Concessionary Fares Research and Analysis Q&A Note

Following on from ENCTS Reimbursement Guidance and Calculator Training session conducted on the 29th February 2024 by the Department for Transport, SYSTRA and Frontier Economics, this note has been compiled to answer questions submitted during the session and the two working days following the session which were submitted to the Department for Transport.

QUESTION	ANSWER
Cambridge is given as an example of an urban area and we have an operator arguing that all journeys originating or ending in Cambridge including those with a largely rural route are also to be counted as urban, is this correct?	Guidance is clear on this aspect, which states: **"**the two demand curves relate to the inherent characteristics of residents from an area (for example, they reflect the car ownership characteristics of the population)". Our interpretation of this is that if a journey originates in Cambridge and the passholder is from Cambridge or other such designated 'Urban' area, then these journeys should be reimbursed using the Urban demand curve. For other passholder journeys originating in Cambridge, the non-urban demand curve should be used.
How can operators provide robust evidence for mean journey length if the concessionary holder only has to touch on their pass?	While we do only know boarding location for the pass holder, some TCAs have continued using passenger surveys and TPS data. Some of this is historic and some conducted more recently, with some of these surveys conducted by operator and/ or different passenger types. Therefore, some authorities have this data along with origin and destination data, and this usually provides the best evidence. If this type of data is not available, you can use the assumption that journeys are half the route length, which is a fair assumption, or use any other evidence which is available.
Is commercial average fare, despite the guidance, still an issue especially with the current flat £2? How is the £2 fare cap scheme accounted for in the average fare calculations?	Annex J sets out the approach to deriving an average fare foregone with the £2 capped fare scheme in place. In summary, it is necessary for the TCA to derive a cash fare for an operator assuming that the £2 capped scheme wasn't in place. As a result, it is necessary to derive an average cash fare based on the data you may have available. A prudent place to start would be the last known cash fare (for most

	operators in most areas that would be the period immediately before the £2 capped fare scheme was implemented, so October, November, and December 2022) and then increase that based on known 'inflation' values. It is up to the TCA and operator to decide on an appropriate inflation value to use, but using CPI is an easily accessible metric for all parties. The £2 fare cap scheme does not impact commercial fares, as it is required to derive a fare which would have been in place without the £2 fare cap scheme, using previous average fares prior for a three-month period prior to entering the £2 fare cap scheme and uplifting the fares by an appropriate inflationary value, such as CPI or RPI between the three-month period and today.
Can you explain the approach to cross boundary routes, both for the Average Commercial Fare and for the route Marginal Capacity Costs (MCC) inputs?	It is recommended to derive inputs from across a whole route, whether across a boundary or not, as if you try and split a route it will become far too complex and may produce inappropriate outputs. Where only a small amount of a route is within another TCA, only a small weighting should be applied for this. It is best practice to include an entire route of data when calculating inputs for Average Commercial Fare or Marginal Capacity Costs.
For an operator that covers several TCAs would you expect the Marginal Capacity Costs (MCC's) to be the same for all TCAs? Otherwise, how do you split off-bus revenue e.g., website sales?	It is not expected for the MCCs to be the same across several TCAs. However, that is for discussion between the operator and each TCA, using the evidence available to produce the best available answer and to derive the MCC inputs as accurately as possible. In deriving MCCs, on-bus and off-bus revenue is required to derive the commercial average fare. One approach is to denote al revenue for a particular off-bus sale to the service on which it was first used. While imperfect, it is a reasonable approach to allocating revenue to a particular service in absence of any other evidence.

What factors create a £0 Marginal Capacity Cost?	Typically, a very large operator with lots of commercial passengers and very few concessionary passengers operating in very urban routes may expect to have Marginal Capacity Costs of £0 but it is rare for this to occur.
If an operator uses an external consultant to manage the scheme should the TCA allow their cost in the admin costs?	In our view, we think the answer to this lies in proportionality. Guidance states that administration costs should not be covered to challenge or appeal a scheme, so provided the consultant is carrying out general scheme administration tasks and the cost of this is reasonable, then that could be included within administration costs. It is important to identify time spent by the consultant to administer the scheme for that specific TCA. Where an operator commissions a consultant to challenge a scheme or schemes, then a TCA should not reimburse these costs.
How is the £2 fare cap scheme accounted for in the average fare calculations?	Guidance is included on this as part of the scheme (Annex J). This fare cap does not impact commercial fares, as it is required to derive a fare which would have been in place without the £2 fare cap scheme, using previous average fares for a three-month period prior to entering the £2 fare cap scheme and uplifting the fares by an appropriate inflationary value, such as CPI or RPI, between the three-month period and today.
In the Basket of Fares method if you had several prices for single fares (for example) would you enter multiple single fares with a percentage for each or take an average for all single fares?	It is not foreseen that there is any reason why either method can't be used if appropriate weighting is used for the percentages. It should also be noted that there is only space for 11 types of tickets in the method which may limit the number of single fare tickets which can be input. Therefore, it may be appropriate to use an average fare with appropriate weighting to avoid this issue.
Not sure whether we are unique (I wouldn't have thought so) but we calculate a per trip rate each year and that is then multiplied by the number of observed journeys. So, with the calculator we must do our own additional sums dividing the figures given to	It is possible to do one of three things to overcome this challenge: 1) You could set the number of concessionary journeys as 1 and not include PVR or administration costs in the inputs.

get a per-trip rate. Could there be a box in the calculator that shows you what the per trip rate is (this would need to be excluding the admin costs, etc. (PVR costs?) which can be added on at the end of the year)?	The resulting total reimbursement will be given for 1 concessionary journey. 2) You could unprotect the 'Outputs' worksheet and include the calculation yourself. 3) You could insert a new worksheet that also has the relevant calculation, and any others you may wish to derive.
Is it recommended that TCAs provide one set of reimbursement rates across their area based on all available data which is applied to all operators, or operator-specific rates based on individual operator data?	Reimbursement rates should always reflect the no better and no worse principles, it is hard to say more on this topic without knowing more information about the area. Typically, we would not expect a TCA to use one reimbursement rate for all operators as operators and operating areas can differ within a TCA. However, there may be circumstances where it may be appropriate for example, where there is little data available, so TCAs derive TCA-wide averages in order to reimburse operators. This may be relevant where there are many newer operators within a TCA. It is encouraged that TCAs and operators engage with each other and in partnership work together to find a conclusion on this issue, using local evidence to derive reimbursement where possible.
The cost per vehicle mile default value is lower than the default value for the previous calculator - why is this?	During this study the inflation for the components which make up the costs per vehicle mile calculations and how they have evolved since the original research was conducted has been investigated and the results compared to those from the previous calculator. The costs when looking at these results show that the inflation since the previous research was conducted is lower than suggested by the approach in the previous calculator, and therefore that is why the values are lower than those within the previous version of the calculator.
How should multi-operator day/week tickets be considered in determining the day/week price? Should this be used to produce an average or by default given the scheme is multi-operator?	The guidance is that they should be included as the method calculates what travellers would have been using if the ENCTS scheme wasn't in place, and using multi operator tickets are included.

	Depending on how the multi operator scheme is administered, the operator(s) may have a detailed record of day and/or tickets sold. These sales and revenues should be added to the sales and revenues of the single operator day/week tickets sold to derive an average day or week ticket price. We would recommend engaging with your operator to understand what evidence they may be able to provide around single and multi-operator product sales and revenues.
We have always set the reimbursement rates and MOC and MCC figures for the year ahead rather than assess them in real time each month. Does the guidance encompass such an approach? If, for example we were using 2023-24 data to inform the rates for 2024-25 would we set the year as 2023-24 or 2024-25? (This may be affecting any inflationary assumptions?)	The calculator should be set up for the year in question, and so if it being set up for 2024-25 this year should be used. In terms of inputs, only one input is used in terms of length of concessionary journey unless significant changes to an operators' network occur. If using local values for MCCs these need to be calculated and input for the current scheme to prevent instability. In a practical sense it is recommended to derive capacity costs from a 12-month period, using data from the most recent 12-month period, providing the network is relatively stable and no significant changes have occurred regarding the area or operators involved within the network.
If the TCA wants an overall percentage reimbursement including the marginal costs, how can that be derived?	Once the calculation has been derived using the reimbursement calculator, it should be a simple case of dividing the total reimbursement (excluding PVR and administration costs) by the number of journeys which will provide you with the typical 'reimbursement per concessionary passenger journey'. If you then divide this by the average fare, this should give you a theoretical 'reimbursement rate' as a percentage of the average fare. Another option would be to set the number of concessionary journeys in the calculator as 1 to derive the estimated reimbursement per passenger and dividing this value by the average fare.
The question on £2 fare cap didn't quite address the impact on the average	The commercial average fare within the MCC model does require some

commercial fare input. Specifically, this income is received as a 'grant' to operators - how should this grant be split down to network level as 'revenue'.	consideration as a result of the £2 fare cap. There are different challenges here as the £2 fare cap does influence choice of tickets bought, which then influences the average commercial fare. We have seen operators recently providing commercial average fare data that includes the grant received by DfT and all on and off-bus revenue, which produced a logical and rational average commercial fare. The operator had allocated the grant across its entire network, which happens to be mostly within one TCA, which simplifies matters. Where an operator's services operate within multiple TCAs, one option is to allocate the grant across services based on single tickets bought on each service and then derive the commercial average fare on the services that are relevant to the TCA in question. There are likely to be other creative ways around this issue, so this is one option to consider, but we would recommend that TCAs and operators engage as soon as possible, share evidence and datasets that allow for calculations to be carried out.
Are you able to share evidence that supports the drop in default values for Cost per Vehicle Mile?	During the study evidence and data which was provided by the Confederation of Passenger Transport, which is behind a paywall, was used to generate the default values for Cost per Vehicle Mile, but a final report has been produced which will be made available for viewing and evidence from the study will be presented in this document.
With the old calculator where you are setting a rate for the coming year, you had to guess what inflation would be in the coming year. Is that the same in this calculator in that it will need us to guess next year's inflation?	There are inflation forecasts incorporated into the new calculator. Users are not required to make changes to the data included in the Inflation tab. DfT will update the data included in the inflation tab (feeding into calculations) as part of their yearly updates. If more recent data becomes available in the time between the annual publication of the updated calculator and the publishing of schemes

	users are able to incorporate this into the inflation tab.
What is the recommended approach to calculate increase in fares - DFM (where the lookup table won't be representative for the 2019 fare) or BOF (which is not the recommended method for calculation of AAF)?	The lookup tables are based on data from April 2022 to March 2023 (it was stated in error that 2019/20 data was used during the training session). The lookup tables are constructed from concessionary trip frequency distributions and hypothetical combinations of fares ratios (Daily to Cash Fare and Weekly to Cash Fare) to understand the implied ticket choices based on propensity to travel. The lookup tables aren't constrained to actual years of fares and are not based on demand under commercial fares structures. Furthermore, the methods aren't used to calculate increases in fares. Ticket prices by type (i.e., Cash Fares, daily etc.) are inputs to whichever method chosen to estimate Average Fare Forgone. The impact of fares increases can be run through the calculator to understand the effect on reimbursement and the method applied should be consistent pre- and post-fares change (i.e., only use one of the methods not a combination). The ticket prices used in either method would be adjusted as inputs, i.e., Daily tickets could be uplifted by 5% under either of the methods such that the pre-change fare might have been £4, and the post-change would be £4.20.
In the old guidance we stumbled across a paragraph that said gross cost contracts don't get the cost elements reimbursed (I think net cost contracts got some costs but not all) is that still in this guidance too?	Nothing has changed in this regard, and it is the same in this new guidance, and so operators should be reimbursed for carrying a concessionary passenger.
Can you please explain why the calculated Average Fare Foregone (AFF) differs between 'Urban' and 'Non-Urban' Area Types for otherwise identical inputs?	The lookup tables "degenerate" the observed level of demand to account for the generation of additional trips arising from the free fare scheme. This is achieved using the demand curves for urban and non-urban areas. As these demand curves are different between these different areas,

	to reflect different average consumer behaviour, the results of the AFF calculation are different.
How were the demand curves derived and how did we get from the outputs of the econometrics to the actual parameters?	The demand curves have the same form as that from the original research. The econometric analysis of the National Travel Survey (NTS) provides estimates of the level of generation factors for different areas. To get from the results of the NTS econometrics to the demand curves, the following process was followed: 1) Set up the demand curve, using the same form as developed by ITS. This requires assumptions to be made on two parameters: β and λ; 2) Set an initial basis of λ, based on the research conducted by ITS; 3) Adjust the values of β, solving for the value of β which aligns with the generation factors from the NTS econometrics, using the value of the national fare index relative to fares in 2019; 4) Assess whether that combination of β and λ deliver a demand curve which provides price elasticities which are consistent with the literature, and with the price elasticity of urban areas being lower, in absolute magnitude, than the price elasticity of a non-urban area. If these constraints are not met, then adjust the starting values of λ and repeat step 2 and 3 until a satisfactory result is derived.
Should the value (change in nominal fares) in cell F22 in general inputs sheet be calculated to the value related to the observed concessionary journeys period (i.e., 2023/4) or estimated to the year of reimbursement (i.e., 2024/5)?	The change in fare should relate to the year in question for the calculation. So, in the case of estimating reimbursement for 2024-25, this would be estimated for the year of reimbursement. It could be revisited at the end of the scheme year once data is known, should that be desired, although in our experience, some operators and TCAs typically prefer to agree a likely change in fare for the year ahead to provide an element of certainty for both parties.
With the use of local survey data, would it be possible to add some additional context around an acceptable time period that the	Guidance recommends considering using robust local evidence wherever possible to estimate operator reimbursement. Provided

survey was completed? Reason being is that some authorities will be proposing to use surveys completed in the 1990 or early 2000's when the bulk of the information used in the update of the calculator and guidance uses data collected in recent years especially during / post pandemic. If a survey has been recently completed and is in accordance with the best practise surveying methods around sample size and approach etc then it would be a much more reliable use otherwise the default assumptions should be used?	the evidence reasonably reflects the current situation, it *should* not matter when the evidence was collected. However, if local bus networks in a local area have changed substantially since the evidence was collected, then operators and TCAs should consider what changes have been made and whether the available evidence reasonably reflects the current situation or not. It is not for the consultancy team to state what evidence would be reasonable or not, but each situation should be considered on a case-by-case basis by the operator(s) and TCA(s).

Disclaimer: These responses from Systra and Frontier Economics do not constitute as formal legal advice but aim to provide TCAs and operators with additional clarity to be able to derive a suitable basis for reimbursement at a local level. The answers here should be read in parallel with the Reimbursement Guidance, User Guide and Calculator, and do not replace this guidance.