CUSTOMER CONTACT WITH TRAIN INCIDENT REPORT

January, 2013
INTRODUCTION / BACKGROUND

• Two high profile incidents where a customer was pushed onto the tracks and struck by a train.

• Heightened concern regarding customers being struck by or contacting moving trains.

• Incidents of this nature involve:
  – Struck by a train on the track
  – Struck by train on the platform
  – Contacted the side of a moving train
STATISTICS

Struck By Incidents, Fatalities & Suicides with Ridership (in Billions)

Year                                            *2012 Ridership Projected


Incidents: 110, 136, 188, 158, 151, 109, 110, 107, 136, 127, 146, 141
Fatalities: 49, 34, 55, 38, 44, 35, 37, 46, 31, 35, 34, 33
Suicides / Attempted Suicides: 1.41, 1.39, 1.42, 1.39, 1.43, 1.45, 1.50, 1.57, 1.63, 1.58, 1.61, 1.65, 1.66*

*2012 Ridership Projected: 680K more riders per day in 2012 vs. 2001
STATISTICS

• 2012 Customer Contact with Train incidents.
  – 54 customers were struck on the tracks.
  – 51 customers contacted a moving train while on the platform.
  – 33 suicide/attempted suicide.
  – 3 customers fell between cars.
CAUSES

• Reasons individuals are struck by trains:
  – Tripping/falling onto track or into moving train
  – Alleged suicide/attempted suicide
  – Intentionally entering the track
  – Leaning over the platform edge
  – Pushed/bumped onto track or into moving train.
  – Medical condition
  – Fell between cars

• Drug/Alcohol impairment contributed to some
MITIGATION STRATEGIES

• Awareness Campaign

• Technological Solutions
  – Help Point Intercoms
  – Platform Screen Doors
  – Intrusion Detection Technology
Customer Awareness Campaign
Communication Strategy

• Safety campaigns have always emphasized:
  – Stand back from platform edge
  – Do not go onto tracks to retrieve lost article

• Use of posters, brochures, subway car cards, website, train and station announcements

• Implementing targeted public information campaign specific to platform safety to increase awareness of hazards
Announcements

• Enhanced station announcements implemented
  – Increased frequency
  – Distinctive attention tone

• Enhanced recorded train announcements
  – Second quarter 2013
Subway Car Cards highlighting platform safety in multiple languages

Every subway car will have the ‘Stand back from the platform edge’ message via three different car cards which will be posted by end in February 2013.
Don’t Become a Statistic. Stand Back!

141 people were struck by trains in 2012, 55 were killed.¹

Standing on or at the yellow platform edge strip is dangerous.

Stand Back. Be Smart. Be Safe.

---

No se convierta en una estadística

En el año 2012, 141 personas fueron atropelladas por trenes, 55 murieron.

Standing on or at the yellow platform edge strip is dangerous!

Stand Back. Be Smart. Be Safe.

---

請勿成為下一個受害者

2012年有141人被列車撞到，55人死亡。

站在月台邊緣十分危險！

請保持警覺，保持明智。

離後。

통계에 포함되지 마세요

2012년에 141명이 기차에 부딪혔습니다, 55명이 사망했습니다。

플랫폼의 가장자리에 서있는 것은 위험합니다!

안전하게, 지혜롭게, 위에 서 계세요.

---

Не становитесь статистикой

В 2012 году 141 человек попала под поезд, 55 из них погибли.

Стоять на краю платформы опасно!

Будьте осторожны. Будьте благоразумны.

Отдайте от края платформы.

---

¹Preliminary 2012 numbers.
Subway Car Cards

NEVER go down onto the tracks, for any reason. Your safety is more important. Tell a police officer, train or station personnel. Or, use a station “Customer Assistance Intercom.”

141 people were struck by trains in 2012, 55 were killed.
Stand Back. Be Smart. Be Safe.

¿Se le cayó algo?
¡Déjelo!
NUNCA baje a las vías por ningún motivo. Su seguridad es más importante. Informe a su oficial de policía, el personal de la estación o el personal de ayuda para los usuarios” de las intersecciones.

En el año 2012, 141 personas fueron atropelladas por trenes, 55 murieron:
Cuidese. Sea inteligente. Mantenga distancia.

Drop Something? Leave it!

Cuidese. Sea inteligente. Mantenga distancia.

MTA New York City Transit
See Someone at Risk? Get Help.
Alert a police officer, train or station personnel. Or, use a station “Customer Assistance Intercom.”

141 people were struck by trains in 2012,
55 were killed.

Stand Back. Be Smart. Be Safe.
Bus Car Card

Car card to be posted on all buses in February 2013.
Stations

Posted in all fare control areas and on 434 platforms with Customer Information frames in February 2013.
MetroCard Vending Machines

Platform Safety screen will be added to all vending machines
MetroCards

Three million of each message will be distributed in 1Q 2013. Reprinted and distributed throughout the year as needed.
Digital Urban Panels and Service Advisory Information Displays

Three messages will be posted on 101 digital urban panels at 48 stations in Manhattan and on 13 Service Advisory Information Displays by the end of January 2013.
On the Go Travel Station

Bowling Green
Atlantic Av-Barclays Ctr
74 St-Roosevelt Av
Grand Central
34 St – Penn Station
Safety on Subway Platforms Brochure

In multiple languages
English
Spanish
Chinese
Korean
Russian

250,000 to be distributed systemwide (buses and subways) beginning 1Q 2013
Comprehensive Bus and Subway Brochure

includes section highlighting platform safety

415,000 copies to be distributed on subways and buses beginning 1Q 2013
Lapel Button For Dept of Subway Personnel

2,400 buttons worn by Subway personnel
Additional Media

• Podcast available on website
• Print advertising campaign
  – Includes non-English newspapers
  – Online advertising
• Transit Transit Cable TV segment – 1Q 2013
• Public Service Announcements
  – Shown monthly on Transit Cable TV show
• YouTube video – MTA website link
• Social media – Facebook and Twitter
Platform Safety Technologies
Technologies

• Two platform safety technologies explored
  – Help Point (HP)
    • NYCT has started the process of equipping stations
  – Platform Doors (a/k/a Screens, Gates)
    • Investigated and results are being evaluated

• New emerging technologies being considered
  – Intrusion detection technology
Help Point (HP)
Purpose

• To provide emergency assistance and travel information in stations
HP Features

• Highly visible – blue beacon

• Buttons for customers to communicate directly with NYCT personnel
  – Red – Emergency
  – Green – Information

• Fast connection and audio response
HP Functions

• Located on station platforms and mezzanines
  – Customers can
    • report emergencies & request assistance
    • obtain station information
      – Accessibility
      – Elevator
      – Escalator
    • obtain travel Information
      – Directions
      – Schedules
      – Transfer Points
NYCT Program

• Implementation Schedule
  – Pilot Phase
    • HP in operation in two stations
      – Brooklyn Bridge/Lexington
      – 23rd St/Lexington
NYCT Program

– First Phase 2013 - 2014
  • Begin Installation at 100 stations
    – 5 stations under the Fulton St/Transit Center Project
    – 2 stations with HP on wireless LAN (Rector Street & Burnside Avenue)
    – 78 station using a wired connection (18 under the ESS security project)
    – 15 on Transit Wireless

– Second Phase 2015 - 2019
  • The remaining 366 stations will be equipped with HP
Platform Doors
World Trend

• For the greater part of the 20th century, stations were not designed with platform doors

• In the latter part of the 20th century, platform doors have been incorporated in a greater number of new builds around the world.
  – Beijing, Shanghai, Bangkok, Copenhagen

• Older systems are starting to retrofit stations
  – Paris, London, Hong Kong, Tokyo, Sao Paolo
Potential Benefits

• Safety
  – Eliminate the occurrence of customers accidentally
    • bumping into a moving train
    • falling or being pushed onto the trackway
  – Deter customers from
    • jumping onto the trackway
    • surfing on cars
    • boarding and alighting between cars
    • retrieving dropped objects on the trackway
  – Reduce incidents
Potential Benefits

• Security
  – Limit unauthorized track access to deter
    • Terrorism
    • Vandalism
    • Vagrancy

• Station Environment Improvement
  – Cleaner and quieter stations
  – Improved customer information (audio/visual)
  – Revenue generation through advertising
Challenges

• Stations
  – 468 stations (281 underground, 187 above ground) each with unique characteristics
    • Curved and narrow platforms
    • Structural columns with varied spacing
  – Need for platform edge reinforcement
  – Substantial electrical upgrades required
  – Limited available space for additional electronic equipment
  – ADA accessibility
  – Landmark/historic stations
Challenges

• Rolling Stock
  – Train door/platform door alignment issues
    • Different car and train lengths with varied door spacing
  – Train to platform communication and door synchronization

• Signals
  – Interface required (platform, signals, cars) for safe operation and proper berthing

• Operations
  – Increased dwell time
  – Additional flagging requirements
Challenges

• Maintenance

• Cost
  - Station modifications and upgrades
  - Purchase and installation of doors
  - Long term maintenance and support
Unfunded Capital Program Needs

• Next twenty years priority investments that also address safety:
  – $15 billion for modernization of the signaling system
  – $4+ billion for emergency ventilation (20% of the needs)
  – $5+ billion for the station component program
  – $2.5 billion for Help Points, CCTV and other safety – related information systems
  – $15 billion for Subway car and bus investments
Steps Taken

• Visited and examined other systems with platform doors (Seoul, JFK AirTrain, Paris)

• Continued outreach to other US and international transit systems

• Monitor the evolution and development of platform doors through APTA, UITP and CoMET
Steps Taken

• Concept of Operations in progress
  – identified internal and external stakeholders
  – defined the key requirements
    • Installation
    • Operation
    • Maintenance
Steps Taken

• Issued a Request for Information (RFI)
  – Enhanced worldwide outreach through international trade publications
  – Received responses from twelve companies
    • under review
  – Obtained information from actual platform door providers and experienced installers
  – Identified manufacturers, technologies and creative business plans available in the market
Intrusion Detection
Steps Taken

• Began engineering investigation
  – Initiate Concept of Operations
  – Review other properties’ application
Possible Next Steps

• Develop Platform Pilot
  – Scope of Work
  – Specifications
  – Competitive Request for Proposals
  – Pilot implementation

• Evaluate intrusion detection

• Identify and evaluate other technologies
SUMMARY

• Incident Rate
• Exceptionally Complex Safety Issue
• Customer Awareness Campaign
• Help Point Intercom
• Intrusion Detection Technology
• Platform Screen Doors
• Solutions must not have unintended safety consequences