### **APPENDIX N2**

CONNECTIVITY IMPROVEMENTS ACHIEVED BY HS2 AND HIGH SPEED UK FOR:

## NOTTINGHAM

(extract from HS2 - High Speed to Nowhere)

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### Nottingham

Town/City	Nottingham	References:				
Population of built-up area**	730,000	HSUK East Midlands Rail Strategy HSUK Regional Maps 05 HSUK Nottingham Network Map All available on HSUK website				
Ranking amongst UK cities**	9					
Number of cities directly linked by existing rail network (out of 31)	13	www.highspeeduk.co.uk				

\*\* https://en.wikipedia.org/wiki/List\_of\_urban\_areas\_in\_the\_United\_Kingdom

#### **Nottingham : Intercity Connectivity with HSUK and HS2**

Nottingham	Average journey time reduction	Cities directly linked (out of 31)	Journeys made faster (out of 31)	Journeys made worse (out of 31)	Best performer (out of 31 journeys)
High Speed UK	56%	27	31	0	31
HS2	<b>10%</b>	0	9	1	0

Nottingham's existing score of 13 cities (out of 31) directly linked indicates moderate connectivity, but the benefits of this connectivity are generally compromised by the poor quality rolling stock used on most services (except to London), by the poor journey times on offer and by the fact that Nottingham is located on a spur, clear of both the Midland and CrossCountry main lines. As a consequence, most intercity services to Nottingham terminate there and the advantages of through routeing are lost.

HS2 will do little to improve Nottingham's intercity connectivity. Rather than serve central Nottingham, HS2 will serve a parkway station located midway between Nottingham and Derby at the existing Toton marshalling yard. Toton is 9km from central Nottingham, and currently has no rail services. As yet, no credible proposals have emerged for:

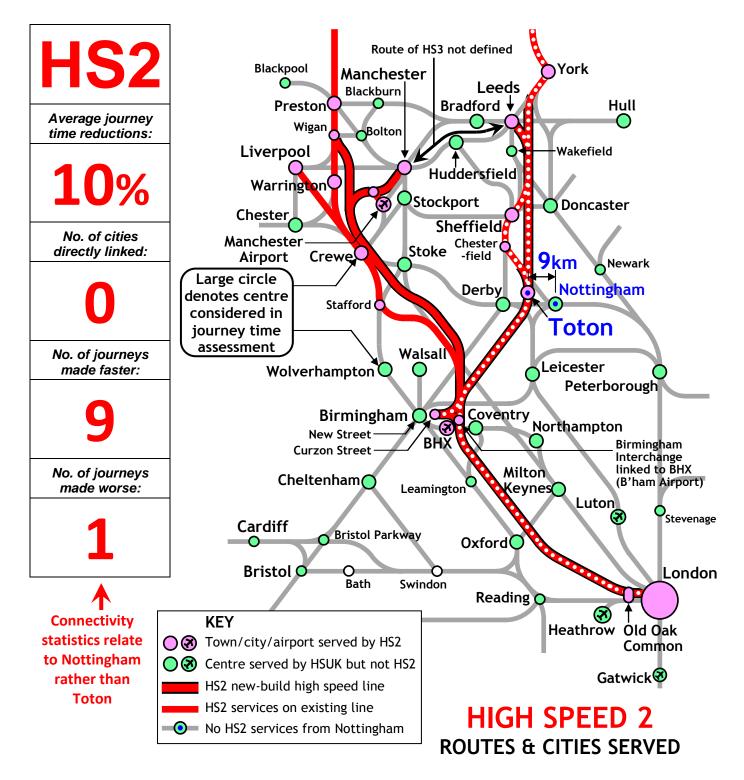
- how local services will be developed to serve Toton and provide efficient links from Toton to Nottingham (and Derby).
- how the combined Nottingham to Toton and Toton to London/Birmingham/Leeds journey can provide a superior passenger experience than direct journeys from central Nottingham to London, Birmingham and Leeds.
- how the quality and connectivity of the local rail network will be maintained, given the likely diversion of local services via Toton.

HSUK avoids all of these problems with its high speed services routed via the existing Nottingham Midland station. Nottingham's current 'branch line' status will be redressed through the upgrading of the eastward route to Grantham, and the restoration of the former route from Bottesford to Newark Northgate. These two measures will allow through, rather than terminating routes to serve Nottingham, and will enable Nottingham's intercity connectivity to be transformed with 56% journey time reductions and direct links to all UK primary cities.

_	SPEED UK			NG	HAM
& HS	2 LINKS TC				
$\left( \cdot \cdot \right)$	Journey time (mins) – Leicester	→ 40	80	120 Intere	160 200 city journey time
	Derby	<b></b> #			<ul> <li>with HSUK in place</li> <li>as existing</li> </ul>
	Sheffield		(47		with HS2 in place
	Northampton		(17	<b>- H</b>	Existing journey made
	Birmingham		(17	<b>1</b> )	worse by HS2
	Leeds		_	·	Quickest journey 31 via HSUK
	Doncaster		_	-	0 no change
	Peterborough		_	20 m	0 via HS2
	Manchester			<b>=</b> jourr	inute increment applied to ney times (where relevant)
	Coventry		_	to	allow for 'deterrent effect' of each change of trains
	Stockport				Average
	Walsall		_		.journey time
	Milton Keynes		_		
	Luton		_		56%
	London			•	HS2
	Stoke		_	-	10%
	B'ham Airport				1070
	Wolverhampton			_	
	M'ch'r Airport				_
	York	_			
IJ	Crewe	_			
	Liverpool	_			
	Warrington	_			
	Oxford	_			
	Cheltenham <sup>\$</sup>	_		_	
ΙΛ	Bradford	_		_	
IA	Chester	_			
	Huddersfield			_	
	Preston	_	_		
	Heathrow		_		
	Hull				
	\$ Cheltenham service onward to Bristol and			-	ney times presented ted format see p314

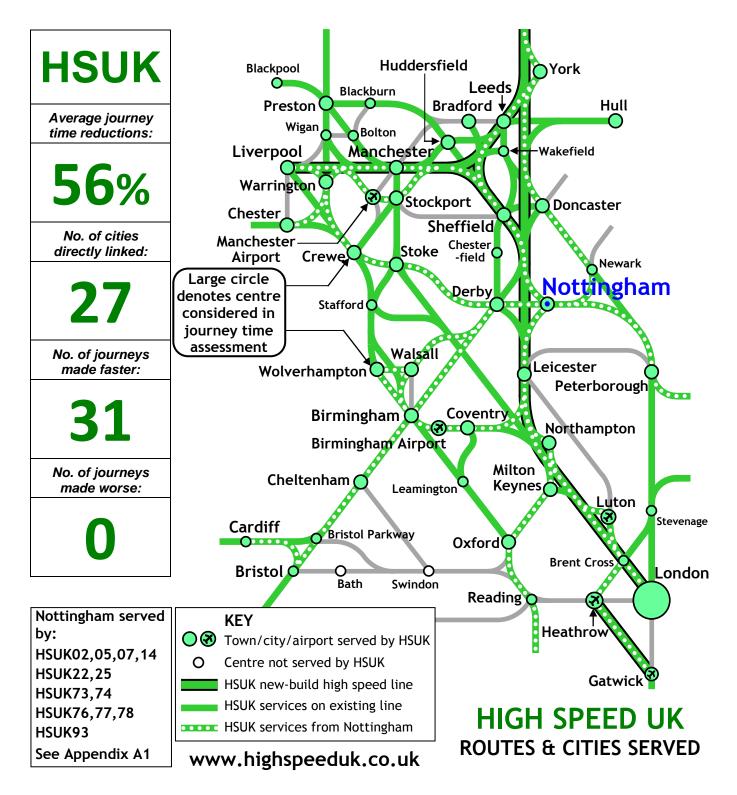
## **TOTON** (for Nottingham)

Nottingham bypassed by HS2; limited connections available from Toton, 9km from Nottingham



# NOTTINGHAM

Fully connected to national high speed network, direct high speed links to most principal UK cities



	Comparative Journey Times from Nottingham										
Quickest via:	HSUK No change HS2		time adju ber of cha		HSUK		Existing		HS2		Journey made
Origin	Destination	HSUK	Existing	HS2	Journey time	No of changes	Journey time	No of changes	Journey time	No of changes	worse by HS2
	Birmingham	40	72	<b>62</b>	40	0	72	0	42	1	
	B'ham Airport	53	123	80	53	0	103	1	50	<b>1</b> <sup>B</sup>	
	Bradford	88	164	129	68	1	144	1	89	2	
Ν	Cheltenham	80	120	120	80	0	120	0	120	0	
IN	Chester	91	192	<b>192</b>	91	0	152	2	152	2	
	Coventry	44	133	118	44	0	113	1	<b>68</b>	<b>2</b> <sup>B</sup>	
	Crewe	59	135	135	59	0	115	1	115	1	
	Derby	15	20	20	15	0	20	0	20	0	#
T	Doncaster	40	108	108	40	0	88	1	88	1	
	Heathrow	104	219	140	104	0	179	2	100	2	
	Huddersfield	90	168	129	70	1	148	1	89	2	
T	Hull	121	181	181	101	1	161	1	161	1	
	Leeds	42	118	72	42	0	118	0	<b>52</b>	1	
	Leicester	14	28	28	14	0	28	0	28	0	
	Liverpool	66	160	<b>160</b>	66	0	160	0	<b>160</b>	0	
	London	47	101	97	47	0	101	0	77	<b>1</b> <sup>A</sup>	
N	Luton	48	89	<b>89</b>	48	0	89	0	<b>89</b>	0	
	Manchester	45	106	<b>106</b>	45	0	106	0	106	0	
	M'ch'r Airport	57	161	161	57	0	141	1	141	1	
G	Milton Keynes	48	146	146	48	0	126	1	<b>126</b>	1	
	Northampton	34	171	171	34	0	131	2	122	<b>2</b> <sup>B</sup>	
	Oxford	77	170	170	77	0	150	1	150	1	
	Peterborough	40	66	<b>66</b>	40	0	66	0	66	0	
	Preston	96	184	184	76	1	164	1	164	1	
A	Sheffield	21	50	50	21	0	50	0	50	0	
	Stockport	48	95	95	48	0	95	0	95	0	
N A	Stoke	49	106	<b>106</b>	49	0	86	1	<b>86</b>	1	
M	Walsall	46	131	131	46	0	111	1	111	1	
	Warrington	75	129	129	75	0	129	0	129	0	
	Wolverhamptor	54	122	122	54	0	102	1	102	1	
	York nge introduced b	59	132	80	59 tle betwee	0	112	1	<b>60</b>	1	

A = Change introduced by HS2 B = Change via shuttle between Birmingham International and Interchange # = Journey made worse by intervention of HS2 (no adjustment made to existing journey time)

Generally, journey times adjusted by 20 minutes to allow for each change of trains. 30 minute adjustment applied for the special cases noted above ie A – extra change introduced by HS2 and B – shuttle connection between Birmingham International and Birmingham Interchange.