

# **Corstorphine Connections**

Automatic Traffic Counts 1 month post implementation results

Project number: 60636731

September 2023



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# 1. Background

- 1.1 The Corstorphine Connections proposals comprise a variety of traffic interventions across the study area aimed at reducing through traffic movements and reducing speeds, whilst permitting access for local residents. The phase 1 measures include:
  - Traffic restrictions restricted access
  - Timed bus gate (incl. access for taxis and cycles)
  - · Traffic calming including priority give-go operation and speed cushions
  - · Footway widening and crossing improvements
  - Placemaking more seating, greening and artwork.

Baseline traffic counts were carried out for 7 days at 16 locations across the project area from 7<sup>th</sup> November 2021 before any interventions were implemented. The trial commenced on 25 May 2023 and a set of 1-month post implementation traffic counts were undertaken for 7 days from 20<sup>th</sup> June 2023. The purpose of these counts is to monitor the effect the measures have had on traffic movements throughout the study area.

The following report includes a summary and details of the traffic counts at each of the sites surveyed. Two of the sites have incomplete data and have been excluded from this report;

- Site 1/A Meadow Place Road traffic data counters in 1-month post surveys were damaged and data not available; and
- > Site 17/Q Featherhall Terrace this site was not included in the original baseline counts.



# 2. Overview of traffic data

The following tables present the average weekday traffic flows (Mon-Fri) per site across a full 24-hour period.

|                                   | Baseline Surveys         |              |   |   |   |   |  |  |  |
|-----------------------------------|--------------------------|--------------|---|---|---|---|--|--|--|
|                                   |                          |              | Weekday<br>Average<br>Flow<br>NB/EB<br>(vehs) | Weekday<br>Average<br>Speed<br>NB/EB<br>(mph) | Weekday<br>Average<br>Flow<br>SB/WB<br>(vehs) | Weekday<br>Average<br>Speed<br>SB/WB<br>(mph) | Weekday<br>Average<br>Total two-<br>way flow<br>(vehs) |  |  |
| Site 2/B                          | St John's Road           | LTN Boundary | 11479   | 16  | 9553  | 17  | 21032  |  |  |
| Site 3/C                          | Station Road             | LTN Street   | 1406  | 13  | 821   | 13  | 2227   |  |  |
| Site 4/D                          | Pinkhill                 | LTN Street   | 689   | 17  | 1067  | 17  | 1756   |  |  |
| Site 5/E                          | Balgreen Road            | LTN Boundary | 3253  | 25  | 3111  | 25  | 6364   |  |  |
| Site 6/F                          | Ladywell Avenue          | LTN Street   | 1130  | 18  | 677   | 19  | 1807   |  |  |
| Site7/G                           | Dovecot Road             | LTN Street   | 213   | 20  | 256   | 19  | 469  |  |  |
| Site 8/H                          | Broomhall Crescent       | LTN Street   | 103   | 17  | 91  | 16  | 194  |  |  |
| Site 9/I                          | Saughton Road North      | LTN Street   | 4304  | 22  | 4585  | 24  | 8889   |  |  |
| Site 10/J                         | Broomhouse Drive         | LTN Boundary | 3658  | 30  | 3282  | 30  | 6940   |  |  |
| Site 11/K                         | Ladywell Road            | LTN Street   | 3981  | 24  | 3115  | 23  | 7096   |  |  |
| Site 12/L                         | Featherhall Avenue       | LTN Street   | 523   | 17  | 520   | 15  | 1043   |  |  |
| Site 13/M                         | Manse Street             | LTN Street   | 62  | 11  | 102   | 12  | 164  |  |  |
| Site 14/N                         | Manse Road               | LTN Street   | 3026  | 17  | 3   | 8   | 3029   |  |  |
| Site 15/O                         | Corstorphine High Street | LTN Street   | 3809  | 22  | 2597  | 23  | 6406   |  |  |
| Site 16/P                         | Kirk Loan                | LTN Street   | 17  | 10  | 2624  | 16  | 2641   |  |  |
|                                   |                          |              |   |   | Total week                                    | day   | 70,057   |  |  |
|                                   |                          |              |   |   | otal LTN week                                 | day   | 35,721   |  |  |
| Total boundary<br>streets weekday |                          |              |   |   |   |   | 34,336   |  |  |

|                                   | 1-Month Post-Surveys     |              |   |   |   |   |  |  |  |
|-----------------------------------|--------------------------|--------------|---|---|---|---|--|--|--|
|                                   |                          |              | Weekday<br>Average<br>Flow<br>NB/EB<br>(vehs) | Weekday<br>Average<br>Speed<br>NB/EB<br>(mph) | Weekday<br>Average<br>Flow<br>SB/WB<br>(vehs) | Weekday<br>Average<br>Speed<br>SB/WB<br>(mph) | Weekday<br>Average<br>Total two-<br>way flow<br>(vehs) |  |  |
| Site 2/B                          | St John's Road           | LTN Boundary | 10966   | 18  | 9977  | 19  | 20942  |  |  |
| Site 3/C                          | Station Road             | LTN Street   | 1839  | 13  | 952   | 13  | 2791   |  |  |
| Site 4/D                          | Pinkhill                 | LTN Street   | 679   | 17  | 903   | 16  | 1582   |  |  |
| Site 5/E                          | Balgreen Road            | LTN Boundary | 3709  | 26  | 4166  | 24  | 7875   |  |  |
| Site 6/F                          | Ladywell Avenue          | LTN Street   | 864   | 18  | 656   | 19  | 1520   |  |  |
| Site7/G                           | Dovecot Road             | LTN Street   | 256   | 17  | 326   | 16  | 582  |  |  |
| Site 8/H                          | Broomhall Crescent       | LTN Street   | 85  | 16  | 80  | 15  | 165  |  |  |
| Site 9/I                          | Saughton Road North      | LTN Street   | 4414  | 21  | 4749  | 22  | 9163   |  |  |
| Site 10/J                         | Broomhouse Drive         | LTN Boundary | 4795  | 30  | 4422  | 30  | 9217   |  |  |
| Site 11/K                         | Ladywell Road            | LTN Street   | 4059  | 22  | 3962  | 22  | 8021   |  |  |
| Site 12/L                         | Featherhall Avenue       | LTN Street   | 589   | 14  | 1250  | 15  | 1839   |  |  |
| Site 13/M                         | Manse Street             | LTN Street   | 50  | 9   | 116   | 9   | 166  |  |  |
| Site 14/N                         | Manse Road               | LTN Street   | 1789  | 17  | 0   | 0   | 1789   |  |  |
| Site 15/O                         | Corstorphine High Street | LTN Street   | 3575  | 22  | 2808  | 24  | 6383   |  |  |
| Site 16/P                         | Kirk Loan                | LTN Street   | 0   | 0   | 2479  | 16  | 2479   |  |  |
|                                   |                          |              |   |   |   |   | 74,513   |  |  |
|                                   |                          |              |   |   |   | lay   | 36,480   |  |  |
| Total boundary<br>streets weekday |                          |              |   |   |   |   | 38,034   |  |  |

The following tables present the average weekday traffic flows (Mon-Fri) per site across the hours of operation of the bus gate on Manse Road (0800 - 1000; and 1445 - 1830).

|           |                          | Baseline     | Surveys                                 |   |                              |  |
|-----------|--------------------------|--------------|---|---|------------------------------|--|
|           |                          |              | Weekday<br>Average Flow<br>NB/EB (vehs) | Weekday<br>Average Flow<br>SB/WB (vehs) | Total two-way<br>flow (vehs) |  |
| Site 2/B  | St John's Road           | LTN Boundary | 4412                                    | 3604                                    | 8016                         |  |
| Site 3/C  | Station Road             | LTN Street   | 574                                     | 308                                     | 882                          |  |
| Site 4/D  | Pinkhill                 | LTN Street   | 281                                     | 509                                     | 790                          |  |
| Site 5/E  | Balgreen Road            | LTN Boundary | 1271                                    | 1288                                    | 2559                         |  |
| Site 6/F  | Ladywell Avenue          | LTN Street   | 557                                     | 326                                     | 883                          |  |
| Site7/G   | Dovecot Road             | LTN Street   | 107                                     | 115                                     | 222                          |  |
| Site 8/H  | Broomhall Crescent       | LTN Street   | 42                                      | 37                                      | 78                           |  |
| Site 9/I  | Saughton Road North      | LTN Street   | 1793                                    | 1844                                    | 3638                         |  |
| Site 10/J | Broomhouse Drive         | LTN Boundary | 1679                                    | 1451                                    | 3130                         |  |
| Site 11/K | Ladywell Road            | LTN Street   | 1579                                    | 1273                                    | 2853                         |  |
| Site 12/L | Featherhall Avenue       | LTN Street   | 273                                     | 256                                     | 529                          |  |
| Site 13/M | Manse Street             | LTN Street   | 29                                      | 48                                      | 76                           |  |
| Site 14/N | Manse Road               | LTN Street   | 1311                                    | 1                                       | 1312                         |  |
| Site 15/O | Corstorphine High Street | LTN Street   | 1510                                    | 1073                                    | 2583                         |  |
| Site 16/P | Kirk Loan                | LTN Street   | 6                                       | 1134                                    | 1141                         |  |
|           |                          |              |   | Total weekday                           | 28,690                       |  |
|           | LTN weekday              |              |   |   |                              |  |
|           | Boundary streets weekday |              |   |   |                              |  |

|             | 1-Month Post-Surveys           |              |   |   |                              |  |  |  |  |
|-------------|--------------------------------|--------------|---|---|------------------------------|--|--|--|--|
|             |                                |              | Weekday<br>Average Flow<br>NB/EB (vehs) | Weekday<br>Average Flow<br>SB/WB (vehs) | Total two-way<br>flow (vehs) |  |  |  |  |
| Site 2/B    | St John's Road                 | LTN Boundary | 3709                                    | 3715                                    | 7424                         |  |  |  |  |
| Site 3/C    | Station Road                   | LTN Street   | 795                                     | 364                                     | 1159                         |  |  |  |  |
| Site 4/D    | Pinkhill                       | LTN Street   | 304                                     | 454                                     | 758                          |  |  |  |  |
| Site 5/E    | Balgreen Road                  | LTN Boundary | 1511                                    | 1520                                    | 3031                         |  |  |  |  |
| Site 6/F    | Ladywell Avenue                | LTN Street   | 396                                     | 304                                     | 701                          |  |  |  |  |
| Site7/G     | Dovecot Road                   | LTN Street   | 138                                     | 158                                     | 296                          |  |  |  |  |
| Site 8/H    | Broomhall Crescent             | LTN Street   | 37                                      | 33                                      | 70                           |  |  |  |  |
| Site 9/I    | Saughton Road North            | LTN Street   | 1875                                    | 1990                                    | 3865                         |  |  |  |  |
| Site 10/J   | Broomhouse Drive               | LTN Boundary | 2252                                    | 1987                                    | 4239                         |  |  |  |  |
| Site 11/K   | Ladywell Road                  | LTN Street   | 1586                                    | 1812                                    | 3398                         |  |  |  |  |
| Site 12/L   | Featherhall Avenue             | LTN Street   | 281                                     | 680                                     | 961                          |  |  |  |  |
| Site 13/M   | Manse Street                   | LTN Street   | 18                                      | 47                                      | 65                           |  |  |  |  |
| Site 14/N   | Manse Road                     | LTN Street   | 566                                     | 0                                       | 566                          |  |  |  |  |
| Site 15/O   | Corstorphine High Street       | LTN Street   | 1435                                    | 1232                                    | 2667                         |  |  |  |  |
| Site 16/P   | Kirk Loan                      | LTN Street   | 0                                       | 1025                                    | 1025                         |  |  |  |  |
|             |                                |              |   | Total weekday                           | 30,223                       |  |  |  |  |
| LTN weekday |                                |              |   |   | 15,529                       |  |  |  |  |
|             | Boundary streets weekday 14,69 |              |   |   |                              |  |  |  |  |



The following tables present the average weekday traffic flows (Mon-Fri) per site at each of the streets surrounding Corstorphine Primary School across a full 24-hour period.

| Baseline Surveys |                          |            |   |   |   |  |  |  |  |
|------------------|--------------------------|------------|---|---|---|--|--|--|--|
|                  |                          |            | Weekday<br>Average<br>Flow<br>NB/EB<br>(vehs) | Weekday<br>Average<br>Speed<br>NB/EB<br>(mph) | Weekday<br>Average<br>Flow<br>SB/WB<br>(vehs) | Weekday<br>Average<br>Speed SB/WB<br>(mph) | Total<br>two-<br>way<br>flow<br>(vehs) |  |  |
| Site 12/L        | Featherhall Avenue       | LTN Street | 523   | 17  | 520   | 15   | 1043                                   |  |  |
| Site 13/M        | Manse Street             | LTN Street | 62  | 11  | 102   | 12   | 164                                    |  |  |
| Site 14/N        | Manse Road               | LTN Street | 3026  | 17  | 3   | 8  | 3029                                   |  |  |
| Site 15/O        | Corstorphine High Street | LTN Street | 3809  | 22  | 2597  | 23   | 6406                                   |  |  |
|                  |                          |            |   |   |   | Total weekday                              | 10,642                                 |  |  |

| Full 24 Hours - Corstorphine Primary School surrounding streets<br>1-Month Post-Surveys |                          |            |   |   |   |  |  |  |  |
|---|--------------------------|------------|---|---|---|--|--|--|--|
|   |                          |            | Weekday<br>Average<br>Flow<br>NB/EB<br>(vehs) | Weekday<br>Average<br>Speed<br>NB/EB<br>(mph) | Weekday<br>Average<br>Flow<br>SB/WB<br>(vehs) | Weekday<br>Average<br>Speed SB/WB<br>(mph) | Total<br>two-<br>way<br>flow<br>(vehs) |  |  |
| Site 12/L   | Featherhall Avenue       | LTN Street | 589   | 14  | 1250  | 15   | 1839                                   |  |  |
| Site 13/M   | Manse Street             | LTN Street | 50  | 9   | 116   | 9  | 166                                    |  |  |
| Site 14/N   | Manse Road               | LTN Street | 1789  | 17  | 0   | 0  | 1789                                   |  |  |
| Site 15/O   | Corstorphine High Street | LTN Street | 3575  | 22  | 2808  | 24   | 6383                                   |  |  |
|   |                          |            |   |   |   | Total weekday                              | 10,177                                 |  |  |

The following tables present the average weekday traffic flows (Mon-Fri) per site at each of the streets surrounding Corstorphine Primary School across the hours of operation of the bus gate on Manse Road (0800 – 1000; and 1445 – 1830).

| During Bus Gate Hours - Corstorphine Primary School surrounding streets |                          |   |   |                                  |      |  |  |  |
|---|--------------------------|---|---|----------------------------------|------|--|--|--|
|   |                          | reys<br>Weekday<br>Average<br>Flow<br>NB/EB<br>(vehs) | Weekday<br>Average Flow<br>SB/WB (vehs) | Total two-<br>way flow<br>(vehs) |      |  |  |  |
| Site 12/L   | Featherhall Avenue       | LTN Street  | 273                                     | 256                              | 529  |  |  |  |
| Site 13/M   | Manse Street             | LTN Street  | 29                                      | 48                               | 76   |  |  |  |
| Site 14/N   | Manse Road               | LTN Street  | 1311                                    | 1                                | 1312 |  |  |  |
| Site 15/O   | Corstorphine High Street | 1073  | 2583                                    |                                  |      |  |  |  |
|   |                          | Total weekday   | 4,500                                   |                                  |      |  |  |  |

| During Bus Gate Hours - Corstorphine Primary School surrounding streets |                          |   |   |                                  |     |  |  |  |
|---|--------------------------|---|---|----------------------------------|-----|--|--|--|
|   | 1-м                      | urveys<br>Weekday<br>Average<br>Flow<br>NB/EB<br>(vehs) | Weekday<br>Average Flow<br>SB/WB (vehs) | Total two-<br>way flow<br>(vehs) |     |  |  |  |
| Site 12/L   | Featherhall Avenue       | LTN Street  | 281                                     | 680                              | 961 |  |  |  |
| Site 13/M   | Manse Street             | LTN Street  | 18                                      | 47                               | 65  |  |  |  |
| Site 14/N   | Manse Road               | LTN Street  | 566                                     | 0                                | 566 |  |  |  |
| Site 15/O   | Corstorphine High Street | 1232  | 2667                                    |                                  |     |  |  |  |
|   |                          | Total weekday   | 4,259                                   |                                  |     |  |  |  |



# 3. Site Survey Results

#### Site 2/B – St John's Road

3.1 Site Summary

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• Eastbound direction saw a decrease in traffic throughout peak hours of the day, most notably during the bus gate operating hours from the baseline data vs one month post counts



Westbound direction has remained for the most part unchanged with similar results on both counts through the entire day.



### Site 3/C – Station Road

- 3.2 Site Summary
  - Northbound travel has increased at this site since the baseline data was recorded, most notably during the bus gate hours. •
  - Vehicles travelling southbound have increased during the morning whereas in the afternoon/evening the levels are similar between the baseline and one month post counts. ٠





## Site 4/D – Pinkhill

3.3 Site Summary

- Northbound vehicles have remained at similar levels during both counts with the greatest change in behaviour being peak traffic flow during the morning changing from 9am to 8am.
- During the morning southbound travel has remained at similar levels, during the afternoon however the peak has lowered significantly and now earlier, during the bus gate hours.





#### Site 5/E – Balgreen Road

- 3.4 Site Summary
  - Northbound traffic has generally increased throughout the entire day when comparing one month post data to the baseline data.
  - Similarly to the northbound, southbound traffic has generally increased throughout the day most notably during the bus gate hours in the afternoon.





### Site 6/F – Ladywell Avenue

- 3.5 Site Summary
  - Northbound vehicles have generally decreased in the one month post data with the largest difference being during the afternoon bus gate hours.
  - The southbound traffic has stayed consistent between both counts without any major changes during bus gate operation hours.





#### AECOM 10

### Site 7/G – Dovecot Road

- 3.6 Site Summary
  - Eastbound traffic has generally stayed at similar levels however the peak, during morning bus gate hours, has decreased, whilst the afternoon peak has increased. •
  - Westbound traffic in the morning has generally stayed at the same levels however the morning peak was recorded earlier in the one month post counts. The most notable increase from the baseline data to the one month post data is during the afternoon bus gate ٠ hours.





### Site 8/H – Broomhall Crescent

- 3.7 Site Summary
  - Eastbound traffic has maintained at similar levels throughout the analysis with no major changes during the bus gate operating hours.
  - Westbound traffic has also stayed at similar levels during the analysis, although there was a decrease during the afternoon peak hours.





AECOM 12

## Site 9/I – Saughton Road North

- 3.8 Site Summary
  - Northbound traffic volumes have increased slightly during daytime hours, with increased peaks during both morning and afternoon bus gate operating hours.
  - Southbound traffic volumes remained at similar levels throughout the study, however there is a noticeable increase in the morning peak during bus gate hours.





#### Site 10/J – Broomhouse Drive

- 3.9 Site Summary
  - Eastbound traffic has increased throughout the analysis period with the most notable increase being during the afternoon bus gate hours.
  - Westbound traffic has also increased throughout the analysis period for the whole day. With large increases during both bus gate operating periods.





#### AECOM 14

## Site 11/K – Ladywell Road

3.10 Site Summary

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- Eastbound traffic has increased in the morning during the study period with a large increase in the AM peak volume. Beyond the morning bus gate hours the traffic volumes have remained at similar levels.
- Westbound traffic volumes have increased with a consistent increase between 6am and 6.30pm. There is a noticeable increase during bus gate operating hours.





## Site 12/L – Featherhall Avenue

3.11 Site Summary

- Northbound traffic has remained at mostly similar levels with the largest changes being an increase in the morning peak traffic and a decrease in the afternoon peak traffic volumes.
- Southbound traffic has increased significantly throughout the entire day and most notably during the periods of bus gate operation.





#### AECOM 16

### Site 13/M – Manse Street

#### 3.12 Site Summary

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Traffic in both directions has remained at similar levels in both directions when comparing the baseline to the one month post data.





#### Site 14/N – Manse Road

3.13 Site Summary

- Northbound traffic has seen a large decrease from the baseline to the one month post data. The largest decrease was seen during the afternoon bus gate operating hours.
- The change in traffic volume is most likely due to the bus gate at the north end of Manse Road.





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#### Site 15/O – Corstorphine High Street

3.14 Site Summary

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- Eastbound traffic volumes have remained consistent throughout the study period, the only notable change in volume is a decrease in peak volumes during the afternoon bus gate operating hours. ٠
- Westbound traffic volumes have increased in the morning hours with an increased peak during bus gate hours. There is a very slight increase in the afternoon peak during bus gate hours, outside of that, traffic volumes have remained similar to the baseline.





#### Site 16/P – Kirk Loan

- 3.15 Site Summary
  - The section of Kirk Loan which was surveyed is a section of 1-way street, westbound only
  - Westbound traffic levels have remained steady throughout the analysis period, with no major changes being noted.



Time



Corstorphine Connections



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