

From: [redacted]
To: [redacted]
Cc: [redacted]
Subject: [redacted]
Date: 10 Jan 2019 16:53:41

Not the kind of news I was expecting...

I asked Amanda to lead on this.

From: Trinder S efan
Sent: 14 January 2019 15:53
To: Karmaly Seymour
Cc: Caldwell Amanda
Subject: FW: WLO actions

Hi Stefan

Some comments below on the attached report. The most important to clarify is the second point as the report gets very confused and has some of the confidence key's actually modified. I've highlighted the right scheme!

2.2.1 state has 'various' networks includes all deep tube upgrades including the recently cancelled INAT (Jubilee and Nothern Additonal Trains). These are included to represent a future capacity increase on these routes even though the precise specification will change. This is considered a conservative assumption to make as the benefits of WLO would likely be higher without. The purpose being to ensure check that the case for WLO still exists even with the Tube upgrades. The most realistic of which is likely to be the Piccadilly Line for the upgrade.

Stefan - I think you're confused on the reporting between London and West Hampstead. For example, Section 1st para says "Scheme 5 (1) ph Hampstead -> West Hampstead" whereas Table 3 says "Table 2011 Ref Case WLO (1) ph Hampstead -> West Hampstead". Judging by the second para of text "Scenario 5 provides a significant benefit to the network as a whole as a result of the relief on the Northern Line and the Northern Line as a result of the relief on the Northern Line".

Would be good to see changes in bus flows as a result of WLO 5.2.2 second bullet and Table 6 refer once a decrease in bus demand it would be good to get a feel for what the impact of this is.

I think reporting of the PT demand impact of the additional demand (what we are claiming as WLO Dependent demand) would be helpful. A flow change plot showing the PT demand impact of each additional demand scenario what proportion of the additional demand trips are WLO? Which other PT services are impacted?

Thanks
Stefan

Stefan Trinder
Public Transport Planning Manager | T L City Planning
Phone: [redacted]
Email: [redacted]
LinkedIn: [redacted]

From: [redacted]
Sent: [redacted]
To: Karmaly Seymour
Cc: Trinder Stefan, Brady Colin, Caldwell Amanda
Subject: RE: WLO actions

Hi Stefan

Please find attached the technical note.

What would you like me to put the full set of model outputs for each scenario? On the TIL, the or in the Matrix?

[redacted]

From: Karmaly Seymour [redacted]
Sent: 14 January 2019 16:53
To: [redacted]
Cc: [redacted] > Caldwell Amanda [redacted]
Subject: RE: WLO actions

Thank you

If the network's really short, can you please share the benefit figures with us as per request?

I'm worried that time is going tight so would be good to understand if the cost with the congestion criteria has worked or not.

Thanks.

Hi Stefan

From: [redacted]
Sent: 14 January 2019 16:53
To: Karmaly Seymour
Cc: Trinder Stefan, Brady Colin, Caldwell Amanda
Subject: RE: WLO actions

Hi Stefan

I am just finalising a technical note containing the key model outputs and inputs. I believe this will provide you with the information you need in relation to model results leading up to the Technical Case.

We will also provide the standard WLO model results for the latest scenario as these have now all been completed and checked.

[redacted]

From: Karmaly Seymour [redacted]
Sent: 14 January 2019 16:53
To: [redacted]
Cc: [redacted] > Caldwell Amanda [redacted]
Subject: RE: WLO actions

Hi [redacted]

Do you have any updates for us?

Hi Stefan

From: [redacted]
Sent: 14 January 2019 16:53
To: Karmaly Seymour
Cc: Trinder Stefan, Brady Colin, Caldwell Amanda
Subject: RE: WLO actions

Hi Stefan

Yes, the runs completed on the weekend.

We are generating the update of results now - if not today they should be ready tomorrow.

[redacted]

From: Karmaly Seymour [redacted]
Sent: 14 January 2019 16:53
To: [redacted]
Cc: [redacted] > Caldwell Amanda [redacted]
Subject: FW: WLO actions

Hi [redacted]

Did the runs complete on the weekend? When are we likely to see results please?

Regards

Hi Stefan

From: Karmaly Seymour [redacted]
Sent: 14 January 2019 16:53
To: [redacted]
Cc: [redacted] > Caldwell Amanda [redacted]
Subject: RE: WLO actions

Hi [redacted]

Could you set off the runs for the land use scenarios with the congestion criteria on the weekend? I'm aware that Richard has requested for some information and we have agreed that these activities can take place simultaneously.

Any questions - please get in touch.

Regards

Hi Stefan

From: [redacted]
Sent: 14 January 2019 16:53
To: Karmaly Seymour, Trinder Stefan, Caldwell Amanda
Cc: [redacted] > Brady Colin
Subject: RE: WLO actions

Stefan

We've produced the benefits for the 2 further tests with a congestion criteria and the good news is that appears to be addressed the counter-argument to the results.

The new benefits are as follows:

1) ph Hampstead -> Hampstead
Whole Model = 13.61 mins as benefit in the AM Peak period
GLA = 112.118 minutes benefit in the AM Peak period
Hampstead -> Brixton/Camden/Brent = 181.673 minutes benefit in the AM Peak period
8) ph Core
Whole Model = 191.850 mins as benefit in the AM Peak period
GLA = 112.118 minutes benefit in the AM Peak period
Hampstead -> Brixton/Camden/Brent = 235.099 minutes benefit in the AM Peak period

I've also updated the plots produced previously in the attached. You can see that the first figure shows some of the changes in demand away from the WLO scheme between 1) and 8) and has reduced which gives a clear that the bus network has become more stable between them once congestion is taken into account. This then feeds into the more sensible benefit to be seen at overall level in the 2nd and 3rd figures.

[redacted]

From: [redacted]
Sent: 14 January 2019 16:53
To: Karmaly Seymour, Trinder Stefan, Caldwell Amanda
Cc: [redacted] > Brady Colin
Subject: RE: WLO actions

Hi Stefan

Benefits at the GLA wide level are as follows:

- 1) ph Hampstead -> Hampstead = 17.177 minutes benefit in the AM Peak period (Whole Model = 240.328 mins)
- 8) ph Hampstead -> Hampstead with Brixton/Camden/Brent = 98.797 minutes benefit in the AM Peak period (Whole Model = 96.076 m ns)
- Core 8) ph Hampstead -> Hampstead with Max Demand = 189.569 minutes benefit in the AM Peak period (Whole Model = 267.23 m ns)
- Core 8) ph Hampstead -> Hampstead with West Hampstead = 165.46 m ns benefit in the AM Peak period (Whole Model = 233.802 m ns)
- Core 8) ph Hampstead -> Hampstead with 1.35 m ns benefit in the AM Peak period (Whole Model = 150.10 m ns)
- Core 8) ph Hampstead -> Hampstead with 1.77538 m ns benefit in the AM Peak period (Whole Model = 197.006 m ns)

As we sit with the counter-argument effects at this level of analysis I will under take the 2 further tests suggested by Stefan with a congestion criteria.

[redacted]

From: Karmaly Seymour [redacted]
Sent: 14 January 2019 16:53
To: [redacted]
Cc: [redacted] > Brady Colin
Subject: RE: WLO actions

Hi [redacted]

I've noticed that Chris Porter has asked for the benefit to the GLA wide level. Could you please share this with us to compare with the numbers reported in your email before?

Many thanks

Hi Stefan

From: Trinder S efan
Sent: 14 January 2019 16:53
To: Karmaly Seymour, Caldwell Amanda
Cc: [redacted] > Brady Colin
Subject: RE: WLO actions

Hi [redacted]

Many thanks for your explanation of the outcomes of your investigation.

In the previous email I asked about congestion criteria. He had assessed this with colleagues, we are keen for you to try running the do-min, 1) and 8) schemes with 10% congestion criteria (can you confirm you are currently using 10%?).

Our best guess at the moment is that the 1) ph Hampstead -> Hampstead scenario may run out any way as it is a congestion criteria. Could you try this and let me know the outcomes?

Many thanks

Stefan

From: [REDACTED]
Sent: Wednesday, 20/01/2016
To: Kemptley Systems; T mair Stefan; Caldwell Amanda
Cc: [REDACTED]; Brady Colin
Subject: RE: L&P 400

Sey an

T' s had a further look into h's I don't h nk t would be worthwhile runn ng h'e c'oding process as I don't think that w B' e'll so much. h'e c' of crowding as a function of demand and actually demand doesn't change much away f'om the WLO scheme when compar ng h'e Core B' ph scena' with the h' ph Hounslow -> Hendon scheme. T' e therefore done some alternat' e analysis shown in the attached document which I am leav ng - B'et or else rate what s happen ng - has to be based on a comparison of the Core B'ph and h' ph Hounslow -> Hendon schemes.

The first figure shows d'ifference - a demand between the B'ph and h'e h' ph scena' is. Th' s illustrates (a) my point abo' e' had demand doesn't change much away from the WLO scheme and (b) more importantly shows logical d'ifferences between the scena'io's. e' is the B'ph scena'io higher demand on the central section and West Hampstead b'ut lower demand on h'e Hendon branch as the West Hampstead branch competes for cap'acity. S'ubtle difference on h'e Hounslow branch as both scena'io's a' e' h' ph and a' reduced on on most other lines to/from Central London.

Howe' or odd does it appear when we look at changes in gene'alised times (unweighted by demand) - end ng from the abo' e' changes in demand flows - refer to h'e 2nd and 3rd f'igures which show changes to and from zones respect' ively. Based on the abo' e' we would expect t'imes to be lower in h'e B' ph scena'io across the whole model except on the Hendon b'ut where the h' ph scena'io p'ro' duces bet' er co's' range h'e wem Hendon and other dist'inct ions. In fact we find that the h' ph scena'io p'ro' duces small impro'vements in generalised time across h'e p'ro' v'ides of the model away from h'e WLO scheme - t' s a' combination of h'ese impro'vements wh'ch outweigh the higher times along the route of WLO and therefore g'e' the odd outcome of h'gher benefits occurr ng - or all in the h' ph scena'io. This s' clearly counter - n'at' ural e' because refer ng back to the d'ist'inct f'igures that B' ph scena'io p'ro' duces demand (and therefore c'rowding) not of on the majority of other lines so we should find on ly c'rowding benefit s in h'e B'ph scena'io s' before on o'ld times.

Based on the abo' e' analys' s my - new scena'io's the same that we should screen benefit s to a' from End ng Hounslow Brent/Barnet - n' due to a' o'ld h'e count' er-intuit' ive effects wh'ch are occurring in the product' on of gene'alised times from the final assigned demand flows which look h'g od.

[REDACTED]

From: Kemptley Systems [REDACTED]
Sent: 01 January 2016 12:11
To: [REDACTED]
Cc: [REDACTED]; T mair Stefan [REDACTED]; Caldwell Amanda [REDACTED]; Brady Colin [REDACTED]
Subject: RE: L&P 400

Thank [REDACTED]

We' s had some internal discussions and agree that h'ere are oddities in the model and h'ere may be a need to screen benefits. We would like to look into this a b't further - s help to decide reasonable boundar'ies for screen ng. What co's' engene'ring co's'ider s be ng used in h'e model? Can you comp'are c'rowding on links between the WLO reference case and test scena'io's so we if we can work out where the changes in c'rowding between the WLO ref' case and test scena'io's occur e'g. co's'ider ng h'e scena'io's below.

h' ph Hendon -> Hounslow

h' ph Hendon -> Hounslow w' th Baseline D'e

I w'd spot some h'g odd hopefully we can agree reasonable screen ng (e'g. boroughs or GLA' etc.) for the benefit s to a' o'ld the odd'ies.

Stefan has p'ro' duced the attached spreadsheet macro which could be helpful for this. Please let me know if you'd like me to call to discuss this

Regards

Sey an

From: [REDACTED]
Sent: Wednesday, 20/01/2016
To: Kemptley Systems; T mair Stefan; Caldwell Amanda
Cc: [REDACTED]; Brady Colin
Subject: RE: L&P 400

Sey an

Please see my comments below - a' not.

[REDACTED]

From: Kemptley Systems [REDACTED]
Sent: 01 January 2016 12:12
To: [REDACTED]; T mair Stefan [REDACTED]; Caldwell Amanda [REDACTED]; Brady Colin [REDACTED]
Cc: [REDACTED]
Subject: RE: L&P 400

[REDACTED]

Thank you for sending this through. It's good to see that h'e station coding updates h'ave impro'ved patronage at h'e stations. Can you please share w'ith us the impact h'ave had at Brent Co's' West s'ation (S'pales Corner)? Total demand (including boardings and aligh'ings) inc'ases f'rom 137 to 528.

I ha'e summarised the benefit s from p'ro' o'ut emails to h'e table below. I'm wonder ng f' the changes need to include Barnet - n'ge her with Hounslow B'ent and Ealing? As S' Stefan need to see in his email it would be challenging to expla' why Barnet - n' part collar has been excluded. Are you able - o' p'ro' vide equ'ivalent benefit s w'ith Barnet - n'cluded (just for h'e scena'io's w'ith station cod ng updates please). Figure 8 would be fine if e' include Barnet - List of benefits

- * h' ph Hendon -> Hounslow - 185.7 2 minutes benefit s in the AM Peak period (Whole Model - 286 328 mins)
- * h' ph Hendon -> Hounslow w' th Baseline D'e - 185.20 minutes co's' benefit s in the AM Peak per od (Whole Model - 96 976 mins)
- * h' ph Hendon -> Hounslow w' th Max D'e - 238.9 3 m'utes benefit s in the AM Peak period (Whole Model - 267 2 2 m'ns)
- * Core B'ph -> h' ph Hendon - h' ph West Hampstead - 222.669 m'utes benefit s in the AM Peak period (Whole Model - 233 862 m'ns)
- * Core B'ph with Baseline D'e - 238 386 m'utes benefit s in the AM Peak period (Whole Model - 159 319 m'ns)
- * Core B'ph with Max D'e - 285 58 m'utes benefit s in the AM Peak period (Whole Model - 197 006 m'ns)

Also in h'e table below the h' ph max d'e'elopment scena'io benefit s in h'e whole model goes up whereas the B'ph max d'e'elopment benefit goes down. Gi' on that the growth scena'io is h'e same this feels a b't odd. Do you think there is a' cause for this? This w'ill be linked to h'e model noise issue hence why it is sensible for us to screen the benefit s. Note we get the same issue in h'e Baseline scena'io's as we I.

With s'ation coding updates

Hounslow/Brent/ Ealing Benefits

Whole model

Whole model - selected boroughs

Hounslow/Brent/ Ealing Benefits

Whole model

Whole model - selected boroughs

h' ph Hendon -> Hounslow

10 510

250 6 3

1 6133

157 577

286 328

126751

h' ph Hendon -> Hounslow w' th Baseline D'e

102 299

5 121

57178

160 3 6

96 976

63370

h' ph Hendon -> Hounslow w' th Max D'e

1 6 252

167 833

27581

207 070

267 2 3

40173

Core B' ph -> h' ph Hendon - h' ph West Hampstead

125 26

160 005

3 7 1

197 12

233 802

36390

Core B' ph w' th Baseline D'e

1 6 396

228 802

82 06

212 921

150 319

62402

Core B' ph w' th Max D'e

175 628

160 20

15308

256 886

197 006

59880

Looking forward to hear ng from you.

Many thanks.

Sey an

From: [REDACTED]
Sent: [REDACTED]
To: Kemptley Systems; T mair Stefan; Caldwell Amanda
Cc: [REDACTED]
Subject: RE: L&P 400

Sey an

We ha'e now reproduced the benefit s from the scena'io's with the updated station coding. The good news is hat (a) the benefit s ha'e been boosted signif'icantly and (b) key count' er-logic which I raised to Hounslow/End ng B'ent. The boost to the benefit s mainly due to a' significant number of passengers now using Harlesden (2 800 board ng or aligh'ng s in the Core B'ph scena'io's whereas p'ro' ducesly h'ere was next to nothing) and a' p'iling of passengers on ng Neasden.

- * h' ph Hendon -> Hounslow - 157 577 minutes benefit s in the AM Peak period (Whole Model - 286 328 mins)
- * h' ph Hendon -> Hounslow w' th Baseline D'e - 160.7 6 minutes co's' benefit s in the AM Peak per od (Whole Model - 96 976 mins)
- * h' ph Hendon -> Hounslow w' th Max D'e - 207 070 m'utes benefit s in the AM Peak period (Whole Model - 267 2 2 m'ns)
- * Core B'ph -> h' ph Hendon - h' ph West Hampstead - 197 12 m'utes benefit s in the AM Peak period (Whole Model - 233 862 m'ns)
- * Core B'ph with Baseline D'e - 212 921 m'utes benefit s in the AM Peak period (Whole Model - 159 319 m'ns)
- * Core B'ph with Max D'e - 256 886 m'utes benefit s in the AM Peak period (Whole Model - 197 006 m'ns)

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 20/01/2016
To: [REDACTED]; T mair Stefan [REDACTED]; Caldwell Amanda [REDACTED]; Brady Colin [REDACTED]
Cc: [REDACTED]
Subject: RE: L&P 400

Sey an

Happy New Year - o' you as well.

The coding has now been updated and we ha'e run the 6 additional scena'io's as agreed.

