

2. Overview and Context

2.1 Background

Norwich is thought to have expanded from a small Saxon settlement north of the river Wensum around AD520 and by the time of the Doomsday Book of 1086, had become one of the largest towns in England with a population of approximately 6,000 people. In the Middle Ages the City thrived from the profits made from the wool trade, with the Rivers Wensum and Yare acting as valuable export routes to the port of Great Yarmouth.

During the 19th century industries such as brewing and leather working boomed, whilst the traditional industries like wool and silk weaving began declining. In the late 19th century Norwich also began to develop engineering industries, the population also had increased from 37,256 in 1811 to 80,368 in 1871 and subsequently the city began to expand beyond its walls.

By the late 20th century the main industries in Norwich were printing, electronics, engineering and finance. Tourism had also become an important industry for the county, in particular the Norfolk Broads and coastal towns. During the 20th century the urban area's population increased from 121,490 in 1911 to an estimated 180,000 in 1980. The city has since developed into one of the largest urban areas in the East of England and has expanded far beyond the old city boundary to the west, north and east.

As the city has expanded, villages which were immediately to the north, east and west (e.g. Old Catton, Hellesdon and Thorpe St Andrew) have been subsumed and become part of Greater Norwich also taking on a more urban form, although the communities themselves have retained their individual identities. However, the story is different south of the city where an undeveloped green gap has been maintained.

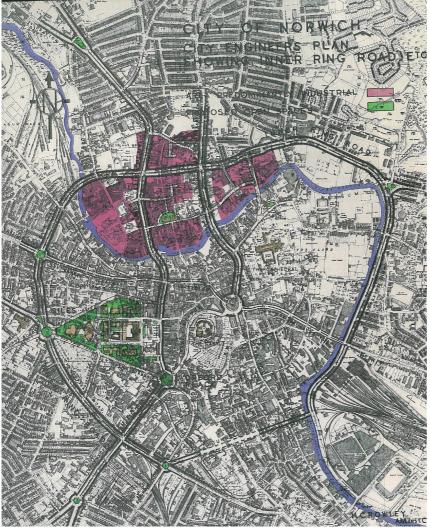
Norwich is now one of the most important city regions in the east of England. It has the region's largest economy and the highest ranking retail centre. The area's emerging economic strengths include specialisms in bio-technology, food processing, financial services and creative industries as well as being the administrative and operational headquarters for a number of commercial and other organisations. The current population of the NPA is circa 280,000, comprising some 127,000 households.

Norwich is widely recognised as being one of the most complete medieval cities in Britain, with a large number of medieval buildings including many churches. The existing road network reflects this medieval past, with the modern day roads of Pottergate, St Giles Street, St Benedicts Street, Fye Bridge Street, Colegate, Magdalen Street, Tombland and Bishop Gate amongst many others, being identified in medieval maps of the city. In addition, the Inner Ring Road (IRR) follows the line of the medieval city wall and its gates.

The need for the IRR was identified as early as 1931 and was implemented from the post-war years when the City of Norwich Plan of 1945 provided a blue print for the city, through to the 1960s and 1970s.



Figure 2.1: City of Norwich Plan



Source: City of Norwich Plan 1944

The need for an Outer Ring Road (ORR) was identified in the 1920s to cope with the burgeoning car use in Norwich, when a project to link several roads around Norwich was drawn up to facilitate car movements around the city. This project was formalised over the years, and its current alignment was implemented in the 1960s.

Outside the NPA, Norfolk retains a largely rural character of high environmental quality. Market towns, smaller towns and numerous villages are spread through attractive countryside, which also provides the setting for the city of Norwich.

Norwich's role as a regional centre for jobs, services and facilities draws people to it from a wide area outside of its boundaries (i.e. in particular Norfolk and north-east Suffolk). The 2001 census found that there was a total of 92,563 people aged 16-74 with a workplace in Norwich, of which 41.9%, 38,806 people, also lived in Norwich, meaning that 53,757 people travelled into Norwich from all other areas in order to work.

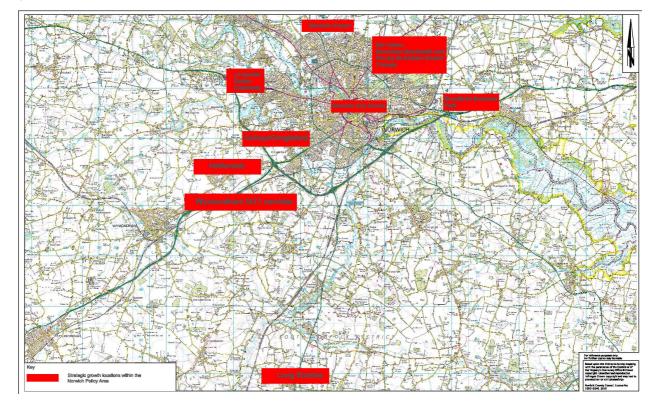
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2.2 Future Context

The NPA is facing a significant increase in the scale and pace of regeneration, development and growth. This minimum level of growth is required by the East of England Plan and is particularly ambitious for new homes and jobs, and the essential supporting infrastructure. In meeting this level of growth, the population of the County of Norfolk could grow by 18.8% from 832,400 in 2006 to 988,800 in 2031, with the most substantial growth being in South Norfolk, Broadland and Norwich districts³. The areas of these districts which form the NPA, account for almost a third of the Norfolk population⁴ and the majority of Norfolk's population change to 2031 is anticipated to be made up of approximately 181,900 through net migration and 27,000 from natural change⁵. The average growth in the population in Greater Norwich equates to 1.24% per annum.

The population of the Norwich Policy Area is currently approximately 280,000, and is forecast to increase by 28.6% to 360,000 by 2031 as a result of the growth required to be accommodated, as set out in the East of England Plan The Revision to the Regional Spatial Strategy for the East of England. Locations of growth in the NPA to 2031 are shown in Figure 2.2. Greater Norwich is recognised by the RES as one of the seven 'engines' of growth in the region, and the RSS proposes growth of around 35,000 dwellings and over 30,000 jobs by 2026.





³ <u>http://www.norfolk.gov.uk/consumption/groups/public/documents/general_resources/ncc073353.pdf</u>

⁴ http://www.norfolk.gov.uk/consumption/groups/public/documents/general_resources/ncc070071.pdf

⁵ <u>http://www.norfolk.gov.uk/consumption/groups/public/documents/general_resources/ncc073354.pdf</u>

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In order to place this growth into context, the levels of growth specified for Norwich's comparable cities have been identified and Table 2.1 details the level of housing and employment growth that are specified in the relevant Spatial Strategies for each of the comparator cities and counties.

Area	Proposed Employment Growth	Proposed Housing Growth
Greater Norwich	35,000 jobs (2006-2021)	33,000 (2006 - 2021)
Lincoln	-	19,800 (2006-2026)
Exeter	28,500 jobs (2006-2026)	1,920 (2006-2026, Exeter Housing Market Area)
lpswich	30,000 jobs (2006-2021, Suffolk Haven Gateway)	15,400 (2006-2021, Ipswich Borough)

Source: Relevant Regional Spatial Strategies

Table 2.1 shows that the level of growth in both housing and jobs in Greater Norwich far exceeds that identified for any of Norwich's comparable cities, with the anticipated housing in Greater Norwich being over 17 times greater than that in Exeter.

The district councils of Broadland, Norwich and South Norfolk, supported by NCC, have prepared a Joint Core Strategy (JCS) covering the entire area of Greater Norwich i.e. the three Districts. The Joint Core Strategy provides the strategy to guide, manage and deliver this growth deemed necessary for the area by central and regional government.

The planned growth in new homes and jobs is centred in the Norwich Policy Area, recognising its role as the focus for jobs, services and facilities. Brownfield sites will be used in preference wherever possible, but given the constraints on the city, developing greenfield sites in Broadland and South Norfolk is unavoidable. Development of market towns and larger villages plays an important role in the strategy.

The Regional Spatial Strategy (RSS) acknowledges the importance of transport in supporting economic growth and it highlights that transport infrastructure and connectivity deficits act as a constraint to the East of England's competitiveness. City centres and the strategic network experience congestion, whilst road and rail access to ports and airports are not considered sufficient to support the future development of their capacity. The Regional Transport Strategy (RTS), contained in the RSS, confirms that the strategic and regional inter-urban road network will continue to be economically important for the region and its development catering not only for long distance but also local roles including for the strategic coach and bus services. For example, the dualling of the A11 which, at the time of writing is being sought at Public Inquiry, is anticipated to catalyse development not only within the A11 corridor but also in Norwich and the NPA as it will add to the overall attractiveness of the area through providing an improved link to the south and east. The RSS also discusses the need for the local network to be managed to tackle congestion and its environmental consequences and to provide efficient vehicular access to locations, particularly to areas of growth⁶.

The RES is clear about the need for the region to invest in tackling both strategic and local pinch points and improving access to the region's key cities and gateways. It recognises the need to boost the regional

⁶ East of England Plan (Government Office for the East of England, 2008, p.44)

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transport system to support the planned growth. This includes improving links to regional airports, which act as important international gateways and are a primary driver of global economic performance.

The RES also recognises that transport is the fastest growing contributor to carbon emissions and that the East of England actually has the highest household car ownership rates and percentage of the workforce travelling by car of all the English regions. As such, the RES stresses the critical importance of introducing interventions that aim to bring about behavioural change in travelling and encouraging modal shift to help reduce the regional carbon footprint. It promotes accessibility planning and increased use of technological solutions in order to secure a resilient and sustainable regional network.

2.3 Demographics

Results from the 2001 census show that the NPA has more than the national average number of 20 to 30 year olds; although other age groups have a similar profile to the national average as demonstrated in Table 2.2. The population within the District of Norwich City has been stable since the 1981 census, whilst in the NPA, but beyond the city boundary, the population has increased steadily for several years. Norwich is the fourth most densely populated Local Authority District within the East of England with 3,179 people per square kilometre (8,241 per square mile).

The population of Wymondham in the 2001 census was 12,539 which is an increase of 13.9% from the 1991 census (10,869) and the town currently has 5,477 households. Long Stratton has also increased in population from 2,896 in the 1991 census to 3,701 in the 2001 census an increase of 22% and currently has 1,598 dwellings, with the population's mean age being 38.63 years.

Both of these towns are on key commuter routes to Norwich and other urban centres including Ipswich, Cambridge and London, which would support the increase in the population shown between the two censuses. In Long Stratton the average employed person travels 17.25 miles to their place of work.

Table 2.2. 20	of Fopulation Froportions	based on	Age Group				
Age	Norwich Policy Area	Exeter	lpswich	Lincoln	Norfolk	East of England	England
0-15	17.97%	17.19%	20.98%	20.11%	18.13%	20.1%	20.15%
16-24	11.69%	16.42%	11.43%	14.45%	9.68%	10.21%	10.91%
25-44	28.5%	28.54%	28.99%	28.91%	26.04%	28.71%	29.3%
45-64	23.97%	21.80%	21.81%	21.13%	26.12%	24.54%	23.75%
65-74	9.17%	7.95%	8.49%	7.66%	10.4%	8.64%	8.35%
75-84	6.44%	5.81%	6.10%	5.99%	7.13%	5.8%	5.6%
85 and over	2.27%	2.29%	2.20%	1.74%	2.51%	2.02%	1.94%
Working Age	61.58%	67.57%	63.09%	65.30%	58.93%	60.95%	61.48%
Pension Age	20.4%	15.21%	15.90%	14.57%	22.94%	18.96%	18.37%

Table 2.2: 2001 Population Proportions based on Age Group

Table 2.2 indicates that the Norwich Policy Area has similar population proportions to those identified in the comparable cities, although the proportion of people of pension age is greater at 20.4% in the NPA than for the three comparable cities. Table 2.1 demonstrates that compared with its nearest neighbours, Norwich experienced very little change in the population between 1991 and 2001. However, there is a significant amount of population growth forecast for the whole of the NPA up to 2031.

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The NPA has been identified as a main focus for growth in the East of England, for new homes and jobs, leisure, cultural and educational development. The population forecasts for Norwich and the NPA over this period are provided at Figure 2.3. This shows that the rate of growth in the NPA is set to increase rapidly from 2011, reaching 300,000 in 2016 before increasing by approximately 60,000 in the following 15 years. It also demonstrates that the rate of growth in South Norfolk is anticipated to be moderately faster than that in the districts of Broadland or Norwich.

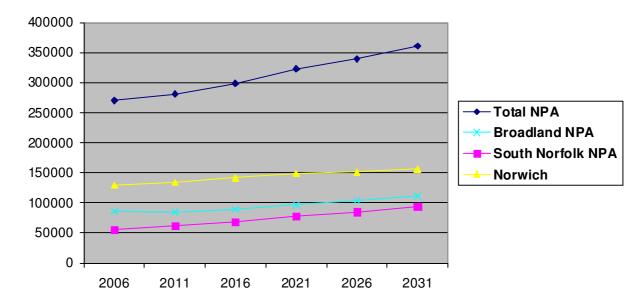


Figure 2.3: Population Forecasts for Norwich Policy Area to 2031

Source: Provisional population results for Broadland and South Norfolk within the NPA, (NCC, January 2010)

Figure 2.4 shows the household forecasts for the same area to 2031.



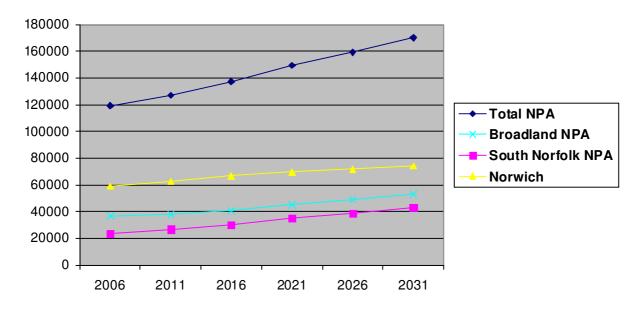


Figure 2.4: Household Forecasts for Norwich Policy Area to 2031

Source: Provisional household results for Broadland and South Norfolk within the NPA, (NCC, January 2010)

As well as housing, the other main focus of growth in the NPA is in commercial and employment uses. The East of England Development Agency has developed the East of England Forecasting Model which projects employment figures to 2031. The most up to date trajectory for employment has been obtained from the autumn 2009 model by NCC and provides a comparison against the JCS and RSS forecasts in Figure 2.5



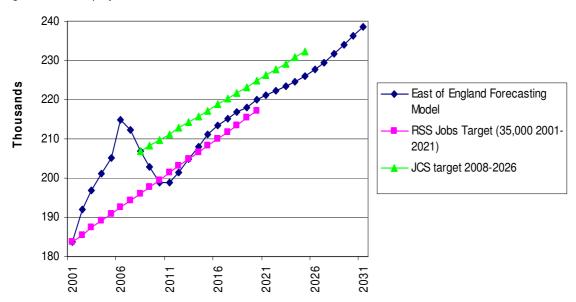


Figure 2.5: Employment Forecasts for Greater Norwich Area to 2031

Source: East of England Forecasting Model Autumn 2009

Employment rates in Norwich fell between 2006 - 2008 by $6.3\%^7$, although private sector employment levels fell by a more moderate 2.0% over the same period⁸. However, although employment levels fell between 2006 and 2008, there has been a growth in earnings in Norwich, with the average weekly earnings increasing from £383 in 2006 to £422 in 2008, an increase of $10.2\%^9$.

This reduction in employment levels is demonstrated by Figure 2.5 which shows that employment has fallen since 2006 and that it is set to fall further to 2011, before rising again from 2012 reflecting the recessionary economy at the time of writing. The forecast beyond 2012 is not set to catch up with the JCS targets that have been set between 2008 and 2026, although they are in accordance with the RSS jobs target of a 35,000 increase by 2021 from 2001. Instead, the recession is forecast to be followed by a steep increase in employment before becoming steadier in its rate of increase from 2016. The graph demonstrates that employment in the NPA is set to lag behind the JCS target by approximately 1 year, meaning that it will take slightly longer to achieve the targets than was originally anticipated.

The East of England Forecasting Model is a tool to inform policy development. By its nature it does not take account of specific local economic development issues or supply side factors. The forecast may be considered too low for a planning target for the following reasons:

 The East of England Forecasting Model applies national trends to local sectors. For example, the local strength in the financial intermediation sector is in insurance, a sub-sector that has suffered much less in the recession than banking.

- ⁸ http://www.centreforcities.org/assets/files/10-01-14%20Private%20sector%20employment%20growth%2008.pdf
- ⁹ http://www.centreforcities.org/assets/files/10-01-14%20Weekly%20earnings%202009.pdf

⁷<u>http://www.centreforcities.org/assets/files/10-01-14%20Employment%20growth%200608.pdf</u>

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- The forecast suggests that unemployment rates will be undesirably high for the latter end of the period, at 3.5% in the years 2019 to 2026 compared to 1.7% 2.0% in the years 2001 to 2008.
- Participation rates are predicted to be relatively low. In the model, the "Residence employment rate" is under 65% for the whole period 2011 – 2031 compared to the regional average of around 68%.
- The forecast includes very low levels of net in-commuting to the GNDP area throughout the period, peaking at 3.200 in 2031. This compares to an average of around 11,500 in the period 2001 2007, with peaks of 17,000. This is a residual product of the model rather than a specific forecast. With this level of net-commuting, Greater Norwich would no longer be the "engine of the local economy" for the surrounding hinterland. This is both unlikely and contrary to regional and local economic aims.
- The forecasts take no account of policy interventions and the GNDP are committed to positive efforts and investment to grow the economy. Partners are working hard and with significant success, to secure continued investment in key job growth sectors.

These differences could add up to several thousand jobs, closing the gap between the forecasts.

Districts	1991	2001	% Change
Norwich	120,895	121,550	0.54
Lincoln	81,434	85,595	5.11
Exeter	104,800	111,200	6.11
lpswich	116,881	117,069	0.16

 Table 2.3:
 Population of Norwich Compared to Nearest Neighbours (Census 1991 and 2001)

Source: Census Data 2001 and Nomisweb.co.uk

Table 2.3 summarises the population of Norwich with its comparable towns and cities based on census data from 1991 and 2001.

Table 2.4: Population of Norfolk Compared to Nearest Neighbours (Census 1991 and	2001)
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County	1991	2001	% Change 1991 – 2001
Norfolk	745,613	796,728	6.86
Cumbria	518,879	552,658	6.51
Lincolnshire	584,538	646,645	10.60
Derbyshire	711,837	734,585	3.20

Source: Census Data 2001 and Nomisweb.co.uk

Table 2.3 and Table 2.4 show that although Norwich has not experienced a high rate of change to its population, Norfolk's population has increased more markedly over the 10 years from 1991 to 2001. This is mirrored by the level of growth identified in Cumbria, but is much higher than that shown for Derbyshire. During this period the UK population increased by a much smaller margin of approximately 2.85% from 55,831,400 in 1991 to 57,424,200 in 2001. This demonstrates that even prior to the forecast increase in growth associated with the RSS, Norfolk experienced a higher rate of population increase than the rate for the UK as a whole.

Overall it can be concluded that Norwich and the NPA has not yet been subject to the effects of accelerated growth.



2.4 Transport

2.4.1 Links and Connectivity

The main transport links to and from Norwich are shown in Figure 2.6. Principal international connections are made via Norwich International Airport, Stansted Airport, Eastport (Great Yarmouth) and the Haven Gateway (Felixstowe and Harwich). The strategic highway network includes two trunk roads which link Norfolk with neighbouring counties and the rest of the UK. The A11 trunk road provides key strategic access to London, Cambridge, the south Midlands and much of the rest of the UK. It is predominantly dual carriageway with the exception of a section at Elveden where a Highways Agency proposal for dualling is currently undergoing a Public Inquiry. The A47 trunk road to the west of Norwich provides strategic road access to the Midlands and North. The A47 to the east of Norwich, connect to Great Yarmouth and Lowestoft. Both are mostly single carriageway in Norfolk.

The A140 county road provides strategic access to London, Ipswich and local links to Diss and Harleston. The A140 is almost entirely single carriageway and subject to a range of speed restrictions, particularly in Suffolk. The A146 county road is an important link for the rural south east of the county, and for Beccles and Bungay in Waveney.

The National Rail Network provides access to Wymondham, Diss, Attleborough, Thetford, Ipswich, Cambridge, Peterborough, London and the rest of the UK. The area also benefits from a local rail network radiating from Norwich to Great Yarmouth, Lowestoft and Sheringham.

Public transport facilities and accessibility in the area are generally good, with a reported passenger satisfaction rate of 55% in 2006/07¹⁰ as shown in Table 2.5 which details the most recent data for Norfolk and its comparable counties.

Area	Year	Bus Passenger Satisfaction (BVPI 104)
Norfolk	2007/08	55%
Lincolnshire	2006/07	49%
Cumbria	2007/08	54%
Derbyshire	2006/07	64%

Table 2.5: Bus Passenger Satisfaction by County

Source: Relevant Local Authorities - Local Transport Plan Monitoring Reports

¹⁰ Local Transport Plan for Norfolk Delivery Report 2006/07 (NCC, July 2007, p.25)

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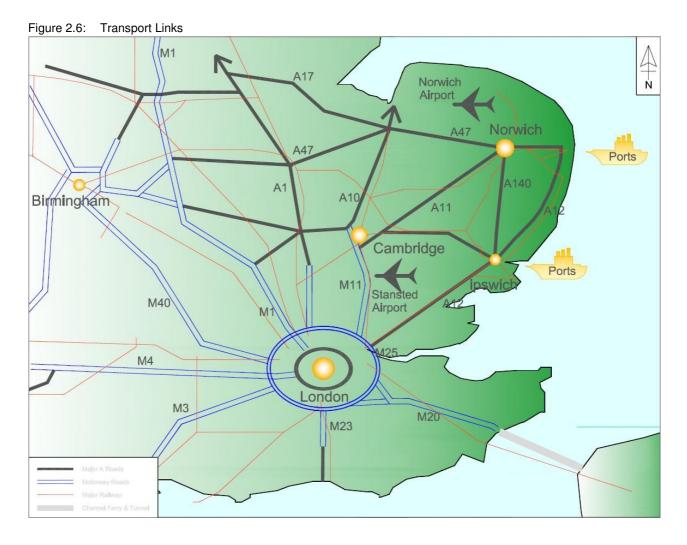


Table 2.3 shows that Norfolk is performing well compared with Lincolnshire and Cumbria, but that it is significantly behind Derbyshire's performance, having a result of 64% in 2006/07. This would suggest that although Norfolk is improving performance against this target, there is realistic scope for improvement within the county. In addition, Norwich has the most bus-based Park & Ride sites in the country and provides adequate rural bus services on radial routes from Norwich, but has limited cross-country links.

2.4.2 Travel Choice

Table 2.6 shows that the dominant mode for all journeys in the NPA is private car having a mode share of 65% including passengers, followed by walking 18%. The journey to work data shows that although more people in the NPA (13%) walk (10%) or cycle to work (9%) compared to the national level, the NPA is lagging behind the mode share achieved by its comparable cities. Exeter has achieved a 19% mode share for walking compared with 13% in the NPA. Car use is also less in all three comparable cities, with Exeter's mode share of 49% for car use being well below that of 54% for the NPA.

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			Journey to Work							
Mode	Norwich Policy Area All journeys	Norwich Policy Area	Lincoln	Exeter	lpswich	East of England	England			
Car	49%	54%	51%	49%	52%	59%	55%			
Walking	18%	13%	16%	19%	14%	9%	10%			
Car passenger	16%	6%	8%	7%	7%	6%	6%			
Bus / Coach	7%	8%	7%	10%	10%	4%	8%			
Bike	5%	9%	7%	4%	6%	4%	3%			
Rail	1%	1%	1%	1%	2%	6%	4%			
Taxi	1%	1%	1%	0%	0%	0%	1%			
Motorbike	1%	2%	1%	2%	2%	1%	1%			
Home working	1%	5%	6%	8%	7%	9%	9%			
Other Modes	0%	0%	1%	0%	0%	2%	3%			

Table 2.6. Journey by Modes by Residents of Norwich Policy Area in 2000	Table 2.6:	Journey by Modes by Residents of Norwich Policy Area in 2000
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(Source: - NCC mode share monitoring 2000/2001)

This data supports the information in Table 2.7 which suggests that a significant proportion of people within Norwich live within walking and cycling distances to their places of work. This demonstrates that the NPA has realistic potential to do better than it currently is when compared against its nearest neighbours.

Data Source	< 2km	2-4km	5-9km	10-19km	20-29km	30-39km	40+ km
1991 Census	28%	38%	22%	6%	2%	1%	2%
2001 Census	38%	37%	10%	5%	3%	2%	5%

Table 2.7: Distance Travelled to Work by Residents of Norwich

Table 2.7 shows that with 85% of all residents of Norwich travelling less than 9km to work, the vast majority of people living in Norwich work within the Norwich Policy Area, with the number of people commuting less than 2km increasing from 28% in the 1991 census to 38% in the 2001 census. This information has been benchmarked against the 2001 census results for the comparator cities as well as for the East of England and for England as a whole, details of which are included at Table 2.8.

Table 2.8:Comparator Distances to Work

Area	<2km	2-4Km	5-9Km	10-19Km	20-29Km	30-39Km	40+Km
Norwich City	38%	37%	10%	5%	3%	2%	5%
Lincoln	33%	35%	13%	5%	5%	2%	8%
Exeter	38%	38%	9%	5%	3%	1%	6%
lpswich	33%	36%	12%	10%	3%	1%	5%
East of England	24%	20%	16%	17%	9%	5%	9%
England	23%	23%	21%	18%	6%	3%	6%

Source: 2001 Census

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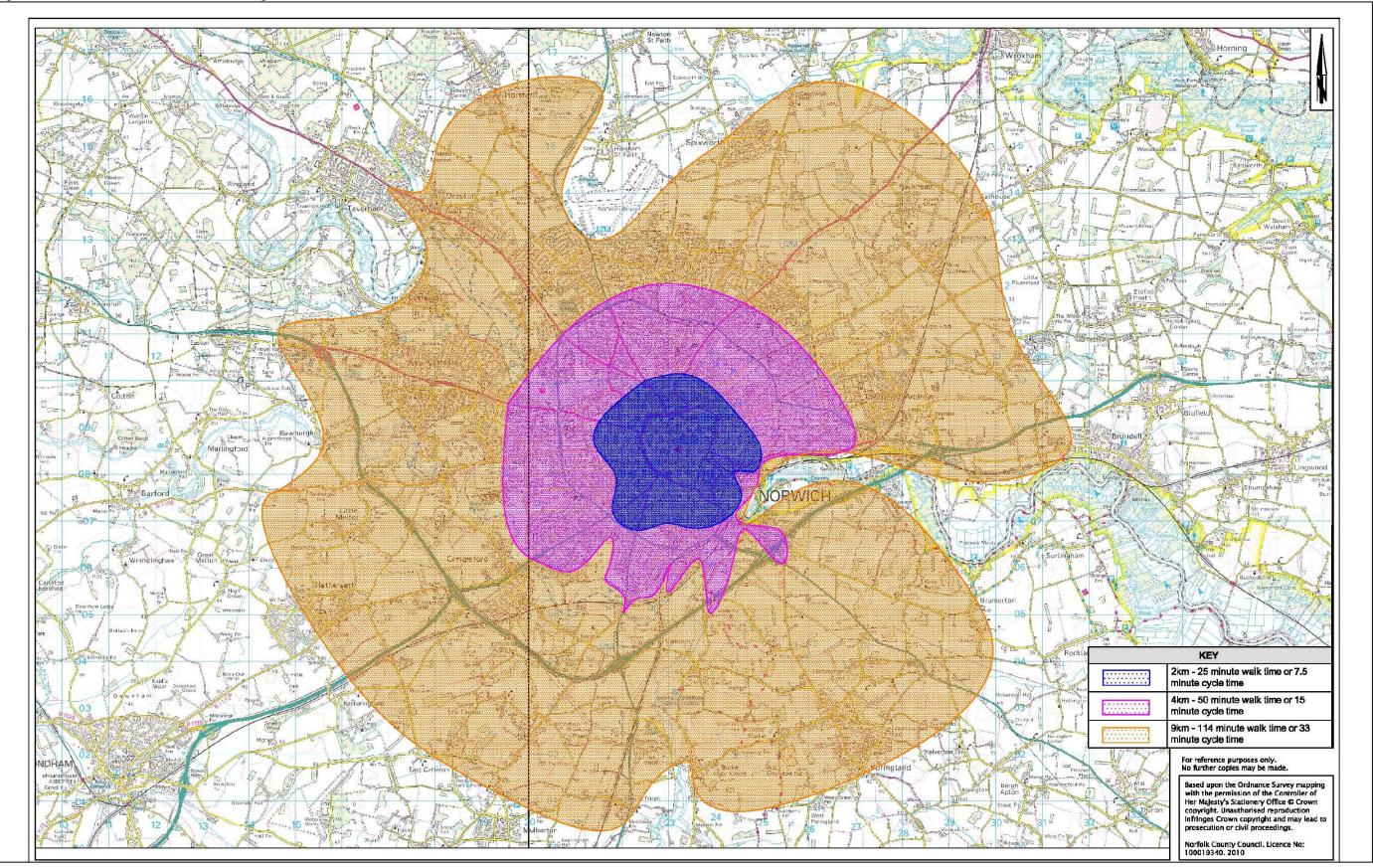
Table 2.8 shows that the distances travelled to work by the residents of Norwich are particularly similar to those identified in the comparator cities. The values for the East of England and for England differ, with a lower percentage of the population travelling shorter distances. This reflects the fact that it is an average for the region or country as a whole and therefore includes residents in rural locations and in large metropolitan areas, who travel greater distances to work. Overall, this demonstrates that Norwich is typical in its residents' distances travelled to work, with no strong deviation from the patterns identified in Lincoln, Exeter or Ipswich. This further demonstrates that Norwich has realistic potential to improve its mode share for journeys to work away from the car, as not only is it currently lagging behind its comparable cities' mode share, but the distances travelled to work in those cities are also comparable to those in Norwich, making this a robust comparison to make.

Figure 2.7 shows the areas that are within a commuting distance of 2km, 4km and 9km from Norwich city centre. This clearly shows that a large area of Norwich can be accessed within a 25 minute walk from the city centre. The accessibility of the city in this respect indicates that there is scope for significant movements into the area to be undertaken on foot.

For cycling trips, a 15 minute journey of 4km can bring cyclists into the city centre from the main suburbs adjacent to the city, i.e. the eastern parts of Costessey, and the southern parts of Sprowston, which lie in the vicinity of the Outer Ring Road. At an approximate 30 minute cycle journey the entire of the built up area of Norwich, including all of its suburbs and towards the first ring of outlying villages, can be reached. This isochrone demonstrates that there is scope for a significant number of trips into Norwich from the NPA to be made by cycle or on foot.

Looking at this isochrone alongside Table 2.7, it can also be seen that there is scope for many more commuting trips to be made on foot or by cycle. Some 75% of Norwich residents work less than 4km from their home but, according to Table 2.6, only 23% of Norwich residents walk or cycle to work, and over half either drive or are a passenger in a private car. It can be inferred that there is a significant proportion of the Norwich population who work within walking or cycling distance of their home, but who commute by car, thereby adding arguably unnecessary vehicular movements onto the network.

Figure 2.7: Norwich 2km, 4km & 9km Commuting Distances



Source: Norfolk County Council 258104/BNI/NOR/1/B 24 November 2009 P:\Norwich\MM Projects\258104 - NCC NATS Plus\258104-AL T12 Final Report\Baseline Traffic Information Report\Work from 07 01 2010\20100128 Baseline Conditions V1.doc





Information on people's reasons for choosing to travel by alternative modes to the private car has been obtained through the annual workplace Travel Plan surveys that were conducted in 2007 and 2008. These surveys were carried out by NCC's Travel Plans team, as part of their annual monitoring of business Travel Plans, at 20 employment sites across the county of Norfolk covered by the survey in 2007, and to 72 sites in 2008. A total of 1,340 responses were received in 2007, rising by 72% to 2,304 in 2008. The results of these surveys are shown in Figure 2.8.

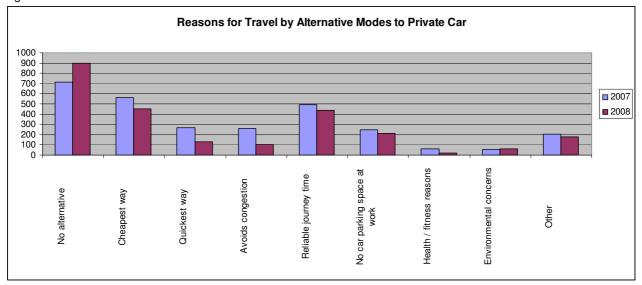


Figure 2.8: Work Place Travel

Figure 2.8 shows that the majority of respondents to the question "If you do not use a car or van to get to work, why do you travel to work the way you do?" perceive that there is no alternative available to them. The next most popular response is that it is the cheapest way or most reliable in journey time. It does not however provide any indication of the distances travelled by these respondents.

2.4.3 Travel Demand

As detailed in Section 2.1, there is a high level of travel demand in to Norwich from commuters, with approximately 50% of people working in Norwich in 2001 commuting from outside Norwich, leading to over 53,000 people travelling into Norwich to work. This peak hour tidal flow of commuters results in large volumes of traffic crossing the Inner and Outer Ring Roads during the weekday peak as detailed in Figure 3.13 and Figure 3.14. Around 212,500 vehicles crossed the Outer Ring Road on a daily basis in 2008. The Inner Ring Road is also subject to high traffic flows of the around 85,000 vehicles per day in 2008.

The rural nature of parts of the NPA, as well as the forecast increase in growth in housing and commercial development in the NPA, means that there is likely to be a significant increase in travel demand into Norwich in the future.

The modes by which these trips are made will necessarily be determined by individuals' own circumstances. However, this growth will result in an increase in the amount of vehicular traffic on the network across the NPA as discussed in section 3.



Some 53,757 people were recorded as commuting into Norwich from outside the District in the 2001 census, and the potential impact of the commercial development in the NPA will be for this number to increase up to 2031.

2.5 Policy

2.5.1 National Guidance

National guidance relevant to transport considerations in development plans is to be found in Planning Policy Guidance Notes (PPG) or Planning Policy Statements (PPS). Much of the guidance is to ensure necessary development is as sustainable as possible and in this respect much emphasis is placed on minimising the need to travel, and trying to ensure that there are realistic alternatives to the car. Preparation of development plans is now the main mechanism by which major new development proposals can be assessed alongside the transport improvements needed to serve them, and by which transport proposals can be linked to the development opportunities they create.

PPG13: Transport

PPG13 provides advice as to how local authorities should integrate transport and land use planning, at a national, regional and local level to:

- Promote more sustainable transport choices for people
- Promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling
- Reduce the need to travel, especially by car

PPS12: Development Plans

PPS12 gives Government policy and guidance on Local Development Frameworks (LDF). It affirms the importance of integrating spatial and transport planning, which means maintaining consistency between Local Development Frameworks and NCC's Local Transport Plan (LTP) 2006/07-2010/11, which sets out the County Council's long term strategy for transport and transport proposals for the next five years. PPS12 also highlights the role that Local Planning Authorities can play in improving accessibility, as the physical location of employment and services is as important to accessibility as transport provision.

PPS3: Housing

Policies on development of housing are set out in PPG3. Several implications for transport can be drawn out of this guidance. These include the need to promote more sustainable patterns of development, exploit and deliver accessibility by public transport to key services and seeking to reduce car dependence by facilitating more walking and cycling. Furthermore, it underlines the need to examine critically the standards they apply to new development, particularly in regard to roads, layouts, car parking.

The Future of Transport White Paper

This sets out the Government's proposals for transport to 2030. The paper's key objective is balancing the need to travel with improving quality of life, based around three central themes:

- Sustained investment over the long term;
- Improvements in transport management; and
- Planning ahead
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Delivering a Sustainable Transport System (DaSTS)

The report published in November 2008 sets out 5 goals:

- to support national economic competitiveness and growth, by delivering reliable and efficient transport networks;
- to reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change;
- to contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health;
- to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society; and
- to improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

DaSTS will be a key document in shaping the County's transport policy including the third Local Transport Plan (LTP3). Work on LTP3 has commenced and will be completed by March 2011 The 5 goals will be met through support of cross-cutting initiatives like those which encourage a modal shift to public transport, walking and cycling, making better use of the existing network and concentrating capacity growth on the lowest carbon emitting transport modes.

2.5.2 Regional Guidance

The East of England Plan

The East of England Plan (EEP) sets a regional context for growth over the next 20 years. It provides a framework for local authorities to produce development plans and sets out the Regional Transport Strategy (RTS) and policies relating to specific locations. The key principles of the RTS largely echo those of national guidance in that local development documents should seek to reduce the need to travel and encourage travel by means other than the private car. Furthermore, delivery of the sub-regional strategy requires local development documents to support better accessibility and transport infrastructure. The objectives of the Regional Transport Strategy include;

- Improving opportunities for all to access jobs, services and leisure/tourist facilities;
- Enable infrastructure programmes and transport service provision to support both existing development and that proposed in the spatial strategy;
- Reduce the need to travel;
- Reduce the transport intensity of economic activity, including freight;
- Improve safety and security

Planning objectives in the EEP that also relate to transport are:

- Accommodate higher levels of growth in sustainable ways.
- Direct most strategically significant growth to the region's major urban areas where strategic networks connect and public transport is at its best.
- Direct development to where there is the greatest potential to build on existing concentrations of activities and physical and social infrastructure and to use growth as a means of extending and enhancing them efficiently.

The RTS also sets out the road and rail network which will act as strategic corridors for movements through the region and connect the major economic generators within the region. Within Norfolk this includes the 258104/BNI/NOR/1/B 24 November 2009



A47 and A11, the A12 corridor between Great Yarmouth and Lowestoft, and the A17 between King's Lynn and Lincolnshire. Significantly, Policy T5 states that improvements to the public transport network are expected to focus on the strategic network, on movement between Regional Interchange Centres (RICs) and on integration with the local bus network.

The RTS identifies Regional Interchange Centres, of which Norwich and King's Lynn are recognised. The text supporting this states that the role of RICs as public transport interchanges will be strengthened by an assured role of other key centres and market towns, both in the provision of local services and as smaller transport hubs. But, it is identified that some areas are more accessible by public transport than others and that this should be taken into account locally when considering the location of facilities. The strategy also promotes the existence of strategic freight interchange where feasible.

The East of England Plan (RSS) also contains Policy NR1: Norwich Key Centre for Development and Change¹¹ which states that Norwich should be a regional focus for housing, employment, retail, leisure, cultural and educational development.

Particular aims, reflecting its identification as a new growth point, should be to:

- provide for 33,000 net additional dwellings in the Norwich Policy Area (NPA) in the period 2001-2021 facilitated by joint or coordinated Local Development Documents prepared by Norwich, South Norfolk and Broadland;
- achieve a major shift in emphasis across the Norwich Policy Area towards travel by public transport, cycling and walking;
- support and enhance the retail, leisure and cultural role of Norwich through development which complements the outstanding historic heritage of the city centre;
- promote the city as a destination for tourists and visitors and a gateway to the wider rural and coastal areas of the county and the Broads; and
- address the deprivation concentrated in parts of the urban area.

Planning for employment growth should focus on:

- the city centre, particularly media and creative industries, finance and insurance, and information communication technologies;
- Thorpe St Andrew and Longwater, Costessey (business park uses);
- Colney/Cringleford (expansion of the research park reserved for research and development, higher education, and hospital/health related uses);
- Norwich Airport (uses benefiting from an airport-related location); and
- Wymondham/A11 corridor (high-tech development and rail-related uses).

Local delivery arrangements should be adopted to plan and deliver these aims. The broad extent of the Norwich Policy Area, based on that of the previous Structure Plan, should be established in Local Development Documents. Requirements for transport infrastructure arising from development in the Norwich area should be determined having regard to NATS, which provides a strategy for improving access by all modes of transport across the Norwich policy area.

¹¹ East of England Plan (Government Office for the East of England, 2008, p.102)

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Local Transport Plan

The LTP sets out the Local Highway Authority's vision, strategy and policies for transport and also describes the approach and measures that will be taken to implement these policies. Key objectives in Norfolk include: -

- Improving strategic accessibility into Norfolk and also access to key services.
- Reducing the need to travel and improving journey reliability, especially for public transport.
- Reducing the number and severity of congestion incidents and road traffic collisions.
- Improving local air quality and minimising the adverse impacts of transport provision on the built environment.

The Local Transport Plan defines Sub Region and Area Transport Strategies that set the particular emphasis in those specific areas.

Norwich Sub Region Transport Strategy

In the Norwich Sub Region and more specifically the urban area of Norwich, there is a need to manage travel demand and promote sustainable travel. The key objective is: -

"To provide the highest possible level of access to and within the strategy area to benefit peoples individual needs and enhance the economic health of the strategy area. To ensure that journeys minimise any adverse impact on people and the built and natural environment."

Norwich Area Transportation Strategy (NATS)

NATS contains a more detailed analysis and promotes travel choice, recognising the need to maintain the economic health of the Norwich area and does not propose radical restrictions on vehicular access. Key objectives include: -

- Undertaking transport improvements that enhance and support the local economy together with building a Northern Distributor Road (NDR).
- Improving the pedestrian environment and also reduce the impact of traffic on residential streets.
- Implementing a programme of public transport improvements, including Park & Ride.
- Reducing the impact of poor air quality.
- Develop the Urban Traffic Control System to provide up-to-date real time information to assist congestion control.
- Reduce congestion on strategic routes to the north of the city
- Reduce noise, air pollution and accidents for communities in the northern suburbs of Norwich and villages outside;
- Enable removal of through traffic from the city centre and implementation of widespread pedestrian / bus priority measures.
- Provide direct access to growth locations, helping to deliver significant housing and employment growth
- Support the continued success of the Norwich economy.

2.6 Conclusions

Norwich is one of the most important cities in the East of England, and has the region's largest economy and the highest ranking retail centre. The current population of the NPA is approximately 280,000 comprising 127,000 households and its standing as an economic centre means that commuting levels to 258104/BNI/NOR/1/B 24 November 2009



Norwich are high, recorded in 2001 as being in the region of 53,757 people per day travelling from outside the Norwich district into Norwich to work.

Problems identified in the NPA include:

- The NPA is facing significant levels of growth in housing and commercial and employment development which could result in the population growing by 26% from 280,000 today to 360,000 in 2031;
- Although a large area of Norwich can be reached within a 30 minute walking or cycling journey from the city centre, and 66% of Norwich residents in 2001 worked within 4km of their home, there is a high level of dependence on the private car for both journeys to work (60% of mode share) and for all journeys (65%);
- The Travel Plan Survey conducted in 2008 has identified that for those people who do not drive to work, the reliability of their chosen mode of transport was a principal reason for choosing to travel in that way;
- Travel demand into Norwich has historically been high, with over 53,000 people travelling into Norwich to work from outside the District in 2001. This level of travel demand is set to increase significantly with the growth that is required under the RSS.