

CUSTOMER CONTACT WITH TRAIN INCIDENT REPORT

January, 2013



INTRODUCTION / BACKGROUND

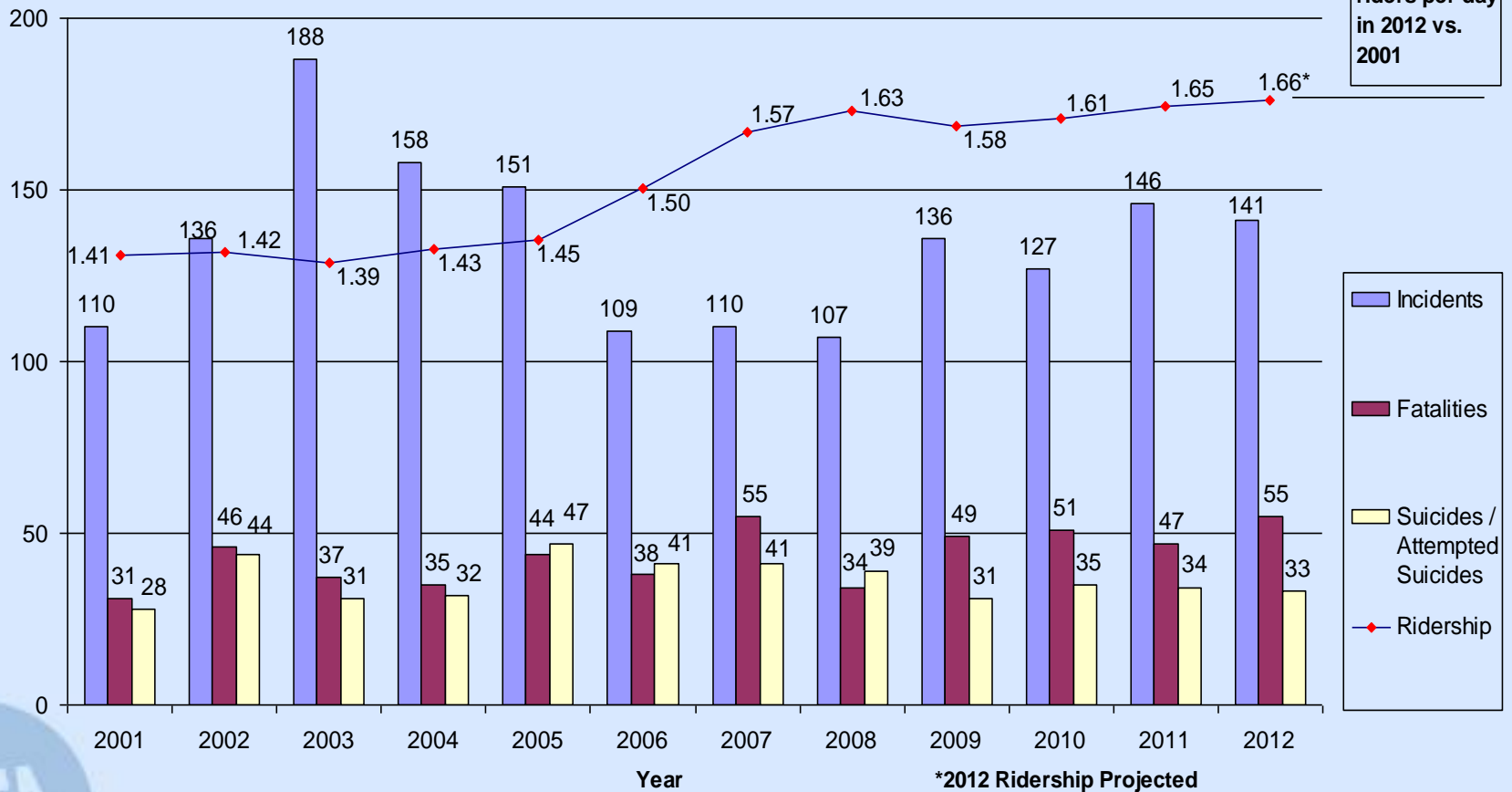
- Two high profile incidents where a customer was pushed onto the tracks and struck by a train.
- Heightened concern regarding customers being struck by or contacting moving trains.
- Incidents of this nature involve:
 - Struck by a train on the track
 - Struck by train on the platform
 - Contacted the side of a moving train



STATISTICS

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

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.*

*Preliminary 2012 numbers.

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.
*Preliminary 2012 numbers.

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 人遭到列車撞擊, 55 人死亡。
*Preliminary 2012 numbers.

站在月臺邊緣十分危險! 確保安全, 保持明智, 靠後站。

통계안에 포함되지 마세요

2012년에 141명이 기차에 부딪혔습니다, 55명이 사망했습니다.
*Preliminary 2012 numbers.

플랫폼의 가장자리에 서있는 것은 위험합니다!

안전하게, 지혜롭게, 뒤에 서 주세요.

Не становитесь статистикой

В 2012 году 141 человек попали под поезд, 55 из них погибли.
*Preliminary 2012 numbers.

Стоять на краю платформы опасно!

Будьте осторожны. Будьте благоразумны. Отойдите от края платформы.



4.18

Subway Car Card



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Будьте благоразумны.
Отойдите от края
платформы.

Subway Car Cards

Drop Something? Leave it!

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 un oficial de policía, o al personal del tren o la estación. O, utilice uno de los "intercomunicadores de ayuda para los usuarios" de las estaciones.

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

Cuidese. Sea Inteligente. Mantenga distancia.

**掉東西了？
別管它！**

請勿以任何理由跳到鐵軌上。您的安全更重要。告知警官、列車或車站工作人員。或使用車站的「顧客援助對講裝置」。

2012 年有 141 人遭列車撞擊，55 人死亡。*

確保安全。保持明智。靠後站。

**무언가를 떨어뜨리
셨습니까?
그대로 놔두세요!**

어린이유리도 철도에 내려가지 마세요. 여러분의 안전은 무엇보다 중요합니다. 경찰이나 지하철 직원에게 말씀하세요. 또는 지하철역의 "고객지원 인터콤"을 이용하세요.

2012년에 141명이 기차에 부딪혔습니다, 55명이 사망했습니다.*

안전하게. 지혜롭게. 뒤에 서주세요.

**Что-то уронили?
Оставьте!**

НИ В КОЕМ СЛУЧАЕ не спускайтесь на рельсовый путь. Ваша безопасность важнее. Сообщите офицеру полиции, персоналу в поезде или на станции. Воспользуйтесь «линией содействия пассажирам» («Customer Assistance Intercom») на станции.

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

Будьте осторожны. Будьте благодарны. Отойдите от края платформы.

Subway Car Cards





See Someone at Risk? Get Help.

Alert a police officer, train or station personnel. Or, use a station "Customer Assistance Intercom."

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Stand Back. Be Smart. Be Safe.

¿Ve a alguien en peligro? Pida ayuda.

Informe a un oficial de policía, o al personal del tren o la estación. O, utilice uno de los "intercomunicadores de ayuda para los usuarios" de las estaciones.

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看到某人危險？獲得協助。

向警官、列車或車站工作人員報警，或使用車站的「顧客援助對講裝置」。

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確保安全。保持明智。最後站。

위험에 처한 누군가를 보셨나요? 도움을 요청하세요.

경찰이나 지하철 직원에게 알리세요. 또는 지하철역의 "고객지원 인터콤"을 이용하세요.

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안전하게, 지혜롭게. 뒤에 서 주세요.

Видите человека в опасности? Позовите на помощь.

Сообщите офицеру полиции, персоналу в поезде или на станции. Воспользуйтесь «Линией содействия пассажирам» («Customer Assistance Intercom») на станции.

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Bus Car Card

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



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No se convierta en una estadística.

¡Mantenga distancia!

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*Números preliminares de 2012

Pararse sobre la franja amarilla del andén es peligroso.

Mantenga distancia. Sea inteligente. Cuidese.

切勿成为下一位事故受害者。

靠后站立!

2012 年有 141 人遭到列车撞击。

55 人死亡。*

*2012 年初步统计结果

站在黄线上或黄线边缘十分危险。

靠后站立。保持理智。确保安全。

통계안에 포함되지 마세요.

안전선 뒤에서 기다리세요!

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*2012년도 예상 사망 수

노란 안전선 플랫폼에 너무 가까이 서 있는 것은 위험합니다.

안전하게, 지혜롭게, 뒤에 서 주세요.

Не становитесь статистикой.

Отойдите от края платформы!

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

*Ориентировочные показатели на 2012 г.

Стоять на желтом крае платформы или рядом с ним опасно.

Отойдите от края платформы. Будьте благоразумны. Будьте осторожны.



23_13

Post: In all bus system-wide, on window behind bus operator.

Stations

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



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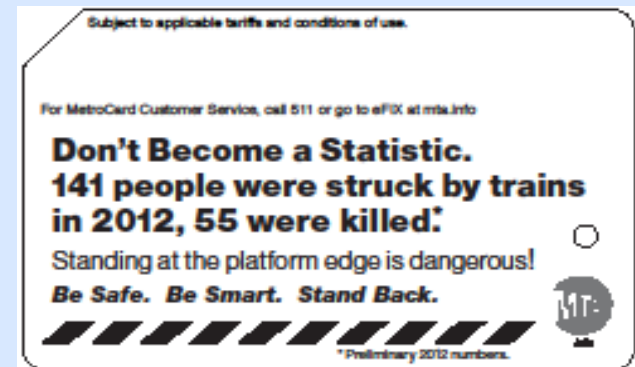
MetroCard Vending Machines

Platform Safety
screen will be
added to all
vending machines



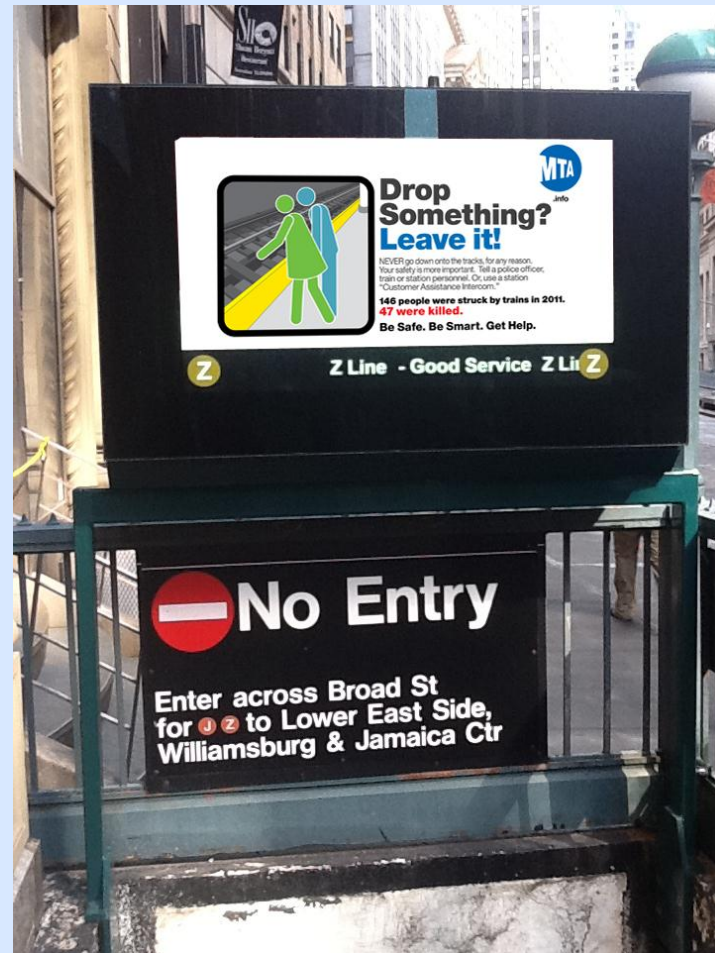
MetroCards

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

Safety on Subway Platforms



Seguridad en las Plataformas

地鐵月臺安全

지하철 플랫폼에서의 안전

Безопасность на платформах метро



**We care about your
safety...**

**Не становитесь
статистикой**

В 2012 году 141 человек
погиб под колеса.
55 из них на платформах.



Стоять на краю платформы
опасно!

Stuff happens...

掉東西了？
別管它！

即使以在可運送軌道網絡
上，您的安全至關重要。告知
警官、列車或車站工作人員。
或使用車站的「乘客援助
設備站臺」。

2012 年有 141 人因意外受傷，
55 人喪生。



Think Safety and Take Precautions



Your safety is a priority at
MTA New York City Transit.

There are more than **75 tips** in this
brochure to help you avoid accidents
and travel safely.



Safety on Platforms and Stairs

- Stay away from the edge of the platform.
- Hold children's hands or make sure they stay next to you on the platform.
- Wait near the center of the platform, especially during non-rush hours (off-hours), when trains have fewer cars.
- Wait for the train to stop before stepping forward.
- Keep off the tracks. They contain more than **600 volts** of electricity. If you drop something, ask a Transit employee or police officer for help.
- Walk—don't run on stairs and platforms.
- Keep to the right on stairs and passageways.
- Hold handrails.
- Hold children's hands.



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