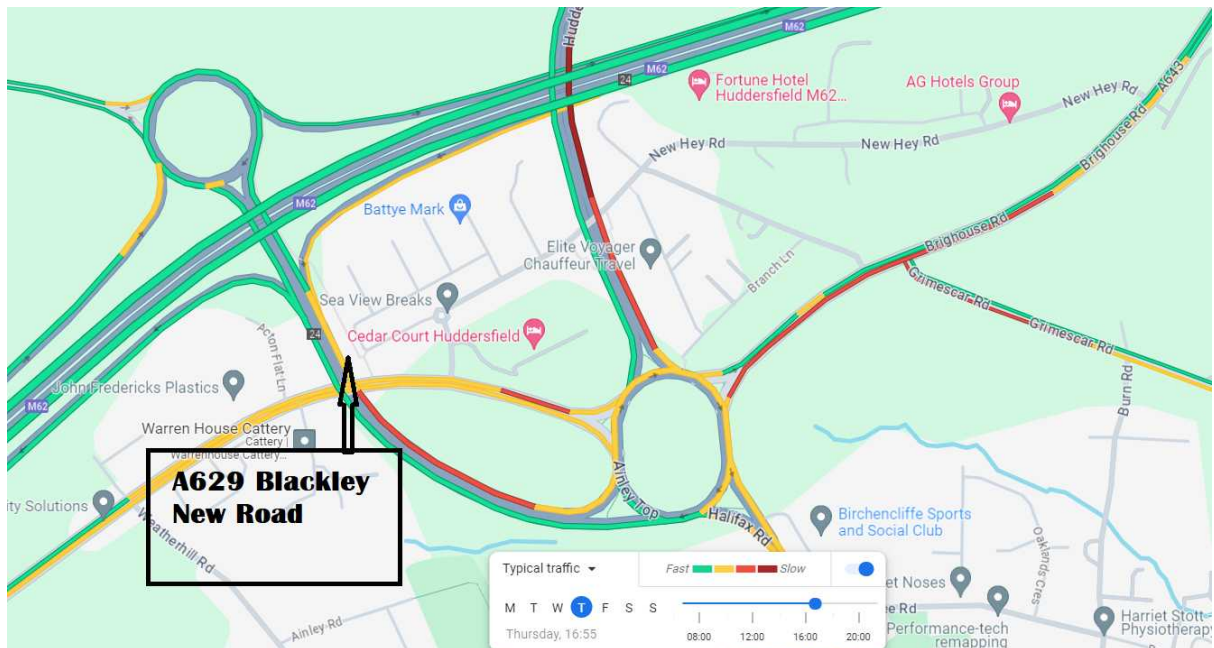


A629 Blackley New Road queue measurements and Linsig model forecasts



National Highways have expressed concerns about existing peak hour queues on A629 Blackley New Road and the direct feed from the M62 westbound exit at J24 at Ainley Top.

The planning application is currently subject to a holding condition imposed by NH until full details of the queues are provided, together with forecasts of queues with the development in place. Paragon Highways are the applicants' highways consultant but have been struggling with sensible and credible queue forecasts from the Linsig traffic modelling program.

Kirklees UTC have developed and adapted the original Paragon Linsig model to provide more meaningful results, which may assist with the lifting of the National Highways holding condition.

Existing modelled queues, with reference to the crowd sourced Google "typical traffic" are considered to correlate the current situation. Future queues are taken from the Linsig model which includes development traffic, and again for 2032 with and without the development flows.

Both JCT, the designers of the Linsig modelling package, and TRL who produce the alternative Transyt modelling program, provide advice and warnings of the difficulty of matching queues to the modelled output provided by their respective programs.

As a result of the NH holding condition, Paragon were required to undertake a queue survey on the five the external approaches to Ainley Top roundabout. The survey took place on Tuesday 24 March 2024. The results have been included in the appraisal, but a one-day count is difficult to justify as general conditions.

A643 Blackley New Road approach

0700-0800 early AM peak

All figures are in metres.

K prefix denotes a Kirklees UTC model

scenario	2024 Q survey		Linsig forecast		Change to length		note
	min	max	MMQ	MMQx2			
2024 Q survey	102	358					
2024 Google		530					
2022 Paragon			95	190			
K 2022 base			524	1049			
K 2022 + devt			560	1120	+34	+71	= development traffic
K 2032 base			765	1530	+241	+481	= 10-year growth
K 2032 + devt			802	1603	+37	+73	= development traffic

0800-0900 main AM peak

scenario	2024 Q survey		Linsig forecast		Change to length		note
	min	max	MMQ	MMQx2			
2024 Q survey	168	365					
2024 Google		867					
2022 Paragon			84	168			
K 2022 base			450	900			
K 2022 + devt			482	965	+32	+65	= development traffic
K 2032 base			673	1346	+223	+446	= 10-year growth
K 2032 + devt			710	1419	+37	+73	= development traffic

1600-1700 early PM peak

scenario	2024 Q survey		Linsig forecast		Change to length		note
	min	max	MMQ	MMQx2			
2024 Q survey	67	127					
2024 Google		886					
2022 Paragon			94	187			
K 2022 base			713	1426			
K 2022 + devt			748	1489	+35	+63	= development traffic
K 2032 base			993	1986	+280	+560	= 10-year growth
K 2032 + devt			1025	2049	+32	+63	= development traffic

1700-1800 main PM peak

scenario	2024 Q survey		Linsig forecast		Change to length		note
	min	max	MMQ	MMQx2			
2024 Q survey	83	171					
2024 Google		759					
2022 Paragon			83	166			
K 2022 base			462	923			
K 2022 + devt			488	975	+26	+52	= development traffic
K 2032 base			706	1411	+218	+488	= 10-year growth
K 2032 + devt			736	1472	+30	+61	= development traffic

As a check the following figures are noted.

Google “typical traffic” snap shot for xx:30 sits in the modelled MMQ to MMQx2 range for the 2022 base models. All figures are metres.

Scenario	Google	MMQ	MMQx2
0700-0800	530	524	1049
0800-0900	867	450	900
1600-1700	886	713	1426
1700-1800	759	462	923

The pattern for the extensions to the queue forecasts follow a similar pattern over all four of the peaks.

The 2022 base to 2022 with development is in the range of 26 to 35 metres.

The 2022 to 2032 growth is 218 to 280, equivalent to about 38 to 49 vehicles / pcus.

The 2032 base to 2032 with development is in the range of 30 to 37 metres.

The increases in queue length attributed to the development traffic are similar for both 2022 and 2032.

The consistencies to queue extensions for the modelled periods, the Google queue checking to the forecast range in modelled queues, anecdotal and eyewitness accounts of the queueing, and captured Google Street views of the Blackley New Road queues,

are useful secondary independent accounts to support the modelled findings of the revised Kirklees UTC Linsig models.