

TfWM has recorded a significant decline in the number of bus boardings by both nonconcessionary and concessionary users, around 21% and 16% respectively (Figure 1). It has been hypothesised that the 5% greater decline in concessionary bus boardings may be due to a change in the age of eligibility for concessionary travellers, rather than a change in behaviour. This report will look at how the eligible population has changed throughout the West Midlands, at both bus stop catchment level and output area level, over the study period.

Figure 1. Monthly bus patronage in the West Midlands, April 2008 – April 2015 (data: TfWM)

The age of eligibility for the ENCTS is tied to the retirement age for women which, between 2010 and 2020, will increase from 60 to 65. As this increase in the age of eligibility is likely to affect concessionary bus boardings and uptake of concessionary travel passes, it is important that we understand how the eligible population has changed over the study period.

While the actual age in eligibility for the ENCTS has increased at several points each year, the temporal resolution of the population estimates used for the analysis (mid-year population estimates) limits the specificity of the eligibility estimates in this analysis. For this analysis, we increased the age of eligibility instead by 0.5 years each year from 2010. Table 1 illustrates the staged increase in the age of eligibility used for this analysis.

Table 1. Staged increase in age of eligibility for ENCTS (2008 – 2016)Year

Figure 2.

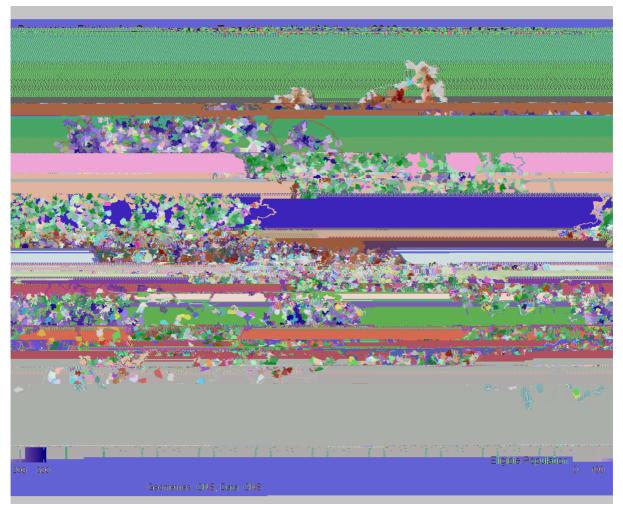


Figure 3. Eligible population living within 400m bus stop catchment areas (2016)

Figure 3 shows an estimate of the number of eligible people living within each 400m bus stop catchment area, giving an indication of the areas that have a particularly high number of people eligible for the ENCTS. Bus stop catchments in central urban areas tend to have particularly low numbers of eligible people, which again is likely due to the propensity of the older population to live in suburban and rural areas (OECD 2015). In addition, bus stop catchments in Solihull also contain low numbers of eligible people, which is likely due to the low population density in this area.

As suggested from the data in Table 2, had the age of eligibility been maintained at 60 it is likely that the eligible population living within the bus stop catchment areas would have increased year-on-year. Table 3 shows how the eligible population within each catchment would likely have changed from 2008 to 2016 had the age of eligibility remained at 60. From these results we can see that the 1% year-on-year increase seen from 2008 – 2010 in Table 2 is predicted to have continued until 2016. From 2008 to 2016 there would have been around a 6% rise in the number of eligible people living within these catchments, with around a 4% rise between 2010 and 2016.

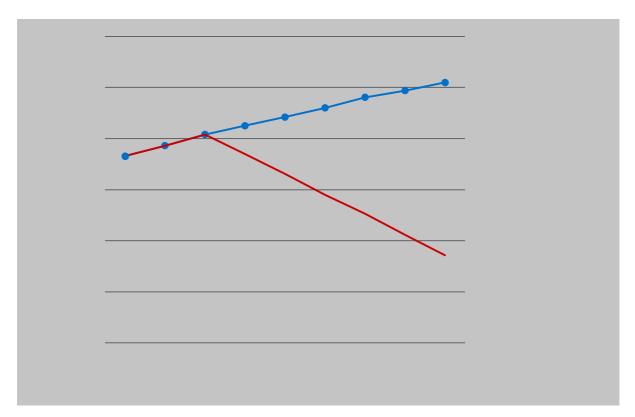


Figure 4. Population eligible for ENCTS living within 400m catchment areas

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In addition to looking at the eligible population in bus stop catchment areas, analysing this at output area level can allow us to see how the eligible population has changed across the whole of the West Midlands, in addition to comparing output area level and catchment area level changes.

Table 5. Eligible population in the West Midlands Combined Authority

Comparing the eligible population within the bus stop catchment areas, shown in Table 2, to the whole of the eligible population in the West Midlands, we can see that changes in the eligible population at output area level are similar to those at catchment area level. The same

Figure 5. Percentage change in eligible population across the West Midlands between 2009 and 2016 (output areas)

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Although the increase in the age of eligibility is unlikely to fully account for the decline in concessionary boardings that has been observed by TfWM and in the AFC data, the decline

Non-Concessionary (5 to threshold)				Concessionary (threshold -)			
Board- ings (m)	Pop. (m)	Boarding Rate	% change since 2009	Board- ings	Pop. (m)	Boarding Rate	% change since 2009

 Table 7. Annual bus patronage in the West Midlands, April 2008 – April 2015 (data provided by TfWM)

Figure 6. Eligible population in the West Midlands (2008 – 2028)

Similarly to Figure 4, Figure 6 shows the annual change in the number of people that are eligible for the ENCTS in the West Midlands between 2008 and 2028. Had the age of eligibility been maintained at 60 throughout this period, the number of eligible people living within the West Midlands would have increased by 30%, from around 540,000 to just over 700,000. With the increase in the age of eligibility increasing from 60 to 65, between 2010 and 2020, the number of eligible people living in the West Midlands is predicted to decrease by around 15%. Once the age of eligibility stabilises at 65 between 2020 and 2025, the eligible population is predicted to increase by around 6%. Once the age of eligibility begins to increase again from 65 to 68 between 2026 and 2028, the eligible population is predicted to fall once again by roughly 11%, meaning that between 2010 and 2028 there is predicted to

Figure 7. Projected change in eligible population in the West Midlands (2010 – 2028)

Figure 7 shows the projected change in the eligible population in each of the seven

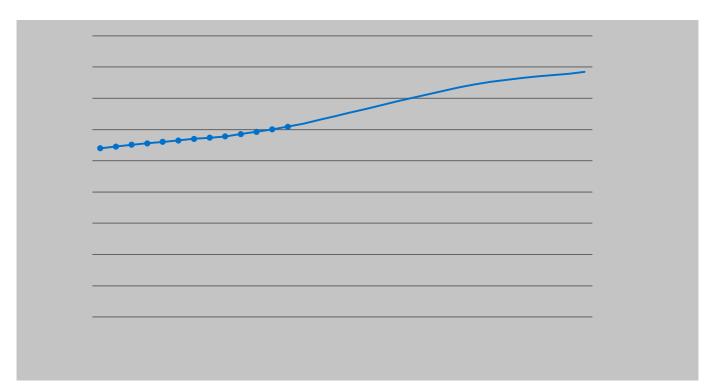


Figure 8. Eligible population in the West Midlands (2008 – 2039)

Figure 9. Projected change in eligible population in the West Midlands (2010 – 2039)

In comparison to the eligible population in 2010, the staged increases taking place between 2010 and 2028, along with natural changes in population, will result in just a 1% decrease in the size of the eligible population by 2039. Compared to this, had the age of eligibility remained at 60, there would be an increase of around 42% from the 2010 level.

Although changes in the eligible population in the West Midlands may result in some significant short-term changes in eligible population, Figure 9 shows that over a longer time period, the increase in age of eligibility from 60 to 68 combined with natural population changes will result in only a small decrease in the number of eligible people in the West Midlands.

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