to perform your job.
- As Train ID 306 stopped mid-platform, MTPD Officer #2 attempted to retrieve the cellphone.
- MTPD Officers do not request FT to enter the roadway unless an Incident Command is established.

Immediate Mitigation to Prevent Recurrence

- A RTRA Supervisor was dispatched to the scene to retrieve the cellphone.

Probable Cause Statement

The probable cause of the Improper Roadway Worker Protection event was lack of awareness on behalf of the MTPD officers which resulted in non-compliance with established MTPD RWP Roadway Safety procedures. The MTPD Officer reported the dropped property in the roadway but failed to establish the required protections before retrieving the property from the roadway.

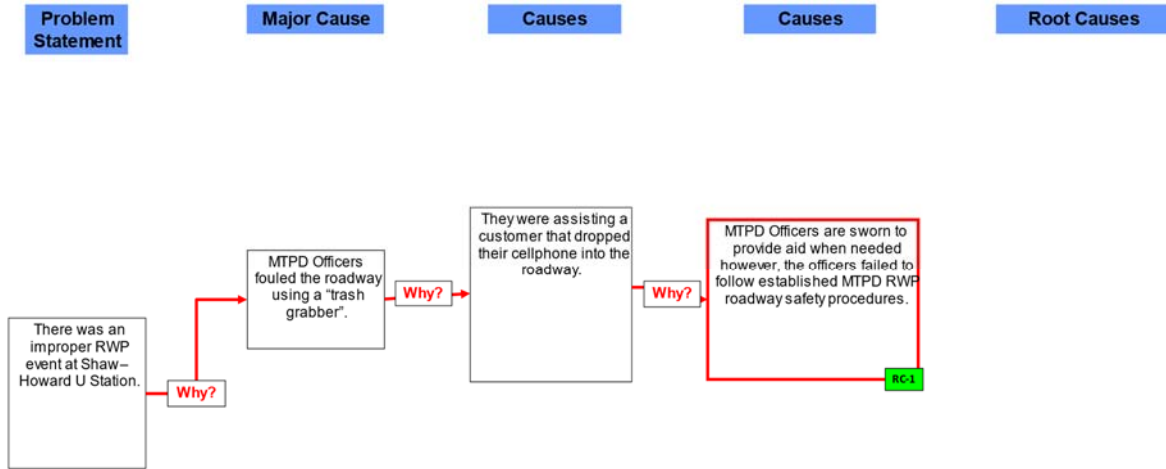
SAFE Recommendations/Corrective Actions

The following recommended corrective actions are from a previous report and apply to the conditions of this incident.

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
90755_SAFE CAPS_ SAFE_004	MTPD RWP training materials shall be reviewed at least annually by OPMS, to ensure process changes and rule updates are reflected in the material.	SAFE SRC	6/30/2022
90755_SAFE CAPS_ SAFE_005	OEM instructors shall be evaluated and approved by OPMS training leadership. The approval process would mirror that followed by SAFE's contractor RWP instructors. Approval would ensure RWP material is presented consistently regardless of instructor group	SAFE SRC	6/30/2022
90755_SAFE CAPS_MTPD _007	Annual MIRs shall include reviews of the ROCC emergency SOPs (including use of Foul Time), which are covered during new recruit training.	MTPD SRC	6/30/2022
90755_SAFE CAPS_MTPD 008	Roll Call notes discussing roadway access violations and reporting (From E22104).	MTPD	Completed
90755_SAFE CAPS_MTPD 009	Continue to work towards addressing open CAPs related to RWP.	MTPD	8/30/2022

Appendices

Appendix A – Root Cause Analysis



Root Cause Analysis

