

# Correction note: Rail passenger numbers and crowding on weekdays in major cities in England and Wales: 2015

February 2017

Following a change of methodology used for calculating passengers in excess of capacity (PiXC) where first class reduction factors apply, revisions have been made to the back-series of PiXC statistics from 2011 to 2014. The change has not affected PiXC percentages in 2015, but there have been minor revisions to some year-on-year percentage point changes.

## What is the change in methodology?

First class reduction factors are used where it is not possible for first and standard class passengers to be counted separately. In these cases a first class reduction factor is applied to the total load to estimate the first class passenger load.

In some cases the estimated first class load exceeds the number of first class seats on the service, and would not be reflected in the PiXC totals. Since the autumn 2015 publication the calculated first class loads are capped at the number of first class seats, and the excess first class passengers are added to the standard class critical load for that service. The increased standard class critical load can lead to higher number of PiXC and passengers standing.

### First Class passenger cap example

A service has 500 seats, made up of 480 standard class seats and 20 first class seats, with no standing allowance. It is counted using automatic passenger counting equipment and has a total passenger load of 550. This is apportioned using a first class reduction factor, which for this service is 6%. The table below shows how the new methodology can affect PiXC:

	Original methodology	New methodology
First class passengers	<b>33</b>	<b>20</b> <i>(capped at number of first class seats)</i>
Standard class passengers	<b>517</b>	<b>530</b> <i>(excess first class passengers added on)</i>
PiXC	<b>17</b>	<b>30</b>

## What statistics have been affected by this change?

The methodology change has affected the calculated standard class critical loads, numbers of standing passengers and PiXC in the published statistics. In particular, revisions have been made to the crowding statistics in the online data tables (Tables [RAI0209](#), [RAI0210](#), [RAI0211](#), [RAI0212](#), [RAI0213](#), [RAI0214](#) and [RAI0215](#)). Passenger number statistics given in Tables RAI0201, RAI0202 and RAI0203 are unaffected by this change.

## How has the change affected the PiXC figures?

For published peak-time PiXC statistics, the magnitude of change is between 0.0% and 0.3% at both the station level and train operator level. PiXC at the following major London stations have been revised between 2011 to 2014:

- Blackfriars via Elephant and Castle
- King's Cross
- Liverpool Street
- London Bridge
- Paddington
- St. Pancras International
- Victoria
- Waterloo.

Stations outside of London were not affected.

The following tables provide an example of changes to PiXC in 2014, and the percentage point change from 2014 to 2015:

### Original crowding statistics:

Station	AM peak PiXC		PM peak PiXC		Overall peak PiXC	
	2014 PiXC	pp change*	2014 PiXC	pp change*	2014 PiXC	pp change*
<i>Blackfriars</i>	10.6%	↑ 4.1%	3.2%	↑ 2.2%	7.6%	↑ 3.6%
<i>King's Cross</i>	2.7%	↑ 1.8%	2.8%	↓ 0.2%	2.7%	↑ 0.8%
<i>London Bridge</i>	3.1%	↓ 0.3%	0.5%	↑ 0.2%	1.9%	↓ 0.1%
<i>St. Pancras</i>	7.2%	↑ 0.3%	6.6%	↓ 0.2%	6.9%	↑ 0.1%
<i>Waterloo</i>	5.5%	↑ 0.1%	3.6%	↑ 0.4%	4.6%	↑ 0.2%
<b>London Total</b>	<b>5.4%</b>	<b>↑ 0.4%</b>	<b>2.5%</b>	<b>↑ 0.2%</b>	<b>4.1%</b>	<b>↑ 0.4%</b>

\* 'pp change' gives the percentage point change in 2015 compared to 2014

### Revised crowding statistics:

Station	AM peak PiXC		PM peak PiXC		Overall peak PiXC	
	2014 PiXC	pp change*	2014 PiXC	pp change*	2014 PiXC	pp change*
<i>Blackfriars</i>	<b>10.8%</b>	↑ 3.8%	<b>3.4%</b>	↑ 2.0%	<b>7.9%</b>	↑ 3.4%
<i>King's Cross</i>	2.7%	↑ 1.7%	2.8%	↓ 0.2%	<b>2.8%</b>	↑ 0.8%
<i>London Bridge</i>	<b>3.2%</b>	↓ 0.5%	0.5%	↑ 0.2%	2.0%	↓ 0.2%
<i>St. Pancras</i>	7.2%	↑ 0.3%	6.6%	↓ 0.3%	6.9%	↔ 0.0%
<i>Waterloo</i>	<b>5.6%</b>	↑ 0.1%	3.6%	↑ 0.4%	4.6%	↑ 0.2%
<b>London Total</b>	<b>5.4%</b>	<b>↑ 0.4%</b>	<b>2.6%</b>	<b>↑ 0.2%</b>	<b>4.1%</b>	<b>↑ 0.3%</b>

\* 'pp change' gives the percentage point change in 2015 compared to 2014

Note: Differences shown at one decimal place. There may be differences between the original and revised PiXC figures of a smaller magnitude than one decimal place. Liverpool Street, Paddington and Victoria are not shown above as any differences are smaller than one decimal place.