WM Combined Authority Mayoral candidates: evidence base for planning

1. The Economy

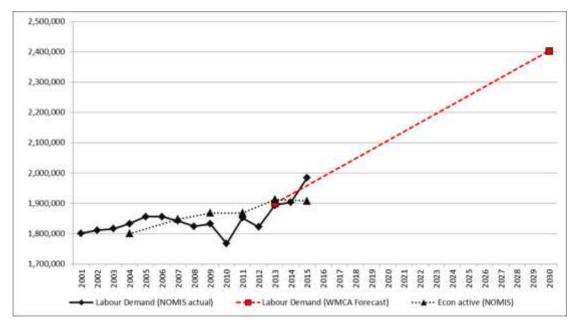
Strategic Economic Plan (SEP) for WMCA: targets

- 1.1. The Combined Authority SEP proposes ambitious targets:
 - a) An increase of 504,000 jobs from 1.9 million in 2013 to 2.4 m in 2030 (full and part-time and including self-employment); and
 - b) An increase of 70% in output per head (productivity) from £19,423 per head to about £33,000 per head by 2030 (surpassing the national average by 2026).

There are also high aspirations for improving the inclusiveness of economic growth.

- 1.2. The targets are outputs of a Dynamic Economic Impact Model (DEIM), commissioned by WMCA. This seems optimistic in the context of performance since 2001 (Figure 1.1), particularly in the light of the following:
 - a) the main data source is sample surveys (ONS/NOMIS), with sample size 1200-1600 for Met Districts and 100-300 for others. Sampling variance would be around 1% (ie 20,000 in 2 million), and there is scope for systematic error as well (eg from the changing proportion of self-employed and part-time roles).
 - b) with the exception of the single data point for 2015 the forecast is noticeably out of line with the trend. Moreover, the simultaneous reduction in the local work force implies an improbably sudden reversal from local job shortages to increased net in-commuting.

Figure 1.1: WMCA jobs, past (2001-2016) and WMCA SEP forecast (2013-2030)



1.3. Though presented without an historical perspective, the reference period for such models is generally the 15 years preceding the base-date (in this case 1998-2013). Much of this was a period of active regional economic policies in a more benign global economic context, so improving on that performance would be challenging.

1.4. However, the eight 'priority actions' proposed to bring this about (Figure 1.2) are similar to those pursued by local authority collaborations and economic development agencies in the region since the 1970s and 1980s. Even the single apparent exception (HS2) had a close parallel in the upgrade of InterCity to 125mph standard. Whether these plans have a better prospect of success than their predecessors depends on the credibility of the DEIM.

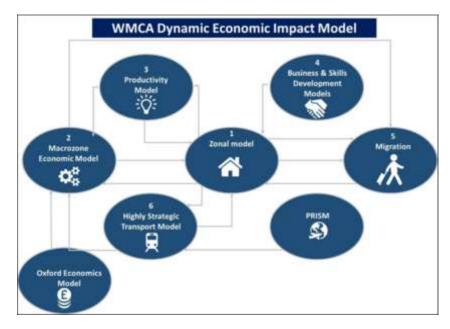
Figure 1.2 WMCA SEP - Priority actions

- New manufacturing economy: harnessing the biggest concentrations of high value manufacturing businesses in Europe and their supply chains.
- Creative and digital: further developing the area's vibrant and flourishing sector.
- Environmental technologies: securing transformational environmental improvements.
- Medical and life sciences: enabling the further growth of the medical and life sciences sector and supporting other businesses to diversify and become part of the sector's supply chain.
- HS2 growth: maximising the benefits of the largest infrastructure project in Europe.
- Skills for growth and employment for all: ensuring the skills needs of businesses are met and everybody can benefit from economic growth.
- Housing: accelerating the delivery of current housing plans to increase the level of house building to support increased level of growth.
- Exploiting the economic geography: making the most of the scale and diversity of the West Midlands' geography to enable economic growth and community wellbeing throughout the urban core and rural areas.

The Dynamic Economic Impact Model

1.5. The claims made for the DEIM are that it can appraise a wide range of infrastructure investments and other interventions, forecast potential synergies and conflicts, and thus permit optimisation of the impact of programmes co-ordinated by these means. Unfortunately only very sketchy details of DEIM have been published, and (these do not inspire confidence. As an initial observation the model draws on a wide range of other existing models together with various bespoke components (Figure 1.3). The interfacing of such multi-component models is often highly problematic.

Figure 1.3: DEIM structure



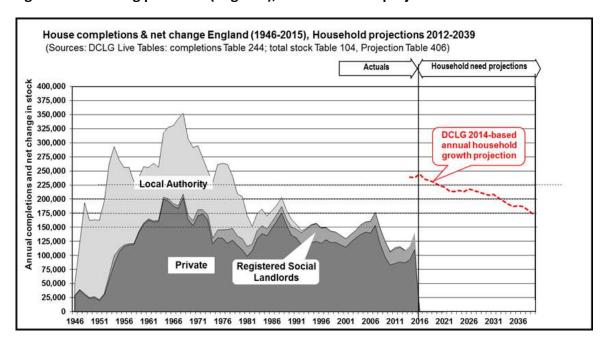
- 1.6. The crucial 'Productivity Model' is stated to be derived from the Land-use/transport integration (LUTI) modelling carried out for HS2 Ltd by David Simmonds. While the LUTI modelling is leading edge, it is also extremely complex and the indications it gives rely on comparisons with base cases: using it to produce free-standing forecasts, as implied here, would be most unsafe.
- 1.7. The zonal and strategic transport modelling appears to use as a baseline DfT's TEMPRO/NTEM data set. This has GB population growing by 5.6m (8.5%) and jobs by 1.6m (5%) 2016-2031, which might be regarded as optimistic but not totally improbable. However, it also factors in an average 2.7% growth in GDP every year (roughly 10 times the growth in employment), thus implying a similar annual growth in productivity. However, for the last several years UK productivity growth has been minimal, and this appears to be a structural consequence of the widening income gaps and the 'gig economy'.
- 1.8. The optimism implied by the underlying projections is compounded by the addition of a further 55,000 jobs in the WMCA SEP, apparently reflecting the benefits of collaboration over a wider area. The implication is that the variable productivity version of the Simmonds LUTI model has been used to add agglomeration benefits to the sum of the individual LEP SEPs. This is not valid.
- 1.9. For all of these reasons the economic targets of the SEP for the WMCA, while perhaps representing a high level of aspiration, do not provide a basis for making expenditure or other commitments without better evidence.

2. Housing

Housing needs and housing provision - national context

- 2.1. Planning policy for housing, nationally as well as locally, is based on providing at least enough housing land to meet the projected increase in housing needs. The hope is that generous provision of land will reduce the general level of house prices and enable the volume of private sales to rise to something approaching needs. This stance continues in the current Housing White Paper.
- 2.2. However, new housing forms too small a part of the market (around 10% of the annual flow) to reduce the general level of house prices (indeed, were it to do so, builders would cut their output). Prices are driven rather by the perception of housing as an appreciating asset and by the availability of finance to invest in it. In these circumstances the effect of a generous supply of housing land is to allow builders to choose the most profitable locations in which to develop. This favours increasing the output of higher-priced housing, generally in more dispersed locations.
- 2.3. Figure 2.1 puts the current (2014-based) national household projections into the context of national levels of housebuilding since 1947. It can be seen that for 50 years (the late 1950s to 2008) private sector building has (apart from the mid-60s and a much briefer period in the mid-80s) been in the range 125-150,000 pa, while since 2008 it has been under 100,000 pa, only recovering above this level in 2015/6 (to 112,000).

Figure 2.1: Housing provision (England), 1947-2014 and projected needs 2014-39



2.4. Unless building for sale takes place at levels unprecedented for at least 70 years, it is clear that at national level closing the gap between overall needs and new housing output depends on the return to pre-1980 levels of non-market housing provision. The White Paper gives no indication at national level that the need for non-market housing will be accompanied by the resources, private or public, that would permit its realisation.

Local context - housing needs in the WMCA

- 2.5. The breakdown of household formation by broad age groups for the WMCA area is shown in Figure 2.2. This is represented in two ways:
 - a) Stock changes in the number of households by age-group at 2011 and 2031. This is the conventional representation, but has the disadvantage that the comparison is between two completely different groups of people. Few of those who will be under 25 in 2031were even born by 2011, while many of those over 65 in 2011 will have died or entered institutions by 2031. The comparison of these disparate groups gives no insight into the process of household formation.
 - b) Flows of households forming during the period 2011 to 2031: This analyses the same DCLG projections by following each age group through from 2011 to 2031, giving a truer understanding of the volume of new young households and the rate of dissolution of elderly households. It also provides a perspective on change in the underlying economic and social processes, especially since the financial crisis of 2008.

Household changes x Age group, 3 WM LEPs 2011-31 ('000s) Source: DCLG 2014-based projections, Dec 2016, Table 414 STOCK CHANGE Overall: 200,977 (+13,827 pa) **FLOWS** 2,000,000 1,900,000 126,829 1,800,000 1,700,000 2 1,600,000 2 1,500,000 224,747 (-15,474 pa (+9,128 pa) 153,627 ₹1,400,000 767,293 2 1,300,000 226,119 × 1,200,000 ₩ 1,100,000 283,482 252,410 1,000,000 900,000 (+3,317 pa) (1,905 pa) 800,000 352,755 317.494 700,000 600,000 500,000 320,196 291,062 400,000 300,000 (-1,382 pa) 200,000 (27,396 pa) 217,569 229 214 100,000 Projection year Stock of H'hlds 2011 Stock of H'hlds 2031

Figure 2.2: Projected stock and flows of households by age, WMCA, 2011-2031

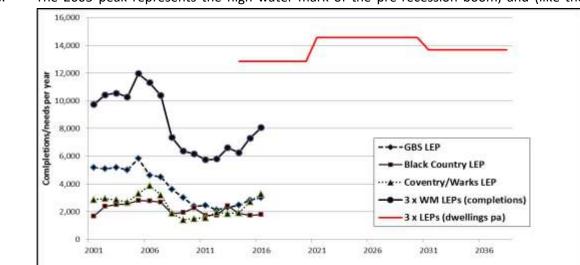
2.6. While the stock of elderly households (65+ at both dates) increases by more than 9,000 pa over this period, the flow of newly-forming households (under 25 in 2011, becoming under 45 in 2031) is much greater – over 27,000 pa. These younger age groups are where the housing crisis lies, because the impact of lower and more uncertain income and higher living costs has affected them to a greater degree than older groups, especially since 2008.

■ <5 ■ < 15 ■ <25 ■ 25-34 ■ 35-44 ■ 45-54 ■ 55-64 ■ 65-74 ■ 75-84 ■ 85+

Local context: housing needs and house completions in WMCA

2.7. Figure 2.3 presents the past rate of house construction in the WMCA and the projections of future housing needs on the basis of the current projections¹. It can be seen that meeting these housing needs would require consistent achievement of output levels considerably above the peak achieved in 2005 (around 14,000 pa compared with 12,000).

Figure 2.3: Housing completions (WMCA), 1991-2015/6 and projected needs 2014-39



2.8. The 2005 peak represents the high water mark of the pre-recession boom, and (like the

previous peak in 1988) has proved unsustainable. The underlying economic realities (the squeeze on younger workers' disposable incomes, the high proportion of young households

¹ As in Figure 2.1 a standard 4% has been added to the projections to allow for second homes and vacancy.

- amongst first time buyers, uncertain growth prospects arising from international and global pressures, and the inevitability of an increase from historically low interest rates) suggest the West Midlands increase between 2014 and 2016 from around 6,000 to around 8,000 dwellings per annum (dpa) will also run out of steam.
- 2.9. While not physically impossible, as at the national level there is no obvious way of reconciling the growth in needs with the past trends in market-led provision. Since 1979 housing for sale has been the dominant source of supply, with social rented housing having a very minor, residual role (see Figure 2.1). For projected housing needs to be met within the framework of this longstanding housing policy there would require either:
 - a) a very much higher rate of economic growth, with more of the benefits going to the younger, household-forming age groups; or
 - b) a return to the levels of genuinely affordable, non-market housing last seen in the period 1950 to 1980. The Government is proposing a Housing White Paper in the New Year, but it is perhaps more likely to continue existing measures like 'Help to Buy' and 'Starter Homes' than to go this far.

Impact of planned economic growth on housing need and demand

- 2.10. While the SEP employment and productivity forecasts appear very optimistic (see Section 1 above), they raise two important questions in relation to housing provision:
 - a) If these levels of employment and productivity were to be achieved, would this remove the present constraints on the incomes of newly-forming households so that they could afford to meet their housing needs by purchase or rent in the housing market?
 - b) How far does the achievement of the economic forecasts depend on the availability of additional housing commensurate with the increase in employment?

The economy and affordability of housing

- 2.11. The answer to the first question depends greatly upon the distribution of any additional income between older and younger age groups. A distribution that would give younger age groups a larger proportion of the fruits of growth and allow them to realise their housing needs would require a major reversal of some deep-seated economic processes, particularly the casualisation of labour.
- 2.12. The discussion in the SEP refers to training as a means of increasing employability in betterpaid occupations, but this does not of itself prevent a continuation of recent trends: many of those in short-term, casual and zero-hours employment are over-qualified already for the work they do. There are also indications that the increase in self-employment is only partly the result of successful business formation; much is low-level under-employment.

Housing as an economic driver

- 2.13. The economic prospects of the WMCA depend on its ability to attract and retain a skilled and varied workforce. Education and training help create skills amongst people already here, but we live in a highly mobile society. Persuading them to stay (and attracting others from elsewhere) depends on the quality of life offered. When deciding where to live, the availability of jobs is fundamental, but housing comes next, which makes homes a key part of the economic infrastructure.
- 2.14. People commute to find the best match for them between the type and quality of job, and the type and quality of home they are looking for. This makes local transport systems crucial to the functioning of the labour market. While higher-paid workers can choose from new as well as existing homes, lower-paid workers depend on the cheaper end of the existing stock. Net commuting (the <u>difference</u> between in- and out-commuting) will be reduced by matching the number of homes in an area with the number of jobs (and will be

- zero if they are equal), but the amount of traffic depends on gross commuting (the <u>sum</u> of in- and out-commuting).
- 2.15. Around 90% of the housing choices made each year are from the turnover of the existing stock, so its quality is vital to ensuring that preferences for both jobs and homes can be met without adding to congestion. Simply seeking to match numbers of new houses and new jobs is not nearly enough. Labour markets and quality of life need give each other mutual support, and that means making places that put together existing and new housing, transport, environment and services. A narrow focus on land for new housing will not achieve this, and unrealistic employment forecasts risk making matters worse by adding to the amounts being sought.
- 2.16. A great deal of space in SHMAs is devoted to modelling relationships between jobs and households. Given the very elastic relationship between these (paras 3.15-16), this is a distraction from the real place-making issues referred to in at 3.17.

3. Transport

Squaring the circle?

- 3.1. The discussion of the economy touched on transport, mainly through the significance accorded to HS2-induced effects on productivity. However, this emerges as a by-product of the projection process, drawing on Land-Use/Transport Integration (LUTI) modelling, and reasons have been given for considering the way it has been used to be misleading.
- 3.2. More appropriate uses of LUTI modelling (as its name implies) would be to understand how changes in accessibility would affect the relationship between transport and land-use, in particular:
 - a) the locational choices of businesses, and how spatial planning could best reinforce potentially positive effects of accessibility improvements on productivity;
 - b) the locational choices of households, and the implications for commuting and for place-making, as discussed in Section 2 above.

'Movement for growth': the WM Strategic Transport Plan (STP)

- 3.3. The STP states an aspirational vision and broad high level objectives in relation to the five 'challenges' of inclusive economic growth, housing a growing population, transport emissions, public health and social well-being. The meat of the STP a 20-year action plan, structured as four 'tiers' (three geographical and one cross-cutting):
 - a) **National and regional tier:** comprising international gateways (Airport and links to seaports), HS2, Midlands Connect (inter-city road and rail), and coaches.
 - b) **Metropolitan tier:** rail and rapid transit (local rail, Metro, tram-train and bus rapid transit), park & ride, main intra-urban roads ('Key Route Network'), and a metropolitan cycle network.
 - c) **Local tier:** local roads, buses and walking and cycle routes, and provision for motorcycling.
 - d) **Smart mobility tier:** comprising travel information services and smart ticketing and payment systems.
- 3.4. The transport enhancements proposed by the STP are set out on a series of network plans (Figures 4.3, 4.4, 4.6, 4.7, 4.8 and 4.9). The stated aim is that "every resident of the metropolitan area should be able to travel from their home and be able to get to a range of at least three main strategic centres, including the regional centre Birmingham, within 45 minutes in the AM peak. (STP 4.45)". The cost of the STP over 20 year is estimated as about

£6.5bn (£330m pa), but it is not clear that this level of spending would achieve the standard of provision aspired to.

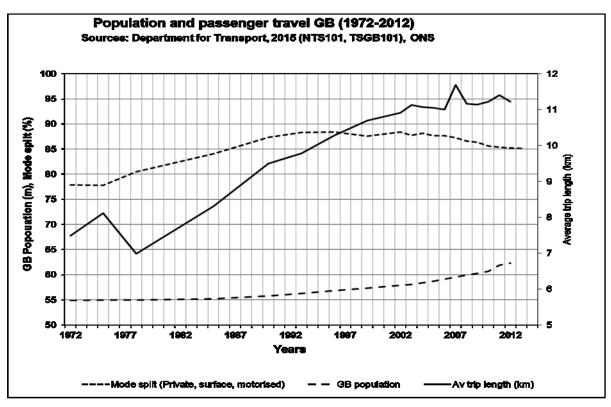
Critique of STP

- 3.5. There are two major concerns about the STP proposals:
 - a) Though broader economic, environmental and social considerations get a good deal of space in the STP, it is not at all clear how far these are likely to be furthered by the proposed programme.
 - b) The estimated resource requirement (£330m pa) is three times the total amount in Local Growth Deals and Local Growth Fund for the six years 2015/16 to 2020/21 (£630m or £110m pa).

Broader concerns: travel demand growth

- 3.6. Missing from the STP analysis is any discussion of what drives growth in travel demand. Figure 3.1 tracks personal travel behaviour from 1972/3 to 2014. Two significant changes are apparent in the later part of the period, which are likely to have been the consequence of national land-use and transport policies intended for these purposes²:
 - a) From around 2003 the previous trend of strongly increasing average trip lengths appears to level out at about 11 km;
 - b) From about the mid-1990s the modal split in favour of private transport seems to plateau and start to decline.

Figure 3.1: trends in travel 1972/3-2014



3.7. This evidence suggests that by opening up wider locational choices for households and businesses transport improvements may drive growth in travel demand, but also that this effect can be countered by more integrated policy.

² Le Vine S, Jones P (2012) On the Move: Making sense of car and train travel trends in Britain, RAC Foundation, London

Broader concerns: transport emissions: air pollution and climate change

3.8. Levels of personal transport demand are strongly associated with emissions of both greenhouse gases (such as CO_2) and local air pollutants with serious health impacts (such as NO_x and particulates).

Broader concerns: wider economic impacts

- 3.9. There are two opposing 'land-use' effects of transport improvements:
 - a) Improved access to existing clusters of economic activity, generating higher productivity through agglomeration effects; and
 - b) Relocation by businesses and households to take advantage of access improvements, leading to more travel demand, more congestion, and loss of productivity benefits.
- 3.10. LUTI modelling can explore these matters, and though lacking the apparent precision of the conventional models within the transport field, provide valuable insights into more integrated policy approaches. It is pity therefore that the use made of LUTI modelling by WM CA so far appears to have been to buttress inflated employment projections, a purpose for which it is inappropriate (see 1.6-1.8 above).
- 3.11. Conventional transport models are used to predict future demand on networks and to evaluate the benefit of improvements, but cannot deal with the possible land-use effects on productivity still less decide which is more likely to happen. For example STP Figure 4.10 shows modelled reductions in delays caused by congestion, compared with 'business as usual'. Because the model cannot assess the effects of relocation on travel demand it cannot indicate whether journeys in the future would be faster or slower than at present only the comparison with a hypothetical alternative.
- 3.12. Present levels of congestion are recognised to be unacceptable for an area aspiring to "... make great progress for a Midlands economic 'Engine for Growth', clean air, improved heath and quality of life for the people of the West Midlands. ... by creating a transport system befitting a sustainable, attractive and economically vibrant conurbation in the world's sixth largest economy." (STP Vision). Congestion getting worse more slowly than a hypothetical alternative is not really good enough.
- 3.13. Just as transport actions have much wider effects, current transport problems are unlikely to be resolved by action within the field of transport itself.

Inadequate resources

3.14. As pointed out above (3.6) the resources required for implementation of the programme envisaged by STP are three times the amount available under current spending regimes. There must be a strong possibility that such resources will not be available (the EU contribution mooted at STP 7.6 seems particularly unlikely). Hard choices between different transport priorities will be necessary. Unfortunately, the structure and reasoning of the STP does not reveal what these priorities would be.

4. Summary: the benefits of place making

An integrated approach to planning for economic development, transport and housing

4.1. The economic prospects of the WM CA depend on attracting and retain a skilled and varied workforce. Education and training help create skills amongst people already here, but we live in a highly mobile society. Persuading them to stay (and attracting others from elsewhere) depends on the quality of life we can offer.

- 4.2. When deciding where to live, the availability of jobs is fundamental, and housing comes next. Around 90% of the housing choices made each year are from the turnover of the existing stock, which is the measure of the importance of homes we already have. But 'home' means more than just a house: a place's attractions depend also on environmental quality, social fabric, services and infrastructure
- 4.3. Local transport systems are particularly important: people commute to find the best match for them between the type and quality of job, and the type and quality of home they are looking for. The amount of traffic depends on how well preferences for both jobs and homes can be met locally. 'Place-making' is not a simple 'numbers game': it is the ability to put these factors together so that labour markets and quality of life give each other mutual support.
- 4.4. In much of continental Europe, cities have higher productivity than their national average: in the UK however most of our major urban areas are less productive than the nation (Figure 4.1)³. If English cities (mostly at least 10% below the UK national average) performed more like continental cities (mostly at least 10% above), the increase in national productivity would be worth around £100bn per year.

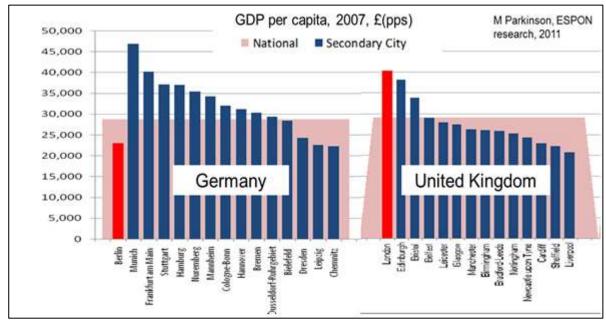


Figure 4.1: Productivity of UK vs German cities compared with their nations

- 4.5. There is a striking parallel to be drawn between Germany's East-West regional disparity, and England's North-South divide. But whilst the former East Germany cities (Dresden, Leipzig, Chemnitz) have substantially closed the gap since reunification in 1991, the northern English cities (Manchester, Birmingham, Leeds-Bradford, Nottingham, Newcastle, Sheffield and Liverpool) are drifting further away from the South.
- 4.6. Studies comparing urban policies between the UK and other countries suggest that it is the ability to integrate economic, transport, housing and spatial policies so as to deliver 'compact, liveable cities' is crucial to productivity. As well as being efficient in transport terms, such places are inherently more attractive to talent and so more productive.
- 4.7. Improving national competitiveness and productivity will thus require a much more devolved style of governance. The revelation of national divisions demonstrated by the Brexit vote gives this renewed importance and urgency. Current Government policy stresses the importance of devolution, clearly indicating recognition of the problem, and the opportunity. However, the strongly top-down style of governance remains an obstacle to progress.

³ Michael Parkinson (2011) 'Secondary cities in Europe: performance, policies and prospects', ESPON

4.8. At the local level strategic planning for a successful local economy requires much more than crude matching of numbers of jobs and houses. The CA will need a coherent long-term strategy that handles transport, jobs, inequality, productivity, sustainability and spatiality as well as housing need. The National Planning Policy Framework places much emphasis on sustainable development, meaning by this very much the same as the RTPI means by 'place-making', and what our continental counterparts mean by 'compact, liveable cities'.