

WMSC Commissioner Brief: W-0170 - Serious Injury - L'Enfant Plaza Station - February 26, 2022

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

Safety event summary:

A juvenile fell from an escalator after attempting to improperly ride the unit from the upper level to the lower-level platform at L'Enfant Plaza and sustained serious injuries requiring medical transport to a hospital.

Closed Circuit Television (CCTV) captured four juveniles horseplaying on the upper-level platform at L'Enfant Plaza Station after exiting a Green Line train as they made their way to Escalator #9. After getting on the descending escalator, one of the juveniles sat on the handrail and began to ride it down before falling backward off the unit and onto the lower-level platform. An MTPD officer who was on the platform at the time of the event administered aid and requested medical assistance. District of Columbia Fire and Emergency Medical Service (DCFEMS) arrived and transported the juvenile to a local hospital to be treated for a right arm fracture.

Escalator #9 was removed from service following the event for post-incident inspection by the Office of Elevators and Escalators (ELES). The inspection determined that there were no defects to the unit that could have contributed to the event.

Probable Cause:

The probable cause of this serious injury event is the improper use of the escalator by the juvenile.

Corrective Actions:

Metrorail took no specific corrective action related to this event.

WMSC staff observations:

Metrorail has signs and periodic automated announcements warning against the improper use of escalators.



Washington Metro Area Transit Authority Department of Safety and Environmental Management (SAFE) FINAL REPORT OF INVESTIGATION A&I – E22128

Date of Event:	02/26/22						
Type of Event:	A-2: Serious Injury						
Incident Time:	17:19 hours						
Location:	L'Enfant Plaza Station – Mezzanine 56, Escalator #9						
Time and How received by SAFE:	17:19 hours Mission Assurance Coordinator (MAC)						
WMSC Notification Time:	18:23 hours						
Responding Safety Officers:	WMATA SAFE: No						
	WMSC: No						
	Other: N/A						
Rail Vehicle:	N/A						
Injuries:	Yes						
Damage:	N/A						
Emergency Responders:	District of Columbia Fire and Emergency Medical						
	Services (DCFEMS), Metro Transit Police						
	Department (MTPD)						
SMS I/A Number	20220226#98668MX						

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury

E22128

L'Enfant Plaza Station – Serious Injury

February 26, 2022

Table of Contents

Abbreviations and Acronyms	3
Executive Summary	4
Incident Site	4
Field Sketch/Schematics	5
Purpose and Scope	5
Investigative Methods	5
Investigation	6
Chronological Event Timeline	6
ROCS Spot Report	8
Weather	8
Findings	8
Immediate Mitigation to Prevent Recurrence	8
Probable Cause Statement	8
Appendices	9
Appendix A – ELES Post Incident Inspection	9

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury

E22128

Abbreviations and Acronyms

ARS Audio Recording System

CAP Corrective Action Plan

CCTV Closed Circuit Television

DCFEMSDistrict of Columbia Fire and Emergency Medical Services

ELES Office of Elevators and Escalators

MSRPH Metrorail Safety Rules and Procedures Handbook

MTPD Metro Transit Police Department

NOAA National Oceanic and Atmospheric Administration

RTRA Office of Rail Transportation

ROCC Rail Operations Control Center

SAFE Department of Safety

SMS Safety Measurement System

WMATA Washington Metropolitan Area Transit Authority

WMSC Washington Metrorail Safety Commission

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury

E22128

Executive Summary

On Saturday, February 26, 2022, at approximately 17:17 hours, Closed Circuit Television (CCTV) captured four juvenile males alighting from outbound Green Line Train ID 503 at L'Enfant Plaza Station. CCTV then captured the four juveniles walking towards Escalator #9 to go to the lower level of L'Enfant Plaza Station. A juvenile wearing a white jacket with an orange hoodie proceeded to sit on and ride the descending escalator handrail to the lower level. While descending, the juvenile fell backwards and injured their right arm. A Metro Transit Police Department (MTPD) Officer was on the lower-level platform when the juvenile fell from the escalator. The MTPD Officer immediately went to aid the juvenile. At approximately 17:20 hours, several other MTPD Officers arrived on scene to assist the first officer with the injured juvenile. At approximately 17:24 hours, a MTPD Officer deployed a yellow blockade gate to create a perimeter around the injured juvenile. At approximately 17:34 hours, District of Columbia Fire and Emergency Medical Services (DCFEMS) Medic #10 arrived on scene and started providing medical assistance. The juvenile was transported to a local hospital to have their injury treated. Escalator #9 was placed out of service because of this event. The Office of Elevators and Escalators (ELES) conducted a postincident inspection of Escalator #9 and did not discover any defects that would have contributed to this serious injury event.

The probable cause of this Serious Injury event was the improper use of an escalator that resulted in the juvenile seriously injuring themselves. The juvenile rode the escalator in a manner that the equipment was not designed for, resulting in them falling backwards and fracturing their arm. Responding personnel provided first aid and dispatched emergency services in an expedient manner.

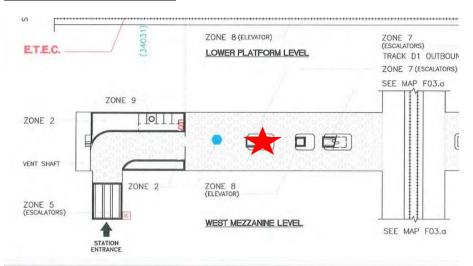
Incident Site

L'Enfant Plaza Station, Escalator # 9, Mezzanine 56, Lower Level

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury

E22128

Field Sketch/Schematics



*This image shows the approximate location of the customer when they fell off escalator # 9.

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
- 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:
 - MTPD Incident Report
 - National Oceanic and Atmospheric Administration (NOAA) data
 - ELES Post Incident Inspection Report
- System Data Recording Review A collection of information contained in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback include RCOM-Asst. Sup-12057, RCOM-Asst. Sup- 12058, RCOM2-2(12054)
 - Closed Circuit Television (CCTV)

Incident Date: 2/26/22 Time: 17:19 hours

Final Report Rev. 1– Serious Injury

E22128

Investigation

On Saturday, February 26, 2022 at approximately 17:17 hours, CCTV captured four juvenile males alighting outbound Green Line Train ID 503 at L'Enfant Plaza Station. As the Train Operator was closing the doors, the juvenile with a white jacket and orange hoodie stuck their hand in the middle of the door causing the Train Operator to recycle the doors. The group of juveniles continued to horseplay (e.g., pushing each other) and tamper with the train while it was servicing the station. As Train ID 503 was exiting the station, the juvenile in the white jacket and orange hoodie and another juvenile ran up to touch or hit the train. CCTV captured the four juveniles walking towards Escalator #9 to go to the lower level of L'Enfant Plaza Station. The juvenile wearing a white jacket with an orange hoodie proceeded to ride the descending escalator rail down to the lower level. As a result, the juvenile fell backwards and injured their right arm. A MTPD Officer was on the lower-level platform when the juvenile fell from the escalator. The MTPD Officer immediately went to aid the juvenile. At approximately 17:20 hours, several other MTPD Officers arrived on scene to assist the first officer with the injured juvenile. At approximately 17:24 hours, a MTPD Officer deployed a yellow blockade gate to create a perimeter around the injured juvenile. At approximately 17:34 hours, DCFEMS Medic #10 arrived on scene and started providing medical assistance. The juvenile was transported to a local hospital to have their injury treated. Escalator #6 was placed out of service as a result of this event. ELES conducted a post incident inspection of Escalator #9 and did not discover any defects that would have contributed to this serious injury event. ELES was current with the preventative maintenance on Escalator #9 and there were no open work orders for any defect at the time of the incident.

Chronological Event Timeline

A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

Time	Description
17:17 hours	Four juveniles alighted an outbound Green Line train, Train ID 503 at L'Enfant Plaza Station. As the Train Operator was closing the doors, one of the four juveniles stuck their hand in the door causing the Train Operator to recycle the doors. [CCTV]
17:19 hours	A juvenile was riding the descending rail of Escalator #9 when they fell backwards on to the platform. A MTPD Officer was on the platform when the juvenile fell and provided aid. [CCTV]
17:22 hours	ROIC Information Manager: Received a call from ROCC Operations Manager informing them there was a report that a customer fell from the mezzanine level to the platform on the C-line at L'Enfant Plaza Station [RCOM-Asst. Sup-12057]
17:23 hours	ROIC Information Manager #2: Contacted the Station Manager at L'Enfant Plaza Station to inquire about the customer falling at the station. The Station Manager was unaware of the incident but was going to check and report back to the ROIC. [RCOM-Asst. Sup- 12058]
17:24 hours	ROIC Information Manager: Informed the ROCC Operations Manager that they contacted the Station Manager at L'Enfant Plaza Station and they would provide details shortly. [RCOM-Asst. Sup- 12058]
17:24 hours	A MTPD Officer deployed a yellow blockade gate to create a perimeter around the injured juvenile. [CCTV]
17:28 hours	A Station Manager arrived on scene. [CCTV]

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury

E22128

Time	Description							
17:29 hours	MTPD Dispatcher: Advised the Information Controller that medics were en							
	route to L'Enfant Plaza Station for an individual that possibly fell from a							
	escalator and broke their arm. [RCOM2-2-(12054)]							
17:30 hours	Information Controller: Contacted MTPD Dispatcher to ask for the specific							
	entrance closest to the incident. The MTPD Dispatcher responded 9 th & D St.							
	[RCOM2-2-(12054)]							
17:31hours	Information Controller: Contacted the L'Enfant Station Manager at the 9 th & D							
	St. entrance to advise them that MTPD was there because a passenger was							
	injured. The Station Manager informed them that the other Station Manager							
47.001	said the passenger was sliding on the escalator and fell. [RCOM2-2(12054)]							
17:32 hours	Information Controller: Contacted ROIC Information Manager to advise that the							
	customer was sliding down the escalator when they fell and injured themselves							
	in Mezzanine 56. They stated they would provide more information once the							
17:33 hours	Station Manager provided an update. [RCOM2-2(12054)] Information Controller: Notified an Ops 2 RTC that medics were headed to							
17.33 110018	L'Enfant Plaza Mezzanine 56 for a young customer that injured themselves.							
	[RCOM2-2(12054)]							
17:34 hours	DCFEMS arrived on scene to provide medical aid. [CCTV]							
17:35 hours	Information Controller: Contacted ELES Desk to inform them of the situation at							
17.00 110013	L'Enfant Plaza Station with the passenger sliding down the railing and falling.							
	[RCOM2-2 (12054)]							
17:40 hours	Mezzanine 57 Station Manager: Contacted the Information Controller to inform							
	them that MTPD was treating the incident like a crime scene and would not let							
	anyone near. Also, advised that the other Station Manager would provide an							
	update. [RCOM2-2 (12054)]							
17:53 hours	Information Controller: Contacted MOC Desk to request custodial services at							
	L'Enfant Plaza Station, Lower Level, in case there were any bodily fluids from							
	the customer falling. [RCOM2-2(12054)]							
17:55 hours	Injured juvenile transported to local hospital. [CCTV]							
17:59 hours	RTRA Supervisor: Contacted the Information Controller to inform them that the							
	first MTPD Officer on scene was at 17:19, Medic #10 arrived at 17:34, EMS #1							
	arrived at 17:51, they arrived at 17:26 and transported at 17:55. The escalator							
	was going down when the customer fell injuring their right arm. Also, informed							
	them that the escalator was still running. [RCOM2-2(12054)]							
18:04 hours	Information Controller: Contacted ELES Desk to provide an update. Informed							
	them the customer fell from escalator #9. ELES advised the escalator should							
10.05	be out of service. [RCOM2-2(12054)]							
18:05 hours	Information Controller: Contacted the Station Manager at Mezzanine 56 and							
	advised them that escalator #9 should be taken out of service. Provided failure							
**************************************	number 16903330. [RCOM2-2(12054)] **Note: Times above may vary from other system's timelines based on clock settings							

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

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury E22128

ROCS Spot Report

a	nd/o	or Select 4-control Date: Fe	ligit car i	number:	nd/or Selec	Leave bl	ank to ren	nove criter	ia	ove criteri	a ✔ To 1	8:00 🗸		
	ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open		dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
Ì	304	F03-2	0	31							17:00:21	17:01:45	3260-3261.3275-3274.3087-3086	-3
	503	F03-2	6	43	17:17:14	17:18:08	54				17:16:40	17:18:29	3188-3189.3128-3129.3280-3281	78
	<u>301</u>	F03-2	6	27	17:26:21	17:30:03	222				17:25:47	17:30:25	6145-6144.6067-6066.6060-6061	9:07
	<u>504</u>	F03-2	6	43	17:32:52	17:33:21	29				17:32:09	17:33:43	2030-2031.3073-3072.3164-3165	6:31
	<u>550</u>	F03-2	8	42	17:42:39	17:46:55	256				17:42:08	17:47:15	unknown	9:47
	302	F03-2	6	27	17:55:34	17:55:58	24				17:55:02	17:56:40	2022-2023.2046-2047.3079-3078	12:55
	505	F03-2	6	43	17:59:14	17:59:37	23				17:58:41	17:59:57	3249-3248.3241-3240.3203-3202	3:40

Weather

On February 26, 2022, at the time of the incident, NOAA recorded the temperature as 44° F, with clear skies throughout the evening. Weather was not a contributing factor in this incident. This injury occurred indoors in a climate-controlled environment. (Weather source: NOAA) – Location: Washington, DC.

Findings

- The juveniles were playing around on the platform when they alighted Train ID 503.
- One juvenile attempted to slide down the rail of Escalator # 9 and fell backwards fracturing their arm.
- There were no mechanical issues with Escalator #9.
- There was a MTPD officer on the platform at the time of this event. The officer was able to provide immediate assistance.

Immediate Mitigation to Prevent Recurrence

Escalator #9 was placed out of service.

Probable Cause Statement

The probable cause of this Serious Injury event was the improper use of an escalator that resulted in the juvenile seriously injuring themselves. The juvenile rode the escalator in a manner that the equipment was not designed for, resulting in them falling backwards and fracturing their arm. Responding personnel provided first aid and dispatched emergency services in an expedient manner.

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury

E22128

^{*}This image shows the Train ID that the injured juvenile alighted from at L'Enfant Plaza Station.

Appendices

Appendix A – ELES Post Incident Inspection

			R INSPECTION OF ESCALATORS							
		RAL NOTES:	nspection information on each item number.							
			= insert number to identify comment on back of this							
	Che	ecklist; NA = not applicable								
Building Address:	9th and d street. S.W.		Inspection Date: <u>2/27/2022</u>							
ity, Zip code:	Washington, D.C. 20		Inspector Name: QEI #/Certification: C#4679							
) Number;	D03W09 Esc Maximo									
Code Year.	A17.1-2000 w/ 2002	Addenda	Type Of Inspection: Accident							
Station Number of Steps	L'Enfant Plaza									
Requirement/Inspe		OK NG N/A	Requirement/Inspection Area	OK NG N/A						
Escalator - Externa	al.		8 Escalator - Internal							
7.1 General Fire pre			8.1 Machinery space access & lighting							
7.2 Geometry			8 2 Stop Switch							
7.3 Handrails			8 3 Controller and wiring							
7.4 Entrance and Egress		∞ □ _ □	8.4 Drive Machine And Brake							
7.5 Lighting		×	8 5 Speed Governor	w. 🖾 🗆 🗆						
7.6 Caution Signs 7.7 Combolate		×	8 6 Broken Drive Chn / Disc Mtr dev Broken Drive Chain/Mtr Disconnect S 8.7 Reversal Stop Switch	w. 🛭 🗀 — 🗅						
7.7 Combplate 7.8 Deck Barricades		8 0 - 0	8 8 Broken Step Chain switch	8 0 - 0						
7.9 Steps and Upthrust device		·	8 9 Step Upthrust Device	×						
7.10 Operating devices			8.10 Missing Step Device							
7.11 Skirt obstruction devices		⊠ □ □	8.11 Step Level Device							
7.12 Handrail-speed monitoring device			8.12 Steps, Step Chains & Trusses							
7.13 Rolling Shutter device		<u> </u>	8.13 Handrails 8.14 Code Data Plate	×						
7.14 Speed 7.15 Balustrades		8 5 - 5	8.15 Response to Smoke / Heat Detectors	×						
7.16 Ceiling Intersec	tion guards		on one of the original of the							
7.17 Step / Skirt clea	rance panels and index									
7.18 Outdoor Protec	tion									
Comments 9/5/2021										
Accident Report	DOIO 1011055 11111	E DATE OF DE DOUBLE THE L	ANDRAS AND ALLEGED LINES F							
		N WHILE AWAITING MEDICS. SU	ANDRAIL AND INJURED HIMSELF. JPERVISOR NOTIF ED. HE WILL SEND A TECHNICIAN TO RESPOND. U	PDATE TO FOLLOW						
			ESCALATOR #9, UNIT OOS AWAIT NG INSPECTION	DATE TO FOLLOW						
ACCIDENT INSPEC	TION REPORT:									
	on the escalator was OC									
On inspection could no	t determine any escalator	factor attributable to this incident. No	difficiency noted							

Incident Date: 2/26/22 Time: 17:19 hours Final Report Rev. 1– Serious Injury E22128