

# **WEST YORKSHIRE COMBINED AUTHORITY**

**TRANSPORT ACT 1985  
Local Government Act 2000  
Travel Concession Scheme**

**To be valid**

**From 1 April 2017**

**WEST YORKSHIRE COMBINED AUTHORITY**

**1985 ACT TRAVEL CONCESSION SCHEME and the well-being power under section 2 of the Local Government Act 2000**

**1<sup>ST</sup> August 2017**

**The Scheme**

1. This Travel Concession Scheme subsequently referred to as “the Scheme” has been established by the West Yorkshire Combined Authority (“WYCA”) , in pursuance of its powers under:-
  - i. the Transport Act 1985 (as amended) (“1985 Act”);
  - ii. Travel Concession Scheme Regulations 1986 (“TCSR”);

all other relevant statutory regulations.

  - iii. **and the well-being power under section 2 of the Local Government Act 2000**
2. The Scheme will be administered by West Yorkshire Combined Authority (“the Authority”).
3. The Scheme covers the discretionary concessions to be provided by operators under the 1985 Act as detailed in paragraph 7 below;
4. Unless otherwise defined in this Scheme words or terms used in the Scheme shall have the same meaning as given to such words or terms in the 1985 Act, and TCSR.

**Operative Date**

5. The Scheme shall come into operation in its entirety on 1<sup>st</sup> April 2017.

**Principal Area**

6. The principal area covered by the scheme is the Combined Authority’s Area of West Yorkshire, which consists of the administrative areas of the Metropolitan District Councils of Leeds, Wakefield, Kirklees, Bradford and Calderdale (“Principal Area”).

**Scheme Applicability**

7. The Scheme shall apply:
  - (a) to eligible persons listed in Schedule 1 who tender to the operator on a Scheme Service (as defined below) the applicable permit or pass and notified fare (if any) for that category of concessionary passenger referred to in Schedule 1;

(b) when travelling on eligible services (as defined in section 94 (4) of the 1985 Act) which have been admitted or required to participate in the Scheme including rail operators within the Principal Area.

but

(c) only on journeys:

(i) between places in the Principal Area; or

(ii) between places in the Principal Area and places outside the Principal Area as are detailed in Schedule 8 if any; or

(iii) between places outside but in the vicinity of the Principal Area, as are detailed in Schedule 8 if any.

For the purpose of this Scheme "journey" means a trip between two points without a change of vehicle or service and "Scheme Service" means services referred to in paragraph 7(b) above.

### **Eligible Persons and Nature of Concession**

8. Operators participating in the Scheme will be required on all Scheme Services to allow the concessions detailed in Schedule 1 to persons who satisfy the requirements set out in paragraph 7 above.
9. The Authority may from time to time by giving a minimum of 28 days notice in writing vary the class of eligible person or nature of the concessions to be provided or the reimbursement arrangements by notice and where relevant such notice should comply with the provisions of section 97(6) of the 1985 Act.

### **Concessionary Fare (Rail & Young Persons Only)**

10. The concessionary fare shall be the fare as notified to operators by the Authority from time to time being the fare to be charged by an operator to a person travelling as a concessionaire under the Scheme in respect of a 1985 Act Concession.

The operator shall admit any eligible person who tenders a valid permit or pass referred to in schedule 1 and pays the concessionary fare to travel on any Scheme Service it provides and shall not charge any class of pass or permit holder more than the concessionary fare for any journey.

### **Entry of Operators to the Scheme**

11. An operator shall be admitted into the Scheme following at least 56 days prior notice in writing from the operator to the Authority that it wishes to participate in the Scheme or, if later, on commencement of their eligible service.
12. In accordance with Sections 96(4) and (5) of the 1985 Act, the Authority may make admission to or continuation by an operator in the Scheme conditional on the operator agreeing appropriate modifications to the reimbursement arrangements where it appears to the Authority that the operators current or proposed fares for any eligible service include a "special amenity element" as defined in Section 96(6) of the 1985 Act.

13. If the Authority serves on the operator a participation notice pursuant to section 97 of the 1985 Act, the operator shall participate in the Scheme in respect of the eligible services specified in the notice from the date stated in and for the duration of such notice, and the operator may not give notice to withdraw such specified eligible services from the Scheme whilst such notice remains in force.

#### **Removal or Withdrawal of Operators from the Scheme**

14. An operator who is participating in the Scheme, in respect of any of its Scheme Services, other than pursuant to a participation notice, must give the Authority at least 56 days notice in writing of withdrawal from the Scheme in respect of all or any of such Scheme Services.

The WYCA may terminate the Scheme by giving the operator not less than 3 months notice in writing.

#### **Objective for Reimbursement of Operators**

15. The objective of the Scheme (which is not a duty) in relation to reimbursement of operators under the 1985 Act is to provide that such operators both individually and collectively are no better and no worse off financially than they would be if they did not participate in the Scheme in accordance with the principles set out in the TCSR but the Authority shall not be liable for any failure to achieve such objective.

#### **Payment Periods and Dates**

16. The “payment periods” under the Scheme are as set out in Schedule 7 or as notified to the Operators from time to time by the Authority in writing.
17. Subject to paragraph 24, the Authority will make a payment to operators not later than the day which is half-way between the first and last days of each payment period, equal to not less than 85% of the sum the Authority estimates to be due to the operator in that period.
18. Subject to paragraph 24, the Authority will make a further payment to operators, not later than 3 months after the end of the relevant payment period, equal to the difference (if any) between:
- (i) The sum already paid to the operator for the relevant payment period as set out in Paragraph 17 and,
  - (ii) The actual amount calculated as due to the operator for that relevant payment period.

If the amount paid under paragraph 17 above exceeds the amount calculated under paragraph 18 (ii) such that the Authority has made an over payment for the relevant period the Authority shall:

- (a) deduct the level of such overpayment from the next or any subsequent payment or
- (b) if no such further payment is likely to become due or to be insufficient to recover such overpayment, demand such overpayment by notice in writing to the operator who shall repay the same within 14 days of demand being made.

**Standard Method of Determining Passenger Journeys and Fare Values/Reimbursement Arrangements**

19. The standard method for assessing the total number of journeys made by eligible persons under the Scheme as set out in Schedule 2. The standard method for assessing the fares value to be attributed to those journeys is set out in Schedule 3. The standard method for calculating the reimbursement due to the operator will be on the basis of the formula and parameters set out in Schedule 4. { In calculating the reimbursement due to the operator, the Authority will take into account any data supplied by the operator if it can be shown that the data supplied is more accurate than the standard method and is more likely to enable the Authority to meet its objective for reimbursement set out in paragraph 15.}
20. By agreement between the operator and the Authority the standard method need not be applied in respect of calculating the reimbursement of that operator if any one of the following conditions are satisfied:-
- (a) the vehicles normally used by the operator in providing services on which concessions are available have 8 or less seats available for fare-paying passengers;
  - (b) the mileage run by vehicles is less than 150,000 miles per annum within the area covered by the Arrangements during the times at which concessions are available;
  - (c) except during the first 3 months of operation of the Arrangements, there has not expired a period of 3 months commencing with the date on which the operator is admitted to participation in the Arrangements in respect of a service or (if appropriate) becomes subject to the obligation imposed by a participation notice to provide concessions on a service.

**Data**

21. When an operator is first admitted or becomes obliged to participate in the Scheme, it shall supply to the Authority within 7 days:
- (a) a list of eligible services to be operated by that operator;
  - (b) all relevant fares and fare tables and a list of the ticket types valid for travel on such services; and
  - (c) the running boards/drivers duties applicable to such eligible services;
- to enable surveys to be scheduled and assessment of its entitlement to reimbursement.
22. The operator shall inform the Authority of the introduction or cessation of any Scheme Services, changes to the times at which and routes on which Scheme Services operate and any circumstances leading to the temporary cessation or major disruptions to such services, within 7 days of such event occurring.
23. An operator shall provide data to the Authority in accordance with the provisions of Schedule 6.
24. If the operator fails to provide such information or data as is referred to above, or to allow such access for surveys as is required pursuant to schedule 5, then

the Authority may in its discretion either defer all or part of any payment otherwise due to the operator until such omission is fully rectified or reimburse the operator on the basis of such estimated reimbursement as it considers appropriate in the absence of such data or survey information.

25. Where it becomes apparent to the Authority that any eligible service is or has been subject to material disruption, or has not been operated in accordance with the registered timetable, then the Authority may, after giving the operator the opportunity to comment on the effects of the same on the journeys being taken by eligible persons on such services, make such adjustments to the reimbursement due to such operators as it considers necessary to reflect the effects of such disruption or non-operation.

### **Recalculation of Reimbursement**

26. At the end of each financial year the Authority shall reserve the right to review the key elements of the arrangements, which are likely to include, but not limited to elasticities, average fares and additional costs. If following the review it is determined by the Authority that changes are required a new Scheme will be issued for consultation.

### **Survey Facilities**

27. The provisions of Schedule 5 shall apply in respect of surveys.

### **Entitlement Rules for 1985 Act Concessionary Travel**

28. For information purposes only the current rules for entitlement of a person to be issued with a travel concessions permit are attached hereto at the Appendix A.

### **Additional Costs**

29. An operator shall be entitled to additional reimbursement payments in accordance with regulation 5 of TCSR where the operator demonstrates (in accordance with paragraph 30 below) to the Authority:-
- (a) that the operator has necessarily incurred costs additional to basic operating costs and attributable to an increase in the number or the capacity of the vehicles used in providing services on which concessions are available in order to meet the extra demand created by the availability of those concessions; and
  - (b) that those costs are such that they will not be met by reimbursement payments made in accordance with the standard method during the year in which the costs are incurred or during the 3 months immediately following the end of that year.
30. Any operator claiming additional reimbursement payments pursuant to paragraph 29 above (increase in the capacity or number of vehicles) shall, in making such a claim, provide the Authority with sufficient information supporting their claim for additional costs to satisfy the criteria set out in paragraph 29(a) and 29(b), including, but not limited to:
- (a) details of the additional number or capacity of vehicles used in providing Scheme Services as a result of concessions being available;

- (b) information demonstrating that the additional capacity was required on those services, and is not spare capacity, and showing the extent to which the reason for requiring such additional capacity was due to the availability of concessionary travel;
  - (c) details of the cost of additional vehicles deployed (or provision of additional capacity) and details of how these have been utilised less any benefit realised by the operator from disposal (or other use) of vehicles previously used to provide such services and any other benefits e.g. generated commercial patronage; and
  - (d) any other information that the operator believes is relevant to its claim for additional reimbursement payments arising from providing additional vehicles or capacity to meet demand created by the availability of the concessions;
31. The Authority shall use all data provided by the operator in conjunction with any further information that the Authority may itself have (including, but not limited to survey data) to assess the additional costs incurred by the operator and assess the additional reimbursement payments to be made.
32. Payment of additional reimbursement payments shall be paid by 12 equal monthly instalments starting from the payment date following the date of calculation of the costs additional to the basic operating costs carried out by the Authority in accordance with regulation 5 of TCSR.

#### **Other Requirements of the Scheme**

33. All operators participating in the Scheme will if required by the Authority display on his vehicle a sign, supplied by the Authority, for the purpose of showing that concessions are available on those vehicles.
34. Operators shall not discriminate against eligible persons or any class of eligible persons in the provision of eligible services or associated services and facilities.

#### **Rail Services**

35. The provisions of this Scheme shall apply to the passenger rail services specified in paragraph 7(b) subject to the modifications in Schedule 9.
36. On first giving notice to be admitted to the Scheme or, if earlier, becoming obliged to participate in the Scheme, the operator shall provide to the Authority details of the name, address, telephone number and fax number of its official contact for communications in relation to these arrangements, and shall by notice in writing inform the Authority of any changes to the same.
37. Any notice or communication sent to the last such address, e-mail address or fax number as is referred to above shall be deemed to be duly served on the recipient. If an operator has failed to give notice in writing to the Authority of such an official contact, then the Authority may send any notice or other communication to any address set out in the most recent correspondence from the operator concerned, which shall be deemed to be its address for service.

**Contact for Communications**

38. All notices, data and other information required to be given to the Combined Authority under the Arrangements shall be provided to the following contact point (or such other contact point as may be nominated by the Combined Authority to operators in writing from time to time):

Position: Director Of Transport Services  
Address: Wellington House, 40-50 Wellington Street, Leeds, LS1 2DE  
E-mail: Dave.Pearson@westyorks-ca.gov.uk

Tel: 0113 251 7246

39. On commencing the provision of eligible services in the Principal Area, the operator shall provide to the Combined Authority details of the name, address, telephone number and fax number of its official contact for communications in relation to the Arrangements, and shall by notice in writing inform the Combined Authority of any changes to the same.
40. Any notice or communication sent to the last such address, e-mail address or fax number as is referred to above shall be deemed to be duly served on the recipient. If an operator has failed to give notice in writing to the Authority of such an official contact, then the Combined Authority may send any notice or other communication to any address set out in the most recent correspondence from the operator concerned, which shall be deemed to be its address for service.



**Schedule 1****Eligible Person and Nature of Concession under 1985 Act (paragraph 8)****1. Bus**

<b>Class of Eligible Persons</b>	<b>Nature of Concession to be Provided On Scheme Services Provided by Bus</b>
<p>(i) <u>Senior Persons</u></p> <p>(as defined in section 146 of the Transport Act 2000), presently:</p> <p>(a) in the case of a woman, her pensionable age,</p> <p>(b) in the case of a man, the pensionable age of a woman born on the same day.</p> <p>(ii) <u>Disabled Persons (with and without companions)</u></p> <p>(as defined in section 146 Transport Act 2000)</p> <p>(a) Persons who are blind or partially sighted</p> <p>(b) Persons who are profoundly or severely deaf</p> <p>(c) Persons without speech</p> <p>(d) Persons with a disability, or have suffered an injury, which has a substantial and long term adverse effect on their ability to walk</p> <p>(e) Persons who do not have arms or have long-term loss of the use of both arms</p> <p>(f) Persons with a learning disability, that is, a state of arrested or incomplete development of mind, which includes significant impairment of intelligence and social functioning</p> <p>(g) Persons who would, if they applied for the grant of a licence to drive a motor vehicle under Part III of the Road Traffic Act 1988, have their application refused pursuant to section 92 of the Act (physical fitness) otherwise than on the ground persistent misuse of drugs or alcohol. Concessions for disabled persons are available at any age.</p>	<p>On production of a statutory travel concession permit a person shall be carried without charge on eligible services* to which the Scheme applies, provided that the actual time of boarding falls during the following hours:</p> <p>(a) Monday to Friday after 23.00hrs until am service commences</p>
<p>(iii) <u>Blind Persons (with or without companion)</u></p>	<p>On production of a Blind Persons Permit (with or without companion) a person and companion, if appropriate, shall be carried without charge on eligible services* to which the Scheme applies at all times throughout the day**</p>
<p>(iv) <u>Young Persons</u></p>	

	<p>Young Persons under age 5 years</p> <p>Young Persons age 5 to 10 years</p> <p>Young Persons age 11 to 18 years</p> <p>School Pass</p> <p>Under 19 - Bus Only (formerly known as Schoolplus) MCard</p> <p>Young Persons Day/Week Ticket</p>	<p>Travel free at all times. ***</p> <p>Half fare travel at all times. ****</p> <p>On production of an Under 16 Photocard (formerly known as Young Persons Photocard) or a 16 – 18 Photocard (formerly known as Scholars Photocard) and payment of a half fare**** any eligible person shall be carried without further charge on all eligible services* to which the Scheme applies. On production of a School Pass an eligible person shall be carried without further charge from home to school on any registered bus or train service providing that it is the most direct route.</p> <p>On production of a School Pass &amp; corresponding Photocard an eligible person shall be carried without further charge from school to home on any registered bus or train service providing that it is the most direct route.</p> <p>Only available during school/college term time</p> <p>On production of an Under 16 Photocard (formerly known as Young Persons Photocard) or a 16 – 18 Photocard (formerly known as Scholars Photocard) an eligible person may purchase a discounted Under 19 - Bus Only (formerly known as Schoolplus) Mcard (price to be notified from time to time) &amp; shall be carried without further charge on all eligible services* to which the scheme applies.</p> <p>Young Persons age 11 to 18 years on production of an Under 16 Photocard (formerly known as Young Persons Photocard) or a 16 – 18 Photocard (formerly known as Scholars Photocard) may purchase a Day/Week Ticket (price to be notified from time to time) &amp; shall be carried without further charge on all eligible services* to which the scheme applies.</p>
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\* Exclusions are certain special services, excursions, tours, private hire vehicles, school and works contract services and certain express bus services, which cross the West Yorkshire boundary.

\*\* Concessions provided on a commercial basis by bus operators before 09:30hrs Monday to Friday

\*\*\* Commercial discount for children under 5 paid for by the operators

\*\*\*\* Half fare is to be rounded down to the nearest 1p

## 2. Rail

Class of Eligible Persons		Nature of Concession to be Provided On Scheme Services Provided by Rail
(i)	<p><u>Senior Persons</u> (i.e. women and men over the age of 60 years)</p> <p>and</p> <p><u>Disabled Persons</u> (as defined in Section 146 Transport Act 2000)</p>	<p>On production of a statutory travel concession permit and payment of a concessionary fare (paragraph 10) a person shall be carried on services to which the Scheme applies, provided that the actual time of boarding falls during the following hours:</p> <p>(a) Monday to Friday between 09.30hrs and 16:00 and after 18:30hrs (b) Saturdays, Sundays and Bank Holidays all day</p>
(ii)	<u>Blind Persons (with or without companion)</u>	On production of a Blind Persons Permit (with or without companion) a person and companion, if appropriate, shall be carried without charge on services to which the Scheme applies at all times throughout the day*
(iii)	<p><u>Young Persons</u></p> <p>Young Persons under age 5 years</p> <p>Young Persons age 5 to 10 years</p> <p>Young Persons age 11 to 18 years</p> <p>School Pass</p>	<p>Travel free at all times</p> <p>Half fare travel at all times</p> <p>On production of an Under 16 Photocard (formerly known as Young Persons Photocard) or a 16-18 Photocard (formerly known as Scholars Photocard) and payment of a half fare any eligible person shall be carried without further charge on all services to which the Scheme applies.</p> <p>On production of a School Pass an eligible person shall be carried without further charge from home to school on any registered bus or train service providing that it is the most direct route.</p> <p>Only available during school/college term time</p>

\* Concession provided on a commercial basis by train operators before 09:30hrs Monday to Friday & for Companion all Day.

## Schedule 2

### Standard Method of Determining Passenger Journeys (paragraph 19)

#### **Schedule 2a) Bus – Senior, Disabled, Blind & Companion**

- 1.1 Refer to schedule 2 in the Transport Act 2000 travel Concessions reimbursement Arrangements.

#### **Schedule 2b) Bus - Young Persons**

##### **1. Operation of the Standard Method**

- 1.1. The Authority will determine its reimbursement payments to the operator on the basis of the estimates it makes of the total number of eligible journeys made by eligible persons listed in Schedule 1 subject to the relevant concession listed in Schedule 1 on the operator's eligible services as defined in section 146 of the 2000 Act.
- 1.2. For the purposes of such calculation the Authority will use with effect from 1 April 2017:
- 1.2.1. the number of eligible journeys recorded using smart ticketing as determined from data in the NERO back office data store operated by the Combined Authority; and
  - 1.2.2. manual journey records recorded by the operator using the electronic ticketing machine (ETM) on the vehicle in respect of an eligible journey where such operator was unable to reasonably record such eligible journey using smart ticketing, which shall include:
    - 1.2.2.1. Any eligible service operated using a vehicle without a smart ticket machine;
    - 1.2.2.2. For any eligible service operated using a vehicle with a smart ticket machine, any failure of the smart element of the statutory travel concession permit or any failure of the smart ticketing machine, provided that for each such eligible journey the operator identifies to the Combined Authority the reason for such failure to record the eligible journey using smart ticketing.
    - 1.2.2.3. Young Persons aged 5 – 10 for whom no smartcard is available.

##### **2. Output from the Standard Method**

- 2.1. The Combined Authority will access via the NERO back office and manual journey records, for each of the payment periods and dates set out in Schedule 7, the total number of eligible journeys made by eligible persons using the relevant concession on the operator's eligible services. This is the quantity of concessionary journeys represented in the formulae set out in Schedule 4b & Appendix B by the letter "J<sub>conc</sub>".

### **3. Estimates to be made in the absence of information from the operator**

- 3.1. In the event that the operator fails to provide sufficient information to enable the Combined Authority to determine the number of concessionary journeys made during a particular period, the Combined Authority may at its discretion make such estimates as it thinks fit of the concessionary journeys made by eligible persons carried by the operator on eligible services, subject to correction when, and to the extent that, better information is made available to the Combined Authority.
- 3.2. In the event that any operator with smart ticketing machines fitted to their vehicles provides a materially greater proportion of manual journey records in accordance with paragraph 1.2 in respect of eligible journeys made on such vehicles than other operators with smart ticketing machines, then the Combined Authority shall be entitled to request further information from such operator(s) in respect of such returns, to identify whether such manual journey records properly relate to eligible journeys. For the avoidance of doubt, where the Combined Authority believes that such manual journey records do not reflect the actual number of eligible journeys, then the Combined Authority shall be entitled to make an estimate as it thinks fit, subject to correction when, and to the extent that, better information is made available to the Combined Authority.

## **Schedule 2c) Rail - Senior, Disabled, Blind, & Young Persons**

### **4. Operation of the Standard Method**

- 4.1. The Authority will determine its reimbursement payments to the operator on the basis of the estimates it makes of the total number of passenger journeys made by eligible persons using the relevant concession on the operator's eligible services as defined in the 1985 Act.
- 4.2. For all operators except those for which alternative arrangements are made by agreement with the Authority, the estimates of passenger journeys are calculated using historical survey data and declarations from operators.
- 4.3. The operator is required to allow surveyors employed by the Authority or its agents access to all passengers using its eligible services, as specified in Schedule 5.

### **5. Output from the Standard Method**

- 5.1. [The Authority will calculate for each of the payment periods and dates set out in Schedule 7 the total number of passenger journeys made by eligible persons using the relevant concession on the operator's eligible services. This is the quantity of concessionary journeys represented in the formulae set out in Schedule 4c & Appendix B by  $J_{conc}$ .

### **6. Estimates to be made in the absence of information from the operator**

- 6.1. In the event that the operator fails to provide sufficient information to enable the Authority to calculate the number of journeys made by eligible persons on the operators eligible services the Authority may at its discretion make such estimates as it thinks fit of the concessionary journeys carried by the operator, subject to correction as and when better information becomes available.

### **Schedule 3**

#### **Standard Method of Determining the Commercial Adult Fare** **(paragraph 19)**

##### **Schedule 3a) Bus Senior, Disabled, Blind, Companion**

1. Refer to schedule 3 in the Transport Act 2000 travel Concessions reimbursement Arrangements

##### **Schedule 3b) Bus - Young Persons**

1. The Authority will determine its reimbursement payments to the operator so as to satisfy the objectives set out in the Travel Concession Scheme Regulations 1986 on the basis of the estimates it makes of the average commercial adult fare that would be paid by eligible persons using the relevant concession on the operator's eligible or relevant services, as defined in section 146 of the 2000 Act, in the absence of the scheme. This quantity is represented in the formulae set out in Schedule 4 & Appendix B by  $F_n$ , and will be calculated for each payment period set out in Schedule 7.
2. In calculating reimbursement according to the formulae set out in Schedule 4b & Appendix B West Yorkshire Combined Authority reserves the right to reimburse an operator up to the average commercial adult fare for the West Yorkshire Combined Authority Area rather than the average commercial adult fare for the operator, where the latter is deemed to be significantly high.
3. The average commercial adult fare is related to the average Adult cash single fare  $F_{\text{cash}}$  by the application of two discount factors:
  - 3.1. the Ticket Discount Factor (TDF) which reflects the likelihood that in the absence of the concession, a proportion of concessionary passengers' journeys would be made using discounted ticket products currently offered by operators such as daily tickets and weekly tickets, assuming the current mix and price of ticket products; and
  - 3.2. the Commercial Discount Factor (CDF) which reflects the extent to which in the absence of the concession, operators would modify the mixture and pricing of ticket products relative to the current offer.
4. The average commercial adult fare  $F_n$  is therefore calculated from
 
$$F_n = F_{\text{cash}} * \text{TDF} * \text{CDF}$$
 where  $F_{\text{cash}}$  is the average Adult cash single fare
 

The Authority will determine appropriate values of TDF and CDF for the operator from time to time. In setting values for TDF and CDF, the Authority will take into account evidence of current discount levels provided by the operator. Adult cash & Day fares & number of ticket sold of each ticket may be required from time to time for this purpose as described in schedule 6b.
5. Schedule 6b represents the minimum information that the operator is obliged to provide to the Authority on revenues and passenger journeys as specified in the Travel Concessions Scheme Regulations 1986. The operator is encouraged to provide additional information beyond this legal minimum if it

considers that this will help the Authority arrive at a more accurate assessment of the Ticket Discount Factor and the Commercial Discount Factor.

For Young Persons (Peak & Off Peak Combined) the current values of TDF = 0.6667 & CDF = 1

6. As the scheme is half fare

$$F_{\text{cash}} = 2 * F_{\text{YPcash}}$$

Where  $F_{\text{YPcash}}$  is the average Young Persons cash single fare

&  $F_{\text{YPcash}}$  is calculated from single & return ticket sales sold & revenue received by Individual operators & will be provided to the Authority by individual operators as detailed in schedule 6.  $F_{\text{YPcash}}$  is the weighted average fare from single & return Young Persons ticket sales. A return ticket is 2 Journeys.

$F_{\text{YPcash}}$  is the maximum concessionary fare charged & is represented in the formulae set out in Schedule 4 by  $F_c$ , and will be calculated for each payment period set out in Schedule 7.

7. Please refer to Appendix B for Bus - Young Persons.

### **Schedule 3c) Rail – Senior, Disabled, Blind, & Young Persons**

1. The Authority will determine its reimbursement payments to the operator so as to satisfy the objectives set out in the Travel Concession Scheme Regulations 1986 on the basis of the estimates it makes of the average commercial adult fare that would be paid by eligible persons using the relevant concession on the operator's eligible or relevant services, as defined in section 146 of the 2000 Act, in the absence of the scheme. This quantity is represented in the formulae set out in Schedule 4c & Appendix B by  $F_n$ , and will be calculated for each payment period set out in Schedule 7c.
2. In calculating reimbursement according to the formulae set out in Schedule 4c & Appendix B West Yorkshire Combined Authority reserves the right to reimburse an operator up to the average commercial adult fare for the West Yorkshire Combined Authority Area rather than the average commercial adult fare for the operator, where the latter is deemed to be significantly high.
3. Schedule 6c represents the minimum information that the operator is obliged to provide to the Authority on revenues and passenger journeys as specified in the Travel Concessions Scheme Regulations 1986.
4. Please refer to Appendix B for Rail.

## Schedule 4

### Standard Method of Determining Reimbursement ( paragraph 19)

#### **Schedule 4a) Bus - Senior & Disabled & Blind & Companions**

Refer to schedule 4 in the Transport Act 2000 travel Concessions reimbursement Arrangements

#### **Schedule 4b) Bus - Young Persons**

Please refer to Appendix B for Bus - Young Persons.

#### **Schedule 4c) Rail – Senior, Disabled, Blind, Companions & Young Persons**

Please refer to Appendix B for Rail.

#### **Schedule 4d) - Young Persons Day/Week Ticket**

- 1 The Authority will reimburse operators for the number of Young Persons Day/Week tickets sold,  $T_c$ , for each reimbursement period as set out in schedule 7,  
The operator will provide the Authority with the number of Young Persons Day/Week tickets sold as set out in Schedule 6d).

$$\text{Reimbursement} = T_c * F_c * 0.5$$

Where

$T_c$  = Number of Young Persons Day/Week Tickets sold by the individual operator.

$F_c$  = Fare paid by a Young Person for a Young Persons Day/Week Ticket

#### **Schedule 4e) - Young Persons Under 19 - Bus Only Ticket (formerly known as Schoolplus)**

- 2 The Authority will reimburse operators for the number of Young Persons Under 19 - Bus Only Tickets (formerly known as Schoolplus) sold,  $T_c$ , for each reimbursement period as set out in schedule 7,

The Authority will access the number of Young Persons Under 19 - Bus Only Tickets (formerly known as Schoolplus) sold from their Dream Financial System.

$$\text{Reimbursement} = T_c * F_c * 0.5$$

Where

$T_c$  = Number of Weekly/Monthly Young Persons Under 19 - Bus Only Tickets (formerly known as Schoolplus) sold by the individual operator.

$F_c$  = Fare paid by a Young Person for a Young Persons Under 19 - Bus Only Ticket (formerly known as Schoolplus).



## **Schedule 5**

### **Survey Facilities (paragraph 27)**

1. An operator shall allow the Combined Authority's officers servants or agents to have access to (including the right to travel free of charge) the vehicles of the operator on which concessions are available for the purpose of:-
  - (a) surveying or counting or estimating the number of passengers (whether generally or of any particular description) and the fares paid by those passengers; and
  - (b) obtaining information on other matters relating to the journeys made by passengers who are eligible to receive concessions and necessary to the calculation by the Authority of reimbursement payments.
  
2. The survey data will be utilised by the Authority in calculating the reimbursement payable to the operator.
  
3. Without prejudice to the generality of 1 above, the information to be obtained from passengers may include the following:-
  - (a) whether or not the passenger is a concessionary passenger;
  - (b) if the passenger is a concessionary passenger, what category of concessionary passenger he or she is;
  - (c) if the passenger is not a concessionary passenger, whether the passenger is an adult, a child or an senior person;
  - (d) if the passenger has paid on-bus or is using a pre-paid ticket;
  - (e) if the passenger has paid on-bus, the fare paid and the type of ticket bought;
  - (f) if the passenger is using a pre-paid ticket, the type of ticket;
  - (g) the stage or stop at which the passenger boarded the bus and the stage or stop at which the passenger is to alight from the bus;
  - (h) permit or ticket fraud or mis-use on the relevant services; and
  - (i) such other information as the Authority may from time to time reasonable consider it necessary or desirable to obtain in order to enable the Authority to reimburse each operator in accordance with this Scheme.
  
4. Each operator is requested to procure that each driver of its vehicles will make available to any survey staff who request the same, the total value of cash fares shown, on the relevant vehicle's electronic ticketing machine, to have been collected on any journey surveyed by such survey staff.
  
5. Where passenger numbers can be ascertained more accurately using data generated from the use of electronic smartcard ticketing, the Combined Authority may determine, acting reasonably, that this data is used in place of such surveys and reduce the number of surveys on such operators' services accordingly.
  
6. Where and to the extent that, pursuant to paragraph 1.2 of Schedule 2, the Combined Authority is able to use, in respect of an operator's eligible services, the NERO back office data to determine concessionary passenger journey numbers, the Combined Authority shall not be required to undertake surveys pursuant to this Schedule 5, but shall retain the right to carry out such surveys, including for the purposes of validating the smart ticketing data and any manual journey records provided by that operator.

## Schedule 6

### Data Provision (paragraph 23)

#### **Schedule 6a) Bus Senior, Disabled Blind & Companions**

Refer to schedule 6 in the Transport Act 2000 travel Concessions reimbursement Arrangements

#### **Schedule 6b Bus Young Persons**

##### **Data Provision for The Authority's Survey Calculations**

- 1) Every operator claiming reimbursement under the Scheme is required to submit to the Authority a statement containing the following:-
  - i. Within 7 working days of the end of each payment period the amount of fares received by the operator for the passengers journeys made on all eligible services (received on bus only).
- 2) Each such statement must be certified in accordance with Regulation 16 of the Travel Concession Scheme Regulations 1986, by a member of the Institute of Chartered Accountants in England and Wales, the Institute of Chartered Accountants of Scotland or the Chartered Association of Certified Accountants and be provided in the form from time to time specified by the Authority.
- 3) Every operator claiming reimbursement under the Scheme is required to submit to the Authority a statement containing the following:-
  - ii. Within 7 working days of the end of each payment period the amount of cash fares revenue received by the operator for Young Persons aged 5 – 18 (Child) made on all eligible services split by single & return fares separately & the number of tickets sold per category. (received on or off bus by any method).

E.g.

Ticket Type	Revenue	Number of tickets sold	Number of journeys
Child Single	£15,000	10,000	10,000
Child Return	£10,000	5,000	=2*5,000 = 10,000
<b>Total</b>	<b>£25,000</b>		<b>20,000</b>

$F_{YP_{cash}} = \text{Total Revenue} / \text{Total Number of Journeys} = £25,000 / 20,000 = £1.25$  (weighted average price per Journey).

A return ticket is 2 Journeys.

Revenue needs to be wholly within West Yorkshire and be reported for gross cost, yellow bus services and other commercial or tendered services separately.

This allows WYCA to Calculate the Average price per journey for young Persons.

- iii. Within 7 working days of the end of each payment period the number of manual counts from the operator of young persons' journeys age 5-10 who will not be smart.

- iv. From time to time revenue from Adult cash fares & Day/ Week tickets & number of tickets sold from each category for CDF & TDF Reviews.
- 4) Each such statement must be certified in accordance with Regulation 16 of the Travel Concession Scheme Regulations 1986, by a member of the Institute of Chartered Accountants in England and Wales, the Institute of Chartered Accountants of Scotland or the Chartered Association of Certified Accountants and be provided in the form from time to time specified by the Authority.

**Schedule 6d) Young Persons Day/ Week Ticket**

- 5) Every operator claiming reimbursement under the Scheme is required to submit to the Authority a statement containing the number & revenue value of Under 19 MetroDay (formerly Metro Halfday)/Operators Own Child Day /Operators Own Child WeekTickets sold within West Yorkshire if possible. Please state which area is covered if not West Yorkshire.

Ticket Type	Revenue	Number of tickets sold	Average Price of Ticket
Under 19 MetroDay	£27,500	10,000	£2.75
Operators own Child Day	£2,500	1,000	£2.50
Operators own Child Week	£8,000	1,000	£8.00

Child day & week day tickets are for Young Persons aged 5 – 18.

## **Schedule 7**

### **Payment Periods (paragraph 16)**

#### **Schedule 7a) Bus Payment Senior Person**

<b>Month</b>	<b>Payment Periods (mid point of each month)</b>
April	Payment March passenger data
May	Payment April passenger data
June	Payment May passenger data
July	Payment June passenger data
August	Payment July passenger data
September	Payment August passenger data
October	Payment September passenger data
November	Payment October passenger data
December	Payment November passenger data
January	Payment December passenger data
February	Payment January passenger data
March	Payment February passenger data

#### **Schedule 7b) Bus Payment Young Person**

<b>Month</b>	<b>Payment Periods (mid point of each month)</b>
April	Payment March passenger data
May	Payment April passenger data
June	Payment May passenger data
July	Payment June passenger data
August	Payment July passenger data
September	Payment August passenger data
October	Payment September passenger data
November	Payment October passenger data
December	Payment November passenger data
January	Payment December passenger data
February	Payment January passenger data
March	Payment February passenger data

#### **Schedule 7c) Rail**

Payment based upon Metro historical survey data at mid point of each month as agreed with rail operators. Data is annualised and divided equally over the year in 12 equal payments.

The “payment periods” under the Arrangements are set out above or as notified to the operators from time to time by the Authority in writing.

**Schedule 8**

**Areas outside Principal Area (paragraph 7(c))**

**1. Areas outside the Principal Area for purpose of paragraph 7(c)(ii)**

**Bus Travel - Senior, Disabled, Blind Persons & Companions**

The Scheme shall apply only on a journey commencing within West Yorkshire to a neighbouring authority.

**Bus Travel - Young Persons**

The Scheme shall apply only on a journey to & from the West Yorkshire boundary.

**Train Travel**

The Scheme shall apply only on a journey to & from the West Yorkshire boundary.

**2. Areas outside the Principal Area for purpose of paragraph 7(c)(iii)**

**Bus Travel**

The Scheme shall not apply to journeys wholly within neighbouring authority areas.

**Train Travel**

The Scheme shall not apply to journeys wholly within neighbouring authority areas.

## Schedule 9

### Modifications for Rail Services (paragraph 36)

1. Schedules 2c) 3c) 4c) 6c) have been modified for rail.
2. Please refer to Appendix B for Rail reimbursement calculations
3. **Additional costs**

This section should be read in conjunction with Appendix B & applies to rail only. The Authority will pay an amount calculated by the following formulae to Rail operators in respect of additional costs for generated travel as a result of operators participating in the Authority's scheme. No further claims for additional costs will be accepted.

Total reimbursement TR is given by the following formulae:

$$TR = RF + AC$$

$$AC = J_{conc} * C_y * D * (1-A)$$

Where

RF is amount of reimbursement for revenue forgone as defined for rail in Appendix B

AC is the amount of reimbursement for additional costs incurred

$J_{conc}$  is the number of concessionary Journeys

$C_y$  is the cost of reimbursement per generated journey for year y (value given below)

D is adjustment to journeys where concessions are charged below the maximum ( $F_c$ ) given by the formula in Appendix B for Rail.

A is defined in Appendix B for Rail by Equations (3) & (1)

In Equation (1) in Appendix B

$C_y$  & is annually inflated using the all items price index at Jan prior to the commencement of that year using the following formulae:

$$C_y = C_0 * RPI_y / 100$$

Where  $C_0 = £0.0288$  at the base price level of Jan 1987 (when the RPI was 100)

For 17/18 Jan 17 RPI = 265.5

$$C_y = 0.0288 * 265.5 / 100 = 0.0765$$

For the example in Appendix B for Rail Senior Persons off peak

$$J_{conc} = 1,500$$

$$D = 1$$

$$A = 0.690985$$

$$AC = J_{conc} * C_y * D * (1-A) = 1500 * 0.0765 * 1 * (1 - 0.690985) = £35.46$$

Total reimbursement = TR = RF + AC

$$TR = £572.96 + £35.46 = £608.42 \text{ Appendix A}$$

## Entitlement to Concessionary Travel Permit (paragraph 28)

### 1. Senior Persons

(as defined in section 146 of the Transport Act 2000), presently:

- (a) in the case of a woman, her pensionable age,
- (b) in the case of a man, the pensionable age of a woman born on the same day.

Must be a resident of West Yorkshire

### 2. Disabled Persons

Available to any eligible person of any age who meets the following criteria: -

- partially sighted;
- profoundly or severely deaf;
- without speech;
- someone who has a disability or injury, which has substantial and long-term adverse effect on their ability to walk;
- someone who does not have arms, or has a long-term loss of the use of both arms;
- someone who has a learning disability, that is, a state of arrested or incomplete development of mind, which includes significant impairment of intelligence and social functioning;
- someone who has been, or would be refused a driving licence on certain medical grounds.

Disabled people who are unable to travel conveniently alone, may be entitled to a special permit entitling a companion (it need not be the same person for every journey) to the same concessions when travelling with them.

Must be a resident of West Yorkshire

### 3. Blind Persons

In general terms a person will be eligible if they cannot see (with glasses, if worn) the top letter of the eye test chart used by opticians and doctors, at a distance of 3 metres.

Must be a resident of West Yorkshire

### 4. Disabled & Blind Companion

Persons who may require a companion when travelling must obtain a special 'with/without' companion permit.

The companion need not be a resident of West Yorkshire.

### 5. Young Persons (up to age 10yrs)

Available to any person up to the age of 10yrs.

### 6. Young Persons (5 to 16yrs)

Available to West Yorkshire Residents aged 5 to the day before the holder's 16<sup>th</sup> Birthday holding a Metro Under 16 Photocard (formerly known as Young Persons Photocard)

**7. Young Persons (16 to 18yrs)**

Available to West Yorkshire Residents aged 16 to the day before the holder's 19<sup>th</sup> Birthday holding a Metro16-18 Photocard (formerly known as Scholars Photocard).

**8. Young Persons MetroDay Ticket**

Available to a person holding a Metro Under 16 Photocard (formerly known as Young Persons Photocard) or 16-18 Photocard (formerly known as Scholars Photocard).

Must be a resident of West Yorkshire.

**9. Young Persons Under 19 - Bus Only Ticket (formerly known as Schoolplus)**

Available to a person holding a Metro Under 16 Photocard (formerly known as Young Persons Photocard) or 16-18 Photocard (formerly known as Scholars Photocard).

Must be a resident of West Yorkshire.

**10. Young Persons Operators Own Ticket**

Available to a person holding a Metro Under 16 Photocard (formerly known as Young Persons Photocard) or 16-18 Photocard (formerly known as Scholars Photocard).

Must be a resident of West Yorkshire.



## Appendix B

### Concessionary Travel Reimbursement

#### For Rail, & Young Persons On Bus

#### 1. Introduction

This appendix provides supplementary and detailed information on the calculation of reimbursement for the West Yorkshire Concessionary Travel Scheme for all Rail categories & Young Persons on Bus. It applies from 1 April 2017 until further notice.

#### 2. Reimbursement Formula

The amount of revenue forgone reimbursement is calculated separately for the following categories:

##### **Rail - Senior Persons, Disabled Persons and Companions**

(a) peak (for historical survey data 15:00 - 18:00 only). From April 2017 this category is no longer reimbursed.

(b) off-peak periods (for historical survey data 9:30 – 15:00 & after 18:00). From April 17 9:30 – 16:00 & after 18:30.

##### **Rail - Blind Persons**

(c) all periods

##### **Rail - Young Persons**

(d) peak periods

(e) off-peak periods.

##### **Bus - Young Persons**

(f) all periods

In each case the amount due is calculated from:

(i) the **average Concessionary fare** actually paid by the category of concessionary passengers on the operator's eligible services in the quarter

(ii) the **average Commercial Adult fare** that would be paid in the absence of the Scheme on the operator's eligible services.

(iii) the **number of Eligible journeys** made on eligible services

## 2.1 Rail – All Categories

The amount of reimbursement for revenue forgone, **RF**, due in each category is then calculated from the formula:

$$\mathbf{RF} = J_{\text{conc.}} \cdot D \cdot (A \cdot F_n - F_c) \quad (1)$$

where -

**RF** is amount of reimbursement for revenue forgone  
**J<sub>conc</sub>** is number of concessionary journeys  
**F<sub>n</sub>** is average commercial adult fare (in £s)  
**F<sub>c</sub>** is average maximum concessionary fare (in £s)  
**D** is adjustment to journeys where concessions are charged below the maximum (**F<sub>c</sub>**) given by the formula:-

$$\mathbf{D} = (1 + B_y \cdot F_d) / (1 + B_y \cdot F_c) \quad (2)$$

A is given by the formula:

$$\mathbf{A} = (1 + B_y \cdot F_c) / (1 + B_y \cdot F_n) \quad (3)$$

where -

**B<sub>y</sub>** are constant for each Eligible category for a given year (values given below)

**F<sub>d</sub>** is the average concessionary fare actually charged.

(Note that  $D = 1$  where maximum concessions are charged ie where  $F_d = F_c$ )

Values for **B<sub>y</sub>** are adjusted annually for inflation using the following formula:

$$\mathbf{B}_y = B_o \times 100 / \mathbf{RPI}_y \quad (4)$$

where -

**B<sub>y</sub>** are the B values for the financial year Y

**B<sub>o</sub>** are the B values at the base price level of January 1987 (when the RPI was 100)

**RPI<sub>y</sub>** is the Retail Price Index for January of year Y.

In (4) **B<sub>o</sub>** takes the following values (with fares and reimbursements both in £s) as at January 1987:

<b>B<sub>o</sub></b>	<b>Peak</b>	<b>Off-Peak</b>
Rail Senior, Disabled Persons and Companions	1.187156	2.147008
Rail Young Persons	0.733214	2.147008
Rail Blind Persons and Companions	2.147008	2.147008

Hence in (2) and (3) for 2017/18 **B<sub>y</sub>** takes the following values (with fares and reimbursements both in £s).

<b>B<sub>y</sub></b>	<b>Peak</b>	<b>Off-Peak</b>
Rail Senior, Disabled Persons and Companions	0.447	0.809
Rail Young Persons	0.276	0.809
Rail Blind Persons	0.809	0.809

(The effect of these adjustments is to increase money reimbursement at any given money fare; if fares are changed in line with inflation then reimbursement will also change with inflation.) Operators will be notified of the B values for the year (B<sub>y</sub>), following publication of the January RPI.

## 2.2 Bus – Young Persons

The amount of reimbursement for revenue forgone, **RF**, due in each category is then calculated from the formula:

$$\mathbf{RF} = J_{\text{conc}} \cdot D \cdot (A \cdot F_n - F_c) \quad (5)$$

where -

**RF** is amount of reimbursement for revenue forgone  
**J<sub>conc</sub>** is number of concessionary journeys  
**F<sub>n</sub>** is average commercial adult fare (in £s)  
**F<sub>c</sub>** is average maximum concessionary fare (in £s)  
**D** is adjustment to journeys where concessions are charged below the maximum (F<sub>c</sub>) given by the formula:-

$$\mathbf{D} = (1 + G_y \cdot F_d) / (1 + G_y \cdot F_c) \quad (6)$$

F<sub>c</sub> is currently half fare

A is given by the formula:

$$\mathbf{A} = (1 + G_y \cdot F_c) / (1 + G_y \cdot F_n) \quad (7)$$

where -

**G<sub>y</sub>** are Constant for each Eligible category for a given year. They represent combined peak & off peak values of former B values. (Their values are given below)

**F<sub>d</sub>** is the average concessionary fare actually charged.

(Note that D = 1 where maximum concessions are charged ie where F<sub>d</sub> = F<sub>c</sub>)

Values for **G<sub>y</sub>** are adjusted annually for inflation using the following formula:

$$\mathbf{G}_y = G_0 \times \text{RPI}_0 / \text{RPI}_y \quad (8)$$

where -

**G<sub>y</sub>** are the G values for the financial year Y

**G<sub>0</sub>** are the G values which have been rebased using July – Sept 2015 survey data (the last available survey data). This has been done to combine reimbursement for peak & off peak Journeys into one demand function. Reimbursement is no longer split into peak & off peak for young persons.

**G<sub>0</sub>** is the average value of Retail Price Index for Jul- Sept 2015

**RPI<sub>y</sub>** is the Retail Price Index for January of year Y.

In (8)  $G_0$  takes the following values (with fares and reimbursements both in £s) from April 2017 & is based on data from July – Sept 2015

$G_0$	All Periods
Bus Young Persons	0.516644

Hence in (6) and (7) for 2017/18  $G_y$  takes the following values (with fares and reimbursements both in £s).

$G_y$	All Periods
Bus Young Persons	0.505

(The effect of these adjustments is to increase money reimbursement at any given money fare; if fares are changed in line with inflation then reimbursement will also change with inflation.) Operators will be notified of the G values for the year ( $G_y$ ), following publication of the January RPI.

### 3. Hypothetical Examples

#### Rail - Senior Persons Off Peak

Suppose revenue forgone reimbursement for Senior Persons travelling by Rail in the off-peak is to be calculated.

Assume :

$J_{conc}$ (number of journeys)	= 1,500
$F_n$ (average commercial adult fare)	= £2.00
$F_c$ (average concessionary fare)	= £1.00
$F_d$	= $F_c$ (ie maximum fares charged)
RPI for the year in question	= 265.5(17/18)

First, it is necessary to calculate the appropriate B value for the year in question. (WYCA publishes these figures each year. NB not to be confused with Beta values for Bus - Senior & Disabled, Blind & Companions)

From equation (4):

$$B_y = 2.147008 \times 100/265.5 = 0.809$$

Next, the A value can be calculated using equation (3):

$$A = (1 + 0.809 \times £1.00) / (1 + 0.809 \times £2.00) = 0.690985$$

**NB.** The value of A will only remain at this value for the year if the Average Commercial Adult fare and the concessionary fare do not change during the year.

Assuming that maximum concessionary fares are charged (ie. No operator gives a discount on concessionary fares)

Then  $F_d = F_c$

It follows from equation (2) that  $D = (1 + B_y F_c) / (1 + B_y F_c) = 1$

Now, reimbursement can be calculated using equation (1):

$$R = 1,500 \times 1 \times (0.690985 \times £2.00 - £1.00) = £572.96$$

### Bus – Young Persons

Suppose revenue forgone reimbursement for Young Persons travelling by Bus is to be calculated.

Assume :

$F_{\text{cash}}$  from the survey system = £1.50

$F_n$  (average commercial adult fare) =  $F_{\text{cash}} * \text{TDF} * \text{CDF} = 1.50 * 0.6667 * 1 = £1.00$

(see schedule 3b for TDF & CDF definitions & values)

$J_{\text{conc}}$  (number of journeys) = 1,000

$F_n$  (average commercial adult fare) = £1.00

$F_c$  (average concessionary fare) = £0.75

$F_d$  =  $F_c$  (ie maximum fares charged)

RPI for the year in question = 265.5 (2017/18)

First, it is necessary to calculate the appropriate G value for the year in question. (WYCA publishes these figures each year. NB not to be confused with B Values from Rail Formulae nor Beta values for Bus - Senior & Disabled, Blind & Companions)

From equation (8):

$$G_y = 0.516644 \times 259.3 / 265.5 = 0.505$$

Next, the A value can be calculated using equation (7):

$$A = (1 + 0.505 \times £0.75) / (1 + 0.505 \times £1.00) = 0.916098$$

**NB.** The value of A will only remain at this value for the year if the average commercial adult fare and the concessionary fare do not change during the year.

Assuming that maximum concessionary fares are charged (ie. No operator discount on concessionary fares)

Then  $F_d = F_c$

It follows from equation (6) that  $D = (1 + G_y F_c) / (1 + G_y F_c) = 1$

Now, reimbursement can be calculated using equation (5):

$$RF = 1,000 \times 1 \times (0.916098 \times £1.00 - £0.75) = £166.14$$

## 4. Reimbursement Rates

The descriptions below show the B or G values (for 17/18) & times they apply for the reimbursement payable from 1 April 2017 to 31 March 2018 for different categories of journeys.

#### **4.1 Rail - Senior & Disabled in Peak Periods**

Rail S&D peak  $B_y = 0.447$

This applies on Mondays to Fridays (excluding Public Holidays) for Senior and Disabled Persons travelling by Rail for historical survey data 15:00 - 18:00 only. From April 2017 this category is no longer reimbursed.

#### **4.2 Rail Young Persons in Peak Periods**

Rail peak  $B_y = 0.276$

This applies on Mondays to Fridays (excluding Public Holidays) for Young Persons travelling by rail boarding before 09:30 and from 15:00 to 18:00 hours. The figures for Young Persons apply to Young Persons (aged 16 to 18) except those (aged 16 to 18) using School Pass.

#### **Note:**

To calculate reimbursement payments assume that an operator's average concessionary fare is exactly half their no scheme fare. However, because of rounding down to the nearest 1p this is not necessarily exactly the case and actual revenue foregone reimbursement may differ slightly from the amounts calculated. (See Young Persons in schedule 1 Eligible persons of the Scheme travelling by rail.)

#### **4.3 Rail Senior & Disabled in Off-Peak Periods (also Rail Blind Persons in all periods\*)**

Rail S&D off-peak  $B_y = 0.809$

This applies on Mondays to Fridays for Senior and Disabled Persons travelling by rail, for historical survey data boarding from 9:30 – 15:00 & after 18:00 and all day on Saturdays, Sundays and Public Holidays. From April 17, 9:30 – 16:00 & after 18:30. and all day on Saturdays, Sundays and Public Holidays.

\* Blind Persons (and in certain cases their companions - see Eligible Persons in schedule 1) pay zero fare all day every day.

#### **4.4 Rail Young Persons Off-Peak**

Rail YP off-peak  $B_y = 0.809$

This applies on Mondays to Fridays for Young Persons boarding on rail from 09:30 to 15:00 hours and from 18:00 hours, and on Saturdays, Sundays and Public Holidays all day. This covers those aged 16 to 18 except those (aged 16 to 18) using School Pass.

#### **4.5 Bus Young Persons All periods**

Bus YP  $G_y = 0.505$

This applies on Mondays to Sundays for Young Persons boarding on bus all day. This covers those aged 5 to 18 except those (aged 5 to 18) using School Pass.

## 5. Explanation Of Formulae Employed

The first part of this section explains how the reimbursement formulae in Section 2 above are derived. The second part details how the particular values for  $B_0$  given above are obtained.

### Derivation of reimbursement formula (R)

Formula (1) above is based on a demand equation relating journeys,  $J$ , to fare,  $F$ :

$$J = K / (1 + BF) \quad (9)$$

where -

K and B are constants.

From (9) above the change in journeys from  $J_{conc}$  to  $J_n$  as a result of applying "average adult commercial" fares ( $F_n$ ) in the absence of the scheme rather than concessionary fares ( $F_c$ ) is given by:

$$J_n/J_{conc} = (1 + BF_c) / (1 + BF_n)$$

As defined in Section 2 above:

$$A = (1 + B_y F_c) / (1 + B_y F_n)$$

So:

$$A = J_n/J_{conc} \quad (\text{With } B = B_y)$$

Reimbursement, R, is determined by the change in revenue:

$$\begin{aligned} R &= J_n F_n - J_{conc} F_c \\ &= J_{conc} \times [(J_n/J_{conc} \times F_n) - F_c] \\ &= J_{conc} \times (A F_n - F_c) \end{aligned} \quad (10)$$

Compare (10) above with (1) (if  $D = 1$ ).

Derivation of values for  $B_0$ .

Values for  $B_0$  in the reimbursement formula (4) have been derived by using national and local evidence of response to fares to determine elasticity values for each passenger group concerned at current average fares. (Elasticity is a measure of the rate of change of passengers in response to a change in fare.)

The relationship between fare elasticity, E, and the constant B is as follows.

By definition:

$$E = (dJ/dF) \times (F/J) \quad (11)$$

From (11) and the general demand equation (9):

$$E = [- KB / (1 + BF)^2] \times [(1 + BF) / K] \times F$$

$$= (-BF) / (1 + BF)$$

So:

$$E(1 + BF) = -BF$$

$$BEF = -BF - E$$

$$B = \frac{-E}{EF + F} = \frac{-E}{F(1 + E)} \quad (12)$$

The following "base values" for B (rail Only) were derived using equation (12) above from the following elasticities and corresponding fares (with fares and B values at January 1987 prices, when RPI=100 :

	<b>Fare</b>	<b>Elasticity</b>	<b>Base B Value ( B<sub>o</sub>)</b>
Peak Rail - Senior & Disabled Persons	36.10p	- 0.300	1.187156
Peak Rail & Bus - Young Persons	34.10p	- 0.200	0.733214
Peak Rail - Blind Persons	28.07p	- 0.376	2.147008
Off - Peak Rail - Senior & Disabled Persons	28.07p	- 0.376	2.147008
Off - Peak Rail & Bus - Young Persons	28.07p	- 0.376	2.147008
Off - Peak Rail - blind	28.07p	- 0.376	2.147008



## **Appendix C**

### **School Pass**

#### **1 Introduction**

This appendix provides supplementary and detailed information on the calculation of reimbursement for the School Pass product, which is valid on bus and train.

#### **2 Reimbursement**

Operators will be reimbursed on the basis of patronage from NERO & manual journey records and fares information derived from Metro's Survey System. The data provided enables Metro to establish the market share of each operator.

Some small operators are reimbursed under deminimis arrangements, whereby they are paid for the number of School Pass issued for use on specified services operated.

#### **3 Revenue Pools**

A revenue pool for School Pass is established on the basis of the actual number of School Pass issued on behalf of Local Education Authorities (LEAs). The total value of the pool is equal to the agreed cost of the School Pass, multiplied by the number of cards issued.

#### **4 Pricing**

The price of School Pass will be agreed annually between WYCA and the West Yorkshire Operators' Group.

#### **5 Payments Timetable**

Operators that receive more than 5% of the revenue pool will be paid in accordance with the timetable set out below. All other operators, unless covered by the deminimis arrangements, will receive a single payment when the revenue pool is reconciled in the Autumn. Timetable for Payments (per academic year):

- First working day in September for the new academic year (45% of Revenue Pool – 1<sup>st</sup> on account)
- First working day in November for new academic year (45% of Revenue Pool – 2<sup>nd</sup> on account)
- Early June payment based on 95% of Revenue Pool less 1<sup>st</sup> and 2<sup>nd</sup> on account payments.
- Late Autumn final distribution of remaining Revenue Pool to all operators.

## **Appendix D**

### **Under 19 - Bus Only Ticket (formerly known as Schoolplus)**

#### **1 Introduction**

This appendix provides supplementary and detailed information on the calculation of reimbursement for the Under 19 - Bus Only (formerly known as Schoolplus) product, which is valid on bus.

#### **2 Reimbursement**

Operators will be reimbursed on the basis of patronage from NERO and manual journeys records and notional fares information derived from Metro's historical data. The data provided enables Metro to establish the market share of each operator.

Some small operators are reimbursed under deminimis arrangements, whereby they are paid for the number of Under 19 - Bus Only (formerly known as Schoolplus) issued for use on specified services operated.

#### **3 Revenue Pools**

Revenue pools are reconciled and distributed to operators on the basis of notional value of travel derived from NERO, manual journey records and Metro historical data.

#### **4 Pricing**

Agreed from time to time by the West Yorkshire Ticketing Company Limited.

#### **5 Payments Timetable**

Please refer to Schedule 7 – Payment Periods