Response to Leicester Campaign for Better Transport's presentation:
***Star trak* – The view from the bus stop**

Briefing note for the Regeneration and Transport Task Group

Background

On 24 April 2008, the Leicester Campaign for Better Transport gave a presentation to the Regeneration and Transport Task Group. This briefing note aims to inform Members of the issues behind the points raised, and what is being done to address them.

General

The presentation given by the Leicester Campaign for Better Transport gave a good view from a passenger perspective. However, many of the issues raised were not directly *star trak* related and, in many cases, related wholly to the bus operators.

It should also be noted that *star trak* is now acting as a conduit of information from many other sources, outside the direct control of the Council, and inaccuracies in that information will therefore reflect on the *star trak* system.

Inconsistency of bus stop names

Issue: Inconsistency of bus stop names on stops, flags, timetables, star trak etc.

This is a known national problem, not just local. To address this, a common national database, NaPTAN, was set up a few years ago to uniquely define every bus stop in the UK. (See Appendix A).

Defining unique bus stop names has always been a problem, and until NaPTAN was created, each bus operator and each local authority maintained their own database, often on paper. It was therefore an impossible job to keep everything aligned. *Star trak* was no exception, originally maintaining its own electronic stop database.

Now that NaPTAN is available and in use, most local authorities and bus operators are committed to using the data as their standard. The problem is, each 'user' may have their own opinion as to what each stop should be called. Ultimately, the local authority has the final word as to the name of the bus stop, but in the interests of partnership working, all bus operators need to be involved if changes are proposed, as they may use the names in their publicity material.

What is required, therefore, is that the NaPTAN database is methodically checked, route by route, stop by stop, until every stop has a name which is both useful and acceptable to all parties. Clearly this is a mammoth undertaking and will not be accomplished in a short timescale.

Current situation: The public transport team are drawing up a program of work to address the issue. It is expected that, due to the enormity of the task, it will take about a year to complete.

In the meantime, the County has been asked to amend the minor inconsistencies raised by CBT, such as spelling errors.

Sign faces

Issue: Sign faces on star trak signs have coloured stars and/or 'other services' information that is out of date

Showing real-time routes and details of other routes turned out to be a double edged sword, as it proved impossible to keep up with the changes in routes. Not only this, but changing the legends on the signs, especially with so many signs, is a significant undertaking. If stickers are used to cover existing information, it looks poor and is prone to peeling (both from natural and human causes).

It is now practice to deploy *star trak* signs with only basic information on the screens; no route information, no coloured stars showing *star trak* routes, and no information on other routes passing the stop. All this should be available at the stop, leaving the *star trak* sign to just give out real-time information where available. It is clear from CBT's presentation, however, that this is not the case. In general, the bus operators produce the service information which either they or the City Council place in the information cases. The City Council maintain the service numbers on the bus stop plates themselves but, due to the large amount of network changes that have taken place over the last few years, resources have not been available to keep up.

Current Situation: Councillor Kitterick has agreed to commit £11k to migrate all the currently out of date signs to the new style basic front screen. A programme of work is being developed for this with a view to completing as soon as possible. However, it would not be prudent to start this work before the public transport team's review of stop names is underway.

Star text codes

Issue: SMS codes displayed on the metal plates at the bus stops do not match those given on the website

When the *star text* SMS messaging service for real-time bus information was developed, it was the first system of its kind in the UK. There was therefore no national standard on code conventions, so the *star trak* team worked with the SMS system supplier to define a convention using 6 character codes to uniquely define any bus stop. These 6 character codes were then used on metal plates fitted at *star trak* served bus stops and, at the time, on the *star trak* web site too.

Following our lead, other authorities became interested in using SMS, and were proposing different coding conventions. In order to avoid national confusion and ambiguity, the Department for Transport developed an SMS coding convention for

national use. This standard was, in fact, based on what Leicester had already pioneered, except that 8 characters were used instead of our 6.

We therefore migrated our scheme to the national standard, but on the condition that the old 6 character codes previously used remained valid. Thus, although the codes still displayed on the stops are 6 characters long and therefore different to those 8 character codes for the same stop now shown on the star trak website, they still give the same result, and will continue to do so indefinitely.

Current Situation: Councillor Kitterick has agreed that whilst it would be useful to remind visitors to the star trak website that both the 6 and the 8 character codes work, that there is no point in replacing any of the plates at the bus stops. The website developer has now been asked to add a reminder to the appropriate page.

Signs giving out real times only

Issue: Signs only give out real-time information, thereby missing non real time buses that may arrive earlier

A decision was made by the Quality Bus Partnership at the start of the *star trak* project that signs should display real times only. This was to avoid any possible confusion between scheduled and real, and to avoid discreditting the real time information when buses on routes without *star trak* passed the bus stop at anything other than their scheduled time.

This approach has been shown to be the correct approach as many authorities who have used both real and scheduled time on the same sign have reported confusion. Indeed, the signs in Nottingham (on our *star trak* system) do show real and scheduled time, and messages had to be displayed on the signs explaining that they were scheduled time only. The feedback from passengers was that they assumed that if a display was electronic, it was real time rather than timetable time.

The situation in Leicester is that the signs were not designed to show scheduled time information, and indeed do not have sufficient characters to do so. It was for this reason that early signs on the system had legends on their faces that showed the real-time routes in coloured stars, and details of other routes passing the sign also shown.

Current Situation: Councillor Kitterick has agreed that the star trak signs in Leicester should continue to give out real times only.

Predicted times

Issue: Some buses are predicted to arrive at stops early

The whole idea of a real-time system is to inform passengers of the actual time that a bus will arrive. CBT highlight a few cases where, using the *star trak* website, the bus is predicted to arrive early at stops. This shows the value of the system, in that passengers are less likely to miss their bus. It should be noted that ‘early’ is a relative concept, and there is nothing wrong with a bus passing a stop earlier than the

published time, as long as the stop is not a published 'timing point', where the bus driver is required to stop and wait. It is precisely for this reason that the County Council give out advice on their Bus Map and Guide that you should ideally arrive at a bus stop 5 minutes before the due departure time.

Problems with the *star trak* website

Issue: Texts on the star trak website map display are sometimes overlapping and thus difficult to read, list of nearby stops is not of any use.

Current Situation: The issue with overlapping stop texts on the maps has been taken up with the website provider, likewise the list of other services passing the stop. After internal discussion over its usefulness, the website provider has also been asked to remove the list of nearby stops facility.

Destinations on website

Issue: Inconsistent destinations on the star trak website

Destinations on the *star trak* website are pulled from the traveline regional database and are thus not part of the *star trak* database. The source of the destinations are the registrations that the bus operators make when starting or changing a route, and are therefore out of the control of the local authority. The destinations are what the bus operators believe are the most informative texts for each route, taking into consideration the nature of the route.

It should be noted that the destinations are given at route level, ie, there is only one destination given for each direction of the route, not a destination for each service at each bus stop. Thus it is entirely reasonable that the destination for a service starting in Braunstone is given as 'City Centre', whereas a service originating in, say, Nuneaton, gives a destination as Leicester.

Routes shown on *star trak* website

Issue: Some bus stops on the star trak website have some routes serving the stop incorrect or missing

The routes displayed are independent of *star trak*, being delivered to the site from the regional traveline database. If any errors are present here, then the traveline database needs changing. This is maintained by Leicestershire County Council.

Current Situation: The errors highlighted by CBT have been passed to the County Council for action. These include the missing routes at Abbey Street, and the removal from the database of stops no longer present, such as St James Hotel and James Went Building.

Campaign for Better Transport Survey

Issue: "star trak doesn't work"

At the end of their presentation, CBT presented the results of a survey carried out by Andy Brookes. CBT claimed that the survey showed that *star trak* was only working in 7 out of 40 cases, showing this information in a very quick breeze through his results. What was clear was that CBT only counted the system as working if the sign was showing 0 when the bus arrived.

The main point of note here is that it is perfectly within the tolerance of the system for a sign to be showing a 1 when the bus arrives, and there may indeed be cases when higher values are explainable and acceptable. It is not clear how many such cases were noted in the survey. It should also be noted that there may have been faulty buses passing the stop during the survey, resulting in dots and subsequently misleading results, as explained in a previous task group meeting.

The presented survey results cannot therefore be taken as representative of reality.

Finally, it should be noted that Andy Brookes was twice asked during his presentation of the survey at which stop the survey was taken. Both times he refused to answer. He was then asked outside the meeting and reluctantly gave the name of the bus stop, but was not prepared to pass over the data from the survey for the *star trak* team to inspect and act upon.

The *star trak* team has since carried out its own survey at the same stop. The results are presented in Appendix B, and show that the system was working as expected in all but one case. In this sample this equates to 97%.

David Wright 28 May 2008

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Appendix A

Background to the NaPTAN Database

The National Public Transport Access Node (NaPTAN) database is a UK nationwide system for uniquely identifying all the points of access to public transport in the UK. It is a core component of the UK national transport information infrastructure and is used by a number of other UK standards and information systems.

Every UK station, coach terminus, airport terminal, ferry terminal, bus stop, etc is allocated at least one identifier.

The NaPTAN schema is a UK national *de facto* standard sponsored by the UK Department for Transport and supports both the public registration of bus timetables by the Vehicle and Operator Services Agency (VOSA), and the data collection for the Transport Direct Portal. NaPTAN includes on a related standard - the National Public Transport Gazetteer.

The NaPTAN database is maintained centrally under contract to the Department for Transport by Thales.

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Appendix B

Bus Stop Survey by the star trak Team

Following the CBT presentation, the *star trak* team conducted their own survey at the same bus stop, in order to be able to ascertain whether a problem exists at that particular stop.

The survey took place on Friday 9 May 2008, between 08:55 and 10:45. The full results follow this summary.

Summary of results:

During the survey time, 37 buses were observed passing the stop. The results can be summarised as follows:

Criteria	**%age fulfilling criteria**
CBT: 'The system is only working if the sign shows 0 on arrival or departure'	57%
All buses passing the stop during the survey period, and with the sign showing 0 or 1 on arrival or departure	68%
All buses passing the stop during the survey period that are fitted with working star trak equipment, and with the sign showing 0 or 1 on arrival or departure	96%
For all buses passing the stop during the survey period, whether the central system and the sign worked as expected	97%

This backs up the information given by David Wright at his presentation to the Task Group:
Of the buses passing the stop, 70% were equipped and working.
Of those equipped and working, 96% were producing information within the expected tolerance of the system.

It is accepted that 70% of buses equipped and working is not acceptable, but this, as explained, is an issue with the bus operators, not the *star trak* system. It is also accepted that, from a passenger point of view, a dot means the system is not working, and this is clearly an area where we must engage with the bus operators.

Freemans Common D - B120401 - 269034038
Observations 09/05/08 08.55 - 10.45

	Time Bus Arrived	Route	Bus Number	Bus logged on?	Info on sign Arrival	Info on sign Departure	Other info
1	9.01	48	4754	Yes	1	0	
2	9.06	84	4708	Yes	0	0	
3	9.16	85	4746	Yes	0	0	
4	9.20	48	4766	Yes	1	0	
5	9.25	88A	32064	Yes	0	0	
6	9.26	88	32058	Yes	0	0	
7	9.30	88	66305	No	.	.	Dot bus
8	9.31	85	4704	No	.	.	Dot bus
9	9.31	48	4771	No	(8)	(8)	Dot bus running late, sign showed 8 mins - next service
10	9.33	88A	32071	No	.	.	Dot bus
11	9.33	88	66969	No	(7)	(7)	Dot bus running late, sign showed 7 mins - next service
12	9.41	88	66316	Yes	0	0	
13	9.42	48	4751	Yes	0	0	
14	9.48	85	4740	Yes	0	0	
15	9.51	88	32632	No	.	.	Dot bus
16	9.52	84A	4709	Yes	1	1	
17	9.54	84	4702	No	(15)	(15)	Dot bus running late, sign showed 15 mins - next service
18	9.55	48	4765	No	(13)	(13)	Dot bus running late, sign showed 13 mins - next service
19	9.56	87	66972	Yes	0	0	
20	10.03	88A	32053	Yes	1	0	
21	10.05	85	4735	Yes	0	0	
22	10.05	88A	32648	No	.	.	Dot bus
23	10.06	87	66963	Yes	1	1	
24	10.09	84	4712	Yes	0	0	
25	10.15	48	4758	Yes	0	0	
26	10.15	88	32090	Yes	0	0	
27	10.15	88	32076	Yes	0	0	
28	10.20	85	4715	Yes	0	.	Cleared down whilst bus at stop. Next vehicle a dot bus
29	10.21	88A	32643	Yes	0	0	
30	10.24	87	66309	Yes	2	2	Bus didn't stop
31	10.25	48	4750	Yes	1	0	
32	10.28	85	4707	No	.	.	Dot bus
33	10.31	84	4713	Yes	0	0	
34	10.32	88A	32066	Yes	0	11	Cleared down whilst bus at stop - next bus due in 11 minutes
35	10.38	87	66975	Yes	1	1	
36	10.41	48	4760	Yes	1	1	
37	10.42	85		No	.	.	Dot bus