

# A52 Bingham Road / Harlequin Junction Improvements – Survey Results

June 2021

# Survey Locations – May 2021



Background image copyright Google Maps

- Turning counts at J1, J2, J3
- Pedestrian / cycle counts at J3
- Speed surveys at A,B,C,D
- Survey dates:
  - 5<sup>th</sup> to 25<sup>th</sup> May 2021
  - 3 weeks continuous
- Data included in pack:
  - Ped'/ cycle counts – 5<sup>th</sup> to 25<sup>th</sup> May
  - Turning counts – 5<sup>th</sup> – 25<sup>th</sup> May
  - Speed data – 5<sup>th</sup> – 25<sup>th</sup> May
- Summaries included in pack:
  - Ped'/ cycle counts – 5<sup>th</sup> to 25<sup>th</sup> May
  - Turning counts – 5<sup>th</sup> – 25<sup>th</sup> May
  - Speed data – 5<sup>th</sup> – 25<sup>th</sup> May

# Typical survey equipment installations



- Typical traffic survey camera installations
- Camera mounted on top of pole (out of shot)



- Typical radar installation

# Survey validity

- Surveys undertaken for a continuous three week period in May 2021
- Vehicle, pedestrian and cycle movements recorded by video
- Vehicle speeds recorded by radar
- Surveys undertaken by independent specialist sub-contractor
- Bingham Road playing fields in full use during surveys.
- Through flows affected by emergency roadworks on A52 during Wednesday 5<sup>th</sup> May. No other reported incidents, roadworks or special events during the survey period.
- Comparison of traffic volumes on the A52 between May 2019 and May 2021 shows that May 2021 peak hour flows were circa 14% below pre-Covid levels

# Playing field fixtures during the survey

## Bingham Road playing field fixtures during survey

Date	Kick off Time	Games
Saturday 8 <sup>th</sup> May	1000hrs	2 x 11 a side teams
Saturday 8 <sup>th</sup> May	1000hrs	1 x 11 a side team
Saturday 8 <sup>th</sup> May	1200hrs	2 x 11 a side teams
Sunday 9 <sup>th</sup> May	1000hrs	2 x 11 a side teams
Sunday 9 <sup>th</sup> May	1030hrs	1 x 11 a side team
Saturday 15 <sup>th</sup> May	1000hrs	1 x 11 a side team
Saturday 15 <sup>th</sup> May	1030hrs	2 x 11 a side teams
Saturday 15 <sup>th</sup> May	1200hrs	2 x 11 a side teams
Sunday 16 <sup>th</sup> May	1030hrs	2 x 11 a side teams
Saturday 22 <sup>nd</sup> May	1000hrs	2 x 11 a side teams
Saturday 22 <sup>nd</sup> May	1200hrs	2 x 11 a side teams
Sunday 23 <sup>rd</sup> May	1030hrs	1 x 11 a side team
Sunday 23 <sup>rd</sup> May	1200hrs	1 x 9 a side team

# Number of left turning vehicles – Ave weekday May 2021

## Total Vehicles & HGV – Average Weekday

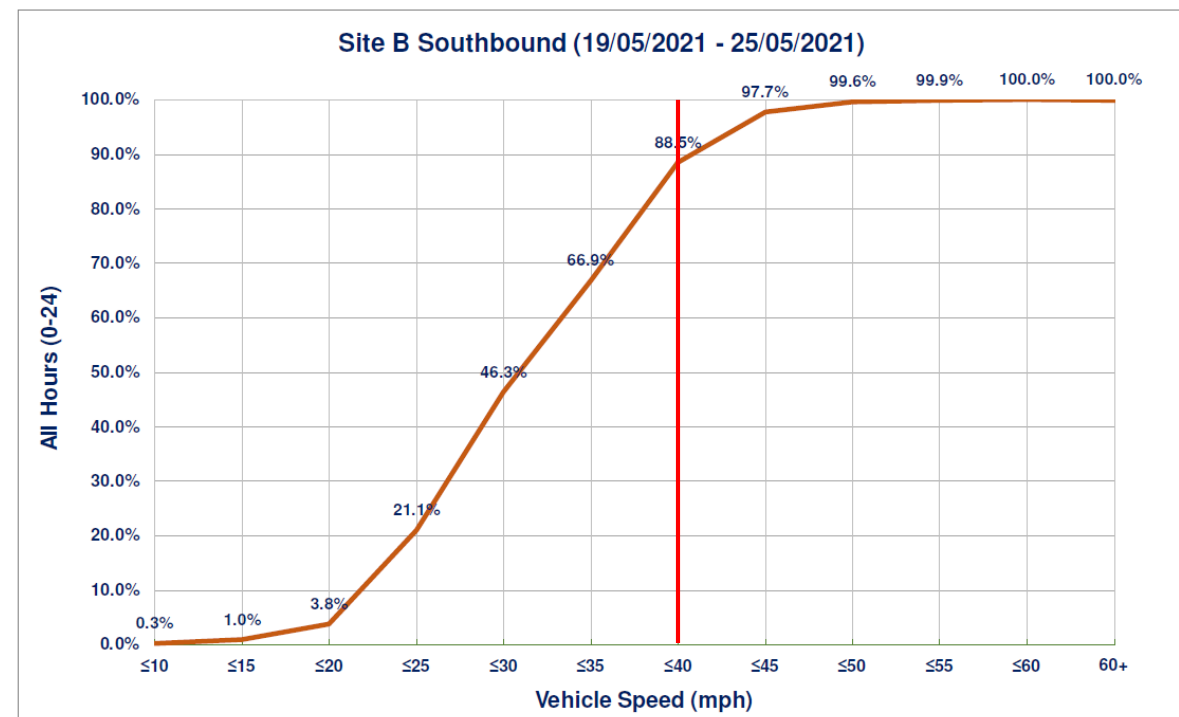
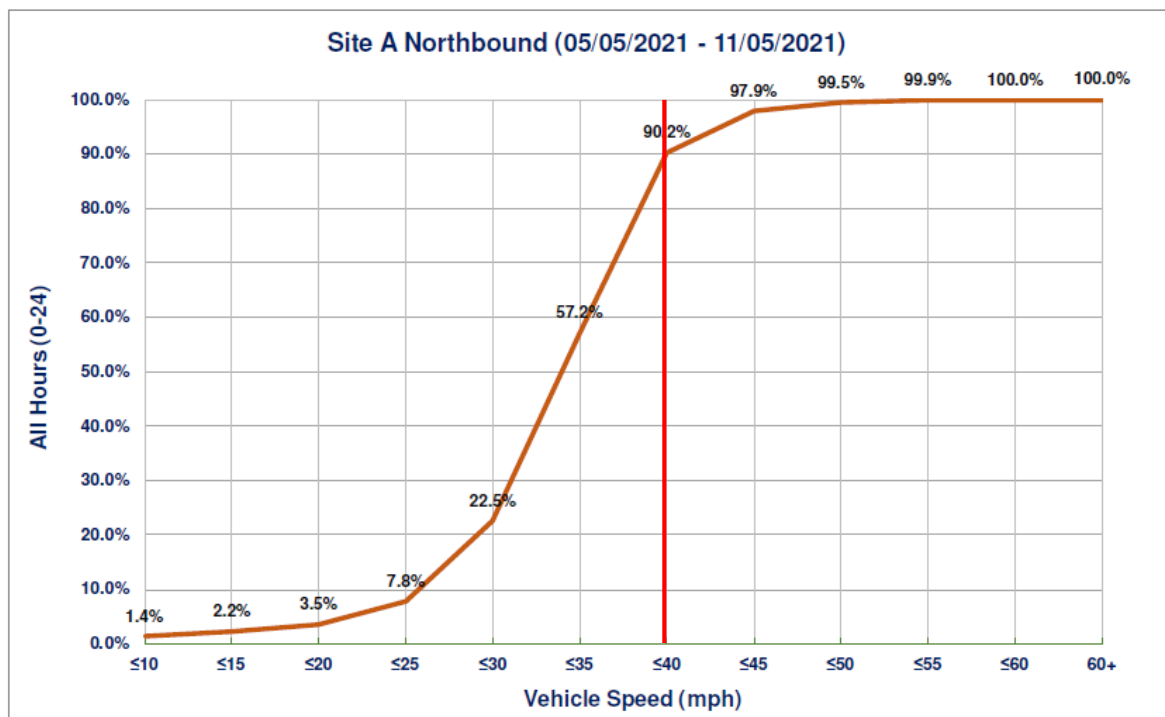
Movement	A52 Eastbound to Bingham Road						Carter Avenue to A52 Westbound					
Time	Week 1		Week 2		Week 3		Week 1		Week 2		Week 3	
	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV
08:00 – 09:00 (Hour Total)	6	1	7	1	5	1	5	0	4	0	6	0
10:00 – 16:00 (Average Hour)	6	1	4	0	4	0	5	0	4	0	4	0
17:00 – 18:00 (Hour Total)	7	0	7	0	4	0	7	0	6	0	5	0
07:00 – 19:00 (12 Hour Total)	64	5	61	7	49	4	63	1	55	1	53	0

# Number of left turning vehicles – Ave weekend May 2021

Total Vehicles & HGV – Average Weekend

Movement	A52 Eastbound to Bingham Road						Carter Avenue to A52 Westbound					
Time	Week 1		Week 2		Week 3		Week 1		Week 2		Week 3	
	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV
08:00 – 09:00 (Hour Total)	4	1	3	1	5	1	1	0	1	0	2	0
10:00 – 16:00 (Average Hour)	6	0	9	0	7	0	2	0	2	0	3	0
17:00 – 18:00 (Hour Total)	3	0	6	1	3	0	2	0	2	0	1	0
07:00 – 19:00 (12 Hour Total)	74	4	85	3	63	1	26	0	22	1	27	0

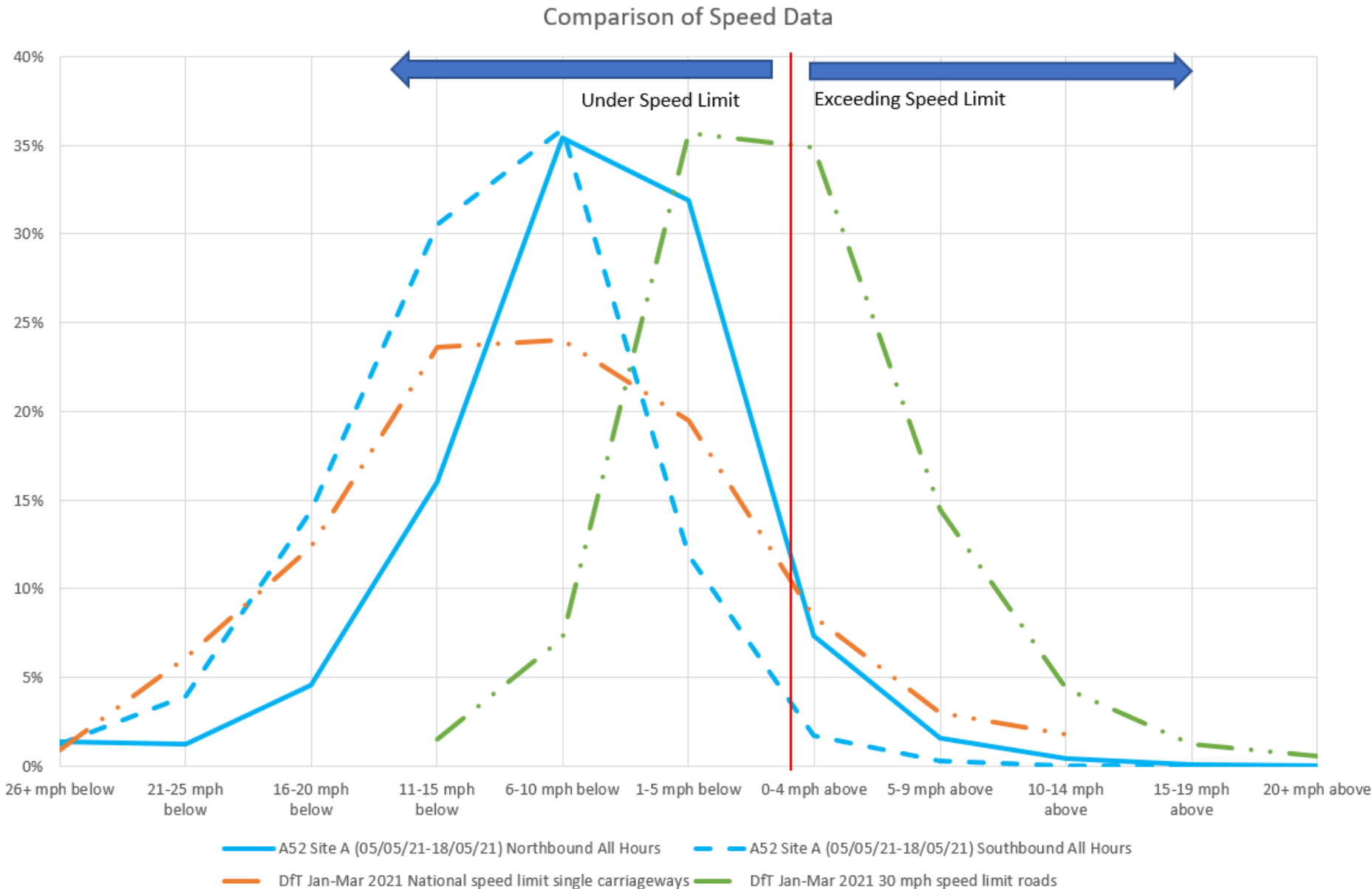
# A52 speed survey results – May 2021



- Highest recorded speeds at Site A northbound and Site B southbound
- 9.8% of northbound traffic travelling over the 40mph speed limit at Site A, 11.5% at Site B
- National daily averages:
  - 13% exceed speed limit on 60mph roads
  - 56% exceed speed limit on 30mph roads (Source: DfT 2021 Q1 data for free flow conditions)



# A52 speeds – comparison to national averages



# Pedestrian crossing numbers - May 2021

Weekday total 2-way pedestrians and cycles

Movement	Carter Ave - Bingham Road (across A52)					
Time	Week 1		Week 2		Week 3	
	Pedestrians	Cycles	Pedestrians	Cycles	Pedestrians	Cycles
08:00 – 09:00 (Hour Total)	45	1	45	2	36	1
10:00 – 16:00 (Average Hour)	23	2	13	2	16	0
17:00 – 18:00 (Hour Total)	15	2	20	1	8	2
07:00 – 19:00 (12 Hour Total)	284	16	244	14	194	13

Weekend total 2-way pedestrians and cycles

Movement	Carter Ave - Bingham Road (across A52)					
Time	Week 1		Week 2		Week 3	
	Pedestrians	Cycles	Pedestrians	Cycles	Pedestrians	Cycles
08:00 – 09:00 (Hour Total)	6	2	9	1	4	1
10:00 – 16:00 (Average Hour)	12	2	15	3	12	1
17:00 – 18:00 (Hour Total)	17	1	11	4	12	3
07:00 – 19:00 (12 Hour Total)	124	20	142	23	115	17

# Two-way traffic flows on Cropwell Road - May 2021

**Weekday Total 2-Way Vehicles**

Movement	Cropwell Road – 2-Way					
Time	Week 1		Week 2		Week 3	
	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV
08:00 – 09:00 (Hour Total)	291	8	296	8	290	6
10:00 – 16:00 (Average Hour)	151	6	157	6	153	4
17:00 – 18:00 (Hour Total)	197	3	186	3	163	1
07:00 – 19:00 (12 Hour Total)	2,017	67	2,038	65	1,948	38

**Weekday impact of diverted trips on Cropwell Road**

Movement	Cropwell Road – 2-Way		
Time	Week 1	Week 2	Week 3
	Total Vehicles	Total Vehicles	Total Vehicles
Max increase (%)	4%	4%	3%

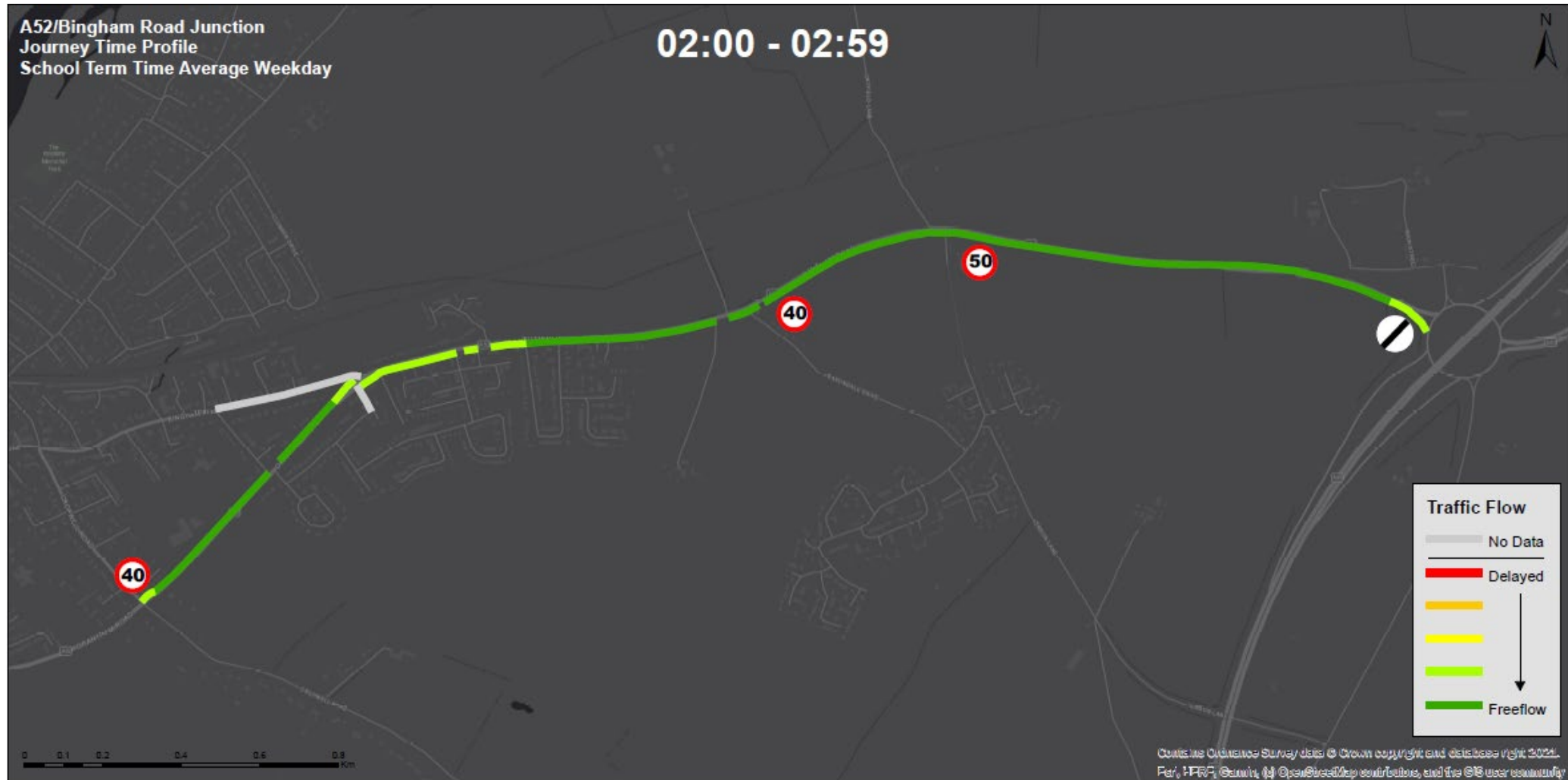
**Weekend Total 2-Way Vehicles**

Movement	Cropwell Road – 2-Way					
Time	Week 1		Week 2		Week 3	
	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV
08:00 – 09:00 (Hour Total)	51	7	72	2	62	0
10:00 – 16:00 (Average Hour)	117	2	103	1	162	0
17:00 – 18:00 (Hour Total)	87	1	67	3	101	0
07:00 – 19:00 (12 Hour Total)	1,133	22	1,037	19	1,511	8

**Weekend impact of diverted trips on Cropwell Road**

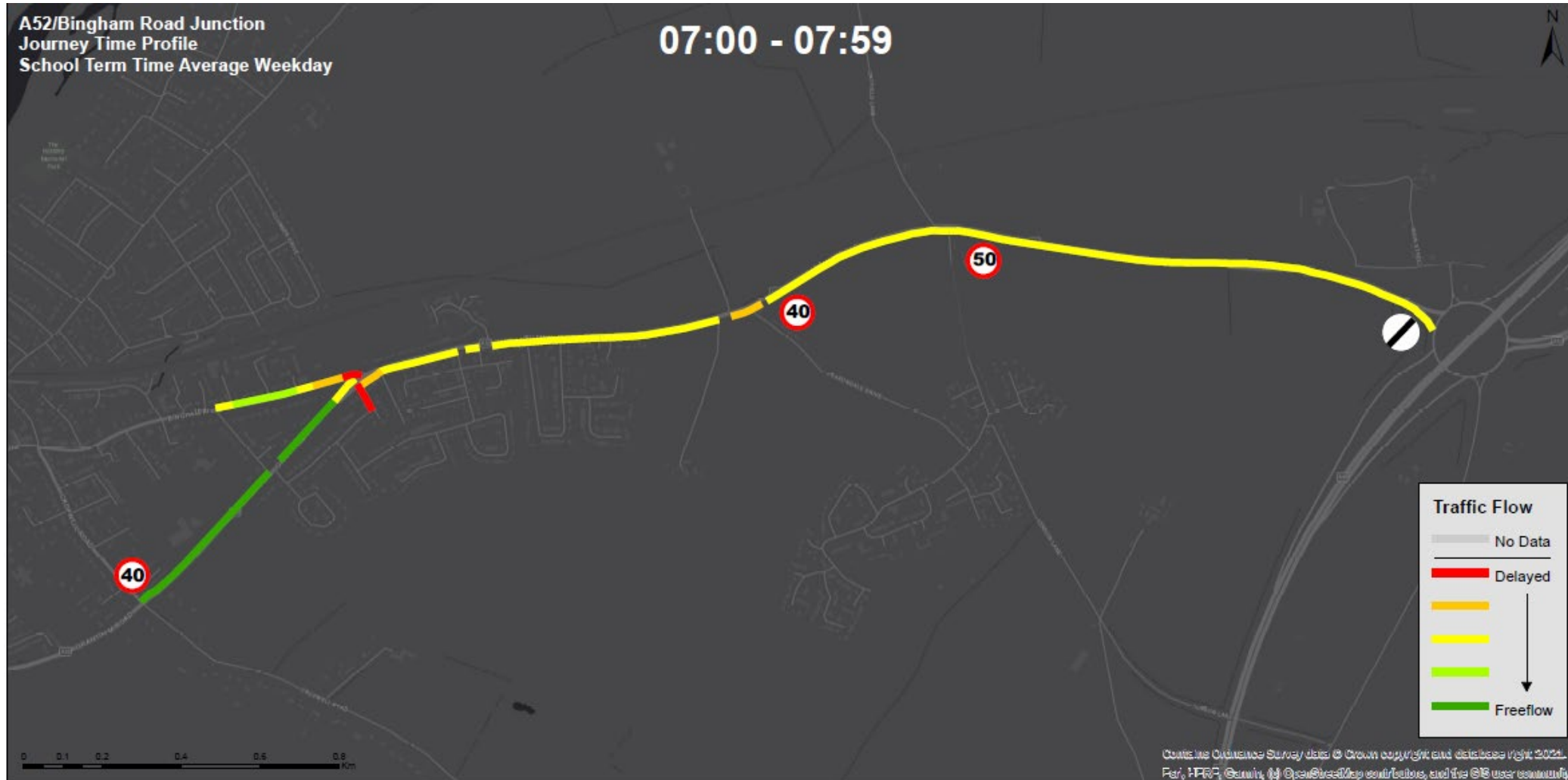
Movement	Cropwell Road – 2-Way		
Time	Week 1	Week 2	Week 3
	Total Vehicles	Total Vehicles	Total Vehicles
Max increase (%)	8%	9%	8%

# 2019 delays on A52 – DfT GPS data



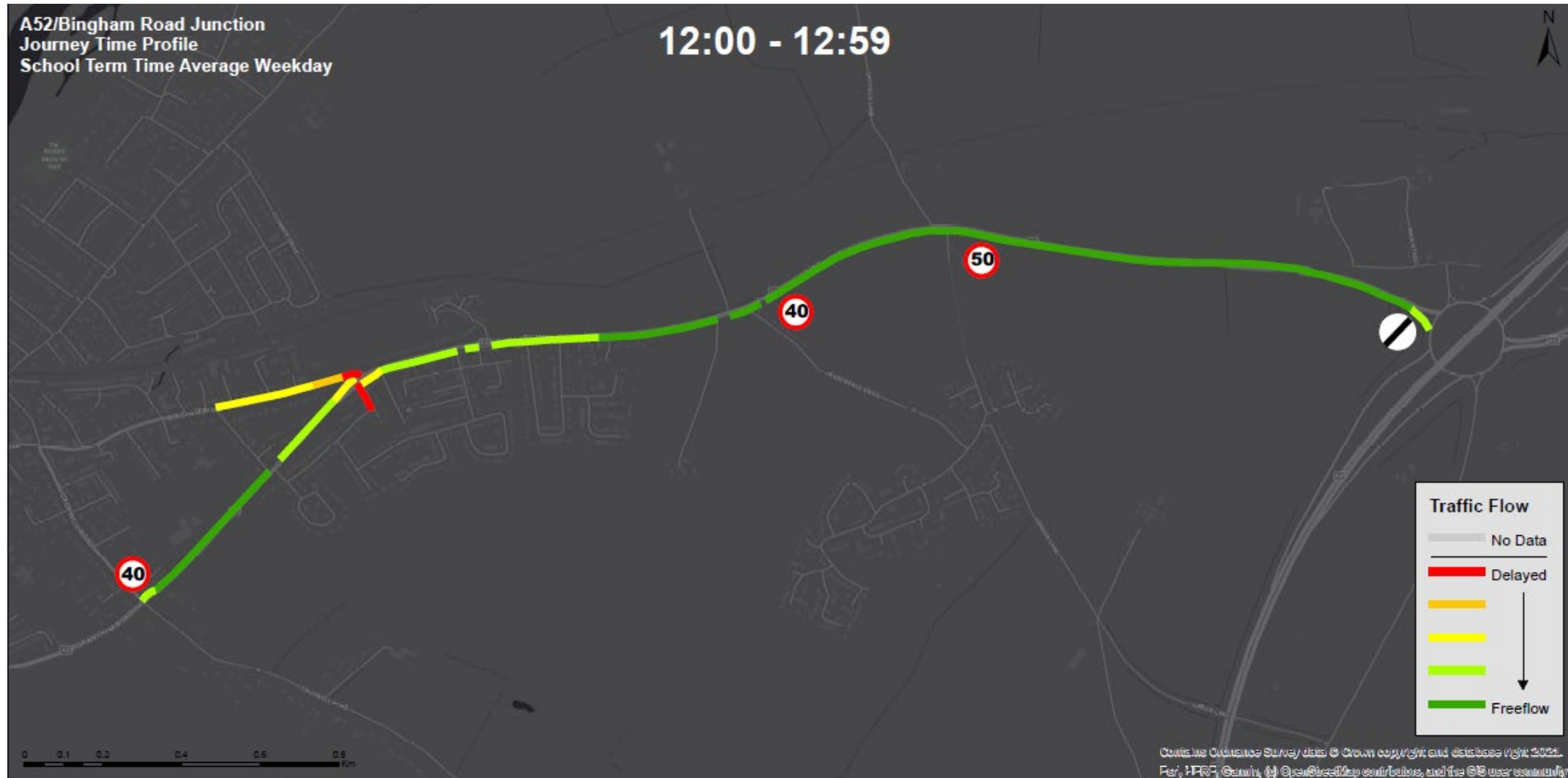
- 2019 average weekday (during school term) journey time delays – Overnight

# 2019 delays on A52 – DfT GPS data



- 2019 average weekday (during school term) journey time delays – AM Peak

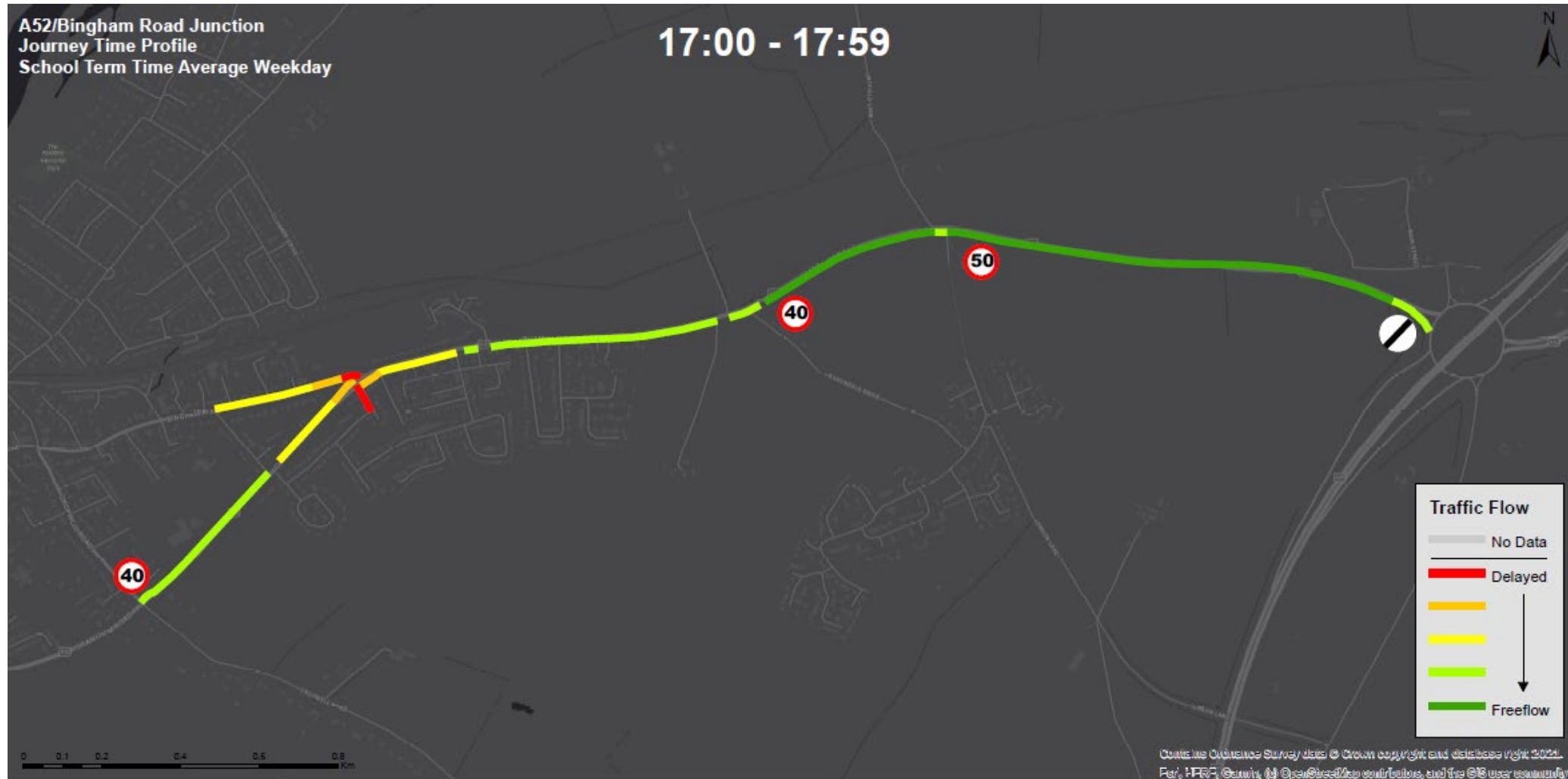
# 2019 delays on A52 – DfT GPS data



- 2019 average weekday (during school term) journey time delays – Midday



# 2019 delays on A52 – DfT GPS data



- 2019 average weekday (during school term) journey time delays – PM Peak

# Conclusions

- Survey results consistent with 2009, 2016 and 2019 data for left turns
- Volume of traffic making the left turns proposed to be banned is very low
- Volume of HGVs turning left into Bingham Road is very low (max' 7 per day)
- Impacts on Cropwell Road due to diverted traffic very low (circa 4% weekday, 9% Weekend – when background flows are lower)
- Most daily traffic on A52 travelling at or within 40mph speed limit
- Speed limit compliance well within national averages
- Without improvement the junction will continue to delay traffic