

PARIS
2 ▶ 7
OCTOBER
2016 ▶ Pullman Bercy Hotel



INTERNATIONAL
RAILWAY SAFETY COUNCIL

MTR Passenger Safety – Caring Every Step



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MTR Overview

Daily Patronage

~5,500,000

(70% of HK population)

Daily Mileage

~830,000 km

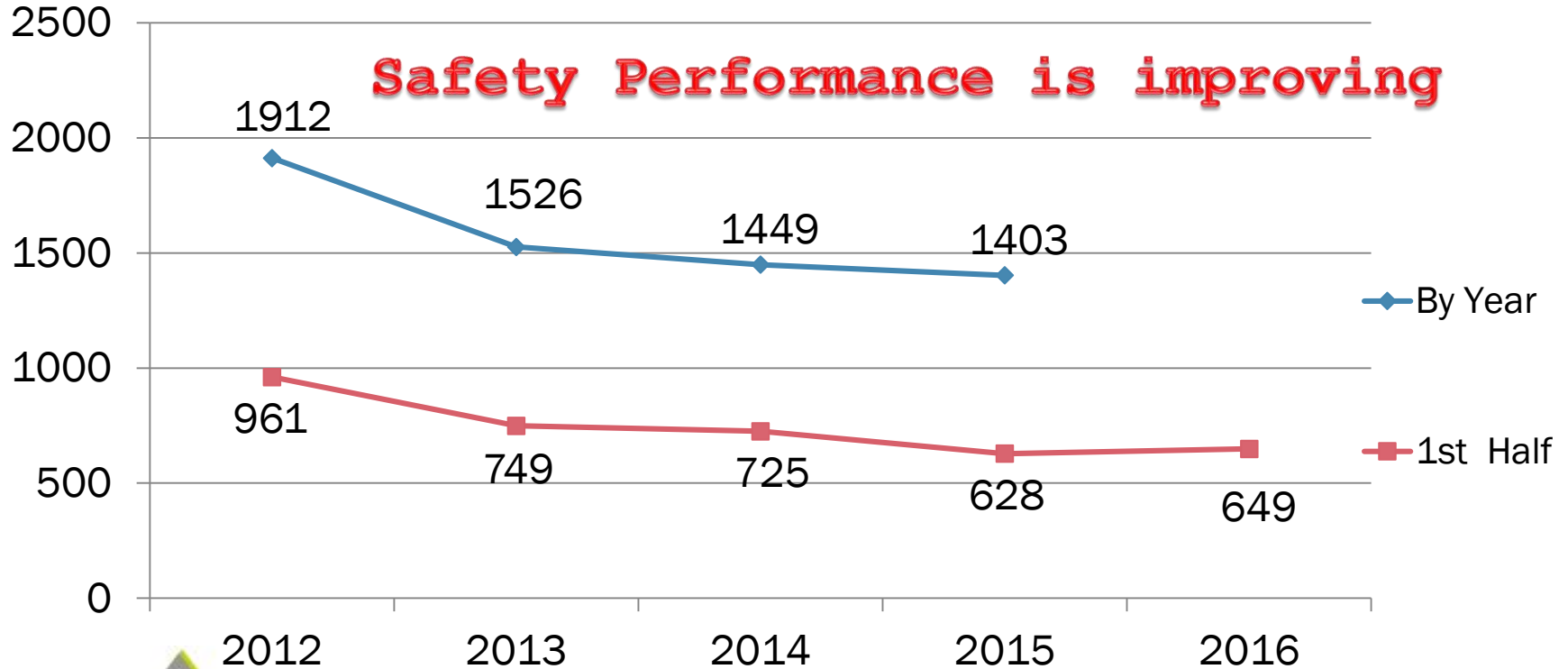
(20,000 times of marathon)

Transport System Affecting Every Hong Kong Citizen

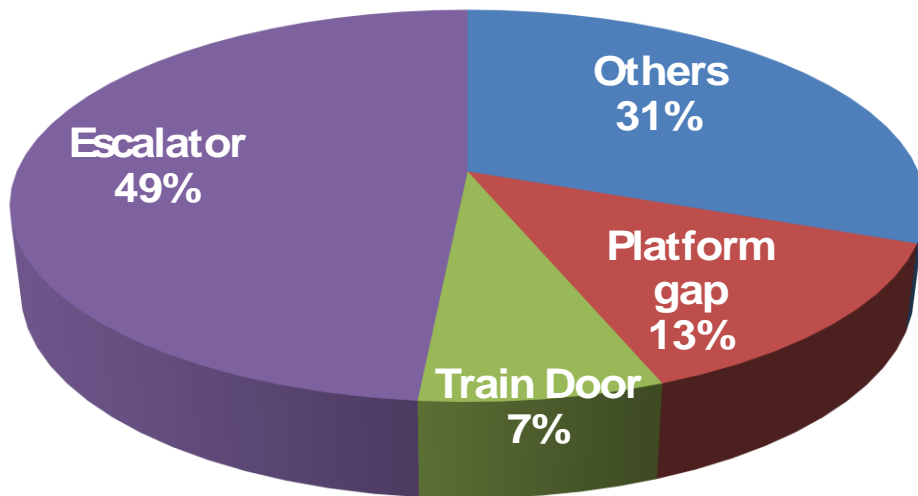


2015 figure

Number of Reportable Accident



2015 MTR Passenger Safety Performance



- ✓ Escalator related cases decreased by 6%
- ✓ Train door related cases decreased by 15%
- ↑ Platform gap related cases increased by 4%

Main Accident Types in 2015

Escalator : 49%

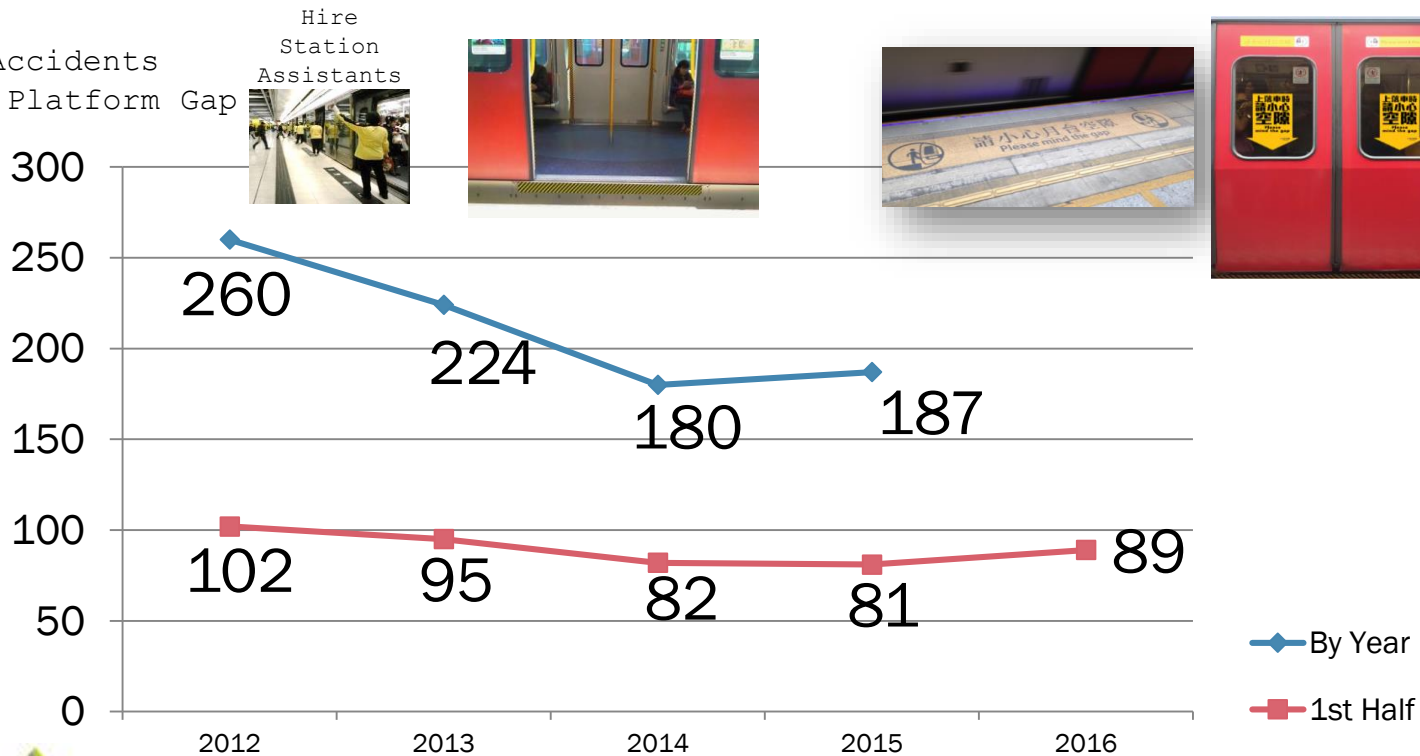
Platform Gap: 13%

Train Door Nipping: 7%

		2012	2013	2014	2015	1st half 2016
Escalator	HR	962	704	728	681	295
Train Door Nipping	HR	212	129	112	87	23
	LR	23	18	9	16	5
Platform Gap	HR	222	214	166	177	81
	LR	38	10	14	10	8

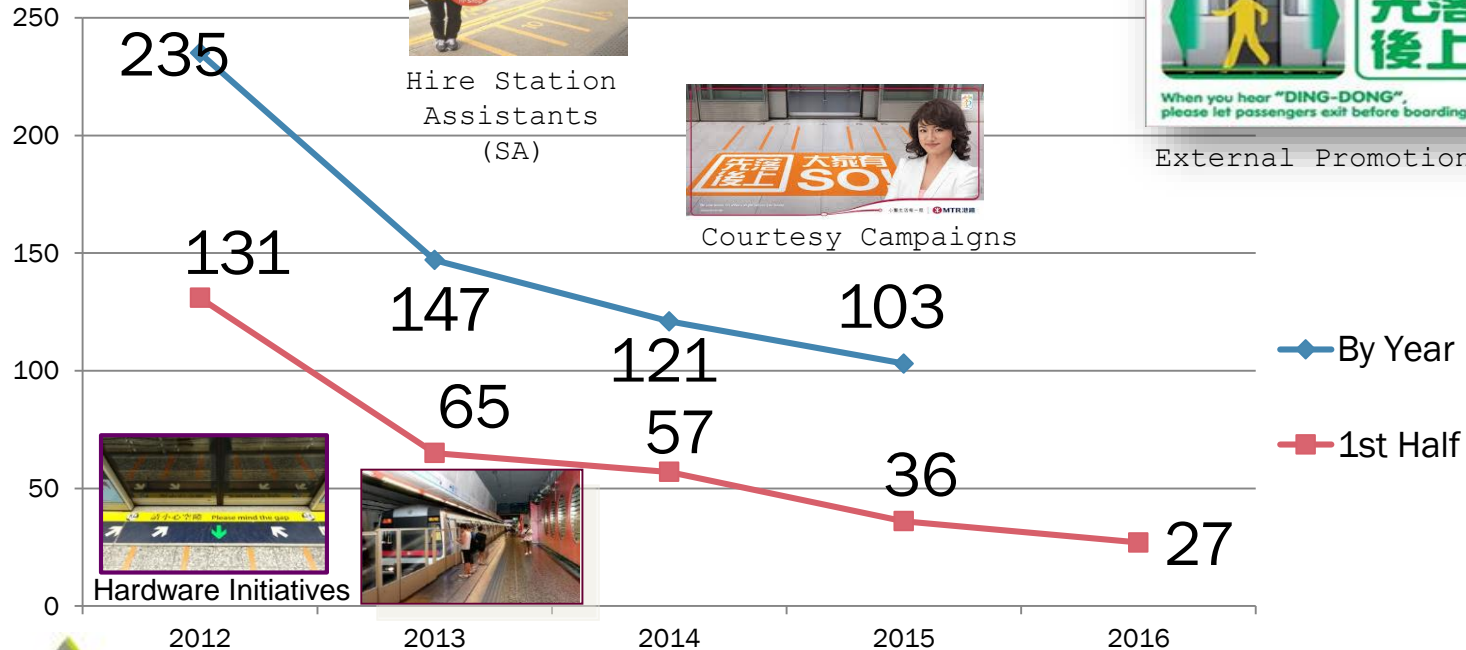
Heavy Rail Safety Performance – Platform Gap

Number of Accidents
Related to Platform Gap



Heavy Rail Safety Performance – Train Doors Nipping

Number of Accidents
Related to train doors
nipping



Hire Station Assistants (SA)



Courtesy Campaigns



External Promotions



Hardware Initiatives



Safety Performance - Escalator

Number of Accidents Related to Escalators

1200

962



Hardware Initiatives



External Promotions



Internal Promotion



Escalator Safety Campaign



◆ By Year
■ 1st Half

1000

800

600

400

200

0

704

728

681

474

349

377

309

295

Hit the new low in 2015 and 1st half 2016

2012

2013

2014

2015

2016

Escalator Fact Sheet

	2012	2013	2014	2015
Yearly Patronage	1720.7M	1771.3M	1849.9M	1883.6M
No. of escalators	1005	1007	1030	1043

⇒ More escalators + passengers after opening of new lines

⇒ Escalator safety performance is crucial to overall MTR safety performance

Escalator Accident Analysis – By Cause & Age

1. By Cause (in number of cases)

Top 3 main causes

- i) Lost balance & misjudged footing = 44.9% (2015), 42% (1st half 2016)
- ii) Own medical condition / drunken = 18.5% (2015), 25% (1st half 2016)
- iii) Bulky baggage = 15.9% (2015), 15% (1st half 2016)

2. By Age (in number of injuries)

- Elderly = 42.4% (2015), 42% (1st half 2016)
- Adult = 47.1% (2015), 52.8% (1st half 2016)
- Child = 11.4% (2015), 5.6% (1st half 2016)

3. Percentage of passenger without holding handrail during accidents

No = 46.1%

Escalator Safety Special Task Force

- Targeted to high escalator accident rate, a working group was formed in 2013.
- The Task Force - Lead by a Senior Manager of Operating and joined with different departments (S&Q, T&ES, Esc Eng. , Operating & Project)
- To analysis the escalator accidents and initiate different safety initiatives to promote escalator safety.
- Focus on 3 Aspects - Internal , Passenger Education, Technical initiatives

Promotion & Education

Escalator Safety Campaign



2016



2015



2014



2013

- Launch on Summer in every year
- Enhance Escalator Safety awareness
- Target to main cause / high risk issue

Hong Kong Book Fair 2016



- Directly reach the public and deliver safety messages
- Enhance Escalator Safety awareness
- Target to main age group of passenger and their family members

Escalator Safety Promotions - External

Elderly House Visit



Escalator Safety Promotional Booth

- _ Target to passengers with baby pram
- _ Elderly



Escalator Safety Promotion - Internal

Increase Staff / Contractor's Awareness on Escalator Safety

Internal Poster (Quarterly)

(focus on shoe / foot jamming, elderly lost balance, bulky baggage)

Internal Video (Half-yearly) – different topics

(focus on consequences of accidents)

(Escalator Safety Star sharing)

(focus on escalator inspection & safety initiatives introduction)

Cue Card for station staff

(safety tips for staff on escalator safety)



Escalator Safety Promotion - Internal

Increase Staff / Contractor's Awareness on Escalator Safety

Escalator Safety Star Award (Jun - Aug)

- Enhance staff awareness on escalator safety
- Encourage proactive approach to assist escalator users in need
- Recognize staff good works / initiatives on escalator safety

Step up inspection to detect external objects

- Level 1 instruction & more frequent escalator inspections



Escalator Safety Promotion - Internal

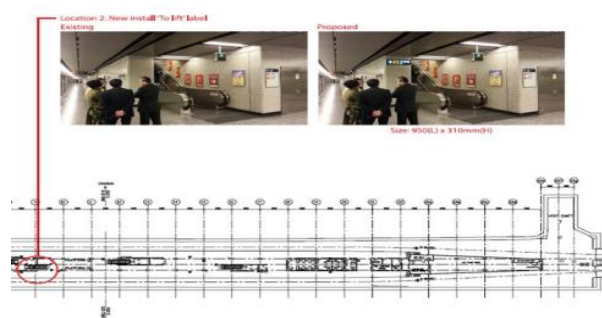
Escalator Safety Walk

All HR stations walked in 2014 - 2016

- Enhance staff awareness on escalator safety
- Work with station representatives to explore new ideas
- Appreciate local measures & extend good local ideas to apply in whole network



LOW : Additional lift direction sign



YMT : Additional lift direction sign



SKM : Plantroom-like lift -> label added to make clear

Partnering with Regulator

Meeting with regulator (EMSD)

- Respond to the increasing trend of step damaged cases
- Respond to the high public concern on escalator safety

Co-operations

- Joint promotion by EMSD & MTR and sharing promotion resource if possible
- Frequent Monitoring the cause of step damaged cases and co-operate on investigation
- Increase the frequency on monitoring the maintainer performance and the parts provided
- Encourage the communication with maintainer to develop new initiatives on step damage.

機電署長強調港電梯安全

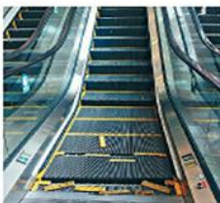
內地及本港近日接連發生扶手梯意外，機電工程署助理署長彭耀雄表示，本港的扶手電梯整體屬安全，業界和承辦商在管理做得不錯，近年並無嚴重事故，呼籲市民避免將嬰兒車或手推車推上扶手電梯，因上述物件的車輪，有機會被夾在電梯夾縫而導致意外。

彭耀雄表示，本港去年的有一千四百多宗扶手梯意外，全部均與機件故障無關，意外絕大部份是因為市民使用不當所致，除不應帶同嬰兒車或手推車登上扶手電梯外，市民亦不應將腳掌靠近梯級邊緣的硬毛。

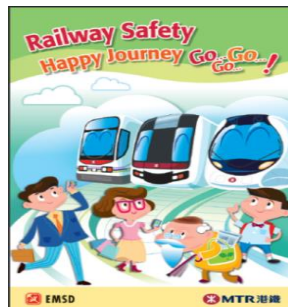
工程師學會前主席司徒家成指，法例規

定本港的扶手電梯須在每一個月、三個月及六個月，由認可執業的工程人員進行定期檢查，相信出現類似內地的意外機會甚微，而經過近日的扶手電梯意外後，業界及政府會審視監管及檢測方法，再加以改善。

對於近日有傳扶手電梯的出入口位置存有安全及非安全區域，升降機及自動梯安全諮詢委員會委員黃啟漢指，香港的扶手電梯主要來自歐洲或日本的品種，較少來自內地，而品牌在香港的分公司亦提供扶手電梯的售賣、安裝、維修和檢查等服務，均依據歐盟或任何其他國際標準，符合機電工程署的實務守則要求。



圖：時代廣場一部扶手電梯日前發生事故，無人受傷。資料圖片



Joint promotion
with Regulator
EMSD0



Escalator Safety Promotion – Hardware initiatives

Technical Initiatives

Yellow Brush Skirt Guard

(Trial : implemented 16pcs)

Yellow Handrail

(22 pcs in MTR)

(Survey: 53% - enhance safety, 90.6% - support the trial)

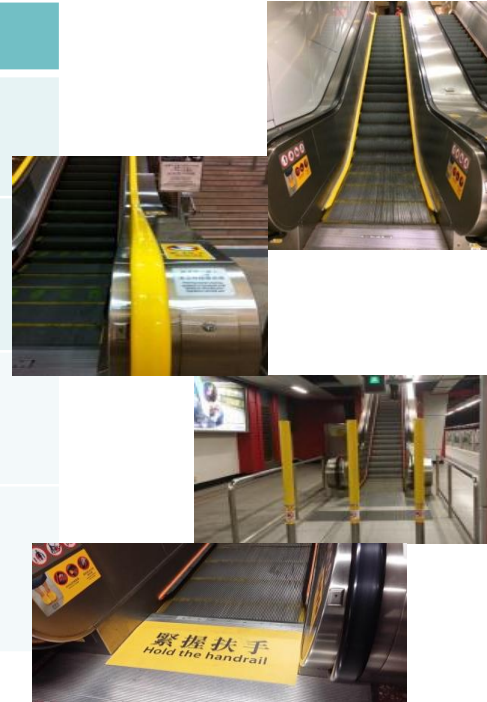
New Design Bollard

(21 escalators were installed)

Large Floor Sticker

Remind Passenger to hold the handrail

(Survey: 70% - enhance safety, 75% - support the trial)



Escalator Safety Promotion – Engineering Initiatives

Engineering Initiatives

OKS lubricant

(trial at 2 escalators)

(reduce the friction of skirt panel ->minimize the shoe jam)



Yellow anodized Comb

(trial at 2 escalators)

(enhance the awareness of reaching landings)



Effectiveness of escalator safety initiatives

- Monitoring and review the effectiveness from time to time.
- The effectiveness will be resulted from accident rate and passenger survey.

Overall Safety performances from all initiatives

- **29.2%** reduction of escalator accidents achieved compared to the highest record in 2012. (962 cases -2012 vs 681 cases – 2015).

Effectiveness of escalator safety initiatives

Effectiveness on various initiatives

- **Large Floor Sticker** - (Survey : 70% passengers believed it could enhance the safety awareness, most of the equipped escalator safety performances were improved).
- **Escalator Safety Promotional Booth** – (Survey : 85% passengers support, most of the selected stations improved the safety performances).
- **Escalator Safety Campaign** - (Survey : 89% passengers believed it could enhance the safety awareness, the escalator accident rate in summer holiday was reduced in comparing with previous year).
- **Yellow Handrail** – (Survey : 90.6% passengers support, most of the equipped escalator safety performances were improved)

Safety Initiatives in planning

Safety Initiatives

Floor Line To Lift

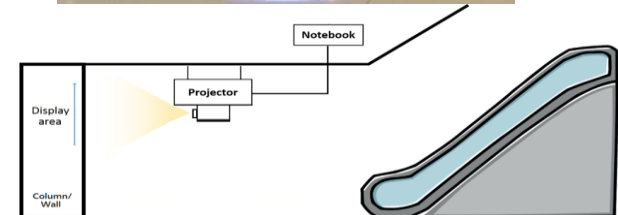
(Will extend to the stations with high escalator accident rate)

Innovative projects – Laser safety message

(in progress – planning to implement at 2 stations)

Different type of Escalator Safety Exhibition

(Plan to have different esc safety exhibition at different stations)



End