

Druid Street Area

Baseline Data Collection



December 2021



SYSTRA
SYSTRA.CO.UK

Introduction

This Report



Two methods of data collection were carried out:

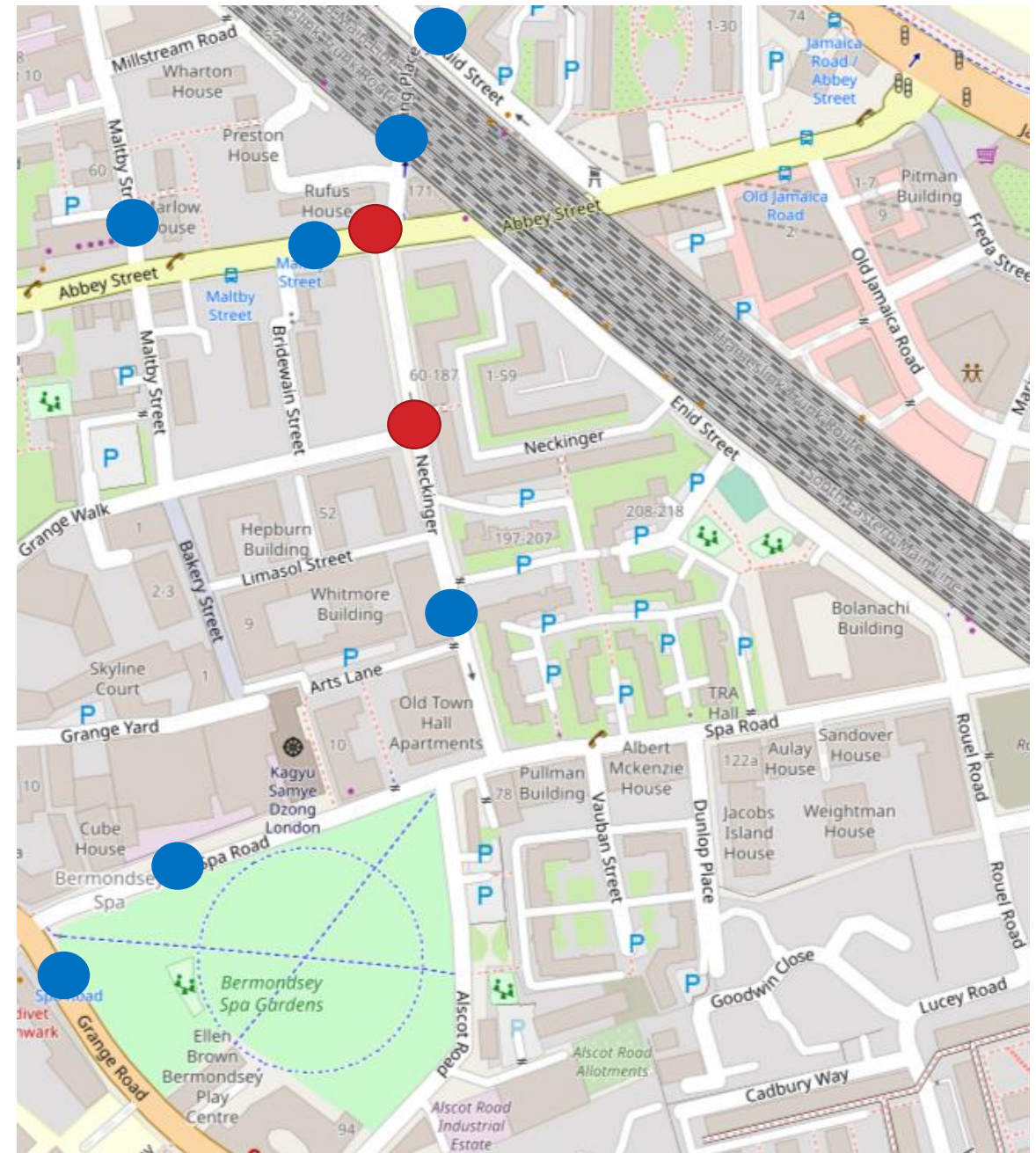
Traffic Counts – 7 days commencing 13/10/2021

- 6 locations via ATC
- 1 location (Gedling Street) by video, due to lack of infrastructure to attach ATC

Junction Turning Counts – one weekday and one weekend, 7am – 7pm

- Abbey Street / Neckinger
- Neckinger / Grange Walk

-  Traffic Counts
-  Junction Turning Counts



Traffic Volumes

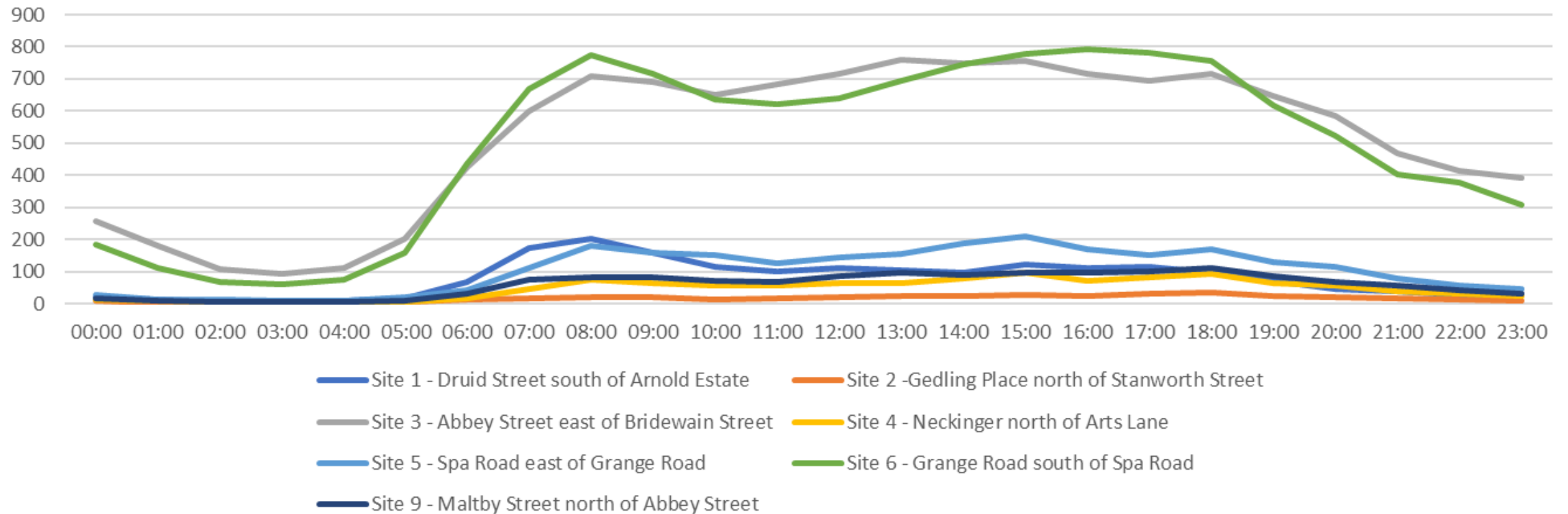
Average Number of Vehicles (Full Day)		
Site Name	Weekday Oct-21	Weekend Oct-21
Site 1 - Druid Street south of Arnold Estate	1,490	1,181
Site 2 - Gedling Place north of Stanworth Street	380	311
Site 3 - Abbey Street east of Bridewain Street	11,976	10,119
Site 4 - Neckinger north of Arts Lane	1,111	861
Site 5 - Spa Road east of Grange Road	2,470	2,027
Site 6 - Grange Road south of Spa Road	11,833	10,204
Site 9 - Maltby Street north of Abbey Street	1,409	1,246
Total across all sites	30,669	25,949

Daily Average Traffic Volumes: Overall

Daily average vehicle volume is presented here.

On the whole, weekdays experienced higher traffic flows than weekends, with Abbey Street and Grange Road experiencing the highest overall traffic flows.

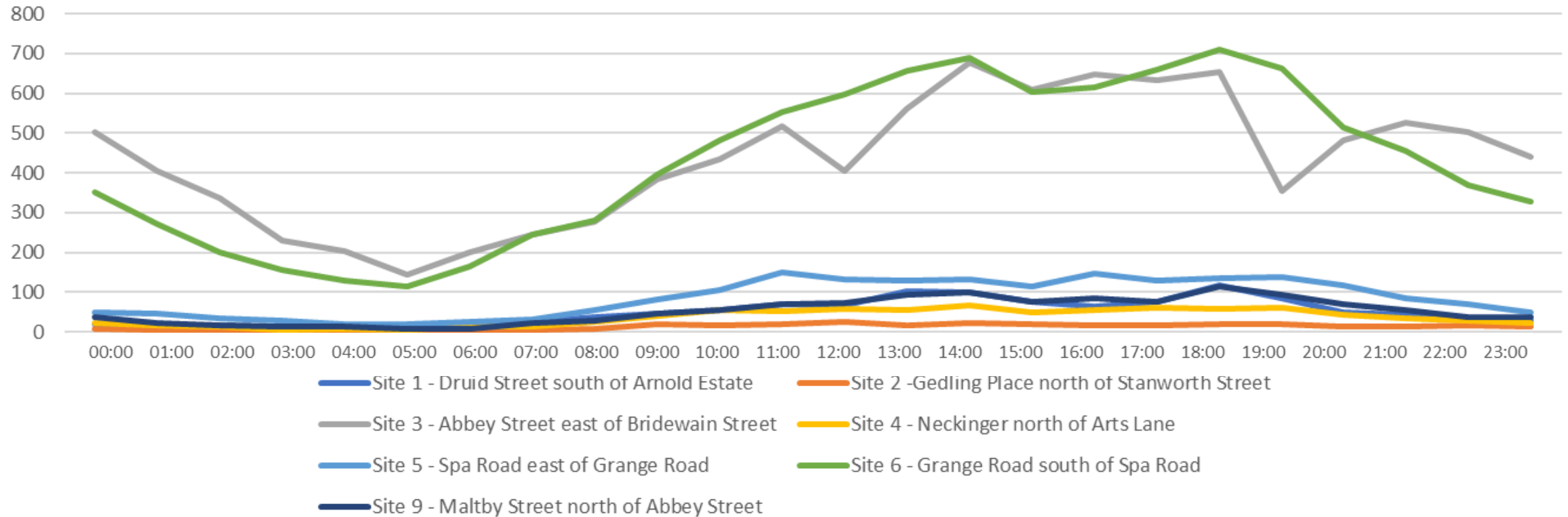
Traffic Volumes - Weekdays



Daily Average Traffic Volumes – Weekdays by Time

The graph above shows the pattern of vehicle flows at each site throughout the course of an average weekday. All sites follow a similar pattern; a morning peak between around 7am and 10am, a slight reduction during the inter-peak period and an increase again (although less significant than the morning peak) during the afternoon/evening peak (4pm-7pm). The graph demonstrates the higher volume of traffic flows seen at some sites (Grange Road and Abbey Street) compared to others in the area.

Traffic Volumes - Weekends



Daily Traffic Volumes – Weekends by Time

The graph above shows the pattern of vehicle flows at each site throughout the course of an average weekend. All sites follow a similar pattern; a morning peak between around 7am and 10am, a slight reduction during the inter-peak period and an increase again (although less significant than the morning peak) during the afternoon/evening peak (4pm-7pm). The graph demonstrates the high volume of traffic flows seen at some sites (Grange Road and Abbey Street) compared to in others in the area, although Abbey Street shows a notable post-peak dip in flows, which increases again at the interpeak. Site 6, Grange Road, has the highest and most consistent morning and evening flows.

Traffic Speeds

Vehicle Speeds (Full Day, 7-Day Average - Average Speeds)			
Site Name	Average Speed	85th Percentile Speed	Over Posted Speed Limit
	Oct-21	Oct-21	Oct-21
Site 1 - Druid Street south of Arnold Estate	14.5	18.6	10.1%
Site 2 - Gedling Place north of Stanworth Street	6.7	8.4	0.0%
Site 3 - Abbey Street east of Bridewain Street	22.1	26.6	68.3%
Site 4 - Neckinger north of Arts Lane	15.6	19.2	9.2%
Site 5 - Spa Road east of Grange Road	15.9	19.7	12.8%
Site 6 - Grange Road south of Spa Road	22.8	27.2	74.1%
Site 9 - Maltby Street north of Abbey Street	14.2	17.6	4.8%
Average across all sites	16.0	19.6	25.6%

Daily Average Traffic Speeds: Overall

Daily average vehicle speed is presented here; overall and at the 85th Percentile. In addition, % over the posted speed limit (20mph) is shown.

The highest speeds were seen at Abbey Street and Grange Road (which also had highest traffic flows). Both sites experienced a high level of vehicles exceeding the posted speed limit; 68.3% and 74.1% respectively. The smaller roads all experienced 12.8% (or less) of vehicles exceeding the speed limit – Gelding Place showed no speeding.

Vehicle Class

Vehicle Class by Site Location (7-Day Average, Full Day)				
Site Name	Oct-21			
	Cycle / Motorcycle	Car / Light Van	LGV	HGV
Site 1 - Druid Street south of Arnold Estate	271	895	232	4
Site 2 -Gedling Place north of Stanworth Street	115	15	230	0
Site 3 - Abbey Street east of Bridewain Street	1,489	8,603	1,308	46
Site 4 - Neckinger north of Arts Lane	192	747	99	1
Site 5 - Spa Road east of Grange Road	571	1,604	166	2
Site 6 - Grange Road south of Spa Road	1,423	7,975	1,918	51
Site 9 - Maltby Street north of Abbey Street	366	807	184	5
Total across all sites	4,427	20,646	4,137	109

Vehicle Classification: 7 day average

The 7-day average of vehicle type is presented above. Although cars account for the majority of vehicle flows (20,646, 70.0%), the next most frequent vehicle type was cars/motorcycles (4,427 , 15.0%). This was followed by LGVs (4,137, 14.0%); and very few HGVs were recorded on these roads.

The slide overleaf shows this data as mode share for each location.

Mode Share

Modal Share by Site Location - (7-Day Average, Full Day)				
Site Name	Oct-21			
	Cycle / Motorcycle	Car / Light Van	LGV	HGV
Site 1 - Druid Street south of Arnold Estate	19.3%	63.8%	16.5%	0.3%
Site 2 -Gedling Place north of Stanworth Street	31.9%	4.2%	63.9%	
Site 3 - Abbey Street east of Bridewain Street	13.0%	75.2%	11.4%	0.4%
Site 4 - Neckinger north of Arts Lane	18.5%	71.9%	9.5%	0.1%
Site 5 - Spa Road east of Grange Road	24.4%	68.5%	7.1%	0.1%
Site 6 - Grange Road south of Spa Road	12.5%	70.2%	16.9%	0.4%
Site 9 - Maltby Street north of Abbey Street	26.9%	59.3%	13.5%	0.4%
Average across all sites	19.3%	63.8%	16.5%	0.3%

Vehicle Classification: 7 day average

The mode share (7-day average) for each site is shown above. At the majority of sites, cars account for around 60% or more of vehicles; however at Gedling Place; this was just 4.2%, with a high mode share for cycling/motorcycling (31.9%) and LGVs (63.9%) – it should be noted that this site had a lower volume of flows than some other sites.

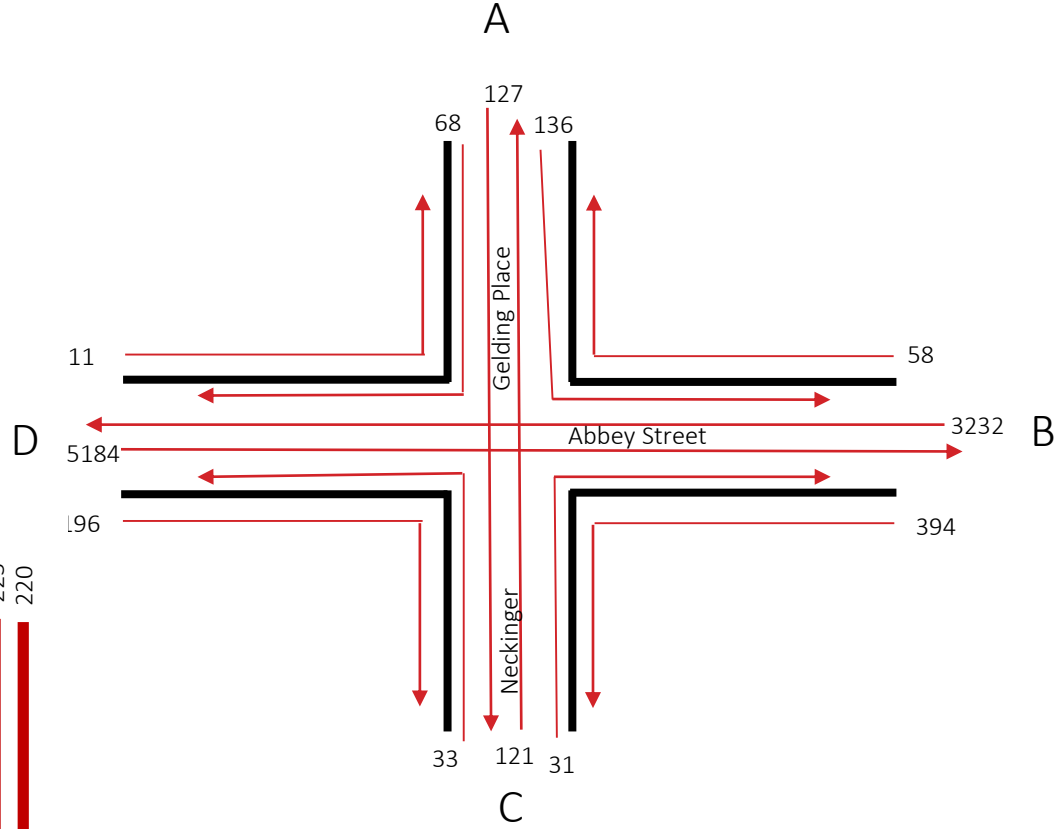
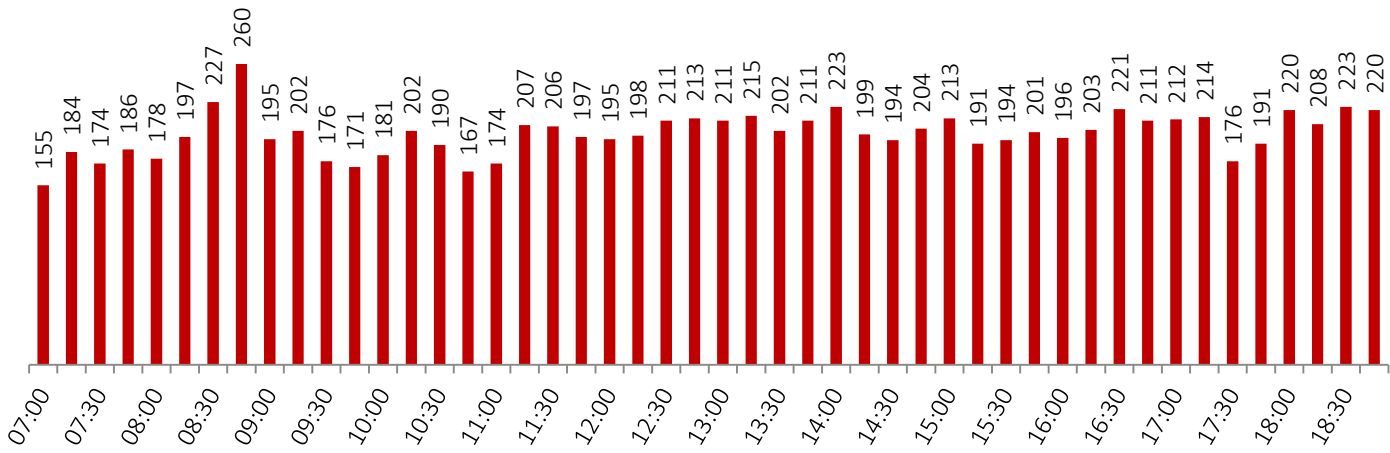
All sites recorded over 10% mode share for cycling/motorcycling; the highest recorded was Gedling Place, followed by Maltby Street (26.9%) and Spa Road (24.4%).

Due to rounding, some rows do not total exactly 100%.

Junction Turning Counts: Abbey St - Weekday

Abbey Street / Gelding Place /Neckinger Junction

The weekday 7am-7pm count is shown on this slide. The majority of movements recorded were West to East along Abbey Street (54.0% of flows) and then East to West (33.7% of flows). The most common turning movement was Abbey Street E, turning left (south) onto Neckinger.



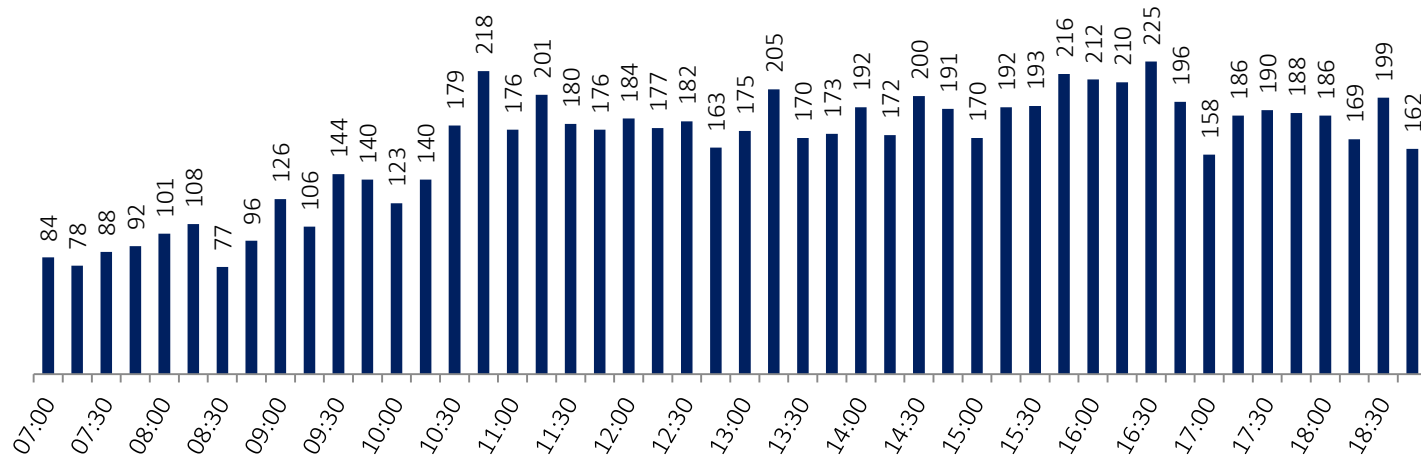
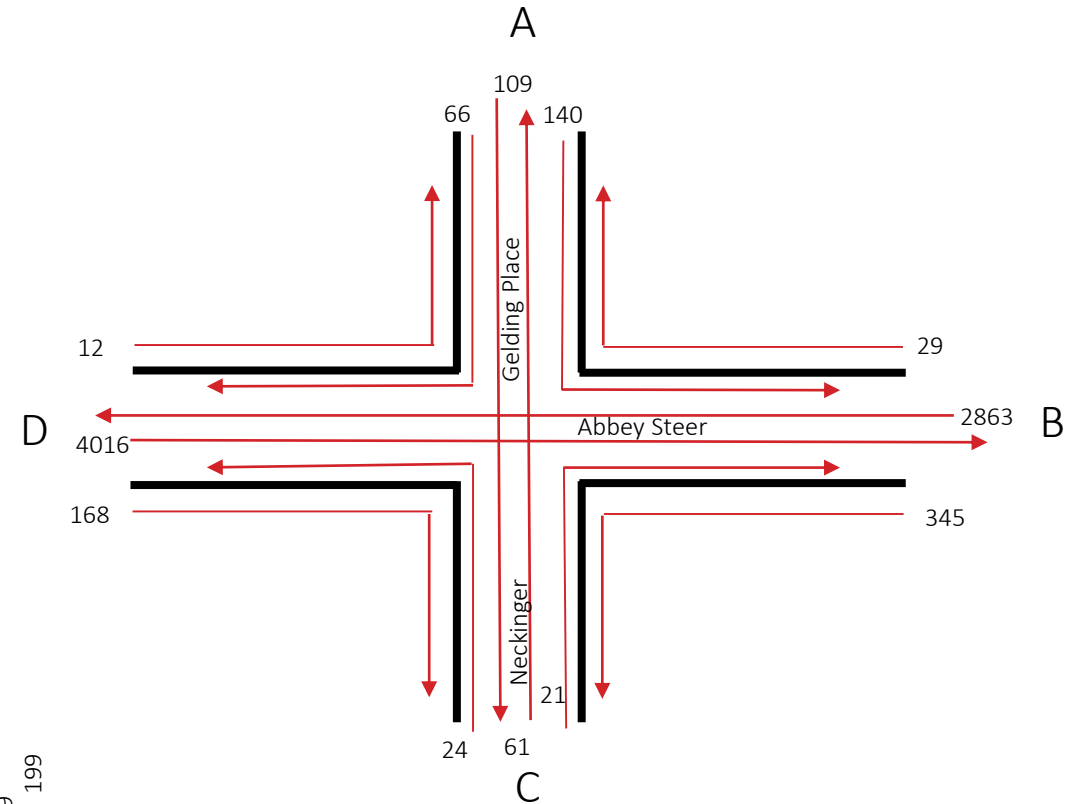
		Destination			
		A	B	C	D
Origin	A	0.0%	1.4%	1.3%	0.7%
	B	0.6%	0.1%	4.1%	33.7%
	C	1.3%	0.3%	0.0%	0.3%
	D	0.1%	54.0%	2.0%	0.0%

Due to rounding, not all %s total 100%

Junction Turning Counts: Abbey St - Weekend

Abbey Street / Gelding Place /Neckinger Junction

The weekend 7am-7pm count is shown on this slide. Following a similar pattern to the weekday, with lower volumes, the majority of movements recorded were West to East along Abbey Street (51.0% of flows) and then East to West (36.4% of flows). The most common turning movement was Abbey Street E, turning left (south) onto Neckinger.

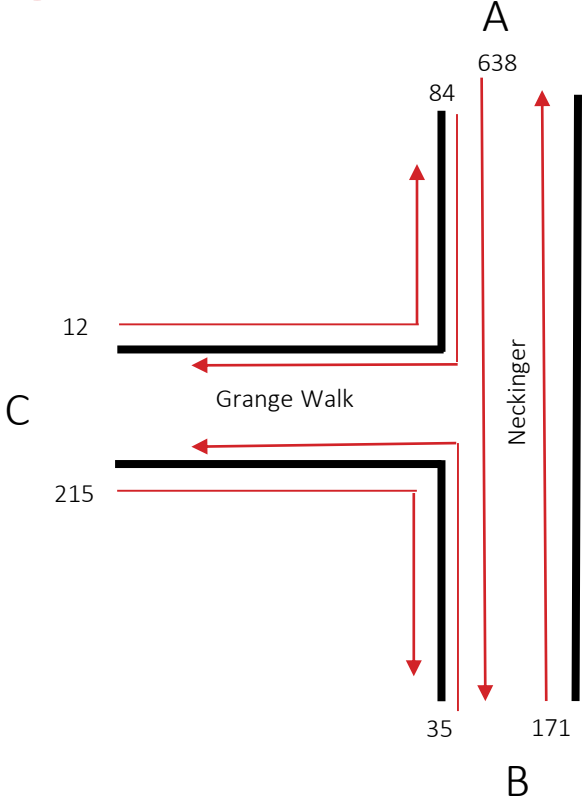
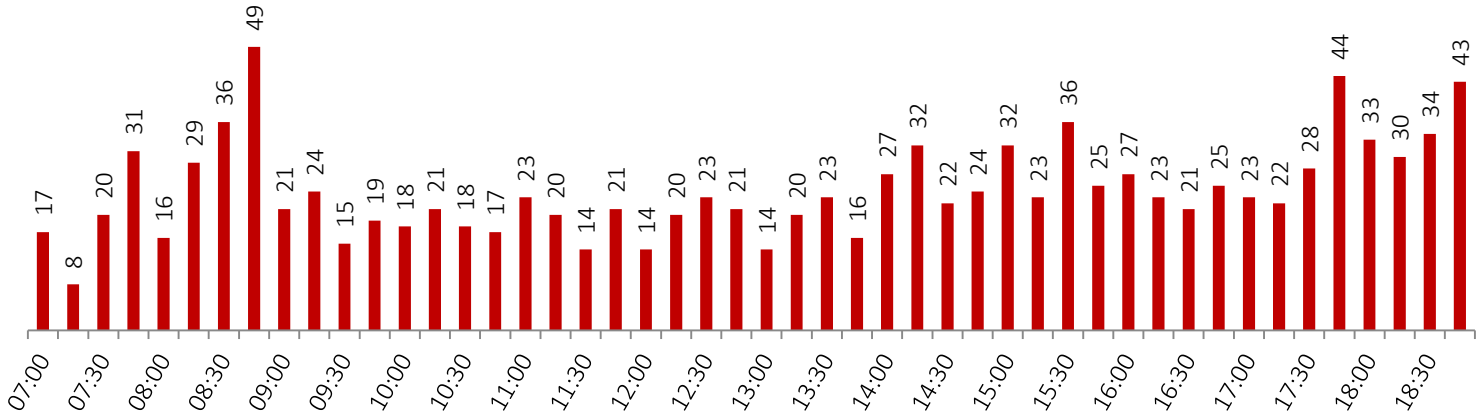


Origin	Destination				
	A	B	C	D	
A		0.0%	1.8%	1.4%	0.8%
B		0.4%	0.0%	4.4%	36.4%
C		0.8%	0.3%	0.0%	0.3%
D		0.2%	51.0%	2.1%	0.1%

Junction Turning Counts: Neckinger - Weekday

Grange Walk/Neckinger Junction

The weekday 7am-7pm count is shown on this slide. The majority of movements recorded were travelling south along Neckinger (54.9%). 18.5% of recorded movements were a right turn from Grange Walk onto Neckinger (travelling south).

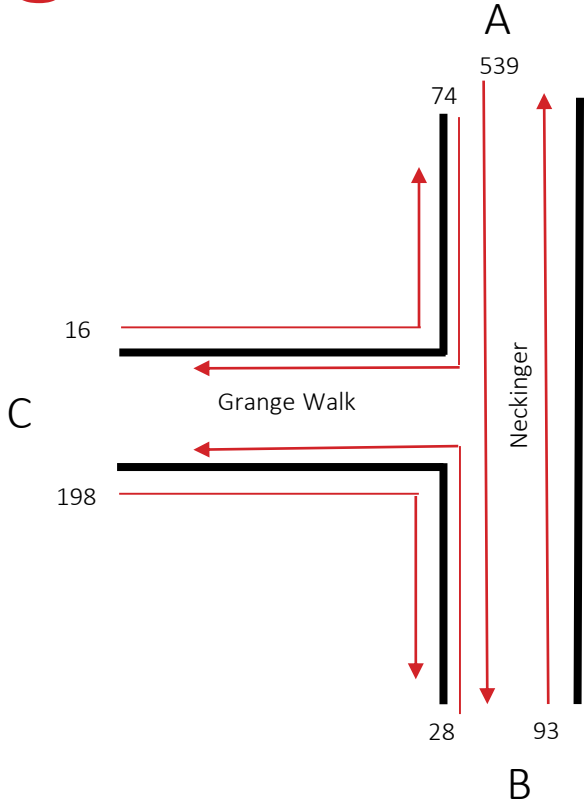
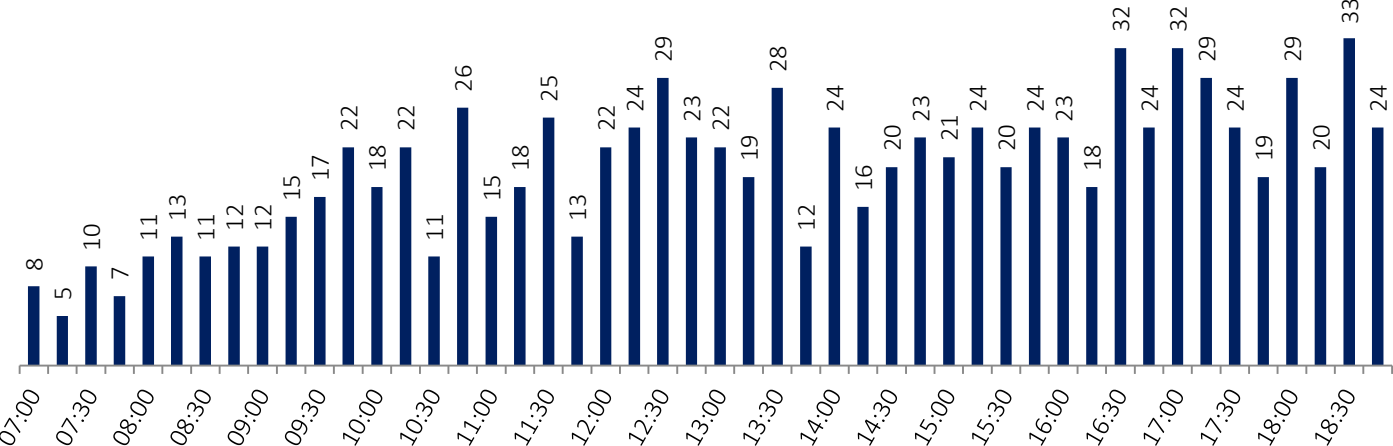


Origin	Destination		
	A	B	C
A	0.2%	54.9%	7.2%
B	14.7%	0.1%	3.0%
C	1.0%	18.5%	0.3%

Junction Turning Counts: Neckinger - Weekend

Grange Walk/Neckinger Junction

The weekday 7am-7pm count is shown on this slide. As with the weekdays, the majority of movements recorded were travelling south along Neckinger (56.8%). 20.9% of recorded movements were a right turn from Grange Walk onto Neckinger (travelling south).



Origin	Destination		
	A	B	C
A	0.1%	56.8%	7.8%
B	9.8%	0.0%	3.0%
C	1.7%	20.9%	0.0%

Summary

- On average, a weekday saw 30,669 average daily traffic flows across the count sites, compared to 25,949 at weekends.
- Abbey Street and Grange Road saw the highest flows in the area.
- The highest speeds were seen at Abbey Street and Grange Road (which also had highest traffic flow). Both sites experienced a high level of vehicles exceeding the posted speed limit; 68.3% and 74.1% respectively. The smaller roads all experienced 13% (or less) of vehicles exceeding the speed limit – Gelding Place showed no speeding.
- Cars accounted for the majority of vehicle flows (20,646, 70.4%), the next most frequent vehicle type was cycles/motorcycles (4,427 , 15.1%). This was followed by LGVs (4,137, 14.1%); and very few HGVs were recorded on these roads.
- All sites recorded over 10% mode share for motorcycling/cycling; the highest recorded was Gedling Place (31.9%), followed by Maltby Street (26.9%) and Spa Road (24.4%).
- At the Abbey Street / Gelding Place / Neckinger junction, both on weekdays and weekends, the majority of movements recorded were West to East along Abbey Street (>50% of flows) and then East to West (>30% of flows). The most common turning movement was Abbey Street E, turning left (south) onto Neckinger.
- At the Grange Walk / Neckinger junction, the majority of movements recorded were travelling south along Neckinger (>50%). Around 20% of recorded movements were a right turn from Grange Walk onto Neckinger (travelling south).

SYSTRA
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