Still waiting for a ticket?

Ticket queuing times at large regional rail stations

Report of Findings

July 2010

Passengerfocus
putting passengers first

Foreword

Train companies are investing heavily in installing ticket machines at stations, many tickets can now be bought over the internet and the industry is trialling new forms of retailing - and yet many passengers still rely on purchasing at the station ticket office window and expect to be able to buy tickets quickly and easily.

A long wait in a ticket queue adds to the 'hassle factor' when travelling which undermines the attractiveness of travelling by rail and also increases the overall journey time. In the worst case it can also mean missing your planned service and having to wait for the next one or boarding the train and risk being issued with a Penalty Fare.

Passenger Focus's research reinforces these views: research into passengers' priorities for improvement in 2010 found that reducing queuing times at stations was still one of the top-ten priorities. A previous study of queuing times at major stations found queue times routinely exceeding targets - especially during off-peak times.

This new piece of research looks again at queuing times but this time at the larger regional stations rather than at the main termini. We will use this, along with the findings from our work on the usability of ticket vending machines, to help us identify what can be done to make buying easier for passengers. Results from the 33 stations surveyed will also be reviewed with the relevant Train Operating Companies.

Results from the 33 stations surveyed will also be reviewed with the individual train companies concerned, in order to seek improvements to the issues identified at these stations.

Executive Summary

This research looked at queuing times at some of the larger regional stations. Stations were selected because of poor satisfaction with ticket buying facilities as identified by the National Passenger Survey, or where passenger feedback indicated queues were thought to be an issue. The research looked at how frequently queue times were above the targets set out in the Ticketing and Settlement Agreement (TSA) times - five minutes during a station's declared peak time and three minutes during a station's declared off-peak time. The research found:

- The queue times above TSA threshold were, in the vast majority, at the ticket office windows and not at ticket vending machines (TVM)
- The incidence of queue times being above TSA threshold time is mostly during off-peak periods, even though the stations generally have higher footfall during peak times;
- Some stations had very significant levels of queues above TSA threshold times for their ticket office window retailing during the off-peak period – ranging from 2% to 48% for the stations investigated, 16 had 10% or more queues above TSA
- Queues at ticket vending machines were infrequently over TSA thresholds even when ticket office window queues were above, or significantly above, TSA threshold.
- The research shows there is a large difference in the queue times experienced at the TVM when the queue at the ticket office window was above TSA; the potential time saving that could have been made by switching from the ticket office queue to the TVM is typically between three and eight minutes.

Introduction

An industry wide agreement, the Ticketing and Settlement Agreement (TSA), states that Train Operating Companies (TOCs) must use reasonable endeavours to ensure that no-one has to queue at ticket offices or ticket vending machines for more than five minutes during times of peak demand or for more than three minutes at any other time.

In 2008 Passenger Focus monitored performance against these targets at 12 major (Category A) stations. It found the TSA thresholds were exceeded in a substantial minority of cases. The Spring 2010 National Passenger Survey found that 13% of rail passengers rated ticket buying facilities as either 'poor' or 'very poor'. Passenger Focus wished to continue this programme of research at the larger regional stations (mostly category B and C stations). The research is increasingly important as train companies are taking revenue protection much more seriously, both in terms of checking tickets and installing ticket gates, making it even more important that passengers are given reasonable opportunity to purchase a ticket before they board a train, without running the risk of a Penalty Fare. A long wait to purchase a ticket not only increases the overall journey time but also can be very stressful to the passenger, and undermines the attractiveness of rail as a travel option.

How the research was carried out

Research conducted in 2008 assessed queuing times at 12 of the largest stations (Category A). This research examined queues at a further 33 stations, this time larger regional stations (primarily Category B and Category C). Stations were chosen as follows:

- Eight category B stations that had the lowest NPS scores over the last four waves of NPS for rating 'ticket buying facilities';
- Eight category C stations that had the lowest NPS scores over the last four waves of NPS for rating 'ticket buying facilities';
- 13 stations where passenger feedback to Passenger Focus indicated there may be queuing issues; and
- Four middle performing 'benchmark' stations to provide some balancing perspective to the results. These are not included in the tables / charts of results for individual stations. Their results are detailed in Appendix 1.

The research should not be seen as constituting a 'representative' result for larger regional stations; it should be viewed as a set of results for the stations outlined.

The research method was observation of passenger queue times at both ticket office window and at a ticket vending machine (TVM) or bank of TVMs. Where there was more than one ticket office or more than one bank of TVMs, the observations were taken at the window/bank of TVMs which received the most footfall.

Observations were taken at three minute intervals at both the ticket office window and TVM; the measurements taken were interleaving every 90 seconds, e.g. over a six minute period from 10:00 to 10:06 there would be observations of the ticket office at 10:00:00, of the TVM at 10:01:30, of the ticket window at 10:03:00, at the TVM at 10:04:30 and the TVM at 10:06:00.

These observations were spread as evenly as possible over the seven days of the week and between 7am and 7pm. There were close to 700 observations taken at both ticket office and TVM for each station. More detail on methodology is available from Passenger Focus.

1. Overall queue measurements in relation to TSA threshold

The overall analysis looks at how many, as a percentage, of queue times across all observations taken were above TSA threshold as it applied when the observation was taken. E.g. an observation taken within a station's peak time (say 07:00 to 9:30) would be judged against the five minutes standard, the TSA peak threshold.

Table 1 shows the percentage of queue times above TSA threshold is much higher for the ticket office windows than the TVMs. The range for ticket office windows is 1.2% to 39.6% with 12 of the 29 stations having 10% or more of queues above TSA threshold. The figure for TVMs is much lower ranging from 0% to 7.3% with 19 of the 29 stations having less than 1% of queues above TSA threshold.

Table 1 – percentage of queue times above TSA threshold – all observations.

	Ticket office window*	TVM*
Basildon	2.8%	1.6%
Basingstoke	33.2%	0.0%
Cambridge	7.2%	2.8%
Cardiff Queen Street	5.3%	0.0%
Chelmsford	6.7%	0.8%
Colchester	2.0%	0.0%
Crewe	2.0%	0.0%
Derby	16.6%	0.3%
Farnborough Main	3.8%	0.0%
Guildford	39.6%	0.3%
Haywards Heath	14.0%	0.3%
Hemel Hempstead	6.0%	1.2%
Ipswich	8.4%	1.4%
Laindon	4.8%	0.7%
Loughborough	12.8%	2.8%
Luton	14.0%	0.0%
Maidenhead	3.6%	0.0%
Manchester Oxford Rd	4.2%	0.3%
Milton Keynes	27.0%	3.6%
Norwich	18.2%	7.3%
Preston	1.2%	0.0%
Salisbury	14.6%	0.3%
Sevenoaks	5.0%	1.0%
Slough	8.4%	0.0%
Three Bridges	12.1%	5.8%
Tunbridge Wells	6.2%	0.0%
Watford Junction	9.5%	0.2%
Winchester	34.0%	1.9%
Woking	14.6%	0.1%

**results based on c.700 observations at both ticket office windows and TVMs for each station*

2. Differences between Peak and Off-Peak

The research identified noticeable differences in the percentage of queues above TSA threshold during the peak and off-peak periods. Chart 1 below shows the percentages of ticket office window queue times above the TSA threshold, peak versus off-peak. It shows that the percentage of ticket office window queues above regulation is consistently higher during off-peak hours than at peak hours, with the exception of Sevenoaks. It also highlights that the proportion of off-peak ticket office windows queues above TSA can become quite considerable.

The percentage of off-peak queues above TSA is highest at Guildford at 48%, Winchester at 45%, Basildon at 40% and Milton Keynes at 33%. A further 12 stations had between 10% and 30% of off-peak queue times above TSA (Norwich, Woking, Haywards Heath, Derby, Salisbury, Luton, Watford Junction, Loughborough, Three Bridges, Ipswich, Hemel Hempstead and Cambridge).

The percentage of queues above TSA for peak periods is lower than for off-peak, although this is partially set against the fact that the time allowed is greater. Nonetheless peak queue percentages above TSA were highest at Guildford at 20%, Basingstoke 17% and Milton Keynes at 13%. Seven stations had no peak queues that went above TSA threshold (Colchester, Crewe, Derby, Farnborough Main, Maidenhead, Preston and Slough).

Chart 1: Percentage of ticket office window queue times above TSA threshold: peak and off-peak

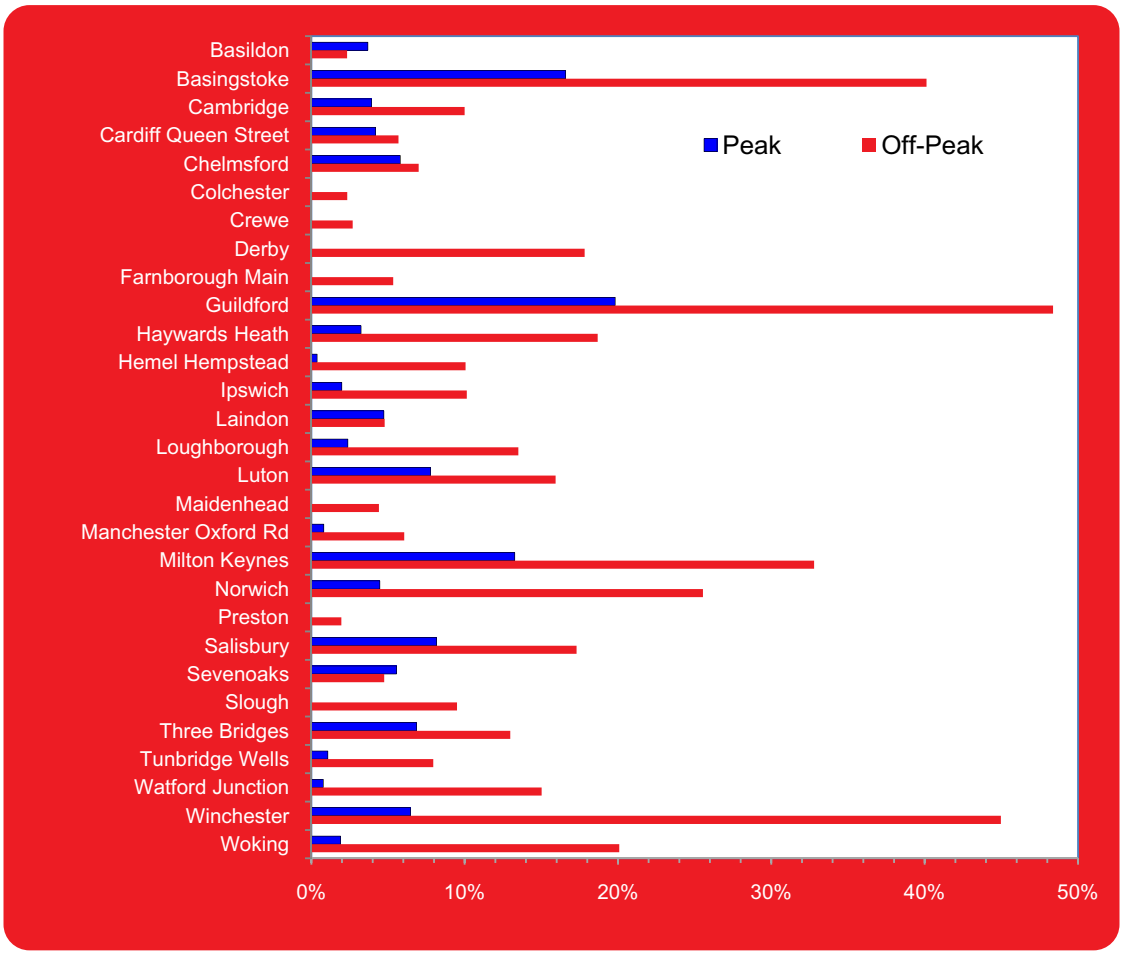
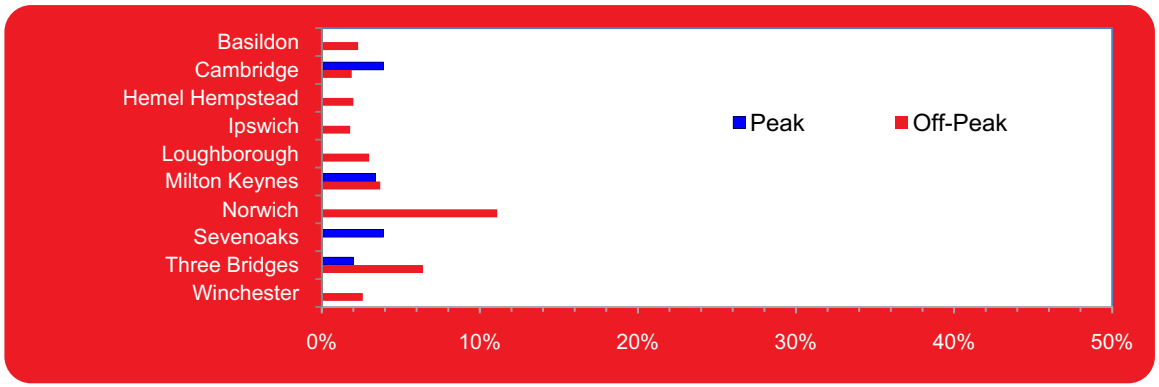


Chart 2 shows the percentages of TVM off-peak queue times above the TSA threshold, on the same scale as Chart 1 for ticket office windows. Since there are very few queue times above TSA (see Table 1), Chart 2 displays only the stations where there were more than 1% of queues above TSA.

Chart 2: Percentage of TVM queue times above TSA threshold – peak and off-peak



As can be seen the level of queues at TVMs is much lower than at ticket office windows. As with ticket office windows, there is a higher percentage of queues over TSA threshold during off-peak hours than at peak hours. The highest percentage of off-peak TVM queues above TSA threshold are at Norwich with 11%, Three Bridges at 6.4% and Milton Keynes at 3.7%. However 23 stations had no off-peak queues above TSA. The highest percentages of peak TVM queue times above TSA threshold were at Cambridge and Sevenoaks at 3.9%. During peak hours 23 stations had no TVM queues above TSA threshold. During off-peak hours 14 stations had no TVM queues above TSA threshold, and a further 20 had less than 1% of queues above TSA.

3. Off-peak ticket window queues weekday and weekend

Table 2 below shows the percentage of queues that were above TSA threshold during weekday off-peak and weekend off-peak for **ticket office windows**.

On weekdays, the stations with the highest proportion of queues above TSA threshold were at Guildford, Winchester and Basingstoke at 60%, 50% and 46% respectively; the stations with the lowest proportion of queues above TSA threshold were at Preston, Farnborough Main and Colchester at 1%, 2% and 2% respectively. The middle-rated station was at Cardiff Queen Street at 8%.

At the weekend, the stations with the highest proportion of queues above TSA threshold were at Winchester, Guildford and Basingstoke at 37%, 32% and 31% respectively; the stations with the lowest proportion of queues above TSA threshold were at Cardiff Queen Street, Crewe and Basildon at 0%, 2% and 2% respectively. The middle-rated station was at Chelmsford at 9%.

The table also shows that at many stations there is a considerable difference in the percentage of queues above TSA between weekday and weekend. Guildford, Derby, Basingstoke, Winchester and Milton Keynes all have more than 10 percentage points more weekday queues above TSA than at the weekend. Conversely, Three Bridges and Hemel Hempstead had over 10 percentage points more weekend queues above TSA than on weekdays.

Table 2: Percentage of off-peak ticket office window queue times above TSA threshold weekday, weekend and the difference between them.

	Weekday	Weekend	Difference
Basildon	2%	2%	0%
Basingstoke	46%	31%	16%
Cambridge	8%	15%	-6%
Cardiff Queen Street	8%	0%	8%
Chelmsford	6%	9%	-4%
Colchester	2%	2%	0%
Crewe	3%	2%	1%
Derby	24%	5%	19%
Farnborough Main	2%	9%	-7%
Guildford	60%	32%	27%
Haywards Heath	15%	24%	-9%
Hemel Hempstead	4%	19%	-15%
Ipswich	11%	8%	3%
Laindon	4%	7%	-3%
Loughborough	14%	11%	3%
Luton	18%	13%	5%
Maidenhead	3%	7%	-5%
Manchester Oxford Rd	7%	5%	2%
Milton Keynes	37%	27%	10%
Norwich	27%	20%	7%
Preston	1%	3%	-2%
Salisbury	18%	16%	3%
Sevenoaks	3%	8%	-5%
Slough	11%	6%	5%
Three Bridges	8%	23%	-15%
Tunbridge Wells	8%	7%	1%
Watford Junction	14%	17%	-3%
Winchester	50%	37%	13%
Woking	24%	15%	9%

**the difference may vary by up to 1% due to rounding*

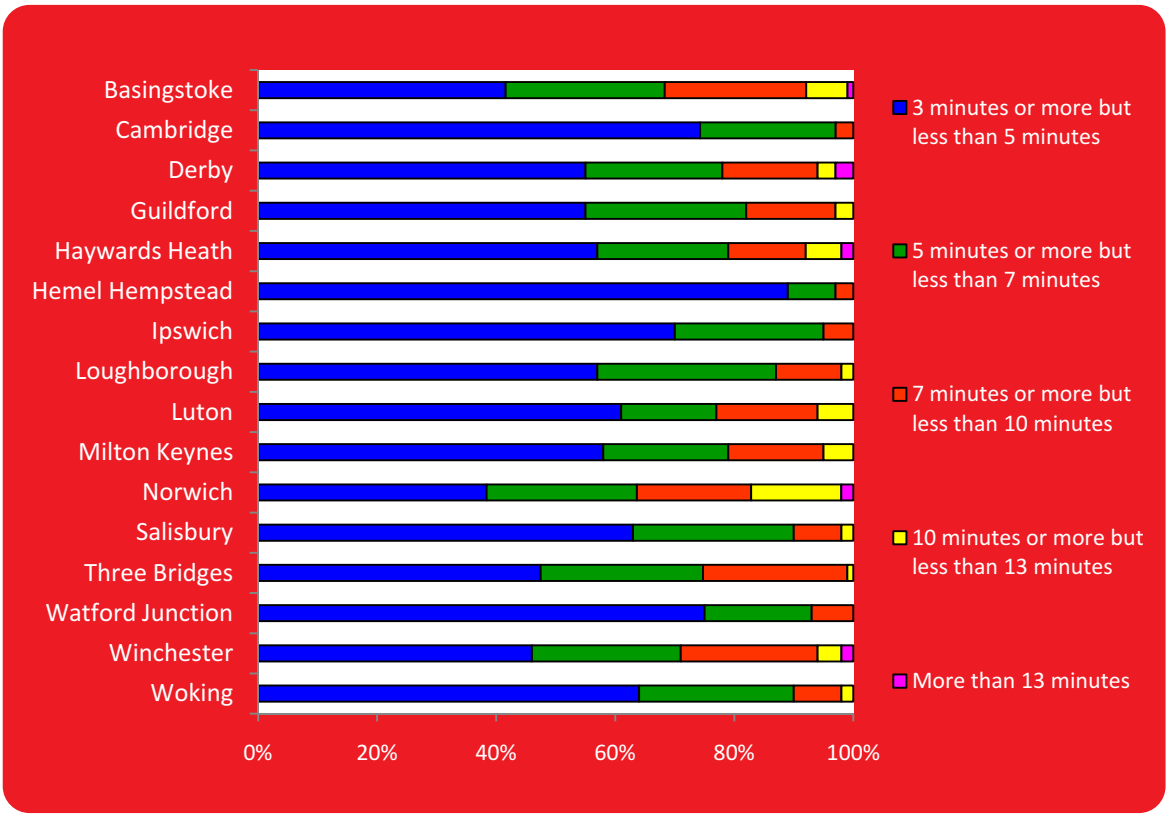
As queues above TSA threshold predominantly occurred at ticket office windows and during off-peak hours, we have not provided an equivalent analysis for TVMs.

4. The length of off-peak ticket window queues

Chart 3 below show the distribution of actual waiting times at the ticket office windows during off-peak periods, where the queue time is above TSA. The analysis, in order to be robust, has been restricted to those stations where more than 10% of queues were above TSA.

This highlights that at some stations there can be considerable waits. Waits of seven minutes or more were particularly common at Norwich (36%), Basingstoke (32%), Winchester (29%) and Three Bridges (25%).

Chart 3: Distribution of above TSA regulation off-peak queuing times at the ticket office windows.



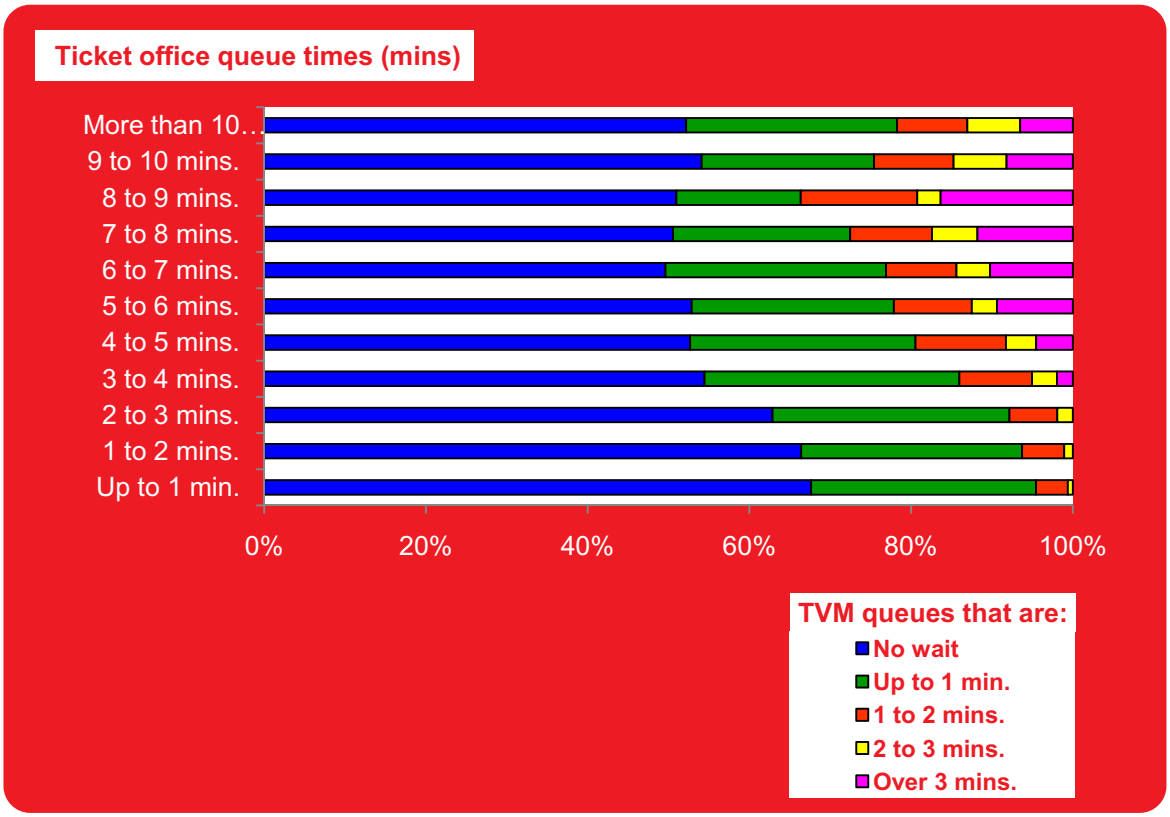
As queues above TSA threshold predominantly occur at ticket office windows and during off-peak hours, we have not provided an equivalent analysis for TVMs.

5. Queue times at TVMs as queue times at ticket office windows increase.

The methodology interleaved observations at ticket office windows and TVMs enabling a very close comparison of the differences in queue times between the two retailing options. The analysis showed that even where a ticket office window had a long queue there were very limited queues at the TVM.

Chart 4 below shows the rise in TVM queue time for increasing queue lengths at the ticket office window. The chart highlights that even when ticket office queue times rise above five minutes, in around half of instances there is no queue at the TVM and where there is a queue at the TVM it is typically two minutes or less (35%). Only very infrequently is it above TSA.

Chart 4 – TVM queue times as ticket office window queue times increase*



* *based on observations at all 33 stations*

6. Actual differences between queue times at the ticket office window and the TVM when queues at the ticket office window are above regulation.

Section 5 showed, in aggregate across all 33 stations observed, that as queue times at the ticket window increase the queues at TVMs do not increase at the same rate. This section shows the actual time difference between the two queues when the queue at the ticket office window was above TSA regulation.

Table 3 on the next page shows the time difference between ticket office window and TVM queues, when queues were above regulation at the ticket window. In effect, this is the potential time saving the passenger could have made if they had switched from the ticket office queue to the TVM. To ensure a reasonable sample size, the table shows only stations where there were 5%, or more, of queues above TSA.

The potential time saving that could have been made by switching from the ticket office queue to the TVM is typically between three and eight minutes. The largest potential time savings exceed 10 minutes: Basingstoke up to 12 minute 26 seconds, Cardiff Queen Street up to 10 minutes 18 seconds, Haywards Heath up to 10 minutes 31 seconds, Salisbury up to 11 minutes 46 seconds and Winchester up to 11 minutes and 14 seconds.

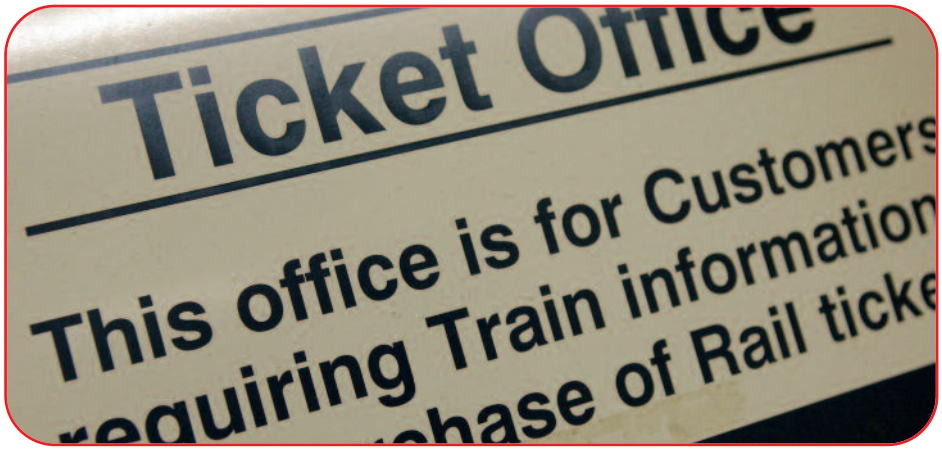


Table 3: Difference between ticket office window and TVM queue times, when queues were above regulation at the ticket window

	Range of time difference* (mins:seconds)
Basingstoke	3:04 to 12:26
Cardiff Queen Street	3:05 to 10:18
Chelmsford	2:28 to 7:56
Derby	3:04 to 9:12
Guildford	2:45 to 8:27
Haywards Heath	3:02 to 10:31
Hemel Hempstead	0:41 to 6:11
Ipswich	1:55 to 7:54
Loughborough	1:36 to 7:34
Luton	3:00 to 9:11
Milton Keynes	0:14 to 5:46
Norwich	0:16 to 5:05
Salisbury	2:29 to 11:46
Sevenoaks	1:57 to 7:56
Slough	3:02 to 6:49
Three Bridges	0:24 to 8:38
Tunbridge Wells	3:06 to 8:52
Watford Junction	1:48 to 6:54
Winchester	2:12 to 11:14
Woking	2:22 to 8:31

** range is the time difference between the 10th and 90th centile of queue time differences*

Conclusions

There is an issue with queue times at many of the stations observed and more so during the off-peak period, weekdays and at weekends. The greater proportion of queues above TSA is at the ticket office windows; the queue times at the ticket vending machines are much less frequently above TSA threshold.

A significant finding is that even when there are queue times above TSA at the ticket office window, only around half the time is there any queue at the TVM and mostly it is well below TSA threshold. On these occasions, the difference between the two queues is considerable, typically between three to eight minutes.

What next?

Passenger Focus will use the research in discussion with Government, train companies and other industry bodies to increase awareness of the situation faced by passengers when trying to purchase a ticket at Britain's rail stations.

We will also ensure that decisions on revenue protection (e.g. including the operation of Penalty Fare schemes) take proper account of queuing times at stations. The more seriously train companies take revenue protection, the more important it is that passengers are given reasonable opportunity to purchase tickets before they board the train.

The individual results from the 33 station reports will also be reviewed with the relevant train company with the aim of identifying potential areas for improvement.

Results from the 33 stations surveyed will also be reviewed with the individual train companies concerned, in order to seek improvements to the issues identified at these stations.

Contact us

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Appendix 1 – Results from the four benchmark stations

Table 1 – percentage of queue times above TSA threshold – all observations.

Ticket office window: Liverpool Central 2.0%, Nottingham10.1%, Southampton Central 9.3% and Swindon 10.0%.

TVM: Liverpool Central 0.8%, Nottingham 2.1%, Southampton Central 0.0% and Swindon 0.7%.

Chart 1: Percentage of ticket office window queue times above TSA threshold: peak and off-peak

Peak: Liverpool Central 0%, Nottingham 3.7%, Southampton Central 5.0% and Swindon 0%

Off-peak: Liverpool Central 2.6%, Nottingham 11.2%, Southampton Central 11.0% and Swindon 12.7%.

Chart 2 – Percentage of TVM queue times above TSA threshold – peak and off-peak

Peak: Liverpool Central 0%, Nottingham 0%, Southampton Central 0% and Swindon 0.7%.

Off-peak: Liverpool Central 1.1%, Nottingham 2.5%, Southampton Central 0%, and Swindon 0.7%.

Table 2: Percentage of ticket office window queue times above TSA threshold weekday, weekend and the difference between them.

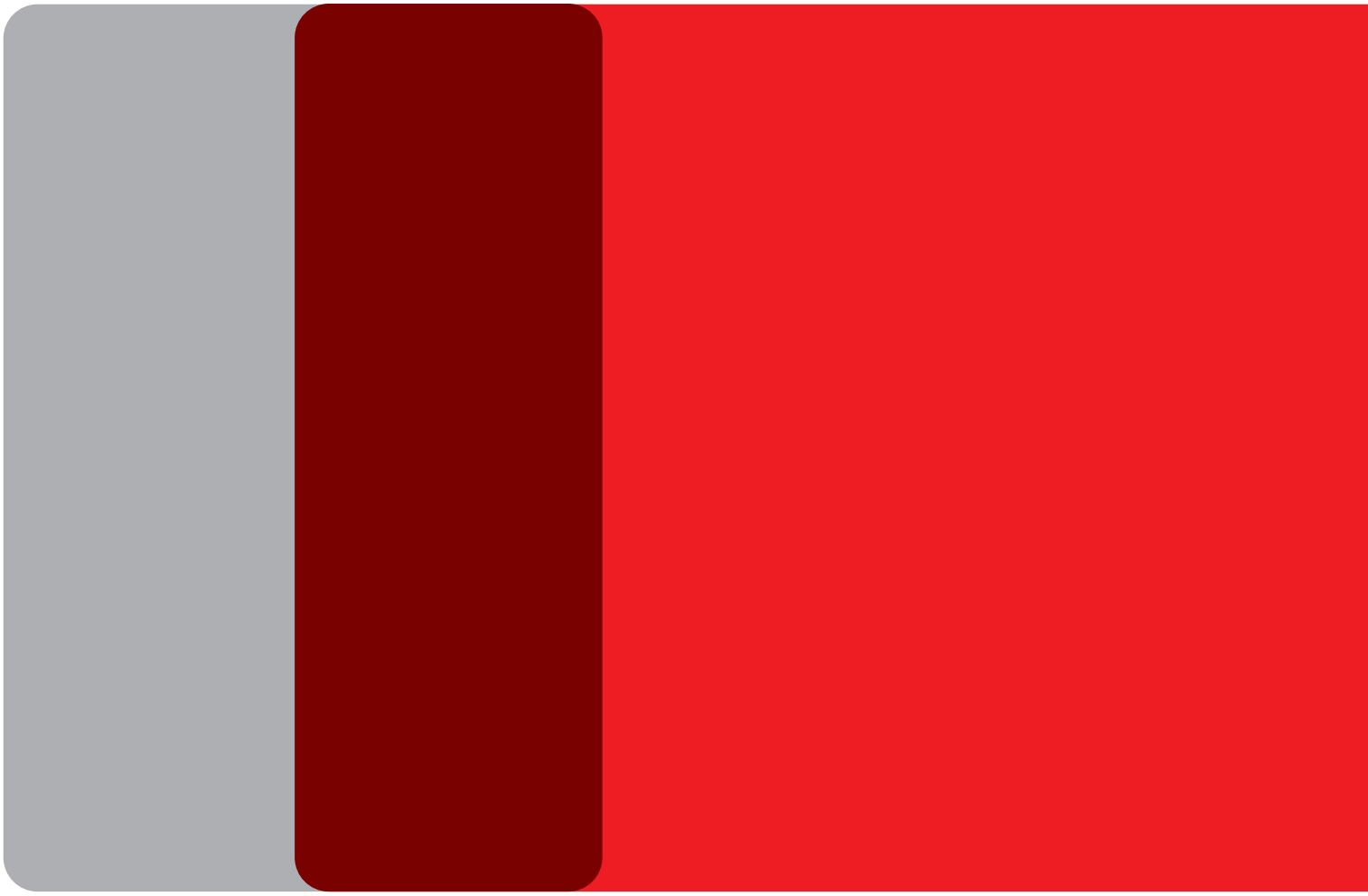
Weekday: Liverpool Central 1.5%, Nottingham 13.5%, Southampton Central 10.2% and Swindon 9.5%.

Weekend: Liverpool Central 4.9%, Nottingham 6.9%, Southampton Central 12.3% and Swindon 18.1%.

Difference: Liverpool Central -3.4%, Nottingham 6.6%, Southampton Central -2.1% and Swindon -8.6%.

Chart 3: Distribution of above TSA regulation off-peak queuing times at the ticket office windows.

	3 minutes or more but less than 5 minutes	5 minutes or more but less than 7 minutes	7 minutes or more but less than 10 minutes	10 minutes or more but less than 13 minutes	More than 13 minutes
Nottingham	87%	10%	3%	0%	0%
Preston	88%	13%	0%	0%	0%
Salisbury	62%	28%	8%	2%	0%
Sevenoaks	79%	8%	13%	0%	0%
Slough	81%	17%	2%	0%	0%
Southampton Central	75%	20%	5%	0%	0%
Swindon	83%	17%	0%	0%	0%



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