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Demography drives travel demand

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In a time of financial stringency, we need to understand where travel demand will develop in the coming years if we are to make sensible decisions about transport investment. A key insight is that demographic change is the main driver of future demand.

In the past, growth of personal incomes was most important in determining travel behaviour. For the best part of two centuries, rising incomes and the development of a succession of new transport technologies enabled us to travel faster and hence further in the time we have available for daily travel. This allowed us more access to jobs, shops, schools and other regular destinations. More access meant more choice – of jobs accessible from where we live, homes accessible from where we work, and so forth.

This growth of daily travel came to an end in the mid-1990s, since when, according to the National Travel Survey, people in Britain have been making about a thousand journeys a year covering about 7000 miles on average (excluding international aviation). My interpretation is that this cessation of growth has happened because we now have enough access and choice to meet our needs (for the full argument, see my paper ‘Saturation of Demand for Daily Travel’ in the September 2010 issue of ‘Transport Reviews’). Whatever the explanation, it is clear that the historic relationship between rising incomes and growing daily travel has ceased to apply. A similar decoupling occurred at about the same time in the case of road freight, where the previous parallel growth of HGV tonne-km and GDP diverged, with the former stabilising while the latter continued to grow.

If personal daily travel is now at a plateau, then the future growth in overall travel demand and traffic will come from demographic change. The population of the UK is growing, from about 62m at present to over 70m by 2030 on current official projections. A key question is: where will the extra people live and work? Will in be in new houses on green field sites, or on brown field land? It makes a big difference for transport needs.

London provides evidence. The population of London is 7.6m and has increased by about a million over the past twenty years – proportionately similar to the increase projected for the whole country over the next twenty. This growth has occurred within existing boundaries, on brown field sites and through intensification, resulting in increased density. National Travel Survey data for London show average distances travelled by car declining, while rising for public transport. Transport for London’s data on mode share shows trips by private transport declining from 50% in 1993 to 41% in 2008, while public transport increased from 24% to 33%.

This trend of declining car use is remarkable. Historically, and pretty well everywhere else in the world, as incomes have grown so has car use. Yet in London, a world city with a vibrant economy and median incomes 50% above the national

average, this trend has gone into reverse. Moreover, the Mayor of London's Transport Strategy projects continued population growth and continued decline in car mode share to 37% in 2031.

The population is not only growing. It is ageing. The proportion of older people is increasing, as life expectancy increases and as the baby boom cohort moves into later life. At some point we have to give up driving, usually due to the impact of a combination of minor disabilities – sensory, muscular, cognitive. At that point, we need alternative means of access, the demand for which will increase as the population ages.

Another noteworthy demographic trend is the decline in driving licence holding by men in their twenties, from a peak of over 80% to 67% currently. When asked, this is attributed to the cost of car ownership and insurance. I suspect that a further factor is the larger proportion of the age group entering higher education, where the car is not central to the student life style.

Both older people and younger people are target groups for 'Smarter Choices' campaigns, hitherto focused on travel to work and to school, as well as individual travel planning. Older people may be persuaded to give up the car earlier, and younger people to defer car ownership for longer, if good alternatives are available.

The impact of demographic change has implications for transport investment. Extra people housed on green field sites will depend largely on the car, and will need more and better managed road capacity. Extra people on brown field sites within existing urban areas, where scope for additional road capacity is very limited, will use public transport and bikes. They will need more and better local buses for young and old; urban and commuter rail and Bus Rapid Transit for reliable work journeys; and High Speed Rail for city centre to city centre travel.

In recent years, about three-quarters of new housing has been on brown field land. The Government's plans for rail investment are consistent with population growth continuing largely within existing urban areas – which is good for containing carbon emissions. But national policy lacks the coherence of transport planning in London, where the Mayor has responsibilities for economic development, housing and land use as well as transport. The Mayor's Transport Strategy, published earlier this year, projects employment growth very largely in the inner boroughs, hence the need for investment in radial rail-based schemes such as Crossrail and Thameslink. In contrast, with the demise of the Regional Development Agencies and Regional Assemblies, the prospects for coherent transport planning in England outside London do not seem promising.

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