



Transition Chesterfield

Town Centre Pedestrian Crossing Survey, August 2023

Introduction

Transition Chesterfield support and promote walking, wheeling and cycling as sustainable and green travel options. We have in the past conducted numerous pedestrian surveys, both in the town centre and on the strategic routes into the town centre. This information has been passed to both Derbyshire County Council and Chesterfield Borough Council. We are currently collating examples of good and bad pedestrian facilities in our [Walk of Fame/Walk of Shame series](#). Because many of the suggested examples for the Walk of Fame/Shame involved signalized pedestrian crossings (and the waiting/crossing times) we decided to do a systematic survey of town centre crossings.

In August 2023 Transition Chesterfield conducted a survey of signal-controlled pedestrian crossings in Chesterfield town centre. These include pedestrian only crossings, with opposite signals (Pelican) or adjacent signals (Puffin) and pedestrian/cycle crossings (Toucan). The aim was to record the waiting and crossing times (using the time when the green man signal is on) and whether these were reasonable and adequate respectively, in order to encourage people to cross the road safely.

Advisory waiting and crossing times

According to Living Streets, the national pedestrian charity, *“Everybody should be able to cross the road safely, directly and without delay. Crossings should be positioned in the right place, give everyone enough time to cross, and should not make pedestrians wait too long for a green signal.”*

Wait times should prioritise pedestrians at junctions and crossings points. Living Streets surveys¹ show that anymore than 30 seconds and people are more likely to take risks when crossing the road.¹

Under Department for Transport (DfT) guidelines, pedestrians have 6 seconds to cross over both lanes of a normal road at a walking pace of 1.2 metres per second.²

Note that while all the crossings have a visual signal (green man) either adjacent (Puffin) or opposite (Pelican), not all of them have an audible signal (beeping). Those without sound often have a tactile signal in the form of a cone on the underside which points down and spins when the green man lights up, for the visually impaired.

Chesterfield Town Centre pedestrian crossings

Transition Chesterfield have counted a total of 73 pedestrian crossing points (excluding two zebra crossings) in Chesterfield Town Centre (see Table 3 for full list). We have numbered them starting from the top of Foljambe Rd in a rough clockwise direction finishing at West Bars. See Figure 1. We used the Cycle Chesterfield map of the town centre³ as the guide to the area covered, though we

¹ <https://www.livingstreets.org.uk/policy-and-resources/our-policy/crossings>

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/851465/dft-traffic-signs-manual-chapter-6.pdf

³ <https://www.cyclechesterfield.org/maps-leaflets/>



did include 3 crossings just outside this area at the bottom of Hady Hill, which is a major pedestrian access point to the town centre for people coming from Hady or Spital.

Volunteers carried out surveys of the crossings on weekdays, at non-peak hours in August 2023. Volunteers noted the type of signalized crossing, approximate waiting and crossing times and other features.

Note that the times of waiting and crossing may vary by time of day, and these times all reflect non-peak hours. The waiting times are maximum times as many of the crossings are linked to other traffic lights and will depend on when in the cycle the button is pushed.

Note that we have excluded the results from 7 crossings (numbers 18-24) at the Doughnut as these were being replaced at the end of August.

Results

The results are shown in Table 1 overleaf.

This shows that out of 66 signalised crossings (excluding the 7 being replaced at the Doughnut) the majority (58%) were the newer style Puffin crossings with around a fifth (20%) Pelican crossings and a fifth (23%) Toucan crossings.

The average waiting time was 41 seconds, though this varied from a very responsive 4 seconds⁴ to a very long one minute and 47 seconds.⁵

The majority of crossings (53%) had a waiting time longer than the recommended time of 30 seconds. This means that at most crossings, pedestrians are more likely to take risks and cross the road on a red pedestrian signal. This behaviour was observed as a frequent occurrence, particularly on crossings of only one road lane where there was good line of sight.

While waiting times are necessarily longer at complicated road junctions (e.g. Markham Road near Ravenside retail park) the fact that pedestrians have to sometimes cross 3 sets of roads in order to reach their destination means that this compounds the pedestrian waiting time into several minutes. Generally, at these junctions road traffic is given far higher priority than pedestrians and cyclists, even when there are significant volumes of pedestrians.

The average time that the green man was showing (which was taken as crossing time) was 13 seconds though this varied from 4 seconds⁶ to a very long one minute and 20 seconds.⁷ Nearly half of the crossings (50%) had crossing times less than the recommended 6 seconds. In many cases the time was barely sufficient to get halfway across the road even for pedestrians already waiting at the crossing, though there was often a long gap after the pedestrian signal turned red and the traffic signal turned green.

⁴ The shortest waiting times were Crossings 44 and 45 near Derby Road and Hornsbridge roundabout across the entrance/exit road to the retail park containing B&Q/Dunelm etc.

⁵ The longest waiting time was Crossing 53 across Markham Rd, from the northside near Park Rd to an island

⁶ The shortest crossing time of 4 seconds was found at 14 crossings. Some of these were one lane only but several were across 2 or 3 lanes of traffic, e.g. Crossing 27 across Holywell St from the Winding Wheel to the island across 3 lanes of traffic.

⁷ The longest crossing time was Crossing 59 across the East Entrance to Ravenside south side



There was a relatively significant proportion (6%) of pedestrian crossings with broken green or red man signals, listed in Table 2. Because many of these did not have any audible signal it was difficult or confusing for pedestrians to know when it was safe to cross.

There were also several pedestrian crossings where traffic is stopped for a long time at the lights on a single lane crossing, but the pedestrian crossing does not go green until after the traffic has gone through. This favours noone but encourages jay walking. This includes crossing 25 on Stephenson's Place.

There were also a handful of pedestrian crossings which seemed redundant. For example, there are two crossing points very close together on Stephenson's Place (crossings 30 and 31), one of which had very long waiting times (up to one minute) on a lightly trafficked road. The whole area around the junctions of Cavendish St, Stephenson's Place and Knifemithgate, which is heavily used by pedestrians and lightly trafficked with buses and taxis, would be better as shared space, similar to Elder Way, with priority given to pedestrians.

There were also several areas where there was no pedestrian crossing at all (zebra or signaled) but were either on main routes into town (e.g. the bottom of Foljambe Road) or which required pedestrians to walk long distances (e.g. the middle of Markham Road opposite the entrance to the middle ramp down to Ravenside). This puts pedestrians at risk or encourages them to take risks.

Finally, there are many crossings where the pavement is far too narrow for the numbers of people waiting (e.g. the crossing on Markham Road between the Coach Station and Ravenside) and pavements which are either overgrown with vegetation and/or not swept (e.g. the path between Matalan and West Bars roundabout which forces pedestrians to walk in the cycle path).

Table 1 Results of pedestrian crossing survey

Statistic	Value
Total no. signaled pedestrian crossings in town centre	73
Total no. pedestrian crossings with results	66
Total no. Pelican crossings (pedestrian only, signal opposite)	12
% of Pelican crossings (%)	20
Total no. Puffin crossings (pedestrian only, signal adjacent)	38
% Puffin crossings (%)	58
Total no. Toucan crossings (pedestrian and cycle)	16
% Toucan crossings (%)	23
Average waiting time (secs)	41
Range of waiting times (secs)	4-107
Average crossing time (secs)	13
Range of crossing times (secs)	4-80
% of crossings with waiting time > 30 secs (%)	53
% of crossings with crossing times < 6 secs (%)	50
No. crossings with pedestrian signals broken	4
% of crossings with pedestrian signals broken (%)	6



Table 2: List of pedestrian crossings with broken green or red man signals

No.	Location	Road crossed	Description
38	St Mary's Gate	Church Way	Church way north side to island
39	St Mary's Gate	Church Way	Church Way South side to island
68	Chatsworth Road	Wheatbridge Road	Matalan to Wickes
69	Chatsworth Road	Boythorpe Road	Travis Perkins to Queen's Park

Recommendations

1. Fix the 4 broken pedestrian signals as a matter of urgency
2. Review the waiting times for the signals with unreasonably long waiting times (> 30 secs) which encourage pedestrians to take risks
3. Review the crossing times for the signals with unreasonably short crossing times (< 6 secs)
4. Review the waiting times for the signals across single lanes where pedestrians are waiting even when the traffic lights are on red.
5. Make the area around Cavendish St/Stephenson's Place/Knifesmithgate a shared space with priority given to pedestrians
6. Review the need for crossing points (zebras or signalized crossings) at key crossing points without them, such as the bottom of Foljambe Road
7. Widen the pavements at key crossing points, such as Markham Rd opposite Ravenside
8. Ensure that vegetation on key pedestrian routes into town are cut back and pavements swept, such as the section on West Bars near Matalan

Figure 1: Location of pedestrian crossings in Chesterfield Town Centre (map © Cycle Chesterfield)

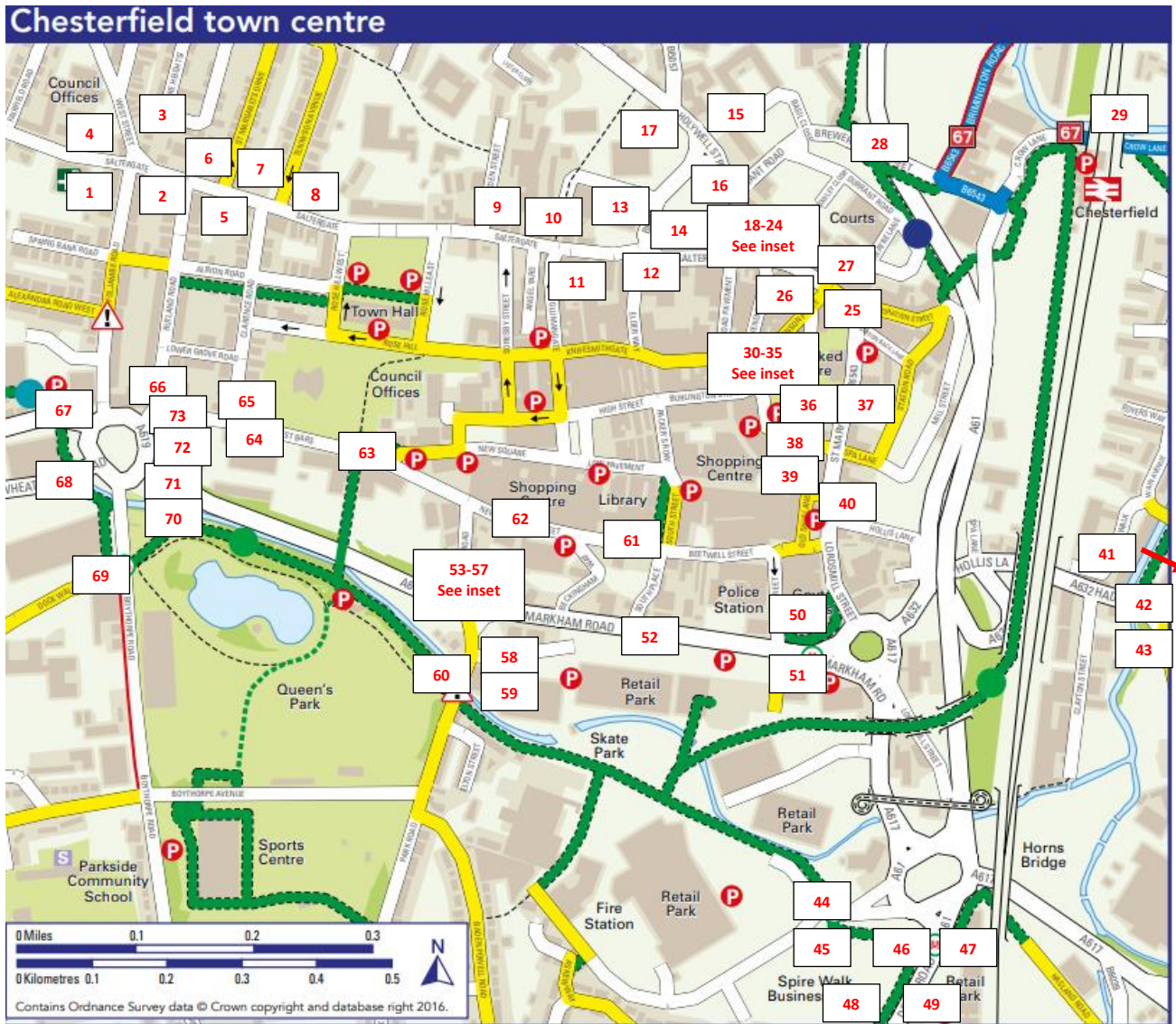


Fig 2: Inset 1, Doughnut (Map © Cycle Chesterfield)

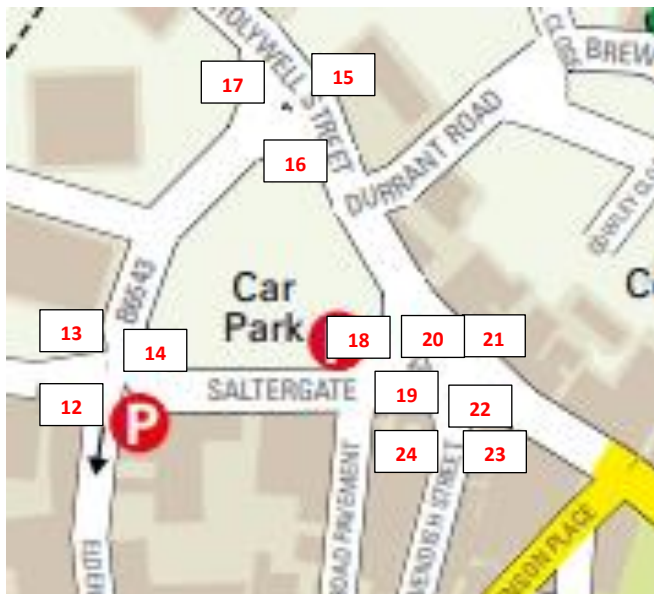


Fig 3: Inset 2, Cavendish St/Stephenson's Place/Church Way (map © Cycle Chesterfield)

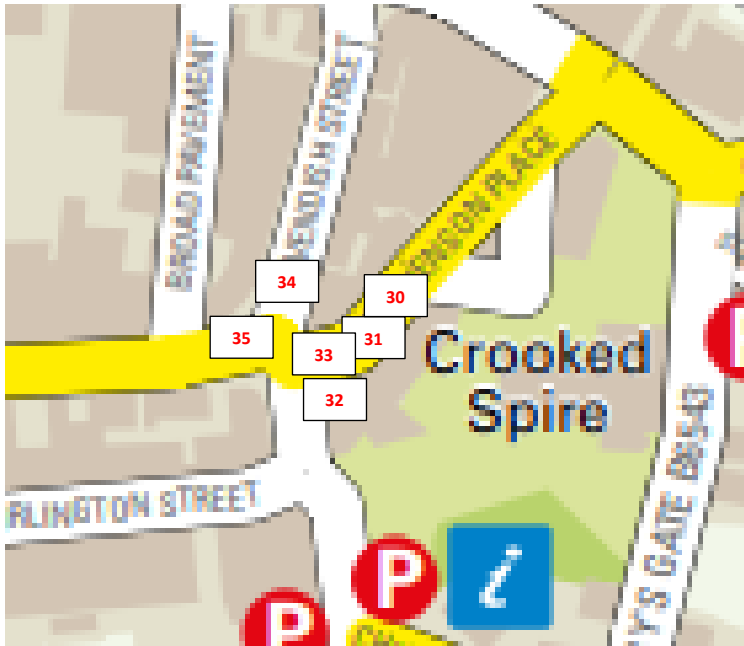


Fig 4: Inset 3, Markham Way/Ravenside (map © Cycle Chesterfield)

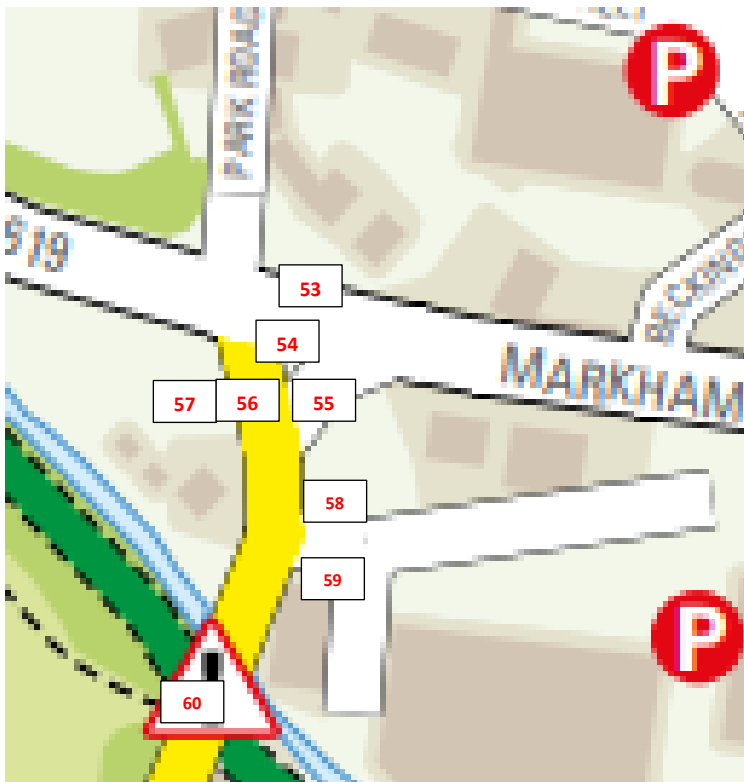




Table 3: List of signalised crossings in Chesterfield town centre

No.	Location	Road crossed	Description
1	Saltergate	Foljambe Rd	Foljambe Rd top, jn with Saltergate
2	Saltergate	Saltergate	Next to Foljambe Road East
3	Saltergate	West Street	West Street
4	Saltergate	Saltergate	Next to Foljambe Road West
5	Saltergate	Rutland Road	Rutland Rd, top, jn Saltergate to opposite side
6	Saltergate	Saltergate	near Rutland Street West
7	Saltergate	Saltergate	near rutland Street East
8	Saltergate	Saltergate	Peak Pharmacy and Dcotors surgery
9	Saltergate	Saltergate	nr Marsden St to opposite side
10	Saltergate	Saltergate	Top of Glumangate
11	Saltergate	Glumangate	Top of Glumangate Thai restaurant
12	Saltergate	Saltergate	Top of Elder Way to island
13	Saltergate	Saltergate	nr multistorey to island
14	Saltergate	Saltergate	slip road nr Elder way from Doughnut to island
15	Holywell Street	Holywell Street	Near steps down to AECOM, across to island
16	Holywell Street	Holywell Street	From island near Newbold rd to Doughnut
17	Holywell Street	Holywell Street	from island near Newbold Rd to pavement near carwash
18	Holywell Street	Holywell Street	Doughnut to island opposite Anatolia
19	Saltergate	Saltergate	Island to Blue Bell
20	Saltergate	Holywell Street	Across bus lane
21	Saltergate	Holywell Street	From island to Punchbowl
22	Saltergate	Saltergate	from island (opposite Punchbowl) to Eyres
23	Saltergate	Cavendish Street	Eyres to refuge on way to Blue Bell
24	Saltergate	Cavendish Street	Refuge to Blue Bell
25	Saltergate	Stephenson Place	Eyres to Refuge on way to Top Nails
26	Saltergate	Stephenson Place	Refuge to Top Nails
27	Saltergate	Holywell Street	Winding Wheel
28	Brewery St	Brewery St	nr ramp to College
29	Crow Lane	Crow Lane	nr railway bridge path to snail
30	Stephensons Place	Stephensons Place	Stephensons Place opposite Victoria Café
31	Stephensons Place	Stephensons Place	Stephensons Place nr jn Knifesmithgate
32	Church Way	Church way	Church way top nr jn with Knifesmithgate
33	Knifesmithgate	Knifesmithgate	Knifesmithgate/Church Way jn to bank
34	Cavendish St	Cavendish St	Cavendish St near bank to opposite side
35	Knifesmithgate	Knifesmithgate	Knifesmithgate/Cavendish St to island and then to opposite side (2 crossings but signals appear to operate as 1)
36	St Mary's Gate	St Mary's Gate	St Mary's Gate nr Crooked Spire, west side to island
37	St Mary's Gate	St Mary's Gate	St Mary's Gate nr Crooked spire island to east side
38	St Mary's Gate	Church Way	Church way north side to island
39	St Mary's Gate	Church Way	Church Way South side to island
40	St Mary's Gate	St Mary's Gate	St Mary's Gate opposite Chandlers Bar nr Hollis Lane



41	Hady Hill	Piccadilly Rd	Piccadilly Rd nr jn Hady Hill
42	Hady Hill	Hady Hill	to island nr Spital Lane
43	Hady Hill	Spital Lane	slip road from Spital Lane to island
44	Derby Rd	Retail park entrance	Hornsbridge roundabout, slip road to B&Q, north to island
45	Derby Rd	Retail park entrance	Hornsbridge roundabout, slip road to B&Q, island to south
46	Derby Rd	Derby Rd	jn Hornsbridge roundabout west/B&Q side to island
47	Derby Rd	Derby Rd	Jn Hornsbridge roundabout island to east/hasland side
48	Derby Rd	Derby Rd	opposite cinema retail park, west side to island
49	Derby Rd	Derby Rd	opposite cinema retail park, east/cinema side to island
50	Markham Rd	Markham Rd	nr Lordsmill roundabout north to island
51	Markham Rd	Markham Rd	nr Lordsmill roundabout south to island
52	Markham Rd	Markham Rd	nr coach station opp Ravenside
53	Markham Rd	Markham Rd	northside nr park rd to island
54	Markham Rd	Markham Rd	north side island to island
55	Markham Rd	Markham Rd	island across slip road to Park Rd (Ravenside side)
56	Markham Rd	Park Rd	west side to small island
57	Markham Rd	Park Rd	small island to main island
58	Markham Road	Markham Road	East Entrance to Ravenside north side
59	Markham Road	Markham Road	East Entrance to Ravenside south side
60	Markham Road	Park Road	Queen's Park west entrance
61	New Beetwell St	New Beetwell St	New Beetwell St near South Place
62	New Beetwell St	New Beetwell St	New Beetwell St near bottom of escalators from Pavements
63	New Beetwell St	New Beetwell St	New Beetwell St across to Queens Park, bottom of Rose Hill
64	West Bars	West Bars	West Bars (south) near sorting office to opposite side
65	West Bars	Clarence Rd	Clarence Rd nr Jn with West Bars
66	West Bars	Rutland Rd	Rutland Rd bottom, jn West Bars
67	Chatsworth Road	Chatsworth Road	Salvation Army shop
68	Chatsworth Road	Wheatbridge Road	Matalan to Wickes
69	Chatsworth Road	Boythorpe Road	Travis Perkins to Queen's Park
70	Markham Road	Markham Road	McDonalds south
71	Markham Road	Markham Road	McDonalds north
71	West Bars	West Bars	Coop Funeral service south
73	West Bars	West Bars	Coop Funeral service north