Anglia Forward



Some thoughts on opportunities for the wider Anglia region to punch above its weight with a sustained and growing economy

Why is this important?

Strategic fit/importance:

- Current and growing shortfall in effective area road capacity, long journey times and congestion.
- Economic growth will be stifled unless more capacity/shorter journey times offered in medium term.
- Unattractive current comparisons with journey times between other LEP zones Anglia is typified by longer distances, lower speeds and unreliability of overall journeys, <u>both</u> by road and by rail.
- Connectivity gaps within Anglia, and with non-London economic principal regions, which are worsening with congestion.
- Sustainability and heritage limits scope for expansion of road links, while public transport has spare capacity within Anglia.
- Builds on emerging economic policy solutions with tier of LEPs and strengthened local partnerships.

Achievable gains with strong regional / national / international outcomes:

- Creation of new transport capacity to allow expansion of area GVA, with jobs created through easier, non-congested travel, joining up principal centres of population and business.
- Increased competitiveness of the wider Anglia zone, if New Anglia LEP able to work in partnership with Greater Cambridge Greater Peterborough LEP, neighbouring areas in Essex, and with other key stakeholders.
- Better linkage to Stansted and Norwich Airports to increase international competitiveness, and for freight via Stansted, and via Felixstowe and other Anglian ports.
- Relief of nationally important strategic road network (SRN) corridors including M11/A11/A12 and cross-country routes, by attracting existing subregional journeys to public transport, so allowing re-allocation of scarce road capacity for greater added value benefit.
- Strong agglomeration advantages, through intra-Anglia scope for greater business efficiencies and joined-up skills clusters.
- Maximise the accessibility of main business investment zones such as Martlesham, Haverhill, Mildenhall (foreseen), and the wider Sizewell catchment, and in concert with existing strong agglomerations such as Cambridge, along with effective marketing stimuli and connectivity to workforce locations.

How will it help by being better connected?

The New Anglia LEP and its partners are leading the way in promoting a growing economy for Norfolk and Suffolk. There are successful early results from the objective to shorten links between the main centres and London, with the 'Norwich in Ninety' campaign. This shows that a focused set of priorities can secure wider regional support and central government backing.

Anglia also seeks a stronger internal economy, and better links on non-London corridors. Within a regionally inclusive catchment, there are fast growing knowledge-based economies demonstrated by Cambridge and its hinterland, the international connectivity of Stansted and Norwich Airports, and the world-competitive port of Felixstowe and the historic ports of Harwich, Ipswich, Lowestoft, Yarmouth, and Lynn. Commercial and innovation strengths are demonstrated at many hubs, such as Martlesham and Haverhill.

The policy window opened by 'Norwich in Ninety' shows the opportunity to leverage other major improvements to linkages which will benefit Anglia, its communities and businesses. To be a fully effective part of the British economy, it is essential to reduce journey times and improve accessibility between main centres of population, jobs and foreseeable new centres of economic activity. To take just two prime examples:

- How is Anglia to secure maximum economic dividends from the multi-billion investment in Sizewell 'C', at a relatively remote site on the Suffolk Coast? The key shortcoming is not knowing how such investment will yield maximum impacts across a broad catchment which experiences much deprivation. It is just 40 miles from Sizewell to beyond Norwich, the Broads, East Dereham, Thetford, Bury, Sudbury and Colchester, yet direct jobs, the scope for associated new infrastructure investment and new businesses, and the flow of wealth around Anglia are hindered by the 50-80 minute journey times across the potential catchment, which is also all car-based with no public transport to rely on.
- What fundamental new opportunities will arise with the USAF's expected departure from Mildenhall Airbase? This is a massive site, strategically sited in the heart of Anglia and opening up many options for industrial and technological businesses, or alternatively scope to create much-needed housing capacity yet it has limited connectivity with the potential employee base, access to back offices, the knowledge economy of Cambridge or the commercial hubs of Ipswich and Norwich.



Discontinuity between Anglia population centres and principal means of travel

Many journeys are local, and will require locally effective means of getting about. Car, bus, walking and cycling are the most realistic options for the bulk of passenger travel. Rail also has a medium and long distance role, and as a time and convenience buster for congested road conditions and on corridors with heavy flows, such as principal commuter corridors or for inter-urban travel. For freight movement and ports access, the lorry predominates. However the Port of Felixstowe is also very reliant on (and vulnerable to) its congested and single-track railway branch from the Great Eastern main line at Ipswich, and generates significant cross-country rail volumes.

We shall look here are two levels of data, to gauge the effectiveness of rail and car modes, principally for inter-urban movements.

NETWORK EFFECTIVENESS

This takes the main population volumes (at 2011/2001 levels for overall urban areas, not the administrative areas), and contrasts those with the 2013-14 station usage estimates for total entry/exit. The number of rail journeys per head of population is established. This is an imperfect number as non-resident populations are excluded (relevant, for example, for university cities and towns), while the urban population has grown since 2001. The resulting figures therefore *overstate* the current day effectiveness of rail. A table is shown overleaf.

It is clear that only at a few major locations does rail travel equate to one journey per person per week on average, or more (over ca. 50 journeys per head of population). The bulk of rail travel equates to less than that, typically one journey per person per fortnight, per month or less. Indicatively, the scale of regular committed rail travel by commuters can be gauged by the proportion of season ticket usage at each station, with the bulk of other travel being for occasional journeys (whether on business or for leisure). This supplementary comparison shows a much more consistent – and small scale volume - across the Anglia rail network, if taking that zone as equivalent to Norfolk, Suffolk, Cambridgeshire, Peterborough and N.Essex.

The conclusion of this quick poll is that there is a large gap between rail's nominal infrastructure presence in Anglia and its actual effectiveness for most ordinary journeys within or beyond the area. This is a combination of weaknesses in infrastructure and service levels, and connection arrangements. It points to a huge challenge, and a huge opportunity, for rail to delivery much more for Anglia, through a targeted programme of investment and service improvements, both within and beyond the Anglia catchment. Improvements to connectivity for major existing and new centres of population and jobs should be considered. Intra-Anglia links could be reviewed according to economic growth and population priorities, and for access to international hubs such as Stansted Airport, while there are many non-London principal corridors to be considered, including the emerging East West Rail project to access MK, Oxford and the South Midlands, and the scope for substantial improvements via Peterborough to the West and East Midlands and the A1/Great Northern trunk corridor to Yorkshire, the NE and Scotland.

Anglia urban area population contrasted with scale of passenger rail use

Populations over 7,	500 with or without rail,	populations below	7,500 only	/ having a rail s	ervice.
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Agglomeration/Town	No. of stns	1314 Station Entries & Exits (main stn only)	Station (minor stations data included in agglomeration totals)	Agglomeration > 45k is 2011 data, else agglom=2001	Rail rides per head	Rides per head excl. season	% using season	Train use: More than 1 per week	Train use: More than 1 per fortnight	Train use: More than 1per month	Hardly any train use
Norwich Urban total	1	4,139,820	Norwich	226,833	18	16	14%			X	
Ipswich Urban total	1+	3,312,522	lpswich+DRd+Wfield	187,528	18	12	34%			X	
Peterborough	1	4,398,491	Peterborough	178,869	25	18	25%		X		
Cambridge Urban tota	1+	9,824,859	Cambridge	177,734	55	38	31%	X			
Colchester	1+	4,402,045	Colchester/C.Town/Hyt	143,819	37	18	52%		Х		
Chelmsford	1	8,286,879	Chelmsford	121,928	68	27	60%	×			
Great Yarmouth Urbar	1	460,921	Great Yarmouth	88,008	5	5	9%				X
Lowestoft	1+	471,338	Lowestpft+OBN+OBS	76,788	8	7	15%				×
Clacton Urban total	1	785,578	Clacton	63,631	12	8	37%			X	
(20m pass, 5k/day staff)	1	3,685,987	Stansted Airport	60,000	61	60	2%	×			
Braintree	1+	806,471	Braintree+B.Freeport	56,638	16	7	55%			X	
Bishop's Stortford	1	2,920,187	Bishops Stortford	52,557	56	26	53%	×			
King's Lynn	1	913,458	King's Lynn	51,229	18	15	16%			X	
Bury St Edmunds Urba	1	578,007	Bury St.Edmunds	36,897	16	13	18%			X	
Felixstowe	1	211,238	Felixstowe+Trimley	29,349	8	7	17%				X
Wisbech Urban total	0	Disused railw	ay, reopening campaign	28,744							
St Neots Urban total	1	1,214,383	St.Neots	27,372	44	23	48%		X		
Witham	1	2,349,736	Witham	22,631	104	38	63%	×			
Haverhill	0	No rail service		22,010	S						
Thetford	1	289,790	Thetford	21,760	13	11	19%			X	
Maldon	0	No rail service	,	20,731							
Huntingdon	1	1,692,134	Huntingdon	20,600	82	51	38%	X			
Sudbury	1	329,154	Sudbury	20,188	16	10	40%			X	
Harwich	1+	155,938	Harwich T/Int/Dovercou	20,130	21	12	43%			X	
St Ives (Cambs) Urban	(1)	Busway servi	ce	18,905							
Newmarket Urban tota	1	285,062	Newmarket	18,598	15	10	38%			X	
March	1	357,864	March	18,040	20	14	31%			X	
East Dereham	Preserve	d No regular se	rvice, preserved line	17,779							
South Woodham Ferre	1	584,312	Woodham Ferrers	16,629	35	11	68%		X		
Frinton and Walton	1+	189,644	Frinton/Walton/KirbyX	16,572	21	13	38%			×	
Stowmarket	1	944,466	Stowmarket	15,059	63	37	40%	X			
Royston	1	1,300,508	Royston	14,570	89	50	44%	X			
Saffron Walden	1	838,804	Audley End	14,313	59	29	51%	X			
Ely	1	1,976,134	Ely	13,954	142	81	43%	×			
Beccles	1	101,280	Beccles	12,917	8	7	10%				×
Whittlesey	1	26,938	Whittlesea	12,442	2	1	38%				×
Mildenhall Urban total	0	No rail service	9	12,151				1			
North Walsham	1	241,604	North Walsham	11,845	20	16	20%			X	
Wymondham	1	178,034	Wymondham	11.420	16	12	24%			X	

The table alongside shows there is large variability in the effectiveness of different Anglian rail services and stations. Even rail commuting to centres such as Norwich is limited in practice, not helped by low service frequency. The railway has a strong presence in only 7 of the 31 most populous and busiest centres, >15,000 pop. Some major towns have no link, lacking even a 'virtual railway' bus.

However, for some smaller Anglia communities, it is clear that the railway performs a vital role as a principal means of travel to the rest of Anglia, and beyond.

The figures describe an immature economy with few agglomeration effects and Gross Value Added gains that come with more interdependence between places within practical journey times.

Outside the London commuting belt, Cambridge's knowledgebased economy shows a strong level of agglomeration, with high rail volumes, and also with high percentage rail use nearby.

	No. of	1314 Station Entries & Exits (main	Station (minor stations data included in	Agglomeration > 45k is 2011 data, else	Rail rides per	Rides per head excl.	% usina	Train use: More than	Train use: More than 1 per	Train use: More than 1 per	Hardly any train
Agglomeration/Town	stns	stn only)	agglomeration totals)	agglom=2001	head	season	season	1per week	fortnight	month	use
Halstead (Braintree)	0	No rail service	•	11,053							
Woodbridge	1	202,440	Woodbridge	10,956	18	15	20%			X	
Attleborough	1	154,172	Attleborough	9,603	16	12	25%			X	
Hunstanton Urban tot.	0	No rail service	•	9,116				a			
Watton Urban total	0	No rail service	•	9,000							
Cromer	1+	186,672	Cromer	8,836	21	19	12%			X	
Wivenhoe Urban total	1	367,722	Wivenhoe	8,812	42	20	53%		X		
Diss Urban total	1	675,527	Diss	8,699	78	54	31%	X			
Chatteris	0	No rail service	,	8,466							
Soham	0	Railway exists	s, station being planned	8,447	20						
Lakenheath	V.limited	378	Lakenheath	8,403	0	0	7%				X
Tiptree	0	No rail service	·	8,305	52						
Brandon (Forest Heatl	1	102,090	Brandon	8,256	12	10	21%			X	
Brightlingsea	0	No rail service		8,146	00 - 200463 - 10 -	2 201703 10		·			
Ramsey	0	No rail service	•	8,041	<u> </u>			<u> </u>		2	
Fakenham	0	Preserved rai	l project, local campaign	7,730	e 1010 - 2						
Burnham-on-Crouch	1	293,876	Burnham-On-Crouch	7,636	38	18	52%		X		
Downham Market Urba	1	460,056	Downham Market	7,577	61	43	30%	X			
Sheringham	1	189,976	Sheringham	7,143	27	25	7%		X		
Littleport	1	225,024	Littleport	6,727	33	16	53%		X		
Brundall	1	92,892	Brundall +B.Gdns	5,832	18	14	22%			X	
Manningtree	1	1,154,294	Manningtree/Mistley	5,628	217	119	45%	X			
Halesworth	1	93,962	Halesworth	5,454	17	16	8%			X	
Stansted Mountfitche	1	509,178	Stansted Mountfitchet	5,311	96	46	53%	Х			
Kelvedon	1	837,236	Kelvedon	4,593	182	47	74%	X			
Needham Market	1	91,358	Needham Market	4,574	20	15	25%			X	
Ingatestone	1	750,746	Ingatestone	4,439	169	58	66%	X			
Waterbeach	1	344,722	Waterbeach	4,205	82	49	40%	×			
Southminster	1	144.010	Southminster	3 776	38	18	54%		X		
Marks Teu	1	494,998	Marks Teu	3 599	138	46	66%	×			
Hatfield Payaral	1	408 896	Hatfield Peyerel	3,258	126	34	73%	×			
Elmonell	1	80,558	Elmouell	3 168	25	18	28./	- "	×		
Visubar / Houston		122,653	Houston & Wouldow	3,100	29	34	13.7		- O		
Thursten		70,500	Thurston C wrosham	2,120	24	10	26.7		- 0		
Thurston		129.254	Thurston "	2,030	24	10	30%		- ^		
Jaxmundham	-	50.072	Jaxmundham	2,112	31	47	0%	~			
Lingwood		50,072	Lingwood	2,374	21	ID 10	23%			×	
Acle	1	50,282	Acle	2,230	23	19	16%			X	
Wickham Market 1		44,270 Wickham Market		2,204	20	17	16%			X	
Watlington (West Norf	1	131,742	Watlington	2,031	65	48	26%	X			
Ashwell	1	131,148	Ashwell & Morden	1,660	79	29	63%	X			
Alresford	1	57,480	·	1,881	27	12	57%		X		

Other urban areas in Anglia with resident populations >3,000 in 2011:

Iown	Station?	2011 pop
Histon	Busway	7,427
Yaxley	0	7,413
Sawston	0	7,150
Hadleigh	0	7,124
West Mersea	0	6,792
Swaffham	0	6,734
Danbury / Little Baddow	0	6,315
Great Dunmow	0	5,943
Godmanchester	0	5,835
Burwell	0	5,833
Aylsham	0	5,504
Cottenham	0	5,478
Leiston	0	5,416
Hemsby	0	5,325
East Wittering	0	5,127
Brampton (Hunts)	0	5,030
Bungay	0	4,895
Buntingford	0	4.820
lavwick	0	4 665
Writtle	0	4 646
Poriogland	0	4 573
Dersingham	0	4 500
Polton (Great Varmouth)	0	4,502
Liston	0	4,000
Malbourg	1	4,200
	1	4,298
	0	4,233
vessingiano	0	4,211
neuriersett Saaraakall	0	4,019
Loggesnall	0	3,919
	0	3,899
Jaydon (Suffolk)	0	3,896
stalham	0	3,870
jouthwold	0	3,858
Warboys	0	3,704
Spixworth	0	3,684
LongStratton	0	3,641
Horsford	0	3,608
Maylandsea	0	3,604
Wickham Bishops / Great Totham	0	3,569
Cherry Willingham / Reepham	0	3,555
Holt (North Norfolk)	Preserved	3,550
Earls Coine	0	3,504
Somersham (Huntingdonshire)	0	3,497
oddon	0	3,455
Willingham	0	3,436
Standon	0	3,354
Glemsford	0	3,286
Dutwell	0	3,248
Sutton (East Cambridge)	0	3,212
Sible Hedingham	0	3,192
Boreham	0	3,188
Doddington / Wimblington	0	3,165
West Bergholt	0	3,164
Terrington St. Clement	0	3,107
Martham	0	3,022
Little Paxton	0	3,006

Comparative effectiveness of road and rail for main corridors in Anglia

The maps alongside show the relative use made of rail and trunk road corridors in Anglia. They are taken from a new consultative report, *Improving Connectivity*, published by Network Rail in December 2014 and supported by the Department for Transport. Its conclusion is that the railway – as described above independently – can raise its game, to secure much better public and market value and assist the economic growth of the region, compared to the high cost/low yield infrastructure and services which exist now. A £1bn capital cost is put on this.

Doubling of most services is suggested, though in some cases this would change current service structures. The main objective is to enable quicker journey times overall between all significant centres of population and jobs, not just on a few, London-focused flows. The railways could offer more of a 21st century 'lifestyle' service. This could also have good benefits in relieving Anglia's roads of unnecessary inter-urban and commuting traffic. In some cases the ideas cut across existing rail investment priorities. However the purpose of the consultation is to test opinions on the general thrust of better connectivity, as well as stimulate views on specific options. Consultation ends on 28th February 2015. JRC estimates that, at £5,000 pa GVA per extra economic efficiency and output per household (at an average 2.3 persons per home), the £1bn capital costs would be covered if 220,000 households benefited to that extent across the Anglia area. At £15,000 pa nominal GVA per new job, an inward stimulus of 10,000 new jobs in rail-served locations would be worth £150m pa, which could support significant service enhancements.

COMPETITIVENESS OF JOURNEY TIMES

The tables overleaf have been compiled by JRC to show comparative journey times between major urban and business centres in Anglia (here focusing only on Cambridgeshire, Norfolk and Suffolk, and as far as Stansted). By road, timings are from centre to centre, by rail from station to station plus some waiting, interchange and station access times. In this overview, under 30% of peak car journey O&D sample pairs achieve 40 mph or more between major centres, with over 80% in the offpeak. On a similar basis, the rail proportion is only 11% at 40mph or more, with some journeys not feasible. 15% of rail journeys had average speeds of less than 25 mph, with some journeys over 2-2½ hours because of poor connections and hourly trains. This disadvantages Anglia's economy.



+traffic counts from http://www.dft.gov.uk/traffic-counts



Comparative journey times by road and rail - peak times



Car or rail faster for journeys? - peak times (rail faster if blue, rail slower if red) - net difference in minutes shown in table below

Rail or ca	iail or car = shorter time? BLUE = nominal time saving by rail (minutes), RED = nominal time disadvantage by rail (minutes)																								
When no	rail serv	ice (light	green zon	e), car tir	ne shown	. Car time	s vs busw	ay not sh	own, car	only data	shown	Beige = o	lirect rail	service b	etween st	ations		Pink = in	direct rai	I service,	connecti	on require	ed betwee	n trains	
Ipswich																									
-24	Martlesh	nam Heat	h																						
-51	-38	Sizewell	(Leiston)																						
-19	-69	-46	Lowestof	ft									2 N												
-1	-90	-69	-64	Great Ya	rmouth																				
+14	-133	-118	-19	-81	Cromer		-																		
+16	-86	-70	+7	-17	-12	Norwich	1																		
-35	-66	-90	+10	-7	-4	+4	Thetford																		
-63	-73	-89	-114	-88	-109	-64	-29	Mildenh	all																
-4	-50	-79	-24	-17	-13	-1	-76	-32	Bury St E	dmunds															
-10	-69	-98	-26	-32	-28	-18	-70	-21	+1	Newmar	ket														
-5	-90	-119	+30	+6	-2	+18	+8	-36	-5	-37	Ely														
-36	-121	-141	-27	-33	-69	-19	-10	-61	-47	-59	+1	Kings Ly	nn												
-121	-131	-153	-140	-114	-103	-93	-70	-63	-85	-74	-48	-33	Wisbech												
+25	-126	-155	+9	+1	-28	+15	+16	-58	+24	-14	+7	-48	-26	March											
+12	-138	-166	+25	+15	-13	+28	+30	-88	+11	-30	+15	-35	-43	+13	Peterbo	rough									
-68	-111	-140	-26	-33	-33	-21	-30	-63	-68	-87	-40	-50	-64	-21	+10	Hunting	lon								
-99	-108	-136	-164	-136	-141	-114	-73	-56	-63	-45	-42	-80	-56	-40	-45	-20	St Ives								
-48	-85	-114	+13	-3	+0	+9	+0	-36	-35	-28	+3	+23	-70	+20	+3	-47	-38	Chestert	on (with S	itn)					
-21	-89	-118	+8	-9	-5	+4	-5	-40	-13	-6	+1	+21	-76	+19	-3	-51	-42	-17	Cambrid	ge					
-71	-81	-113	-139	-121	-143	-98	-58	-43	-42	-29	-55	-103	-99	-90	-90	-64	-61	-43	-57	Haverhil					
-63	-95	-124	-17	-27	-24	-16	-24	-46	-57	-51	-11	-6	-98	+12	-15	-69	-46	-5	-2	-33	Saffron	Walden/A	udley Enc		-
-71	-86	-120	-22	-13	-10	-2	-10	-61	-47	-47	+2	+3	-111	+22	-5	-60	-59	+6	+8	-43	-6	Stansted	Airport		
+3	-34	-59	-18	+7	+12	+22	-67	-44	+1	-8	+1	+6	-104	+23	+16	-41	-79	-35	-12	-58	-43	-23	Stowmar	ket	
+0	-12	-39	-17	-37	-32	+11	-51	-78	-22	-22	-45	-38	-138	-20	-29	-81	-111	-49	-27	-88	-58	-63	-18	Woodbri	idge
-11	-20	-50	-66	-33	-20	-8	-90	-76	-42	-75	-38	-24	-135	-4	-23	-76	-113	-55	-33	-85	-89	-110	-28	-48	Felixstow

Comparative journey times by road and rail - offpeak times



Car or rail faster for journeys? - offpeak times (rail faster if blue, rail slower if red) - net difference in minutes shown in table below

Rail or ca	ar = short	er time?	? BLUE = nominal time saving by rail (minutes), RED = nominal time disadvantage by rail (minutes)																						
When no	rail serv	vice (light	nt green zone), car time shown. Car times vs busway not shown, car only data shown 🛛 🖪							Beige = c	Beige = direct rail service between stations						Pink = indirect rail service, connection required between trains								
Ipswich																									
-16	Martles	<mark>h</mark> am Heat	h																						
-41	-30	Sizewell	(Leiston)												1								1		
-35	-55	-37	Lowesto	ft						1															
-21	-72	-55	-74	Great Ya	rmouth																				
-11	-106	-94	-36	-93	Cromer																				
+0	-69	-56	-5	-23	-21	Norwich																			
-46	-53	-72	-9	-21	-22	-5	Thetford	A			2														
-50	-58	-71	-91	-70	-87	-51	-19	Mildenh	all																
-12	-40	-63	-45	-35	-36	-15	-85	-21	Bury St	<mark>E</mark> dmunds															
-22	-55	-78	-50	-51	-52	-32	-83	-14	-9	Newman	ket												1		
-21	-72	-95	+2	-17	-25	+0	-2	-24	-14	-49	Ely														
-58	-97	-113	-52	-53	-86	-35	-21	-49	-62	-74	-9	Kings Ly	nn												
-97	-105	-122	-112	-91	-82	-74	-56	-50	-68	-59	-38	-22	Wisbeck	r											
+1	-101	-124	-23	-25	-52	-7	+0	-46	+8	-27	-2	-57	-17	March											
-14	-110	-133	-11	-16	-41	+2	+10	-70	-7	-45	+1	-48	-34	+5	Peterbo	rough									
-88	-89	-112	-59	-61	-65	-44	-45	-50	-81	-97	-50	-67	-51	-30	+3	Hunting	don								
-79	-86	-109	-131	-109	-113	-91	-58	-45	-50	-36	-28	-64	-45	-32	-36	-13	St Ives								
-63	-68	-91	-15	-26	-27	-9	-10	-29	-43	-37	-9	+8	-56	+8	-9	-60	-25	Chestert	on (with !	Stn)			1		
-37	-71	-94	-21	-32	-33	-15	-16	-32	-22	-16	-13	+4	-61	+5	-15	-66	-28	-11	Cambrid	lge					
-57	-65	-90	-111	-97	-114	-78	-46	-34	-28	-19	-44	-82	-79	-72	-72	-51	-49	-34	-38	Haverhil	11				
-80	-76	-99	-47	-52	-53	-36	-36	-37	-67	-63	-22	-27	-78	-5	-30	-79	-37	-13	-16	-22	Saffron	Walden/A	Audley End	ł	
-86	-69	-96	-52	-41	-42	-25	-25	-49	-60	-56	-12	-21	-89	+2	-22	-72	-47	-4	-3	-34	-17	Stanster	Airport		
-7	-27	-47	-35	-11	-11	+9	-75	-35	-8	-16	-12	-13	-83	+3	-6	-57	-63	-47	-25	-46	-57	-40	Stowman	rket	
-10	-8	-26	-30	-54	-58	-7	-65	-62	-33	-37	-64	-64	-110	-46	-57	-104	-89	-67	-46	-70	-78	-82	-26	Woodbr	idge
-21	-13	-40	-82	-54	-47	-26	-104	-61	-53	-90	-57	-49	-108	-30	-51	-99	-90	-73	-52	-68	-109	-125	-35	-57	Felixstow

Commentary on road and rail journey times

Both road and rail travel times put Anglia at a disadvantage, compared to more central parts of England. The starting point is that Anglia has comparatively long inter-urban travel distances. There is an average distance of 50 miles for the 325 O&D journey pairs between populous cities and towns, plus Stansted Airport and some business centres, which are set out above. This puts a premium on good inter-urban travel times.

With an estimate of under 30% of peak time car O&D journey pairs achieving 40 mph or more, for many longish journeys, this means that the bulk of journeys will be taking an hour or more, with an average journey time of 1½ hours across the area. This is based on a 30% additional time for interurban travel in peaks (it can be longer), and a 50% increase in times for local journeys up to 20 miles in distance. The proportion of peak time flows under 40 mph would still be more than half of all O&D journey pairs, if the extra peak time delay averaged only 15% on long inter-urban travel, and only 25% for local trips.

The combination of long distances and long journey times limits Anglia's competitiveness, through constraints on accessibility, connectivity and the effective working day. The ability to cluster skills and secure agglomeration advantages is reduced because of the shortfall in road transport infrastructure. Offpeak timings show over 80% of journeys achieving 40 mph or more, which helps daytime business and leisure travel, however this is also largely on single carriageway roads which incur stressful driving.

With the rail infrastructure, there are multiple shortcomings. Only three main lines within Anglia – Ipswich-Norwich, Stansted-Cambridge-Peterborough and Norwich-Thetford-Ely-(Cambridge/Peterborough) have at least two trains every hour or more. All other lines, and most individual services, offer only basic hourly frequencies offpeak (on the Bury Line, one service is hourly, and one is every two hours). There are occasional additional peak trains, not assessed in this quick survey. The outcome is many long waits for connecting trains, and slow overall journeys, as highlighted in the tables above. Just 18 O&D journeys (under 6%) are as quick as or quicker by rail than car, in the offpeak sample, after allowing for some time to access the stations and wait for trains. In peak times under a quarter of the O&D journey pairs are quicker by rail.

It is this shortfall in rail output qualities – therefore jeopardising value for public money and also limiting opportunities for economic growth – which Network Rail (supported by the Department for Transport) are challenging in the report "Improving Connectivity". Our initial research suggests that more through trains – to speed up journey times between major O&D urban and business centre pairs – are potentially as important as increasing service frequency to at least 2 trains per hour, plus quicker interchanges.

Conclusions

There is no shortage of options to improve road and rail travel, and offer better bus links as well, around Anglia, and between Anglia and other parts of Britain. There are emerging topics such as securing the best economic leverage from projects such as Sizewell and Mildenhall. There are already many individual ideas and initiatives around. However the scale and relevance of transport investment should be validated, in terms of measures such as value for money, affordability, and timescales for delivery. Just aiming for the first obvious 'solution' might not be the best approach when the required outputs are taken in the round.

JRC considers that the summary analyses set out above make a clear case, that Anglia's main inter-urban corridors for both modes require improvement, to achieve shorter journey times and better capacity between main centres and business development areas. Road initiatives are likely to focus on outputs which improve journey quality and journey times. The same generality will apply also to rail (and 'virtual railways' supplied by bus links), but from a worse starting point, because the inter-urban and commuting rail offer is much less satisfactory as a whole than the road offer, as demonstrated by the usage mapping above. Enabling the existing railway to do more is a large challenge, away from the three main routes. Enabling it to become a trusted, 'lifestyle' umbilical is a challenge beyond that. It is open to the New Anglia LEP to ensure that the 'Norwich in Ninety' project is delivered, whilst also spreading the railway frequency and connectivity net more widely.

There is a combined 1.4m population for the 25 urban and business development areas described above, and ca. 2½m including Anglian towns over 3,000 population plus those in north Essex. Looking to the expansion of the Anglian population and economy, there are major towns and business areas with growing populations and expanding economies who merit either a direct rail service or a high quality busway. Wisbech, Haverhill, East Dereham and Mildenhall, not rail-served, have populations in the 12-30,000 range. At Chesterton, a station opens in 2016 for Cambridge Science Park.

Much of Anglia's economic growth will rely on existing urban areas – whose economic capabilities need strengthening – plus improved inter-urban roads. However it is unlikely that the whole burden should be road based, nor that this will represent the right investment to achieve the best outputs. The DfT has already shown interest in a fundamental Anglian rail recast. Expanding business centres such as Martlesham Heath, and potentially Sizewell/ Saxmundham and a future Mildenhall vacant airbase, point to a dynamic for new road and rail links to be considered urgently as part of a visioning plan for Anglia's connectivity as a whole.

JRC is keen to discuss the basis of a scoping study or a more extensive analysis, to develop the thinking shown in this outline document.

2nd February 2015





ANGLIA MAJOR POPULATION CATCHMENTS

Size of circles proportional to size of population Resident population > 6,700

Selected major business development opportunities shown, also 40 mile catchments from Sizewell and Mildenhall Airbase.

Locations with railway stations or busway shown with **blue circles**. Locations without stations shown with **red circles**.