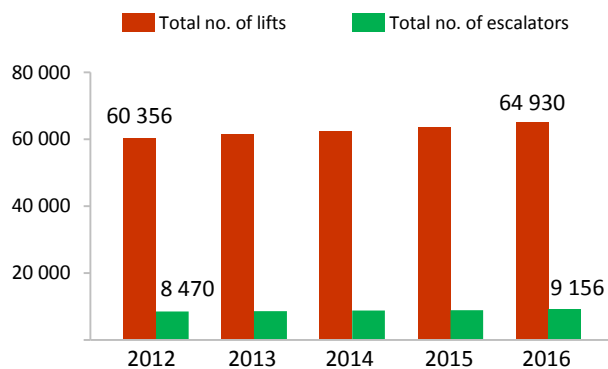




## Lift and escalator safety

**Figure 1 – Number of lifts and escalators in Hong Kong, 2012-2016**



**Figure 2 – Age distribution of lifts and escalators in Hong Kong as at March 2016**

Age of lifts (years)	No. of lifts	Proportion of the total lifts
31 or above	17 771	28%
21 – 30	15 460	24%
11 – 20	18 149	29%
10 or below	12 271	19%
<b>Total no. of lifts</b>	<b>63 651</b>	<b>100%</b>

Age of escalators (years)	No. of escalators	Proportion of the total escalators*
31 or above	1 213	14%
21 – 30	2 200	25%
11 – 20	2 761	31%
10 or below	2 751	31%
<b>Total no. of escalators</b>	<b>8 925</b>	<b>100%</b>

Note: (\*) Figures may not add up to 100% due to rounding.

**Figure 3 – Lift modernization programme, 2012-2016**

	2012	2013	2014	2015	2016
No. of lifts aged over 20 years	n.a.	29 020	30 455	33 231	35 323
No. of lifts participated in modernization	28	915	2 123	983	883

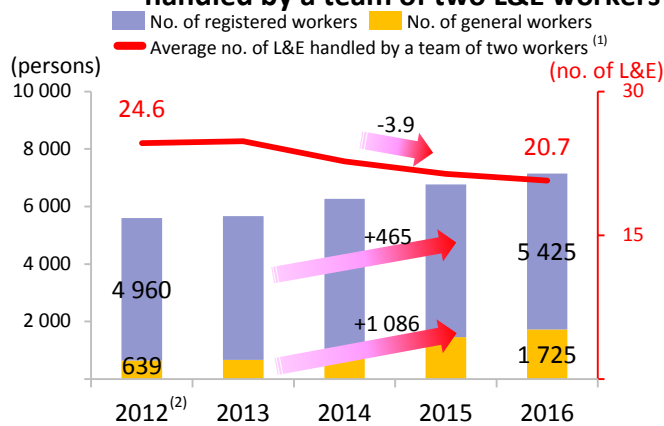
Note: The escalator modernization programme was launched in September 2016. Data of the number of escalators participated in modernization has yet been available.

## Highlights

- In Hong Kong, a city with a high density of tall buildings, lifts and escalators ("L&E") are the principal means of vertical transportation between floors of a building. There were 64 930 lifts and 9 156 escalators in 2016 (**Figure 1**), with a high lift density of one lift per 114 persons.
- Given the prevalence of L&E in Hong Kong, passenger safety has been closely related to the daily life of the public. As such, the Government in 2012 implemented the Lifts and Escalators Ordinance (Cap. 618) and introduced a registration system for L&E engineers and workers.
- During 2012-2016, the number of L&E incidents increased by 50.4% and 5.6% respectively. According to the Electrical and Mechanical Services Department ("EMSD"), over 90% of the total number of reported L&E incidents was caused by the inappropriate behaviour of passengers such as having their hands too close to the lift doors.
- While there have been few L&E incidents related to equipment fault, many L&E in Hong Kong have been in service for more than 20 years (**Figure 2**). According to EMSD, for a lift that has been in use for more than two decades, some of its major accessories may get worn out due to prolonged use, resulting in declining efficacy. Older L&E might also lack up-to-date safety devices such as a double brake system.
- EMSD has since 2011 advocated lift modernization works and recommended owners of aged lifts to have the relevant equipment/device retrofitted. In September 2016, EMSD launched a similar voluntary programme for escalators. As shown in **Figure 3**, the lift modernization programme has met with lukewarm response from lift owners.

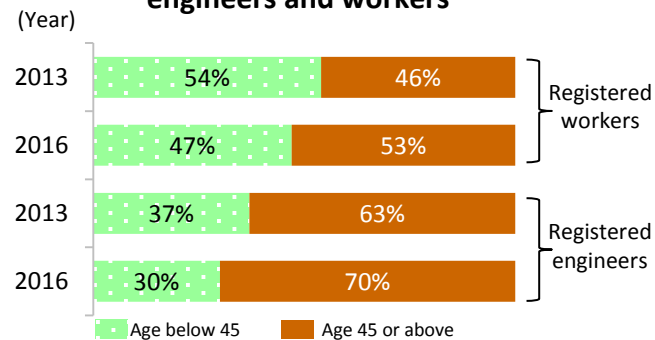
## Lift and escalator safety (cont'd)

**Figure 4 – Average number of lifts and escalators handled by a team of two L&E workers**



Notes: (1)  $[\text{No. of L\&E} / (\text{No. of registered workers} + \text{No. of general workers})] \times 2$ .  
 (2) Before the L&E Ordinance (Cap. 618) enacted in 2012, registered L&E workers were called competent workers.

**Figure 5 – Age distribution of registered L&E engineers and workers**



**Figure 6 – Comparison of wage levels in the L&E industry and other trades with more registered skilled workers**

Trades	May 2007	May 2017
	Average daily wage (HK\$)	
Lift and escalator mechanic	788.2	802.3
Bar bender and fixer	1,134.6	2,099.6
Carpenter (formwork)	999.1	1,932.6
Electrical fitter	733.3	1,228.4
General welder	798	1,459.8
Joiner	934.7	1,262.9
Metal worker	816.5	1,258.6
Painter and decorator	756.8	1,280.5
Plumber	808.1	1,423.8
Refrigeration/air-conditioning/ventilation mechanic	675.8	1,059.8
Truck driver	595.9	909.1

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## Highlights

- Looking ahead, the number of L&E will continue to rise in the coming years in view of the ongoing local infrastructure and housing development projects. The ensuing increase in the demand for skilled engineers and technicians will further stretch the already tight manpower situation in the L&E industry.
- In 2016, a working team of two L&E workers on average carried out installation, maintenance and repair works for 20.7 lifts/escalators, compared with 24.6 in 2012 (**Figure 4**). In Hong Kong, registered lift contractors each time must assign at least two workers for carrying out a variety of lift works.
- As shown in Figure 4, the above reduction in per team workload during 2012-2016 was largely attributable to the marked increase in the number of general workers, which were mostly apprentices and non-registered workers. They must work under the supervision of registered workers or registered engineers.
- The ageing of the workforce further adds to the concern over the tight manpower situation in the L&E industry. Among the registered L&E workers in Hong Kong, 53% of them were aged 45 or above in 2016 (**Figure 5**). The corresponding proportion for registered engineers was even higher at 70%.
- Against the above, there have been calls for attracting more people to join the L&E industry and pursue career progression. However, the wage level of L&E mechanics is not particularly attractive relative to that of workers in other trades (**Figure 6**). As at May 2017, the average daily wage of L&E mechanics was the lowest among workers engaged in public sector construction projects as reported by main contractors. The wage level was also virtually the same as it was a decade ago.

Data sources: Latest figures from Electrical and Mechanical Services Department, Census and Statistics Department and Construction Industry Council.