'one' Customer Services Centre, Grosvenor House, 112-114 Prince of Wales Road, Norwich,<br>NR1 1NS

Dear Sir,
I have been travelling on 'one' railway services between Witham and London Liverpool Street since I moved to Witham in July 2006. Prompted by the experience of my very first journey on 'one', which was delayed by 55 minutes, I decided to keep a record of the arrival times of each journey for comparison against the timetabled arrival times.

The following is an analysis of that data, up to the $24^{t h}$ November 2006 along with a number of specific questions which I would be grateful if you would address in your response.

I decided early on in my data collection that I would write to 'one' once I either reached a year's worth of collected data or the total delays came to more than a nominal working day (i.e. eight hours). Over the last four months the latter has happened, with the total delays coming to 8 hours 24 minutes.

Whilst I understand that you already collect (and publish overviews of) train arrival data for all of your services, I thought you might find this analysis of a subset of mostly peak time journeys interesting. Certainly the figure I measure for punctuality is somewhat different to the figure published in the 'one' website on your "Performance bar" page. I measure 75.5\% as compared to your published "Performance bar" figures of $88.0 \%$ (annual) and $84.5 \%$ (4 weeks to 11th November). It isn't made clear on your site how your "Performance bar" is defined in terms of measured punctuality and reliability.


I collected measurements of 143 journeys. The graph above shows how the total minutes late has risen with time. The blue line indicates the total number of minutes late, with the blue squares marking the individual journeys. The lateness (or earliness) of individual journeys is also shown as vertical lines which are red for late trains and green for early ones. Journeys ranged between 7 minutes early and 55 minutes late.

Of the 143 measured journeys, 72 were on time or early, 36 were late, but by less than 5 minutes late and 35 were 5 or more minutes late. This means that $50.3 \%$ of journeys were (strictly) on time whilst, as previously mentioned, the percentage of journeys on time by the Passengers' charter definition (i.e. arriving within 5 minute of the timetabled time) was $75.5 \%$. The total minutes late over the 4 months was 504 ( 8 hours 24 minutes).

There are some apparently seasonal influences in the graph. It is clear that the punctuality began to get significantly worse after around the middle of September, although this may have happened earlier, I have no data for the period whilst I was on vacation (from the end of August until early September). My guess is that this is due to Autumnal influences (the much-maligned "leaves on the line", which seems to be referred to more often these days as "poor rail conditions"). The rate of increase of lateness also seems to jump around the middle of November which I suppose is the same issue compounded by the onset of colder overnight weather.


The histogram above shows the distribution of arrival times relative to the timetabled arrival time.

On a positive note, interestingly, the most common arrivals are one and two minutes early or on time and more than half of all trains arrived on time or early. The average delay, however, was 3 minutes 31 seconds.

It is notable that very few (i.e. 2) journeys were delayed beyond the 30 minute Passengers' Charter claim threshold. Whilst this is, on the one hand, to be commended, on the other hand it appears that there are more delays in the 22-27 minute area than the overall shape of the distribution would seem to warrant. A cynic might imply from this that extra effort is made to get trains in under 30 minutes to avoid paying compensation, but that 'one' has little or no interest in reducing delays further than that.

As noted earlier, I have some specific questions which I'd like to put to you:-

- On your website, you publish a "Performance bar" which shows your performance against a Public Performace Measure (PPM). Other train operating companies publish both punctuality and reliability statistics. Can you explain exactly how your published "Performance bar" and the associated PPM is defined in terms of punctuality and reliability?
- How, precisely, do you work out "Delay Repay" compensation for season ticket holders? Your Passengers' Charter states that in the event of a 30-59 minute delay

We will pay compensation to the value of at least $50 \%$ of the cost of a single ticket or $50 \%$ of the cost of either portion of a return ticket. By "portion" we mean either the outward or return part of a return ticket. In the case of all season tickets the compensation will be calculated using the proportional daily cost of the price of the ticket.
My best guess of the definition of the proportional daily cost for my season ticket works out as $£ 8.22$. (The same figure results either by dividing $£ 3000$ by 365 , or dividing the actual price on my (changeover) season ticket (£1413.70) by its validity period).
This would lead me to expect a minimum compensation of $£ 4.11$. In regard of both of the delayed journeys for which I have received compensation, on each occasion I received £3.
Can you please explain this figure in the light of your Passengers' Charter promise? For your convenience, the journeys delayed by more than 30 minutes are tabulated below.

| Date | Time | From | To | Delay | Compensation | Your Ref |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $24 / 07 / 2006$ | $08: 04$ | WTM | LST | 55 min | $£ 3.00$ | XXXXXX |
| $20 / 11 / 2006$ | $07: 58$ | WTM | LST | 36 min | $£ 3.00$ | XXXXXX |

- How is your published figure for punctuality so far different to the one I experience? I can think of three effects that might explain the difference:-

1. I measure almost exclusively peak-time trains. Perhaps your off-peak trains are more punctual than the peak trains?
2. I don't treat cancelled trains differently. That is to say, if a train I was travelling on is taken out of service, or cancelled, I treat the journey as if it was delayed by the difference between the scheduled arrival time of my original (or intended in the case of a cancellation) train and the actual arrival time of the train I travelled on. I don't think this particular effect would make a large difference to the figures since so few trains are actually cancelled.
3. Perhaps I am just phenomenally unlucky in the trains on which I travel. Certainly, recently, the 08:04 from Witham to Liverpool Street seems to be particularly jinxed.

- Why does 'one' now use the "Delay Repay" scheme for season ticket holders instead of the alternative scheme of automatic $5 \%$ or $10 \%$ discounts based on published performance against punctuality and reliability targets in use by most, if not all, other train operating companies?
To examine the difference, for a hypothetical commuter on my route (Witham to Liverpool Street), at $£ 3$ "Delay Repay" compensation per journey on a $£ 3000$ annual season ticket, it would require the commuter to experience 50 journeys delayed by more than 30 minutes each (a minimum of 1500 delay minutes-i.e. 25 hours) over a year to get $5 \%$ of their ticket price back in compensation. Not to mention that they would have had to fill in 50 "Delay Repay" forms.
If you assume that that commuter travelled twice a day on every working day of the year (around 250 days so 500 journeys) then this would mean that $10 \%$ of that commuter's journeys would have been delayed by more than 30 minutes. To get a $5 \%$ discount under the other scheme, the punctuality (or reliability) measure for the train operating company would have had to fall below the trigger level - for punctuality, this typically is
$1 \%$ below the target level so, with the 'one' punctuality target of $88 \%$, the hypothetical commuter above would "only" have had to experience delays of 5 minutes or more on $13 \%$ or more of journeys to get the $5 \%$ discount.
The "Delay Repay" scheme clearly then leads to reduced compensation for season ticket holders who are subject to delays. Or are any of the assumptions I am working under in my calculations above incorrect?

I hope that this analysis is of some use to you and that you are able to answer my questions. I look forward to receiving your response and any comments you might have on my experiences of 'one' railways.

A version of this analysis is available at http://www.oakden.org/mark/one which is periodically updated as and when I add more measurements to my dataset.

Yours faithfully,

Mark Oakden

