

Bus Strategy Appendix C

WEST YORKSHIRE TRENDS: EVIDENCE

June 2016

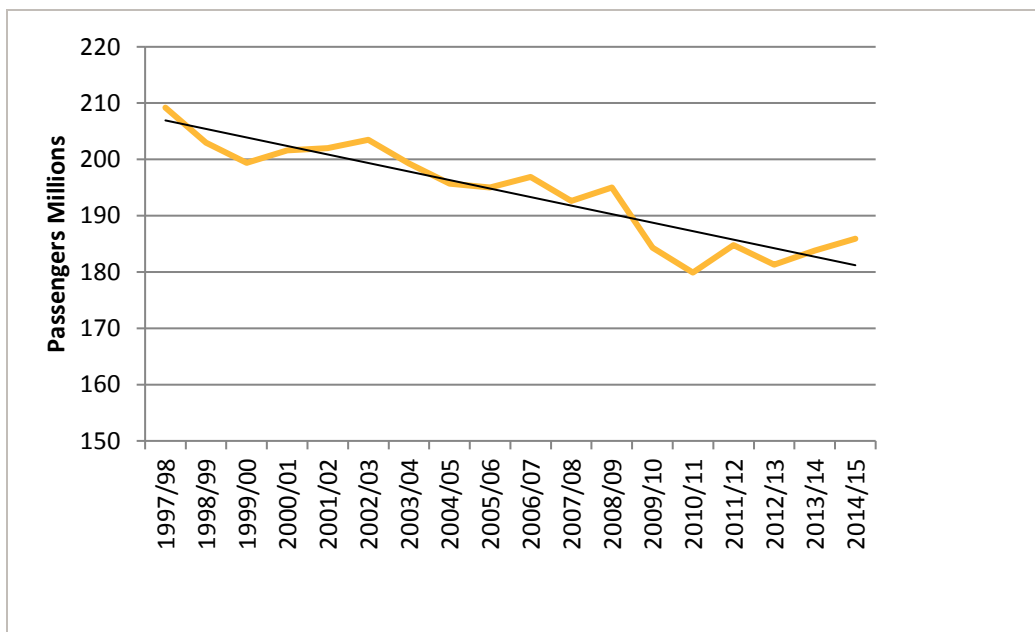
1 West Yorkshire Trends Evidence

1.1 This appendix compiles information on the key trends that have been affecting the bus system in West Yorkshire over the last twenty years. We start by looking at the trends in bus use over this period.

BUS USE HAS BEEN FALLING FOR MANY YEARS

1.2 There is a picture of long term decline in bus use in West Yorkshire. Ridership fell from around 210 million journeys per year in 1997/8 to just under 180 million journeys in 2010/11 in the midst of the last recession. Since then ridership levels have risen slightly, to around 186 million journeys, but remain around 11% lower than they were in 1997/8.

Figure 1.1 West Yorkshire Bus Patronage



Source: West Yorkshire LTP

1.3 During this period patronage has followed a general downward trend, falling most sharply through the early years of the most recent economic crisis from 2008/9 onwards, dropping from 195 million to 180 million in 2010/11, an 8% fall in three years.

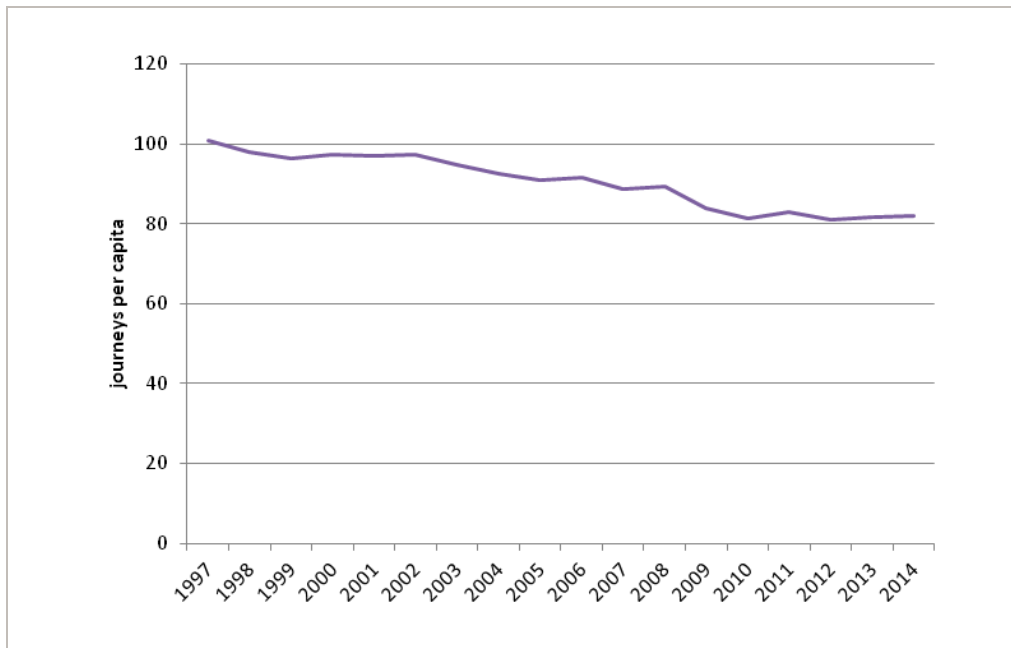
1.4 The recent modest upward trend coincides with the economic recovery out of recession (a patronage profile that is consistent with the pattern following previous recessions) and with the delivery of a number on-going enhancement initiatives by both WYCA and the operators described in Chapter 1 of the Bus Strategy. The growth masks differences in patronage across West Yorkshire, with for example First Leeds claiming double digit growth since 2013.

1.5 It has also coincided with the population of West Yorkshire growing by over 3% since 2009, and by over 9% overall since 1997.

1.6 The population of West Yorkshire increased from 2.07 million in 1997 to 2.26 million in 2014, with both Bradford (13% growth to 0.53 million) and Kirklees (12% growth to 0.43 million) growing at faster rates than the West Yorkshire average of just over 9%.

- 1.7 When compared to this backdrop of population growth the contrast with the long term decline in the level of bus use is stark - ridership has been falling despite there being more potential users of the system.
- 1.8 The small upswing in bus ridership since 2011 shown in Figure 1.1, whilst welcome, needs to be viewed in the context of this population growth which means that ridership per capita is in effect standing still over this period - Figure 1.2 below.

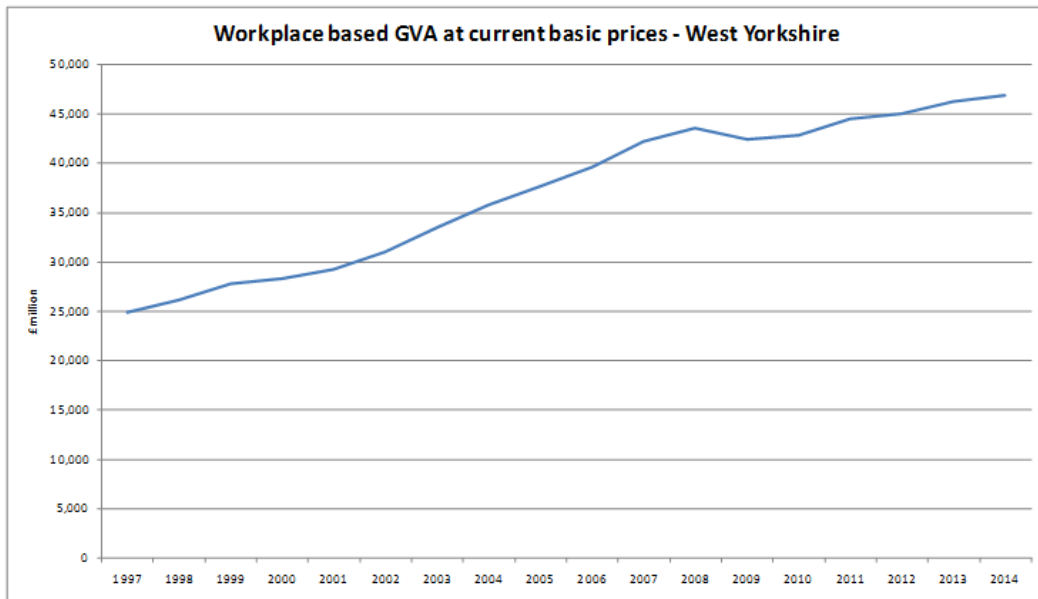
Figure 1.2 Index of West Yorkshire Bus Passenger Journey Per Capita



WYCA/ ONS mid year population estimates

- 1.9 Over the same period the economy in West Yorkshire, as measured by workplace GVA, has also followed an upward course, albeit at a lower rate post-recession (averaging 1.6 % pa between 2010 and 2014), than pre-recession (averaging 3.1% pa between 1991 and 2008).

Figure 1.3 Workplace based GVA



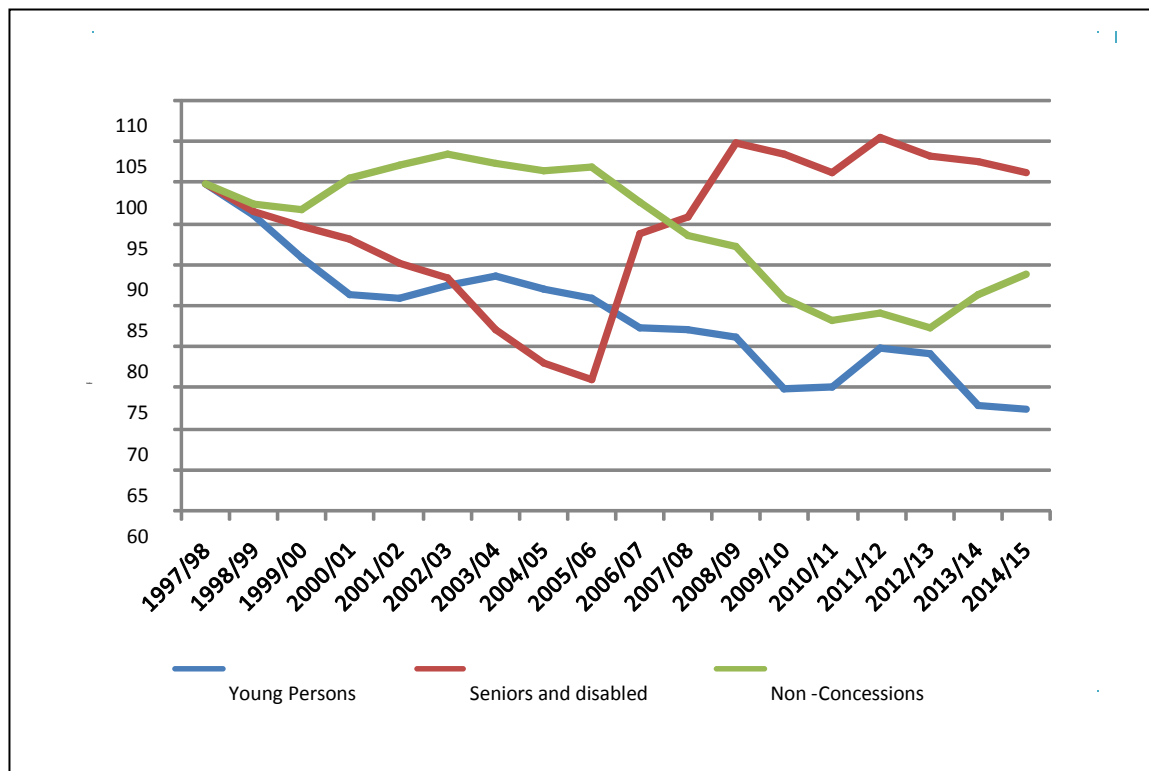
ONS: Regional Gross Value Added (income Approach) NUTS2 Tables (Table 2.1)

- 1.10 A growing economy can be a double-edged sword for bus patronage. Economic growth has been accompanied by car ownership growth (see Figure 1.8 later in this appendix) which can impact adversely on bus patronage, but has also resulted in more employment which increases the demand for commuting.
- 1.11 As the economy has recovered following the economic crisis, employment has risen in West Yorkshire. This is reflected in a levelling out in the decline of full fare paying passengers, and subsequently a small increase in third part of the market over this period. This core element of this market sector is people using the bus to travel to work.

The overall patronage decline masks a number of other trends

- 1.12 While the general picture on patronage is one of decline there are some significant trends underlying the overall bus passenger numbers. Figure 1.4 (over) illustrates them.
- 1.13 After many years of decline in the number of senior and disabled users the introduction of free concessionary travel in 2005/6 reversed this trend providing free travel for those of pensionable age within their local authority area. A second, smaller, increase can be seen in 2007/8 which coincides with the expansion of the concessionary scheme to cover travel nationally by bus for those of pensionable age. A reduction in usage is evident from 2010 which coincides with later age at which passes can be acquired, as result of state pension policy changes. (This downward drift is likely to continue at least through to 2020.)
- 1.14 This increase in senior and disabled travel has helped ameliorate the full impact of what has been a significant period of decline in young people and non-concessionary (full fare) patronage for much of the period up to 2010/11.

Figure 1.4 Bus Passenger Journeys by Group (Index)

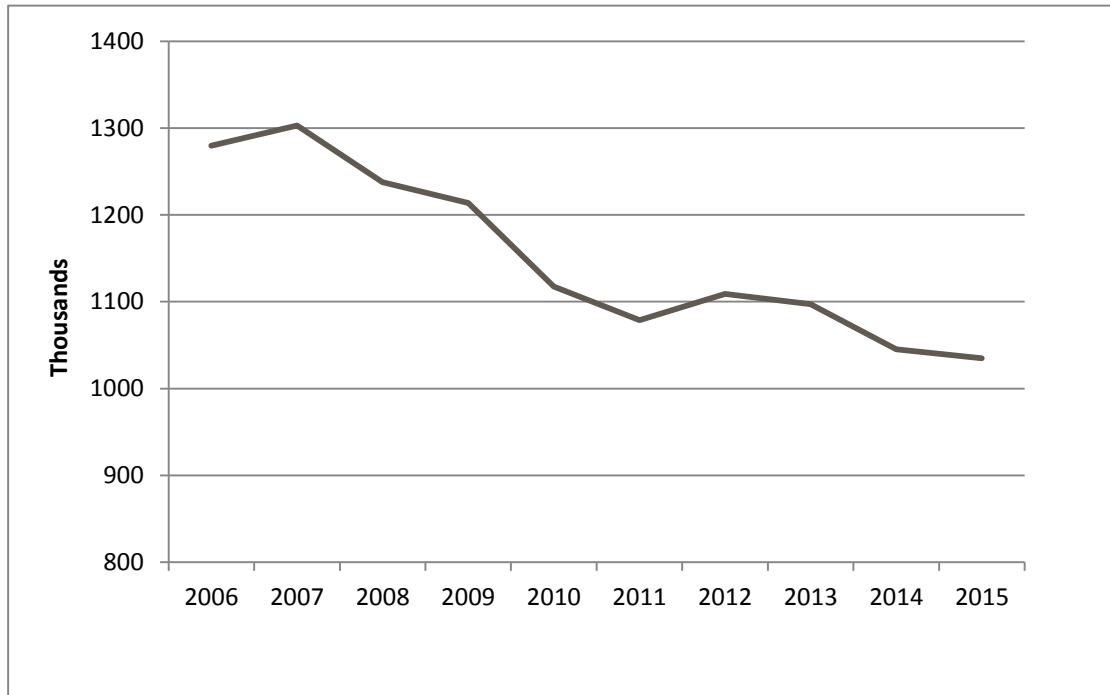


WYCA

- 1.15 Unlike the non-concessionary travel which, as already noted, has seen a recent levelling off and small increase in usage, travel by young people has declined almost continuously – falling by more than 25% since 1997/8. When viewed in combination with the decline in non-concession (full fare) passengers – more than 10% lower in 2014/15 than in 1997/8 - the declining use of the bus by these future passengers represents a severe challenge to the bus system in West Yorkshire.
- 1.16 Looking ahead, the demographic trends are also likely to be challenging. The population of West Yorkshire is forecast to rise by 8% from 2.3 million to almost 2.5 million between now and 2031 but the number of young people is expected to grow by just 7%, while those 60 and over are likely to rise by 31%, though much of this increase is amongst older seniors who will probably be less mobile.
- 1.17 The implication is that unless the bus industry can reverse its long term patronage trend of decline in journeys per head by driving up growth amongst young people the revenue earned by bus operators will be limited by the degree to which fares can be raised. Past experience has shown that willingness to pay effects can easily undermine the impact of fare rises, particularly at times of low inflation and sluggish economic growth. Therefore it is vital that trip rates increase, as have been achieved in other UK cities. We return to this point later.

BUS MILEAGE OPERATED HAS ALSO BEEN FALLING

Figure 1.5 West Yorkshire Weekly Bus Mileageⁱ



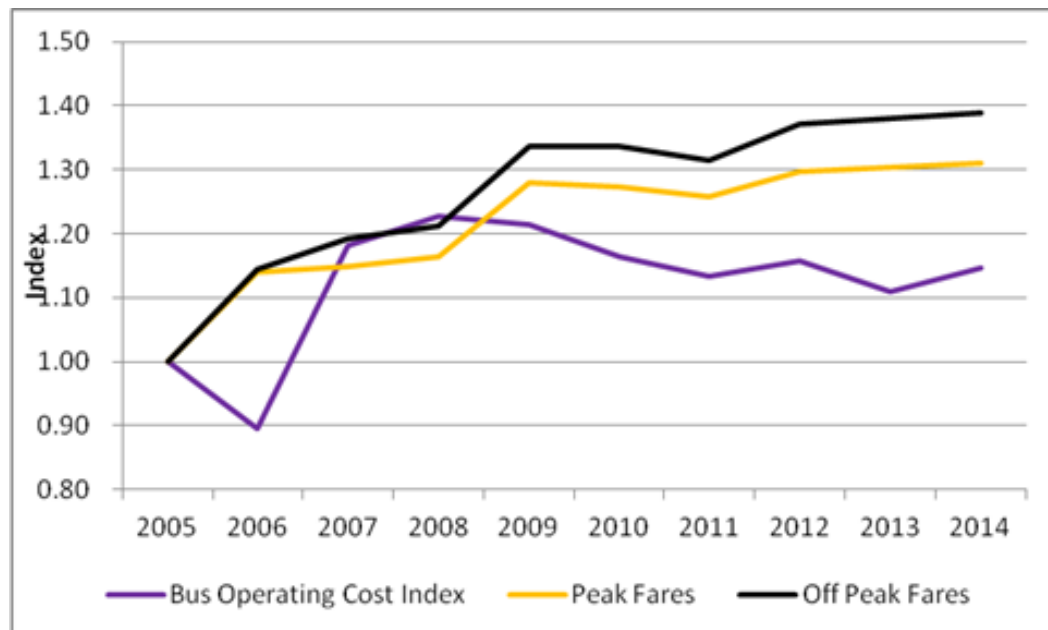
WY timetable database (WYCA does not have splits by commercial / tendered mileage)

- 1.18 As bus use has fallen so has bus mileage in West Yorkshire, from around 1.3million miles per year in 2007 to a little over 1 million miles in 2015. It is notable that this reduction in circa 20% of the bus mileage operated is significantly in excess of the decline in bus patronage in West Yorkshire over this period, a figure which is closer to 6%.
- 1.19 The decline in mileage starts in 2007 reflecting the pressures on operators at this time from high inflation, fuel prices and driver shortages. The decline steepens between 2009 and 2010 which reflects the impact of austerity and the reduction in tendered services.
- 1.20 It is also notable that the slowing in the rate of reduction since 2011 has coincided with the levelling off and small increase in patronage over this period shown in Figure 1.1.

USING THE BUS HAS BECOME MORE EXPENSIVE

- 1.21 Meanwhile bus fares have risen faster than inflation. Since 2005 off-peak fares (measured by the Adult fare) have increased by 70%, while peak fares have increased by 60%. Over the same period the Government's official measure of inflation, the Consumer Prices Index (CPI) rose by a little over 20%.
- 1.22 Examining fares and the costs of bus operation in real terms (adjusted for inflation in terms of CPI - see Figure 1.6 over) there is evidence that both peak and off-peak fares have increased more than the cost of bus operation. Fares rose sharply between 2005 and 2009, but since this time fare increases have levelled off, reflecting the more challenging conditions following the recession. The cost of bus operation also increased sharply between 2006 and 2008, likely reflecting high fuel prices and driver shortages around this time. Operating costs have remained steady, and indeed may have decreased a little in real terms, since that time.

Figure 1.6 Indices of Real Average Adult Bus Fares (West Yorkshire) and Costs of Bus Operation



LTP Monitoring Report 2014/WYCA/TAG databook. Indices and real fares and costs after accounting for changes in CPI. In the absence of data on the costs incurred by operators in West Yorkshire the best available indicator is provided by the Confederation of Passenger Transport (CPT) who produce an index of the costs of bus operation across Northern England.

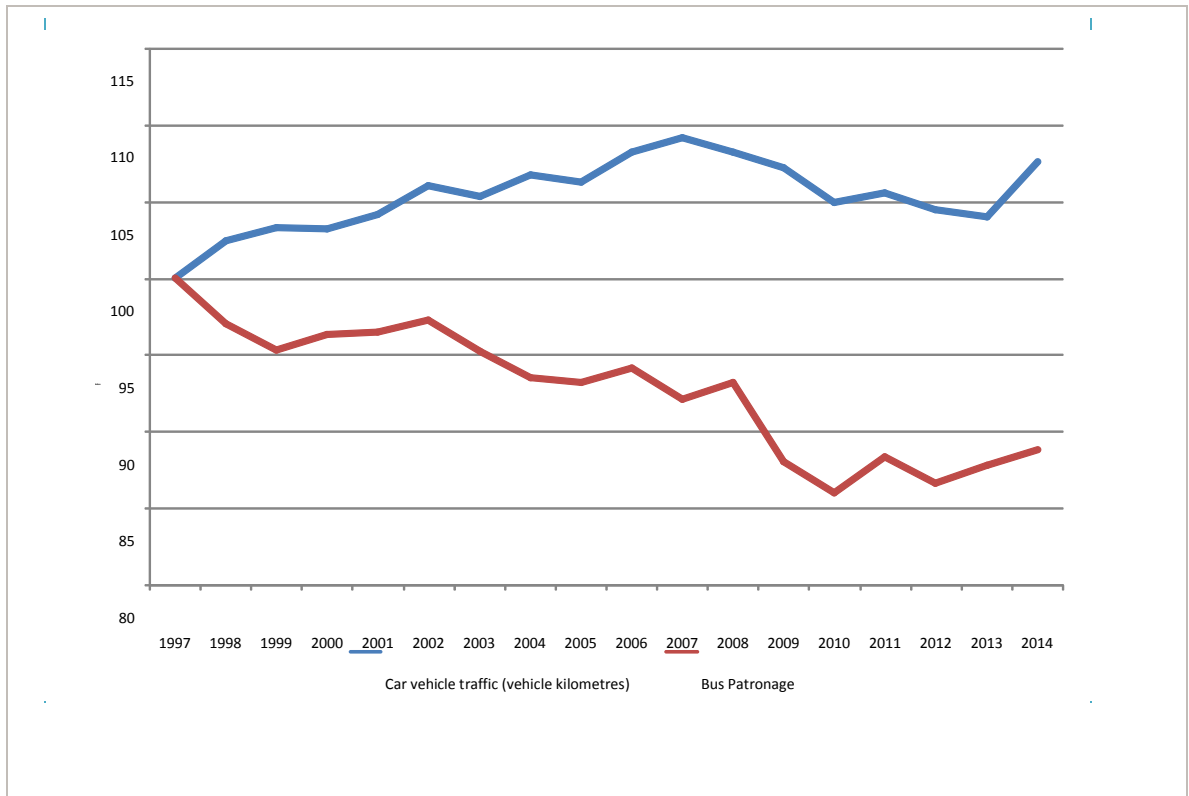
CAR, RAIL AND TAXI USAGE AND CAR OWNERSHIP CONTINUES TO RISE

- 1.23 The decline in bus usage that has been seen in West Yorkshire contrasts with the long term increase in car ownership and in travel by car. Figure 1.7 compares the trends in index form for car travel (measured in vehicle kms) and bus patronage (measured as journeys per year).
- 1.24 In line with national trends on car travel the distance travelled by car in West Yorkshire rose steadily to a peak approximately 10% higher than 1997 levels in 2008, prior to the economic crisis. Having fallen from that point until 2013 it rose again in 2014, returning to levels last seen in 2007.
- 1.25 Other modes of travel in West Yorkshire have also been growing.
- 1.26 **Rail** patronage, measured by West Yorkshire rail station entries and exitsⁱⁱ rose from around 25 million in 1997/8 to almost 70 million in 2013/14 – approaching a three-fold increase, presenting a marked contrast with the 11% decline in bus use. There are numerous factors underpinning this, not least the growth of service sector employment in city centres such as Leeds, where rail is particularly effective in providing the capacity to deliver large numbers of longer-distance commuters into congested city centre locations. However rail operates in relatively few corridors in West Yorkshire and can therefore be only part of the solution to providing access to employment for West Yorkshire residents.
- 1.27 **Taxi and private hire** provision has also grown in recent years. Data is not available for the same period as bus, rail and car travel and what is available relates to the number of vehicles (and drivers) licensed rather than journeys made. Nevertheless the data availableⁱⁱⁱ shows that between 2005 and 2015 the number of taxi and private hire vehicles licensed in West Yorkshire rose from just under 8,000 to over 10,600, which measured in terms of registered vehicles per 1000 people was an increase from 3.7 per 1000 to 4.7 (an increase of 27%). Some parts of the county have witnessed higher growth, increasing by 63% to 4.4 vehicles per 1000 people in Kirklees and by 38% in Leeds to 5.8 vehicles per 1000. While this is a measure of service provision and not ridership it is indicative of the very substantial

growth in a key competitor to the bus which is expected to be exacerbated by the impact of Uber and other technology-driven approaches to taxi and ride sharing services.

West Yorkshire Vehicle Km

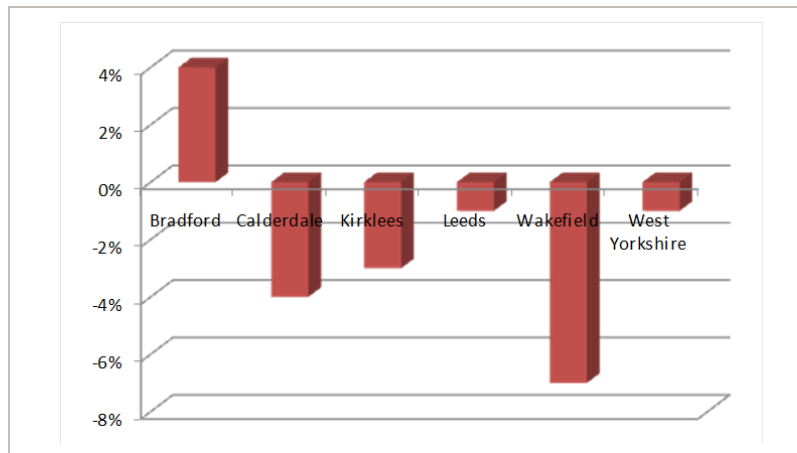
Figure 1.7 West Yorkshire Car Vehicle Km and Bus Patronage Trends (Index)



DfT statistics: Table TRA8905/ West Yorkshire LTP

1.28 Another aspect of particular importance to the competitive position of the bus is car ownership. Evidence both nationally^{iv} and locally in West Yorkshire^v show that higher usage of bus comes from households without access to a car and in West Yorkshire car ownership has continued to rise (up 12% between 2001 and 2011 to over 650,000 households) while the number of households with no car available to them has fallen steadily (from 275,000 in 2001 to 271,000 in 2011, equivalent to 30% of all households).^{vi}

Figure 1.8 Percentage Change in Households Without a Car Available 2001-2011



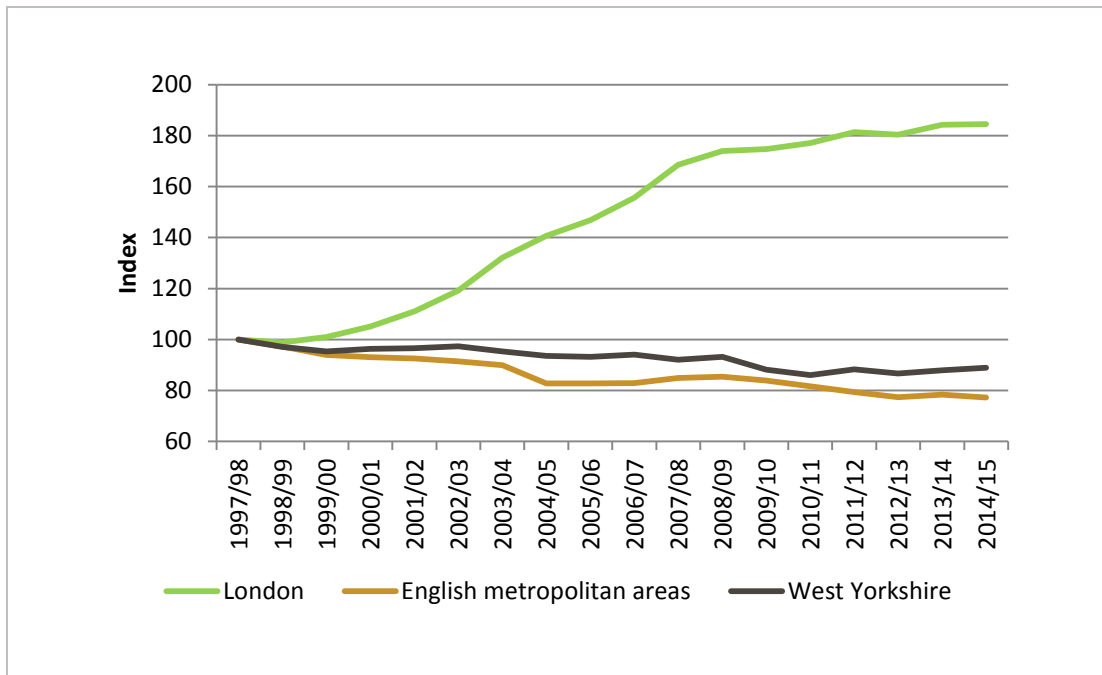
Nomis

- 1.29 Across West Yorkshire the fall in the number of households without a car between 2001 and 2011 was circa 1% but as Figure 1.8 above indicates it has been greater than that in Kirklees and Calderdale and particularly so in Wakefield with a 7% reduction, with only Bradford bucking the trend.
- 1.30 This overall trend is forecast to continue. The West Yorkshire LTP assumes, on the basis of DfT forecasts, that there will be a further reduction in the number of no-car households in West Yorkshire from 30% in 2012 to 26% in 2026.
- 1.31 Unless, as noted earlier, the bus can attract new markets these car ownership trends are another potentially serious issue since non-car owning households have traditionally been the core market for bus.

BUT A DECLINE IN BUS USE IS NOT INEVITABLE

- 1.32 The decline in West Yorkshire bus patronage has been mirrored in other metropolitan areas, indeed West Yorkshire has actually fared slightly better (Figure 1.9), but despite the trends discussed in the preceding paragraphs further decline is not inevitable. Probably the most extreme counterpoint to this is London which has seen a very different pattern of demand growth over the same period.

Figure 1.9 Passenger Journeys by Bus, London, Metropolitan Areas and West Yorkshire



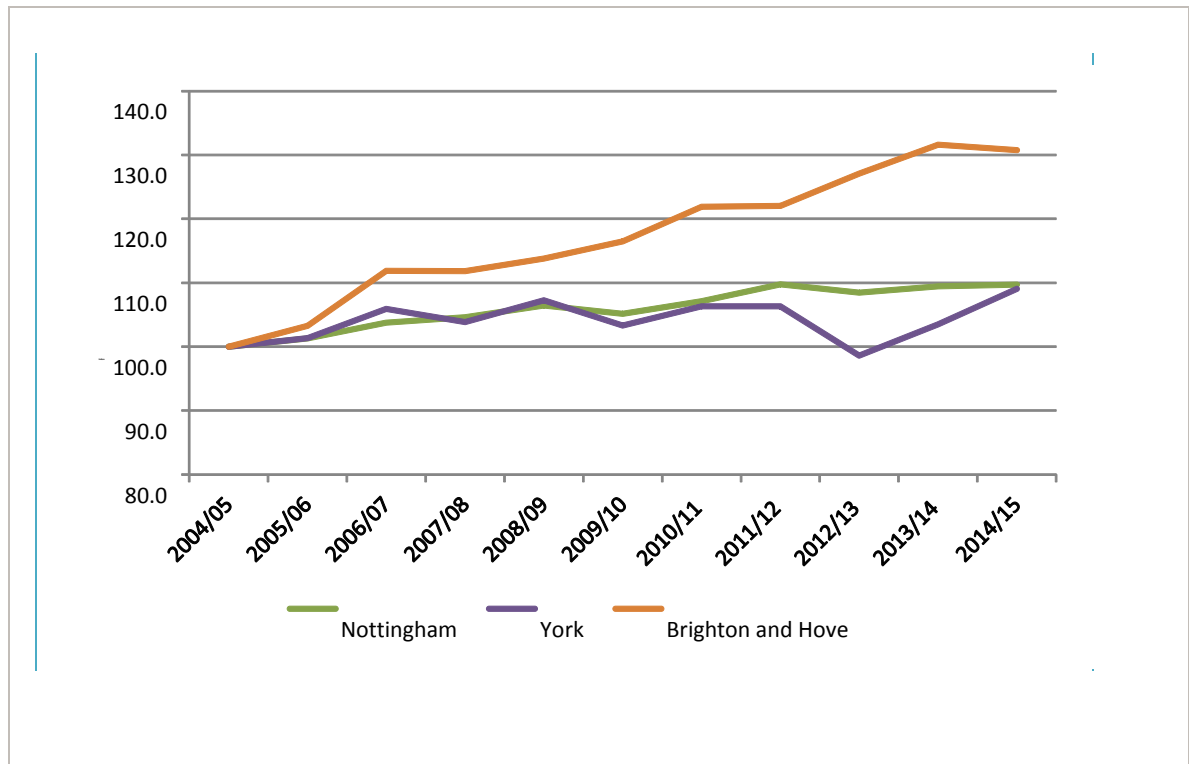
DfT Bus Statistics and West Yorkshire LTP

1.33 Although there are particular economic, demographic, legislative and policy factors at play in the capital there is evidence that growth can be achieved in local bus markets outside of London.

1.34 Research by Greener Journeys highlights a number of examples of bus passenger growth in England^{vii}:

- In Brighton bus patronage has grown by 10% over the last decade (10m additional bus passengers), contributing to a 3% reduction in city centre traffic in the 3 years to 2014;
- Kent Fastrack has seen passenger numbers up 50% on forecasts, with 20% of Fastrack passengers previously having used their car for the same journey;
- In York there has been a 10% growth in bus patronage over the 10 years to 2014, a 1.4m increase in passenger numbers;

Figure 1.10 Recent Bus Patronage -Selected Cities



DfT Bus Statistics, BUS0109b

CONCLUSIONS

1.35 In spite of investment, bus usage in West Yorkshire has continued to fall. This has occurred against a backdrop of:

- An increasing population and therefore more potential users of the system, with the population of West Yorkshire rising by 9% since 1997;
- The economy in West Yorkshire has followed an upward trend. This has been accompanied by a growth in car ownership but also an increase in employment, increasing the demand for commuting;
- An even greater contraction in the vehicle mileage operated on local bus services in West Yorkshire. It is notable that the rate of reduction in mileage slowed between 2011 and 2015, which coincides with an increase in patronage;
- An increase in senior and disabled bus users following the introduction of the free concessionary travel schemes, though this increase has levelled off as qualification age has drifted upwards, both trends being driven by national policy;
- A severe and long-term decline in bus travel by young people;
- A smaller decline in passengers of working age;
- An increase in fares above the rate of operating costs;
- Rising car ownership. There has been a reduction in 'no car' households in Wakefield, Calderdale and Kirklees; and West Yorkshire as a whole has experienced an increase in households with 1 or more cars of over 12%;
- Substantial growth in rail use, and in taxi and private hire service provision.

- 1.36 Nevertheless, experience in other areas suggests that long term decline in bus usage is not inevitable, and towns and cities elsewhere around the country have shown that with the right conditions sustained and significant annual growth rates can be achieved.

Notes and References

i weekly bus mileage for all services in WY from 2006-2015. This is based on extracts from WYCA timetable database showing weekly bus mileage for all service during the first week in February for each year covered.

ii Office of Rail and Road

iii DfT Taxis and Private Hire Vehicles (PHVs) per thousand people: England and Wales by licensing area and rural-urban classification, 31 March 2015 Table TAXI0105

iv https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/485296/annual-bus-statistics-year-ending-march-2015.pdf

v West Yorkshire Tracker Survey 2015 and Leeds TIF Surveys 2009

vi National Census 2001 and 2011

vii Greener Journeys (2014) The One Billion Challenge