

Traffic performance data from NCC-commissioned modelling of three roundabout options.

Notes

Delay is measured in Vehicle Hours (sum of all the minutes of delay experienced by each vehicle in the modelled period)

Queues lengths (Average and Maximum) are measured in metres

am and pm periods are the busiest hours in the morning and evening weekday peaks

1. Simple 'Turbo' Roundabout (considered at BHWG on 31 st October; some tree loss)

		2016 am				2016 pm				2016 am queue		2016 pm queue		2016 delay	
		A	B	C	D	A	B	C	D	Av(m)	Max (m)	Av(m)	Max (m)	am	pm
A	Great North Road (N)	0	74	704	81	0	137	550	98	5	61	1	33	>56 vehHr	>100 vehHr
B	Jesmond Dene Road	100	0	469	429	141	0	308	478	75	213	255	312f		
C	Great North Road (S)	550	522	0	132	630	465	0	225	9	128	25	158		
D	Grandstand Road	24	340	164	0	34	368	112	0	215	236f	216	231f		
		3589				3546									
		2031 am				2031 pm				2031 am queue		2031 pm queue		2031 delay	
		A	B	C	D	A	B	C	D	Av(m)	Max (m)	Av(m)	Max (m)	am	pm
A	Great North Road (N)	0	99	869	106	0	169	667	129	52	200	18	125	>113 vehHr	>137 vehHr
B	Jesmond Dene Road	109	0	421	412	137	0	293	430	226	312f	296	312f		
C	Great North Road (S)	662	603	0	148	737	542	0	262	26	241	85	258		
D	Grandstand Road	21	305	150	0	24	335	100	0	217	237f	218	231f		
		3905				3825									

2. Large Oval Roundabout (considered at BHWG on 31st October and dismissed due to excessive tree loss)

		2016 am				2016 pm				2016 am queue		2016 pm queue		2016 delay	
		A	B	C	D	A	B	C	D	Av(m)	Max (m)	Av(m)	Max (m)	am	pm
A	Great North Road (N)	0	73	688	81	0	140	552	97	44	130	6	61	29 vehHr	24 vehHr
B	Jesmond Dene Road	101	0	476	438	176	0	385	597	6	55	12	111		
C	Great North Road (S)	551	532	0	131	629	470	0	226	2	38	9	111		
D	Grandstand Road	22	400	194	0	42	483	143	0	2	38	4	52		
		3687				3940									
		2031 am				2031 pm				2031 am queue		2031 pm queue		2031 delay	
		A	B	C	D	A	B	C	D	Av(m)	Max (m)	Av(m)	Max (m)	am	pm
A	Great North Road (N)	0	78	658	81	0	148	596	121	433	487	164	339	>138 vehHr	>113 vehHr
B	Jesmond Dene Road	133	0	537	557	213	0	473	719	15	110	37	167		
C	Great North Road (S)	667	617	0	151	721	547	0	255	5	56	183	363		
D	Grandstand Road	27	489	227	0	45	582	175	0	82	162	114	190		
		4222				4595									

3. Conventional Circular Roundabout - no tree loss (considered at BHWG on 14th November)

		2016 am				2016 pm				2016 am queue		2016 pm queue		2016 delay	
		A	B	C	D	A	B	C	D	Av(m)	Max (m)	Av(m)	Max (m)	am	pm
A	Great North Road (N)	0	75	715	81	0	139	555	97	1	29	1	23	18 vehHr	26 vehHr
B	Jesmond Dene Road	101	0	474	437	173	0	382	599	15	124	26	183		
C	Great North Road (S)	540	510	0	131	618	456	0	223	26	154	59	194		
D	Grandstand Road	22	399	194	0	43	484	143	0	5	36	8	45		
		3679				3912									
		2031 am				2031 pm				2031 am queue		2031 pm queue		2031 delay	
		A	B	C	D	A	B	C	D	Av(m)	Max (m)	Av(m)	Max (m)	am	pm
A	Great North Road (N)	0	99	864	103	0	170	672	130	101	201	7	59	>100 vehHr	>118 vehHr
B	Jesmond Dene Road	126	0	517	527	201	0	453	692	126	269	138	292		
C	Great North Road (S)	641	581	0	143	638	458	0	232	247	355	407	466		
D	Grandstand Road	26	492	232	0	45	587	174	0	31	111	22	69		
		4351				4452									