

SPACES FOR PEOPLE SURVEYS COMBINED SURVEY REPORT



tactran



SYSTRA

SPACES FOR PEOPLE SURVEYS

ATTITUDE SURVEYS AND TRAFFIC SURVEYS

IDENTIFICATION TABLE

Project owner	Tactran
Project	Spaces for People Surveys
Study	Attitude Surveys and Traffic Surveys
Type of document	Draft Report
Date	09/03/2022
File name	20211122_Tactran_SfP_Survey_W1-W12_Draft Report_v1.2.docx
Reference number	110064/12
Number of pages	133

APPROVAL

Version	Name	Position	Date	Modifications	
Draft	Authors	Marianne Woodyard Alasdair Kay	Project Managers	09/03/2022	
	Checked by	Eve Robertson	Project Director	09/03/2022	
	Approved by	Eve Robertson	Project Director	09/03/2022	
1	Author				
	Checked by				
	Approved by				

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
1. INTRODUCTION	8
1.1 OBJECTIVES	8
1.2 APPROACH	8
1.3 THIS REPORT	8
2. SPACES FOR PEOPLE MEASURES	12
2.1 INTRODUCTION OF MEASURES IN DUNDEE, ANGUS, PERTH & KINROSS AND STIRLING	12
3. SPACES FOR PEOPLE: 20MPH SPEED RESTRICTIONS	13
3.1 LOCATION OF MEASURES	13
3.2 AWARENESS OF 20MPH SPEED RESTRICTIONS	14
3.3 ATTITUDES TOWARDS THE MEASURE	15
3.4 IMPACT OF MEASURE ON WALKING AND CYCLING	17
3.5 EFFECTIVENESS OF MEASURES IN REDUCING VEHICLE SPEEDS	17
4. SPACES FOR PEOPLE: PAVEMENT WIDENING	90
4.1 AWARENESS OF PAVEMENT WIDENING	90
4.2 ATTITUDES TOWARDS THE MEASURE	91
4.3 IMPACT OF MEASURE ON WALKING AND CYCLING	93
5. SPACES FOR PEOPLE: SEGREGATED CYCLE LANES	94
5.1 AWARENESS OF SEGREGATED CYCLE LANES	94
5.2 ATTITUDES TOWARDS THE MEASURES	95
5.3 FEELINGS TOWARDS THE INTRODUCTION OF MORE OF THE MEASURE	96
5.4 IMPACT OF MEASURE ON WALKING AND CYCLING	97
6. SPACES FOR PEOPLE: RESTRICTIONS ON CERTAIN TYPES OF VEHICLES	98
6.1 AWARENESS OF RESTRICTIONS ON CERTAIN TYPES OF VEHICLES	98
6.2 ATTITUDES TOWARDS THE MEASURE	99
6.3 IMPACT OF MEASURE ON WALKING AND CYCLING	101
7. SPACES FOR PEOPLE: TEMPORARY ROAD CLOSURES EXCEPT FOR BUSES, PEDESTRIANS AND CYCLISTS	102
7.1 AWARENESS OF TEMPORARY ROAD CLOSURES EXCEPT FOR BUSES, PEDESTRIANS AND CYCLISTS	102
7.2 ATTITUDES TOWARDS THE MEASURE	103
7.3 IMPACT OF MEASURE ON WALKING AND CYCLING	105

8.	SPACES FOR PEOPLE: TEMPORARY ROAD CLOSURES EXCEPT PEDESTRIANS AND CYCLISTS	106
8.1	AWARENESS OF TEMPORARY ROAD CLOSURES EXCEPT PEDESTRIANS AND CYCLISTS	106
8.2	ATTITUDES TOWARDS THE MEASURE	107
8.3	IMPACT OF MEASURE ON WALKING AND CYCLING	109
9.	SPACES FOR PEOPLE: ONE-WAY SYSTEMS FOR PEDESTRIANS	110
9.1	AWARENESS OF ONE-WAY SYSTEMS FOR PEDESTRIANS	110
9.2	ATTITUDES TOWARDS THE MEASURE	111
9.3	IMPACT OF MEASURE ON WALKING AND CYCLING	113
10.	SPACES FOR PEOPLE: ONE-WAY SYSTEMS FOR VEHICLES	114
10.1	AWARENESS OF ONE-WAY SYSTEMS FOR VEHICLES	114
10.2	ATTITUDES TOWARDS THE MEASURE	115
10.3	IMPACT OF MEASURE ON WALKING AND CYCLING	117
11.	SPACES FOR PEOPLE: PARKING SUSPENSIONS	118
11.1	AWARENESS OF PARKING SUSPENSIONS	118
11.2	ATTITUDES TOWARDS THE MEASURE	119
11.3	IMPACT OF MEASURE ON WALKING AND CYCLING	121
12.	TRAVEL BEHAVIOUR IN THE LAST SEVEN DAYS	122
12.1	JOURNEY TYPES	122
12.2	ANTICIPATED CHANGE IN TRAVEL	122
12.3	MAIN MODES OF TRAVEL	123
12.4	ANTICIPATED CHANGE IN WAYS OF TRAVELLING	125
13.	WALKING AND CYCLING BEHAVIOUR	126
13.1	CHANGES IN CURRENT WALKING AND CYCLING BEHAVIOUR	126
14.	ATTITUDES TOWARDS DIFFERENT WAYS OF TRAVELLING	127
14.1	POSITIVITY TOWARDS DIFFERENT WAYS OF TRAVELLING	127
14.2	REASONS FOR NEGATIVITY AND CONCERNS TOWARDS TRAVEL	127
A	APPENDIX A – ANGUS COUNCIL SURVEY REPORT	129
B	APPENDIX B – DUNDEE CITY COUNCIL SURVEY REPORT	130
C	APPENDIX C – PERTH & KINROSS COUNCIL SURVEY REPORT	131
D	APPENDIX D – STIRLING COUNCIL SURVEY REPORT	132

EXECUTIVE SUMMARY

In response to travel restrictions, which were put in place in Scotland as a result of the Covid-19 pandemic, the Spaces for People (SfP) programme was announced in May 2020, with the aim of making journeys safer for walking, cycling and wheeling and to improve public spaces.

Twelve attitudinal and behavioural surveys, administered by SYSTRA, were delivered through an online panel, issued approximately every month between August 2020 and September 2021. The sample was made up of respondents from Dundee, Angus, Perth & Kinross and Stirling. The data used in this report has been weighted to ensure the sample is representative of the Tactran region by age and gender.

The results show the population's attitudes towards the Spaces for People measures, including awareness and levels of positivity, across the twelve waves, as well as their travel behaviour, including how the population reacted during different points of lockdown.

Following each of the twelve survey waves, individual survey reports were completed and published, allowing changes in attitudes and behaviours to be closely tracked. This report presents results looking at changes across the twelve month period, allowing the identification of key trends and other substantive findings.

Key findings across the twelve waves on the SfP measures include:

- **20mph speed restrictions**
 - Awareness increased somewhat over the first three waves (54%-66%), and remained largely consistent over the latter nine waves peaking during wave 12 (61%-72%);
 - Respondents reported highest awareness of the measure in Dundee;
 - Around half (47%-53%) of all respondents felt positively towards the introduction of (more) 20mph restrictions;
 - Vehicle link and speed counts which surveyed the effectiveness of the 20mph speed restrictions showed varied impact across the locations with the average proportion of vehicles exceeding 20mph varying within the Local Authority area as well by the different points in the time the data was collected.

- **Pavement widening**
 - Awareness increased across the first five waves (28%-51%), and remained relatively consistent across the latter seven waves (42%-50%);
 - Respondents reported similar levels of awareness in all four regions;
 - At least half (50%-61%) of all respondents felt positively towards the introduction of (more) pavement widening.

- **Segregated cycle lanes**
 - Awareness generally increased over the first seven waves (33%-48%) and decreased slightly across the latter three waves (41%-42%) and then increased in the final two waves (49%-51%);
 - Respondents reported highest awareness of the measure in Dundee
 - Around half (46%-53%) of all respondents consistently felt positively towards the introduction of (more) segregated cycle lanes.

- **Restrictions on certain types of vehicles**
 - Awareness steadily increased over the first four waves (20%-43%), and remained relatively consistent over the latter eight waves (36%-44%);
 - Respondents reported similar levels of awareness in all four regions;
 - Around three to four tenths (31%-47%) of all respondents felt positively towards the introduction of (more) restrictions on certain types of vehicles.

- **Temporary road closures except for buses, pedestrians and cyclists**
 - While only a third (33%) were aware of the measure in Wave 1, around half were aware in the latter waves (44%-53%);
 - Respondents reported highest awareness of the measure in Dundee;
 - Around a third (31%-41%) of all respondents felt positively towards the introduction of (more) temporary road closures except for buses, pedestrians and cyclists.

- **Temporary road closures except pedestrians and cyclists**
 - Awareness increased over the first seven waves (35%-55%); remained relatively consistent over the following three waves (44%-46%), and increased again in the two final waves (49%-53%);
 - Respondents reported highest awareness of the measure in Dundee;
 - Similar proportions of all respondents felt positively (34%-43%) as felt neither positively nor negatively (33%-41%) towards the introduction of (more) temporary road closures except pedestrians and cyclists.

- **One-way systems for pedestrians**
 - Awareness increased over the first six waves (36%-52%), and somewhat decreased over the latter six waves (43%-47%);
 - Respondents reported similar levels of awareness in all four regions;
 - Around four in ten (34%-53%) of all respondents felt positively towards the introduction of (more) one-way systems for pedestrians.

- **Awareness of one-way systems for vehicles**
 - Awareness increased over the first five waves (28%-47%), and remained relatively consistent over the latter seven waves (41%-49%);
 - Respondents reported highest awareness of the measure in Dundee;
 - Around four in ten (34%-44%) of all respondents felt positively towards the introduction of (more) one-way systems for vehicles.

- **Parking suspensions**
 - Around half (46%-59%) of respondents were aware of parking suspensions;
 - Respondents reported highest awareness of the measure in Dundee;
 - Around four in ten of all respondents (38%-48%) felt positively towards the introduction of (more) parking suspensions, while around a third (29%-40%) felt neither positively nor negatively.

In summary, 20mph speed restrictions consistently had the highest levels of awareness across the twelve waves, while restrictions on certain types of vehicles consistently had the lowest levels of awareness. Respondents most commonly reported awareness of measures in Dundee across the measures, compared to levels of awareness in Angus, Perth & Kinross and Stirling. Positivity towards the introduction of (more) measures was highest for pavement widening for the majority of waves, and lowest for temporary road closures except for buses, pedestrians and cyclists for the majority of the waves.

A summary of findings across the twelve waves on travel attitudes and behaviour include:

- In all twelve waves, at least 99% of respondents had made at least one journey in the last seven days. The most commonly undertaken journey was for shopping across all twelve waves;

- The number of journeys made remained fairly consistent, with increases and decreases reflecting changes in Covid-19 travel restrictions and guidance. For

example Wave 6, which coincided with the stricter 'Stay at Home Protection' Level, saw a decrease in all journey types. Furthermore, in Wave 11 and Wave 12 an increase in indoor leisure activities and visits to friends and family was reported, likely in light of relaxed restrictions;

- Travelling by car was consistently the most frequently used main way of travelling for all journey purposes, with the exception of outdoor leisure activities where walking was the most used way of travelling;
- Between four and five in ten (38%-53%) of respondents reported an increase in the average amount of time they spent walking for leisure and exercise since Covid-19 restrictions were introduced; and
- Respondents consistently felt most positively towards walking (73%-80%) across the twelve waves, and around four in ten (38%-46%) felt this way towards travelling by bicycle.

1. INTRODUCTION

1.1 Objectives

- 1.1.1 This interim report provides the findings of research undertaken by SYSTRA on behalf of Tactran, supported by Sustrans.
- 1.1.2 The research has been undertaken to better understand the effectiveness of the Spaces for People (SfP) Programme in Dundee, Angus, Perth & Kinross and Stirling, as well as to understand attitudes and behaviour during Covid-19 restrictions towards travelling, including walking and cycling.

1.2 Approach

- 1.2.1 Attitudinal and behavioural surveys, administered by SYSTRA, were delivered through an online panel, issued approximately monthly during August 2020 and September 2021. Each of the twelve survey waves were undertaken with a different sample of respondents, however it is likely there was some overlap across the waves. Between 235-312 respondents took part in each survey wave, with respondents from Dundee, Angus, Perth & Kinross and Stirling.
- 1.2.2 Where proposed temporary infrastructure changes included the retention of traffic movements, speed surveys were undertaken to monitor the vehicle speeds adjacent to the proposed infrastructure changes between October 2020 and September 2021. Automatic Tube Counters (ATCs) were used to capture the vehicle speeds and classified counts across a 7-day period. Analysis of this data shows the mean speeds at each site, the 85th percentile speed (speed below which 85% of vehicles each day was travelling at), and allows the proportion of vehicles who are travelling above the posted speed limit to be calculated. The surveys were undertaken in October/November 2020; February 2021, May 2021 and September 2021 in each area to monitor the change in speeds through time and whilst Scotland was living under different levels of restriction.

1.3 This Report

- 1.3.1 A full report of findings was provided following each survey wave, and key changes in attitudes and behaviour from the previous wave were highlighted.
- 1.3.2 This report focuses on the longitudinal findings in the Tactran region, over the twelve survey waves, highlighting notable changes over time.
- 1.3.3 The survey data used in this report has been weighted to ensure the sample is representative of the Tactran region by age and gender.
- 1.3.4 In this report external factors, such as changes in Covid-19 guidelines and legislation and time of year which could have influenced the research results, have been highlighted. The dates of the waves and corresponding restrictions are as follows in Table 1.

Table 1. Dates of survey wave and corresponding Covid-19 Guidelines

SURVEY	SURVEY DATES	COVID-19 GUIDELINES
Wave 1 attitudinal survey	19th August - 31st August 2020	<ul style="list-style-type: none"> • Individuals could meet people from up to two households at a time indoors; • Individuals were required to wear a face covering in shops; public transport; on public transport premises (i.e. rail and bus stations); and other indoor public places; • Remote working was the default position for those who could; • Primary and secondary schools reopened in August 2020; • Non-essential shops could open in line with guidance; and • All holiday accommodation could open in line with guidance.
Wave 2 attitudinal survey	24th September - 6th October 2020	<ul style="list-style-type: none"> • Individuals could not make indoor social visits to other households unless they were an extended household; • Pubs, bars and restaurants were required to close at 10pm • Individuals could meet others outside (i.e. garden or public space) in groups of up to 6 people from no more than 2 households; and • Sports and leisure facilities could re-open in line with guidance.
Wave 3 attitudinal survey	19th October and 29th October 2020	<ul style="list-style-type: none"> • All indoor premises could only open between 6am and 6pm with no sale of alcohol; and • Individuals were advised to walk, cycle and drive where possible to save space of public transport.
Speed and vehicles count	October 2020	
Wave 4 attitudinal survey	9th November - 16th November 2020	<p>Angus and Perth & Kinross were in Protection Level 2 from 9th to 12th November 2020</p> <ul style="list-style-type: none"> • Restaurants, cafes, pubs and bars could open indoors for the consumption of food and non-alcoholic drinks. Last entry was 19:00 and all venues had to close by 20:00;
Speed and vehicles count	November 2020	<p>Angus and Perth & Kinross were in protection level 3 from 13th November 2020. Dundee and Stirling were in Protection Level 3 for entirety of the survey period:</p> <ul style="list-style-type: none"> • Restaurants, cafes, pubs and bars could open indoors and outdoors for the consumption of food and non-alcoholic drinks only, with table services; • Individuals were not allowed to travel into or out of Level 3 and 4 local authority areas except for essential reasons; and • Public transport was for essential purposes only.
Wave 5 attitudinal survey	30th November - 8th December 2020	<p>Protection Level 3</p> <ul style="list-style-type: none"> • Protection Level 3 guidance remained the same as during the previous wave.
Wave 6 attitudinal survey	11th January - 18th January 2021	<p>Stay at Home Protection Level</p> <ul style="list-style-type: none"> • Individuals were told to stay at home as much as possible to minimise the risk of spreading Covid-19; • By law, individuals in a level 4 area could only leave their home for essential purposes; • Individuals were encouraged to shop online or use local shops and services where possible, and to avoid all unnecessary travel;

SURVEY	SURVEY DATES	COVID-19 GUIDELINES
		<p>Lockdown restrictions were further strengthened on January 13th 2021</p> <ul style="list-style-type: none"> • Working from home became the default position for businesses and services; • Non-essential click and collect retail services became prohibited; • Businesses providing takeaway food also had to operate on a 'non-entry' basis only; and • Restrictions banning the consumption of alcohol in public places.
Wave 7 attitudinal survey	1st February - 8th February 2021	<p>Stay at Home Protection Level</p> <ul style="list-style-type: none"> • Stay at Home Protection Level guidance remained the same as during the previous wave.
Speed and vehicles count	February 2021	
Wave 8 attitudinal survey	22nd February - 2nd March 2021	<p>Stay at Home Protection Level</p> <ul style="list-style-type: none"> • Stay at Home Protection Level guidance remained the same as during the previous wave.
Wave 9 attitudinal survey	15th March - 23rd March 2021	<p>Stay at Home Protection Level</p> <ul style="list-style-type: none"> • Stay at Home Protection Level guidance remained the same as during the previous wave.
Wave 10 attitudinal survey	5th April and 14th April 2021	<p>Protection Level 4</p> <ul style="list-style-type: none"> • Individuals were told to stay local in their own council area (except for essential reasons like going to work or visiting an extended household); • Individuals could meet in groups of up to 4 people from two households outdoor; • Individuals were told to work from home wherever practicable; • Hospitality venues like cafes, pubs and restaurants; gyms; non-essential shops and stores; holiday accommodation; and all indoor visitor attractions had to remain closed.
Speed and vehicles count	May 2021	<p>Protection Level 3</p> <ul style="list-style-type: none"> • Individuals could meet in groups of up to 6 from 2 households in an indoor public place such as a café, pub or restaurant; • Individuals could meet in groups of up to 6 from 6 households outdoors, in a private garden or a public place like a park or an outdoor area of a café; • Individuals could travel anywhere in Scotland and can stay in holiday accommodation - but you should not stay in someone else's house; and • Individuals were advised to work from home were possible.
Wave 11 attitudinal survey	26 th July and 8 th August 2021	<p>Protection Level 0</p> <ul style="list-style-type: none"> • Individuals could meet friends and family socially in groups of up to eight people from four households in homes, and could stay overnight; • Up to ten people from four households could meet in an indoor public place like a café, pub or restaurant; • Some hospitality setting were required to close at midnight;

SURVEY	SURVEY DATES	COVID-19 GUIDELINES
		<ul style="list-style-type: none"> • Individuals could travel anywhere in Scotland, England, Wales and Northern Ireland; • Individuals could take part in any sport or exercise activity; • Individuals were advised to work from home where possible; • Retail, hospitality, sport and leisure and pubs, restaurants and cafés could open, however nightclubs had to remain closed.
Wave 12 attitudinal survey	6 th September and 7 th September 2021	<p>Beyond protection level 0</p> <ul style="list-style-type: none"> • Encouragement for individuals to get the vaccine when offered continued; • Individuals were told to wear face coverings where required; • Individuals were encouraged to keep distance, and meet outside if possible or with the windows open if inside; • Individuals were encouraged to work from home if possible, or to do a mixture of home and office working; and • Some boarder control remained, relating to international travel.
Speed and vehicles count	<p>October /November 2020</p> <p>February/March 2021</p> <p>May 2021</p> <p>September 2021</p>	

1.3.5 This report looks at the following Spaces for People measures:

- 20mph speed restrictions;
- Pavement widening;
- Segregated cycle lanes;
- Restrictions on certain types of vehicles;
- Temporary road closures except for buses, pedestrians and cyclists;
- Temporary road closures except pedestrians and cyclists;
- One-way systems for pedestrians;
- One-way systems for vehicles; and
- Parking suspensions.

1.3.6 Details on the SfP measures introduced in Dundee, Angus, Perth & Kinross and Stirling are highlighted in Chapters 2.

1.3.7 Changes in travel attitudes and behaviour across the twelve waves are outlined in chapters 12, 13 and 14.

1.3.8 Appendix A to Appendix D contain the separate survey reports that were produced for the following local authorities, Angus Council, Dundee City Council, Perth & Kinross Council and Stirling Council.

2. SPACES FOR PEOPLE MEASURES

2.1 Introduction of measures in Dundee, Angus, Perth & Kinross and Stirling

2.1.1 In May 2020, the Spaces for People programme was announced in response to the Covid-19 pandemic, with the aim of making journeys safer for walking, cycling and wheeling and to improve public spaces.

Dundee

2.1.2 Measures introduced in various locations across Dundee included:

- 20mph speed restrictions; and
- Road closures.

Angus

2.1.3 Measures introduced in various locations across Angus included:

- 20mph speed restrictions introduced between September 2020 and April 2021; and
- Footpath widening was introduced in February 2021.

Perth and Kinross

2.1.4 Measures introduced in various locations across Perth and Kinross included:

- 20mph speed restrictions introduced between June and November 2020;
- Footpath widening in July 2020; and
- Street closures in August 2020.

Stirling

2.1.5 While there were no SfP measures in place in Stirling during the undertaking of the attitudinal surveys, a consultation was carried out in October 2020. Subsequently, the following measures were introduced across Stirling in May and June 2021 included:

- Advisory pedestrian and cyclist priority signage;
- Footpath widening;
- 20mph speed restrictions; and
- Bi-directional active travel links.

3. SPACES FOR PEOPLE: 20MPH SPEED RESTRICTIONS

3.1 Location of measures

3.1.1 As part of the spaces for people measures, speeds were reduced to 20mph at a number of locations across the 4 council areas. The locations of the 20mph zones in each local authority area are detailed below.

Angus Council

- | | |
|--------------------------|---------------------------|
| ○ Arbroath town centre | ○ Arbirlot |
| ○ Brechin town centre | ○ Kirkton of Auchterhouse |
| ○ Carnoustie town centre | ○ Barry |
| ○ Forfar town centre | ○ Bridgefoot |
| ○ Kirriemuir town centre | ○ Easthaven |
| ○ Monifieth town centre | ○ Ferryden |
| ○ Montrose town centre | ○ Fowlis |
| ○ Friockheim | ○ Inveraldie |
| ○ Edzell | ○ Inverkeilor |
| ○ Liff | ○ Leysmill |
| ○ Glamis | ○ Lunanhead |
| ○ Hillside | ○ Monikie |
| ○ Kingsmuir | ○ Redford |
| ○ Letham | ○ Tealing |
| ○ Newbigging | ○ Wellbank |
| ○ Newtyle | ○ Westmuir |

Dundee City Council

- Perth Road, Dundee
- Fintry, Dundee
- Douglas, Dundee
- Broughty Ferry

Perth & Kinross Council

- | | |
|--------------------------|---------------------------|
| ○ Muirton, Perth | ○ Forneth |
| ○ City centre, Perth | ○ Forteviot |
| ○ Royal Infirmary, Perth | ○ Glenfarg |
| ○ Coupar Angus | ○ Grandtully |
| ○ Abernyte | ○ Grange |
| ○ Airtully | ○ Kettins |
| ○ Alyth | ○ Kinloch |
| ○ Ardler | ○ Kinnaird |
| ○ Auchterarder | ○ Kinross |
| ○ Ballintuim | ○ Kinrossie |
| ○ Blairgowrie | ○ Kirkmichael |
| ○ Bridge of Cally | ○ Maryburgh & Keltybridge |
| ○ Bridge of Earn | ○ Meiklour |
| ○ Butterstone | ○ Milnathort |
| ○ Campmuir | ○ Pitcairngreen |
| ○ Cleish | ○ Pitlochry |
| ○ Collace | ○ Rait |
| ○ Comrie | ○ Scone |
| ○ Crieff | ○ Scotlandwell |
| ○ Dunning | ○ Spittalfield |
| ○ Errol Station | ○ Strathtay |

○ Tummel Bridge

○ Wolfhill

Stirling Council

○ Aberfoyle

○ Killearn

○ Fallin

○ Dunblane

○ Kings Park, Stirling

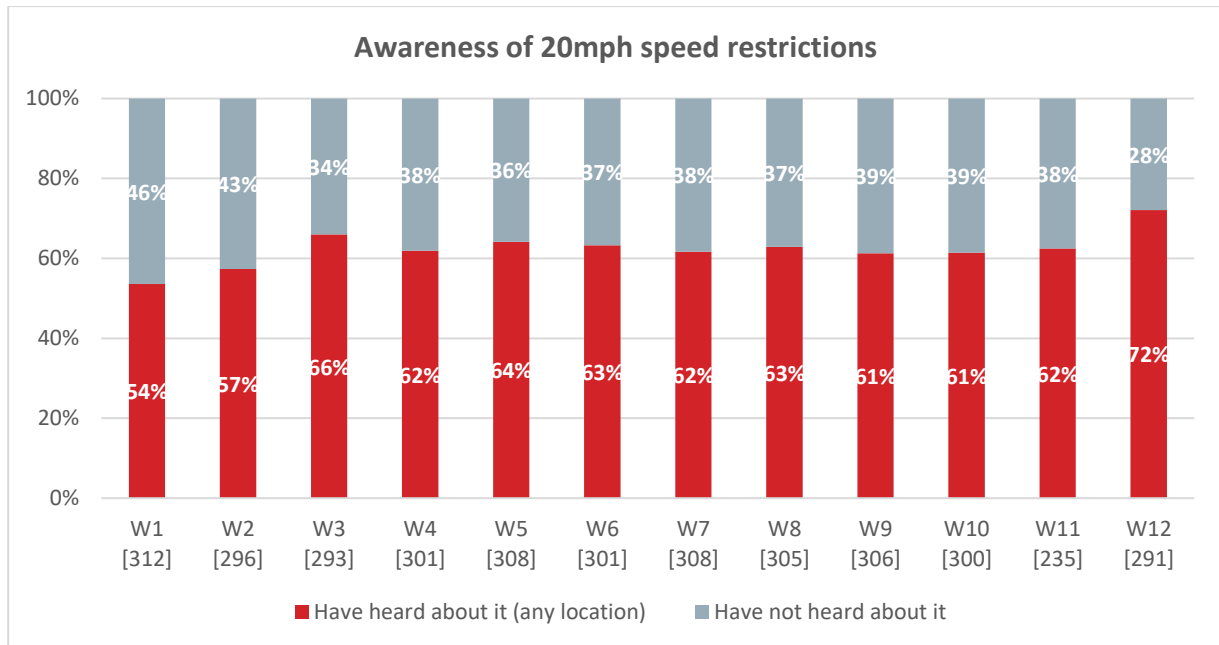
○ Callander

○ City Centre & Riverside, Stirling

○ Plean

3.2 Awareness of 20mph speed restrictions

3.2.1 Awareness of 20mph speed restriction in Angus, Dundee, Perth & Kinross, Stirling or an unspecified location increased over the first three waves (54%-66%), however remained largely consistent over the latter nine waves, with around two-thirds of respondents aware of 20mph speed restrictions (61%-72%), peaking during Wave 12.

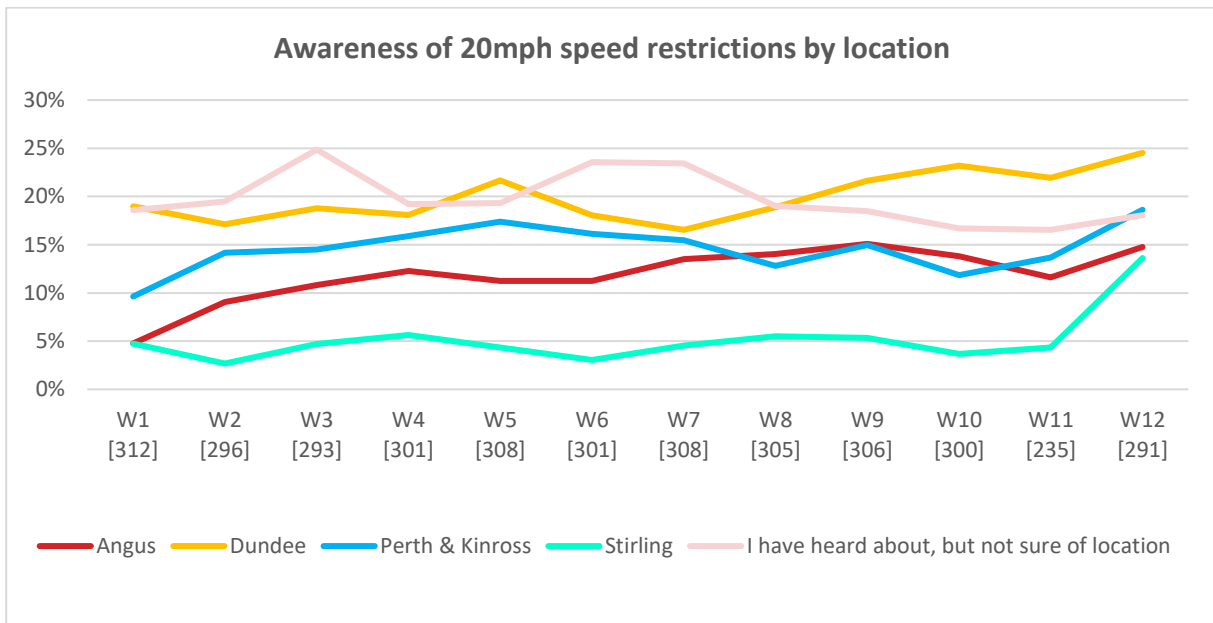


Base: All respondents (varies by wave: 235-312)

Figure 1. Awareness of 20mph speed restrictions (in any location) from July 2020 onwards

3.2.2 Figure 2 shows a breakdown of awareness of 20mph speed restrictions across the twelve waves by location. Around a fifth of respondents reported that they had heard of the 20mph speed restrictions, but were unsure in what location the measures were in place (17%-25%).

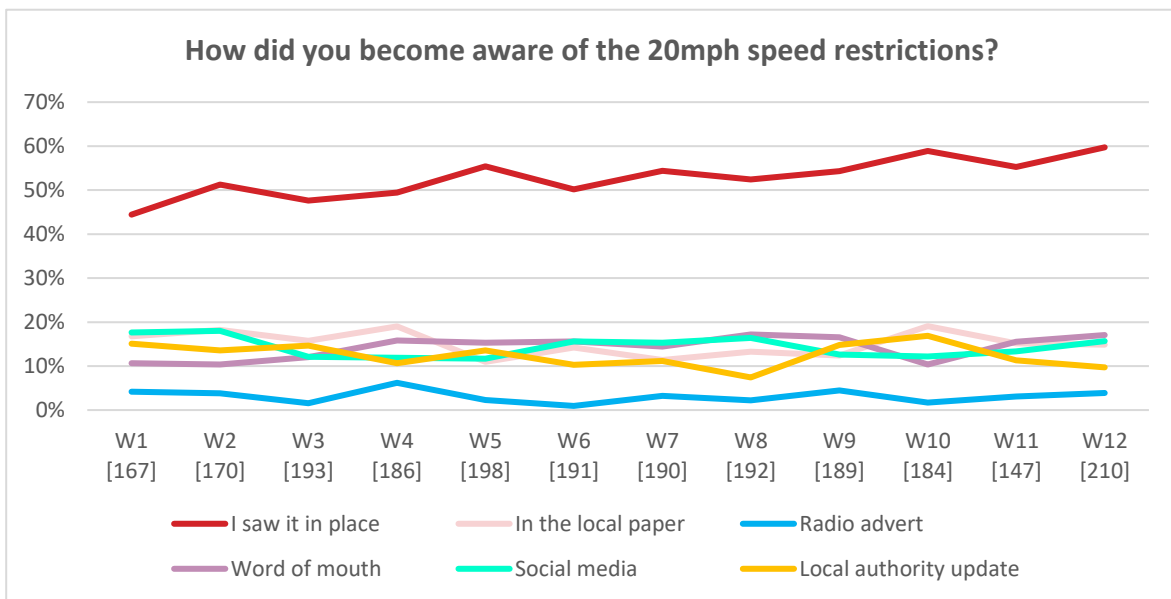
3.2.3 Awareness of the measures did differ by the four specified locations, with respondents most commonly aware of the measures in Dundee (17%-25%), and least aware of the measures in Stirling (3%-14%).



Base: All respondents (varies by wave: 235-312)

Figure 2. Awareness of 20mph speed restrictions (by location) from July 2020 onwards

3.2.4 Across the waves, respondents most commonly reported that they became aware of 20mph speed restrictions by seeing them in place, increasing steadily over the research waves (44%-60%), while respondents least commonly reported becoming aware of the measures by radio advert (1%-6%).



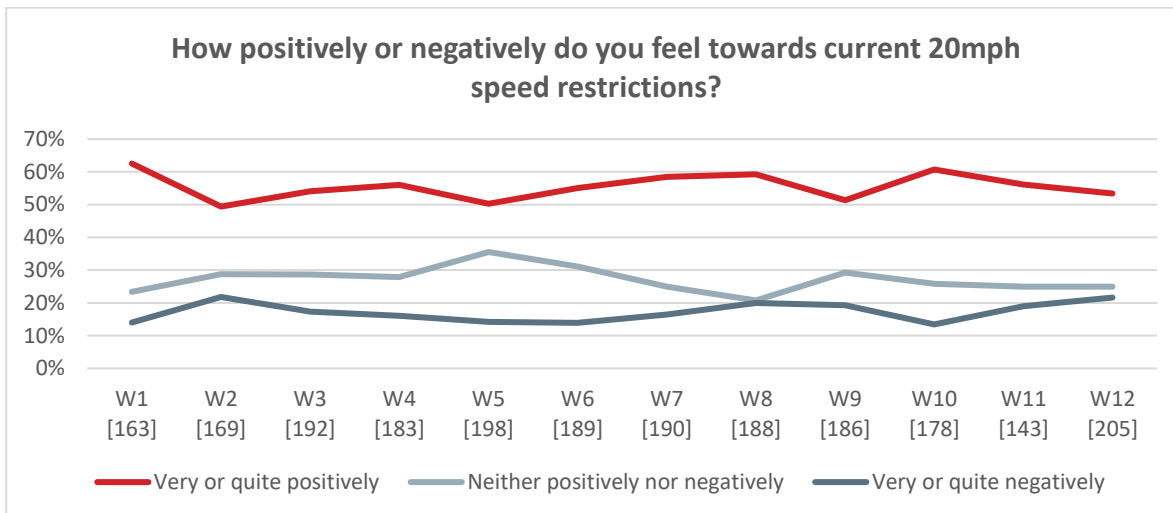
Base: Respondents aware of the 20mph speed restrictions (varies by wave: 147-210)

Figure 3. How respondents became aware of the 20mph speed restrictions

3.3 Attitudes towards the measure

3.3.1 Figure 4 shows a breakdown of how respondents who reported being aware of the 20mph speed restrictions felt towards the measure.

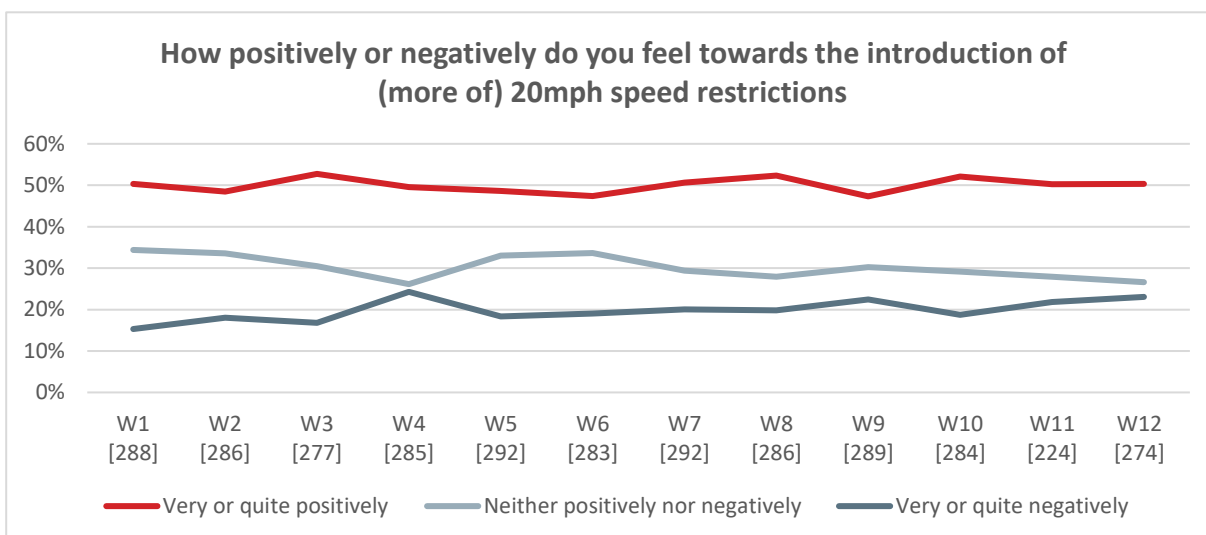
3.3.2 Around half of respondents felt positively towards the 20mph speed restrictions (49%-63%). Less than a quarter of respondents felt negatively towards the measures (13%-22%).



Base: Respondents aware of the 20mph speed restrictions, excluding those who answered 'Don't know' (varies by wave: 143-205)

Figure 4. Feelings towards 20mph speed restrictions currently

3.3.3 All respondents were asked how they felt towards the introduction of (more) 20mph speed restrictions. Around half of respondents felt positively (47%-53%), while around a fifth felt negatively (15%-24%).



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 224-292)

Figure 5. Feelings towards the introduction of (more) 20mph speed restrictions

3.3.4 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Between two and seven in ten respondents from Dundee (46%-66%); Angus (46%-56%); Perth and Kinross (39%-56%); Stirling (23%-61%) felt positively towards the measure across the twelve waves. Respondents from Stirling in wave 12 were the least positive (23%) and respondents from Dundee in wave 12 were the most positive (66%).

3.3.5 Respondents who reported feeling positively towards current or potential 20mph speed restrictions cited a number of reasons why they felt this way. Most commonly across the twelve waves, respondents cited that with the measure in place respondents feel safer walking (45%-55%); feel safer cycling (19%-35%); and air quality is improved (20%-32%).

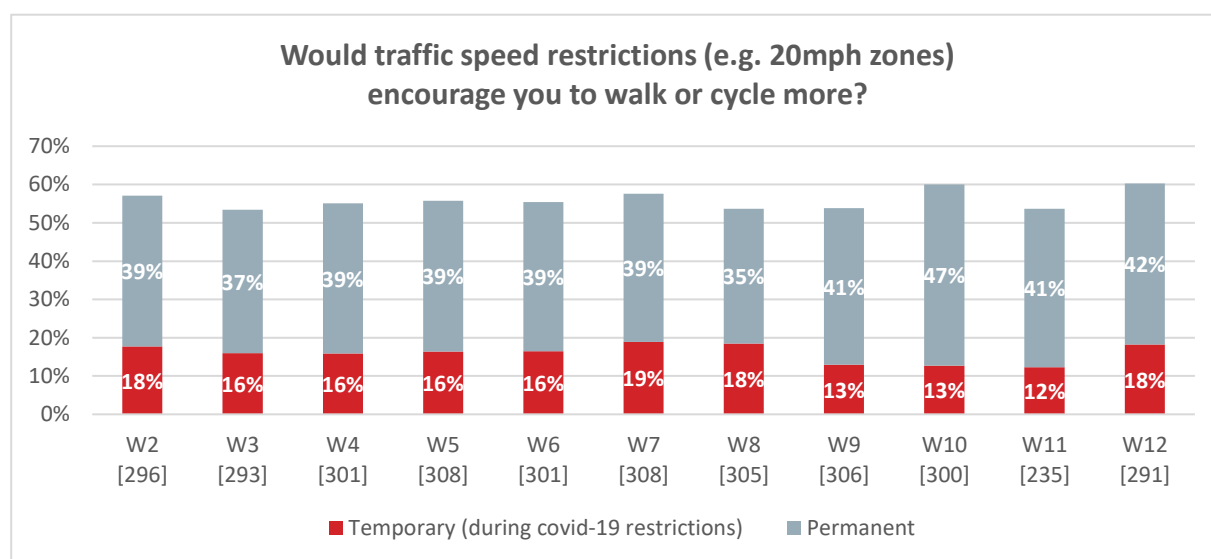
3.3.6 Respondents who reported feeling negatively towards current or potential 20mph speed restrictions cited a number of reasons why they felt this way. Most commonly respondents cited that with the measure in place, traffic moves too slowly (61%-84%), a

reason cited less frequently over the latter waves. Other common reasons included that the measure does make them feel safer walking (13%-31%), a reason which was cited least commonly during Wave 4 and most commonly during Wave 12, remaining consistent for the other waves (15%-20%). An increase in traffic on the roads (10%-28%), was a reason less commonly cited over the latter five waves.

3.4 Impact of measure on walking and cycling

3.4.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

3.4.2 The majority of respondents (53%-60%) reported that 20mph speed restrictions would encourage them to walk or cycle more. Around a sixth (12%-19%), specified that they would prefer the measure in place temporarily (i.e. during Covid-19 restrictions), while around four tenths (35%-47%) would prefer the measures to be in place permanently.



Base: All respondents (varies by wave: 235-308)*

* Question was asked during Wave 2-12 only

Figure 6. Impact of 20mph restrictions on encouraging respondents to walk or cycle more

3.5 Effectiveness of measures in reducing vehicle speeds

Angus Council

3.5.1 Vehicle link counts and speeds were surveyed using ATC tube counters at five locations in the Angus Council area, namely:

- Link & Speed 1 – West Port, Arbroath
- Link & Speed 2 – Millgate, Arbroath
- Link & Speed 3 – Commerce Street, Arbroath
- Link & Speed 4 – Castle Street, Forfar
- Link & Speed 5 – B966 outside Edzell Primary School, Edzell

3.5.2 Summary tables below present the results of the link count and speed surveys in the Angus Council area.

3.5.3 For each survey, the summary information is as follows:

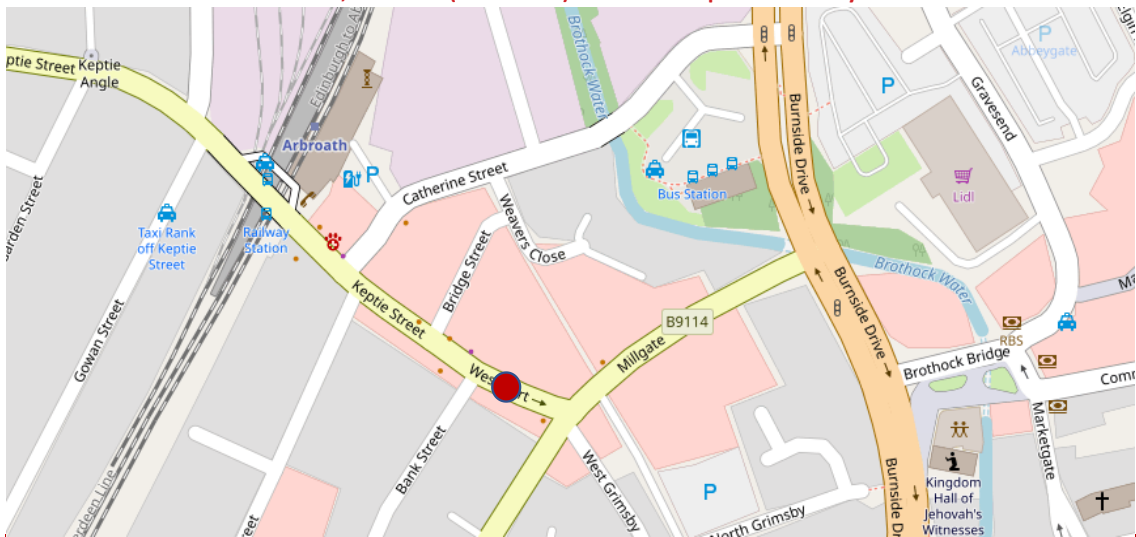
- Site Number
- Site Location

- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed below which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

Arbroath

3.5.4 Table 2 below presents a comparison of the results of the link flow and speed data on the West Port eastbound in Arbroath.

Table 2. West Port, Arbroath (eastbound) Link Flow & Speed Summary



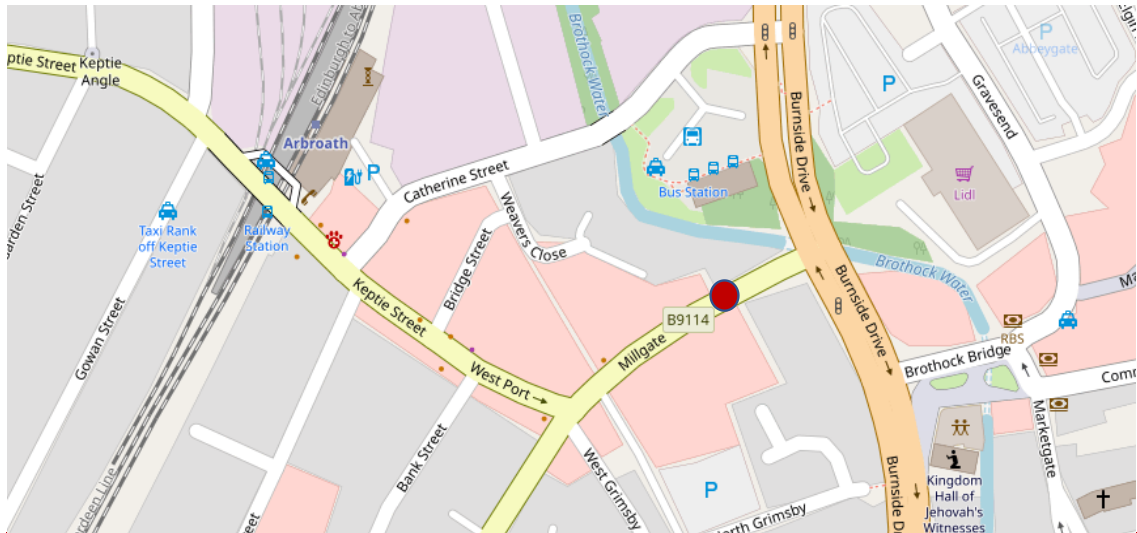
Site 1 West Port									
October 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1762	1867	1814	2065	2280	2006	1160	1958	1851
Mean Speed (mph)	18.9	18.4	18.6	18.9	18.0	18.0	19.3	18.6	18.6
85%ile Speed (mph)	23.0	22.5	22.9	23.0	22.2	22.5	23.5	22.7	22.8
No. Vehicles > 20 MPH Limit	706	684	690	846	733	658	524	732	692
% Vehicles > 20 MPH Limit	40.1%	36.6%	38.0%	41.0%	32.1%	32.8%	45.2%	37.6%	38.0%
No. Vehicles > 35 MPH	6	2	0	5	1	5	0	3	3
% Vehicles > 35 MPH	0.3%	0.1%	0.0%	0.2%	0.0%	0.2%	0.0%	0.1%	0.1%
March 2021	Mon 29/03/21	Tue 30/03/21	Wed 31/03/21	Thu 01/04/21	Fri 26/03/21	Sat 27/03/21	Sun 28/03/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1537	1544	1568	1698	2100	1506	1042	1689	1571
Mean Speed (mph)	19.0	19.1	19.3	19.4	18.9	18.6	20.0	19.1	19.2
85%ile Speed (mph)	22.9	23.1	23.4	23.3	23.0	23.0	24.0	23.1	23.2
No. Vehicles > 20 MPH Limit	667	656	707	781	835	586	532	729	681
% Vehicles > 20 MPH Limit	43.4%	42.5%	45.1%	46.0%	39.8%	38.9%	51.1%	43.3%	43.8%
No. Vehicles > 35 MPH	0	0	2	1	3	3	1	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%
May 2021	Mon 10/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1837	2029	1948	2093	2310	1972	1272	2043	1923
Mean Speed (mph)	18.5	18.7	18.4	17.9	18.3	17.6	19.0	18.4	18.3
85%ile Speed (mph)	22.4	22.8	22.6	22.3	22.3	22.0	23.2	22.5	22.5
No. Vehicles > 20 MPH Limit	686	814	740	661	822	576	527	745	689
% Vehicles > 20 MPH Limit	37.3%	40.1%	38.0%	31.6%	35.6%	29.2%	41.4%	36.4%	35.9%
No. Vehicles > 35 MPH	1	1	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1726	1821	1892	2092	2435	2253	1408	1993	1947
Mean Speed (mph)	18.4	17.9	18.4	17.9	18.0	17.9	19.3	18.1	18.3
85%ile Speed (mph)	22.4	22.1	22.6	22.1	22.2	22.0	23.3	22.3	22.4
No. Vehicles > 20 MPH Limit	593	577	684	660	788	738	641	660	669
% Vehicles > 20 MPH Limit	34.4%	31.7%	36.2%	31.5%	32.4%	32.8%	45.5%	33.1%	34.4%
No. Vehicles > 35 MPH	2	1	0	2	1	1	0	1	1
% Vehicles > 35 MPH	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%

3.5.5 Table 2 indicates that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 19.1 mph.

3.5.6 The average proportion of vehicles travelling above 20mph was slightly lower in May 2021 compared with October 2020, the lowest proportion being observed in September 2021.

3.5.7 Table 3 presents the results for Millgate eastbound in Arbroath.

Table 3. Millgate, Arbroath (eastbound) Link Flow & Speed Summary



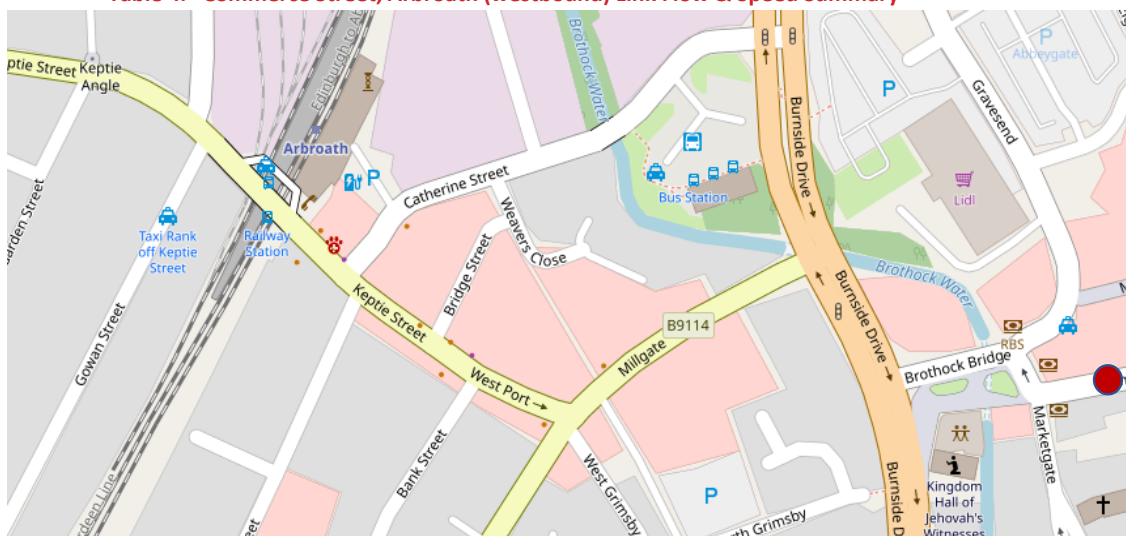
Site 2 Millgate									
October 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1264	1331	1313	1461	1621	1391	784	1398	1309
Mean Speed (mph)	16.9	16.9	16.5	16.6	16.8	16.9	18.1	16.7	17.0
85 th ile Speed (mph)	21.1	20.9	20.6	20.6	20.7	21.0	22.1	20.8	21.0
No. Vehicles > 20 MPH Limit	275	266	245	273	306	295	245	273	272
% Vehicles > 20 MPH Limit	21.8%	20.0%	18.7%	18.7%	18.9%	21.2%	31.3%	19.6%	21.5%
No. Vehicles > 35 MPH	0	0	1	1	0	6	0	0	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.1%	0.0%	0.4%	0.0%	0.0%	0.1%
March 2021	Mon 29/03/21	Tue 30/03/21	Wed 31/03/21	Thu 01/04/21	Fri 26/03/21	Sat 27/03/21	Sun 28/03/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1018	1044	1090	1132	1425	1020	707	1142	1062
Mean Speed (mph)	18.3	18.4	18.2	18.2	18.1	18.0	18.7	18.2	18.3
85 th ile Speed (mph)	22.3	22.4	22.4	22.0	22.3	21.9	22.4	22.3	22.2
No. Vehicles > 20 MPH Limit	324	335	356	349	428	308	247	358	335
% Vehicles > 20 MPH Limit	31.8%	32.1%	32.7%	30.8%	30.0%	30.2%	34.9%	31.5%	31.8%
No. Vehicles > 35 MPH	2	1	2	2	4	0	4	2	2
% Vehicles > 35 MPH	0.2%	0.1%	0.2%	0.2%	0.3%	0.0%	0.6%	0.2%	0.2%
May 2021	Mon 10/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1303	1409	1413	1550	1625	1471	817	1460	1370
Mean Speed (mph)	17.7	17.5	17.4	17.1	17.6	17.0	18.2	17.5	17.5
85 th ile Speed (mph)	21.6	21.5	21.3	21.0	21.7	21.0	22.0	21.4	21.4
No. Vehicles > 20 MPH Limit	340	363	336	338	427	307	224	361	334
% Vehicles > 20 MPH Limit	26.1%	25.8%	23.8%	21.8%	26.3%	20.9%	27.4%	24.7%	24.4%
No. Vehicles > 35 MPH	2	1	0	0	1	0	0	1	1
% Vehicles > 35 MPH	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1207	1308	1336	1466	1719	1646	982	1407	1381
Mean Speed (mph)	17.4	17.4	17.0	17.0	17.2	16.8	17.9	17.2	17.2
85 th ile Speed (mph)	21.7	21.9	21.3	21.3	21.4	21.0	22.1	21.5	21.5
No. Vehicles > 20 MPH Limit	301	321	317	324	414	355	293	335	332
% Vehicles > 20 MPH Limit	24.9%	24.5%	23.7%	22.1%	24.1%	21.6%	29.8%	23.8%	24.1%
No. Vehicles > 35 MPH	1	2	1	0	0	1	0	1	1
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%

3.5.8 Table 3 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown. Again, the 5-day mean speed was highest at 18.2 mph.

3.5.9 The average proportion of vehicles travelling above 20mph was higher in May 2021 compared with October 2020. The proportion of vehicles exceeding the 20mph speed limit in September 2021 was similar to May 2021 and both were higher than October 2020.

3.5.10 Table 4 presents the results for Commerce Street westbound in Arbroath.

Table 4. Commerce Street, Arbroath (westbound) Link Flow & Speed Summary



Site 3 Commerce Street									
October 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3852	4092	3718	3910	4208	3427	2611	3956	3688
Mean Speed (mph)	17.8	17.8	18.1	17.6	17.5	18.0	18.2	17.8	17.9
85%ile Speed (mph)	21.4	21.3	21.6	21.1	21.1	21.7	22.0	21.3	21.5
No. Vehicles > 20 MPH Limit	991	1045	1110	932	988	942	782	1013	970
% Vehicles > 20 MPH Limit	25.7%	25.5%	29.9%	23.8%	23.5%	27.5%	30.0%	25.6%	26.3%
No. Vehicles > 35 MPH	0	2	0	0	1	4	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
March 2021	Mon 29/03/21	Tue 30/03/21	Wed 31/03/21	Thu 01/04/21	Fri 26/03/21	Sat 27/03/21	Sun 28/03/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3297	3195	3390	3769	4115	2844	2380	3553	3284
Mean Speed (mph)	18.2	18.0	18.3	17.8	17.7	17.8	18.4	18.0	18.0
85%ile Speed (mph)	21.5	21.4	21.6	21.2	21.3	21.5	21.8	21.4	21.5
No. Vehicles > 20 MPH Limit	915	850	957	936	989	741	717	929	872
% Vehicles > 20 MPH Limit	27.8%	26.6%	28.2%	24.8%	24.0%	26.1%	30.1%	26.3%	26.8%
No. Vehicles > 35 MPH	1	1	2	0	0	0	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Mon 10/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4538	4606	4736	5111	5209	4086	3100	4840	4484
Mean Speed (mph)	16.9	17.0	17.2	16.6	16.9	16.8	17.8	16.9	17.0
85%ile Speed (mph)	20.3	20.2	20.5	19.9	20.1	20.1	21.1	20.2	20.3
No. Vehicles > 20 MPH Limit	802	771	892	735	837	634	727	807	771
% Vehicles > 20 MPH Limit	17.7%	16.7%	18.8%	14.4%	16.1%	15.5%	23.5%	16.7%	17.2%
No. Vehicles > 35 MPH	1	0	1	1	1	0	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4207	4394	3640	4362	4971	4015	2894	4315	4069
Mean Speed (mph)	17.5	17.5	17.7	17.4	16.9	17.1	18.0	17.4	17.4
85%ile Speed (mph)	21.0	20.7	21.1	20.7	20.3	20.5	21.4	20.8	20.8
No. Vehicles > 20 MPH Limit	934	951	850	894	847	743	782	895	857
% Vehicles > 20 MPH Limit	22.2%	21.6%	23.4%	20.5%	17.0%	18.5%	27.0%	20.7%	21.1%
No. Vehicles > 35 MPH	0	0	0	0	1	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.11 Table 4 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown, the mean speed being 18.0 mph at this point.

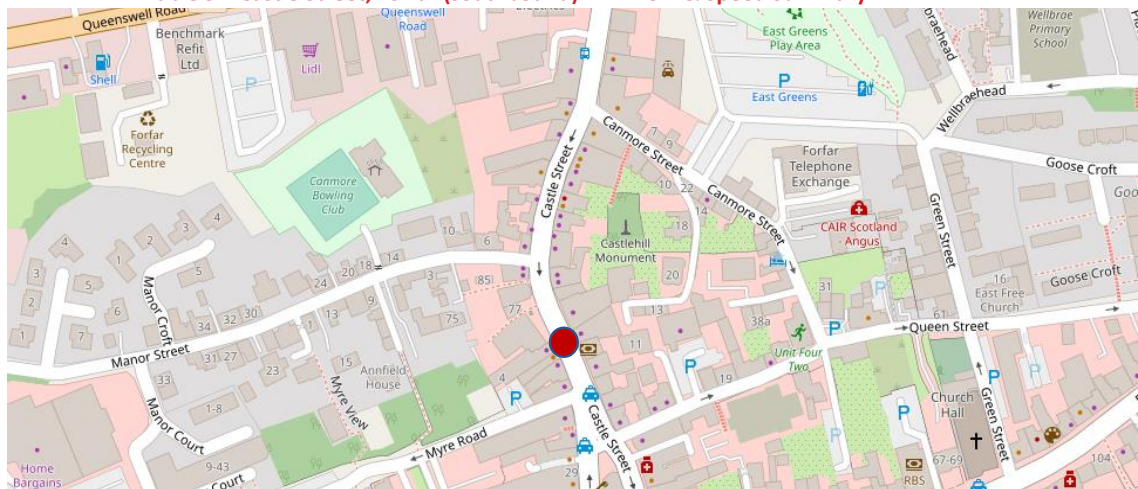
3.5.12 The average proportion of vehicles travelling above 20mph was lower in May 2021 compared with October 2020, and much lower than in March 2021. There was an increase

in the proportion of vehicles exceeding 20mph in September 2021 when compared to May 2021, although the number was lower than October 2020 and March 2021

Forfar

3.5.13 Table 5 presents the results for Castle Street southbound in Forfar.

Table 5. Castle Street, Forfar (southbound) Link Flow & Speed Summary



Site 1 Castle Street									
October / November 2020	Mon 02/11/20	Tue 27/10/20	Wed 28/10/20	Thu 29/10/20	Fri 30/10/20	Sat 31/10/20	Sun 01/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3174	3465	3722	3083	3484	3981	2606	3386	3359
Mean Speed (mph)	14.1	15.5	15.3	11.5	13.2	14.7	17.2	13.9	14.5
85%ile Speed (mph)	19.0	19.2	19.1	16.0	18.1	18.5	20.6	18.3	18.6
No. Vehicles > 20 MPH Limit	330	368	368	149	264	321	509	296	330
% Vehicles > 20 MPH Limit	10.4%	10.6%	9.9%	4.8%	7.6%	8.1%	19.5%	8.7%	10.1%
No. Vehicles > 35 MPH	10	13	7	15	6	12	0	10	9
% Vehicles > 35 MPH	0.3%	0.4%	0.2%	0.5%	0.2%	0.3%	0.0%	0.3%	0.3%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3015	3010	3310	3516	3913	3182	2475	3353	3203
Mean Speed (mph)	17.2	16.8	17.4	17.4	16.9	16.5	18.1	17.1	17.2
85%ile Speed (mph)	21.1	20.9	21.3	21.5	20.9	20.3	21.5	21.1	21.1
No. Vehicles > 20 MPH Limit	697	621	804	893	805	537	711	764	724
% Vehicles > 20 MPH Limit	23.1%	20.6%	24.3%	25.4%	20.6%	16.9%	28.7%	22.8%	22.6%
No. Vehicles > 35 MPH	1	0	0	0	3	4	1	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3377	4643	4693	4976	5095	4600	3455	4557	4406
Mean Speed (mph)	16.7	16.2	16.1	16.3	15.6	15.6	17.3	16.2	16.3
85%ile Speed (mph)	20.4	20.1	20.1	20.2	19.8	19.8	20.5	20.1	20.1
No. Vehicles > 20 MPH Limit	574	712	735	823	711	646	683	711	698
% Vehicles > 20 MPH Limit	17.0%	15.3%	15.7%	16.5%	14.0%	14.0%	19.8%	15.6%	15.8%
No. Vehicles > 35 MPH	2	10	2	8	8	15	1	6	7
% Vehicles > 35 MPH	0.1%	0.2%	0.0%	0.2%	0.2%	0.3%	0.0%	0.1%	0.1%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3984	4154	3471	3928	3669	4307	2925	3841	3777
Mean Speed (mph)	15.9	15.8	16.1	15.7	15.7	15.5	17.3	15.8	16.0
85%ile Speed (mph)	19.7	19.4	19.6	19.5	19.5	19.1	20.6	19.5	19.6
No. Vehicles > 20 MPH Limit	516	491	410	491	447	422	543	471	474
% Vehicles > 20 MPH Limit	13.0%	11.8%	11.8%	12.5%	12.2%	9.8%	18.6%	12.3%	12.6%
No. Vehicles > 35 MPH	4	5	8	1	2	0	2	4	3
% Vehicles > 35 MPH	0.1%	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%

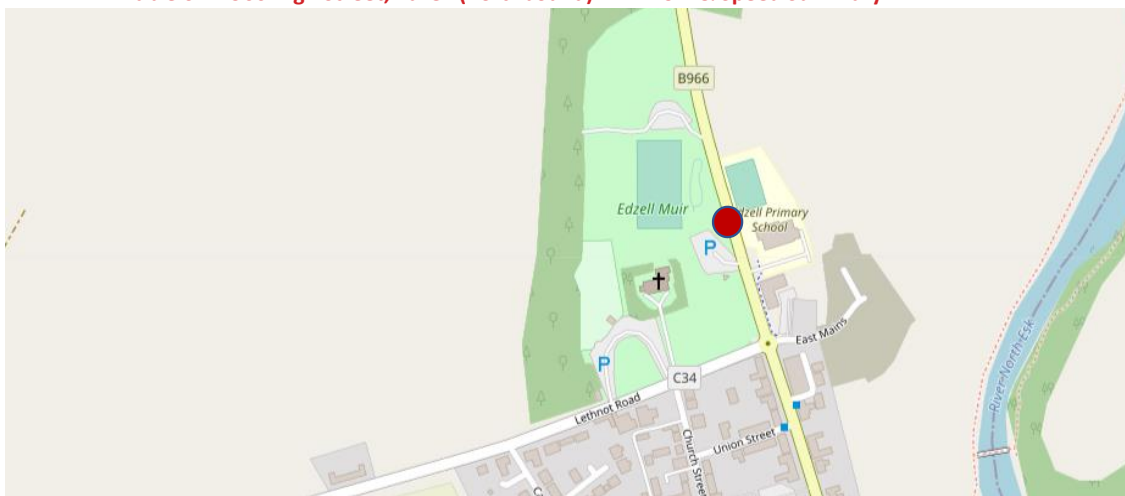
3.5.14 Table 5 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown, although they were only slightly lower than October /November 2020. The mean speed of traffic in October 2020 was only 13.9 mph, compared with 15.5 mph in September 2021.

3.5.15 The average proportion of vehicles travelling above 20mph was much higher in May 2021 compared with October 2020 and September 2021, but lower than in March 2021.

Edzell

3.5.16 Table 6 presents the results for the B966 High Street northbound in Edzell.

Table 6. B966 High Street, Edzell (northbound) Link Flow & Speed Summary



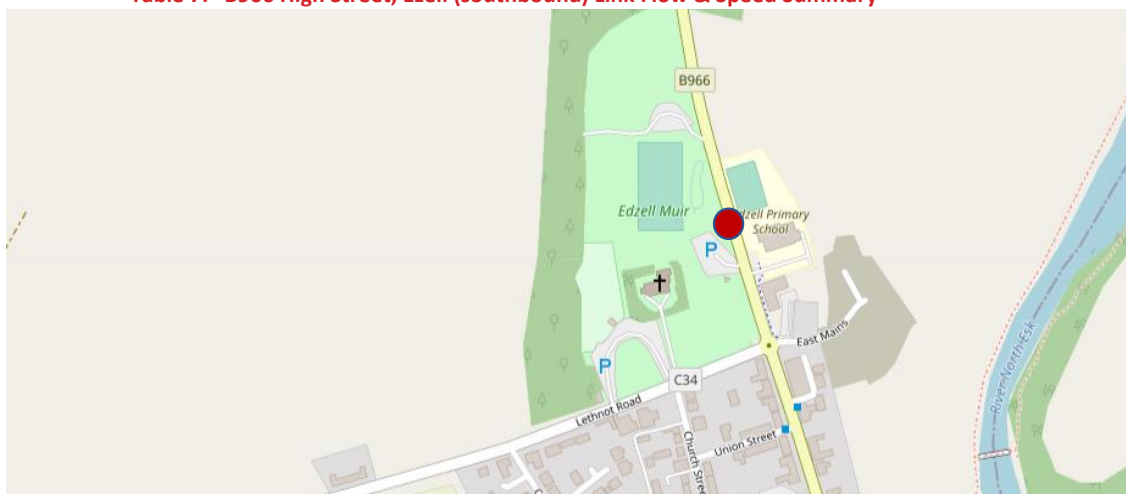
Site 1 High Street									
Oct / Nov 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	806	796	898	878	904	697	894	856	839
Mean Speed (mph)	29.1	29.1	29.0	28.1	28.6	30.7	30.6	28.8	29.3
85%ile Speed (mph)	36.2	36.4	36.2	35.0	35.0	37.0	37.4	35.8	36.2
No. Vehicles > 20 MPH Limit	757	731	822	785	825	657	853	784	776
% Vehicles > 20 MPH Limit	93.9%	91.8%	91.5%	89.4%	91.3%	94.3%	95.4%	91.6%	92.5%
No. Vehicles > 35 MPH	150	156	179	132	135	178	213	150	163
% Vehicles > 35 MPH	18.6%	19.6%	19.9%	15.0%	14.9%	25.5%	23.8%	17.6%	19.5%
Feb-21	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	673	537	662	677	753	510	552	660	623
Mean Speed (mph)	29.3	29.1	29.3	30.1	29.9	31.3	30.2	29.5	29.9
85%ile Speed (mph)	35.7	36.2	36.3	37.3	37.0	37.6	35.9	36.5	36.6
No. Vehicles > 20 MPH Limit	628	492	611	642	703	496	525	615	585
% Vehicles > 20 MPH Limit	93.3%	91.6%	92.3%	94.8%	93.4%	97.3%	95.1%	93.2%	93.9%
No. Vehicles > 35 MPH	123	104	123	155	161	129	115	133	130
% Vehicles > 35 MPH	18.3%	19.4%	18.6%	22.9%	21.4%	25.3%	20.8%	20.2%	20.9%
April / May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 30/04/21	Sat 01/05/21	Sun 02/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	752	773	886	804	969	957	776	837	845
Mean Speed (mph)	28.5	27.6	28.0	27.6	28.0	28.7	27.9	27.9	28.2
85%ile Speed (mph)	34.5	34.3	34.8	34.6	34.3	34.3	34.3	34.5	34.4
No. Vehicles > 20 MPH Limit	706	689	795	708	885	892	727	757	772
% Vehicles > 20 MPH Limit	93.9%	89.1%	89.7%	88.1%	91.3%	93.2%	93.7%	90.4%	91.3%
No. Vehicles > 35 MPH	97	92	130	105	123	122	91	109	109
% Vehicles > 35 MPH	12.9%	11.9%	14.7%	13.1%	12.7%	12.7%	11.7%	13.1%	12.8%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	922	985	1001	866	905	913	944	936	934
Mean Speed (mph)	27.0	26.6	26.4	26.9	27.0	28.5	26.2	26.8	26.9
85%ile Speed (mph)	33.9	33.0	32.7	33.8	33.6	34.7	33.1	33.4	33.5
No. Vehicles > 20 MPH Limit	807	851	859	768	794	860	790	816	818
% Vehicles > 20 MPH Limit	87.5%	86.4%	85.8%	88.7%	87.7%	94.2%	83.7%	87.2%	87.7%
No. Vehicles > 35 MPH	106	84	84	97	87	131	89	92	97
% Vehicles > 35 MPH	11.5%	8.5%	8.4%	11.2%	9.6%	14.3%	9.4%	9.8%	10.4%

3.5.17 Table 6 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown, at this point the mean speed was 29.5mph. The highest flows were observed in September 2021 when the mean speed was 26.8 mph.

3.5.18 The average proportion of vehicles travelling above 20mph was similar in all survey periods..

3.5.20 Table 7 presents the results for the B966 High Street southbound in Edzell.

Table 7. B966 High Street, Ezell (southbound) Link Flow & Speed Summary



Site 1 High Street									
October / November 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	906	879	1004	941	958	754	920	938	909
Mean Speed (mph)	25.3	25.2	24.9	24.9	25.6	27.2	26.6	25.2	25.7
85%ile Speed (mph)	32.2	31.7	31.6	31.5	32.2	33.8	32.6	31.8	32.2
No. Vehicles > 20 MPH Limit	715	689	770	736	769	671	807	736	737
% Vehicles > 20 MPH Limit	78.9%	78.4%	76.7%	78.2%	80.3%	89.0%	87.7%	78.5%	81.3%
No. Vehicles > 35 MPH	71	61	63	57	74	90	70	65	69
% Vehicles > 35 MPH	7.8%	6.9%	6.3%	6.1%	7.7%	11.9%	7.6%	7.0%	7.6%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	713	620	670	716	810	513	565	706	658
Mean Speed (mph)	26.6	25.7	26.4	26.6	26.7	27.6	26.9	26.4	26.6
85%ile Speed (mph)	33.7	32.8	33.3	33.6	33.8	34.7	33.3	33.4	33.6
No. Vehicles > 20 MPH Limit	606	493	546	609	706	454	497	592	559
% Vehicles > 20 MPH Limit	85.0%	79.5%	81.5%	85.1%	87.2%	88.5%	88.0%	83.9%	84.9%
No. Vehicles > 35 MPH	83	63	83	82	97	75	71	82	79
% Vehicles > 35 MPH	11.6%	10.2%	12.4%	11.5%	12.0%	14.6%	12.6%	11.6%	12.0%
April / May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 30/04/21	Sat 01/05/21	Sun 02/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	835	874	943	886	946	1006	804	897	899
Mean Speed (mph)	25.5	25.1	25.1	24.8	24.7	26.0	26.2	25.0	25.3
85%ile Speed (mph)	31.9	32.1	32.3	31.8	31.8	31.9	32.1	32.0	32.0
No. Vehicles > 20 MPH Limit	687	677	737	672	729	869	696	700	724
% Vehicles > 20 MPH Limit	82.3%	77.5%	78.2%	75.8%	77.1%	86.4%	86.6%	78.1%	80.5%
No. Vehicles > 35 MPH	64	72	83	74	69	73	63	72	71
% Vehicles > 35 MPH	7.7%	8.2%	8.8%	8.4%	7.3%	7.3%	7.8%	8.1%	7.9%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	992	1136	1123	952	1017	888	1036	1044	1021
Mean Speed (mph)	23.3	23.1	23.2	23.5	23.7	25.2	23.6	23.4	23.7
85%ile Speed (mph)	29.4	28.9	28.8	29.9	29.9	31.2	29.5	29.4	29.7
No. Vehicles > 20 MPH Limit	695	785	804	692	740	735	754	743	744
% Vehicles > 20 MPH Limit	70.1%	69.1%	71.6%	72.7%	72.8%	82.8%	72.8%	71.2%	72.9%
No. Vehicles > 35 MPH	32	32	30	36	49	48	43	36	39
% Vehicles > 35 MPH	3.2%	2.8%	2.7%	3.8%	4.8%	5.4%	4.2%	3.4%	3.8%

3.5.21 Table 7 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 26.4mph.

3.5.22 The average flows were highest in September 2021 and the mean speed was lower at 23.4mph.

3.5.23 The proportion of vehicles exceeding 20mph in May 2021 was 78.1%, similar to October 2020 (78.5%), and higher than September 2021 (71.2%).

3.5.24 The results of link counts and speed surveys in the Angus Council area indicate:

Arbroath

- The mean speed of traffic on West Port and Millgate increased in March 2021, May 2021 and September 2021 when compared against October 2020, whilst at Commerce Street there was an increase in March 2021 before a reduction was seen in May 2021 with a slight increase noted in September 2021.

Forfar

- Mean speeds increased in March, May and September 2021 when compared against October 2020.

Edzell

- On the High Street, adjacent to the primary school, the mean speeds remained consistent in all three survey periods. All surveys indicated in excess of 85% of vehicles travelling above 20mph northbound.
- The speeds were highest in March 2020 when Scotland was living under lockdown conditions. In the southbound direction, approximately 80% of vehicles were travelling above 20mph and the mean speeds were around 25mph in each survey period.

Dundee City Council

3.5.25 Vehicle link counts and speeds were surveyed using ATC tube counters at ten locations in the Dundee City Council area, namely:

Dundee

- Link & Speed 1 - Perth Road (adjacent to shops near Step Row)
- Link & Speed 2 - Perth Road (adjacent to Art School)
- Link & Speed 3 - Perth Road (adjacent to Nethergate)
- Link & Speed 4 – Findowrie Street (west of Findchapel Place)
- Link & Speed 5 – Fintry Road (east of Finavon Terrace)
- Link & Speed 7 - Balunie Drive around number 114
- Link & Speed 8 - Ballindean Road (east of Ballindean Place)

Broughty Ferry

- Link & Speed 1 - The Esplanade (circa 600m east of junction with Panmure Street)
- Link & Speed 2 - Brook Street (east of Gray Street)
- Link & Speed 3 - King Street (west of Gray Street)

3.5.26 Summary tables below present the results of the link count and speed surveys in the Dundee City Council area.

3.5.27 For each survey, the summary information is as follows:

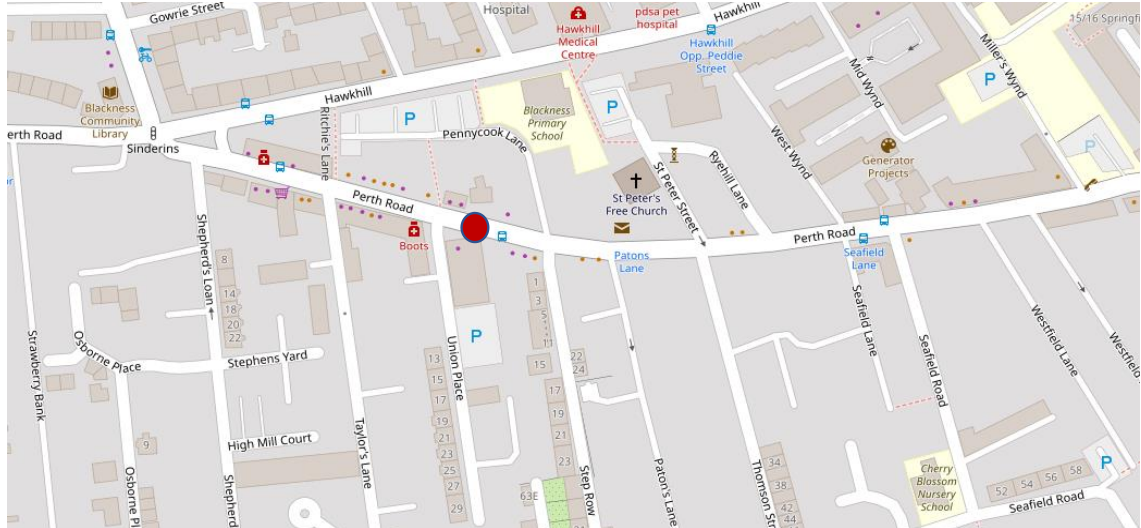
- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85th Percentile Speed (mph) – Speed below which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph

- Proportion of vehicles travelling at a speed greater than 35mph.

Dundee

3.5.28 Table 8 below presents a comparison of the results of the link flow and speed data on the Perth Road (Step Row) in Dundee.

Table 8. Perth Road (Step Row) (Eastbound) Link Flow & Speed Summary



Site 1 Perth Rd (Step Row) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2573	2757	2681	2851	3127	2553	2000	2798	2649
Mean Speed (mph)	18.0	17.6	17.4	17.4	16.2	17.3	19.1	17.3	17.6
85%ile Speed (mph)	22.5	22.2	21.5	21.8	20.5	22.0	23.4	21.7	22.0
No. Vehicles > 20 MPH Limit	732	704	606	693	534	622	866	654	680
% Vehicles > 20 MPH Limit	28.4%	25.5%	22.6%	24.3%	17.1%	24.4%	43.3%	23.6%	26.5%
No. Vehicles > 35 MPH	11	7	7	8	5	6	6	8	7
% Vehicles > 35 MPH	0.4%	0.3%	0.3%	0.3%	0.2%	0.2%	0.3%	0.3%	0.3%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2268	2325	2414	2524	2782	2397	1667	2463	2340
Mean Speed (mph)	18.5	18.5	18.5	18.2	17.5	17.8	19.7	18.2	18.4
85%ile Speed (mph)	23.1	22.9	23.0	22.9	21.9	22.3	24.4	22.8	22.9
No. Vehicles > 20 MPH Limit	784	793	856	820	710	662	756	793	769
% Vehicles > 20 MPH Limit	34.6%	34.1%	35.5%	32.5%	25.5%	27.6%	45.4%	32.4%	33.6%
No. Vehicles > 35 MPH	2	6	5	2	7	5	8	4	5
% Vehicles > 35 MPH	0.1%	0.3%	0.2%	0.1%	0.3%	0.2%	0.5%	0.2%	0.2%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 30 Apr 21	Saturday 01 May 21	Sunday 02 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2829	3382	3524	0	3816	3463	2439	3388	3242
Mean Speed (mph)	16.7	17.5	17.9	-	17.2	16.5	17.6	17.3	17.2
85%ile Speed (mph)	20.6	21.7	22.3	-	21.9	20.9	21.8	21.6	21.5
No. Vehicles > 20 MPH Limit	516	806	1016	0	900	667	613	810	753
% Vehicles > 20 MPH Limit	18.2%	23.8%	28.8%	-	23.6%	19.3%	25.1%	23.9%	23.2%
No. Vehicles > 35 MPH	12	17	13	0	30	23	12	18	18
% Vehicles > 35 MPH	0.4%	0.5%	0.4%	-	0.8%	0.7%	0.5%	0.5%	0.6%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3237	3441	3406	3590	3926	3418	2563	3520	3369
Mean Speed (mph)	18.1	17.4	17.3	16.9	15.9	17.0	18.9	17.1	17.4
85%ile Speed (mph)	22.3	21.5	21.6	21.0	20.3	21.3	23.2	21.3	21.6
No. Vehicles > 20 MPH Limit	920	822	846	748	638	759	896	795	804
% Vehicles > 20 MPH Limit	28.4%	23.9%	24.8%	20.8%	16.3%	22.2%	35.0%	22.6%	23.9%
No. Vehicles > 35 MPH	20	8	15	19	20	12	22	16	17
% Vehicles > 35 MPH	0.6%	0.2%	0.4%	0.5%	0.5%	0.4%	0.9%	0.5%	0.5%

Counter Damaged on Thursday 6th May 2021

3.5.29 Table 8 indicates that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 18.2 mph. The highest flows were observed in September 2021, when the mean speed was lowest at 17.1mph.

3.5.30 The proportion of vehicles exceeding 20mph was slightly higher in May 2021 compared with October 2020, but was lowest in September 2021.

3.5.31 Table 9 presents the results for Perth Road (Step Row) Westbound in Dundee.

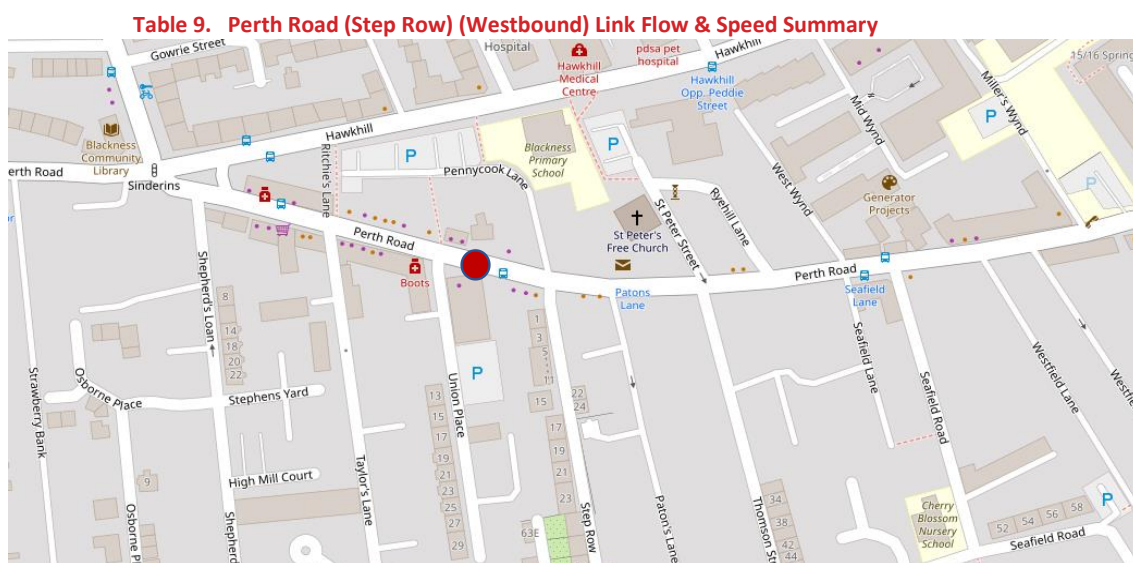


Table 9. Perth Road (Step Row) (Westbound) Link Flow & Speed Summary

Site 1 Perth Rd (Step Row) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2372	2479	2483	2667	2870	2427	1854	2574	2450
Mean Speed (mph)	18.2	17.9	17.4	17.7	16.4	17.5	19.3	17.5	17.8
85 th ile Speed (mph)	23.4	23.2	22.2	22.6	21.3	22.4	23.9	22.5	22.7
No. Vehicles > 20 MPH Limit	820	801	691	757	631	694	776	740	739
% Vehicles > 20 MPH Limit	34.6%	32.3%	27.8%	28.4%	22.0%	28.6%	41.9%	29.0%	30.8%
No. Vehicles > 35 MPH	12	6	11	18	17	8	19	13	13
% Vehicles > 35 MPH	0.5%	0.2%	0.4%	0.7%	0.6%	0.3%	1.0%	0.5%	0.5%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2160	2158	2268	2299	2352	2072	1551	2247	2123
Mean Speed (mph)	18.5	19.3	19.2	18.5	17.6	17.9	20.0	18.6	18.7
85 th ile Speed (mph)	23.2	24.1	24.3	23.5	22.7	23.2	25.1	23.6	23.7
No. Vehicles > 20 MPH Limit	794	894	930	842	689	627	737	830	788
% Vehicles > 20 MPH Limit	36.8%	41.4%	41.0%	36.6%	29.3%	30.3%	47.5%	37.0%	37.6%
No. Vehicles > 35 MPH	16	25	27	14	11	9	16	19	17
% Vehicles > 35 MPH	0.7%	1.2%	1.2%	0.6%	0.5%	0.4%	1.0%	0.8%	0.8%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 30 Apr 21	Saturday 01 May 21	Sunday 02 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2548	3015	3078	0	3410	3198	2306	2410	2508
Mean Speed (mph)	16.4	16.9	17.3	-	16.3	16.0	17.5	16.7	16.7
85 th ile Speed (mph)	20.8	21.9	22.5	-	21.6	20.7	21.9	21.7	21.6
No. Vehicles > 20 MPH Limit	485	755	850	0	786	576	597	575	578
% Vehicles > 20 MPH Limit	19.0%	25.0%	27.6%	-	23.0%	18.0%	25.9%	23.9%	23.1%
No. Vehicles > 35 MPH	1	5	7	0	10	9	7	5	6
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	-	0.3%	0.3%	0.3%	0.2%	0.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2854	3081	3011	3251	3673	3230	2256	3174	3051
Mean Speed (mph)	17.6	17.0	16.9	16.7	15.6	17.0	19.1	16.8	17.1
85 th ile Speed (mph)	22.7	21.9	21.8	21.9	20.5	22.0	24.4	21.8	22.2
No. Vehicles > 20 MPH Limit	876	795	725	788	654	866	952	768	808
% Vehicles > 20 MPH Limit	30.7%	25.8%	24.1%	24.2%	17.8%	26.8%	42.2%	24.2%	26.5%
No. Vehicles > 35 MPH	10	12	8	3	13	11	16	9	10
% Vehicles > 35 MPH	0.4%	0.4%	0.3%	0.1%	0.4%	0.3%	0.7%	0.3%	0.3%

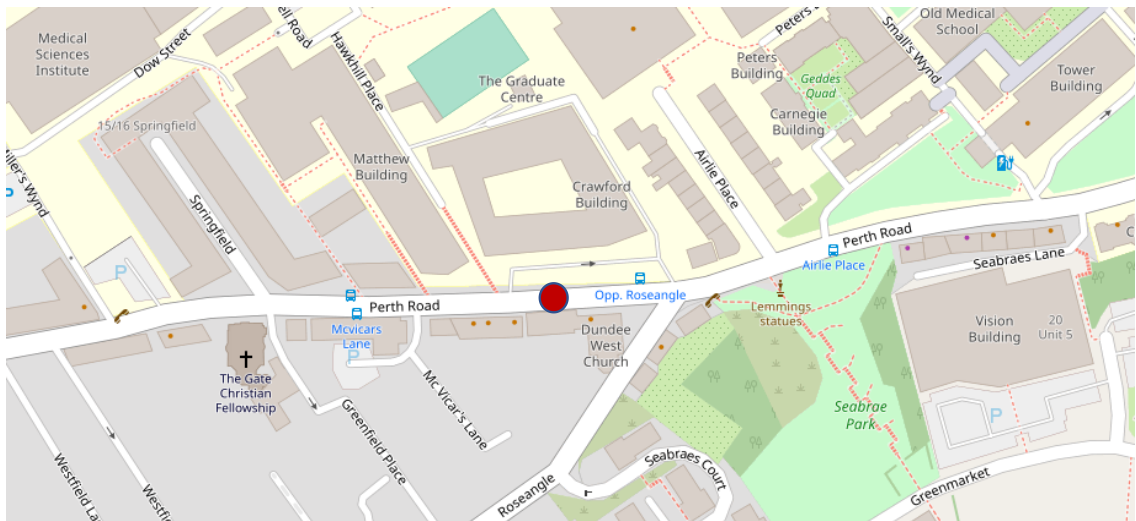
3.5.32 Table 9 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Again, the 5-day mean speed was highest at 18.6 mph. Flows were around 30% higher in September 2021, when compared against May 2021, when the 5 day mean speed was 16.8 mph.

3.5.33 The proportion of vehicles exceeding 20mph was lower in May 2021 compared with October 2020. The proportion of vehicles exceeding the 20mph speed limit in February

2021 was higher still. There was a slight increase in vehicles exceeding 20mph in September 2021 when compared against May 2021.

3.5.34 Table 10 presents the results for Perth Road (Art School) Eastbound in Dundee.

Table 10. Perth Road (Art School) (Eastbound) Link Flow & Speed Summary



Site 2 Perth Rd (Art School) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1639	1810	1749	1824	1971	1775	1330	1799	1728
Mean Speed (mph)	24.0	24.0	24.1	24.1	24.0	24.5	25.1	24.0	24.3
85 th ile Speed (mph)	28.8	28.7	29.1	28.7	28.9	29.4	30.3	28.8	29.1
No. Vehicles > 20 MPH Limit	1314	1474	1410	1479	1577	1444	1116	1451	1402
% Vehicles > 20 MPH Limit	80.2%	81.4%	80.6%	81.1%	80.0%	81.4%	83.9%	80.7%	81.2%
No. Vehicles > 35 MPH	48	31	37	29	46	47	54	38	42
% Vehicles > 35 MPH	2.9%	1.7%	2.1%	1.6%	2.3%	2.6%	4.1%	2.1%	2.4%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1399	1307	1459	1504	1676	1352	1020	1469	1388
Mean Speed (mph)	24.7	24.4	24.4	25.0	24.7	24.6	25.5	24.6	24.8
85 th ile Speed (mph)	29.6	29.5	29.2	29.9	29.5	29.6	31.3	29.5	29.8
No. Vehicles > 20 MPH Limit	1154	1056	1187	1260	1392	1119	869	1210	1148
% Vehicles > 20 MPH Limit	82.5%	80.8%	81.4%	83.8%	83.1%	82.8%	85.2%	82.3%	82.8%
No. Vehicles > 35 MPH	44	43	23	45	49	35	44	41	40
% Vehicles > 35 MPH	3.1%	3.3%	1.6%	3.0%	2.9%	2.6%	4.3%	2.8%	2.9%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1623	1962	1981	2082	2321	1949	1437	1994	1908
Mean Speed (mph)	24.4	24.6	24.4	24.4	25.0	25.6	25.6	24.6	24.9
85 th ile Speed (mph)	29.4	29.3	29.2	29.3	29.8	30.4	30.1	29.4	29.6
No. Vehicles > 20 MPH Limit	1332	1638	1678	1752	2015	1734	1288	1683	1634
% Vehicles > 20 MPH Limit	82.1%	83.5%	84.7%	84.1%	86.8%	89.0%	89.6%	84.4%	85.6%
No. Vehicles > 35 MPH	44	53	41	47	76	52	43	52	51
% Vehicles > 35 MPH	2.7%	2.7%	2.1%	2.3%	3.3%	2.7%	3.0%	2.6%	2.7%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1868	2040	2042	2189	2366	2079	0	2101	2097
Mean Speed (mph)	24.4	23.9	23.9	23.7	23.3	24.5	-	23.8	24.0
85 th ile Speed (mph)	29.2	28.8	28.9	28.5	28.2	29.4	-	28.7	28.8
No. Vehicles > 20 MPH Limit	1571	1614	1652	1742	1834	1741	0	1683	1692
% Vehicles > 20 MPH Limit	84.1%	79.1%	80.9%	79.6%	77.5%	83.7%	-	80.1%	80.7%
No. Vehicles > 35 MPH	34	33	32	40	40	42	0	36	37
% Vehicles > 35 MPH	1.8%	1.6%	1.6%	1.8%	1.7%	2.0%	-	1.7%	1.8%

No data available for Sunday 12 September 2021

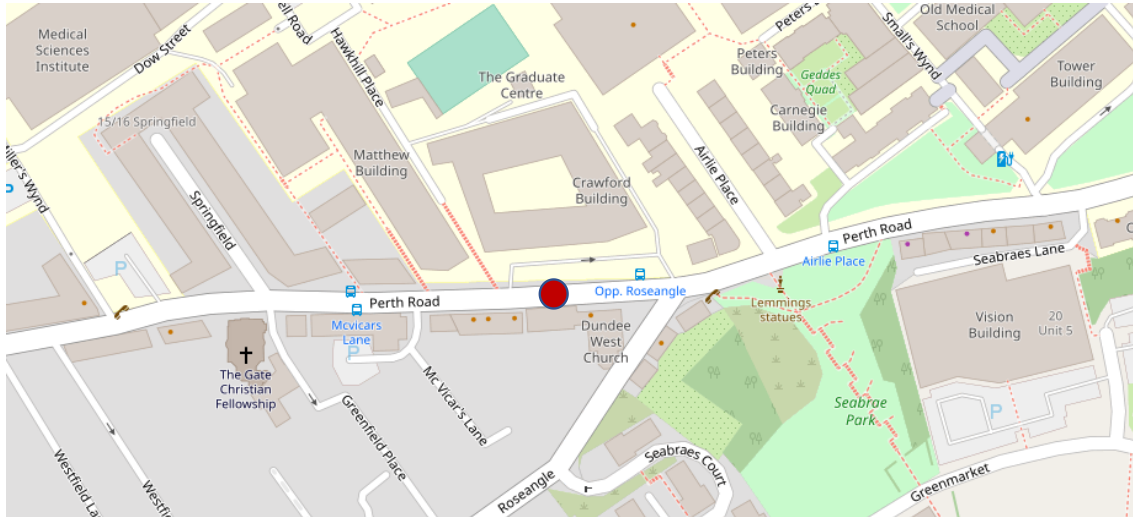
3.5.35 Table 10 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, the mean speed being 24.6 mph in both February and May 2021. The highest flow was observed in September 2021, when the mean speed was lowest at 23.8 mph.

3.5.36 The proportion of vehicles travelling above 20mph was higher in May 2021 compared with October 2020 and September 2021.

3.5.37

Table 11 presents the results for Perth Road (Art School) Westbound in Dundee.

Table 11. Perth Road (Art School) (Westbound) Link Flow & Speed Summary



Site 2 Perth Rd (Art School) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1894	2110	2079	2111	2316	1988	1497	2102	1999
Mean Speed (mph)	24.7	24.3	24.3	24.6	24.2	24.9	25.3	24.4	24.6
85%ile Speed (mph)	30.0	30.0	29.7	29.5	29.8	30.0	30.5	29.8	29.9
No. Vehicles > 20 MPH Limit	1577	1701	1694	1768	1868	1671	1266	1722	1649
% Vehicles > 20 MPH Limit	83.3%	80.6%	81.5%	83.8%	80.7%	84.1%	84.6%	82.0%	82.6%
No. Vehicles > 35 MPH	55	57	46	63	54	57	69	55	57
% Vehicles > 35 MPH	2.9%	2.7%	2.2%	3.0%	2.3%	2.9%	4.6%	2.6%	2.9%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1607	1505	1621	1682	1729	1436	1203	1629	1540
Mean Speed (mph)	25.5	24.8	24.8	25.1	24.9	25.6	26.3	25.0	25.3
85%ile Speed (mph)	30.9	30.0	30.3	30.8	30.6	31.0	31.7	30.5	30.8
No. Vehicles > 20 MPH Limit	1383	1271	1351	1420	1435	1218	1063	1372	1306
% Vehicles > 20 MPH Limit	86.1%	84.5%	83.3%	84.4%	83.0%	84.8%	88.4%	84.3%	84.9%
No. Vehicles > 35 MPH	65	46	41	50	55	70	75	51	57
% Vehicles > 35 MPH	4.0%	3.1%	2.5%	3.0%	3.2%	4.9%	6.2%	3.2%	3.7%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2097	2285	2375	2440	2728	2251	1709	2385	2269
Mean Speed (mph)	25.1	25.4	25.0	24.8	25.3	26.1	25.8	25.1	25.4
85%ile Speed (mph)	30.4	30.4	30.0	29.8	30.2	31.1	30.6	30.2	30.4
No. Vehicles > 20 MPH Limit	1759	1989	2033	2058	2368	2035	1539	2041	1969
% Vehicles > 20 MPH Limit	83.9%	87.0%	85.6%	84.3%	86.8%	90.4%	90.1%	85.6%	86.8%
No. Vehicles > 35 MPH	70	62	67	65	70	89	73	67	71
% Vehicles > 35 MPH	3.3%	2.7%	2.8%	2.7%	2.6%	4.0%	4.3%	2.8%	3.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2172	2405	2410	2469	2754	2475	0	2442	2448
Mean Speed (mph)	24.8	24.3	24.5	24.5	23.8	25.0	-	24.4	24.5
85%ile Speed (mph)	30.1	29.5	29.7	29.3	28.7	30.0	-	29.5	29.6
No. Vehicles > 20 MPH Limit	1835	1960	2004	2084	2186	2122	0	2014	2032
% Vehicles > 20 MPH Limit	84.5%	81.5%	83.2%	84.4%	79.4%	85.7%	-	82.5%	83.0%
No. Vehicles > 35 MPH	57	73	55	42	51	75	0	56	59
% Vehicles > 35 MPH	2.6%	3.0%	2.3%	1.7%	1.9%	3.0%	-	2.3%	2.4%

No data available for Sunday 12 September 2021

3.5.38

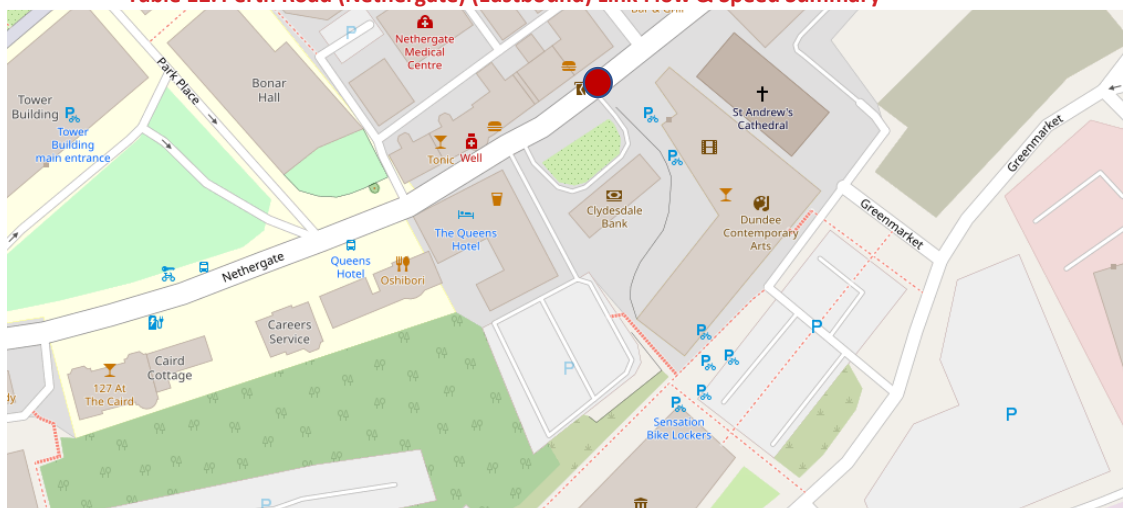
Table 11 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic was greatest in May 2021 at 25.1mph. The highest flow was observed in September 2021, the mean speed being the same as October 2020.

3.5.39

The proportion of vehicles travelling above 20mph was higher in May 2021 compared with October 2020, February 2021 and September 2021.

3.5.40 Table 12 presents the results for Perth Road (Nethergate) Eastbound in Dundee.

Table 12. Perth Road (Nethergate) (Eastbound) Link Flow & Speed Summary



Site 3 Perth Rd (Nethergate) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2283	2303	2379	2441	2684	2227	1712	2418	2290
Mean Speed (mph)	17.8	17.6	17.7	17.4	17.0	17.8	19.5	17.5	17.8
85%ile Speed (mph)	23.3	23.1	23.0	23.0	22.6	23.2	25.3	23.0	23.4
No. Vehicles > 20 MPH Limit	841	806	835	824	798	788	841	821	819
% Vehicles > 20 MPH Limit	36.8%	35.0%	35.1%	33.8%	29.7%	35.4%	49.1%	34.1%	36.4%
No. Vehicles > 35 MPH	4	2	5	2	5	5	9	4	5
% Vehicles > 35 MPH	0.2%	0.1%	0.2%	0.1%	0.2%	0.2%	0.5%	0.1%	0.2%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1720	1792	1934	1983	1981	1550	1319	1882	1754
Mean Speed (mph)	20.6	20.5	20.3	20.6	19.6	20.9	22.0	20.3	20.6
85%ile Speed (mph)	25.4	25.4	25.1	25.2	24.8	26.0	27.1	25.2	25.6
No. Vehicles > 20 MPH Limit	895	904	958	1029	881	848	859	933	911
% Vehicles > 20 MPH Limit	52.0%	50.4%	49.5%	51.9%	44.5%	54.7%	65.1%	49.7%	52.6%
No. Vehicles > 35 MPH	8	11	6	6	6	7	13	7	8
% Vehicles > 35 MPH	0.5%	0.6%	0.3%	0.3%	0.3%	0.5%	1.0%	0.4%	0.5%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2311	2729	2875	2776	2909	2816	1711	2720	2590
Mean Speed (mph)	18.0	18.0	17.2	18.1	17.2	17.4	19.4	17.7	17.9
85%ile Speed (mph)	22.7	22.1	21.6	22.5	21.4	22.1	24.0	22.1	22.3
No. Vehicles > 20 MPH Limit	664	797	713	827	667	707	704	734	726
% Vehicles > 20 MPH Limit	28.7%	29.2%	24.8%	29.8%	22.9%	25.1%	41.1%	27.0%	28.0%
No. Vehicles > 35 MPH	3	2	3	8	2	5	11	4	5
% Vehicles > 35 MPH	0.1%	0.1%	0.1%	0.3%	0.1%	0.2%	0.6%	0.1%	0.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2504	2598	2590	2545	3135	2697	1864	2674	2562
Mean Speed (mph)	18.5	18.2	18.1	17.8	17.3	17.8	19.1	18.0	18.1
85%ile Speed (mph)	22.9	22.4	22.4	22.2	21.5	22.1	23.6	22.3	22.4
No. Vehicles > 20 MPH Limit	858	833	768	725	763	763	775	789	784
% Vehicles > 20 MPH Limit	34.3%	32.1%	29.7%	28.5%	24.3%	28.3%	41.6%	29.5%	30.6%
No. Vehicles > 35 MPH	0	4	6	8	3	7	6	4	5
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	0.3%	0.1%	0.3%	0.3%	0.2%	0.2%

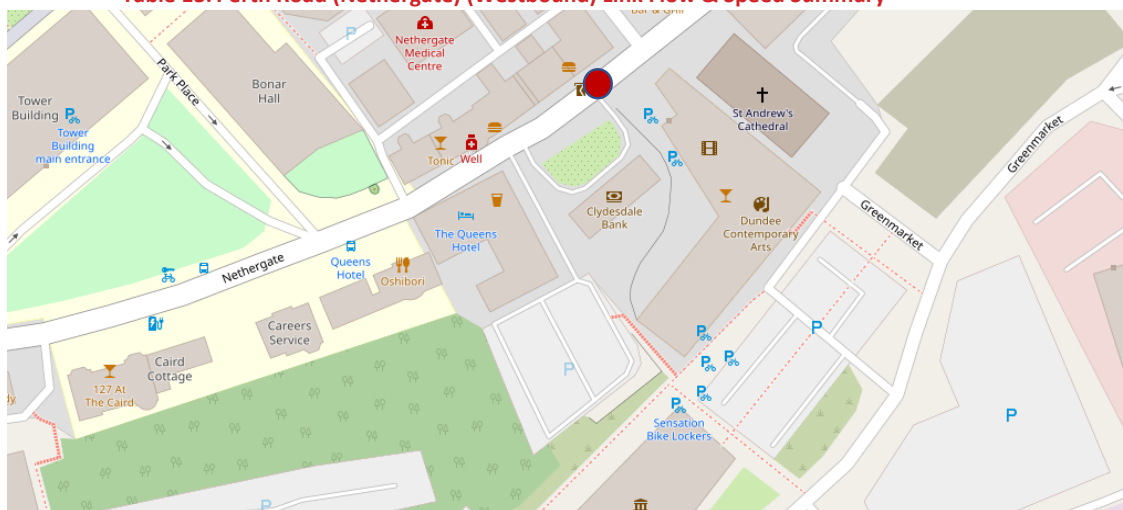
Vehicles parked on tubes on Thursday 9th September 2021 between approx 16:00 & 17:10

3.5.41 Table 12 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown, but the mean speed was the highest at 20.3mph. Flows in September 2021 were lower than May 2021.

3.5.42 The average proportion of vehicles travelling above 20mph in February 2021 was greater than October 2020, May 2021 and September 2021.

3.5.43 Table 13 presents the results for Perth Road (Nethergate) Westbound in Dundee.

Table 13. Perth Road (Nethergate) (Westbound) Link Flow & Speed Summary



Site 3 Perth Rd (Nethergate) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2314	2435	2456	2542	2828	2513	1775	2515	2409
Mean Speed (mph)	17.1	17.2	16.6	16.7	16.0	16.3	17.5	16.7	16.8
85 th ile Speed (mph)	23.5	23.4	22.8	22.8	22.1	22.1	23.5	22.9	22.9
No. Vehicles > 20 MPH Limit	834	870	764	824	752	692	655	809	770
% Vehicles > 20 MPH Limit	36.0%	35.7%	31.1%	32.4%	26.6%	27.5%	36.9%	32.4%	32.3%
No. Vehicles > 35 MPH	3	4	2	1	1	2	3	2	2
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.2%	0.1%	0.1%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1819	1739	1956	1986	2217	1675	1395	1943	1827
Mean Speed (mph)	20.2	19.7	19.4	20.0	19.0	20.4	21.4	19.7	20.0
85 th ile Speed (mph)	25.3	24.7	24.5	25.2	24.0	25.6	26.5	24.7	25.1
No. Vehicles > 20 MPH Limit	924	767	842	961	838	829	828	866	856
% Vehicles > 20 MPH Limit	50.8%	44.1%	43.0%	48.4%	37.8%	49.5%	59.4%	44.8%	47.6%
No. Vehicles > 35 MPH	5	7	5	3	2	6	13	4	6
% Vehicles > 35 MPH	0.3%	0.4%	0.3%	0.2%	0.1%	0.4%	0.9%	0.2%	0.3%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2622	2873	2865	2938	3096	3089	1775	2879	2751
Mean Speed (mph)	18.2	18.3	17.6	18.2	17.5	17.4	18.7	18.0	18.0
85 th ile Speed (mph)	22.9	23.0	22.3	22.7	22.0	22.1	23.6	22.6	22.7
No. Vehicles > 20 MPH Limit	820	954	786	951	776	808	624	857	817
% Vehicles > 20 MPH Limit	31.3%	33.2%	27.4%	32.4%	25.1%	26.2%	35.2%	29.8%	29.7%
No. Vehicles > 35 MPH	4	9	4	5	8	2	8	6	6
% Vehicles > 35 MPH	0.2%	0.3%	0.1%	0.2%	0.3%	0.1%	0.5%	0.2%	0.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2565	2682	2691	2690	3280	3038	1924	2782	2696
Mean Speed (mph)	18.7	18.5	18.4	18.1	17.6	17.6	18.8	18.3	18.2
85 th ile Speed (mph)	23.2	22.7	23.0	22.6	22.1	22.1	23.4	22.7	22.7
No. Vehicles > 20 MPH Limit	911	966	861	861	878	877	733	895	870
% Vehicles > 20 MPH Limit	35.5%	36.0%	32.0%	32.0%	26.8%	28.9%	38.1%	32.2%	32.3%
No. Vehicles > 35 MPH	5	6	5	6	5	3	4	5	5
% Vehicles > 35 MPH	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.2%	0.2%

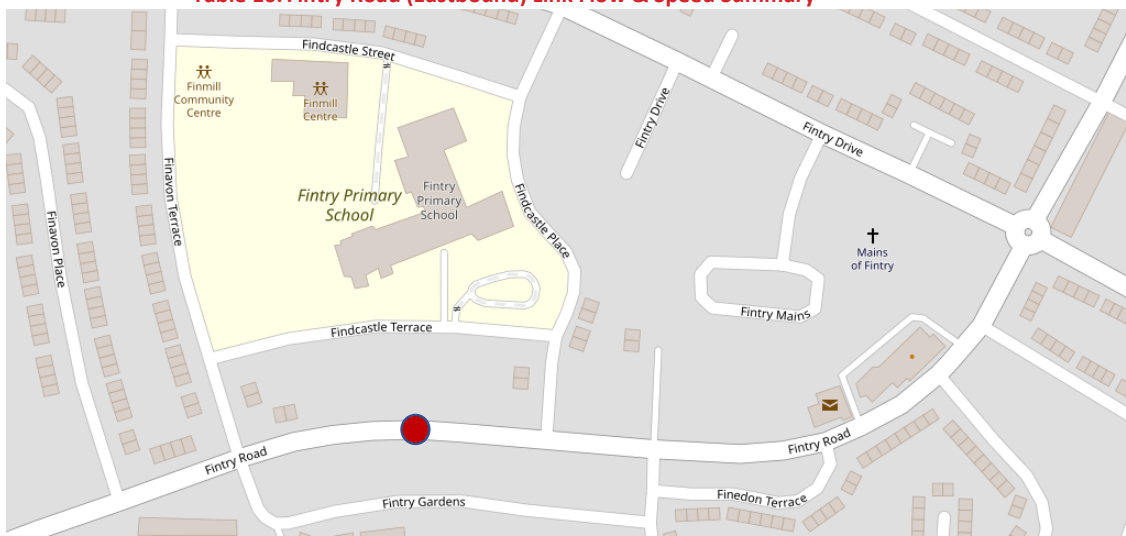
Vehicles parked on tubes on Thursday 9th September 2021 between approx 16:00 & 17:10

3.5.44 Table 13 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 19.7mph. The flow in May 2021 was higher than that observed in September 2021.

3.5.45 The average proportion of vehicles travelling above 20mph in February 2021 was greater than October 2020, May 2021 and September 2021.

3.5.46 Table 14 presents the results for Findowrie Street Eastbound in Dundee.

Table 16. Fintry Road (Eastbound) Link Flow & Speed Summary



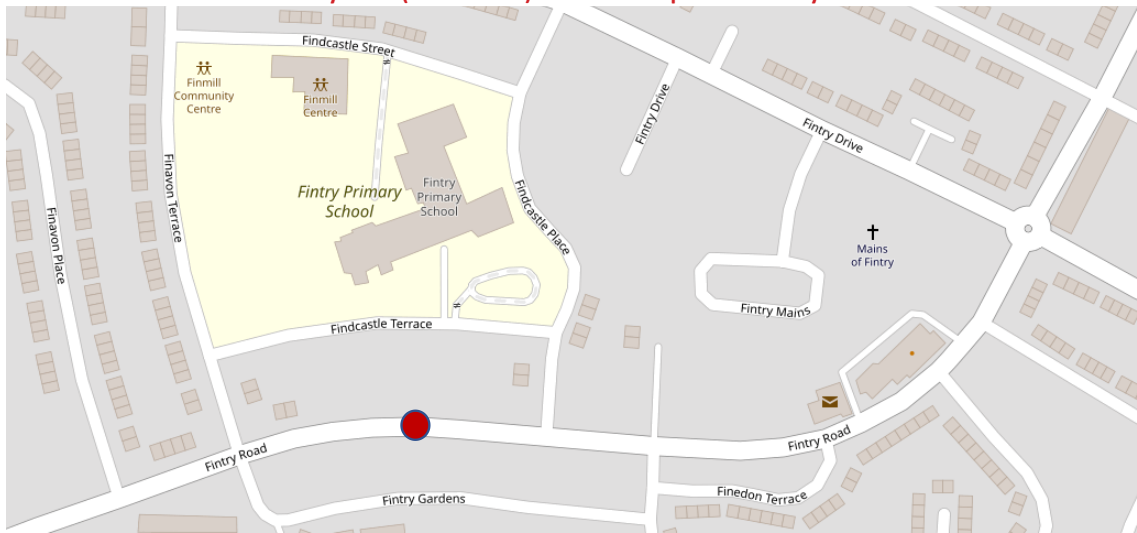
Site 5 Fintry Rd (Finavon Terr) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1119	1135	1244	1294	1291	1056	872	1217	1144
Mean Speed (mph)	21.0	21.1	14.7	15.5	21.4	21.3	21.9	18.7	19.6
85%ile Speed (mph)	24.9	25.0	18.0	18.8	25.4	25.6	26.0	22.4	23.4
No. Vehicles > 20 MPH Limit	682	702	68	136	841	646	593	486	524
% Vehicles > 20 MPH Limit	60.9%	61.9%	5.5%	10.5%	65.1%	61.2%	68.0%	40.8%	47.6%
No. Vehicles > 35 MPH	5	1	2	2	9	4	6	4	4
% Vehicles > 35 MPH	0.4%	0.1%	0.2%	0.2%	0.7%	0.4%	0.7%	0.3%	0.4%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1114	1095	1145	1218	1225	985	833	1159	1088
Mean Speed (mph)	26.3	26.0	26.3	26.8	26.5	26.6	27.6	26.4	26.6
85%ile Speed (mph)	31.2	30.4	31.3	31.3	31.4	31.4	32.2	31.1	31.3
No. Vehicles > 20 MPH Limit	1006	986	1025	1135	1116	900	774	1054	992
% Vehicles > 20 MPH Limit	90.3%	90.0%	89.5%	93.2%	91.1%	91.4%	92.9%	90.8%	91.2%
No. Vehicles > 35 MPH	1	6	6	3	4	0	6	4	4
% Vehicles > 35 MPH	0.1%	0.5%	0.5%	0.2%	0.3%	0.0%	0.7%	0.3%	0.3%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1021	1219	1289	1173	1379	1120	885	1216	1155
Mean Speed (mph)	24.9	25.4	25.1	25.2	25.2	25.3	25.7	25.2	25.3
85%ile Speed (mph)	29.5	29.6	29.7	29.9	29.8	30.2	30.3	29.7	29.9
No. Vehicles > 20 MPH Limit	866	1090	1132	1024	1218	979	777	1066	1012
% Vehicles > 20 MPH Limit	84.8%	89.4%	87.8%	87.3%	88.3%	87.4%	87.8%	87.7%	87.6%
No. Vehicles > 35 MPH	21	15	29	26	33	18	25	25	24
% Vehicles > 35 MPH	2.1%	1.2%	2.2%	2.2%	2.4%	1.6%	2.8%	2.0%	2.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1244	1210	1269	1262	1433	1204	971	1284	1228
Mean Speed (mph)	25.8	26.0	26.0	25.5	25.5	26.2	26.5	25.8	25.9
85%ile Speed (mph)	30.4	30.5	30.5	30.3	30.3	31.1	31.1	30.4	30.6
No. Vehicles > 20 MPH Limit	1116	1082	1143	1096	1280	1079	884	1143	1097
% Vehicles > 20 MPH Limit	89.7%	89.4%	90.1%	86.8%	89.3%	89.6%	91.0%	89.1%	89.4%
No. Vehicles > 35 MPH	39	46	27	33	37	37	39	36	37
% Vehicles > 35 MPH	3.1%	3.8%	2.1%	2.6%	2.6%	3.1%	4.0%	2.8%	3.0%

3.5.53 Table 16 shows that the 5-day average traffic flows were slightly lower in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 26.4mph. The highest flow was observed in September 2021, when the mean speed was 25.8mph.

3.5.54 The average proportion of vehicles travelling above 20mph was highest in February 2021, slightly lower in May 2021 and September 2021, and lowest in October 2020.

3.5.55 Table 17 presents the results for Fintry Road (Westbound) in Dundee.

Table 17. Fintry Road (Westbound) Link Flow & Speed Summary



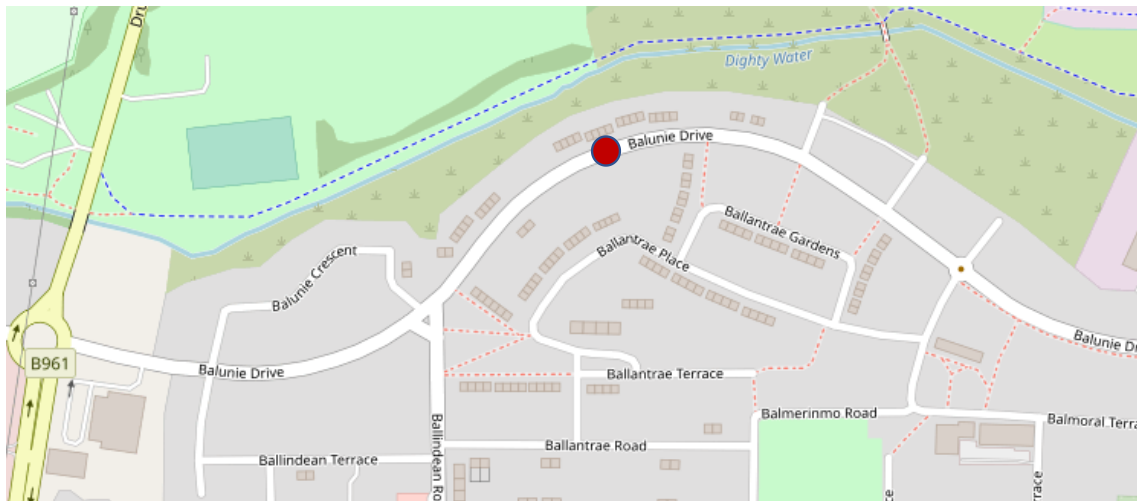
Site 5 Fintry Rd (Finavon Terr) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1455	1512	1563	1570	1683	1349	1152	1557	1469
Mean Speed (mph)	21.6	21.5	16.3	16.2	21.6	22.1	22.2	19.4	20.2
85%ile Speed (mph)	25.7	25.6	20.5	20.9	25.4	26.2	26.4	23.6	24.4
No. Vehicles > 20 MPH Limit	993	995	285	308	1124	952	819	741	782
% Vehicles > 20 MPH Limit	68.2%	65.8%	18.2%	19.6%	66.8%	70.6%	71.1%	47.7%	54.3%
No. Vehicles > 35 MPH	6	4	2	2	6	7	7	4	5
% Vehicles > 35 MPH	0.4%	0.3%	0.1%	0.1%	0.4%	0.5%	0.6%	0.3%	0.3%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1324	1338	1431	1431	1390	1163	974	1383	1293
Mean Speed (mph)	26.2	25.6	25.8	26.6	26.3	26.9	27.3	26.1	26.4
85%ile Speed (mph)	30.7	30.4	30.4	31.0	31.0	31.2	32.0	30.7	31.0
No. Vehicles > 20 MPH Limit	1201	1182	1277	1334	1267	1089	897	1252	1178
% Vehicles > 20 MPH Limit	90.7%	88.3%	89.2%	93.2%	91.2%	93.6%	92.1%	90.5%	91.2%
No. Vehicles > 35 MPH	4	2	1	5	3	5	4	3	3
% Vehicles > 35 MPH	0.3%	0.1%	0.1%	0.3%	0.2%	0.4%	0.4%	0.2%	0.3%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1326	1544	1537	1541	1798	1433	1123	1549	1472
Mean Speed (mph)	25.8	26.1	25.8	26.1	25.7	26.2	26.4	25.9	26.0
85%ile Speed (mph)	30.5	30.8	30.4	30.7	30.5	30.8	31.3	30.6	30.7
No. Vehicles > 20 MPH Limit	1171	1397	1375	1391	1575	1299	1012	1382	1317
% Vehicles > 20 MPH Limit	88.3%	90.5%	89.5%	90.3%	87.6%	90.6%	90.1%	89.2%	89.5%
No. Vehicles > 35 MPH	30	51	48	56	48	54	46	47	48
% Vehicles > 35 MPH	2.3%	3.3%	3.1%	3.6%	2.7%	3.8%	4.1%	3.0%	3.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1480	1541	1563	1482	1802	1557	1284	1574	1530
Mean Speed (mph)	26.9	27.2	27.3	26.5	26.6	27.5	27.6	26.9	27.1
85%ile Speed (mph)	31.7	31.7	32.0	31.7	31.4	32.0	32.7	31.7	31.9
No. Vehicles > 20 MPH Limit	1355	1444	1466	1349	1646	1451	1192	1452	1415
% Vehicles > 20 MPH Limit	91.6%	93.7%	93.8%	91.0%	91.3%	93.2%	92.8%	92.3%	92.5%
No. Vehicles > 35 MPH	69	82	91	66	78	88	99	77	82
% Vehicles > 35 MPH	4.7%	5.3%	5.8%	4.5%	4.3%	5.7%	7.7%	4.9%	5.4%

3.5.56 Table 17 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 26.1mph.

3.5.57 The average proportion of vehicles travelling above 20mph was highest in September 2021, then lower in February and May 2021, and lowest in October 2020.

3.5.58 Table 18 presents the results for Balunie Drive Eastbound in Dundee.

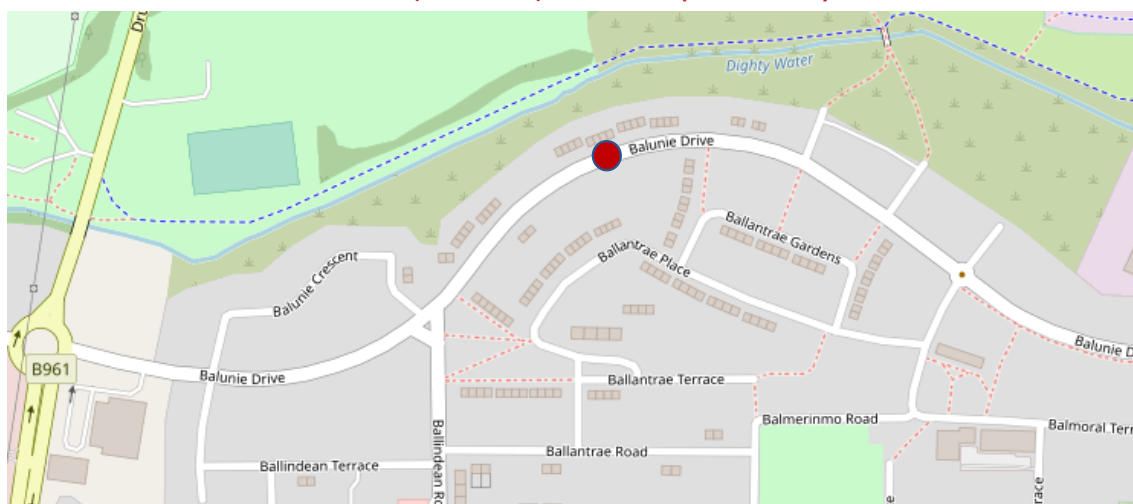
Table 18. Balunie Drive (Eastbound) Link Flow & Speed Summary



Site 7 Balunie Dr Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1566	1525	2297	2133	2122	1986	774	1929	1772
Mean Speed (mph)	24.3	24.6	24.5	24.2	24.3	25.2	25.2	24.4	24.6
85 th ile Speed (mph)	28.6	28.9	28.7	28.5	28.7	29.6	29.8	28.7	29.0
No. Vehicles > 20 MPH Limit	1336	1331	1988	1793	1828	1757	692	1655	1532
% Vehicles > 20 MPH Limit	85.3%	87.3%	86.5%	84.1%	86.1%	88.5%	89.4%	85.9%	86.7%
No. Vehicles > 35 MPH	17	14	19	16	24	32	23	18	21
% Vehicles > 35 MPH	1.1%	0.9%	0.8%	0.8%	1.1%	1.6%	3.0%	0.9%	1.2%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2218	1805	1495	2395	1195	589	1544	1822	1606
Mean Speed (mph)	25.1	24.4	24.5	25.1	24.1	24.3	25.2	24.6	24.7
85 th ile Speed (mph)	29.1	28.4	28.5	29.1	28.1	28.7	29.2	28.6	28.7
No. Vehicles > 20 MPH Limit	2032	1578	1316	2158	1035	514	1399	1624	1433
% Vehicles > 20 MPH Limit	91.6%	87.4%	88.0%	90.1%	86.6%	87.3%	90.6%	88.8%	88.8%
No. Vehicles > 35 MPH	25	16	14	33	4	4	17	18	16
% Vehicles > 35 MPH	1.1%	0.9%	0.9%	1.4%	0.3%	0.7%	1.1%	1.0%	1.0%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2224	2460	2912	2846	3093	2268	1891	2707	2528
Mean Speed (mph)	24.7	24.9	24.8	25.0	24.6	25.0	24.6	24.8	24.8
85 th ile Speed (mph)	28.9	28.8	29.0	28.9	28.7	29.0	28.8	28.9	28.9
No. Vehicles > 20 MPH Limit	1937	2195	2585	2583	2725	2018	1649	2405	2242
% Vehicles > 20 MPH Limit	87.1%	89.2%	88.8%	90.8%	88.1%	89.0%	87.2%	88.8%	88.7%
No. Vehicles > 35 MPH	24	19	29	37	35	29	19	29	27
% Vehicles > 35 MPH	1.1%	0.8%	1.0%	1.3%	1.1%	1.3%	1.0%	1.1%	1.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3010	3162	3296	3173	3436	2677	2143	3215	2985
Mean Speed (mph)	25.3	25.7	25.7	25.2	25.1	25.3	25.6	25.4	25.4
85 th ile Speed (mph)	29.4	29.6	29.6	29.3	29.2	29.6	30.2	29.4	29.6
No. Vehicles > 20 MPH Limit	2699	2895	3037	2858	3062	2385	1953	2910	2698
% Vehicles > 20 MPH Limit	89.7%	91.6%	92.1%	90.1%	89.1%	89.1%	91.1%	90.5%	90.4%
No. Vehicles > 35 MPH	40	52	54	50	45	42	56	48	48
% Vehicles > 35 MPH	1.3%	1.6%	1.6%	1.6%	1.3%	1.6%	2.6%	1.5%	1.6%

- 3.5.59 Table 18 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 24.6mph. The highest flow was observed in September 2021 when the mean speed was also highest at 25.4mph.
- 3.5.60 The average proportion of vehicles travelling above 20mph in February, May and September 2021 was higher than October 2020.
- 3.5.61 Table 19 presents the results for Balunie Drive (Westbound) in Dundee.

Table 19. Balunie Drive (Westbound) Link Flow & Speed Summary



Site 7 Balunie Dr Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1716	1825	2606	2401	2517	1555	872	2213	1927
Mean Speed (mph)	25.9	26.1	26.4	26.2	26.1	27.3	27.2	26.1	26.5
85 th ile Speed (mph)	30.2	30.4	30.7	30.5	30.5	31.9	31.7	30.5	30.8
No. Vehicles > 20 MPH Limit	1571	1691	2454	2243	2329	1483	830	2058	1800
% Vehicles > 20 MPH Limit	91.6%	92.7%	94.2%	93.4%	92.5%	95.4%	95.2%	92.9%	93.6%
No. Vehicles > 35 MPH	44	42	57	59	48	93	29	50	53
% Vehicles > 35 MPH	2.6%	2.3%	2.2%	2.5%	1.9%	6.0%	3.3%	2.3%	2.8%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2477	2056	1530	2711	1375	692	1605	2030	1778
Mean Speed (mph)	26.1	25.9	26.3	26.2	25.5	26.4	26.8	26.0	26.2
85 th ile Speed (mph)	30.3	29.8	30.4	30.4	29.6	30.5	31.2	30.1	30.3
No. Vehicles > 20 MPH Limit	2323	1928	1442	2546	1268	657	1508	1901	1667
% Vehicles > 20 MPH Limit	93.8%	93.8%	94.2%	93.9%	92.2%	94.9%	94.0%	93.6%	93.8%
No. Vehicles > 35 MPH	46	41	43	69	16	20	68	43	43
% Vehicles > 35 MPH	1.9%	2.0%	2.8%	2.5%	1.2%	2.9%	4.2%	2.1%	2.4%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2631	2900	3558	3444	3769	2532	2103	3260	2991
Mean Speed (mph)	25.8	25.7	25.8	25.6	25.6	26.3	25.6	25.7	25.8
85 th ile Speed (mph)	30.1	29.9	29.9	29.8	29.8	30.7	30.3	29.9	30.1
No. Vehicles > 20 MPH Limit	2419	2645	3344	3170	3446	2362	1851	3005	2748
% Vehicles > 20 MPH Limit	91.9%	91.2%	94.0%	92.0%	91.4%	93.3%	88.0%	92.2%	91.9%
No. Vehicles > 35 MPH	57	63	58	55	75	79	61	62	64
% Vehicles > 35 MPH	2.2%	2.2%	1.6%	1.6%	2.0%	3.1%	2.9%	1.9%	2.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2600	2677	2741	2634	2880	2400	1894	2706	2547
Mean Speed (mph)	24.2	25.0	24.6	24.7	24.3	24.7	24.7	24.6	24.6
85 th ile Speed (mph)	28.1	29.0	28.4	28.5	28.1	28.7	28.6	28.4	28.5
No. Vehicles > 20 MPH Limit	2219	2397	2428	2354	2491	2116	1690	2378	2242
% Vehicles > 20 MPH Limit	85.3%	89.5%	88.6%	89.4%	86.5%	88.2%	89.2%	87.9%	88.0%
No. Vehicles > 35 MPH	15	19	26	12	25	32	22	19	22
% Vehicles > 35 MPH	0.6%	0.7%	0.9%	0.5%	0.9%	1.3%	1.2%	0.7%	0.8%

- 3.5.62 Table 19 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed was 26.0mph, similar to October 2020 (26.1mph). The flow in May 2021 was higher than September 2021.
- 3.5.63 The proportion of vehicles exceeding 20mph in February 2021 was similar to October 2020. The lowest proportion was observed in September 2021.
- 3.5.64 Table 20 presents the results for Ballindean Road (Eastbound) in Dundee.

Broughty Ferry

3.5.71 Table 22 presents the results for The Esplanade (Eastbound) in Broughty Ferry.

Table 22. The Esplanade (Eastbound) Link Flow & Speed Summary



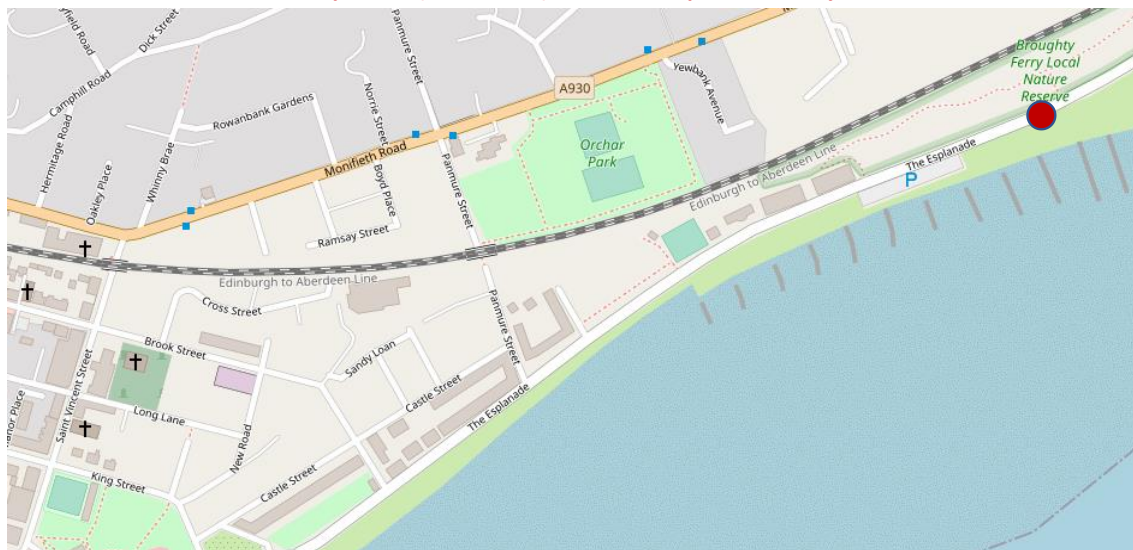
Site 1 The Esplanade Eastbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	316	269	212	169	182	192	235	230	225
Mean Speed (mph)	17.5	17.6	16.3	16.0	16.2	18.0	17.4	16.7	17.0
85 th ile Speed (mph)	21.4	21.7	20.4	20.9	21.0	22.2	21.5	21.1	21.3
No. Vehicles > 20 MPH Limit	81	78	38	34	33	52	62	53	54
% Vehicles > 20 MPH Limit	25.6%	29.0%	17.9%	20.1%	18.1%	27.1%	26.4%	22.2%	23.5%
No. Vehicles > 35 MPH	0	0	2	0	0	1	2	0	1
% Vehicles > 35 MPH	0.0%	0.0%	0.9%	0.0%	0.0%	0.5%	0.9%	0.2%	0.3%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	262	96	216	262	330	191	421	233	254
Mean Speed (mph)	17.9	18.2	17.8	18.1	17.6	17.3	17.9	17.9	17.8
85 th ile Speed (mph)	22.3	21.9	21.4	21.8	21.1	20.5	21.4	21.7	21.5
No. Vehicles > 20 MPH Limit	80	24	59	74	81	41	106	64	66
% Vehicles > 20 MPH Limit	30.5%	25.0%	27.3%	28.2%	24.5%	21.5%	25.2%	27.1%	26.0%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	377	343	403	386	463	290	522	394	398
Mean Speed (mph)	18.7	18.8	18.9	19.5	18.5	18.9	18.3	18.9	18.8
85 th ile Speed (mph)	23.3	23.6	23.3	24.5	23.3	23.7	22.3	23.6	23.4
No. Vehicles > 20 MPH Limit	137	124	159	167	169	110	176	151	149
% Vehicles > 20 MPH Limit	36.3%	36.2%	39.5%	43.3%	36.5%	37.9%	33.7%	38.3%	37.4%
No. Vehicles > 35 MPH	2	1	1	0	0	0	0	1	1
% Vehicles > 35 MPH	0.5%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	494	676	710	409	520	630	487	562	561
Mean Speed (mph)	18.9	19.3	19.0	19.2	19.7	19.7	19.1	19.2	19.3
85 th ile Speed (mph)	23.5	24.2	23.8	23.6	24.2	23.8	23.6	23.9	23.8
No. Vehicles > 20 MPH Limit	201	317	303	179	260	310	207	252	254
% Vehicles > 20 MPH Limit	40.7%	46.9%	42.7%	43.8%	50.0%	49.2%	42.5%	44.9%	45.3%
No. Vehicles > 35 MPH	0	1	2	2	2	0	1	1	1
% Vehicles > 35 MPH	0.0%	0.1%	0.3%	0.5%	0.4%	0.0%	0.2%	0.2%	0.2%

3.5.72 Table 22 shows that the 5-day average traffic flows were lowest in October 2020, however a similar vehicle flow is observed in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 19.2mph in September 2021.

3.5.73 The average proportion of vehicles exceeding 20mph in May 2021 was 38.3%. In February 2021 this value was 22.2%, and higher in February 2021 (27.1%). The highest proportion was in September 2021 (44.9%).

3.5.74 Table 23 presents the results for The Esplanade (Westbound) in Dundee.

Table 23. The Esplanade (Westbound) Link Flow & Speed Summary



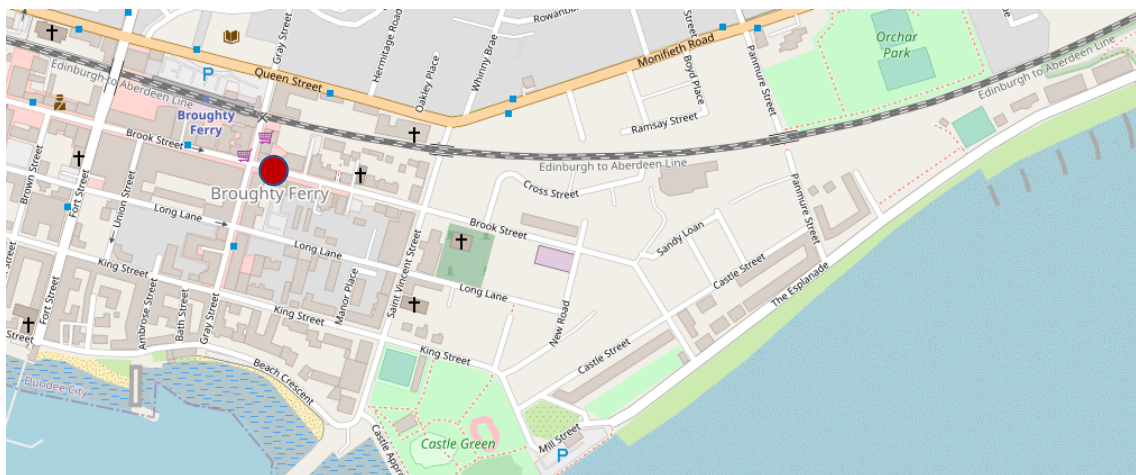
Site 1 The Esplanade Westbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	203	195	170	151	138	175	200	171	176
Mean Speed (mph)	17.1	16.6	17.0	16.0	16.9	16.5	16.5	16.7	16.7
85 th ile Speed (mph)	21.9	20.3	21.6	20.3	21.9	20.7	21.5	21.2	21.2
No. Vehicles > 20 MPH Limit	57	32	44	24	37	30	45	39	38
% Vehicles > 20 MPH Limit	28.1%	16.4%	25.9%	15.9%	26.8%	17.1%	22.5%	22.6%	21.8%
No. Vehicles > 35 MPH	1	0	0	0	0	1	0	0	0
% Vehicles > 35 MPH	0.5%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.1%	0.2%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	188	92	160	204	234	182	327	176	198
Mean Speed (mph)	18.4	17.9	17.6	18.3	17.5	16.5	17.2	17.9	17.6
85 th ile Speed (mph)	22.6	22.8	21.4	22.3	21.4	20.6	21.1	22.1	21.7
No. Vehicles > 20 MPH Limit	59	25	33	61	58	37	71	47	49
% Vehicles > 20 MPH Limit	31.4%	27.2%	20.6%	29.9%	24.8%	20.3%	21.7%	26.8%	25.1%
No. Vehicles > 35 MPH	2	0	0	0	1	0	0	1	0
% Vehicles > 35 MPH	1.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.3%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	210	224	208	243	269	189	278	231	232
Mean Speed (mph)	18.3	18.5	18.8	19.3	18.5	18.4	18.0	18.7	18.5
85 th ile Speed (mph)	22.4	22.0	22.9	23.7	23.0	22.2	21.5	22.8	22.5
No. Vehicles > 20 MPH Limit	65	72	74	98	90	62	79	80	77
% Vehicles > 20 MPH Limit	31.0%	32.1%	35.6%	40.3%	33.5%	32.8%	28.4%	34.6%	33.3%
No. Vehicles > 35 MPH	0	0	1	0	1	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.0%	0.2%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	282	370	394	238	265	357	306	310	316
Mean Speed (mph)	19.8	20.1	20.7	19.7	19.7	20.1	19.7	20.0	20.0
85 th ile Speed (mph)	25.0	24.5	25.3	24.4	23.8	24.5	23.8	24.6	24.5
No. Vehicles > 20 MPH Limit	128	181	224	115	114	179	145	152	155
% Vehicles > 20 MPH Limit	45.4%	48.9%	56.9%	48.3%	43.0%	50.1%	47.4%	49.2%	49.1%
No. Vehicles > 35 MPH	0	2	0	0	1	0	0	1	0
% Vehicles > 35 MPH	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.2%	0.1%

3.5.75 Table 23 shows that the 5-day average traffic flows were lowest in October 2020, however a similar vehicle flow was observed in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 20.0mph in September 2021.

3.5.76 The average proportion of vehicles exceeding 20mph in May 2021 was 34.6%. In February 2021 this value was 26.8%, and higher in February 2021 (22.6%), before increasing further in September 2021 (49.2%).

3.5.77 Table 24 presents the results for Brook Street (Eastbound) in Dundee.

Table 24. Brook Street (Eastbound) Link Flow & Speed Summary



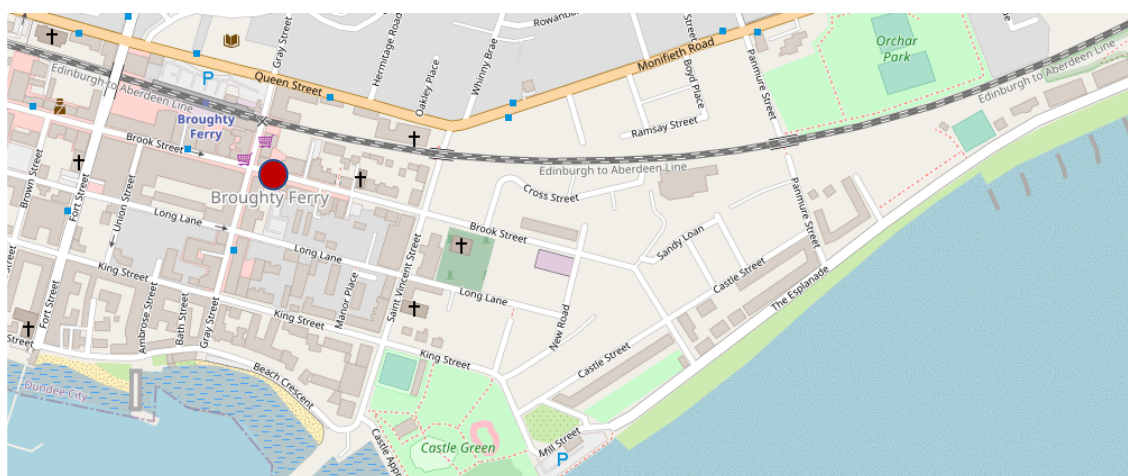
Site 2 Brook Street Eastbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2047	2043	2241	2171	2406	2275	1781	2182	2138
Mean Speed (mph)	16.3	16.9	16.2	16.2	15.4	15.1	17.5	16.2	16.2
85%ile Speed (mph)	20.7	21.3	20.5	20.7	19.6	19.2	21.4	20.6	20.5
No. Vehicles > 20 MPH Limit	385	442	391	407	303	270	443	386	377
% Vehicles > 20 MPH Limit	18.8%	21.6%	17.4%	18.7%	12.6%	11.9%	24.9%	17.8%	18.0%
No. Vehicles > 35 MPH	1	10	2	7	7	3	4	5	5
% Vehicles > 35 MPH	0.0%	0.5%	0.1%	0.3%	0.3%	0.1%	0.2%	0.2%	0.2%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2028	1677	1923	2001	2348	1900	1779	1995	1951
Mean Speed (mph)	17.3	18.2	18.1	17.9	17.1	17.3	18.2	17.7	17.7
85%ile Speed (mph)	21.4	22.6	22.3	22.1	21.3	21.4	22.3	21.9	21.9
No. Vehicles > 20 MPH Limit	486	558	582	577	508	457	544	542	530
% Vehicles > 20 MPH Limit	24.0%	33.3%	30.3%	28.8%	21.6%	24.1%	30.6%	27.6%	27.5%
No. Vehicles > 35 MPH	0	3	4	3	6	3	3	3	3
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	0.1%	0.3%	0.2%	0.2%	0.2%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2286	2555	2516	2502	2908	2434	1995	2553	2457
Mean Speed (mph)	16.5	16.7	16.8	15.7	15.5	16.1	17.6	16.2	16.4
85%ile Speed (mph)	21.1	21.4	21.4	20.5	19.9	20.3	21.5	20.9	20.9
No. Vehicles > 20 MPH Limit	497	587	584	420	423	402	514	502	490
% Vehicles > 20 MPH Limit	21.7%	23.0%	23.2%	16.8%	14.5%	16.5%	25.8%	19.7%	19.9%
No. Vehicles > 35 MPH	2	4	9	6	4	1	4	5	4
% Vehicles > 35 MPH	0.1%	0.2%	0.4%	0.2%	0.1%	0.0%	0.2%	0.2%	0.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2150	2419	2542	2289	2681	2483	1779	2416	2335
Mean Speed (mph)	16.8	17.2	17.8	16.7	15.9	16.1	18.0	16.9	16.9
85%ile Speed (mph)	21.4	21.7	22.0	21.2	20.3	20.5	22.1	21.3	21.3
No. Vehicles > 20 MPH Limit	495	615	734	497	459	431	533	560	538
% Vehicles > 20 MPH Limit	23.0%	25.4%	28.9%	21.7%	17.1%	17.4%	30.0%	23.2%	23.0%
No. Vehicles > 35 MPH	2	4	1	1	3	4	0	2	2
% Vehicles > 35 MPH	0.1%	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	0.1%	0.1%

3.5.78 Table 24 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 17.7mph in February 2021. The flows in September 2021 were lower than May 2021.

3.5.79 The average proportion of vehicles exceeding 20mph in February 2021 was 27.6%. In October 2020, May 2021 and September 2021 it was lower at 17.8%, 19.7% and 23.2% respectively.

3.5.80 Table 25 presents the results for Brook Street(Westbound) in Dundee.

Table 25. Brook Street (Westbound) Link Flow & Speed Summary



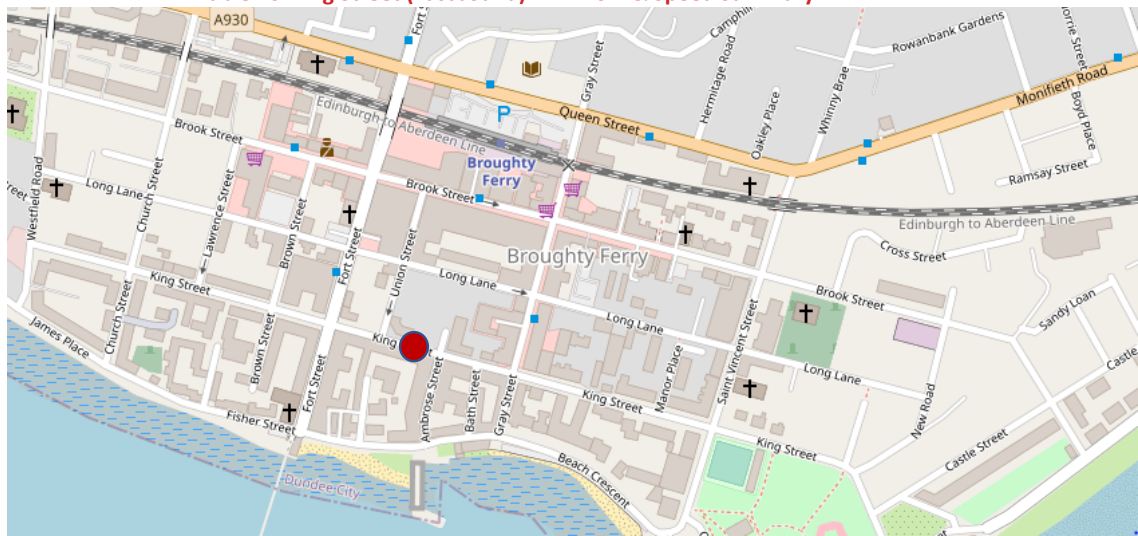
Site 2 Brook Street Westbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	820	859	837	967	1172	1075	574	931	901
Mean Speed (mph)	17.0	18.3	18.1	18.1	15.3	16.5	17.7	17.4	17.3
85%ile Speed (mph)	22.4	23.9	21.8	23.6	19.2	20.9	22.0	22.2	22.0
No. Vehicles > 20 MPH Limit	204	244	185	273	159	190	142	213	200
% Vehicles > 20 MPH Limit	24.9%	28.4%	22.1%	28.2%	13.6%	17.7%	24.7%	23.4%	22.8%
No. Vehicles > 35 MPH	16	28	32	24	17	30	13	23	23
% Vehicles > 35 MPH	2.0%	3.3%	3.8%	2.5%	1.5%	2.8%	2.3%	2.5%	2.5%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	773	657	693	777	931	758	590	766	740
Mean Speed (mph)	18.5	19.0	18.2	19.3	19.2	19.4	20.4	18.8	19.1
85%ile Speed (mph)	24.0	23.4	23.2	25.5	23.0	24.3	26.4	23.8	24.3
No. Vehicles > 20 MPH Limit	232	218	195	225	277	260	238	229	235
% Vehicles > 20 MPH Limit	30.0%	33.2%	28.1%	29.0%	29.8%	34.3%	40.3%	30.0%	32.1%
No. Vehicles > 35 MPH	27	25	20	41	52	29	29	33	32
% Vehicles > 35 MPH	3.5%	3.8%	2.9%	5.3%	5.6%	3.8%	4.9%	4.3%	4.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	946	1148	1023	1076	1391	1224	750	1117	1080
Mean Speed (mph)	18.6	19.0	18.5	17.0	16.8	19.8	18.5	18.0	18.3
85%ile Speed (mph)	25.1	27.4	24.5	21.7	22.0	26.7	22.6	24.1	24.3
No. Vehicles > 20 MPH Limit	270	365	324	250	304	438	190	303	306
% Vehicles > 20 MPH Limit	28.5%	31.8%	31.7%	23.2%	21.9%	35.8%	25.3%	27.1%	28.3%
No. Vehicles > 35 MPH	48	92	39	25	62	104	23	53	56
% Vehicles > 35 MPH	5.1%	8.0%	3.8%	2.3%	4.5%	8.5%	3.1%	4.8%	5.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	782	828	858	851	1238	1116	709	911	912
Mean Speed (mph)	15.4	16.0	16.5	15.0	14.9	15.3	17.1	15.6	15.7
85%ile Speed (mph)	19.7	20.7	20.8	19.6	19.5	20.1	21.9	20.1	20.3
No. Vehicles > 20 MPH Limit	103	158	180	114	157	176	183	142	153
% Vehicles > 20 MPH Limit	13.2%	19.1%	21.0%	13.4%	12.7%	15.8%	25.8%	15.6%	16.8%
No. Vehicles > 35 MPH	1	0	0	1	0	0	0	0	0
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.81 Table 25 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however has similar vehicle flow was observed in October 2020. The mean speed was highest at 18.8 mph in February 2021.

3.5.82 The average proportion of vehicles exceeding 20mph in February 2021 was 30.0%. In October 2020, May 2021 and September 2021 it was lower at 23.4%, 27.1% and 15.6% respectively.

3.5.83 Table 26 presents the results for King Street (Eastbound) in Broughty Ferry.

Table 26. King Street (Eastbound) Link Flow & Speed Summary



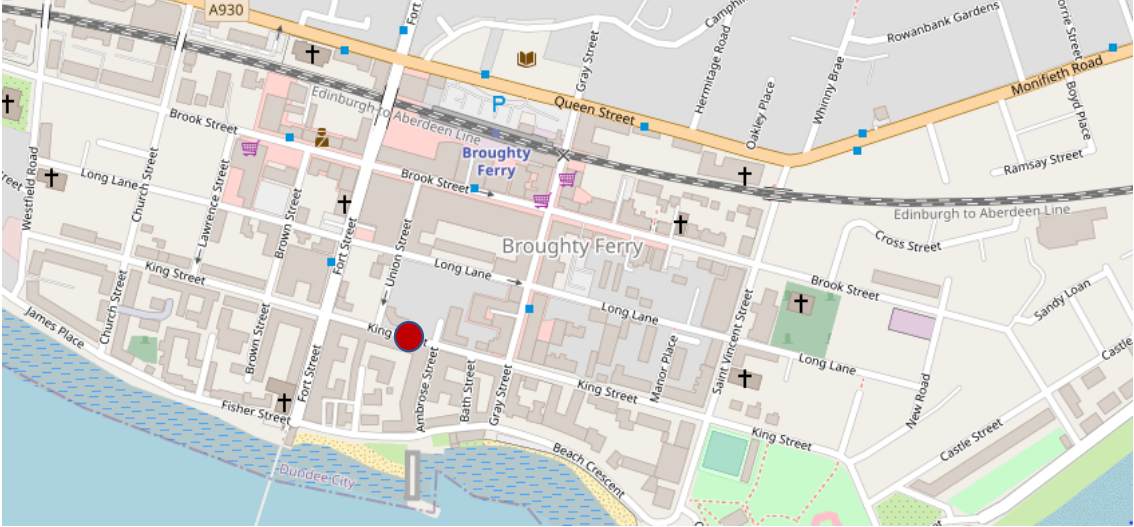
Site 3 King Street Eastbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	817	922	558	681	1008	1127	674	797	827
Mean Speed (mph)	17.6	17.4	17.5	17.3	17.0	16.4	18.1	17.4	17.3
85%ile Speed (mph)	22.3	22.0	22.8	22.0	22.0	21.1	23.3	22.2	22.2
No. Vehicles > 20 MPH Limit	234	252	147	164	267	238	237	213	220
% Vehicles > 20 MPH Limit	28.6%	27.3%	26.3%	24.1%	26.5%	21.1%	35.2%	26.6%	27.0%
No. Vehicles > 35 MPH	1	1	0	4	0	0	0	1	1
% Vehicles > 35 MPH	0.1%	0.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.2%	0.1%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	680	582	651	630	801	586	522	669	636
Mean Speed (mph)	18.6	18.7	18.7	18.4	18.0	18.4	18.4	18.5	18.5
85%ile Speed (mph)	23.7	23.9	23.7	23.5	22.8	24.0	24.0	23.5	23.7
No. Vehicles > 20 MPH Limit	246	221	244	227	260	207	179	240	226
% Vehicles > 20 MPH Limit	36.2%	38.0%	37.5%	36.0%	32.5%	35.3%	34.3%	36.0%	35.7%
No. Vehicles > 35 MPH	0	0	3	0	2	1	1	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.5%	0.0%	0.2%	0.2%	0.2%	0.1%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	892	981	1086	1057	1173	939	704	1038	976
Mean Speed (mph)	17.7	17.4	16.8	17.1	16.8	16.8	17.6	17.2	17.2
85%ile Speed (mph)	22.8	22.1	21.8	21.9	21.4	21.3	22.8	22.0	22.0
No. Vehicles > 20 MPH Limit	256	253	259	270	267	206	207	261	245
% Vehicles > 20 MPH Limit	28.7%	25.8%	23.8%	25.5%	22.8%	21.9%	29.4%	25.1%	25.1%
No. Vehicles > 35 MPH	4	0	1	1	0	4	3	1	2
% Vehicles > 35 MPH	0.4%	0.0%	0.1%	0.1%	0.0%	0.4%	0.4%	0.1%	0.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	981	1113	1108	1205	1341	1072	824	1150	1092
Mean Speed (mph)	16.8	17.1	16.1	16.6	16.0	16.2	17.3	16.5	16.6
85%ile Speed (mph)	21.5	22.0	20.7	21.3	20.5	20.7	22.0	21.2	21.2
No. Vehicles > 20 MPH Limit	234	293	207	275	238	209	218	249	239
% Vehicles > 20 MPH Limit	23.9%	26.3%	18.7%	22.8%	17.7%	19.5%	26.5%	21.7%	21.9%
No. Vehicles > 35 MPH	0	1	4	2	2	1	0	2	1
% Vehicles > 35 MPH	0.0%	0.1%	0.4%	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%

3.5.84 Table 21 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however the results show a similar vehicle flow in October 2020. The mean speed was highest at 18.5mph in February 2021.

3.5.85 The average proportion of vehicles exceeding 20mph was highest in February 2021 and lower in October 2020, May 2021 and September 2021.

3.5.86 Table 27 presents the results for King Street (Eastbound) in Broughty Ferry.

Table 27. King Street (Eastbound) Link Flow & Speed Summary



Site 3 King Street Westbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2402	2451	1559	1870	2698	2897	1957	2196	2262
Mean Speed (mph)	19.6	18.9	18.8	18.3	18.5	18.8	19.2	18.8	18.9
85%ile Speed (mph)	24.3	23.8	23.5	22.8	23.5	23.5	24.0	23.6	23.6
No. Vehicles > 20 MPH Limit	1118	1005	624	657	1014	1105	822	884	906
% Vehicles > 20 MPH Limit	46.5%	41.0%	40.0%	35.1%	37.6%	38.1%	42.0%	40.1%	40.1%
No. Vehicles > 35 MPH	4	2	1	1	3	9	10	2	4
% Vehicles > 35 MPH	0.2%	0.1%	0.1%	0.1%	0.1%	0.3%	0.5%	0.1%	0.2%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2108	1737	2128	2033	2547	1943	1881	2111	2054
Mean Speed (mph)	20.0	20.3	20.0	20.1	19.4	19.7	19.3	20.0	19.8
85%ile Speed (mph)	24.6	24.8	24.8	24.9	24.0	24.2	24.2	24.6	24.5
No. Vehicles > 20 MPH Limit	1078	949	1120	1051	1183	938	862	1076	1026
% Vehicles > 20 MPH Limit	51.1%	54.6%	52.6%	51.7%	46.4%	48.3%	45.8%	51.3%	50.1%
No. Vehicles > 35 MPH	9	3	8	7	6	2	10	7	6
% Vehicles > 35 MPH	0.4%	0.2%	0.4%	0.3%	0.2%	0.1%	0.5%	0.3%	0.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2573	2757	2807	2776	3252	2853	2042	2833	2723
Mean Speed (mph)	19.3	18.9	18.6	18.8	18.6	18.6	19.2	18.8	18.9
85%ile Speed (mph)	24.0	23.8	23.6	23.4	23.3	23.3	23.8	23.6	23.6
No. Vehicles > 20 MPH Limit	1140	1134	1058	1079	1199	1093	877	1122	1083
% Vehicles > 20 MPH Limit	44.3%	41.1%	37.7%	38.9%	36.9%	38.3%	42.9%	39.6%	39.8%
No. Vehicles > 35 MPH	9	6	8	6	11	6	3	8	7
% Vehicles > 35 MPH	0.3%	0.2%	0.3%	0.2%	0.3%	0.2%	0.1%	0.3%	0.3%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2599	2945	2965	2806	3337	2668	1957	2930	2754
Mean Speed (mph)	18.4	18.1	17.8	17.6	17.6	18.0	18.5	17.9	18.0
85%ile Speed (mph)	23.0	22.6	22.5	22.5	22.4	22.6	22.9	22.6	22.6
No. Vehicles > 20 MPH Limit	962	994	939	846	996	844	708	947	898
% Vehicles > 20 MPH Limit	37.0%	33.8%	31.7%	30.1%	29.8%	31.6%	36.2%	32.3%	32.6%
No. Vehicles > 35 MPH	1	5	6	2	2	10	8	3	5
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	0.1%	0.1%	0.4%	0.4%	0.1%	0.2%

3.5.87 Table 27 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however has similar vehicle flow in October 2020. The mean speed was highest at 20.0mph in February 2021.

3.5.88 The average proportion of vehicles exceeding 20mph was highest in February 2021 with October 2020 similar to May 2021.

3.5.89 The results of link counts and speed surveys in the Dundee City Council area indicate:

Dundee

- The mean speed of traffic on Perth Road, Art School (Site 2), Balunie Drive (Site 7) and Ballindean Road (Site 8) showed similar values throughout each survey period. Speeds on Findowrie Street (Site 4) and Fintry Road (Site 5) went up in February and May 2021 when compared with October 2020. On Perth Road, Step Row (site 1) and Perth Road, Nethergate (Site 3) mean speeds were similar in October 2020 and February 2021, however went down in May 2021.

Broughty Ferry

- Mean speeds increased on The Esplanade (Site 1) in February 2021 and then again in May 2021 – compared with October 2020. On Brook Street (Site 2) and King Street (Site 3) mean speeds went up in February 2021 and then returned to similar levels in May 2021 compared with October 2020.

Perth & Kinross Council

3.5.90 Vehicle link counts and speeds were surveyed using ATC tube counters at two locations in the Perth & Kinross Council area, namely:

- Link Count & Speed 1 – Tay Street (north of South Street)
- Link Count & Speed 2 – Tay Street (south of Canal Street)

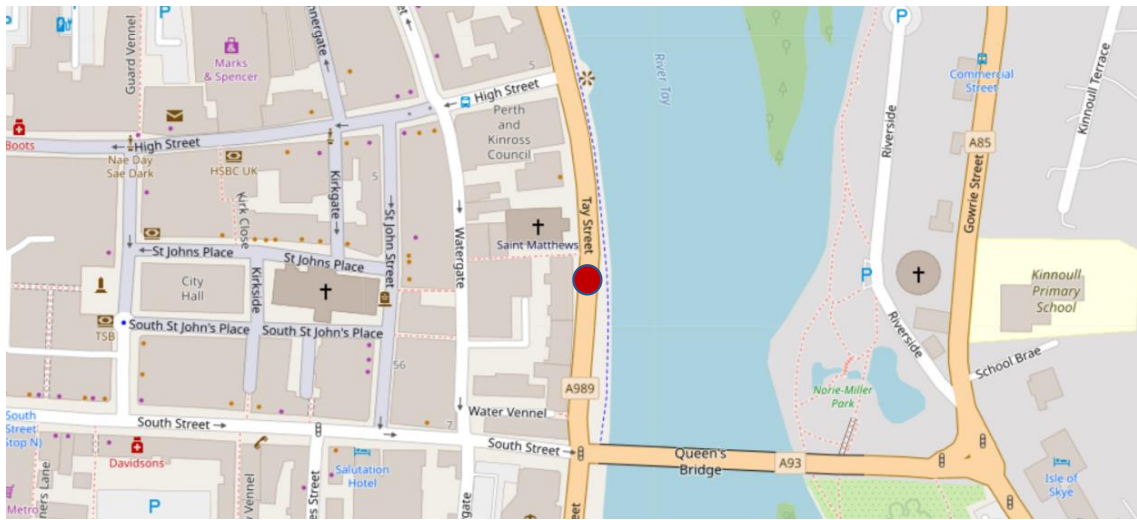
3.5.91 Summary tables below present the results of the link count and speed surveys in the Perth & Kinross Council area.

3.5.92 For each survey, the summary information is as follows:

- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed below which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

3.5.93 Table 28 below presents a comparison of the results of the link flow and speed data on Tay Street, north of South Street (northbound).

Table 28. Tay Street north of South St (northbound) Link Flow & Speed Summary



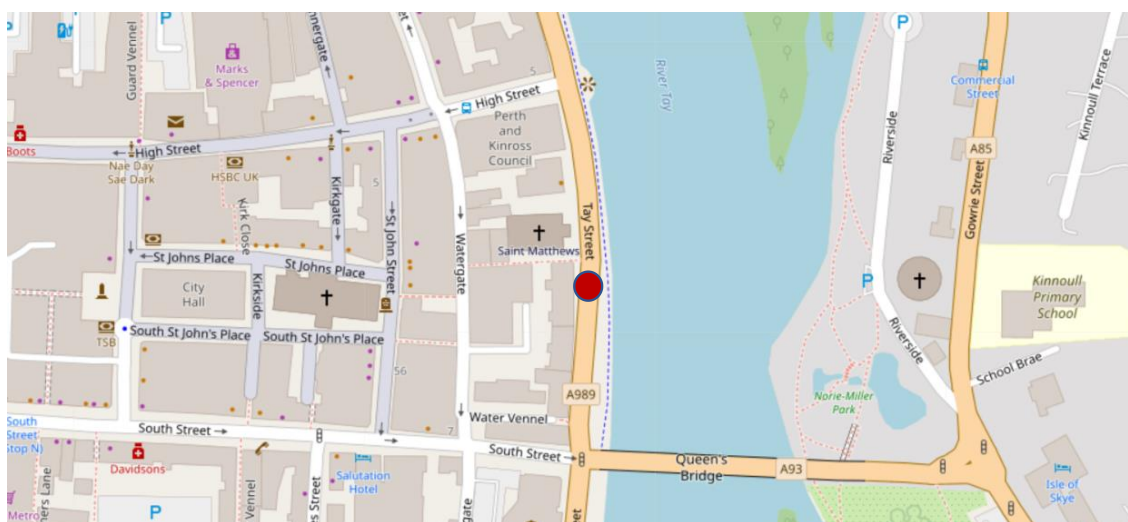
Site 1 Tay St between South Street and High Street Northbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2529	2584	2562	2722	2832	2539	1749	2646	2502
Mean Speed (mph)	22.7	21.8	22.7	22.5	22.2	23.0	22.7	22.4	22.5
85%ile Speed (mph)	26.1	25.9	26.5	26.4	25.8	26.8	26.6	26.1	26.3
No. Vehicles > 20 MPH Limit	2002	1811	1987	2088	2107	2066	1357	1999	1917
% Vehicles > 20 MPH Limit	79.2%	70.1%	77.6%	76.7%	74.4%	81.4%	77.6%	75.6%	76.7%
No. Vehicles > 35 MPH	8	7	14	9	10	6	7	10	9
% Vehicles > 35 MPH	0.3%	0.3%	0.5%	0.3%	0.4%	0.2%	0.4%	0.4%	0.3%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2179	2040	2123	2239	2540	1952	1734	2224	2115
Mean Speed (mph)	22.8	22.5	22.6	22.9	22.7	22.4	22.0	22.7	22.6
85%ile Speed (mph)	26.5	26.1	26.3	26.7	26.3	26.1	25.5	26.4	26.2
No. Vehicles > 20 MPH Limit	1678	1528	1630	1778	1969	1436	1274	1717	1613
% Vehicles > 20 MPH Limit	77.0%	74.9%	76.8%	79.4%	77.5%	73.6%	73.5%	77.1%	76.1%
No. Vehicles > 35 MPH	8	3	6	11	7	10	3	7	7
% Vehicles > 35 MPH	0.4%	0.1%	0.3%	0.5%	0.3%	0.5%	0.2%	0.3%	0.3%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2648	3000	2982	3018	3432	2927	1980	3016	2855
Mean Speed (mph)	21.9	22.1	22.2	21.7	22.2	21.9	22.1	22.0	22.0
85%ile Speed (mph)	25.6	25.8	26.1	25.8	25.8	25.7	26.2	25.8	25.9
No. Vehicles > 20 MPH Limit	1877	2186	2161	2061	2532	2043	1417	2163	2040
% Vehicles > 20 MPH Limit	70.9%	72.9%	72.5%	68.3%	73.8%	69.8%	71.6%	71.7%	71.4%
No. Vehicles > 35 MPH	6	5	10	8	13	10	5	8	8
% Vehicles > 35 MPH	0.2%	0.2%	0.3%	0.3%	0.4%	0.3%	0.3%	0.3%	0.3%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2881	2984	2953	2987	3328	3193	2058	3027	2912
Mean Speed (mph)	21.4	21.5	22.3	21.2	21.7	21.6	22.2	21.6	21.7
85%ile Speed (mph)	25.3	25.6	26.2	25.4	25.7	25.7	26.2	25.6	25.7
No. Vehicles > 20 MPH Limit	1875	1984	2152	1939	2248	2085	1454	2040	1962
% Vehicles > 20 MPH Limit	65.1%	66.5%	72.9%	64.9%	67.5%	65.3%	70.7%	67.4%	67.4%
No. Vehicles > 35 MPH	5	3	8	4	9	10	11	6	7
% Vehicles > 35 MPH	0.2%	0.1%	0.3%	0.1%	0.3%	0.3%	0.5%	0.2%	0.2%

3.5.94 Table 28 indicates that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 22.7 mph. The flows in May 2021 and September 2021 were very similar, with the lowest average speeds being recorded in September 2021.

3.5.95 The proportion of vehicles exceeding 20mph was slightly lower in May 2021 compared with October 2020, but was lowest in September 2021.

3.5.96 Table 29 presents the results for Tay Street, north of South Street (southbound).

Table 29. Tay Street north of South St (southbound) Link Flow & Speed Summary



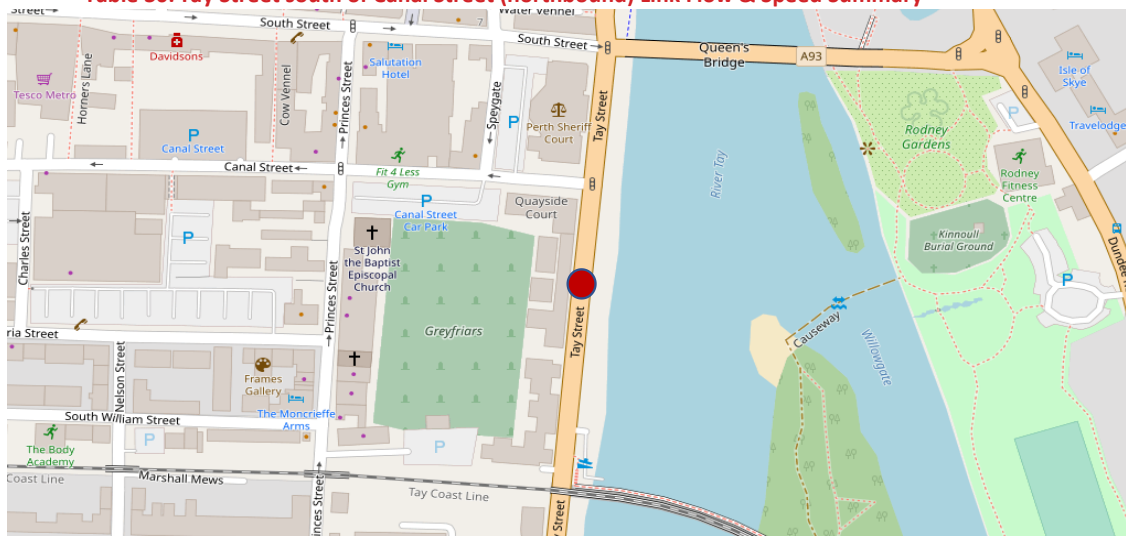
Site 1 Tay St between South Street and High Street Southbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2738	2623	2670	2931	2951	2384	1955	2783	2607
Mean Speed (mph)	20.9	20.8	21.0	20.4	20.6	21.5	21.3	20.7	20.9
85%ile Speed (mph)	24.7	24.9	24.8	24.4	24.7	25.4	25.3	24.7	24.9
No. Vehicles > 20 MPH Limit	1593	1507	1582	1538	1617	1520	1242	1567	1514
% Vehicles > 20 MPH Limit	58.2%	57.5%	59.3%	52.5%	54.8%	63.8%	63.5%	56.4%	58.5%
No. Vehicles > 35 MPH	8	9	13	9	7	6	8	9	9
% Vehicles > 35 MPH	0.3%	0.3%	0.5%	0.3%	0.2%	0.3%	0.4%	0.3%	0.3%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2541	2256	2483	2592	2679	1918	2372	2510	2406
Mean Speed (mph)	20.2	21.0	20.7	20.8	20.3	20.9	19.5	20.6	20.5
85%ile Speed (mph)	23.9	24.8	24.6	24.5	24.2	24.8	23.7	24.4	24.4
No. Vehicles > 20 MPH Limit	1337	1384	1448	1539	1472	1134	1072	1436	1341
% Vehicles > 20 MPH Limit	52.6%	61.3%	58.3%	59.4%	54.9%	59.1%	45.2%	57.3%	55.8%
No. Vehicles > 35 MPH	4	3	6	3	6	4	12	4	5
% Vehicles > 35 MPH	0.2%	0.1%	0.2%	0.1%	0.2%	0.2%	0.5%	0.2%	0.2%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2855	3257	3146	3152	3331	2790	2425	3148	2994
Mean Speed (mph)	20.8	20.5	21.0	20.8	20.7	21.0	21.0	20.8	20.8
85%ile Speed (mph)	24.4	24.2	24.7	24.4	24.6	24.7	25.2	24.5	24.6
No. Vehicles > 20 MPH Limit	1631	1823	1812	1834	1870	1625	1387	1794	1712
% Vehicles > 20 MPH Limit	57.1%	56.0%	57.6%	58.2%	56.1%	58.2%	57.2%	57.0%	57.2%
No. Vehicles > 35 MPH	9	10	11	7	11	8	13	10	10
% Vehicles > 35 MPH	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%	0.5%	0.3%	0.3%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3351	3316	3365	3264	3480	3148	2527	3355	3207
Mean Speed (mph)	21.2	21.4	21.7	21.4	21.6	21.5	22.1	21.5	21.6
85%ile Speed (mph)	25.2	25.2	25.4	25.3	25.4	25.4	26.4	25.3	25.5
No. Vehicles > 20 MPH Limit	2088	2176	2311	2110	2294	2035	1777	2196	2113
% Vehicles > 20 MPH Limit	62.3%	65.6%	68.7%	64.6%	65.9%	64.6%	70.3%	65.4%	65.9%
No. Vehicles > 35 MPH	9	8	10	15	19	15	12	12	13
% Vehicles > 35 MPH	0.3%	0.2%	0.3%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%

3.5.97 Table 29 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The 5 day mean speed was relatively consistent across all survey periods, with the exception of September 2021 when both the flows and average speed increased.

3.5.98 The proportion of vehicles exceeding 20mph was higher in May 2021 compared with October 2020. The proportion of vehicles exceeding 20mph was highest in February 2021.

3.5.99 Table 30 presents the results for Tay Street between the railway bridge and Canal Street (northbound) in Perth.

Table 30. Tay Street south of Canal Street (northbound) Link Flow & Speed Summary



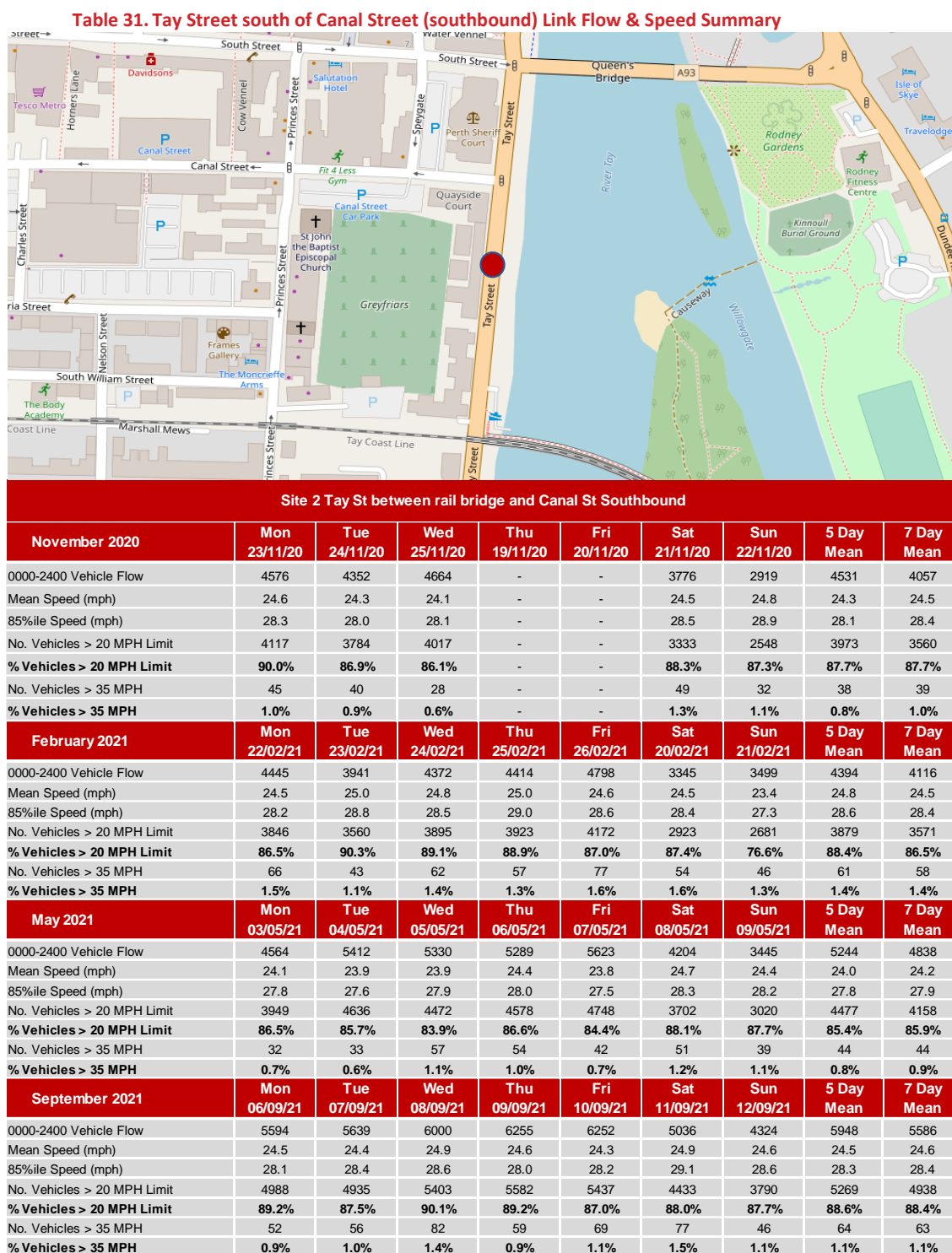
Site 2 Tay St between rail bridge and Canal St Northbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2675	2562	2840	-	-	2327	1699	2692	2421
Mean Speed (mph)	23.7	23.6	23.5	-	-	24.0	24.0	23.6	23.8
85%ile Speed (mph)	27.3	27.5	27.3	-	-	28.1	27.8	27.4	27.6
No. Vehicles > 20 MPH Limit	2272	2138	2325	-	-	1990	1454	2245	2036
% Vehicles > 20 MPH Limit	84.9%	83.5%	81.9%	-	-	85.5%	85.6%	83.4%	84.3%
No. Vehicles > 35 MPH	15	13	13	-	-	14	7	14	12
% Vehicles > 35 MPH	0.6%	0.5%	0.5%	-	-	0.6%	0.4%	0.5%	0.5%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2620	2369	2482	2606	2843	2035	2038	2584	2428
Mean Speed (mph)	23.8	24.2	24.1	24.1	23.8	24.0	23.5	24.0	23.9
85%ile Speed (mph)	27.9	28.4	28.2	28.1	28.1	28.0	27.6	28.1	28.0
No. Vehicles > 20 MPH Limit	2179	2051	2090	2205	2368	1730	1630	2179	2036
% Vehicles > 20 MPH Limit	83.2%	86.6%	84.2%	84.6%	83.3%	85.0%	80.0%	84.4%	83.8%
No. Vehicles > 35 MPH	20	27	24	23	25	29	27	24	25
% Vehicles > 35 MPH	0.8%	1.1%	1.0%	0.9%	0.9%	1.4%	1.3%	0.9%	1.0%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2748	3322	3349	3235	3428	2546	2086	3216	2959
Mean Speed (mph)	24.0	22.8	23.1	23.4	22.5	24.1	24.3	23.2	23.5
85%ile Speed (mph)	28.0	27.0	27.4	27.5	27.1	28.3	28.4	27.4	27.7
No. Vehicles > 20 MPH Limit	2333	2539	2646	2608	2521	2182	1833	2529	2380
% Vehicles > 20 MPH Limit	84.9%	76.4%	79.0%	80.6%	73.5%	85.7%	87.9%	78.6%	80.4%
No. Vehicles > 35 MPH	27	20	16	22	10	32	18	19	21
% Vehicles > 35 MPH	1.0%	0.6%	0.5%	0.7%	0.3%	1.3%	0.9%	0.6%	0.7%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3238	3342	3525	3308	3712	3009	2328	3425	3209
Mean Speed (mph)	21.9	21.5	21.8	21.7	20.1	21.9	23.4	21.4	21.8
85%ile Speed (mph)	26.7	26.6	26.7	26.5	25.6	26.7	27.7	26.4	26.6
No. Vehicles > 20 MPH Limit	2225	2172	2303	2242	2001	2055	1826	2189	2118
% Vehicles > 20 MPH Limit	68.7%	65.0%	65.3%	67.8%	53.9%	68.3%	78.4%	63.9%	66.0%
No. Vehicles > 35 MPH	19	16	31	21	15	15	25	20	20
% Vehicles > 35 MPH	0.6%	0.5%	0.9%	0.6%	0.4%	0.5%	1.1%	0.6%	0.6%

* No data available for Thursday 19th & Friday 20th November 2020 due to vehicle parked on ATC tube

3.5.100 Table 30 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, the mean speed also being highest at 24 mph in February 2021. The highest flow was observed in September 2021.

3.5.101 The proportion of vehicles exceeding 20mph was highest in February 2021 and lowest in May 2021.

3.5.102 Table 31 presents the results for Tay Street south of Canal Street (northbound) in Perth.



* No data available for Thursday 19th & Friday 20th November 2020 due to vehicle parked on ATC tube

3.5.103 Table 31 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic was greatest in February 2021 at 24.8mph. The highest flow was observed in September 2021.

3.5.104 The proportion of vehicles exceeding 20mph was higher in February 2021 compared with May 2021 and October 2020, but the highest proportion was observed in September 2021.

3.5.105 The results of the wider link counts and speed surveys indicate:

- On Tay Street, between South Street and High Street, the mean speeds remained consistent in all three survey periods. All surveys indicated in a higher number of northbound vehicles exceeding 20mph than southbound.
- On Tay Street, between Marshall Place and Canal Street, the mean speeds again remained consistent in all three survey periods.

Stirling Council

3.5.106 Vehicle link counts and speeds were surveyed using ATC tube counters at fourteen locations in the Stirling Council area, namely:

Stirling

- Link Count & Speed 1 - Murray Place (McDonalds)
- Link Count & Speed 2 - Upper Craigs
- Link Count & Speed 3 - Millenium Way
- Link Count & Speed 4 - Murray Place (Ian Gallacher Jewellers)
- Link Count & Speed 5 – Causewayhead Road
- Link Count & Speed 6 – Forrest Road
- Link Count & Speed 7 – Argyll Avenue

Dunblane

- Link Count & Speed 1 - High St (near gold post box)
- Link Count & Speed 2 - B8033 Perth Rd (north of Bridge)
- Link Count & Speed 3 - B8033 Stirling Rd (South of Central Scotland jewellery access)

Bridge of Allan

- Link Count & Speed 1 - Henderson St (Outside Baynes)

Aberfoyle

- Link Count & Speed 1 - Main St (Near Coop)

Fallin

- Link Count & Speed 1 - A905 (Near library/health centre)

Plean

- Link Count & Speed 1 - Main St (Near Graham Bakers/Keystore Convenience shop)
- Link Count & Speed 2 – Cadgers Loan

Callander

- Link Count & Speed 1 - Main St (Near Coop)

Killearn

- Link Count & Speed 1 - Main St (Near Coop)

Gargunnoch

- Link Count & Speed 1 – Manse Brae
- Link Count & Speed 2 – Station Road

3.5.107 Summary tables below present the results of the link count and speed surveys in the Stirling Council area.

3.5.108 For each survey, the summary information is as follows:

- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed below which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

Stirling

3.5.109 Table 32 below presents a comparison of the results of the link flow and speed data on Murray Place northbound in Stirling.

Table 32. Site 1 Murray Place (Northbound) Link Flow & Speed Summary



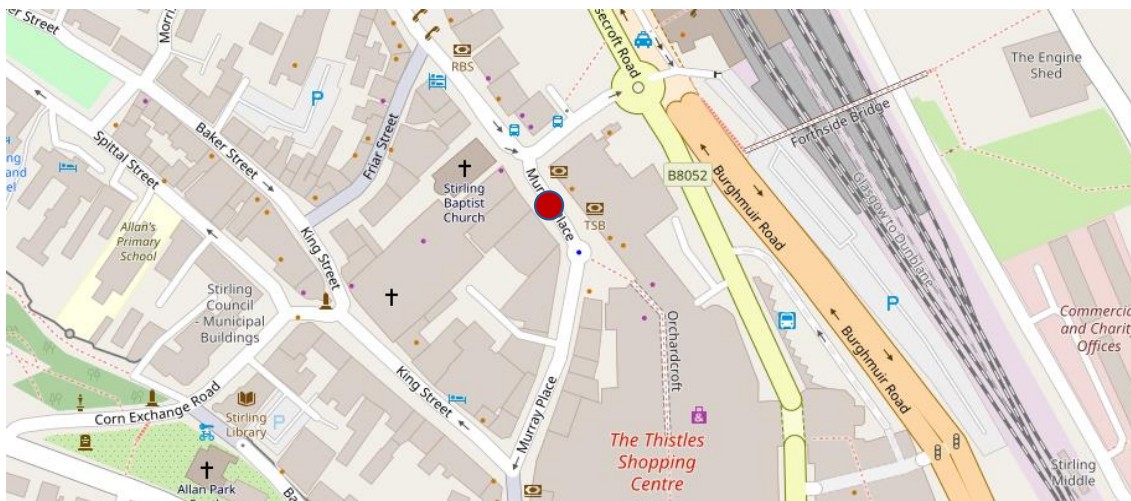
Stirling Site 1 Murray Place Northbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	308	282	297	360	371	275	274	324	310
Mean Speed (mph)	10.1	10.1	10.2	9.6	9.9	10.5	9.9	10.0	10.0
85%ile Speed (mph)	12.8	12.1	12.7	11.9	12.7	12.7	12.2	12.4	12.4
No. Vehicles > 20 MPH Limit	0	0	1	0	0	1	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.3%	0.0%	0.0%	0.4%	0.0%	0.1%	0.1%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	297	255	294	284	376	300	256	301	295
Mean Speed (mph)	11.2	11.0	10.3	10.7	10.7	10.9	10.7	10.8	10.8
85%ile Speed (mph)	13.8	13.9	12.6	13.2	13.6	13.5	13.4	13.4	13.4
No. Vehicles > 20 MPH Limit	4	0	0	0	2	1	0	1	1
% Vehicles > 20 MPH Limit	1.3%	0.0%	0.0%	0.0%	0.5%	0.3%	0.0%	0.4%	0.3%
No. Vehicles > 35 MPH	2	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	543	507	497	532	610	605	472	538	538
Mean Speed (mph)	10.3	10.6	10.6	10.2	10.4	10.5	10.7	10.4	10.5
85%ile Speed (mph)	13.3	13.2	13.7	12.8	13.1	13.1	13.4	13.2	13.2
No. Vehicles > 20 MPH Limit	2	3	0	0	10	0	3	3	3
% Vehicles > 20 MPH Limit	0.4%	0.6%	0.0%	0.0%	1.6%	0.0%	0.6%	0.5%	0.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	340	457	434	405	499	413	418	427	424
Mean Speed (mph)	10.3	10.4	10.3	11.0	10.2	10.3	10.4	10.4	10.4
85%ile Speed (mph)	12.5	13.0	13.0	13.4	12.6	13.1	12.8	12.9	12.9
No. Vehicles > 20 MPH Limit	1	1	3	0	1	2	5	1	2
% Vehicles > 20 MPH Limit	0.3%	0.2%	0.7%	0.0%	0.2%	0.5%	1.2%	0.3%	0.4%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.110 Table 32 indicates that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 10.8 mph. The flows in September 2021 were lower than May 2021.

3.5.111 The average proportion of exceeding 20mph was slightly higher in May 2021 compared with October 2020.

3.5.113 Table 33 presents the results Murray Place southbound in Stirling.

Table 33. Site 1 Murray Place (Southbound) Link Flow & Speed Summary



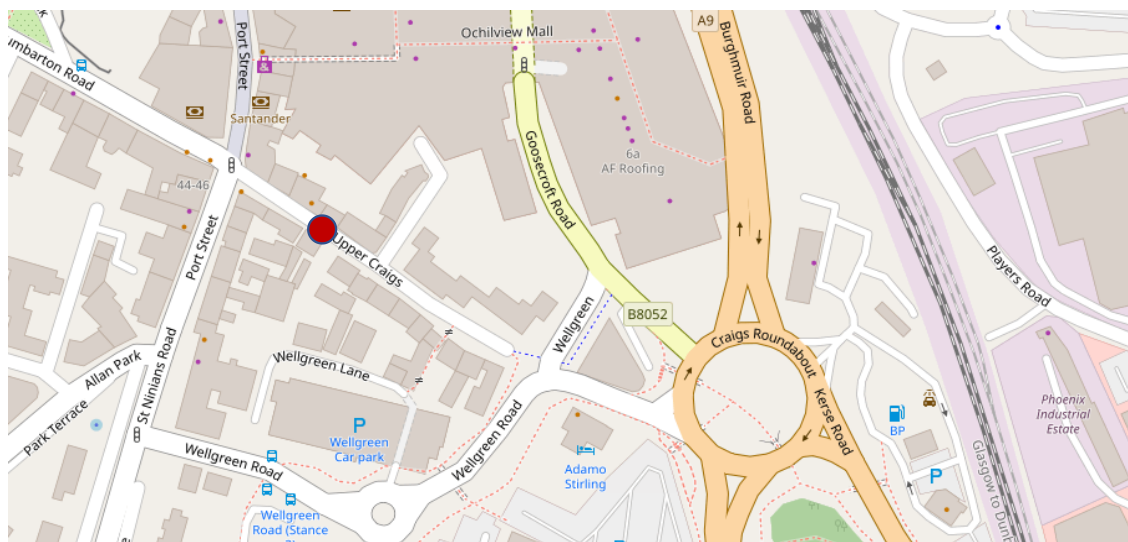
Stirling Site 1 Murray Place Southbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	787	813	828	1136	1217	845	653	956	897
Mean Speed (mph)	11.3	11.2	10.9	10.5	10.8	11.5	11.4	10.9	11.1
85%ile Speed (mph)	14.4	14.3	13.8	13.4	13.5	14.4	14.0	13.9	14.0
No. Vehicles > 20 MPH Limit	3	4	2	5	2	4	2	3	3
% Vehicles > 20 MPH Limit	0.4%	0.5%	0.2%	0.4%	0.2%	0.5%	0.3%	0.3%	0.4%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	843	814	883	866	1114	922	708	904	879
Mean Speed (mph)	12.3	12.7	12.4	12.4	12.4	13.0	12.9	12.4	12.6
85%ile Speed (mph)	15.4	16.1	15.7	15.5	15.7	16.3	16.7	15.7	15.9
No. Vehicles > 20 MPH Limit	15	14	18	15	22	23	24	17	19
% Vehicles > 20 MPH Limit	1.8%	1.7%	2.0%	1.7%	2.0%	2.5%	3.4%	1.8%	2.2%
No. Vehicles > 35 MPH	0	0	0	2	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1320	1413	1369	1415	1621	1630	1167	1428	1419
Mean Speed (mph)	11.3	11.4	11.8	11.1	11.2	11.2	11.7	11.4	11.4
85%ile Speed (mph)	14.4	14.8	15.1	14.3	14.3	14.4	14.7	14.6	14.6
No. Vehicles > 20 MPH Limit	11	10	15	21	9	11	10	13	12
% Vehicles > 20 MPH Limit	0.8%	0.7%	1.1%	1.5%	0.6%	0.7%	0.9%	0.9%	0.9%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1303	1380	1387	1499	1690	1528	1329	1452	1445
Mean Speed (mph)	11.5	11.8	12.2	11.9	11.8	12.1	11.9	11.8	11.9
85%ile Speed (mph)	14.6	14.9	15.2	14.7	14.8	15.2	15.0	14.8	14.9
No. Vehicles > 20 MPH Limit	12	14	13	7	16	17	8	12	12
% Vehicles > 20 MPH Limit	0.9%	1.0%	0.9%	0.5%	0.9%	1.1%	0.6%	0.9%	0.9%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.114 Table 33 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Again, the 5-day mean speed was highest at 12.4 mph. The September 2021 flows were the highest that were observed.

3.5.115 The average proportion of vehicles exceeding 20mph was higher in February 2021 compared with October 2020, May 2021 and September 2021.

3.5.116 Table 34 presents the results for Upper Craigs eastbound in Stirling.

Table 34. Site 2 Upper Craigs (Eastbound) Link Flow & Speed Summary



Stirling Site 2 Upper Craigs Eastbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	372	444	459	859	960	428	335	619	551
Mean Speed (mph)	12.0	12.0	12.2	11.4	11.1	12.6	13.2	11.7	12.1
85%ile Speed (mph)	16.1	15.8	15.9	14.6	14.1	15.8	16.9	15.3	15.6
No. Vehicles > 20 MPH Limit	15	8	15	17	14	10	9	14	13
% Vehicles > 20 MPH Limit	4.0%	1.8%	3.3%	2.0%	1.5%	2.3%	2.7%	2.5%	2.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	379	385	182	433	512	508	347	378	392
Mean Speed (mph)	13.4	13.5	14.9	13.4	13.6	12.9	13.9	13.8	13.7
85%ile Speed (mph)	17.6	17.9	18.8	17.7	17.8	17.3	17.8	18.0	17.8
No. Vehicles > 20 MPH Limit	21	22	16	24	33	24	24	23	23
% Vehicles > 20 MPH Limit	5.5%	5.7%	8.8%	5.5%	6.4%	4.7%	6.9%	6.4%	6.2%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	541	665	632	711	775	816	573	665	673
Mean Speed (mph)	12.9	12.0	12.6	11.9	12.3	11.9	12.9	12.3	12.4
85%ile Speed (mph)	16.5	15.9	16.7	15.7	16.1	15.5	16.2	16.2	16.1
No. Vehicles > 20 MPH Limit	0	0	0	0	1	0	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	468	571	585	594	776	490	489	599	568
Mean Speed (mph)	12.6	12.4	12.6	12.4	12.5	13.2	13.5	12.5	12.7
85%ile Speed (mph)	16.2	15.7	16.1	15.8	15.7	16.6	17.4	15.9	16.2
No. Vehicles > 20 MPH Limit	0	1	0	0	1	2	0	0	1
% Vehicles > 20 MPH Limit	0.0%	0.2%	0.0%	0.0%	0.1%	0.4%	0.0%	0.1%	0.1%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.117 Table 34 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, the mean speed being 13.8mph at this point.

3.5.118 The average proportion of vehicles exceeding 20mph was lower in May 2021 and September 2021 compared with October 2020, and much lower than in February 2021.

3.5.119 Table 35 presents the results for Upper Craigs westbound in Stirling.

Table 35. Site 2 Upper Craigs (Westbound) Link Flow & Speed Summary



Stirling Site 2 Upper Craigs Westbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	365	428	417	856	965	431	301	606	538
Mean Speed (mph)	10.6	10.7	10.9	11.0	10.9	11.0	11.0	10.8	10.9
85%ile Speed (mph)	12.9	13.5	14.2	14.1	13.7	14.7	14.4	13.7	13.9
No. Vehicles > 20 MPH Limit	8	5	10	8	4	10	6	7	7
% Vehicles > 20 MPH Limit	2.2%	1.2%	2.4%	0.9%	0.4%	2.3%	2.0%	1.4%	1.6%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	382	386	182	444	529	510	344	385	397
Mean Speed (mph)	12.1	12.4	13.8	12.4	12.4	11.9	12.5	12.6	12.5
85%ile Speed (mph)	15.4	15.9	16.9	15.9	15.9	15.3	15.9	16.0	15.9
No. Vehicles > 20 MPH Limit	3	3	8	7	6	7	6	5	6
% Vehicles > 20 MPH Limit	0.8%	0.8%	4.4%	1.6%	1.1%	1.4%	1.7%	1.7%	1.7%
No. Vehicles > 35 MPH	0	0	2	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	586	666	661	768	817	842	583	700	703
Mean Speed (mph)	11.9	11.6	11.9	11.6	11.6	11.9	12.2	11.7	11.8
85%ile Speed (mph)	14.9	14.7	15.0	15.1	14.9	15.3	15.5	14.9	15.1
No. Vehicles > 20 MPH Limit	0	0	1	0	0	0	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	485	568	574	603	774	502	471	601	568
Mean Speed (mph)	10.9	11.0	11.3	11.7	11.5	11.6	12.2	11.3	11.5
85%ile Speed (mph)	14.4	14.1	14.8	15.5	16.0	15.2	16.5	15.0	15.2
No. Vehicles > 20 MPH Limit	0	0	0	1	0	1	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

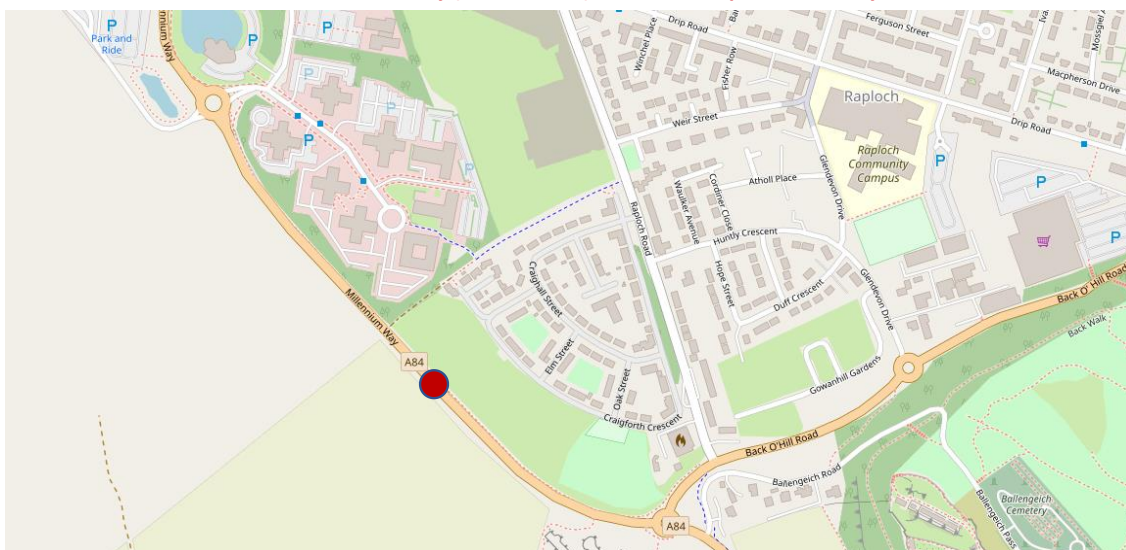
3.5.120 Table 35 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in November 2020 was 10.8 mph.

3.5.121 The average proportion of vehicles exceeding 20mph was much lower in May 2021 and September 2021 compared with November 2020 and February 2021.

3.5.123 Table 36 presents the results for Millennium Way northbound in Stirling.

3.5.124 The remaining sites only contain data for February, May and September 2021 as no surveys were undertaken at these locations in October/November 2020.

Table 36. Site 3 Millennium Way (Northbound) Link Flow & Speed Summary



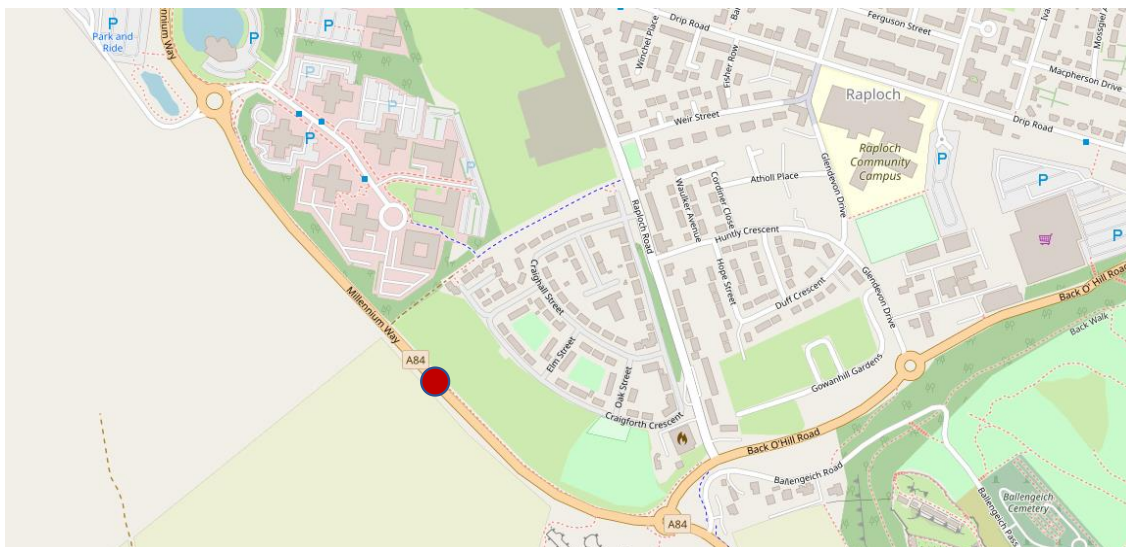
Stirling Site 3 Millenium Way Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4666	4393	4755	4984	5483	4098	3354	4856	4533
Mean Speed (mph)	43.4	43.6	43.0	43.2	43.4	43.8	43.7	43.3	43.4
85%ile Speed (mph)	48.3	48.5	48.1	48.1	48.3	49.3	49.1	48.3	48.5
No. Vehicles > 40 MPH Limit	3483	3318	3332	3713	4050	3068	2469	3579	3348
% Vehicles > 40 MPH Limit	74.6%	75.5%	70.1%	74.5%	73.9%	74.9%	73.6%	73.7%	73.9%
No. Vehicles > 55 MPH	134	140	118	113	156	160	139	132	137
% Vehicles > 55 MPH	2.9%	3.2%	2.5%	2.3%	2.8%	3.9%	4.1%	2.7%	3.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5531	5737	5853	5939	6322	5317	4687	5876	5627
Mean Speed (mph)	37.2	41.3	41.2	41.0	41.2	41.4	38.9	40.4	40.3
85%ile Speed (mph)	41.6	45.4	45.5	45.2	45.3	45.5	43.2	44.6	44.5
No. Vehicles > 40 MPH Limit	5497	5736	5851	5937	6322	5316	4685	5869	5621
% Vehicles > 40 MPH Limit	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	99.9%
No. Vehicles > 55 MPH	15	49	41	48	54	56	21	41	41
% Vehicles > 55 MPH	0.3%	0.9%	0.7%	0.8%	0.9%	1.1%	0.4%	0.7%	0.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	7441	7344	7845	7789	8139	7332	6606	7712	7499
Mean Speed (mph)	40.8	40.4	35.0	40.1	39.8	42.1	42.2	39.2	40.1
85%ile Speed (mph)	45.8	45.7	45.0	45.5	45.8	46.6	46.7	45.6	45.9
No. Vehicles > 40 MPH Limit	4139	4130	3440	4000	4501	4804	4303	4042	4188
% Vehicles > 40 MPH Limit	55.6%	56.2%	43.8%	51.4%	55.3%	65.5%	65.1%	52.5%	56.1%
No. Vehicles > 55 MPH	79	75	95	91	99	114	92	88	92
% Vehicles > 55 MPH	1.1%	1.0%	1.2%	1.2%	1.2%	1.6%	1.4%	1.1%	1.2%

3.5.125 Table 36 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The flow in September 2021 was higher than May 2021. The mean speed of traffic in February 2021 was 43.3 mph, compared with 40.4 mph in May 2021 and 39.2 mph in September 2021.

3.5.126 The proportion of vehicles exceeding 40mph was much greater in May 2021 compared with February 2021, with September 2021 being lower than both November 2020 and May 2021.

3.5.128 Table 37 presents the results for Millennium Way southbound In Stirling.

Table 37. Site 3 Millennium Way (Southbound) Link Flow & Speed Summary



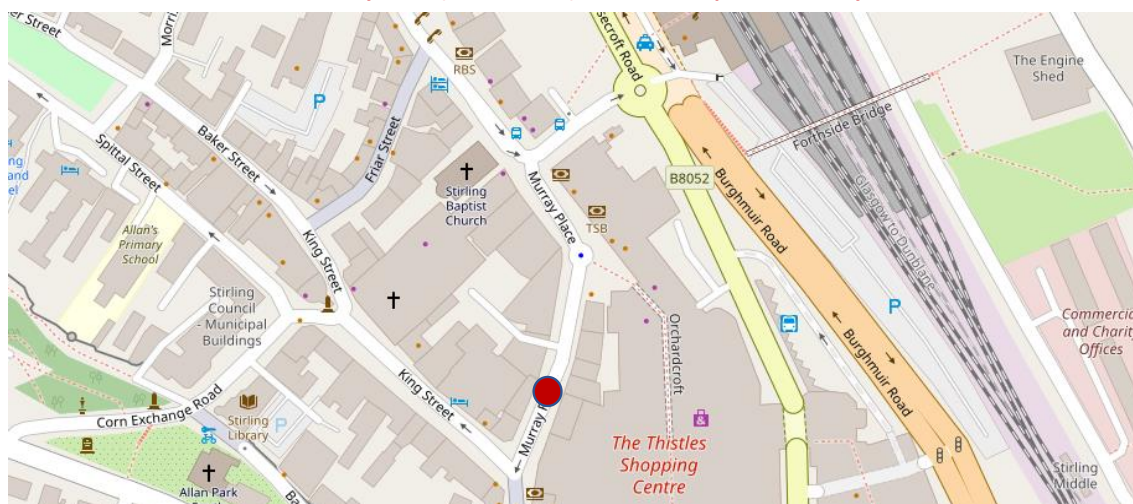
Stirling Site 3 Millennium Way Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3794	3420	3737	3948	4543	3382	2760	3888	3655
Mean Speed (mph)	43.3	42.7	42.6	42.8	43.1	43.2	43.1	42.9	43.0
85%ile Speed (mph)	48.9	47.9	48.5	48.3	48.9	48.8	48.7	48.5	48.6
No. Vehicles > 40 MPH Limit	2622	2274	2393	2646	3091	2356	1911	2605	2470
% Vehicles > 40 MPH Limit	69.1%	66.5%	64.0%	67.0%	68.0%	69.7%	69.2%	66.9%	67.7%
No. Vehicles > 55 MPH	145	112	113	101	168	116	83	128	120
% Vehicles > 55 MPH	3.8%	3.3%	3.0%	2.6%	3.7%	3.4%	3.0%	3.3%	3.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	7383	7630	7713	7835	8275	6732	6048	7767	7374
Mean Speed (mph)	37.0	37.8	38.2	37.9	38.3	38.7	37.6	37.8	37.9
85%ile Speed (mph)	41.4	42.1	42.6	42.1	42.6	43.1	41.9	42.2	42.3
No. Vehicles > 40 MPH Limit	7349	7623	7696	7827	8266	6726	6041	7752	7361
% Vehicles > 40 MPH Limit	99.5%	99.9%	99.8%	99.9%	99.9%	99.9%	99.9%	99.8%	99.8%
No. Vehicles > 55 MPH	23	32	36	19	34	42	29	29	31
% Vehicles > 55 MPH	0.3%	0.4%	0.5%	0.2%	0.4%	0.6%	0.5%	0.4%	0.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5840	5874	5713	6166	6439	5974	5127	6006	5876
Mean Speed (mph)	39.8	39.6	38.7	38.6	40.3	42.2	42.3	39.4	40.2
85%ile Speed (mph)	44.6	44.1	43.7	42.9	45.2	47.2	47.4	44.1	45.0
No. Vehicles > 40 MPH Limit	2511	2388	2202	1983	2985	3857	3359	2414	2755
% Vehicles > 40 MPH Limit	43.0%	40.7%	38.5%	32.2%	46.4%	64.6%	65.5%	40.1%	47.3%
No. Vehicles > 55 MPH	37	54	29	55	83	118	99	52	68
% Vehicles > 55 MPH	0.6%	0.9%	0.5%	0.9%	1.3%	2.0%	1.9%	0.8%	1.2%

3.5.129 Table 37 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown. The flows in September 2021 were lower than May 2021. The mean speed of traffic in February 2021 was 42.9mph, compared with 42.2 mph in May 2021 and 39.4mph in September 2021.

3.5.130 The proportion of vehicles exceeding 20mph was much higher in May 2021 compared with February 2021.

3.5.132 Table 38 presents the results for Murray Place southbound in Stirling.

Table 38. Site 4 Murray Place (Southbound) Link Flow & Speed Summary

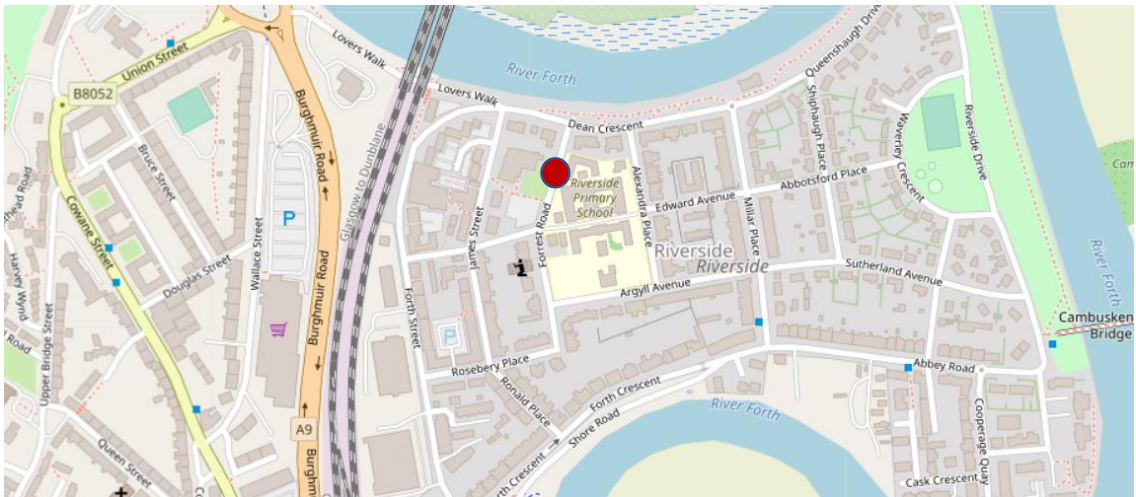


Stirling Site 4 Murray Place Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	579	573	614	603	778	668	481	629	614
Mean Speed (mph)	10.1	10.0	10.1	9.8	10.1	10.2	10.6	10.0	10.1
85%ile Speed (mph)	13.1	12.8	13.0	12.5	13.3	13.2	13.7	12.9	13.1
No. Vehicles > 20 MPH Limit	1	0	4	0	3	1	0	2	1
% Vehicles > 20 MPH Limit	0.2%	0.0%	0.7%	0.0%	0.4%	0.1%	0.0%	0.2%	0.2%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	926	990	971	1018	1223	1120	818	1026	1009
Mean Speed (mph)	9.9	9.4	9.8	9.9	9.8	9.9	9.8	9.8	9.8
85%ile Speed (mph)	12.6	12.4	12.8	12.3	12.2	12.5	12.1	12.5	12.4
No. Vehicles > 20 MPH Limit	2	3	1	1	1	2	1	2	2
% Vehicles > 20 MPH Limit	0.2%	0.3%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.2%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	954	1014	1057	1137	1246	1157	929	1082	1071
Mean Speed (mph)	9.7	9.8	10.1	10.1	10.0	10.3	10.3	9.9	10.0
85%ile Speed (mph)	12.5	12.8	13.0	13.0	12.9	13.3	13.4	12.8	13.0
No. Vehicles > 20 MPH Limit	2	0	3	2	7	6	3	3	3
% Vehicles > 20 MPH Limit	0.2%	0.0%	0.3%	0.2%	0.6%	0.5%	0.3%	0.2%	0.3%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.133 Table 38 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was only 10.0mph, 9.8mph in May 2021 and 9.9mph in September 2021.

3.5.134 The proportion of vehicles exceeding 20mph was the same throughout all survey periods.

Table 41. Site 6 Forrest Road (northbound) Link Flow & Speed Summary



Stirling Site 6 Forrest Road between Edward Road & Dean Crescent Northbound

September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	259	196	306	78	92	106	80	186	160
Mean Speed (mph)	16.1	16.9	16.7	17.9	18.7	20.1	21.4	17.3	18.3
85 th ile Speed (mph)	21.3	21.1	21.0	24.0	23.8	24.7	25.6	22.2	23.1
No. Vehicles > 20 MPH Limit	51	52	65	27	35	53	49	46	47
% Vehicles > 20 MPH Limit	19.7%	26.5%	21.2%	34.6%	38.0%	50.0%	61.3%	28.0%	35.9%
No. Vehicles > 35 MPH	1	0	0	0	1	0	2	0	1
% Vehicles > 35 MPH	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	2.5%	0.3%	0.6%

3.5.145 Table 41 shows that the 5-day average traffic flows was just under 200 vehicles. The mean speed of traffic in September 2021 was 17.3 mph.

3.5.146 The proportion of vehicles exceeding 20mph was 28% in September 2021.

3.5.147 Table 42 presents the results for Forrest Road Southbound in Stirling.

Table 42. Site 6 Forrest Road (southbound) Link Flow & Speed Summary

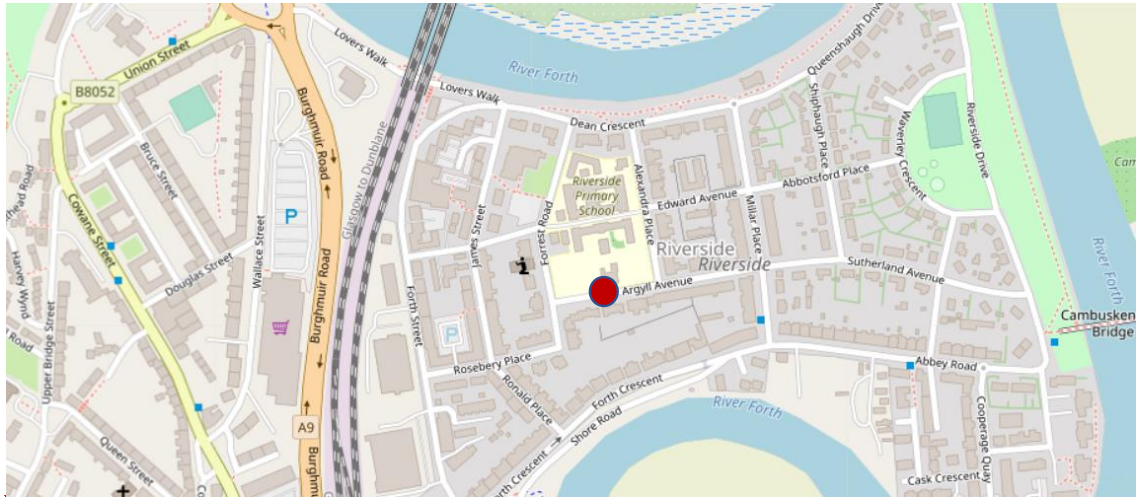


Stirling Site 6 Forrest Road between Edward Road & Dean Crescent Southbound

September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	56	37	66	8	15	22	7	36	30
Mean Speed (mph)	12.3	12.1	12.9	15.7	14.9	16.0	16.4	13.6	14.3
85 th ile Speed (mph)	15.4	15.4	18.4	-	20.0	20.3	-	17.3	17.9
No. Vehicles > 20 MPH Limit	2	2	3	1	2	3	2	2	2
% Vehicles > 20 MPH Limit	3.6%	5.4%	4.5%	12.5%	13.3%	13.6%	28.6%	7.9%	11.7%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- 3.5.148 Table 42 shows that the 5-day average traffic flows was just under 50 vehicles. The mean speed of traffic in September 2021 was 13.6 mph.
- 3.5.149 The proportion of vehicles exceeding 20mph was 7.9% in September 2021.
- 3.5.150 Table 43 presents the results for Argyll Avenue eastbound in Stirling.

Table 43. Site 7 Argyll Avenue (eastbound) Link Flow & Speed Summary

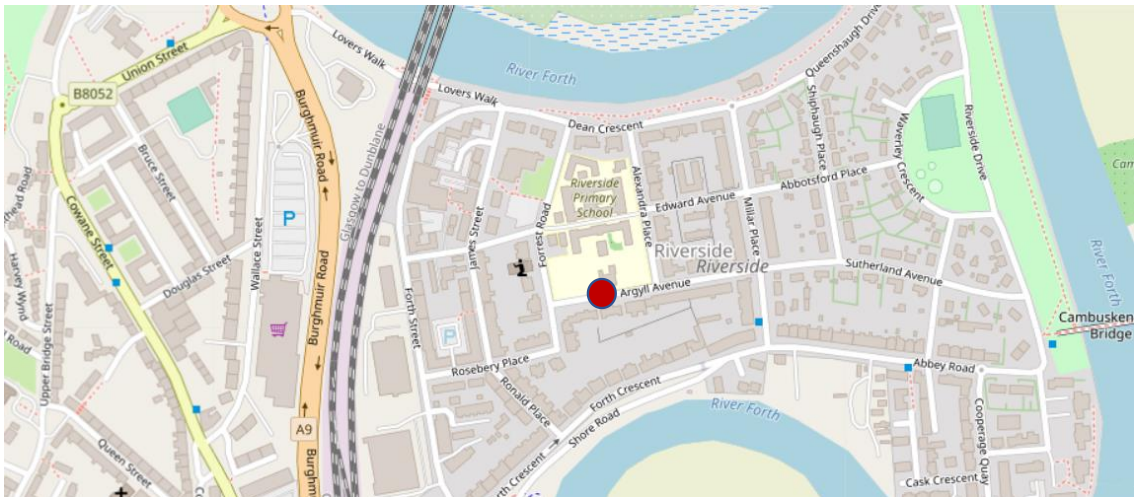


Stirling Site 7 Argyll Avenue between Forest Road & Alexandra Place Eastbound

September 2021	Monday 13 Sep 2021	Tuesday 14 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	264	283	269	276	289	112	89	276	226
Mean Speed (mph)	15.4	15.5	16.0	16.1	16.5	17.8	16.5	15.9	16.3
85%ile Speed (mph)	20.3	20.7	20.4	21.1	21.7	21.9	21.9	20.8	21.1
No. Vehicles > 20 MPH Limit	49	50	44	63	63	32	20	54	46
% Vehicles > 20 MPH Limit	18.6%	17.7%	16.4%	22.8%	21.8%	28.6%	22.5%	19.4%	21.2%
No. Vehicles > 35 MPH	0	0	2	5	6	0	0	3	2
% Vehicles > 35 MPH	0.0%	0.0%	0.7%	1.8%	2.1%	0.0%	0.0%	0.9%	0.7%

- 3.5.151 Table 43 shows that the 5-day average traffic flow was just under 300 vehicles. The mean speed of traffic in September 2021 was 15.9 mph.
- 3.5.152 The proportion of vehicles exceeding 20mph was 19.4% in September 2021.
- 3.5.153 Table 44 presents the results for Argyll Avenue westbound in Stirling.

Table 44. Site 7 Argyll Avenue (westbound) Link Flow & Speed Summary



Stirling Site 7 Argyll Avenue between Forest Road & Alexandra Place Eastbound									
September 2021	Monday 13 Sep 2021	Tuesday 14 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	181	134	195	191	181	120	105	176	158
Mean Speed (mph)	17.4	16.3	17.3	20.5	28.8	20.5	16.4	20.1	19.6
85%ile Speed (mph)	21.6	21.0	21.2	27.0	41.0	25.6	21.6	26.4	25.6
No. Vehicles > 20 MPH Limit	62	25	51	82	132	55	27	70	62
% Vehicles > 20 MPH Limit	34.3%	18.7%	26.2%	42.9%	72.9%	45.8%	25.7%	39.0%	38.1%
No. Vehicles > 35 MPH	0	0	0	12	56	0	0	14	10
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	6.3%	30.9%	0.0%	0.0%	7.4%	5.3%

3.5.154 Table 44 shows that the 5-day average traffic flow was just under 200 vehicles. The mean speed of traffic in September 2021 was 20.1 mph.

3.5.155 The proportion of vehicles exceeding 20mph was 39.0% in September 2021.

Dunblane

3.5.157 Table 45 presents the results for High Street northbound in Dunblane.

Table 45. Site 1 High Street (northbound) Link Flow & Speed Summary



Dunblane Site 1 High Street Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	695	603	718	782	891	810	527	738	718
Mean Speed (mph)	13	14	13	13	13	13	14	13.1	13.2
85%ile Speed (mph)	17	17	17	16	17	16	17	16.6	16.7
No. Vehicles > 20 MPH Limit	13	19	22	13	27	14	20	19	18
% Vehicles > 20 MPH Limit	1.9%	3.2%	3.1%	1.7%	3.0%	1.7%	3.8%	2.6%	2.6%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1005	1029	1003	1125	1213	1122	686	1075	1026
Mean Speed (mph)	12.4	12.7	13.1	12.6	12.8	12.5	14.2	12.7	12.9
85%ile Speed (mph)	15.7	16.1	16.7	15.7	16.3	16.0	17.5	16.1	16.3
No. Vehicles > 20 MPH Limit	16	27	28	26	30	28	20	25	25
% Vehicles > 20 MPH Limit	1.6%	2.6%	2.8%	2.3%	2.5%	2.5%	2.9%	2.4%	2.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	952	1038	1048	1121	1282	1088	714	1088	1035
Mean Speed (mph)	12.5	12.3	12.7	12.7	12.3	12.3	13.4	12.5	12.6
85%ile Speed (mph)	15.8	15.7	16.0	15.9	15.8	15.7	16.8	15.8	16.0
No. Vehicles > 20 MPH Limit	0	1	0	0	0	0	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
No. Vehicles > 35 MPH	0	1	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.5.158 Table 45 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in May 2021 was only 12.7mph, compared with 13.1mph in February 2021, reducing further to 12.5mph in September 2021.

3.5.159 The average proportion of vehicles exceeding 20mph in February 2021 was similar in May 2021.

3.5.161 Table 46 presents the results for Perth Road northbound in Dunblane.

Table 46. Site 2 B8033 Perth Road (northbound) Link Flow & Speed Summary



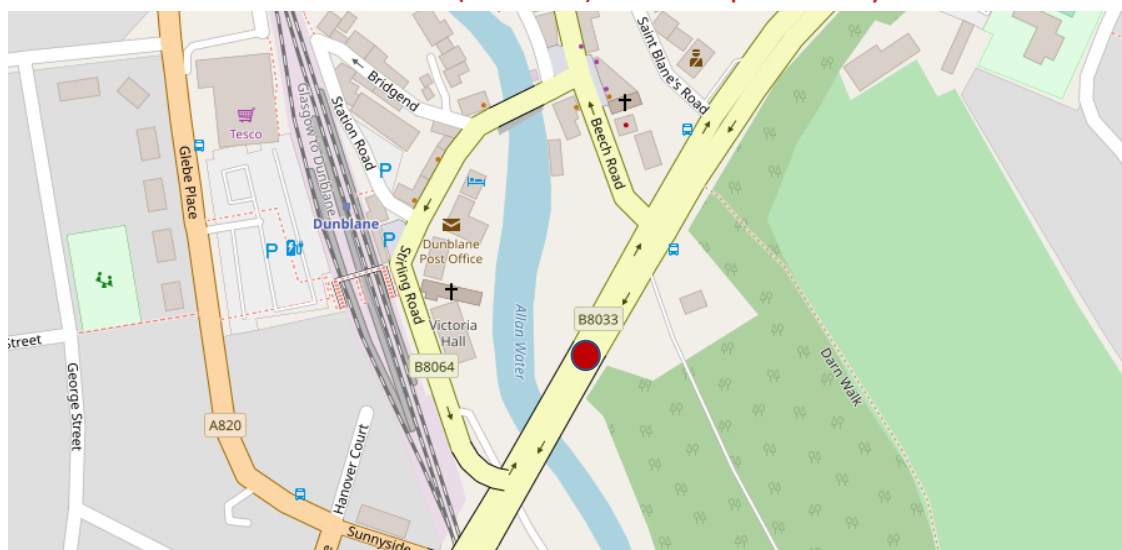
Dunblane Site 2 B8033 Perth Road Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4064	3482	3797	4228	4692	3462	3129	4053	3836
Mean Speed (mph)	27	27	28	27	27	27	28	27.2	27.4
85%ile Speed (mph)	34	34	35	34	34	35	35	34.3	34.4
No. Vehicles > 20 MPH Limit	3091	2661	2891	3196	3538	2604	2446	3075	2918
% Vehicles > 20 MPH Limit	76.1%	76.4%	76.1%	75.6%	75.4%	75.2%	78.2%	75.9%	76.1%
No. Vehicles > 35 MPH	0	1	4	1	0	0	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5538	5908	5784	6776	6252	5287	3786	6052	5619
Mean Speed (mph)	26.7	26.5	26.9	25.6	26.6	25.6	27.7	26.5	26.5
85%ile Speed (mph)	33.6	33.1	33.3	31.9	33.2	32.5	34.6	33.0	33.2
No. Vehicles > 20 MPH Limit	4212	4560	4515	5046	4764	3846	3004	4619	4278
% Vehicles > 20 MPH Limit	76.1%	77.2%	78.1%	74.5%	76.2%	72.7%	79.3%	76.4%	76.3%
No. Vehicles > 35 MPH	16	11	13	12	23	7	17	15	14
% Vehicles > 35 MPH	0.3%	0.2%	0.2%	0.2%	0.4%	0.1%	0.4%	0.2%	0.3%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5645	5825	6134	6133	6705	5275	4385	6088	5729
Mean Speed (mph)	24.2	24.2	23.9	24.1	24.0	24.4	24.7	24.1	24.2
85%ile Speed (mph)	30.8	30.8	30.3	30.8	30.6	31.2	31.5	30.7	30.9
No. Vehicles > 20 MPH Limit	4011	4126	4271	4294	4702	3710	3160	4281	4039
% Vehicles > 20 MPH Limit	71.1%	70.8%	69.6%	70.0%	70.1%	70.3%	72.1%	70.3%	70.6%
No. Vehicles > 35 MPH	5	13	7	8	1	2	4	7	6
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%

3.5.162 Table 46 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was 27.2mph. The highest flows was observed in September 2021 when the mean speed had reduced to 24.1mph.

3.5.163 The average proportion of vehicles exceeding 20mph was similar across all surveys.

3.5.165 Table 47 presents the results for Perth Road southbound in Dunblane.

Table 47. Site 2 B8033 Perth Road (southbound) Link Flow & Speed Summary



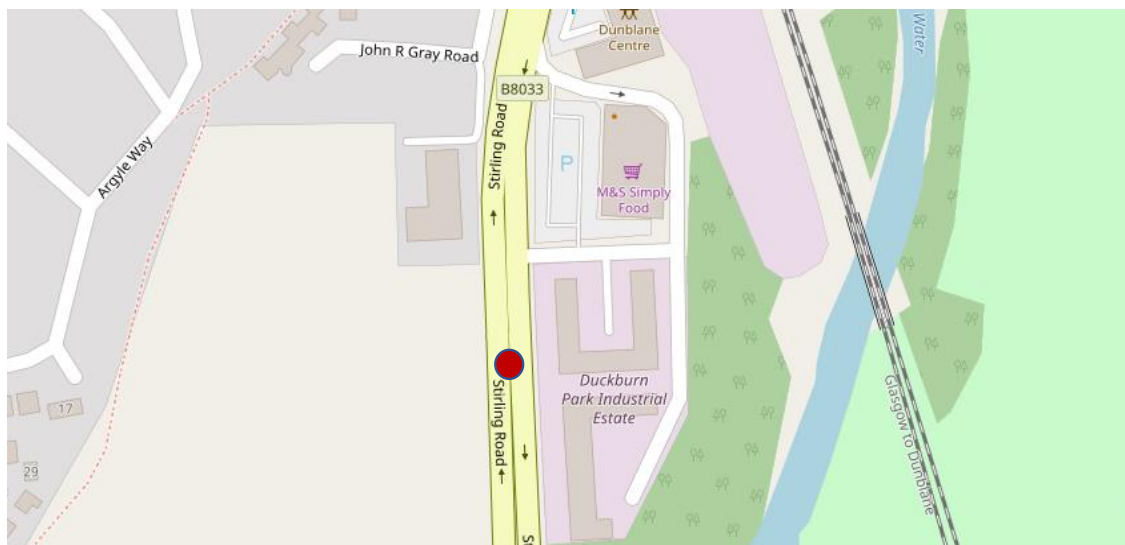
Dunblane Site 2 B8033 Perth Road Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3468	2956	3379	3714	4086	3058	2901	3521	3366
Mean Speed (mph)	31	32	31	31	31	32	32	31.4	31.5
85%ile Speed (mph)	36	36	36	36	36	36	36	35.9	36.0
No. Vehicles > 20 MPH Limit	3424	2929	3346	3668	4027	3014	2874	3479	3326
% Vehicles > 20 MPH Limit	98.7%	99.1%	99.0%	98.8%	98.6%	98.6%	99.1%	98.8%	98.8%
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4839	4968	5025	4972	5377	4417	3458	5036	4722
Mean Speed (mph)	30.0	29.9	29.9	28.7	29.9	29.0	31.3	29.7	29.8
85%ile Speed (mph)	34.3	34.2	34.0	33.2	34.2	33.6	35.7	34.0	34.2
No. Vehicles > 20 MPH Limit	4720	4858	4920	4741	5264	4185	3414	4901	4586
% Vehicles > 20 MPH Limit	97.5%	97.8%	97.9%	95.4%	97.9%	94.7%	98.7%	97.3%	97.1%
No. Vehicles > 45 MPH	14	15	15	9	17	27	20	14	17
% Vehicles > 45 MPH	0.3%	0.3%	0.3%	0.2%	0.3%	0.6%	0.6%	0.3%	0.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5032	5169	5406	5356	5926	4801	4001	5378	5099
Mean Speed (mph)	26.7	27.0	27.1	26.6	26.6	27.3	28.0	26.8	27.0
85%ile Speed (mph)	32.0	32.4	32.5	32.0	31.9	32.8	33.4	32.2	32.4
No. Vehicles > 20 MPH Limit	4566	4831	5000	4881	5448	4455	3735	4945	4702
% Vehicles > 20 MPH Limit	90.7%	93.5%	92.5%	91.1%	91.9%	92.8%	93.4%	92.0%	92.3%
No. Vehicles > 45 MPH	9	6	10	10	8	15	20	9	11
% Vehicles > 45 MPH	0.2%	0.1%	0.2%	0.2%	0.1%	0.3%	0.5%	0.2%	0.2%

3.5.166 Table 47 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was slightly higher (31.4mph) compared with May 2021 (29.7mph) and lower in September 2021 (26.8mph).

3.5.167 The average proportion of vehicles exceeding 20mph was similar across all surveys.

3.5.169 Table 48 presents the results for Stirling Road northbound in Dunblane.

Table 48. Site 3 Castle Street, Dunblane (Northbound) Link Flow & Speed Summary



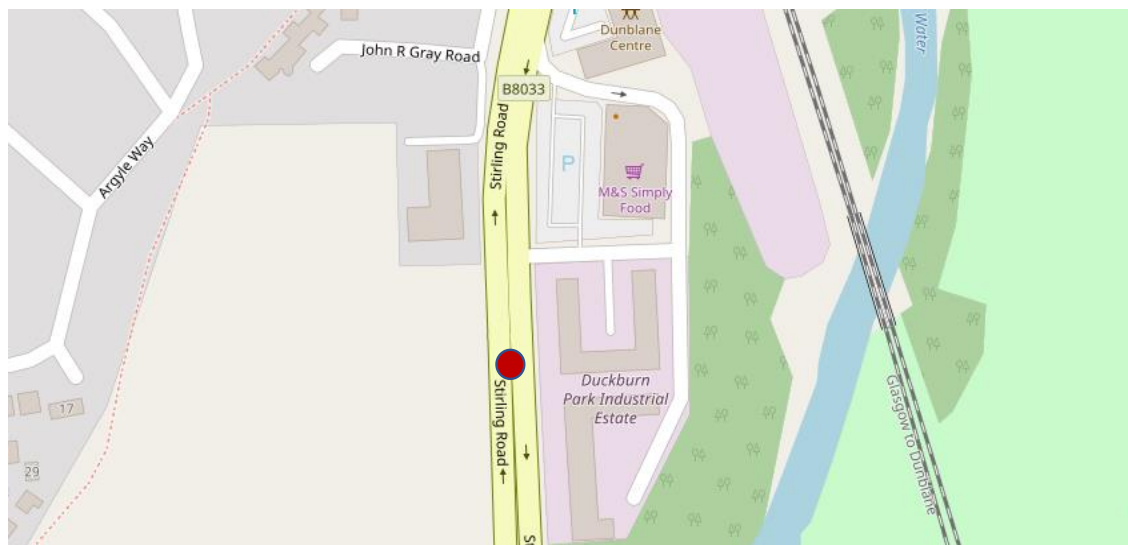
Dunblane Site 3 Stirling Road Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3992	3598	4030	4429	4855	3675	3207	4181	3969
Mean Speed (mph)	33	33	33	33	33	33	33	33.0	33.0
85%ile Speed (mph)	38	38	38	38	38	38	39	38.2	38.2
No. Vehicles > 20 MPH Limit	3978	3589	4014	4404	4832	3659	3178	4163	3951
% Vehicles > 20 MPH Limit	99.6%	99.7%	99.6%	99.4%	99.5%	99.6%	99.1%	99.6%	99.5%
No. Vehicles > 35 MPH	84	57	80	79	71	62	60	74	70
% Vehicles > 35 MPH	2.1%	1.6%	2.0%	1.8%	1.5%	1.7%	1.9%	1.8%	1.8%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5209	5244	5433	5524	6019	5050	3936	5486	5202
Mean Speed (mph)	33.0	33.2	33.0	32.8	33.1	33.3	33.9	33.0	33.2
85%ile Speed (mph)	38.4	38.2	38.1	38.0	38.4	38.4	39.2	38.2	38.4
No. Vehicles > 20 MPH Limit	5144	5231	5389	5473	5979	5033	3913	5443	5166
% Vehicles > 20 MPH Limit	98.8%	99.8%	99.2%	99.1%	99.3%	99.7%	99.4%	99.2%	99.3%
No. Vehicles > 35 MPH	88	74	83	88	91	107	88	85	88
% Vehicles > 35 MPH	1.7%	1.4%	1.5%	1.6%	1.5%	2.1%	2.2%	1.5%	1.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5197	5406	5578	5815	6169	5022	4290	5633	5354
Mean Speed (mph)	28.1	28.4	28.5	28.3	28.3	29.2	29.0	28.3	28.5
85%ile Speed (mph)	32.5	32.3	32.5	32.4	32.2	33.2	33.3	32.4	32.6
No. Vehicles > 20 MPH Limit	5047	5337	5478	5705	6100	4961	4241	5533	5267
% Vehicles > 20 MPH Limit	97.1%	98.7%	98.2%	98.1%	98.9%	98.8%	98.9%	98.2%	98.4%
No. Vehicles > 35 MPH	14	15	8	13	17	24	18	13	16
% Vehicles > 35 MPH	0.3%	0.3%	0.1%	0.2%	0.3%	0.5%	0.4%	0.2%	0.3%

3.5.170 Table 48 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February and May 2021 was 33.0mph, which reduced to 28.3mph in September 2021.

3.5.171 Therefore, the average proportion of vehicles exceeding 20mph was similar in May 2021 compared with February 2021.

3.5.173 Table 49 presents the results for Stirling Road southbound in Dunblane.

Table 49. Site 3 Stirling Road (Southbound) Link Flow & Speed Summary



Dunblane Site 3 Stirling Road Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3272	2847	3206	3510	3661	2760	2588	3299	3121
Mean Speed (mph)	36	35	35	35	35	35	35	35.2	35.1
85%ile Speed (mph)	40	39	40	40	40	39	40	39.7	39.6
No. Vehicles > 20 MPH Limit	3237	2842	3192	3493	3627	2747	2528	3278	3095
% Vehicles > 20 MPH Limit	98.9%	99.8%	99.6%	99.5%	99.1%	99.5%	97.7%	99.4%	99.2%
No. Vehicles > 35 MPH	106	55	76	103	101	71	91	88	86
% Vehicles > 35 MPH	3.2%	1.9%	2.4%	2.9%	2.8%	2.6%	3.5%	2.6%	2.8%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4286	4336	4472	4359	4754	3890	3198	4441	4185
Mean Speed (mph)	35.4	35.8	35.6	35.2	35.6	35.5	35.7	35.5	35.5
85%ile Speed (mph)	39.8	40.3	40.0	39.7	39.9	39.9	40.2	39.9	40.0
No. Vehicles > 20 MPH Limit	4271	4323	4452	4345	4741	3880	3168	4426	4169
% Vehicles > 20 MPH Limit	99.7%	99.7%	99.6%	99.7%	99.7%	99.7%	99.1%	99.7%	99.6%
No. Vehicles > 35 MPH	94	116	141	117	120	119	120	118	118
% Vehicles > 35 MPH	2.2%	2.7%	3.2%	2.7%	2.5%	3.1%	3.8%	2.6%	2.9%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4365	4584	4741	4789	5081	4290	3572	4712	4489
Mean Speed (mph)	30.3	30.6	30.8	29.1	28.9	29.2	28.8	29.9	29.7
85%ile Speed (mph)	35.0	35.0	35.4	33.6	33.1	33.3	33.1	34.4	34.1
No. Vehicles > 20 MPH Limit	4303	4530	4692	4702	4995	4237	3509	4644	4424
% Vehicles > 20 MPH Limit	98.6%	98.8%	99.0%	98.2%	98.3%	98.8%	98.2%	98.6%	98.6%
No. Vehicles > 35 MPH	19	11	21	9	11	12	7	14	13
% Vehicles > 35 MPH	0.4%	0.2%	0.4%	0.2%	0.2%	0.3%	0.2%	0.3%	0.3%

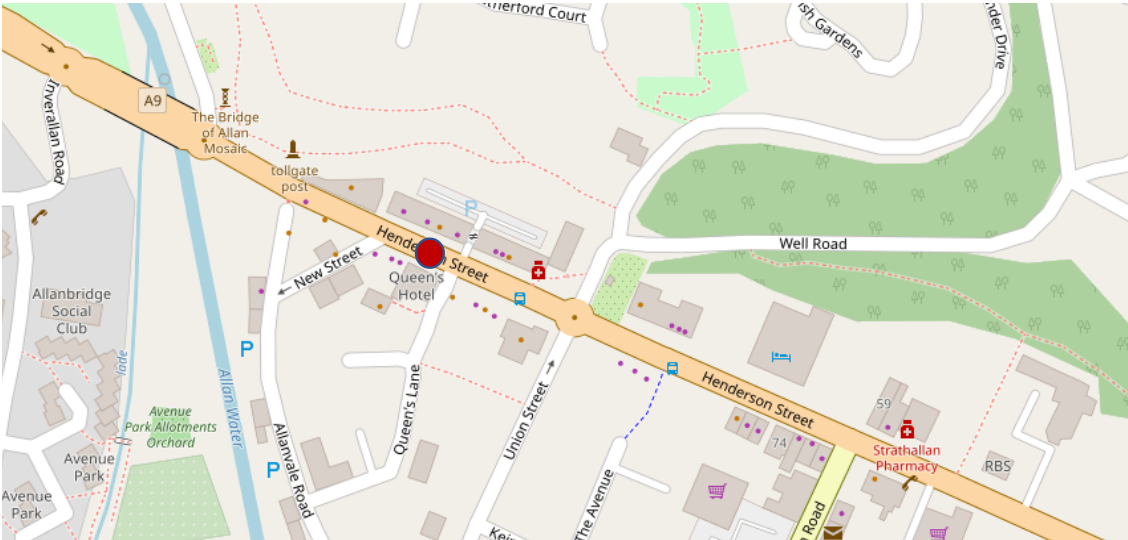
3.5.174 Table 49 shows that the 5-day average traffic flows were lower in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was similar to that of May 2021 (35.2mph and 35.5mph respectively), but reduced in September 2021 (29.9mph)

3.5.175 Therefore, the average proportion of vehicles exceeding 20mph speed was similar across all surveys.

Bridge of Allan

3.5.176 Table 50 presents the results for the Henderson Street eastbound in Bridge of Allan.

Table 50. Site 1 Henderson Street (Eastbound) Link Flow & Speed Summary



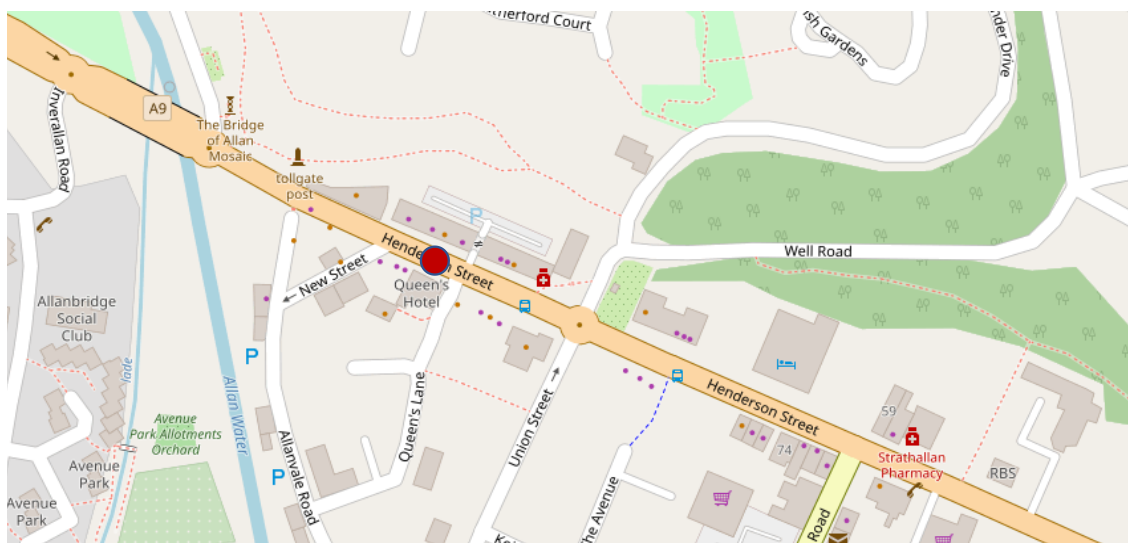
Bridge of Allan Site 1 Henderson Street Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4345	3926	4313	4505	5035	4230	3647	4425	4286
Mean Speed (mph)	20.6	21.3	20.3	20.4	19.3	18.8	19.3	20.4	20.0
85%ile Speed (mph)	24.6	25.2	24.4	24.4	23.4	23.2	23.5	24.4	24.1
No. Vehicles > 20 MPH Limit	2406	2453	2195	2326	2006	1525	1451	2277	2052
% Vehicles > 20 MPH Limit	55.4%	62.5%	50.9%	51.6%	39.8%	36.1%	39.8%	52.0%	48.0%
No. Vehicles > 35 MPH	11	22	17	13	21	20	12	17	17
% Vehicles > 35 MPH	0.3%	0.6%	0.4%	0.3%	0.4%	0.5%	0.3%	0.4%	0.4%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5477	5770	6033	5993	6423	5476	4478	5939	5664
Mean Speed (mph)	20.0	19.8	19.4	19.2	18.4	18.2	19.3	19.4	19.2
85%ile Speed (mph)	23.9	23.6	23.3	23.2	22.8	22.6	23.7	23.4	23.3
No. Vehicles > 20 MPH Limit	2795	2678	2523	2397	2193	1705	1787	2517	2297
% Vehicles > 20 MPH Limit	51.0%	46.4%	41.8%	40.0%	34.1%	31.1%	39.9%	42.7%	40.6%
No. Vehicles > 35 MPH	5	0	5	3	4	1	1	3	3
% Vehicles > 35 MPH	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5672	6024	6543	6279	6586	5959	4935	6221	6000
Mean Speed (mph)	19.7	19.0	18.5	18.7	17.9	17.7	19.0	18.8	18.6
85%ile Speed (mph)	23.6	23.2	22.8	22.8	22.1	22.0	23.1	22.9	22.8
No. Vehicles > 20 MPH Limit	2585	2412	2167	2254	1917	1632	1828	2267	2114
% Vehicles > 20 MPH Limit	45.6%	40.0%	33.1%	35.9%	29.1%	27.4%	37.0%	36.7%	35.5%
No. Vehicles > 35 MPH	28	13	19	24	23	14	20	21	20
% Vehicles > 35 MPH	0.5%	0.2%	0.3%	0.4%	0.3%	0.2%	0.4%	0.3%	0.3%

3.5.177 Table 50 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, and the mean speed was 20.4mph. Flows increased in both May and September 2021, whilst the mean speed reduced over time.

3.5.178 The proportion of vehicles exceeding 20mph in May 2021 was slightly lower than in February 2021, and continued to decline in September 2021.

3.5.179 Table 51 presents the results for the Henderson Street westbound in Bridge of Allan.

Table 51. Site Henderson Street (Westbound) Link Flow & Speed Summary



Bridge of Allan Site 1 Henderson Street Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4786	4202	4672	5101	5572	4751	3844	4867	4704
Mean Speed (mph)	21.0	21.8	20.8	20.7	19.5	18.4	19.3	20.8	20.2
85%ile Speed (mph)	24.7	25.4	24.6	24.7	24.0	22.8	23.7	24.7	24.3
No. Vehicles > 20 MPH Limit	2907	2869	2685	2917	2463	1533	1579	2768	2422
% Vehicles > 20 MPH Limit	60.7%	68.3%	57.5%	57.2%	44.2%	32.3%	41.1%	57.6%	51.6%
No. Vehicles > 35 MPH	11	19	18	21	20	15	18	18	17
% Vehicles > 35 MPH	0.2%	0.5%	0.4%	0.4%	0.4%	0.3%	0.5%	0.4%	0.4%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5823	6170	6480	6638	7011	6108	4700	6424	6133
Mean Speed (mph)	20.9	20.3	19.7	19.4	18.7	18.1	19.5	19.8	19.5
85%ile Speed (mph)	24.7	24.6	24.2	23.8	23.5	22.9	24.0	24.2	24.0
No. Vehicles > 20 MPH Limit	3452	3286	2975	2921	2641	1958	2056	3055	2756
% Vehicles > 20 MPH Limit	59.3%	53.3%	45.9%	44.0%	37.7%	32.1%	43.7%	48.0%	45.1%
No. Vehicles > 35 MPH	0	1	6	0	5	1	5	2	3
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	6244	6734	7399	6989	7546	6974	5519	6982	6772
Mean Speed (mph)	19.5	18.7	17.5	18.6	17.6	16.4	18.7	18.4	18.1
85%ile Speed (mph)	23.6	23.2	22.8	23.3	22.5	21.8	23.1	23.1	22.9
No. Vehicles > 20 MPH Limit	2813	2534	2290	2647	2250	1617	2069	2507	2317
% Vehicles > 20 MPH Limit	45.1%	37.6%	31.0%	37.9%	29.8%	23.2%	37.5%	36.3%	34.6%
No. Vehicles > 35 MPH	21	16	12	17	16	20	21	16	18
% Vehicles > 35 MPH	0.3%	0.2%	0.2%	0.2%	0.2%	0.3%	0.4%	0.2%	0.3%

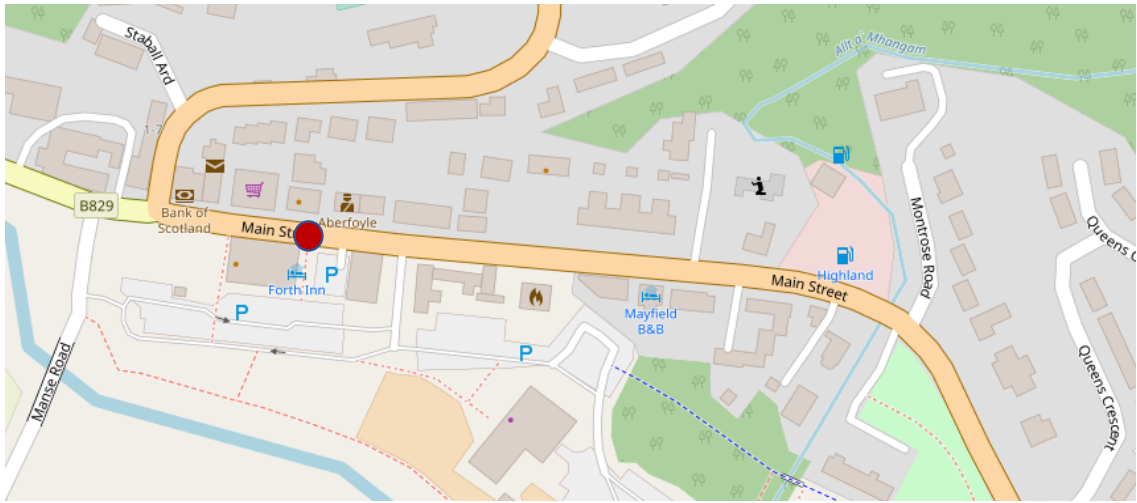
3.5.180 Table 51 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 20.8mph. Flows increased in May 2021 and continued to increase in September 2021, whilst the mean speed reduced over time.

3.5.181 The proportion of vehicles exceeding 20mph in May 2021 was slightly lower than in February 2021, and continued to decline in September 2021.

Aberfoyle

3.5.182 Table 52 presents the results for the Main Street eastbound in Aberfoyle.

Table 52. Site 1 Main Street (Eastbound) Link Flow & Speed Summary



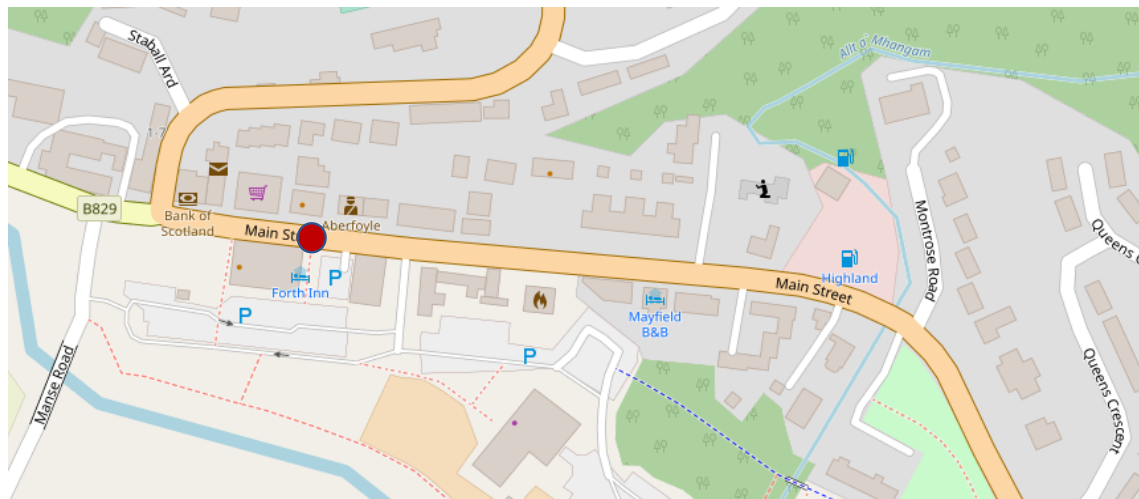
Aberfoyle Site 1 Main Street Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	708	659	742	861	940	971	958	782	834
Mean Speed (mph)	20.0	20.1	20.7	19.0	20.0	18.8	18.9	20.0	19.6
85%ile Speed (mph)	25.6	25.4	26.0	24.4	25.3	23.5	23.7	25.3	24.8
No. Vehicles > 20 MPH Limit	347	307	380	330	439	327	360	361	356
% Vehicles > 20 MPH Limit	49.0%	46.6%	51.2%	38.3%	46.7%	33.7%	37.6%	46.4%	43.3%
No. Vehicles > 35 MPH	3	7	7	3	2	3	0	4	4
% Vehicles > 35 MPH	0.4%	1.1%	0.9%	0.3%	0.2%	0.3%	0.0%	0.6%	0.5%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	761	1019	1281	1253	1454	1421	1547	1154	1248
Mean Speed (mph)	21.1	20.5	20.6	20.6	19.4	19.3	18.9	20.4	20.1
85%ile Speed (mph)	26.5	25.3	25.7	25.9	24.8	24.3	23.9	25.6	25.2
No. Vehicles > 20 MPH Limit	445	549	697	698	654	606	604	609	608
% Vehicles > 20 MPH Limit	58.5%	53.9%	54.4%	55.7%	45.0%	42.6%	39.0%	53.5%	49.9%
No. Vehicles > 35 MPH	2	2	5	4	2	7	3	3	4
% Vehicles > 35 MPH	0.3%	0.2%	0.4%	0.3%	0.1%	0.5%	0.2%	0.3%	0.3%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1335	1452	1821	1241	1467	508	2134	1463	1423
Mean Speed (mph)	18.2	17.9	17.8	18.9	17.7	18.8	16.3	18.1	17.9
85%ile Speed (mph)	22.6	22.3	22.0	23.3	21.9	23.4	20.1	22.4	22.2
No. Vehicles > 20 MPH Limit	426	424	502	469	388	190	331	442	390
% Vehicles > 20 MPH Limit	31.9%	29.2%	27.6%	37.8%	26.4%	37.4%	15.5%	30.6%	29.4%
No. Vehicles > 35 MPH	4	1	1	6	3	1	1	3	2
% Vehicles > 35 MPH	0.3%	0.1%	0.1%	0.5%	0.2%	0.2%	0.0%	0.2%	0.2%

3.5.183 Table 52 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was 20.0mph. The highest flows were observed in September 2021 when the mean speed was 18.1mph

3.5.184 The proportion of vehicles exceeding 20mph was similar in February 2021 and May 2021, but decreased in September 2021.

3.5.185 Table 53 presents the results for the Main Street westbound in Main Street.

Table 53. Site Main Street (Westbound) Link Flow & Speed Summary



Aberfoyle Site 1 Main Street Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	781	733	804	907	1024	1032	1017	850	900
Mean Speed (mph)	21	21	21	21	21	20	21	21.0	20.9
85%ile Speed (mph)	27	26	27	26	27	26	27	26.6	26.6
No. Vehicles > 20 MPH Limit	470	417	494	523	635	558	573	508	524
% Vehicles > 20 MPH Limit	60.2%	56.9%	61.4%	57.7%	62.0%	54.1%	56.3%	59.6%	58.4%
No. Vehicles > 35 MPH	7	4	9	7	6	4	16	7	8
% Vehicles > 35 MPH	0.9%	0.5%	1.1%	0.8%	0.6%	0.4%	1.6%	0.8%	0.8%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	808	1028	1376	1310	1580	1435	1537	1220	1296
Mean Speed (mph)	22.6	21.6	22.6	22.2	21.5	21.4	21.5	22.1	21.9
85%ile Speed (mph)	27.5	26.5	27.5	27.0	26.9	26.9	26.5	27.1	27.0
No. Vehicles > 20 MPH Limit	573	676	991	906	1002	902	953	830	858
% Vehicles > 20 MPH Limit	70.9%	65.8%	72.0%	69.2%	63.4%	62.9%	62.0%	68.3%	66.6%
No. Vehicles > 35 MPH	14	8	8	16	12	8	15	12	12
% Vehicles > 35 MPH	1.7%	0.8%	0.6%	1.2%	0.8%	0.6%	1.0%	1.0%	0.9%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1415	1547	1883	1331	1607	653	1991	1557	1490
Mean Speed (mph)	19.7	19.4	19.3	19.9	18.9	20.0	18.0	19.4	19.3
85%ile Speed (mph)	23.9	23.9	24.0	24.5	23.8	24.8	22.5	24.0	23.9
No. Vehicles > 20 MPH Limit	659	692	849	661	659	332	626	704	640
% Vehicles > 20 MPH Limit	46.6%	44.7%	45.1%	49.7%	41.0%	50.8%	31.4%	45.4%	44.2%
No. Vehicles > 35 MPH	3	2	8	3	4	0	4	4	3
% Vehicles > 35 MPH	0.2%	0.1%	0.4%	0.2%	0.2%	0.0%	0.2%	0.2%	0.2%

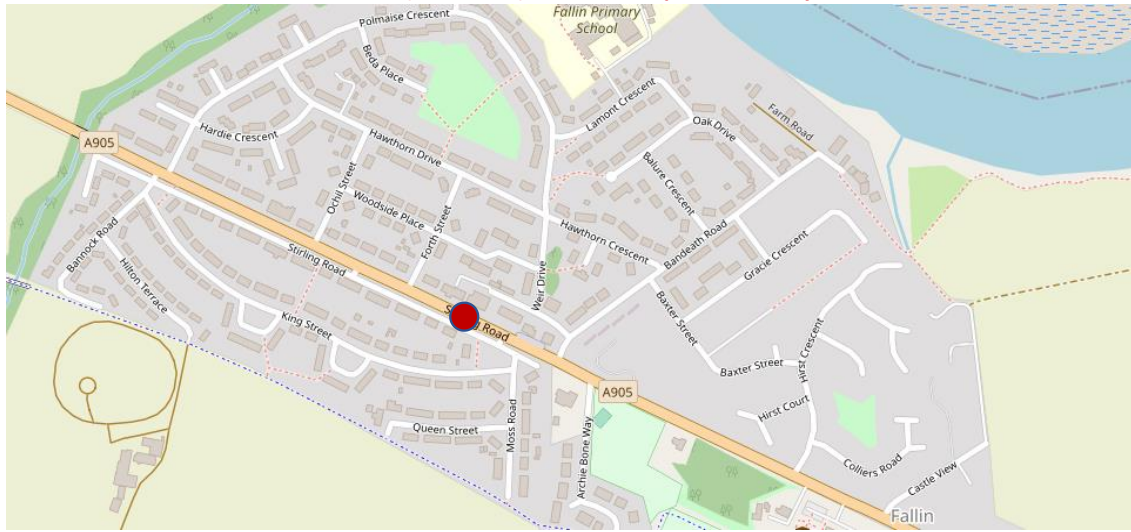
3.5.186 Table 53 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in May 2021 (22.1mph).

3.5.187 The proportion of vehicles exceeding 20mph was similar in May 2021 and February 2021, before decreasing in September 2021.

Fallin

3.5.188 Table 54 presents the results for the A905 eastbound in Fallin.

Table 54. Site 1 A905 (Eastbound) Link Flow & Speed Summary



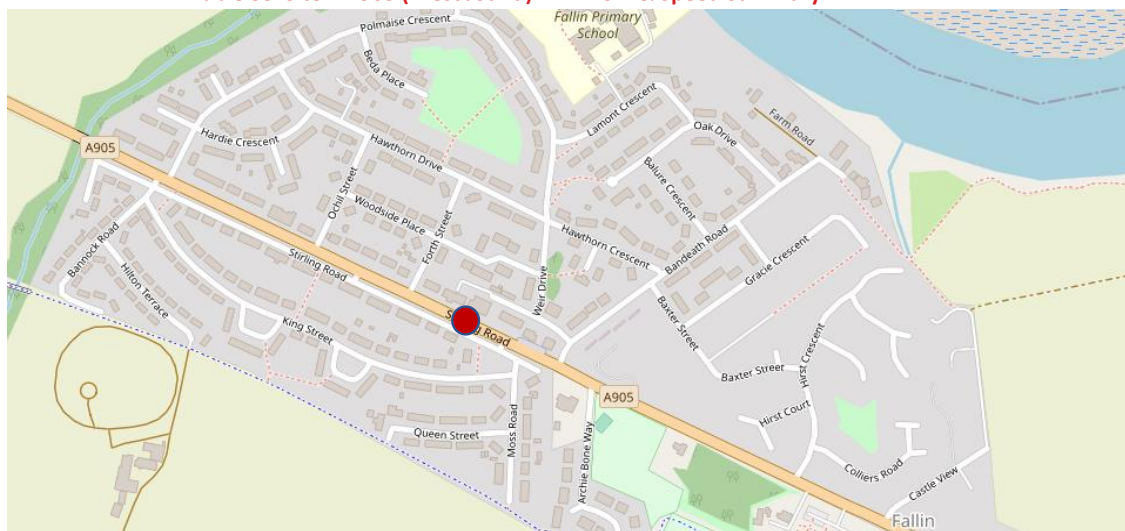
Fallin Site 1 A905 Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3442	3137	3408	3469	3926	2653	2255	3476	3184
Mean Speed (mph)	27.8	27.8	27.9	28.1	27.6	28.4	29.2	27.8	28.1
85%ile Speed (mph)	31.5	31.4	31.4	31.7	31.3	31.9	33.0	31.5	31.7
No. Vehicles > 20 MPH Limit	3304	3049	3328	3383	3800	2601	2214	3373	3097
% Vehicles > 20 MPH Limit	96.0%	97.2%	97.7%	97.5%	96.8%	98.0%	98.2%	97.0%	97.3%
No. Vehicles > 35 MPH	144	118	126	141	142	127	165	134	138
% Vehicles > 35 MPH	4.2%	3.8%	3.7%	4.1%	3.6%	4.8%	7.3%	3.9%	4.5%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4126	4379	4340	4245	4616	3476	2970	4341	4022
Mean Speed (mph)	28.7	28.7	28.2	29.0	28.3	29.4	29.8	28.6	28.9
85%ile Speed (mph)	32	32	32	33	32	33	33	32.2	32.5
No. Vehicles > 20 MPH Limit	4036	4292	4174	4182	4493	3430	2937	4235	3935
% Vehicles > 20 MPH Limit	97.8%	98.0%	96.2%	98.5%	97.3%	98.7%	98.9%	97.6%	97.9%
No. Vehicles > 35 MPH	218	191	187	224	201	249	251	204	217
% Vehicles > 35 MPH	5.3%	4.4%	4.3%	5.3%	4.4%	7.2%	8.5%	4.7%	5.6%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4022	4282	4245	4193	4483	3560	2904	4245	3956
Mean Speed (mph)	25.4	25.3	25.3	25.5	25.2	26.2	26.7	25.3	25.7
85%ile Speed (mph)	29.7	29.4	29.7	29.7	29.3	30.8	30.8	29.6	29.9
No. Vehicles > 20 MPH Limit	3713	3942	3846	3812	4088	3350	2780	3880	3647
% Vehicles > 20 MPH Limit	92.3%	92.1%	90.6%	90.9%	91.2%	94.1%	95.7%	91.4%	92.4%
No. Vehicles > 35 MPH	82	114	102	93	87	113	115	96	101
% Vehicles > 35 MPH	2.0%	2.7%	2.4%	2.2%	1.9%	3.2%	4.0%	2.3%	2.6%

3.5.189 Table 54 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in May 2021 (28.6mph), before reducing again in September 2021.

3.5.190 The proportion of vehicles exceeding 20mph was higher in May 2021 when compared to February 2021, before reducing slightly in September 2021, although was still over 90%.

3.5.191 Table 55 presents the results for the A905 westbound in Fallin.

Table 55. Site 1 A905 (Westbound) Link Flow & Speed Summary



Fallin Site 1 A905 Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3387	3081	3352	3372	3869	2598	2208	3412	3124
Mean Speed (mph)	28.2	28.3	28.4	28.3	28.3	28.8	29.4	28.3	28.5
85 th ile Speed (mph)	31.8	32.2	31.9	31.8	31.9	32.5	33.2	31.9	32.2
No. Vehicles > 20 MPH Limit	3302	3000	3266	3298	3785	2560	2163	3330	3053
% Vehicles > 20 MPH Limit	97.5%	97.4%	97.4%	97.8%	97.8%	98.5%	98.0%	97.6%	97.8%
No. Vehicles > 35 MPH	132	174	170	137	178	148	172	158	159
% Vehicles > 35 MPH	3.9%	5.6%	5.1%	4.1%	4.6%	5.7%	7.8%	4.7%	5.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4123	4214	4261	4156	4411	3343	2766	4233	3896
Mean Speed (mph)	28.7	28.4	28.1	28.7	28.5	29.4	29.8	28.5	28.8
85 th ile Speed (mph)	32	32	32	32	32	33	34	32.0	32.4
No. Vehicles > 20 MPH Limit	4052	4123	4094	4076	4304	3286	2732	4130	3810
% Vehicles > 20 MPH Limit	98.3%	97.8%	96.1%	98.1%	97.6%	98.3%	98.8%	97.6%	97.8%
No. Vehicles > 35 MPH	198	197	182	210	202	240	241	198	210
% Vehicles > 35 MPH	4.8%	4.7%	4.3%	5.1%	4.6%	7.2%	8.7%	4.7%	5.6%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3922	4173	4249	4049	4436	3396	2795	4166	3860
Mean Speed (mph)	25.4	25.2	25.7	25.8	25.6	26.4	26.9	25.5	25.9
85 th ile Speed (mph)	29.6	29.4	29.9	29.9	29.9	30.9	31.3	29.7	30.1
No. Vehicles > 20 MPH Limit	3574	3778	3941	3750	4048	3189	2624	3818	3558
% Vehicles > 20 MPH Limit	91.1%	90.5%	92.8%	92.6%	91.3%	93.9%	93.9%	91.7%	92.3%
No. Vehicles > 35 MPH	82	74	106	97	96	120	120	91	99
% Vehicles > 35 MPH	2.1%	1.8%	2.5%	2.4%	2.2%	3.5%	4.3%	2.2%	2.7%

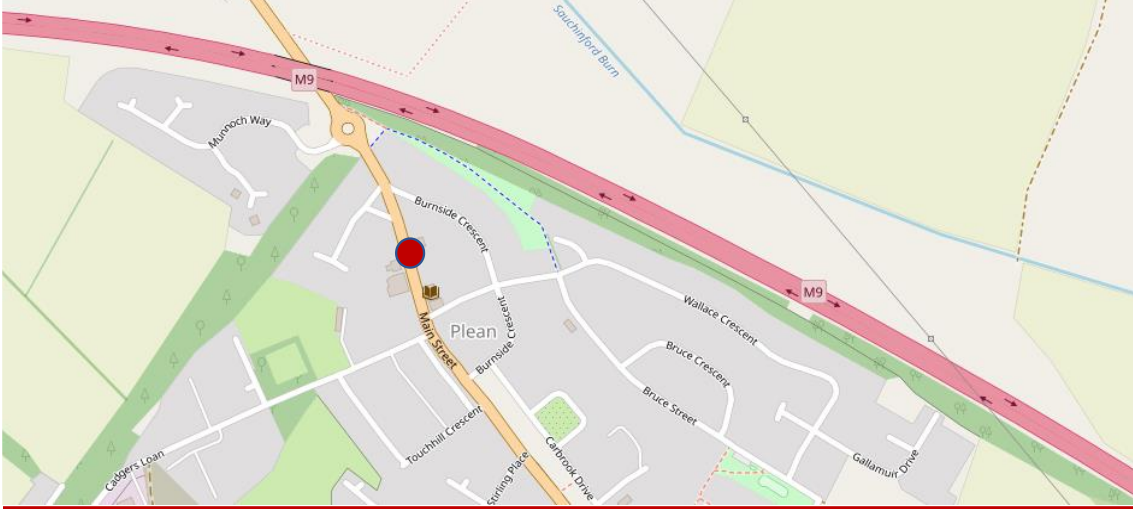
3.5.192 Table 55 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed was similar for both February and May 2021 (28.3mph and 28.5mph respectively), but reduced in September 2021 (25.5mph).

3.5.193 The proportion of vehicles exceeding 20mph in May 2021 was similar to February 2021, during a period of lockdown, but reduced slightly in September 2021 although it was over 90% in all survey periods.

Plean

3.5.194 Table 56 presents the results for the Main Street northbound in Plean.

Table 56. Site 1 Main Street (Northbound) Link Flow & Speed Summary



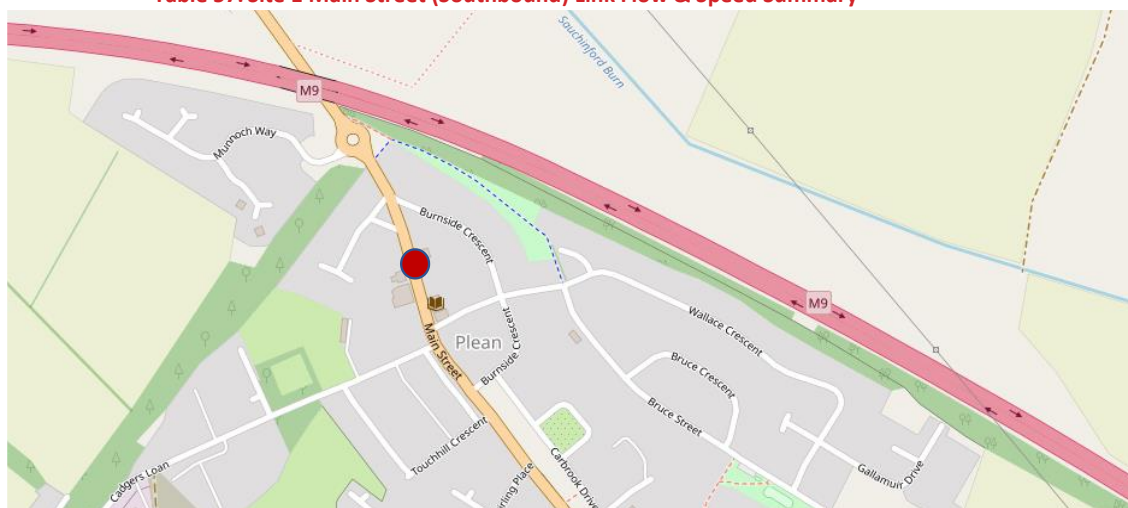
Plean Site 1 Main Street Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3914	3991	4041	4090	4240	2779	2496	4055	3650
Mean Speed (mph)	24.9	24.4	25.0	24.8	24.6	25.7	26.1	24.7	25.1
85 th ile Speed (mph)	28.5	28.1	28.5	28.3	28.5	29.8	29.9	28.4	28.8
No. Vehicles > 30 MPH Limit	310	281	326	291	343	389	360	310	329
% Vehicles > 30 MPH Limit	7.9%	7.0%	8.1%	7.1%	8.1%	14.0%	14.4%	7.6%	9.5%
No. Vehicles > 35 MPH	4	3	2	3	3	0	0	3	2
% Vehicles > 35 MPH	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4941	4948	5100	5079	5097	3826	3376	5033	4624
Mean Speed (mph)	25.4	25.2	25.2	25.1	25.1	25.9	26.6	25.2	25.5
85 th ile Speed (mph)	28.9	29.0	29.1	28.9	29.1	29.6	30.4	29.0	29.3
No. Vehicles > 30 MPH Limit	483	500	547	484	539	488	587	511	518
% Vehicles > 30 MPH Limit	9.8%	10.1%	10.7%	9.5%	10.6%	12.8%	17.4%	10.1%	11.6%
No. Vehicles > 35 MPH	3	1	2	0	1	1	5	1	2
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4445	4556	4683	4492	4701	3646	3147	4575	4239
Mean Speed (mph)	23.3	22.9	23.1	23.1	23.1	23.9	24.0	23.1	23.3
85 th ile Speed (mph)	27.2	26.9	27.1	27.1	27.0	27.7	28.4	27.1	27.3
No. Vehicles > 30 MPH Limit	201	199	225	194	203	225	250	204	214
% Vehicles > 30 MPH Limit	4.5%	4.4%	4.8%	4.3%	4.3%	6.2%	7.9%	4.5%	5.2%
No. Vehicles > 35 MPH	37	40	28	34	26	32	47	33	35
% Vehicles > 35 MPH	0.0%	-0.1%	0.0%	-0.1%	-0.1%	0.0%	0.1%	0.0%	0.0%

3.5.195 Table 56 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was lower than May 2021. The mean speed was lowest in September 2021.

3.5.196 The proportion of vehicles exceeding 30mph was higher in May 2021 than in February 2021, the lowest proportion was observed in September 2021.

3.5.197 Table 57 presents the results for Main Street southbound in Plan.

Table 57. Site 1 Main Street (Southbound) Link Flow & Speed Summary



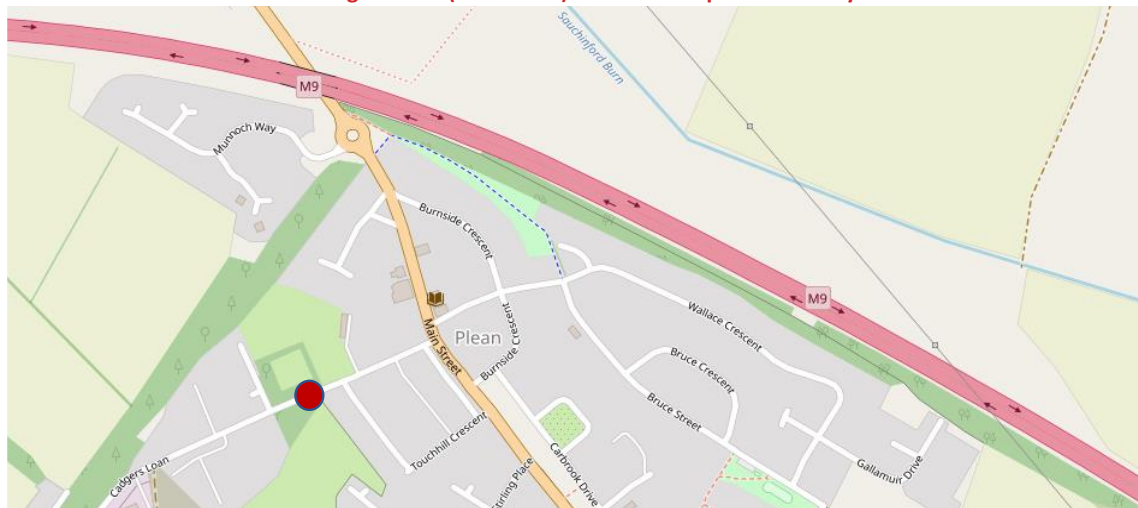
Plan Site 1 Main Street Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3947	4196	4152	4306	4314	2916	2497	4183	3761
Mean Speed (mph)	24.0	23.1	23.6	23.6	23.1	24.5	24.9	23.5	23.8
85%ile Speed (mph)	28.1	27.3	28.0	27.8	27.2	29.0	29.3	27.7	28.1
No. Vehicles > 20 MPH Limit	240	188	269	239	155	296	297	218	241
% Vehicles > 20 MPH Limit	6.1%	4.5%	6.5%	5.6%	3.6%	10.2%	11.9%	5.2%	6.9%
No. Vehicles > 35 MPH	1	0	1	0	0	4	1	0	1
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4856	5078	5187	5031	5216	4090	3308	5074	4681
Mean Speed (mph)	24.4	24.3	24.0	24.0	23.5	24.1	25.8	24.0	24.3
85%ile Speed (mph)	28.6	28.5	28.5	28.3	28.1	28.9	30.0	28.4	28.7
No. Vehicles > 20 MPH Limit	446	405	417	386	367	402	488	404	416
% Vehicles > 20 MPH Limit	9.2%	8.0%	8.0%	7.7%	7.0%	9.8%	14.8%	8.0%	9.2%
No. Vehicles > 35 MPH	9	1	1	1	1	2	4	3	3
% Vehicles > 35 MPH	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4486	4674	4928	4712	4819	3649	3146	4724	4345
Mean Speed (mph)	22.0	21.5	21.6	21.3	21.2	22.5	23.1	21.5	21.9
85%ile Speed (mph)	26.7	26.4	26.5	26.4	25.9	27.5	27.7	26.4	26.7
No. Vehicles > 30 MPH Limit	176	173	190	201	155	210	204	179	187
% Vehicles > 30 MPH Limit	3.9%	3.7%	3.9%	4.3%	3.2%	5.8%	6.5%	3.8%	4.5%
No. Vehicles > 35 MPH	24	19	25	19	23	30	36	22	25
% Vehicles > 35 MPH	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%

3.5.198 Table 57 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed in February 2021 was 23.5mph and reduced to 21.5mph in September 2021.

3.5.199 The proportion of vehicles exceeding 20mph in May 2021 was higher than February 2021, before reducing in September 2021.

3.5.200 Table 58 presents the results for Cadgers Loan eastbound in Plean.

Table 58. Site 2 Cadgers Loan (eastbound) Link Flow & Speed Summary



Plean Site 2 Cadgers Loan east of the junction with Parkside Court Eastbound

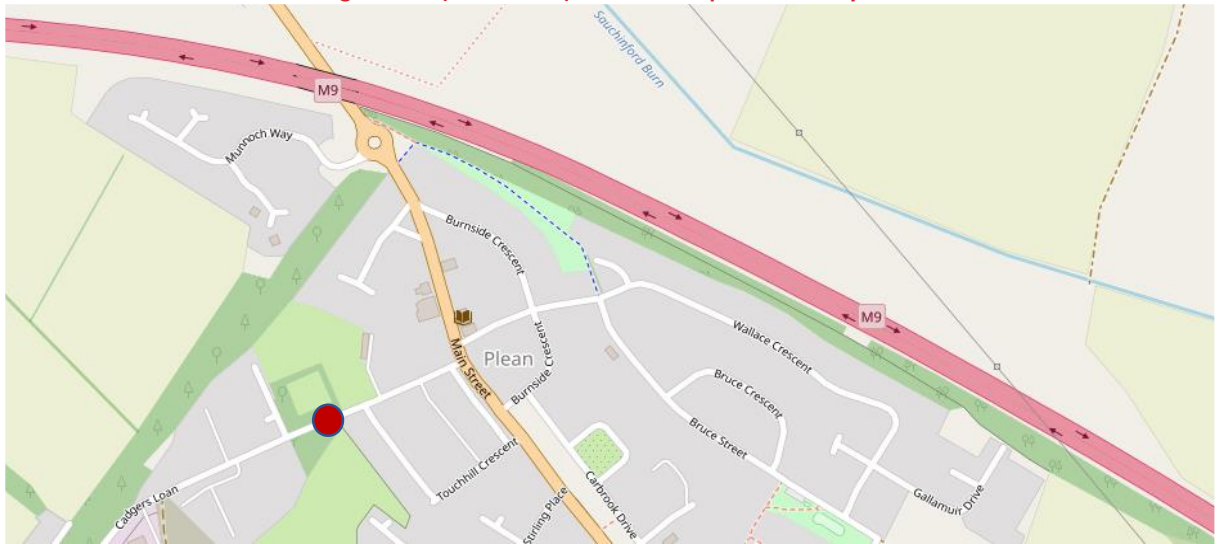
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	509	510	513	441	462	478	403	487	474
Mean Speed (mph)	29.4	29.7	29.4	29.5	28.3	28.8	28.0	29.3	29.0
85%ile Speed (mph)	35.9	36.9	35.8	36.8	35.7	35.6	34.2	36.2	35.8
No. Vehicles > 20 MPH Limit	470	474	476	408	412	433	370	448	435
% Vehicles > 20 MPH Limit	92.3%	92.9%	92.8%	92.5%	89.2%	90.6%	91.8%	92.0%	91.7%
No. Vehicles > 35 MPH	98	115	90	94	79	83	50	95	87
% Vehicles > 35 MPH	19.3%	22.5%	17.5%	21.3%	17.1%	17.4%	12.4%	19.6%	18.2%

3.5.201 Table 58 shows that the average flow was 487 vehicles and the mean speed was 29.3mph.

3.5.202 The proportion of vehicles exceeding 20mph was 92.0%.

3.5.203 Table 59 presents the results for Cadgers Loan westbound in Plean.

Table 59. Site 2 Cadgers Loan (Westbound) Link Flow & Speed Summary



Plean Site 2 Cadgers Loan east of the junction with Parkside Court Westbound									
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	471	514	525	477	477	469	405	493	477
Mean Speed (mph)	28.6	29.1	29.4	28.8	28.0	28.4	28.2	28.8	28.6
85%ile Speed (mph)	34.7	35.3	35.9	35.2	34.7	34.3	34.1	35.2	34.9
No. Vehicles > 20 MPH Limit	432	475	493	437	426	425	378	453	438
% Vehicles > 20 MPH Limit	91.7%	92.4%	93.9%	91.6%	89.3%	90.6%	93.3%	91.8%	91.8%
No. Vehicles > 35 MPH	66	84	97	75	66	57	47	78	70
% Vehicles > 35 MPH	14.0%	16.3%	18.5%	15.7%	13.8%	12.2%	11.6%	15.7%	14.6%

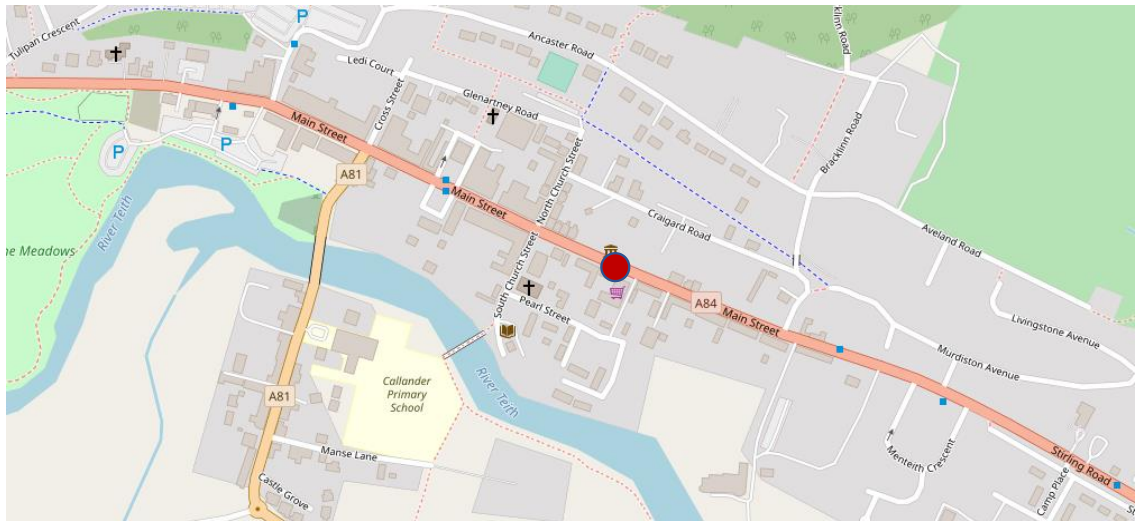
3.5.204 Table 59 shows that the average flow was 493 vehicles and the mean speed was 28.8mph.

3.5.205 The proportion of vehicles exceeding 20mph was 91.8.

Callander

3.5.206 Table 60 presents the results for the Main Street eastbound in Callander.

Table 60. Site Main Street (Eastbound) Link Flow & Speed Summary



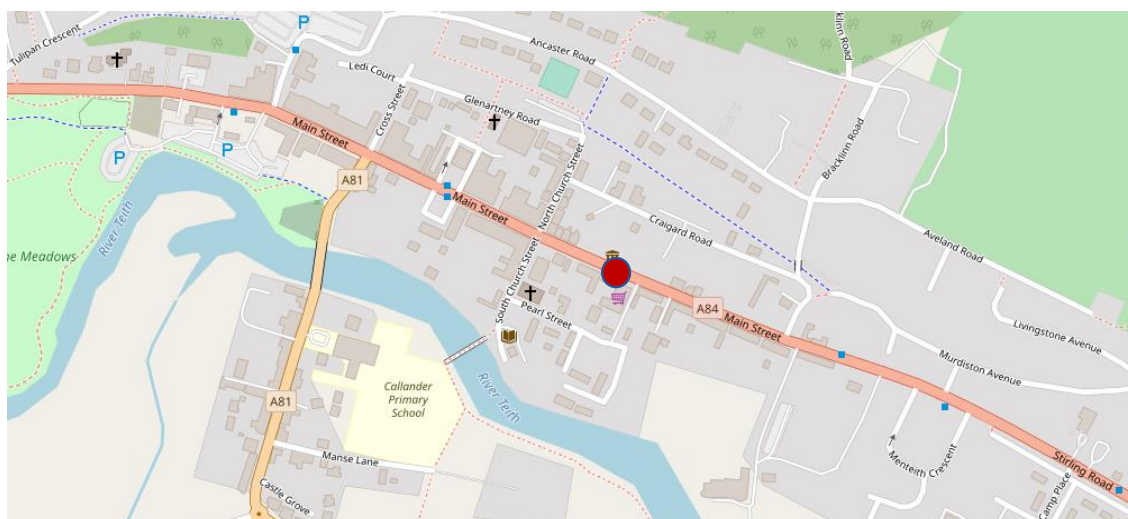
Callander Site 1 Main Street Eastbound									
February 2021	Monday 01 Mar 2021	Tuesday 02 Mar 2021	Wednesday 03 Mar 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2657	2671	2597	2835	2959	2501	2211	2744	2633
Mean Speed (mph)	24.0	24.1	23.8	24.2	24.4	23.9	24.5	24.1	24.1
85%ile Speed (mph)	28.3	28.4	28.1	28.5	28.5	28.6	29.1	28.4	28.5
No. Vehicles > 20 MPH Limit	2203	2252	2135	2400	2559	2036	1854	2310	2206
% Vehicles > 20 MPH Limit	82.9%	84.3%	82.2%	84.7%	86.5%	81.4%	83.9%	84.1%	83.7%
No. Vehicles > 35 MPH	26	19	22	26	25	16	28	24	23
% Vehicles > 35 MPH	1.0%	0.7%	0.8%	0.9%	0.8%	0.6%	1.3%	0.9%	0.9%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4122	4297	4387	4236	5006	4360	4361	4410	4396
Mean Speed (mph)	23.0	22.9	23.1	22.2	21.9	21.8	22.5	22.6	22.5
85%ile Speed (mph)	27.7	27.3	27.7	27.0	26.7	26.9	26.9	27.3	27.2
No. Vehicles > 20 MPH Limit	3159	3276	3471	3046	3350	2940	3156	3260	3200
% Vehicles > 20 MPH Limit	76.6%	76.2%	79.1%	71.9%	66.9%	67.4%	72.4%	74.2%	72.9%
No. Vehicles > 35 MPH	34	31	26	23	38	26	33	30	30
% Vehicles > 35 MPH	0.8%	0.7%	0.6%	0.5%	0.8%	0.6%	0.8%	0.7%	0.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 03 Sep 2021	Saturday 04 Sep 2021	Sunday 05 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3922	4233	5087	4387	5304	5304	5392	4587	4804
Mean Speed (mph)	21.2	20.8	21.4	21.5	20.4	20.2	20.7	21.1	20.9
85%ile Speed (mph)	25.8	25.7	25.7	25.9	25.0	24.8	25.2	25.6	25.4
No. Vehicles > 20 MPH Limit	2418	2502	3316	2809	2900	2748	3043	2789	2819
% Vehicles > 20 MPH Limit	61.7%	59.1%	65.2%	64.0%	54.7%	51.8%	56.4%	60.9%	59.0%
No. Vehicles > 35 MPH	17	23	18	30	15	22	24	21	21
% Vehicles > 35 MPH	0.4%	0.5%	0.4%	0.7%	0.3%	0.4%	0.4%	0.5%	0.5%

3.5.207 Table 60 shows that the 5-day average traffic flows were far lower in February 2021 when Scotland was in a period of lockdown. The mean speed in February 2021 was 24.1mph. The highest flows were observed in September 2021 when the mean speed had decreased to 21.1mph.

3.5.208 The proportion of vehicles exceeding 20mph was lower in May 2021 when compared to February 2021, the decline continuing in September 2021.

3.5.209 Table 61 presents the results for the Main Street westbound in Callander.

Table 61. Site 1 Main Street (Westbound) Link Flow & Speed Summary



Callander Site 1 Main Street Westbound									
February 2021	Monday 01 Mar 2021	Tuesday 02 Mar 2021	Wednesday 03 Mar 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2600	2406	2260	2423	2569	2213	2028	2452	2357
Mean Speed (mph)	24.4	24.7	24.9	24.9	25.3	24.9	25.5	24.8	24.9
85%ile Speed (mph)	28.4	28.6	28.9	29.1	29.3	29.2	29.6	28.9	29.0
No. Vehicles > 20 MPH Limit	2277	2106	1993	2077	2340	1971	1848	2159	2087
% Vehicles > 20 MPH Limit	87.6%	87.5%	88.2%	85.7%	91.1%	89.1%	91.1%	88.0%	88.6%
No. Vehicles > 35 MPH	19	26	22	33	31	24	31	26	27
% Vehicles > 35 MPH	0.7%	1.1%	1.0%	1.4%	1.2%	1.1%	1.5%	1.1%	1.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3931	3881	4000	3935	5197	3919	3340	4189	4029
Mean Speed (mph)	23.5	23.1	23.2	22.8	21.9	22.3	23.2	22.9	22.9
85%ile Speed (mph)	27.4	27.4	27.3	26.7	26.5	26.7	27.6	27.1	27.1
No. Vehicles > 20 MPH Limit	3234	3050	3131	3059	3464	2767	2607	3188	3045
% Vehicles > 20 MPH Limit	82.3%	78.6%	78.3%	77.7%	66.7%	70.6%	78.1%	76.7%	76.0%
No. Vehicles > 35 MPH	36	23	22	19	42	24	31	28	28
% Vehicles > 35 MPH	0.9%	0.6%	0.6%	0.5%	0.8%	0.6%	0.9%	0.7%	0.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 03 Sep 2021	Saturday 04 Sep 2021	Sunday 05 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4071	4081	4793	3879	5639	5569	4133	4493	4595
Mean Speed (mph)	17.3	18.7	20.7	21.1	19.4	16.7	20.5	19.4	19.2
85%ile Speed (mph)	24.1	24.3	24.7	24.9	23.9	23.2	24.6	24.4	24.2
No. Vehicles > 20 MPH Limit	1697	1887	2690	2276	2611	2008	2197	2232	2195
% Vehicles > 20 MPH Limit	41.7%	46.2%	56.1%	58.7%	46.3%	36.1%	53.2%	49.8%	48.3%
No. Vehicles > 35 MPH	23	19	20	20	20	39	21	20	23
% Vehicles > 35 MPH	0.6%	0.5%	0.4%	0.5%	0.4%	0.7%	0.5%	0.5%	0.5%

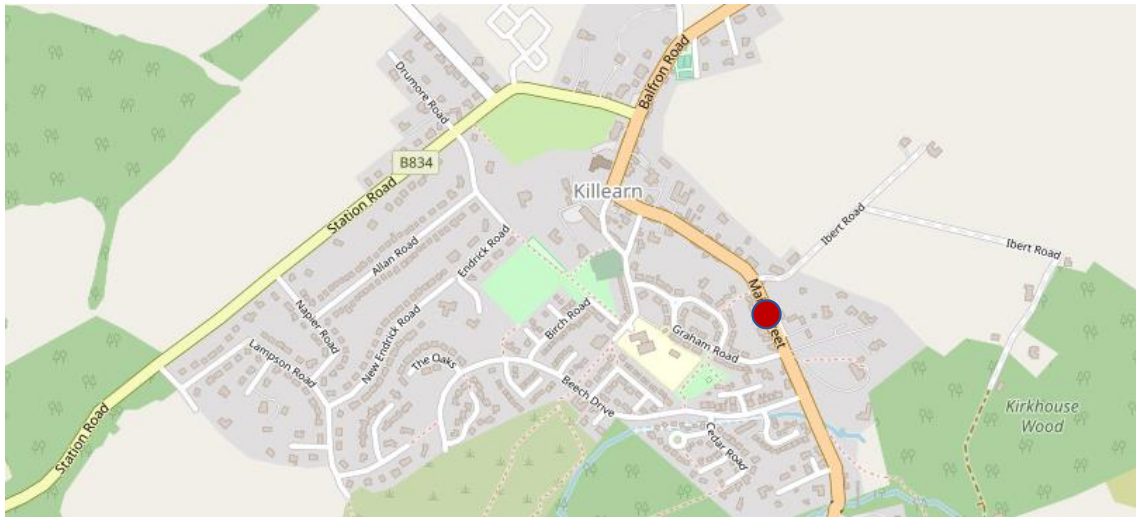
3.5.210 Table 61 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was higher at 24.8mph. Traffic flows were highest in September 2021, by which time the mean speed had decreased to 19.4mph.

3.5.211 The proportion of vehicles exceeding 20mph in May 2021 was lower than February 2021, reducing further in September 2021.

Killearn

3.5.212 Table 62 presents the results for the Main Street northbound in Killearn.

Table 62. Site 1 Main Street (Northbound) Link Flow & Speed Summary



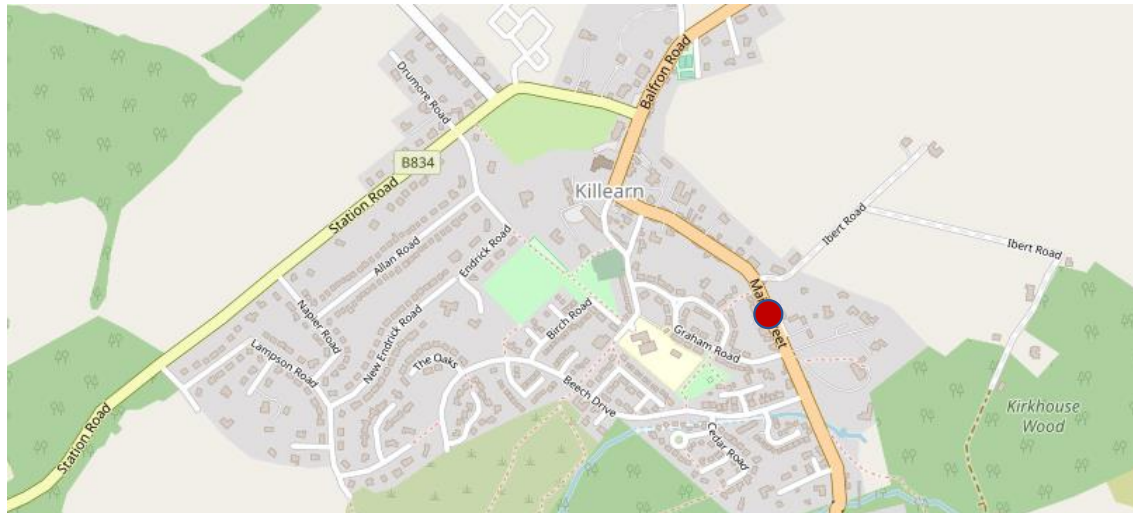
Killearn Site 1 Main Street Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1301	1178	1287	1255	1190	1023	970	1242	1172
Mean Speed (mph)	24.7	24.8	24.3	24.5	24.9	23.3	24.2	24.6	24.4
85%ile Speed (mph)	30.8	31.1	30.6	30.7	31.2	30.4	30.2	30.9	30.7
No. Vehicles > 30 MPH Limit	253	241	230	238	245	169	154	241	219
% Vehicles > 30 MPH Limit	19.4%	20.5%	17.9%	19.0%	20.6%	16.5%	15.9%	19.5%	18.5%
No. Vehicles > 45 MPH	3	2	1	1	0	1	1	1	1
% Vehicles > 45 MPH	0.2%	0.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1641	1545	1630	1688	1656	1229	1023	1632	1487
Mean Speed (mph)	24.8	24.9	24.6	25.0	24.9	24.4	24.9	24.8	24.8
85%ile Speed (mph)	30.3	30.5	30.5	30.8	30.9	30.7	31.2	30.6	30.7
No. Vehicles > 30 MPH Limit	274	278	297	323	337	223	215	302	278
% Vehicles > 30 MPH Limit	16.7%	18.0%	18.2%	19.1%	20.4%	18.1%	21.0%	18.5%	18.8%
No. Vehicles > 45 MPH	1	1	1	0	1	0	0	1	1
% Vehicles > 45 MPH	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1713	1859	1917	1769	1871	1547	1213	1826	1698
Mean Speed (mph)	22.5	22.6	23.3	23.4	23.0	22.9	22.8	23.0	22.9
85%ile Speed (mph)	28.1	28.1	29.3	29.2	28.9	28.7	28.9	28.7	28.7
No. Vehicles > 30 MPH Limit	138	161	237	215	194	171	141	189	180
% Vehicles > 30 MPH Limit	8.1%	8.7%	12.4%	12.2%	10.4%	11.1%	11.6%	10.3%	10.6%
No. Vehicles > 45 MPH	0	1	3	3	2	5	0	2	2
% Vehicles > 45 MPH	0.0%	0.1%	0.2%	0.2%	0.1%	0.3%	0.0%	0.1%	0.1%

3.5.213 Table 62 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was 24.6mph. Flows were highest in September 2021 when the mean speed was 23.0mph.

3.5.214 The proportion of vehicles exceeding 20mph was similar in February and May 2021, but reduced in September 2021.

3.5.215 Table 63 presents the results for the Main Street southbound in Killearn.

Table 63. Site 1 Main Street (Southbound) Link Flow & Speed Summary



Killearn Site 1 Main Street Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1095	928	1053	1037	966	824	892	1016	971
Mean Speed (mph)	27.8	28.1	27.6	28.1	28.2	26.9	26.8	28.0	27.6
85 th ile Speed (mph)	32.8	32.8	32.8	33.0	33.3	32.1	32.1	32.9	32.7
No. Vehicles > 30 MPH Limit	346	311	308	329	338	213	237	326	297
% Vehicles > 30 MPH Limit	31.6%	33.5%	29.2%	31.7%	35.0%	25.8%	26.6%	32.2%	30.5%
No. Vehicles > 45 MPH	0	4	3	2	4	2	3	3	3
% Vehicles > 45 MPH	0.0%	0.4%	0.3%	0.2%	0.4%	0.2%	0.3%	0.3%	0.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1325	1301	1377	1421	1474	1080	929	1380	1272
Mean Speed (mph)	27.1	27.4	27.3	27.3	27.3	26.7	26.7	27.3	27.1
85 th ile Speed (mph)	31.6	31.9	32.2	31.9	31.9	31.1	31.9	31.9	31.8
No. Vehicles > 30 MPH Limit	322	360	363	359	390	248	228	359	324
% Vehicles > 30 MPH Limit	24.3%	27.7%	26.4%	25.3%	26.5%	23.0%	24.5%	26.0%	25.4%
No. Vehicles > 45 MPH	2	5	3	2	1	1	1	3	2
% Vehicles > 45 MPH	0.2%	0.4%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1345	1473	1563	1496	1557	1285	1054	1487	1396
Mean Speed (mph)	25.5	25.5	25.9	25.9	25.7	25.7	25.8	25.7	25.7
85 th ile Speed (mph)	30.8	30.8	31.2	30.9	30.9	31.0	31.3	30.9	31.0
No. Vehicles > 30 MPH Limit	252	276	314	302	305	243	214	290	272
% Vehicles > 30 MPH Limit	18.7%	18.7%	20.1%	20.2%	19.6%	18.9%	20.3%	19.5%	19.5%
No. Vehicles > 45 MPH	1	2	2	2	2	4	1	2	2
% Vehicles > 45 MPH	0.1%	0.1%	0.1%	0.1%	0.1%	0.3%	0.1%	0.1%	0.1%

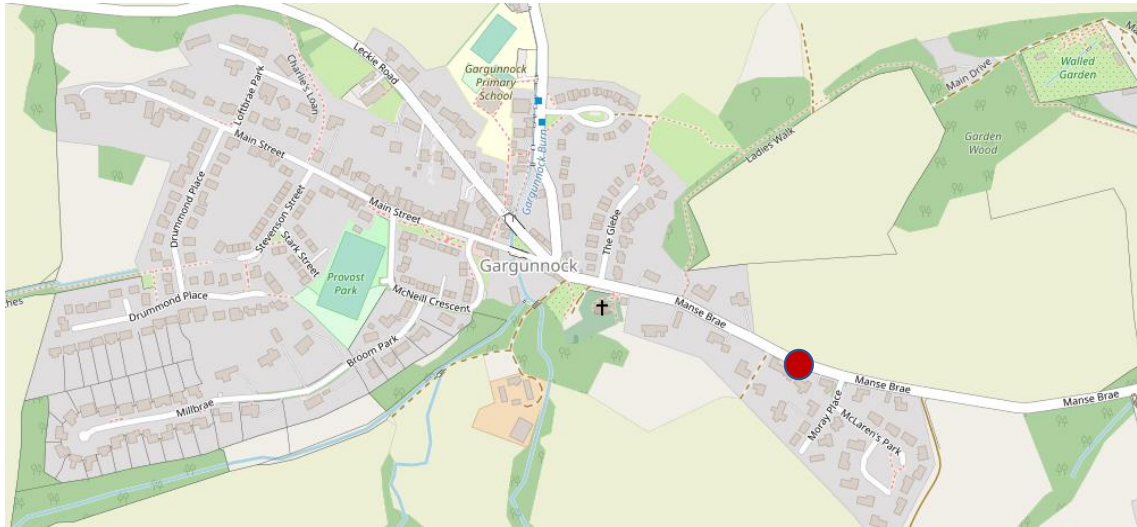
3.5.216 Table 63 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was higher at 28.0mph. The highest flows were observed in September 2021 when the mean speed was lowest at 25.7mph.

3.5.217 The proportion of vehicles exceeding 20mph was lower in May 2021, when compared with February 2021, the reduction continued in September 2021.

Gargunnoch

3.5.219 Table 64 presents the results for the Manse Brae eastbound in Gargunnoch.

Table 64. Site 1 Manse Brae (Eastbound) Link Flow & Speed Summary



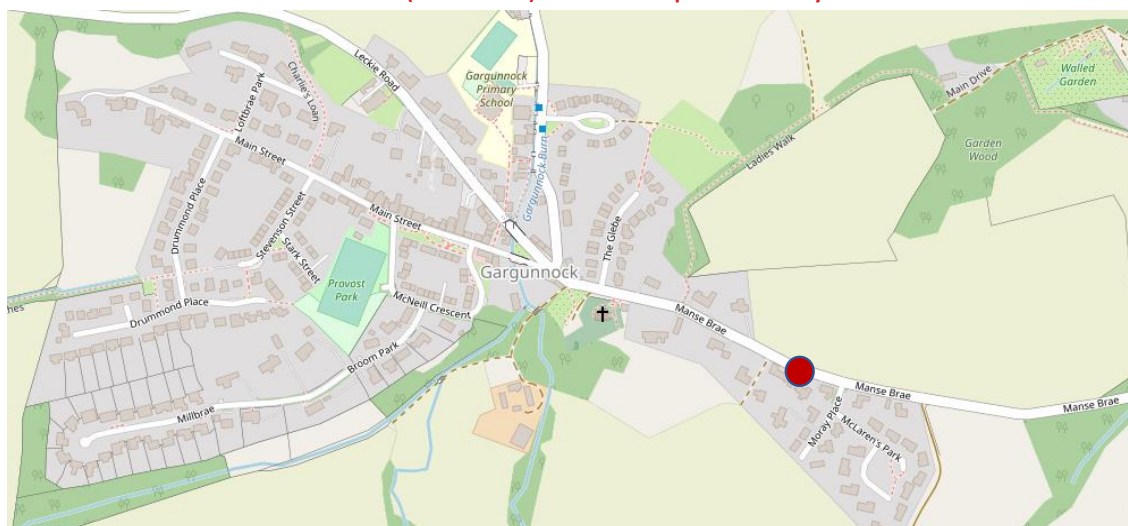
Gargunnoch Site 1 Manse Brae Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	214	187	205	218	263	176	189	217	207
Mean Speed (mph)	24	25	25	25	25	24	24	24.7	24.4
85%ile Speed (mph)	29	30	30	30	30	29	29	29.6	29.4
No. Vehicles > 20 MPH Limit	175	155	169	184	212	131	153	179	168
% Vehicles > 20 MPH Limit	81.8%	82.9%	82.4%	84.4%	80.6%	74.4%	81.0%	82.4%	81.1%
No. Vehicles > 35 MPH	3	5	6	6	8	2	2	6	5
% Vehicles > 35 MPH	1.4%	2.7%	2.9%	2.8%	3.0%	1.1%	1.1%	2.6%	2.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	347	317	325	348	350	252	238	337	311
Mean Speed (mph)	26.1	26.0	26.2	24.5	24.9	26.0	25.5	25.5	25.6
85%ile Speed (mph)	31.4	31.4	31.6	30.2	31.0	31.2	31.1	31.1	31.1
No. Vehicles > 20 MPH Limit	298	279	284	281	284	213	204	285	263
% Vehicles > 20 MPH Limit	85.9%	88.0%	87.4%	80.7%	81.1%	84.5%	85.7%	84.6%	84.8%
No. Vehicles > 35 MPH	17	18	16	11	11	14	8	15	14
% Vehicles > 35 MPH	4.9%	5.7%	4.9%	3.2%	3.1%	5.6%	3.4%	4.4%	4.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	350	345	358	353	373	307	277	356	338
Mean Speed (mph)	25.9	25.9	26.0	25.6	25.3	25.8	25.1	25.7	25.7
85%ile Speed (mph)	30.7	31.6	31.2	30.9	30.6	30.6	30.9	31.0	30.9
No. Vehicles > 20 MPH Limit	311	296	321	310	327	268	231	313	295
% Vehicles > 20 MPH Limit	88.9%	85.8%	89.7%	87.8%	87.7%	87.3%	83.4%	88.0%	87.2%
No. Vehicles > 35 MPH	11	16	18	10	14	14	10	14	13
% Vehicles > 35 MPH	3.1%	4.6%	5.0%	2.8%	3.8%	4.6%	3.6%	3.9%	3.9%

3.5.220 Table 64 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in May and September 2021 (25.5mph and 25.7mph respectively).

3.5.221 The proportion of vehicles exceeding 20mph was similar in February 2021 and May 2021, but was highest in September 2021 (88.0%).

3.5.222 Table 65 presents the results for the Manse Brae westbound in Gargunnoch.

Table 65. Manse Brae (Westbound) Link Flow & Speed Summary



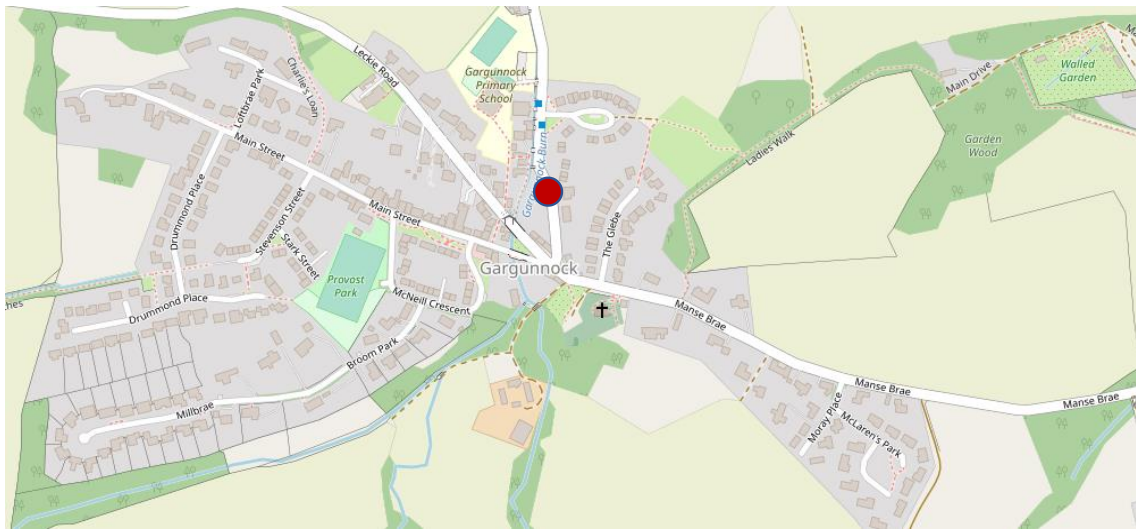
Gargunnoch Site 1 Manse Brae Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	108	89	75	87	131	95	120	98	101
Mean Speed (mph)	21	22	22	22	21	21	21	21.7	21.3
85 th ile Speed (mph)	26	28	29	29	26	26	26	27.5	27.0
No. Vehicles > 20 MPH Limit	61	56	49	51	79	51	65	59	59
% Vehicles > 20 MPH Limit	56.5%	62.9%	65.3%	58.6%	60.3%	53.7%	54.2%	60.7%	58.8%
No. Vehicles > 35 MPH	2	1	1	1	1	0	1	1	1
% Vehicles > 35 MPH	1.9%	1.1%	1.3%	1.1%	0.8%	0.0%	0.8%	1.2%	1.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	119	113	116	165	172	89	106	137	126
Mean Speed (mph)	23.5	23.5	24.0	21.0	22.7	24.1	22.9	22.9	23.1
85 th ile Speed (mph)	29.5	28.4	29.4	26.7	27.7	29.6	28.2	28.3	28.5
No. Vehicles > 20 MPH Limit	90	83	89	97	123	73	74	96	90
% Vehicles > 20 MPH Limit	75.6%	73.5%	76.7%	58.8%	71.5%	82.0%	69.8%	71.2%	72.6%
No. Vehicles > 35 MPH	3	4	4	0	3	0	2	3	2
% Vehicles > 35 MPH	2.5%	3.5%	3.4%	0.0%	1.7%	0.0%	1.9%	2.3%	1.9%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	141	160	144	127	146	128	127	144	139
Mean Speed (mph)	24.3	23.0	24.3	23.4	22.7	23.8	23.1	23.5	23.5
85 th ile Speed (mph)	28.7	27.8	30.4	28.6	29.4	29.8	28.3	29.0	29.0
No. Vehicles > 20 MPH Limit	116	119	118	98	102	99	85	111	105
% Vehicles > 20 MPH Limit	82.3%	74.4%	81.9%	77.2%	69.9%	77.3%	66.9%	77.1%	75.7%
No. Vehicles > 35 MPH	4	2	2	4	0	4	1	2	2
% Vehicles > 35 MPH	2.8%	1.3%	1.4%	3.1%	0.0%	3.1%	0.8%	1.7%	1.8%

3.5.223 Table 65 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in September 2021 (23.5mph)

3.5.224 The average proportion of vehicles exceeding 20mph was highest in September 2021 (77.1%).

3.5.225 Table 66 presents the results for Station Road northbound in Gargunnoch.

Table 66. Site 2 Station Road (Northbound) Link Flow & Speed Summary

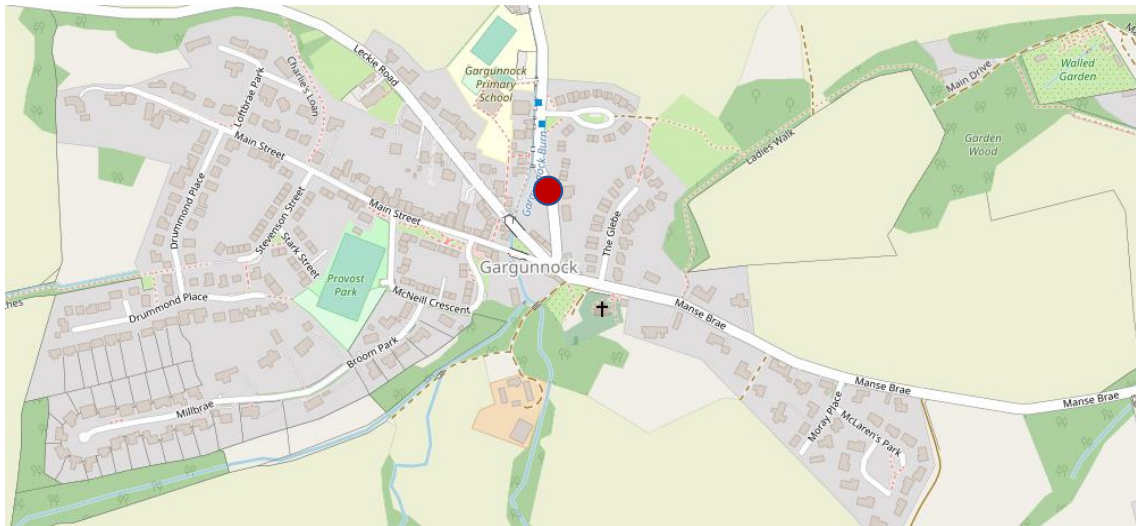


Gargunnoch Site 2 Station Road Northbound

September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	204	226	230	221	213	171	183	219	207
Mean Speed (mph)	18.9	18.5	18.3	18.5	18.4	18.4	18.5	18.5	18.5
85 th ile Speed (mph)	21.9	21.3	21.2	21.3	21.5	21.2	21.7	21.4	21.4
No. Vehicles > 20 MPH Limit	72	56	66	77	69	42	63	68	64
% Vehicles > 20 MPH Limit	35.3%	24.8%	28.7%	34.8%	32.4%	24.6%	34.4%	31.2%	30.7%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- 3.5.226 Table 66 shows that the 5-day average traffic flows were 219 vehicles and the mean speed was 18.5mph.
- 3.5.227 The proportion of vehicles exceeding 20mph was 31.2%.
- 3.5.228 Table 67 presents the results for Station Road Southbound in Gargunnoch.

Table 67. Station Road (Southbound) Link Flow & Speed Summary



Gargunnoch Site 2 Station Road Southbound

September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	440	460	492	471	468	375	354	466	437
Mean Speed (mph)	19.1	19.0	19.3	19.1	19.4	18.7	19.2	19.2	19.1
85 th ile Speed (mph)	22.4	22.7	22.2	22.5	22.6	21.9	22.4	22.5	22.4
No. Vehicles > 20 MPH Limit	157	167	193	197	184	120	136	180	165
% Vehicles > 20 MPH Limit	35.7%	36.3%	39.2%	41.8%	39.3%	32.0%	38.4%	38.5%	37.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- 3.5.229 Table 67 shows that the 5-day average traffic flows were 466 vehicles and the mean speed was 19.2mph
- 3.5.230 The proportion of vehicles exceeding 20mph was 38.5%.
- 3.5.231 The results of the wider link counts and speed surveys indicate:

Stirling

- The mean speed of traffic on Murray Place (Site 1) and Upper Craigs (Site 2) went up in February 2021 and returned to November 2020 levels in May 2021 and September 2021.
- Millennium Way (Site 3) mean speeds went down in May 2021 and September 2021 from February 2021.
- Murray Place (Site 4) average speeds remained the same across all survey periods.
- Mean speeds on Causewayhead Road (Site 5) northbound went down in May 2021 and September 2021, while southbound went up in May 2021 before falling back in September 2021 – when compared to February 2021.

Dunblane

- Northbound directions for all three sites remained the same in February and May 2021, reducing slightly at sites 2 and 3 in September 2021.
- Southbound mean speeds increased in May 2021 from February 2021 at Stirling Road (Site 3), and reduced again in September 2021.
- Southbound mean speeds decreased in May 2021 and September 2021 from February 2021 for the B8033 (Sites 2).

Bridge of Allan

- Mean speeds decreased in both directions on Henderson Street.

Aberfoyle

- Mean speeds on Main Street increased in both directions between February 2021 and May 2021 before reducing in September 2021.

Fallin

- A905 mean speeds increased in both directions between February 2021 and May 2021, before reducing in September 2021.

Plean

- Mean speeds on Main Street increased in both directions between February 2021 and May 2021 before reducing in September 2021.

Callander

- In May 2021, mean speeds had decreased in both directions on Main Street, when compared to February 2021. Speeds further decreased in September 2021.

Killearn

- Mean speeds increased on Main Street in the northbound direction between February and May 2021, before decreasing in September 2021, however decreased

for traffic heading southbound, when comparing February, May and September 2021.

Gargunnoch

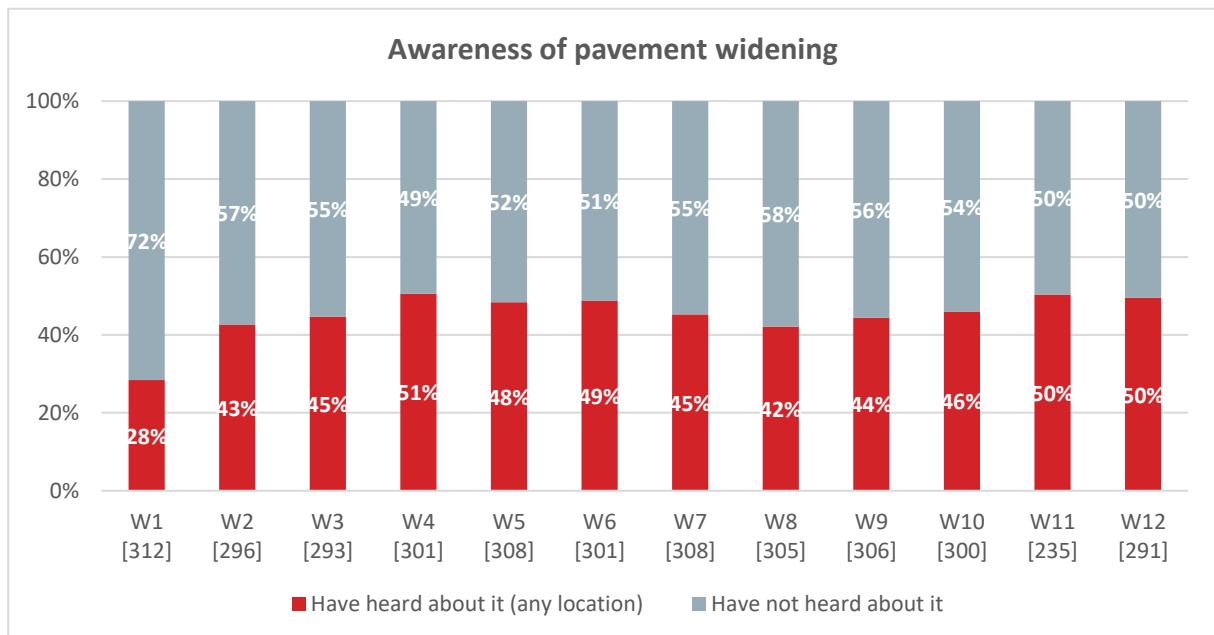
- Mean speeds increased in May 2021 from February 2021 and again in September 2021 in both eastbound and westbound directions for Manse Brae.

4. SPACES FOR PEOPLE: PAVEMENT WIDENING

4.1 Awareness of pavement widening

4.1.1 Figure 7 shows the level of awareness respondents had for pavement widening in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

4.1.2 Levels of awareness in any of the locations generally increased across the first five waves (28%-51%), and subsequently remained consistent across the latter seven waves (42%-50%).

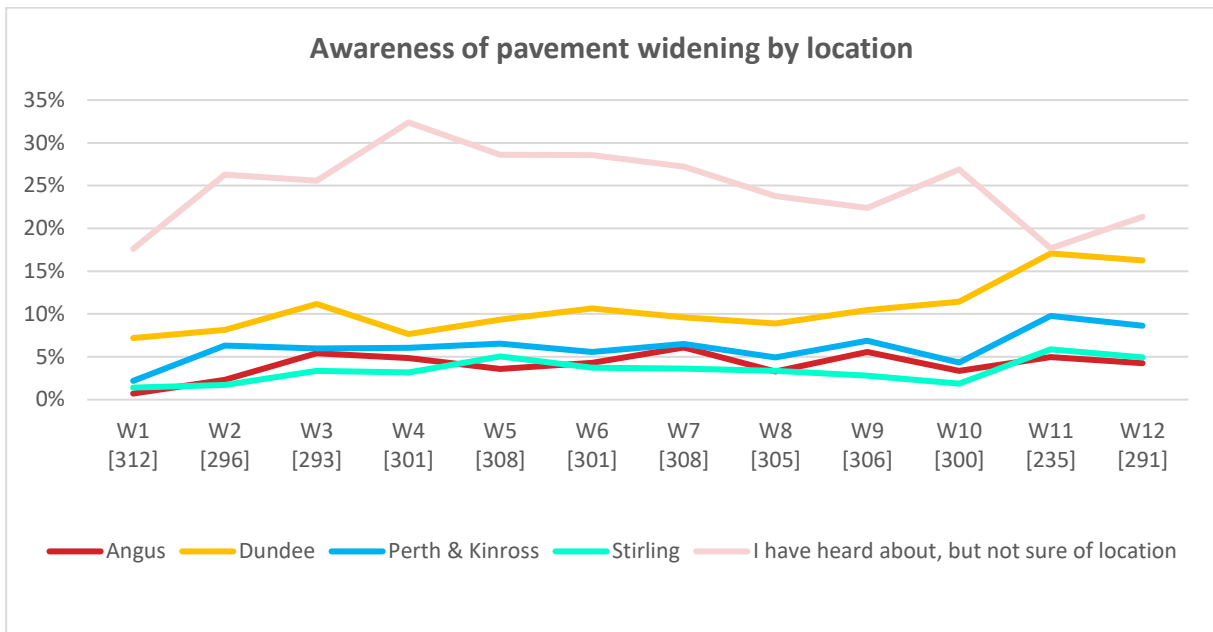


Base: Base: All respondents (varies by wave: 235-312)

Figure 7. Awareness of pavement widening (in any location) from July 2020 onwards

4.1.3 Figure 8 shows a breakdown of awareness of pavement widening across the twelve waves, specifically by location.

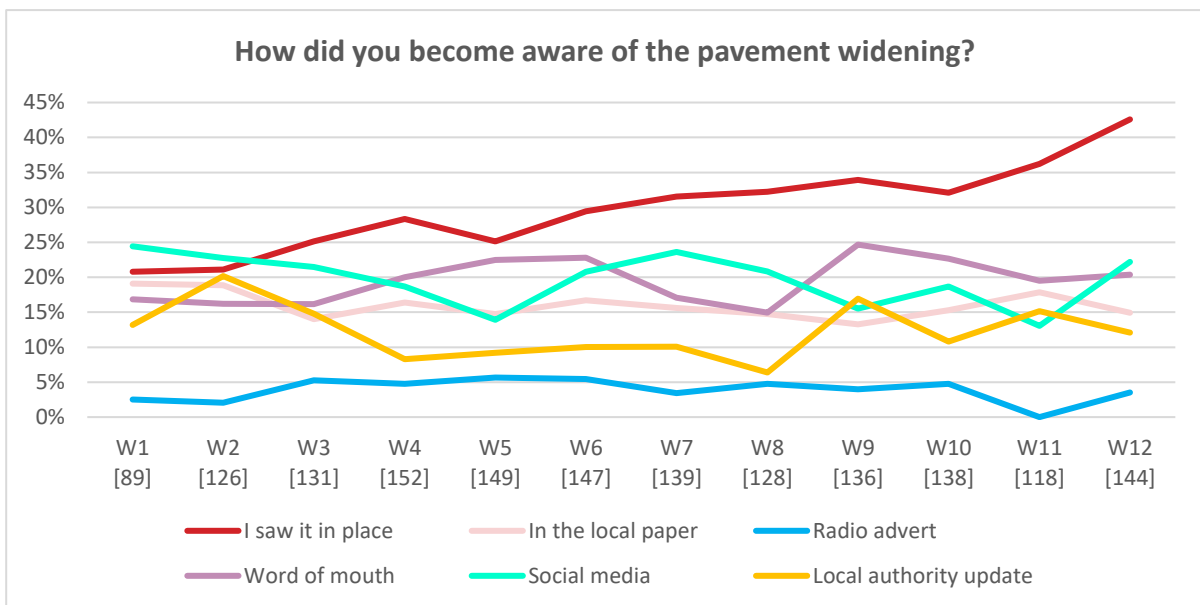
4.1.4 Most commonly, those who were aware of pavement widening, were unsure of the location the measure was in (18%-32%), with this proportion generally decreasing from Wave 5 onwards. Awareness of the measure in the specific four locations remained low across the first ten waves (1%-17%), with awareness increasing in the latter two waves Dundee (16%-17%) and Perth and Kinross (9%-10%).



Base: All respondents (varies by wave: 235-312)

Figure 8. Awareness of pavement widening (by location) from July 2020 onwards

4.1.5 Respondents commonly reported that they became aware of pavement widening by seeing it in place (21%-34%), via word of mouth (15%-25%) and social media (13%-24%).

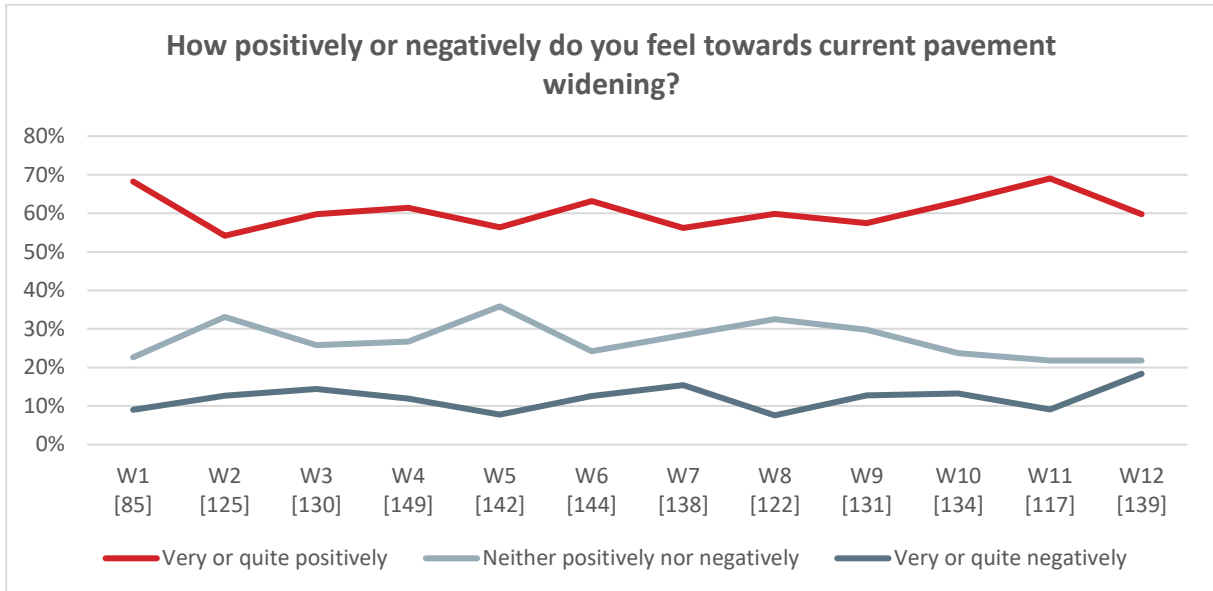


Base: Respondents aware of pavement widening (varies by wave: 89-152)

Figure 9. How respondents became aware of pavement widening

4.2 Attitudes towards the measure

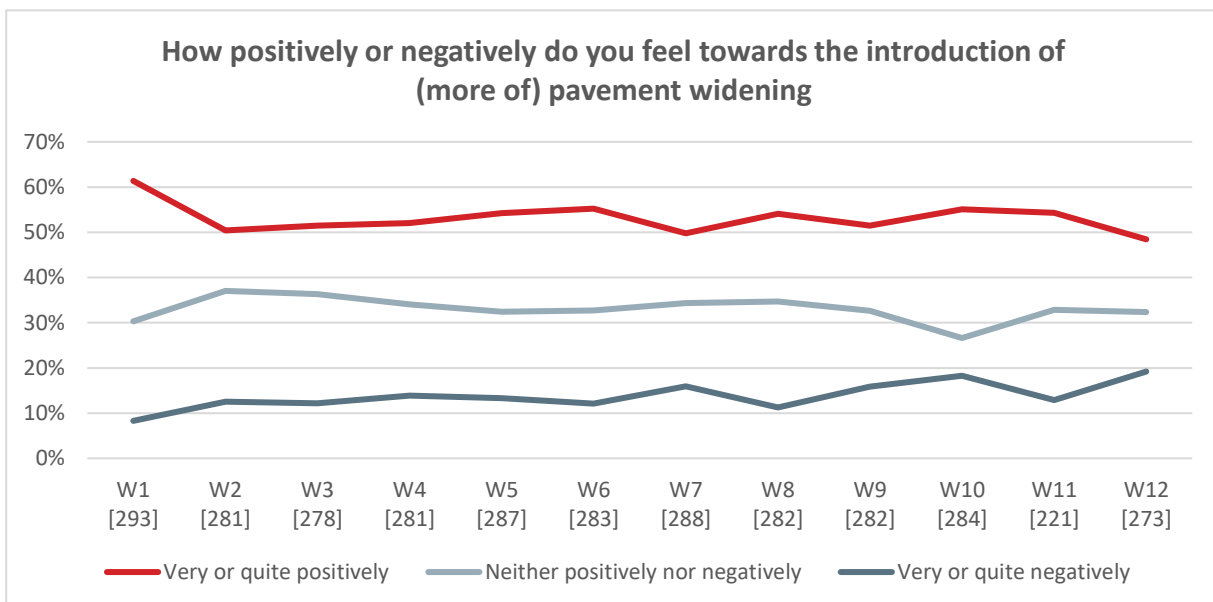
4.2.1 Those who were aware of pavement widening were asked how they felt toward the measure. The majority of respondents felt positively (54%-69%), while less than a sixth felt negatively (8%-18%) notably increasing during Wave 12.



Base: Respondents aware of pavement widening, excluding those who answered 'Don't know' (varies by wave: 85-149)

Figure 10. Feelings towards pavement widening currently

4.2.2 All respondents were asked how they felt towards the introduction of (more) pavement widening. Around half felt positively (48%-61%), while around a tenth felt negatively (8%-19%), with negativity somewhat increasing across the twelve waves.



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 221-293)

Figure 11. Feelings towards the introduction of (more) pavement widening

4.2.3 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Between three and seven in ten respondents from Dundee (48%-65%); Angus (42%-68%); Perth and Kinross (41%-56%); Stirling (35%-63%) felt positively towards the measure across the twelve waves. Respondents from Stirling in wave 12 were the least positive (35%) and respondents from Angus in wave 1 were the most positive (68%).

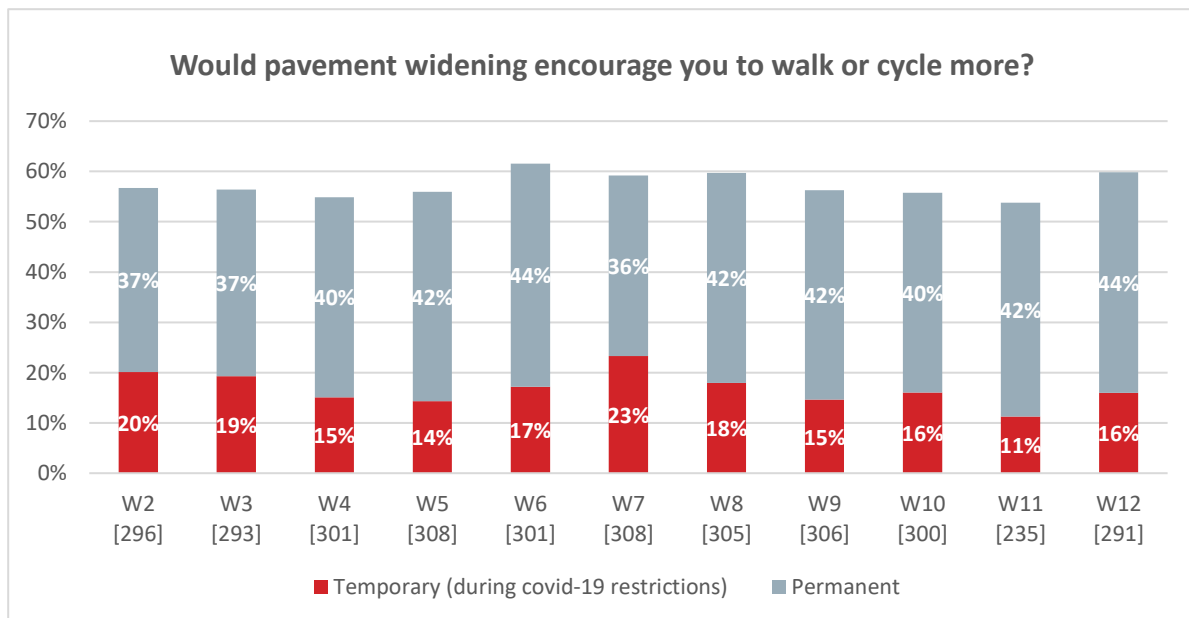
4.2.4 Respondents who reported feeling positively towards current or potential pavement widening cited a number of reasons why they felt this way. Most commonly across the twelve waves, respondents cited with the measure in place, they feel safer walking (53%-

66%); it makes it easier to social distance (36%-57%); and it encourages walking (30%-42%).

4.2.5 Respondents who reported feeling negatively towards current or potential pavement widening noted that with the measure in place, there is reduced road space for cars and motor vehicles (32%-74%), a reason which was more commonly cited as the waves went on. The measure not making respondents feel safer walking (18%-48%) was also noted, however was cited less commonly as the waves went on; as was the inability to park to access shops (18%-37%).

4.3 Impact of measure on walking and cycling

4.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more. The majority of respondents (54%-62%) reported that pavement widening would encourage them to walk or cycle more. Around a fifth (11%-23%) specified that they would prefer the measure in place temporarily (i.e. during Covid-19 restrictions), while around four tenths (36%-44%) would prefer the measures to be in place permanently.



Base: All respondents (varies by wave: 235-308)*

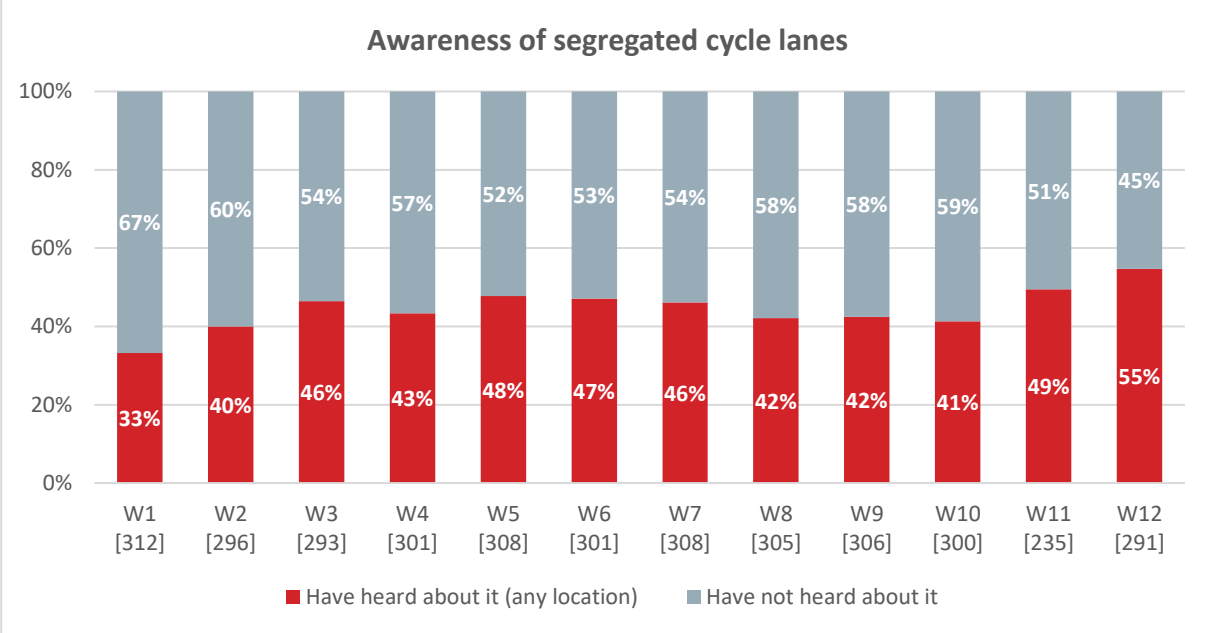
*Question was asked during Wave 2-12 only

Figure 12. Impact of pavement widening on encouraging respondents to walk or cycle more

5. SPACES FOR PEOPLE: SEGREGATED CYCLE LANES

5.1 Awareness of segregated cycle lanes

5.1.1 Awareness of segregated cycle lanes in Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves is shown in Figure 13. Generally, awareness increased over the first seven waves (33%-48%), however decreased slightly across the latter three waves (41%-42%), and then increased in the final two waves (49%-51%).

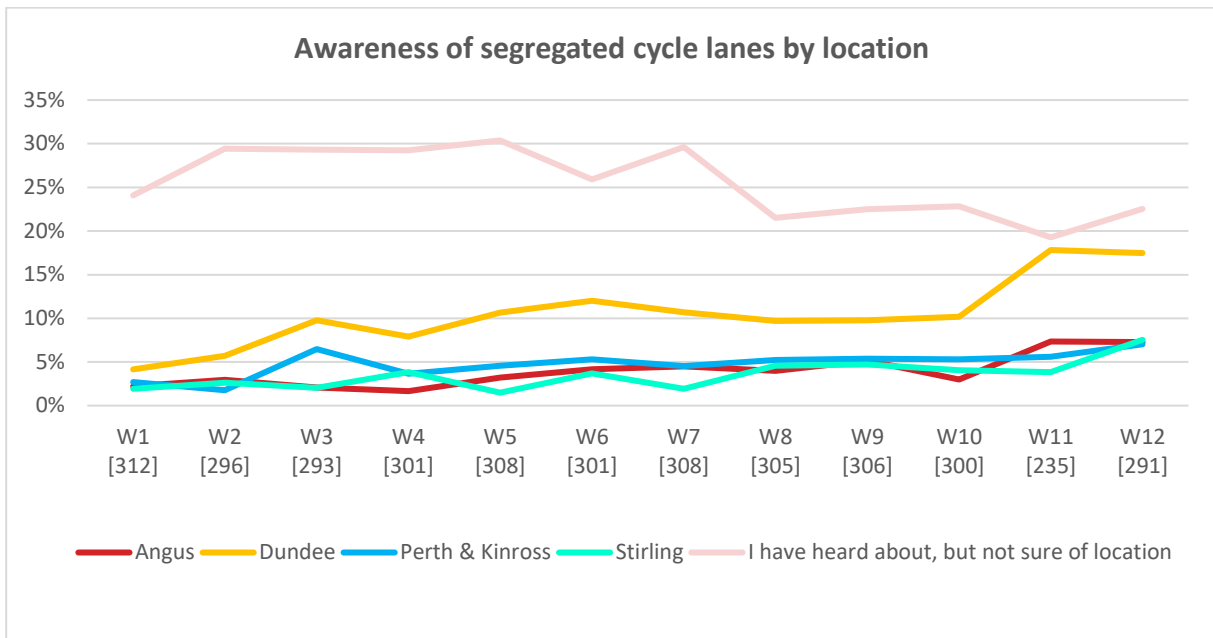


Base: All respondents (varies by wave: 235-312)

Figure 13. Awareness of segregated cycle lanes (in any location) from July 2020 onwards

5.1.2 Figure 14 shows a breakdown of awareness of segregated cycle lanes across the twelve waves by location. Commonly, around a quarter of respondents reported that they had heard of the segregated cycle lanes, but were unsure of what locations the measure was in place (19%-30%).

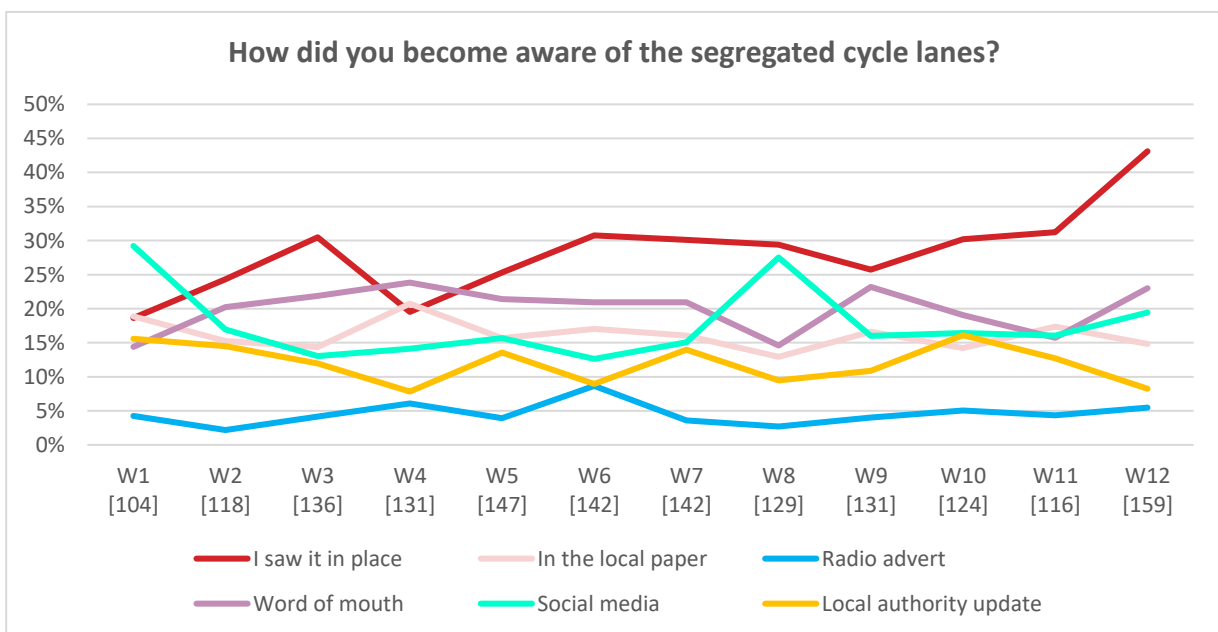
5.1.3 Awareness of the measures generally did not differ by the four specified locations to a large extent, however more were aware of the measure in Dundee (which increased over time) (4%-18%), than the other locations (1%-8%).



Base: All respondents (varies by wave: 235-312)

Figure 14. Awareness of segregated cycle lanes (by location) from July 2020 onwards

5.1.4 For the majority of the waves, respondents commonly reported becoming aware of segregated cycle lanes by seeing it in place (19%-43%), peaking during Wave 12, as well as by word of mouth (14%-24%) and social media (13%-29%).

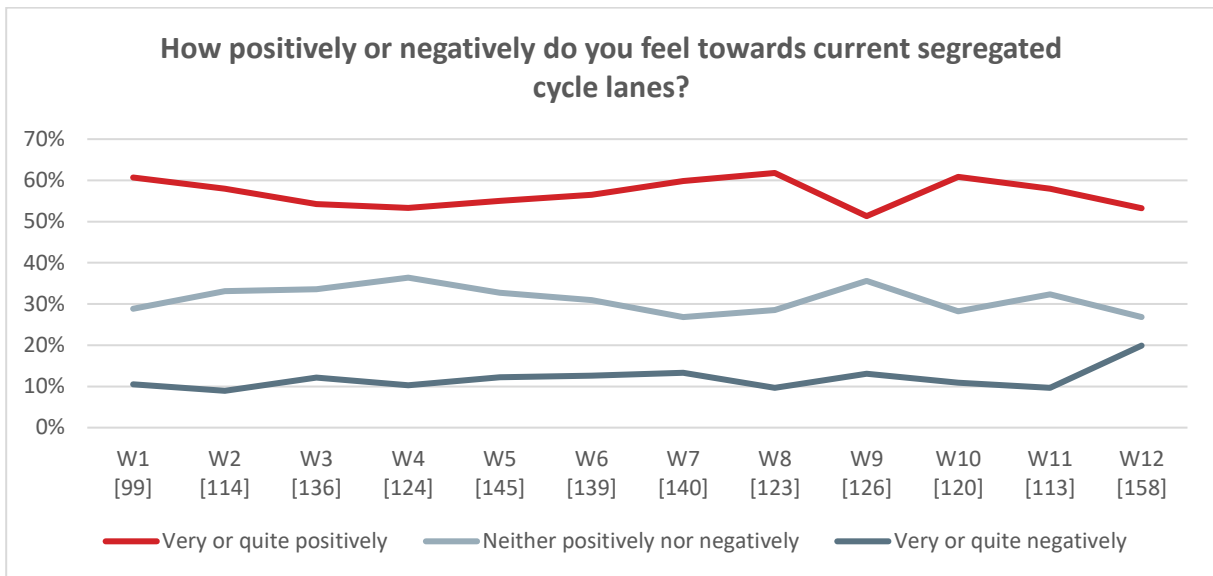


Base: Respondents aware of the segregated cycle lanes (varies by wave: 104-159)

Figure 15. How respondents became aware of the segregated cycle lanes

5.2 Attitudes towards the measures

5.2.1 The majority of respondents who reported that they were aware of segregated cycle lanes felt positively towards the measure (51%-62%), while around a tenth felt negatively (9%-20%), peaking in Wave 12.

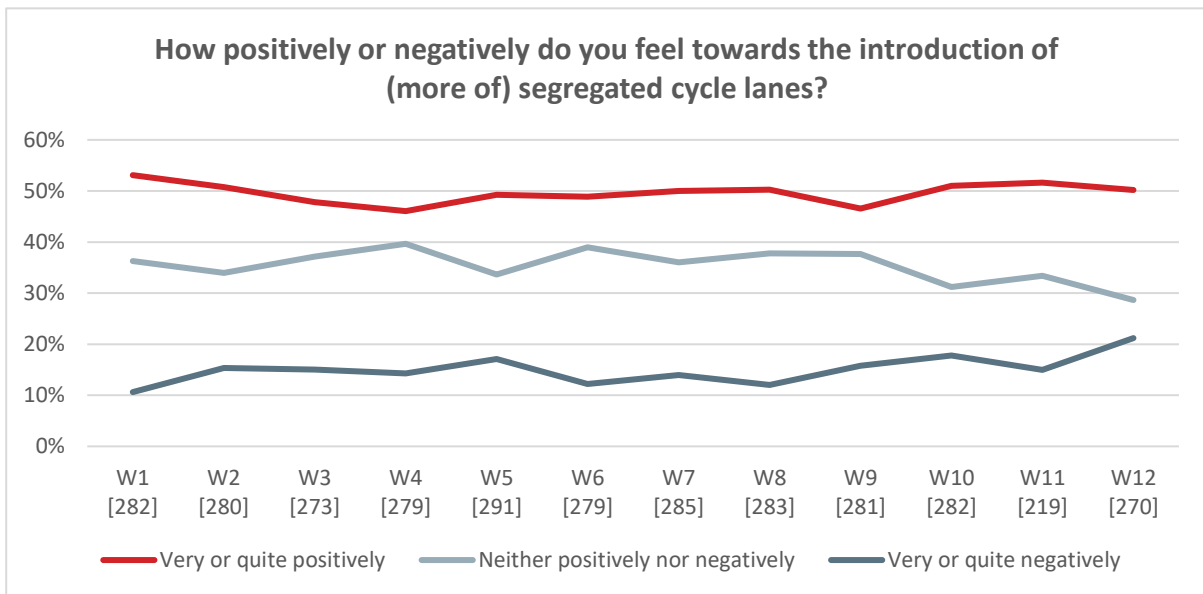


Base: Respondents aware of the segregated cycle lanes excluding those who answered 'Don't know' (varies by wave: 99-158)

Figure 16. Feelings towards current segregated cycle lanes

5.3 Feelings towards the introduction of more of the measure

5.3.1 All respondents were asked how they felt towards the introduction of (more) segregated cycle lanes. Around half felt positively towards the measure (46%-53%), while between 11% and 21% felt negatively.



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 219-291)

Figure 17. Feelings towards the introduction of (more) segregated cycle lanes

5.3.2 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Between three and seven in ten respondents from Dundee (44%-63%); Angus (37%-68%); Perth and Kinross (37%-55%); Stirling (32%-52%) felt positively towards the measure across the twelve waves. Respondents from Stirling in wave 6 were the least positive (32%) and respondents from Angus in wave 1 were the most positive (68%).

5.3.3 Respondents who reported feeling positively towards current or potential segregated cycle lanes cited a number of reasons why they felt this way. Most commonly across the twelve waves, respondents cited with the measure in place, they feel safer cycling (41%-

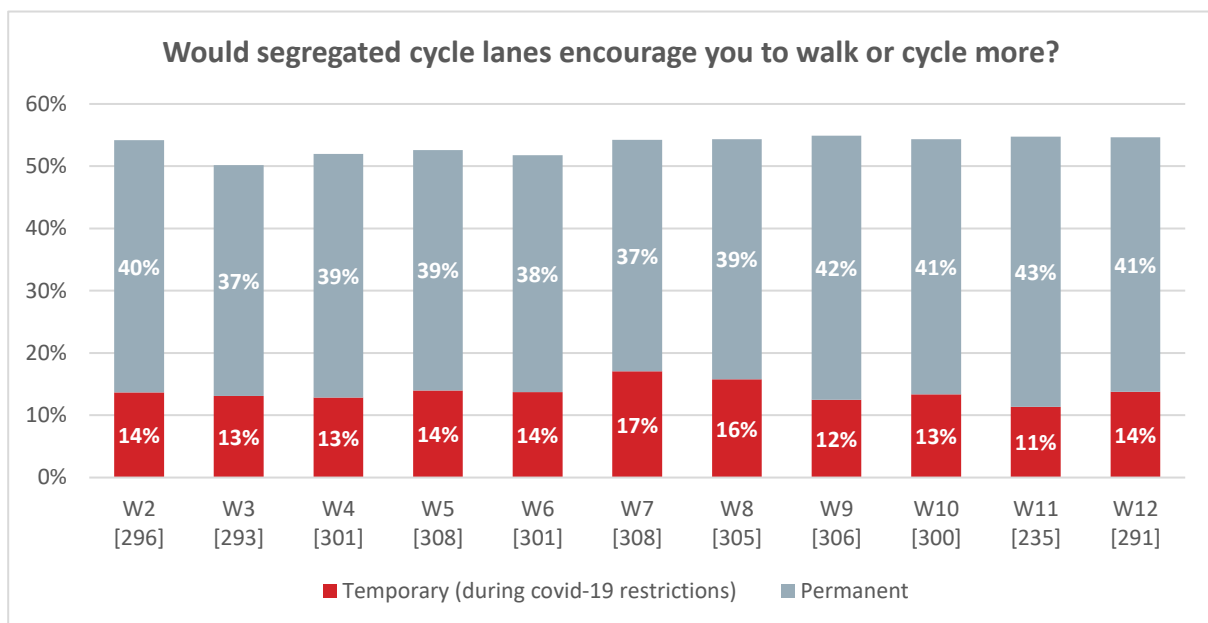
56%); it encourages cycling (30%-51%), which was less commonly cited as the waves went on; and the measure makes it easier to maintain social distancing (18%-29%).

5.3.4 Respondents who reported feeling negatively towards current or potential segregated cycle lanes noted that with the measure in place there is reduced road spaces for cars and motor vehicles (32%-59%), a reason which was cited increasingly more commonly during Wave 3 to Wave 9. It was also noted that the measure does not make them feel safer walking (20%-37%); and traffic moves too slowly (7%-40%), which was less commonly cited in the latter four waves.

5.4 Impact of measure on walking and cycling

5.4.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

5.4.2 Around half of respondents reported that the segregated cycle lanes would encourage them to walk or cycle more (50%-55%). Between 11% to 17% of respondents would prefer the measure on a temporary basis (i.e. during Covid-19 restrictions), while the remaining 37% to 43% would prefer the measure to be in place permanently.



Base: All respondents (varies by wave: 235-308)*

*Question was asked during Wave 2-10 only

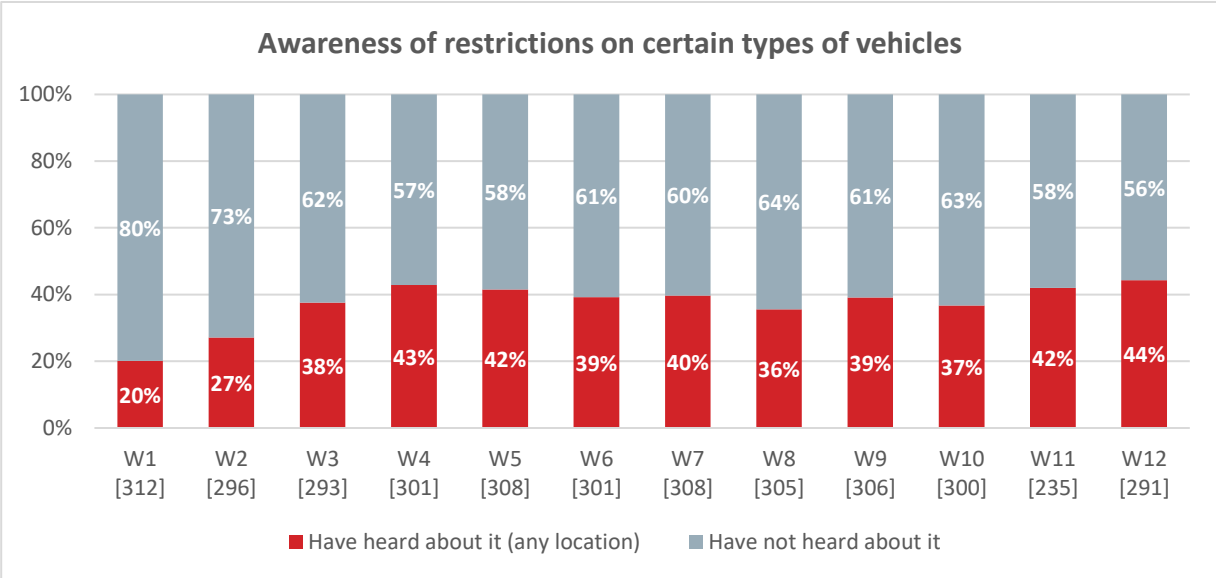
Figure 18. Impact of segregated cycle lanes on encouraging respondents to walk or cycle more

6. SPACES FOR PEOPLE: RESTRICTIONS ON CERTAIN TYPES OF VEHICLES

6.1 Awareness of restrictions on certain types of vehicles

6.1.1 Figure 19 shows the level of awareness respondents had for restrictions on certain types of vehicles in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

6.1.2 Awareness steadily increased over the first four waves (20%-43%), and remained relatively consistent over the latter eight waves (36%-44%).

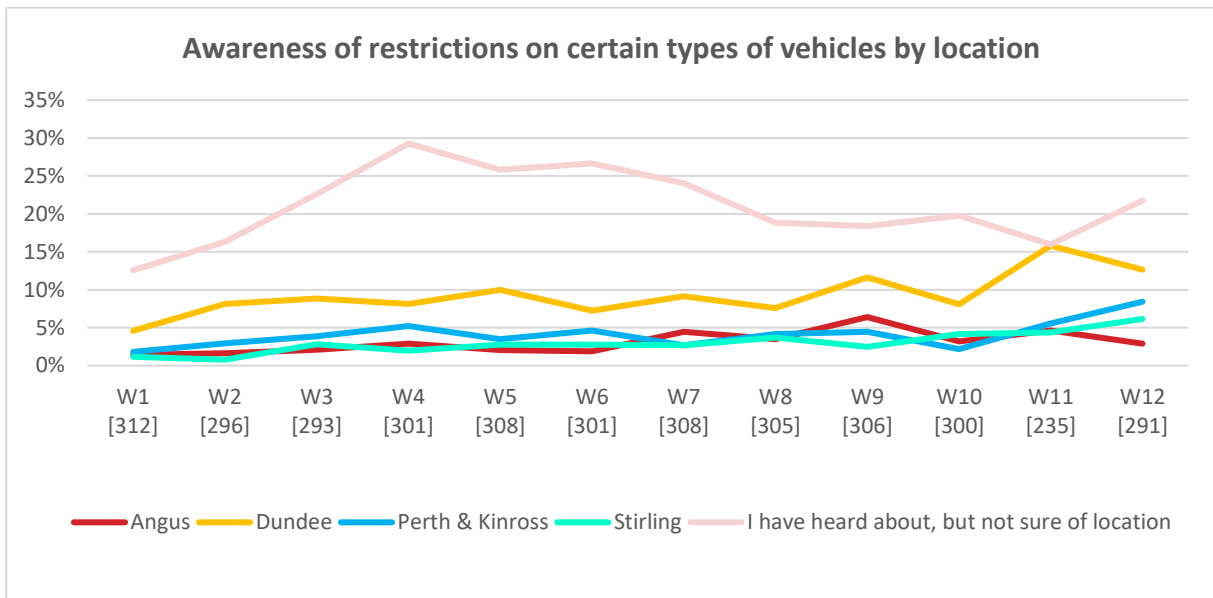


Base: All respondents (varies by wave: 235-312)

Figure 19. Awareness of restrictions on certain types of vehicles (in any location) from July 2020 onwards

6.1.3 A breakdown of awareness of restrictions on certain types of vehicles across the twelve waves, by location is shown in Figure 20. Commonly, around a fifth of respondents reported that they had heard of the measure, but were unsure in what location the measure was in place (13%-29%).

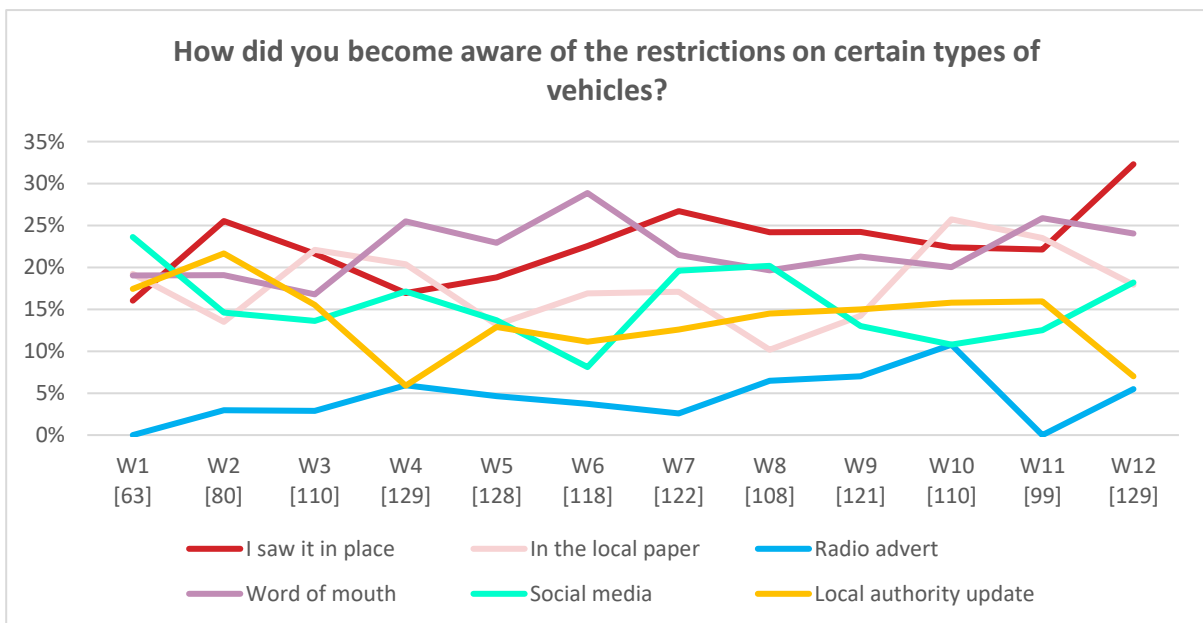
6.1.4 There was little variation in awareness of the measure by location, with only between 1%-16% able to specify where they were aware of measure in a specific location across the twelve waves, with slightly higher awareness in Dundee.



Base: All respondents (varies by wave: 235-312)

Figure 20. Awareness of restrictions on certain types of vehicles (by location) from July 2020 onwards

6.1.5 Respondents most commonly became aware of the measures by seeing them in place (16%-32%) and by word of mouth (17%-29%).



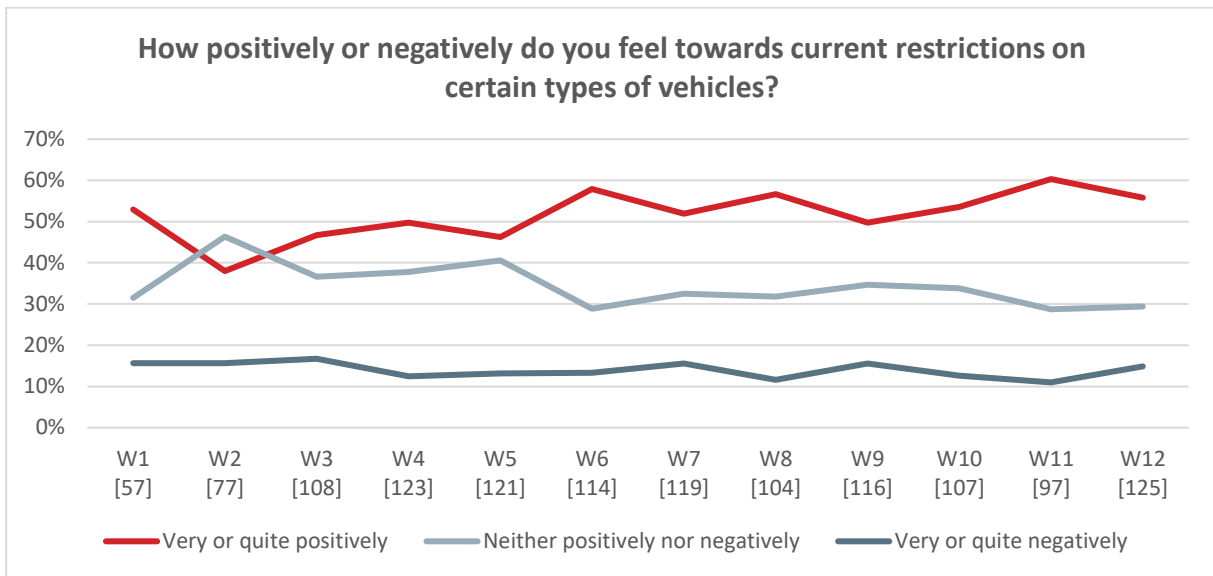
Base: Respondents aware of restrictions on certain types of vehicles (varies by wave: 63-129)

Figure 21. How respondents became aware of the restrictions on certain types of vehicles

6.2 Attitudes towards the measure

6.2.1 Respondents who were aware of restrictions on certain types of vehicles were asked how positively or negatively they felt towards the measure.

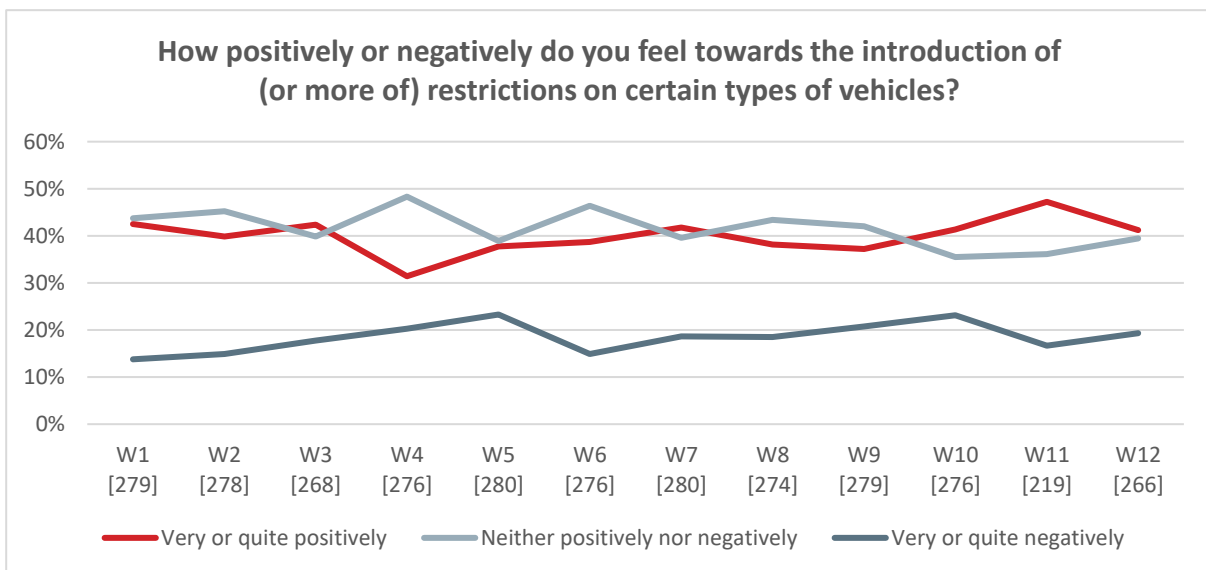
6.2.2 Between two and three in five felt positively towards the measure (38%-60%), while between 11% and 17% felt negatively. Notably, during Wave 2, more respondents felt neutral (46%), compared to positively (38%).



Base: Respondents aware of restrictions on certain types of vehicles, excluding those who answered 'Don't know' (varies by wave: 57-125)

Figure 22. Feelings towards restrictions on current certain types of vehicles

6.2.3 All respondents were asked how they felt about the introduction of (more) restrictions on certain types of vehicles. Around four in ten felt positively (31%-47%), while around a fifth felt negatively (14%-23%). Between 35% and 48% felt neutrally, with a higher proportion of respondents feeling neutrally than positively for over half of the waves.



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 219-280)

Figure 23. Feelings towards the introduction of (more) restrictions on certain types of vehicles

6.2.4 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Between two and six in ten respondents from Dundee (32%-60%); Angus (31%-55%); Perth and Kinross (28%-38%); Stirling (21%-52%) felt positively towards the measure across the twelve waves. Respondents from Stirling in wave 12 were the least positive (21%) and respondents from Angus in wave 11 were the most positive (60%).

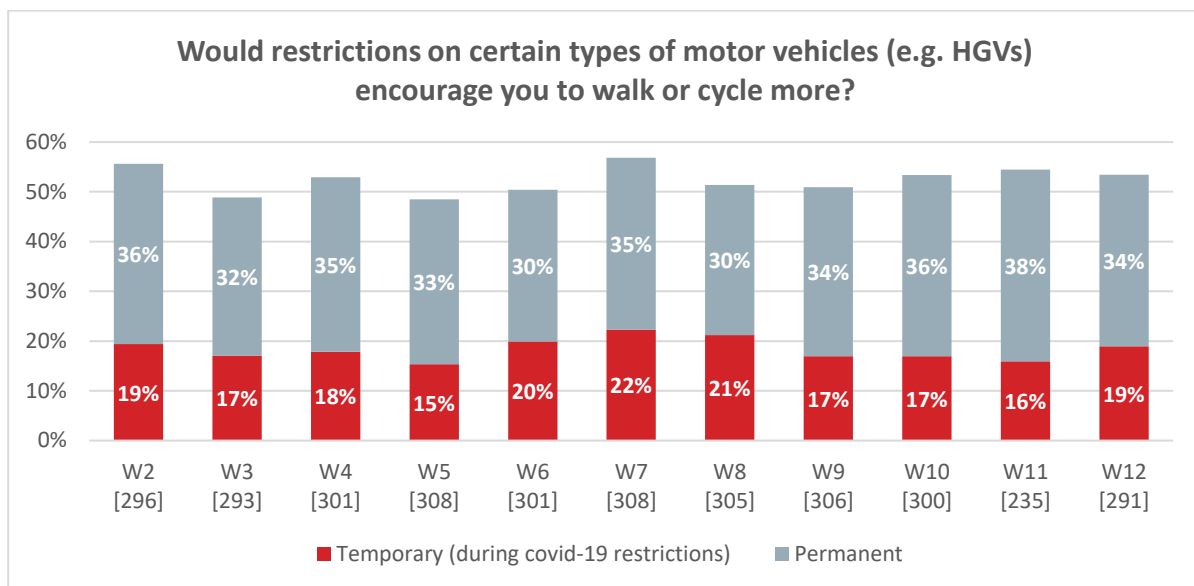
6.2.5 Respondents who felt positively towards current or potential restrictions on certain types of vehicles, cited a number of reasons why they felt this way. Most commonly across the twelve waves, respondents cited with the measure in place, air quality is improved (30%-46%); there is less traffic on the roads (27%-48%); and they feel safer walking (19%-38%).

6.2.6 Respondents who felt negatively towards current or potential restrictions on certain types of vehicles, most commonly cited that that with the measure in place there is reduced road space for cars and motors vehicles (24%-45%); they are unable to park to access shops (13%-33%); and traffic moving too slowly (14%-31%).

6.3 Impact of measure on walking and cycling

6.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

6.3.2 Around half of all respondents reported that the restrictions on certain types of motor vehicles would encourage them to walk or cycle more (48%-57%). About one in five (15%-22%) would prefer the measure in place temporarily (i.e. during Covid-19 restrictions), while around a third (30%-38%) would prefer the measure in place permanently.



Base: All respondents (varies by wave: 235-308)*

*Question was asked during Wave 2-10 only

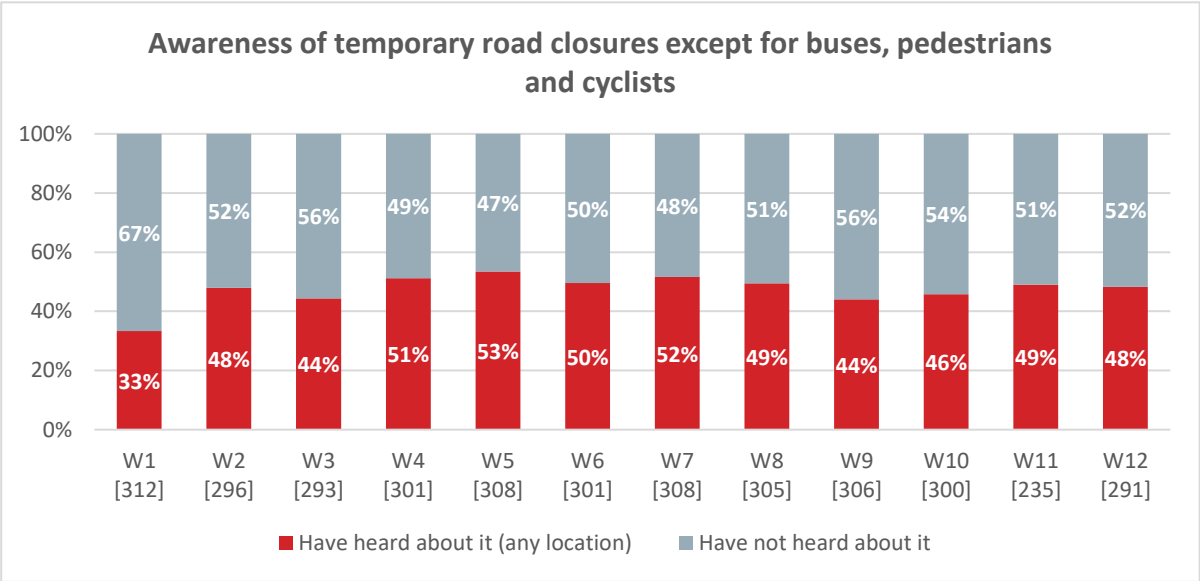
Figure 24. Impact of restrictions on certain types of vehicles on encouraging respondents to walk or cycle more

7. SPACES FOR PEOPLE: TEMPORARY ROAD CLOSURES EXCEPT FOR BUSES, PEDESTRIANS AND CYCLISTS

7.1 Awareness of temporary road closures except for buses, pedestrians and cyclists

7.1.1 Figure 25 shows the level of awareness respondents had for temporary road closures except for buses, pedestrians and cyclists in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

7.1.2 While only a third (33%) were aware of the measure in Wave 1, around half were aware of the measures in the latter waves (44%-53%).

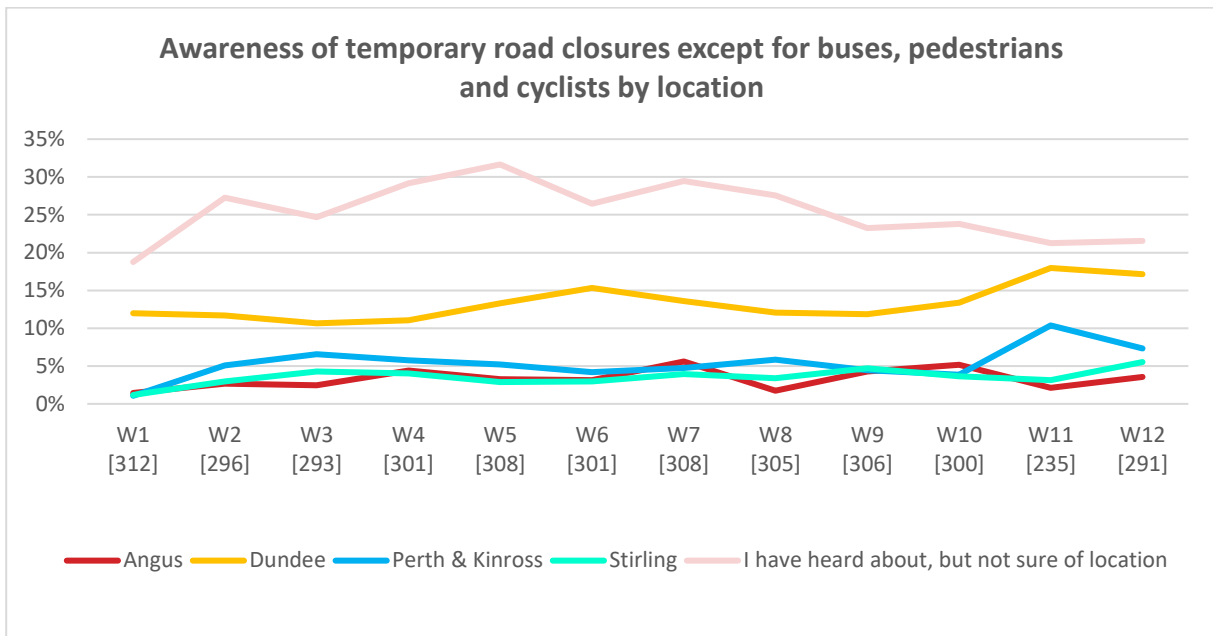


Base: All respondents (varies by wave: 235-312)

Figure 25. Awareness of temporary road closures except for buses, pedestrians and cyclists (in any location) from July 2020 onwards

7.1.3 Figure 26 shows a breakdown of awareness of temporary road closures except for buses, pedestrians and cyclists across the twelve waves, by location. Commonly, around a quarter of respondents reported that they had heard of the measure, but were unsure in what location the road restrictions were in place (19%-32%).

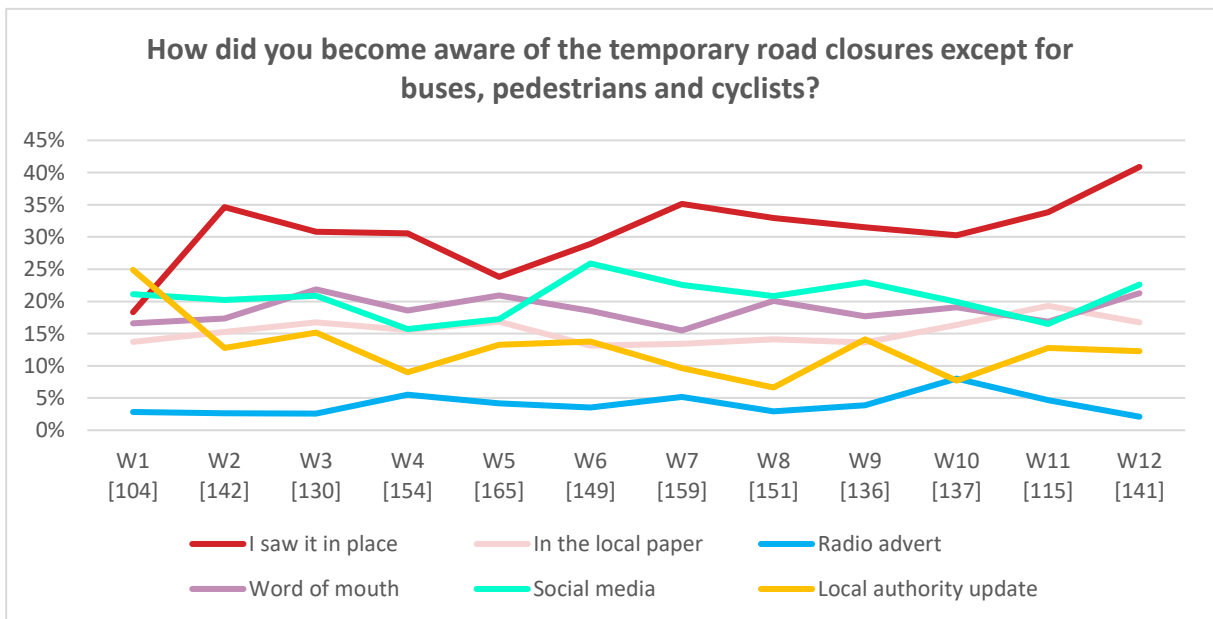
7.1.4 There was limited variation in awareness across the four areas, however more were aware of the measures in place in Dundee (11%-18%) than in the other locations (1%-10%).



Base: All respondents (varies by wave: 235-312)

Figure 26. Awareness of temporary road closures except for buses, pedestrians and cyclists (by location) from July 2020 onwards

7.1.5 Across the waves, respondents most commonly reported that they became aware of the measures by seeing them in place (18%-41%), as well as via social media (16%-26%) and word of mouth (15%-22%).

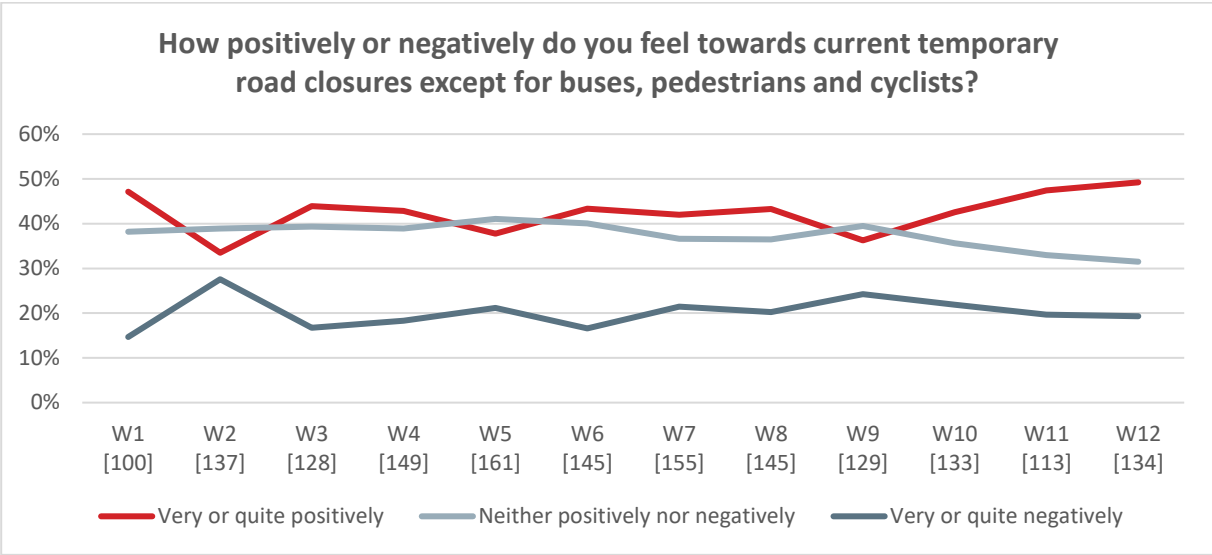


Base: Respondents aware of the temporary road closures except for buses, pedestrians and cyclists (varies by wave: 104-165)

Figure 27. How respondents became aware of the temporary road closures except for buses, pedestrians and cyclists

7.2 Attitudes towards the measure

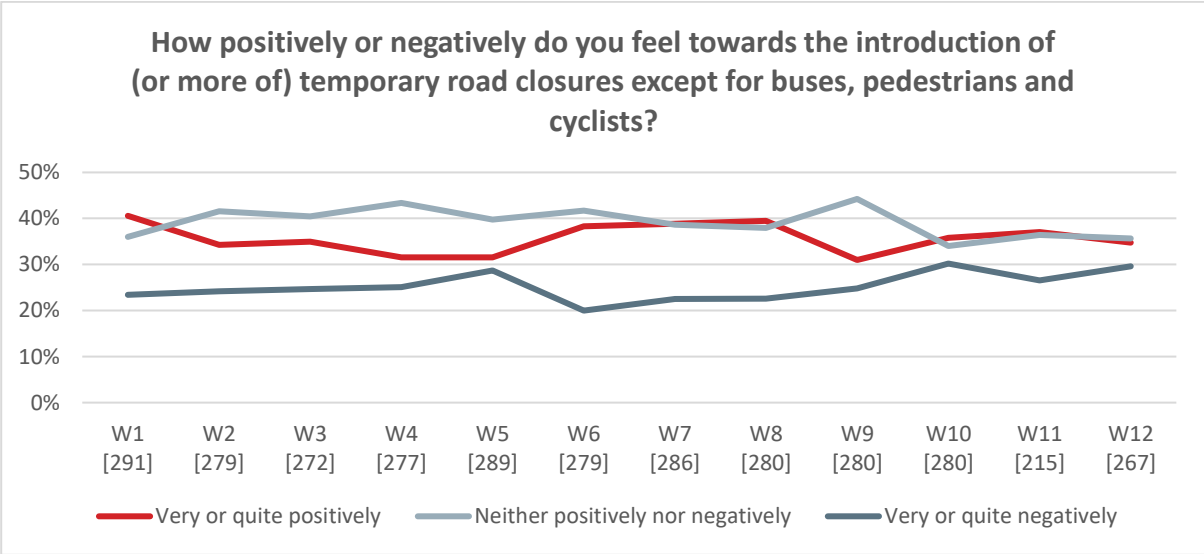
7.2.1 Of those who reported being aware of the temporary road closures except for buses, pedestrians and cyclists, around four in ten reported feeling positively (33%-49%), while for some waves, more felt neither positively nor negatively (31%-41%). Around a fifth felt negatively towards the measure (15%-28%).



Base: Respondents aware of temporary road closures except for buses, pedestrians and cyclists, excluding those who answered 'Don't know' (varies by wave: 100-161)

Figure 28. Feelings towards temporary road closures except for buses, pedestrians and cyclists currently

7.2.2 All respondents were asked how they felt towards the introduction of (more) temporary road closures except for buses, pedestrians and cyclists. Around a third (31%-41%) felt positively, while a similar proportion felt neither positively nor negatively across the twelve waves (34%-44%). Around a quarter (20%-30%) felt negatively.



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 215-291)

Figure 29. Feelings towards the introduction of (more) temporary road closures except for buses, pedestrians and cyclists

7.2.3 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Between a sixth and six in ten respondents from Dundee (33%-55%); Angus (30%-47%); Perth and Kinross (16%-33%); Stirling (17%-44%) felt positively towards the measure across the twelve waves. Respondents from Perth and Kinross in wave 11 were the least positive (16%) and respondents from Dundee in wave 12 were the most positive (55%).

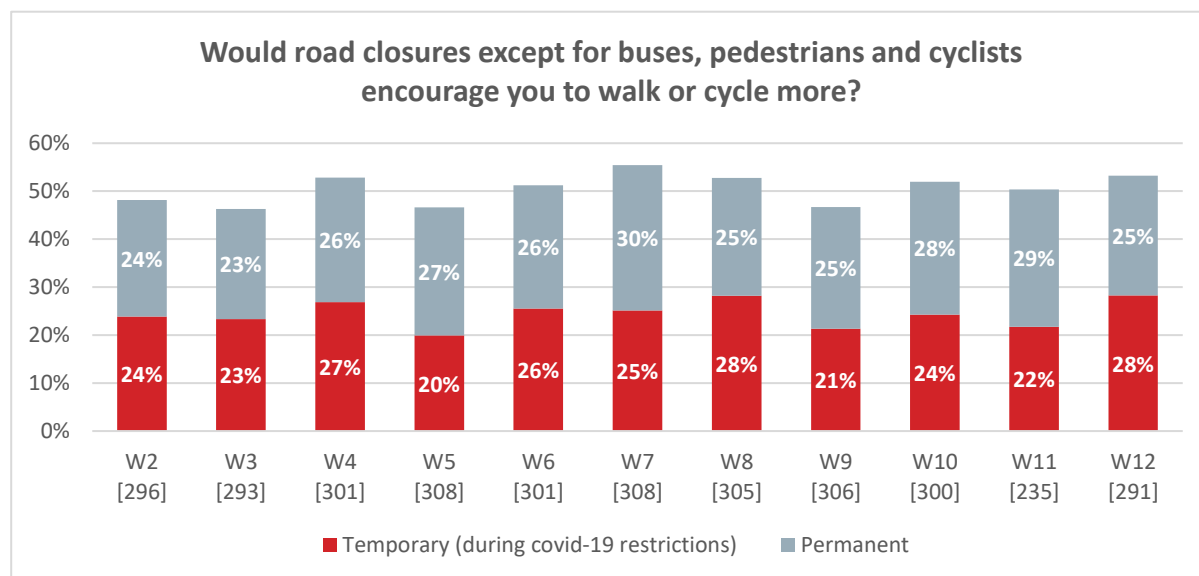
7.2.4 Respondents who reported feeling positively towards current or potential temporary road closures except for buses, pedestrians and cyclists cited a number of reasons as to why they felt this way. The most common reasons respondents cited were that with the measure in place, they feel safer walking (26%-44%); there is less traffic on the roads (19%-40%); and air quality is improved (15%-37%).

7.2.5 Respondents who reported feeling negatively towards the current or potential measure also cited that with the measure in place, there is reduced road space for cars and motor vehicles (38%-53%); they are unable to park to access shops (28%-45%); and traffic moves too slowly (25%-38%).

7.3 Impact of measure on walking and cycling

7.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

7.3.2 Around half (46%-55%) of respondents across the waves reported that temporary road closures except for buses, pedestrians and cyclists would encourage them to walk or cycle more. More specifically, a quarter (20%-28%) would prefer the measure on temporary basis (i.e. during Covid-19 restrictions), while a further quarter (23%-30%) would prefer the measures on a permanent basis.



Base: All respondents (varies by wave:235-308)*

*Question was asked during Wave 2-10 only

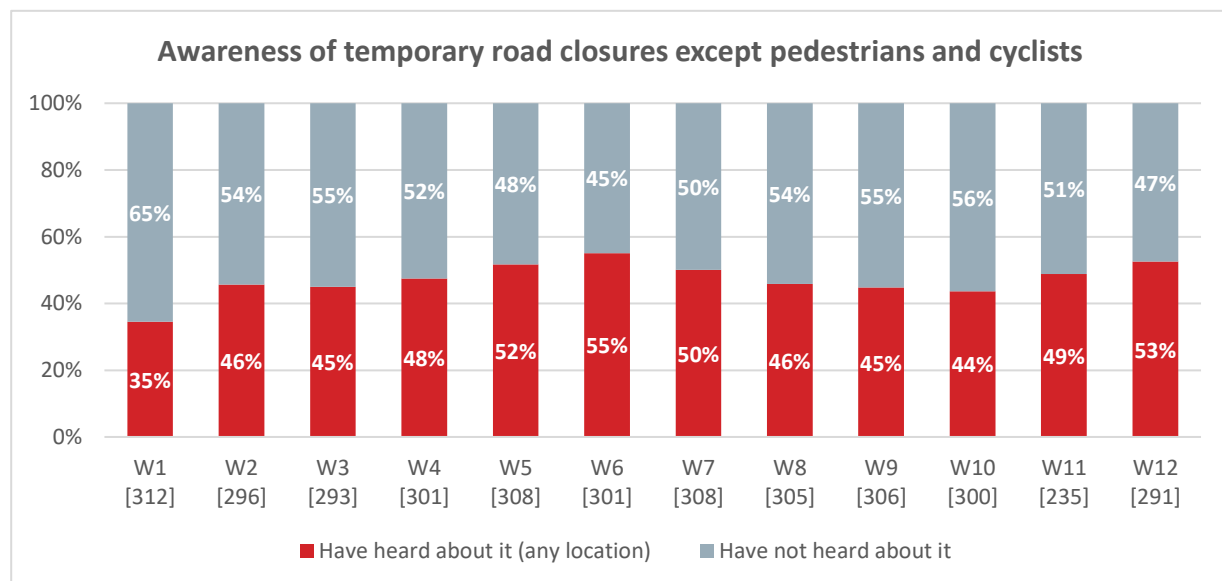
Figure 30. Impact of temporary road closures except for buses, pedestrians and cyclists on encouraging respondents to walk or cycle more

8. SPACES FOR PEOPLE: TEMPORARY ROAD CLOSURES EXCEPT PEDESTRIANS AND CYCLISTS

8.1 Awareness of temporary road closures except pedestrians and cyclists

8.1.1 Figure 31 shows the level of awareness respondents had for temporary road closures except pedestrians and cyclists in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

8.1.2 Awareness generally increased over the first seven waves (35%-55%); however slightly decreased over the latter three waves (44%-46%). There was a slight increase again in the latest two waves (49%-53%).

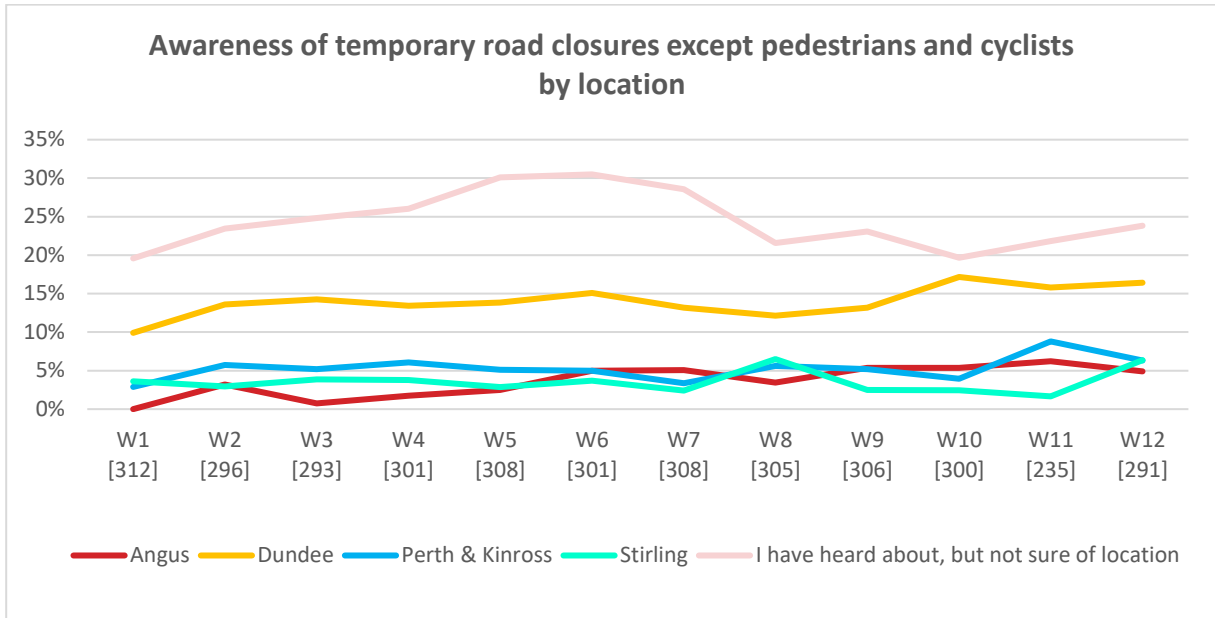


Base: All respondents (varies by wave: 235-312)

Figure 31. Awareness of temporary road closures except pedestrians and cyclists (in any location) from July 2020 onwards

8.1.3 Figure 32 shows a breakdown of awareness of the measure across the twelve waves, specifically by location. Commonly, around a quarter of respondents (20%-30%) had heard of temporary road closures except pedestrians and cyclists, but were unsure of the location the measure was in place.

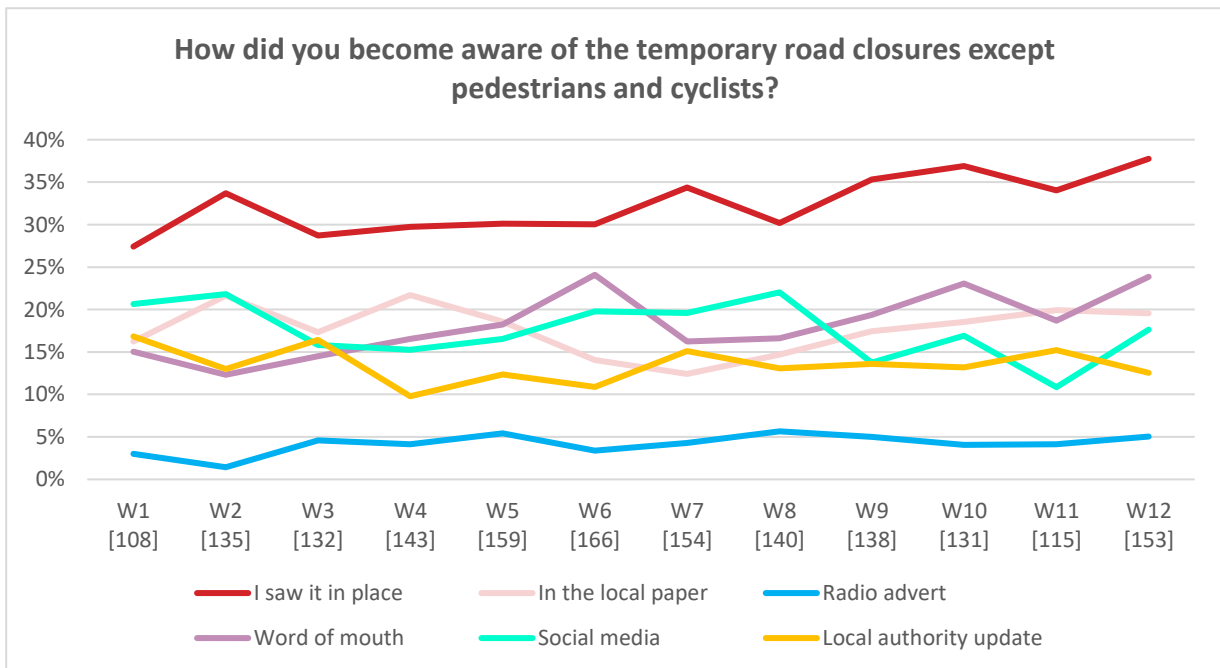
8.1.4 Around a tenth (10%-17%) of respondents were aware of the measure in Dundee, however no more than 9% were aware of the measure in any of the other locations.



Base: All respondents (varies by wave: 235-312)

Figure 32. Awareness of temporary road closures except pedestrians and cyclists (by location) from July 2020 onwards

8.1.5 The most common way that respondents reported becoming aware of the measure was by seeing it in place (27%-38%), while the least common way of becoming aware of the measure was via a radio advert (1%-6%).



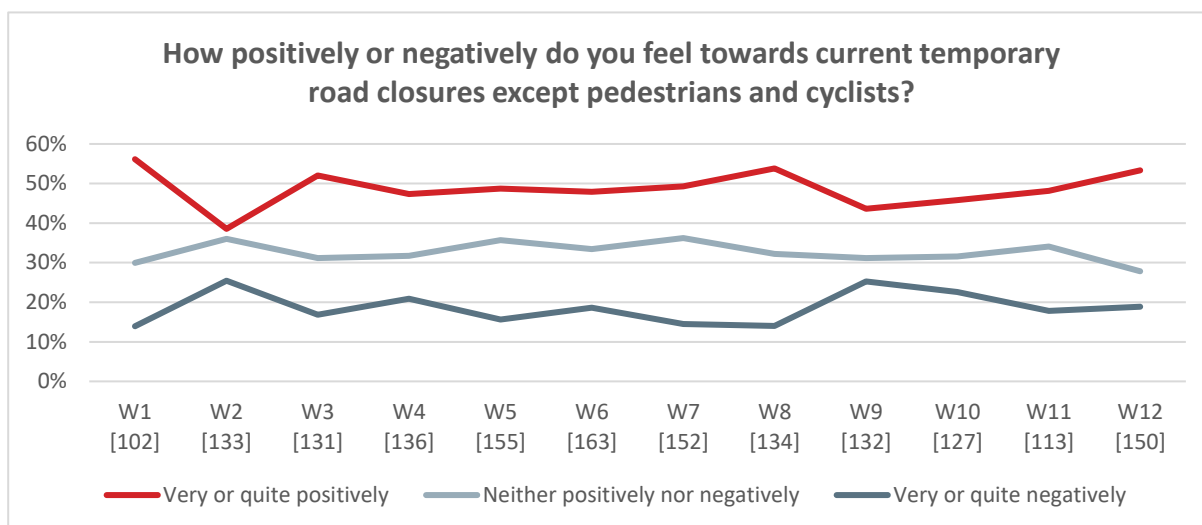
Base: Respondents aware of temporary road closures except pedestrians and cyclists (varies by wave: 108-166)

Figure 33. How respondents became aware of the temporary road closures except pedestrians and cyclists

8.2 Attitudes towards the measure

8.2.1 Figure 34 shows a breakdown of how respondents who reported being aware of temporary road closures except pedestrians and cyclists, felt towards the measure.

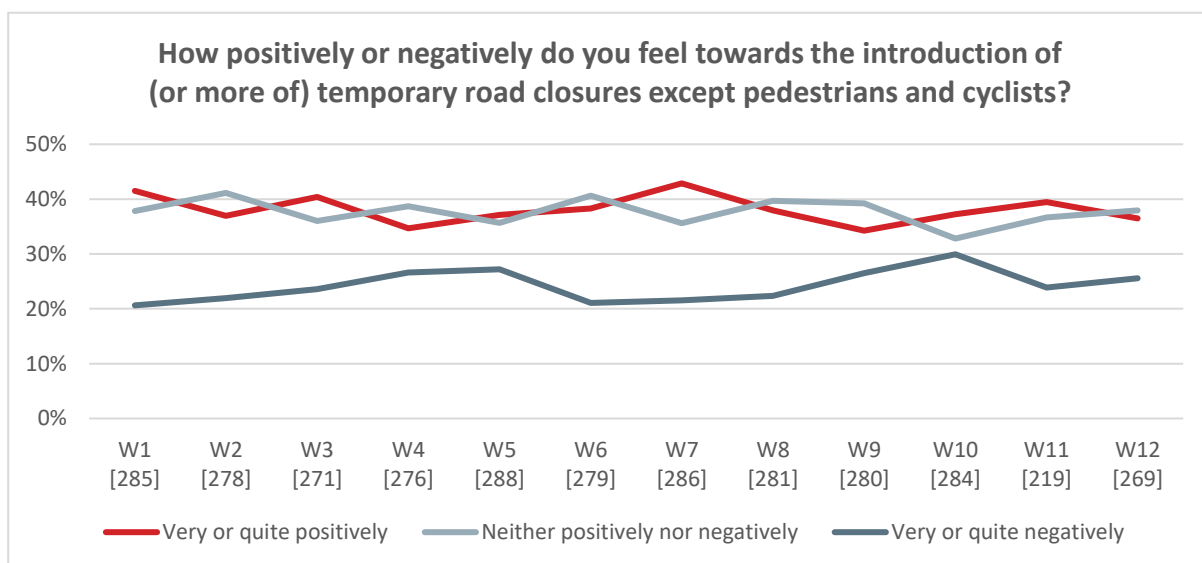
8.2.2 Around half of respondents felt positively towards the measure across the twelve waves (39%-56%). A quarter or less of respondents felt negatively towards the measures (14%-25%).



Base: Respondents aware of the temporary road closures except pedestrians and cyclists, excluding those who answered 'Don't know' (varies by wave: 102-163)

Figure 34. Feelings towards temporary road closures except pedestrians and cyclists currently

8.2.3 All respondents were asked how they felt towards the introduction of (more) temporary road closures except pedestrians and cyclists. Similar proportions felt positively (34%-43%) as felt neither positively nor negatively (33%-41%).



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 219-288)

Figure 35. Feelings towards the introduction of (more) temporary road closures except pedestrians and cyclists

8.2.4 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Between four and six in ten respondents from Dundee (40%-56%) felt positively towards the measure compared to between two and five in Angus (31%-51%); Perth and Kinross (20%-39%); Stirling (19%-43%) across the twelve waves. Respondents from Stirling in wave 12 were the least positive (19%) and respondents from Dundee in wave 7 were the most positive (56%).

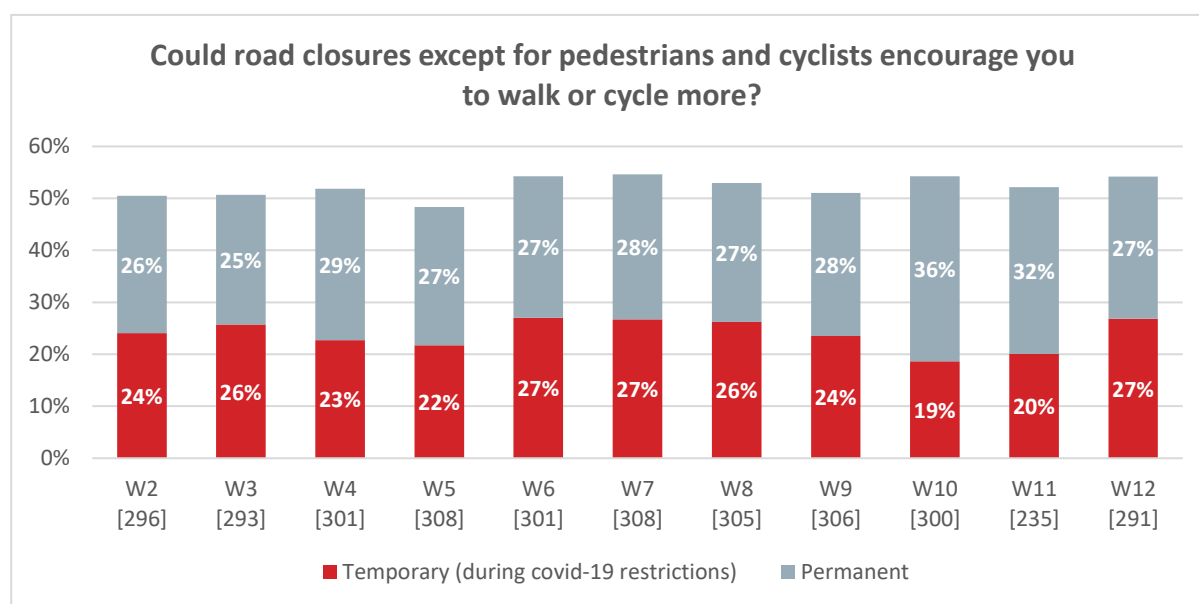
8.2.5 Respondents who reported feeling positively towards temporary road closures except pedestrians and cyclists cited a number of reasons as to why they felt this way. The most common reasons included that with the measure in place, they feel safer walking (38%-51%); it encourages walking (25%-42%); and they feel safer cycling (25%-41%).

8.2.6 Respondents who felt negatively towards the measure most commonly cited that the measure reduces road space for cars and motor vehicles (34%-52%); they were unable to park to access shops (26%-43%); and traffic moves slowly (15%-34%).

8.3 Impact of measure on walking and cycling

8.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

8.3.2 Around half of respondents (48%-55%) reported that temporary road closures except pedestrians and cyclists would encourage them to walk or cycle more. More specifically, around a quarter (19%-27%) would prefer the measure in place temporarily (i.e. during Covid-19 restrictions), while around a further quarter (25%-36%) would prefer the measure in place permanently.



Base: All respondents (varies by wave: 235-208)*

*Question was asked during Wave 2-12 only

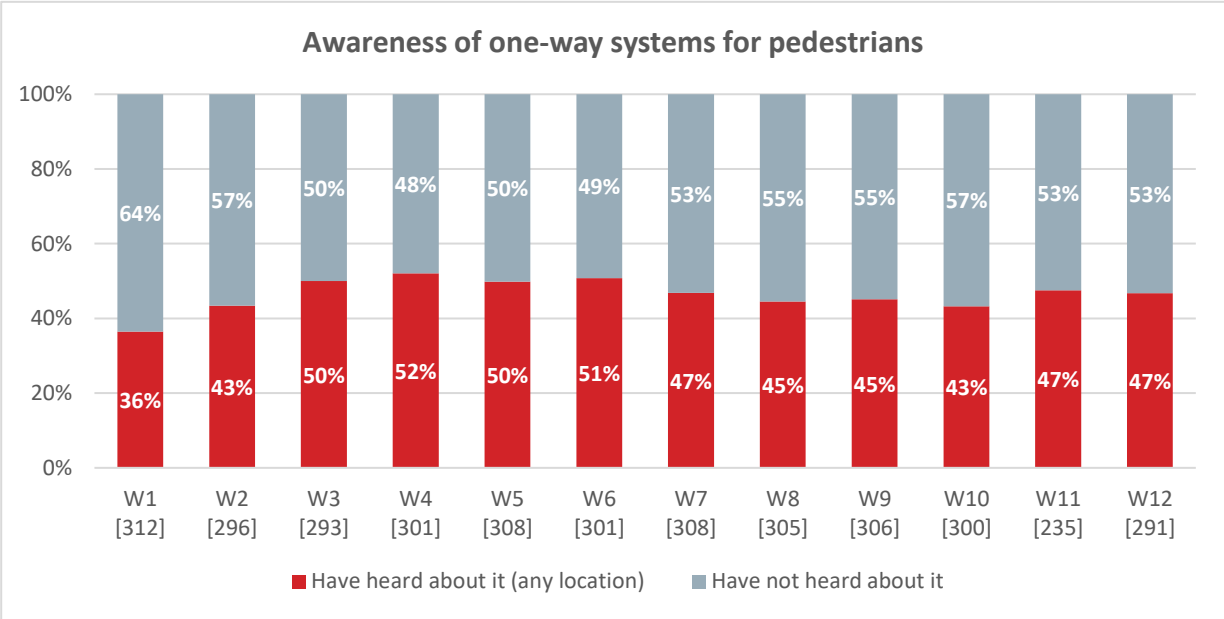
Figure 36. Impact of road closures except for buses, pedestrians and cyclists on encouraging respondents to walk or cycle more

9. SPACES FOR PEOPLE: ONE-WAY SYSTEMS FOR PEDESTRIANS

9.1 Awareness of one-way systems for pedestrians

9.1.1 Figure 37 shows the level of awareness respondents had for one-way systems for pedestrians in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

9.1.2 Awareness of one-way systems for pedestrians in any of these locations generally increased over the first six waves (36%-52%), however somewhat decreased over the latter six waves (43%-47%).

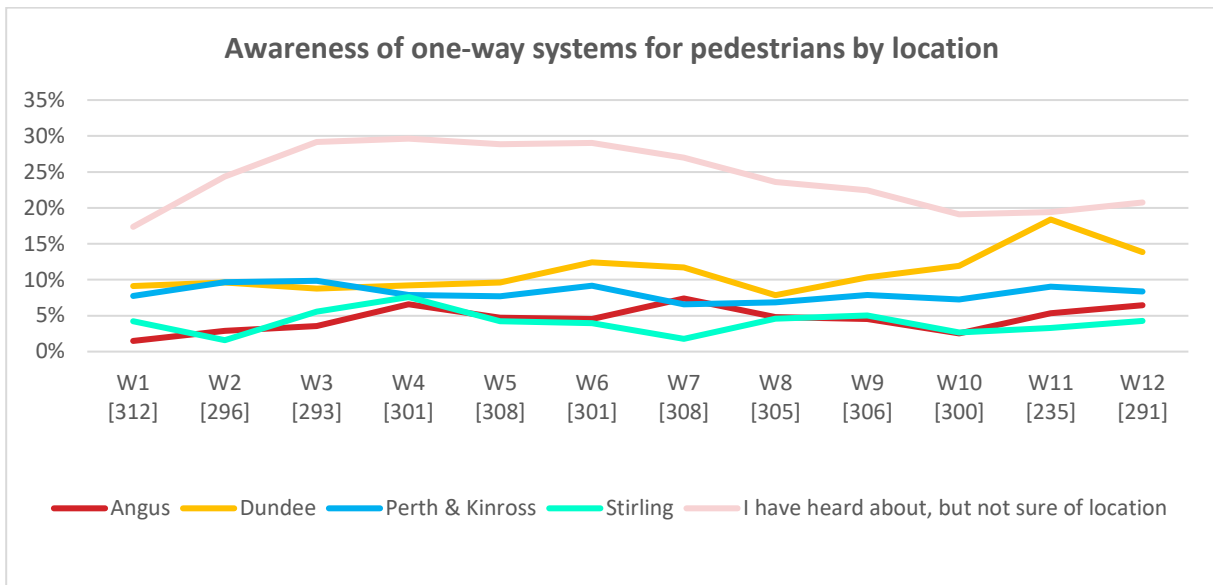


Base: All respondents (varies by wave: 235-312)

Figure 37. Awareness of one-way systems for pedestrians (in any location) from July 2020 onwards

9.1.3 Figure 38 shows a breakdown of awareness of one-way systems for pedestrians across the twelve waves, specifically by location. Commonly, around a quarter of respondents reported that they had heard of the measure, but were unsure in what location they were in place (17%-30%).

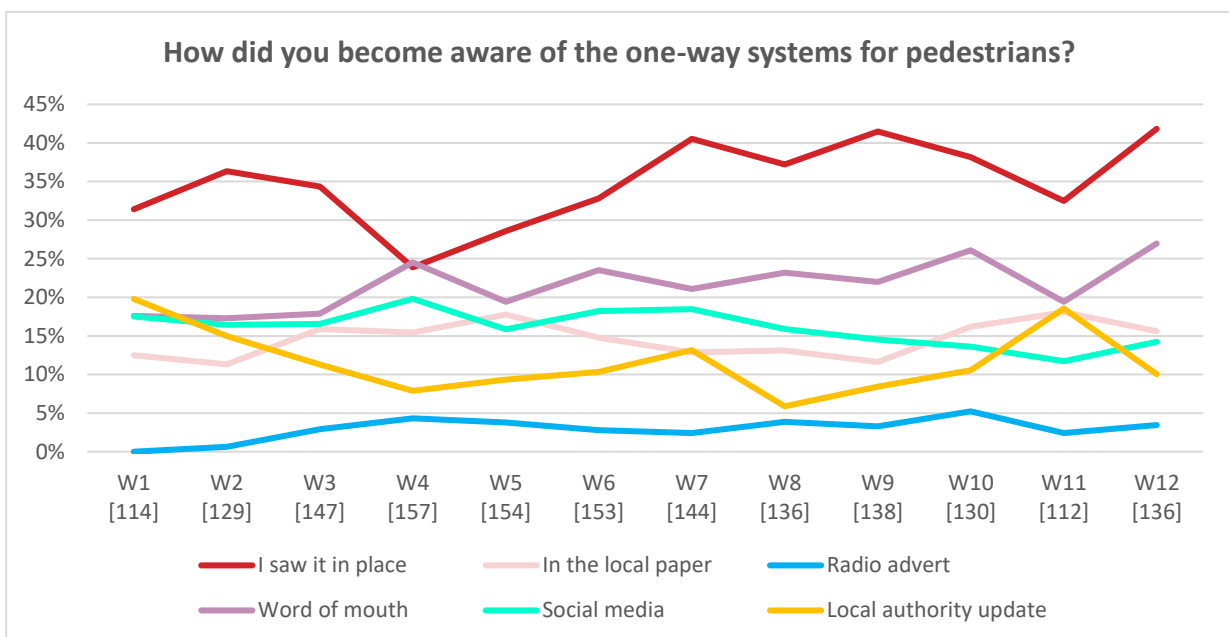
9.1.4 There was little variation in where respondents were aware of the measure in place, with less than sixth consistently aware of placement in any specific location (1%-18%), with slightly more aware in Dundee.



Base: All respondents (varies by wave: 235-312)

Figure 38. Awareness of one-way systems for pedestrians (by location) from July 2020 onwards

9.1.5 Respondents most commonly reported becoming aware of one-way systems for pedestrians by seeing them in place (24%-42%); closely followed by word of mouth (17%-27%).

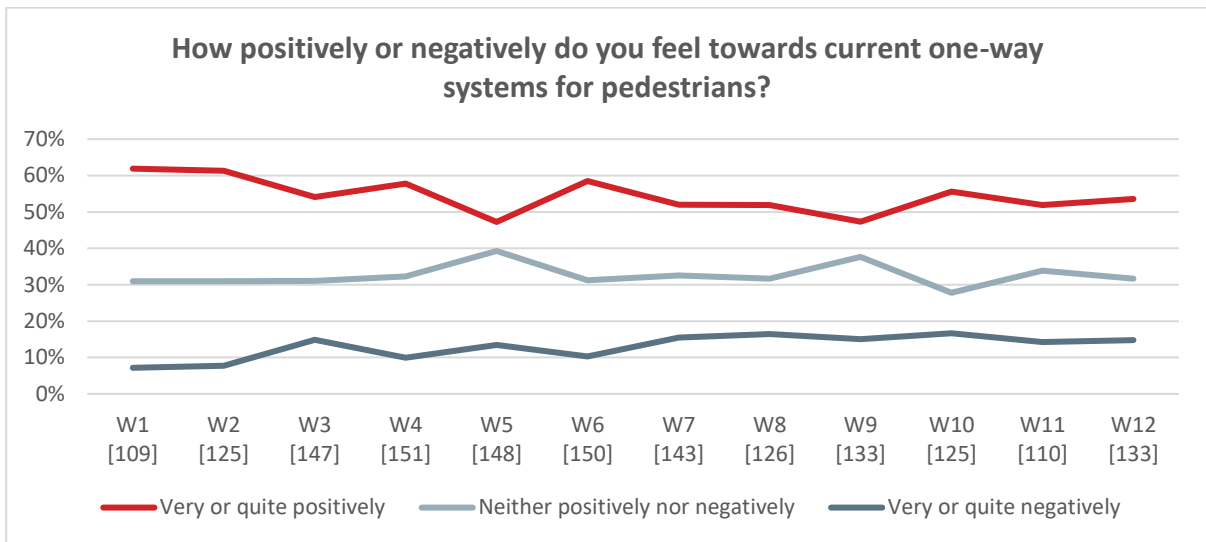


Base: Respondents aware of the one-way systems for pedestrians (varies by wave: 112-157)

Figure 39. How respondents became aware of one-way systems for pedestrians

9.2 Attitudes towards the measure

9.2.1 Respondents who reported being aware of one-way systems for pedestrians were asked how they felt towards the measure. Around half of respondents across the twelve waves felt positively (47%-62%), while less than a sixth felt negatively (7%-17%).

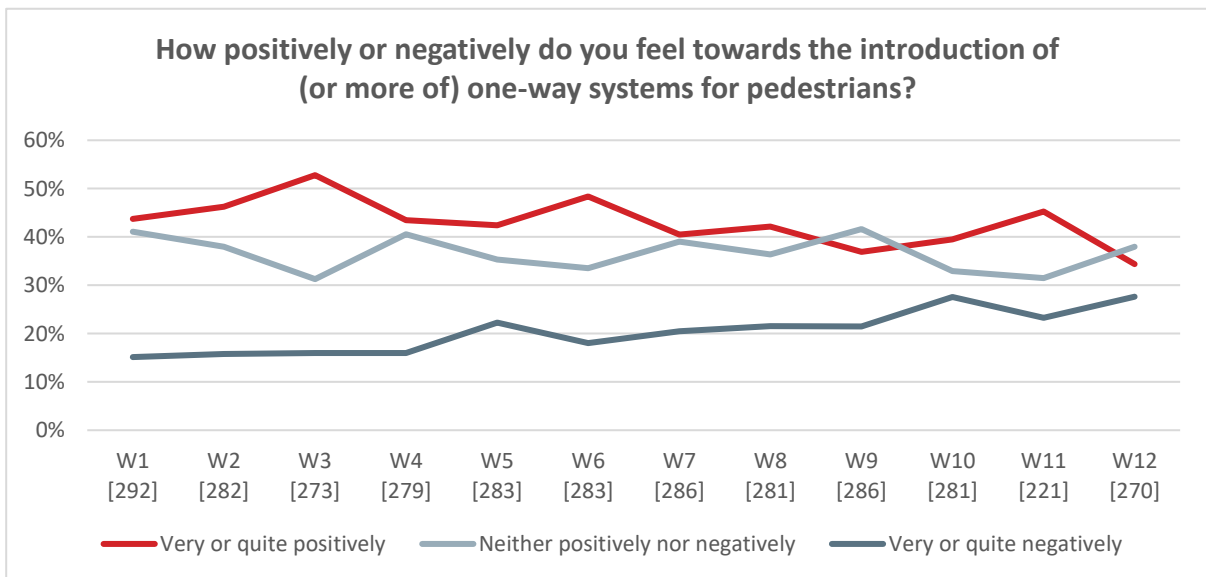


Base: Respondents aware of the one-way systems for pedestrians, excluding those who answered 'Don't know' (varies by wave: 109-151)

Figure 40. Feelings towards one-way systems for pedestrians currently

9.2.2 All respondents were asked how they felt towards the introduction of (more) one way systems for pedestrians. Around four in ten felt positively towards the measures (34%-53%), with positivity generally decreasing across the waves, while similar amounts felt neither positively nor negatively (31%-42%).

9.2.3 Around a sixth felt (15%-16%) negatively during the first four waves, and this somewhat increased in the latter waves (18%-28%).



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 221-292)

Figure 41. Feelings towards the introduction of (more) one-way systems for pedestrians

9.2.4 Positivity towards the introduction of (more) of the measure varied somewhat between those from different local authority areas. Slightly more from Dundee (40%-65%) felt positively towards the measure, compared to Angus (30%-55%); Perth and Kinross (31%-48%); Stirling (19%-48%) across the twelve waves. Respondents from Stirling in wave 12 were the least positive (19%) and respondents from Dundee in wave 6 were the most positive (65%).

9.2.5 Respondents who reported feeling positively towards current or potential one-way systems for pedestrians cited a number of reasons why they felt this way. The most common reasons included that with the measures in place, respondents feel safer walking

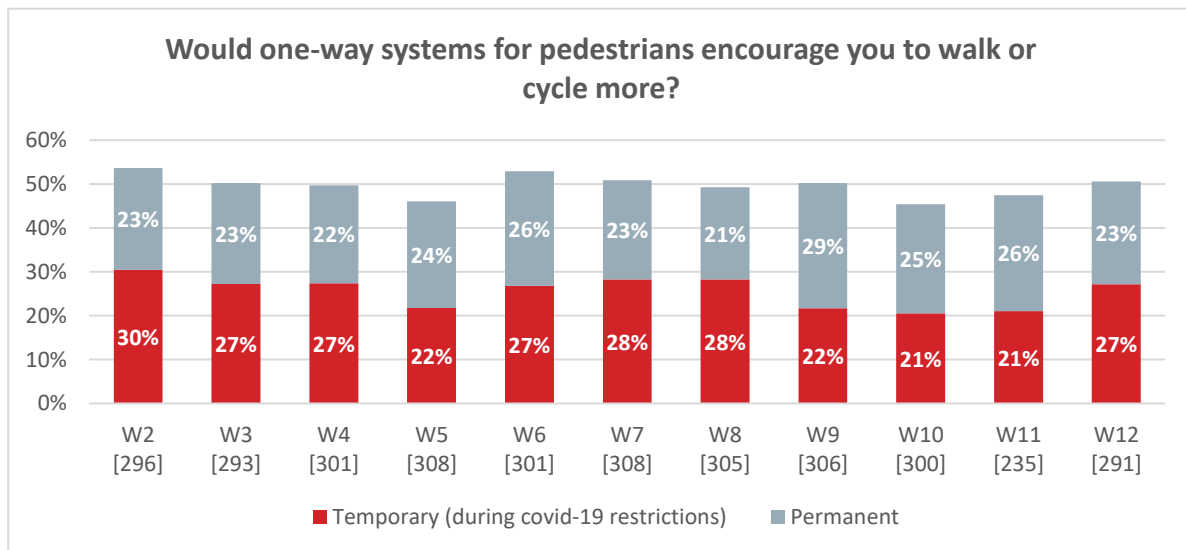
(47%-65%), a reason more commonly cited in the latter five waves; it makes it easier to maintain social distancing (42%-53%); it encourages walking (17%-33%), a reason less commonly cited in the latter three waves.

9.2.6 Respondents who felt negatively also cited a number of reasons, the most common being that with the measure in place, respondents do not feel safer walking (34%-56%); one-way systems are confusing (35%-49%); and they are unable to access shops (4%-21%), a reason which was cited less as the waves went on.

9.3 Impact of measure on walking and cycling

9.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

9.3.2 Around half of respondents (45%-54%) reported that one ways systems for pedestrians would encourage them to walk or cycle more. More specifically, around a quarter (21%-30%) would prefer the measure on a temporary basis, while around a further quarter would prefer the measure on a permanent basis (21%-29%).



Base: All respondents (varies by wave: 235-308)*

*Question was asked during Wave 2-12 only

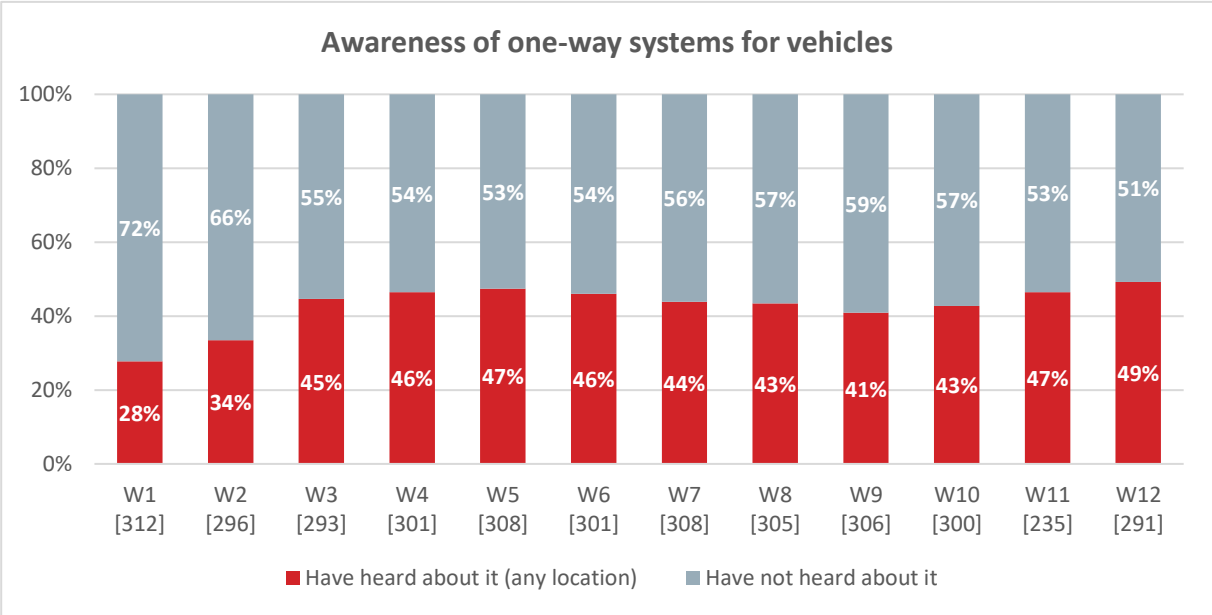
Figure 42. Impact of one-way systems for pedestrians on encouraging respondents to walk or cycle more

10. SPACES FOR PEOPLE: ONE-WAY SYSTEMS FOR VEHICLES

10.1 Awareness of one-way systems for vehicles

10.1.1 Figure 43 shows the level of awareness respondents had for one-way systems for vehicles in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

10.1.2 Awareness increased over the first five waves (28%-47%), and remained relatively consistent over the latter seven waves (41%-49%).

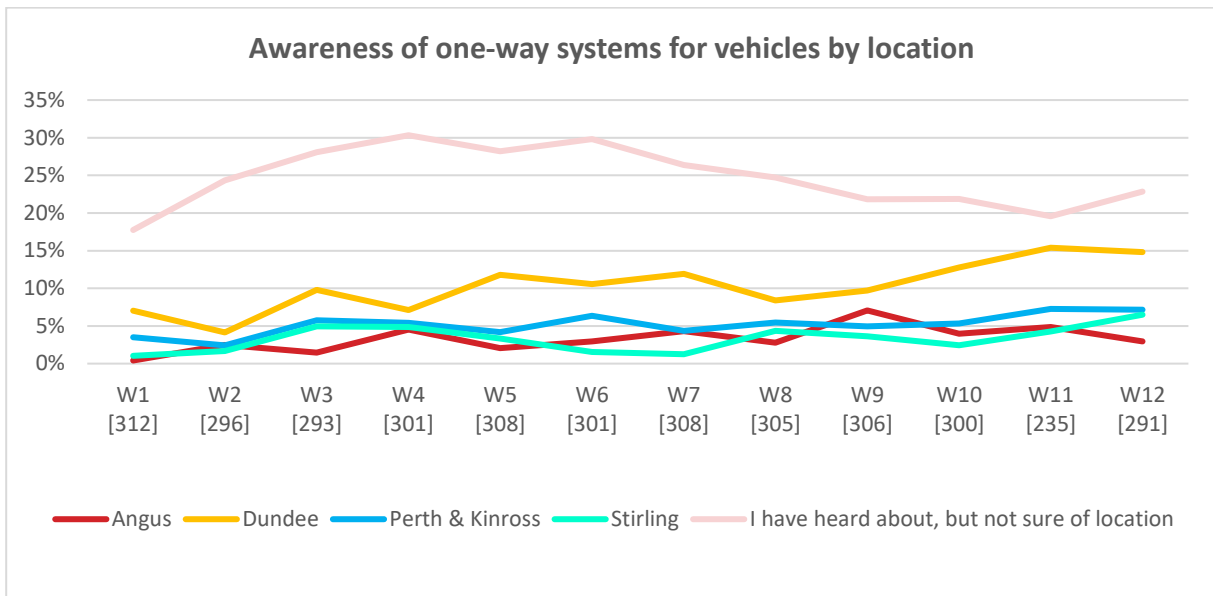


Base: All respondents (varies by wave: 235-312)

Figure 43. Awareness of one-way systems for vehicles (in any location) from July 2020 onwards

10.1.3 Figure 44 shows a breakdown of awareness of one-way systems for vehicles across the twelve waves by location. Commonly, around a quarter of respondents reported that they had heard of one-way systems for vehicles, but were unsure in what location they were in place (18%-30%).

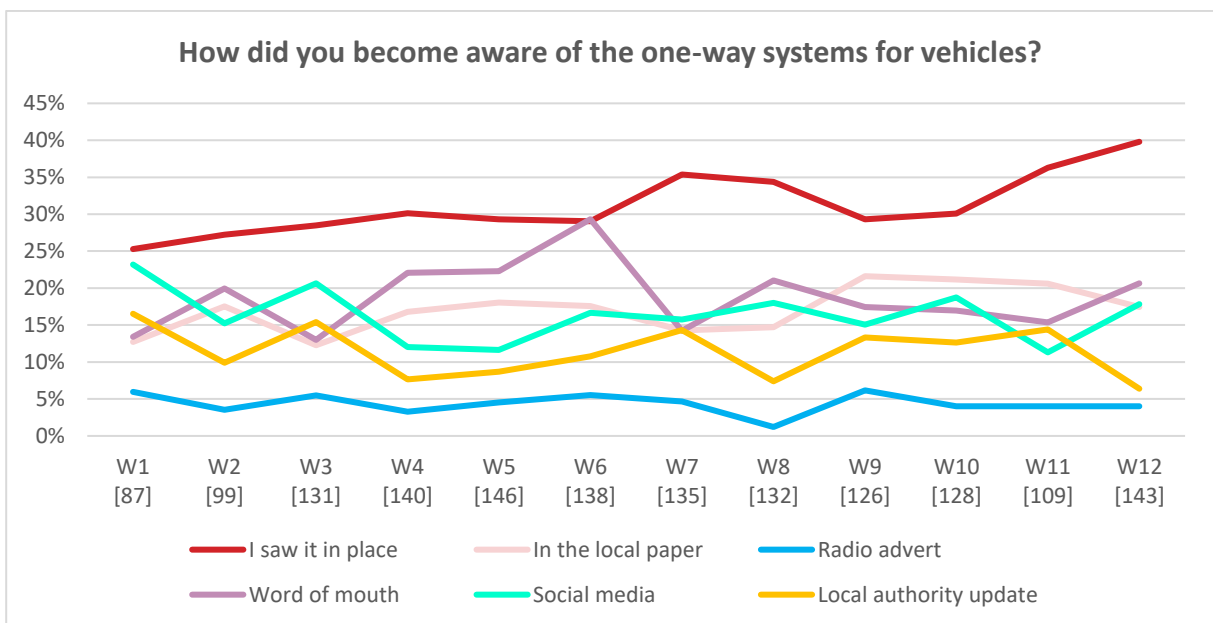
10.1.4 There was not much variation in awareness in the four location, with slightly more aware of measures in place in Dundee (4%-15%), compared to the remaining three locations (0%-7%).



Base: All respondents (varies by wave: 235-312)

Figure 44. Awareness of one-way systems for vehicles (by location) from July 2020 onwards

10.1.5 Respondents most commonly reported becoming aware of the measure via seeing it in place (25%-40%) and word of mouth (13%-29%).



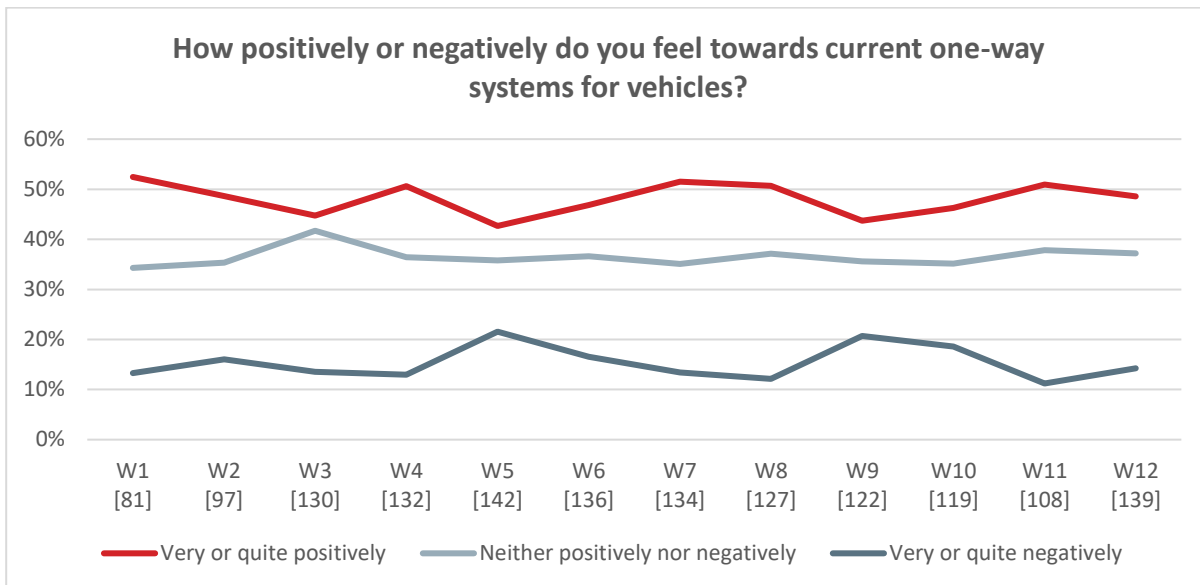
Base: Respondents aware of the one-way systems for vehicles (varies by wave: 87-146)

Figure 45. How respondents became aware of the one-way systems for vehicles

10.2 Attitudes towards the measure

10.2.1 Figure 46 shows a breakdown of how respondents who were aware of one-way systems for vehicles felt towards the measure.

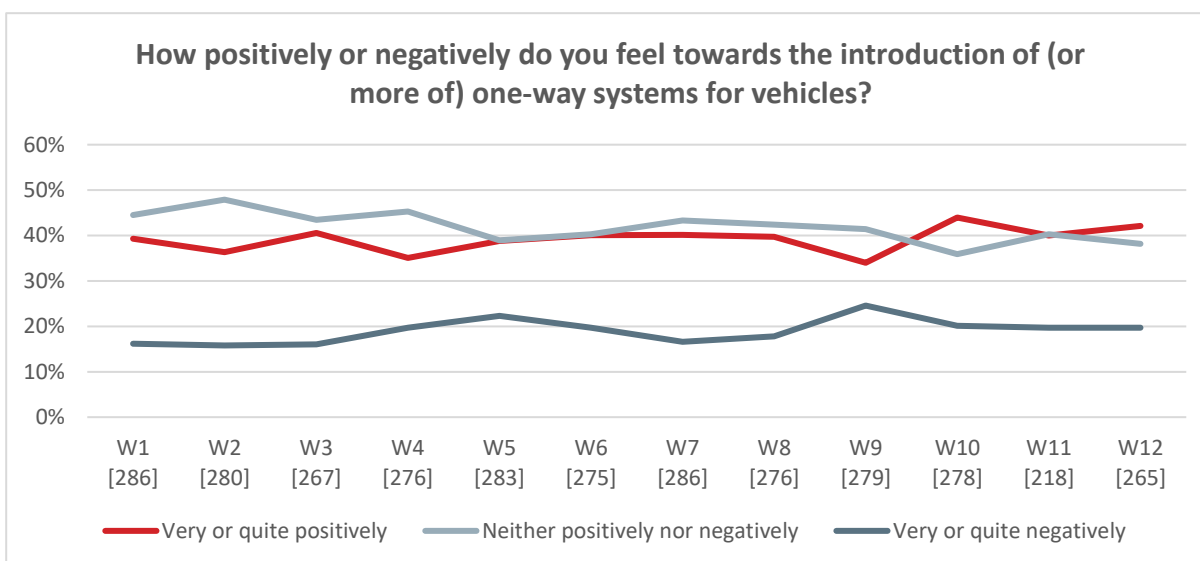
10.2.2 Around half (43%-52%) felt positively, while around a third felt neither positively nor negatively (34%-42%). Less than a quarter felt negatively (12%-22%).



Base: Respondents aware of the one-way systems for vehicles, excluding those who answered 'Don't know' (varies by wave: 81-142)

Figure 46. Feelings towards one-way systems for vehicles currently

10.2.3 All respondents were asked how they felt towards the introduction of (more) one-way systems for vehicles. Around four in ten felt positively (34%-44%), while a similar proportion felt neither positively nor negatively (36%-48%). Around a fifth (16%-25%) felt negatively.



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 218-286)

Figure 47. Feelings towards the introduction of (more) one-way systems for vehicles

10.2.4 Positivity towards the introduction of (more) of the measure varied somewhat between those from different local authority areas. Slightly more from Dundee (35%-58%) felt positively towards the measure, compared to Angus (32%-44%); Perth and Kinross (27%-38%); Stirling (20%-50%) across the twelve waves. Respondents from Stirling in wave 12 were the least positive (20%) and respondents from Dundee in wave 12 were the most positive (58%).

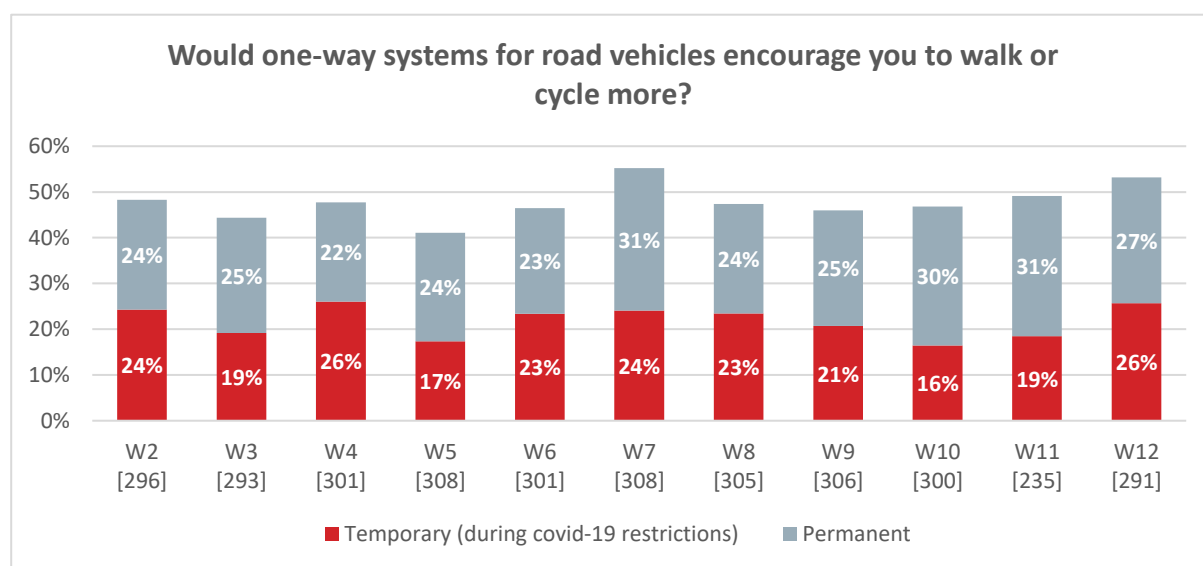
10.2.5 Respondents who felt positively towards current or potential one-way systems for vehicles cited a number of reasons why they felt this way. The most common reasons included that with the measure in place, it means there is less traffic on the roads (25%-51%), a reason which was more commonly cited during the first two waves; respondents feel safer walking (23%-39%); air quality is improved (13%-26%).

10.2.6 Respondents who felt negatively also cited a number of reasons for feeling this way, the most common being that with the measure in place, respondents thought that one-way systems are confusing (40%-70%); traffic moves too slowly (23%-42%); they are unable to park to access shops (6%-33%), a reason which was more commonly cited from Wave 2 onwards.

10.3 Impact of measure on walking and cycling

10.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

10.3.2 Around half of respondents (41%-55%) reported that one-way systems for vehicles would encourage them to walk or cycle more. More specifically, around a fifth (16%-26%) would like the measure to be in place temporarily (i.e. during Covid-19 restrictions), while around a quarter (22%-31%) would like the measure to be in place permanently.



Base: All respondents (varies by wave: 235-308)*

*Question was asked during Wave 2-12 only

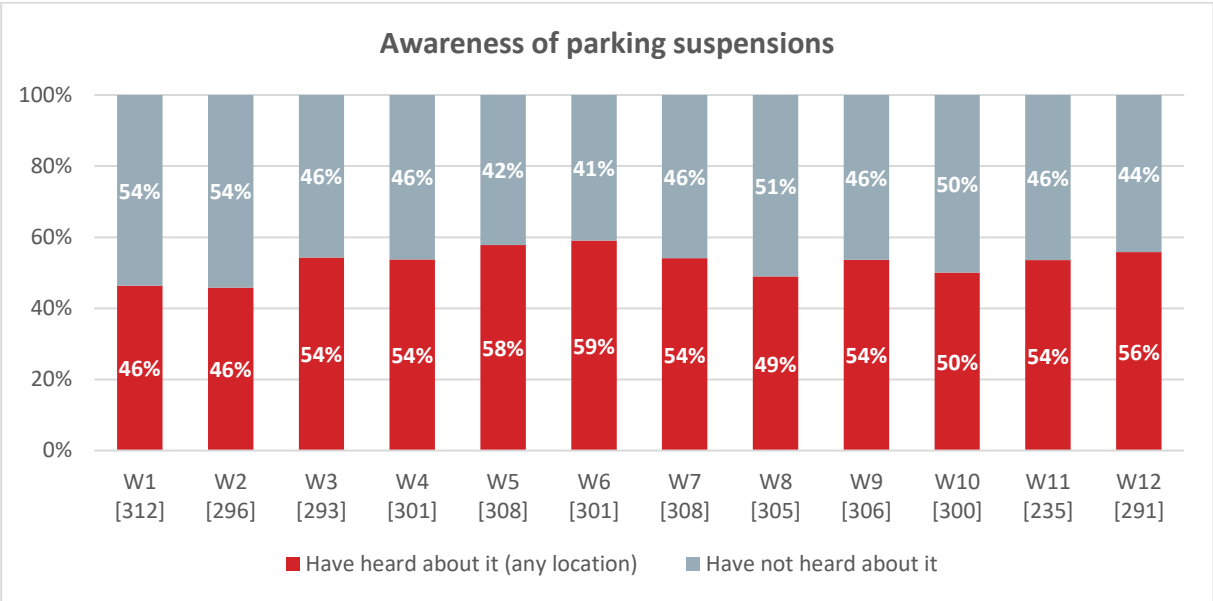
Figure 48. Impact of one-way systems for vehicles on encouraging respondents to walk or cycle more

11. SPACES FOR PEOPLE: PARKING SUSPENSIONS

11.1 Awareness of parking suspensions

11.1.1 Figure 49 shows the level of awareness respondents had for parking suspensions in either Angus, Dundee, Perth & Kinross, Stirling or an unspecified location across the twelve waves.

11.1.2 Awareness increased over the first six waves (46%-59%) and remained relatively consistent in the latter waves (49%-56%).

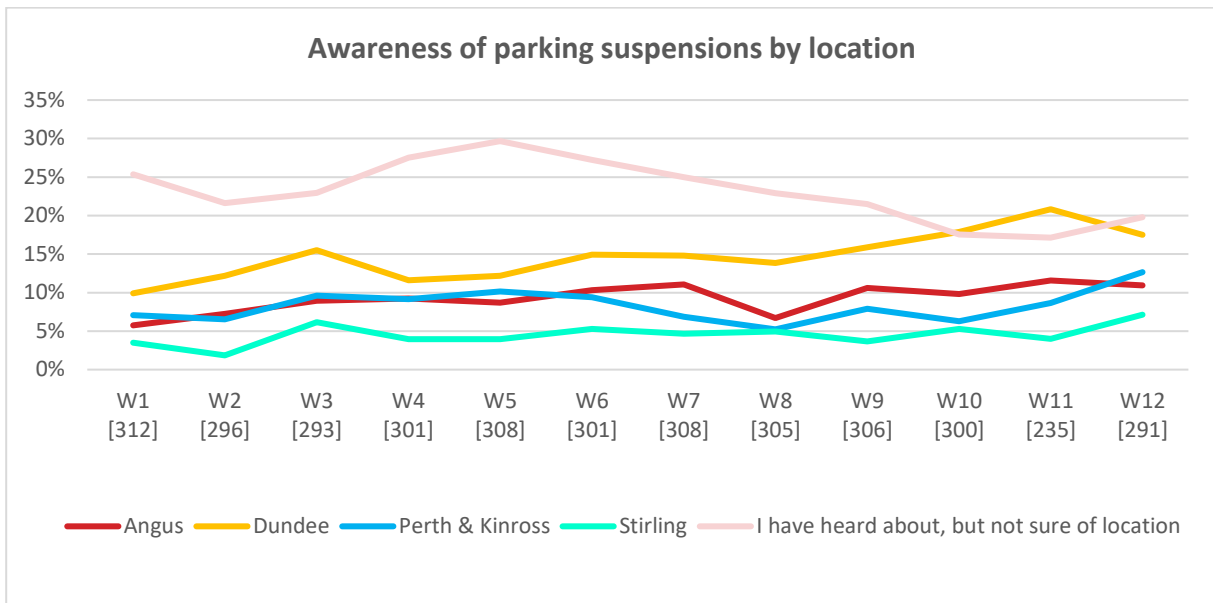


Base: All respondents (varies by wave: 235-312)

Figure 49. Awareness of parking suspensions (in any location) from July 2020 onwards

11.1.3 Figure 50 shows a breakdown of awareness of parking suspensions across the twelve waves, by location. Commonly, around a quarter of respondents reported that they had heard of the parking suspensions, but were unsure in what location they were in place (17%-30%).

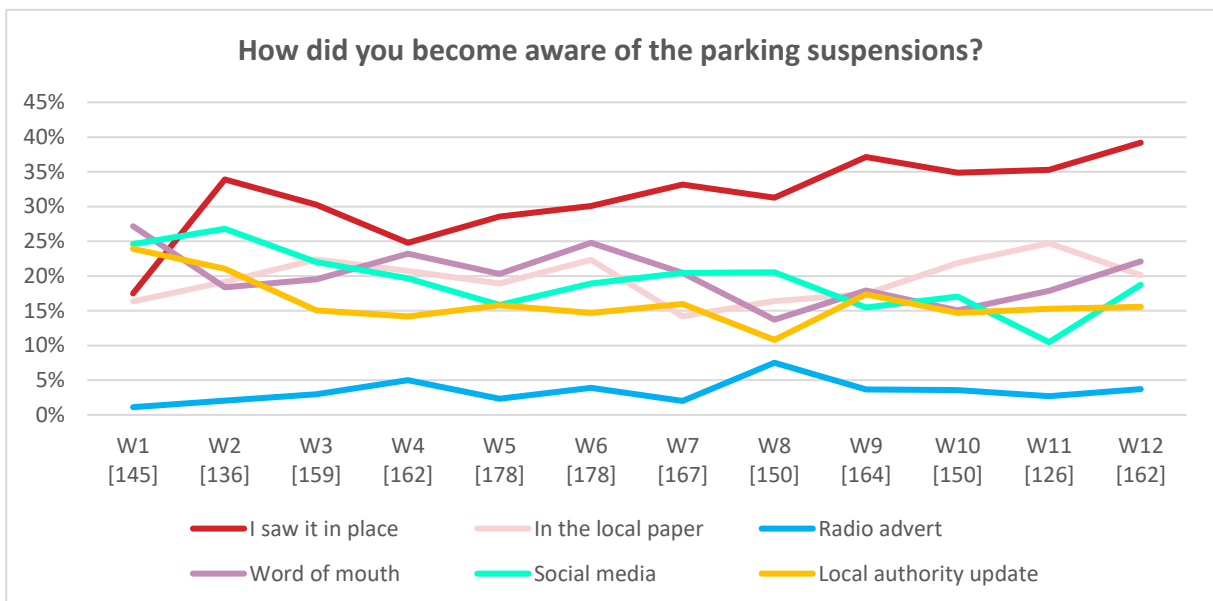
11.1.4 Awareness of the measures differed somewhat by location, with around a sixth (10%-21%) aware of the measure in Dundee, compared to between 2% and 13% in the remaining locations.



Base: All respondents (varies by wave: 235-312)

Figure 50. Awareness of parking suspensions (by location) from July 2020 onwards

11.1.5 Respondents most commonly reported becoming aware of the measures by seeing them in place (17%-39%); word of mouth (14%-27%); and by seeing it in the local paper (14%-25%).

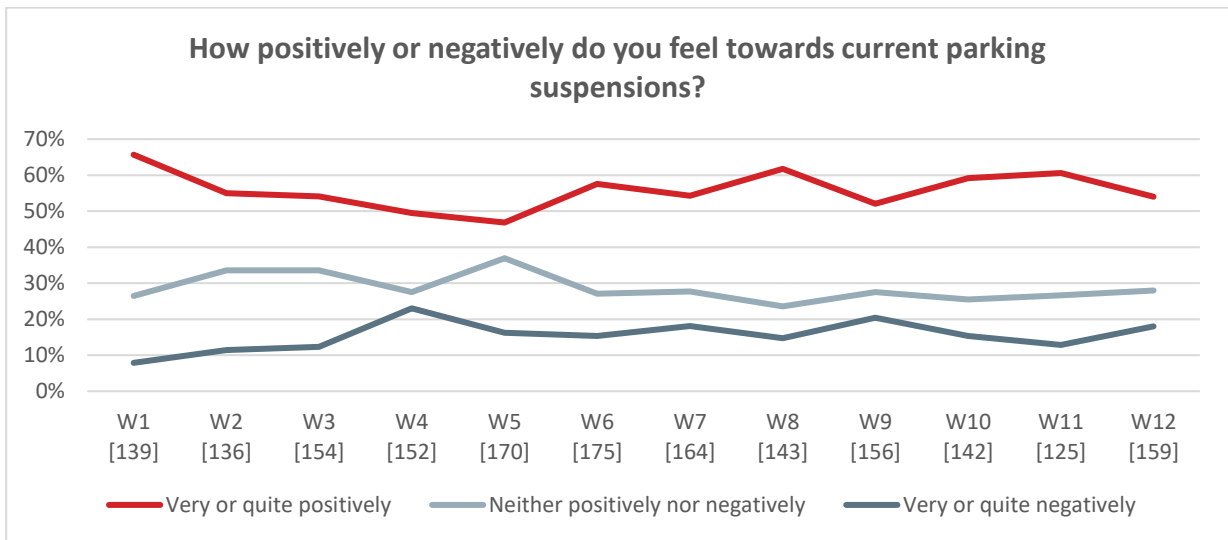


Base: Respondents aware of the parking suspensions (varies by wave: 126-178)

Figure 51. How respondents became aware of the parking suspensions

11.2 Attitudes towards the measure

11.2.1 Around half (47%-66%) of respondents who reported being aware of the parking suspensions felt very positively towards them, while less than a quarter reported feeling negatively (8%-23%).

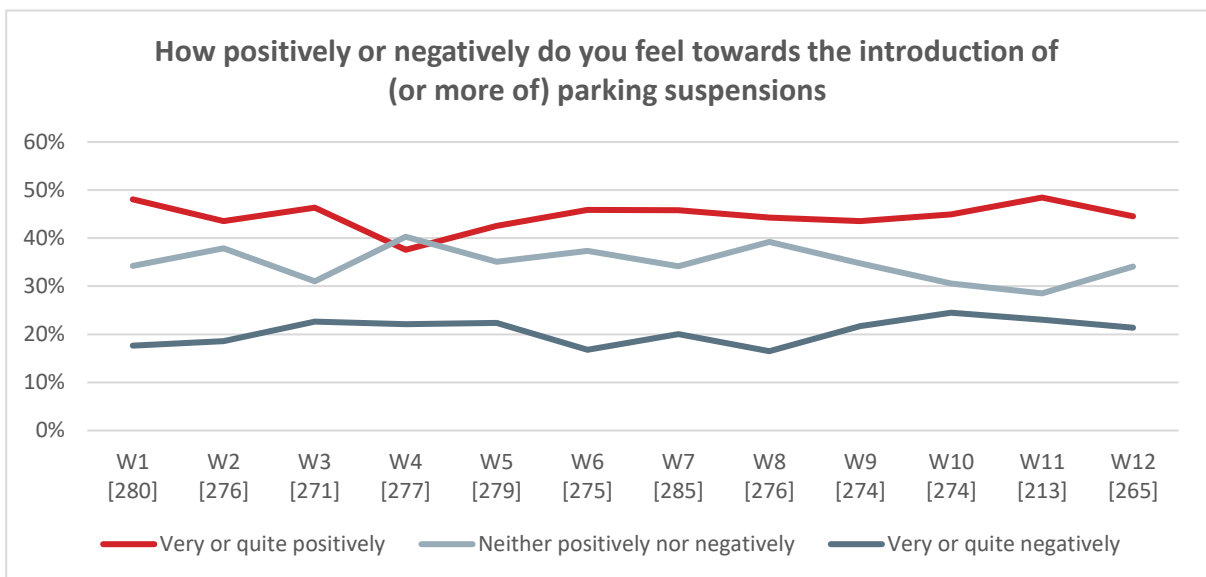


Base: Respondents aware of the parking suspensions, excluding those who answered 'Don't know' (varies by wave: 125-175)

Figure 52. Feelings towards parking suspensions currently

11.2.2 All respondents were asked how they felt towards the introduction of (more) parking suspensions.

11.2.3 Around four in ten of respondents (38%-48%) felt positively, while around a third (29%-40%) felt neither positively nor negatively.



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 213-285)

Figure 53. Feelings towards the introduction of (more) parking suspensions

11.2.4 Positivity towards the introduction of (more) of the measure did not vary much between those from different local authority areas. Slightly less from Stirling (25%-45%) felt positively towards the measure, compared to those from Dundee (36%-64%); Angus (46%-60%); Perth and Kinross (28%-52%) across the twelve waves. Respondents from Stirling in wave 12 were the least positive (24%) and respondents from Dundee in wave 6 were the most positive (64%).

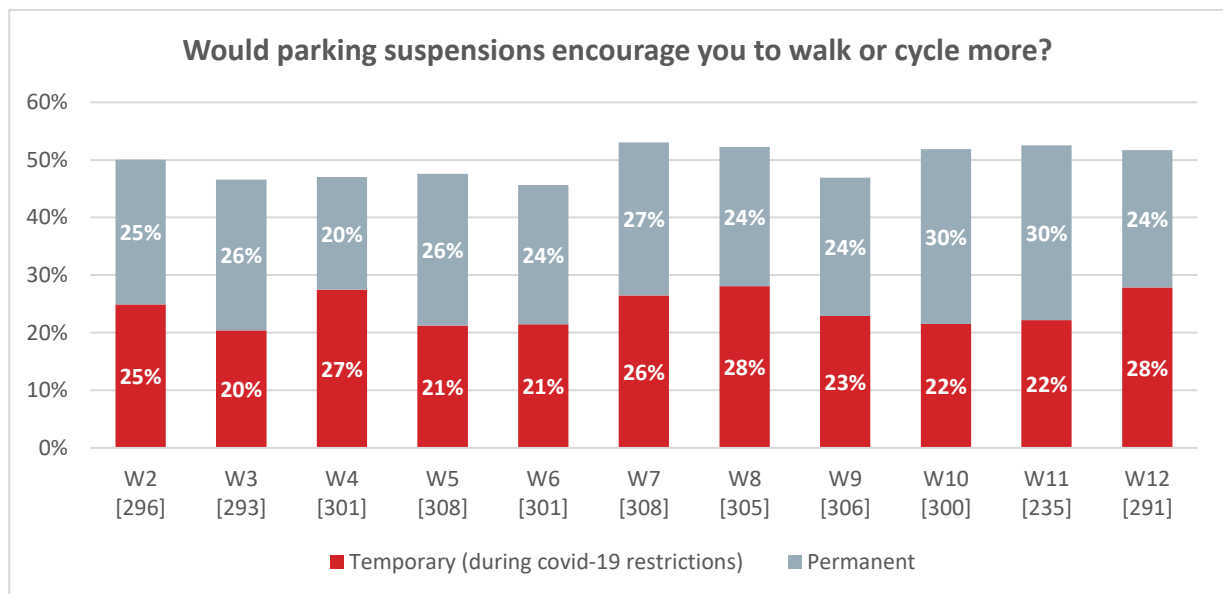
11.2.5 Respondents who reported feeling positively towards current or potential parking suspensions cited a number of reasons as to why they felt this way. The most common reasons included that with the measure in place, there is less traffic on the roads (26%-43%), a reason less commonly cited as time went on; air quality is improved (14%-27%); walking is encouraged (11%-26%).

11.2.6 Respondents who felt negatively also cited a number of reasons, the most common being that with the measure in place, respondents are unable to park to access shops (53%-73%); there is reduced roads space for cars/motor vehicles (15%-34%); there is increased traffic on the roads (9%-22%), a reason less commonly cited in the latter two waves.

11.3 Impact of measure on walking and cycling

11.3.1 All respondents were asked whether certain measures would encourage them to walk or cycle more.

11.3.2 Around half (46%-53%) of respondents reported that parking suspensions would encourage them to walk or cycle more. Around a quarter (20%-28%) would like the measure in place temporarily (i.e. during Covid-19 restrictions), while a further quarter would like the measure in place permanently (20%-30%).



Base: All respondents (varies by wave: 235-308)*

*Question was asked during Wave 2-12 only

Figure 54. Impact of parking suspensions on encouraging respondents to walk or cycle more

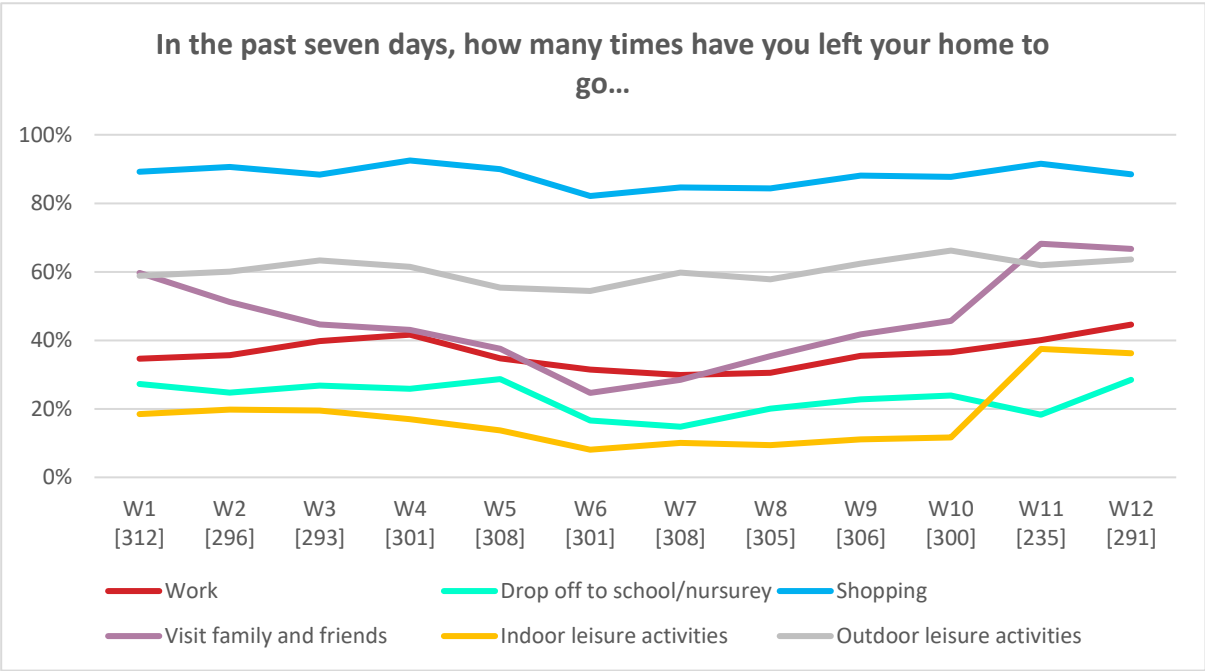
12. TRAVEL BEHAVIOUR IN THE LAST SEVEN DAYS

12.1 Journey types

12.1.1 Figure 55 shows an overview of the types of journeys made at least once in the last seven days, across the twelve survey waves.

12.1.2 In all waves, at least 99% of respondents made at least one trip during the last seven days. The most commonly undertaken journey was for shopping, while the least commonly undertaken journey was for indoor leisure activities. The frequency of journeys being made at least once in the last seven days remained broadly consistent across the twelve waves.

12.1.3 There was a slight decrease in all journey types in Wave 6 however, which coincided with the stricter 'Stay at Home Protection' Level Covid-19 guidance which came into effect in January 2021, following increases in Covid-19 cases. This is likely to have resulted in people making fewer journeys compared to earlier waves. An increase in certain journeys was seen in subsequent waves, most notably during Wave 11 and Wave 12 at which point the protection level was at 0 or below. For example, in the latter two waves compared with the former ten waves there was an increase in indoor leisure activities (36%-37% compared with 8%-20%); trips to visit friends and family (67%-68% compared with 25%-60%); and those travelling to work (40%-45% compared with 30%-37%).



Base: All respondents (varies by wave: 235-312)

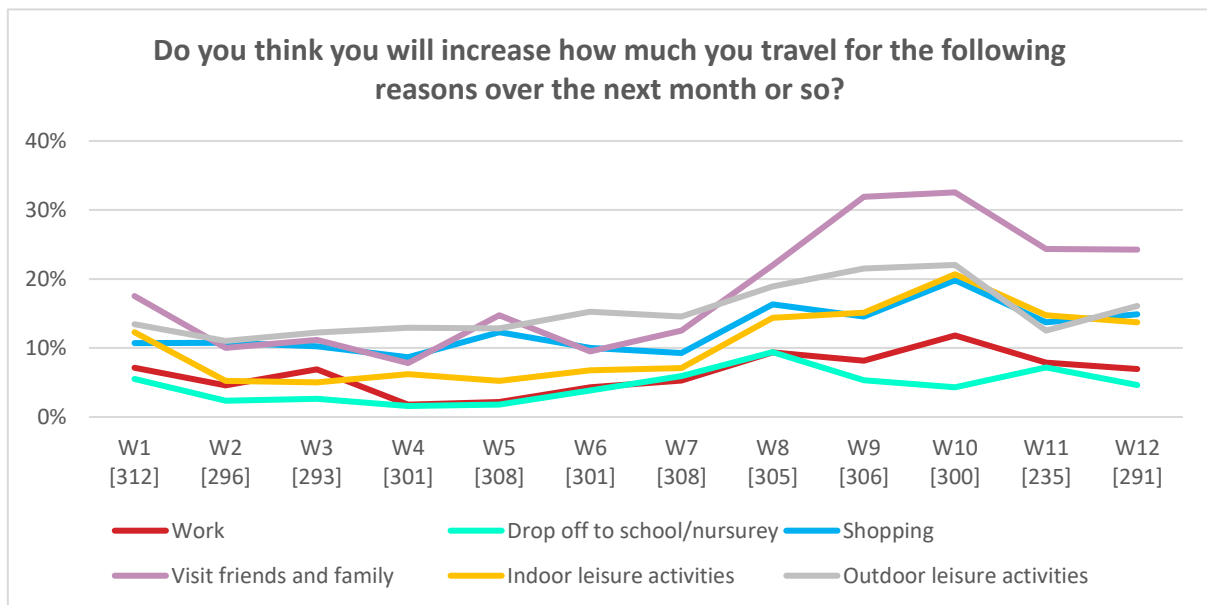
Figure 55. Journeys made at least once in the last seven days

12.2 Anticipated change in travel

12.2.1 Figure 56 shows an overview of the proportion of respondents who anticipated an increase in how much they will travel for the specified journey purposes over the next month or so.

12.2.2 The proportion of respondents who did anticipate an increase remained relatively consistent for the first seven Waves. Wave 8, which saw a much larger increase in those anticipating an increase in travel for all journey types, coincided with March 2021, with respondents possibly holding more positive travel outlooks for the then upcoming Spring

and/or Easter holidays. This was particularly notable for visiting family and friends. This increase continued until Wave 10, after which anticipation plateaued, which can likely be attributed to the lifting of restrictions.



Base: All respondents (varies by wave: 235-312)

Figure 56. Anticipated increase in journeys

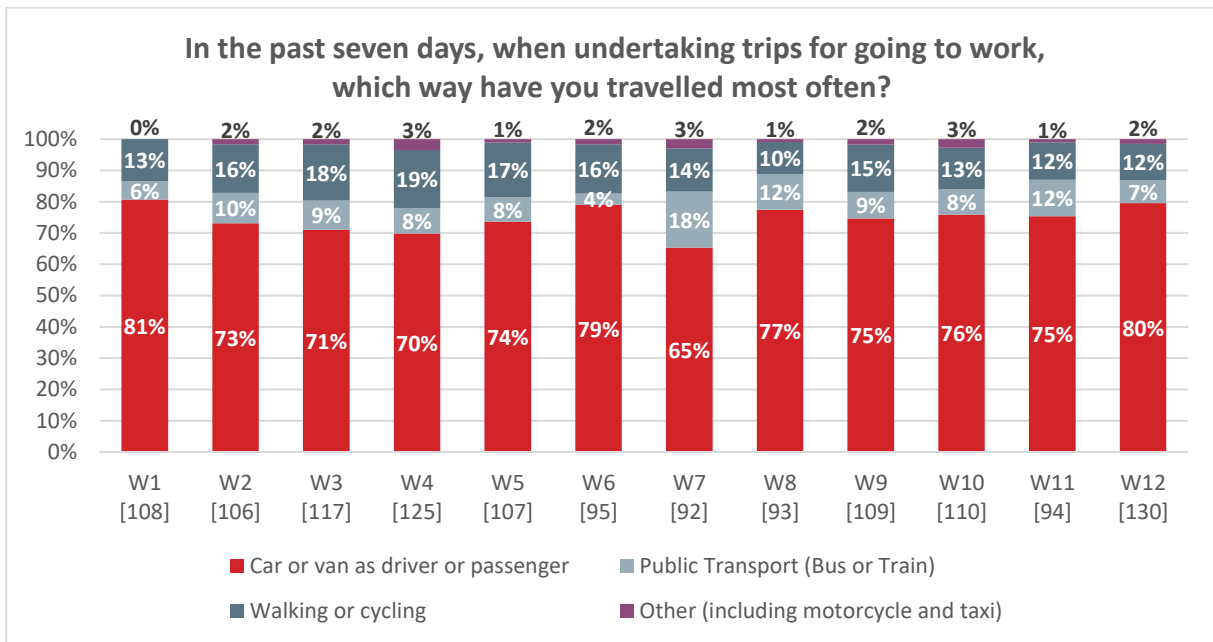
12.3 Main modes of travel

12.3.1 Travelling by car was consistently the most frequently used main way of travelling for all journey purposes, with the exception of outdoor leisure activities.

Travelling to work

12.3.2 Figure 57 shows the main ways respondents reported travelling to work over the last seven days, across the twelve waves. The most common way of travelling to work was consistently reported as by car or van as a driver or a passenger (65%-81%).

12.3.3 While the use of public transport (bus or train) did drop to a low of 4% during Wave 6, which took place following the New Year and the commencement of the stricter Covid-19 protection level in January 2021, and subsequently to a high of 18% during the following wave, use was relatively consistent for the remaining waves (6%-12%).

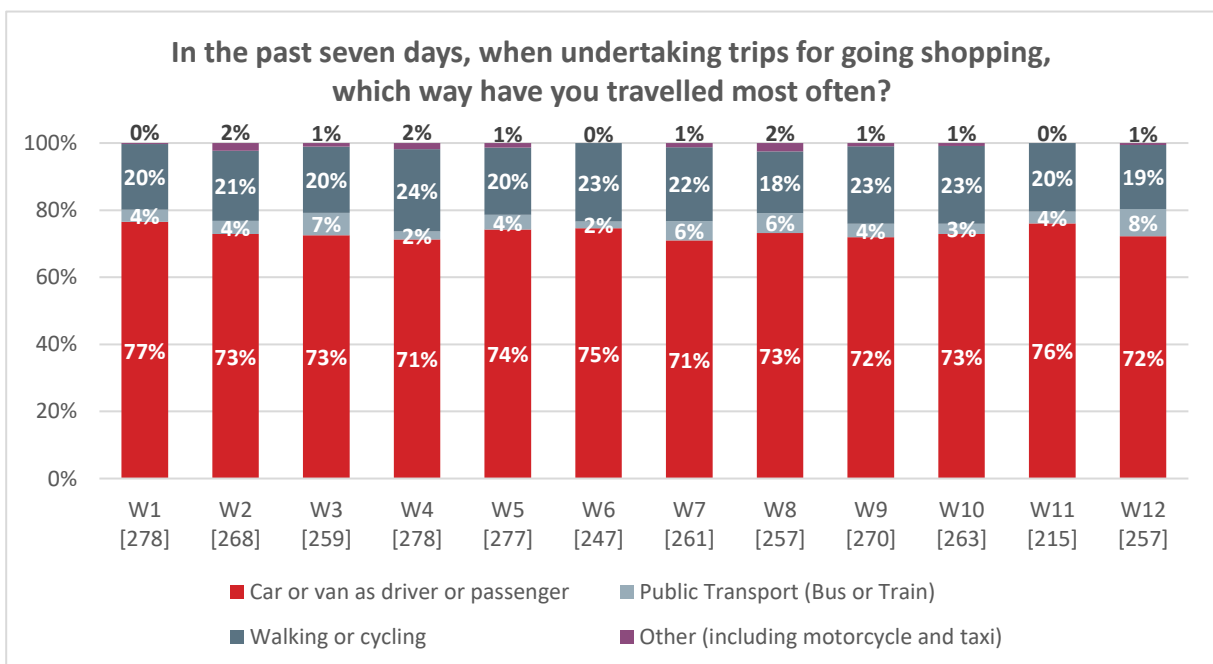


Base: Respondents who travelled to work in the last seven days (varies by wave: 92-130)

Figure 57. Main ways of Travelling to work in the Last Seven Days

Travelling to go shopping

12.3.4 Similarly, travelling by car or van as a driver or a passenger was the most common main way of travelling to undertake shopping trips (71%-77%), as shown in Figure 58. Around a fifth (18%-24%) consistently undertook this journey by foot or by bike, and less than a tenth (2%-8%) used public transport.



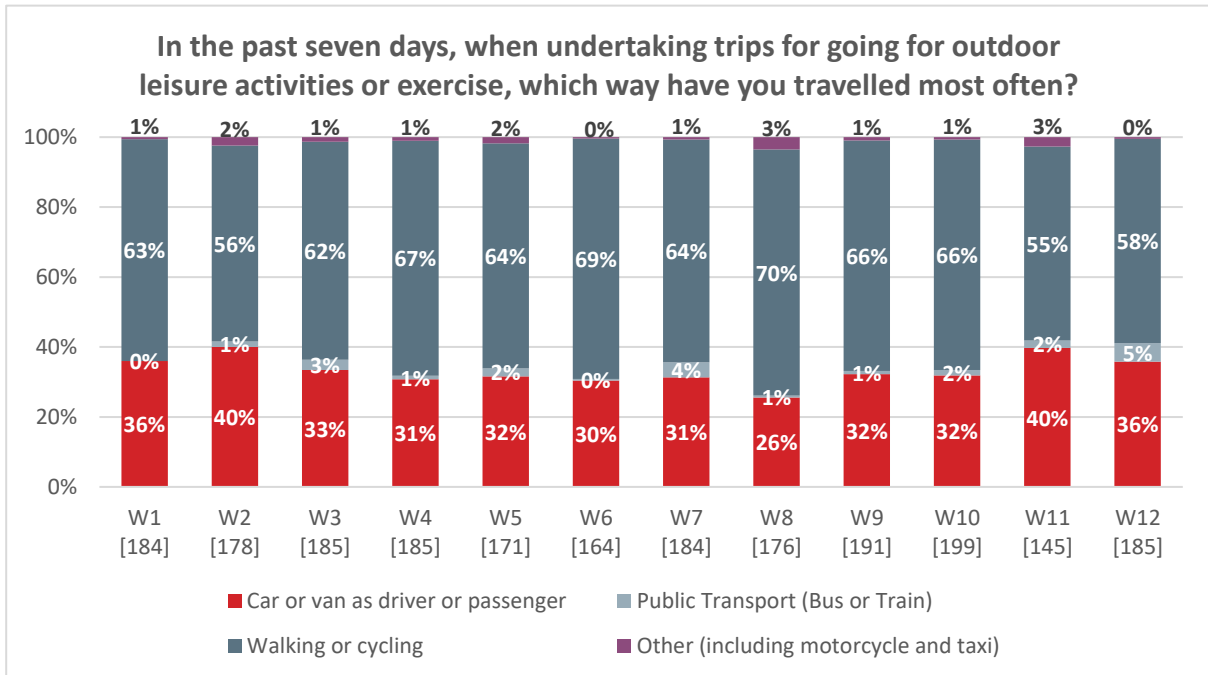
Base: Respondents who made shopping trips in the last seven days (varies by wave: 215-278)

Figure 58. Main way of travelling to go shopping in the last seven days

Travelling to go outdoor leisure activities and exercise

12.3.5 For all twelve waves, walking or cycling was the most common main way of travelling to outdoor leisure activities or exercise (55%-70%), while travelling by a car or van as a driver

or as a passenger was the second most common main way of travelling across the twelve waves (26%-40%).

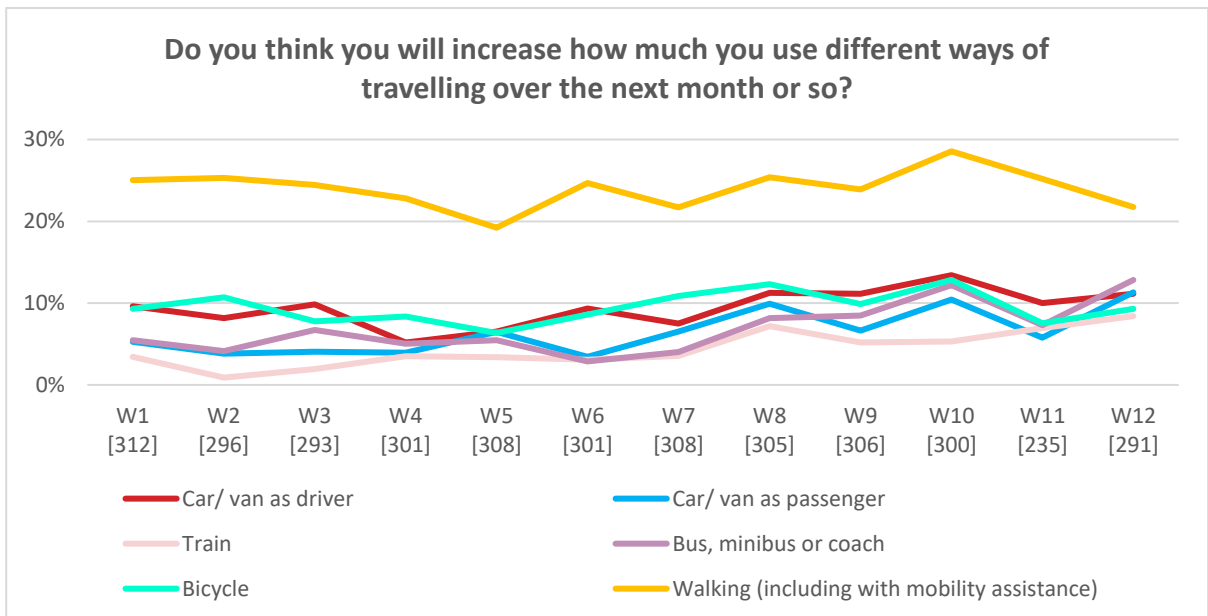


Base: Respondents who made outdoor leisure activities journeys or exercised in the last seven days (varies by wave: 145-199)

Figure 59. Main ways of travelling to outdoor leisure activities/exercise in the last seven days

12.4 Anticipated change in ways of travelling

12.4.1 Generally, respondents did not anticipate an increase in how much they would be using different ways of travelling in the next month or so. Notably, a slightly higher proportion of respondents anticipated an increase in travelling by bicycle from Wave 6 onwards.



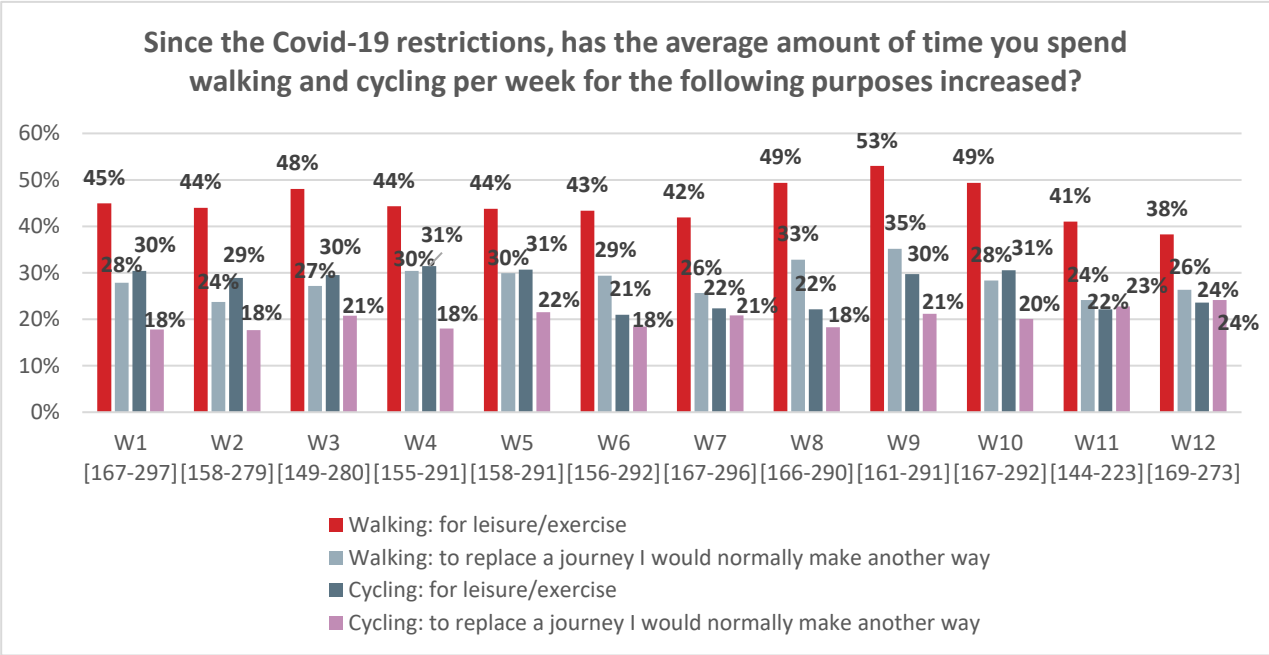
Base: All respondents (varies by wave: 235-312)

Figure 60. Anticipated increase in use of different transport modes

13. WALKING AND CYCLING BEHAVIOUR

13.1 Changes in current walking and cycling behaviour

- 13.1.1 Figure 61 provides a breakdown of reported increases in the average time spent walking and cycling for different journey purposes.
- 13.1.2 Across the waves, a higher proportion of respondents reported an increase specifically for walking for leisure and exercise (38%-53%) than to replace a journey otherwise made another way (24%-35%).
- 13.1.3 The same was largely true for cycling for leisure and exercise (21%-31%), compared to replacing a journey normally made another way (18%-24%).



Base: All respondents excluding those who answered 'Don't know' (varies by wave: 144-297)

Figure 61. Increase in average time spent walking and cycling for exercise/leisure and to replace a journey normally made another way

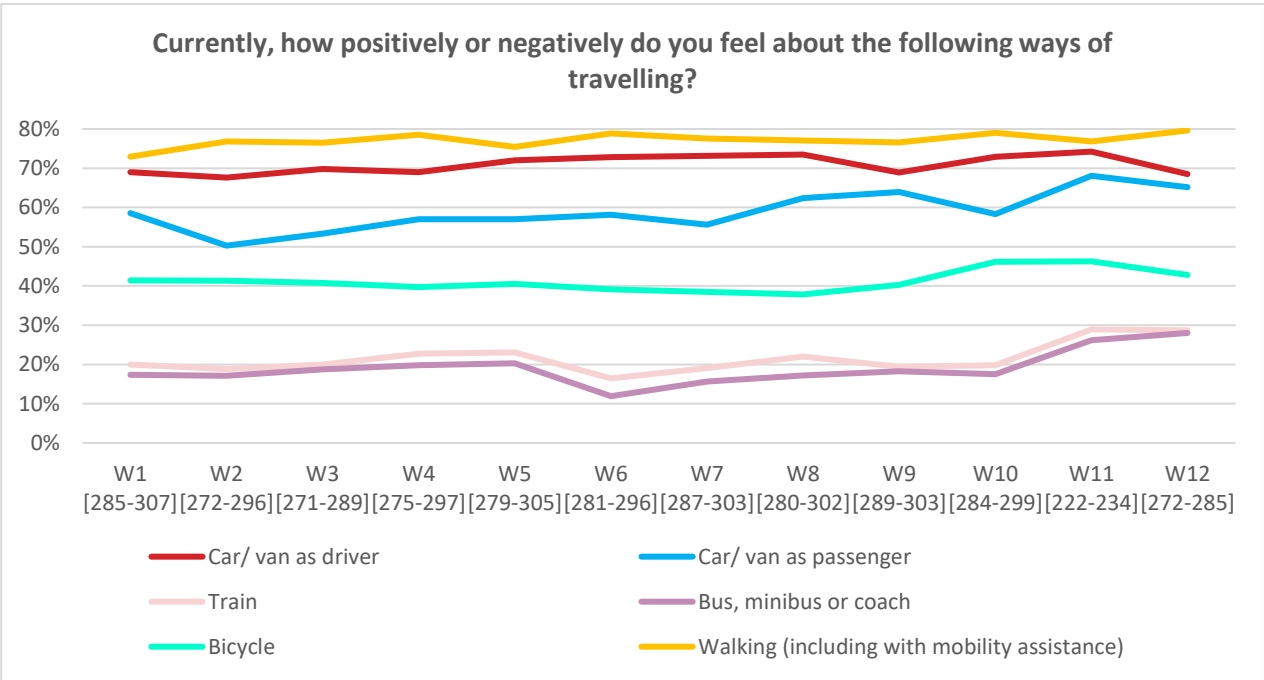
- 13.1.4 Across all twelve waves, the majority of respondents who reported an increase in their walking and cycling behaviour for leisure and exercise purposes, said that it was likely that they would continue this walking behaviour after all Covid-19 restrictions are lifted (80-96%).
- 13.1.5 Furthermore, of those who reported an increase in walking for leisure/exercise purposes, around half (46%-65%) noted that the increase was somewhat impacted by the Spaces for People measures. The impact of the measures on encouraging walking and cycling is discussed in more detail in chapters 3 to 11.

14. ATTITUDES TOWARDS DIFFERENT WAYS OF TRAVELLING

14.1 Positivity towards different ways of travelling

14.1.1 As shown in Figure 62, positivity towards different ways of travelling remained relatively consistent across the twelve waves. Respondents consistently felt more positively towards walking (73%-80%) compared to any other way of travelling, while respondents consistently felt less positively towards travelling by train (16%-29%) and bus (12%-26%) across the twelve waves. Notably, there was a decrease of 7%-8% in positivity towards public transport during wave 6, most likely to due to the introduction of the Stay at Home protection level and increase in Covid-19 cases. However, there was also an increase of 9%-11% during the latter two waves, where the protection level was 0 or below.

14.1.2 Around seven in ten (68%-74%) felt positively towards travelling by car or van as a driver, while around four in ten (38%-46%) felt this way towards travelling by bicycle.



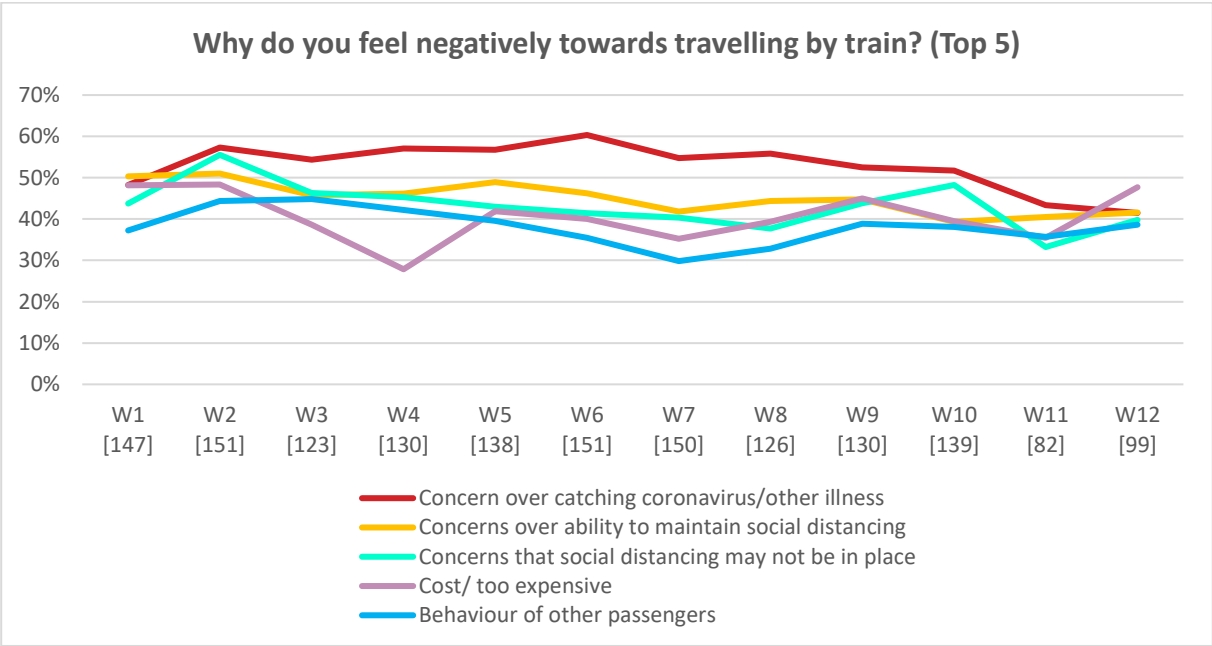
Base: All respondents excluding those who answered 'Don't know' (varies by wave: 222-307)

Figure 62. Positivity towards different ways of travelling

14.2 Reasons for negativity and concerns towards travel

14.2.1 The top 5 most common reasons respondents cited for feeling negatively towards travelling by train across the twelve waves are shown in Figure 63.

14.2.2 From wave 2 onwards, the most common reason for feeling negatively towards travelling by train was concern about catching Covid-19 or other illness (41%-60%). Notably, three out of five of the top five reasons cited were related to Covid-19 concerns, including concerns about the enforcement of social distancing measures as well as the behaviour of other passengers.

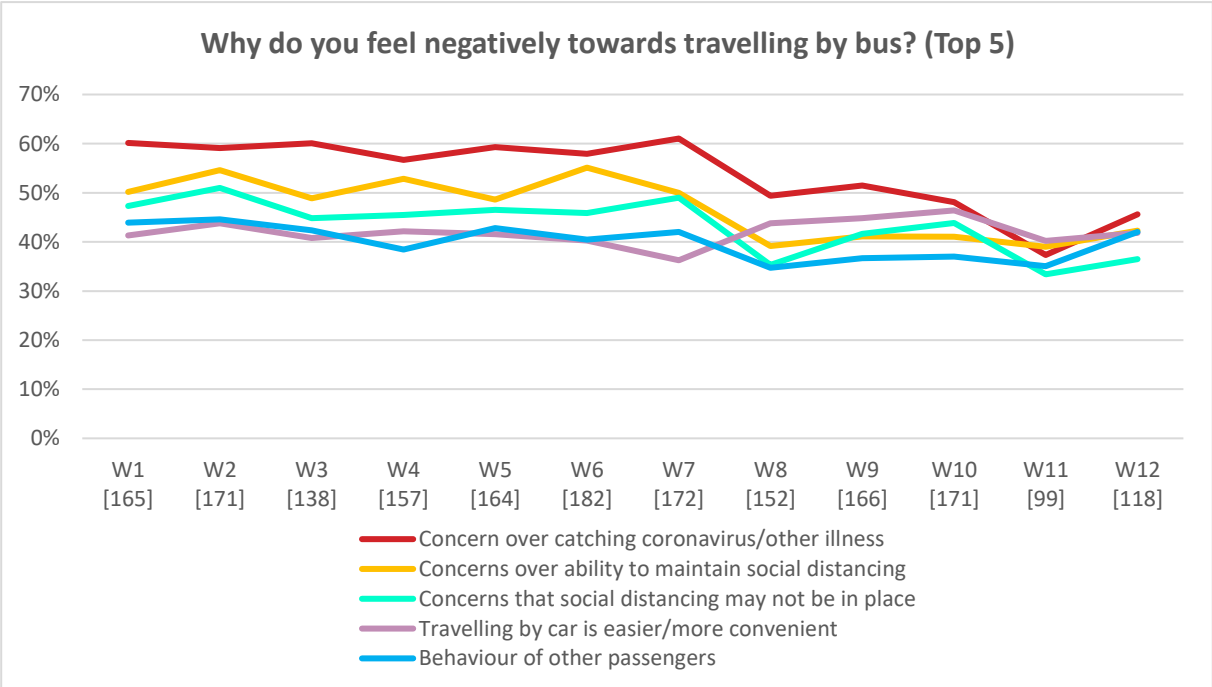


Base: Respondents who reported feeling negatively towards travelling by train (varies by wave: 82-151)

Figure 63. Reasons for feeling negatively towards travelling by train (Top 5)

14.2.3 Four out of the top five reasons cited for feeling negatively towards travelling by train were also cited for feeling negatively towards travelling by bus, all three of which were related to Covid-19 concerns and enforcement of measures.

14.2.4 Concern about catching Covid-19 or other illnesses was the most commonly cited reason across all twelve wave (37%-61%).



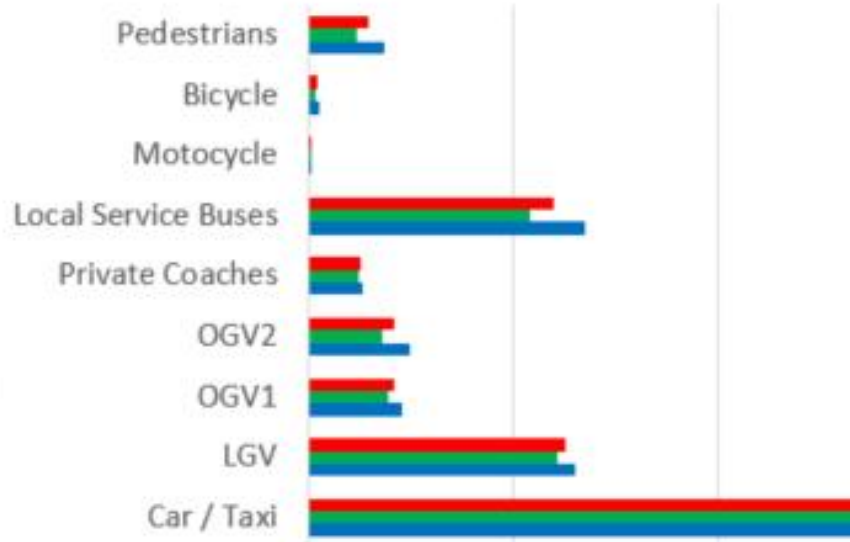
Base: Respondents who reported feeling negatively towards travelling by bus (varies by wave: 99-182)

Figure 64. for feeling negatively towards travelling by bus (Top 5)

A APPENDIX A – ANGUS COUNCIL SURVEY REPORT



ANGUS SPACES FOR PEOPLE SURVEY REPORT 2020/21



ANGUS COUNCIL AREA

MODE SHARE SURVEYS 2020/2021

IDENTIFICATION TABLE

Client/Project owner	Tactran
Project	Angus Council Area
Study	Mode Share Surveys 2020/2021
Type of document	Survey Report
Date	13/12/2021
File name	Traffic Survey Report - Draft
Reference number	GB01T20C61/6

APPROVAL

Version	Name	Position	Date	Modifications	
1	Author	Alasdair Kay	Principal Transportation Engineer	13/12/2021	
	Checked	Alasdair Kay	Principal Transportation Engineer	13/12/2021	
	Approved	Iain Clement	Associate Director	13/12/2021	
2	Author			DD/MM/YY	
	Checked			DD/MM/YY	
	Approved			DD/MM/YY	

TABLE OF CONTENTS

1.	INTRODUCTION	9
1.1	BACKGROUND	9
1.2	SPACES FOR PEOPLE	9
1.3	SPACES FOR PEOPLE INTERVENTIONS	9
2.	DATA COLLATION	11
2.1	OVERVIEW OF TRAFFIC SURVEYS	11
2.2	PEDESTRIAN BEHAVIOUR AND VOLUME COUNTS	12
2.3	LINK COUNT AND SPEED SURVEYS	14
2.4	CLASSIFIED TURNING COUNTS	17
2.5	MODE SHARE SURVEYS	18
2.6	SUMMARY	18
3.	PEDESTRIAN BEHAVIOUR AND VOLUME REVIEW	19
3.1	PEDESTRIAN BEHAVIOUR SURVEYS	19
3.2	PEDESTRIAN VOLUME SURVEYS	19
3.3	RESULTS OF PEDESTRIAN BEHAVIOUR SURVEYS	20
3.4	RESULTS OF PEDESTRIAN VOLUME SURVEYS	27
4.	VEHICLE LINK COUNT & SPEED REVIEW	44
4.1	OVERVIEW	44
4.2	RESULTS OF LINK COUNTS AND SPEED SURVEYS	45
5.	CLASSIFIED LINK COUNT SURVEYS	56
5.1	OVERVIEW	56
6.	MODE SHARE SURVEYS	62
6.1	RAIL STATION COUNTS	62
6.2	BUS STATION COUNTS	63
6.3	BUS OCCUPANCY COUNTS	65
6.4	VEHICLE OCCUPANCY COUNTS	67
6.5	RESULTS OF MODE SHARE SURVEYS	71
7.	SUMMARY & FINDINGS	80
7.1	SUMMARY	80

LIST OF FIGURES

Figure 1.	Pedestrian Surveys - Arbroath	12
Figure 2.	Pedestrian Surveys - Forfar	13
Figure 3.	Link & Speed Surveys - Arbroath	14
Figure 4.	Link & Speed Surveys - Forfar	15
Figure 5.	Link & Speed Surveys - Edzell	16
Figure 6.	Classified Turn Count Surveys – Arbroath	17
Figure 7.	Arbroath Mode Share Distribution – AM Peak	72
Figure 8.	Arbroath Person Share Distribution – AM Peak	73
Figure 9.	Arbroath Mode Share Distribution – Interpeak	74
Figure 10.	Arbroath Person Share Distribution – Interpeak	75
Figure 11.	Arbroath Mode Share Distribution – PM Peak	76
Figure 12.	Arbroath Person Share Distribution – PM Peak	77
Figure 13.	Arbroath Mode Share Distribution – Full Day	78
Figure 14.	Arbroath Person Share Distribution – Full Day	79

LIST OF TABLES

Table 1.	Installed Interventions Summary	10
Table 2.	Traffic Survey Summary	18
Table 3.	West Port, Arbroath (north footpath) Pedestrian Behaviour Summary	21
Table 4.	West Port, Arbroath (south footpath) Pedestrian Behaviour Summary	23
Table 5.	Castle Street, Forfar (east footpath) Pedestrian Behaviour Summary	25
Table 6.	Castle Street, Forfar (west footpath) Pedestrian Behaviour Summary	26
Table 7.	West Port, Arbroath (north footpath) Pedestrian Volume Summary	28
Table 8.	West Port, Arbroath (south footpath) Pedestrian Volume Summary	30
Table 9.	Millgate, Arbroath (north footpath) Pedestrian Volume Summary	32
Table 10.	Millgate, Arbroath (south footpath) Pedestrian Volume Summary	34
Table 11.	Commerce Street, Arbroath (north footpath) Pedestrian Volume Summary	36
Table 12.	Commerce Street, Arbroath (south footpath) Pedestrian Volume Summary	38
Table 13.	Castle Street, Forfar (east footpath) Pedestrian Volume Summary	40
Table 14.	Castle Street, Forfar (west footpath) Pedestrian Volume Summary	42
Table 15.	West Port, Arbroath (eastbound) Link Flow & Speed Summary	45
Table 16.	Millgate, Arbroath (eastbound) Link Flow & Speed Summary	47
Table 17.	Commerce Street, Arbroath (westbound) Link Flow & Speed Summary	48
Table 18.	Castle Street, Forfar (southbound) Link Flow & Speed Summary	50
Table 19.	B966 High Street, Edzell (northbound) Link Flow & Speed Summary	52
Table 20.	B966 High Street, Edzell (southbound) Link Flow & Speed Summary	54
Table 21.	West Port Arbroath Link Flow Summary	57
Table 22.	Millgate Link Flow Summary	58
Table 23.	Commerce Street Link Flow Summary	60
Table 24.	Castle Street Link Flow Summary	61
Table 25.	Arbroath Railway Station Entry/Exit Counts	62
Table 26.	Arbroath Bus Station Boarding and Alighting Counts (AM Peak 07:00 – 10:00)	63
Table 27.	Arbroath Bus Station Boarding and Alighting Counts (Inter Peak 10:00 – 16:00)	64

Table 28.	Arbroath Bus Station Boarding and Alighting Counts (PM Peak 16:00 – 19:00)	64
Table 29.	Bus & Coach Inbound Cordon Occupancy (AM Peak 07:00 – 10:00)	66
Table 30.	Bus & Coach Inbound Cordon Occupancy (Inter Peak 10:00 – 16:00)	66
Table 31.	Bus & Coach Inbound Cordon Occupancy (PM Peak 16:00 – 19:00)	67
Table 32.	Vehicle Inbound Cordon Occupancy (AM Peak 07:00 – 10:00)	68
Table 33.	Vehicle Inbound Cordon Occupancy (Inter Peak 10:00 – 16:00)	69
Table 34.	Vehicle Inbound Cordon Occupancy (PM Peak 16:00 – 19:00)	70

(Blank Page)

1. INTRODUCTION

1.1 Background

- 1.1.1 SYSTRA Ltd (SYSTRA) was commissioned by regional transport authority Tactran in June 2020 in response to the *Spaces for People* initiative, to undertake a comprehensive survey programme to capture changes in active travel behaviour and mode share as the people of Angus, Dundee, Perth & Kinross and Stirling change travel behaviours following the Covid-19 outbreak.
- 1.1.2 The results of the surveys will inform decisions on the benefits of the temporary infrastructure measures being brought forward by the four local authorities Dundee City Council, Perth & Kinross Council, Stirling Council and Angus Council.

1.2 Spaces for People

- 1.2.1 The *Spaces for People* programme is funded by the Scottish Government and managed by Sustrans Scotland. The aim of the initiative is to enable statutory bodies to implement measures focused on protecting public health by enabling pedestrians and cyclists to social distance safely on public roads physical distancing.
- 1.2.2 The initiative focuses on essential journeys, which might include:
- Journeys to and from hospitals and health services
 - Journeys to shops, pharmacies, schools, and other returning workplaces
 - Journeys for recommended exercise, for example neighbourhoods and local parks.
- 1.2.3 The measures being investigated by the authorities will provide temporary walking and cycling infrastructure that helps to protect public health by enabling safe physical distancing for essential journeys and exercise for everyone, in particular where there are space constraints or user safety concerns. The measures might include, but are not limited to:
- Physical interventions
 - Selective road closures using planters or cones
 - Reallocating road space for wider footway
 - Reallocating road space for cycle tracks
 - Reallocating parking and loading
 - Reduced speed limits and/or traffic calming measures
 - Removal of barriers to open up constrained spaces and remove pinch points.
- 1.2.4 This report details the traffic surveys undertaken in four phases between October 2020 and September 2021, and the mode share summary information for each location.

1.3 Spaces for People Interventions

- 1.3.1 A summary of the *Spaces for People* programme interventions within the Angus Council area is given in Table 1 below.

Table 1. Installed Interventions Summary

Area	Type of Intervention	Approx. Installation Date
School(s) in Arbroath	Physical Distancing Signage	30/10/2020
School(s) in Brechin	Physical Distancing Signage	30/10/2020
School(s) in Camoustie	Physical Distancing Signage	30/10/2020
School(s) in Forfar	Physical Distancing Signage	30/10/2020
School(s) in Kirriemuir	Physical Distancing Signage	30/10/2020
School(s) in Monifieth	Physical Distancing Signage	30/10/2020
School(s) in Montrose	Physical Distancing Signage	30/10/2020
Arbroath town centre	Speed reduction - 20mph	16/09/2020
Brechin town centre	Speed reduction - 20mph	10/09/2020
Camoustie town centre	Speed reduction - 20mph	16/09/2020
Forfar town centre	Speed reduction - 20mph	15/09/2020
Kirriemuir town centre	Speed reduction - 20mph	15/09/2020
Monifieth town centre	Speed reduction - 20mph	16/09/2020
Montrose town centre	Speed reduction - 20mph	10/09/2020
Friockheim	Speed reduction - 20mph	14/09/2020
Edzell	Speed reduction - 20mph	07/09/2020
Liff	Speed reduction - 20mph	03/09/2020
Glamis	Speed reduction - 20mph	15/12/2020
Hillside	Speed reduction - 20mph	22/02/2021
Kingsmuir	Speed reduction - 20mph	15/12/2020
Letham	Speed reduction - 20mph	15/12/2020
Newbigging	Speed reduction - 20mph	15/12/2020
Newtyle	Speed reduction - 20mph	15/12/2020
Arbirlot	Speed reduction - 20mph	12/04/2021
Kirkton Of Auchterhouse	Speed reduction - 20mph	12/04/2021
Bary	Speed reduction - 20mph	12/04/2021
Bridgefoot	Speed reduction - 20mph	12/04/2021
Easthaven	Speed reduction - 20mph	12/04/2021
Ferryden	Speed reduction - 20mph	12/04/2021
Fowls	Speed reduction - 20mph	12/04/2021
Inveraldie	Speed reduction - 20mph	12/04/2021
Inverkeilor	Speed reduction - 20mph	12/04/2021
Leysmill	Speed reduction - 20mph	12/04/2021
Lunanhead	Speed reduction - 20mph	12/04/2021
Monikie	Speed reduction - 20mph	12/04/2021
Redford	Speed reduction - 20mph	12/04/2021
Tealing	Speed reduction - 20mph	12/04/2021
Wellbank	Speed reduction - 20mph	12/04/2021
Westmuir	Speed reduction - 20mph	12/04/2021
20no. Cycle Shelters Council Area	Cycle Parking	12/05/2021
Physical Distancing Stickers Council Area	Stickers	24/11/2020
VAS council wide area	Signage	01/04/2021
Arbroath town centre	Footpath widening	10/02/2021
Brechin town centre	Footpath widening	11/02/2021
Forfar town centre	Footpath widening	12/02/2021
Montrose town centre	Footpath widening	15/02/2021

2. DATA COLLATION

2.1 Overview of Traffic Surveys

2.1.1 A programme of traffic surveys for all the locations was undertaken by specialists Nationwide Data Collection (NDC).

2.1.2 The types of surveys undertaken in the Angus area were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Rail Station Counts*
- Bus Station Counts*
- Bus Occupancy Counts*
- Vehicle Occupancy Counts*.

2.1.3 Data was recorded over a 16 hour period (06:00-22:00) and analysis undertaken for the following time periods:

- AM Peak Period – 07:00 – 10:00
- Inter Peak Period – 10:00 – 16:00
- PM Peak Period – 16:00 – 19:00.

2.1.4 The surveys were undertaken on the following dates:

- October 2020 – Thursday 22nd to Saturday 24th October 2020
- February 2021 – Thursday 25th to Saturday 27th February 2021
- May 2021 – Thursday 11th to Saturday 13th May 2021
- September 2021 – Thursday 9th to Saturday 11th September 2021.

2.1.5 ATC tubes were in place for seven days on the following days:

- Arbroath
- Forfar
- Edzell.

2.1.6 The exception to the programme were the rail, bus and car occupancy surveys informing the mode share analysis (denoted by * above). These were undertaken on Thursday 11th May 2021 only.

2.2 Pedestrian Behaviour and Volume Counts

Arbroath

2.2.1 Six locations within Arbroath were selected in discussion with Tactran for pedestrian volume counts and behaviour surveys. These are detailed below and in Figure 1:

- Ped 1 – West Port between Bridge Street and Millgate (north side)
- Ped 2 – West Port between Bridge Street and Millgate (south side)
- Ped 3 – Millgate between Grimsby Place and A92 Burnside Drive (north side)
- Ped 4 – Millgate between Grimsby Place and A92 Burnside Drive (south side)
- Ped 5 – Commerce Street between Marketgate and High Street (north side)
- Ped 6 – Commerce Street between Marketgate and High Street (south side).

2.2.2 Two-directional classified link counts were carried out within the study section, to include both pedestrians and cyclists. Results were categorised as follows:

- Pedestrians
- Wheeled pedestrians (on scooters etc)
- Pedal Cycles
- Motorcycles
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.



Figure 1. Pedestrian Surveys - Arbroath

Forfar

2.2.3 One location within Forfar was selected for pedestrian survey counts and behaviour surveys. This is detailed below and in Figure 2:

- Ped 7 – Castle Street between Manor Street and Myre Road (east side)
- Ped 8 – Castle Street between Manor Street and Myre Road (west side)



Figure 2. Pedestrian Surveys - Forfar

2.3 Link Count and Speed Surveys

Arbroath

2.3.1 Three locations within Arbroath were selected for link count and speed surveys over a seven day period. These are detailed below and in Figure 3:

- Link & Speed 1 – West Port
- Link & Speed 2 – Millgate
- Link & Speed 3 – Commerce Street.

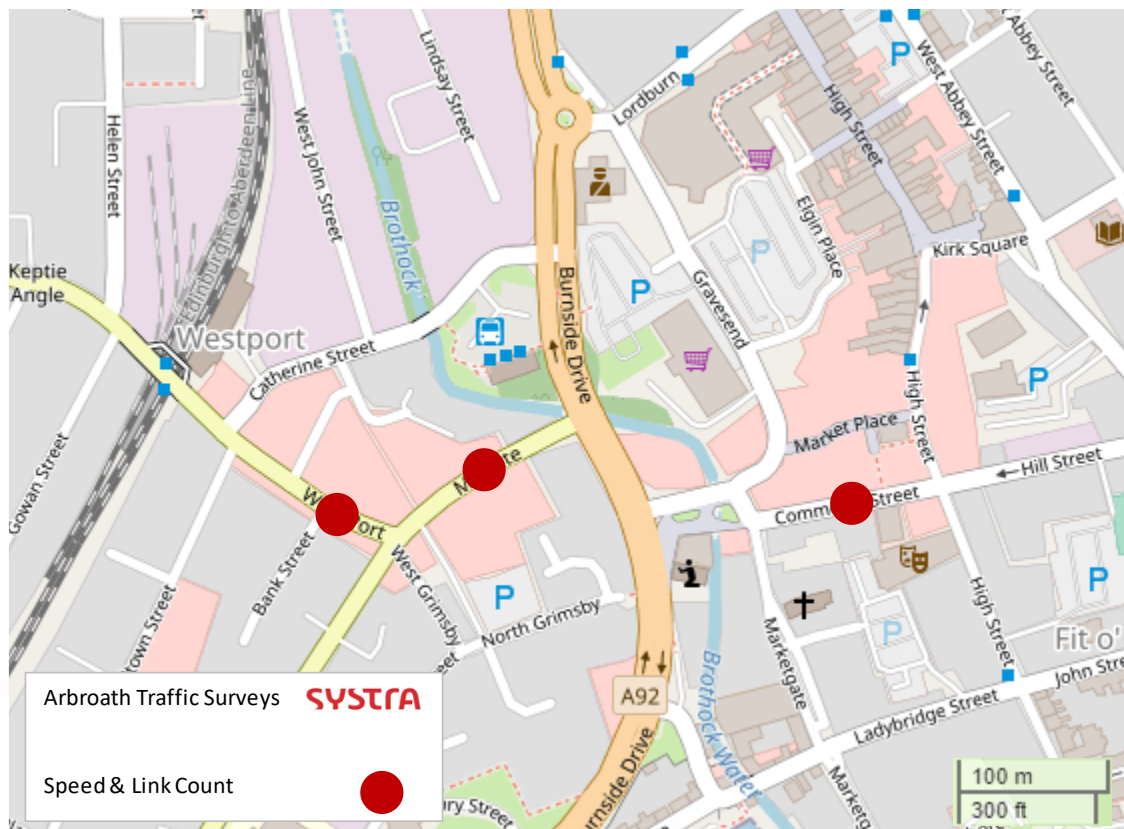


Figure 3. Link & Speed Surveys - Arbroath

Forfar

2.3.2 One location within Forfar was selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 4:

○ Link & Speed 4 – Castle Street

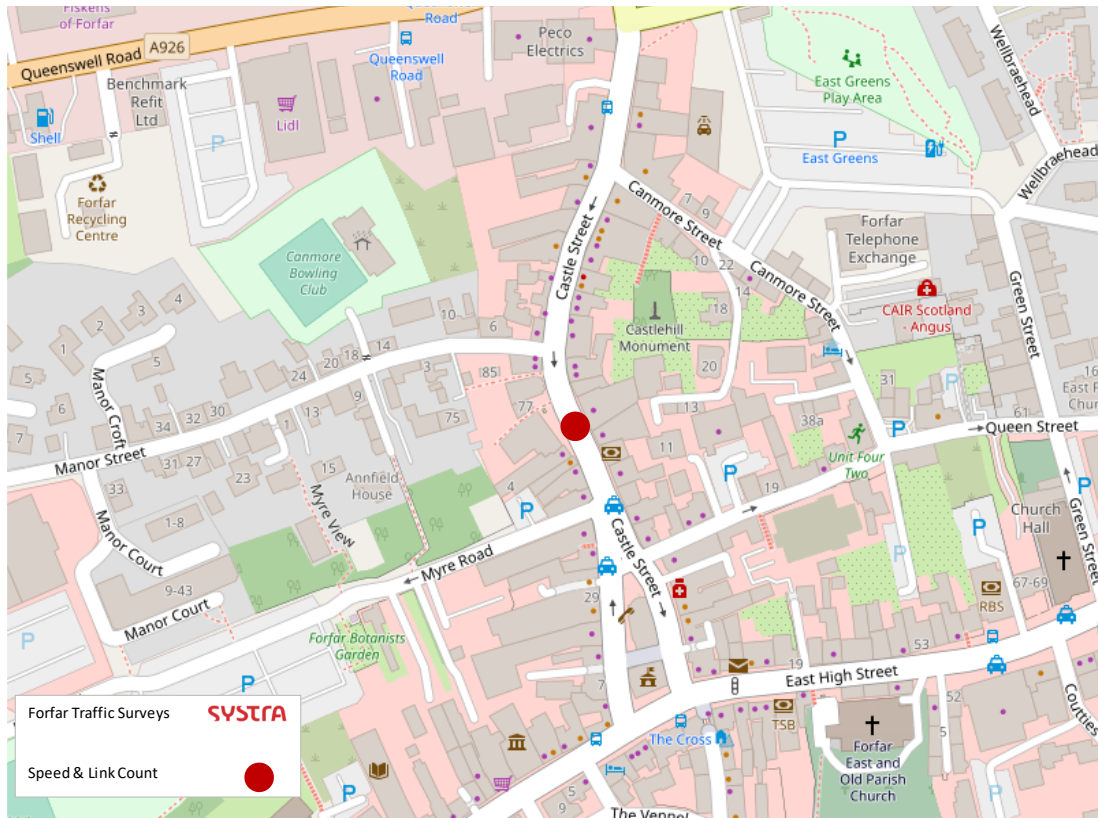


Figure 4. Link & Speed Surveys - Forfar

Edzell

2.3.3 One location within Edzell was selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 5:

- Link & Speed 5 – B966 outside Edzell Primary School



Figure 5. Link & Speed Surveys - Edzell

2.4 Classified Turning Counts

Arbroath

2.4.1 Six locations within Arbroath were selected for classified turn counts. These are detailed below and in Figure 6. The mode share cordon counts were undertaken on the Thursday of each survey period between 06:00 and 22:00:

- CC 1 – Fisheracre/Guthrie Port/A92 Burnside Drive
- CC 2 – West Abbey Street/Academy Street/Hill Place
- CC 3 – A92 Burnside Drive/Harbour/Ladyloan/East Mary Street
- CC 4 – Addison Place/Alexandra Place/Rosemount Road/Nolt Loan Road
- CC 5 – Lochlands Drive/Keptie Road/Footpath
- CC 6 – Cairnie Street/Lochlands Street.

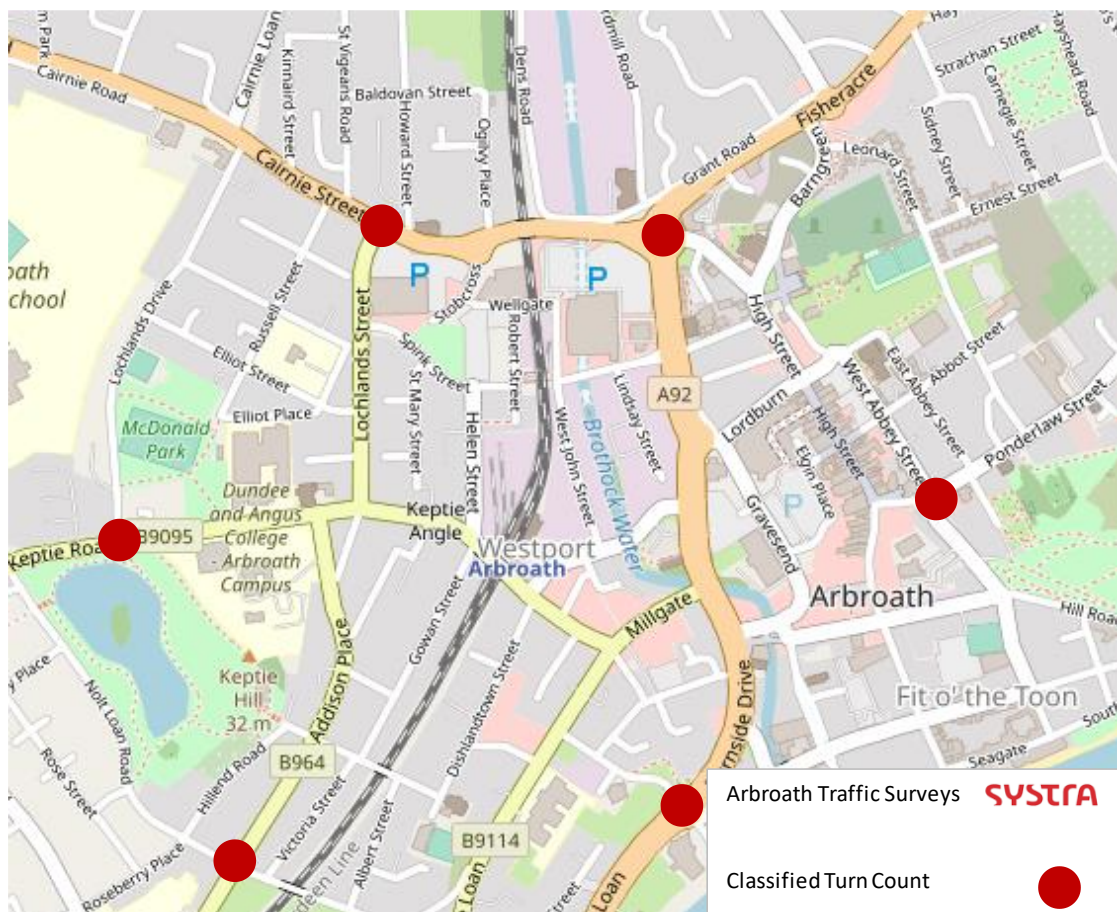


Figure 6. Classified Turn Count Surveys – Arbroath

2.4.2 At each site, link count data was collated into the following categories:

- Pedestrians
- Pedal Cycles
- Motorcycles
- Horses
- Cars/Taxis

- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.

2.5 Mode Share Surveys

Rail Station Barrier Counts

- 2.5.1 Barrier counts were conducted at Arbroath rail station over the 16 hour period (06:00-22:00) on Thursday 11th May 2021 with pedestrian movements captured at both entrances/exits to the station.

Bus Station Counts

- 2.5.2 Counts were undertaken at Arbroath bus station over the 16 hour period (06:00-22:00) on Thursday 11th May 2021, with pedestrian movements captured at all passenger stances within the bus station.

Bus Occupancy Surveys

- 2.5.3 Bus occupancy counts were undertaken at sites CC1 to CC6 shown in Figure 6 over the 16 hour period (06:00-22:00) on Thursday 11th May 2021. Counts were undertaken in an inbound direction only.

Vehicle Occupancy Counts

- 2.5.4 Vehicle occupancy counts were undertaken all classified turn count sites over the 16 hour period (06:00-22:00) on Thursday 11th May 2021. Again, counts were undertaken in an inbound direction only.

2.6 Summary

- 2.6.1 A summary of survey programme undertaken across the Angus Council area is given in Table 2 below.

Table 2. Traffic Survey Summary

Survey Requirement		Oct-20	Feb-21	May-21	Sep-21
Arbroath	Pedestrian Surveys	✓	✓	✓	✓
	Classified Link Count	✓	✓	✓	✓
	Speed Surveys	✓	✓	✓	✓
	Cordon Turn Counts	✓	✓	✓	✓
	Vehicle Occupancy Surveys			✓	
Forfar	Pedestrian Surveys	✓	✓	✓	✓
	Classified Link Count	✓	✓	✓	✓
	Speed Surveys	✓	✓	✓	✓
Edzell	Speed Surveys	✓	✓	✓	✓

3. PEDESTRIAN BEHAVIOUR AND VOLUME REVIEW

3.1 Pedestrian Behaviour Surveys

3.1.1 Summary tables below present the results of the pedestrian behaviour surveys in the Angus Council area.

3.1.2 Following discussion with TACTRAN analysis was undertaken for the following sites in October 2020 only:

- Arbroath Ped 1 – West Port between Bridge Street and Millgate (north side)
- Arbroath Ped 2 – West Port between Bridge Street and Millgate (south side)
- Forfar Ped 7 – Castle Street between Manor Street and Myre Road (east side)
- Forfar Ped 8 – Castle Street between Manor Street and Myre Road (west side)

3.2 Pedestrian Volume Surveys

3.2.1 Six locations within Arbroath were selected in discussion with Tactran for pedestrian volume:

- Ped 1 – West Port between Bridge Street and Millgate (north side)
- Ped 2 – West Port between Bridge Street and Millgate (south side)
- Ped 3 – Millgate between Grimsby Place and A92 Burnside Drive (north side)
- Ped 4 – Millgate between Grimsby Place and A92 Burnside Drive (south side)
- Ped 5 – Commerce Street between Marketgate and High Street (north side)
- Ped 6 – Commerce Street between Marketgate and High Street (south side).

3.2.2 One location within Forfar was selected for pedestrian survey counts and behaviour surveys:

- Ped 7 – Castle Street between Manor Street and Myre Road (east side)
- Ped 8 – Castle Street between Manor Street and Myre Road (west side)

3.3 Results of Pedestrian Behaviour Surveys

Arbroath

- 3.3.1 Table 3 below presents the results of the pedestrian behaviour data on the north side of West Port in Arbroath.

Table 3. West Port, Arbroath (north footpath) Pedestrian Behaviour Summary



Site 1 West Port Step Out Analysis East Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	663	5	1	432	122	3	0	4	2
AM Peak Pd 0700-1000	101	3	0	71	11	0	0	0	1
AM Peak Hr 0800-0900	59	2	0	33	6	0	0	0	1
IP Peak Pd 1000-1600	349	2	1	233	90	3	0	4	0
IP Peak Hr 1200-1300	54	0	0	48	16	0	0	0	0
PM Peak Pd 1600-1900	150	0	0	90	15	0	0	0	1
PM Peak Hr 1700-1800	49	0	0	35	4	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	77%	22%	1%	0%	1%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	692	7	3	502	132	1	0	9	1
AM Peak Pd 0700-1000	103	3	1	84	13	0	0	1	0
AM Peak Hr 0800-0900	65	3	1	46	4	0	0	1	0
IP Peak Pd 1000-1600	412	3	2	288	104	1	0	7	0
IP Peak Hr 1200-1300	64	0	0	49	14	0	0	0	0
PM Peak Pd 1600-1900	111	1	0	86	14	0	0	1	1
PM Peak Hr 1700-1800	45	0	0	26	5	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	78%	20%	0%	0%	1%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	576	6	0	495	90	0	0	1	3
AM Peak Pd 0700-1000	41	1	0	60	6	0	0	0	0
AM Peak Hr 0800-0900	14	1	0	22	3	0	0	0	0
IP Peak Pd 1000-1600	371	2	0	315	76	0	0	0	3
IP Peak Hr 1200-1300	62	0	0	61	10	0	0	0	0
PM Peak Pd 1600-1900	114	3	0	84	7	0	0	1	0
PM Peak Hr 1700-1800	31	1	0	22	2	0	0	1	0
0600-2200 Behaviour Proportion (%)	-	-	-	84%	15%	0%	0%	0%	1%

3.3.2 Table 3 shows that on the east side footpath of the West Port in Arbroath, on average 80% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 19% passed

on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway.

3.3.3 Table 4 below presents the results of the pedestrian behaviour data on the south side of West Port in Arbroath.

Table 4. West Port, Arbroath (south footpath) Pedestrian Behaviour Summary



Site 1 West Port Step Out Analysis West Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	602	8	1	450	42	0	0	1	6
AM Peak Pd 0700-1000	86	1	0	66	4	0	0	0	3
AM Peak Hr 0800-0900	41	0	0	27	2	0	0	0	3
IP Peak Pd 1000-1600	369	4	1	260	33	0	0	1	2
IP Peak Hr 1200-1300	64	0	0	44	7	0	0	0	2
PM Peak Pd 1600-1900	104	0	0	82	5	0	0	0	1
PM Peak Hr 1700-1800	30	0	0	29	1	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	90%	8%	0%	0%	0%	1%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	729	8	2	525	56	0	0	1	1
AM Peak Pd 0700-1000	73	0	0	84	4	0	0	1	0
AM Peak Hr 0800-0900	31	0	0	34	2	0	0	1	0
IP Peak Pd 1000-1600	479	2	2	296	49	0	0	0	1
IP Peak Hr 1200-1300	98	1	0	46	10	0	0	0	0
PM Peak Pd 1600-1900	99	3	0	89	3	0	0	0	0
PM Peak Hr 1700-1800	33	1	0	33	1	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	90%	10%	0%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	759	6	2	526	36	0	0	0	6
AM Peak Pd 0700-1000	52	1	0	52	1	0	0	0	0
AM Peak Hr 0800-0900	24	0	0	24	0	0	0	0	0
IP Peak Pd 1000-1600	520	4	2	334	32	0	0	0	4
IP Peak Hr 1200-1300	99	0	0	63	4	0	0	0	3
PM Peak Pd 1600-1900	126	0	0	93	2	0	0	0	2
PM Peak Hr 1700-1800	41	0	0	24	1	0	0	0	1
0600-2200 Behaviour Proportion (%)	-	-	-	93%	6%	0%	0%	0%	1%

- 3.3.4 Table 4 shows that on the west side footpath of the West Port in Arbroath, on average 91% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 8% passed on the footpath within a space of 2m or less.

Forfar

- 3.3.5 Table 5 below presents the results of the pedestrian behaviour data on the east side of Castle Street in Forfar.

Table 5. Castle Street, Forfar (east footpath) Pedestrian Behaviour Summary



Site 7 Castle Street Step Out Analysis East Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1497	10	2	610	933	44	0	0	0
AM Peak Pd 0700-1000	191	1	0	115	79	4	0	0	0
AM Peak Hr 0800-0900	66	1	0	36	15	1	0	0	0
IP Peak Pd 1000-1600	1046	1	2	312	774	38	0	0	0
IP Peak Hr 1200-1300	180	0	0	43	113	5	0	0	0
PM Peak Pd 1600-1900	195	4	0	115	78	2	0	0	0
PM Peak Hr 1700-1800	59	1	0	41	18	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	38%	59%	3%	0%	0%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1818	5	5	618	1727	55	0	0	0
AM Peak Pd 0700-1000	216	0	1	128	111	2	0	0	0
AM Peak Hr 0800-0900	83	0	1	37	40	1	0	0	0
IP Peak Pd 1000-1600	1229	0	3	293	1425	47	0	0	0
IP Peak Hr 1200-1300	171	0	0	53	192	12	0	0	0
PM Peak Pd 1600-1900	246	4	1	108	161	6	0	0	0
PM Peak Hr 1700-1800	56	1	0	33	38	2	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	26%	72%	2%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1262	4	0	552	823	53	0	0	0
AM Peak Pd 0700-1000	107	0	0	89	30	3	0	0	0
AM Peak Hr 0800-0900	32	0	0	22	11	1	0	0	0
IP Peak Pd 1000-1600	908	3	0	287	726	49	0	0	0
IP Peak Hr 1200-1300	163	3	0	41	167	10	0	0	0
PM Peak Pd 1600-1900	189	1	0	114	62	1	0	0	0
PM Peak Hr 1700-1800	58	0	0	29	22	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	39%	58%	4%	0%	0%	0%

3.3.6 Table 5 shows that on the east side footpath of Castle Street in Forfar, on average 34% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 63% passed on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway.

3.3.7 Table 6 below presents the results of the pedestrian behaviour data on the west side of Castle Street in Forfar.

Table 6. Castle Street, Forfar (west footpath) Pedestrian Behaviour Summary



Site 8 Castle Street Step Out Analysis West Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1493	7	2	908	496	52	4	1	0
AM Peak Pd 0700-1000	191	1	0	126	57	2	0	1	0
AM Peak Hr 0800-0900	76	0	0	49	11	0	0	0	0
IP Peak Pd 1000-1600	860	1	1	487	374	48	2	0	0
IP Peak Hr 1200-1300	176	0	0	90	66	9	0	0	0
PM Peak Pd 1600-1900	337	2	1	226	63	2	2	0	0
PM Peak Hr 1700-1800	120	2	0	78	24	2	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	62%	34%	4%	0%	0%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1669	19	5	1059	899	81	2	1	1
AM Peak Pd 0700-1000	207	2	0	162	52	1	2	0	0
AM Peak Hr 0800-0900	92	1	0	62	6	1	2	0	0
IP Peak Pd 1000-1600	1037	5	4	481	601	71	0	1	1
IP Peak Hr 1200-1300	167	0	0	95	61	12	0	1	0
PM Peak Pd 1600-1900	258	9	0	236	176	8	0	0	0
PM Peak Hr 1700-1800	71	4	0	87	44	2	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	52%	44%	4%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1262	11	0	861	627	90	2	0	0
AM Peak Pd 0700-1000	95	2	0	115	7	7	0	0	0
AM Peak Hr 0800-0900	36	0	0	44	2	1	0	0	0
IP Peak Pd 1000-1600	885	0	0	429	432	80	2	0	0
IP Peak Hr 1200-1300	143	0	0	73	63	10	0	0	0
PM Peak Pd 1600-1900	192	9	0	166	167	3	0	0	0
PM Peak Hr 1700-1800	66	7	0	51	68	2	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	54%	40%	6%	0%	0%	0%

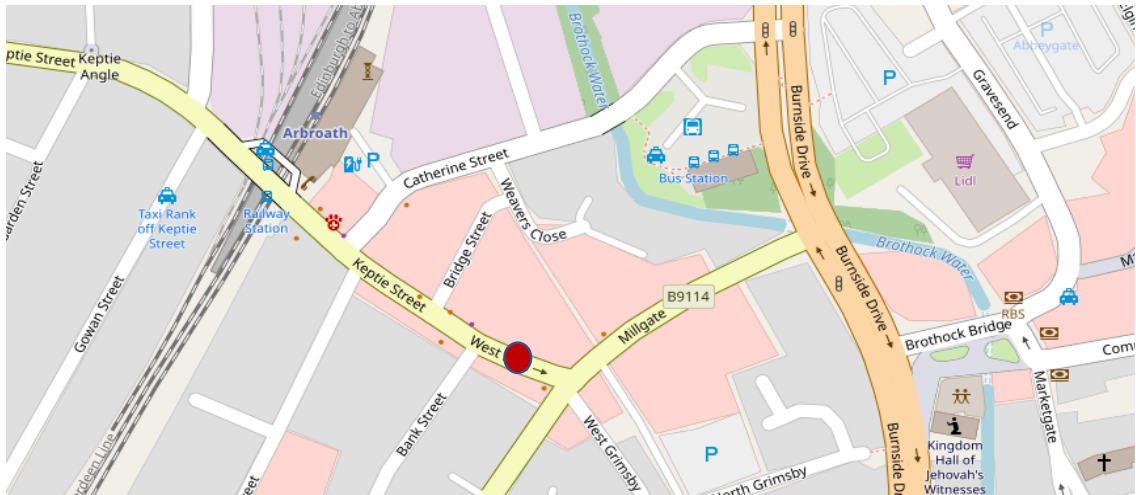
- 3.3.8 Table 6 shows that on the west side footpath of Castle Street in Forfar, on average 56% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 39% passed on the footpath within a space of 2m or less, the remaining 5% passing with a gap of over 2m.

3.4 Results of Pedestrian Volume Surveys

Arbroath

- 3.4.1 Table 7 below presents the results of the pedestrian volume data on the north side of West Port in Arbroath during each of the four survey periods.

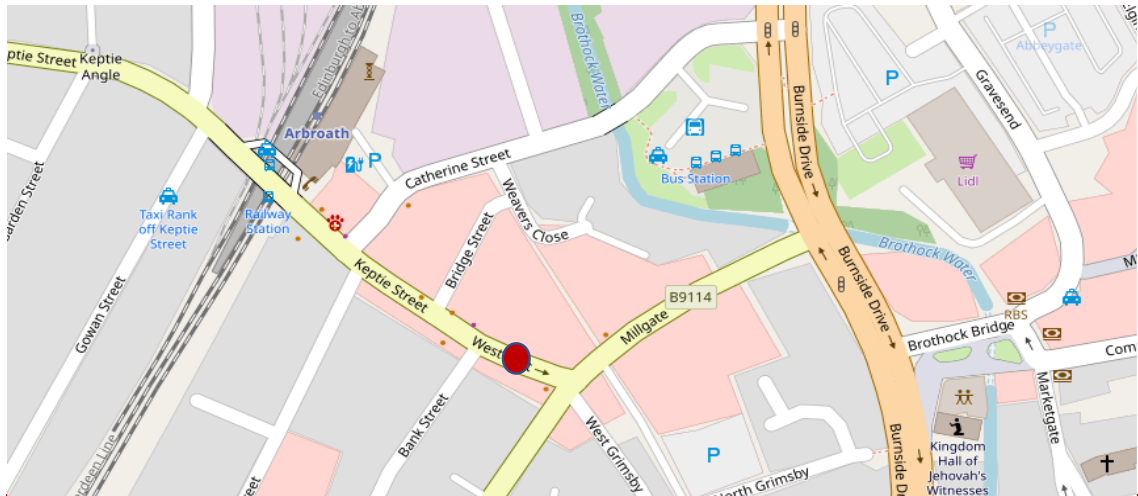
Table 7. West Port, Arbroath (north footpath) Pedestrian Volume Summary



Site 1 West Port North Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	322	20	12	2	1	4	0	0	362
0600 - 2200 Westbound	308	21	8	1	0	3	1	0	343
AM Peak Pd 0630-0930 Eastbound	28	2	2	1	0	0	0	0	32
AM Peak Pd 0630-0930 Westbound	32	1	4	1	0	1	0	0	39
IP Peak Pd 0930-1530 Eastbound	220	12	3	1	0	3	0	0	239
IP Peak Pd 0930-1530 Westbound	203	14	2	0	0	1	1	0	222
PM Peak Pd 1530-1830 Eastbound	46	4	5	0	0	1	0	0	57
PM Peak Pd 1530-1830 Westbound	46	5	2	0	0	0	0	0	54
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	196	18	3	1	2	1	0	0	223
0600 - 2200 Westbound	171	7	3	1	0	2	2	0	185
AM Peak Pd 0630-0930 Eastbound	30	3	0	0	0	0	0	0	34
AM Peak Pd 0630-0930 Westbound	18	0	0	0	0	0	0	0	19
IP Peak Pd 0930-1530 Eastbound	114	13	2	1	1	1	0	0	132
IP Peak Pd 0930-1530 Westbound	99	7	2	1	0	0	1	0	110
PM Peak Pd 1530-1830 Eastbound	27	2	1	0	0	1	0	0	32
PM Peak Pd 1530-1830 Westbound	33	0	1	0	0	1	0	0	35
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	307	16	4	5	2	3	1	0	337
0600 - 2200 Westbound	272	14	2	4	1	2	1	0	298
AM Peak Pd 0630-0930 Eastbound	44	2	0	1	0	0	0	0	47
AM Peak Pd 0630-0930 Westbound	32	2	1	0	0	0	0	0	36
IP Peak Pd 0930-1530 Eastbound	185	6	2	4	1	1	1	0	199
IP Peak Pd 0930-1530 Westbound	159	7	0	3	1	0	1	0	172
PM Peak Pd 1530-1830 Eastbound	47	6	2	0	0	1	0	0	56
PM Peak Pd 1530-1830 Westbound	47	3	1	0	0	1	0	0	52
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	415	11	5	3	3	3	1	0	440
0600 - 2200 Westbound	367	11	1	2	3	5	4	0	392
AM Peak Pd 0630-0930 Eastbound	43	2	1	1	1	0	0	0	49
AM Peak Pd 0630-0930 Westbound	46	1	0	1	1	1	0	0	49
IP Peak Pd 0930-1530 Eastbound	261	6	2	1	1	1	0	0	272
IP Peak Pd 0930-1530 Westbound	199	9	1	1	2	2	2	0	216
PM Peak Pd 1530-1830 Eastbound	64	3	3	0	0	1	0	0	71
PM Peak Pd 1530-1830 Westbound	65	1	0	0	0	0	1	0	67

- 3.4.2 Table 7 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.
- 3.4.3 Table 8 below presents the results of the pedestrian volume data on the south side of West Port in Arbroath during each of the four survey periods.

Table 8. West Port, Arbroath (south footpath) Pedestrian Volume Summary

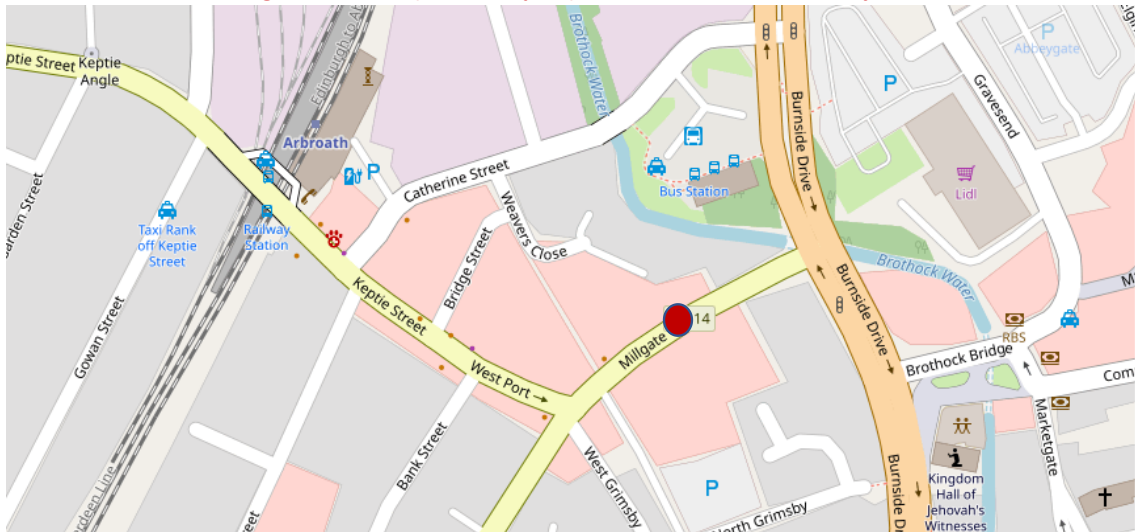


Site 1 West Port South Kerbside (3 day Average Thur-Fri-Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	288	41	21	1	0	2	0	0	353
0600 - 2200 Westbound	241	36	14	1	0	4	1	0	298
AM Peak Pd 0630-0930 Eastbound	22	20	7	0	0	0	0	0	50
AM Peak Pd 0630-0930 Westbound	26	2	4	0	0	2	0	0	35
IP Peak Pd 0930-1530 Eastbound	181	14	10	0	0	1	0	0	207
IP Peak Pd 0930-1530 Westbound	141	25	6	0	0	1	1	0	173
PM Peak Pd 1530-1830 Eastbound	59	6	4	0	0	0	0	0	69
PM Peak Pd 1530-1830 Westbound	47	6	4	0	0	1	0	0	58
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	229	33	9	2	4	3	0	0	279
0600 - 2200 Westbound	199	26	8	1	2	4	2	0	242
AM Peak Pd 0630-0930 Eastbound	29	14	1	0	1	0	0	0	45
AM Peak Pd 0630-0930 Westbound	17	1	0	0	1	1	1	0	22
IP Peak Pd 0930-1530 Eastbound	137	12	4	2	3	2	0	0	160
IP Peak Pd 0930-1530 Westbound	109	18	5	1	1	1	0	0	135
PM Peak Pd 1530-1830 Eastbound	42	5	3	0	0	0	0	0	51
PM Peak Pd 1530-1830 Westbound	49	5	3	0	0	1	0	0	59
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	275	43	14	4	2	1	1	0	340
0600 - 2200 Westbound	241	35	11	1	2	3	1	0	295
AM Peak Pd 0630-0930 Eastbound	33	19	7	1	0	0	0	0	59
AM Peak Pd 0630-0930 Westbound	39	4	2	0	0	2	0	0	47
IP Peak Pd 0930-1530 Eastbound	169	19	5	3	1	0	1	0	198
IP Peak Pd 0930-1530 Westbound	139	25	6	1	2	0	1	0	174
PM Peak Pd 1530-1830 Eastbound	43	3	1	0	0	1	0	0	49
PM Peak Pd 1530-1830 Westbound	39	3	2	0	0	1	0	0	46
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	336	24	11	2	1	3	1	0	378
0600 - 2200 Westbound	279	24	5	2	1	4	2	0	317
AM Peak Pd 0630-0930 Eastbound	38	5	4	0	1	1	0	0	50
AM Peak Pd 0630-0930 Westbound	38	1	0	1	0	1	0	0	41
IP Peak Pd 0930-1530 Eastbound	201	17	4	2	0	1	0	0	226
IP Peak Pd 0930-1530 Westbound	152	17	4	1	0	2	2	0	178
PM Peak Pd 1530-1830 Eastbound	62	1	2	0	0	1	0	0	66
PM Peak Pd 1530-1830 Westbound	56	5	1	0	0	0	0	0	63

- 3.4.4 Table 8 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.
- 3.4.5 Table 9 below presents the results of the pedestrian volume data on the north side of Millgate in Arbroath during each of the four survey periods.

Table 9. Millgate, Arbroath (north footpath) Pedestrian Volume Summary

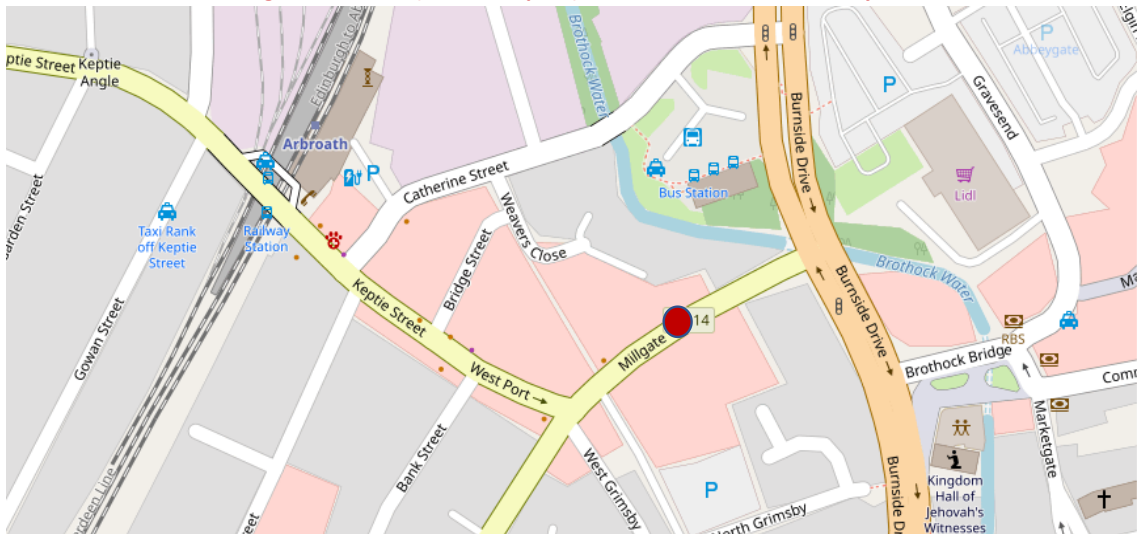


Site 2 Millgate North Kerbside (3 day Average Thur-Fri-Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	259	15	3	2	3	4	0	0	287
0600 - 2200 Westbound	210	24	5	2	1	5	1	0	248
AM Peak Pd 0630-0930 Eastbound	35	1	1	0	0	1	0	0	39
AM Peak Pd 0630-0930 Westbound	16	14	1	1	0	1	0	0	32
IP Peak Pd 0930-1530 Eastbound	138	11	3	2	2	1	0	0	157
IP Peak Pd 0930-1530 Westbound	116	8	3	1	1	1	0	0	131
PM Peak Pd 1530-1830 Eastbound	53	3	0	0	0	1	0	0	57
PM Peak Pd 1530-1830 Westbound	48	1	1	0	0	2	0	0	52
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	212	25	6	1	2	5	0	0	250
0600 - 2200 Westbound	211	26	4	1	2	4	1	0	249
AM Peak Pd 0630-0930 Eastbound	31	2	0	0	0	1	0	0	34
AM Peak Pd 0630-0930 Westbound	14	6	1	0	0	1	0	0	22
IP Peak Pd 0930-1530 Eastbound	100	22	4	1	1	3	0	0	131
IP Peak Pd 0930-1530 Westbound	106	15	1	1	2	3	0	0	127
PM Peak Pd 1530-1830 Eastbound	42	2	2	0	0	1	0	0	47
PM Peak Pd 1530-1830 Westbound	52	4	2	0	0	0	1	0	58
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	248	22	4	3	5	5	1	0	288
0600 - 2200 Westbound	221	17	7	6	3	4	1	0	259
AM Peak Pd 0630-0930 Eastbound	36	1	0	0	1	2	0	0	40
AM Peak Pd 0630-0930 Westbound	22	6	3	1	0	0	0	0	32
IP Peak Pd 0930-1530 Eastbound	135	17	3	2	4	0	0	0	161
IP Peak Pd 0930-1530 Westbound	120	6	1	4	2	1	0	0	134
PM Peak Pd 1530-1830 Eastbound	44	3	1	0	0	1	0	0	50
PM Peak Pd 1530-1830 Westbound	50	5	1	1	0	2	1	0	60
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	306	17	5	5	4	4	0	0	341
0600 - 2200 Westbound	263	18	5	3	3	4	2	0	298
AM Peak Pd 0630-0930 Eastbound	33	0	0	0	1	0	0	0	36
AM Peak Pd 0630-0930 Westbound	23	10	2	1	0	0	0	0	36
IP Peak Pd 0930-1530 Eastbound	161	14	3	4	2	2	0	0	186
IP Peak Pd 0930-1530 Westbound	140	6	2	2	2	1	1	0	154
PM Peak Pd 1530-1830 Eastbound	60	2	2	1	1	1	0	0	67
PM Peak Pd 1530-1830 Westbound	51	1	1	0	1	2	0	0	56

- 3.4.6 Table 9 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.
- 3.4.7 Table 10 below presents the results of the pedestrian volume data on the south side of Millgate in Arbroath during each of the four survey periods.

Table 10. Millgate, Arbroath (south footpath) Pedestrian Volume Summary

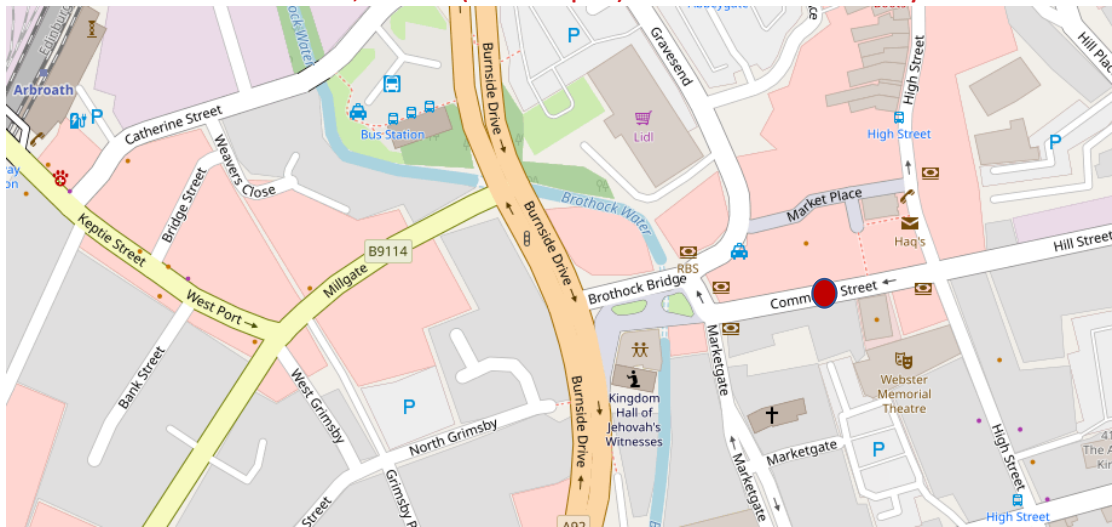


Site 2 Millgate South Kerbside (3 day Average Thur-Fri-Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	272	37	3	1	3	2	0	0	317
0600 - 2200 Westbound	250	40	2	2	3	4	1	0	302
AM Peak Pd 0630-0930 Eastbound	44	1	0	0	0	1	0	0	46
AM Peak Pd 0630-0930 Westbound	23	6	1	0	0	1	0	0	32
IP Peak Pd 0930-1530 Eastbound	174	29	0	1	2	1	0	0	207
IP Peak Pd 0930-1530 Westbound	162	28	0	1	2	1	1	0	195
PM Peak Pd 1530-1830 Eastbound	28	6	2	0	0	0	0	0	37
PM Peak Pd 1530-1830 Westbound	49	5	1	0	0	0	0	0	56
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	216	32	5	0	4	4	0	0	262
0600 - 2200 Westbound	165	24	3	1	2	4	2	0	200
AM Peak Pd 0630-0930 Eastbound	43	3	0	0	1	2	0	0	49
AM Peak Pd 0630-0930 Westbound	12	6	1	0	0	0	1	0	21
IP Peak Pd 0930-1530 Eastbound	122	28	4	0	3	1	0	0	159
IP Peak Pd 0930-1530 Westbound	103	14	1	1	1	2	1	0	124
PM Peak Pd 1530-1830 Eastbound	29	1	1	0	0	1	0	0	31
PM Peak Pd 1530-1830 Westbound	35	4	1	0	0	1	0	0	40
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	249	31	3	5	3	2	1	0	295
0600 - 2200 Westbound	220	36	5	6	4	4	1	0	277
AM Peak Pd 0630-0930 Eastbound	56	5	0	2	1	0	0	0	64
AM Peak Pd 0630-0930 Westbound	18	12	2	2	1	1	0	0	36
IP Peak Pd 0930-1530 Eastbound	135	22	2	3	3	1	1	0	166
IP Peak Pd 0930-1530 Westbound	130	19	3	3	3	1	1	0	160
PM Peak Pd 1530-1830 Eastbound	37	4	0	0	0	0	0	0	41
PM Peak Pd 1530-1830 Westbound	43	5	1	1	0	1	0	0	50
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	298	42	3	3	4	4	1	0	354
0600 - 2200 Westbound	268	42	4	5	6	4	1	0	330
AM Peak Pd 0630-0930 Eastbound	52	5	0	0	1	3	0	0	61
AM Peak Pd 0630-0930 Westbound	22	11	1	0	0	1	0	0	36
IP Peak Pd 0930-1530 Eastbound	162	29	2	2	2	1	1	0	199
IP Peak Pd 0930-1530 Westbound	160	22	2	4	5	1	1	0	195
PM Peak Pd 1530-1830 Eastbound	43	7	0	1	1	1	0	0	53
PM Peak Pd 1530-1830 Westbound	49	7	1	1	1	1	0	0	60

- 3.4.8 Table 10 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.
- 3.4.9 Table 11 below presents the results of the pedestrian volume data on the north side of Commerce Street in Arbroath during each of the four survey periods.

Table 11. Commerce Street, Arbroath (north footpath) Pedestrian Volume Summary

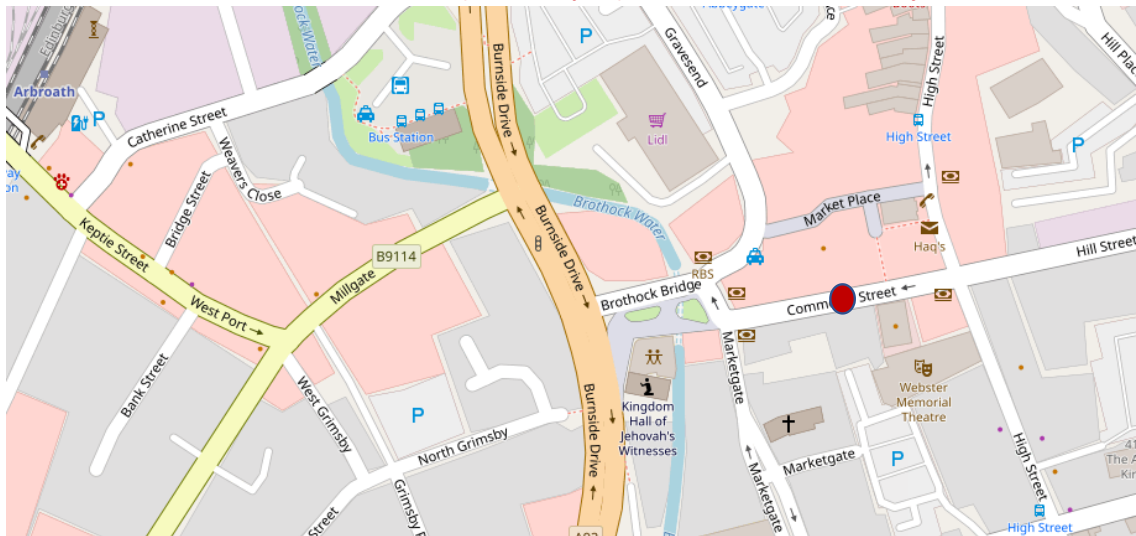


Site 3 Commerce Street North Kerbside (3 day Average Thur-Fri-Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	99	10	2	2	0	1	1	0	114
0600 - 2200 Westbound	119	11	3	1	1	1	0	0	136
AM Peak Pd 0630-0930 Eastbound	14	2	0	0	0	0	0	0	16
AM Peak Pd 0630-0930 Westbound	15	2	0	0	0	0	0	0	17
IP Peak Pd 0930-1530 Eastbound	65	4	1	1	0	0	1	0	72
IP Peak Pd 0930-1530 Westbound	78	6	2	1	1	0	0	0	88
PM Peak Pd 1530-1830 Eastbound	14	3	1	1	0	0	0	0	19
PM Peak Pd 1530-1830 Westbound	20	4	1	0	0	0	0	0	25
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	97	4	0	1	0	1	1	0	104
0600 - 2200 Westbound	118	10	0	2	0	1	2	0	133
AM Peak Pd 0630-0930 Eastbound	17	1	0	0	0	0	0	0	18
AM Peak Pd 0630-0930 Westbound	19	2	0	0	0	0	0	0	22
IP Peak Pd 0930-1530 Eastbound	64	2	0	0	0	1	1	0	68
IP Peak Pd 0930-1530 Westbound	66	8	0	1	0	1	1	0	78
PM Peak Pd 1530-1830 Eastbound	10	1	0	0	0	0	0	0	11
PM Peak Pd 1530-1830 Westbound	23	0	0	0	0	0	0	0	23
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	134	3	0	1	0	1	1	0	140
0600 - 2200 Westbound	143	3	0	2	1	2	1	0	150
AM Peak Pd 0630-0930 Eastbound	31	1	0	0	0	0	0	0	33
AM Peak Pd 0630-0930 Westbound	22	1	0	0	0	0	0	0	24
IP Peak Pd 0930-1530 Eastbound	75	1	0	0	0	0	1	0	77
IP Peak Pd 0930-1530 Westbound	84	0	0	1	1	2	1	0	88
PM Peak Pd 1530-1830 Eastbound	17	1	0	0	0	0	0	0	18
PM Peak Pd 1530-1830 Westbound	22	1	0	0	0	0	0	0	23
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	123	5	0	0	1	0	0	0	130
0600 - 2200 Westbound	164	8	4	1	0	1	1	0	179
AM Peak Pd 0630-0930 Eastbound	24	2	0	0	0	0	0	0	26
AM Peak Pd 0630-0930 Westbound	21	2	1	0	0	0	0	0	24
IP Peak Pd 0930-1530 Eastbound	72	0	0	0	1	0	0	0	73
IP Peak Pd 0930-1530 Westbound	94	3	2	1	0	0	0	0	100
PM Peak Pd 1530-1830 Eastbound	18	1	0	0	0	0	0	0	20
PM Peak Pd 1530-1830 Westbound	33	3	1	0	0	0	1	0	38

- 3.4.10 Table 11 shows that the pedestrian volumes remained relatively consistent across all surveys, with the lowest volume being recorded in February 2021 when Scotland was in lockdown, and the highest number recorded in May 2021.
- 3.4.11 Table 12 below presents the results of the pedestrian volume data on the south side of Commerce Street in Arbroath during each of the four survey periods.

Table 12. Commerce Street, Arbroath (south footpath) Pedestrian Volume Summary



Site 3 Commerce Street South Kerbside (3 day Average Thur-Fri-Sat)

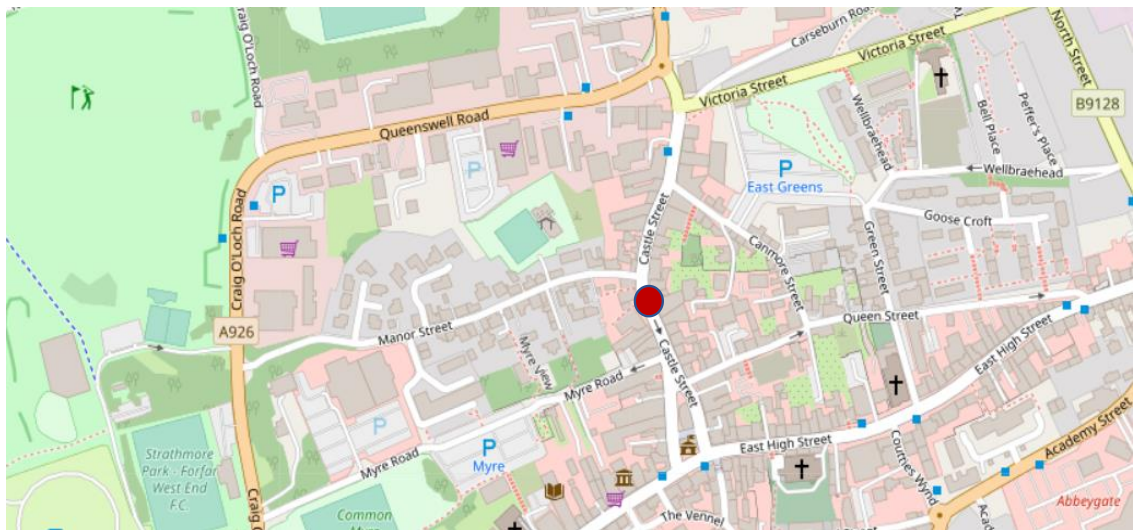
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	95	5	2	2	0	1	0	0	105
0600 - 2200 Westbound	85	4	2	1	1	1	1	0	94
AM Peak Pd 0630-0930 Eastbound	8	0	0	0	0	0	0	0	9
AM Peak Pd 0630-0930 Westbound	10	1	0	0	0	1	0	0	12
IP Peak Pd 0930-1530 Eastbound	57	2	1	1	0	1	0	0	62
IP Peak Pd 0930-1530 Westbound	47	2	2	0	1	0	1	0	52
PM Peak Pd 1530-1830 Eastbound	19	3	0	0	0	0	0	0	22
PM Peak Pd 1530-1830 Westbound	16	0	0	0	0	0	0	0	16
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	69	3	0	0	0	1	0	0	74
0600 - 2200 Westbound	67	4	0	0	1	1	0	0	75
AM Peak Pd 0630-0930 Eastbound	8	1	0	0	0	0	0	0	10
AM Peak Pd 0630-0930 Westbound	7	1	0	0	1	0	0	0	9
IP Peak Pd 0930-1530 Eastbound	40	1	0	0	0	0	0	0	41
IP Peak Pd 0930-1530 Westbound	42	3	0	0	0	1	0	0	47
PM Peak Pd 1530-1830 Eastbound	12	1	0	0	0	0	0	0	13
PM Peak Pd 1530-1830 Westbound	12	0	0	0	0	0	0	0	12
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	94	5	0	1	1	1	0	0	103
0600 - 2200 Westbound	97	7	0	2	2	0	1	0	108
AM Peak Pd 0630-0930 Eastbound	10	2	0	1	1	0	0	0	14
AM Peak Pd 0630-0930 Westbound	12	3	0	0	1	0	0	0	17
IP Peak Pd 0930-1530 Eastbound	52	1	0	0	0	1	0	0	55
IP Peak Pd 0930-1530 Westbound	55	4	0	1	1	0	1	0	62
PM Peak Pd 1530-1830 Eastbound	18	2	0	0	0	0	0	0	20
PM Peak Pd 1530-1830 Westbound	18	0	0	0	0	0	0	0	18
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	112	5	2	0	0	1	0	0	120
0600 - 2200 Westbound	120	8	2	0	0	1	0	0	132
AM Peak Pd 0630-0930 Eastbound	12	3	0	0	0	0	0	0	15
AM Peak Pd 0630-0930 Westbound	14	0	0	0	0	0	0	0	14
IP Peak Pd 0930-1530 Eastbound	56	1	2	0	0	0	0	0	59
IP Peak Pd 0930-1530 Westbound	74	5	2	0	0	1	0	0	81
PM Peak Pd 1530-1830 Eastbound	25	2	0	0	0	0	0	0	28
PM Peak Pd 1530-1830 Westbound	15	3	0	0	0	0	0	0	18

3.4.12 Table 12 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.

Forfar

3.4.13 Table 13 below presents the results of the pedestrian volume data on the east side of Castle Street in Forfar during each of the four survey periods.

Table 13. Castle Street, Forfar (east footpath) Pedestrian Volume Summary

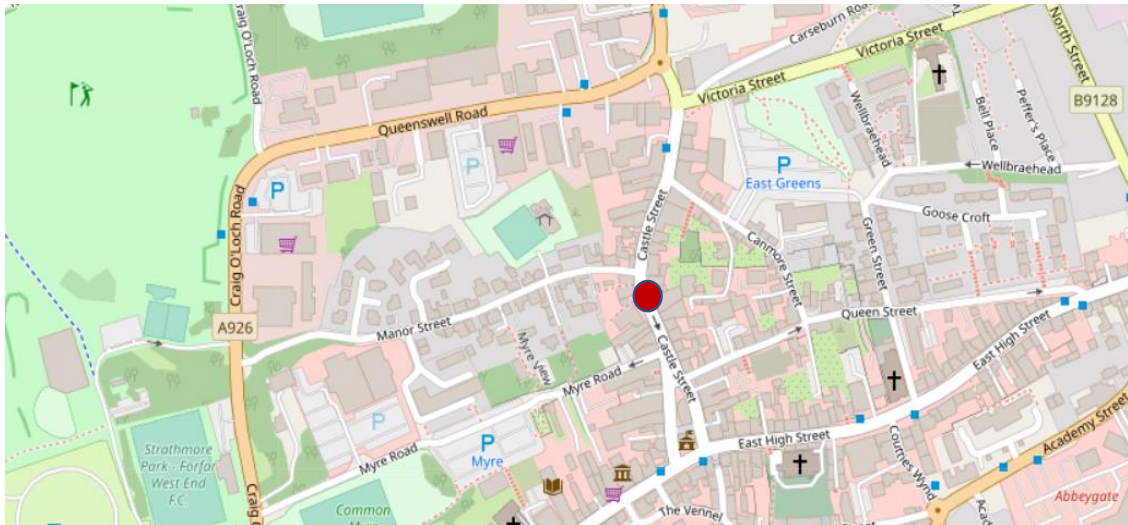


Site 1 Castle Street East Kerbside (3 day Average Thur-Fri-Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	623	25	23	10	3	2	1	0	686
0600 - 2200 Southbound	758	26	47	9	2	4	2	0	848
AM Peak Pd 0700-1000 Northbound	65	6	14	0	0	0	0	0	86
AM Peak Pd 0700-1000 Southbound	80	4	1	1	0	0	0	0	86
IP Peak Pd 1000-1600 Northbound	440	17	5	9	3	1	0	0	475
IP Peak Pd 1000-1600 Southbound	527	14	35	8	2	1	1	0	589
PM Peak Pd 1600-1900 Northbound	82	1	4	0	0	1	0	0	89
PM Peak Pd 1600-1900 Southbound	106	6	10	0	0	2	0	0	124
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	482	27	3	4	4	1	0	0	521
0600 - 2200 Southbound	202	19	1	1	0	2	0	0	224
AM Peak Pd 0700-1000 Northbound	27	1	0	0	0	0	0	0	29
AM Peak Pd 0700-1000 Southbound	266	9	1	3	3	0	0	0	282
IP Peak Pd 1000-1600 Northbound	131	11	1	1	1	0	0	0	146
IP Peak Pd 1000-1600 Southbound	139	19	0	1	0	1	0	0	160
PM Peak Pd 1600-1900 Northbound	30	1	0	0	0	0	0	0	31
PM Peak Pd 1600-1900 Southbound	22	1	1	0	0	0	0	0	24
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	672	33	24	4	10	5	0	0	747
0600 - 2200 Southbound	746	32	33	4	9	4	1	0	829
AM Peak Pd 0700-1000 Northbound	97	7	15	1	2	0	0	0	122
AM Peak Pd 0700-1000 Southbound	96	4	3	0	2	0	0	0	105
IP Peak Pd 1000-1600 Northbound	452	19	6	3	7	1	0	0	488
IP Peak Pd 1000-1600 Southbound	504	26	23	4	6	2	1	0	565
PM Peak Pd 1600-1900 Northbound	84	5	3	0	2	2	0	0	95
PM Peak Pd 1600-1900 Southbound	99	3	7	0	1	1	0	0	111
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	698	42	28	6	2	5	1	0	782
0600 - 2200 Southbound	774	48	34	8	2	2	1	0	868
AM Peak Pd 0700-1000 Northbound	77	5	13	0	0	0	0	0	96
AM Peak Pd 0700-1000 Southbound	80	5	0	1	0	0	0	0	86
IP Peak Pd 1000-1600 Northbound	486	26	14	5	1	4	0	0	537
IP Peak Pd 1000-1600 Southbound	516	30	22	7	2	1	0	0	578
PM Peak Pd 1600-1900 Northbound	87	9	1	1	0	0	0	0	98
PM Peak Pd 1600-1900 Southbound	105	12	12	0	0	0	0	0	129

- 3.4.14 Table 13 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.
- 3.4.15 Table 14 below presents the results of the pedestrian volume data on the west side of Castle Street in Forfar during each of the four survey periods.

Table 14. Castle Street, Forfar (west footpath) Pedestrian Volume Summary



Site 1 Castle Street West Kerbside (3 day Average Thur-Fri-Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	624	29	61	10	2	6	1	0	733
0600 - 2200 Southbound	593	41	105	7	2	6	1	0	757
AM Peak Pd 0700-1000 Northbound	73	5	25	0	1	1	0	0	105
AM Peak Pd 0700-1000 Southbound	55	4	0	0	0	1	0	0	61
IP Peak Pd 1000-1600 Northbound	395	18	27	9	1	0	1	0	452
IP Peak Pd 1000-1600 Southbound	366	24	79	6	2	2	1	0	479
PM Peak Pd 1600-1900 Northbound	98	4	9	1	0	4	0	0	115
PM Peak Pd 1600-1900 Southbound	113	11	26	1	0	3	0	0	154
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	439	32	6	3	5	3	0	0	489
0600 - 2200 Southbound	438	26	5	3	5	7	1	0	485
AM Peak Pd 0700-1000 Northbound	67	6	0	1	1	1	0	0	75
AM Peak Pd 0700-1000 Southbound	50	3	0	0	1	1	0	0	56
IP Peak Pd 1000-1600 Northbound	266	21	3	3	3	1	0	0	297
IP Peak Pd 1000-1600 Southbound	273	19	2	2	3	3	1	0	303
PM Peak Pd 1600-1900 Northbound	66	3	3	0	1	2	0	0	74
PM Peak Pd 1600-1900 Southbound	77	4	3	0	1	1	0	0	85
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	600	34	54	4	10	5	2	0	710
0600 - 2200 Southbound	591	35	69	3	7	7	0	0	713
AM Peak Pd 0700-1000 Northbound	90	5	23	1	1	1	0	0	121
AM Peak Pd 0700-1000 Southbound	68	8	0	1	0	1	0	0	78
IP Peak Pd 1000-1600 Northbound	372	23	29	3	9	2	0	0	438
IP Peak Pd 1000-1600 Southbound	372	16	44	3	7	3	0	0	445
PM Peak Pd 1600-1900 Northbound	79	6	3	0	0	1	1	0	90
PM Peak Pd 1600-1900 Southbound	87	10	25	0	0	1	0	0	122
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	684	40	45	9	2	9	1	0	790
0600 - 2200 Southbound	684	40	63	7	1	7	0	0	802
AM Peak Pd 0700-1000 Northbound	93	3	20	0	0	2	0	0	118
AM Peak Pd 0700-1000 Southbound	69	6	0	0	0	0	0	0	75
IP Peak Pd 1000-1600 Northbound	434	28	22	8	1	3	0	0	496
IP Peak Pd 1000-1600 Southbound	435	24	46	6	1	2	0	0	516
PM Peak Pd 1600-1900 Northbound	89	7	3	1	0	2	0	0	102
PM Peak Pd 1600-1900 Southbound	109	8	16	0	0	2	0	0	135

3.4.16 Table 14 shows that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.

4. VEHICLE LINK COUNT & SPEED REVIEW

4.1 Overview

4.1.1 Summary tables below present the results of the link count and speed surveys in the Angus Council area (three sites in Arbroath, one site in Forfar and one site in Edzell).

4.1.2 For each survey, the summary information is as follows:

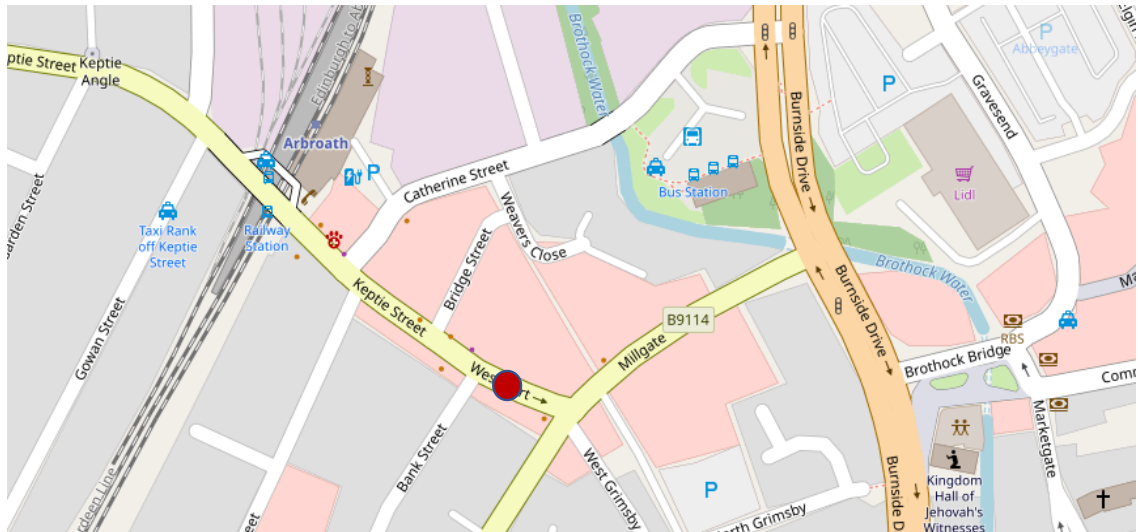
- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed at, or below, which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

4.2 Results of Link Counts and Speed Surveys

Arbroath

4.2.1 Table 15 below presents a comparison of the results of the link flow and speed data on the West Port eastbound in Arbroath.

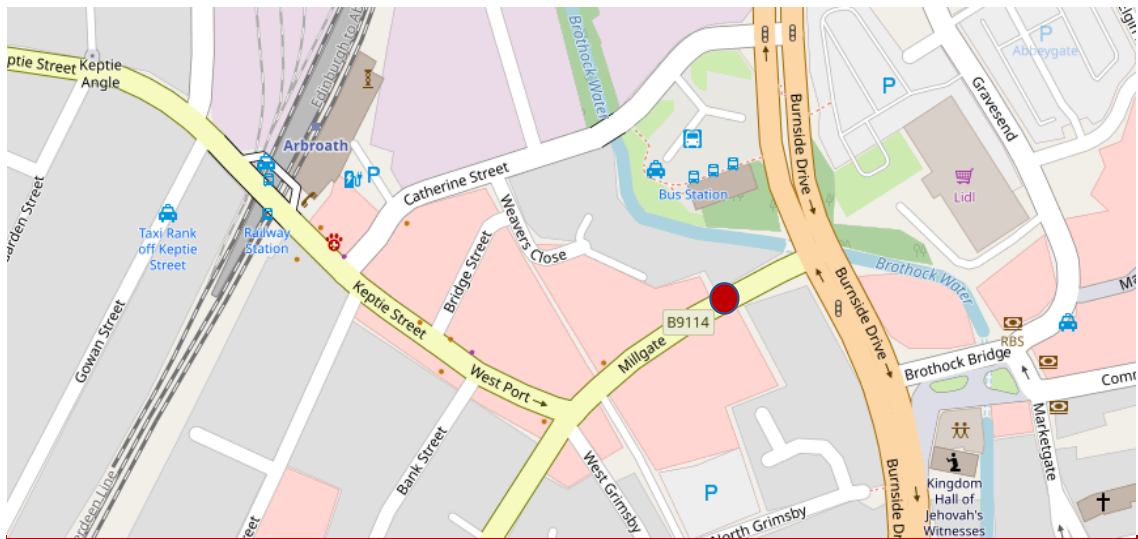
Table 15. West Port, Arbroath (eastbound) Link Flow & Speed Summary



Site 1 West Port									
October 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1762	1867	1814	2065	2280	2006	1160	1958	1851
Mean Speed (mph)	18.9	18.4	18.6	18.9	18.0	18.0	19.3	18.6	18.6
85%ile Speed (mph)	23.0	22.5	22.9	23.0	22.2	22.5	23.5	22.7	22.8
No. Vehicles > 20 MPH Limit	706	684	690	846	733	658	524	732	692
% Vehicles > 20 MPH Limit	40.1%	36.6%	38.0%	41.0%	32.1%	32.8%	45.2%	37.6%	38.0%
No. Vehicles > 35 MPH	6	2	0	5	1	5	0	3	3
% Vehicles > 35 MPH	0.3%	0.1%	0.0%	0.2%	0.0%	0.2%	0.0%	0.1%	0.1%
March 2021	Mon 29/03/21	Tue 30/03/21	Wed 31/03/21	Thu 01/04/21	Fri 26/03/21	Sat 27/03/21	Sun 28/03/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1537	1544	1568	1698	2100	1506	1042	1689	1571
Mean Speed (mph)	19.0	19.1	19.3	19.4	18.9	18.6	20.0	19.1	19.2
85%ile Speed (mph)	22.9	23.1	23.4	23.3	23.0	23.0	24.0	23.1	23.2
No. Vehicles > 20 MPH Limit	667	656	707	781	835	586	532	729	681
% Vehicles > 20 MPH Limit	43.4%	42.5%	45.1%	46.0%	39.8%	38.9%	51.1%	43.3%	43.8%
No. Vehicles > 35 MPH	0	0	2	1	3	3	1	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%
May 2021	Mon 10/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1837	2029	1948	2093	2310	1972	1272	2043	1923
Mean Speed (mph)	18.5	18.7	18.4	17.9	18.3	17.6	19.0	18.4	18.3
85%ile Speed (mph)	22.4	22.8	22.6	22.3	22.3	22.0	23.2	22.5	22.5
No. Vehicles > 20 MPH Limit	686	814	740	661	822	576	527	745	689
% Vehicles > 20 MPH Limit	37.3%	40.1%	38.0%	31.6%	35.6%	29.2%	41.4%	36.4%	35.9%
No. Vehicles > 35 MPH	1	1	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1726	1821	1892	2092	2435	2253	1408	1993	1947
Mean Speed (mph)	18.4	17.9	18.4	17.9	18.0	17.9	19.3	18.1	18.3
85%ile Speed (mph)	22.4	22.1	22.6	22.1	22.2	22.0	23.3	22.3	22.4
No. Vehicles > 20 MPH Limit	593	577	684	660	788	738	641	660	669
% Vehicles > 20 MPH Limit	34.4%	31.7%	36.2%	31.5%	32.4%	32.8%	45.5%	33.1%	34.4%
No. Vehicles > 35 MPH	2	1	0	2	1	1	0	1	1
% Vehicles > 35 MPH	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%

- 4.2.2 Table 15 indicates that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 19.1 mph.
- 4.2.3 The proportion of vehicles exceeding 20mph was slightly lower in May 2021 compared with October 2020, the lowest proportion being observed in September 2021.
- 4.2.4 The vehicle flows out with lockdown (March 2021) and vehicle speeds are relatively consistent.
- 4.2.5 Table 16 presents the results for Millgate eastbound in Arbroath.

Table 16. Millgate, Arbroath (eastbound) Link Flow & Speed Summary



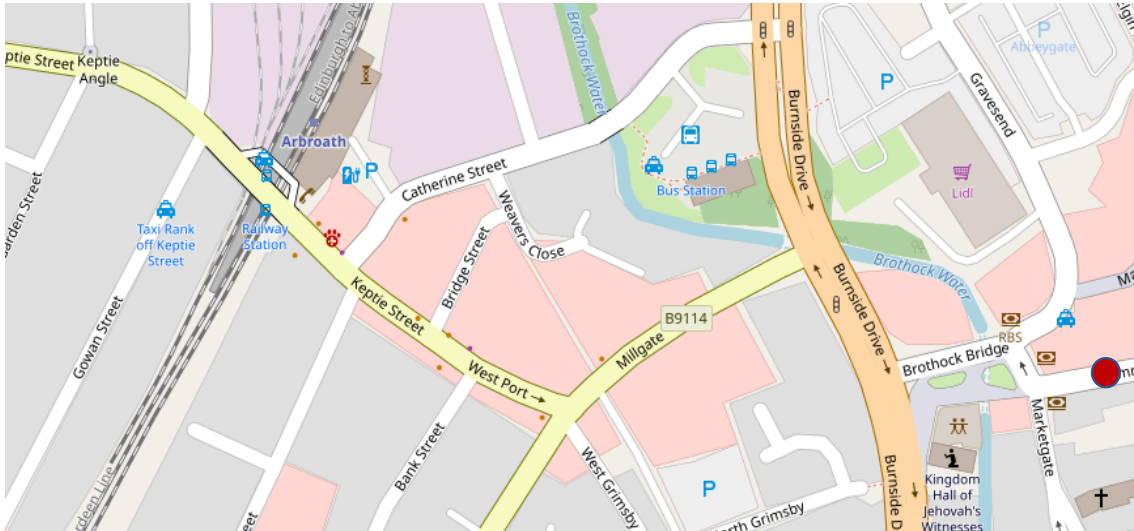
Site 2 Millgate									
October 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1264	1331	1313	1461	1621	1391	784	1398	1309
Mean Speed (mph)	16.9	16.9	16.5	16.6	16.8	16.9	18.1	16.7	17.0
85%ile Speed (mph)	21.1	20.9	20.6	20.6	20.7	21.0	22.1	20.8	21.0
No. Vehicles > 20 MPH Limit	275	266	245	273	306	295	245	273	272
% Vehicles > 20 MPH Limit	21.8%	20.0%	18.7%	18.7%	18.9%	21.2%	31.3%	19.6%	21.5%
No. Vehicles > 35 MPH	0	0	1	1	0	6	0	0	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.1%	0.0%	0.4%	0.0%	0.0%	0.1%
March 2021	Mon 29/03/21	Tue 30/03/21	Wed 31/03/21	Thu 01/04/21	Fri 26/03/21	Sat 27/03/21	Sun 28/03/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1018	1044	1090	1132	1425	1020	707	1142	1062
Mean Speed (mph)	18.3	18.4	18.2	18.2	18.1	18.0	18.7	18.2	18.3
85%ile Speed (mph)	22.3	22.4	22.4	22.0	22.3	21.9	22.4	22.3	22.2
No. Vehicles > 20 MPH Limit	324	335	356	349	428	308	247	358	335
% Vehicles > 20 MPH Limit	31.8%	32.1%	32.7%	30.8%	30.0%	30.2%	34.9%	31.5%	31.8%
No. Vehicles > 35 MPH	2	1	2	2	4	0	4	2	2
% Vehicles > 35 MPH	0.2%	0.1%	0.2%	0.2%	0.3%	0.0%	0.6%	0.2%	0.2%
May 2021	Mon 10/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1303	1409	1413	1550	1625	1471	817	1460	1370
Mean Speed (mph)	17.7	17.5	17.4	17.1	17.6	17.0	18.2	17.5	17.5
85%ile Speed (mph)	21.6	21.5	21.3	21.0	21.7	21.0	22.0	21.4	21.4
No. Vehicles > 20 MPH Limit	340	363	336	338	427	307	224	361	334
% Vehicles > 20 MPH Limit	26.1%	25.8%	23.8%	21.8%	26.3%	20.9%	27.4%	24.7%	24.4%
No. Vehicles > 35 MPH	2	1	0	0	1	0	0	1	1
% Vehicles > 35 MPH	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1207	1308	1336	1466	1719	1646	982	1407	1381
Mean Speed (mph)	17.4	17.4	17.0	17.0	17.2	16.8	17.9	17.2	17.2
85%ile Speed (mph)	21.7	21.9	21.3	21.3	21.4	21.0	22.1	21.5	21.5
No. Vehicles > 20 MPH Limit	301	321	317	324	414	355	293	335	332
% Vehicles > 20 MPH Limit	24.9%	24.5%	23.7%	22.1%	24.1%	21.6%	29.8%	23.8%	24.1%
No. Vehicles > 35 MPH	1	2	1	0	0	1	0	1	1
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%

4.2.6 Table 16 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown. Again, the 5-day mean speed was highest at 18.2 mph.

4.2.7 The proportion of vehicles exceeding 20mph was higher in May 2021 compared with October 2020. The proportion of vehicles exceeding the 20mph speed limit in September 2021 was similar to May 2021 and both were higher than October 2020.

4.2.8 Table 17 presents the results for Commerce Street westbound in Arbroath.

Table 17. Commerce Street, Arbroath (westbound) Link Flow & Speed Summary



Site 3 Commerce Street									
October 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3852	4092	3718	3910	4208	3427	2611	3956	3688
Mean Speed (mph)	17.8	17.8	18.1	17.6	17.5	18.0	18.2	17.8	17.9
85%ile Speed (mph)	21.4	21.3	21.6	21.1	21.1	21.7	22.0	21.3	21.5
No. Vehicles > 20 MPH Limit	991	1045	1110	932	988	942	782	1013	970
% Vehicles > 20 MPH Limit	25.7%	25.5%	29.9%	23.8%	23.5%	27.5%	30.0%	25.6%	26.3%
No. Vehicles > 35 MPH	0	2	0	0	1	4	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
March 2021	Mon 29/03/21	Tue 30/03/21	Wed 31/03/21	Thu 01/04/21	Fri 26/03/21	Sat 27/03/21	Sun 28/03/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3297	3195	3390	3769	4115	2844	2380	3553	3284
Mean Speed (mph)	18.2	18.0	18.3	17.8	17.7	17.8	18.4	18.0	18.0
85%ile Speed (mph)	21.5	21.4	21.6	21.2	21.3	21.5	21.8	21.4	21.5
No. Vehicles > 20 MPH Limit	915	850	957	936	989	741	717	929	872
% Vehicles > 20 MPH Limit	27.8%	26.6%	28.2%	24.8%	24.0%	26.1%	30.1%	26.3%	26.8%
No. Vehicles > 35 MPH	1	1	2	0	0	0	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Mon 10/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4538	4606	4736	5111	5209	4086	3100	4840	4484
Mean Speed (mph)	16.9	17.0	17.2	16.6	16.9	16.8	17.8	16.9	17.0
85%ile Speed (mph)	20.3	20.2	20.5	19.9	20.1	20.1	21.1	20.2	20.3
No. Vehicles > 20 MPH Limit	802	771	892	735	837	634	727	807	771
% Vehicles > 20 MPH Limit	17.7%	16.7%	18.8%	14.4%	16.1%	15.5%	23.5%	16.7%	17.2%
No. Vehicles > 35 MPH	1	0	1	1	1	0	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4207	4394	3640	4362	4971	4015	2894	4315	4069
Mean Speed (mph)	17.5	17.5	17.7	17.4	16.9	17.1	18.0	17.4	17.4
85%ile Speed (mph)	21.0	20.7	21.1	20.7	20.3	20.5	21.4	20.8	20.8
No. Vehicles > 20 MPH Limit	934	951	850	894	847	743	782	895	857
% Vehicles > 20 MPH Limit	22.2%	21.6%	23.4%	20.5%	17.0%	18.5%	27.0%	20.7%	21.1%
No. Vehicles > 35 MPH	0	0	0	0	1	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.9 Table 17 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown, the mean speed being 18.0 mph at this point.

4.2.10 The proportion of vehicles exceeding 20mph was lower in May 2021 compared with October 2020, and much lower than in March 2021. There was an increase in the proportion of vehicles

exceeding 20mph in September 2021 when compared to May 2021, although the number wa lower than October 2020 and March 2021.

Forfar

4.2.11 Table 18 presents the results for Castle Street southbound in Forfar.

Table 18. Castle Street, Forfar (southbound) Link Flow & Speed Summary

Site 1 Castle Street									
October / November 2020	Mon 02/11/20	Tue 27/10/20	Wed 28/10/20	Thu 29/10/20	Fri 30/10/20	Sat 31/10/20	Sun 01/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3174	3465	3722	3083	3484	3981	2606	3386	3359
Mean Speed (mph)	14.1	15.5	15.3	11.5	13.2	14.7	17.2	13.9	14.5
85%ile Speed (mph)	19.0	19.2	19.1	16.0	18.1	18.5	20.6	18.3	18.6
No. Vehicles > 20 MPH Limit	330	368	368	149	264	321	509	296	330
% Vehicles > 20 MPH Limit	10.4%	10.6%	9.9%	4.8%	7.6%	8.1%	19.5%	8.7%	10.1%
No. Vehicles > 35 MPH	10	13	7	15	6	12	0	10	9
% Vehicles > 35 MPH	0.3%	0.4%	0.2%	0.5%	0.2%	0.3%	0.0%	0.3%	0.3%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3015	3010	3310	3516	3913	3182	2475	3353	3203
Mean Speed (mph)	17.2	16.8	17.4	17.4	16.9	16.5	18.1	17.1	17.2
85%ile Speed (mph)	21.1	20.9	21.3	21.5	20.9	20.3	21.5	21.1	21.1
No. Vehicles > 20 MPH Limit	697	621	804	893	805	537	711	764	724
% Vehicles > 20 MPH Limit	23.1%	20.6%	24.3%	25.4%	20.6%	16.9%	28.7%	22.8%	22.6%
No. Vehicles > 35 MPH	1	0	0	0	3	4	1	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3377	4643	4693	4976	5095	4600	3455	4557	4406
Mean Speed (mph)	16.7	16.2	16.1	16.3	15.6	15.6	17.3	16.2	16.3
85%ile Speed (mph)	20.4	20.1	20.1	20.2	19.8	19.8	20.5	20.1	20.1
No. Vehicles > 20 MPH Limit	574	712	735	823	711	646	683	711	698
% Vehicles > 20 MPH Limit	17.0%	15.3%	15.7%	16.5%	14.0%	14.0%	19.8%	15.6%	15.8%
No. Vehicles > 35 MPH	2	10	2	8	8	15	1	6	7
% Vehicles > 35 MPH	0.1%	0.2%	0.0%	0.2%	0.2%	0.3%	0.0%	0.1%	0.1%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3984	4154	3471	3928	3669	4307	2925	3841	3777
Mean Speed (mph)	15.9	15.8	16.1	15.7	15.7	15.5	17.3	15.8	16.0
85%ile Speed (mph)	19.7	19.4	19.6	19.5	19.5	19.1	20.6	19.5	19.6
No. Vehicles > 20 MPH Limit	516	491	410	491	447	422	543	471	474
% Vehicles > 20 MPH Limit	13.0%	11.8%	11.8%	12.5%	12.2%	9.8%	18.6%	12.3%	12.6%
No. Vehicles > 35 MPH	4	5	8	1	2	0	2	4	3
% Vehicles > 35 MPH	0.1%	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%

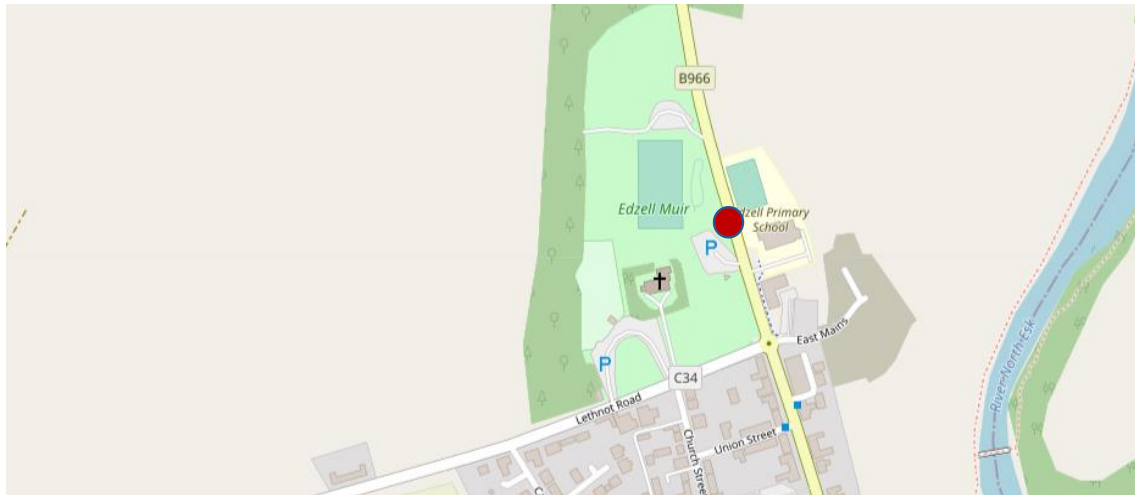
4.2.12 Table 18 shows that the 5-day average traffic flows were lowest in March 2021 when Scotland was in a period of lockdown, although they were only slightly lower than October /November 2020. The mean speed of traffic in October 2020 was only 13.9 mph, compared with 15.8 mph in September 2021..

4.2.13 The proportion of vehicles exceeding 20mph was much higher in May 2021 compared with October 2020 and September 2021, but lower than in February 2021.

Edzell

4.2.14 Table 19 presents the results for the B966 High Street northbound in Edzell.

Table 19. B966 High Street, Edzell (northbound) Link Flow & Speed Summary



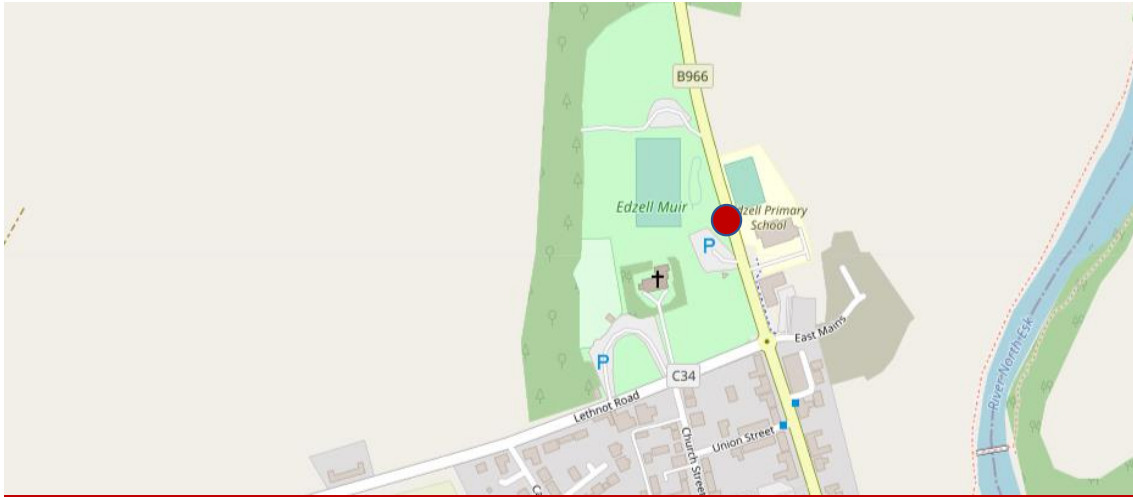
Site 1 High Street									
Oct / Nov 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	806	796	898	878	904	697	894	856	839
Mean Speed (mph)	29.1	29.1	29.0	28.1	28.6	30.7	30.6	28.8	29.3
85%ile Speed (mph)	36.2	36.4	36.2	35.0	35.0	37.0	37.4	35.8	36.2
No. Vehicles > 20 MPH Limit	757	731	822	785	825	657	853	784	776
% Vehicles > 20 MPH Limit	93.9%	91.8%	91.5%	89.4%	91.3%	94.3%	95.4%	91.6%	92.5%
No. Vehicles > 35 MPH	150	156	179	132	135	178	213	150	163
% Vehicles > 35 MPH	18.6%	19.6%	19.9%	15.0%	14.9%	25.5%	23.8%	17.6%	19.5%
Feb-21	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	673	537	662	677	753	510	552	660	623
Mean Speed (mph)	29.3	29.1	29.3	30.1	29.9	31.3	30.2	29.5	29.9
85%ile Speed (mph)	35.7	36.2	36.3	37.3	37.0	37.6	35.9	36.5	36.6
No. Vehicles > 20 MPH Limit	628	492	611	642	703	496	525	615	585
% Vehicles > 20 MPH Limit	93.3%	91.6%	92.3%	94.8%	93.4%	97.3%	95.1%	93.2%	93.9%
No. Vehicles > 35 MPH	123	104	123	155	161	129	115	133	130
% Vehicles > 35 MPH	18.3%	19.4%	18.6%	22.9%	21.4%	25.3%	20.8%	20.2%	20.9%
April / May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 30/04/21	Sat 01/05/21	Sun 02/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	752	773	886	804	969	957	776	837	845
Mean Speed (mph)	28.5	27.6	28.0	27.6	28.0	28.7	28.7	27.9	28.2
85%ile Speed (mph)	34.5	34.3	34.8	34.6	34.3	34.3	34.3	34.5	34.4
No. Vehicles > 20 MPH Limit	706	689	795	708	885	892	727	757	772
% Vehicles > 20 MPH Limit	93.9%	89.1%	89.7%	88.1%	91.3%	93.2%	93.7%	90.4%	91.3%
No. Vehicles > 35 MPH	97	92	130	105	123	122	91	109	109
% Vehicles > 35 MPH	12.9%	11.9%	14.7%	13.1%	12.7%	12.7%	11.7%	13.1%	12.8%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	922	985	1001	866	905	913	944	936	934
Mean Speed (mph)	27.0	26.6	26.4	26.9	27.0	28.5	26.2	26.8	26.9
85%ile Speed (mph)	33.9	33.0	32.7	33.8	33.6	34.7	33.1	33.4	33.5
No. Vehicles > 20 MPH Limit	807	851	859	768	794	860	790	816	818
% Vehicles > 20 MPH Limit	87.5%	86.4%	85.8%	88.7%	87.7%	94.2%	83.7%	87.2%	87.7%
No. Vehicles > 35 MPH	106	84	84	97	87	131	89	92	97
% Vehicles > 35 MPH	11.5%	8.5%	8.4%	11.2%	9.6%	14.3%	9.4%	9.8%	10.4%

4.2.15 Table 19 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was 29.5 mph. The highest flows were observed in September 2021 when the mean speed was 26.8 mph.

4.2.16 The proportion of vehicles exceeding 20mph in May 2021 was 90.4%, similar to October 2020 (91.6%), higher than the proportion in September 2021 (87.2%).

4.2.17 Table 20 presents the results for the B966 High Street southbound in Edzell.

Table 20. B966 High Street, Edzell (southbound) Link Flow & Speed Summary



Site 1 High Street									
October / November 2020	Mon 26/10/20	Tue 27/10/20	Wed 21/10/20	Thu 22/10/20	Fri 23/10/20	Sat 24/10/20	Sun 25/10/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	906	879	1004	941	958	754	920	938	909
Mean Speed (mph)	25.3	25.2	24.9	24.9	25.6	27.2	26.6	25.2	25.7
85%ile Speed (mph)	32.2	31.7	31.6	31.5	32.2	33.8	32.6	31.8	32.2
No. Vehicles > 20 MPH Limit	715	689	770	736	769	671	807	736	737
% Vehicles > 20 MPH Limit	78.9%	78.4%	76.7%	78.2%	80.3%	89.0%	87.7%	78.5%	81.3%
No. Vehicles > 35 MPH	71	61	63	57	74	90	70	65	69
% Vehicles > 35 MPH	7.8%	6.9%	6.3%	6.1%	7.7%	11.9%	7.6%	7.0%	7.6%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	713	620	670	716	810	513	565	706	658
Mean Speed (mph)	26.6	25.7	26.4	26.6	26.7	27.6	26.9	26.4	26.6
85%ile Speed (mph)	33.7	32.8	33.3	33.6	33.8	34.7	33.3	33.4	33.6
No. Vehicles > 20 MPH Limit	606	493	546	609	706	454	497	592	559
% Vehicles > 20 MPH Limit	85.0%	79.5%	81.5%	85.1%	87.2%	88.5%	88.0%	83.9%	84.9%
No. Vehicles > 35 MPH	83	63	83	82	97	75	71	82	79
% Vehicles > 35 MPH	11.6%	10.2%	12.4%	11.5%	12.0%	14.6%	12.6%	11.6%	12.0%
April / May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 30/04/21	Sat 01/05/21	Sun 02/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	835	874	943	886	946	1006	804	897	899
Mean Speed (mph)	25.5	25.1	25.1	24.8	24.7	26.0	26.2	25.0	25.3
85%ile Speed (mph)	31.9	32.1	32.3	31.8	31.8	31.9	32.1	32.0	32.0
No. Vehicles > 20 MPH Limit	687	677	737	672	729	869	696	700	724
% Vehicles > 20 MPH Limit	82.3%	77.5%	78.2%	75.8%	77.1%	86.4%	86.6%	78.1%	80.5%
No. Vehicles > 35 MPH	64	72	83	74	69	73	63	72	71
% Vehicles > 35 MPH	7.7%	8.2%	8.8%	8.4%	7.3%	7.3%	7.8%	8.1%	7.9%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	992	1136	1123	952	1017	888	1036	1044	1021
Mean Speed (mph)	23.3	23.1	23.2	23.5	23.7	25.2	23.6	23.4	23.7
85%ile Speed (mph)	29.4	28.9	28.8	29.9	29.9	31.2	29.5	29.4	29.7
No. Vehicles > 20 MPH Limit	695	785	804	692	740	735	754	743	744
% Vehicles > 20 MPH Limit	70.1%	69.1%	71.6%	72.7%	72.8%	82.8%	72.8%	71.2%	72.9%
No. Vehicles > 35 MPH	32	32	30	36	49	48	43	36	39
% Vehicles > 35 MPH	3.2%	2.8%	2.7%	3.8%	4.8%	5.4%	4.2%	3.4%	3.8%

4.2.18 Table 20 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 26.4mph. The average flows were highest in September 2021 and the mean speed was lower at 23.4mph.

4.2.19 The proportion of vehicles exceeding 20mph in May 2021 was 78.1%, similar to October 2020 (78.5%), and higher than September 2021 (71.2%).

5. CLASSIFIED LINK COUNT SURVEYS

5.1 Overview

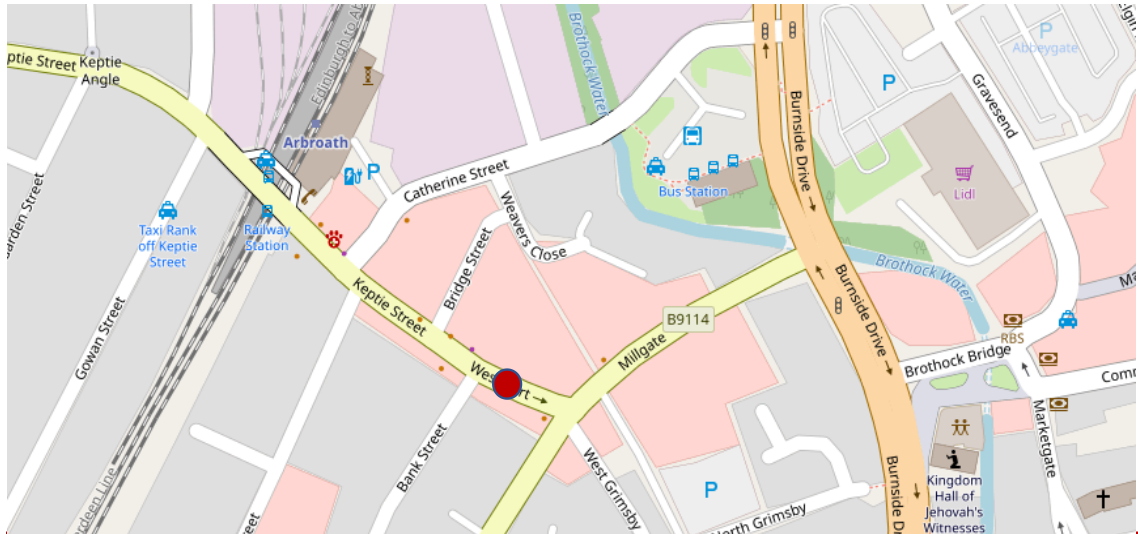
5.1.1 Summary tables below present the results of the classified link count surveys in the Angus Council area (three sites in Arbroath, one site in Forfar).

5.1.2 For each survey, the summary data is presented as a 3-day average (Thursday, Friday & Saturday) and aggregated into the following information:

- Site Number
- Site Location
- 06:00 – 22:00 Total Flow – Directional daily flow
- AM Peak Period 07:00-10:00 Vehicle Flow
- AM Peak Hr 08:00-09:00 Vehicle Flow
- IP Peak Period 10:00-16:00 Vehicle Flow
- IP Peak Hour 12:00-13:00 Vehicle Flow
- PM Peak Period 16:00-19:00 Vehicle Flow
- PM Peak Hour 17:00-18:00 Vehicle Flow
- 06:00-22:00 Vehicle Proportion.

5.1.4 Table 21 presents the results for West Port in Arbroath.

Table 21. West Port Arbroath Link Flow Summary

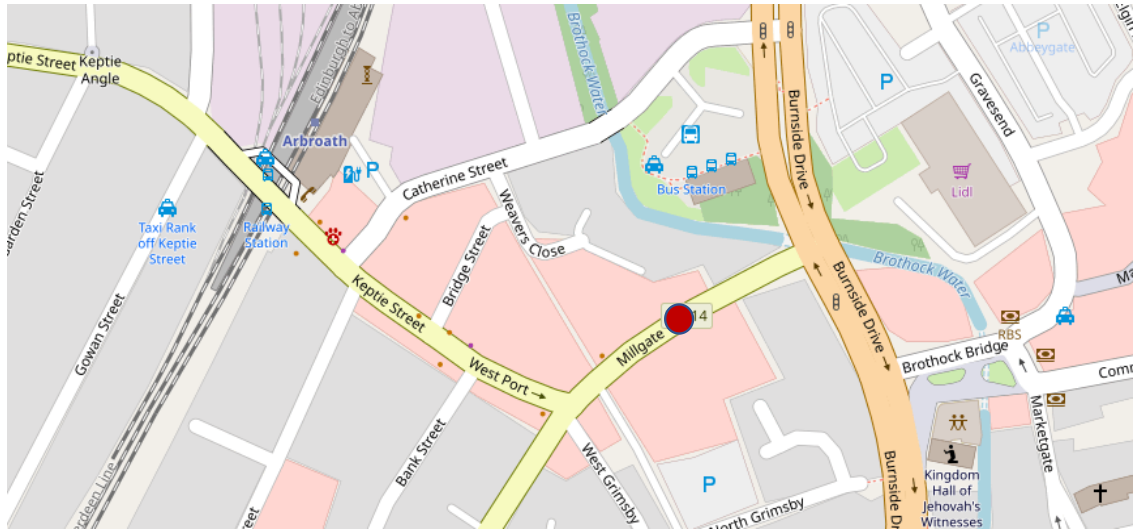


Site 1 West Port (3 day Average Thur-Fri-Sat)									
October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1762	223	25	1	0	6	2	22	2041
AM Peak Pd 0700-1000 Vehicle Flow	266	47	8	1	0	3	0	4	329
AM Peak Hr 0800-0900 Vehicle Flow	103	18	3	0	0	0	0	2	126
IP Peak Pd 1000-1600 Vehicle Flow	878	116	14	0	0	3	0	10	1022
IP Peak Hr 1200-1300 Vehicle Flow	157	21	3	0	0	0	0	1	183
PM Peak Pd 1600-1900 Vehicle Flow	389	43	2	0	0	0	1	3	438
PM Peak Hr 1700-1800 Vehicle Flow	122	14	1	0	0	0	1	1	139
0600-2200 Vehicle Proportion	86%	11%	1%	0%	0%	0%	0%	1%	100%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1550	190	16	0	0	1	5	42	1803
AM Peak Pd 0700-1000 Vehicle Flow	195	37	5	0	0	1	1	4	242
AM Peak Hr 0800-0900 Vehicle Flow	73	13	1	0	0	0	0	2	89
IP Peak Pd 1000-1600 Vehicle Flow	792	104	8	0	0	0	4	24	932
IP Peak Hr 1200-1300 Vehicle Flow	137	21	1	0	0	0	0	3	163
PM Peak Pd 1600-1900 Vehicle Flow	357	35	2	0	0	0	0	10	405
PM Peak Hr 1700-1800 Vehicle Flow	122	12	1	0	0	0	0	2	137
0600-2200 Vehicle Proportion	86%	10%	1%	0%	0%	0%	0%	2%	100%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1761	197	19	1	0	4	5	21	2008
AM Peak Pd 0700-1000 Vehicle Flow	284	46	4	0	0	2	1	6	343
AM Peak Hr 0800-0900 Vehicle Flow	109	21	1	0	0	1	0	3	135
IP Peak Pd 1000-1600 Vehicle Flow	867	102	13	0	0	1	3	10	995
IP Peak Pd 1200-1300 Vehicle Flow	144	19	3	0	0	0	1	1	166
PM Peak Pd 1600-1900 Vehicle Flow	375	33	2	1	0	0	0	2	413
PM Peak Pd 1700-1800 Vehicle Flow	121	11	1	0	0	0	0	1	133
0600-2200 Vehicle Proportion	88%	10%	1%	0%	0%	0%	0%	1%	100%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1870	177	20	1	0	2	1	31	2101
AM Peak Pd 0700-1000 Vehicle Flow	284	40	5	0	0	1	0	8	338
AM Peak Hr 0800-0900 Vehicle Flow	118	16	1	0	0	1	0	4	140
IP Peak Pd 1000-1600 Vehicle Flow	869	88	12	1	0	0	1	14	984
IP Peak Hr 1200-1300 Vehicle Flow	147	17	2	0	0	0	0	2	169
PM Peak Pd 1600-1900 Vehicle Flow	430	37	2	0	0	0	0	7	477
PM Peak Hr 1700-1800 Vehicle Flow	135	14	1	0	0	0	0	4	154
0600-2200 Vehicle Proportion	89%	8%	1%	0%	0%	0%	0%	1%	100%

5.1.5 Table 21 shows that the proportion of vehicles was very similar across all survey periods. The proportion of cyclists showed a slight increase in February 2021.

5.1.6 Table 22 presents the results for Millgate in Arbroath.

Table 22. Millgate Link Flow Summary

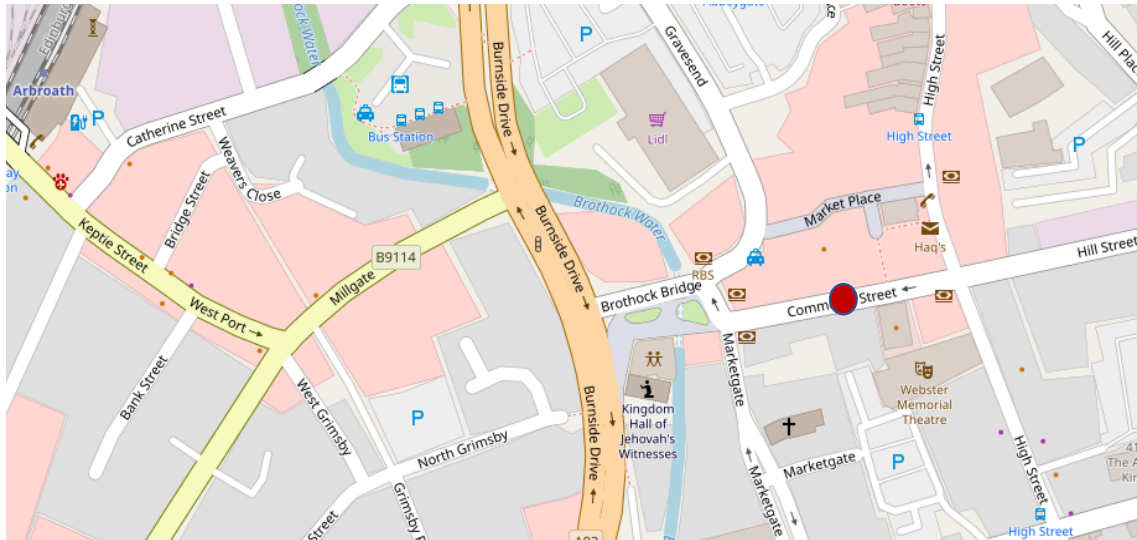


Site 2 Millgate (3 day Average Thur-Fri-Sat)									
October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1256	161	20	0	0	10	1	30	1478
AM Peak Pd 0700-1000 Vehicle Flow	153	26	7	0	0	2	0	6	195
AM Peak Hr 0800-0900 Vehicle Flow	46	13	2	0	0	0	0	2	64
IP Peak Pd 1000-1600 Vehicle Flow	654	93	10	0	0	5	0	12	774
IP Peak Hr 1200-1300 Vehicle Flow	117	17	3	0	0	0	0	1	138
PM Peak Pd 1600-1900 Vehicle Flow	298	32	1	0	0	2	0	4	338
PM Peak Hr 1700-1800 Vehicle Flow	100	12	1	0	0	1	0	1	115
0600-2200 Vehicle Proportion	85.0%	10.9%	1.4%	0.0%	0.0%	0.7%	0.0%	2.0%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1046	122	15	0	0	6	4	38	1232
AM Peak Pd 0700-1000 Vehicle Flow	120	22	6	0	0	0	0	4	153
AM Peak Hr 0800-0900 Vehicle Flow	33	8	2	0	0	0	0	1	45
IP Peak Pd 1000-1600 Vehicle Flow	533	69	6	0	0	4	3	19	633
IP Peak Hr 1200-1300 Vehicle Flow	88	13	2	0	0	0	0	2	105
PM Peak Pd 1600-1900 Vehicle Flow	252	25	3	0	0	2	0	9	291
PM Peak Hr 1700-1800 Vehicle Flow	87	8	1	0	0	1	0	2	99
0600-2200 Vehicle Proportion	85.0%	9.9%	1.2%	0.0%	0.0%	0.5%	0.3%	3.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1262	147	17	0	0	8	4	20	1458
AM Peak Pd 0700-1000 Vehicle Flow	165	26	3	0	0	0	1	4	199
AM Peak Hr 0800-0900 Vehicle Flow	51	12	1	0	0	0	0	2	66
IP Peak Pd 1000-1600 Vehicle Flow	660	83	12	0	0	5	2	8	771
IP Peak Hr 1200-1300 Vehicle Flow	121	14	2	0	0	0	1	1	138
PM Peak Pd 1600-1900 Vehicle Flow	278	25	0	0	0	2	0	4	309
PM Peak Hr 1700-1800 Vehicle Flow	101	8	0	0	0	1	0	1	112
0600-2200 Vehicle Proportion	86.5%	10.1%	1.2%	0.0%	0.0%	0.5%	0.3%	1.4%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1330	120	23	2	0	7	2	25	1509
AM Peak Pd 0700-1000 Vehicle Flow	169	19	7	0	0	0	0	5	201
AM Peak Hr 0800-0900 Vehicle Flow	57	8	4	0	0	0	0	3	72
IP Peak Pd 1000-1600 Vehicle Flow	640	68	12	2	0	4	1	12	738
IP Peak Hr 1200-1300 Vehicle Flow	107	14	1	0	0	0	0	1	124
PM Peak Pd 1600-1900 Vehicle Flow	322	26	2	0	0	2	1	7	361
PM Peak Hr 1700-1800 Vehicle Flow	104	9	0	0	0	1	0	3	117
0600-2200 Vehicle Proportion	88.1%	8.0%	1.5%	0.1%	0.0%	0.4%	0.1%	1.7%	100.0%

- 5.1.7 Table 22 shows that the proportion of cars was higher in May 2021 and September 2021 than in October 2020 and February 2021. The proportion of cyclists increased in February 2021 but was at its lowest in May 2021.

5.1.9 Table 23 presents the results for the Commerce Street in Arbroath.

Table 23. Commerce Street Link Flow Summary

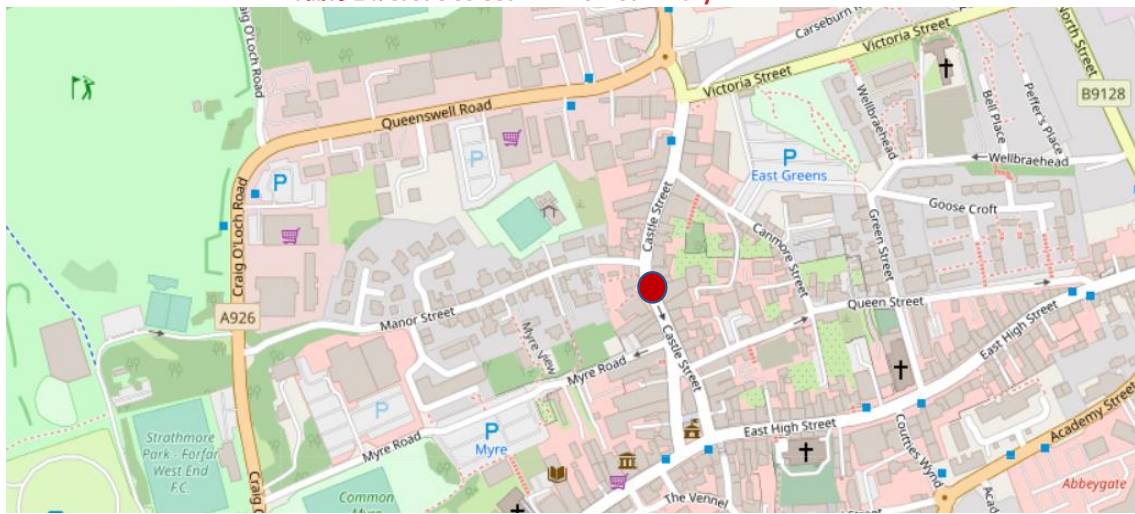


Site 3 Commerce Street (3 day Average Thur-Fri-Sat)									
October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3325	339	38	3	0	3	3	10	3721
AM Peak Pd 0700-1000 Vehicle Flow	493	84	10	1	0	1	0	1	590
AM Peak Hr 0800-0900 Vehicle Flow	164	31	3	0	0	0	0	0	199
IP Peak Pd 1000-1600 Vehicle Flow	1724	172	22	2	0	2	2	5	1930
IP Peak Hr 1200-1300 Vehicle Flow	293	30	6	0	0	0	0	0	329
PM Peak Pd 1600-1900 Vehicle Flow	774	50	4	0	0	0	0	2	831
PM Peak Hr 1700-1800 Vehicle Flow	268	16	0	0	0	0	0	2	287
0600-2200 Vehicle Proportion	89.4%	9.1%	1.0%	0.1%	0.0%	0.1%	0.1%	0.3%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3275	323	37	3	0	3	10	27	3678
AM Peak Pd 0700-1000 Vehicle Flow	448	81	12	0	0	0	1	3	546
AM Peak Hr 0800-0900 Vehicle Flow	143	24	4	0	0	0	0	0	171
IP Peak Pd 1000-1600 Vehicle Flow	1785	167	19	2	0	3	6	17	1999
IP Peak Hr 1200-1300 Vehicle Flow	288	26	3	1	0	1	0	1	320
PM Peak Pd 1600-1900 Vehicle Flow	744	55	3	0	0	0	2	5	809
PM Peak Hr 1700-1800 Vehicle Flow	244	21	1	0	0	0	1	2	269
0600-2200 Vehicle Proportion	89.0%	8.8%	1.0%	0.1%	0.0%	0.1%	0.3%	0.7%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3015	256	46	1	0	5	13	13	3350
AM Peak Pd 0700-1000 Vehicle Flow	645	73	10	0	0	1	1	1	732
AM Peak Hr 0800-0900 Vehicle Flow	208	21	4	0	0	1	0	0	234
IP Peak Pd 1000-1600 Vehicle Flow	1537	117	27	1	0	4	9	9	1703
IP Peak Hr 1200-1300 Vehicle Flow	220	21	3	0	0	1	2	1	249
PM Peak Pd 1600-1900 Vehicle Flow	514	39	5	0	0	0	3	1	563
PM Peak Hr 1700-1800 Vehicle Flow	185	14	0	0	0	0	1	0	201
0600-2200 Vehicle Proportion	90.0%	7.7%	1.4%	0.0%	0.0%	0.1%	0.4%	0.4%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3832	358	57	4	0	2	11	21	4286
AM Peak Pd 0700-1000 Vehicle Flow	577	86	13	1	0	1	1	5	684
AM Peak Hr 0800-0900 Vehicle Flow	193	30	5	0	0	0	0	1	230
IP Peak Pd 1000-1600 Vehicle Flow	1957	187	33	2	0	1	6	10	2196
IP Peak Hr 1200-1300 Vehicle Flow	321	30	5	0	0	0	1	1	360
PM Peak Pd 1600-1900 Vehicle Flow	848	58	7	2	0	1	2	2	919
PM Peak Hr 1700-1800 Vehicle Flow	305	20	1	0	0	0	1	0	329
0600-2200 Vehicle Proportion	89.4%	8.4%	1.3%	0.1%	0.0%	0.1%	0.3%	0.5%	100.0%

5.1.10 Table 23 shows that the proportion of all vehicle types was fairly consistent across all survey periods.

5.1.11 Table 24 presents the results for Castle Street in Forfar.

Table 24. Castle Street Link Flow Summary



Site 1 Castle Street Forfar (3 day Average Thur-Fri-Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3626	430	41	3	2	4	6	23	4135
AM Peak Pd 0700-1000 Vehicle Flow	532	100	17	0	1	3	1	3	656
AM Peak Hr 0800-0900 Vehicle Flow	187	31	5	0	0	1	0	1	225
IP Peak Pd 1000-1600 Vehicle Flow	1834	208	15	2	0	1	2	9	2073
IP Peak Pd 1200-1300 Vehicle Flow	319	36	3	0	0	0	0	1	360
PM Peak Pd 1600-1900 Vehicle Flow	839	85	5	1	0	0	3	6	938
PM Peak Pd 1700-1800 Vehicle Flow	291	28	1	0	0	0	1	2	322
0600-2200 Vehicle Proportion	88%	10%	1%	0%	0%	0%	0%	1%	100%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3198	410	38	3	1	7	14	30	3702
AM Peak Pd 0700-1000 Vehicle Flow	454	82	14	0	0	2	1	4	558
AM Peak Hr 0800-0900 Vehicle Flow	158	29	3	0	0	1	1	0	191
IP Peak Pd 1000-1600 Vehicle Flow	1641	204	16	2	0	4	8	16	1891
IP Peak Pd 1200-1300 Vehicle Flow	277	34	4	1	0	0	1	2	319
PM Peak Pd 1600-1900 Vehicle Flow	737	86	4	0	0	1	4	6	837
PM Peak Pd 1700-1800 Vehicle Flow	270	35	2	0	0	0	1	4	312
0600-2200 Vehicle Proportion	86%	11%	1%	0%	0%	0%	0%	1%	100%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	4263	455	43	4	1	7	17	19	4810
AM Peak Pd 0700-1000 Vehicle Flow	587	92	15	3	0	2	1	1	701
AM Peak Hr 0800-0900 Vehicle Flow	184	26	6	1	0	1	1	0	219
IP Peak Pd 1000-1600 Vehicle Flow	2155	215	22	0	0	4	8	11	2415
IP Peak Pd 1200-1300 Vehicle Flow	385	36	3	0	0	0	0	2	428
PM Peak Pd 1600-1900 Vehicle Flow	965	102	4	1	0	1	3	2	1078
PM Peak Pd 1700-1800 Vehicle Flow	340	35	1	1	0	0	1	0	379
0600-2200 Vehicle Proportion	89%	9%	1%	0%	0%	0%	0%	0%	100%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	3866	440	55	0	0	5	13	22	4401
AM Peak Pd 0700-1000 Vehicle Flow	561	86	19	0	0	2	0	3	671
AM Peak Hr 0800-0900 Vehicle Flow	182	27	6	0	0	0	0	0	216
IP Peak Pd 1000-1600 Vehicle Flow	1851	225	28	0	0	2	6	15	2127
IP Peak Pd 1200-1300 Vehicle Flow	318	37	4	0	0	0	0	2	362
PM Peak Pd 1600-1900 Vehicle Flow	892	89	5	0	0	1	4	3	994
PM Peak Pd 1700-1800 Vehicle Flow	302	35	2	0	0	0	1	2	342
0600-2200 Vehicle Proportion	88%	10%	1%	0%	0%	0%	0%	0%	100%

5.1.12 Table 24 shows that the proportion of all vehicle types was consistent across all survey periods.

6. MODE SHARE SURVEYS

6.1 Rail Station Counts

6.1.1 Entry and exit counts were undertaken at both the front and rear entrances of Arbroath Railway Station on Tuesday 11th May 2021. Surveys were undertaken between 06:00 and 22:00.

6.1.2 The results were classified by the following:

- Adult
- Adult & Child
- Child
- Elderly
- Disabled
- Cyclist on Bike
- Cyclist on Foot.

6.1.3 Table 25 presents a summary of the entry and exit counts.

Table 25. Arbroath Railway Station Entry/Exit Counts

Arbroath Rail Stn	Station Front Entrance	Station Front Exit	Station Rear Entrance	Station Rear Exit	Total Entry	Total Exit
06:00 - 22:00	140	151	247	224	387	375
07:00 - 10:00	29	24	59	38	88	62
10:00 - 16:00	90	82	107	97	197	179
16:00 - 19:00	28	44	51	53	79	97

6.1.4 Table 25 shows that over the 16 hour period (0600-2200hrs), there was a total of 387 pedestrians entering Arbroath Railway Station and 375 pedestrians exiting:

- In the AM peak period (07:00 – 10:00), 88 pedestrians entered the station and 62 departed the station.
- In the Off peak period (10:00 – 16:00), 197 pedestrians entered the station and 179 departed the station.
- In the PM peak period (16:00 – 19:00), 79 pedestrians entered the station and 97 departed the station.

6.2 Bus Station Counts

6.2.1 Boarding (on bus) and alighting (off bus) counts were undertaken at all eight stances in Arbroath Bus Station on Tuesday 11th May 2021. Surveys were undertaken between 06:00 and 22:00.

6.2.2 The results were classified by the following:

- Arrival Time
- Bus Number during arrival
- Operator
- Boarding (On bus)
- Alighting (Off bus)
- Bus Number during departure
- Departure Time
- Dwell Time.

6.2.3 Table 26 below summarises the results of the boarding and alighting counts in the AM Peak (07:00 – 10:00).

Table 26. Arbroath Bus Station Boarding and Alighting Counts (AM Peak 07:00 – 10:00)

AM Peak Period (07:00-10:00)	Boarding (On bus)	Alighting (Off bus)	Number of services	Average Boarding	Average Alighting	Average dwell time
Stance 1	0	3	1	0	3	00:00:29
Stance 2	26	32	15	2	2	00:02:51
Stance 3	2	4	4	1	1	00:04:07
Stance 4	28	38	11	3	3	00:05:55
Stance 5	29	15	7	4	2	00:08:48
Stance 6	4	19	7	1	3	00:05:31
Stance 7	2	3	2	1	2	00:02:10
Stance 8	7	5	1	7	5	00:01:21
Average	12	15	6	2	3	00:03:54

6.2.4 Table 26 shows that the busiest stance in Arbroath Bus Station, during the AM Peak, in terms of passengers was Stance 4 which saw a total of 66 passengers either boarding or alighting in the AM peak period. Stance 4 was used by services 27, 27A, 43A, 73 and 73A, all of which are operated by Stagecoach.

6.2.5 In terms of the number of bus services, Stance 2 was busiest with 15 services, comprising the 27, 30, 30A and 39, again all operated by Stagecoach.

6.2.6 The stance with the longest dwell time (08:48), was Stance 5, whilst the average dwell time across all stances is just under 4 minutes (03:54).

6.2.7 Table 27 presents the same information for the inter-peak period (10:00-16:00).

Table 27. Arbroath Bus Station Boarding and Alighting Counts (Inter Peak 10:00 – 16:00)

IP Peak Period (10:00-16:00)	Boarding (On bus)	Alighting (Off bus)	Number of services	Average Boarding	Average Alighting	Average dwell time
Stance 1	12	1	4	3	0	00:02:19
Stance 2	91	70	25	4	3	00:04:10
Stance 3	51	53	18	3	3	00:02:44
Stance 4	147	58	22	7	3	00:05:42
Stance 5	81	58	16	5	4	00:02:57
Stance 6	55	45	10	6	5	00:04:41
Stance 7	0	0	0	0	0	-
Stance 8	16	18	4	4	5	00:05:26
Average	57	38	12	4	3	00:04:00

6.2.8 Table 27 shows that the busiest stance in Arbroath Bus Station, during the inter-peak, in terms of passengers was again Stance 4 which saw a total of 205 passengers either boarding or alighting during the inter-peak peak period. Stance 4 was used by services 27, 30, 43A, 73 and 73A, all of which are operated by Stagecoach.

6.2.9 In terms of the number of bus services, Stance 2 was busiest with 25 services, comprising the 27, 30, and 39, again all operated by Stagecoach.

6.2.10 The stance with the longest dwell time (05:42), was Stance 4, whilst the average dwell time across all stances was exactly 4 minutes.

6.2.11 Table 28 presents the same information for the PM peak period (16:00-19:00).

Table 28. Arbroath Bus Station Boarding and Alighting Counts (PM Peak 16:00 – 19:00)

PM Peak Period (16:00-19:00)	Boarding (On bus)	Alighting (Off bus)	Number of services	Average Boarding	Average Alighting	Average dwell time
Stance 1	0	0	1	0	0	00:00:14
Stance 2	37	18	14	3	1	00:05:52
Stance 3	5	5	6	1	1	00:03:40
Stance 4	26	18	10	3	2	00:06:44
Stance 5	28	18	10	3	2	00:05:28
Stance 6	16	9	9	2	1	00:02:45
Stance 7	35	8	3	12	3	00:04:26
Stance 8	14	14	5	3	3	00:10:31
Average	20	11	7	3	2	00:04:58

6.2.12 Table 28 shows that the busiest stance in Arbroath Bus Station, during the PM Peak, in terms of passengers is Stance 2 which saw a total of 55 passengers either boarding or alighting in the PM peak period. Stance 2 was used by services 27 and 39, both of which are operated by Stagecoach.

6.2.13 In terms of the number of bus services, again stance 2 was busiest with 14 services.

6.2.14 The stance with the longest dwell time (10:31), was Stance 8, whilst the average dwell time across all stances was almost 5 minutes (04:58).

6.3 Bus Occupancy Counts

6.3.1 Bus occupancy surveys were undertaken inbound only towards Arbroath at each of the classified turning count sites CC1 to CC6, as shown in Figure 6.

6.3.2 Bus occupancy data was gathered for one day, Tuesday 11th May 2021, between 06:00 and 22:00.

6.3.3 The methodology used to gather the bus occupancy required manual enumerators to review the footage at each site – i.e. manual check and note if the bus was empty, ¼ full, ½ full, ¾ full, full or full with standing passengers.

6.3.4 The capacity of vehicles was the same as those used in a previous study for TACTRAN [*Mode Share Surveys 2019 – Draft, SYSTRA, Ref. GB01t19A57/4, 11/07/19*], namely:

○	Midi bus	15 passengers
○	Mini bus	15 passengers
○	Single decker bus	30 passengers
○	Double decker bus	72 passengers
○	Coach	55 passengers
○	Mini Coach	14 passengers
○	Midi Coach	14 passengers
○	School Bus	40 passengers

6.3.5 Vehicles where the occupancy was not visible (e.g. where coaches had dark tinted windows) were excluded from the analysis, and similarly where vehicles were subsequently observed at Arbroath Bus Station, these were excluded from the analysis to remove any element of double counting.

6.3.6 Table 29 below presents the bus occupancy at each of the inbound cordon entry points around Arbroath town centre in the AM peak period (07:00 – 10:00).

Table 29. Bus & Coach Inbound Cordon Occupancy (AM Peak 07:00 – 10:00)

AM Peak Period (07:00-10:00)	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	2	18	9
	Coach	2	10.5	5
CC2	Bus	-	-	-
	Coach	1	3.5	4
CC3	Bus	1	0	0
	Coach	4	3.5	1
CC4	Bus	-	-	-
	Coach	1	0	0
CC5	Bus	4	0	0
	Coach	2	3.5	2
CC6	Bus	-	-	-
	Coach	1	0	0

6.3.7 Table 29 shows that the corridor with the highest bus and coach occupancy was CC1, A92 Burnside Drive, southbound towards Arbroath town centre.

6.3.8 The average inbound AM peak period bus occupancy was 3 passengers and the average coach occupancy was 2 passengers.

6.3.9 Table 30 presents the same information for the Inter peak period (10:00 – 16:00).

Table 30. Bus & Coach Inbound Cordon Occupancy (Inter Peak 10:00 – 16:00)

Inter Peak Period (10:00-16:00)	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	1	3.75	4
	Coach	3	10.5	4
CC2	Bus	1	3.75	4
	Coach	4	20.75	5
CC3	Bus	1	3.75	4
	Coach	8	10.5	1
CC4	Bus	-	-	-
	Coach	2	3.5	2
CC5	Bus	5	15	3
	Coach	4	10.5	3
CC6	Bus	-	-	-
	Coach	-	-	-

6.3.10 Table 30 shows that bus and coach occupancy was highest on corridor CC2, Academy Street in the inter peak period.

6.3.11 The average inbound inter peak period bus occupancy was 4 passengers and the average coach occupancy was 3 passengers

6.3.12 Table 31 presents the same information for the PM peak (16:00 – 19:00).

Table 31. Bus & Coach Inbound Cordon Occupancy (PM Peak 16:00 – 19:00)

PM Peak Period (15:00-19:00)	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	1	18	18
	Coach	2	3.5	2
CC2	Bus	1	7.5	8
	Coach	1	3.5	4
CC3	Bus	2	0	0
	Coach	2	0	0
CC4	Bus	-	-	-
	Coach	1	0	0
CC5	Bus	3	18	6
	Coach	1	13.75	14
CC6	Bus	1	18	18
	Coach	-	-	-

6.3.13 Table 31 shows that bus occupancy during the PM Peak period was highest on CC1 (A92 Burnside Drive southbound) and CC6 (Lochlands Street southbound). The highest coach occupancy was seen on CC5 (Keptie Road eastbound), all inbound towards Arbroath town centre.

6.3.14 The average inbound PM peak period bus occupancy was 10 passengers and the average coach occupancy was 4 passengers

6.4 Vehicle Occupancy Counts

6.4.1 Vehicle occupancy counts were undertaken inbound only towards Arbroath at each of the classified turning count sites CC1 to CC6, as shown in Figure 6.

6.4.2 Vehicle occupancy data was gathered for one day, Tuesday 11th May 2021, between 06:00 and 22:00.

6.4.3 Table 32 below presents the vehicle occupancy and sample rates at each of the inbound cordon entry points around Arbroath town centre in the AM peak period (07:00 – 10:00).

Table 32. Vehicle Inbound Cordon Occupancy (AM Peak 07:00 – 10:00)

AM Peak Period (07:00-10:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	1497	330	22.0%	444	1.35
	LGV	245	78	31.8%	95	1.22
	OGV1	45	29	64.4%	36	1.24
	OGV2	22	15	68.2%	15	1.00
CC2	Car	592	139	23.5%	202	1.45
	LGV	96	41	42.7%	50	1.22
	OGV1	8	7	87.5%	7	1.00
	OGV2	1	1	100.0%	1	1.00
CC3	Car	806	186	23.1%	243	1.31
	LGV	228	64	28.1%	86	1.34
	OGV1	40	25	62.5%	28	1.12
	OGV2	11	7	63.6%	10	1.43
CC4	Car	184	57	31.0%	72	1.26
	LGV	33	23	69.7%	26	1.13
	OGV1	6	3	50.0%	3	1.00
	OGV2	0	0	-	0	-
CC5	Car	503	124	24.7%	154	1.24
	LGV	83	36	43.4%	41	1.14
	OGV1	15	12	80.0%	16	1.33
	OGV2	0	0	-	0	-
CC6	Car	356	91	25.6%	119	1.31
	LGV	67	30	44.8%	36	1.20
	OGV1	8	7	87.5%	9	1.29
	OGV2	3	2	66.7%	2	1.00
Average	Car	770	178	23.1%	240	1.35
	LGV	151	52	34.4%	64	1.23
	OGV1	25	16	64.0%	19	1.19
	OGV2	9	6	66.7%	7	1.17

6.4.4 Table 32 shows that in the AM peak period, inbound towards Arbroath town centre, the average car occupancy was 1.35 persons, LGV 1.23 persons, OGV1 1.19 persons and OGV 2 1.17 persons.

6.4.5 Table 33 presents the same information for the inter peak period (10:00 – 16:00).

Table 33. Vehicle Inbound Cordon Occupancy (Inter Peak 10:00 – 16:00)

Inter Peak Period (10:00-16:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	3210	697	21.7%	976	1.40
	LGV	450	143	31.8%	176	1.23
	OGV1	101	54	53.5%	61	1.13
	OGV2	61	35	57.4%	38	1.09
CC2	Car	1265	296	23.4%	395	1.33
	LGV	158	65	41.1%	79	1.22
	OGV1	22	17	77.3%	18	1.06
	OGV2	0	0	-	0	-
CC3	Car	2223	494	22.2%	673	1.36
	LGV	301	109	36.2%	136	1.25
	OGV1	78	48	61.5%	57	1.19
	OGV2	29	22	75.9%	23	1.05
CC4	Car	346	105	30.3%	144	1.37
	LGV	41	35	85.4%	41	1.17
	OGV1	9	6	66.7%	8	1.33
	OGV2	0	0	-	0	-
CC5	Car	1053	279	26.5%	351	1.26
	LGV	170	83	48.8%	98	1.18
	OGV1	22	18	81.8%	20	1.11
	OGV2	1	1	100.0%	1	1.00
CC6	Car	825	215	26.1%	273	1.27
	LGV	112	57	50.9%	68	1.19
	OGV1	20	15	75.0%	17	1.13
	OGV2	1	0	0.0%	0	-
Average	Car	1761	398	22.6%	547	1.37
	LGV	238	88	37.0%	108	1.23
	OGV1	53	31	58.5%	36	1.16
	OGV2	23	14	60.9%	15	1.07

6.4.6 Table 33 shows that in the inter peak period, inbound towards Arbroath town centre, the average car occupancy was 1.37 persons, LGV 1.23 persons, OGV1 1.16 persons and OGV 2 1.07 persons.

6.4.7 Table 34 presents the same information for the PM peak period (16:00 – 19:00).

Table 34. Vehicle Inbound Cordon Occupancy (PM Peak 16:00 – 19:00)

PM Peak Period (16:00-19:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	1842	385	20.9%	576	1.50
	LGV	196	64	32.7%	78	1.22
	OGV1	22	14	63.6%	16	1.14
	OGV2	9	7	77.8%	7	1.00
CC2	Car	623	144	23.1%	209	1.45
	LGV	79	36	45.6%	52	1.44
	OGV1	5	3	60.0%	3	1.00
	OGV2	2	2	100.0%	2	1.00
CC3	Car	1194	255	21.4%	362	1.42
	LGV	151	51	33.8%	66	1.29
	OGV1	22	15	68.2%	16	1.07
	OGV2	1	1	100.0%	1	1.00
CC4	Car	213	68	31.9%	85	1.25
	LGV	40	24	60.0%	28	1.17
	OGV1	1	1	100.0%	1	1.00
	OGV2	0	0	-	0	-
CC5	Car	537	135	25.1%	170	1.26
	LGV	69	35	50.7%	41	1.17
	OGV1	3	3	100.0%	3	1.00
	OGV2	2	1	50.0%	1	1.00
CC6	Car	442	113	25.6%	142	1.26
	LGV	48	25	52.1%	32	1.28
	OGV1	0	0	-	0	-
	OGV2	0	0	-	0	-
Average	Car	968	213	22.0%	308	1.45
	LGV	117	44	37.6%	56	1.27
	OGV1	13	8	61.5%	9	1.13
	OGV2	3	3	100.0%	3	1.00

6.4.8 Table 34 shows that in the PM peak period, inbound towards Arbroath town centre, the average car occupancy was 1.45 persons, LGV 1.27 persons, OGV1 1.13 persons and OGV 2 1.00 persons.

6.5 Results of Mode Share Surveys

6.5.1 The results of the various mode share surveys can be analysed and presented in different ways. Through discussions previously with Tactran, the methodology developed for assessing and summarising the survey data for each site was agreed as follows:

- By Time Period
- By Mode – both by vehicle and by person.

Mode Share By Time Period

6.5.2 All traffic surveys were undertaken over a 16 hour period 06:00-22:00. The mode share data is presented into four separate time periods, namely:

- AM Peak 07:00 – 10:00
- Inter-peak 10:00 – 16:00
- PM Peak 16:00 – 19:00
- Full day 07:00 – 19:00

Mode Share By Mode

6.5.3 Mode share data can be presented from the perspective of the share of vehicles or by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle

6.5.4 Within each site assessed, traffic is analysed routing inbound to the town/city.

6.5.5 The survey data collected for Arbroath included additional pedestrian and cycle information, as requested by Tactran.

6.5.6 In order to consider the volume of inbound trips to Arbroath, the following assumptions and data usage was applied:

- Sites CC1 to CC6 were assessed to represent the points of entry to the town.
- Bus/coach passengers which entered Arbroath were assumed to be destinating in Arbroath

6.5.7 The following figures present the Arbroath mode share distribution, calculated from the survey data as detailed above. Figure 7 and Figure 8 present the AM Peak mode share by vehicle and by person respectively.

6.5.8 Figure 9 and Figure 10 present the interpeak mode share results, Figure 11 and Figure 12 present the PM Peak mode share results and Figure 13 and Figure 14 present the full day mode share results.

6.5.9 Each figure presents the inbound mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021). The inbound mode share by person is presented for May 2021, as this was the only survey that captured vehicle occupancy.

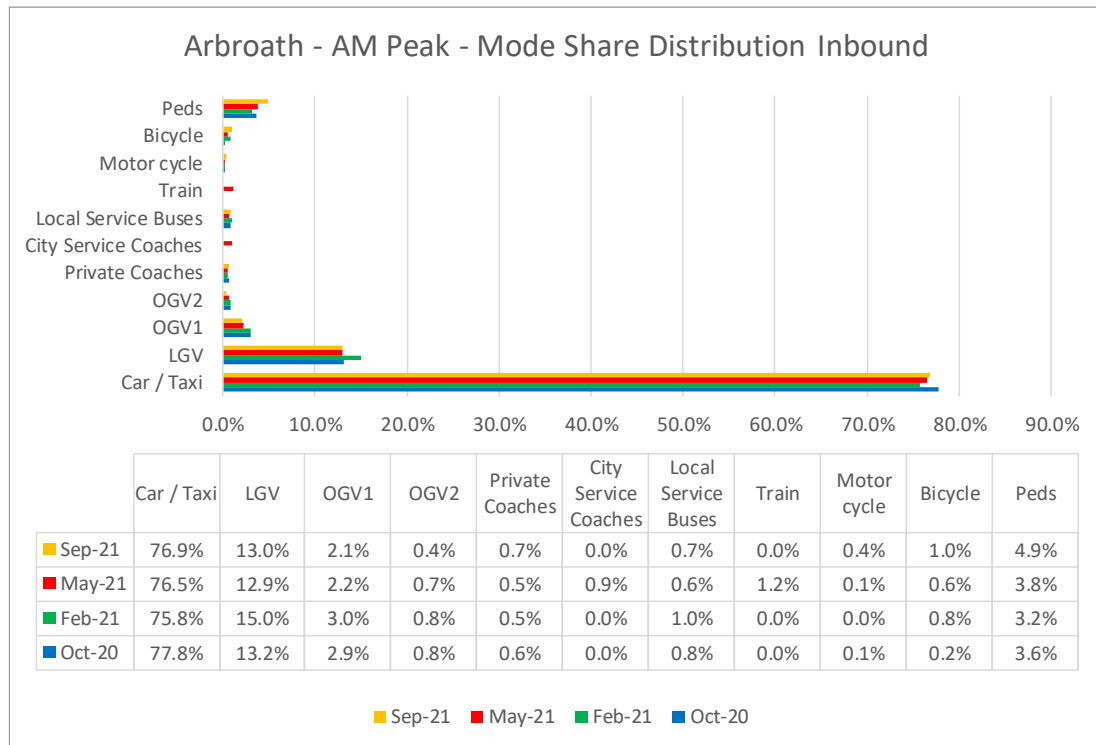


Figure 7. Arbroath Mode Share Distribution – AM Peak

6.5.10 Figure 7 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for city service coaches and rail are only included in May 2021 as bus station and rail station surveys were only undertaken at this point.

6.5.11 The proportion of pedestrians was very similar across the first three surveys but showed a slight increase in September 2021, whilst the proportion of cyclists shows a similar increase.

6.5.12 The total of the vehicles and pedestrians observed as part of the mode surveys in the AM peak was 4,845 in October 2020, 3,453 in February 2021, 5,196 in May 2021 and 4,864 in September 2021.

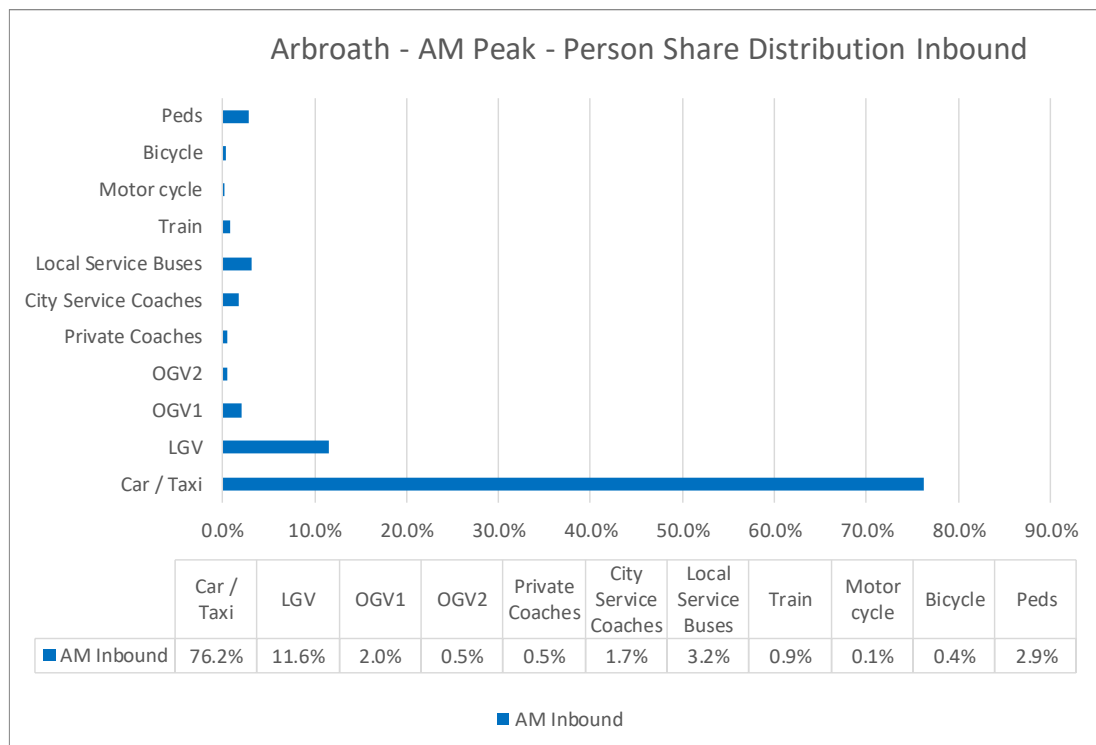


Figure 8. Arbroath Person Share Distribution – AM Peak

6.5.13 Figure 8 shows that the majority of people heading into Arbroath did so by car and taxi. Total bus usage was around 5% in the AM peak, rail was around 1%, bicycle 0.4% and walking just under 3%.

6.5.14 The person total observed in the AM peak was 6,820 in May 2021

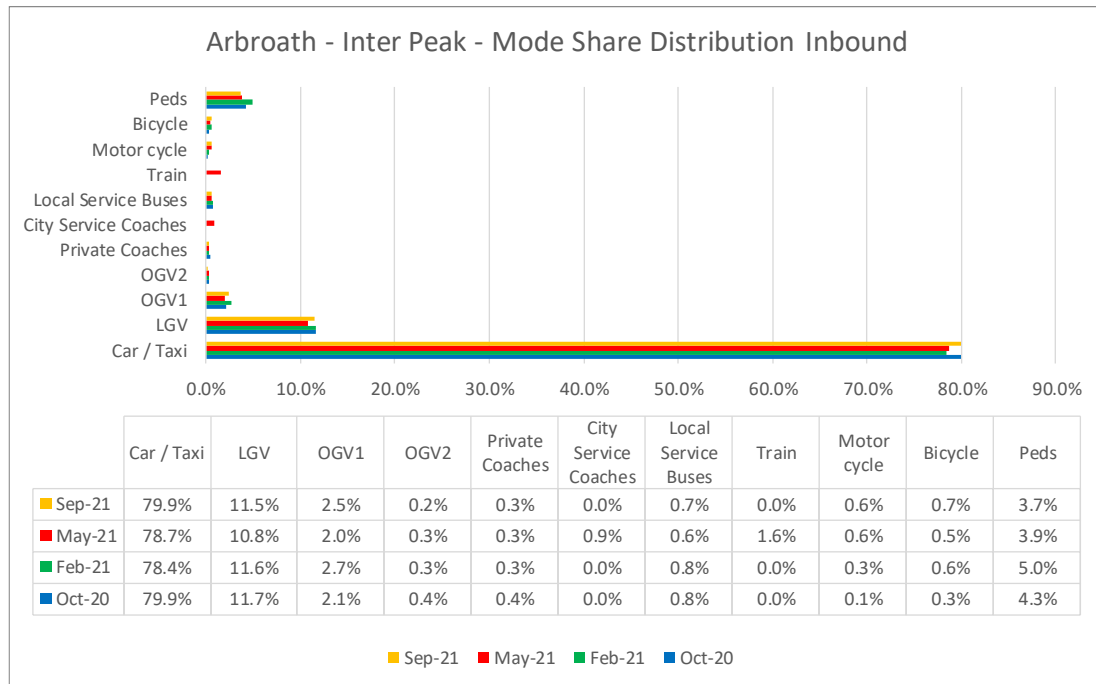


Figure 9. Arbroath Mode Share Distribution – Interpeak

- 6.5.15 Figure 9 shows that in the inter peak, the mode share of vehicles remained relatively consistent over the four survey periods. The results for city service coaches and rail are only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 6.5.16 The proportion of pedestrians reduced in May 2021 and September 2021 which was the lowest of all of the surveys, whilst the proportion of cyclists was highest in September 2021.
- 6.5.17 The total of the vehicles and pedestrians observed as part of the mode surveys in the inter peak was 10,533 in October 2020, 8,632 in February 2021, 11,301 in May 2021 and 10,628 in September 2021.

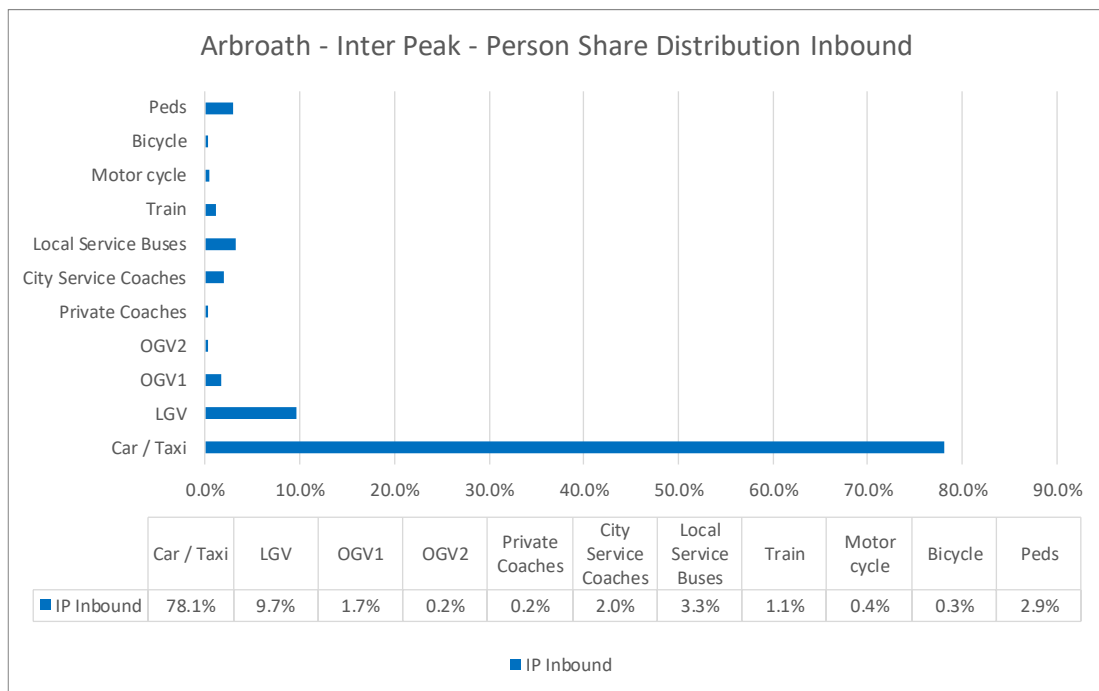


Figure 10. Arbroath Person Share Distribution – Interpeak

6.5.18 Figure 10 shows that the majority of people heading into Arbroath did so by car and taxi. Total bus usage was just under 6% in the inter peak, rail around 1%, bicycle 0.3% and walking just under 3%.

6.5.19 The person total observed in the inter peak was 14,832 in May 2021.

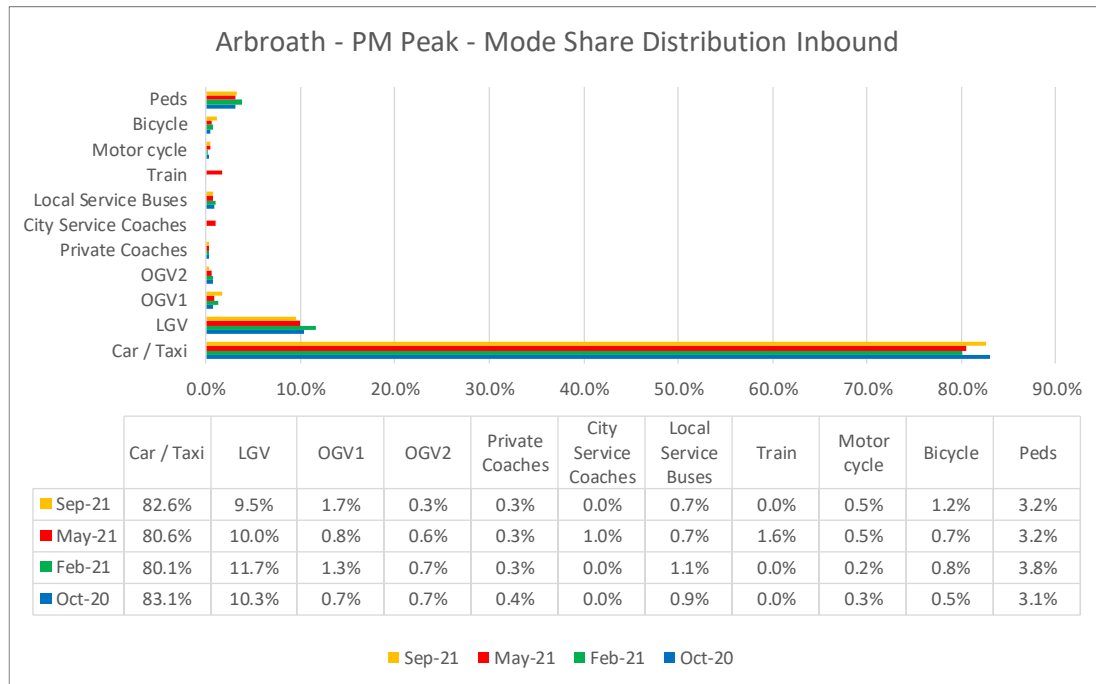


Figure 11. Arbroath Mode Share Distribution – PM Peak

- 6.5.20 Figure 11 shows that in the PM peak, the mode share of vehicles again remained relatively consistent over the four survey periods. The results for city service coaches and rail were only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 6.5.21 The proportion of pedestrians remained consistent, but was highest in February 2021 when Scotland was under lockdown conditions, whilst the proportion of cyclists was highest in September 2021.
- 6.5.22 The total of the vehicles and pedestrians observed as part of the mode surveys in the PM peak was 5,446 in October 2020, 4,024 in February 2021, 5,883 in May 2021 and 5,878 in September 2021.

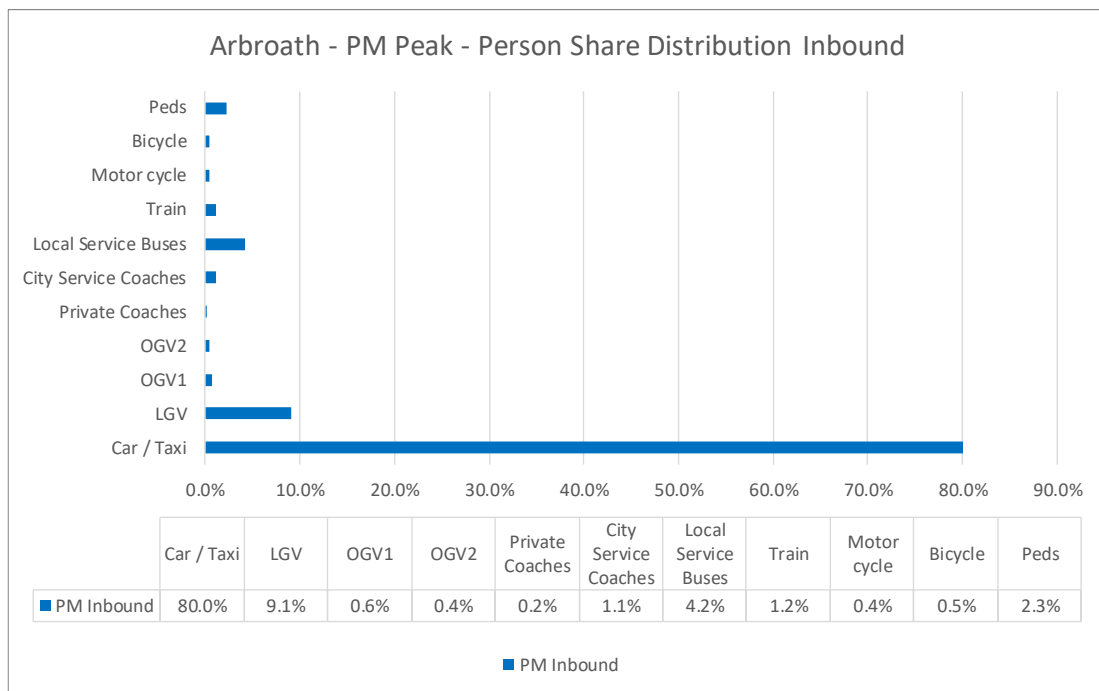


Figure 12. Arbroath Person Share Distribution – PM Peak

6.5.23 Figure 12 shows that the majority of people heading into Arbroath did so by car and taxi. Total bus usage was just under 6% in the PM peak, rail just over 1%, bicycle 0.5% and walking just over 2%.

6.5.24 The person total observed in the inter peak was 8,225 in May 2021.

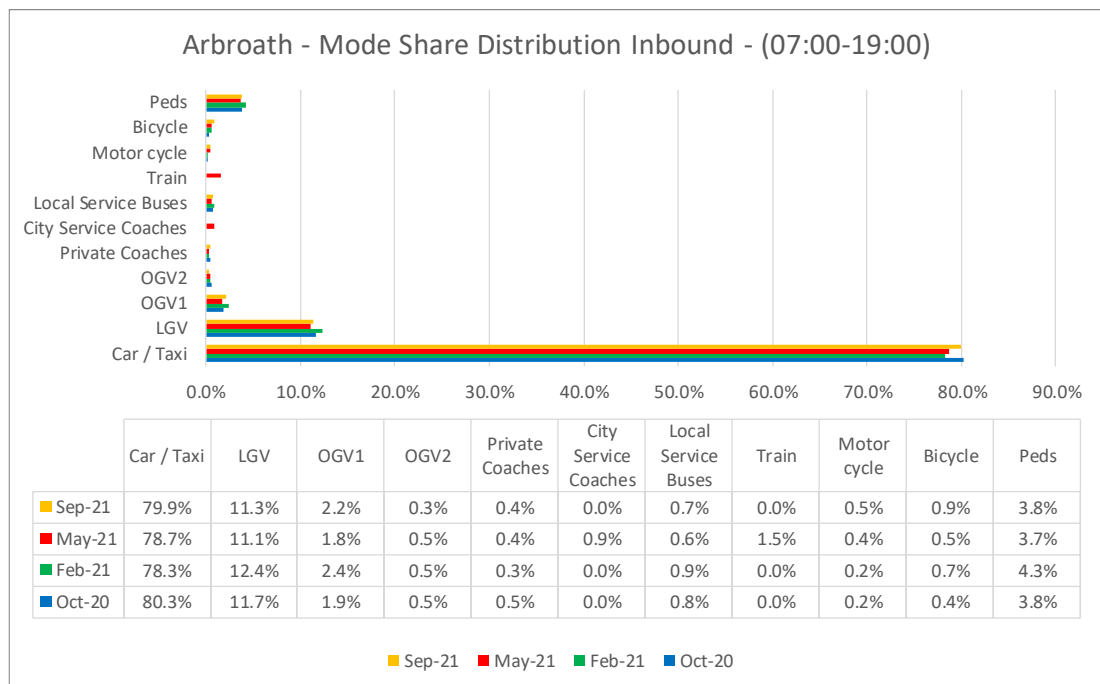


Figure 13. Arbroath Mode Share Distribution – Full Day

- 6.5.25 Figure 13 shows that across the day, the mode share of vehicles again remained relatively consistent over the four survey periods. The results for city service coaches and rail were only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 6.5.26 The proportion of pedestrians remained consistent, but was highest in February 2021 when Scotland was under lockdown conditions, whilst the proportion of cyclists was highest in September 2021.
- 6.5.27 The total of the vehicles and pedestrians observed as part of the mode surveys across the day was 20,824 in October 2020, 16,109 in February 2021, 22,380 in May 2021 and 21,370 in September 2021.

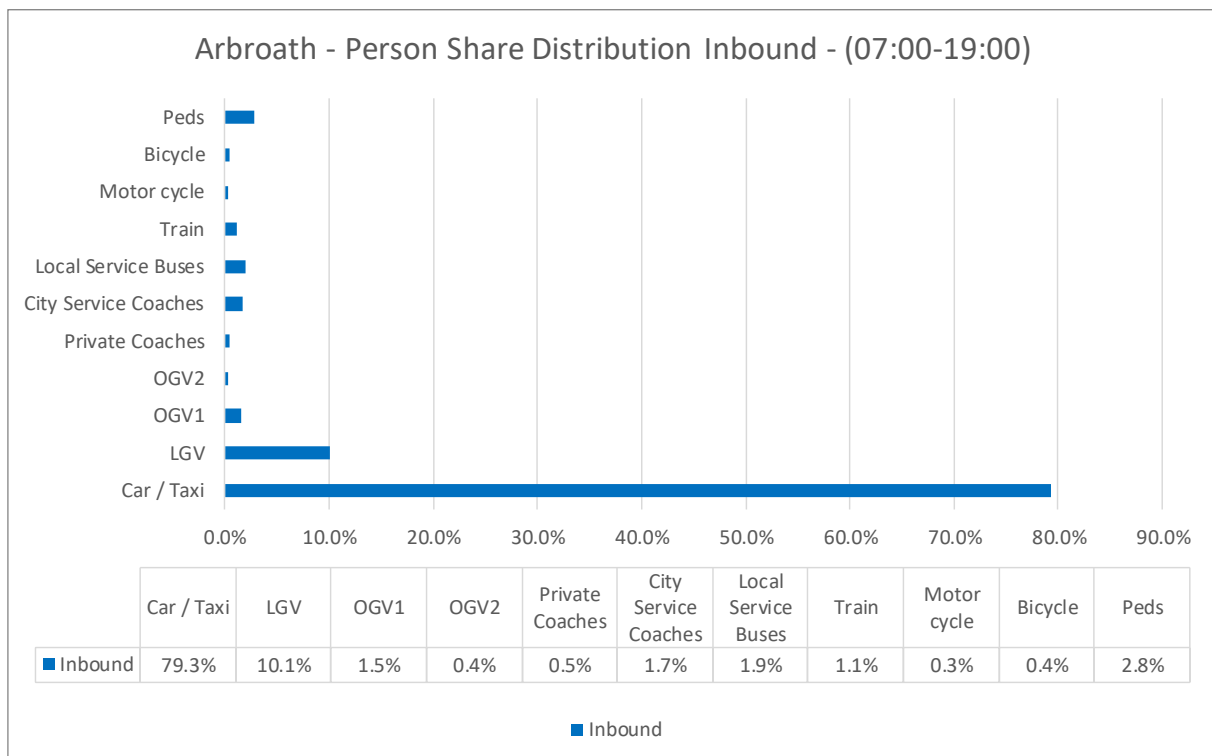


Figure 14. Arbroath Person Share Distribution – Full Day

6.5.28 Figure 14 shows that the majority of people heading into Arbroath did so by car and taxi. Total bus usage was just under 5%, rail just over 1%, bicycle 0.4% and walking just under 3%.

6.5.29 The person total observed in the inter peak was 29,877 in May 2021.

7. SUMMARY & FINDINGS

7.1 Summary

7.1.1 SYSTRA Ltd (SYSTRA) was commissioned by Tactran to undertake traffic surveys through various sites in the Angus, Dundee, Perth & Kinross, & Stirling area.

7.1.2 The types of surveys undertaken for this study were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Rail Station Counts
- Bus Station Counts
- Bus Occupancy Counts
- Vehicle Occupancy Counts.

7.1.3 All surveys were recorded over a 16 hour period (06:00-22:00) and the analysis was split into the following time periods:

- AM Peak Period – 07:00 – 10:00
- Inter Peak Period – 10:00 – 16:00
- PM Peak Period – 16:00 – 19:00

7.1.4 The mode share data was also considered from the perspective of the share of vehicles and by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle.

7.1.5 The mode share data was collated inbound only towards Arbroath Town centre area.

7.2 Findings

Pedestrian Behaviour and Volume Counts

7.2.1 The results of the pedestrian behaviour and volume count surveys indicate:

Arbroath

- On the east side footpath of the West Port in Arbroath, on average 80% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 19% passed on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway.
- On the west side footpath of the West Port in Arbroath, on average 91% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 8% passed on the footpath within a space of 2m or less.

- Pedestrian volume surveys show that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021.

Forfar

- On the east side footpath of Castle Street in Forfar, on average 34% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 63% passed on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway
- On the west side footpath of Castle Street in Forfar, on average 56% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 39% passed on the footpath within a space of 2m or less, the remaining 5% passing with a gap of over 2m
- Pedestrian volume surveys show that the lowest pedestrian volumes were recorded in February 2021 when Scotland was in lockdown, and the highest pedestrian volumes were recorded in September 2021 Link Count and Speed Surveys

7.2.2 The results of the wider link counts and speed surveys indicate:

Arbroath

- The mean speed of traffic on West Port and Millgate increased in March 2021 when compared against October 2020 before reducing again in May and September 2021, whilst at Commerce Street there was an increase in March 2021 before a reduction was seen in May 2021 and September 2021.

Forfar

- Mean speeds increased in February, May and September 2021 when compared against October 2020.

Edzell

- On the High Street, adjacent to the primary school, the mean speeds remained consistent in all four survey periods. All surveys indicated in excess of 70% of drivers exceeding the 20mph limit northbound.
- The speeds were highest in March 2020 when Scotland was living under lockdown conditions.

Mode Share Surveys (Arbroath)

7.2.3 The results of the mode share surveys in Arbroath indicate that the mode share has remained consistent over the three surveys, car usage in each period has been around 80%, the volume of cyclists has remained below 1% and pedestrians have remained consistent at around 3% to 5%. The mode share by person surveys indicated:

- In the AM peak the majority of people travelling inbound were doing so by car/taxi (76.2%), LGV accounted for almost 12 % of people and HGV around 2.5%. In terms of public transport bus accounted for around 5.4% of people and train just under

1%. Cycling and walking accounted for just under 4%, cycling at 0.5% and walking at 2.9% of all people heading inbound towards Arbroath town centre.

- In the inter-peak, the majority of people travelling inbound were doing so by car/taxi (78.1%), LGV accounted for almost 10 % of people and HGV around 2%. In terms of public transport bus accounted for around 5.5% of people and train just over 1%. Cycling and walking accounted for just under 4%, cycling at 0.7% and walking at 2.9% of all people heading inbound towards Arbroath town centre.
- In the PM peak, the majority of people travelling inbound were doing so by car/taxi (80%), LGV accounted for slightly over 9% of people and HGV around 1%. In terms of public transport bus accounted for around 5.5% of people and train just over 1%. Cycling and walking accounted for just under 4%, cycling at 0.9% and walking at 2.3% of all people heading inbound towards Arbroath town centre.
- Across the full day, the majority of people travelling inbound were doing so by car/taxi (79.3%), LGV accounted for around 10 % of people and HGV around 2%. In terms of public transport bus accounted for around 4% of people and train just over 1%. Cycling and walking accounted for just over 3%, cycling at 0.4% and walking at 2.8% of all people heading inbound towards Arbroath town centre.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Newhall Street

5th Floor, Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 393 4841

Birmingham – Edmund Gardens

1 Edmund Gardens, 121 Edmund Street,
Birmingham B3 2HJ
T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Glasgow – West George St

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1
1LE
United Kingdom
T: +44 (0)191 249 3816

Reading

Soane Point, 6-8 Market Place, Reading,
Berkshire, RG1 2EG
T: +44 (0)118 206 0220

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

SYSTRA

B APPENDIX B – DUNDEE CITY COUNCIL SURVEY REPORT

Dundee Council Area

16/12/2021

Reference number GB01T20C61/5



DUNDEE CITY SPACES FOR PEOPLE SURVEY REPORT 2020/21



SYSTRA

DUNDEE COUNCIL AREA

MODE SHARE SURVEYS 2020/2021

IDENTIFICATION TABLE

Client/Project owner	Tactran
Project	Dundee Council Area
Study	Mode Share Surveys 2020/2021
Type of document	Survey Report
Date	16/12/2021
File name	Traffic Survey Report - Draft
Reference number	GB01T20C61/5

APPROVAL

Version	Name	Position	Date	Modifications	
1	Author	Alasdair Kay	Principal Transportation Engineer	16/12/2021	
	Checked	Alasdair Kay	Principal Transportation Engineer	16/12/2021	
	Approved	Iain Clement	Associate Director	16/12/2021	
2	Author			DD/MM/YY	
	Checked			DD/MM/YY	
	Approved			DD/MM/YY	

TABLE OF CONTENTS

1.	INTRODUCTION	7
1.1	BACKGROUND	7
1.2	SPACES FOR PEOPLE	7
1.3	SPACES FOR PEOPLE SCHEMES	7
2.	DATA COLLATION	9
2.1	OVERVIEW OF TRAFFIC SURVEYS	9
2.2	PEDESTRIAN BEHAVIOUR AND VOLUME COUNTS	10
2.3	LINK COUNT SURVEYS	11
2.4	SPEED SURVEYS	13
2.5	CLASSIFIED LINK COUNTS	16
2.6	MODE SHARE SURVEYS	17
2.7	SUMMARY	18
3.	PEDESTRIAN BEHAVIOUR AND VOLUME REVIEW	19
3.1	PEDESTRIAN BEHAVIOUR SURVEYS	19
3.2	PEDESTRIAN VOLUME SURVEYS	19
3.3	RESULTS OF PEDESTRIAN BEHAVIOUR SURVEYS	19
3.4	RESULTS OF PEDESTRIAN VOLUME SURVEYS	25
4.	VEHICLE LINK COUNT & SPEED REVIEW	42
4.1	OVERVIEW	42
4.2	RESULTS OF LINK COUNTS AND SPEED SURVEYS	43
5.	LINK COUNT SURVEYS	79
7.	MODE SHARE SURVEYS	96
7.1	RAIL STATION COUNTS	96
7.2	BUS OCCUPANCY COUNTS	97
7.3	VEHICLE OCCUPANCY COUNTS	101
7.4	RESULTS OF MODE SHARE SURVEYS	107
8.	SUMMARY & FINDINGS	124
8.1	SUMMARY	124
8.2	FINDINGS	124

LIST OF FIGURES

Figure 1.	Pedestrian Surveys - Dundee	10
Figure 2.	Link Count Surveys - Dundee	11
Figure 3.	Link Count Surveys – Broughty Ferry	12
Figure 4.	Speed Count Surveys - Perth Rd - Dundee	13
Figure 5.	Speed Count Surveys - Fintry - Dundee	14
Figure 6.	Speed Count Surveys - Douglas - Dundee	14
Figure 7.	Speed Count Surveys – Broughty Ferry	15
Figure 8.	Classified Cordon Count Surveys – Dundee	16
Figure 9.	Classified Cordon Count Surveys – Dundee (Sites 5, 6 & 7)	17
Figure 10.	Dundee Mode Share Distribution Inbound – AM Peak	108
Figure 11.	Dundee Mode Share Distribution Outbound – AM Peak	109
Figure 12.	Dundee Person Share Distribution Inbound – AM Peak	110
Figure 13.	Dundee Person Share Distribution Outbound – AM Peak	111
Figure 14.	Dundee Mode Share Distribution Inbound – Inter Peak	112
Figure 15.	Dundee Mode Share Distribution Outbound – Inter Peak	113
Figure 16.	Dundee Person Share Distribution Inbound – Inter Peak	114
Figure 17.	Dundee Person Share Distribution Outbound – Inter Peak	115
Figure 18.	Dundee Mode Share Distribution Inbound – PM Peak	116
Figure 19.	Dundee Mode Share Distribution Outbound – PM Peak	117
Figure 20.	Dundee Person Share Distribution Inbound – PM Peak	118
Figure 21.	Dundee Person Share Distribution Outbound – PM Peak	119
Figure 22.	Dundee Mode Share Distribution Inbound – Full Day	120
Figure 23.	Dundee Mode Share Distribution Outbound – Full Day	121
Figure 24.	Dundee Person Share Distribution Inbound – Full Day	122
Figure 25.	Dundee Person Share Distribution Outbound – Full Day	123

LIST OF TABLES

Table 1.	Spaces for People - Scheme Summary	8
Table 2.	Traffic Survey Summary	18
Table 3.	Perth Road adjacent to Nethergate (west side) Pedestrian Behaviour Summary	20
Table 4.	Perth Road adjacent to Nethergate (east side) Pedestrian Behaviour Summary	21
Table 5.	Union Street (east side) Pedestrian Behaviour Summary	23
Table 6.	Union Street (west side) Pedestrian Behaviour Summary	24
Table 7.	Perth Road, Dundee, adjacent to shops near Step Row (north footpath) Pedestrian Volume Summary	26
Table 8.	Perth Road, Dundee, adjacent to shops near Step Row (south footpath) Pedestrian Volume Summary	28
Table 9.	Perth Road, Dundee, adjacent to Art School (north footpath) Pedestrian Volume Summary	30
Table 10.	Perth Road, Dundee, adjacent to Art School (south footpath) Pedestrian Volume Summary	32
Table 11.	Perth Road, Dundee, adjacent to Nethergate (north footpath) Pedestrian Volume Summary	34

Table 12.	Perth Road, Dundee, adjacent to Nethergate (south footpath) Pedestrian Volume Summary	36
Table 13.	Union Street (north footpath), Dundee Pedestrian Volume Summary	38
Table 14.	Union Street (south footpath), Dundee Pedestrian Volume Summary	40
Table 15.	Perth Road (Step Row) (Eastbound)	44
Table 16.	Perth Road (Step Row) (Westbound)	45
Table 17.	Perth Road (Art School) (Eastbound)	47
Table 18.	Perth Road (Art School) (Westbound)	49
Table 19.	Perth Road (Nethergate) (Eastbound)	51
Table 20.	Perth Road (Nethergate) (Westbound)	53
Table 21.	Findowrie Street (Eastbound)	54
Table 22.	Findowrie Street (Westbound)	56
Table 23.	Fintry Road (Eastbound)	57
Table 24.	Fintry Road (Westbound)	59
Table 25.	Balunie Drive (Eastbound)	61
Table 26.	Balunie Drive (Westbound)	62
Table 27.	Ballindean Road (Eastbound)	63
Table 28.	Ballindean Road (Westbound)	65
Table 29.	The Esplanade (Eastbound)	67
Table 30.	The Esplanade (Westbound)	69
Table 31.	Brook Street (Eastbound)	71
Table 32.	Brook Street (Westbound)	73
Table 33.	King Street (Eastbound)	75
Table 34.	King Street (Westbound)	77
Table 35.	Perth Road, Step Row (Eastbound)	80
Table 36.	Perth Road, Step Row (Westbound)	82
Table 37.	Perth Road, Art School (Eastbound)	84
Table 38.	Perth Road, Art School (Westbound)	86
Table 39.	Perth Road, Nethergate (Eastbound)	88
Table 40.	Perth Road, Nethergate (Westbound)	90
Table 41.	Union Street (Eastbound)	91
Table 42.	Union Street (Westbound)	93
Table 43.	The Esplanade (Eastbound)	94
Table 44.	The Esplanade (Westbound)	95
Table 45.	Dundee Railway Station Entry/Exit Counts	96
Table 46.	Bus & Coach Cordon Occupancy (AM Peak 06:30 – 09:30)	98
Table 47.	Bus & Coach Cordon Occupancy (Inter Peak 09:30 – 15:30)	99
Table 48.	Bus & Coach Cordon Occupancy (PM Peak 15:30 – 18:30)	100
Table 49.	Vehicle Inbound Cordon Occupancy (AM Peak 06:30 – 09:30)	101
Table 50.	Vehicle Outbound Cordon Occupancy (AM Peak 06:30 – 09:30)	102
Table 51.	Vehicle Inbound Cordon Occupancy (Inter Peak 09:30 – 15:30)	103
Table 52.	Vehicle Outbound Cordon Occupancy (Inter Peak 09:30 – 15:30)	104
Table 53.	Vehicle Inbound Cordon Occupancy (PM Peak 15:30 – 18:30)	105
Table 54.	Vehicle Inbound Cordon Occupancy (Inter Peak 09:30 – 15:30)	106

1. INTRODUCTION

1.1 Background

1.1.1 SYSTRA Ltd (SYSTRA) was commissioned by regional transport authority Tactran in June 2020 in response to the *Spaces for People* initiative, to undertake a comprehensive survey programme to capture changes in active travel behaviour and mode share as the people of Angus, Dundee, Perth & Kinross and Stirling change travel behaviours following the Covid-19 outbreak.

1.1.2 The results of the surveys will inform decisions on the benefits of the temporary infrastructure measures being brought forward by the four local authorities Dundee City Council, Perth & Kinross Council, Stirling Council and Angus Council.

1.2 Spaces for People

1.2.1 The *Spaces for People* programme is funded by the Scottish Government and managed by Sustrans Scotland. The aim of the initiative is to enable statutory bodies to implement measures focused on protecting public health by enabling pedestrians and cyclists to social distance safely on public roads physical distancing.

1.2.2 The initiative focuses on essential journeys, which might include:

- Journeys to and from hospitals and health services
- Journeys to shops, pharmacies, schools, and other returning workplaces
- Journeys for recommended exercise, for example neighbourhoods and local parks.

1.2.3 The measures being investigated by the authorities will provide temporary walking and cycling infrastructure that helps to protect public health by enabling safe physical distancing for essential journeys and exercise for everyone, in particular where there are space constraints or user safety concerns. The measures might include, but are not limited to:

- Physical interventions
- Selective road closures using planters or cones
- Reallocating road space for wider footway
- Reallocating road space for cycle tracks
- Reallocating parking and loading
- Reduced speed limits and/or traffic calming measures
- Removal of barriers to open up constrained spaces and remove pinch points.

1.2.4 This Note details the traffic surveys undertaken in four phases between October 2020 and September 2021, and the mode share summary information for each location.

1.3 Spaces for People Schemes

1.3.1 A summary of Spaces for People schemes is shown in Table 1 below, categorised by phase and location.

Table 1. Spaces for People - Scheme Summary

Spaces for People Phase	Area	Scheme Description
SFP1 - Introduction of 20mph zones	Fintry	20 mph zone. Introduced July 2020 - Ongoing
	Douglas	20 mph zone. Introduced July 2020 - Ongoing
	West End (Perth Road)	20 mph zone. Introduced July 2020 - Ongoing
	Central Broughty Ferry	20 mph zone. Introduced July 2020 - Ongoing
SFP2 - Pedestrianisation and Placemaking	Dundee city centre	Pedestrianisation of Union Street and city centre placemaking. July 2020 - Ongoing
SFP3 - Modal Filters	Esplanade, Broughty Ferry	Closure to vehicular traffic, mid June 2020 - late October 2020, January to April 2021
	Douglas Terrace, Broughty Ferry	June 2020 - Ongoing during flood defence construction
SFP4 - District Centres	Eliza Street.	TTRO for prohibition of driving and parking to create a Pedestrianised Zone in this no through road section - implemented May 2021.
	Craigie Street.	TTRO for prohibition of driving and parking to create a Pedestrianised Zone in this no through road section - implemented May 2021.
	Hilltown	Footway widening scheme - implemented July 2021
SFP5 - Pop Up Cycle Lanes	Ninewells Avenue N/B	Segregated semi permanent cycle lane with orca separators. Reducing carriageway width.
	Ninewells Avenue S/B	Widening of existing southbound footway to provide combined cycleway/footway.
	Perth Road (Ninewells Avenue - Harris Academy)	Combination of segregated cycleway and shared use of carriageway for motorised vehicles and cyclists with give and take arrangements in shared use sections
SFP6 - Green Circular	Balgillo Road (deferred)	Various improvement schemes including resurfacing and widening on cycle route mainly remote from live carriageway.
	Drumgeith Park	
	Emmock Road	
	Finlathen Park A	
	Finlathen Park	
	Perth Road	
	Tom Johnston Road (deferred)	
	Whittle Place	
	Camperdown Phase 1	
Camperdown Phase 2		
SFP7 - Connecting Schools and Communities	West Grange Road	New footway link from Lawers Drive to existing cycleway/footway link adjacent to A92 Arbroath Road.
	Gillburn Road (St Pauls PS)	New footway on south side from Derwent Avenue junction to bus stop opposite Ambleside Avenue to tie into the existing footway. Provision of new pedestrianised crossing facilities.
	Longhaugh Road	(Fintry Terrace to Findowrie Street) Widening of existing footway/cycleway to improve connections to the North East Campus which includes Longhaugh Primary and St Francis Primary School.
	St Leonards Road (St Andrews PS)	Reconstruct and widening the existing footway to 3.5m wide within the park opposite the school. Provision for a table top crossing at St Leonards Place to improve connections.

2. DATA COLLATION

2.1 Overview of Traffic Surveys

2.1.1 A programme of traffic surveys for all the locations was undertaken by specialists Nationwide Data Collection (NDC).

2.1.2 The types of surveys undertaken in the Dundee area were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Mode Share Counts.

2.1.3 The types of surveys undertaken in the Broughty Ferry area were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys.

2.1.4 Data was recorded over a 16 hour period (06:00-22:00) and analysis undertaken for the following time periods:

- AM Peak Period – 07:00 – 10:00
- Inter Peak Period – 10:00 – 16:00
- PM Peak Period – 16:00 – 19:00.

2.1.5 The surveys were undertaken on the following dates:

- October 2020 – Thursday 22nd to Saturday 24th October 2020
- February 2021 – Thursday 25th to Saturday 27th February 2021
- May 2021 – Thursday 11th to Saturday 13th May 2021
- September 2021 - Thursday 9th to Saturday 11th September 2021

2.2 Pedestrian Behaviour and Volume Counts

Dundee

2.2.1 Seven locations within Dundee were selected in discussion with Tactran for pedestrian volume counts and behaviour surveys. These are detailed below and in Figure 1:

- Pedestrian 1 – Perth Road (adjacent to shops near Step Row north side)
- Pedestrian 2 – Perth Road (adjacent to shops near Step Row south side)
- Pedestrian 3 – Perth Road (adjacent to Art School north side)
- Pedestrian 4 – Perth Road (adjacent to Art School south side)
- Pedestrian 5 – Perth Road (adjacent to Nethergate north side)
- Pedestrian 6 – Perth Road (adjacent to Nethergate south side)
- Pedestrian 7 – Union Street (between Nethergate and Dock Street)

2.2.2 Following discussion with TACTRAN, pedestrian behaviour analysis was only undertaken for the Union Street site in October 2020.

2.2.3 Two-directional classified link counts were carried out within the study section, to include both pedestrians and cyclists. Results were categorised as follows:

- Pedestrians
- Wheeled pedestrians (on scooters etc)
- Pedal Cycles
- Motorcycles
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.

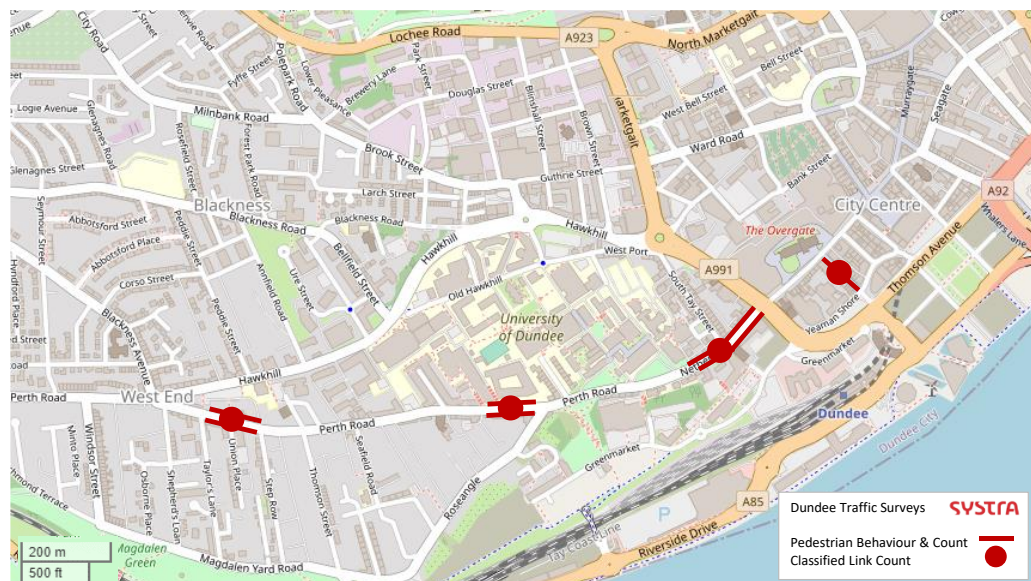


Figure 1. Pedestrian Surveys - Dundee

2.3 Link Count Surveys

Dundee

2.3.1 Four locations within Dundee were selected for link count and speed survey over a seven day period. These are detailed below and in Figure 2:

- Link Count 1 – Perth Road (adjacent to shops near Step Row)
- Link Count 2 – Perth Road (adjacent to Art School)
- Link Count 3 – Perth Road (adjacent to Nethergate)
- Link Count 4 – Union Street (between Nethergate and Dock Street)

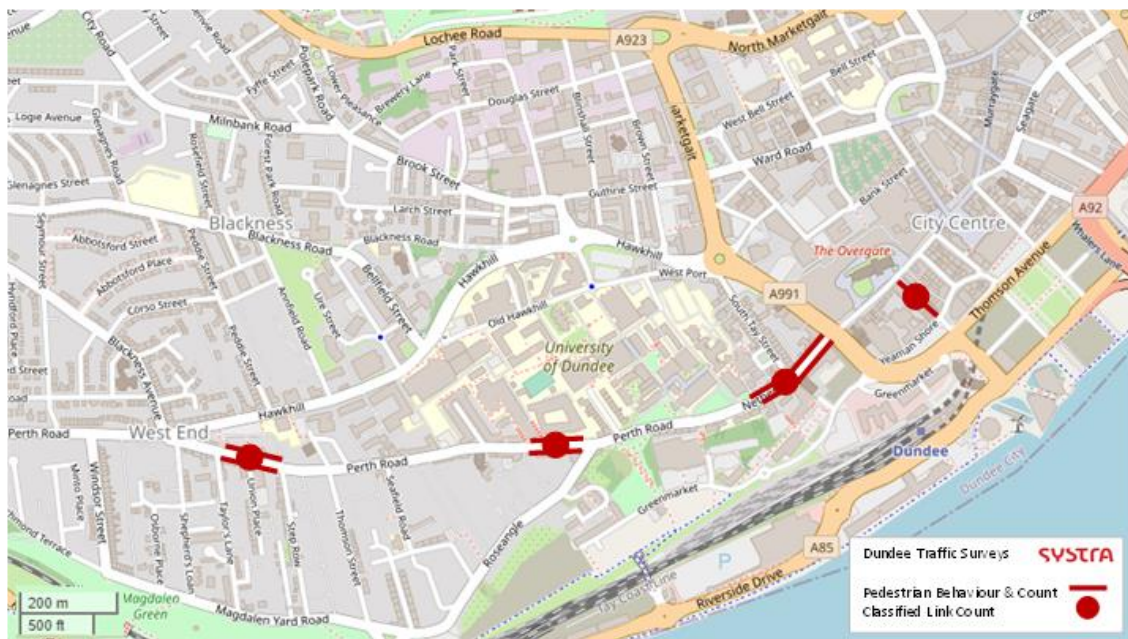


Figure 2. Link Count Surveys - Dundee

Broughty Ferry

2.3.2 One location within Broughty Ferry was selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 3:

- Link 1 - The Esplanade (circa 600m east of junction with Panmure Street)



Figure 3. Link Count Surveys – Broughty Ferry

2.4 Speed Surveys

Dundee

2.4.1 Seven locations within Dundee were selected for link count and speed surveys over a seven day period. These are detailed below and in Figures 4 - 6:

- Speed 1 - Perth Road (adjacent to shops near Step Row)
- Speed 2 - Perth Road (adjacent to Art School)
- Speed 3 - Perth Road (adjacent to Nethergate)
- Speed 4 – Findowrie Street (west of Findchapel Place)
- Speed 5 – Fintry Road (east of Finavon Terrace)
- Speed 7 - Balunie Drive around number 114
- Speed 8 - Ballindean Road (east of Ballindean Place)

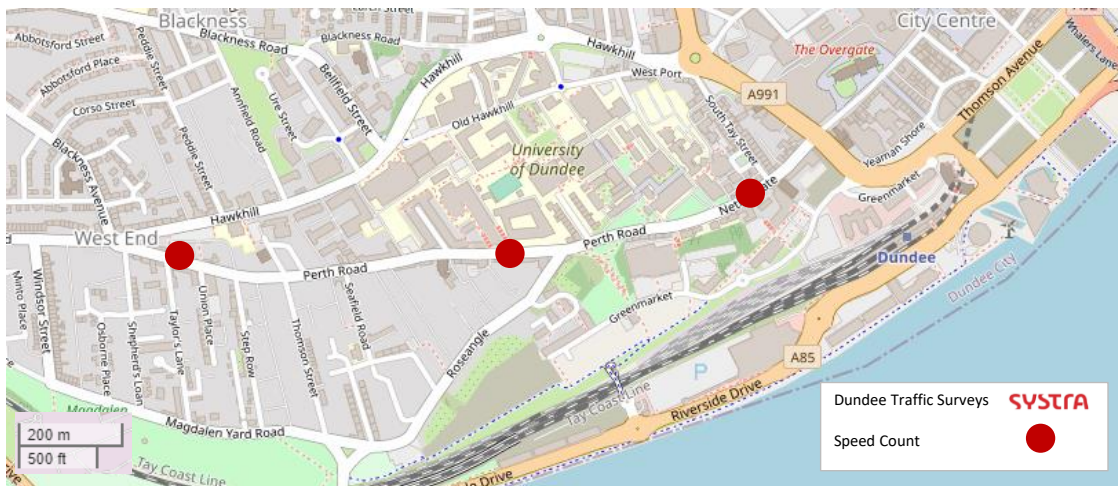


Figure 4. Speed Count Surveys - Perth Rd - Dundee

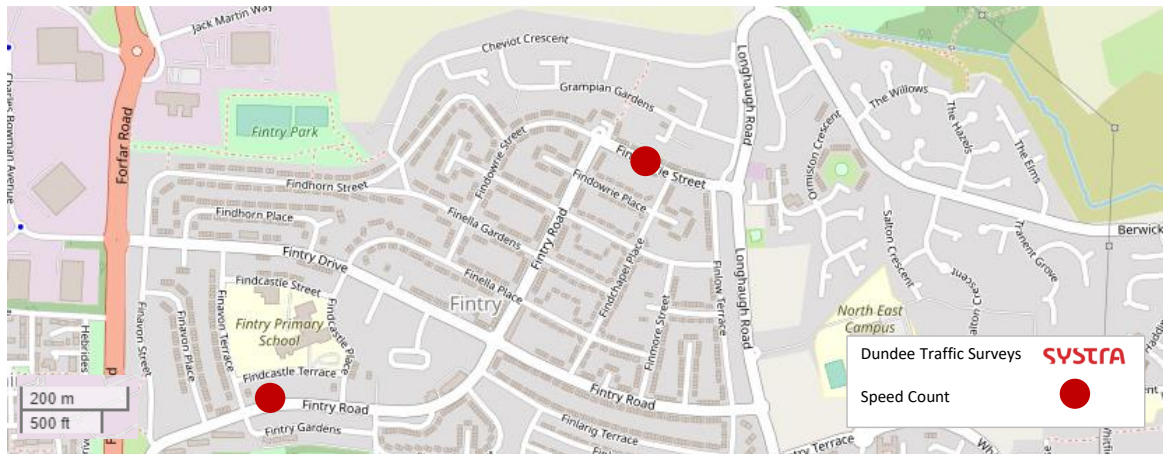


Figure 5. Speed Count Surveys - Fintry - Dundee

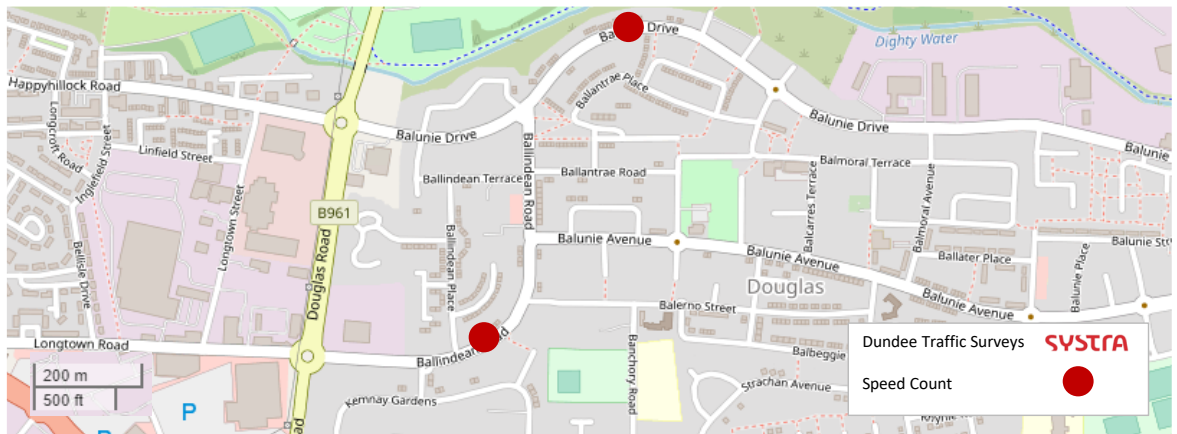


Figure 6. Speed Count Surveys - Douglas - Dundee

Broughty Ferry

2.4.2 Three locations within Broughty Ferry were selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 7:

- Speed 1 - The Esplanade (circa 600m east of junction with Panmure Street)
- Speed 2 - Brook Street (east of Gray Street)
- Speed 3 - King Street (west of Gray Street)

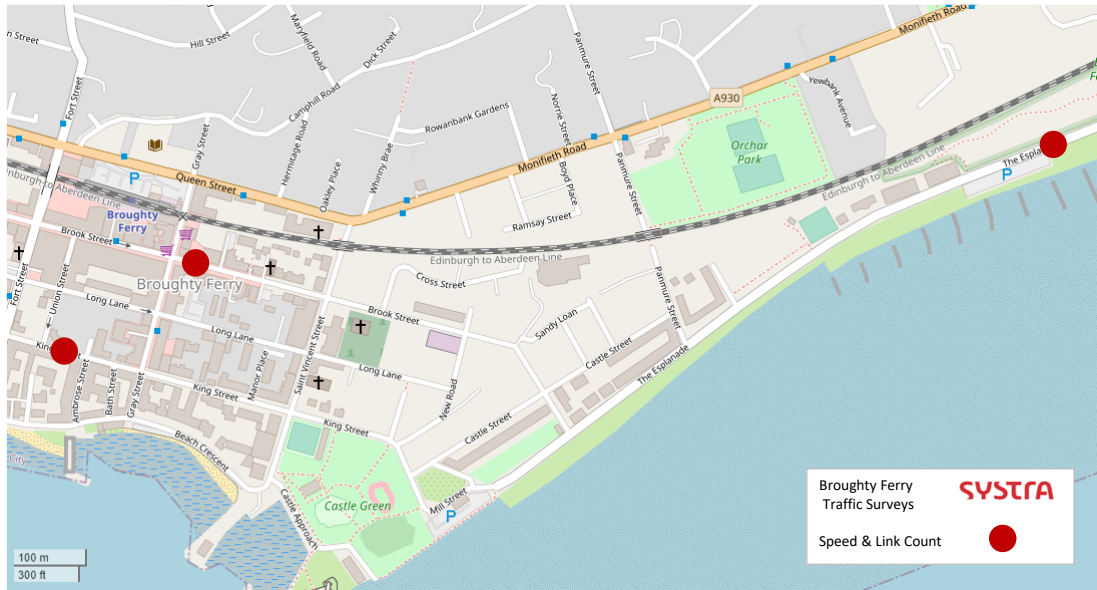


Figure 7. Speed Count Surveys – Broughty Ferry

2.5 Classified Link Counts

Dundee

2.5.1 16 locations within Dundee were selected for classified link counts. These are detailed below in Figure 8 and Figure 9. The mode share cordon counts were undertaken on the Thursday of each survey period between 06:00 and 22:00:

- CC1 - Tay Road Bridge - Entering the city - Including cyclists & pedestrians
- CC2 - Victoria Road - at the back of the Wellgate/bottom of the Hilltown
- OC1 - Broughty Ferry Road at Stannergate Road
- OC2 - Riverside Drive - At the new crossing near Bridgeview Station/playing fields
- OC3 - Dundee Road - Near Monymusk Park
- OC4 - Drumgeith Road - Near the playing fields
- OC5 - Dundee Road - at Kemback Street
- OC6 - Dundee Road - at Albert Street
- OC7 - Albert Street - at Raglan Street and Lyon Street
- OC8 - Pitkerro Road - at Dalkeith Road and Stobsmuir Road
- OC9 - Old Glamis Road - outside the college
- OC10 - Macalpine Road - Near the Kingsway
- OC11 - Coupar Angus Road - West of the north entrance at the cycle crossing
- OC12 - South Road - between Tesco and the bottom of Arran Drive
- OC13 - Lochee Road - near the entrance to Tullidelph Road
- OC14 - Ninewells Avenue - Around Kinloch Park where the shared-use path enters the hospital

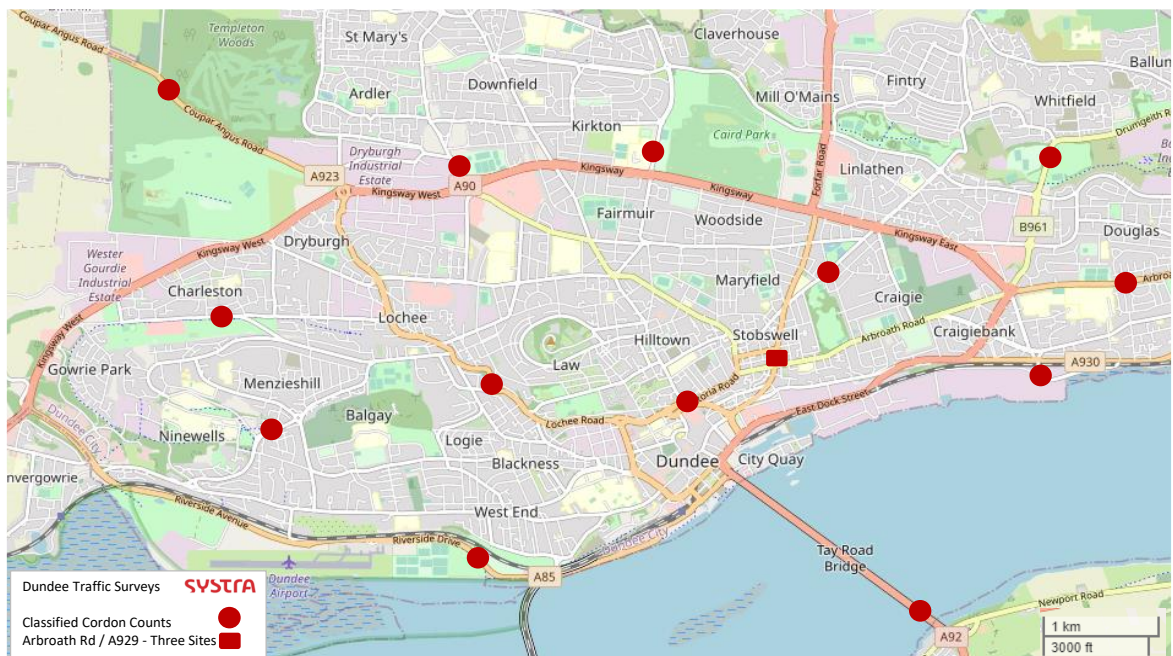


Figure 8. Classified Cordon Count Surveys – Dundee

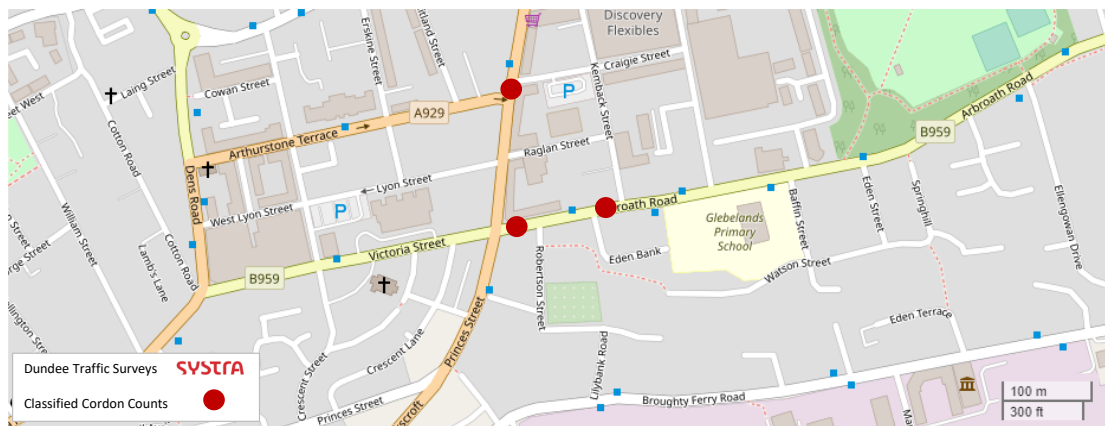


Figure 9. Classified Cordon Count Surveys – Dundee (Sites 5, 6 & 7)

2.5.2 At each site, link count data was collated into the following categories:

- Pedestrians
- Pedal Cycles
- Motorcycles
- Horses
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.

2.6 Mode Share Surveys

Bus Occupancy Surveys

2.6.1 Bus occupancy counts were undertaken at all 16 sites shown in Figure 9, over the 16 hour period (06:00-22:00) on Wednesday 5th May 2021. Counts were undertaken in both directions.

Vehicle Occupancy Counts

2.6.2 Vehicle occupancy counts were undertaken at all 16 sites shown in Figure 9, over the 16 hour period (06:00-22:00) on Wednesday 5th May 2021. Counts were undertaken in both directions.

Rail Station Barrier Counts

2.6.3 Barrier counts were conducted at Dundee rail station over the 16 hour period (06:00-22:00) on Wednesday 5th May 2021 with pedestrian movements captured at the entrance/exit to the station.

2.7 Summary

2.7.1 A summary of survey programme undertaken across the Dundee City Council area is given in Table 2 below.

Table 2. Traffic Survey Summary

Survey Requirement		Oct-20	Feb-21	May-21	Sep-21
Dundee	Pedestrian Surveys	✓	✓	✓	✓
	Classified Link Counts	✓	✓	✓	✓
	Speed Surveys	✓	✓	✓	✓
	Cordon Link Counts	✓	✓	✓	✓
	Vehicle Occupancy Surveys			✓	
Broughty Ferry	Classified Link Counts	✓			
	Speed Surveys	✓	✓	✓	✓

3. PEDESTRIAN BEHAVIOUR AND VOLUME REVIEW

3.1 Pedestrian Behaviour Surveys

3.1.1 Summary tables below present the results of the pedestrian behaviour surveys in the Dundee City Council area.

3.1.2 Following discussion with TACTRAN analysis was undertaken for the following sites in October 2020 only:

- Pedestrian 5 – Perth Road (adjacent to Nethergate west side)
- Pedestrian 6 – Perth Road (adjacent to Nethergate east side)
- Pedestrian 7 – Union Street (between Nethergate and Dock Street east side)
- Pedestrian 8 – Union Street (between Nethergate and Dock Street west side)

3.2 Pedestrian Volume Surveys

3.2.1 Seven locations within Dundee were selected in discussion with TACTRAN for pedestrian volume surveys:

- Pedestrian 1 – Perth Road (adjacent to shops near Step Row north side)
- Pedestrian 2 – Perth Road (adjacent to shops near Step Row south side)
- Pedestrian 3 – Perth Road (adjacent to Art School north side)
- Pedestrian 4 – Perth Road (adjacent to Art School south side)
- Pedestrian 5 – Perth Road (adjacent to Nethergate north side)
- Pedestrian 6 – Perth Road (adjacent to Nethergate south side)
- Pedestrian 7 – Union Street (between Nethergate and Dock Street east side)
- Pedestrian 8 – Union Street (between Nethergate and Dock Street west side)

3.2.2 One location within Broughty Ferry was surveyed in October 2020 only:

- The Esplanade (circa 600m east of junction with Panmure Street)

3.3 Results of Pedestrian Behaviour Surveys

Dundee

3.3.1 Table 3 below presents the results of the pedestrian behaviour data on the west side of Perth Road, adjacent to Nethergate in Dundee.

Table 3. Perth Road adjacent to Nethergate (west side) Pedestrian Behaviour Summary



Site 5 Perth Road (adjacent to Nethergate) Step Out Analysis West Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2451	9	1	942	882	14	0	0	2
AM Peak Pd 0700-1000	268	1	0	155	67	6	0	0	1
AM Peak Hr 0800-0900	127	0	0	67	34	5	0	0	1
IP Peak Pd 1000-1600	1403	0	0	470	621	5	0	0	1
IP Peak Hr 1200-1300	306	0	0	84	155	0	0	0	0
PM Peak Pd 1600-1900	590	3	1	202	179	2	0	0	0
PM Peak Hr 1700-1800	194	2	1	76	52	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	51%	48%	1%	0%	0%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2663	14	7	885	1014	6	0	0	0
AM Peak Pd 0700-1000	267	3	0	157	63	2	0	0	0
AM Peak Hr 0800-0900	123	0	0	67	33	2	0	0	0
IP Peak Pd 1000-1600	1386	0	2	420	590	3	0	0	0
IP Peak Hr 1200-1300	284	0	0	63	139	1	0	0	0
PM Peak Pd 1600-1900	721	6	4	167	332	1	0	0	0
PM Peak Hr 1700-1800	294	1	0	60	152	1	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	46%	53%	0%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2161	13	2	842	457	1	0	0	0
AM Peak Pd 0700-1000	100	1	0	89	6	0	0	0	0
AM Peak Hr 0800-0900	32	0	0	28	1	0	0	0	0
IP Peak Pd 1000-1600	1192	6	0	408	312	1	0	0	0
IP Peak Hr 1200-1300	185	0	0	72	55	1	0	0	0
PM Peak Pd 1600-1900	585	2	2	219	111	0	0	0	0
PM Peak Hr 1700-1800	206	1	1	64	46	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	65%	35%	0%	0%	0%	0%

3.3.2 Table 3 shows that on the west side of Perth Road, adjacent to the Nethergate, on average 54% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 45% passed on the footpath with a space of 2m or less. The remaining 1% passed with a space over 2m.

3.3.3 Table 4 below presents the results of the pedestrian behaviour data on the east side of Perth Road, adjacent to Nethergate in Dundee

Table 4. Perth Road adjacent to Nethergate (east side) Pedestrian Behaviour Summary



Site 6 Perth Road (adjacent to Nethergate) Step Out Analysis East Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2 -Way Cyclist on Bike	2 -Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1686	10	3	861	507	11	0	1	1
AM Peak Pd 0700-1000	114	1	0	97	46	0	0	0	1
AM Peak Hr 0800-0900	46	1	0	45	12	0	0	0	0
IP Peak Pd 1000-1600	868	3	0	436	303	6	0	1	0
IP Peak Hr 1200-1300	168	0	0	75	68	3	0	0	0
PM Peak Pd 1600-1900	489	3	3	203	131	4	0	0	0
PM Peak Hr 1700-1800	164	1	1	66	49	1	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	62%	37%	1%	0%	0%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2310	4	2	947	608	6	0	1	0
AM Peak Pd 0700-1000	138	1	0	121	34	1	0	0	0
AM Peak Hr 0800-0900	46	1	0	47	12	0	0	0	0
IP Peak Pd 1000-1600	970	1	1	447	290	4	0	1	0
IP Peak Hr 1200-1300	152	0	1	67	52	1	0	0	0
PM Peak Pd 1600-1900	727	2	1	215	213	0	0	0	0
PM Peak Hr 1700-1800	248	0	0	78	65	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	61%	39%	0%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2489	12	4	841	723	5	0	0	1
AM Peak Pd 0700-1000	91	1	0	96	9	0	0	0	0
AM Peak Hr 0800-0900	26	0	0	29	2	0	0	0	0
IP Peak Pd 1000-1600	1082	4	1	385	364	4	0	0	1
IP Peak Hr 1200-1300	152	1	0	56	51	1	0	0	0
PM Peak Pd 1600-1900	783	3	2	207	233	0	0	0	0
PM Peak Hr 1700-1800	274	1	2	59	82	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	54%	46%	0%	0%	0%	0%

- 3.3.4 Table 4 shows that on the east side of Perth Road, adjacent to the Nethergate, on average 59% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 41% passed on the footpath with a space of 2m or less.
- 3.3.5 Table 5 below presents the results of the pedestrian behaviour data on the east side of Union Street in Dundee, which was pedestrianised at the start of the pandemic.

Table 5. Union Street (east side) Pedestrian Behaviour Summary



Site 7 Union Street Step Out Analysis West Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1298	2	1	1080	295	41	0	9	0
AM Peak Pd 0700-1000	104	0	0	112	7	1	0	0	0
AM Peak Hr 0800-0900	41	0	0	54	2	1	0	0	0
IP Peak Pd 1000-1600	797	2	1	589	203	14	0	8	0
IP Peak Hr 1200-1300	151	0	0	108	43	0	0	1	0
PM Peak Pd 1600-1900	278	0	0	296	65	24	0	0	0
PM Peak Hr 1700-1800	123	0	0	132	30	6	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	76%	21%	3%	0%	1%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1767	0	1	860	999	80	1	0	1
AM Peak Pd 0700-1000	123	0	0	137	11	0	0	0	0
AM Peak Hr 0800-0900	56	0	0	56	3	0	0	0	0
IP Peak Pd 1000-1600	900	0	0	497	441	31	1	0	1
IP Peak Hr 1200-1300	134	0	0	96	31	3	0	0	0
PM Peak Pd 1600-1900	470	0	0	147	376	38	0	0	0
PM Peak Hr 1700-1800	197	0	0	54	113	8	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	44%	51%	4%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1955	3	1	942	1322	106	0	0	0
AM Peak Pd 0700-1000	82	0	0	122	11	1	0	0	0
AM Peak Hr 0800-0900	26	0	0	47	3	1	0	0	0
IP Peak Pd 1000-1600	1135	3	1	523	695	80	0	0	0
IP Peak Hr 1200-1300	180	0	1	112	32	16	0	0	0
PM Peak Pd 1600-1900	481	0	0	202	427	25	0	0	0
PM Peak Hr 1700-1800	173	0	0	79	158	4	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	40%	56%	4%	0%	0%	0%

3.3.6 Table 5 shows that on the east side of Union Street, on average 53% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 43% passed on the footpath with a space of 2m or less. The remaining 4% either passed within a space over 2m or stepped out into the carriageway.

3.3.7 Table 6 below presents the results of the pedestrian behaviour data on the west side of Union Street in Dundee, which was pedestrianised at the start of the pandemic.

Table 6. Union Street (west side) Pedestrian Behaviour Summary



Site 8 Union Street Step Out Analysis West Footpath (3 day Thur-Fri-Sat October 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2 -Way Cyclist on Bike	2 -Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2337	1	3	1088	760	259	0	11	0
AM Peak Pd 0700-1000	196	0	0	134	49	21	0	0	0
AM Peak Hr 0800-0900	78	0	0	54	13	11	0	0	0
IP Peak Pd 1000-1600	1304	1	2	553	520	154	0	9	0
IP Peak Hr 1200-1300	252	0	0	104	76	32	0	1	0
PM Peak Pd 1600-1900	588	0	1	283	165	72	0	2	0
PM Peak Hr 1700-1800	244	0	0	109	71	33	0	2	0
0600-2200 Behaviour Proportion (%)	-	-	-	51%	36%	12%	0%	1%	0%
Friday 23rd Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	2747	2	1	1179	783	219	4	4	2
AM Peak Pd 0700-1000	171	0	0	175	33	12	0	0	1
AM Peak Hr 0800-0900	63	0	0	76	6	5	0	0	1
IP Peak Pd 1000-1600	1535	0	0	610	494	131	4	1	0
IP Peak Hr 1200-1300	310	0	0	83	119	19	1	0	0
PM Peak Pd 1600-1900	693	2	1	243	221	64	0	0	1
PM Peak Hr 1700-1800	280	0	0	99	65	23	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	54%	36%	10%	0%	0%	0%
Saturday 24th Oct 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	3397	6	2	939	1423	371	0	10	0
AM Peak Pd 0700-1000	154	1	2	134	40	6	0	0	0
AM Peak Hr 0800-0900	41	0	0	51	7	2	0	0	0
IP Peak Pd 1000-1600	2076	1	0	490	954	202	0	10	0
IP Peak Hr 1200-1300	300	0	0	74	126	34	0	5	0
PM Peak Pd 1600-1900	802	3	0	206	348	110	0	0	0
PM Peak Hr 1700-1800	296	1	0	62	128	48	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	34%	52%	14%	0%	0%	0%

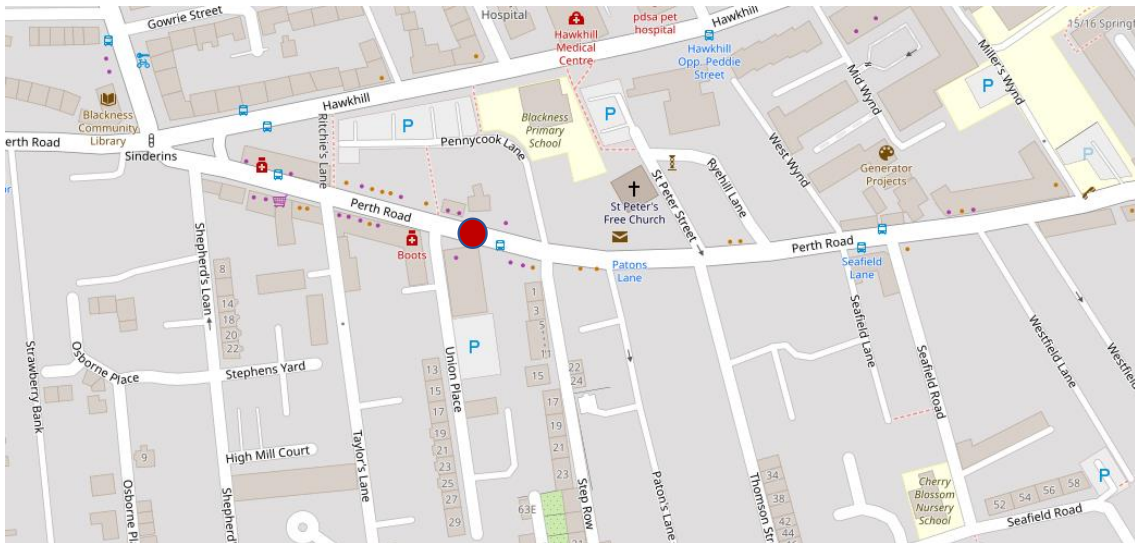
- 3.3.8 Table 6 shows that on the west side of Union Street, on average 46% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 41% passed on the footpath with a space of 2m or less. The remaining 13% either passed within a space over 2m or stepped out into the carriageway.

3.4 Results of Pedestrian Volume Surveys

Dundee

- 3.4.1 Table 7 below presents the results of the pedestrian volume data on the north side of Perth Road, adjacent to the shops near Step Row in Dundee during each of the four survey periods.

Table 7. Perth Road, Dundee, adjacent to shops near Step Row (north footpath) Pedestrian Volume Summary

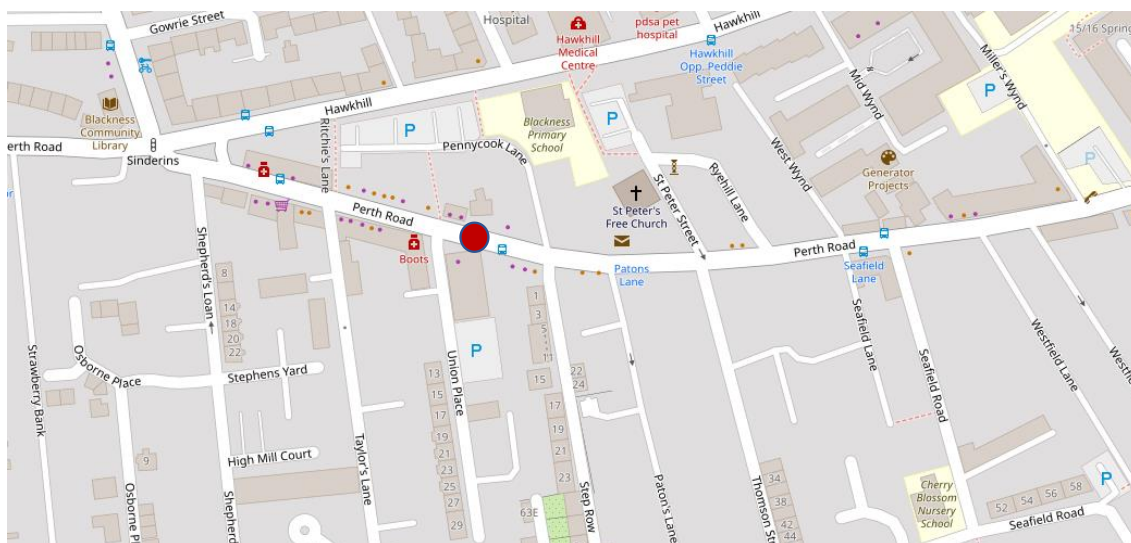


Site 1 Perth Rd (Step Row) North Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	689	43	33	3	3	2	1	0	774
0600 - 2200 Westbound	700	82	24	2	1	5	2	0	815
AM Peak Pd 0700-1000 Eastbound	64	26	9	0	0	0	0	0	100
AM Peak Pd 0700-1000 Westbound	51	3	4	0	0	0	0	0	58
IP Peak Pd 1000-1600 Eastbound	412	16	23	2	1	1	1	0	456
IP Peak Pd 1000-1600 Westbound	364	69	17	2	1	2	0	0	454
PM Peak Pd 1600-1900 Eastbound	147	1	0	0	1	1	1	0	151
PM Peak Pd 1600-1900 Westbound	196	9	3	0	0	2	2	0	211
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	502	63	3	2	5	2	2	0	578
0600 - 2200 Westbound	593	79	3	1	5	2	0	0	683
AM Peak Pd 0700-1000 Eastbound	47	42	1	1	1	0	0	0	93
AM Peak Pd 0700-1000 Westbound	60	3	0	0	1	0	0	0	64
IP Peak Pd 1000-1600 Eastbound	316	18	1	1	2	1	1	0	341
IP Peak Pd 1000-1600 Westbound	346	75	2	0	3	0	0	0	427
PM Peak Pd 1600-1900 Eastbound	95	2	0	0	1	1	0	0	100
PM Peak Pd 1600-1900 Westbound	138	1	1	0	1	1	0	0	141
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	579	50	21	5	2	1	1	0	659
0600 - 2200 Westbound	567	83	26	3	1	1	1	0	684
AM Peak Pd 0700-1000 Eastbound	77	33	5	1	0	0	0	0	116
AM Peak Pd 0700-1000 Westbound	56	4	2	0	0	0	0	0	63
IP Peak Pd 1000-1600 Eastbound	351	15	14	2	2	1	0	0	384
IP Peak Pd 1000-1600 Westbound	332	64	22	1	1	0	1	0	420
PM Peak Pd 1600-1900 Eastbound	85	1	2	1	0	0	0	0	91
PM Peak Pd 1600-1900 Westbound	114	15	3	2	0	0	0	0	135
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	659	47	27	2	4	4	2	0	746
0600 - 2200 Westbound	584	101	19	2	2	2	1	0	711
AM Peak Pd 0700-1000 Eastbound	63	30	11	0	1	0	0	0	106
AM Peak Pd 0700-1000 Westbound	60	4	2	0	0	0	0	0	66
IP Peak Pd 1000-1600 Eastbound	356	14	15	1	2	2	1	0	390
IP Peak Pd 1000-1600 Westbound	278	80	14	1	2	1	1	0	377
PM Peak Pd 1600-1900 Eastbound	131	1	1	0	2	2	0	0	138
PM Peak Pd 1600-1900 Westbound	147	14	3	0	1	0	1	0	166

- 3.4.2 Table 7 shows that the lowest pedestrian flows were observed in February 2021. The highest volume of pedestrians were observed in October 2021 in both eastbound and westbound directions.
- 3.4.3 Table 8 below presents the results of the pedestrian volume data on the south side of Perth Road, adjacent to the shops near Step Row in Dundee during each of the four survey periods.

Table 8. Perth Road, Dundee, adjacent to shops near Step Row (south footpath) Pedestrian Volume Summary

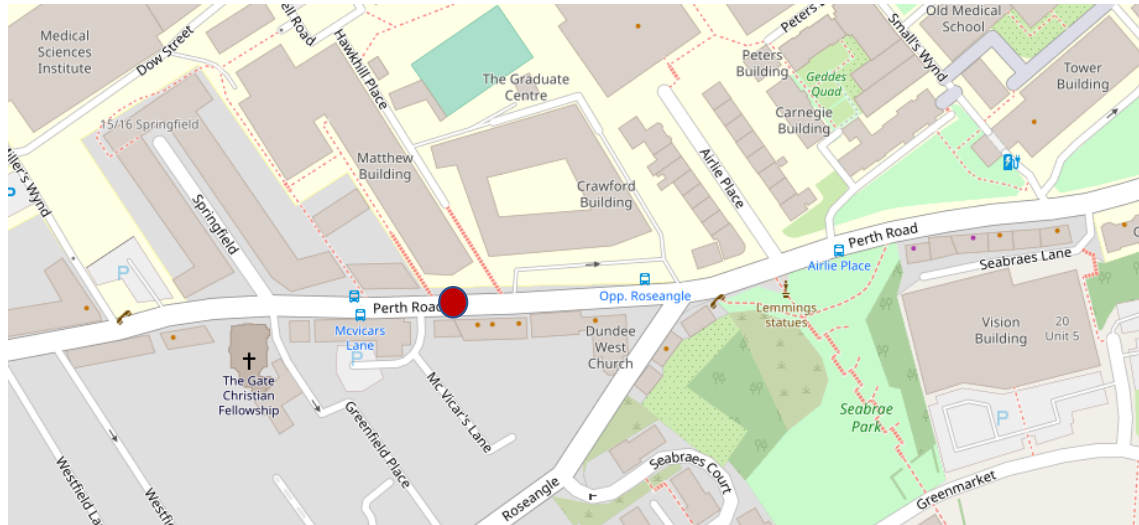


Site 2 Perth Rd (Step Row) South Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1238	47	49	3	3	3	1	0	1345
0600 - 2200 Westbound	1225	37	42	5	2	4	1	0	1315
AM Peak Pd 0700-1000 Eastbound	93	4	3	1	1	1	0	0	102
AM Peak Pd 0700-1000 Westbound	96	4	6	1	0	0	0	0	108
IP Peak Pd 1000-1600 Eastbound	631	36	45	1	1	0	1	0	715
IP Peak Pd 1000-1600 Westbound	564	23	33	2	2	1	1	0	625
PM Peak Pd 1600-1900 Eastbound	312	7	2	1	0	1	1	0	323
PM Peak Pd 1600-1900 Westbound	347	8	2	2	0	1	0	0	361
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1140	37	2	3	5	2	2	0	1192
0600 - 2200 Westbound	1108	38	3	5	3	2	4	0	1164
AM Peak Pd 0700-1000 Eastbound	96	3	0	1	0	0	0	0	100
AM Peak Pd 0700-1000 Westbound	74	3	0	1	0	0	0	0	78
IP Peak Pd 1000-1600 Eastbound	567	30	1	1	3	1	2	0	606
IP Peak Pd 1000-1600 Westbound	548	25	3	4	2	1	3	0	585
PM Peak Pd 1600-1900 Eastbound	313	3	1	1	2	1	0	0	321
PM Peak Pd 1600-1900 Westbound	335	10	1	0	1	0	1	0	348
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1050	41	80	6	4	4	2	0	1187
0600 - 2200 Westbound	971	45	59	6	2	5	2	0	1090
AM Peak Pd 0700-1000 Eastbound	101	8	1	1	0	0	0	0	111
AM Peak Pd 0700-1000 Westbound	92	5	9	1	0	0	0	0	106
IP Peak Pd 1000-1600 Eastbound	525	23	76	4	2	1	0	0	632
IP Peak Pd 1000-1600 Westbound	447	21	47	4	1	1	1	0	521
PM Peak Pd 1600-1900 Eastbound	223	8	2	0	1	1	1	0	236
PM Peak Pd 1600-1900 Westbound	232	15	3	1	1	2	0	0	255
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1201	48	63	3	5	1	0	0	1322
0600 - 2200 Westbound	1091	43	37	3	6	2	1	0	1182
AM Peak Pd 0700-1000 Eastbound	114	7	3	1	1	0	0	0	126
AM Peak Pd 0700-1000 Westbound	101	4	10	0	0	0	0	0	116
IP Peak Pd 1000-1600 Eastbound	579	26	59	2	3	0	0	0	670
IP Peak Pd 1000-1600 Westbound	512	24	25	2	3	0	1	0	567
PM Peak Pd 1600-1900 Eastbound	280	11	1	0	1	0	0	0	294
PM Peak Pd 1600-1900 Westbound	275	8	2	1	1	1	0	0	287

- 3.4.4 Table 8 shows that the lowest flows were observed in May 2021, and the highest flow in both directions was in October 2020.
- 3.4.5 Table 9 below presents the results of the pedestrian volume data on the north side of Perth Road, adjacent to the Art School in Dundee during each of the four survey periods.

Table 9. Perth Road, Dundee, adjacent to Art School (north footpath) Pedestrian Volume Summary

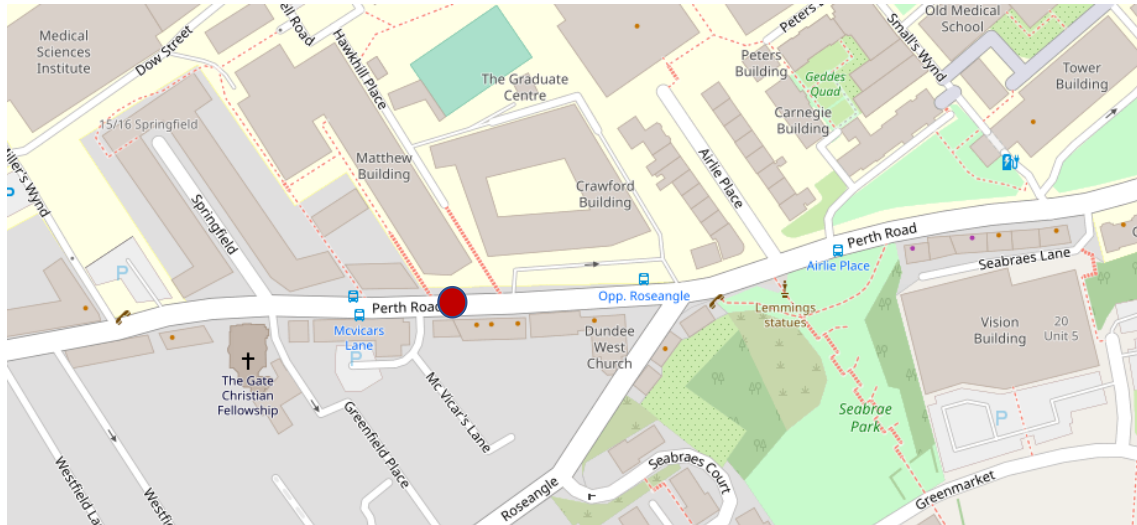


Site 3 Perth Rd (adjacent to Art School) North Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	872	19	8	0	2	3	1	0	905
0600 - 2200 Westbound	811	10	5	0	0	4	1	0	832
AM Peak Pd 0700-1000 Eastbound	88	5	4	0	0	0	0	0	98
AM Peak Pd 0700-1000 Westbound	46	3	1	0	0	1	0	0	51
IP Peak Pd 1000-1600 Eastbound	497	9	3	0	1	1	1	0	511
IP Peak Pd 1000-1600 Westbound	398	4	3	0	0	2	0	0	407
PM Peak Pd 1600-1900 Eastbound	213	5	0	0	1	2	0	0	221
PM Peak Pd 1600-1900 Westbound	242	3	2	0	0	1	1	0	249
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	525	11	5	1	0	6	0	0	548
0600 - 2200 Westbound	521	12	1	3	0	4	0	0	540
AM Peak Pd 0700-1000 Eastbound	64	0	1	0	0	0	0	0	65
AM Peak Pd 0700-1000 Westbound	33	1	0	0	0	0	0	0	34
IP Peak Pd 1000-1600 Eastbound	320	9	3	1	0	5	0	0	339
IP Peak Pd 1000-1600 Westbound	297	6	0	2	0	1	0	0	307
PM Peak Pd 1600-1900 Eastbound	100	1	1	0	0	1	0	0	104
PM Peak Pd 1600-1900 Westbound	135	5	0	1	0	3	0	0	143
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	667	19	10	1	1	4	1	0	702
0600 - 2200 Westbound	564	8	8	1	1	4	2	0	588
AM Peak Pd 0700-1000 Eastbound	93	4	2	0	0	0	0	0	99
AM Peak Pd 0700-1000 Westbound	47	0	0	0	0	1	0	0	49
IP Peak Pd 1000-1600 Eastbound	382	10	6	1	1	2	0	0	401
IP Peak Pd 1000-1600 Westbound	299	5	6	1	1	1	1	0	313
PM Peak Pd 1600-1900 Eastbound	118	4	2	0	0	1	0	0	127
PM Peak Pd 1600-1900 Westbound	123	4	2	0	0	2	0	0	130
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	718	12	11	1	0	3	1	0	746
0600 - 2200 Westbound	605	9	4	0	1	1	1	0	622
AM Peak Pd 0700-1000 Eastbound	81	5	1	0	0	0	0	0	88
AM Peak Pd 0700-1000 Westbound	29	0	0	0	0	0	0	0	29
IP Peak Pd 1000-1600 Eastbound	386	5	5	1	0	2	1	0	398
IP Peak Pd 1000-1600 Westbound	288	3	2	0	1	1	0	0	296
PM Peak Pd 1600-1900 Eastbound	128	3	5	0	0	1	0	0	136
PM Peak Pd 1600-1900 Westbound	177	5	1	0	0	0	1	0	184

- 3.4.6 Table 9 shows that the lowest pedestrian flows were observed in February 2021 when Scotland was living under lockdown conditions. The highest pedestrian flows were observed in October 2020 in both directions.
- 3.4.7 Table 10 below presents the results of the pedestrian volume data on the south side of Perth Road, adjacent to the Art School in Dundee during each of the four survey periods.

Table 10. Perth Road, Dundee, adjacent to Art School (south footpath) Pedestrian Volume Summary

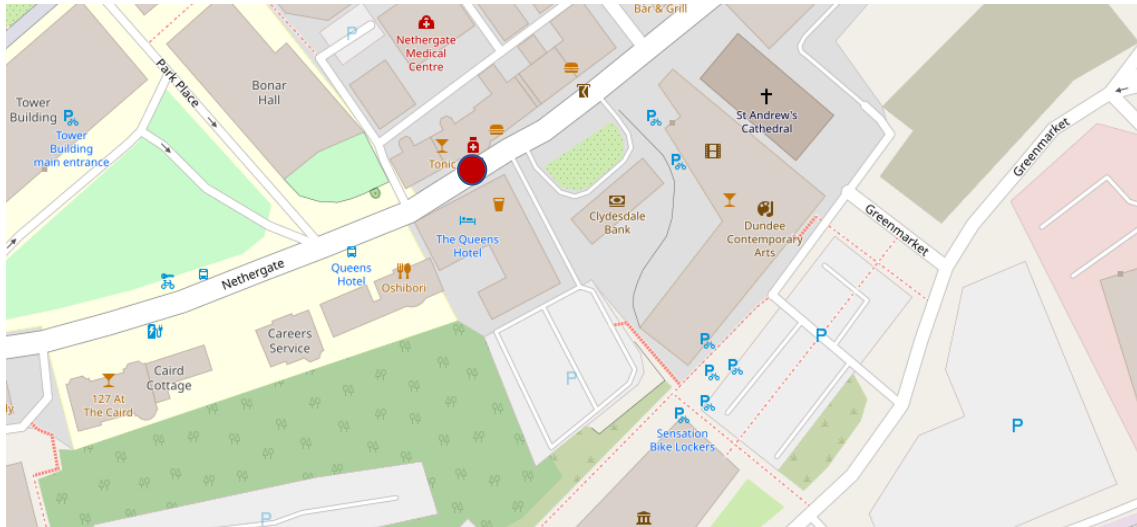


Site 4 Perth Rd (adjacent to Art School) South Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	595	2	2	0	1	2	0	0	603
0600 - 2200 Westbound	560	3	2	1	0	2	1	0	568
AM Peak Pd 0700-1000 Eastbound	47	1	1	0	0	0	0	0	49
AM Peak Pd 0700-1000 Westbound	24	0	1	0	0	0	0	0	24
IP Peak Pd 1000-1600 Eastbound	293	1	1	0	1	0	0	0	297
IP Peak Pd 1000-1600 Westbound	235	2	1	1	0	0	0	0	240
PM Peak Pd 1600-1900 Eastbound	150	1	0	0	0	0	0	0	151
PM Peak Pd 1600-1900 Westbound	188	1	0	0	0	1	1	0	191
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	375	4	2	0	0	1	0	0	382
0600 - 2200 Westbound	410	5	0	0	0	4	1	0	421
AM Peak Pd 0700-1000 Eastbound	34	1	0	0	0	0	0	0	35
AM Peak Pd 0700-1000 Westbound	24	0	0	0	0	0	0	0	24
IP Peak Pd 1000-1600 Eastbound	196	3	2	0	0	0	0	0	201
IP Peak Pd 1000-1600 Westbound	201	5	0	0	0	2	1	0	209
PM Peak Pd 1600-1900 Eastbound	96	1	0	0	0	0	0	0	97
PM Peak Pd 1600-1900 Westbound	146	1	0	0	0	0	0	0	147
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	487	6	8	1	1	1	0	0	503
0600 - 2200 Westbound	430	4	4	2	1	1	1	0	444
AM Peak Pd 0700-1000 Eastbound	47	0	1	0	0	0	0	0	48
AM Peak Pd 0700-1000 Westbound	21	0	0	0	0	0	0	0	21
IP Peak Pd 1000-1600 Eastbound	243	6	3	1	1	0	0	0	253
IP Peak Pd 1000-1600 Westbound	194	3	3	2	1	0	0	0	204
PM Peak Pd 1600-1900 Eastbound	111	1	4	0	0	0	0	0	116
PM Peak Pd 1600-1900 Westbound	97	1	1	0	0	0	1	0	100
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	659	10	18	0	1	1	0	0	690
0600 - 2200 Westbound	561	10	2	0	0	2	1	0	576
AM Peak Pd 0700-1000 Eastbound	50	0	4	0	1	0	0	0	55
AM Peak Pd 0700-1000 Westbound	22	0	0	0	0	0	0	0	22
IP Peak Pd 1000-1600 Eastbound	272	5	13	0	1	0	0	0	291
IP Peak Pd 1000-1600 Westbound	200	5	2	0	0	1	1	0	209
PM Peak Pd 1600-1900 Eastbound	157	4	1	0	0	0	0	0	162
PM Peak Pd 1600-1900 Westbound	166	3	0	0	0	0	0	0	169

- 3.4.8 Table 10 shows that the lowest pedestrian flows were again observed in February 2021. The highest eastbound and westbound flows were observed in September 2021.
- 3.4.9 Table 11 below presents the results of the pedestrian volume data on the north side of Perth Road, adjacent to the Nethergate in Dundee during each of the four survey periods.

Table 11. Perth Road, Dundee, adjacent to Nethergate (north footpath) Pedestrian Volume Summary

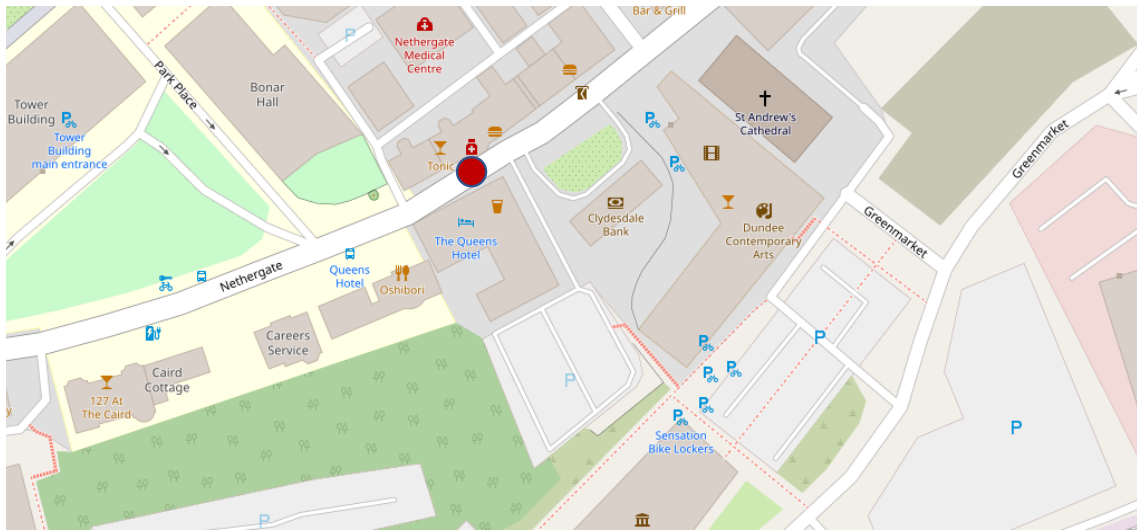


Site 5 Perth Road (Nethergate) North Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1173	20	15	3	1	5	1	0	1218
0600 - 2200 Westbound	1173	25	13	0	1	7	2	0	1222
AM Peak Pd 0700-1000 Eastbound	98	2	4	0	0	0	0	0	104
AM Peak Pd 0700-1000 Westbound	102	2	4	0	1	2	0	0	110
IP Peak Pd 1000-1600 Eastbound	662	17	9	2	0	1	0	0	692
IP Peak Pd 1000-1600 Westbound	610	18	8	0	0	1	0	0	638
PM Peak Pd 1600-1900 Eastbound	297	2	2	1	1	2	0	0	305
PM Peak Pd 1600-1900 Westbound	335	4	1	0	0	1	2	0	343
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	819	9	0	0	1	6	3	0	839
0600 - 2200 Westbound	740	9	0	0	1	6	6	0	763
AM Peak Pd 0700-1000 Eastbound	89	0	0	0	0	0	1	0	90
AM Peak Pd 0700-1000 Westbound	74	1	0	0	0	0	0	0	76
IP Peak Pd 1000-1600 Eastbound	482	6	0	0	1	2	2	0	493
IP Peak Pd 1000-1600 Westbound	456	4	0	0	0	3	5	0	469
PM Peak Pd 1600-1900 Eastbound	188	1	0	0	0	4	1	0	194
PM Peak Pd 1600-1900 Westbound	161	3	0	0	1	1	0	0	165
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1098	10	6	1	3	5	2	0	1125
0600 - 2200 Westbound	1038	6	2	1	4	6	2	0	1058
AM Peak Pd 0700-1000 Eastbound	129	2	3	0	1	0	0	0	134
AM Peak Pd 0700-1000 Westbound	96	0	0	0	0	1	0	0	98
IP Peak Pd 1000-1600 Eastbound	593	7	3	1	2	1	0	0	608
IP Peak Pd 1000-1600 Westbound	548	4	0	1	3	1	0	0	557
PM Peak Pd 1600-1900 Eastbound	213	1	0	0	0	2	1	0	217
PM Peak Pd 1600-1900 Westbound	235	2	1	0	0	2	1	0	242
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1237	23	7	1	2	3	1	0	1275
0600 - 2200 Westbound	1270	18	2	1	1	1	3	0	1296
AM Peak Pd 0700-1000 Eastbound	126	3	2	0	1	0	0	0	131
AM Peak Pd 0700-1000 Westbound	97	0	0	0	0	0	0	0	98
IP Peak Pd 1000-1600 Eastbound	672	15	5	1	1	2	1	0	696
IP Peak Pd 1000-1600 Westbound	649	11	2	1	1	0	1	0	665
PM Peak Pd 1600-1900 Eastbound	234	5	0	0	0	1	0	0	240
PM Peak Pd 1600-1900 Westbound	305	6	0	0	0	0	1	0	313

- 3.4.10 Table 11 shows that the lowest pedestrian volumes were observed in February 2021 when Scotland was under lockdown. The highest pedestrian volumes were observed in September 2021.
- 3.4.11 Table 12 below presents the results of the pedestrian volume data on the south side of Perth Road, adjacent to the Nethergate in Dundee during each of the four survey periods.

Table 12. Perth Road, Dundee, adjacent to Nethergate (south footpath) Pedestrian Volume Summary

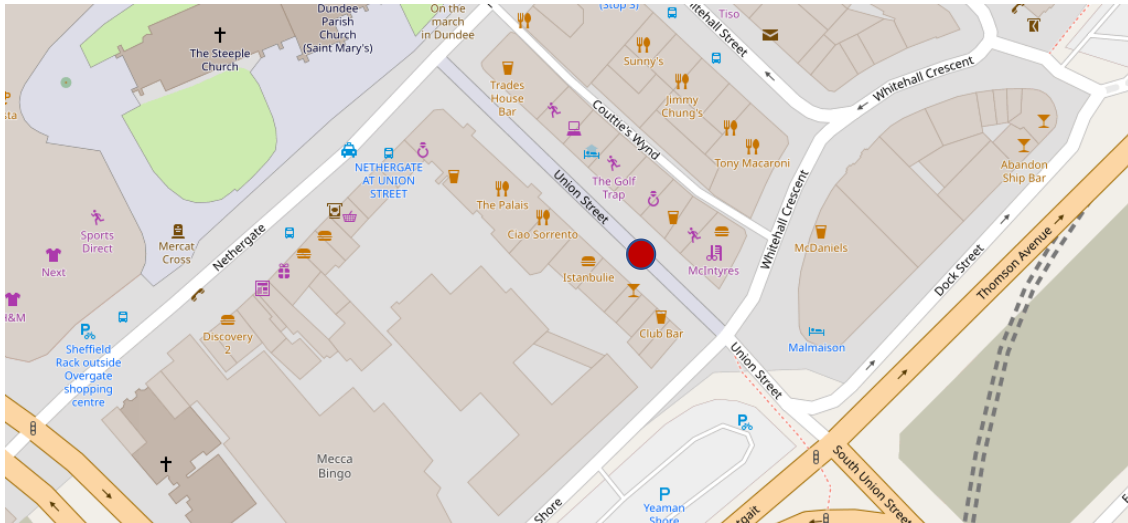


Site 6 Perth Road (Nethergate) South Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1132	20	2	1	0	4	1	0	1160
0600 - 2200 Westbound	991	12	1	2	0	5	2	0	1013
AM Peak Pd 0700-1000 Eastbound	61	0	1	0	0	0	0	0	62
AM Peak Pd 0700-1000 Westbound	51	1	0	0	0	1	0	0	53
IP Peak Pd 1000-1600 Eastbound	519	15	2	0	0	1	0	0	537
IP Peak Pd 1000-1600 Westbound	426	9	1	2	0	2	0	0	439
PM Peak Pd 1600-1900 Eastbound	323	3	0	0	0	2	1	0	328
PM Peak Pd 1600-1900 Westbound	343	2	0	1	0	1	1	0	348
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	487	4	1	1	0	3	3	0	500
0600 - 2200 Westbound	510	1	1	1	2	8	2	0	525
AM Peak Pd 0700-1000 Eastbound	43	0	0	0	0	0	0	0	43
AM Peak Pd 0700-1000 Westbound	36	0	0	0	0	0	1	0	37
IP Peak Pd 1000-1600 Eastbound	242	4	1	1	0	2	2	0	253
IP Peak Pd 1000-1600 Westbound	253	1	1	1	1	4	0	0	261
PM Peak Pd 1600-1900 Eastbound	139	0	0	0	0	0	0	0	140
PM Peak Pd 1600-1900 Westbound	158	0	0	0	1	2	1	0	161
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1137	5	7	1	1	2	1	0	1155
0600 - 2200 Westbound	985	11	2	1	2	3	1	0	1005
AM Peak Pd 0700-1000 Eastbound	67	0	1	0	0	0	0	0	69
AM Peak Pd 0700-1000 Westbound	45	0	0	0	0	1	0	0	46
IP Peak Pd 1000-1600 Eastbound	458	4	4	1	1	1	1	0	470
IP Peak Pd 1000-1600 Westbound	362	7	1	1	2	0	0	0	373
PM Peak Pd 1600-1900 Eastbound	285	1	0	0	0	0	0	0	288
PM Peak Pd 1600-1900 Westbound	297	3	1	0	0	1	1	0	303
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1262	16	10	3	2	1	2	0	1295
0600 - 2200 Westbound	1149	16	7	2	2	4	3	0	1182
AM Peak Pd 0700-1000 Eastbound	93	1	1	0	1	0	0	0	95
AM Peak Pd 0700-1000 Westbound	57	0	0	0	0	1	0	0	59
IP Peak Pd 1000-1600 Eastbound	525	11	8	2	1	1	1	0	549
IP Peak Pd 1000-1600 Westbound	446	9	2	1	2	1	2	0	464
PM Peak Pd 1600-1900 Eastbound	302	4	1	0	0	0	0	0	308
PM Peak Pd 1600-1900 Westbound	329	6	4	0	0	1	1	0	340

- 3.4.12 Table 12 shows that again the lowest pedestrian volumes were observed in February 2021. The highest were once again observed in September 2021 in both directions.
- 3.4.13 Table 13 below presents the results of the pedestrian volume data on the north side of Union Street in Dundee during each of the four survey periods.

Table 13. Union Street (north footpath), Dundee Pedestrian Volume Summary

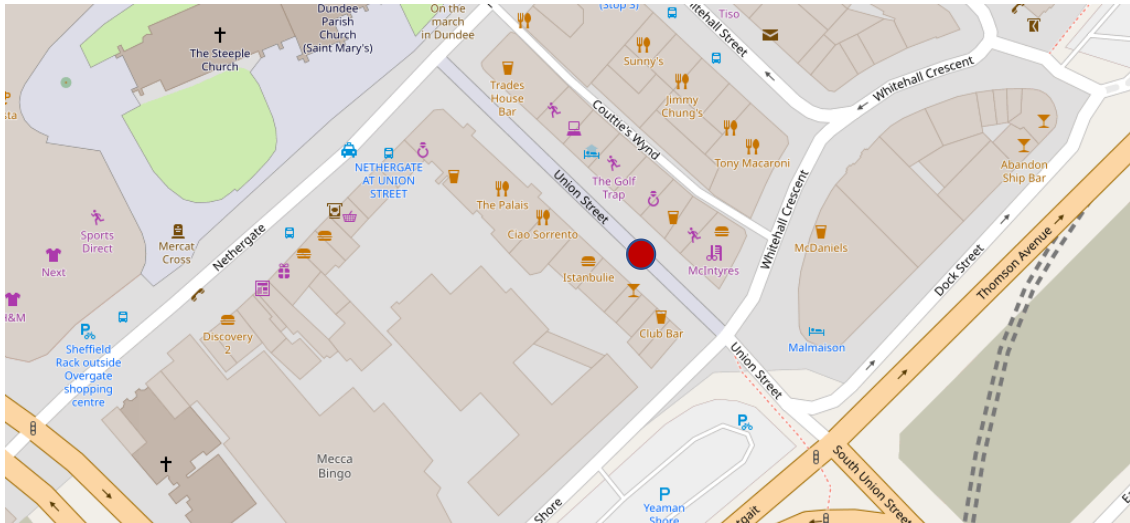


Site7 Union Street North Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1501	127	8	0	0	1	2	0	1639
0600 - 2200 Westbound	1107	74	9	0	1	2	0	0	1193
AM Peak Pd 0700-1000 Eastbound	106	2	1	0	0	0	0	0	109
AM Peak Pd 0700-1000 Westbound	62	2	2	0	0	0	0	0	65
IP Peak Pd 1000-1600 Eastbound	891	104	6	0	0	0	1	0	1002
IP Peak Pd 1000-1600 Westbound	591	40	6	0	1	0	0	0	637
PM Peak Pd 1600-1900 Eastbound	357	17	0	0	0	0	1	0	375
PM Peak Pd 1600-1900 Westbound	337	30	1	0	0	1	0	0	370
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	399	4	3	0	1	2	0	0	409
0600 - 2200 Westbound	405	10	2	0	0	2	0	0	419
AM Peak Pd 0700-1000 Eastbound	29	0	1	0	0	0	0	0	30
AM Peak Pd 0700-1000 Westbound	39	0	0	0	0	0	0	0	39
IP Peak Pd 1000-1600 Eastbound	233	3	1	0	1	1	0	0	239
IP Peak Pd 1000-1600 Westbound	228	7	1	0	0	1	0	0	239
PM Peak Pd 1600-1900 Eastbound	105	1	1	0	0	0	0	0	106
PM Peak Pd 1600-1900 Westbound	103	1	0	0	0	0	0	0	105
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	711	35	4	2	2	3	1	0	759
0600 - 2200 Westbound	860	37	5	4	1	3	1	0	911
AM Peak Pd 0700-1000 Eastbound	79	3	3	0	0	1	0	0	86
AM Peak Pd 0700-1000 Westbound	115	6	2	0	0	2	0	0	124
IP Peak Pd 1000-1600 Eastbound	394	22	2	2	2	2	1	0	424
IP Peak Pd 1000-1600 Westbound	470	26	2	3	1	1	1	0	503
PM Peak Pd 1600-1900 Eastbound	142	6	0	0	0	0	0	0	149
PM Peak Pd 1600-1900 Westbound	142	5	2	0	0	0	0	0	148
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1125	37	4	1	2	0	1	0	1170
0600 - 2200 Westbound	1319	56	2	1	2	2	0	0	1383
AM Peak Pd 0700-1000 Eastbound	87	0	0	0	0	0	0	0	87
AM Peak Pd 0700-1000 Westbound	84	1	1	0	0	0	0	0	86
IP Peak Pd 1000-1600 Eastbound	597	26	3	1	1	0	1	0	629
IP Peak Pd 1000-1600 Westbound	749	47	1	1	2	1	0	0	802
PM Peak Pd 1600-1900 Eastbound	255	9	1	0	0	0	0	0	265
PM Peak Pd 1600-1900 Westbound	277	8	0	0	0	1	0	0	286

- 3.4.14 Table 13 shows that again the lowest pedestrian volumes were recorded in February 2021. The highest eastbound volume was recorded in October 2020 and westbound in September 2021.
- 3.4.15 Table 14 below presents the results of the pedestrian volume data on the south side of Union Street in Dundee during each of the four survey periods.

Table 14. Union Street (south footpath), Dundee Pedestrian Volume Summary



Site8 Union Street South Kerbside (3 day Average Thur - Fri - Sat)

October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	718	41	3	0	0	1	1	0	764
0600 - 2200 Westbound	872	36	2	1	0	1	0	0	912
AM Peak Pd 0700-1000 Eastbound	54	2	0	0	0	0	0	0	56
AM Peak Pd 0700-1000 Westbound	47	0	0	0	0	0	0	0	47
IP Peak Pd 1000-1600 Eastbound	416	33	1	0	0	1	1	0	452
IP Peak Pd 1000-1600 Westbound	465	25	2	1	0	1	0	0	494
PM Peak Pd 1600-1900 Eastbound	167	5	0	0	0	0	0	0	171
PM Peak Pd 1600-1900 Westbound	243	11	0	0	0	0	0	0	254
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	563	9	1	0	1	4	0	0	577
0600 - 2200 Westbound	665	12	1	2	1	3	1	0	685
AM Peak Pd 0700-1000 Eastbound	52	0	0	0	0	0	0	0	53
AM Peak Pd 0700-1000 Westbound	66	2	0	0	0	0	0	0	68
IP Peak Pd 1000-1600 Eastbound	296	8	1	0	1	1	0	0	306
IP Peak Pd 1000-1600 Westbound	331	7	1	2	1	2	1	0	344
PM Peak Pd 1600-1900 Eastbound	171	1	0	0	0	1	0	0	173
PM Peak Pd 1600-1900 Westbound	202	3	0	0	0	1	0	0	207
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1001	37	6	2	1	0	0	0	1047
0600 - 2200 Westbound	1150	61	7	4	1	0	1	0	1223
AM Peak Pd 0700-1000 Eastbound	52	2	0	1	0	0	0	0	55
AM Peak Pd 0700-1000 Westbound	81	4	1	1	0	0	0	0	87
IP Peak Pd 1000-1600 Eastbound	491	25	5	1	1	0	0	0	523
IP Peak Pd 1000-1600 Westbound	631	44	5	3	1	0	1	0	684
PM Peak Pd 1600-1900 Eastbound	271	7	0	0	1	0	0	0	280
PM Peak Pd 1600-1900 Westbound	269	11	1	0	0	0	0	0	281
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1633	74	7	2	1	2	1	0	1720
0600 - 2200 Westbound	2006	58	12	2	2	1	1	0	2080
AM Peak Pd 0700-1000 Eastbound	119	5	1	0	0	0	0	0	125
AM Peak Pd 0700-1000 Westbound	144	9	2	0	0	0	0	0	156
IP Peak Pd 1000-1600 Eastbound	874	46	5	2	1	1	1	0	930
IP Peak Pd 1000-1600 Westbound	1041	34	4	2	1	0	1	0	1084
PM Peak Pd 1600-1900 Eastbound	372	19	1	0	0	0	0	0	393
PM Peak Pd 1600-1900 Westbound	468	8	3	0	0	0	0	0	480

3.4.16 Table 14 shows that the lowest volumes were again recorded in February 2021. The highest volumes in either direction were recorded in September 2021.

4. VEHICLE LINK COUNT & SPEED REVIEW

4.1 Overview

4.1.1 Summary tables below present the results of the link count and speed surveys in the Dundee Council area (seven sites located in Dundee and three sites located in Broughty Ferry).

4.1.2 For each survey, the summary information is as follows:

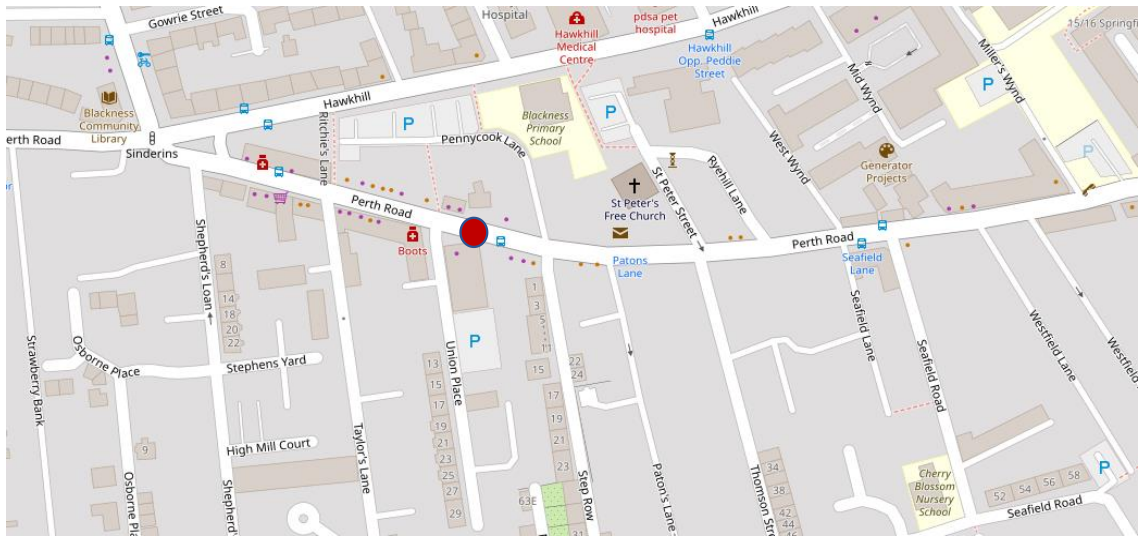
- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed at, or below, which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

4.2 Results of Link Counts and Speed Surveys

Dundee

- 4.2.1 Table 15 below presents a comparison of the results of the link flow and speed data on the Perth Road (Step Row) in Dundee.

Table 15. Perth Road (Step Row) (Eastbound)



Site 1 Perth Rd (Step Row) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2573	2757	2681	2851	3127	2553	2000	2798	2649
Mean Speed (mph)	18.0	17.6	17.4	17.4	16.2	17.3	19.1	17.3	17.6
85%ile Speed (mph)	22.5	22.2	21.5	21.8	20.5	22.0	23.4	21.7	22.0
No. Vehicles > 20 MPH Limit	732	704	606	693	534	622	866	654	680
% Vehicles > 20 MPH Limit	28.4%	25.5%	22.6%	24.3%	17.1%	24.4%	43.3%	23.6%	26.5%
No. Vehicles > 35 MPH	11	7	7	8	5	6	6	8	7
% Vehicles > 35 MPH	0.4%	0.3%	0.3%	0.3%	0.2%	0.2%	0.3%	0.3%	0.3%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2268	2325	2414	2524	2782	2397	1667	2463	2340
Mean Speed (mph)	18.5	18.5	18.5	18.2	17.5	17.8	19.7	18.2	18.4
85%ile Speed (mph)	23.1	22.9	23.0	22.9	21.9	22.3	24.4	22.8	22.9
No. Vehicles > 20 MPH Limit	784	793	856	820	710	662	756	793	769
% Vehicles > 20 MPH Limit	34.6%	34.1%	35.5%	32.5%	25.5%	27.6%	45.4%	32.4%	33.6%
No. Vehicles > 35 MPH	2	6	5	2	7	5	8	4	5
% Vehicles > 35 MPH	0.1%	0.3%	0.2%	0.1%	0.3%	0.2%	0.5%	0.2%	0.2%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 30 Apr 21	Saturday 01 May 21	Sunday 02 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2829	3382	3524	0	3816	3463	2439	3388	3242
Mean Speed (mph)	16.7	17.5	17.9	-	17.2	16.5	17.6	17.3	17.2
85%ile Speed (mph)	20.6	21.7	22.3	-	21.9	20.9	21.8	21.6	21.5
No. Vehicles > 20 MPH Limit	516	806	1016	0	900	667	613	810	753
% Vehicles > 20 MPH Limit	18.2%	23.8%	28.8%	-	23.6%	19.3%	25.1%	23.9%	23.2%
No. Vehicles > 35 MPH	12	17	13	0	30	23	12	18	18
% Vehicles > 35 MPH	0.4%	0.5%	0.4%	-	0.8%	0.7%	0.5%	0.5%	0.6%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3237	3441	3406	3590	3926	3418	2563	3520	3369
Mean Speed (mph)	18.1	17.4	17.3	16.9	15.9	17.0	18.9	17.1	17.4
85%ile Speed (mph)	22.3	21.5	21.6	21.0	20.3	21.3	23.2	21.3	21.6
No. Vehicles > 20 MPH Limit	920	822	846	748	638	759	896	795	804
% Vehicles > 20 MPH Limit	28.4%	23.9%	24.8%	20.8%	16.3%	22.2%	35.0%	22.6%	23.9%
No. Vehicles > 35 MPH	20	8	15	19	20	12	22	16	17
% Vehicles > 35 MPH	0.6%	0.2%	0.4%	0.5%	0.5%	0.4%	0.9%	0.5%	0.5%

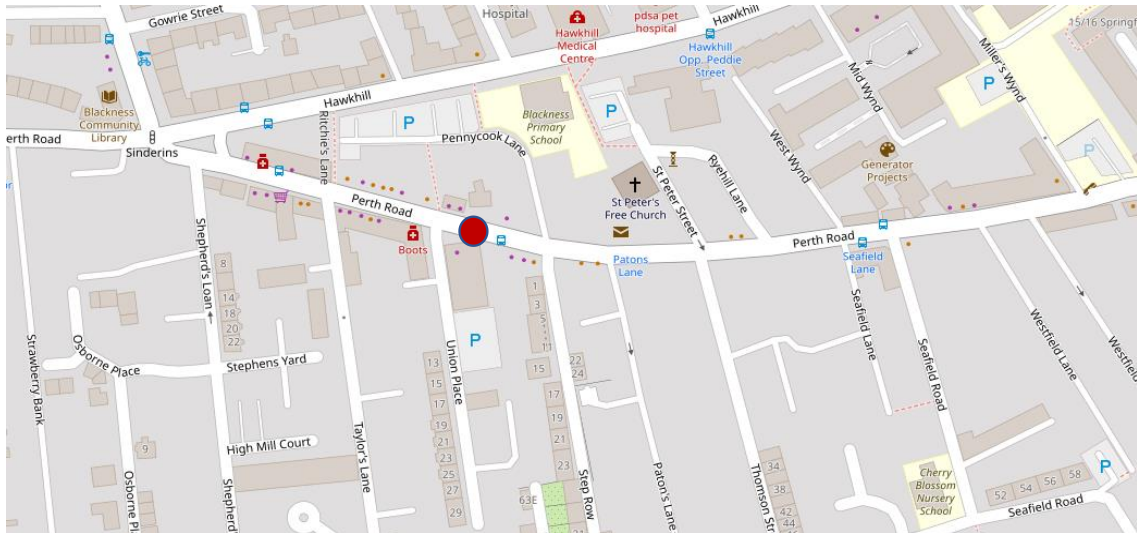
Counter Damaged on Thursday 6th May 2021

4.2.2 Table 15 indicates that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 18.2 mph. The highest flows were observed in September 2021, when the mean speed was lowest at 17.1mph.

4.2.3 The proportion of vehicles exceeding 20mph was slightly higher in May 2021 compared with October 2020, but was lowest in September 2021.

4.2.4 Table 16 presents the results for Perth Road (Step Row) Westbound in Dundee.

Table 16. Perth Road (Step Row) (Westbound)



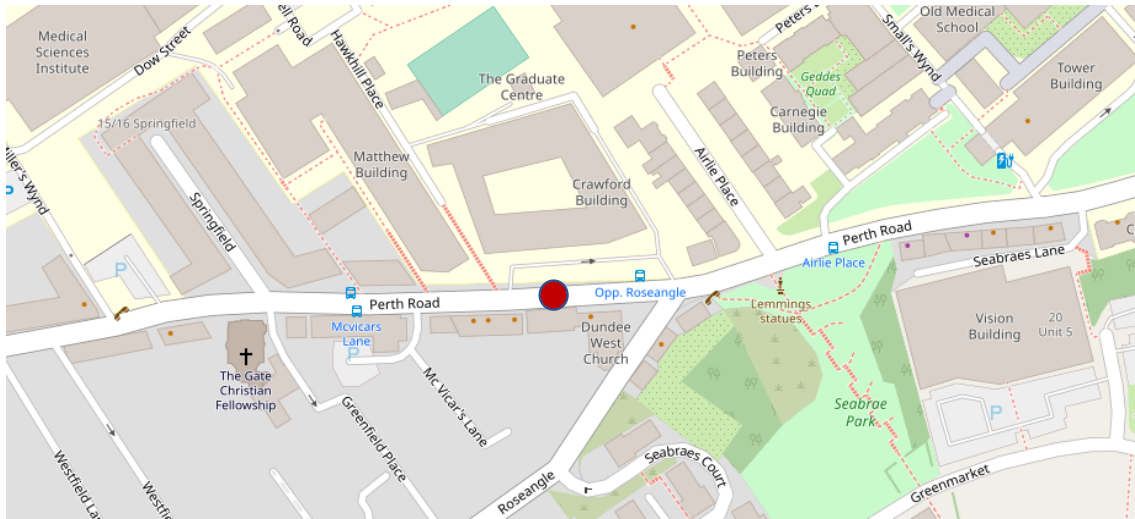
Site 1 Perth Rd (Step Row) Westbound

October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2372	2479	2483	2667	2870	2427	1854	2574	2450
Mean Speed (mph)	18.2	17.9	17.4	17.7	16.4	17.5	19.3	17.5	17.8
85%ile Speed (mph)	23.4	23.2	22.2	22.6	21.3	22.4	23.9	22.5	22.7
No. Vehicles > 20 MPH Limit	820	801	691	757	631	694	776	740	739
% Vehicles > 20 MPH Limit	34.6%	32.3%	27.8%	28.4%	22.0%	28.6%	41.9%	29.0%	30.8%
No. Vehicles > 35 MPH	12	6	11	18	17	8	19	13	13
% Vehicles > 35 MPH	0.5%	0.2%	0.4%	0.7%	0.6%	0.3%	1.0%	0.5%	0.5%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2160	2158	2268	2299	2352	2072	1551	2247	2123
Mean Speed (mph)	18.5	19.3	19.2	18.5	17.6	17.9	20.0	18.6	18.7
85%ile Speed (mph)	23.2	24.1	24.3	23.5	22.7	23.2	25.1	23.6	23.7
No. Vehicles > 20 MPH Limit	794	894	930	842	689	627	737	830	788
% Vehicles > 20 MPH Limit	36.8%	41.4%	41.0%	36.6%	29.3%	30.3%	47.5%	37.0%	37.6%
No. Vehicles > 35 MPH	16	25	27	14	11	9	16	19	17
% Vehicles > 35 MPH	0.7%	1.2%	1.2%	0.6%	0.5%	0.4%	1.0%	0.8%	0.8%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 30 Apr 21	Saturday 01 May 21	Sunday 02 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2548	3015	3078	0	3410	3198	2306	2410	2508
Mean Speed (mph)	16.4	16.9	17.3	-	16.3	16.0	17.5	16.7	16.7
85%ile Speed (mph)	20.8	21.9	22.5	-	21.6	20.7	21.9	21.7	21.6
No. Vehicles > 20 MPH Limit	485	755	850	0	786	576	597	575	578
% Vehicles > 20 MPH Limit	19.0%	25.0%	27.6%	-	23.0%	18.0%	25.9%	23.9%	23.1%
No. Vehicles > 35 MPH	1	5	7	0	10	9	7	5	6
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	-	0.3%	0.3%	0.3%	0.2%	0.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2854	3081	3011	3251	3673	3230	2256	3174	3051
Mean Speed (mph)	17.6	17.0	16.9	16.7	15.6	17.0	19.1	16.8	17.1
85%ile Speed (mph)	22.7	21.9	21.8	21.9	20.5	22.0	24.4	21.8	22.2
No. Vehicles > 20 MPH Limit	876	795	725	788	654	866	952	768	808
% Vehicles > 20 MPH Limit	30.7%	25.8%	24.1%	24.2%	17.8%	26.8%	42.2%	24.2%	26.5%
No. Vehicles > 35 MPH	10	12	8	3	13	11	16	9	10
% Vehicles > 35 MPH	0.4%	0.4%	0.3%	0.1%	0.4%	0.3%	0.7%	0.3%	0.3%

- 4.2.5 Table 16 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Again, the 5-day mean speed was highest at 18.6 mph. Flows were around 30% higher in September 2021, when compared against May 2021, when the 5 day mean speed was 16.8 mph.
- 4.2.6 The proportion of vehicles exceeding 20mph was lower in May 2021 compared with October 2020. The proportion of vehicles exceeding the 20mph speed limit in February 2021 was higher still. There was a slight increase in vehicles exceeding 20mph in September 2021 when compared against May 2021.

4.2.7 Table 17 presents the results for Perth Road (Art School) Eastbound in Dundee.

Table 17. Perth Road (Art School) (Eastbound)



Site 2 Perth Rd (Art School) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1639	1810	1749	1824	1971	1775	1330	1799	1728
Mean Speed (mph)	24.0	24.0	24.1	24.1	24.0	24.5	25.1	24.0	24.3
85%ile Speed (mph)	28.8	28.7	29.1	28.7	28.9	29.4	30.3	28.8	29.1
No. Vehicles > 20 MPH Limit	1314	1474	1410	1479	1577	1444	1116	1451	1402
% Vehicles > 20 MPH Limit	80.2%	81.4%	80.6%	81.1%	80.0%	81.4%	83.9%	80.7%	81.2%
No. Vehicles > 35 MPH	48	31	37	29	46	47	54	38	42
% Vehicles > 35 MPH	2.9%	1.7%	2.1%	1.6%	2.3%	2.6%	4.1%	2.1%	2.4%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1399	1307	1459	1504	1676	1352	1020	1469	1388
Mean Speed (mph)	24.7	24.4	24.4	25.0	24.7	24.6	25.5	24.6	24.8
85%ile Speed (mph)	29.6	29.5	29.2	29.9	29.5	29.6	31.3	29.5	29.8
No. Vehicles > 20 MPH Limit	1154	1056	1187	1260	1392	1119	869	1210	1148
% Vehicles > 20 MPH Limit	82.5%	80.8%	81.4%	83.8%	83.1%	82.8%	85.2%	82.3%	82.8%
No. Vehicles > 35 MPH	44	43	23	45	49	35	44	41	40
% Vehicles > 35 MPH	3.1%	3.3%	1.6%	3.0%	2.9%	2.6%	4.3%	2.8%	2.9%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1623	1962	1981	2082	2321	1949	1437	1994	1908
Mean Speed (mph)	24.4	24.6	24.4	24.4	25.0	25.6	25.6	24.6	24.9
85%ile Speed (mph)	29.4	29.3	29.2	29.3	29.8	30.4	30.1	29.4	29.6
No. Vehicles > 20 MPH Limit	1332	1638	1678	1752	2015	1734	1288	1683	1634
% Vehicles > 20 MPH Limit	82.1%	83.5%	84.7%	84.1%	86.8%	89.0%	89.6%	84.4%	85.6%
No. Vehicles > 35 MPH	44	53	41	47	76	52	43	52	51
% Vehicles > 35 MPH	2.7%	2.7%	2.1%	2.3%	3.3%	2.7%	3.0%	2.6%	2.7%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1868	2040	2042	2189	2366	2079	0	2101	2097
Mean Speed (mph)	24.4	23.9	23.9	23.7	23.3	24.5	-	23.8	24.0
85%ile Speed (mph)	29.2	28.8	28.9	28.5	28.2	29.4	-	28.7	28.8
No. Vehicles > 20 MPH Limit	1571	1614	1652	1742	1834	1741	0	1683	1692
% Vehicles > 20 MPH Limit	84.1%	79.1%	80.9%	79.6%	77.5%	83.7%	-	80.1%	80.7%
No. Vehicles > 35 MPH	34	33	32	40	40	42	0	36	37
% Vehicles > 35 MPH	1.8%	1.6%	1.6%	1.8%	1.7%	2.0%	-	1.7%	1.8%

No data available for Sunday 12 September 2021

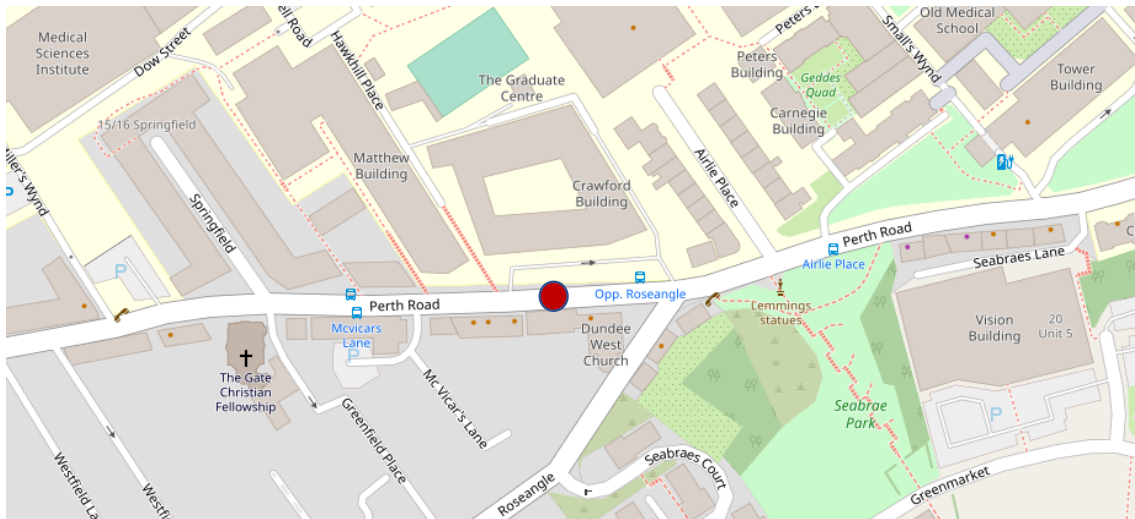
4.2.8 Table 17 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, the mean speed being 24.6 mph in both February and

May 2021. The highest flow was observed in September 2021, when the mean speed was lowest at 23.8 mph.

- 4.2.9 The proportion of vehicles exceeding 20mph was slightly higher in May 2021 compared with October 2020 and September 2021.

4.2.10 Table 18 presents the results for Perth Road (Art School) Westbound in Dundee.

Table 18. Perth Road (Art School) (Westbound)



Site 2 Perth Rd (Art School) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1894	2110	2079	2111	2316	1988	1497	2102	1999
Mean Speed (mph)	24.7	24.3	24.3	24.6	24.2	24.9	25.3	24.4	24.6
85%ile Speed (mph)	30.0	30.0	29.7	29.5	29.8	30.0	30.5	29.8	29.9
No. Vehicles > 20 MPH Limit	1577	1701	1694	1768	1868	1671	1266	1722	1649
% Vehicles > 20 MPH Limit	83.3%	80.6%	81.5%	83.8%	80.7%	84.1%	84.6%	82.0%	82.6%
No. Vehicles > 35 MPH	55	57	46	63	54	57	69	55	57
% Vehicles > 35 MPH	2.9%	2.7%	2.2%	3.0%	2.3%	2.9%	4.6%	2.6%	2.9%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1607	1505	1621	1682	1729	1436	1203	1629	1540
Mean Speed (mph)	25.5	24.8	24.8	25.1	24.9	25.6	26.3	25.0	25.3
85%ile Speed (mph)	30.9	30.0	30.3	30.8	30.6	31.0	31.7	30.5	30.8
No. Vehicles > 20 MPH Limit	1383	1271	1351	1420	1435	1218	1063	1372	1306
% Vehicles > 20 MPH Limit	86.1%	84.5%	83.3%	84.4%	83.0%	84.8%	88.4%	84.3%	84.9%
No. Vehicles > 35 MPH	65	46	41	50	55	70	75	51	57
% Vehicles > 35 MPH	4.0%	3.1%	2.5%	3.0%	3.2%	4.9%	6.2%	3.2%	3.7%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2097	2285	2375	2440	2728	2251	1709	2385	2269
Mean Speed (mph)	25.1	25.4	25.0	24.8	25.3	26.1	25.8	25.1	25.4
85%ile Speed (mph)	30.4	30.4	30.0	29.8	30.2	31.1	30.6	30.2	30.4
No. Vehicles > 20 MPH Limit	1759	1989	2033	2058	2368	2035	1539	2041	1969
% Vehicles > 20 MPH Limit	83.9%	87.0%	85.6%	84.3%	86.8%	90.4%	90.1%	85.6%	86.8%
No. Vehicles > 35 MPH	70	62	67	65	70	89	73	67	71
% Vehicles > 35 MPH	3.3%	2.7%	2.8%	2.7%	2.6%	4.0%	4.3%	2.8%	3.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2172	2405	2410	2469	2754	2475	0	2442	2448
Mean Speed (mph)	24.8	24.3	24.5	24.5	23.8	25.0	-	24.4	24.5
85%ile Speed (mph)	30.1	29.5	29.7	29.3	28.7	30.0	-	29.5	29.6
No. Vehicles > 20 MPH Limit	1835	1960	2004	2084	2186	2122	0	2014	2032
% Vehicles > 20 MPH Limit	84.5%	81.5%	83.2%	84.4%	79.4%	85.7%	-	82.5%	83.0%
No. Vehicles > 35 MPH	57	73	55	42	51	75	0	56	59
% Vehicles > 35 MPH	2.6%	3.0%	2.3%	1.7%	1.9%	3.0%	-	2.3%	2.4%

No data available for Sunday 12 September 2021

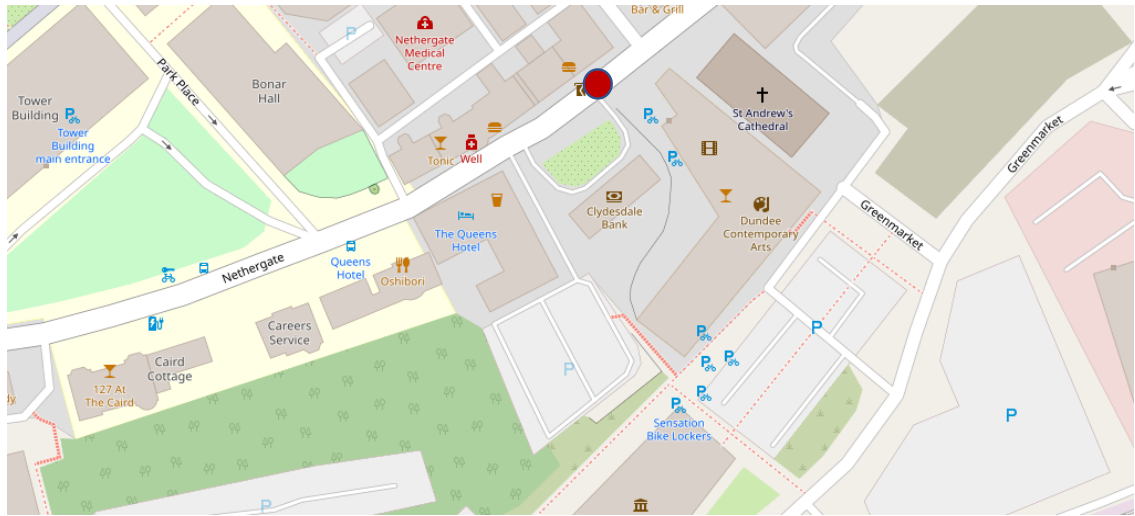
4.2.11 Table 18 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic was greatest in May 2021 at

25.1mph. The highest flow was observed in September 2021, the mean speed being the same as October 2020.

4.2.12 The proportion of vehicles exceeding 20mph was highest in May 2021 compared with October 2020, February 2021 and September 2021.

4.2.13 Table 19 presents the results for Perth Road (Nethergate) Eastbound in Dundee.

Table 19. Perth Road (Nethergate) (Eastbound)



Site 3 Perth Rd (Nethergate) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2283	2303	2379	2441	2684	2227	1712	2418	2290
Mean Speed (mph)	17.8	17.6	17.7	17.4	17.0	17.8	19.5	17.5	17.8
85%ile Speed (mph)	23.3	23.1	23.0	23.0	22.6	23.2	25.3	23.0	23.4
No. Vehicles > 20 MPH Limit	841	806	835	824	798	788	841	821	819
% Vehicles > 20 MPH Limit	36.8%	35.0%	35.1%	33.8%	29.7%	35.4%	49.1%	34.1%	36.4%
No. Vehicles > 35 MPH	4	2	5	2	5	5	9	4	5
% Vehicles > 35 MPH	0.2%	0.1%	0.2%	0.1%	0.2%	0.2%	0.5%	0.1%	0.2%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1720	1792	1934	1983	1981	1550	1319	1882	1754
Mean Speed (mph)	20.6	20.5	20.3	20.6	19.6	20.9	22.0	20.3	20.6
85%ile Speed (mph)	25.4	25.4	25.1	25.2	24.8	26.0	27.1	25.2	25.6
No. Vehicles > 20 MPH Limit	895	904	958	1029	881	848	859	933	911
% Vehicles > 20 MPH Limit	52.0%	50.4%	49.5%	51.9%	44.5%	54.7%	65.1%	49.7%	52.6%
No. Vehicles > 35 MPH	8	11	6	6	6	7	13	7	8
% Vehicles > 35 MPH	0.5%	0.6%	0.3%	0.3%	0.3%	0.5%	1.0%	0.4%	0.5%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2311	2729	2875	2776	2909	2816	1711	2720	2590
Mean Speed (mph)	18.0	18.0	17.2	18.1	17.2	17.4	19.4	17.7	17.9
85%ile Speed (mph)	22.7	22.1	21.6	22.5	21.4	22.1	24.0	22.1	22.3
No. Vehicles > 20 MPH Limit	664	797	713	827	667	707	704	734	726
% Vehicles > 20 MPH Limit	28.7%	29.2%	24.8%	29.8%	22.9%	25.1%	41.1%	27.0%	28.0%
No. Vehicles > 35 MPH	3	2	3	8	2	5	11	4	5
% Vehicles > 35 MPH	0.1%	0.1%	0.1%	0.3%	0.1%	0.2%	0.6%	0.1%	0.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2504	2598	2590	2545	3135	2697	1864	2674	2562
Mean Speed (mph)	18.5	18.2	18.1	17.8	17.3	17.8	19.1	18.0	18.1
85%ile Speed (mph)	22.9	22.4	22.4	22.2	21.5	22.1	23.6	22.3	22.4
No. Vehicles > 20 MPH Limit	858	833	768	725	763	763	775	789	784
% Vehicles > 20 MPH Limit	34.3%	32.1%	29.7%	28.5%	24.3%	28.3%	41.6%	29.5%	30.6%
No. Vehicles > 35 MPH	0	4	6	8	3	7	6	4	5
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	0.3%	0.1%	0.3%	0.3%	0.2%	0.2%

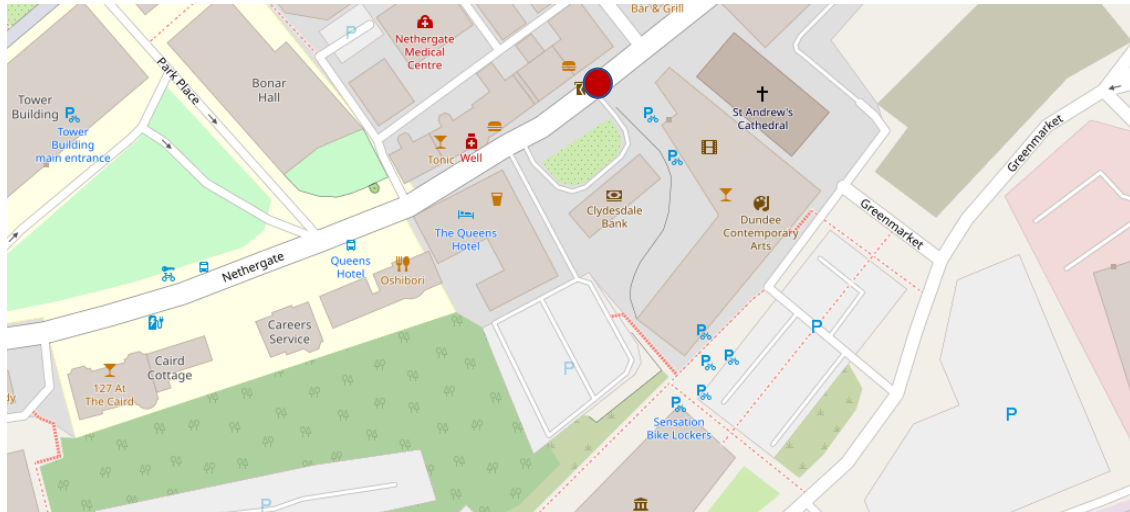
Vehicles parked on tubes on Thursday 9th September 2021 between approx 16:00 & 17:10

4.2.14 Table 19 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown, but the mean speed was 20.3mph. Flows in September 2021 were lower than May 2021.

4.2.15 The proportion of vehicles exceeding 20mph in May 2021 was 49.7%, greater than October 2020, May 2021 and September 2021 (34.1%, 27.0% and 29.5% respectively).

4.2.16 Table 20 presents the results for Perth Road (Nethergate) Westbound in Dundee.

Table 20. Perth Road (Nethergate) (Westbound)



Site 3 Perth Rd (Nethergate) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2314	2435	2456	2542	2828	2513	1775	2515	2409
Mean Speed (mph)	17.1	17.2	16.6	16.7	16.0	16.3	17.5	16.7	16.8
85%ile Speed (mph)	23.5	23.4	22.8	22.8	22.1	22.1	23.5	22.9	22.9
No. Vehicles > 20 MPH Limit	834	870	764	824	752	692	655	809	770
% Vehicles > 20 MPH Limit	36.0%	35.7%	31.1%	32.4%	26.6%	27.5%	36.9%	32.4%	32.3%
No. Vehicles > 35 MPH	3	4	2	1	1	2	3	2	2
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.2%	0.1%	0.1%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1819	1739	1956	1986	2217	1675	1395	1943	1827
Mean Speed (mph)	20.2	19.7	19.4	20.0	19.0	20.4	21.4	19.7	20.0
85%ile Speed (mph)	25.3	24.7	24.5	25.2	24.0	25.6	26.5	24.7	25.1
No. Vehicles > 20 MPH Limit	924	767	842	961	838	829	828	866	856
% Vehicles > 20 MPH Limit	50.8%	44.1%	43.0%	48.4%	37.8%	49.5%	59.4%	44.8%	47.6%
No. Vehicles > 35 MPH	5	7	5	3	2	6	13	4	6
% Vehicles > 35 MPH	0.3%	0.4%	0.3%	0.2%	0.1%	0.4%	0.9%	0.2%	0.3%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2622	2873	2865	2938	3096	3089	1775	2879	2751
Mean Speed (mph)	18.2	18.3	17.6	18.2	17.5	17.4	18.7	18.0	18.0
85%ile Speed (mph)	22.9	23.0	22.3	22.7	22.0	22.1	23.6	22.6	22.7
No. Vehicles > 20 MPH Limit	820	954	786	951	776	808	624	857	817
% Vehicles > 20 MPH Limit	31.3%	33.2%	27.4%	32.4%	25.1%	26.2%	35.2%	29.8%	29.7%
No. Vehicles > 35 MPH	4	9	4	5	8	2	8	6	6
% Vehicles > 35 MPH	0.2%	0.3%	0.1%	0.2%	0.3%	0.1%	0.5%	0.2%	0.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2565	2682	2691	2690	3280	3038	1924	2782	2696
Mean Speed (mph)	18.7	18.5	18.4	18.1	17.6	17.6	18.8	18.3	18.2
85%ile Speed (mph)	23.2	22.7	23.0	22.6	22.0	22.1	23.4	22.7	22.7
No. Vehicles > 20 MPH Limit	911	966	861	861	878	877	733	895	870
% Vehicles > 20 MPH Limit	35.5%	36.0%	32.0%	32.0%	26.8%	28.9%	38.1%	32.2%	32.3%
No. Vehicles > 35 MPH	5	6	5	6	5	3	4	5	5
% Vehicles > 35 MPH	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.2%	0.2%

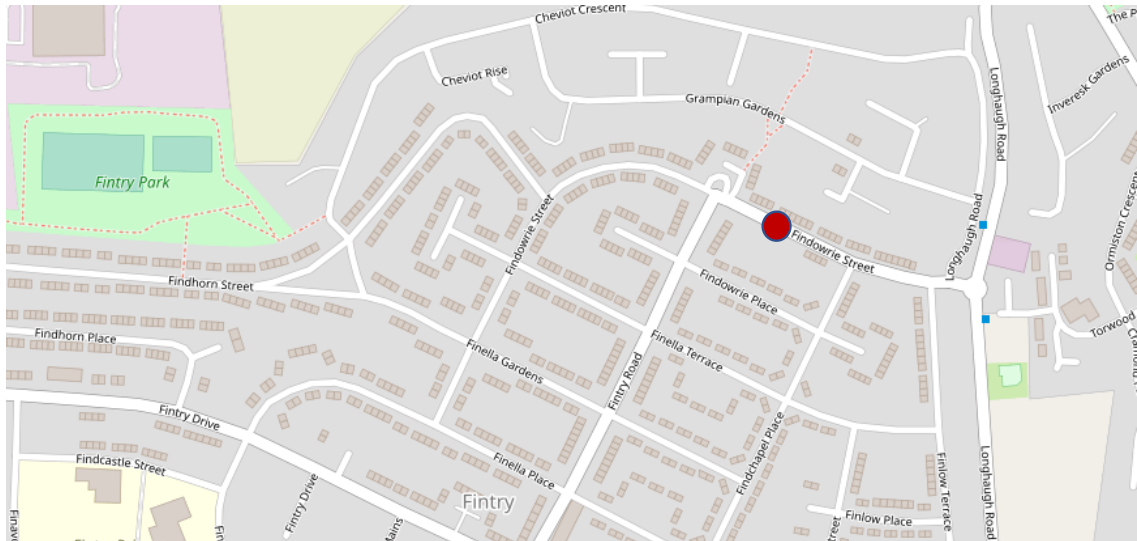
Vehicles parked on tubes on Thursday 9th September 2021 between approx 16:00 & 17:10

4.2.17 Table 20 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 19.7mph. The flow in May 2021 was higher than that observed in September 2021.

4.2.18 The proportion of vehicles exceeding 20mph in May 2021 was 44.8%, greater than October 2020, May 2021 and September 2021 (32.4%, 29.8% and 32.2% respectively).

4.2.19 Table 21 presents the results for Findowrie Street Eastbound in Dundee.

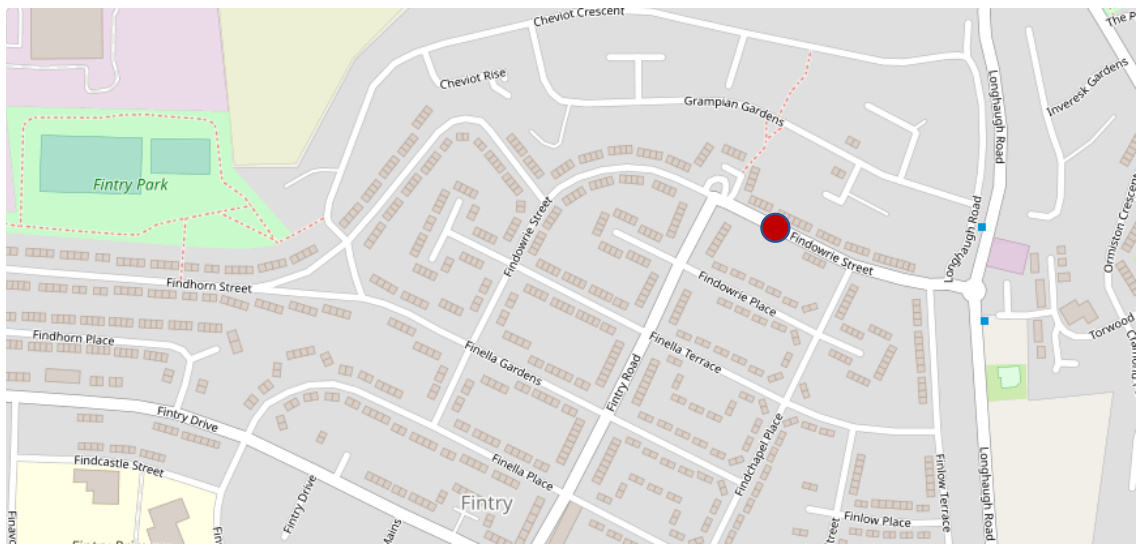
Table 21. Findowrie Street (Eastbound)



Site 4 Findowrie St (Findchapel PI) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1068	1092	1149	1178	858	898	826	1069	1010
Mean Speed (mph)	20.5	20.1	18.7	19.0	19.6	19.9	20.2	19.6	19.7
85%ile Speed (mph)	24.9	24.2	23.4	23.2	24.0	24.7	25.3	23.9	24.2
No. Vehicles > 20 MPH Limit	595	568	451	501	396	454	439	502	486
% Vehicles > 20 MPH Limit	55.7%	52.0%	39.3%	42.5%	46.2%	50.6%	53.1%	47.1%	48.5%
No. Vehicles > 35 MPH	1	2	3	4	1	1	3	2	2
% Vehicles > 35 MPH	0.1%	0.2%	0.3%	0.3%	0.1%	0.1%	0.4%	0.2%	0.2%
February 2021	Monday 01 Mar 21	Tuesday 02 Mar 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 26 Feb 21	Saturday 27 Feb 21	Sunday 28 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	328	999	1185	1118	1027	1099	872	931	947
Mean Speed (mph)	22.5	21.8	21.5	22.1	22.3	22.4	21.8	22.0	22.1
85%ile Speed (mph)	26.2	25.8	25.7	26.1	26.8	26.7	26.6	26.1	26.3
No. Vehicles > 20 MPH Limit	248	677	783	809	716	788	577	647	657
% Vehicles > 20 MPH Limit	75.6%	67.8%	66.1%	72.4%	69.7%	71.7%	66.2%	70.3%	69.9%
No. Vehicles > 35 MPH	0	1	0	0	1	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 17 May 21	Tuesday 11 May 21	Wednesday 12 May 21	Thursday 13 May 21	Friday 14 May 21	Saturday 15 May 21	Sunday 16 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1193	1205	1176	1266	1262	1061	905	1220	1153
Mean Speed (mph)	21.4	22.4	22.1	20.4	20.5	21.0	20.8	21.4	21.2
85%ile Speed (mph)	25.6	26.2	26.3	24.4	24.6	25.2	25.1	25.4	25.3
No. Vehicles > 20 MPH Limit	763	876	825	661	677	623	510	760	705
% Vehicles > 20 MPH Limit	64.0%	72.7%	70.2%	52.2%	53.6%	58.7%	56.4%	62.3%	61.2%
No. Vehicles > 35 MPH	8	5	6	5	4	8	5	6	6
% Vehicles > 35 MPH	0.7%	0.4%	0.5%	0.4%	0.3%	0.8%	0.6%	0.5%	0.5%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	587	1155	1194	1180	1238	998	888	1071	1034
Mean Speed (mph)	21.0	21.3	21.3	21.1	21.2	21.5	21.4	21.2	21.3
85%ile Speed (mph)	25.6	25.3	25.5	24.8	25.3	25.9	25.7	25.3	25.4
No. Vehicles > 20 MPH Limit	325	733	747	719	767	634	548	658	639
% Vehicles > 20 MPH Limit	55.4%	63.5%	62.6%	60.9%	62.0%	63.5%	61.7%	61.5%	61.8%
No. Vehicles > 35 MPH	3	3	9	6	4	6	4	5	5
% Vehicles > 35 MPH	0.5%	0.3%	0.8%	0.5%	0.3%	0.6%	0.5%	0.5%	0.5%

- 4.2.20 Table 21 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 22.0mph. The flow in September 2021 was lower than May 2021.
- 4.2.21 The proportion of vehicles exceeding 20mph was higher in February 2021 (70.3%), when compared to October 2020, May 2021 and September 2021 (47.1%, 62.3% and 61.5% respectively).
- 4.2.22 Table 22 presents the results for Findowrie Street westbound in Dundee.

Table 22. Findowrie Street (Westbound)



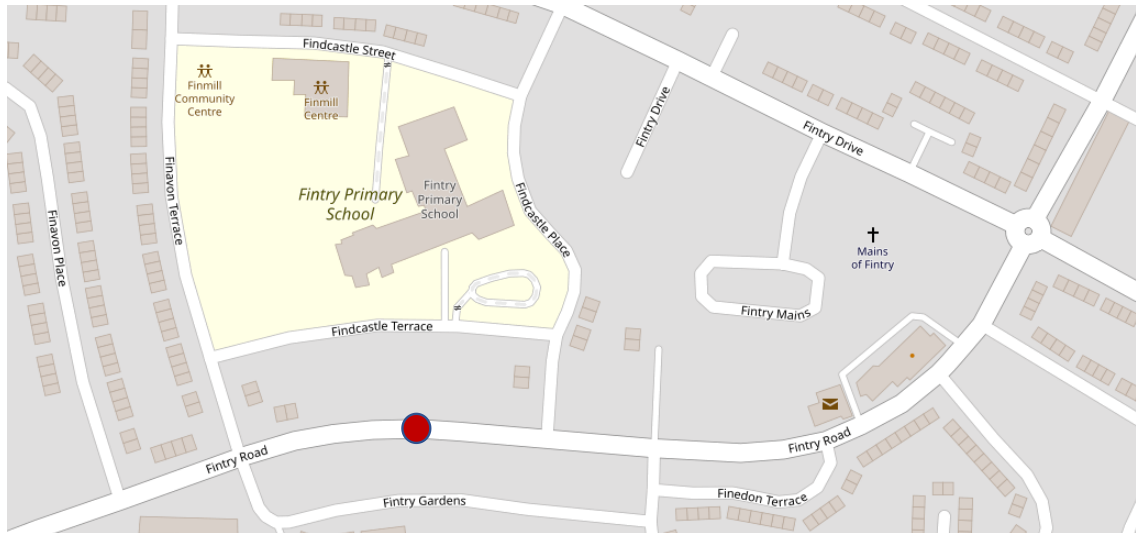
Site 4 Findowrie St (Findchapel PI) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1054	1204	1257	1216	1029	949	927	1152	1091
Mean Speed (mph)	20.6	20.7	20.8	20.1	20.1	21.0	21.2	20.5	20.6
85%ile Speed (mph)	25.5	25.2	25.9	25.0	24.7	26.3	26.2	25.3	25.5
No. Vehicles > 20 MPH Limit	594	703	717	624	531	540	550	634	608
% Vehicles > 20 MPH Limit	56.4%	58.4%	57.0%	51.3%	51.6%	56.9%	59.3%	54.9%	55.8%
No. Vehicles > 35 MPH	3	4	7	6	0	8	9	4	5
% Vehicles > 35 MPH	0.3%	0.3%	0.6%	0.5%	0.0%	0.8%	1.0%	0.3%	0.5%
February 2021	Monday 01 Mar 21	Tuesday 02 Mar 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 26 Feb 21	Saturday 27 Feb 21	Sunday 28 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	453	943	1280	1122	1100	1169	895	980	995
Mean Speed (mph)	24.1	22.1	22.6	23.0	23.3	23.2	22.7	23.0	23.0
85%ile Speed (mph)	28.5	27.1	27.1	27.3	27.8	27.8	27.2	27.6	27.5
No. Vehicles > 20 MPH Limit	383	653	920	876	866	925	646	740	753
% Vehicles > 20 MPH Limit	84.5%	69.2%	71.9%	78.1%	78.7%	79.1%	72.2%	76.5%	76.3%
No. Vehicles > 35 MPH	0	1	0	2	0	0	1	1	1
% Vehicles > 35 MPH	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.1%	0.1%	0.1%
May 2021	Monday 17 May 21	Tuesday 11 May 21	Wednesday 12 May 21	Thursday 13 May 21	Friday 14 May 21	Saturday 15 May 21	Sunday 16 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1383	1324	1336	1298	1368	1086	982	1342	1254
Mean Speed (mph)	20.8	21.6	21.8	20.9	20.6	21.4	21.0	21.1	21.2
85%ile Speed (mph)	25.8	26.5	26.7	25.6	24.9	26.4	25.3	25.9	25.9
No. Vehicles > 20 MPH Limit	775	817	904	724	734	651	559	791	738
% Vehicles > 20 MPH Limit	56.0%	61.7%	67.7%	55.8%	53.7%	59.9%	56.9%	58.9%	58.8%
No. Vehicles > 35 MPH	7	20	13	11	9	11	10	12	12
% Vehicles > 35 MPH	0.5%	1.5%	1.0%	0.8%	0.7%	1.0%	1.0%	0.9%	0.9%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	663	1242	1238	1197	1293	1054	919	1127	1087
Mean Speed (mph)	21.2	22.0	21.6	21.3	21.4	21.8	21.7	21.5	21.6
85%ile Speed (mph)	25.7	25.9	25.8	25.7	25.5	26.2	26.9	25.7	26.0
No. Vehicles > 20 MPH Limit	420	877	816	742	813	712	592	734	710
% Vehicles > 20 MPH Limit	63.3%	70.6%	65.9%	62.0%	62.9%	67.6%	64.4%	65.1%	65.4%
No. Vehicles > 35 MPH	3	12	10	8	8	9	10	8	9
% Vehicles > 35 MPH	0.5%	1.0%	0.8%	0.7%	0.6%	0.9%	1.1%	0.7%	0.8%

4.2.23 Table 22 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 23.0mph. The flows in September 2021 were lower than May 2021.

4.2.24 The proportion of vehicles exceeding 20mph was higher in February 2021 (76.5%), when compared to October 2020, May 2021 and September 2021 (54.9%, 58.9% and 65.1% respectively).

4.2.25 Table 23 presents the results for Fintry Road (Eastbound) in Dundee.

Table 23. Fintry Road (Eastbound)

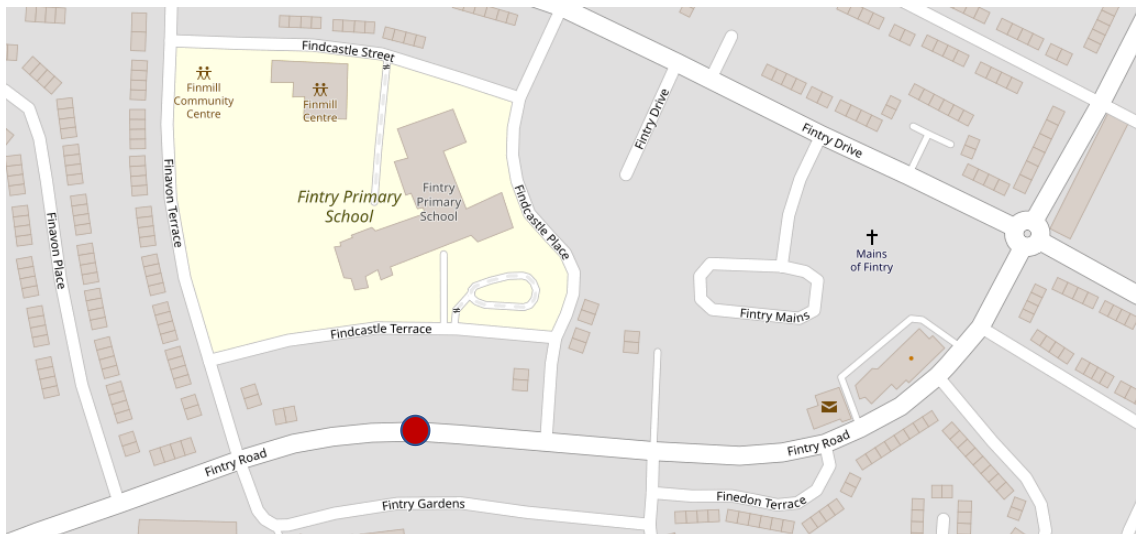


Site 5 Fintry Rd (Finavon Terr) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1119	1135	1244	1294	1291	1056	872	1217	1144
Mean Speed (mph)	21.0	21.1	14.7	15.5	21.4	21.3	21.9	18.7	19.6
85%ile Speed (mph)	24.9	25.0	18.0	18.8	25.4	25.6	26.0	22.4	23.4
No. Vehicles > 20 MPH Limit	682	702	68	136	841	646	593	486	524
% Vehicles > 20 MPH Limit	60.9%	61.9%	5.5%	10.5%	65.1%	61.2%	68.0%	40.8%	47.6%
No. Vehicles > 35 MPH	5	1	2	2	9	4	6	4	4
% Vehicles > 35 MPH	0.4%	0.1%	0.2%	0.2%	0.7%	0.4%	0.7%	0.3%	0.4%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1114	1095	1145	1218	1225	985	833	1159	1088
Mean Speed (mph)	26.3	26.0	26.3	26.8	26.5	26.6	27.6	26.4	26.6
85%ile Speed (mph)	31.2	30.4	31.3	31.3	31.4	31.4	32.2	31.1	31.3
No. Vehicles > 20 MPH Limit	1006	986	1025	1135	1116	900	774	1054	992
% Vehicles > 20 MPH Limit	90.3%	90.0%	89.5%	93.2%	91.1%	91.4%	92.9%	90.8%	91.2%
No. Vehicles > 35 MPH	1	6	6	3	4	0	6	4	4
% Vehicles > 35 MPH	0.1%	0.5%	0.5%	0.2%	0.3%	0.0%	0.7%	0.3%	0.3%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1021	1219	1289	1173	1379	1120	885	1216	1155
Mean Speed (mph)	24.9	25.4	25.1	25.2	25.2	25.3	25.7	25.2	25.3
85%ile Speed (mph)	29.5	29.6	29.7	29.9	29.8	30.2	30.3	29.7	29.9
No. Vehicles > 20 MPH Limit	866	1090	1132	1024	1218	979	777	1066	1012
% Vehicles > 20 MPH Limit	84.8%	89.4%	87.8%	87.3%	88.3%	87.4%	87.8%	87.7%	87.6%
No. Vehicles > 35 MPH	21	15	29	26	33	18	25	25	24
% Vehicles > 35 MPH	2.1%	1.2%	2.2%	2.2%	2.4%	1.6%	2.8%	2.0%	2.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1244	1210	1269	1262	1433	1204	971	1284	1228
Mean Speed (mph)	25.8	26.0	26.0	25.5	25.5	26.2	26.5	25.8	25.9
85%ile Speed (mph)	30.4	30.5	30.5	30.3	30.3	31.1	31.1	30.4	30.6
No. Vehicles > 20 MPH Limit	1116	1082	1143	1096	1280	1079	884	1143	1097
% Vehicles > 20 MPH Limit	89.7%	89.4%	90.1%	86.8%	89.3%	89.6%	91.0%	89.1%	89.4%
No. Vehicles > 35 MPH	39	46	27	33	37	37	39	36	37
% Vehicles > 35 MPH	3.1%	3.8%	2.1%	2.6%	2.6%	3.1%	4.0%	2.8%	3.0%

- 4.2.26 Table 23 shows that the 5-day average traffic flows were slightly lower in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 26.4mph. The highest flow was observed in September 2021, when the mean speed was 25.8mph.
- 4.2.27 The proportion of vehicles exceeding 20mph was highest in February 2021 (90.8%), slightly lower in May 2021 at 87.7%, and lowest in October 2020 (40.8%), before rising again in September 2021 (89.1%).

4.2.29 Table 24 presents the results for Fintry Road (Westbound) in Dundee.

Table 24. Fintry Road (Westbound)



Site 5 Fintry Rd (Finavon Terr) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1455	1512	1563	1570	1683	1349	1152	1557	1469
Mean Speed (mph)	21.6	21.5	16.3	16.2	21.6	22.1	22.2	19.4	20.2
85%ile Speed (mph)	25.7	25.6	20.5	20.9	25.4	26.2	26.4	23.6	24.4
No. Vehicles > 20 MPH Limit	993	995	285	308	1124	952	819	741	782
% Vehicles > 20 MPH Limit	68.2%	65.8%	18.2%	19.6%	66.8%	70.6%	71.1%	47.7%	54.3%
No. Vehicles > 35 MPH	6	4	2	2	6	7	7	4	5
% Vehicles > 35 MPH	0.4%	0.3%	0.1%	0.1%	0.4%	0.5%	0.6%	0.3%	0.3%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1324	1338	1431	1431	1390	1163	974	1383	1293
Mean Speed (mph)	26.2	25.6	25.8	26.6	26.3	26.9	27.3	26.1	26.4
85%ile Speed (mph)	30.7	30.4	30.4	31.0	31.0	31.2	32.0	30.7	31.0
No. Vehicles > 20 MPH Limit	1201	1182	1277	1334	1267	1089	897	1252	1178
% Vehicles > 20 MPH Limit	90.7%	88.3%	89.2%	93.2%	91.2%	93.6%	92.1%	90.5%	91.2%
No. Vehicles > 35 MPH	4	2	1	5	3	5	4	3	3
% Vehicles > 35 MPH	0.3%	0.1%	0.1%	0.3%	0.2%	0.4%	0.4%	0.2%	0.3%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1326	1544	1537	1541	1798	1433	1123	1549	1472
Mean Speed (mph)	25.8	26.1	25.8	26.1	25.7	26.2	26.4	25.9	26.0
85%ile Speed (mph)	30.5	30.8	30.4	30.7	30.5	30.8	31.3	30.6	30.7
No. Vehicles > 20 MPH Limit	1171	1397	1375	1391	1575	1299	1012	1382	1317
% Vehicles > 20 MPH Limit	88.3%	90.5%	89.5%	90.3%	87.6%	90.6%	90.1%	89.2%	89.5%
No. Vehicles > 35 MPH	30	51	48	56	48	54	46	47	48
% Vehicles > 35 MPH	2.3%	3.3%	3.1%	3.6%	2.7%	3.8%	4.1%	3.0%	3.2%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1480	1541	1563	1482	1802	1557	1284	1574	1530
Mean Speed (mph)	26.9	27.2	27.3	26.5	26.6	27.5	27.6	26.9	27.1
85%ile Speed (mph)	31.7	31.7	32.0	31.7	31.4	32.0	32.7	31.7	31.9
No. Vehicles > 20 MPH Limit	1355	1444	1466	1349	1646	1451	1192	1452	1415
% Vehicles > 20 MPH Limit	91.6%	93.7%	93.8%	91.0%	91.3%	93.2%	92.8%	92.3%	92.5%
No. Vehicles > 35 MPH	69	82	91	66	78	88	99	77	82
% Vehicles > 35 MPH	4.7%	5.3%	5.8%	4.5%	4.3%	5.7%	7.7%	4.9%	5.4%

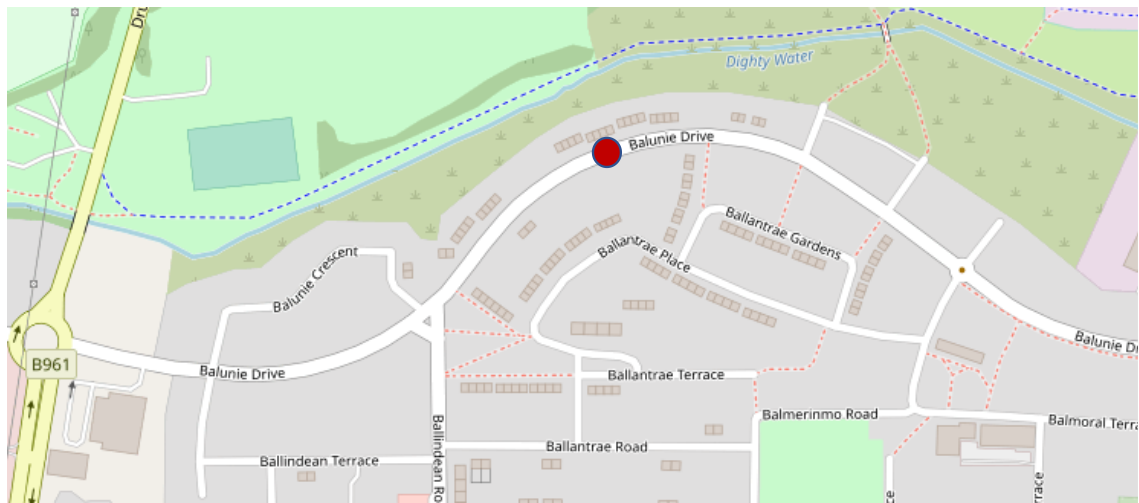
4.2.30 Table 24 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown when the mean speed was 26.1mph. The flows in the

other 3 months were very similar, whilst the highest speed was recorder in September 2021 (26.9 mph).

4.2.31 The proportion of vehicles exceeding 20mph was highest in September 2021 (92.3%), then lower in February 2021 at 90.5%, lower again in May 2021 at 89.2%, and lowest in October 2020 at 47.7%.

4.2.32 Table 25 presents the results for Balunie Drive Eastbound in Dundee.

Table 25. Balunie Drive (Eastbound)



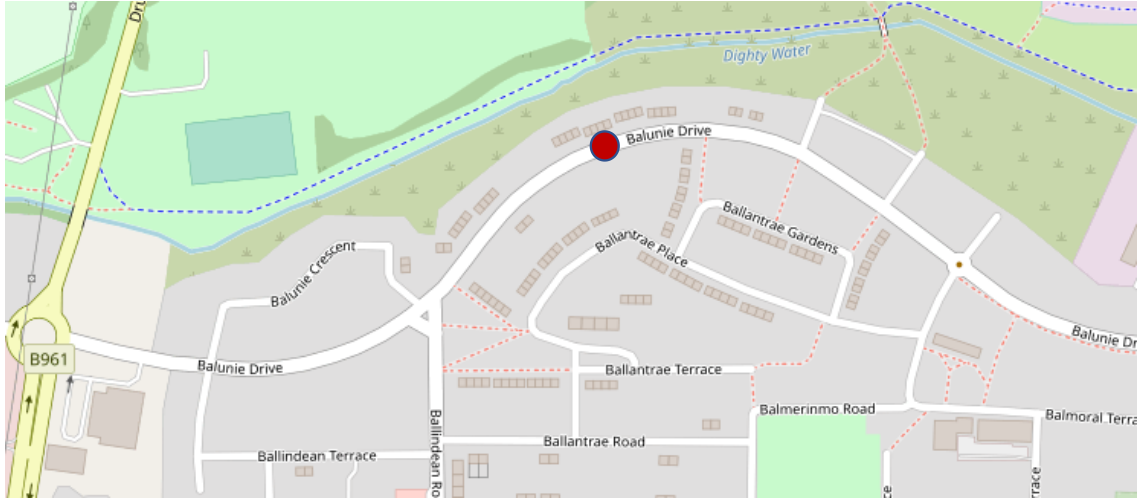
Site 7 Balunie Dr Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1566	1525	2297	2133	2122	1986	774	1929	1772
Mean Speed (mph)	24.3	24.6	24.5	24.2	24.3	25.2	25.2	24.4	24.6
85 th ile Speed (mph)	28.6	28.9	28.7	28.5	28.7	29.6	29.8	28.7	29.0
No. Vehicles > 20 MPH Limit	1336	1331	1988	1793	1828	1757	692	1655	1532
% Vehicles > 20 MPH Limit	85.3%	87.3%	86.5%	84.1%	86.1%	88.5%	89.4%	85.9%	86.7%
No. Vehicles > 35 MPH	17	14	19	16	24	32	23	18	21
% Vehicles > 35 MPH	1.1%	0.9%	0.8%	0.8%	1.1%	1.6%	3.0%	0.9%	1.2%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2218	1805	1495	2395	1195	589	1544	1822	1606
Mean Speed (mph)	25.1	24.4	24.5	25.1	24.1	24.3	25.2	24.6	24.7
85 th ile Speed (mph)	29.1	28.4	28.5	29.1	28.1	28.7	29.2	28.6	28.7
No. Vehicles > 20 MPH Limit	2032	1578	1316	2158	1035	514	1399	1624	1433
% Vehicles > 20 MPH Limit	91.6%	87.4%	88.0%	90.1%	86.6%	87.3%	90.6%	88.8%	88.8%
No. Vehicles > 35 MPH	25	16	14	33	4	4	17	18	16
% Vehicles > 35 MPH	1.1%	0.9%	0.9%	1.4%	0.3%	0.7%	1.1%	1.0%	1.0%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2224	2460	2912	2846	3093	2268	1891	2707	2528
Mean Speed (mph)	24.7	24.9	24.8	25.0	24.6	25.0	24.6	24.8	24.8
85 th ile Speed (mph)	28.9	28.8	29.0	28.9	28.7	29.0	28.8	28.9	28.9
No. Vehicles > 20 MPH Limit	1937	2195	2585	2583	2725	2018	1649	2405	2242
% Vehicles > 20 MPH Limit	87.1%	89.2%	88.8%	90.8%	88.1%	89.0%	87.2%	88.8%	88.7%
No. Vehicles > 35 MPH	24	19	29	37	35	29	19	29	27
% Vehicles > 35 MPH	1.1%	0.8%	1.0%	1.3%	1.1%	1.3%	1.0%	1.1%	1.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3010	3162	3296	3173	3436	2677	2143	3215	2985
Mean Speed (mph)	25.3	25.7	25.7	25.2	25.1	25.3	25.6	25.4	25.4
85 th ile Speed (mph)	29.4	29.6	29.6	29.3	29.2	29.6	30.2	29.4	29.6
No. Vehicles > 20 MPH Limit	2699	2895	3037	2858	3062	2385	1953	2910	2698
% Vehicles > 20 MPH Limit	89.7%	91.6%	92.1%	90.1%	89.1%	89.1%	91.1%	90.5%	90.4%
No. Vehicles > 35 MPH	40	52	54	50	45	42	56	48	48
% Vehicles > 35 MPH	1.3%	1.6%	1.6%	1.6%	1.3%	1.6%	2.6%	1.5%	1.6%

4.2.33 Table 25 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was 26.4mph. The highest flow was observed in September 2021 when the mean speed was also highest at 25.4mph.

4.2.34 The proportion of vehicles exceeding 20mph in February and May 2021 was 88.8%, higher than October 2020 at 85.9%. The highest proportion was in September 2021 (90.5%).

4.2.35 Table 26 presents the results for Balunie Drive(Westbound) in Dundee.

Table 26. Balunie Drive (Westbound)



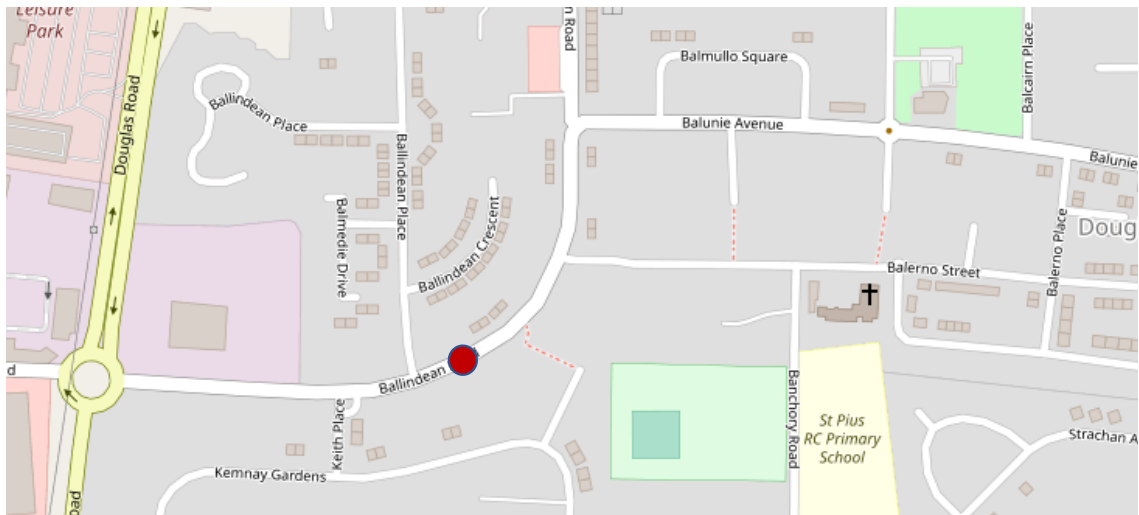
Site 7 Balunie Dr Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1716	1825	2606	2401	2517	1555	872	2213	1927
Mean Speed (mph)	25.9	26.1	26.4	26.2	26.1	27.3	27.2	26.1	26.5
85%ile Speed (mph)	30.2	30.4	30.7	30.5	30.5	31.9	31.7	30.5	30.8
No. Vehicles > 20 MPH Limit	1571	1691	2454	2243	2329	1483	830	2058	1800
% Vehicles > 20 MPH Limit	91.6%	92.7%	94.2%	93.4%	92.5%	95.4%	95.2%	92.9%	93.6%
No. Vehicles > 35 MPH	44	42	57	59	48	93	29	50	53
% Vehicles > 35 MPH	2.6%	2.3%	2.2%	2.5%	1.9%	6.0%	3.3%	2.3%	2.8%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2477	2056	1530	2711	1375	692	1605	2030	1778
Mean Speed (mph)	26.1	25.9	26.3	26.2	25.5	26.4	26.8	26.0	26.2
85%ile Speed (mph)	30.3	29.8	30.4	30.4	29.6	30.5	31.2	30.1	30.3
No. Vehicles > 20 MPH Limit	2323	1928	1442	2546	1268	657	1508	1901	1667
% Vehicles > 20 MPH Limit	93.8%	93.8%	94.2%	93.9%	92.2%	94.9%	94.0%	93.6%	93.8%
No. Vehicles > 35 MPH	46	41	43	69	16	20	68	43	43
% Vehicles > 35 MPH	1.9%	2.0%	2.8%	2.5%	1.2%	2.9%	4.2%	2.1%	2.4%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2631	2900	3558	3444	3769	2532	2103	3260	2991
Mean Speed (mph)	25.8	25.7	25.8	25.6	25.6	26.3	25.6	25.7	25.8
85%ile Speed (mph)	30.1	29.9	29.9	29.8	29.8	30.7	30.3	29.9	30.1
No. Vehicles > 20 MPH Limit	2419	2645	3344	3170	3446	2362	1851	3005	2748
% Vehicles > 20 MPH Limit	91.9%	91.2%	94.0%	92.0%	91.4%	93.3%	88.0%	92.2%	91.9%
No. Vehicles > 35 MPH	57	63	58	55	75	79	61	62	64
% Vehicles > 35 MPH	2.2%	2.2%	1.6%	1.6%	2.0%	3.1%	2.9%	1.9%	2.1%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2600	2677	2741	2634	2880	2400	1894	2706	2547
Mean Speed (mph)	24.2	25.0	24.6	24.7	24.3	24.7	24.7	24.6	24.6
85%ile Speed (mph)	28.1	29.0	28.4	28.5	28.1	28.7	28.6	28.4	28.5
No. Vehicles > 20 MPH Limit	2219	2397	2428	2354	2491	2116	1690	2378	2242
% Vehicles > 20 MPH Limit	85.3%	89.5%	88.6%	89.4%	86.5%	88.2%	89.2%	87.9%	88.0%
No. Vehicles > 35 MPH	15	19	26	12	25	32	22	19	22
% Vehicles > 35 MPH	0.6%	0.7%	0.9%	0.5%	0.9%	1.3%	1.2%	0.7%	0.8%

4.2.36 Table 26 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 26.0mph, similar to October 2020 (26.1mph). The flow in May 2021 was higher than September 2021.

4.2.37 The proportion of vehicles exceeding 20mph in February 2021 was 93.6%, similar to October 2020 (92.9%). The lowest proportion was observed in September 2021 (87.9%).

4.2.38 Table 27 presents the results for Ballindean Road (Eastbound) in Dundee.

Table 27. Ballindean Road (Eastbound)

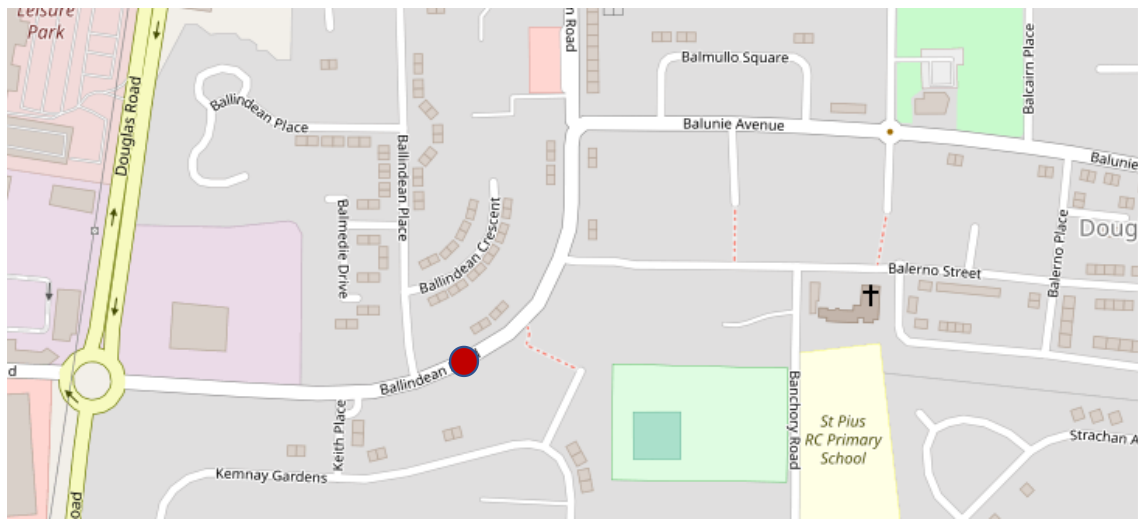


Site 8 Ballindean Rd (Ballindean PI) Eastbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3066	3218	3207	877	3533	3471	2488	2780	2837
Mean Speed (mph)	24.1	23.6	23.4	24.4	24.0	24.1	24.8	23.9	24.1
85%ile Speed (mph)	28.3	27.9	27.8	28.8	28.2	28.5	29.1	28.2	28.4
No. Vehicles > 20 MPH Limit	2561	2620	2602	737	2997	2872	2189	2303	2368
% Vehicles > 20 MPH Limit	83.5%	81.4%	81.1%	84.0%	84.8%	82.7%	88.0%	83.0%	83.7%
No. Vehicles > 35 MPH	24	18	16	13	25	19	27	19	20
% Vehicles > 35 MPH	0.8%	0.6%	0.5%	1.5%	0.7%	0.5%	1.1%	0.7%	0.7%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2750	2777	2847	2990	3264	2523	2194	2926	2764
Mean Speed (mph)	24.6	24.4	24.1	24.6	24.0	24.8	25.4	24.3	24.6
85%ile Speed (mph)	28.5	28.3	28.2	28.7	28.2	29.1	29.5	28.4	28.6
No. Vehicles > 20 MPH Limit	2426	2414	2357	2597	2746	2231	2003	2508	2396
% Vehicles > 20 MPH Limit	88.2%	86.9%	82.8%	86.9%	84.1%	88.4%	91.3%	85.8%	86.9%
No. Vehicles > 35 MPH	2	1	1	5	1	1	0	2	2
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2858	3382	3445	3546	3824	3074	2492	3411	3232
Mean Speed (mph)	24.1	24.0	23.9	23.8	23.9	24.3	24.8	23.9	24.1
85%ile Speed (mph)	28.3	28.3	27.9	27.7	28.1	28.2	28.6	28.1	28.2
No. Vehicles > 20 MPH Limit	2420	2847	2890	2983	3187	2652	2222	2865	2743
% Vehicles > 20 MPH Limit	84.7%	84.2%	83.9%	84.1%	83.3%	86.3%	89.2%	84.0%	84.9%
No. Vehicles > 35 MPH	11	20	17	15	30	18	16	19	18
% Vehicles > 35 MPH	0.4%	0.6%	0.5%	0.4%	0.8%	0.6%	0.6%	0.5%	0.6%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3137	0	0	0	3586	3056	2474	3362	3063
Mean Speed (mph)	24.1	-	-	-	23.7	24.6	25.1	23.9	24.4
85%ile Speed (mph)	28.1	-	-	-	27.6	28.6	29.0	27.9	28.3
No. Vehicles > 20 MPH Limit	2690	0	0	0	2999	2677	2246	2845	2653
% Vehicles > 20 MPH Limit	85.8%	-	-	-	83.6%	87.6%	90.8%	84.6%	86.6%
No. Vehicles > 35 MPH	24	0	0	0	19	30	27	22	25
% Vehicles > 35 MPH	0.8%	-	-	-	0.5%	1.0%	1.1%	0.6%	0.8%

Counter damaged between 1100 on Tuesday 7 September 2021 until 1140 on Thursday 9th September 2021

- 4.2.39 Table 27 shows that the 5-day average traffic flows were lowest in October 2020 and higher in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 24.3mph in February 2021.
- 4.2.40 The average proportion of vehicles exceeding 20mph was highest in February 2021 (85.8%), similar to October 2020, May 2021 and September 2021 (83.0%, 84.0% and 84.6% respectively).
- 4.2.41 Table 28 presents the results for Ballindean Road (Westbound) in Dundee.

Table 28. Ballindean Road (Westbound)



Site 8 Ballindean Rd (Ballindean PI) Westbound									
October 2020	Monday 26 Oct 20	Tuesday 27 Oct 20	Wednesday 21 Oct 20	Thursday 22 Oct 20	Friday 23 Oct 20	Saturday 24 Oct 20	Sunday 25 Oct 20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2806	2992	2982	1020	3289	2639	2253	2618	2569
Mean Speed (mph)	23.0	22.3	22.4	23.5	22.5	22.8	23.5	22.7	22.9
85%ile Speed (mph)	27.2	26.8	26.7	28.3	26.8	27.3	27.7	27.2	27.3
No. Vehicles > 20 MPH Limit	2154	2139	2177	802	2400	1983	1821	1934	1925
% Vehicles > 20 MPH Limit	76.8%	71.5%	73.0%	78.6%	73.0%	75.1%	80.8%	74.6%	75.5%
No. Vehicles > 35 MPH	25	11	8	9	19	20	26	14	17
% Vehicles > 35 MPH	0.9%	0.4%	0.3%	0.9%	0.6%	0.8%	1.2%	0.6%	0.7%
February 2021	Monday 22 Feb 21	Tuesday 23 Feb 21	Wednesday 24 Feb 21	Thursday 25 Feb 21	Friday 19 Feb 21	Saturday 20 Feb 21	Sunday 21 Feb 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2469	2490	2581	2691	2789	2272	1967	2604	2466
Mean Speed (mph)	23.5	23.4	23.4	23.4	23.1	23.9	24.2	23.4	23.6
85%ile Speed (mph)	27.8	27.6	27.5	27.6	27.3	28.4	28.3	27.6	27.8
No. Vehicles > 20 MPH Limit	1972	2015	2047	2161	2162	1836	1656	2071	1978
% Vehicles > 20 MPH Limit	79.9%	80.9%	79.3%	80.3%	77.5%	80.8%	84.2%	79.6%	80.4%
No. Vehicles > 35 MPH	0	2	2	0	4	2	2	2	2
% Vehicles > 35 MPH	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
May 2021	Monday 03 May 21	Tuesday 04 May 21	Wednesday 05 May 21	Thursday 06 May 21	Friday 07 May 21	Saturday 08 May 21	Sunday 09 May 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2827	3236	3304	3360	3572	2931	2310	3260	3077
Mean Speed (mph)	23.3	23.0	22.9	23.0	22.5	22.8	23.5	22.9	23.0
85%ile Speed (mph)	27.3	27.0	26.9	26.7	26.6	26.7	27.5	26.9	27.0
No. Vehicles > 20 MPH Limit	2296	2492	2573	2663	2673	2280	1905	2539	2412
% Vehicles > 20 MPH Limit	81.2%	77.0%	77.9%	79.3%	74.8%	77.8%	82.5%	77.9%	78.4%
No. Vehicles > 35 MPH	12	24	12	14	10	5	14	14	13
% Vehicles > 35 MPH	0.4%	0.7%	0.4%	0.4%	0.3%	0.2%	0.6%	0.4%	0.4%
September 2021	Monday 06 Sep 21	Tuesday 07 Sep 21	Wednesday 08 Sep 21	Thursday 09 Sep 21	Friday 10 Sep 21	Saturday 11 Sep 21	Sunday 12 Sep 21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2955	0	0	0	3362	2772	2253	3159	2836
Mean Speed (mph)	23.8	-	-	-	23.5	24.4	25.0	23.7	24.2
85%ile Speed (mph)	28.0	-	-	-	27.7	28.6	29.1	27.9	28.4
No. Vehicles > 20 MPH Limit	2449	0	0	0	2722	2371	2010	2586	2388
% Vehicles > 20 MPH Limit	82.9%	-	-	-	81.0%	85.5%	89.2%	81.9%	84.2%
No. Vehicles > 35 MPH	24	0	0	0	25	32	39	25	30
% Vehicles > 35 MPH	0.8%	-	-	-	0.7%	1.2%	1.7%	0.8%	1.1%

4.2.42 Table 28 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however has a similar vehicle flow in October 2020. The mean speed was highest at 23.7mph in September 2021.

4.2.43 The average proportion of vehicles exceeding 20mph was highest in September 2021 (81.9%), similar to October 2020, February 2021 and May 2021 (74.6%, 79.6% and 77.9% respectively).

Broughty Ferry

4.2.45 Table 29 presents the results for The Esplanade (Eastbound) in Broughty Ferry.

Table 29. The Esplanade (Eastbound)



Site 1 The Esplanade Eastbound

October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	316	269	212	169	182	192	235	230	225
Mean Speed (mph)	17.5	17.6	16.3	16.0	16.2	18.0	17.4	16.7	17.0
85%ile Speed (mph)	21.4	21.7	20.4	20.9	21.0	22.2	21.5	21.1	21.3
No. Vehicles > 20 MPH Limit	81	78	38	34	33	52	62	53	54
% Vehicles > 20 MPH Limit	25.6%	29.0%	17.9%	20.1%	18.1%	27.1%	26.4%	22.2%	23.5%
No. Vehicles > 35 MPH	0	0	2	0	0	1	2	0	1
% Vehicles > 35 MPH	0.0%	0.0%	0.9%	0.0%	0.0%	0.5%	0.9%	0.2%	0.3%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	262	96	216	262	330	191	421	233	254
Mean Speed (mph)	17.9	18.2	17.8	18.1	17.6	17.3	17.9	17.9	17.8
85%ile Speed (mph)	22.3	21.9	21.4	21.8	21.1	20.5	21.4	21.7	21.5
No. Vehicles > 20 MPH Limit	80	24	59	74	81	41	106	64	66
% Vehicles > 20 MPH Limit	30.5%	25.0%	27.3%	28.2%	24.5%	21.5%	25.2%	27.1%	26.0%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	377	343	403	386	463	290	522	394	398
Mean Speed (mph)	18.7	18.8	18.9	19.5	18.5	18.9	18.3	18.9	18.8
85%ile Speed (mph)	23.3	23.6	23.3	24.5	23.3	23.7	22.3	23.6	23.4
No. Vehicles > 20 MPH Limit	137	124	159	167	169	110	176	151	149
% Vehicles > 20 MPH Limit	36.3%	36.2%	39.5%	43.3%	36.5%	37.9%	33.7%	38.3%	37.4%
No. Vehicles > 35 MPH	2	1	1	0	0	0	0	1	1
% Vehicles > 35 MPH	0.5%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	494	676	710	409	520	630	487	562	561
Mean Speed (mph)	18.9	19.3	19.0	19.2	19.7	19.7	19.1	19.2	19.3
85%ile Speed (mph)	23.5	24.2	23.8	23.6	24.2	23.8	23.6	23.9	23.8
No. Vehicles > 20 MPH Limit	201	317	303	179	260	310	207	252	254
% Vehicles > 20 MPH Limit	40.7%	46.9%	42.7%	43.8%	50.0%	49.2%	42.5%	44.9%	45.3%
No. Vehicles > 35 MPH	0	1	2	2	2	0	1	1	1
% Vehicles > 35 MPH	0.0%	0.1%	0.3%	0.5%	0.4%	0.0%	0.2%	0.2%	0.2%

- 4.2.46 Table 29 shows that the 5-day average traffic flows were lowest in October 2020, however had a similar vehicle flow in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 19.2mph in September 2021.
- 4.2.47 The average proportion of vehicles exceeding 20mph in May 2021 was 38.3%. In February 2021 this value was 22.2%, and higher in February 2021 (27.1%). The highest proportion was in September 2021 (44.9%).

4.2.49 Table 30 presents the results for The Esplanade (Westbound) in Broughty Ferry.

Table 30. The Esplanade (Westbound)



Site 1 The Esplanade Westbound

October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	203	195	170	151	138	175	200	171	176
Mean Speed (mph)	17.1	16.6	17.0	16.0	16.9	16.5	16.5	16.7	16.7
85%ile Speed (mph)	21.9	20.3	21.6	20.3	21.9	20.7	21.5	21.2	21.2
No. Vehicles > 20 MPH Limit	57	32	44	24	37	30	45	39	38
% Vehicles > 20 MPH Limit	28.1%	16.4%	25.9%	15.9%	26.8%	17.1%	22.5%	22.6%	21.8%
No. Vehicles > 35 MPH	1	0	0	0	0	1	0	0	0
% Vehicles > 35 MPH	0.5%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.1%	0.2%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	188	92	160	204	234	182	327	176	198
Mean Speed (mph)	18.4	17.9	17.6	18.3	17.5	16.5	17.2	17.9	17.6
85%ile Speed (mph)	22.6	22.8	21.4	22.3	21.4	20.6	21.1	22.1	21.7
No. Vehicles > 20 MPH Limit	59	25	33	61	58	37	71	47	49
% Vehicles > 20 MPH Limit	31.4%	27.2%	20.6%	29.9%	24.8%	20.3%	21.7%	26.8%	25.1%
No. Vehicles > 35 MPH	2	0	0	0	1	0	0	1	0
% Vehicles > 35 MPH	1.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.3%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	210	224	208	243	269	189	278	231	232
Mean Speed (mph)	18.3	18.5	18.8	19.3	18.5	18.4	18.0	18.7	18.5
85%ile Speed (mph)	22.4	22.0	22.9	23.7	23.0	22.2	21.5	22.8	22.5
No. Vehicles > 20 MPH Limit	65	72	74	98	90	62	79	80	77
% Vehicles > 20 MPH Limit	31.0%	32.1%	35.6%	40.3%	33.5%	32.8%	28.4%	34.6%	33.3%
No. Vehicles > 35 MPH	0	0	1	0	1	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.0%	0.2%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	282	370	394	238	265	357	306	310	316
Mean Speed (mph)	19.8	20.1	20.7	19.7	19.7	20.1	19.7	20.0	20.0
85%ile Speed (mph)	25.0	24.5	25.3	24.4	23.8	24.5	23.8	24.6	24.5
No. Vehicles > 20 MPH Limit	128	181	224	115	114	179	145	152	155
% Vehicles > 20 MPH Limit	45.4%	48.9%	56.9%	48.3%	43.0%	50.1%	47.4%	49.2%	49.1%
No. Vehicles > 35 MPH	0	2	0	0	1	0	0	1	0
% Vehicles > 35 MPH	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.2%	0.1%

- 4.2.50 Table 30 shows that the 5-day average traffic flows were lowest in October 2020, however had a similar vehicle flow in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 20.0mph in September 2021.
- 4.2.51 The average proportion of vehicles exceeding 20mph in May 2021 was 34.6%. In February 2021 this value was 26.8%, and higher in February 2021 (22.6%), before increasing further in September 2021 (49.2%).

4.2.53 Table 31 presents the results for Brook Street (Eastbound) in Broughty Ferry.

Table 31. Brook Street (Eastbound)



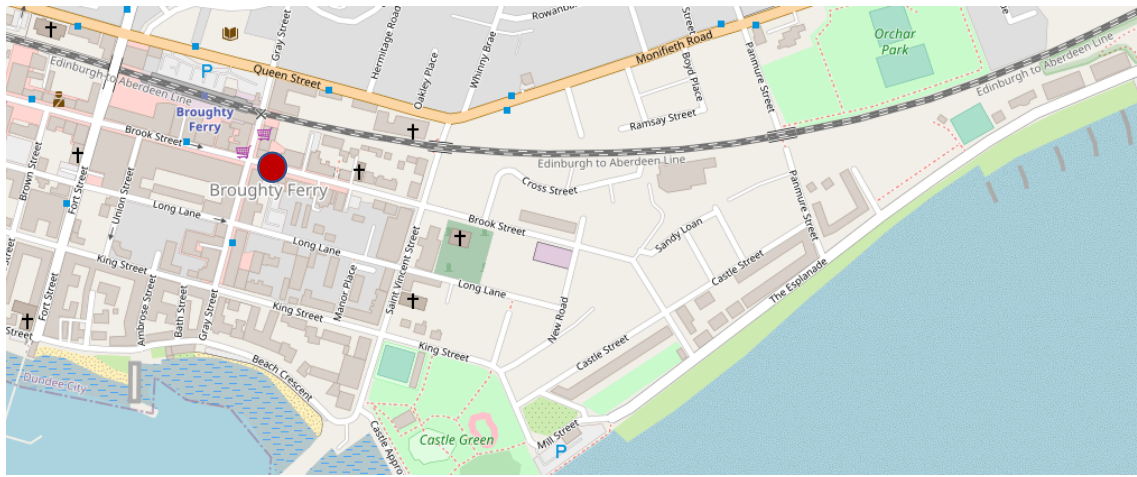
Site 2 Brook Street Eastbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2047	2043	2241	2171	2406	2275	1781	2182	2138
Mean Speed (mph)	16.3	16.9	16.2	16.2	15.4	15.1	17.5	16.2	16.2
85%ile Speed (mph)	20.7	21.3	20.5	20.7	19.6	19.2	21.4	20.6	20.5
No. Vehicles > 20 MPH Limit	385	442	391	407	303	270	443	386	377
% Vehicles > 20 MPH Limit	18.8%	21.6%	17.4%	18.7%	12.6%	11.9%	24.9%	17.8%	18.0%
No. Vehicles > 35 MPH	1	10	2	7	7	3	4	5	5
% Vehicles > 35 MPH	0.0%	0.5%	0.1%	0.3%	0.3%	0.1%	0.2%	0.2%	0.2%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2028	1677	1923	2001	2348	1900	1779	1995	1951
Mean Speed (mph)	17.3	18.2	18.1	17.9	17.1	17.3	18.2	17.7	17.7
85%ile Speed (mph)	21.4	22.6	22.3	22.1	21.3	21.4	22.3	21.9	21.9
No. Vehicles > 20 MPH Limit	486	558	582	577	508	457	544	542	530
% Vehicles > 20 MPH Limit	24.0%	33.3%	30.3%	28.8%	21.6%	24.1%	30.6%	27.6%	27.5%
No. Vehicles > 35 MPH	0	3	4	3	6	3	3	3	3
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	0.1%	0.3%	0.2%	0.2%	0.2%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2286	2555	2516	2502	2908	2434	1995	2553	2457
Mean Speed (mph)	16.5	16.7	16.8	15.7	15.5	16.1	17.6	16.2	16.4
85%ile Speed (mph)	21.1	21.4	21.4	20.5	19.9	20.3	21.5	20.9	20.9
No. Vehicles > 20 MPH Limit	497	587	584	420	423	402	514	502	490
% Vehicles > 20 MPH Limit	21.7%	23.0%	23.2%	16.8%	14.5%	16.5%	25.8%	19.7%	19.9%
No. Vehicles > 35 MPH	2	4	9	6	4	1	4	5	4
% Vehicles > 35 MPH	0.1%	0.2%	0.4%	0.2%	0.1%	0.0%	0.2%	0.2%	0.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2150	2419	2542	2289	2681	2483	1779	2416	2335
Mean Speed (mph)	16.8	17.2	17.8	16.7	15.9	16.1	18.0	16.9	16.9
85%ile Speed (mph)	21.4	21.7	22.0	21.2	20.3	20.5	22.1	21.3	21.3
No. Vehicles > 20 MPH Limit	495	615	734	497	459	431	533	560	538
% Vehicles > 20 MPH Limit	23.0%	25.4%	28.9%	21.7%	17.1%	17.4%	30.0%	23.2%	23.0%
No. Vehicles > 35 MPH	2	4	1	1	3	4	0	2	2
% Vehicles > 35 MPH	0.1%	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	0.1%	0.1%

4.2.54 Table 31 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed was highest at 17.7mph in February 2021. The flows in September 2021 were lower than May 2021.

4.2.55 The average proportion of vehicles exceeding 20mph in February 2021 was 27.6%. In October 2020, May 2021 and September 2021 it was lower at 17.8%, 19.7% and 23.2% respectively.

4.2.57 Table 32 presents the results for Brook Street(Westbound) in Broughty Ferry.

Table 32. Brook Street (Westbound)



Site 2 Brook Street Westbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	820	859	837	967	1172	1075	574	931	901
Mean Speed (mph)	17.0	18.3	18.1	18.1	15.3	16.5	17.7	17.4	17.3
85%ile Speed (mph)	22.4	23.9	21.8	23.6	19.2	20.9	22.0	22.2	22.0
No. Vehicles > 20 MPH Limit	204	244	185	273	159	190	142	213	200
% Vehicles > 20 MPH Limit	24.9%	28.4%	22.1%	28.2%	13.6%	17.7%	24.7%	23.4%	22.8%
No. Vehicles > 35 MPH	16	28	32	24	17	30	13	23	23
% Vehicles > 35 MPH	2.0%	3.3%	3.8%	2.5%	1.5%	2.8%	2.3%	2.5%	2.5%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	773	657	693	777	931	758	590	766	740
Mean Speed (mph)	18.5	19.0	18.2	19.3	19.2	19.4	20.4	18.8	19.1
85%ile Speed (mph)	24.0	23.4	23.2	25.5	23.0	24.3	26.4	23.8	24.3
No. Vehicles > 20 MPH Limit	232	218	195	225	277	260	238	229	235
% Vehicles > 20 MPH Limit	30.0%	33.2%	28.1%	29.0%	29.8%	34.3%	40.3%	30.0%	32.1%
No. Vehicles > 35 MPH	27	25	20	41	52	29	29	33	32
% Vehicles > 35 MPH	3.5%	3.8%	2.9%	5.3%	5.6%	3.8%	4.9%	4.3%	4.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	946	1148	1023	1076	1391	1224	750	1117	1080
Mean Speed (mph)	18.6	19.0	18.5	17.0	16.8	19.8	18.5	18.0	18.3
85%ile Speed (mph)	25.1	27.4	24.5	21.7	22.0	26.7	22.6	24.1	24.3
No. Vehicles > 20 MPH Limit	270	365	324	250	304	438	190	303	306
% Vehicles > 20 MPH Limit	28.5%	31.8%	31.7%	23.2%	21.9%	35.8%	25.3%	27.1%	28.3%
No. Vehicles > 35 MPH	48	92	39	25	62	104	23	53	56
% Vehicles > 35 MPH	5.1%	8.0%	3.8%	2.3%	4.5%	8.5%	3.1%	4.8%	5.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	782	828	858	851	1238	1116	709	911	912
Mean Speed (mph)	15.4	16.0	16.5	15.0	14.9	15.3	17.1	15.6	15.7
85%ile Speed (mph)	19.7	20.7	20.8	19.6	19.5	20.1	21.9	20.1	20.3
No. Vehicles > 20 MPH Limit	103	158	180	114	157	176	183	142	153
% Vehicles > 20 MPH Limit	13.2%	19.1%	21.0%	13.4%	12.7%	15.8%	25.8%	15.6%	16.8%
No. Vehicles > 35 MPH	1	0	0	1	0	0	0	0	0
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

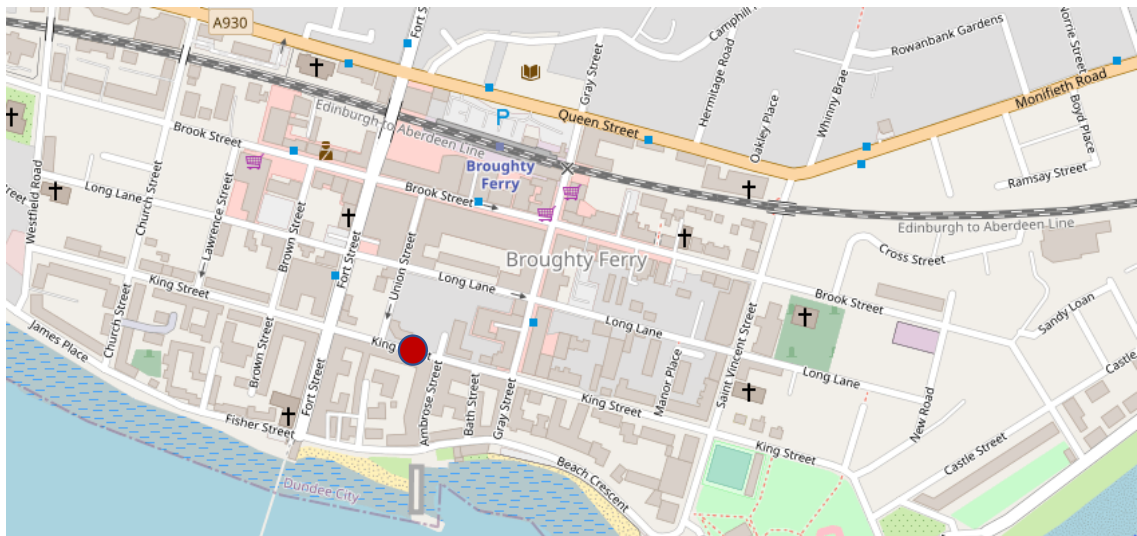
4.2.58 Table 32 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however has similar vehicle flow in October 2020. The

mean speed was highest at 18.8mph in February 2021. The flows in September 2021 were comparable with October 2020.

4.2.59 The average proportion of vehicles exceeding 20mph in February 2021 was 30.0%. In October 2020, May 2021 and September 2021 it was lower at 23.4%, 27.1% and 15.6% respectively.

4.2.61 Table 33 presents the results for King Street (Eastbound) in Broughty Ferry.

Table 33. King Street (Eastbound)



Site 3 King Street Eastbound

October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	817	922	558	681	1008	1127	674	797	827
Mean Speed (mph)	17.6	17.4	17.5	17.3	17.0	16.4	18.1	17.4	17.3
85%ile Speed (mph)	22.3	22.0	22.8	22.0	22.0	21.1	23.3	22.2	22.2
No. Vehicles > 20 MPH Limit	234	252	147	164	267	238	237	213	220
% Vehicles > 20 MPH Limit	28.6%	27.3%	26.3%	24.1%	26.5%	21.1%	35.2%	26.6%	27.0%
No. Vehicles > 35 MPH	1	1	0	4	0	0	0	1	1
% Vehicles > 35 MPH	0.1%	0.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.2%	0.1%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	680	582	651	630	801	586	522	669	636
Mean Speed (mph)	18.6	18.7	18.7	18.4	18.0	18.4	18.4	18.5	18.5
85%ile Speed (mph)	23.7	23.9	23.7	23.5	22.8	24.0	24.0	23.5	23.7
No. Vehicles > 20 MPH Limit	246	221	244	227	260	207	179	240	226
% Vehicles > 20 MPH Limit	36.2%	38.0%	37.5%	36.0%	32.5%	35.3%	34.3%	36.0%	35.7%
No. Vehicles > 35 MPH	0	0	3	0	2	1	1	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.5%	0.0%	0.2%	0.2%	0.2%	0.1%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	892	981	1086	1057	1173	939	704	1038	976
Mean Speed (mph)	17.7	17.4	16.8	17.1	16.8	16.8	17.6	17.2	17.2
85%ile Speed (mph)	22.8	22.1	21.8	21.9	21.4	21.3	22.8	22.0	22.0
No. Vehicles > 20 MPH Limit	256	253	259	270	267	206	207	261	245
% Vehicles > 20 MPH Limit	28.7%	25.8%	23.8%	25.5%	22.8%	21.9%	29.4%	25.1%	25.1%
No. Vehicles > 35 MPH	4	0	1	1	0	4	3	1	2
% Vehicles > 35 MPH	0.4%	0.0%	0.1%	0.1%	0.0%	0.4%	0.4%	0.1%	0.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	981	1113	1108	1205	1341	1072	824	1150	1092
Mean Speed (mph)	16.8	17.1	16.1	16.6	16.0	16.2	17.3	16.5	16.6
85%ile Speed (mph)	21.5	22.0	20.7	21.3	20.5	20.7	22.0	21.2	21.2
No. Vehicles > 20 MPH Limit	234	293	207	275	238	209	218	249	239
% Vehicles > 20 MPH Limit	23.9%	26.3%	18.7%	22.8%	17.7%	19.5%	26.5%	21.7%	21.9%
No. Vehicles > 35 MPH	0	1	4	2	2	1	0	2	1
% Vehicles > 35 MPH	0.0%	0.1%	0.4%	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%

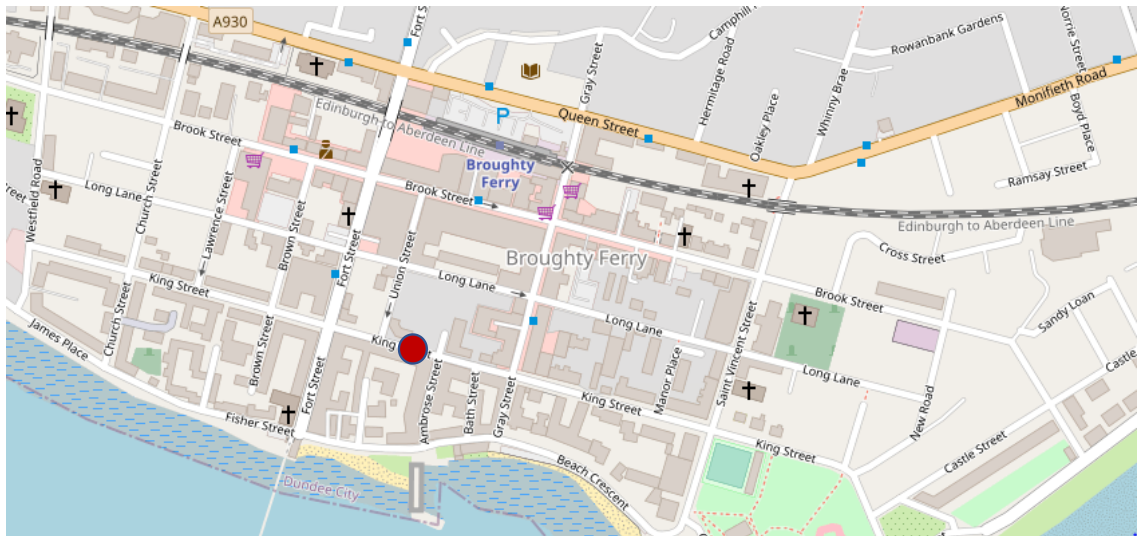
4.2.62 Table 33 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however has similar vehicle flow in October 2020. The

mean speed was highest at 18.5mph in February 2021. The flows in September 2021 were the highest recorded.

4.2.63 The average proportion of vehicles exceeding 20mph in February 2021 was 36.0%. In October 2020, May 2021 and September 2021 it was lower at 26.6%, 25.1% and 21.7% respectively.

4.2.65 Table 34 presents the results for King Street (Westbound) in Broughty Ferry.

Table 34. King Street (Westbound)



Site 3 King Street Westbound									
October 2020	Monday 26 Oct 2020	Tuesday 27 Oct 2020	Wednesday 21 Oct 2020	Thursday 22 Oct 2020	Friday 23 Oct 2020	Saturday 24 Oct 2020	Sunday 25 Oct 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2402	2451	1559	1870	2698	2897	1957	2196	2262
Mean Speed (mph)	19.6	18.9	18.8	18.3	18.5	18.8	19.2	18.8	18.9
85%ile Speed (mph)	24.3	23.8	23.5	22.8	23.5	23.5	24.0	23.6	23.6
No. Vehicles > 20 MPH Limit	1118	1005	624	657	1014	1105	822	884	906
% Vehicles > 20 MPH Limit	46.5%	41.0%	40.0%	35.1%	37.6%	38.1%	42.0%	40.1%	40.1%
No. Vehicles > 35 MPH	4	2	1	1	3	9	10	2	4
% Vehicles > 35 MPH	0.2%	0.1%	0.1%	0.1%	0.1%	0.3%	0.5%	0.1%	0.2%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2108	1737	2128	2033	2547	1943	1881	2111	2054
Mean Speed (mph)	20.0	20.3	20.0	20.1	19.4	19.7	19.3	20.0	19.8
85%ile Speed (mph)	24.6	24.8	24.8	24.9	24.0	24.2	24.2	24.6	24.5
No. Vehicles > 20 MPH Limit	1078	949	1120	1051	1183	938	862	1076	1026
% Vehicles > 20 MPH Limit	51.1%	54.6%	52.6%	51.7%	46.4%	48.3%	45.8%	51.3%	50.1%
No. Vehicles > 35 MPH	9	3	8	7	6	2	10	7	6
% Vehicles > 35 MPH	0.4%	0.2%	0.4%	0.3%	0.2%	0.1%	0.5%	0.3%	0.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2573	2757	2807	2776	3252	2853	2042	2833	2723
Mean Speed (mph)	19.3	18.9	18.6	18.8	18.6	18.6	19.2	18.8	18.9
85%ile Speed (mph)	24.0	23.8	23.6	23.4	23.3	23.3	23.8	23.6	23.6
No. Vehicles > 20 MPH Limit	1140	1134	1058	1079	1199	1093	877	1122	1083
% Vehicles > 20 MPH Limit	44.3%	41.1%	37.7%	38.9%	36.9%	38.3%	42.9%	39.6%	39.8%
No. Vehicles > 35 MPH	9	6	8	6	11	6	3	8	7
% Vehicles > 35 MPH	0.3%	0.2%	0.3%	0.2%	0.3%	0.2%	0.1%	0.3%	0.3%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2599	2945	2965	2806	3337	2668	1957	2930	2754
Mean Speed (mph)	18.4	18.1	17.8	17.6	17.6	18.0	18.5	17.9	18.0
85%ile Speed (mph)	23.0	22.6	22.5	22.5	22.4	22.6	22.9	22.6	22.6
No. Vehicles > 20 MPH Limit	962	994	939	846	996	844	708	947	898
% Vehicles > 20 MPH Limit	37.0%	33.8%	31.7%	30.1%	29.8%	31.6%	36.2%	32.3%	32.6%
No. Vehicles > 35 MPH	1	5	6	2	2	10	8	3	5
% Vehicles > 35 MPH	0.0%	0.2%	0.2%	0.1%	0.1%	0.4%	0.4%	0.1%	0.2%

4.2.66 Table 34 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, however has similar vehicle flow in October 2020. The

mean speed was highest at 20.0mph in February 2021. The highest flows were observed in September 2021.

- 4.2.67 The average proportion of vehicles exceeding 20mph in February 2021 was 51.3%. However, in October 2020 this was 40.1%, similar to May 2021 (39.6%) and September 2021 (32.3%).

5. LINK COUNT SURVEYS

5.1.1 Summary tables below present the results of the link count in the Dundee Council area (four sites located in Dundee and one site located in Broughty Ferry).

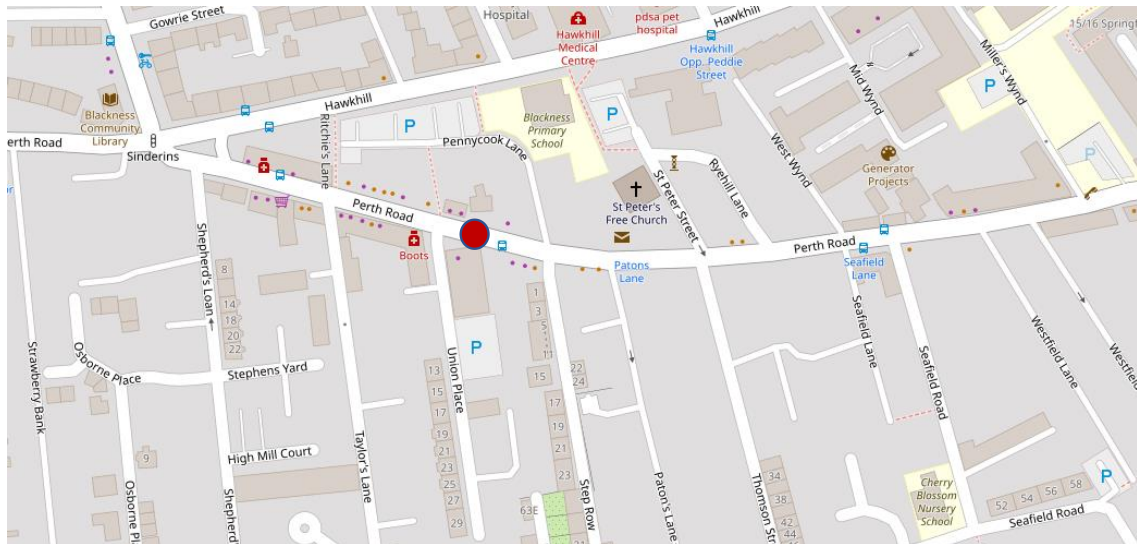
5.1.2 For each survey, the summary data is presented as a 3-day average (Thursday, Friday & Saturday) and aggregated into the following information:

- Site Number
- Site Location
- Total Flow – Directional daily flow
- AM Peak Pd 07:00-10:00 Vehicle Flow
- AM Peak Hr 08:00-09:00 Vehicle Flow
- IP Peak Pd 10:00-16:00 Vehicle Flow
- IP Peak Pd 12:00-13:00 Vehicle Flow
- PM Peak Pd 16:00-19:00 Vehicle Flow
- PM Peak Pd 17:00-18:00 Vehicle Flow
- Vehicle Proportion

Dundee

5.1.4 Table 35 presents the results for Perth Road, Step Row (Eastbound) in Dundee.

Table 35. Perth Road, Step Row (Eastbound)



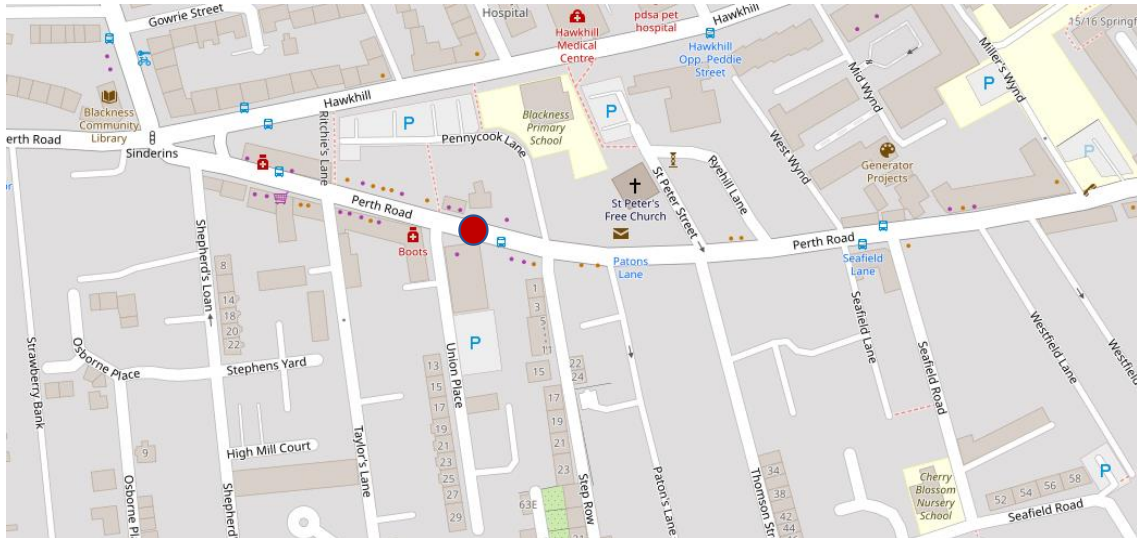
Site 1 Perth Rd (Step Row) Eastbound (3 day Average Thur - Fri - Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2309	231	44	1	177	5	12	56	2835
AM Peak Pd 0700-1000 Vehicle Flow	326	51	14	0	33	2	1	8	435
AM Peak Hr 0800-0900 Vehicle Flow	141	19	6	0	13	1	0	2	182
IP Peak Pd 1000-1600 Vehicle Flow	1091	126	23	1	81	2	3	24	1351
IP Peak Pd 1200-1300 Vehicle Flow	208	23	3	0	14	0	0	2	250
PM Peak Pd 1600-1900 Vehicle Flow	549	39	3	0	38	1	3	15	648
PM Peak Pd 1700-1800 Vehicle Flow	189	12	1	0	13	0	1	9	225
0600-2200 Vehicle Proportion	81.5%	8.1%	1.6%	0.0%	6.2%	0.2%	0.4%	2.0%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1824	218	47	1	188	7	11	65	2360
AM Peak Pd 0700-1000 Vehicle Flow	233	47	17	1	38	3	1	6	345
AM Peak Hr 0800-0900 Vehicle Flow	99	20	7	0	13	1	0	1	141
IP Peak Pd 1000-1600 Vehicle Flow	839	124	19	0	83	4	6	32	1107
IP Peak Pd 1200-1300 Vehicle Flow	137	20	4	0	14	0	1	5	181
PM Peak Pd 1600-1900 Vehicle Flow	465	31	6	0	44	0	2	15	563
PM Peak Pd 1700-1800 Vehicle Flow	167	9	2	0	15	0	1	5	199
0600-2200 Vehicle Proportion	77.3%	9.2%	2.0%	0.1%	8.0%	0.3%	0.5%	2.7%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2461	242	44	0	203	6	8	48	3012
AM Peak Pd 0700-1000 Vehicle Flow	329	48	15	0	39	3	0	6	440
AM Peak Hr 0800-0900 Vehicle Flow	158	14	7	0	15	1	0	2	197
IP Peak Pd 1000-1600 Vehicle Flow	1121	126	21	0	92	3	4	23	1390
IP Peak Pd 1200-1300 Vehicle Flow	189	20	2	0	16	0	1	5	233
PM Peak Pd 1600-1900 Vehicle Flow	603	47	3	0	48	0	2	9	712
PM Peak Pd 1700-1800 Vehicle Flow	195	16	1	0	16	0	2	3	232
0600-2200 Vehicle Proportion	81.7%	8.0%	1.5%	0.0%	6.7%	0.2%	0.3%	1.6%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2479	259	51	0	199	6	11	40	3046
AM Peak Pd 0700-1000 Vehicle Flow	328	57	15	0	40	4	0	6	449
AM Peak Hr 0800-0900 Vehicle Flow	137	19	8	0	15	2	0	3	183
IP Peak Pd 1000-1600 Vehicle Flow	1096	145	29	0	91	2	4	16	1383
IP Peak Pd 1200-1300 Vehicle Flow	178	27	4	0	14	0	0	4	227
PM Peak Pd 1600-1900 Vehicle Flow	604	43	3	0	43	0	3	10	706
PM Peak Pd 1700-1800 Vehicle Flow	207	13	1	0	15	0	2	4	242
0600-2200 Vehicle Proportion	81.4%	8.5%	1.7%	0.0%	6.5%	0.2%	0.4%	1.3%	100.0%

- 5.1.5 Table 35 shows that the car usage proportion decreased from October 2020 to February 2021, while PT and cycling marginally increased between each survey period. The vehicle proportions seen in May 2021 and September 2021 are very similar to October 2020.

5.1.7 Table 36 presents the results for Perth Road, Step Row(Westbound) in Dundee.

Table 36. Perth Road, Step Row (Westbound)



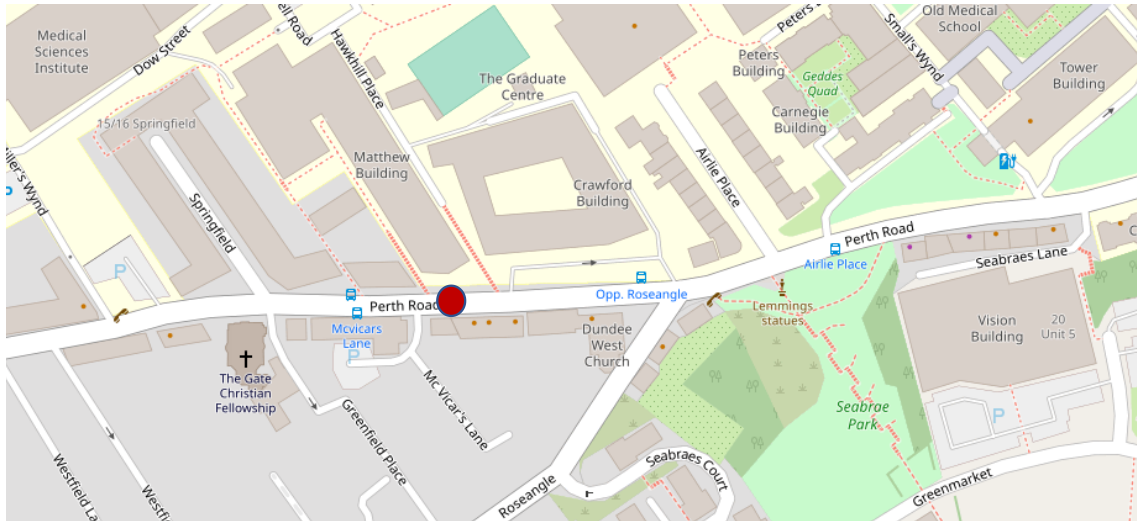
Site 1 Perth Rd (Step Row) Westbound (3 day Average Thur - Fri - Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1999	202	41	0	177	3	6	61	2489
AM Peak Pd 0700-1000 Vehicle Flow	227	37	9	0	37	0	1	6	318
AM Peak Hr 0800-0900 Vehicle Flow	92	15	3	0	13	0	0	2	125
IP Peak Pd 1000-1600 Vehicle Flow	918	114	24	0	80	2	1	28	1168
IP Peak Pd 1200-1300 Vehicle Flow	170	19	3	0	13	0	0	3	209
PM Peak Pd 1600-1900 Vehicle Flow	536	41	4	0	36	0	2	16	635
PM Peak Pd 1700-1800 Vehicle Flow	190	14	1	0	14	0	0	6	225
0600-2200 Vehicle Proportion	80.3%	8.1%	1.6%	0.0%	7.1%	0.1%	0.2%	2.5%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1612	181	38	1	188	2	10	66	2100
AM Peak Pd 0700-1000 Vehicle Flow	177	36	11	0	40	0	0	6	270
AM Peak Hr 0800-0900 Vehicle Flow	69	12	3	0	14	0	0	3	101
IP Peak Pd 1000-1600 Vehicle Flow	721	105	22	1	84	2	6	30	971
IP Peak Pd 1200-1300 Vehicle Flow	128	17	4	0	14	0	1	4	168
PM Peak Pd 1600-1900 Vehicle Flow	446	30	2	0	39	0	3	19	539
PM Peak Pd 1700-1800 Vehicle Flow	154	9	1	0	14	0	2	8	187
0600-2200 Vehicle Proportion	76.8%	8.6%	1.8%	0.0%	9.0%	0.1%	0.5%	3.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2244	217	43	0	203	4	8	50	2770
AM Peak Pd 0700-1000 Vehicle Flow	264	49	11	0	43	1	1	7	376
AM Peak Hr 0800-0900 Vehicle Flow	111	15	4	0	14	1	0	4	149
IP Peak Pd 1000-1600 Vehicle Flow	1005	113	24	0	91	3	4	21	1261
IP Peak Pd 1200-1300 Vehicle Flow	179	20	5	0	16	0	0	4	225
PM Peak Pd 1600-1900 Vehicle Flow	582	37	3	0	45	0	3	13	684
PM Peak Pd 1700-1800 Vehicle Flow	205	14	2	0	17	0	2	5	244
0600-2200 Vehicle Proportion	81.0%	7.8%	1.5%	0.0%	7.3%	0.2%	0.3%	1.8%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2247	227	36	1	200	3	9	47	2769
AM Peak Pd 0700-1000 Vehicle Flow	249	48	10	0	45	1	1	4	358
AM Peak Hr 0800-0900 Vehicle Flow	99	16	3	0	14	1	0	1	134
IP Peak Pd 1000-1600 Vehicle Flow	969	125	18	1	87	3	2	20	1225
IP Peak Pd 1200-1300 Vehicle Flow	173	20	3	0	15	0	0	5	216
PM Peak Pd 1600-1900 Vehicle Flow	596	35	3	0	42	0	3	12	692
PM Peak Pd 1700-1800 Vehicle Flow	198	11	2	0	15	0	2	4	231
0600-2200 Vehicle Proportion	81.1%	8.2%	1.3%	0.0%	7.2%	0.1%	0.3%	1.7%	100.0%

5.1.8 Table 36 shows similar results to the eastbound direction, again the vehicle proportions in May 2021 and September 2021 are very similar to October 2020, with the exception of pedal cycles which have shown a decrease.

5.1.10 Table 37 presents the results for Perth Road, Art School (Eastbound) in Dundee.

Table 37. Perth Road, Art School (Eastbound)



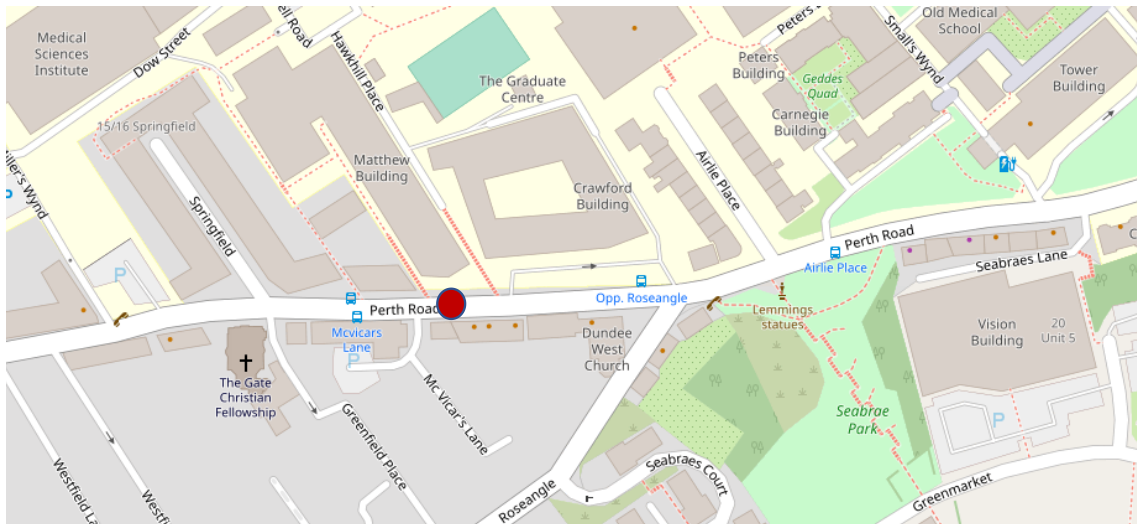
Site 2 Perth Rd (Art School) Eastbound (3 day Average Thur - Fri - Sat)									
October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1365	144	34	1	176	6	8	67	1801
AM Peak Pd 0700-1000 Vehicle Flow	148	34	11	0	32	2	0	9	236
AM Peak Hr 0800-0900 Vehicle Flow	57	11	6	0	13	1	0	3	90
IP Peak Pd 1000-1600 Vehicle Flow	642	81	18	0	81	2	3	32	861
IP Peak Pd 1200-1300 Vehicle Flow	120	16	4	0	13	0	0	4	157
PM Peak Pd 1600-1900 Vehicle Flow	351	21	2	0	36	0	3	16	429
PM Peak Pd 1700-1800 Vehicle Flow	118	6	0	0	13	0	1	8	146
0600-2200 Vehicle Proportion	75.8%	8.0%	1.9%	0.1%	9.8%	0.3%	0.4%	3.7%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1001	147	28	1	188	4	11	79	1458
AM Peak Pd 0700-1000 Vehicle Flow	103	31	9	0	38	2	0	6	189
AM Peak Hr 0800-0900 Vehicle Flow	38	11	5	0	14	1	0	2	69
IP Peak Pd 1000-1600 Vehicle Flow	459	84	12	0	83	1	8	36	683
IP Peak Pd 1200-1300 Vehicle Flow	80	16	2	0	13	1	1	8	121
PM Peak Pd 1600-1900 Vehicle Flow	259	19	4	0	43	0	1	18	344
PM Peak Pd 1700-1800 Vehicle Flow	91	5	1	0	15	0	0	6	118
0600-2200 Vehicle Proportion	68.7%	10.1%	1.9%	0.1%	12.9%	0.3%	0.8%	5.4%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1640	134	37	2	197	2	9	61	2082
AM Peak Pd 0700-1000 Vehicle Flow	180	36	9	0	39	2	1	9	277
AM Peak Hr 0800-0900 Vehicle Flow	83	12	3	0	14	1	1	3	117
IP Peak Pd 1000-1600 Vehicle Flow	724	68	22	1	88	1	4	25	934
IP Peak Pd 1200-1300 Vehicle Flow	125	14	3	0	16	0	1	5	164
PM Peak Pd 1600-1900 Vehicle Flow	424	16	2	0	46	0	3	14	505
PM Peak Pd 1700-1800 Vehicle Flow	140	7	1	0	17	0	2	5	172
0600-2200 Vehicle Proportion	78.8%	6.5%	1.8%	0.1%	9.4%	0.1%	0.4%	2.9%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1496	181	39	2	198	6	10	62	1993
AM Peak Pd 0700-1000 Vehicle Flow	158	37	9	1	40	2	0	10	258
AM Peak Hr 0800-0900 Vehicle Flow	52	13	4	0	15	1	0	4	89
IP Peak Pd 1000-1600 Vehicle Flow	627	108	25	1	89	3	3	28	884
IP Peak Pd 1200-1300 Vehicle Flow	105	20	3	0	14	0	0	5	148
PM Peak Pd 1600-1900 Vehicle Flow	392	23	2	0	44	1	4	15	480
PM Peak Pd 1700-1800 Vehicle Flow	137	6	0	0	14	0	3	8	168
0600-2200 Vehicle Proportion	75.1%	9.1%	1.9%	0.1%	9.9%	0.3%	0.5%	3.1%	100.0%

5.1.11 Table 37 shows that the car usage proportion decreased from October 2020 to February 2021, while PT and cycling marginally increased between each survey period. The modal proportion

of LGV drivers increased in February 2021 while Scotland was in a period of lockdown. The vehicle proportions observed in May 2021 and September 2021 are very similar to October 2020.

5.1.13 Table 38 presents the results for Perth Road, Art School (Westbound) in Dundee.

Table 38. Perth Road, Art School (Westbound)



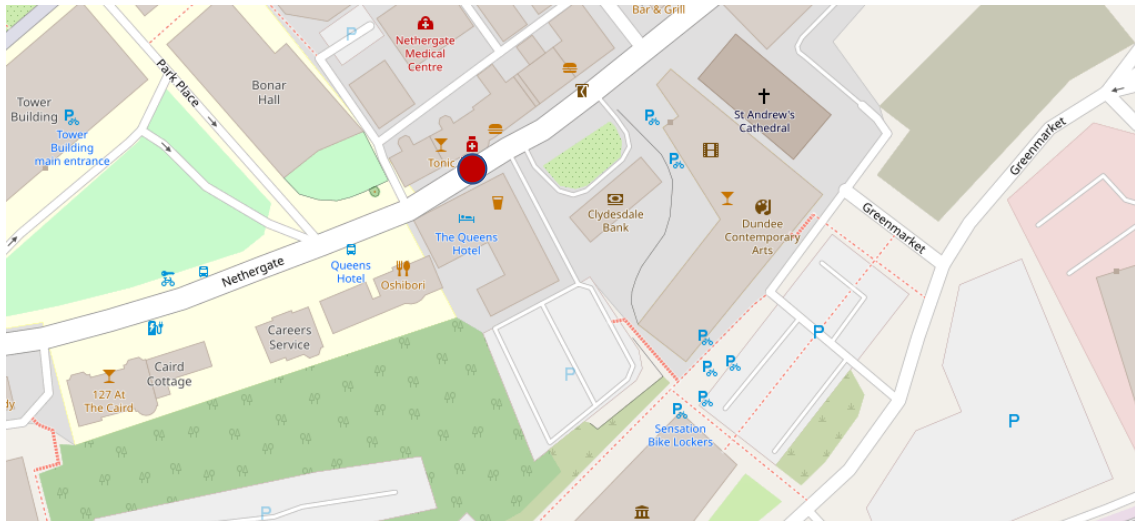
Site 2 Perth Rd (Art School) Westbound (3 day Average Thur - Fri - Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1534	174	34	0	176	3	6	62	1989
AM Peak Pd 0700-1000 Vehicle Flow	179	33	9	0	39	0	0	4	264
AM Peak Hr 0800-0900 Vehicle Flow	83	12	3	0	13	0	0	2	113
IP Peak Pd 1000-1600 Vehicle Flow	703	99	19	0	79	2	2	31	936
IP Peak Pd 1200-1300 Vehicle Flow	122	16	2	0	14	1	0	4	159
PM Peak Pd 1600-1900 Vehicle Flow	407	30	3	0	34	0	2	16	493
PM Peak Pd 1700-1800 Vehicle Flow	142	10	1	0	14	0	0	5	172
0600-2200 Vehicle Proportion	77.1%	8.7%	1.7%	0.0%	8.8%	0.2%	0.3%	3.1%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1188	160	30	1	189	1	9	79	1657
AM Peak Pd 0700-1000 Vehicle Flow	134	33	11	0	42	0	0	4	224
AM Peak Hr 0800-0900 Vehicle Flow	61	12	2	0	15	0	0	2	92
IP Peak Pd 1000-1600 Vehicle Flow	534	93	17	1	84	1	6	38	773
IP Peak Pd 1200-1300 Vehicle Flow	101	14	3	0	14	0	1	6	139
PM Peak Pd 1600-1900 Vehicle Flow	324	25	1	0	39	0	2	22	413
PM Peak Pd 1700-1800 Vehicle Flow	105	7	0	0	14	0	1	8	134
0600-2200 Vehicle Proportion	71.7%	9.7%	1.8%	0.0%	11.4%	0.1%	0.6%	4.8%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1708	172	32	2	202	2	7	60	2184
AM Peak Pd 0700-1000 Vehicle Flow	181	33	12	0	43	0	1	7	278
AM Peak Hr 0800-0900 Vehicle Flow	75	11	3	0	15	0	0	3	108
IP Peak Pd 1000-1600 Vehicle Flow	774	98	15	1	90	1	4	27	1010
IP Peak Pd 1200-1300 Vehicle Flow	138	16	3	0	16	0	0	6	179
PM Peak Pd 1600-1900 Vehicle Flow	438	25	2	0	45	1	2	14	527
PM Peak Pd 1700-1800 Vehicle Flow	161	6	0	0	15	0	1	5	188
0600-2200 Vehicle Proportion	78.2%	7.9%	1.5%	0.1%	9.2%	0.1%	0.3%	2.7%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1792	221	37	1	199	6	11	59	2326
AM Peak Pd 0700-1000 Vehicle Flow	228	48	11	0	46	0	0	3	336
AM Peak Hr 0800-0900 Vehicle Flow	99	17	5	0	15	0	0	1	137
IP Peak Pd 1000-1600 Vehicle Flow	732	121	19	1	88	4	2	26	991
IP Peak Pd 1200-1300 Vehicle Flow	131	18	3	0	13	0	0	6	172
PM Peak Pd 1600-1900 Vehicle Flow	467	34	3	0	42	2	4	17	569
PM Peak Pd 1700-1800 Vehicle Flow	157	11	1	0	15	0	2	4	191
0600-2200 Vehicle Proportion	77.1%	9.5%	1.6%	0.0%	8.6%	0.3%	0.5%	2.5%	100.0%

5.1.14 Table 38 shows that the car usage proportion decreased slightly in February 2021, when compared with October 2020. Again, proportions observed in May 2021 and September 2021 are similar to October 2020.

5.1.16 Table 39 presents the results for Perth Road, Nethergate (Eastbound) in Dundee.

Table 39. Perth Road, Nethergate (Eastbound)



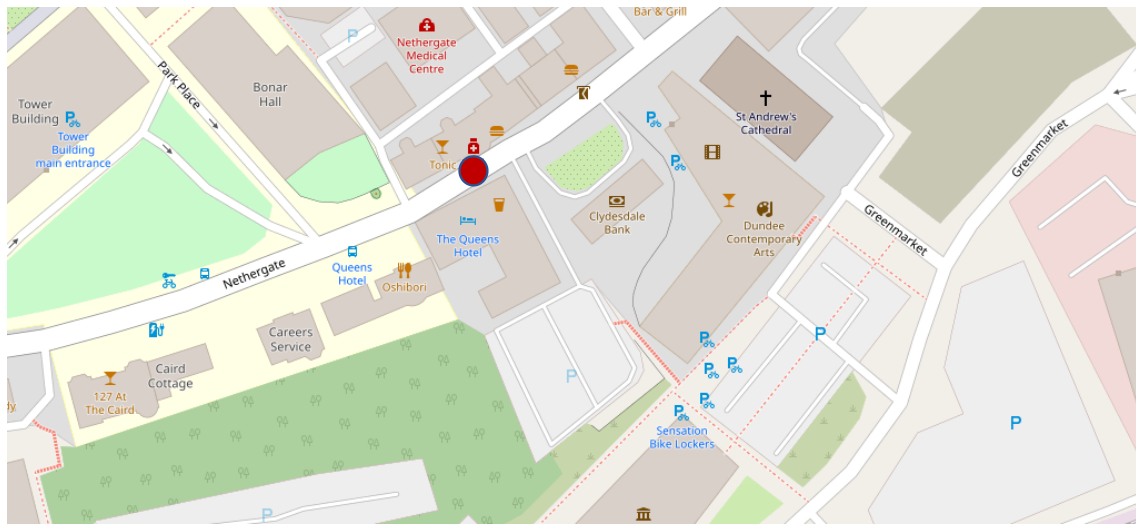
Site 3 Perth Road (Nethergate) Eastbound (3 day Average Thur - Fri - Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1812	237	44	1	178	4	13	91	2379
AM Peak Pd 0700-1000 Vehicle Flow	188	46	15	0	32	2	1	7	290
AM Peak Hr 0800-0900 Vehicle Flow	75	18	8	0	13	0	0	2	116
IP Peak Pd 1000-1600 Vehicle Flow	780	140	22	0	81	2	3	34	1062
IP Peak Pd 1200-1300 Vehicle Flow	133	26	3	0	13	0	0	5	181
PM Peak Pd 1600-1900 Vehicle Flow	511	36	2	0	38	0	4	33	624
PM Peak Pd 1700-1800 Vehicle Flow	185	12	0	0	13	0	1	14	226
0600-2200 Vehicle Proportion	76.2%	9.9%	1.9%	0.0%	7.5%	0.2%	0.5%	3.8%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1337	198	41	1	193	4	14	97	1885
AM Peak Pd 0700-1000 Vehicle Flow	131	40	15	0	39	2	0	6	234
AM Peak Hr 0800-0900 Vehicle Flow	52	14	8	0	14	1	0	2	90
IP Peak Pd 1000-1600 Vehicle Flow	603	115	19	0	88	1	8	45	880
IP Peak Pd 1200-1300 Vehicle Flow	99	23	3	0	14	0	1	14	155
PM Peak Pd 1600-1900 Vehicle Flow	361	28	4	0	42	0	3	28	466
PM Peak Pd 1700-1800 Vehicle Flow	134	7	1	0	14	0	1	12	168
0600-2200 Vehicle Proportion	70.9%	10.5%	2.2%	0.1%	10.2%	0.2%	0.7%	5.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2289	244	47	1	205	4	10	68	2868
AM Peak Pd 0700-1000 Vehicle Flow	212	54	15	0	41	1	1	10	335
AM Peak Hr 0800-0900 Vehicle Flow	86	20	6	0	14	1	1	3	130
IP Peak Pd 1000-1600 Vehicle Flow	984	125	25	0	93	2	6	25	1260
IP Peak Pd 1200-1300 Vehicle Flow	174	25	3	0	16	0	2	5	226
PM Peak Pd 1600-1900 Vehicle Flow	678	42	2	0	46	0	2	21	792
PM Peak Pd 1700-1800 Vehicle Flow	267	17	1	0	15	0	1	10	311
0600-2200 Vehicle Proportion	79.8%	8.5%	1.7%	0.0%	7.1%	0.1%	0.3%	2.4%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2098	277	51	2	204	6	21	66	2724
AM Peak Pd 0700-1000 Vehicle Flow	209	63	16	1	43	3	2	9	346
AM Peak Hr 0800-0900 Vehicle Flow	85	20	7	0	15	1	2	4	135
IP Peak Pd 1000-1600 Vehicle Flow	860	161	29	1	92	2	4	22	1172
IP Peak Pd 1200-1300 Vehicle Flow	150	30	4	0	15	0	0	5	205
PM Peak Pd 1600-1900 Vehicle Flow	575	37	2	0	44	1	8	22	690
PM Peak Pd 1700-1800 Vehicle Flow	200	11	1	0	14	0	2	11	238
0600-2200 Vehicle Proportion	77.0%	10.2%	1.9%	0.1%	7.5%	0.2%	0.8%	2.4%	100.0%

5.1.17 Table 39 shows car usage decreased slightly in February 2021, compared to October 2020, while Scotland was in a period of lockdown, before returning to similar levels in May and September 2021.

5.1.19 Table 40 presents the results for Perth Road, Nethergate (Westbound) in Dundee.

Table 40. Perth Road, Nethergate (Westbound)



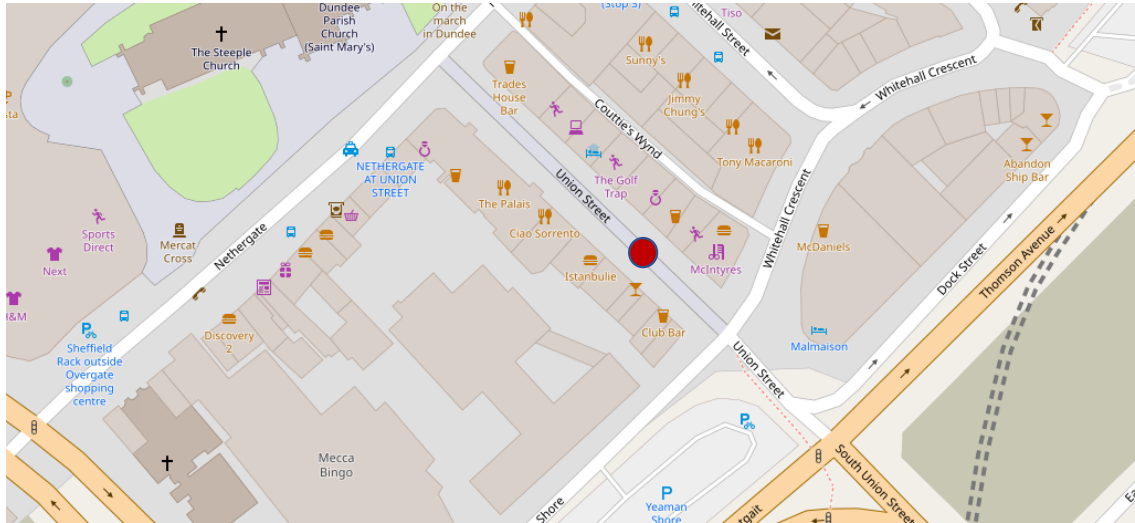
Site 3 Perth Road (Nethergate) Westbound (3 day Average Thur - Fri - Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1940	238	44	1	176	3	9	91	2502
AM Peak Pd 0700-1000 Vehicle Flow	250	53	15	0	39	0	0	19	376
AM Peak Hr 0800-0900 Vehicle Flow	118	20	4	0	12	0	0	9	163
IP Peak Pd 1000-1600 Vehicle Flow	839	131	22	1	79	2	2	36	1113
IP Peak Pd 1200-1300 Vehicle Flow	142	22	3	0	14	1	0	7	188
PM Peak Pd 1600-1900 Vehicle Flow	512	38	2	0	35	0	3	21	611
PM Peak Pd 1700-1800 Vehicle Flow	180	13	1	0	14	0	0	6	215
0600-2200 Vehicle Proportion	77.5%	9.5%	1.8%	0.0%	7.0%	0.1%	0.4%	3.6%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	1428	195	40	1	196	1	10	102	1972
AM Peak Pd 0700-1000 Vehicle Flow	190	49	14	0	43	0	0	9	306
AM Peak Hr 0800-0900 Vehicle Flow	88	20	5	0	15	0	0	4	132
IP Peak Pd 1000-1600 Vehicle Flow	621	107	23	1	88	1	6	44	890
IP Peak Pd 1200-1300 Vehicle Flow	113	17	2	0	15	0	1	8	156
PM Peak Pd 1600-1900 Vehicle Flow	380	28	1	0	40	0	3	27	478
PM Peak Pd 1700-1800 Vehicle Flow	122	8	0	0	14	0	1	9	155
0600-2200 Vehicle Proportion	72.4%	9.9%	2.0%	0.0%	9.9%	0.0%	0.5%	5.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2255	252	45	1	206	4	9	79	2851
AM Peak Pd 0700-1000 Vehicle Flow	264	59	15	1	43	1	1	16	400
AM Peak Hr 0800-0900 Vehicle Flow	120	24	5	0	15	1	1	10	176
IP Peak Pd 1000-1600 Vehicle Flow	984	133	25	0	95	2	5	30	1274
IP Peak Pd 1200-1300 Vehicle Flow	174	24	5	0	16	0	0	8	228
PM Peak Pd 1600-1900 Vehicle Flow	570	32	2	0	45	1	2	20	672
PM Peak Pd 1700-1800 Vehicle Flow	197	11	0	0	17	0	1	7	234
0600-2200 Vehicle Proportion	79.1%	8.8%	1.6%	0.0%	7.2%	0.1%	0.3%	2.8%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2121	264	42	2	209	4	13	78	2735
AM Peak Pd 0700-1000 Vehicle Flow	288	63	14	1	45	0	1	14	426
AM Peak Hr 0800-0900 Vehicle Flow	125	25	6	0	15	0	1	7	178
IP Peak Pd 1000-1600 Vehicle Flow	860	146	20	1	94	3	2	30	1158
IP Peak Pd 1200-1300 Vehicle Flow	152	24	2	0	14	0	0	8	200
PM Peak Pd 1600-1900 Vehicle Flow	511	33	3	0	44	1	5	18	615
PM Peak Pd 1700-1800 Vehicle Flow	169	9	1	0	16	0	4	6	206
0600-2200 Vehicle Proportion	77.6%	9.7%	1.5%	0.1%	7.7%	0.1%	0.5%	2.9%	100.0%

5.1.20 Table 40 shows similar results to the eastbound direction.

5.1.22 Table 41 presents the results for Union Street (Eastbound) in Dundee.

Table 41. Union Street (Eastbound)



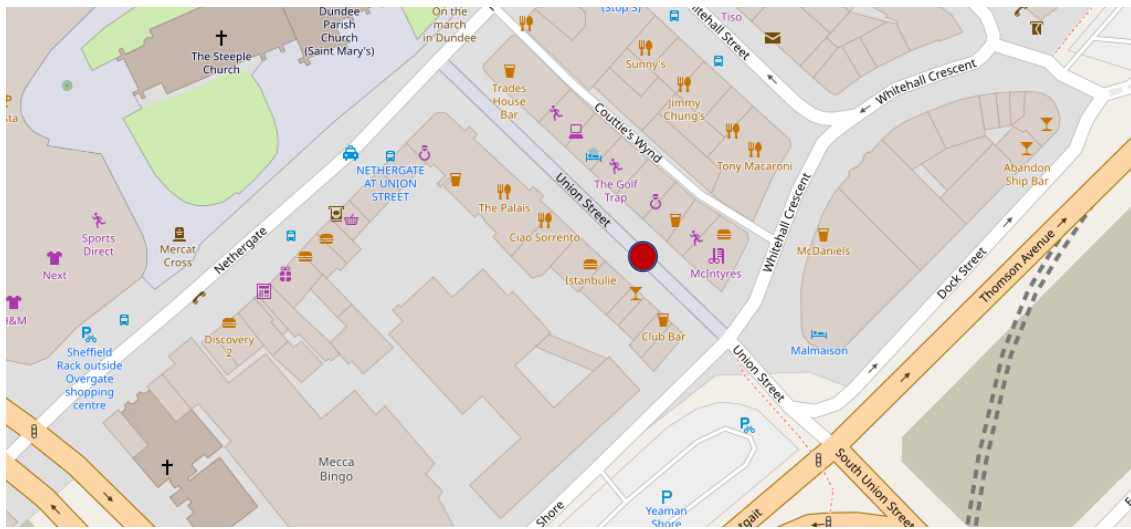
Site 4 Union Street Eastbound (3 day Average Thur - Fri - Sat)

October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	7	2	1	0	0	0	0	23	33
AM Peak Pd 0700-1000 Vehicle Flow	1	0	0	0	0	0	0	2	3
AM Peak Hr 0800-0900 Vehicle Flow	0	0	0	0	0	0	0	1	1
IP Peak Pd 1000-1600 Vehicle Flow	3	1	0	0	0	0	0	11	14
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	1	1
PM Peak Pd 1600-1900 Vehicle Flow	1	0	0	0	0	0	0	8	10
PM Peak Pd 1700-1800 Vehicle Flow	0	0	0	0	0	0	0	4	5
0600-2200 Vehicle Proportion	20.4%	7.1%	2.0%	0.0%	0.0%	0.0%	0.0%	70.4%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	6	3	1	0	0	0	0	34	44
AM Peak Pd 0700-1000 Vehicle Flow	0	0	1	0	0	0	0	3	4
AM Peak Hr 0800-0900 Vehicle Flow	0	0	0	0	0	0	0	1	1
IP Peak Pd 1000-1600 Vehicle Flow	2	2	0	0	0	0	0	18	22
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	3	4
PM Peak Pd 1600-1900 Vehicle Flow	1	0	0	0	0	0	0	9	10
PM Peak Pd 1700-1800 Vehicle Flow	0	0	0	0	0	0	0	3	3
0600-2200 Vehicle Proportion	13.7%	6.1%	2.3%	0.0%	0.0%	0.0%	0.8%	77.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	2	1	0	0	0	0	0	23	27
AM Peak Pd 0700-1000 Vehicle Flow	0	0	0	0	0	0	0	2	2
AM Peak Hr 0800-0900 Vehicle Flow	0	0	0	0	0	0	0	1	1
IP Peak Pd 1000-1600 Vehicle Flow	1	1	0	0	0	0	0	11	12
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	4	4
PM Peak Pd 1600-1900 Vehicle Flow	0	0	0	0	0	0	0	6	6
PM Peak Pd 1700-1800 Vehicle Flow	0	0	0	0	0	0	0	2	2
0600-2200 Vehicle Proportion	7.5%	5.0%	1.3%	0.0%	0.0%	0.0%	0.0%	86.3%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	4	2	1	0	0	0	0	19	26
AM Peak Pd 0700-1000 Vehicle Flow	1	1	0	0	0	0	0	2	4
AM Peak Hr 0800-0900 Vehicle Flow	0	0	0	0	0	0	0	0	1
IP Peak Pd 1000-1600 Vehicle Flow	1	1	1	0	0	0	0	10	12
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	3	4
PM Peak Pd 1600-1900 Vehicle Flow	1	0	0	0	0	0	0	5	6
PM Peak Pd 1700-1800 Vehicle Flow	0	0	0	0	0	0	0	1	1
0600-2200 Vehicle Proportion	16.5%	6.3%	5.1%	0.0%	0.0%	0.0%	0.0%	72.2%	100.0%

5.1.23 Table 41 shows minimal vehicular traffic on Union Street, with cyclists making up the majority of users. The proportion of which increased from October 2020 to February 2021 and again in May 2021, before reducing again in September 2021.

5.1.25 Table 42 presents the results for Union Street (Westbound) in Dundee.

Table 42. Union Street (Westbound)



Site 4 Union Street Westbound (3 day Average Thur - Fri - Sat)

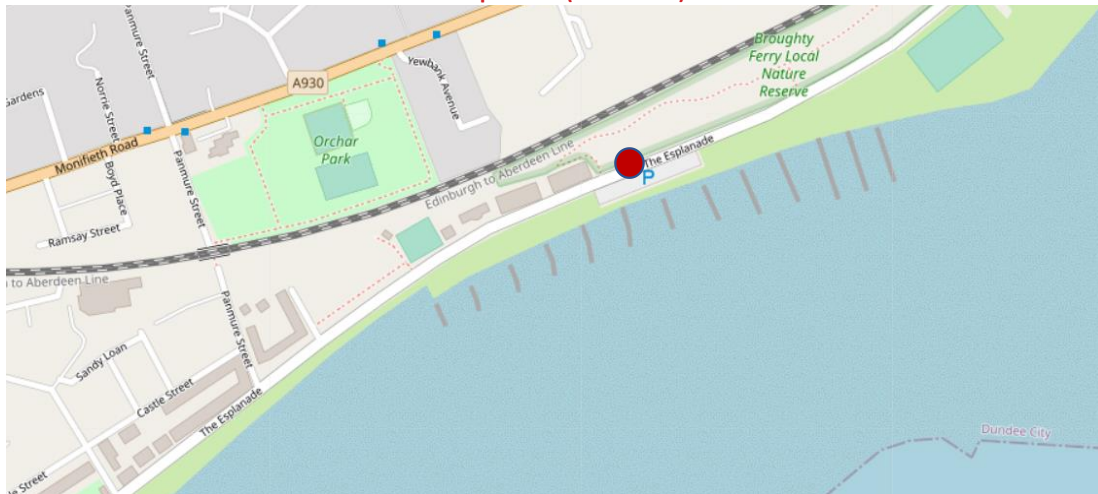
October 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	20	10	4	0	0	0	0	27	61
AM Peak Pd 0700-1000 Vehicle Flow	4	6	1	0	0	0	0	5	16
AM Peak Hr 0800-0900 Vehicle Flow	3	3	1	0	0	0	0	2	9
IP Peak Pd 1000-1600 Vehicle Flow	7	1	2	0	0	0	0	10	20
IP Peak Pd 1200-1300 Vehicle Flow	1	0	0	0	0	0	0	0	1
PM Peak Pd 1600-1900 Vehicle Flow	5	1	0	0	0	0	0	10	17
PM Peak Pd 1700-1800 Vehicle Flow	2	1	0	0	0	0	0	3	6
0600-2200 Vehicle Proportion	32.1%	16.8%	6.5%	0.0%	0.0%	0.0%	0.0%	44.6%	100.0%
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	20	6	3	0	0	0	1	44	73
AM Peak Pd 0700-1000 Vehicle Flow	2	3	1	0	0	0	0	3	9
AM Peak Hr 0800-0900 Vehicle Flow	1	1	0	0	0	0	0	1	3
IP Peak Pd 1000-1600 Vehicle Flow	2	1	1	0	0	0	0	20	25
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	2	2
PM Peak Pd 1600-1900 Vehicle Flow	7	1	0	0	0	0	0	13	21
PM Peak Pd 1700-1800 Vehicle Flow	2	0	0	0	0	0	0	4	6
0600-2200 Vehicle Proportion	27.1%	7.8%	4.1%	0.0%	0.0%	0.0%	0.9%	60.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	6	3	1	0	0	0	0	26	36
AM Peak Pd 0700-1000 Vehicle Flow	0	1	1	0	0	0	0	2	5
AM Peak Hr 0800-0900 Vehicle Flow	0	1	0	0	0	0	0	0	1
IP Peak Pd 1000-1600 Vehicle Flow	1	0	0	0	0	0	0	10	11
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	3	3
PM Peak Pd 1600-1900 Vehicle Flow	2	1	0	0	0	0	0	10	13
PM Peak Pd 1700-1800 Vehicle Flow	1	0	0	0	0	0	0	3	4
0600-2200 Vehicle Proportion	15.7%	8.3%	3.7%	0.0%	0.0%	0.0%	0.9%	71.3%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	11	4	5	0	0	0	0	23	43
AM Peak Pd 0700-1000 Vehicle Flow	2	2	3	0	0	0	0	4	11
AM Peak Hr 0800-0900 Vehicle Flow	1	1	1	0	0	0	0	3	6
IP Peak Pd 1000-1600 Vehicle Flow	4	2	2	0	0	0	0	12	19
IP Peak Pd 1200-1300 Vehicle Flow	0	0	0	0	0	0	0	3	3
PM Peak Pd 1600-1900 Vehicle Flow	2	0	0	0	0	0	0	3	6
PM Peak Pd 1700-1800 Vehicle Flow	0	0	0	0	0	0	0	2	2
0600-2200 Vehicle Proportion	26.2%	10.0%	11.5%	0.0%	0.0%	0.0%	0.0%	52.3%	100.0%

5.1.26 Table 42 shows minimal motorised vehicle usage on Union Street, with cyclists making up the majority of users. The proportion of which increased from October 2020 to February 2021 and again in May 2021, before dropping slightly in September 2021.

Broughty Ferry

5.1.27 Table 43 presents the results for The Esplanade (Eastbound) in Broughty Ferry.

Table 43. The Esplanade (Eastbound)



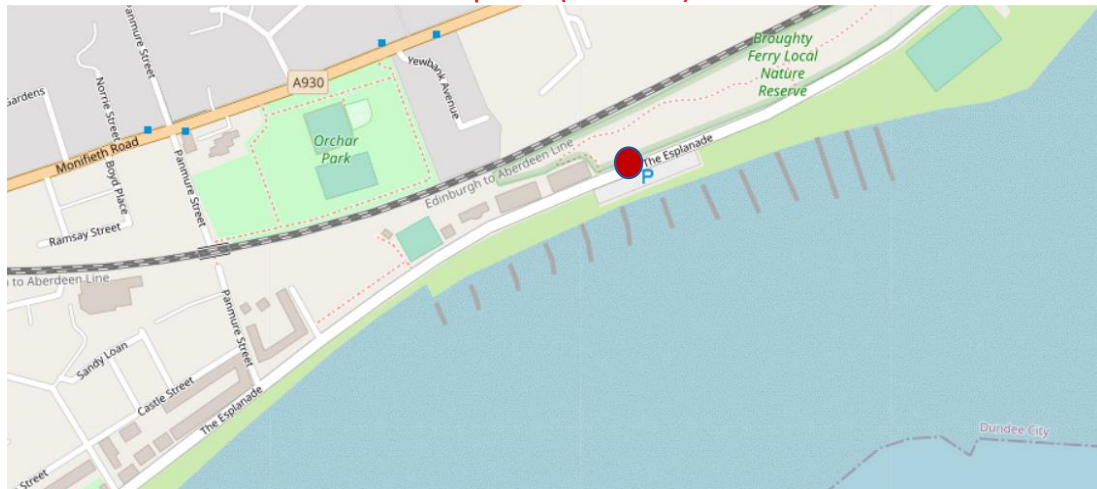
Site 1 The Esplanade Eastbound (3 day Average Thur - Fri - Sat)

22nd - 24th Oct 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	119	8	3	1	0	0	3	72	205
AM Peak Pd 0700-1000 Vehicle Flow	12	1	1	0	0	0	0	5	20
AM Peak Hr 0800-0900 Vehicle Flow	4	0	0	0	0	0	0	2	7
IP Peak Pd 1000-1600 Vehicle Flow	75	5	2	0	0	0	2	39	123
IP Peak Pd 1200-1300 Vehicle Flow	8	0	0	0	0	0	0	4	12
PM Peak Pd 1600-1900 Vehicle Flow	21	2	0	0	0	0	0	24	48
PM Peak Pd 1700-1800 Vehicle Flow	6	0	0	0	0	0	0	9	16
0600-2200 Vehicle Proportion	57.8%	3.9%	1.5%	0.3%	0.0%	0.0%	1.6%	34.9%	100.0%
29th - 31st Oct 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	228	19	2	0	0	0	1	56	306
AM Peak Pd 0700-1000 Vehicle Flow	19	3	0	0	0	0	0	9	31
AM Peak Hr 0800-0900 Vehicle Flow	4	1	0	0	0	0	0	2	8
IP Peak Pd 1000-1600 Vehicle Flow	143	13	1	0	0	0	1	35	192
IP Peak Pd 1200-1300 Vehicle Flow	26	2	0	0	0	0	0	8	36
PM Peak Pd 1600-1900 Vehicle Flow	41	3	0	0	0	0	0	8	52
PM Peak Pd 1700-1800 Vehicle Flow	9	2	0	0	0	0	0	3	14
0600-2200 Vehicle Proportion	74.6%	6.1%	0.7%	0.1%	0.0%	0.0%	0.2%	18.3%	100.0%
Difference	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	109	11	-1	0	0	0	-3	-16	100
AM Peak Pd 0700-1000 Vehicle Flow	6	2	-1	0	0	0	0	4	11
AM Peak Hr 0800-0900 Vehicle Flow	0	1	0	0	0	0	0	0	1
IP Peak Pd 1000-1600 Vehicle Flow	68	8	-1	0	0	0	-1	-4	69
IP Peak Pd 1200-1300 Vehicle Flow	17	2	0	0	0	0	0	4	24
PM Peak Pd 1600-1900 Vehicle Flow	20	1	0	0	0	0	0	-16	5
PM Peak Pd 1700-1800 Vehicle Flow	3	1	0	0	0	0	0	-7	-3
0600-2200 Vehicle Proportion	16.8%	2.2%	-0.8%	-0.2%	0.0%	0.0%	-1.4%	-16.6%	0.0%

5.1.28 Table 43 shows that between there was a 17% drop in cyclists and a 17% increase in cars when comparing the 2 different October survey weeks, following removal of the Spaces for People scheme during the week commencing Monday 26th October 2020.

5.1.30 Table 44 presents the results for The Esplanade (Westbound) in Broughty Ferry.

Table 44. The Esplanade (Westbound)



Site 1 The Esplanade Westbound (3 day Average Thur - Fri - Sat)

22nd - 24th Oct 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	114	8	5	1	0	0	1	61	190
AM Peak Pd 0700-1000 Vehicle Flow	10	1	2	0	0	0	0	6	19
AM Peak Hr 0800-0900 Vehicle Flow	2	0	0	0	0	0	0	3	5
IP Peak Pd 1000-1600 Vehicle Flow	69	4	3	0	0	0	1	33	110
IP Peak Pd 1200-1300 Vehicle Flow	8	1	0	0	0	0	0	4	13
PM Peak Pd 1600-1900 Vehicle Flow	24	2	0	0	0	0	0	19	45
PM Peak Pd 1700-1800 Vehicle Flow	8	0	0	0	0	0	0	6	14
0600-2200 Vehicle Proportion	60.3%	4.0%	2.5%	0.4%	0.0%	0.0%	0.7%	32.2%	100.0%
29th - 31st Oct 2020	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	148	18	2	0	0	0	1	44	213
AM Peak Pd 0700-1000 Vehicle Flow	18	3	0	0	0	0	0	9	30
AM Peak Hr 0800-0900 Vehicle Flow	6	1	0	0	0	0	0	2	9
IP Peak Pd 1000-1600 Vehicle Flow	91	11	1	0	0	0	1	29	133
IP Peak Pd 1200-1300 Vehicle Flow	16	3	0	0	0	0	0	4	23
PM Peak Pd 1600-1900 Vehicle Flow	25	4	0	0	0	0	0	5	34
PM Peak Pd 1700-1800 Vehicle Flow	10	0	0	0	0	0	0	1	10
0600-2200 Vehicle Proportion	69.3%	8.5%	0.9%	0.2%	0.0%	0.0%	0.3%	20.8%	100.0%
Difference	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Pedal Cycle	Total
0600-2200 Vehicle Flow	33	10	-3	0	0	0	-1	-17	23
AM Peak Pd 0700-1000 Vehicle Flow	8	2	-2	0	0	0	0	3	11
AM Peak Hr 0800-0900 Vehicle Flow	4	1	0	0	0	0	0	0	4
IP Peak Pd 1000-1600 Vehicle Flow	22	6	-1	0	0	0	0	-4	23
IP Peak Pd 1200-1300 Vehicle Flow	8	1	0	0	0	0	0	0	10
PM Peak Pd 1600-1900 Vehicle Flow	1	2	0	0	0	0	0	-15	-11
PM Peak Pd 1700-1800 Vehicle Flow	1	0	0	0	0	0	0	-5	-4
0600-2200 Vehicle Proportion	9.0%	4.4%	-1.5%	-0.2%	0.0%	0.0%	-0.4%	-11.3%	0.0%

5.1.31 Table 44 shows that between there was an 11% drop in cyclists and a 9% increase in cars when comparing the 2 different October survey weeks, following removal of the Spaces for People scheme during the week commencing Monday 26th October 2020.

7. MODE SHARE SURVEYS

7.1 Rail Station Counts

7.1.1 Entry and exit counts were undertaken at both the front and rear entrances of Dundee Railway Station on Wednesday 5th May 2021. Surveys were undertaken between 06:00 and 22:00.

7.1.2 The results were classified by the following:

- Adult
- Adult & Child
- Child
- Elderly
- Disabled
- Cyclist on Bike
- Cyclist on Foot.

7.1.3 Table 45 presents a summary of the entry and exit counts.

Table 45. Dundee Railway Station Entry/Exit Counts

Dundee Rail Stn	Station Entrance	Station Exit	Total Entry	Total Exit
06:00 - 22:00	939	926	939	926
06:30 - 09:30	156	147	156	147
09:30 - 15:30	407	369	407	369
15:30 - 18:30	242	219	242	219

7.1.4 Table 45 shows that over the 16 hour period (0600-2200hrs), there was a total of 939 pedestrians entering Dundee Railway Station and 926 pedestrians exiting:

- In the AM peak period (07:00 – 10:00), 156 pedestrians entered the station and 147 departed the station.
- In the Off peak period (10:00 – 16:00), 407 pedestrians entered the station and 369 departed the station.
- In the PM peak period (16:00 – 19:00), 242 pedestrians entered the station and 219 departed the station.

7.2 Bus Occupancy Counts

- 7.2.1 Bus occupancy surveys were undertaken inbound towards Dundee and outbound from Dundee at each of the 16 classified turning count sites, as shown in Figure 9.
- 7.2.2 Bus occupancy data was gathered for one day, Wednesday 5th May 2021, between 06:00 and 22:00.
- 7.2.3 The methodology used to gather the bus occupancy required manual enumerators to review the footage at each site – i.e. manual check and note if the bus was empty, ¼ full, ½ full, ¾ full, full or full with standing passengers.
- 7.2.4 The capacity of vehicles was the same as those used in a previous study for TACTRAN [*Mode Share Surveys 2019 – Draft, SYSTRA, Ref. GB01t19A57/4, 11/07/19*], namely:
- | | | |
|---|-------------------|---------------|
| ○ | Midi bus | 15 passengers |
| ○ | Mini bus | 15 passengers |
| ○ | Single decker bus | 30 passengers |
| ○ | Double decker bus | 72 passengers |
| ○ | Coach | 55 passengers |
| ○ | Mini Coach | 14 passengers |
| ○ | Midi Coach | 14 passengers |
| ○ | School Bus | 40 passengers |
- 7.2.5 Vehicles where the occupancy was not visible (e.g. where coaches had dark tinted windows) were excluded from the analysis. No surveys were undertaken at Dundee bus station, just at the cordon locations.
- 7.2.6 Table 46 below presents the bus occupancy at each of the cordon points around Dundee city centre in the AM peak period (06:30 – 09:30).

Table 46. Bus & Coach Cordon Occupancy (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	29	109	4	Bus	37	83	2
	Coach	3	11	4	Coach	0	0	0
CC2	Bus	123	1518	12	Bus	37	540	15
	Coach	0	0	0	Coach	0	0	0
OC1	Bus	-	-	-	Bus	-	-	-
	Coach	-	-	-	Coach	-	-	-
OC2	Bus	2	18	9	Bus	0	0	0
	Coach	2	4	2	Coach	1	0	0
OC3	Bus	8	59	7	Bus	6	30	5
	Coach	2	4	2	Coach	6	4	1
OC4	Bus	21	255	12	Bus	27	213	8
	Coach	4	11	3	Coach	7	11	2
OC5	Bus	36	480	13	Bus	37	447	12
	Coach	3	7	2	Coach	5	17	3
OC6	Bus	36	512	14	Bus	37	473	13
	Coach	4	21	5	Coach	2	4	2
OC7	Bus	49	727	15	Bus	1	0	0
	Coach	0	0	0	Coach	0	0	0
OC8	Bus	56	280	5	Bus	52	228	4
	Coach	0	0	0	Coach	0	0	0
OC9	Bus	18	191	11	Bus	19	189	10
	Coach	4	28	7	Coach	2	7	4
OC10	Bus	21	308	15	Bus	24	344	14
	Coach	7	18	3	Coach	7	7	1
OC11	Bus	7	90	13	Bus	5	72	14
	Coach	0	0	0	Coach	0	0	0
OC12	Bus	1	0	0	Bus	7	51	7
	Coach	0	0	0	Coach	0	0	0
OC13	Bus	24	335	14	Bus	28	345	12
	Coach	1	0	0	Coach	0	0	0
OC14	Bus	2	26	13	Bus	1	18	18
	Coach	0	0	0	Coach	0	0	0

7.2.7 Table 46 shows that the corridor with the highest bus and coach occupancy was OC10, McAlpine Road north of Kingsway. The average inbound bus occupancy was 10 passengers and the average coach occupancy 2 passengers. The average outbound bus occupancy was 9 passengers and the average outbound coach was running empty.

7.2.8 Table 47 presents the same information for the Inter peak period (09:30 – 15:30).

Table 47. Bus & Coach Cordon Occupancy (Inter Peak 09:30 – 15:30)

Inter Peak Period (09:30-15:30)	Inbound towards Dundee				Outbound from Dundee			
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	72	520	7	Bus	74	404	5
	Coach	7	14	2	Coach	3	0	0
CC2	Bus	268	3494	13	Bus	100	1384	14
	Coach	1	4	4	Coach	2	7	4
OC1	Bus	-	-	-	Bus	-	-	-
	Coach	-	-	-	Coach	-	-	-
OC2	Bus	1	4	4	Bus	1	0	0
	Coach	4	0	0	Coach	3	0	0
OC3	Bus	14	90	6	Bus	14	115	8
	Coach	0	0	0	Coach	0	0	0
OC4	Bus	53	570	11	Bus	47	566	12
	Coach	7	18	3	Coach	10	14	1
OC5	Bus	81	1091	13	Bus	83	1112	13
	Coach	2	4	2	Coach	7	14	2
OC6	Bus	80	1051	13	Bus	83	1097	13
	Coach	2	0	0	Coach	8	18	2
OC7	Bus	122	1776	15	Bus	2	0	0
	Coach	3	4	0	Coach	2	0	0
OC8	Bus	56	656	12	Bus	52	605	12
	Coach	1	0	0	Coach	0	0	0
OC9	Bus	39	489	13	Bus	40	453	11
	Coach	3	14	5	Coach	7	25	4
OC10	Bus	50	753	15	Bus	45	677	15
	Coach	9	7	1	Coach	3	0	0
OC11	Bus	11	198	18	Bus	13	180	14
	Coach	2	0	0	Coach	3	4	0
OC12	Bus	6	0	0	Bus	6	0	0
	Coach	1	0	0	Coach	0	0	0
OC13	Bus	56	818	15	Bus	55	770	14
	Coach	2	7	0	Coach	1	0	0
OC14	Bus	1	18	18	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0

7.2.9 Table 47 shows that bus and coach occupancy was again highest on corridor OC10, Macalpine Road north of Kingsway. The average inbound bus occupancy was 12 passengers and the average coach occupancy 1 passenger. The average outbound bus occupancy was 9 passengers and the average outbound coach occupancy was 1 passenger.

7.2.10 Table 48 presents the same information for the PM peak (15:30 – 18:30).

Table 48. Bus & Coach Cordon Occupancy (PM Peak 15:30 – 18:30)

PM Peak Period (15:30-18:30)	Inbound towards Dundee				Outbound from Dundee			
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	42	239	7	Bus	36	240	7
	Coach	3	11	2	Coach	0	0	0
CC2	Bus	121	1660	13	Bus	47	587	12
	Coach	1	4	4	Coach	0	0	0
OC1	Bus	-	-	-	Bus	-	-	-
	Coach	-	-	-	Coach	-	-	-
OC2	Bus	0	0	0	Bus	0	0	0
	Coach	3	4	1	Coach	1	0	0
OC3	Bus	9	74	8	Bus	7	59	8
	Coach	2	4	2	Coach	2	0	0
OC4	Bus	22	237	11	Bus	23	260	11
	Coach	3	4	1	Coach	4	7	2
OC5	Bus	45	538	12	Bus	38	541	14
	Coach	0	0	0	Coach	0	0	0
OC6	Bus	45	524	12	Bus	39	523	13
	Coach	1	0	0	Coach	2	0	0
OC7	Bus	59	726	12	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
OC8	Bus	56	243	4	Bus	52	335	6
	Coach	0	0	0	Coach	0	0	0
OC9	Bus	20	263	13	Bus	23	252	11
	Coach	0	0	0	Coach	0	0	0
OC10	Bus	25	398	16	Bus	25	365	15
	Coach	2	0	0	Coach	2	0	0
OC11	Bus	7	90	13	Bus	6	108	18
	Coach	0	0	0	Coach	0	0	0
OC12	Bus	3	0	0	Bus	1	0	0
	Coach	0	0	0	Coach	0	0	0
OC13	Bus	32	378	12	Bus	28	390	14
	Coach	0	0	0	Coach	0	0	0
OC14	Bus	1	36	36	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0

7.2.11 Table 48 shows that bus occupancy during the PM Peak period was again highest on OC10 Macalpine Road north of Kingsway. The average inbound bus occupancy was 11 passengers and the average coach occupancy 1 passenger. The average outbound bus occupancy was 9 passengers and the average outbound coach was running empty.

7.3 Vehicle Occupancy Counts

- 7.3.1 Vehicle occupancy counts were undertaken at each of the classified turning count sites, as shown in Figure 9.
- 7.3.2 Vehicle occupancy data was gathered for one day, Wednesday 5th May 2021, between 06:00 and 22:00.
- 7.3.3 Table 49 below presents the vehicle occupancy and sample rates at each of the inbound cordon points around Dundee city centre in the AM peak period (06:30 – 09:30).

Table 49. Vehicle Inbound Cordon Occupancy (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	2224	468	21.0%	543	1.16	OC7	Car	692	159	23.0%	199	1.25
	LGV	469	127	27.1%	152	1.20		LGV	163	57	35.0%	75	1.32
	OGV1	98	44	44.9%	48	1.09		OGV1	29	20	69.0%	24	1.20
	OGV2	47	25	53.2%	25	1.00		OGV2	15	12	80.0%	13	1.08
CC2	Car	806	186	23.1%	213	1.15	OC8	Car	682	159	23.3%	206	1.30
	LGV	136	19	14.0%	20	1.05		LGV	101	38	37.6%	44	1.16
	OGV1	16	2	12.5%	2	1.00		OGV1	16	12	75.0%	14	1.17
	OGV2	1	0	0.0%	0	-		OGV2	1	0	0.0%	0	-
OC1	Car	155	58	37.4%	69	1.19	OC9	Car	862	191	22.2%	260	1.36
	LGV	42	27	64.3%	33	1.22		LGV	154	50	32.5%	56	1.12
	OGV1	5	4	80.0%	7	1.75		OGV1	28	19	67.9%	24	1.26
	OGV2	39	22	56.4%	24	1.09		OGV2	5	4	80.0%	5	1.25
OC2	Car	1015	221	21.8%	271	1.23	OC10	Car	1418	326	23.0%	430	1.32
	LGV	231	76	32.9%	93	1.22		LGV	313	94	30.0%	117	1.24
	OGV1	44	30	68.2%	33	1.10		OGV1	64	31	48.4%	38	1.23
	OGV2	29	19	65.5%	20	1.05		OGV2	13	9	69.2%	11	1.22
OC3	Car	2254	496	22.0%	615	1.24	OC11	Car	876	198	22.6%	253	1.28
	LGV	430	112	26.0%	145	1.29		LGV	167	55	32.9%	67	1.22
	OGV1	96	45	46.9%	56	1.24		OGV1	23	17	73.9%	21	1.24
	OGV2	92	35	38.0%	40	1.14		OGV2	10	9	90.0%	11	1.22
OC4	Car	1307	282	21.6%	335	1.19	OC12	Car	437	121	27.7%	149	1.23
	LGV	241	70	29.0%	79	1.13		LGV	69	44	63.8%	53	1.20
	OGV1	75	33	44.0%	38	1.15		OGV1	39	24	61.5%	30	1.25
	OGV2	31	20	64.5%	24	1.20		OGV2	1	1	100.0%	1	1.00
OC5	Car	854	224	26.2%	246	1.10	OC13	Car	700	157	22.4%	195	1.24
	LGV	144	61	42.4%	74	1.21		LGV	135	50	37.0%	63	1.26
	OGV1	14	10	71.4%	12	1.20		OGV1	36	22	61.1%	25	1.14
	OGV2	2	2	100.0%	2	1.00		OGV2	6	5	83.3%	5	1.00
OC6	Car	773	173	22.4%	224	1.29	OC14	Car	543	136	25.0%	167	1.23
	LGV	132	55	41.7%	68	1.24		LGV	62	32	51.6%	36	1.13
	OGV1	13	11	84.6%	15	1.36		OGV1	18	15	83.3%	18	1.20
	OGV2	2	2	100.0%	2	1.00		OGV2	1	1	100.0%	1	1.00

- 7.3.4 Table 49 shows that in the AM Peak period, inbound towards Dundee city centre, the average car occupancy was 1.23 persons, LGV 1.20 persons, OGV1 1.22 persons and OGV2 1.09 persons.

7.3.5 Table 50 presents the vehicle occupancy and sample rates at each of the outbound cordon points around Dundee city centre in the AM peak period (06:30 – 09:30).

Table 50. Vehicle Outbound Cordon Occupancy (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	1545	328	21.2%	349	1.06	OC7	Car	469	116	24.7%	140	1.21
	LGV	493	100	20.3%	117	1.17		LGV	109	47	43.1%	63	1.34
	OGV1	126	29	23.0%	32	1.10		OGV1	24	19	79.2%	23	1.21
	OGV2	70	9	12.9%	10	1.11		OGV2	13	11	84.6%	13	1.18
CC2	Car	402	102	25.4%	115	1.13	OC8	Car	516	130	25.2%	161	1.24
	LGV	75	30	40.0%	37	1.23		LGV	101	46	45.5%	54	1.17
	OGV1	23	18	78.3%	21	1.17		OGV1	16	12	75.0%	15	1.25
	OGV2	3	3	100.0%	3	1.00		OGV2	1	0	0.0%	0	-
OC1	Car	26	18	69.2%	20	1.11	OC9	Car	754	179	23.7%	228	1.27
	LGV	12	10	83.3%	12	1.20		LGV	133	42	31.6%	51	1.21
	OGV1	5	4	80.0%	5	1.25		OGV1	23	17	73.9%	21	1.24
	OGV2	39	22	56.4%	22	1.00		OGV2	11	9	81.8%	11	1.22
OC2	Car	1720	361	21.0%	453	1.25	OC10	Car	802	190	23.7%	233	1.23
	LGV	199	69	34.7%	77	1.12		LGV	211	72	34.1%	86	1.19
	OGV1	37	22	59.5%	24	1.09		OGV1	51	28	54.9%	38	1.36
	OGV2	37	26	70.3%	30	1.15		OGV2	7	5	71.4%	5	1.00
OC3	Car	1261	287	22.8%	380	1.32	OC11	Car	531	144	27.1%	188	1.31
	LGV	443	118	26.6%	172	1.46		LGV	197	63	32.0%	84	1.33
	OGV1	129	53	41.1%	67	1.26		OGV1	42	24	57.1%	29	1.21
	OGV2	82	39	47.6%	44	1.13		OGV2	15	11	73.3%	12	1.09
OC4	Car	885	205	23.2%	246	1.20	OC12	Car	426	123	28.9%	159	1.29
	LGV	203	69	34.0%	88	1.28		LGV	79	38	48.1%	51	1.34
	OGV1	68	35	51.5%	42	1.20		OGV1	15	13	86.7%	17	1.31
	OGV2	25	20	80.0%	22	1.10		OGV2	1	1	100.0%	1	1.00
OC5	Car	533	149	28.0%	169	1.13	OC13	Car	395	103	26.1%	136	1.32
	LGV	114	50	43.9%	60	1.20		LGV	122	54	44.3%	69	1.28
	OGV1	24	16	66.7%	20	1.25		OGV1	19	16	84.2%	20	1.25
	OGV2	4	3	75.0%	4	1.33		OGV2	4	3	75.0%	4	1.33
OC6	Car	588	141	24.0%	163	1.16	OC14	Car	1078	234	21.7%	286	1.22
	LGV	130	49	37.7%	63	1.29		LGV	47	27	57.4%	30	1.11
	OGV1	24	17	70.8%	22	1.29		OGV1	9	7	77.8%	8	1.14
	OGV2	4	4	100.0%	5	1.25		OGV2	0	0	-	0	-

7.3.6 Table 50 shows that in the AM peak period, outbound from Dundee city centre, the average car occupancy was 1.22 persons, LGV 1.25 persons, OGV1 1.22 persons and OGV2 1.14 persons.

7.3.7 Table 51 presents the vehicle occupancy and sample rates at each of the inbound cordon points around Dundee city centre in the inter peak period (09:30 – 15:30).

Table 51. Vehicle Inbound Cordon Occupancy (Inter Peak 09:30 – 15:30)

In Peak Period (09:30-15:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
OC1	Car	4124	885	21.5%	1099	1.24	OC7	Car	1902	439	23.1%	594	1.35
	LGV	733	197	26.9%	232	1.18		LGV	299	115	38.5%	143	1.24
	OGV1	230	83	36.1%	93	1.12		OGV1	78	48	61.5%	60	1.25
	OGV2	140	59	42.1%	59	1.00		OGV2	29	21	72.4%	24	1.14
OC2	Car	1721	375	21.8%	478	1.27	OC8	Car	1422	321	22.6%	440	1.37
	LGV	233	55	23.6%	65	1.18		LGV	178	74	41.6%	82	1.11
	OGV1	40	6	15.0%	9	1.50		OGV1	40	29	72.5%	36	1.24
	OGV2	3	0	0.0%	0	-		OGV2	5	5	100.0%	6	1.20
OC1	Car	74	47	63.5%	56	1.19	OC9	Car	1613	369	22.9%	485	1.31
	LGV	38	29	76.3%	33	1.14		LGV	262	90	34.4%	111	1.23
	OGV1	29	26	89.7%	29	1.12		OGV1	60	43	71.7%	51	1.19
	OGV2	82	50	61.0%	53	1.06		OGV2	14	12	85.7%	14	1.17
OC2	Car	2862	626	21.9%	804	1.28	OC10	Car	2763	614	22.2%	836	1.36
	LGV	421	141	33.5%	167	1.18		LGV	534	155	29.0%	173	1.12
	OGV1	79	50	63.3%	62	1.24		OGV1	143	65	45.5%	74	1.14
	OGV2	44	32	72.7%	35	1.09		OGV2	18	15	83.3%	17	1.13
OC3	Car	2600	571	22.0%	767	1.34	OC11	Car	1694	393	23.2%	492	1.25
	LGV	424	135	31.8%	166	1.23		LGV	285	96	33.7%	114	1.19
	OGV1	169	76	45.0%	88	1.16		OGV1	63	41	65.1%	47	1.15
	OGV2	153	72	47.1%	79	1.10		OGV2	24	20	83.3%	22	1.10
OC4	Car	2411	522	21.7%	592	1.13	OC12	Car	1324	341	25.8%	432	1.27
	LGV	388	127	32.7%	146	1.15		LGV	139	66	47.5%	82	1.24
	OGV1	192	77	40.1%	85	1.10		OGV1	51	37	72.5%	42	1.14
	OGV2	88	50	56.8%	55	1.10		OGV2	3	2	66.7%	2	1.00
OC5	Car	1619	444	27.4%	516	1.16	OC13	Car	1568	367	23.4%	499	1.36
	LGV	217	86	39.6%	104	1.21		LGV	250	90	36.0%	103	1.14
	OGV1	51	34	66.7%	41	1.21		OGV1	80	50	62.5%	59	1.18
	OGV2	7	5	71.4%	6	1.20		OGV2	5	4	80.0%	4	1.00
OC6	Car	1481	334	22.6%	434	1.30	OC14	Car	1146	278	24.3%	375	1.35
	LGV	210	93	44.3%	106	1.14		LGV	108	57	52.8%	70	1.23
	OGV1	46	33	71.7%	44	1.33		OGV1	31	27	87.1%	34	1.26
	OGV2	7	4	57.1%	5	1.25		OGV2	3	2	66.7%	3	1.50

7.3.8 Table 51 shows that in the inter peak period, inbound towards Dundee city centre, the average car occupancy was 1.28 persons, LGV 1.18 persons, OGV1 1.21 persons and OGV2 1.14 persons.

7.3.9 Table 52 below presents the vehicle occupancy and sample rates at each of the outbound cordon points around Dundee city centre in the inter peak period (09:30 – 15:30).

Table 52. Vehicle Outbound Cordon Occupancy (Inter Peak 09:30 – 15:30)

In Peak Period (09:30-15:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
OC1	Car	4003	816	20.4%	1024	1.25	OC7	Car	1376	315	22.9%	379	1.20
	LGV	822	180	21.9%	222	1.23		LGV	204	88	43.1%	110	1.25
	OGV1	218	41	18.8%	50	1.22		OGV1	34	27	79.4%	34	1.26
	OGV2	113	24	21.2%	28	1.17		OGV2	27	20	74.1%	22	1.10
OC2	Car	1535	345	22.5%	449	1.30	OC8	Car	1701	379	22.3%	500	1.32
	LGV	229	90	39.3%	109	1.21		LGV	225	82	36.4%	97	1.18
	OGV1	58	40	69.0%	50	1.25		OGV1	56	37	66.1%	46	1.24
	OGV2	5	3	60.0%	3	1.00		OGV2	4	4	100.0%	4	1.00
OC1	Car	83	49	59.0%	61	1.24	OC9	Car	1656	388	23.4%	503	1.30
	LGV	50	36	72.0%	40	1.11		LGV	272	86	31.6%	105	1.22
	OGV1	26	20	76.9%	23	1.15		OGV1	57	40	70.2%	49	1.23
	OGV2	82	49	59.8%	49	1.00		OGV2	10	9	90.0%	11	1.22
OC2	Car	3076	663	21.6%	849	1.28	OC10	Car	2465	569	23.1%	748	1.31
	LGV	571	168	29.4%	190	1.13		LGV	466	155	33.3%	180	1.16
	OGV1	124	60	48.4%	64	1.07		OGV1	134	61	45.5%	72	1.18
	OGV2	68	48	70.6%	52	1.08		OGV2	16	13	81.3%	16	1.23
OC3	Car	2567	564	22.0%	884	1.57	OC11	Car	1721	399	23.2%	518	1.30
	LGV	496	166	33.5%	244	1.47		LGV	301	101	33.6%	116	1.15
	OGV1	162	77	47.5%	93	1.21		OGV1	77	48	62.3%	57	1.19
	OGV2	154	69	44.8%	72	1.04		OGV2	41	32	78.0%	33	1.03
OC4	Car	2576	584	22.7%	678	1.16	OC12	Car	1390	340	24.5%	453	1.33
	LGV	433	153	35.3%	176	1.15		LGV	117	69	59.0%	84	1.22
	OGV1	207	82	39.6%	98	1.20		OGV1	45	37	82.2%	47	1.27
	OGV2	77	49	63.6%	54	1.10		OGV2	3	1	33.3%	1	1.00
OC5	Car	1973	502	25.4%	563	1.12	OC13	Car	1382	332	24.0%	443	1.33
	LGV	255	106	41.6%	123	1.16		LGV	241	96	39.8%	113	1.18
	OGV1	47	36	76.6%	42	1.17		OGV1	83	53	63.9%	64	1.21
	OGV2	3	3	100.0%	3	1.00		OGV2	18	14	77.8%	14	1.00
OC6	Car	2133	453	21.2%	583	1.29	OC14	Car	810	201	24.8%	253	1.26
	LGV	280	96	34.3%	113	1.18		LGV	98	51	52.0%	59	1.16
	OGV1	53	36	67.9%	46	1.28		OGV1	30	26	86.7%	32	1.23
	OGV2	5	5	100.0%	5	1.00		OGV2	0	0	-	0	-

7.3.10 Table 52 shows that in the inter peak period, outbound from Dundee city centre, the average car occupancy was 1.29 persons, LGV 1.20 persons, OGV1 1.21 persons and OGV2 1.07 persons.

7.3.11 Table 53 presents the vehicle occupancy and sample rates at each of the inbound cordon points around Dundee city centre in the PM peak period (15:30 – 18:30).

Table 53. Vehicle Inbound Cordon Occupancy (PM Peak 15:30 – 18:30)

PM Peak Period (15:30-18:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
OC1	Car	2464	521	21.1%	663	1.27	OC7	Car	1111	241	21.7%	319	1.32
	LGV	479	127	26.5%	153	1.20		LGV	147	47	32.0%	53	1.13
	OGV1	69	34	49.3%	40	1.18		OGV1	17	11	64.7%	12	1.09
	OGV2	29	17	58.6%	17	1.00		OGV2	12	9	75.0%	9	1.00
OC2	Car	907	191	21.1%	253	1.32	OC8	Car	815	177	21.7%	251	1.42
	LGV	98	22	22.4%	29	1.32		LGV	68	35	51.5%	39	1.11
	OGV1	15	3	20.0%	4	1.33		OGV1	10	8	80.0%	8	1.00
	OGV2	1	0	0.0%	0	-		OGV2	0	0	-	0	-
OC1	Car	20	15	75.0%	20	1.33	OC9	Car	1221	252	20.6%	356	1.41
	LGV	9	8	88.9%	8	1.00		LGV	117	48	41.0%	55	1.15
	OGV1	5	3	60.0%	3	1.00		OGV1	18	14	77.8%	16	1.14
	OGV2	22	18	81.8%	19	1.06		OGV2	6	5	83.3%	5	1.00
OC2	Car	2090	447	21.4%	585	1.31	OC10	Car	1564	337	21.5%	437	1.30
	LGV	198	69	34.8%	81	1.17		LGV	205	66	32.2%	76	1.15
	OGV1	15	12	80.0%	13	1.08		OGV1	38	21	55.3%	25	1.19
	OGV2	12	9	75.0%	10	1.11		OGV2	2	2	100.0%	2	1.00
OC3	Car	2190	487	22.2%	640	1.31	OC11	Car	839	193	23.0%	244	1.26
	LGV	397	108	27.2%	136	1.26		LGV	119	45	37.8%	52	1.16
	OGV1	85	41	48.2%	50	1.22		OGV1	31	15	48.4%	18	1.20
	OGV2	49	26	53.1%	27	1.04		OGV2	7	7	100.0%	7	1.00
OC4	Car	1381	301	21.8%	338	1.12	OC12	Car	900	205	22.8%	278	1.36
	LGV	194	71	36.6%	84	1.18		LGV	98	39	39.8%	49	1.26
	OGV1	37	17	45.9%	18	1.06		OGV1	10	10	100.0%	11	1.10
	OGV2	12	10	83.3%	12	1.20		OGV2	3	3	100.0%	3	1.00
OC5	Car	880	240	27.3%	283	1.18	OC13	Car	894	203	22.7%	257	1.27
	LGV	114	46	40.4%	53	1.15		LGV	134	48	35.8%	60	1.25
	OGV1	15	11	73.3%	12	1.09		OGV1	13	11	84.6%	13	1.18
	OGV2	1	0	0.0%	0	-		OGV2	1	1	100.0%	1	1.00
OC6	Car	815	178	21.8%	244	1.37	OC14	Car	885	193	21.8%	255	1.32
	LGV	98	38	38.8%	46	1.21		LGV	43	27	62.8%	31	1.15
	OGV1	12	8	66.7%	9	1.13		OGV1	4	3	75.0%	4	1.33
	OGV2	1	1	100.0%	1	1.00		OGV2	0	0	-	0	-

7.3.12 Table 53 shows that in the PM peak period, inbound towards Dundee city centre, the average car occupancy was 1.31 persons, LGV 1.18 persons, OGV1 1.15 persons and OGV2 1.03 persons.

7.3.13 Table 54 presents the vehicle occupancy and sample rates at each of the outbound cordon points around Dundee city centre in the inter peak period (09:30 – 15:30).

Table 54. Vehicle Inbound Cordon Occupancy (Inter Peak 09:30 – 15:30)

PM Peak Period (15:30-18:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	3083	636	20.6%	859	1.35	OC7	Car	766	168	21.9%	223	1.33
	LGV	473	96	20.3%	121	1.26		LGV	82	35	42.7%	42	1.20
	OGV1	72	15	20.8%	18	1.20		OGV1	19	16	84.2%	19	1.19
	OGV2	44	10	22.7%	11	1.10		OGV2	8	8	100.0%	9	1.13
CC2	Car	1310	280	21.4%	366	1.31	OC8	Car	1203	261	21.7%	352	1.35
	LGV	143	51	35.7%	72	1.41		LGV	155	51	32.9%	59	1.16
	OGV1	11	10	90.9%	10	1.00		OGV1	12	10	83.3%	13	1.30
	OGV2	2	2	100.0%	3	1.50		OGV2	1	0	0.0%	0	-
OC1	Car	157	55	35.0%	67	1.22	OC9	Car	1428	307	21.5%	423	1.38
	LGV	44	30	68.2%	38	1.27		LGV	173	59	34.1%	72	1.22
	OGV1	4	4	100.0%	5	1.25		OGV1	18	14	77.8%	16	1.14
	OGV2	23	14	60.9%	14	1.00		OGV2	4	3	75.0%	3	1.00
OC2	Car	1804	386	21.4%	517	1.34	OC10	Car	1627	350	21.5%	469	1.34
	LGV	270	80	29.6%	92	1.15		LGV	261	80	30.7%	92	1.15
	OGV1	36	19	52.8%	22	1.16		OGV1	25	19	76.0%	22	1.16
	OGV2	15	11	73.3%	11	1.00		OGV2	8	7	87.5%	7	1.00
OC3	Car	2682	557	20.8%	780	1.40	OC11	Car	1277	282	22.1%	359	1.27
	LGV	325	100	30.8%	141	1.41		LGV	188	57	30.3%	71	1.25
	OGV1	54	27	50.0%	33	1.22		OGV1	28	20	71.4%	23	1.15
	OGV2	39	26	66.7%	28	1.08		OGV2	10	10	100.0%	11	1.10
OC4	Car	1859	398	21.4%	460	1.16	OC12	Car	832	210	25.2%	280	1.33
	LGV	219	69	31.5%	78	1.13		LGV	68	35	51.5%	42	1.20
	OGV1	39	26	66.7%	29	1.12		OGV1	14	12	85.7%	14	1.17
	OGV2	21	15	71.4%	16	1.07		OGV2	3	3	100.0%	3	1.00
OC5	Car	1633	378	23.1%	450	1.19	OC13	Car	717	166	23.2%	238	1.43
	LGV	184	69	37.5%	82	1.19		LGV	107	47	43.9%	61	1.30
	OGV1	23	17	73.9%	21	1.24		OGV1	10	9	90.0%	12	1.33
	OGV2	0	0	-	0	-		OGV2	4	3	75.0%	3	1.00
OC6	Car	1644	331	20.1%	461	1.39	OC14	Car	398	89	22.4%	109	1.22
	LGV	195	72	36.9%	83	1.15		LGV	33	20	60.6%	24	1.20
	OGV1	22	17	77.3%	21	1.24		OGV1	3	3	100.0%	3	1.00
	OGV2	0	0	-	0	-		OGV2	1	1	100.0%	1	1.00

7.3.14 Table 54 shows that in the PM peak period, outbound from Dundee city centre, the average car occupancy was 1.31 persons, LGV 1.23 persons, OGV1 1.18 persons and OGV2 1.07 persons.

7.4 Results of Mode Share Surveys

7.4.1 The results of the various mode share surveys can be analysed and presented in different ways. Through discussions previously with Tactran, the methodology developed for assessing and summarising the survey data for each site was agreed as follows:

- By Time Period
- By Mode – both by vehicle and by person.

Mode Share By Time Period

7.4.2 All traffic surveys were undertaken over a 16 hour period 06:00-22:00. The mode share data is presented into three separate time periods, namely:

- AM Peak 06:30 – 09:30
- Inter-peak 09:30 – 15:30
- PM Peak 15:30 – 18:30

Mode Share By Mode

7.4.3 Mode share data can be presented from the perspective of the share of vehicles or by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle

7.4.4 In order to consider the volume of trips to and from Dundee, the following assumptions and data usage was applied:

- The 16 cordon sites were assessed to represent the points of entry/exit to the city.
- Bus/coach passengers which entered/left Dundee were assumed to be destinating and originating in Dundee

7.4.5 The following figures present the Dundee mode share distribution, calculated from the survey data as detailed above. Figure 10 and Figure 11 present the AM peak mode share results by vehicle by direction and Figure 12 and Figure 13 present the AM Peak mode share results by person by direction.

7.4.6 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in May 2019. The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in May 2019.

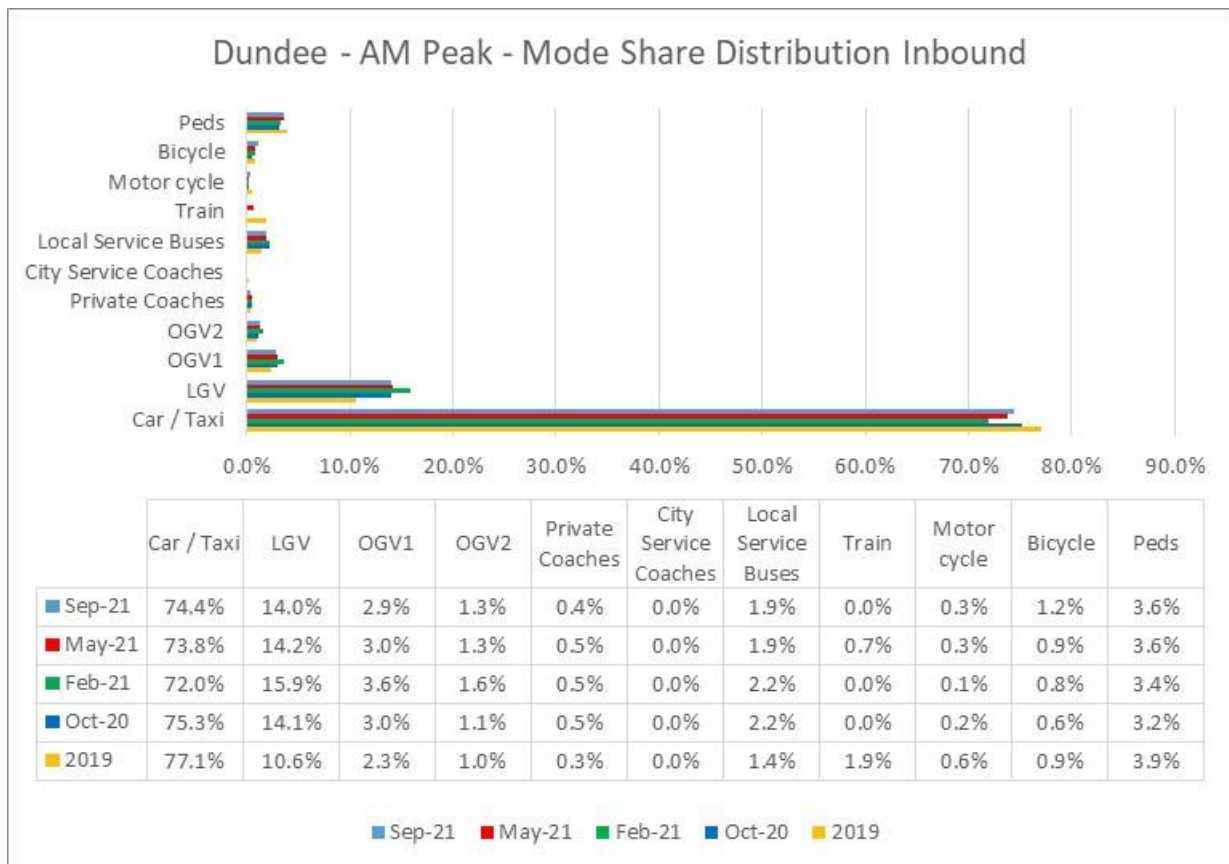


Figure 10. Dundee Mode Share Distribution Inbound – AM Peak

- 7.4.7 Figure 10 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. The total vehicle movements recorded in each survey period was 24,653 in May 2019, 19,568 in October 2020, 16,644 in February 2021, 20,675 in May 2021 and 20,965 in September 2021.
- 7.4.8 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries.
- 7.4.9 The proportion of pedestrians was very similar across all of the surveys, whilst the proportion of cyclists was also similar across all survey periods, the highest proportion being observed in September 2021.

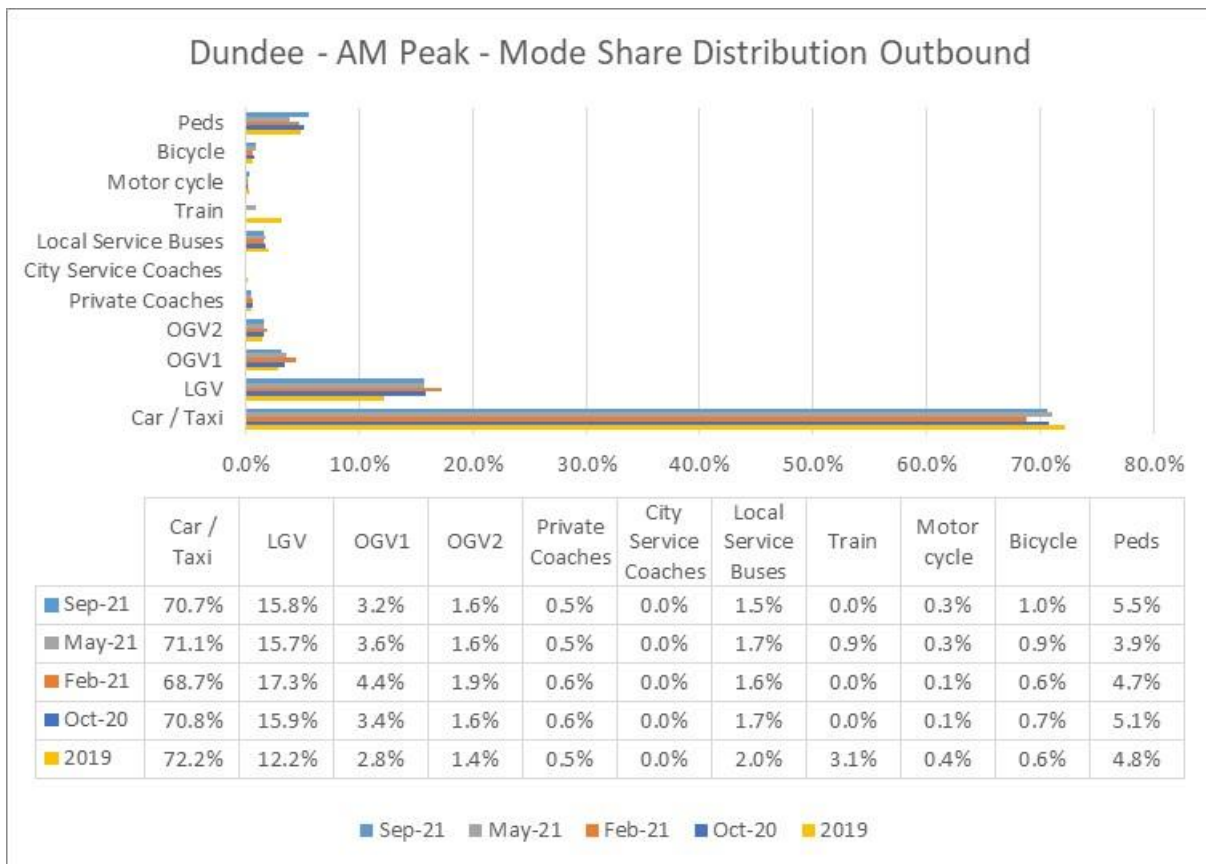


Figure 11. Dundee Mode Share Distribution Outbound – AM Peak

7.4.10 Figure 11 shows that the majority of people heading out of Dundee did so by car and taxi. Total bus usage was around 2.5% in the AM peak, rail was around 1%, bicycle 0.7% and walking between 4% and 5%. The total vehicle movements recorded in each survey period was 19,201 in May 2019, 17,125 in October 2020, 13,646 in February 2021 17,715 in May 2021 and 17,998 in September 2021.

7.4.11 Figure 12 presents the mode share by person in the AM peak

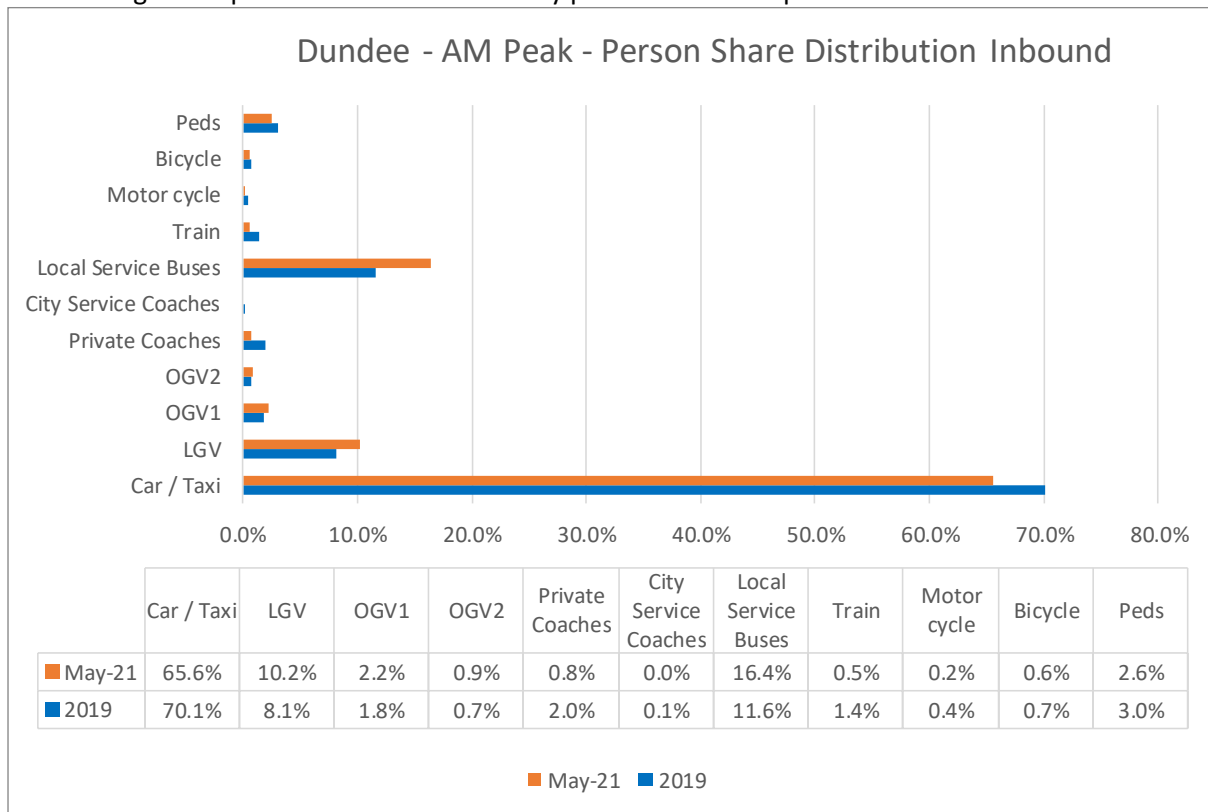


Figure 12. Dundee Person Share Distribution Inbound – AM Peak

7.4.12 Figure 12 shows that in the AM peak, the person mode share inbound remained relatively consistent over the survey periods. The results for rail show a drop between 2019 and May 2021. The total person movements recorded in each survey period was 32,151 in May 2019, and 28,683 in May 2021.

7.4.13 Figure 13 presents the same information for the outbound direction.

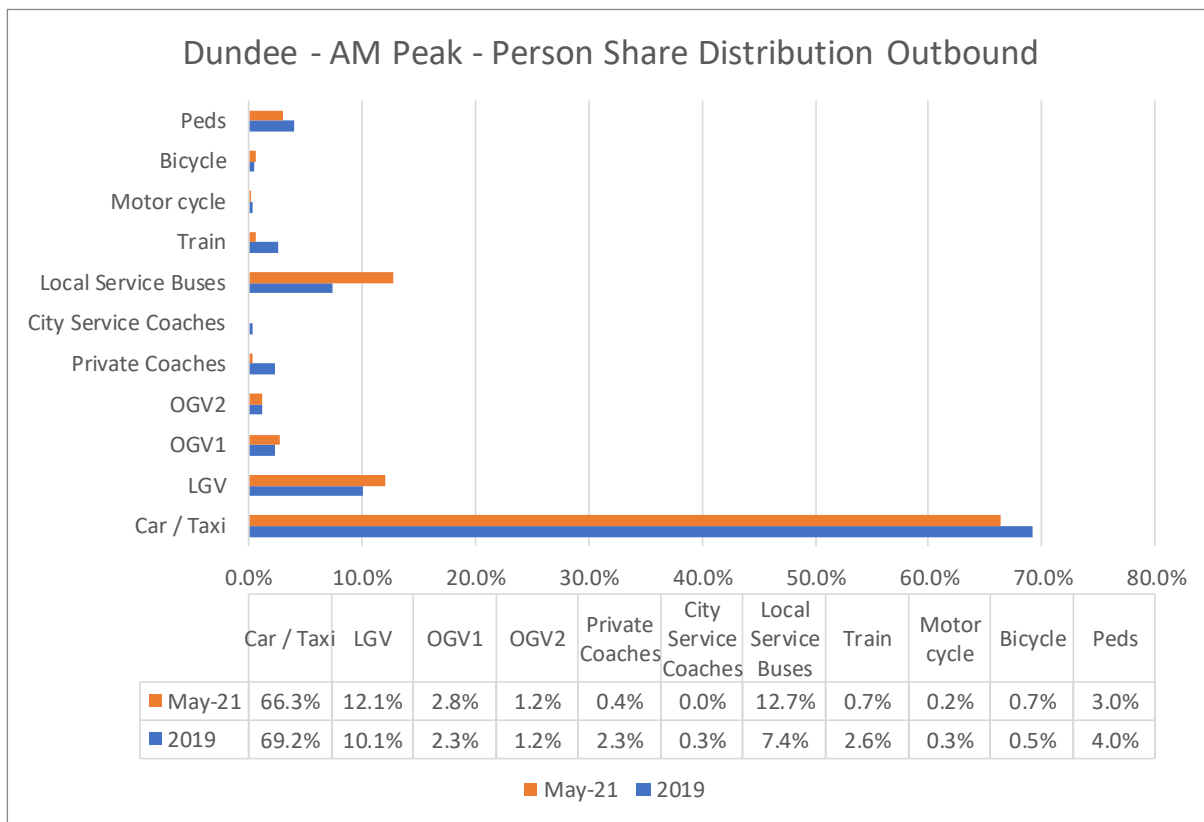


Figure 13. Dundee Person Share Distribution Outbound – AM Peak

7.4.14 Figure 13 shows a similar result to the inbound direction. The total person movements recorded in each survey period was 23,182 in May 2019, and 22,992 in May 2021.

7.4.15 Figure 14 and Figure 15 present the Inter peak mode share results by vehicle by direction and Figure 16 and Figure 17 present the Inter Peak mode share results by person by direction.

7.4.16 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019 (May 2019). The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

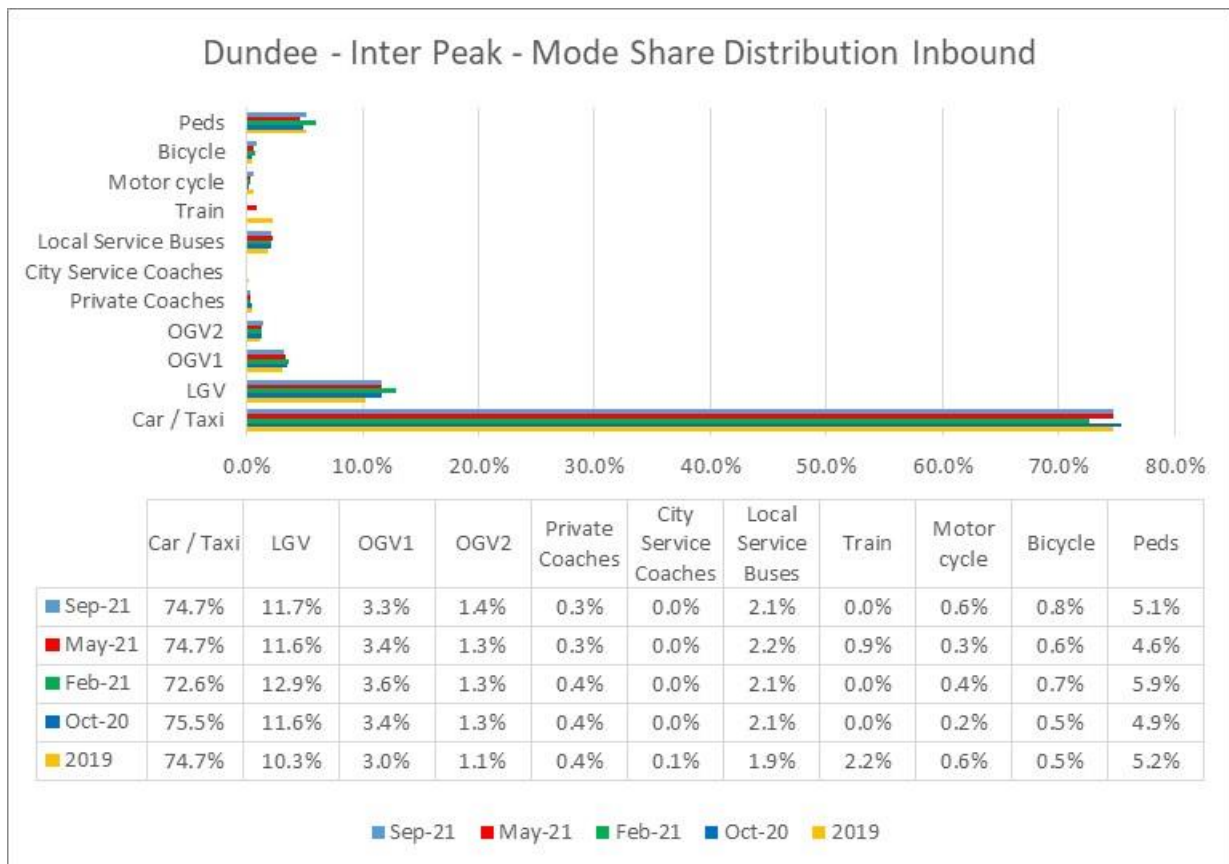


Figure 14. Dundee Mode Share Distribution Inbound – Inter Peak

- 7.4.17 Figure 14 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. The total vehicle movements recorded in each survey period was 45,375 in May 2019, 43,318 in October 2020, 36,778 in February 2021, 41,231 in May 2021 and 43,037 in September 2021.
- 7.4.18 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries.
- 7.4.19 The proportion of pedestrians was very similar across all of the surveys, whilst the proportion of cyclists was also similar across all survey periods.

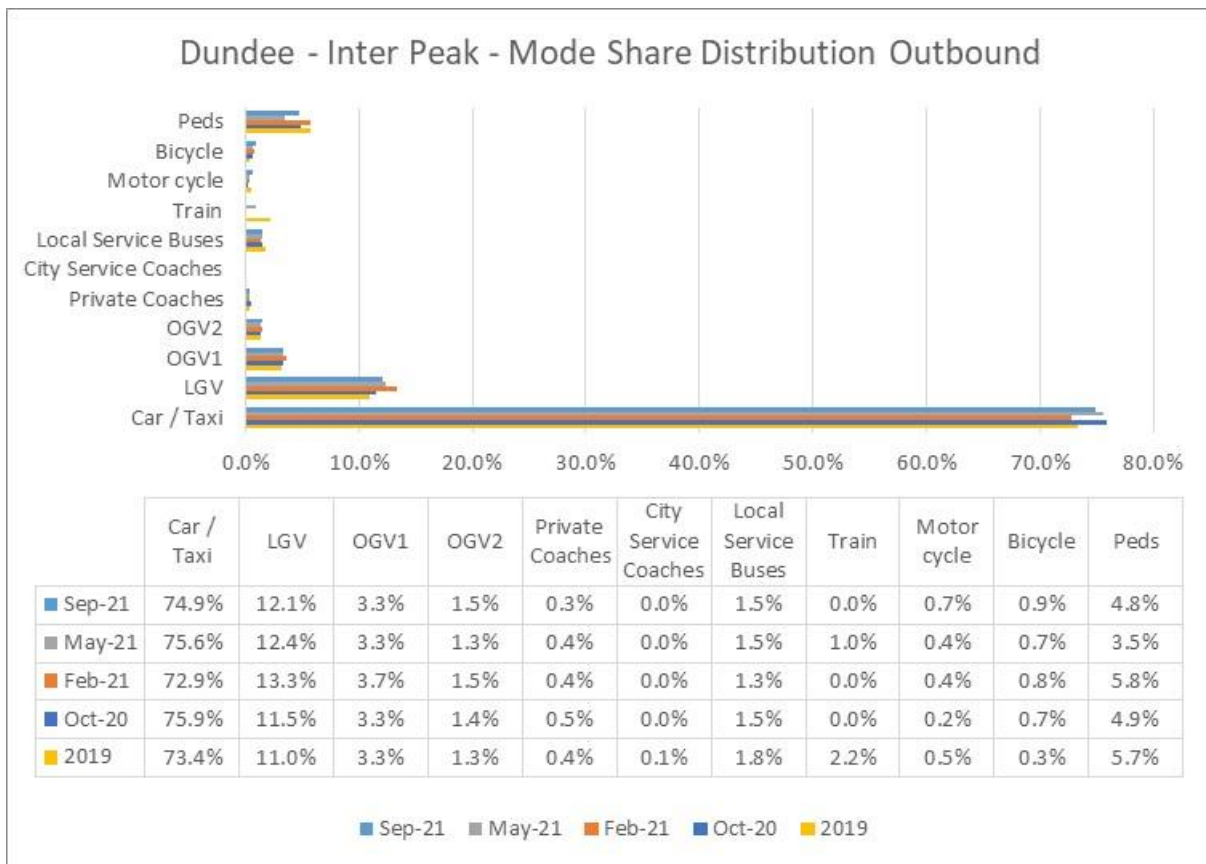


Figure 15. Dundee Mode Share Distribution Outbound – Inter Peak

7.4.20 Figure 15 shows that the majority of people heading out of Dundee did so by car and taxi. Total bus usage was around 2% in the inter peak, rail was around 1%, bicycle 0.7% and walking between 3% and 5%. The total vehicle movements recorded in each survey period was 47,809 in May 2019, 41,639 in October 2020, 34,398 in February 2021, 41,606 in May 2021 and 41,745 in September 2021.

7.4.21 Figure 16 presents the mode share by person in the Inter peak.

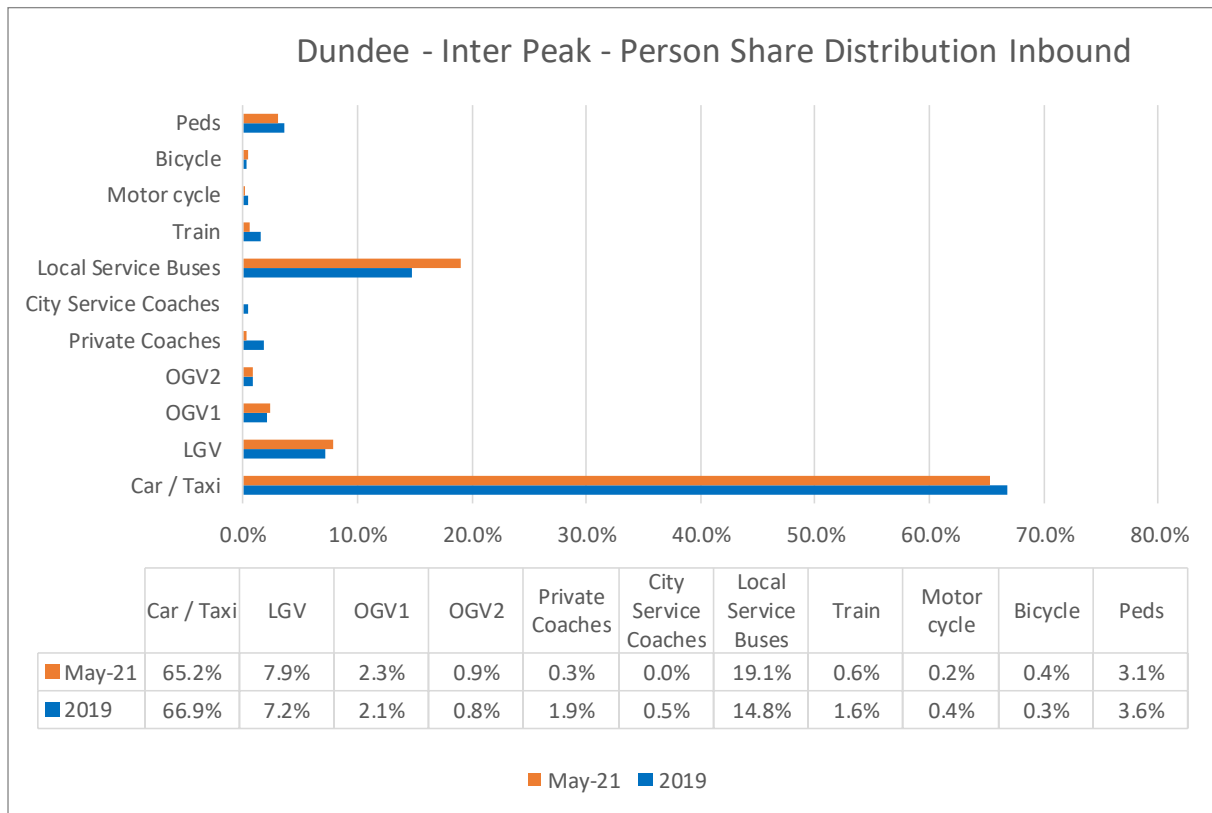


Figure 16. Dundee Person Share Distribution Inbound – Inter Peak

7.4.22 Figure 16 shows that in the inter peak, the person mode share inbound remained relatively consistent over the survey periods. The total person movements recorded in each survey period was 65,076 in May 2019, and 60,811 in May 2021.

7.4.23 Figure 17 presents the same information for the outbound direction.

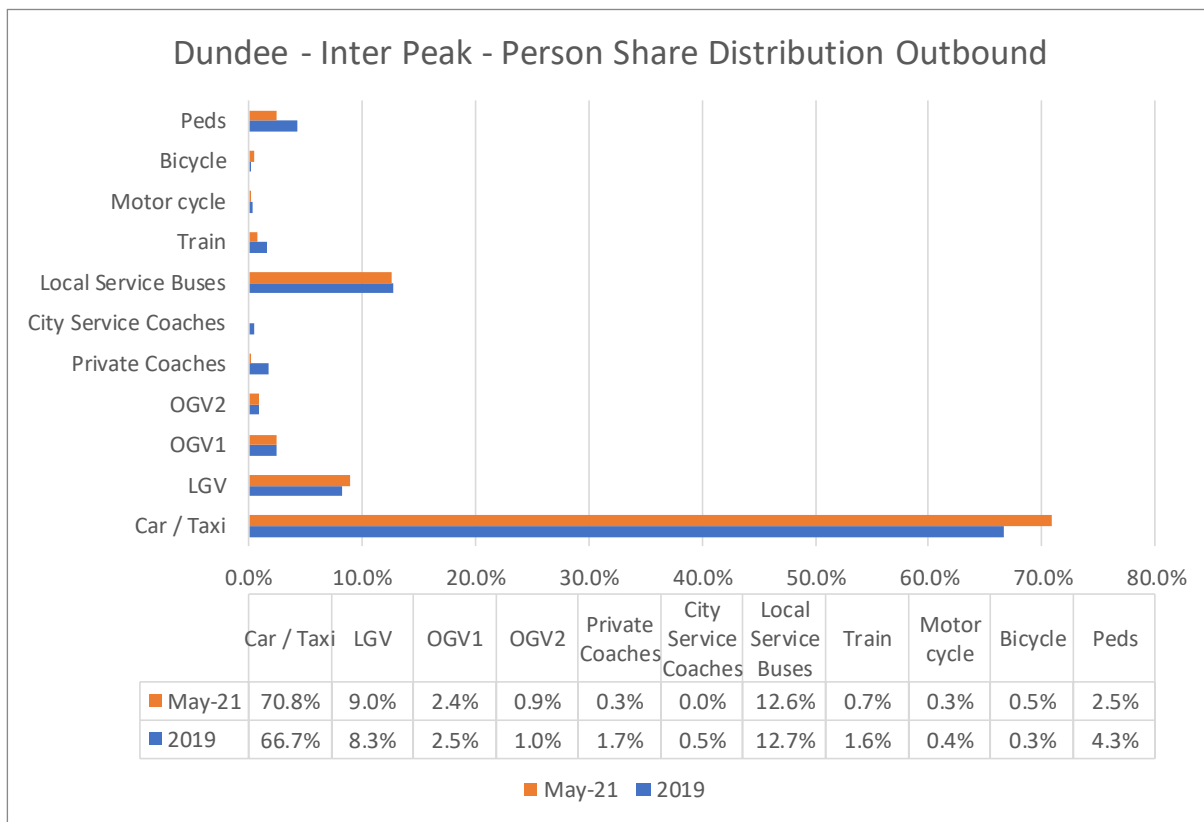


Figure 17. Dundee Person Share Distribution Outbound – Inter Peak

7.4.24 Figure 17 shows a similar result to the inbound direction, although car usage has increased, whilst rail, bus and coach usage and walking have reduced. The total person movements recorded in each survey period was 63,432 in May 2019, and 57,237 in May 2021.

7.4.25 Figure 18 and Figure 19 present the PM peak mode share results by vehicle by direction and Figure 20 and Figure 21 present the PM Peak mode share results by person by direction.

7.4.26 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019 (May 2019). The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

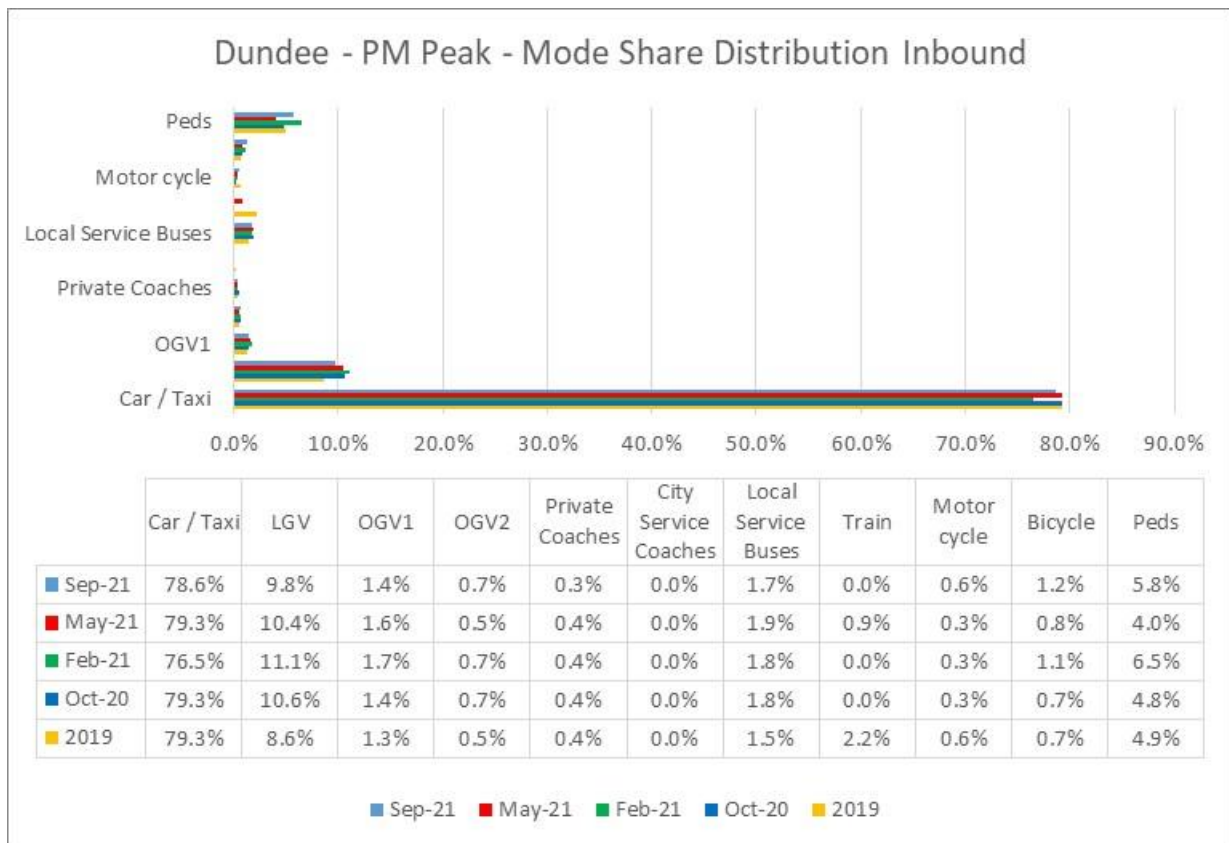


Figure 18. Dundee Mode Share Distribution Inbound – PM Peak

7.4.27 Figure 18 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. The total vehicle movements recorded in each survey period was 27,005 in May 2019, 24,521 in October 2020, 21,081 in February 2021, 24,968 in May 2021 and 26,301 in September 2021.

7.4.28 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries.

7.4.29 The proportion of pedestrians was very similar across all of the surveys, whilst the proportion of cyclists was also similar across all survey periods.

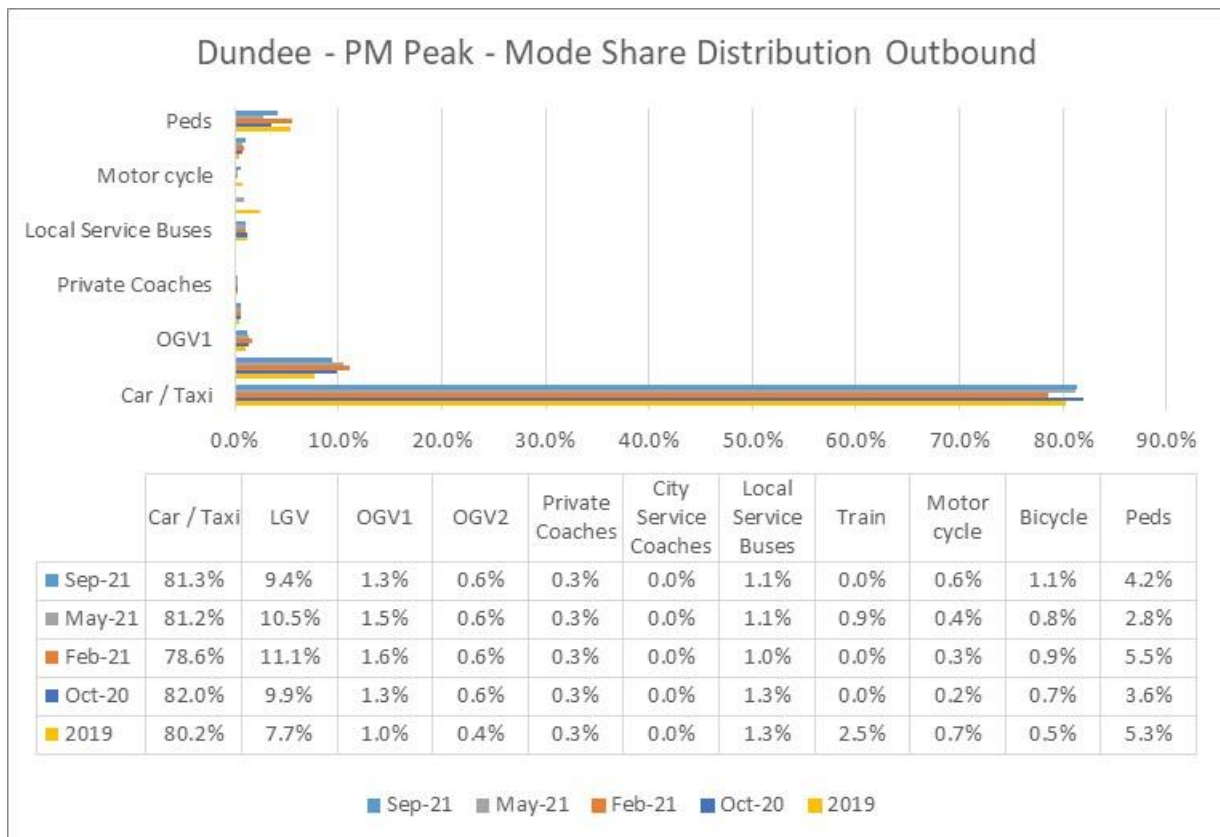


Figure 19. Dundee Mode Share Distribution Outbound – PM Peak

7.4.30 Figure 19 shows that the majority of people heading out of Dundee did so by car and taxi. Total bus usage was around 1.5% in the PM peak, rail was around 1%, bicycle 0.7% and walking between 3% and 6%. The total vehicle movements recorded in each survey period was 31,807 in May 2019, 26,692 in October 2020, 21,440 in February 2021, 27,400 in May 2021 and 27,564 in September 2021.

7.4.31 Figure 20 presents the mode share by person in the Inter peak.

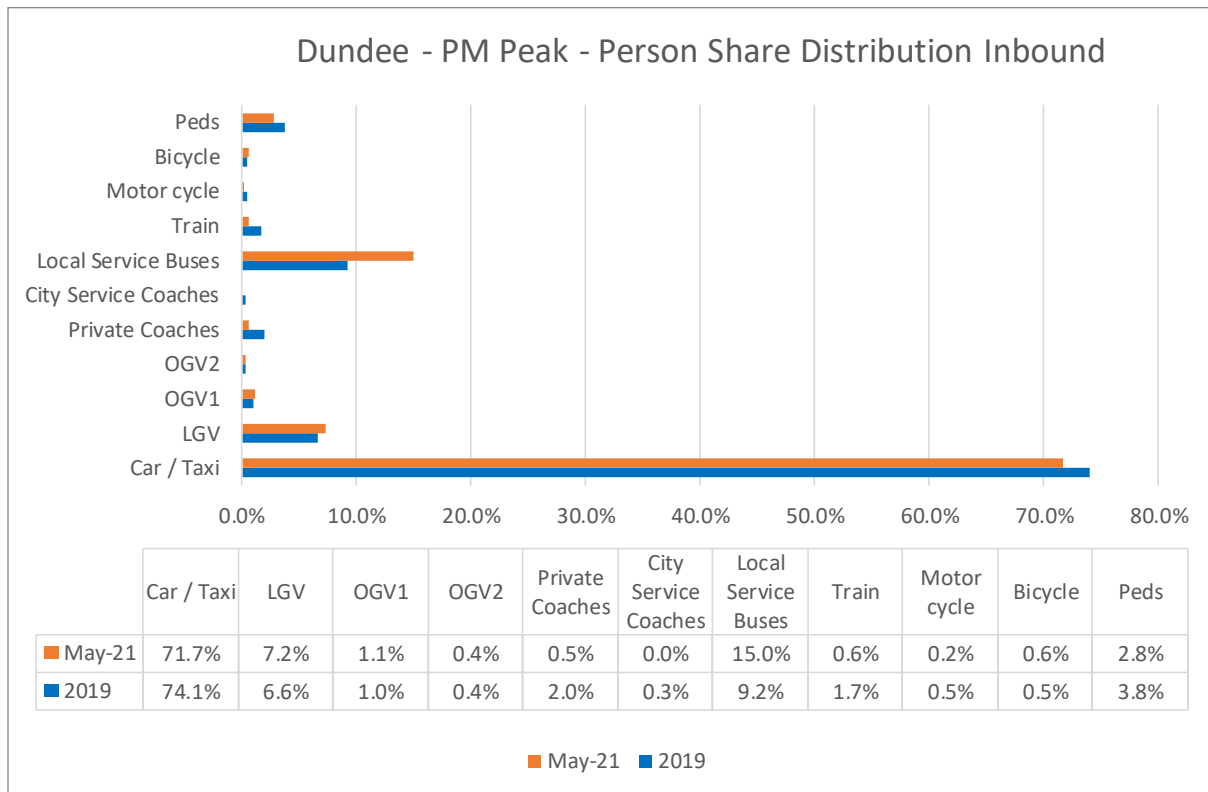


Figure 20. Dundee Person Share Distribution Inbound – PM Peak

7.4.32 Figure 20 shows that in the PM peak, the person mode share inbound remained relatively consistent over the survey periods. The results for rail shows a drop between 2019 and May 2021. The total person movements recorded in each survey period was 35,391 in May 2019, and 35,948 in May 2021.

7.4.33 Figure 21 presents the same information for the outbound direction.

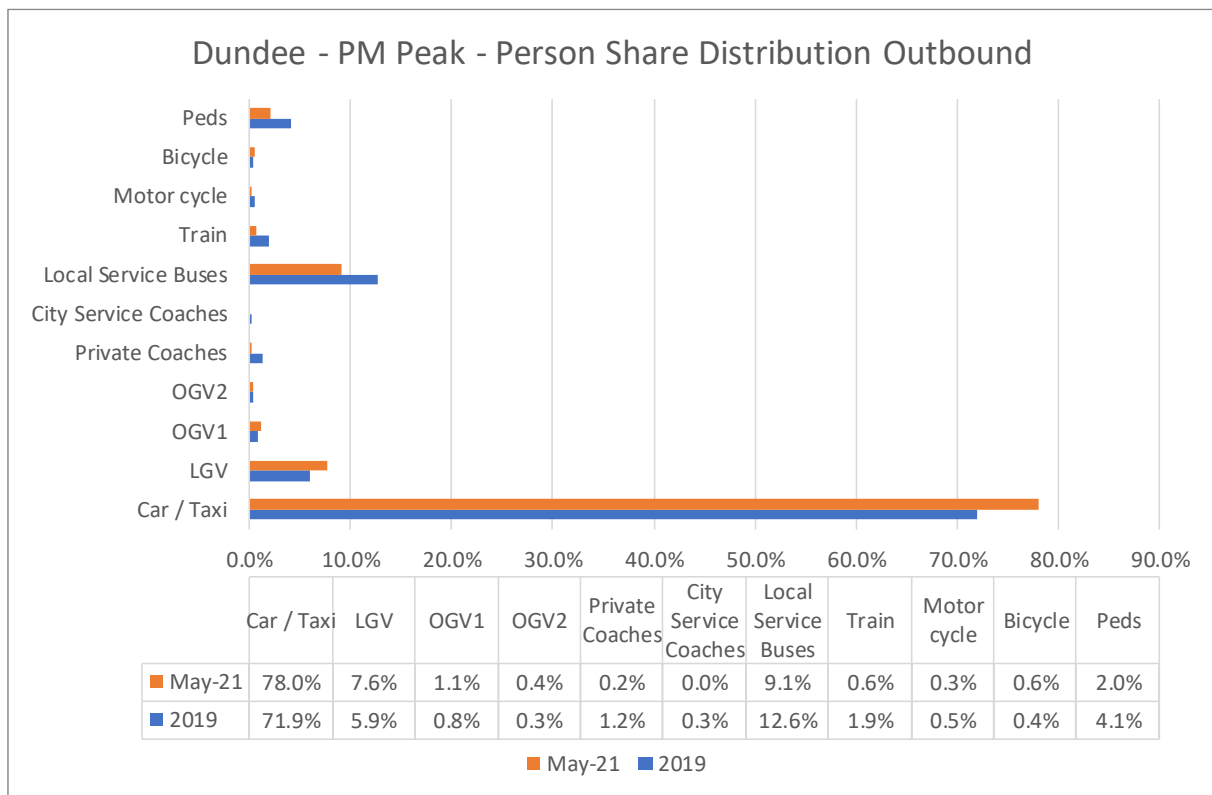


Figure 21. Dundee Person Share Distribution Outbound – PM Peak

7.4.34 Figure 21 shows a similar result to the inbound direction, although car usage has increased, whilst rail, bus and coach usage and walking have reduced. The total person movements recorded in each survey period was 41,477 in May 2019, and 37,699 in May 2021

7.4.35 Figure 22 and Figure 23 present the 12 hour (06:30-18:30) mode share results by vehicle by direction and Figure 24 and Figure 25 present the 12 hour (06:30-18:30) mode share results by person by direction.

7.4.36 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019 (May 2019). The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

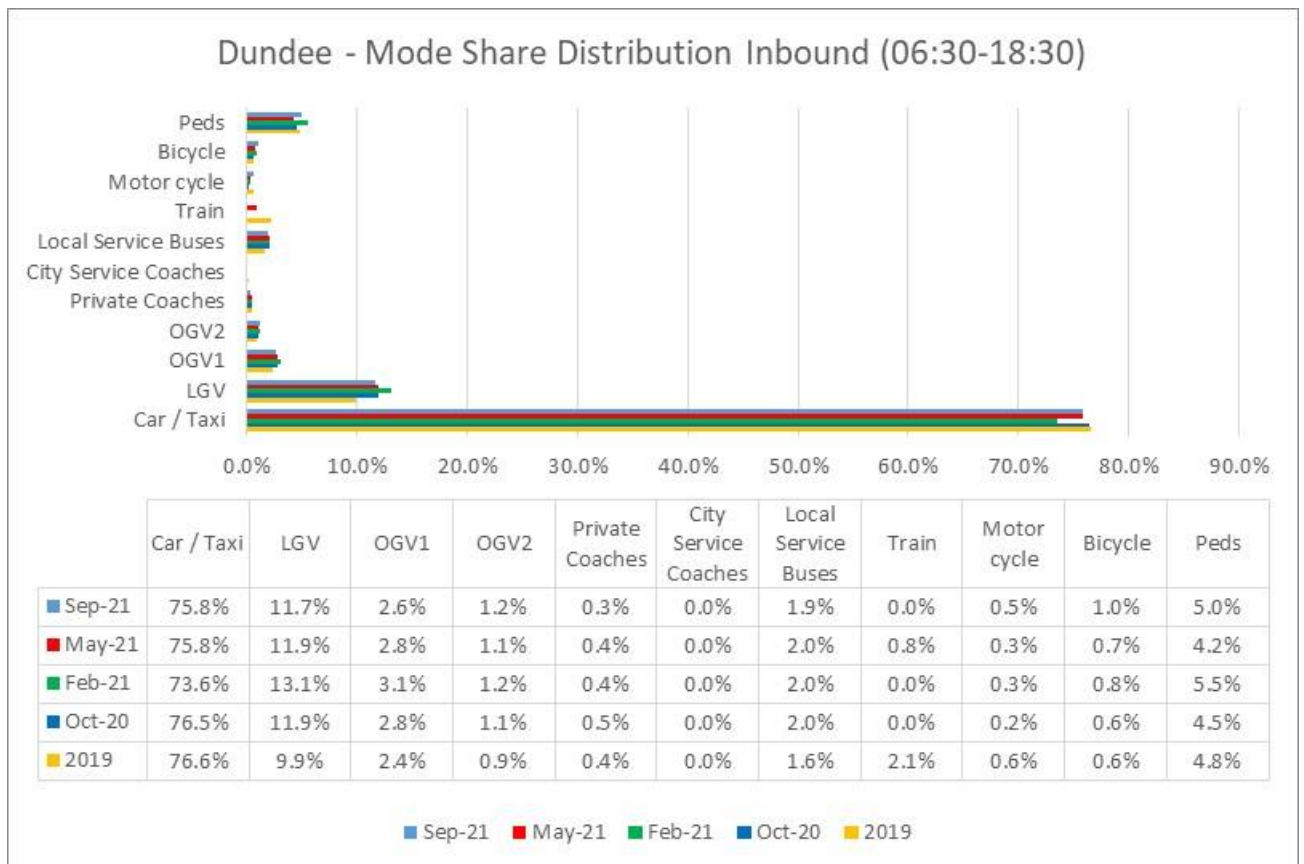


Figure 22. Dundee Mode Share Distribution Inbound – Full Day

- 7.4.37 Figure 22 shows that the mode share of vehicles remained relatively consistent over the three survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. The total vehicle movements recorded in each survey period was 97,033 in May 2019, 87,407 in October 2020, 74,503 in February 2021, 86,874 in May 2021 and 90,303 in September 2021.
- 7.4.38 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries.
- 7.4.39 The proportion of pedestrians was very similar across all of the surveys, whilst the proportion of cyclists was also similar across all survey periods, the highest proportion being recorded in September 2021.

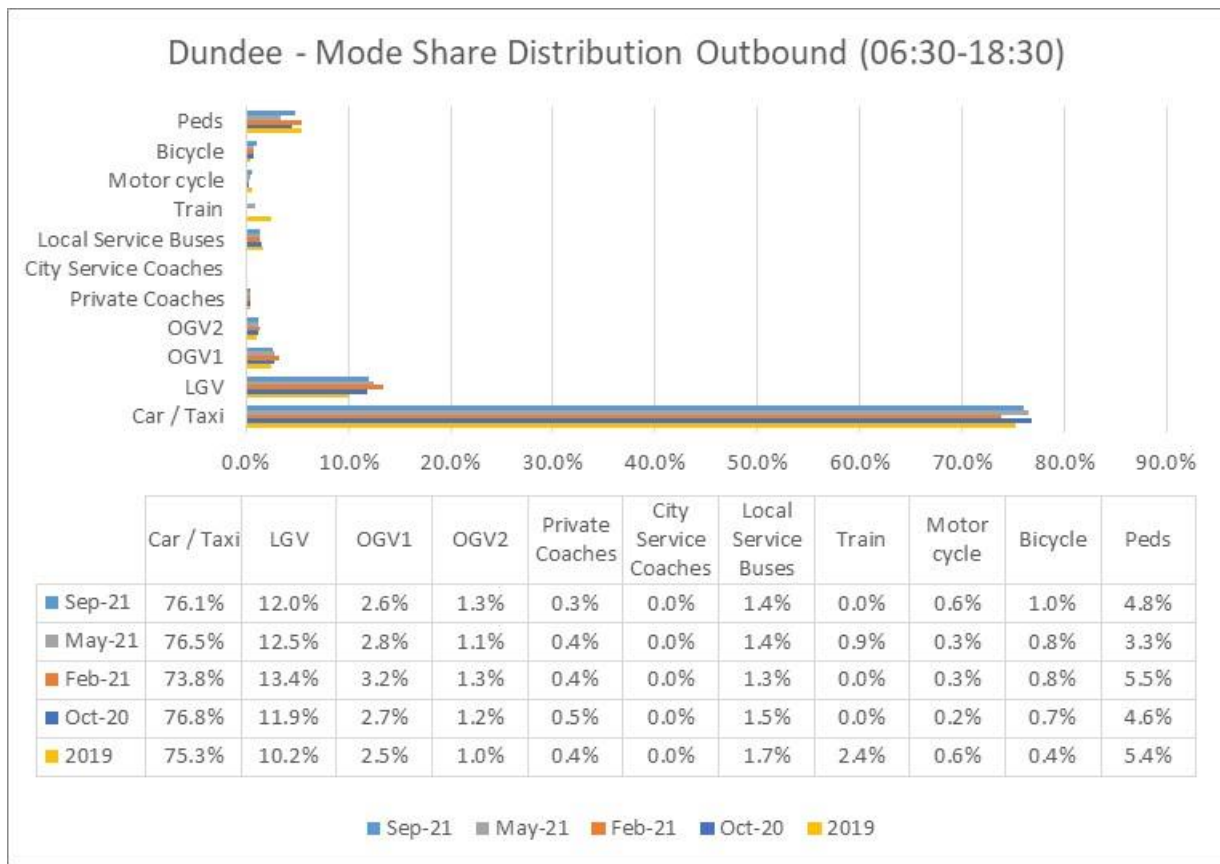


Figure 23. Dundee Mode Share Distribution Outbound – Full Day

7.4.40 Figure 23 shows that the majority of people heading out of Dundee did so by car and taxi. Total bus usage was around 2% in the PM peak, rail was around 1%, bicycle 0.7% and walking between 3% and 6%. The total vehicle movements recorded in each survey period was 98,817 in May 2019, 85,456 in October 2020, 69,484 in February 2021, 86,721 in May 2021 and 87,307 in September 2021.

7.4.41 Figure 24 presents the mode share by person in the Inter peak.

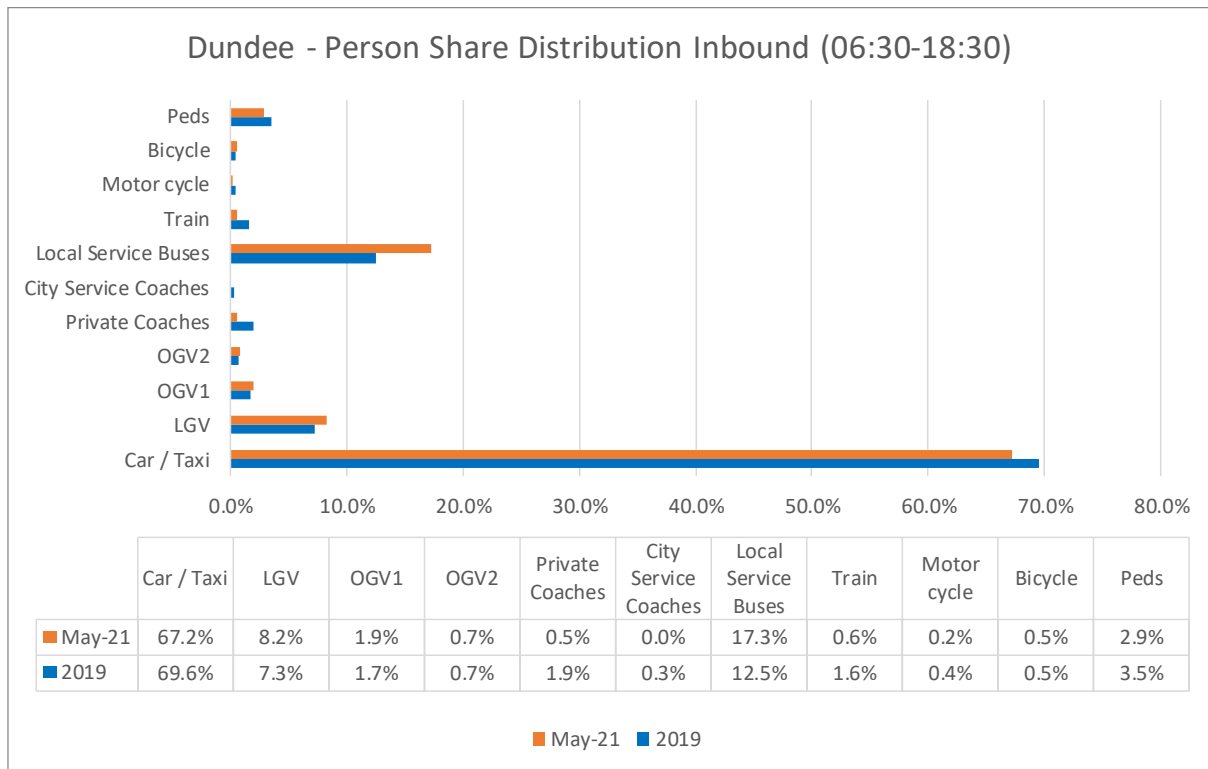


Figure 24. Dundee Person Share Distribution Inbound – Full Day

7.4.42 Figure 24 shows that across the day, the person mode share inbound remained relatively consistent over the survey periods. The results for rail shows a drop between 2019 and May 2021. The total person movements recorded in each survey period was 132,618 in May 2019, and 125,442 in May 2021.

7.4.43 Figure 25 presents the same information for the outbound direction.

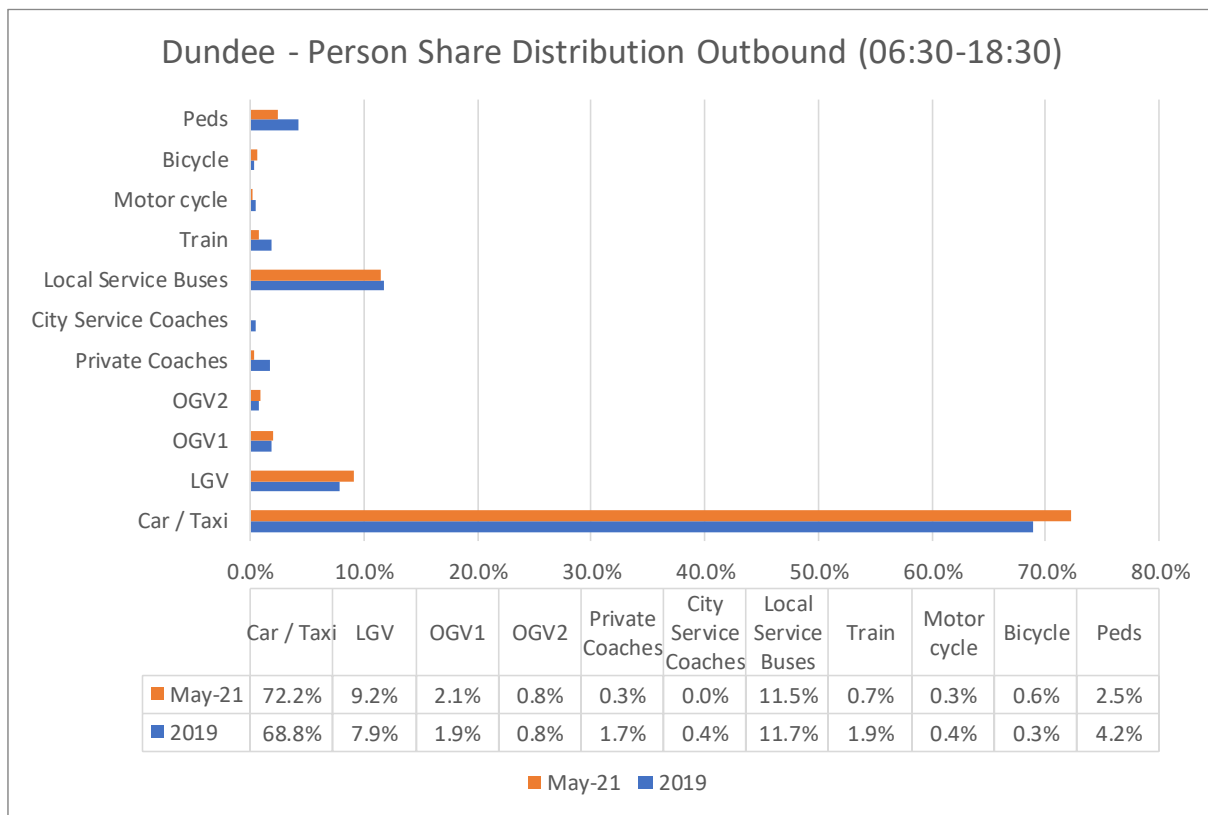


Figure 25. Dundee Person Share Distribution Outbound – Full Day

7.4.44 Figure 25 shows a similar result to the inbound direction, although car usage has increased, whilst rail, bus and coach usage and walking have reduced. The total person movements recorded in each survey period was 128,091 in May 2019, and 117,928 in May 2021

8. SUMMARY & FINDINGS

8.1 Summary

8.1.1 SYSTRA Ltd (SYSTRA) was commissioned by Tactran to undertake traffic surveys through various sites in the Angus, Dundee, Perth & Kinross, & Stirling area.

8.1.2 This report has captured the outcomes from surveys across the Dundee Council area.

8.1.3 The types of surveys undertaken for this study were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Rail Station Counts
- Bus Occupancy Counts
- Vehicle Occupancy Counts.

8.1.4 All surveys were recorded over a 16 hour period (06:00-22:00) and the analysis was split into the following time periods:

- AM Peak Period – 07:00 – 10:00
- Inter Peak Period – 10:00 – 16:00
- PM Peak Period – 16:00 – 19:00

8.1.5 The mode share data was also considered from the perspective of the share of vehicles and by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle.

8.2 Findings

Pedestrian Behaviour and Volume Counts

8.2.1 The results of the pedestrian behaviour and volume surveys indicate:

Dundee

- On the west side footpath of Perth Road, adjacent to the Nethergate, on average 54% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 45% passed on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway.
- On the east side footpath of Perth Road, adjacent to the Nethergate, on average 59% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 41% passed on the footpath within a space of 2m or less.

- On the west side footpath of Union Street, on average 46% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 41% passed on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway.
- On the east side footpath of Union Street, on average 53% of pedestrians across the 3 days did not conflict with oncoming pedestrians, whilst 43% passed on the footpath within a space of 2m or less. The remainder passed with a space over 2m or stepped out into the live carriageway
- Pedestrian volumes were generally lowest in February 2021 when Scotland was under lockdown and highest in September 2021.

Link Count and Speed Surveys

8.2.2 The results of the wider link counts and speed surveys indicate:

Dundee

- The mean speed of traffic on Perth Road, Art School (Site 2), Balunie Drive (Site 7) and Ballindean Road (Site 8) showed similar values throughout each survey period. Speeds on Findowrie Street (Site 4) and Fintry Road (Site 5) went up in February, May and September 2021 when compared with October 2020. On Perth Road, Step Row (site 1) and Perth Road, Nethergate (Site 3) mean speeds were similar in October 2020 and February 2021, however went down in May and September 2021.

Broughty Ferry

- Mean speeds increased on The Esplanade (Site 1) in February 2021 and then again in May and September 2021 – compared with October 2020. On Brook Street (Site 2) and King Street (Site 3) mean speeds went up in February 2021 and then returned to similar levels in May and September 2021 compared with October 2020.

Mode Share Surveys (Dundee)

8.2.3 The results of the mode share surveys in Dundee indicate that the mode share has remained consistent over the four surveys, car usage in each period has been around 75%, the volume of cyclists has remained around or below 1% and pedestrians have remained consistent at around 3% to 5%. The mode share by person surveys indicated:

- In the 2021 AM peak the majority of people travelling inbound were doing so by car/taxi (65.6%), LGV accounted for around 10% of people and HGV around 3%. In terms of public transport bus accounted for around 17% of people and train under 1%. Cycling and walking accounted for just under 4%, cycling at 0.6% and walking at 2.6% of all people heading inbound towards Dundee city centre.
- In the 2021 AM peak the majority of people travelling outbound were again doing so by car/taxi (66.3%), LGV accounted for around 12% of people and HGV around 4%. In terms of public transport bus accounted for around 13% of people and train under 1%. Cycling and walking accounted for just under 4%, cycling at 0.7% and walking at 3% of all people heading outbound from Dundee city centre.

- In the 2021 inter-peak, the majority of people travelling inbound were doing so by car/taxi (65.2%), LGV accounted for 8% of people and HGV around 3%. In terms of public transport bus accounted for around 20% of people and train under 1%. Cycling and walking accounted for just under 4%, cycling at 0.4% and walking at 3.1% of all people heading inbound towards Dundee city centre.
- In the 2021 inter-peak, the majority of people travelling outbound were again doing so by car/taxi (70.8%), LGV accounted for 9% of people and HGV around 3%. In terms of public transport bus accounted for around 13% of people and train under 1%. Cycling and walking accounted for just 3%, cycling at 0.5% and walking at 2.5% of all people heading outbound from Dundee city centre.
- In the 2021 PM peak, the majority of people travelling inbound were doing so by car/taxi (71.7%), LGV accounted for slightly over 7% of people and HGV around 1.5%. In terms of public transport bus accounted for around 15.5% of people and train under 1%. Cycling and walking accounted for just under 4%, cycling at 0.9% and walking at 2.8% of all people heading inbound towards Dundee city centre.
- In the 2021 PM peak, the majority of people travelling outbound were doing so by car/taxi (78%), LGV accounted for around 8% of people and HGV around 1.5%. In terms of public transport bus accounted for around 9% of people and train under 1%. Cycling and walking accounted for just under 3%, cycling at 0.6% and walking at 2% of all people heading outbound from Dundee city centre.
- Across the full day (06:30-18:30), the majority of people travelling inbound were doing so by car/taxi (67.2%), LGV accounted for slightly over 8% of people and HGV around 2.6%. In terms of public transport bus accounted for around 17.3% of people and train under 1%. Cycling and walking accounted for just under 4%, cycling at 0.5% and walking at 2.9% of all people heading inbound towards Dundee city centre.
- Across the full day (06:30-18:30), the majority of people travelling outbound were doing so by car/taxi (72.2%), LGV accounted for around 9% of people and HGV around 3%. In terms of public transport bus accounted for around 12% of people and train under 1%. Cycling and walking accounted for just over 3%, cycling at 0.6% and walking at 2.5% of all people heading outbound from Dundee city centre

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Newhall Street

5th Floor, Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 393 4841

Birmingham – Edmund Gardens

1 Edmund Gardens, 121 Edmund Street,
Birmingham B3 2HJ
T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Glasgow – West George St

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1
1LE
United Kingdom
T: +44 (0)191 249 3816

Reading

Soane Point, 6-8 Market Place, Reading,
Berkshire, RG1 2EG
T: +44 (0)118 206 0220

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

SYSTRA

C APPENDIX C – PERTH & KINROSS COUNCIL SURVEY REPORT



PERTH & KINROSS SPACES FOR PEOPLE SURVEY REPORT 2020/21



SYSTRA

PERTH & KINROSS COUNCIL AREA

MODE SHARE SURVEYS 2020/2021

IDENTIFICATION TABLE

Client/Project owner	Tactran
Project	Perth & Kinross Council Area
Study	Mode Share Surveys 2020/2021
Type of document	Survey Report
Date	13/12/2021
File name	Traffic Survey Report - Draft
Reference number	GB01T20C61/7

APPROVAL

Version	Name		Position	Date	Modifications
1	Author	Alasdair Kay	Principal Transportation Engineer	13/12/2021	
	Checked	Alasdair Kay	Principal Transportation Engineer	13/12/2021	
	Approved	Iain Clement	Associate Director	13/12/2021	
2	Author			DD/MM/YY	
	Checked			DD/MM/YY	
	Approved			DD/MM/YY	

TABLE OF CONTENTS

1.	INTRODUCTION	7
1.1	BACKGROUND	7
1.2	SPACES FOR PEOPLE	7
1.3	SPACES FOR PEOPLE INTERVENTION SUMMARY	7
2.	DATA COLLATION	9
2.1	OVERVIEW OF TRAFFIC SURVEYS	9
2.2	PEDESTRIAN BEHAVIOUR AND VOLUME COUNTS	10
2.3	LINK COUNT AND SPEED SURVEYS	12
2.4	CLASSIFIED LINK COUNTS	13
2.5	MODE SHARE SURVEYS	14
2.6	SUMMARY	15
3.	PEDESTRIAN BEHAVIOUR REVIEW	16
3.1	PEDESTRIAN BEHAVIOUR SURVEYS	16
3.2	RESULTS OF PEDESTRIAN BEHAVIOUR SURVEYS	16
4.	LINK COUNT & SPEED REVIEW	18
4.1	OVERVIEW	18
4.2	RESULTS OF LINK COUNTS AND SPEED SURVEYS	19
5.	LINK COUNT REVIEW	26
5.1	OVERVIEW	26
5.2	RESULTS OF LINK COUNTS SURVEYS	26
6.	MODE SHARE SURVEYS	47
6.1	RAIL STATION COUNTS	47
6.2	BUS OCCUPANCY COUNTS	48
6.3	BUS STATION/STOP COUNTS	52
6.4	VEHICLE OCCUPANCY COUNTS	55
6.5	RESULTS OF MODE SHARE SURVEYS	61
7.	SUMMARY & FINDINGS	78
7.1	SUMMARY	78
7.2	FINDINGS	78

LIST OF FIGURES

Figure 1.	Pedestrian Surveys - Perth	11
Figure 2.	Link Count & Speed Surveys - Perth	12
Figure 3.	Classified Link Count Surveys – Perth	13
Figure 4.	Perth Mode Share Distribution Inbound – AM Peak	62
Figure 5.	Perth Mode Share Distribution Outbound – AM Peak	63
Figure 6.	Perth Person Share Distribution Inbound – AM Peak	64
Figure 7.	Perth Person Share Distribution Outbound – AM Peak	65
Figure 8.	Perth Mode Share Distribution Inbound – Inter Peak	66
Figure 9.	Perth Mode Share Distribution Outbound – Inter Peak	67
Figure 10.	Perth Person Share Distribution Inbound – Inter Peak	68
Figure 11.	Perth Person Share Distribution Outbound – Inter Peak	69
Figure 12.	Perth Mode Share Distribution Inbound – PM Peak	70
Figure 13.	Perth Mode Share Distribution Outbound – PM Peak	71
Figure 14.	Perth Person Share Distribution Inbound – PM Peak	72
Figure 15.	Perth Person Share Distribution Outbound – PM Peak	73
Figure 16.	Perth Mode Share Distribution Inbound – Full Day	74
Figure 17.	Perth Mode Share Distribution Outbound – Full Day	75
Figure 18.	Perth Person Share Distribution Inbound – Full Day	76
Figure 19.	Perth Person Share Distribution Outbound – Full Day	77

LIST OF TABLES

Table 1.	Spaces for People Interventions Summary	8
Table 2.	Traffic Survey Summary	15
Table 3.	Tay Street north of South St (west footpath) Pedestrian Behaviour Summary	16
Table 4.	Tay Street north of South St (east footpath) Pedestrian Behaviour Summary	17
Table 5.	Tay Street north of South St (Northbound)	19
Table 6.	Tay Street north of South St (Southbound)	21
Table 7.	Tay Street south of Canal Street (Northbound)	23
Table 8.	Tay Street south of Canal Street (Southbound)	25
Table 9.	Tay Street (North of High Street) Vehicular Link Flow	27
Table 10.	Tay Street (North of High Street) Pedestrian Flow	28
Table 11.	Tay Street (North of High Street) Pedestrian Flow	30
Table 12.	Tay Street (North of South Street) Vehicular Flow	32
Table 13.	Tay Street (North of South Street) Pedestrian Flow	34
Table 14.	Tay Street (North of South Street) Pedestrian Flow	36
Table 15.	Tay Street (South of South Street) Vehicular Flow	37
Table 16.	Tay Street (South of South Street) Pedestrian Flow	39
Table 17.	Tay Street (North of Marshall Place) Vehicular Flow	41
Table 18.	Tay Street (North of Marshall Place) Pedestrian Flow	43
Table 19.	Tay Street (North of Marshall Place) Pedestrian Flow	45
Table 20.	Perth Railway Station Entry/Exit Counts	47
Table 21.	Bus & Coach Cordon Occupancy (AM Peak 06:30 – 09:30)	49
Table 22.	Bus & Coach Cordon Occupancy (Inter Peak 09:30 – 15:30)	50

Table 23.	Bus & Coach Cordon Occupancy (PM Peak 15:30 – 18:30)	51
Table 24.	Perth Bus Station/Stops Boarding and Alighting Counts (AM Peak 06:30 – 09:30)	52
Table 25.	Perth Bus Station/Stops Boarding and Alighting Counts (Inter Peak 09:30 – 15:30)	53
Table 26.	Perth Bus Station Boarding and Alighting Counts (PM Peak 15:30 – 18:30)	54
Table 27.	Vehicle Inbound Cordon Occupancy (AM Peak 06:30 – 09:30)	55
Table 28.	Vehicle Outbound Cordon Occupancy (AM Peak 06:30 – 09:30)	56
Table 29.	Vehicle Inbound Cordon Occupancy (Inter Peak 09:30 – 15:30)	57
Table 30.	Vehicle Outbound Cordon Occupancy (Inter Peak 09:30 – 15:30)	58
Table 31.	Vehicle Inbound Cordon Occupancy (PM Peak 15:30 – 18:30)	59
Table 32.	Vehicle Outbound Cordon Occupancy (PM Peak 15:30 – 18:30)	60

1. INTRODUCTION

1.1 Background

- 1.1.1 SYSTRA Ltd (SYSTRA) was commissioned by regional transport authority Tactran in June 2020 in response to the *Spaces for People* initiative, to undertake a comprehensive survey programme to capture changes in active travel behaviour and mode share as the people of Angus, Dundee, Perth & Kinross and Stirling change travel behaviours following the Covid-19 outbreak.
- 1.1.2 The results of the surveys will inform decisions on the benefits of the temporary infrastructure measures being brought forward by the four local authorities Dundee City Council, Perth & Kinross Council, Stirling Council and Angus Council.
- 1.1.3 This report summarises the outcomes from surveys undertaken across the Perth & Kinross Council area.

1.2 Spaces for People

- 1.2.1 The *Spaces for People* programme is funded by the Scottish Government and managed by Sustrans Scotland. The aim of the initiative is to enable statutory bodies to implement measures focused on protecting public health by enabling pedestrians and cyclists to social distance safely on public roads physical distancing.
- 1.2.2 The initiative focuses on essential journeys, which might include:
- Journeys to and from hospitals and health services
 - Journeys to shops, pharmacies, schools, and other returning workplaces
 - Journeys for recommended exercise, for example neighbourhoods and local parks.
- 1.2.3 The measures being investigated by the authorities will provide temporary walking and cycling infrastructure that helps to protect public health by enabling safe physical distancing for essential journeys and exercise for everyone, in particular where there are space constraints or user safety concerns. The measures might include, but are not limited to:
- Physical interventions
 - Selective road closures using planters or cones
 - Reallocating road space for wider footway
 - Reallocating road space for cycle tracks
 - Reallocating parking and loading
 - Reduced speed limits and/or traffic calming measures
 - Removal of barriers to open up constrained spaces and remove pinch points.
- 1.2.4 This Report details the traffic surveys undertaken in four phases between October 2020 and September 2021, and the mode share summary information for each location.

1.3 Spaces for People Intervention Summary

- 1.3.1 A summary of the *Spaces for People* programme interventions within the Perth & Kinross Council area is given in Table 1 below.

Table 1. Spaces for People Interventions Summary

Intervention	Type of Intervention	Date installed	Date of removal (if applicable)	Permanent Intervention?
Coupar Angus	Speed reduction - 20mph	TBC		Yes
Abernyte	Speed reduction - 20mph	01/09/2020		Yes
Airtully	Speed reduction - 20mph	01/09/2020		Yes
Alyth	Speed reduction - 20mph	06/11/2020		Yes
Ardler	Speed reduction - 20mph	01/09/2020		Yes
Auchterarder	Speed reduction - 20mph	06/11/2020		Yes
Ballintuim	Speed reduction - 20mph	01/09/2020		Yes
Blairgowrie	Speed reduction - 20mph	06/11/2020		Yes
Bridge of Cally	Speed reduction - 20mph	01/09/2020		Yes
Bridge of Earn	Speed reduction - 20mph	06/11/2020		Yes
Butterstone	Speed reduction - 20mph	01/09/2020		Yes
Campmuir	Speed reduction - 20mph	01/09/2020		Yes
Cleish	Speed reduction - 20mph	01/09/2020		Yes
Collace	Speed reduction - 20mph	01/09/2020		Yes
Comrie	Speed reduction - 20mph	TBC		No
Crieff	Speed reduction - 20mph	TBC		No
Dunning	Speed reduction - 20mph	01/09/2020		Yes
Errol Station	Speed reduction - 20mph	01/09/2020		Yes
Forneth	Speed reduction - 20mph	01/09/2020		Yes
Forteviot	Speed reduction - 20mph	01/09/2020		Yes
Glenfarg	Speed reduction - 20mph	01/09/2020		Yes
Grandtully	Speed reduction - 20mph	01/09/2020		Yes
Grange	Speed reduction - 20mph	01/09/2020		Yes
Kettins	Speed reduction - 20mph	01/09/2020		Yes
Kinloch	Speed reduction - 20mph	01/09/2020		Yes
Kinnaird	Speed reduction - 20mph	01/09/2020		Yes
Kinross	Speed reduction - 20mph	01/09/2020		Yes
Kinrossie	Speed reduction - 20mph	01/09/2020		Yes
Kirkmichael	Speed reduction - 20mph	01/09/2020		Yes
Maryburgh & Keltybridge	Speed reduction - 20mph	01/09/2020		Yes
Meiklour	Speed reduction - 20mph	06/11/2020		Yes
Milnathort	Speed reduction - 20mph	01/09/2020		Yes
Pitcairngreen	Speed reduction - 20mph	01/09/2020		Yes
Pitlochry	Speed reduction - 20mph	01/09/2020		Yes
Rait	Speed reduction - 20mph	01/09/2020		Yes
Scone	Speed reduction - 20mph	06/11/2020		Yes
Scotlandwell	Speed reduction - 20mph	01/09/2020		Yes
Spittalfield	Speed reduction - 20mph	01/09/2020		Yes
Strathtay	Speed reduction - 20mph	01/09/2020		Yes
Tummel Bridge	Speed reduction - 20mph	01/09/2020		Yes
Wolfhill	Speed reduction - 20mph	01/09/2020		Yes
High Street, Perth	Street closure	02/08/2020	26/09/2020	No
Route signage and road marking	Installation of signage and markings.	02/07/2020		No
Muirton, Perth	Speed reduction - 20mph	26/06/2020		No
City centre, Perth	Speed reduction - 20mph	26/06/2020		No
Royal Infirmary, Perth	Speed reduction - 20mph	26/06/2020		No
Temporary toucan, Charlotte St., Perth	Crossing upgrade	13/07/2020		Yes
Cycle parking	Cycle Parking	01/09/2020		Yes
Temporary Footway Widening Glover St., Perth	Footpath widening	07/07/2020	01/02/2020	No
Temporary Footway Widening Leonards Pl./Kings Pl., Perth	Footpath widening	07/07/2020	01/02/2020	No
Craigie Pl./Gillespie Pl., Perth	School Exclusion Zone	TBC		No
Pitlochry	Footpath widening	28/07/2020		No
Temporary footpath, St Leonards Bridge, Perth	Footpath widening	07/07/2020	01/02/2020	No
Wellmeadow and Tannage St., Blairgowrie	Street closure	15/08/2020	TBC	No
SEZ Balhousie Primary School, Perth	School Exclusion Zone	TBC		No
SEZ Guildtown Primary School	School Exclusion Zone	TBC		No
SEZ Kinloch Rannoch Primary School	School Exclusion Zone	TBC		No
SEZ Newhill Primary School, Blairgowrie	School Exclusion Zone	TBC		No
SEZ Tulloch Primary School, Perth	School Exclusion Zone	TBC		No
SEZ Viewlands Primary/Fairview Primary/Perth Academy, Perth	School Exclusion Zone	TBC		No
Dalchonzie and Dalrannoch Cycling and Walking Friendly Route	40mph speed limit	06/07/2020		No
Glenfoot Cycling and Walking Friendly Route	40mph speed limit	08/07/2020		No
Marshall Place Toucan Crossing	Crossing upgrade	01/08/2020		Yes
Stewart Tower 40mph Speed Limit	40mph Speed Limit	14/09/2020		Yes
Disabled Parking Bays	Disabled Parking Bays	02/08/2020		Yes

2. DATA COLLATION

2.1 Overview of Traffic Surveys

2.1.1 A programme of traffic surveys for all the locations was undertaken by specialists Nationwide Data Collection (NDC).

2.1.2 The types of surveys undertaken in the Perth area were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Mode Share Counts

2.1.3 Data was recorded over a 16 hour period (06:00-22:00) and analysis undertaken for the following time periods:

- AM Peak Period – 06:30 – 09:30
- Inter Peak Period – 09:30 – 15:30
- PM Peak Period – 15:30 – 18:30.

2.1.4 The surveys were undertaken on the following dates:

- October 2020 – Thursday 22nd to Saturday 24th October 2020
- February 2021 – Thursday 25th to Saturday 27th February 2021
- May 2021 – Thursday 4th to Saturday 6th May 2021
- September 2021 - Thursday 9th to Saturday 11th September 2021.

2.2 Pedestrian Behaviour and Volume Counts

Perth

2.2.1 Seven locations within Perth were selected in discussion with Tactran for pedestrian volume counts and behaviour surveys. These are detailed below and in Figure 1:

- Pedestrian 1 – Tay Street (north of High Street, west footpath)
- Pedestrian 2 – Tay Street (north of High Street, east footpath)
- Pedestrian 3 – Tay Street (north of South Street, west footpath)
- Pedestrian 4 – Tay Street (north of South Street, east footpath)
- Pedestrian 5 – Tay Street (south of South Street, east footpath)
- Pedestrian 6 – Tay Street (north of Marshall Place, west footpath)
- Pedestrian 7 – Tay Street (north of Marshall Place, east footpath)

2.2.2 Classified turn counts were carried out within the study section, to include both pedestrians and cyclists. Results were categorised as follows:

- Pedestrians
- Wheeled pedestrians (on scooters etc)
- Pedal Cycles
- Motorcycles
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.

2.2.3 Figure 1 below illustrates the locations of the pedestrian surveys and classified turn count surveys.

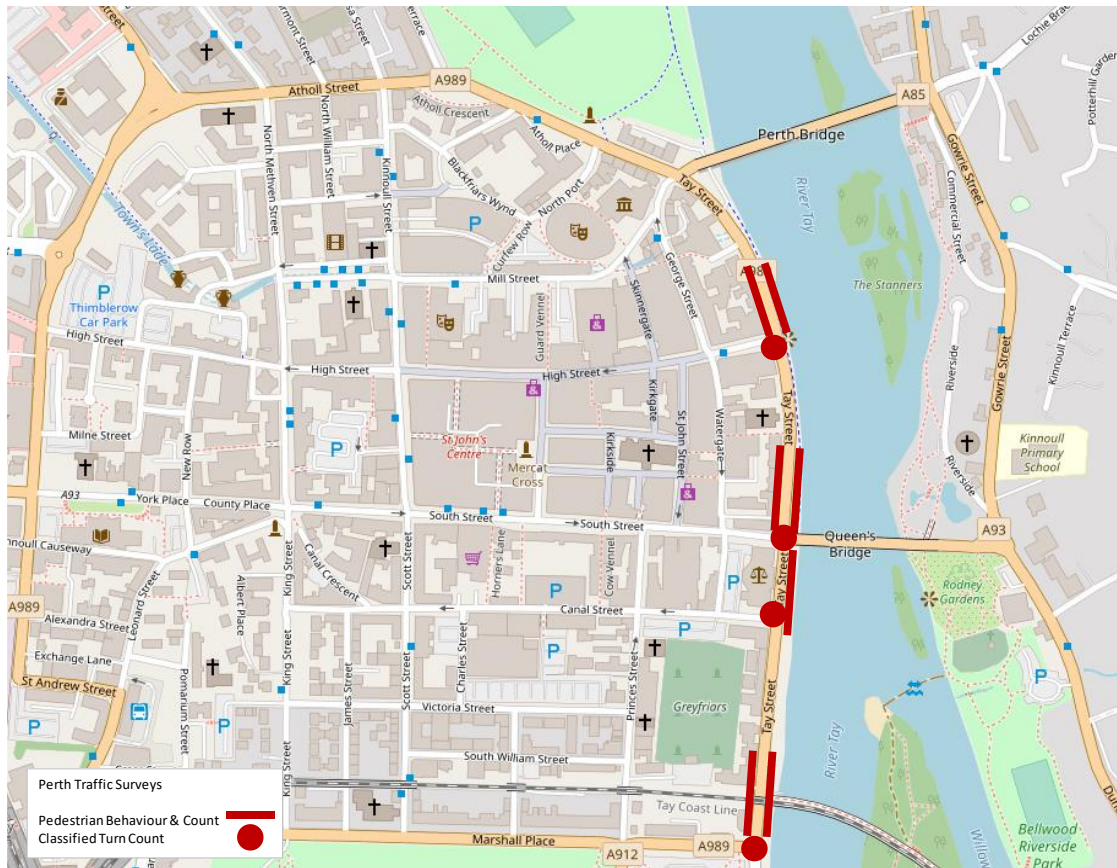


Figure 1. Pedestrian Surveys - Perth

2.3 Link Count and Speed Surveys

Perth

2.3.1 Two locations within Perth were selected for link count and speed surveys over a seven day period. These are detailed below and in Figure 2:

- Link Count 1 – Tay Street (north of South Street)
- Link Count 2 – Tay Street (south of Canal Street)

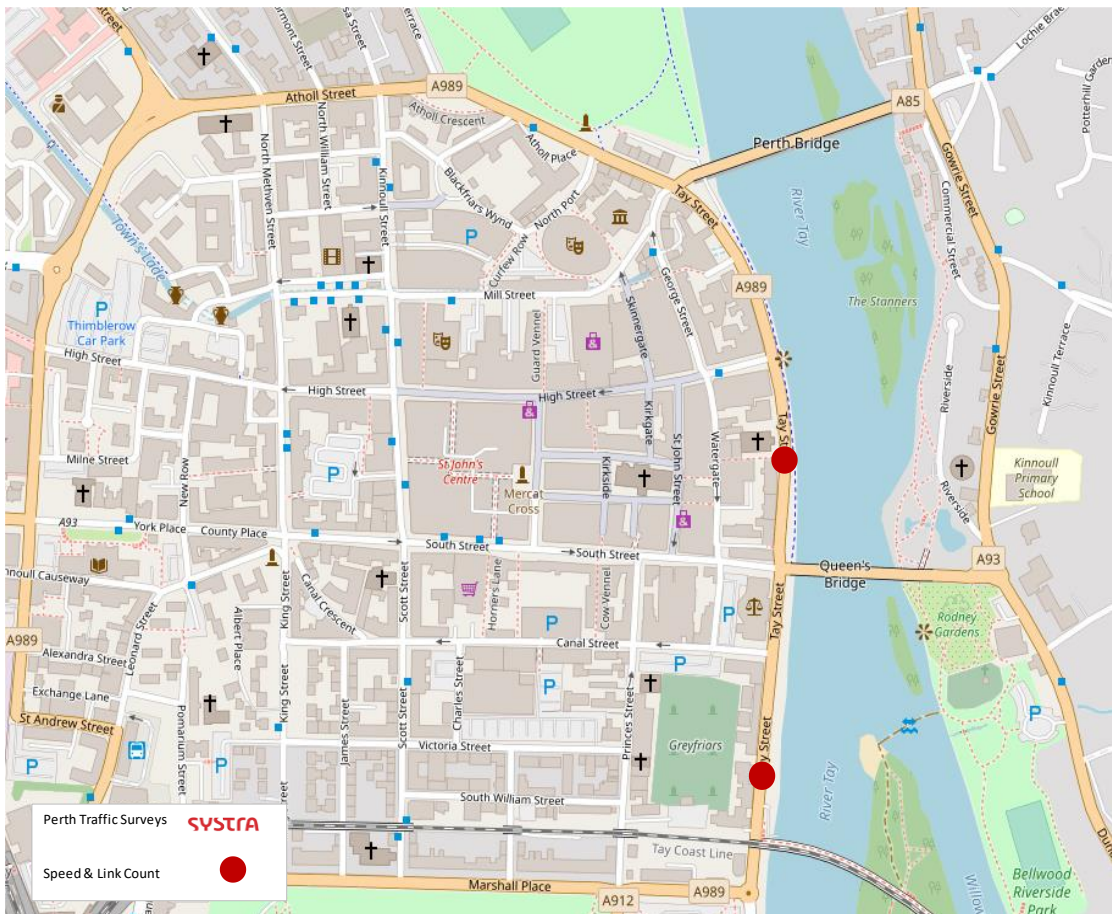


Figure 2. Link Count & Speed Surveys - Perth

2.4 Classified Link Counts

Perth

2.4.1 Seventeen locations within Perth were selected for classified link counts. These are detailed below and in Figure 3. The mode share cordon counts were undertaken on the Thursday of each survey period between 06:00 and 22:00:

- CC1 – Barrack Street
- CC2 – Cycle path east of Balhousie Street
- CC3 – Main Street
- CC4 – Perth Bridge
- CC5 – Queens Bridge
- CC6 – Shore Road
- CC7 – Edinburgh Road (north)
- CC8 – Marshall Place
- CC9 – St Leonards Bridge
- CC10 – Glasgow Road (east)
- CC11 – Dunkeld Road
- CC12 – Crieff Road
- CC13 – Glasgow Road (west)
- CC14 - Edinburgh Road (south)
- CC15 – Dundee Road south of Manse Road
- CC16 – Long Causeway, east of Old Market Road
- CC17 – Melville Street, south of Low Street

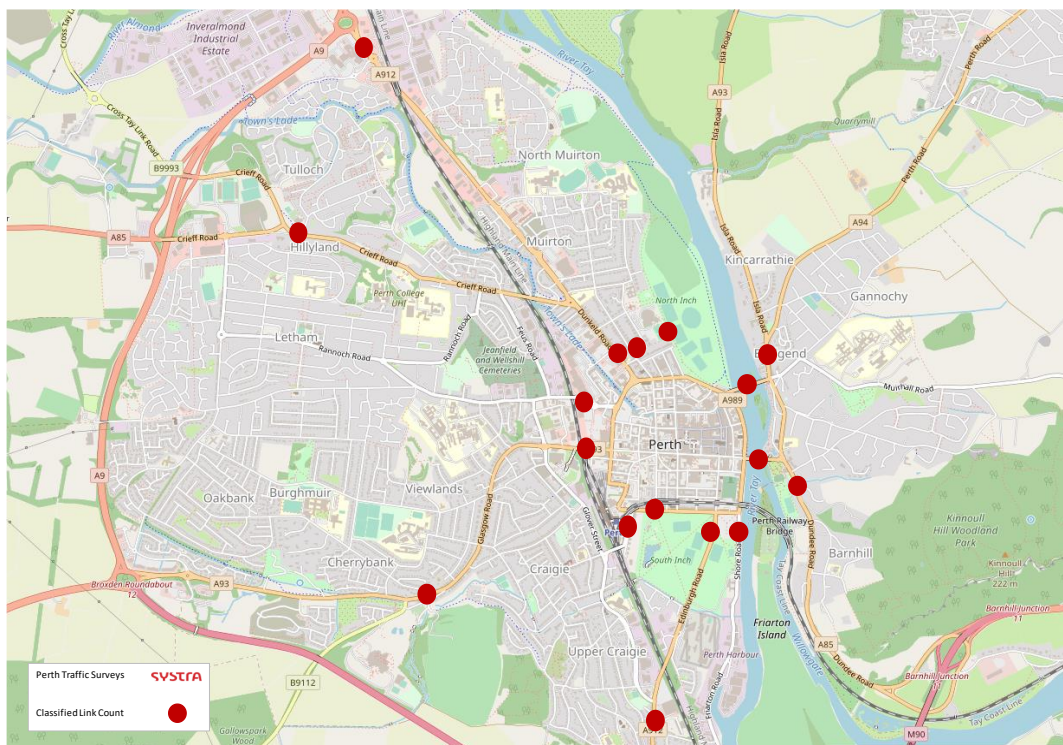


Figure 3. Classified Link Count Surveys – Perth

2.4.2 At each site, link count data was collated into the following categories:

- Pedestrians
- Pedal Cycles
- Motorcycles
- Horses
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.

2.5 Mode Share Surveys

Rail Station Barrier Counts

2.5.1 Barrier counts were conducted at Perth rail station over the 16 hour period (06:00-22:00) on Tuesday 4th May 2021 with pedestrian movements captured at both entrances/exits to the station.

Bus Occupancy Surveys

2.5.2 Bus occupancy counts were undertaken at all 17 sites shown in Figure 3, over the 16 hour period (06:00-22:00) on Tuesday 4th May 2021.

Bus Station/Stop Counts

2.5.3 Boarding and alighting counts were undertaken at a number of stops in Perth city centre over the 16 hour period (06:00-22:00) on Wednesday 4th May 2021, with movements captured at the following stops:

- Perth Bus Station Stance 1
- Perth Bus Station Stance 2
- Perth Bus Station Stance 10
- South Street eastbound (bus stop K)
- South Street immediately east of Scott Street
- South Street outside St Johns shopping centre
- Scott Street southbound (bus stop X)
- Broxden Park and Ride (Megabus/Citylink stop)
- Broxden Park and Ride (local services stop)
- Canal Street westbound (behind Tesco)

Vehicle Occupancy Counts

2.5.4 Vehicle occupancy counts were undertaken at all 17 sites shown in Figure 3, over the 16 hour period (06:00-22:00) on Tuesday 4th May 2021.

2.6 Summary

2.6.1 A summary of survey programme undertaken across the Perth & Kinross Council area is given in Table 2 below.

Table 2. Traffic Survey Summary

Survey Requirement	Oct-20	Feb-21	May-21	Sep-21
Perth - Pedestrian Surveys	✓	✓	✓	✓
Perth - Link Counts	✓	✓	✓	✓
Perth - Speed Surveys	✓	✓	✓	✓
Perth - Cordon Counts	✓	✓	✓	✓
Perth - Occupancy Surveys			✓	

3. PEDESTRIAN BEHAVIOUR REVIEW

3.1 Pedestrian Behaviour Surveys

3.1.1 Summary tables below present the results of the pedestrian behaviour surveys in the Perth and Kinross Council area.

3.1.2 Following discussion with TACTRAN analysis was undertaken for the following site in November 2020 only:

- Pedestrian 3 – Tay Street (north of South Street, west footpath)
- Pedestrian 4 – Tay Street (north of South Street, east footpath)

3.1.3 Data on Tay Street was only recorded for one day as the intention here was originally to monitor the number of cyclists using

3.2 Results of Pedestrian Behaviour Surveys

3.2.1 Table 3 below presents the results of the pedestrian behaviour data on the west side of Tay Street in Perth, between South Street and High Street.

Table 3. Tay Street north of South St (west footpath) Pedestrian Behaviour Summary



Site 3 Tay Street Step Out Analysis West Footpath (Thursday 19th November 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	304	3	0	300	37	1	0	0	0
AM Peak Pd 0700-1000	54	1	0	52	9	0	0	0	0
AM Peak Hr 0800-0900	25	1	0	26	6	0	0	0	0
IP Peak Pd 1000-1600	148	0	0	144	22	1	0	0	0
IP Peak Hr 1200-1300	36	0	0	24	5	0	0	0	0
PM Peak Pd 1600-1900	56	0	0	66	6	0	0	0	0
PM Peak Hr 1700-1800	29	0	0	32	1	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	89%	11%	0%	0%	0%	0%

3.2.2 Table 3 shows that on the west side footpath of Tay Street in Perth, on average 89% of pedestrians did not conflict with oncoming pedestrians, whilst 11% passed on the footpath within a space of 2m or less.

3.2.3 Table 4 below presents the results of the pedestrian behaviour data on the east side of Tay Street in Perth, between South Street and High Street.

Table 4. Tay Street north of South St (east footpath) Pedestrian Behaviour Summary



Site 4 Tay Street Step Out Analysis East Footpath (Thursday 19th November 2020)

Thursday 22nd Oct 2020	2-Way Ped Count	2-Way Cyclist on Bike	2-Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	551	93	0	314	51	37	0	0	0
AM Peak Pd 0700-1000	76	17	0	58	4	1	0	0	0
AM Peak Hr 0800-0900	23	7	0	23	0	0	0	0	0
IP Peak Pd 1000-1600	304	54	0	157	37	27	0	0	0
IP Peak Hr 1200-1300	44	14	0	23	3	2	0	0	0
PM Peak Pd 1600-1900	117	15	0	57	10	9	0	0	0
PM Peak Hr 1700-1800	24	8	0	14	3	2	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	78%	13%	9%	0%	0%	0%

3.2.4 Table 4 shows that on the east side footpath of Tay Street in Perth, on average 78% of pedestrians did not conflict with oncoming pedestrians, whilst 13% passed on the footpath within a space of 2m or less. The remaining 9% passed with over 2m between them.

4. LINK COUNT & SPEED REVIEW

4.1 Overview

4.1.1 Summary tables below present the results of the speed surveys in the Perth & Kinross Council area.

4.1.2 For each survey, the summary information is as follows:

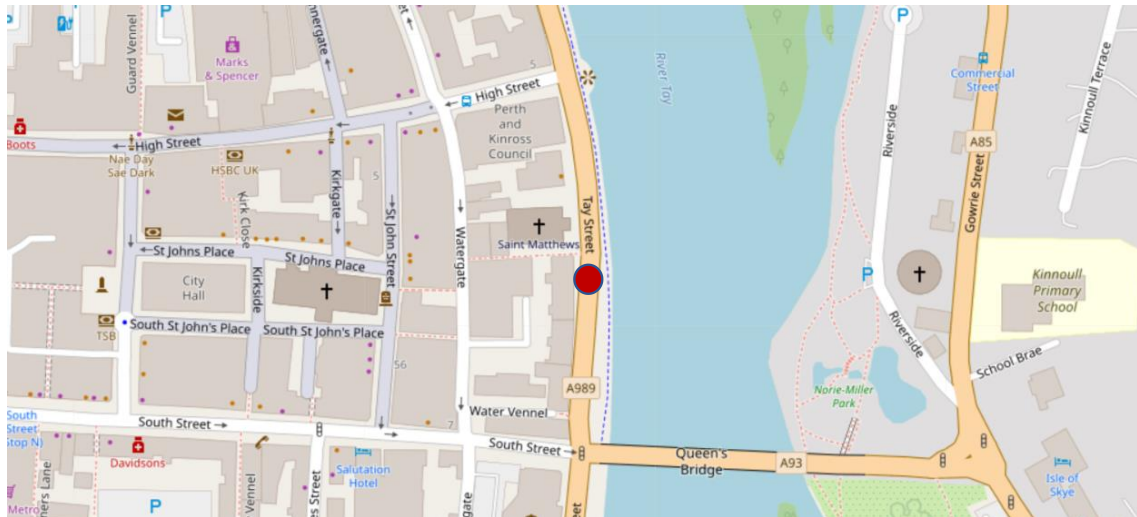
- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed at, or below, which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

4.2 Results of Link Counts and Speed Surveys

Perth

4.2.1 Table 5 below presents a comparison of the results of the link flow and speed data on Tay Street, north of South Street (northbound).

Table 5. Tay Street north of South St (Northbound)

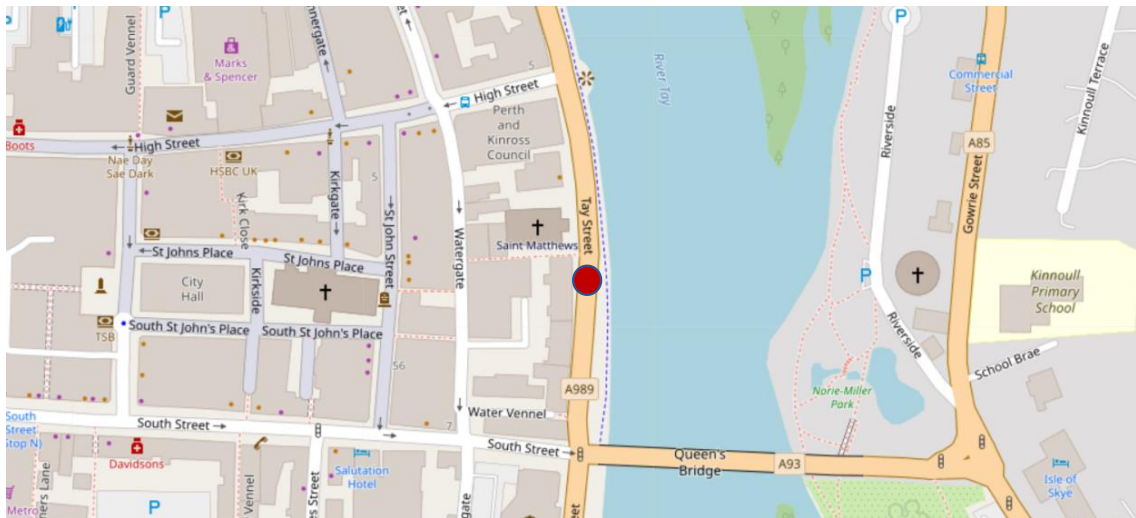


Site 1 Tay St between South Street and High Street Northbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2529	2584	2562	2722	2832	2539	1749	2646	2502
Mean Speed (mph)	22.7	21.8	22.7	22.5	22.2	23.0	22.7	22.4	22.5
85%ile Speed (mph)	26.1	25.9	26.5	26.4	25.8	26.8	26.6	26.1	26.3
No. Vehicles > 20 MPH Limit	2002	1811	1987	2088	2107	2066	1357	1999	1917
% Vehicles > 20 MPH Limit	79.2%	70.1%	77.6%	76.7%	74.4%	81.4%	77.6%	75.6%	76.7%
No. Vehicles > 35 MPH	8	7	14	9	10	6	7	10	9
% Vehicles > 35 MPH	0.3%	0.3%	0.5%	0.3%	0.4%	0.2%	0.4%	0.4%	0.3%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2179	2040	2123	2239	2540	1952	1734	2224	2115
Mean Speed (mph)	22.8	22.5	22.6	22.9	22.7	22.4	22.0	22.7	22.6
85%ile Speed (mph)	26.5	26.1	26.3	26.7	26.3	26.1	25.5	26.4	26.2
No. Vehicles > 20 MPH Limit	1678	1528	1630	1778	1969	1436	1274	1717	1613
% Vehicles > 20 MPH Limit	77.0%	74.9%	76.8%	79.4%	77.5%	73.6%	73.5%	77.1%	76.1%
No. Vehicles > 35 MPH	8	3	6	11	7	10	3	7	7
% Vehicles > 35 MPH	0.4%	0.1%	0.3%	0.5%	0.3%	0.5%	0.2%	0.3%	0.3%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2648	3000	2982	3018	3432	2927	1980	3016	2855
Mean Speed (mph)	21.9	22.1	22.2	21.7	22.2	21.9	22.1	22.0	22.0
85%ile Speed (mph)	25.6	25.8	26.1	25.8	25.8	25.7	26.2	25.8	25.9
No. Vehicles > 20 MPH Limit	1877	2186	2161	2061	2532	2043	1417	2163	2040
% Vehicles > 20 MPH Limit	70.9%	72.9%	72.5%	68.3%	73.8%	69.8%	71.6%	71.7%	71.4%
No. Vehicles > 35 MPH	6	5	10	8	13	10	5	8	8
% Vehicles > 35 MPH	0.2%	0.2%	0.3%	0.3%	0.4%	0.3%	0.3%	0.3%	0.3%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2881	2984	2953	2987	3328	3193	2058	3027	2912
Mean Speed (mph)	21.4	21.5	22.3	21.2	21.7	21.6	22.2	21.6	21.7
85%ile Speed (mph)	25.3	25.6	26.2	25.4	25.7	25.7	26.2	25.6	25.7
No. Vehicles > 20 MPH Limit	1875	1984	2152	1939	2248	2085	1454	2040	1962
% Vehicles > 20 MPH Limit	65.1%	66.5%	72.9%	64.9%	67.5%	65.3%	70.7%	67.4%	67.4%
No. Vehicles > 35 MPH	5	3	8	4	9	10	11	6	7
% Vehicles > 35 MPH	0.2%	0.1%	0.3%	0.1%	0.3%	0.3%	0.5%	0.2%	0.2%

- 4.2.2 Table 5 indicates that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 22.7 mph. The flows in May 2021 and September 2021 were very similar, with the lowest average speeds being recorded in September 2021.
- 4.2.3 The proportion of vehicles exceeding 20mph was slightly lower in May 2021 compared with October 2020, but was lowest in September 2021.

4.2.5 Table 6 presents the results for Tay Street, north of South Street (southbound).

Table 6. Tay Street north of South St (Southbound)



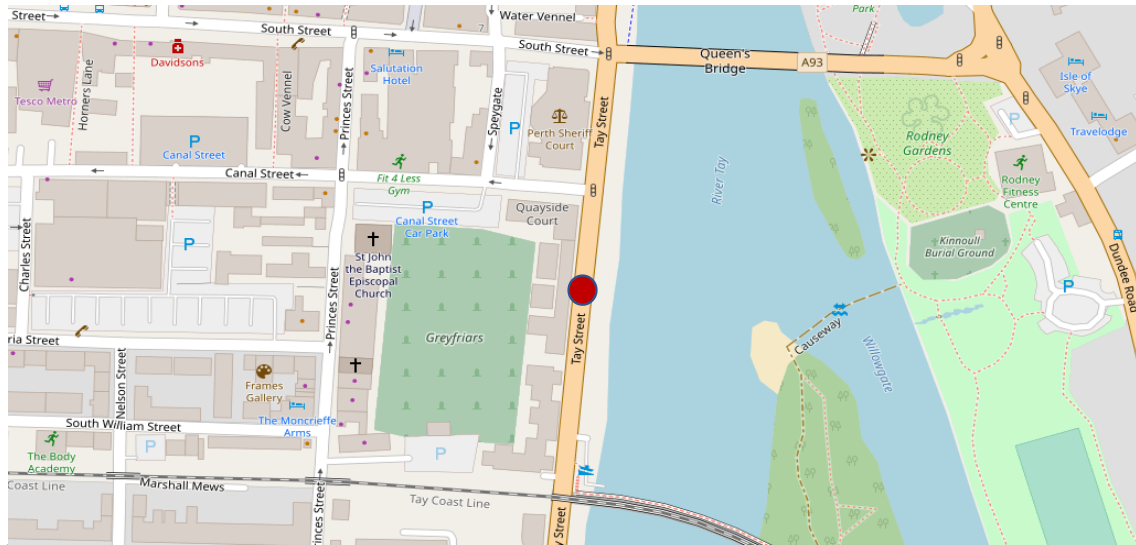
Site 1 Tay St between South Street and High Street Southbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2738	2623	2670	2931	2951	2384	1955	2783	2607
Mean Speed (mph)	20.9	20.8	21.0	20.4	20.6	21.5	21.3	20.7	20.9
85%ile Speed (mph)	24.7	24.9	24.8	24.4	24.7	25.4	25.3	24.7	24.9
No. Vehicles > 20 MPH Limit	1593	1507	1582	1538	1617	1520	1242	1567	1514
% Vehicles > 20 MPH Limit	58.2%	57.5%	59.3%	52.5%	54.8%	63.8%	63.5%	56.4%	58.5%
No. Vehicles > 35 MPH	8	9	13	9	7	6	8	9	9
% Vehicles > 35 MPH	0.3%	0.3%	0.5%	0.3%	0.2%	0.3%	0.4%	0.3%	0.3%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2541	2256	2483	2592	2679	1918	2372	2510	2406
Mean Speed (mph)	20.2	21.0	20.7	20.8	20.3	20.9	19.5	20.6	20.5
85%ile Speed (mph)	23.9	24.8	24.6	24.5	24.2	24.8	23.7	24.4	24.4
No. Vehicles > 20 MPH Limit	1337	1384	1448	1539	1472	1134	1072	1436	1341
% Vehicles > 20 MPH Limit	52.6%	61.3%	58.3%	59.4%	54.9%	59.1%	45.2%	57.3%	55.8%
No. Vehicles > 35 MPH	4	3	6	3	6	4	12	4	5
% Vehicles > 35 MPH	0.2%	0.1%	0.2%	0.1%	0.2%	0.2%	0.5%	0.2%	0.2%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2855	3257	3146	3152	3331	2790	2425	3148	2994
Mean Speed (mph)	20.8	20.5	21.0	20.8	20.7	21.0	21.0	20.8	20.8
85%ile Speed (mph)	24.4	24.2	24.7	24.4	24.6	24.7	25.2	24.5	24.6
No. Vehicles > 20 MPH Limit	1631	1823	1812	1834	1870	1625	1387	1794	1712
% Vehicles > 20 MPH Limit	57.1%	56.0%	57.6%	58.2%	56.1%	58.2%	57.2%	57.0%	57.2%
No. Vehicles > 35 MPH	9	10	11	7	11	8	13	10	10
% Vehicles > 35 MPH	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%	0.5%	0.3%	0.3%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3351	3316	3365	3264	3480	3148	2527	3355	3207
Mean Speed (mph)	21.2	21.4	21.7	21.4	21.6	21.5	22.1	21.5	21.6
85%ile Speed (mph)	25.2	25.2	25.4	25.3	25.4	25.4	26.4	25.3	25.5
No. Vehicles > 20 MPH Limit	2088	2176	2311	2110	2294	2035	1777	2196	2113
% Vehicles > 20 MPH Limit	62.3%	65.6%	68.7%	64.6%	65.9%	64.6%	70.3%	65.4%	65.9%
No. Vehicles > 35 MPH	9	8	10	15	19	15	12	12	13
% Vehicles > 35 MPH	0.3%	0.2%	0.3%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%

4.2.6 Table 6 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The 5-day mean speed was relatively consistent across all survey periods, with the exception of September 2021 when both the flows and average speed increased.

- 4.2.7 The proportion of vehicles exceeding 20mph was higher in May 2021 compared with October 2020. The proportion of vehicles exceeding the 20mph speed limit in September 2021 was higher still.

4.2.8 Table 7 presents the results for Tay Street between the railway bridge and Canal Street (northbound) in Perth.

Table 7. Tay Street south of Canal Street (Northbound)



Site 2 Tay St between rail bridge and Canal St Northbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2675	2562	2840	-	-	2327	1699	2692	2421
Mean Speed (mph)	23.7	23.6	23.5	-	-	24.0	24.0	23.6	23.8
85%ile Speed (mph)	27.3	27.5	27.3	-	-	28.1	27.8	27.4	27.6
No. Vehicles > 20 MPH Limit	2272	2138	2325	-	-	1990	1454	2245	2036
% Vehicles > 20 MPH Limit	84.9%	83.5%	81.9%	-	-	85.5%	85.6%	83.4%	84.3%
No. Vehicles > 35 MPH	15	13	13	-	-	14	7	14	12
% Vehicles > 35 MPH	0.6%	0.5%	0.5%	-	-	0.6%	0.4%	0.5%	0.5%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2620	2369	2482	2606	2843	2035	2038	2584	2428
Mean Speed (mph)	23.8	24.2	24.1	24.1	23.8	24.0	23.5	24.0	23.9
85%ile Speed (mph)	27.9	28.4	28.2	28.1	28.1	28.0	27.6	28.1	28.0
No. Vehicles > 20 MPH Limit	2179	2051	2090	2205	2368	1730	1630	2179	2036
% Vehicles > 20 MPH Limit	83.2%	86.6%	84.2%	84.6%	83.3%	85.0%	80.0%	84.4%	83.8%
No. Vehicles > 35 MPH	20	27	24	23	25	29	27	24	25
% Vehicles > 35 MPH	0.8%	1.1%	1.0%	0.9%	0.9%	1.4%	1.3%	0.9%	1.0%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2748	3322	3349	3235	3428	2546	2086	3216	2959
Mean Speed (mph)	24.0	22.8	23.1	23.4	22.5	24.1	24.3	23.2	23.5
85%ile Speed (mph)	28.0	27.0	27.4	27.5	27.1	28.3	28.4	27.4	27.7
No. Vehicles > 20 MPH Limit	2333	2539	2646	2608	2521	2182	1833	2529	2380
% Vehicles > 20 MPH Limit	84.9%	76.4%	79.0%	80.6%	73.5%	85.7%	87.9%	78.6%	80.4%
No. Vehicles > 35 MPH	27	20	16	22	10	32	18	19	21
% Vehicles > 35 MPH	1.0%	0.6%	0.5%	0.7%	0.3%	1.3%	0.9%	0.6%	0.7%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3238	3342	3525	3308	3712	3009	2328	3425	3209
Mean Speed (mph)	21.9	21.5	21.8	21.7	20.1	21.9	23.4	21.4	21.8
85%ile Speed (mph)	26.7	26.6	26.7	26.5	25.6	26.7	27.7	26.4	26.6
No. Vehicles > 20 MPH Limit	2225	2172	2303	2242	2001	2055	1826	2189	2118
% Vehicles > 20 MPH Limit	68.7%	65.0%	65.3%	67.8%	53.9%	68.3%	78.4%	63.9%	66.0%
No. Vehicles > 35 MPH	19	16	31	21	15	15	25	20	20
% Vehicles > 35 MPH	0.6%	0.5%	0.9%	0.6%	0.4%	0.5%	1.1%	0.6%	0.6%

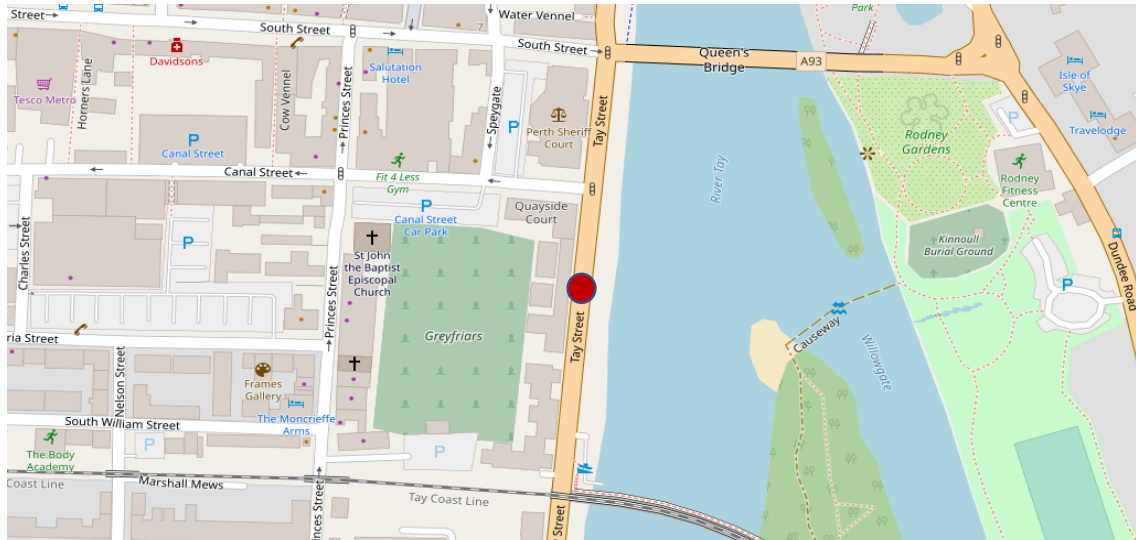
* No data available for Thursday 19th & Friday 20th November 2020 due to vehicle parked on ATC tube

4.2.9 Table 7 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, the mean speed also being highest at 24.0mph in February 2021. The highest flow was observed in September 2021.

4.2.10 The proportion of vehicles exceeding 20mph was highest in February 2021, and lowest in September 2021.

4.2.11 Table 8 presents the results for Tay Street south of Canal Street (southbound) in Perth.

Table 8. Tay Street south of Canal Street (Southbound)



Site 2 Tay St between rail bridge and Canal St Southbound									
November 2020	Mon 23/11/20	Tue 24/11/20	Wed 25/11/20	Thu 19/11/20	Fri 20/11/20	Sat 21/11/20	Sun 22/11/20	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4576	4352	4664	-	-	3776	2919	4531	4057
Mean Speed (mph)	24.6	24.3	24.1	-	-	24.5	24.8	24.3	24.5
85%ile Speed (mph)	28.3	28.0	28.1	-	-	28.5	28.9	28.1	28.4
No. Vehicles > 20 MPH Limit	4117	3784	4017	-	-	3333	2548	3973	3560
% Vehicles > 20 MPH Limit	90.0%	86.9%	86.1%	-	-	88.3%	87.3%	87.7%	87.7%
No. Vehicles > 35 MPH	45	40	28	-	-	49	32	38	39
% Vehicles > 35 MPH	1.0%	0.9%	0.6%	-	-	1.3%	1.1%	0.8%	1.0%
February 2021	Mon 22/02/21	Tue 23/02/21	Wed 24/02/21	Thu 25/02/21	Fri 26/02/21	Sat 20/02/21	Sun 21/02/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4445	3941	4372	4414	4798	3345	3499	4394	4116
Mean Speed (mph)	24.5	25.0	24.8	25.0	24.6	24.5	23.4	24.8	24.5
85%ile Speed (mph)	28.2	28.8	28.5	29.0	28.6	28.4	27.3	28.6	28.4
No. Vehicles > 20 MPH Limit	3846	3560	3895	3923	4172	2923	2681	3879	3571
% Vehicles > 20 MPH Limit	86.5%	90.3%	89.1%	88.9%	87.0%	87.4%	76.6%	88.4%	86.5%
No. Vehicles > 35 MPH	66	43	62	57	77	54	46	61	58
% Vehicles > 35 MPH	1.5%	1.1%	1.4%	1.3%	1.6%	1.6%	1.3%	1.4%	1.4%
May 2021	Mon 03/05/21	Tue 04/05/21	Wed 05/05/21	Thu 06/05/21	Fri 07/05/21	Sat 08/05/21	Sun 09/05/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4564	5412	5330	5289	5623	4204	3445	5244	4838
Mean Speed (mph)	24.1	23.9	23.9	24.4	23.8	24.7	24.4	24.0	24.2
85%ile Speed (mph)	27.8	27.6	27.9	28.0	27.5	28.3	28.2	27.8	27.9
No. Vehicles > 20 MPH Limit	3949	4636	4472	4578	4748	3702	3020	4477	4158
% Vehicles > 20 MPH Limit	86.5%	85.7%	83.9%	86.6%	84.4%	88.1%	87.7%	85.4%	85.9%
No. Vehicles > 35 MPH	32	33	57	54	42	51	39	44	44
% Vehicles > 35 MPH	0.7%	0.6%	1.1%	1.0%	0.7%	1.2%	1.1%	0.8%	0.9%
September 2021	Mon 06/09/21	Tue 07/09/21	Wed 08/09/21	Thu 09/09/21	Fri 10/09/21	Sat 11/09/21	Sun 12/09/21	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5594	5639	6000	6255	6252	5036	4324	5948	5586
Mean Speed (mph)	24.5	24.4	24.9	24.6	24.3	24.9	24.6	24.5	24.6
85%ile Speed (mph)	28.1	28.4	28.6	28.0	28.2	29.1	28.6	28.3	28.4
No. Vehicles > 20 MPH Limit	4988	4935	5403	5582	5437	4433	3790	5269	4938
% Vehicles > 20 MPH Limit	89.2%	87.5%	90.1%	89.2%	87.0%	88.0%	87.7%	88.6%	88.4%
No. Vehicles > 35 MPH	52	56	82	59	69	77	46	64	63
% Vehicles > 35 MPH	0.9%	1.0%	1.4%	0.9%	1.1%	1.5%	1.1%	1.1%	1.1%

* No data available for Thursday 19th & Friday 20th November 2020 due to vehicle parked on ATC tube

4.2.12 Table 8 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic was greatest in February 2021 at 24.8mph. The highest flow was observed in September 2021.

- 4.2.13 The proportion of vehicles exceeding 20mph was higher in February 2021 compared with May 2021 and October 2020, but the highest proportion was observed in September 2021.

5. LINK COUNT REVIEW

5.1 Overview

- 5.1.1 Summary tables below present the results of the link count surveys in the Perth & Kinross Council area.

- 5.1.2 For motorised vehicle link count survey, the summary information is as follows:

- Site Number
- Site Location
- Total Flow – Directional surveyed flow (categorised as: Car, LGV, OGV1, OGV2, Bus, Coach, Motorcycle)
- 0600 - 2200 Northbound
- 0600 - 2200 Southbound
- AM Peak Pd 06:30-09:30 Northbound
- AM Peak Pd 06:30-09:30 Southbound
- IP Peak Pd 09:30-15:30 Northbound
- IP Peak Pd 09:30-15:30 Southbound
- PM Peak Pd 15:30-18:30 Northbound
- PM Peak Pd 15:30-18:30 Southbound.

- 5.1.3 For pedestrian link count (on pavement) each survey, the summary information is as follows:

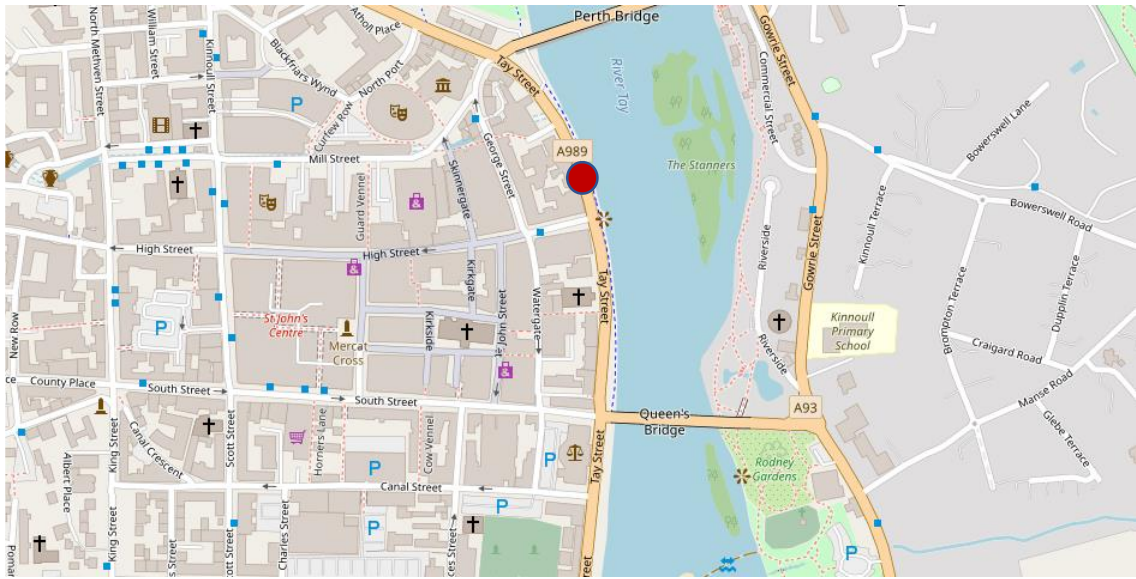
- Site Number
- Site Location
- Total Flow – Directional surveyed flow (categorised as: Adult, Adult & Child, Child, Elderly, Disabled, Cyclist on Road, Pavement Cyclist on Bike, Pavement Cyclist on Foot, Horses)
- 0600 - 2200 Northbound
- 0600 - 2200 Southbound
- AM Peak Pd 06:30-09:30 Northbound
- AM Peak Pd 06:30-09:30 Southbound
- IP Peak Pd 09:30-15:30 Northbound
- IP Peak Pd 09:30-15:30 Southbound
- PM Peak Pd 15:30-18:30 Northbound
- PM Peak Pd 15:30-18:30 Southbound.

5.2 Results of Link Counts Surveys

Perth

- 5.2.1 Table 9 below presents a comparison of the results of the link flow data on Tay Street, north of High Street.

Table 9. Tay Street (North of High Street) Vehicular Link Flow

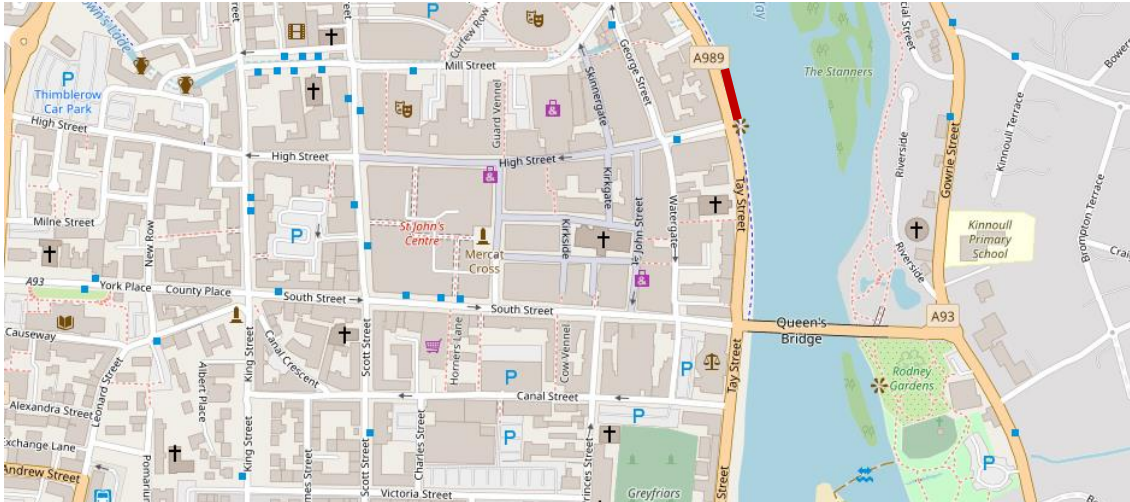


Tay Street (North of High Street)								
October 2020	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1263	224	90	29	2	3	2	1613
0600 - 2200 Southbound	2755	456	155	81	23	11	6	3487
AM Peak Pd 0630-0930 Northbound	168	58	19	10	0	1	0	256
AM Peak Pd 0630-0930 Southbound	395	118	38	13	2	3	0	569
IP Peak Pd 0930-1530 Northbound	598	110	51	14	0	1	0	774
IP Peak Pd 0930-1530 Southbound	1294	219	97	46	18	6	3	1683
PM Peak Pd 1530-1830 Northbound	292	34	18	1	0	0	1	346
PM Peak Pd 1530-1830 Southbound	701	82	14	13	3	2	3	818
February 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1088	263	83	26	3	1	3	1467
0600 - 2200 Southbound	2267	475	150	49	26	4	4	2975
AM Peak Pd 0630-0930 Northbound	137	62	25	8	0	0	0	232
AM Peak Pd 0630-0930 Southbound	343	110	45	10	4	1	1	514
IP Peak Pd 0930-1530 Northbound	529	141	46	13	1	1	2	733
IP Peak Pd 0930-1530 Southbound	1065	243	79	19	19	2	2	1429
PM Peak Pd 1530-1830 Northbound	292	49	8	4	0	0	1	354
PM Peak Pd 1530-1830 Southbound	552	94	17	11	3	1	0	678
May 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1380	302	106	29	2	3	7	1829
0600 - 2200 Southbound	3039	598	157	53	22	9	6	3884
AM Peak Pd 0630-0930 Northbound	195	62	28	13	0	0	1	299
AM Peak Pd 0630-0930 Southbound	427	136	47	10	2	2	0	624
IP Peak Pd 0930-1530 Northbound	626	141	61	12	0	3	0	843
IP Peak Pd 0930-1530 Southbound	1407	308	88	28	19	6	2	1858
PM Peak Pd 1530-1830 Northbound	370	71	16	0	0	0	5	462
PM Peak Pd 1530-1830 Southbound	757	108	12	14	1	0	3	895
September 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1463	263	96	21	4	12	17	1876
0600 - 2200 Southbound	3087	510	150	34	22	16	30	3849
AM Peak Pd 0630-0930 Northbound	182	64	33	7	0	2	0	288
AM Peak Pd 0630-0930 Southbound	421	131	36	11	2	7	6	614
IP Peak Pd 0930-1530 Northbound	625	125	48	11	0	7	8	824
IP Peak Pd 0930-1530 Southbound	1345	247	95	18	18	6	11	1740
PM Peak Pd 1530-1830 Northbound	351	48	12	0	2	2	7	422
PM Peak Pd 1530-1830 Southbound	792	95	14	4	2	3	9	919

5.2.2 Table 9 indicates that vehicular flow in September 2021 was greater than February 2021 and October 2020 and similar to May 2021.

Table 10 below presents a comparison of the results of the pedestrian flow on Tay Street, north of High Street (east kerbside).

Table 10. Tay Street (North of High Street) Pedestrian Flow

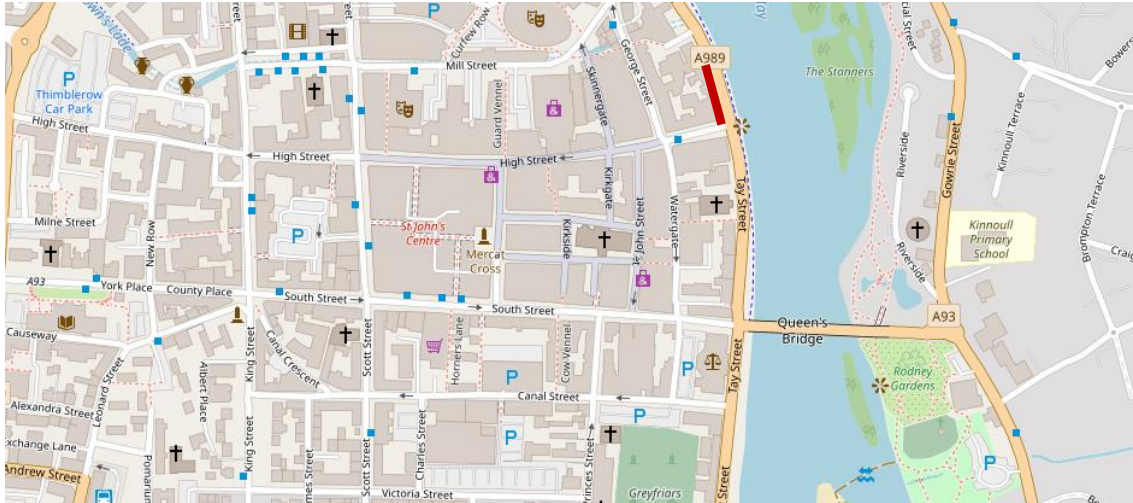


Site 1 Tay Street (North of High Street) East Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	363	7	0	0	5	0	46	0	0	421
0600 - 2200 Southbound	326	18	0	3	6	0	43	7	0	403
AM Peak Pd 0630-0930 Northbound	44	2	0	0	0	0	5	0	0	51
AM Peak Pd 0630-0930 Southbound	37	0	0	0	0	0	8	0	0	45
IP Peak Pd 0930-1530 Northbound	213	0	0	0	4	0	29	0	0	246
IP Peak Pd 0930-1530 Southbound	180	0	0	2	5	0	27	0	0	214
PM Peak Pd 1530-1830 Northbound	66	0	0	0	0	0	7	0	0	73
PM Peak Pd 1530-1830 Southbound	63	13	0	1	0	0	3	7	0	87
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	593	20	0	1	2	0	65	0	0	681
0600 - 2200 Southbound	586	14	0	1	2	0	60	0	0	663
AM Peak Pd 0630-0930 Northbound	55	5	0	0	0	0	6	0	0	66
AM Peak Pd 0630-0930 Southbound	47	0	0	0	0	0	7	0	0	54
IP Peak Pd 0930-1530 Northbound	338	2	0	1	2	0	33	0	0	376
IP Peak Pd 0930-1530 Southbound	302	8	0	1	2	0	27	0	0	340
PM Peak Pd 1530-1830 Northbound	119	11	0	0	0	0	19	0	0	149
PM Peak Pd 1530-1830 Southbound	157	4	0	0	0	0	19	0	0	180
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	383	15	2	1	3	0	42	0	0	446
0600 - 2200 Southbound	408	13	0	1	1	0	58	0	0	481
AM Peak Pd 0630-0930 Northbound	29	2	0	0	0	0	3	0	0	34
AM Peak Pd 0630-0930 Southbound	32	0	0	0	0	0	8	0	0	40
IP Peak Pd 0930-1530 Northbound	170	10	2	0	3	0	10	0	0	195
IP Peak Pd 0930-1530 Southbound	175	6	0	0	1	0	23	0	0	205
PM Peak Pd 1530-1830 Northbound	102	3	0	1	0	0	22	0	0	128
PM Peak Pd 1530-1830 Southbound	109	7	0	1	0	0	17	0	0	134
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	516	9	4	5	1	0	91	1	0	627
0600 - 2200 Southbound	429	11	0	6	1	0	108	0	0	555
AM Peak Pd 0630-0930 Northbound	41	0	0	0	0	0	10	0	0	51
AM Peak Pd 0630-0930 Southbound	41	0	0	0	0	0	10	0	0	51
IP Peak Pd 0930-1530 Northbound	271	2	4	4	0	0	40	1	0	322
IP Peak Pd 0930-1530 Southbound	216	2	0	3	1	0	52	0	0	274
PM Peak Pd 1530-1830 Northbound	115	4	0	1	1	0	32	0	0	153
PM Peak Pd 1530-1830 Southbound	93	2	0	3	0	0	28	0	0	126

5.2.4 Table 10 indicates that pedestrian flow in February 2021 was greater than September 2021, May 2021 and October 2020. More cyclists appeared in September 2021 than any other survey period.

5.2.6 Table 11 below presents a comparison of the results of the pedestrian flow data on Tay Street, north of High Street (west kerbside).

Table 11. Tay Street (North of High Street) Pedestrian Flow

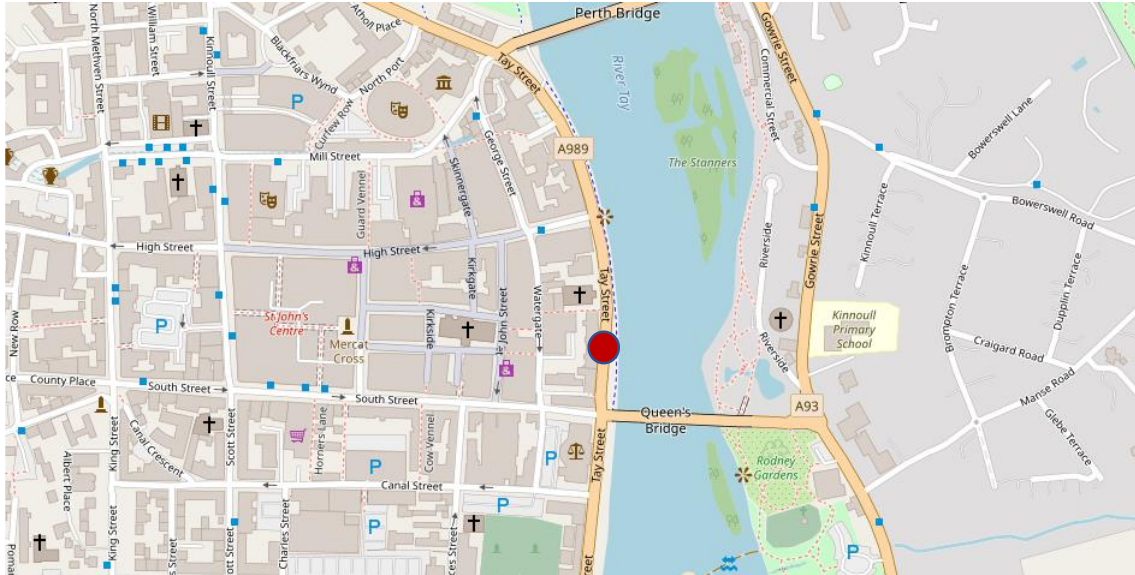


Site 2 Tay Street (North of High Street) West Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	116	0	0	1	3	0	2	0	0	122
0600 - 2200 Southbound	169	0	0	7	4	0	0	0	0	180
AM Peak Pd 0700-1000 Northbound	12	0	0	0	0	0	1	0	0	13
AM Peak Pd 0700-1000 Southbound	21	0	0	0	0	0	0	0	0	21
IP Peak Pd 1000-1600 Northbound	65	0	0	1	1	0	1	0	0	68
IP Peak Pd 1000-1600 Southbound	105	0	0	5	4	0	0	0	0	114
PM Peak Pd 1600-1900 Northbound	25	0	0	0	2	0	0	0	0	27
PM Peak Pd 1600-1900 Southbound	24	0	0	2	0	0	0	0	0	26
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	102	0	0	1	0	0	6	0	0	109
0600 - 2200 Southbound	139	0	0	0	0	0	2	0	0	141
AM Peak Pd 0700-1000 Northbound	9	0	0	0	0	0	0	0	0	9
AM Peak Pd 0700-1000 Southbound	17	0	0	0	0	0	1	0	0	18
IP Peak Pd 1000-1600 Northbound	50	0	0	1	0	0	2	0	0	53
IP Peak Pd 1000-1600 Southbound	61	0	0	0	0	0	1	0	0	62
PM Peak Pd 1600-1900 Northbound	27	0	0	0	0	0	4	0	0	31
PM Peak Pd 1600-1900 Southbound	35	0	0	0	0	0	0	0	0	35
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	90	0	0	0	0	0	2	0	0	92
0600 - 2200 Southbound	134	0	0	0	0	0	3	0	0	137
AM Peak Pd 0700-1000 Northbound	10	0	0	0	0	0	1	0	0	11
AM Peak Pd 0700-1000 Southbound	15	0	0	0	0	0	1	0	0	16
IP Peak Pd 1000-1600 Northbound	35	0	0	0	0	0	0	0	0	35
IP Peak Pd 1000-1600 Southbound	63	0	0	0	0	0	1	0	0	64
PM Peak Pd 1600-1900 Northbound	21	0	0	0	0	0	1	0	0	22
PM Peak Pd 1600-1900 Southbound	24	0	0	0	0	0	1	0	0	25
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	212	10	0	4	0	0	3	0	0	229
0600 - 2200 Southbound	265	0	0	2	0	0	4	0	0	271
AM Peak Pd 0700-1000 Northbound	29	0	0	0	0	0	0	0	0	29
AM Peak Pd 0700-1000 Southbound	29	0	0	0	0	0	1	0	0	30
IP Peak Pd 1000-1600 Northbound	80	10	0	3	0	0	3	0	0	96
IP Peak Pd 1000-1600 Southbound	114	0	0	1	0	0	0	0	0	115
PM Peak Pd 1600-1900 Northbound	52	0	0	1	0	0	0	0	0	53
PM Peak Pd 1600-1900 Southbound	79	0	0	0	0	0	2	0	0	81

5.2.7 Table 11 indicates that pedestrian flow in September 2021 was greater than May 2021, February 2021 and October 2020.

5.2.9 Table 12 below presents a comparison of the results of the vehicle flow data on Tay Street, north of South Street.

Table 12. Tay Street (North of South Street) Vehicular Flow

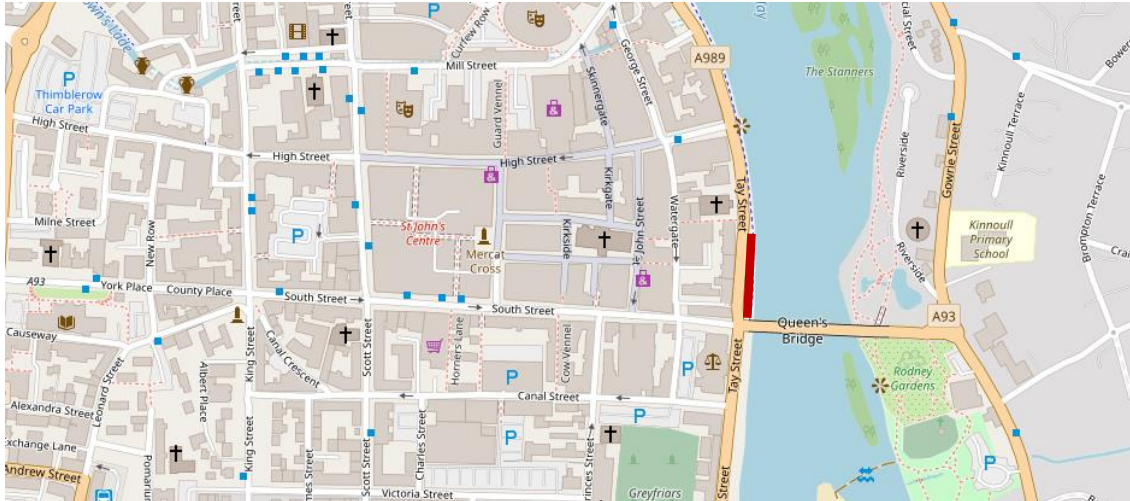


Tay Street (North of South Street)								
October 2020	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1994	363	132	31	68	4	6	2598
0600 - 2200 Southbound	2149	366	139	81	0	8	6	2749
AM Peak Pd 0630-0930 Northbound	253	98	41	12	12	1	0	417
AM Peak Pd 0630-0930 Southbound	316	100	34	13	0	3	0	466
IP Peak Pd 0930-1530 Northbound	975	179	67	14	36	2	3	1276
IP Peak Pd 0930-1530 Southbound	976	171	86	46	0	3	3	1285
PM Peak Pd 1530-1830 Northbound	477	59	22	1	12	0	1	572
PM Peak Pd 1530-1830 Southbound	551	60	14	13	0	2	3	643
February 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1603	363	104	26	67	1	6	2170
0600 - 2200 Southbound	1847	380	135	49	1	4	3	2419
AM Peak Pd 0630-0930 Northbound	188	87	35	8	12	0	2	332
AM Peak Pd 0630-0930 Southbound	278	90	39	10	1	1	1	420
IP Peak Pd 0930-1530 Northbound	807	190	54	13	36	1	2	1103
IP Peak Pd 0930-1530 Southbound	857	188	72	19	0	2	2	1140
PM Peak Pd 1530-1830 Northbound	420	67	10	4	12	0	2	515
PM Peak Pd 1530-1830 Southbound	455	82	16	11	0	1	0	565
May 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2154	488	140	29	67	3	9	2890
0600 - 2200 Southbound	2415	463	139	53	0	8	3	3081
AM Peak Pd 0630-0930 Northbound	279	104	38	13	12	0	2	448
AM Peak Pd 0630-0930 Southbound	352	103	41	10	0	2	0	508
IP Peak Pd 0930-1530 Northbound	1053	245	81	12	36	3	0	1430
IP Peak Pd 0930-1530 Southbound	1068	233	80	28	0	5	2	1416
PM Peak Pd 1530-1830 Northbound	552	103	19	0	12	0	5	691
PM Peak Pd 1530-1830 Southbound	599	89	11	14	0	0	1	714
September 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2170	393	128	21	70	13	32	2827
0600 - 2200 Southbound	2537	399	133	34	0	16	21	3140
AM Peak Pd 0630-0930 Northbound	266	95	46	7	12	2	1	429
AM Peak Pd 0630-0930 Southbound	357	100	33	11	0	7	5	513
IP Peak Pd 0930-1530 Northbound	959	184	66	11	37	7	11	1275
IP Peak Pd 0930-1530 Southbound	1071	187	82	18	0	6	9	1373
PM Peak Pd 1530-1830 Northbound	516	79	12	0	14	3	13	637
PM Peak Pd 1530-1830 Southbound	666	83	14	4	0	3	3	773

5.2.10 Table 12 indicates that vehicular flow in May 2021 and September 2021 were consistent and both were greater than February 2021 and October 2020.

5.2.12 Table 13 below presents a comparison of the results of the pedestrian flow data on Tay Street, north of South Street (east kerbside).

Table 13. Tay Street (North of South Street) Pedestrian Flow

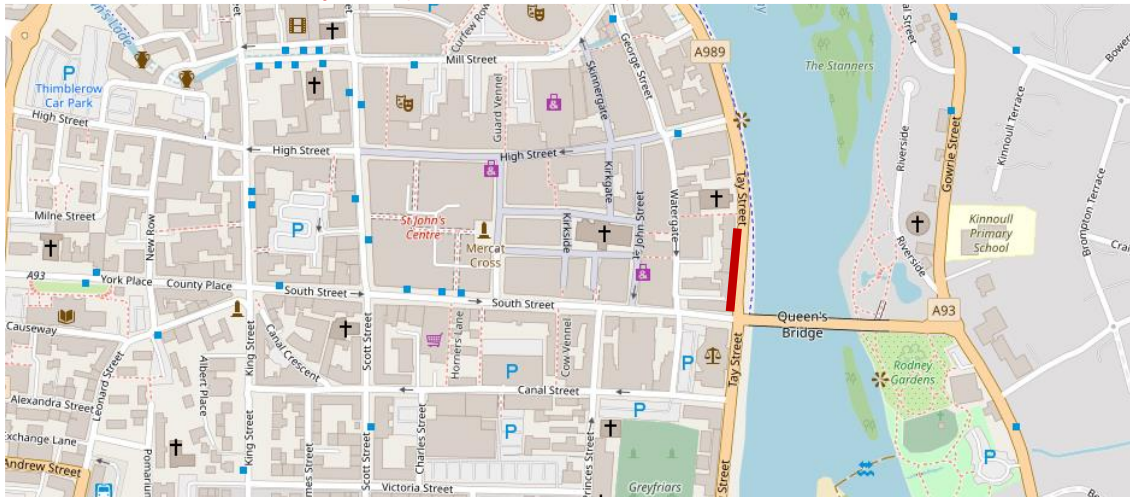


Site 3 Tay Street (North of South Street) East Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	247	4	1	0	0	0	46	0	0	298
0600 - 2200 Southbound	307	5	0	0	2	0	45	0	0	359
AM Peak Pd 0700-1000 Northbound	36	4	0	0	0	0	5	0	0	45
AM Peak Pd 0700-1000 Southbound	27	0	0	0	0	0	10	0	0	37
IP Peak Pd 1000-1600 Northbound	140	0	1	0	0	0	29	0	0	170
IP Peak Pd 1000-1600 Southbound	166	0	0	0	2	0	23	0	0	191
PM Peak Pd 1600-1900 Northbound	47	0	0	0	0	0	8	0	0	55
PM Peak Pd 1600-1900 Southbound	73	5	0	0	0	0	6	0	0	84
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	433	21	0	2	3	0	53	1	0	513
0600 - 2200 Southbound	545	8	3	1	1	0	49	1	0	608
AM Peak Pd 0700-1000 Northbound	44	0	0	0	0	0	5	0	0	49
AM Peak Pd 0700-1000 Southbound	41	0	0	0	0	0	5	0	0	46
IP Peak Pd 1000-1600 Northbound	216	4	0	2	3	0	27	0	0	252
IP Peak Pd 1000-1600 Southbound	288	6	0	1	1	0	26	0	0	322
PM Peak Pd 1600-1900 Northbound	104	10	0	0	0	0	17	1	0	132
PM Peak Pd 1600-1900 Southbound	148	2	3	0	0	0	15	1	0	169
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	285	7	0	0	1	0	30	0	0	323
0600 - 2200 Southbound	364	5	0	0	0	0	35	0	0	404
AM Peak Pd 0700-1000 Northbound	23	2	0	0	0	0	4	0	0	29
AM Peak Pd 0700-1000 Southbound	27	0	0	0	0	0	6	0	0	33
IP Peak Pd 1000-1600 Northbound	122	3	0	0	1	0	9	0	0	135
IP Peak Pd 1000-1600 Southbound	145	0	0	0	0	0	17	0	0	162
PM Peak Pd 1600-1900 Northbound	58	2	0	0	0	0	13	0	0	73
PM Peak Pd 1600-1900 Southbound	89	5	0	0	0	0	6	0	0	100
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	377	6	4	0	5	0	71	2	0	465
0600 - 2200 Southbound	448	2	4	1	3	0	86	3	0	547
AM Peak Pd 0700-1000 Northbound	44	0	0	0	0	0	6	0	0	50
AM Peak Pd 0700-1000 Southbound	39	0	0	1	0	0	8	0	0	48
IP Peak Pd 1000-1600 Northbound	183	4	4	0	4	0	34	2	0	231
IP Peak Pd 1000-1600 Southbound	217	0	3	0	3	0	39	0	0	262
PM Peak Pd 1600-1900 Northbound	62	2	0	0	0	0	22	0	0	86
PM Peak Pd 1600-1900 Southbound	99	2	1	0	0	0	25	3	0	130

5.2.13 Table 13 indicates that pedestrian flow in February 2021 was greater than September 2021, May 2021 and October 2020.

5.2.15 Table 14 below presents a comparison of the results of the pedestrian flow data on Tay Street, north of South Street (west kerbside).

Table 14. Tay Street (North of South Street) Pedestrian Flow

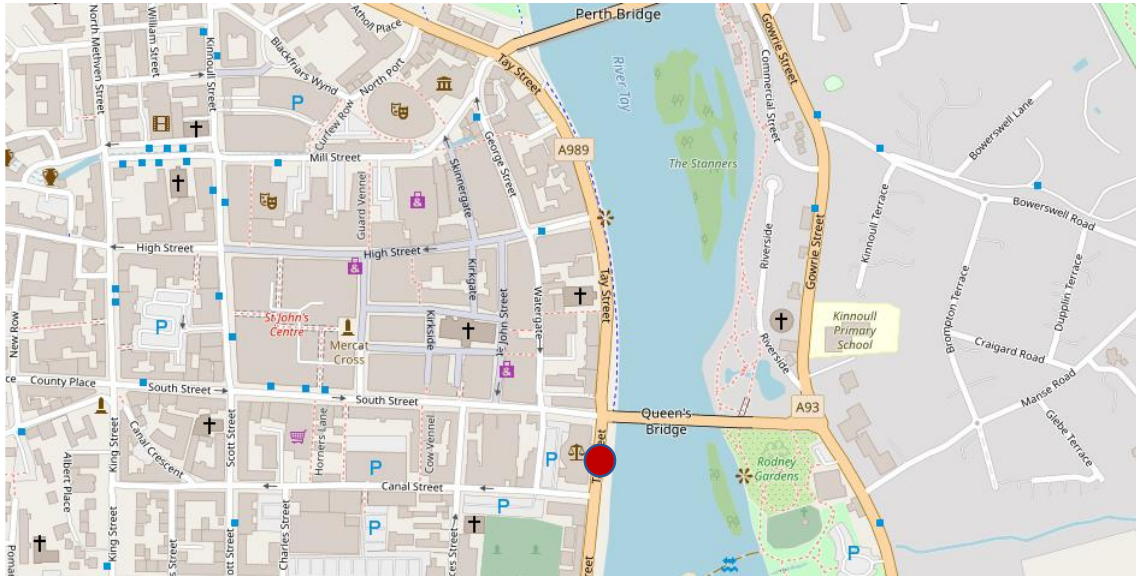


Site 4 Tay Street (North of South Street) West Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	148	0	0	0	2	0	2	1	0	153
0600 - 2200 Southbound	152	0	0	0	2	0	2	0	0	156
AM Peak Pd 0700-1000 Northbound	35	0	0	0	0	0	2	0	0	37
AM Peak Pd 0700-1000 Southbound	13	0	0	0	0	0	0	0	0	13
IP Peak Pd 1000-1600 Northbound	66	0	0	0	1	0	0	1	0	68
IP Peak Pd 1000-1600 Southbound	81	0	0	0	2	0	0	0	0	83
PM Peak Pd 1600-1900 Northbound	30	0	0	0	1	0	0	0	0	31
PM Peak Pd 1600-1900 Southbound	22	0	0	0	0	0	1	0	0	23
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	161	0	1	0	0	0	6	0	0	168
0600 - 2200 Southbound	174	2	0	1	0	0	8	0	0	185
AM Peak Pd 0700-1000 Northbound	24	0	0	0	0	0	0	0	0	24
AM Peak Pd 0700-1000 Southbound	15	0	0	0	0	0	1	0	0	16
IP Peak Pd 1000-1600 Northbound	77	0	0	0	0	0	1	0	0	78
IP Peak Pd 1000-1600 Southbound	82	0	0	1	0	0	3	0	0	86
PM Peak Pd 1600-1900 Northbound	41	0	1	0	0	0	5	0	0	47
PM Peak Pd 1600-1900 Southbound	55	2	0	0	0	0	4	0	0	61
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	208	10	0	1	1	0	3	0	0	223
0600 - 2200 Southbound	188	10	0	0	1	0	1	2	0	202
AM Peak Pd 0700-1000 Northbound	28	0	0	0	0	0	1	0	0	29
AM Peak Pd 0700-1000 Southbound	13	0	0	0	0	0	0	0	0	13
IP Peak Pd 1000-1600 Northbound	95	0	0	1	1	0	0	0	0	97
IP Peak Pd 1000-1600 Southbound	104	0	0	0	1	0	0	0	0	105
PM Peak Pd 1600-1900 Northbound	55	10	0	0	0	0	1	0	0	66
PM Peak Pd 1600-1900 Southbound	39	10	0	0	0	0	1	1	0	51
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	294	4	0	3	0	0	9	0	0	310
0600 - 2200 Southbound	294	2	0	0	2	0	6	0	0	304
AM Peak Pd 0700-1000 Northbound	33	0	0	0	0	0	2	0	0	35
AM Peak Pd 0700-1000 Southbound	30	0	0	0	0	0	1	0	0	31
IP Peak Pd 1000-1600 Northbound	142	2	0	1	0	0	4	0	0	149
IP Peak Pd 1000-1600 Southbound	129	0	0	0	2	0	3	0	0	134
PM Peak Pd 1600-1900 Northbound	67	0	0	1	0	0	3	0	0	71
PM Peak Pd 1600-1900 Southbound	75	2	0	0	0	0	2	0	0	79

5.2.16 Table 14 indicates that pedestrian flow in September 2021 was greater than May 2021, February 2021 and October 2020.

Table 15 below presents a comparison of the results of the vehicle flow data on Tay Street, south of South Street.

Table 15. Tay Street (South of South Street) Vehicular Flow

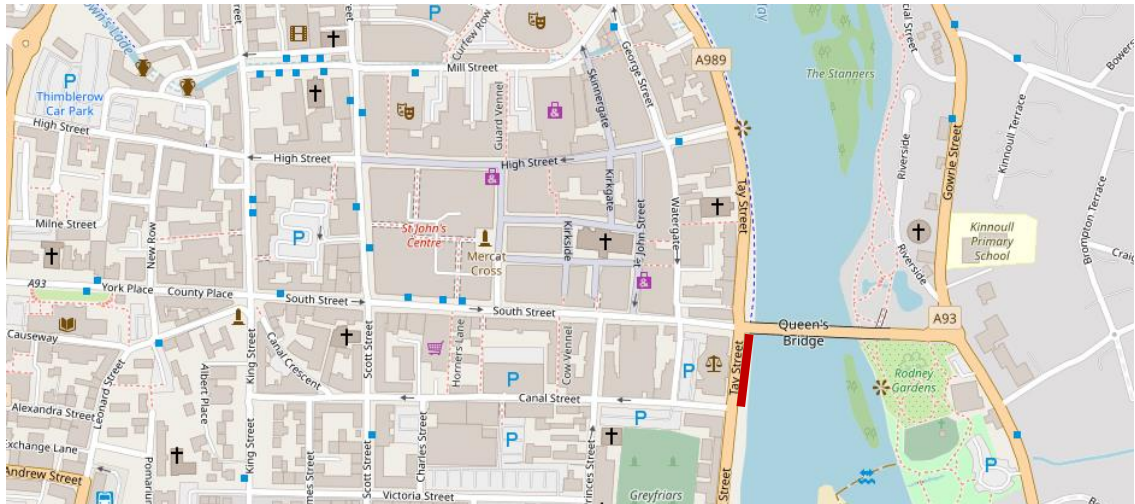


Tay Street (South of South Street)								
October 2020	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2109	379	158	48	0	11	6	2711
0600 - 2200 Southbound	5372	947	311	133	23	54	14	6854
AM Peak Pd 0630-0930 Northbound	336	97	43	14	0	3	0	493
AM Peak Pd 0630-0930 Southbound	1088	242	62	30	9	13	0	1444
IP Peak Pd 0930-1530 Northbound	901	185	80	26	0	5	3	1200
IP Peak Pd 0930-1530 Southbound	2504	443	188	69	6	25	9	3244
PM Peak Pd 1530-1830 Northbound	567	66	31	2	0	0	1	667
PM Peak Pd 1530-1830 Southbound	1187	182	43	28	4	12	4	1460
February 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1789	420	165	48	0	2	9	2433
0600 - 2200 Southbound	4388	872	278	94	26	26	9	5693
AM Peak Pd 0630-0930 Northbound	271	106	57	15	0	0	0	449
AM Peak Pd 0630-0930 Southbound	885	250	69	21	10	4	2	1241
IP Peak Pd 0930-1530 Northbound	764	197	88	23	0	1	6	1079
IP Peak Pd 0930-1530 Southbound	1986	403	157	43	6	13	4	2612
PM Peak Pd 1530-1830 Northbound	534	98	14	6	0	0	3	655
PM Peak Pd 1530-1830 Southbound	1007	178	39	16	6	5	2	1253
May 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2320	507	174	48	0	6	11	3066
0600 - 2200 Southbound	5748	1133	338	99	25	45	22	7410
AM Peak Pd 0630-0930 Northbound	346	115	47	17	0	1	0	526
AM Peak Pd 0630-0930 Southbound	1149	260	84	17	10	11	1	1532
IP Peak Pd 0930-1530 Northbound	941	230	103	26	0	3	2	1305
IP Peak Pd 0930-1530 Southbound	2496	554	200	47	7	20	5	3329
PM Peak Pd 1530-1830 Northbound	700	118	20	1	0	1	8	848
PM Peak Pd 1530-1830 Southbound	1336	223	46	25	4	7	11	1652
September 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2527	437	155	45	0	17	29	3210
0600 - 2200 Southbound	6086	982	335	107	27	53	70	7660
AM Peak Pd 0630-0930 Northbound	372	87	48	11	0	3	0	521
AM Peak Pd 0630-0930 Southbound	1177	239	76	19	9	15	16	1551
IP Peak Pd 0930-1530 Northbound	997	199	87	21	0	9	12	1325
IP Peak Pd 0930-1530 Southbound	2494	486	203	62	11	23	29	3308
PM Peak Pd 1530-1830 Northbound	662	109	15	2	0	0	10	798
PM Peak Pd 1530-1830 Southbound	1413	192	46	21	3	11	11	1697

5.2.18 Table 15 indicates that vehicular flow in September 2021 was greater than May 2021, February 2021 and October 2020.

5.2.20 Table 16 below presents a comparison of the results of the pedestrian flow data on Tay Street, south of South Street (east kerbside). Please note: west kerbside was omitted from the survey programme due to proximity with Court House.

Table 16. Tay Street (South of South Street) Pedestrian Flow

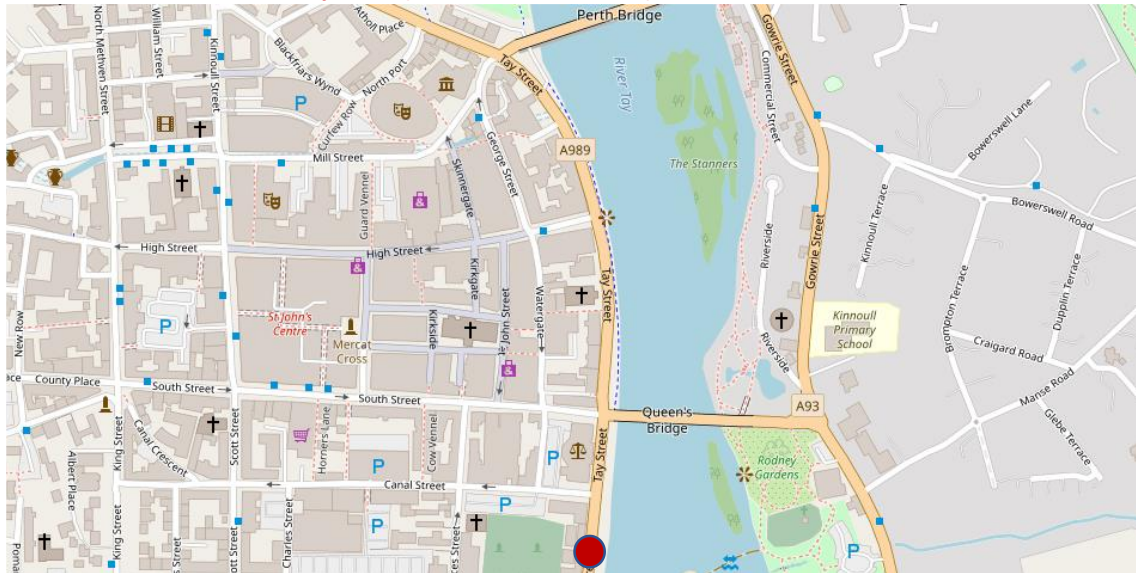


Site 5 Tay Street (South of South Street) East Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	197	11	7	1	0	0	45	0	0	261
0600 - 2200 Southbound	219	9	10	2	2	0	41	1	0	284
AM Peak Pd 0700-1000 Northbound	22	3	4	0	0	0	4	0	0	33
AM Peak Pd 0700-1000 Southbound	19	0	4	0	0	0	10	0	0	33
IP Peak Pd 1000-1600 Northbound	116	8	3	1	0	0	29	0	0	157
IP Peak Pd 1000-1600 Southbound	114	6	5	2	2	0	25	0	0	154
PM Peak Pd 1600-1900 Northbound	34	0	0	0	0	0	7	0	0	41
PM Peak Pd 1600-1900 Southbound	43	3	1	0	0	0	1	0	0	48
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	382	19	0	0	3	0	49	1	0	454
0600 - 2200 Southbound	392	22	2	1	4	0	54	0	0	475
AM Peak Pd 0700-1000 Northbound	44	0	0	0	0	0	5	0	0	49
AM Peak Pd 0700-1000 Southbound	28	0	0	0	0	0	7	0	0	35
IP Peak Pd 1000-1600 Northbound	191	7	0	0	2	0	31	0	0	231
IP Peak Pd 1000-1600 Southbound	207	15	2	1	3	0	28	0	0	256
PM Peak Pd 1600-1900 Northbound	89	10	0	0	1	0	13	1	0	114
PM Peak Pd 1600-1900 Southbound	97	5	0	0	1	0	16	0	0	119
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	265	3	0	1	1	0	29	0	0	299
0600 - 2200 Southbound	270	4	0	0	0	0	34	0	0	308
AM Peak Pd 0700-1000 Northbound	25	0	0	0	0	0	5	0	0	30
AM Peak Pd 0700-1000 Southbound	25	0	0	0	0	0	9	0	0	34
IP Peak Pd 1000-1600 Northbound	108	0	0	0	1	0	8	0	0	117
IP Peak Pd 1000-1600 Southbound	97	0	0	0	0	0	12	0	0	109
PM Peak Pd 1600-1900 Northbound	69	3	0	1	0	0	11	0	0	84
PM Peak Pd 1600-1900 Southbound	72	4	0	0	0	0	3	0	0	79
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	297	9	5	0	4	0	69	2	0	386
0600 - 2200 Southbound	334	7	4	0	2	0	77	2	0	426
AM Peak Pd 0700-1000 Northbound	28	2	0	0	0	0	9	0	0	39
AM Peak Pd 0700-1000 Southbound	32	0	0	0	0	0	9	0	0	41
IP Peak Pd 1000-1600 Northbound	144	0	5	0	4	0	30	2	0	185
IP Peak Pd 1000-1600 Southbound	162	2	4	0	2	0	30	0	0	200
PM Peak Pd 1600-1900 Northbound	61	2	0	0	0	0	26	0	0	89
PM Peak Pd 1600-1900 Southbound	78	0	0	0	0	0	24	2	0	104

5.2.21 Table 16 indicates that pedestrian flow in February 2021 was greater than September 2021, May 2021 and October 2020.

5.2.23 Table 17 below presents a comparison of the results of the vehicle flow data on Tay Street, north of Marshall Place.

Table 17. Tay Street (North of Marshall Place) Vehicular Flow

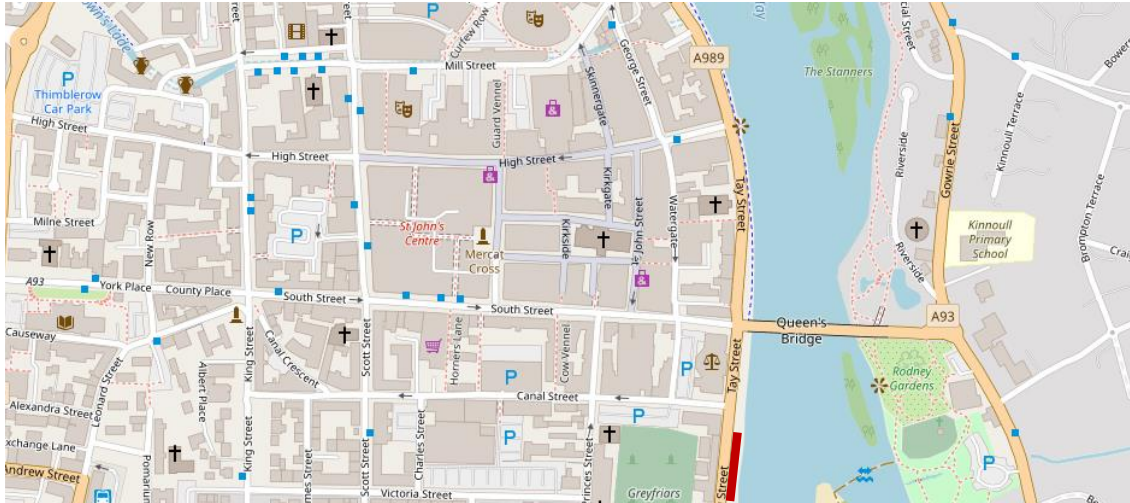


Tay Street (North of Marshall Place)								
October 2020	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2219	397	163	50	0	11	6	2846
0600 - 2200 Southbound	3616	699	231	60	0	17	8	4631
AM Peak Pd 0630-0930 Northbound	351	104	44	15	0	3	0	517
AM Peak Pd 0630-0930 Southbound	751	183	43	16	0	7	0	1000
IP Peak Pd 0930-1530 Northbound	956	191	85	27	0	5	3	1267
IP Peak Pd 0930-1530 Southbound	1625	330	142	30	0	7	5	2139
PM Peak Pd 1530-1830 Northbound	593	68	31	2	0	0	1	695
PM Peak Pd 1530-1830 Southbound	813	136	35	11	0	3	2	1000
February 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	1830	414	168	48	0	2	9	2471
0600 - 2200 Southbound	3206	663	214	65	0	2	8	4158
AM Peak Pd 0630-0930 Northbound	281	98	57	14	0	0	0	450
AM Peak Pd 0630-0930 Southbound	681	191	56	13	0	0	2	943
IP Peak Pd 0930-1530 Northbound	791	200	89	23	0	1	6	1110
IP Peak Pd 0930-1530 Southbound	1451	313	116	32	0	1	4	1917
PM Peak Pd 1530-1830 Northbound	546	91	16	7	0	0	3	663
PM Peak Pd 1530-1830 Southbound	741	130	32	12	0	1	2	918
May 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2397	520	180	48	0	7	13	3165
0600 - 2200 Southbound	4005	866	264	55	0	16	11	5217
AM Peak Pd 0630-0930 Northbound	351	122	50	17	0	1	0	541
AM Peak Pd 0630-0930 Southbound	836	213	66	10	0	5	1	1131
IP Peak Pd 0930-1530 Northbound	998	234	107	26	0	4	2	1371
IP Peak Pd 0930-1530 Southbound	1647	428	156	30	0	8	2	2271
PM Peak Pd 1530-1830 Northbound	722	122	19	1	0	1	10	875
PM Peak Pd 1530-1830 Southbound	956	162	38	15	0	1	5	1177
September 2021	Car	LGV	OGV1	OGV2	Bus	Coach	Motorcycle	Total
0600 - 2200 Northbound	2624	447	165	46	0	17	26	3325
0600 - 2200 Southbound	4166	712	246	64	0	20	49	5257
AM Peak Pd 0630-0930 Northbound	387	95	51	12	0	3	0	548
AM Peak Pd 0630-0930 Southbound	851	177	59	14	0	7	14	1122
IP Peak Pd 0930-1530 Northbound	1021	207	93	21	0	9	12	1363
IP Peak Pd 0930-1530 Southbound	1643	355	152	40	0	9	14	2213
PM Peak Pd 1530-1830 Northbound	732	105	16	2	0	1	9	865
PM Peak Pd 1530-1830 Southbound	967	126	28	8	0	4	7	1140

5.2.24 Table 17 indicates that vehicular flow in May 2021 and September 2021 were relatively consistent, and both were greater than February 2021 and October 2020.

5.2.26 Table 18 below presents a comparison of the results of the pedestrian flow data on Tay Street, north of Marshall Place (east kerbside).

Table 18. Tay Street (North of Marshall Place) Pedestrian Flow

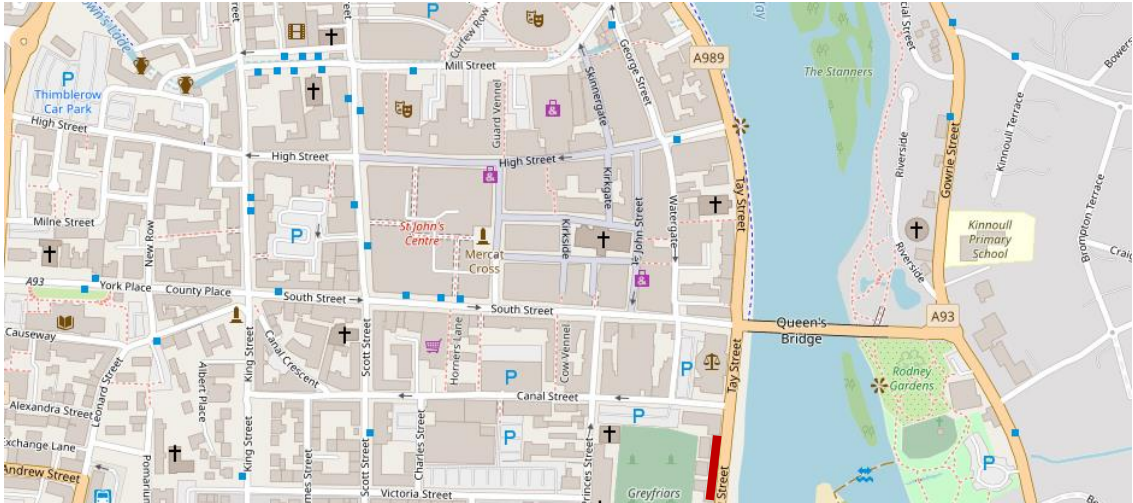


Site 6 Tay Street (North of Marshall Place) East Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	127	4	4	1	0	0	33	0	0	169
0600 - 2200 Southbound	133	3	2	0	1	0	29	0	0	168
AM Peak Pd 0700-1000 Northbound	17	0	0	0	0	0	4	0	0	21
AM Peak Pd 0700-1000 Southbound	10	0	0	0	0	0	8	0	0	18
IP Peak Pd 1000-1600 Northbound	81	4	4	1	0	0	25	0	0	115
IP Peak Pd 1000-1600 Southbound	82	3	2	0	1	0	17	0	0	105
PM Peak Pd 1600-1900 Northbound	22	0	0	0	0	0	2	0	0	24
PM Peak Pd 1600-1900 Southbound	18	0	0	0	0	0	1	0	0	19
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	252	15	2	1	0	0	32	0	0	302
0600 - 2200 Southbound	205	7	4	0	1	0	36	1	0	254
AM Peak Pd 0700-1000 Northbound	33	0	0	0	0	0	5	0	0	38
AM Peak Pd 0700-1000 Southbound	14	0	1	0	0	0	6	0	0	21
IP Peak Pd 1000-1600 Northbound	141	11	1	1	0	0	15	0	0	169
IP Peak Pd 1000-1600 Southbound	100	4	2	0	1	0	18	0	0	125
PM Peak Pd 1600-1900 Northbound	43	4	0	0	0	0	9	0	0	56
PM Peak Pd 1600-1900 Southbound	69	3	1	0	0	0	10	0	0	83
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	210	0	0	0	0	0	22	0	0	232
0600 - 2200 Southbound	197	4	0	0	0	0	24	0	0	225
AM Peak Pd 0700-1000 Northbound	25	0	0	0	0	0	4	0	0	29
AM Peak Pd 0700-1000 Southbound	13	0	0	0	0	0	6	0	0	19
IP Peak Pd 1000-1600 Northbound	82	0	0	0	0	0	5	0	0	87
IP Peak Pd 1000-1600 Southbound	58	0	0	0	0	0	9	0	0	67
PM Peak Pd 1600-1900 Northbound	47	0	0	0	0	0	8	0	0	55
PM Peak Pd 1600-1900 Southbound	54	4	0	0	0	0	3	0	0	61
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	362	2	2	0	1	0	16	0	0	383
0600 - 2200 Southbound	335	9	2	2	1	0	21	0	0	370
AM Peak Pd 0700-1000 Northbound	22	0	1	0	0	0	2	0	0	25
AM Peak Pd 0700-1000 Southbound	53	2	1	0	0	0	1	0	0	57
IP Peak Pd 1000-1600 Northbound	165	0	0	0	1	0	8	0	0	174
IP Peak Pd 1000-1600 Southbound	179	0	0	0	1	0	10	0	0	190
PM Peak Pd 1600-1900 Northbound	93	2	1	0	0	0	3	0	0	99
PM Peak Pd 1600-1900 Southbound	64	4	0	2	0	0	9	0	0	79

5.2.27 Table 18 indicates that pedestrian flow in September 2021 were greater than May 2021, February 2021 and October 2020.

5.2.29 Table 19 below presents a comparison of the results of the pedestrian flow data on Tay Street, north of Marshall Place (west kerbside).

Table 19. Tay Street (North of Marshall Place) Pedestrian Flow



Site 7 Tay Street (North of Marshall Place) West Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	271	2	2	0	1	0	7	1	0	284
0600 - 2200 Southbound	255	0	3	0	3	0	6	0	0	267
AM Peak Pd 0700-1000 Northbound	66	0	0	0	0	0	1	0	0	67
AM Peak Pd 0700-1000 Southbound	28	0	0	0	0	0	2	0	0	30
IP Peak Pd 1000-1600 Northbound	123	2	2	0	1	0	3	1	0	132
IP Peak Pd 1000-1600 Southbound	135	0	2	0	3	0	2	0	0	142
PM Peak Pd 1600-1900 Northbound	52	0	0	0	0	0	2	0	0	54
PM Peak Pd 1600-1900 Southbound	56	0	1	0	0	0	0	0	0	57
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	308	0	2	0	1	0	9	0	0	320
0600 - 2200 Southbound	324	11	19	0	0	0	6	0	0	360
AM Peak Pd 0700-1000 Northbound	46	0	0	0	0	0	0	0	0	46
AM Peak Pd 0700-1000 Southbound	20	0	3	0	0	0	1	0	0	24
IP Peak Pd 1000-1600 Northbound	149	0	0	0	1	0	4	0	0	154
IP Peak Pd 1000-1600 Southbound	169	11	16	0	0	0	4	0	0	200
PM Peak Pd 1600-1900 Northbound	83	0	2	0	0	0	4	0	0	89
PM Peak Pd 1600-1900 Southbound	81	0	0	0	0	0	1	0	0	82
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	264	16	0	2	1	0	7	0	0	290
0600 - 2200 Southbound	284	8	0	5	1	0	2	0	0	300
AM Peak Pd 0700-1000 Northbound	46	0	0	0	0	0	0	0	0	46
AM Peak Pd 0700-1000 Southbound	24	0	0	0	0	0	0	0	0	24
IP Peak Pd 1000-1600 Northbound	115	3	0	2	1	0	1	0	0	122
IP Peak Pd 1000-1600 Southbound	127	3	0	4	1	0	1	0	0	136
PM Peak Pd 1600-1900 Northbound	61	13	0	0	0	0	5	0	0	79
PM Peak Pd 1600-1900 Southbound	84	5	0	1	0	0	1	0	0	91
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	188	4	2	0	2	0	49	2	0	247
0600 - 2200 Southbound	219	8	0	1	1	0	48	1	0	278
AM Peak Pd 0700-1000 Northbound	13	0	0	0	0	0	5	0	0	18
AM Peak Pd 0700-1000 Southbound	29	0	0	0	0	0	7	0	0	36
IP Peak Pd 1000-1600 Northbound	79	0	0	0	2	0	17	0	0	98
IP Peak Pd 1000-1600 Southbound	106	0	0	0	1	0	22	1	0	130
PM Peak Pd 1600-1900 Northbound	56	2	2	0	0	0	19	2	0	81
PM Peak Pd 1600-1900 Southbound	45	6	0	1	0	0	15	0	0	67

5.2.30 Table 19 indicates that pedestrian flow in February 2021 was greater than September 2021, May 2021 and October 2020.

6. MODE SHARE SURVEYS

6.1 Rail Station Counts

6.1.1 Entry and exit counts were undertaken at both the front and rear entrances of Perth Railway Station on Tuesday 4th May 2021. Surveys were undertaken between 06:00 and 22:00.

6.1.2 The results were classified by the following:

- Adult
- Adult & Child
- Child
- Elderly
- Disabled
- Cyclist on Bike
- Cyclist on Foot.

6.1.3 Table 20 presents a summary of the entry and exit counts.

Table 20. Perth Railway Station Entry/Exit Counts

Perth Rail Stn	Station Frnt Entrance	Station Front Exit	Station Rear Entrance	Station Rear Exit	Total Entry	Total Exit
06:00 - 22:00	504	486	240	203	744	689
06:30 - 09:30	106	85	19	38	125	123
09:30 - 15:30	227	212	98	102	325	314
15:30 - 18:30	114	134	57	26	171	160

6.1.4 Table 20 shows that over the 16 hour period (0600-2200hrs), there was a total of 744 pedestrians entering Perth Railway Station and 689 pedestrians exiting:

- In the AM peak period (06:30 – 09:30), 125 pedestrians entered the station and 123 departed the station.
- In the Off peak period (09:30 – 15:30), 325 pedestrians entered the station and 314 departed the station.
- In the PM peak period (15:30 – 18:30), 171 pedestrians entered the station and 160 departed the station.

6.2 Bus Occupancy Counts

- 6.2.1 Bus occupancy surveys were undertaken inbound towards Perth and outbound from Perth at each of the 14 classified link count sites, as shown in Figure 3.
- 6.2.2 Bus occupancy data was gathered for one day, Tuesday 4th May 2021, between 06:00 and 22:00.
- 6.2.3 The methodology used to gather the bus occupancy required manual enumerators to review the footage at each site – i.e. manual check and note if the bus was empty, ¼ full, ½ full, ¾ full, full or full with standing passengers.
- 6.2.4 The capacity of vehicles was the same as those used in a previous study for TACTRAN [*Mode Share Surveys 2019 – Draft, SYSTRA, Ref. GB01T19A57/4, 11/07/19*], namely:
- Midi bus 15 passengers
 - Mini bus 15 passengers
 - Single decker bus 30 passengers
 - Double decker bus 72 passengers
 - Coach 55 passengers
 - Mini Coach 14 passengers
 - Midi Coach 14 passengers
 - School Bus 40 passengers.
- 6.2.5 Vehicles where the occupancy was not visible (e.g. where coaches had dark tinted windows) were excluded from the analysis, and similarly where vehicles were subsequently observed at Perth Bus Station/city centre bus stops, these were excluded from the analysis to remove any element of double counting.
- 6.2.6 Table 21 below presents the bus occupancy at each of the cordon points around Perth city centre in the AM peak period (06:30 – 09:30).

Table 21. Bus & Coach Cordon Occupancy (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Inbound				Outbound			
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	31	266	9	Bus	28	208	7
	Coach	1	4	4	Coach	3	17	6
CC3	Bus	11	221	20	Bus	1	18	18
	Coach	0	0	0	Coach	0	0	0
CC4	Bus	9	99	11	Bus	2	26	13
	Coach	2	35	17	Coach	2	0	0
CC5	Bus	10	206	21	Bus	5	33	7
	Coach	4	14	4	Coach	4	4	1
CC6	Bus	0	0	0	Bus	0	0	0
	Coach	3	14	5	Coach	2	14	7
CC7	Bus	1	15	15	Bus	0	0	0
	Coach	2	4	2	Coach	2	7	4
CC8	Bus	8	60	8	Bus	9	68	8
	Coach	0	0	0	Coach	0	0	0
CC9	Bus	8	68	8	Bus	8	68	8
	Coach	0	0	0	Coach	0	0	0
CC10	Bus	18	119	7	Bus	33	413	13
	Coach	1	0	0	Coach	2	0	0
CC11	Bus	18	311	17	Bus	10	71	7
	Coach	1	4	4	Coach	5	14	3
CC12	Bus	19	134	7	Bus	18	134	7
	Coach	1	0	0	Coach	3	4	1
CC13	Bus	7	26	4	Bus	10	55	5
	Coach	1	4	4	Coach	1	0	0
CC14	Bus	1	8	8	Bus	1	8	8
	Coach	4	11	3	Coach	3	11	4
CC15	Bus	5	59	12	Bus	4	26	6
	Coach	4	35	9	Coach	2	4	2
CC16	Bus	0	0	0	Bus	0	0	0
	Coach	1	0	0	Coach	1	4	4
CC17	Bus	16	215	13	Bus	13	168	13
	Coach	1	0	0	Coach	2	21	10

6.2.7 The average inbound bus occupancy was 10 passengers and the average inbound coach had 3 passengers onboard. In the outbound direction, the average bus occupancy was 8 passengers and the average coach occupancy was 3 passengers.

6.2.8 Table 22 presents the same information for the Inter peak period (09:30 – 15:30).

Table 22. Bus & Coach Cordon Occupancy (Inter Peak 09:30 – 15:30)

Inter Peak Period (09:30-15:30)	Inbound				Outbound			
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	62	628	10	Bus	59	747	13
	Coach	5	7	1	Coach	10	21	2
CC3	Bus	14	123	9	Bus	9	256	28
	Coach	8	21	3	Coach	2	4	2
CC4	Bus	14	141	10	Bus	9	160	18
	Coach	8	14	2	Coach	6	0	0
CC5	Bus	6	74	12	Bus	17	283	17
	Coach	2	4	2	Coach	2	4	2
CC6	Bus	0	0	0	Bus	0	0	0
	Coach	5	14	3	Coach	4	14	4
CC7	Bus	0	0	0	Bus	0	0	0
	Coach	2	7	4	Coach	2	4	2
CC8	Bus	23	180	8	Bus	25	173	7
	Coach	2	7	0	Coach	0	0	0
CC9	Bus	23	158	7	Bus	23	173	8
	Coach	0	0	0	Coach	0	0	0
CC10	Bus	46	515	11	Bus	42	244	6
	Coach	2	0	0	Coach	2	4	2
CC11	Bus	26	312	12	Bus	30	464	15
	Coach	6	11	2	Coach	5	21	4
CC12	Bus	35	279	8	Bus	37	413	11
	Coach	4	0	0	Coach	2	4	2
CC13	Bus	10	116	12	Bus	4	0	0
	Coach	2	4	2	Coach	4	4	1
CC14	Bus	0	0	0	Bus	0	0	0
	Coach	5	7	1	Coach	5	11	2
CC15	Bus	7	66	9	Bus	7	59	8
	Coach	1	0	0	Coach	3	4	1
CC16	Bus	0	0	0	Bus	0	0	0
	Coach	1	4	4	Coach	1	0	0
CC17	Bus	29	418	14	Bus	31	411	13
	Coach	1	0	0	Coach	2	21	10

6.2.9 Table 22 shows that bus and coach occupancy was again highest on corridor 3, Main Street, south of Isla Road.

6.2.10 The average inbound bus occupancy was 7 passengers and the average inbound coach had 2 passengers onboard. In the outbound direction, the average bus occupancy was 9 passengers and the average coach occupancy was 2 passengers.

6.2.11 No results are included for CC2 as this is a cycle path east of Balhousie Street.

6.2.12 Table 23 presents the same information for the PM peak (15:30 – 18:30).

Table 23. Bus & Coach Cordon Occupancy (PM Peak 15:30 – 18:30)

PM Peak Period (15:30-18:30)	Inbound				Outbound			
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
CC1	Bus	20	78	4	Bus	14	104	7
	Coach	0	0	0	Coach	4	11	0
CC3	Bus	3	8	3	Bus	1	8	8
	Coach	0	0	0	Coach	0	0	0
CC4	Bus	5	11	2	Bus	6	96	16
	Coach	1	4	4	Coach	0	0	0
CC5	Bus	2	26	13	Bus	7	77	11
	Coach	0	0	0	Coach	1	0	0
CC6	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
CC7	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
CC8	Bus	8	56	7	Bus	9	38	4
	Coach	0	0	0	Coach	0	0	0
CC9	Bus	8	30	4	Bus	8	49	6
	Coach	0	0	0	Coach	0	0	0
CC10	Bus	19	122	6	Bus	15	93	6
	Coach	1	7	7	Coach	0	0	0
CC11	Bus	9	99	11	Bus	12	150	13
	Coach	1	4	4	Coach	1	4	4
CC12	Bus	18	162	9	Bus	18	173	10
	Coach	0	0	0	Coach	0	0	0
CC13	Bus	6	4	1	Bus	7	8	1
	Coach	3	4	1	Coach	4	4	1
CC14	Bus	2	0	0	Bus	2	15	8
	Coach	0	0	0	Coach	1	0	0
CC15	Bus	2	26	13	Bus	4	51	13
	Coach	3	17	6	Coach	2	0	0
CC16	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
CC17	Bus	11	117	11	Bus	12	122	10
	Coach	0	0	0	Coach	1	4	0

6.2.13 Table 23 shows that bus occupancy during the PM Peak period was relatively consistent across each of the main corridors in Perth.

6.2.14 The average inbound bus occupancy was 5 passengers and the average inbound coach had 1 passenger onboard. In the outbound direction, the average bus occupancy was 7 passengers and the average coach occupancy was 1 passenger.

6.2.15 No results are included for CC2 as this is a cycle path east of Balhousie Street.

6.3 Bus Station/Stop Counts

6.3.1 Boarding (on bus) and alighting (off bus) counts were undertaken the following locations on Tuesday 4th May 2021. Surveys were undertaken between 06:00 and 22:00.

- Perth Bus Station Stance 1
- Perth Bus Station Stance 2
- Perth Bus Station Stance 10
- South Street eastbound (bus stop K)
- South Street immediately east of Scott Street
- South Street outside St Johns shopping centre
- Scott Street southbound (bus stop X)
- Broxden Park and Ride (Megabus/Citylink stop)
- Broxden Park and Ride (local services stop)
- Canal Street westbound (behind Tesco).

6.3.2 The results were classified by the following:

- Arrival Time
- Bus Number during arrival
- Operator
- Boarding (On bus)
- Alighting (Off bus)
- Bus Number during departure
- Departure Time
- Dwell Time.

6.3.3 Table 24 below summarises the results of the boarding and alighting counts in the AM Peak (06:30 – 09:30).

Table 24. Perth Bus Station/Stops Boarding and Alighting Counts (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Boarding (On bus)	Alighting (Off bus)	Number of services	Average Boarding	Average Alighting	Average dwell time
Bus Station Stance 1	0	2	2	0	1	00:13:56
Bus Station Stance 2	9	3	5	2	1	00:12:11
Bus Station Stance 10	1	0	3	0	0	00:17:10
South St Stop K	9	45	24	0	2	00:00:16
South St Stop L	55	23	17	3	1	00:04:09
South St Stop M	40	4	12	3	0	00:05:10
Scott St Stop X	11	0	7	2	0	00:01:30
Canal St Stop ZP	8	62	13	1	5	00:01:34
Broxden P&R Express	41	24	15	3	2	00:07:02
Broxden P&R Local	7	5	16	0	0	00:01:01
Average	18	17	11	1	1	00:06:24

6.3.4 Table 24 shows that the busiest stop in Perth in terms of passengers was Canal Street stop ZP, where the majority of passengers on services from Dundee and Fife alight in the AM peak, which saw a total of 70 passengers either boarding or alighting.

- 6.3.5 In terms of the number of bus services, South Street stop K was busiest with 24 services, comprising the 2, 7, 13, 14, 17, 36, 56, X56, all operated by Stagecoach, and the 19, operated by Docherty's Midland Coaches.
- 6.3.6 The stance with the longest dwell time (17:10), was the bus station stance 10, whilst the average dwell time across all stances was over 6 minutes (06:24).
- 6.3.7 Table 25 presents the same information for the inter-peak period (09:30-15:30).

Table 25. Perth Bus Station/Stops Boarding and Alighting Counts (Inter Peak 09:30 – 15:30)

IP Peak Period (09:30-15:30)	Boarding (On bus)	Alighting (Off bus)	Number of services	Average Boarding	Average Alighting	Average dwell time
Bus Station Stance 1	16	3	9	2	0	00:04:31
Bus Station Stance 2	29	14	11	3	1	00:03:49
Bus Station Stance 10	10	11	9	1	1	00:07:55
South St Stop K	31	105	53	1	2	00:00:20
South St Stop L	214	94	39	5	2	00:04:16
South St Stop M	131	25	33	4	1	00:02:26
Scott St Stop X	36	0	18	2	0	00:00:57
Canal St Stop ZP	2	198	34	0	6	00:01:07
Broxden P&R Express	48	79	39	1	2	00:06:22
Broxden P&R Local	33	12	32	1	0	00:00:42
Average	55	54	28	2	2	00:03:15

- 6.3.8 Table 25 shows that the busiest stop in Perth in terms of passengers was South Street stop L which saw a total of 308 passengers either boarding or alighting during the inter-peak peak period. Stop L was used by services 7, 58 and 58 all of which are operated by Stagecoach.
- 6.3.9 In terms of the number of bus services, South Street stop K was busiest with 53 services, comprising the 2, 7, 13, 14, 17, 36, 56, X56, all operated by Stagecoach, and the 19, operated by Docherty's Midland Coaches.
- 6.3.10 The stance with the longest dwell time (07:55), was at Perth bus station (Stance 10), whilst the average dwell time across all stances was just over 3 minutes (03:15).

6.3.11 Table 26 presents the same information for the PM peak period (15:30-18:30).

Table 26. Perth Bus Station Boarding and Alighting Counts (PM Peak 15:30 – 18:30)

PM Peak Period (15:30-18:30)	Boarding (On bus)	Alighting (Off bus)	Number of services	Average Boarding	Average Alighting	Average dwell time
Bus Station Stance 1	15	2	7	2	0	00:07:49
Bus Station Stance 2	7	7	6	1	1	00:08:18
Bus Station Stance 10	0	1	2	0	1	00:26:21
South St Stop K	35	46	26	1	2	00:00:31
South St Stop L	136	62	20	7	3	00:05:52
South St Stop M	59	3	8	7	0	00:05:09
Scott St Stop X	32	2	14	2	0	00:01:16
Canal St Stop ZP	1	70	16	0	4	00:01:03
Broxden P&R Express	27	33	19	1	2	00:06:35
Broxden P&R Local	5	27	20	0	1	00:02:34
Average	32	25	14	2	1	00:06:33

6.3.12 Table 26 shows that the busiest stop in Perth in terms of passengers is South Street stop L which saw a total of 198 passengers either boarding or alighting in the PM peak period. Stop was used by services 7, 57 and 58, all of which are operated by Stagecoach.

6.3.13 In terms of the number of bus services, again South Street stop K was busiest with 26 services.

6.3.14 The stance with the longest dwell time (26:21), was the bus station (Stance 10), whilst the average dwell time across all stances was almost 7 minutes (06:33).

6.4 Vehicle Occupancy Counts

- 6.4.1 Vehicle occupancy counts were undertaken at each of the classified turning count sites, as shown in Figure 3.
- 6.4.2 Vehicle occupancy data was gathered for one day, Tuesday 4th May 2021, between 06:00 and 22:00.
- 6.4.3 Table 27 below presents the vehicle occupancy and sample rates at each of the inbound cordon points around Perth city centre in the AM peak period (06:30 – 09:30).

Table 27. Vehicle Inbound Cordon Occupancy (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	1007	223	22.1%	278	1.25	CC10	Car	677	155	22.9%	209	1.35
	LGV	260	79	30.4%	97	1.23		LGV	140	55	39.3%	82	1.49
	OGV1	69	34	49.3%	39	1.15		OGV1	38	22	57.9%	26	1.18
	OGV2	11	9	81.8%	9	1.00		OGV2	11	9	81.8%	11	1.22
CC3	Car	1629	361	22.2%	430	1.19	CC11	Car	1541	332	21.5%	453	1.36
	LGV	325	103	31.7%	116	1.13		LGV	426	118	27.7%	165	1.40
	OGV1	48	28	58.3%	29	1.04		OGV1	88	51	58.0%	58	1.14
	OGV2	37	22	59.5%	23	1.05		OGV2	22	15	68.2%	15	1.00
CC4	Car	1389	297	21.4%	381	1.28	CC12	Car	715	174	24.3%	224	1.29
	LGV	267	73	27.3%	85	1.16		LGV	149	60	40.3%	62	1.03
	OGV1	24	19	79.2%	19	1.00		OGV1	28	15	53.6%	16	1.07
	OGV2	-	-	-	-	-		OGV2	7	6	85.7%	6	1.00
CC5	Car	896	242	27.0%	300	1.24	CC13	Car	898	210	23.4%	275	1.31
	LGV	157	56	35.7%	66	1.18		LGV	194	64	33.0%	65	1.02
	OGV1	44	26	59.1%	30	1.15		OGV1	31	19	61.3%	19	1.00
	OGV2	13	9	69.2%	9	1.00		OGV2	14	12	85.7%	12	1.00
CC6	Car	198	69	34.8%	86	1.25	CC14	Car	1092	255	23.4%	325	1.27
	LGV	106	37	34.9%	41	1.11		LGV	278	75	27.0%	83	1.11
	OGV1	61	30	49.2%	34	1.13		OGV1	47	29	61.7%	29	1.00
	OGV2	29	16	55.2%	16	1.00		OGV2	16	13	81.3%	13	1.00
CC7	Car	670	190	28.4%	215	1.13	CC15	Car	1026	235	22.9%	295	1.26
	LGV	187	63	33.7%	69	1.10		LGV	276	78	28.3%	96	1.23
	OGV1	49	32	65.3%	34	1.06		OGV1	56	32	57.1%	37	1.16
	OGV2	7	5	71.4%	5	1.00		OGV2	45	25	55.6%	26	1.04
CC8	Car	464	134	28.9%	156	1.16	CC16	Car	614	149	24.3%	170	1.14
	LGV	94	50	53.2%	52	1.04		LGV	130	41	31.5%	46	1.12
	OGV1	25	19	76.0%	22	1.16		OGV1	21	13	61.9%	14	1.08
	OGV2	4	3	75.0%	4	1.33		OGV2	2	2	100.0%	2	1.00
CC9	Car	303	80	26.4%	102	1.28	CC17	Car	333	93	27.9%	110	1.18
	LGV	57	34	59.6%	37	1.09		LGV	59	39	66.1%	49	1.26
	OGV1	2	2	100.0%	2	1.00		OGV1	8	6	75.0%	6	1.00
	OGV2	-	-	-	-	-		OGV2	-	-	-	-	-

- 6.4.4 Table 27 shows that in the AM peak period, inbound towards Perth city centre, the average car occupancy was 1.25 persons, LGV 1.17 persons, OGV1 1.08 persons and OGV2 1.05 persons.

6.4.5 Table 28 presents the vehicle occupancy and sample rates at each of the outbound cordon points around Perth city centre in the AM peak period (06:30 – 09:30).

Table 28. Vehicle Outbound Cordon Occupancy (AM Peak 06:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	993	227	22.9%	293	1.29	CC10	Car	554	135	24.4%	197	1.46
	LGV	303	85	28.1%	95	1.12		LGV	111	51	45.9%	65	1.27
	OGV1	64	30	46.9%	35	1.17		OGV1	43	26	60.5%	32	1.23
	OGV2	20	12	60.0%	12	1.00		OGV2	12	8	66.7%	10	1.25
CC3	Car	904	208	23.0%	226	1.09	CC11	Car	1137	254	22.3%	351	1.38
	LGV	304	90	29.6%	102	1.13		LGV	479	138	28.8%	214	1.55
	OGV1	73	28	38.4%	31	1.11		OGV1	97	49	50.5%	60	1.22
	OGV2	54	30	55.6%	32	1.07		OGV2	16	12	75.0%	13	1.08
CC4	Car	661	163	24.7%	203	1.25	CC12	Car	658	174	26.4%	219	1.26
	LGV	142	51	35.9%	57	1.12		LGV	169	55	32.5%	56	1.02
	OGV1	25	16	64.0%	16	1.00		OGV1	25	17	68.0%	17	1.00
	OGV2	-	-	-	-	-		OGV2	13	9	69.2%	9	1.00
CC5	Car	702	176	25.1%	228	1.30	CC13	Car	699	177	25.3%	222	1.25
	LGV	234	78	33.3%	92	1.18		LGV	195	64	32.8%	76	1.19
	OGV1	71	47	66.2%	55	1.17		OGV1	39	23	59.0%	23	1.00
	OGV2	19	14	73.7%	14	1.00		OGV2	11	8	72.7%	8	1.00
CC6	Car	389	94	24.2%	121	1.29	CC14	Car	645	164	25.4%	203	1.24
	LGV	132	49	37.1%	60	1.22		LGV	225	74	32.9%	83	1.12
	OGV1	37	21	56.8%	22	1.05		OGV1	32	19	59.4%	20	1.05
	OGV2	18	13	72.2%	13	1.00		OGV2	14	12	85.7%	12	1.00
CC7	Car	505	164	32.5%	177	1.08	CC15	Car	775	178	23.0%	248	1.39
	LGV	133	62	46.6%	70	1.13		LGV	229	66	28.8%	82	1.24
	OGV1	37	23	62.2%	23	1.00		OGV1	70	32	45.7%	37	1.16
	OGV2	11	10	90.9%	10	1.00		OGV2	43	21	48.8%	22	1.05
CC8	Car	445	129	29.0%	139	1.08	CC16	Car	762	176	23.1%	200	1.14
	LGV	99	51	51.5%	52	1.02		LGV	120	51	42.5%	54	1.06
	OGV1	23	16	69.6%	18	1.13		OGV1	16	12	75.0%	12	1.00
	OGV2	2	2	100.0%	2	1.00		OGV2	3	2	66.7%	2	1.00
CC9	Car	268	75	28.0%	100	1.33	CC17	Car	523	124	23.7%	155	1.25
	LGV	62	33	53.2%	39	1.18		LGV	64	34	53.1%	37	1.09
	OGV1	10	8	80.0%	8	1.00		OGV1	10	9	90.0%	9	1.00
	OGV2	-	-	-	-	-		OGV2	-	-	-	-	-

6.4.6 Table 28 shows that in the AM peak period, outbound from Perth city centre, the average car occupancy was 1.25 persons, LGV 1.17 persons, OGV1 1.08 persons and OGV2 1.03 persons.

6.4.7 Table 29 presents the vehicle occupancy and sample rates at each of the inbound cordon points around Perth city centre in the inter peak period (09:30 – 15:30).

Table 29. Vehicle Inbound Cordon Occupancy (Inter Peak 09:30 – 15:30)

Int Peak Period (09:30-15:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	3244	669	20.6%	880	1.32	CC10	Car	2099	464	22.1%	649	1.40
	LGV	522	158	30.3%	191	1.21		LGV	272	107	39.3%	152	1.42
	OGV1	131	60	45.8%	66	1.10		OGV1	88	57	64.8%	67	1.18
	OGV2	42	28	66.7%	28	1.00		OGV2	29	20	69.0%	22	1.10
CC3	Car	3142	690	22.0%	869	1.26	CC11	Car	3368	722	21.4%	1137	1.57
	LGV	492	166	33.7%	182	1.10		LGV	839	223	26.6%	327	1.47
	OGV1	150	68	45.3%	68	1.00		OGV1	179	89	49.7%	95	1.07
	OGV2	143	79	55.2%	79	1.00		OGV2	62	38	61.3%	48	1.26
CC4	Car	2850	575	20.2%	762	1.33	CC12	Car	1898	457	24.1%	620	1.36
	LGV	387	139	35.9%	146	1.05		LGV	281	104	37.0%	111	1.07
	OGV1	59	38	64.4%	38	1.00		OGV1	73	54	74.0%	54	1.00
	OGV2	-	-	-	-	-		OGV2	23	18	78.3%	18	1.00
CC5	Car	1657	427	25.8%	533	1.25	CC13	Car	1927	459	23.8%	607	1.32
	LGV	334	129	38.6%	141	1.09		LGV	363	120	33.1%	123	1.03
	OGV1	132	66	50.0%	75	1.14		OGV1	81	56	69.1%	56	1.00
	OGV2	35	27	77.1%	29	1.07		OGV2	27	23	85.2%	23	1.00
CC6	Car	709	201	28.3%	256	1.27	CC14	Car	2501	565	22.6%	721	1.28
	LGV	275	100	36.4%	120	1.20		LGV	422	127	30.1%	137	1.08
	OGV1	128	67	52.3%	72	1.07		OGV1	80	52	65.0%	52	1.00
	OGV2	49	36	73.5%	39	1.08		OGV2	26	20	76.9%	20	1.00
CC7	Car	1856	496	26.7%	583	1.18	CC15	Car	1953	454	23.2%	566	1.25
	LGV	314	122	38.9%	131	1.07		LGV	416	126	30.3%	147	1.17
	OGV1	91	56	61.5%	59	1.05		OGV1	129	68	52.7%	73	1.07
	OGV2	31	27	87.1%	27	1.00		OGV2	99	53	53.5%	56	1.06
CC8	Car	1211	336	27.7%	394	1.17	CC16	Car	2345	518	22.1%	650	1.25
	LGV	207	106	51.2%	114	1.08		LGV	263	106	40.3%	119	1.12
	OGV1	58	42	72.4%	46	1.10		OGV1	27	22	81.5%	22	1.00
	OGV2	12	8	66.7%	8	1.00		OGV2	3	2	66.7%	2	1.00
CC9	Car	644	178	27.6%	234	1.31	CC17	Car	744	191	25.7%	229	1.20
	LGV	117	69	59.0%	73	1.06		LGV	106	60	56.6%	77	1.28
	OGV1	23	18	78.3%	18	1.00		OGV1	12	9	75.0%	9	1.00
	OGV2	-	-	-	-	-		OGV2	-	-	-	-	-

6.4.8 Table 29 shows that in the inter peak period, inbound towards Perth city centre, the average car occupancy was 1.29 persons, LGV 1.16 persons, OGV1 1.05 persons and OGV2 1.04 persons.

6.4.9 Table 30 below presents the vehicle occupancy and sample rates at each of the outbound cordon points around Perth city centre in the inter peak period (09:30 – 15:30).

Table 30. Vehicle Outbound Cordon Occupancy (Inter Peak 09:30 – 15:30)

Int Peak Period (09:30-15:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	3295	706	21.4%	876	1.24	CC10	Car	1728	396	22.9%	615	1.55
	LGV	472	154	32.6%	164	1.06		LGV	272	123	45.2%	144	1.17
	OGV1	157	64	40.8%	71	1.11		OGV1	78	44	56.4%	49	1.11
	OGV2	44	26	59.1%	26	1.00		OGV2	20	14	70.0%	18	1.29
CC3	Car	2870	620	21.6%	766	1.24	CC11	Car	3419	736	21.5%	1046	1.42
	LGV	475	149	31.4%	173	1.16		LGV	838	229	27.3%	322	1.41
	OGV1	128	62	48.4%	68	1.10		OGV1	212	103	48.6%	145	1.41
	OGV2	109	68	62.4%	68	1.00		OGV2	61	41	67.2%	48	1.17
CC4	Car	2122	482	22.7%	609	1.26	CC12	Car	1883	459	24.4%	603	1.31
	LGV	260	95	36.5%	106	1.12		LGV	266	106	39.8%	111	1.05
	OGV1	34	27	79.4%	27	1.00		OGV1	61	42	68.9%	44	1.05
	OGV2	-	-	-	-	-		OGV2	34	20	58.8%	20	1.00
CC5	Car	2235	575	25.7%	728	1.27	CC13	Car	1762	435	24.7%	578	1.33
	LGV	443	148	33.4%	170	1.15		LGV	342	111	32.5%	132	1.19
	OGV1	142	77	54.2%	84	1.09		OGV1	70	48	68.6%	49	1.02
	OGV2	48	35	72.9%	37	1.06		OGV2	22	15	68.2%	15	1.00
CC6	Car	741	201	27.1%	283	1.41	CC14	Car	2291	520	22.7%	675	1.30
	LGV	270	104	38.5%	127	1.22		LGV	387	138	35.7%	143	1.04
	OGV1	131	64	48.9%	78	1.22		OGV1	76	45	59.2%	45	1.00
	OGV2	43	29	67.4%	30	1.03		OGV2	27	22	81.5%	22	1.00
CC7	Car	1523	427	28.0%	483	1.13	CC15	Car	1893	409	21.6%	540	1.32
	LGV	271	115	42.4%	124	1.08		LGV	376	123	32.7%	141	1.15
	OGV1	84	54	64.3%	59	1.09		OGV1	165	71	43.0%	81	1.14
	OGV2	37	31	83.8%	31	1.00		OGV2	138	54	39.1%	55	1.02
CC8	Car	1224	332	27.1%	367	1.11	CC16	Car	2805	587	20.9%	750	1.28
	LGV	200	96	48.0%	104	1.08		LGV	273	109	39.9%	113	1.04
	OGV1	54	42	77.8%	43	1.02		OGV1	34	24	70.6%	24	1.00
	OGV2	12	10	83.3%	12	1.20		OGV2	6	5	83.3%	5	1.00
CC9	Car	731	189	25.9%	245	1.30	CC17	Car	1091	267	24.5%	329	1.23
	LGV	128	69	53.9%	77	1.12		LGV	178	79	44.4%	81	1.03
	OGV1	27	18	66.7%	19	1.06		OGV1	22	16	72.7%	16	1.00
	OGV2	-	-	-	-	-		OGV2	-	-	-	-	-

6.4.10 Table 30 shows that in the inter peak period, outbound from Perth city centre, the average car occupancy was 1.29 persons, LGV 1.13 persons, OGV1 1.09 persons and OGV2 1.06 persons.

6.4.11 Table 31 presents the vehicle occupancy and sample rates at each of the inbound cordon points around Perth city centre in the PM peak period (15:30 – 18:30).

Table 31. Vehicle Inbound Cordon Occupancy (PM Peak 15:30 – 18:30)

PM Peak Period (15:30-18:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	1769	364	20.6%	482	1.32	CC10	Car	1077	236	21.9%	313	1.33
	LGV	250	78	31.2%	89	1.14		LGV	118	47	39.8%	63	1.34
	OGV1	30	18	60.0%	19	1.06		OGV1	26	17	65.4%	20	1.18
	OGV2	18	10	55.6%	10	1.00		OGV2	11	8	72.7%	9	1.13
CC3	Car	1548	359	23.2%	453	1.26	CC11	Car	1702	369	21.7%	550	1.49
	LGV	289	85	29.4%	96	1.13		LGV	421	109	25.9%	153	1.40
	OGV1	47	30	63.8%	30	1.00		OGV1	50	30	60.0%	9	0.30
	OGV2	57	30	52.6%	30	1.00		OGV2	29	21	72.4%	26	1.24
CC4	Car	1336	273	20.4%	360	1.32	CC12	Car	1099	266	24.2%	364	1.37
	LGV	198	72	36.4%	75	1.04		LGV	171	59	34.5%	62	1.05
	OGV1	22	18	81.8%	18	1.00		OGV1	21	17	81.0%	17	1.00
	OGV2	-	-	-	-	-		OGV2	5	3	60.0%	3	1.00
CC5	Car	885	228	25.8%	268	1.18	CC13	Car	1060	241	22.7%	309	1.28
	LGV	153	53	34.6%	60	1.13		LGV	168	61	36.3%	62	1.02
	OGV1	34	24	70.6%	29	1.21		OGV1	23	14	60.9%	14	1.00
	OGV2	13	12	92.3%	13	1.08		OGV2	9	8	88.9%	8	1.00
CC6	Car	625	145	23.2%	193	1.33	CC14	Car	1325	295	22.3%	368	1.25
	LGV	105	43	41.0%	48	1.12		LGV	187	60	32.1%	64	1.07
	OGV1	28	16	57.1%	17	1.06		OGV1	22	13	59.1%	13	1.00
	OGV2	16	12	75.0%	12	1.00		OGV2	4	2	50.0%	2	1.00
CC7	Car	1050	275	26.2%	325	1.18	CC15	Car	1110	254	22.9%	334	1.31
	LGV	178	66	37.1%	71	1.08		LGV	219	65	29.7%	76	1.17
	OGV1	22	17	77.3%	19	1.12		OGV1	26	18	69.2%	18	1.00
	OGV2	5	4	80.0%	4	1.00		OGV2	29	14	48.3%	15	1.07
CC8	Car	781	199	25.5%	247	1.24	CC16	Car	1176	256	21.8%	322	1.26
	LGV	100	43	43.0%	49	1.14		LGV	118	44	37.3%	50	1.14
	OGV1	17	12	70.6%	12	1.00		OGV1	12	8	66.7%	8	1.00
	OGV2	3	2	66.7%	2	1.00		OGV2	-	-	-	-	-
CC9	Car	361	89	24.7%	121	1.36	CC17	Car	601	141	23.5%	185	1.31
	LGV	31	20	64.5%	20	1.00		LGV	75	45	60.0%	55	1.22
	OGV1	6	5	83.3%	6	1.20		OGV1	4	3	75.0%	3	1.00
	OGV2	-	-	-	-	-		OGV2	-	-	-	-	-

6.4.12 Table 31 shows that in the PM peak period, inbound towards Perth city centre, the average car occupancy was 1.30 persons, LGV 1.14 persons, OGV1 1.01 persons and OGV2 1.04 persons.

6.4.13 Table 32 presents the vehicle occupancy and sample rates at each of the outbound cordon points around Perth city centre in the PM peak period (15:30 – 18:30).

Table 32. Vehicle Outbound Cordon Occupancy (PM Peak 15:30 – 18:30)

PM Peak Period (15:30-18:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
CC1	Car	1666	345	20.7%	426	1.23	CC10	Car	1063	236	22.2%	351	1.49
	LGV	256	88	34.4%	95	1.08		LGV	117	50	42.7%	63	1.26
	OGV1	50	22	44.0%	25	1.14		OGV1	19	13	68.4%	18	1.38
	OGV2	7	6	85.7%	6	1.00		OGV2	9	8	88.9%	8	1.00
CC3	Car	2033	427	21.0%	583	1.37	CC11	Car	2210	476	21.5%	661	1.39
	LGV	308	80	26.0%	97	1.21		LGV	377	109	28.9%	138	1.27
	OGV1	37	25	67.6%	28	1.12		OGV1	60	35	58.3%	41	1.17
	OGV2	39	25	64.1%	25	1.00		OGV2	25	17	68.0%	21	1.24
CC4	Car	1324	296	22.4%	377	1.27	CC12	Car	1083	253	23.4%	330	1.30
	LGV	190	62	32.6%	69	1.11		LGV	161	54	33.5%	54	1.00
	OGV1	17	13	76.5%	13	1.00		OGV1	25	19	76.0%	19	1.00
	OGV2	-	-	-	-	-		OGV2	4	4	100.0%	4	1.00
CC5	Car	1663	411	24.7%	526	1.28	CC13	Car	1230	280	22.8%	358	1.28
	LGV	241	81	33.6%	95	1.17		LGV	164	52	31.7%	58	1.12
	OGV1	27	21	77.8%	22	1.05		OGV1	22	16	72.7%	16	1.00
	OGV2	10	9	90.0%	9	1.00		OGV2	11	9	81.8%	9	1.00
CC6	Car	425	108	25.4%	150	1.39	CC14	Car	1630	337	20.7%	443	1.31
	LGV	88	41	46.6%	51	1.24		LGV	171	58	33.9%	61	1.05
	OGV1	35	19	54.3%	24	1.26		OGV1	24	22	91.7%	22	1.00
	OGV2	20	11	55.0%	11	1.00		OGV2	5	3	60.0%	3	1.00
CC7	Car	1045	269	25.7%	323	1.20	CC15	Car	1351	282	20.9%	374	1.33
	LGV	142	46	32.4%	51	1.11		LGV	271	76	28.0%	86	1.13
	OGV1	25	19	76.0%	22	1.16		OGV1	35	19	54.3%	20	1.05
	OGV2	4	3	75.0%	3	1.00		OGV2	53	30	56.6%	30	1.00
CC8	Car	741	206	27.8%	251	1.22	CC16	Car	1391	282	20.3%	360	1.28
	LGV	58	33	56.9%	35	1.06		LGV	150	61	40.7%	64	1.05
	OGV1	19	15	78.9%	17	1.13		OGV1	14	9	64.3%	9	1.00
	OGV2	4	3	75.0%	4	1.33		OGV2	-	-	-	-	-
CC9	Car	474	112	23.6%	162	1.45	CC17	Car	761	179	23.5%	216	1.21
	LGV	63	32	50.8%	38	1.19		LGV	94	45	47.9%	46	1.02
	OGV1	4	4	100.0%	6	1.50		OGV1	11	9	81.8%	9	1.00
	OGV2	-	-	-	-	-		OGV2	-	-	-	-	-

6.4.14 Table 32 shows that in the PM peak period, outbound from Perth city centre, the average car occupancy was 1.31 persons, LGV 1.13 persons, OGV1 1.12 persons and OGV2 1.05 persons.

6.5 Results of Mode Share Surveys

6.5.1 The results of the various mode share surveys can be analysed and presented in different ways. Through discussions previously with Tactran, the methodology developed for assessing and summarising the survey data for each site was agreed as follows:

- By Time Period
- By Mode – both by vehicle and by person.

Mode Share By Time Period

6.5.2 All traffic surveys were undertaken over a 16 hour period 06:00-22:00. The mode share data is presented into four separate time periods, namely:

- AM Peak 06:30 – 09:30
- Inter-peak 09:30 – 15:30
- PM Peak 15:30 – 18:30
- Full day 06:30 – 18:30

Mode Share By Mode

6.5.3 Mode share data can be presented from the perspective of the share of vehicles or by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle

6.5.4 In order to consider the volume of trips to and from Perth, the following assumptions and data usage was applied:

- Sites CC1 to CC17 were assessed to represent the points of entry/exit to the city.
- Bus/coach passengers which entered/left Perth were assumed to be destinating and originating in Perth

6.5.5 The following figures present the Perth mode share distribution, calculated from the survey data as detailed above. Figure 4 and Figure 5 present the AM peak mode share results by vehicle by direction and Figure 6 and Figure 7 present the AM Peak mode share results by person by direction.

6.5.6 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey undertaken in June/July 2019. The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in June/July 2019.

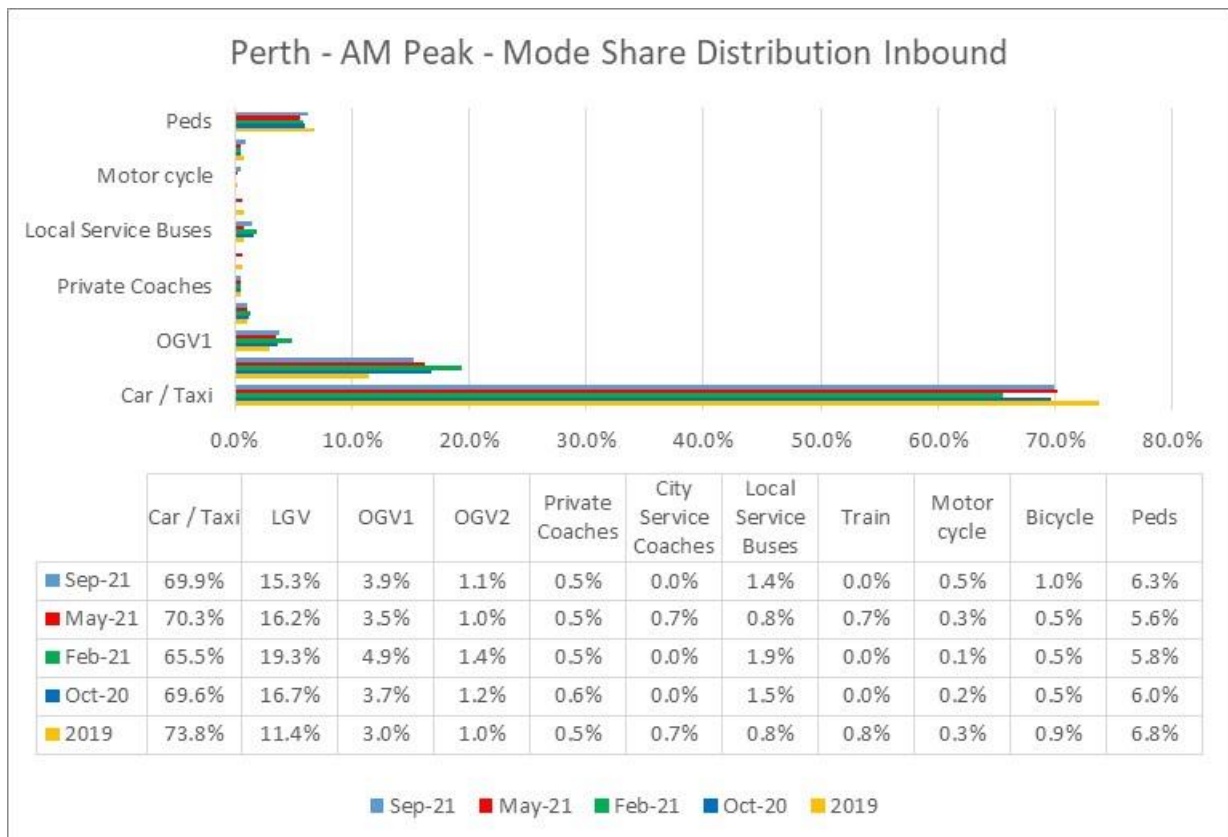


Figure 4. Perth Mode Share Distribution Inbound – AM Peak

- 6.5.7 Figure 4 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. It should be noted that the 2019 surveys were undertaken during school holidays so no school buses were observed at that point.
- 6.5.8 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries.
- 6.5.9 The proportion of pedestrians was very similar across all of the surveys, whilst the proportion of cyclists was also similar across all survey periods.
- 6.5.10 The total number of vehicles and pedestrians observed as part of the mode surveys inbound in the AM peak period was 18,524 in June/July 2019, 16,262 in October 2020, 13,786 in February 2021, 17,132 in May 2021 and 18,032 in September 2021.

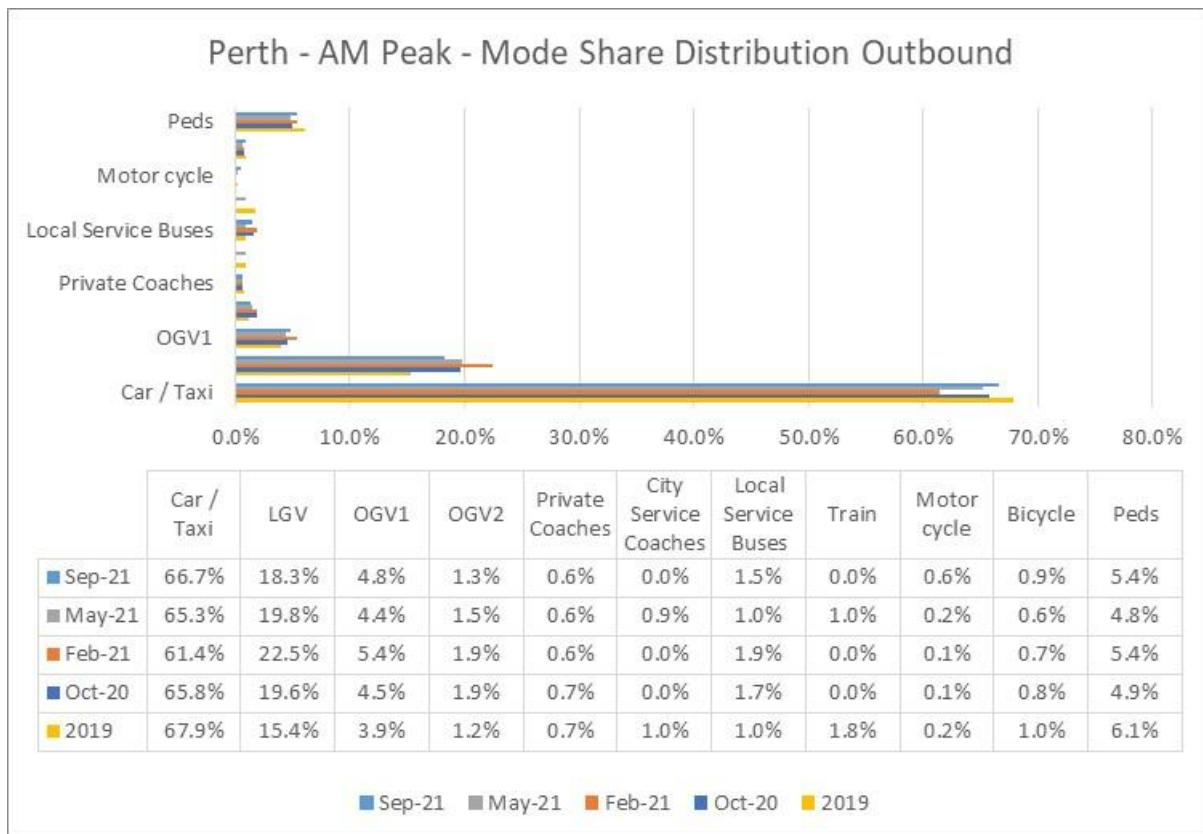


Figure 5. Perth Mode Share Distribution Outbound – AM Peak

6.5.11 Figure 5 shows that the majority of people heading out of Perth did so by car and taxi. Total bus usage was around 2.5% in the AM peak in each survey period, rail has decreased from around 2% to around 1%, bicycle around 0.7% and walking between 4% and 6%.

6.5.12 The total number of vehicles and pedestrians observed as part of the mode surveys outbound in the AM peak period was 13,522 in June/July 2019, 12,727 in October 2020, 10,925 in February 2021, 13,002 in May 2021 and 14,135 in September 2021.

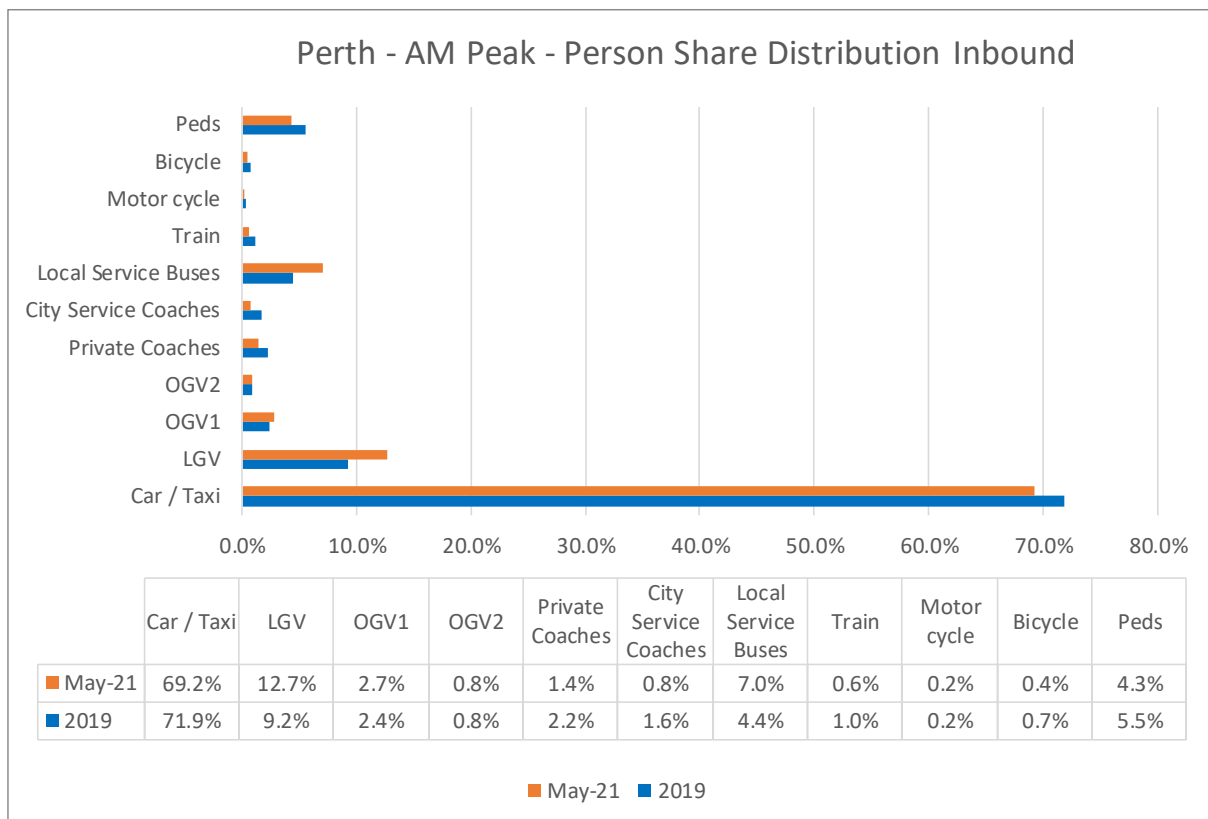


Figure 6. Perth Person Share Distribution Inbound – AM Peak

6.5.13 Figure 6 shows that in the AM peak, the person mode share inbound remained relatively consistent over the survey periods. The results for local service buses are influenced by the 2019 surveys being undertaken during the school holidays, and rail shows a drop between 2019 and May 2021.

6.5.14 The total number of people recorded in the AM peak inbound was 23,076 in June/July 2019 and 21,925 in May 2021.

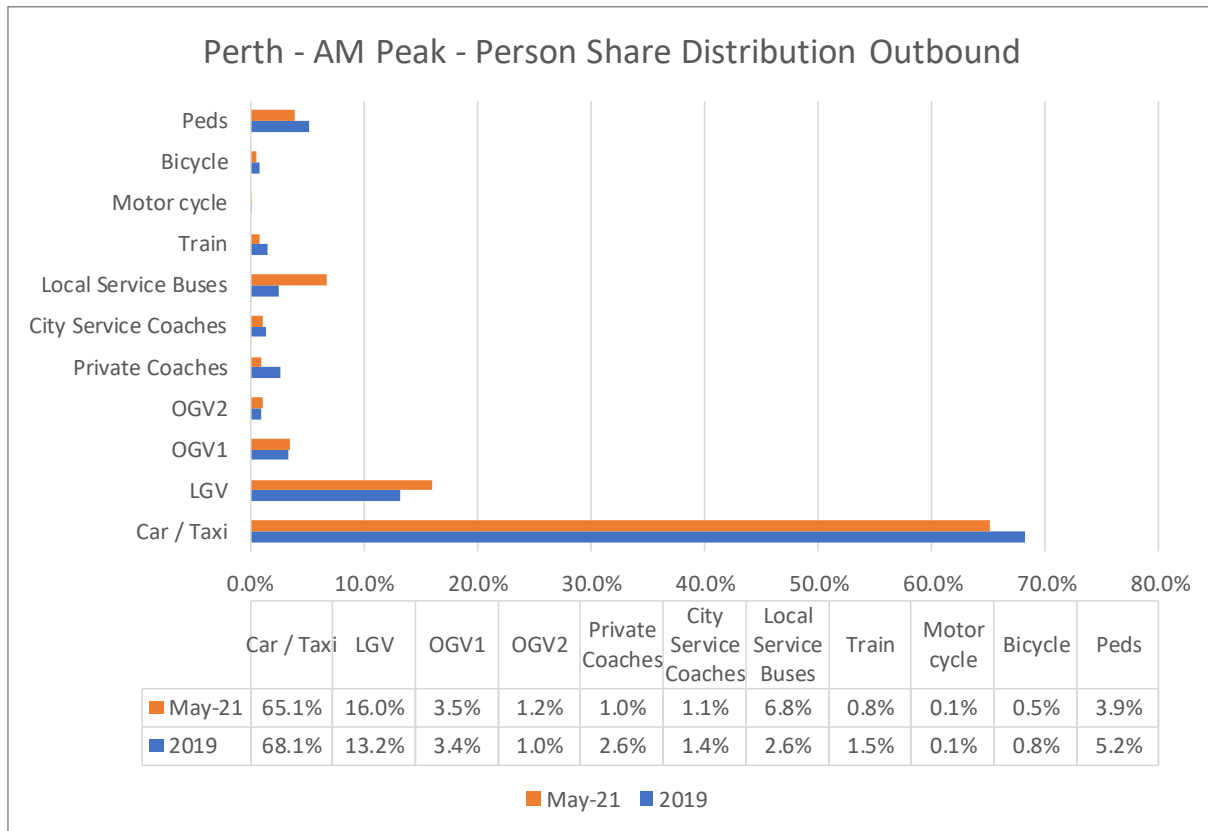


Figure 7. Perth Person Share Distribution Outbound – AM Peak

- 6.5.15 Figure 7 shows a similar result to the inbound direction.
- 6.5.16 The total number of people recorded in the AM peak outbound was 15,792 in June/July 2019 and 16,163 in May 2021
- 6.5.17 Figure 8 and Figure 9 present the Inter peak mode share results by vehicle by direction and Figure 10 and Figure 11 present the Inter Peak mode share results by person by direction.
- 6.5.18 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019. The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

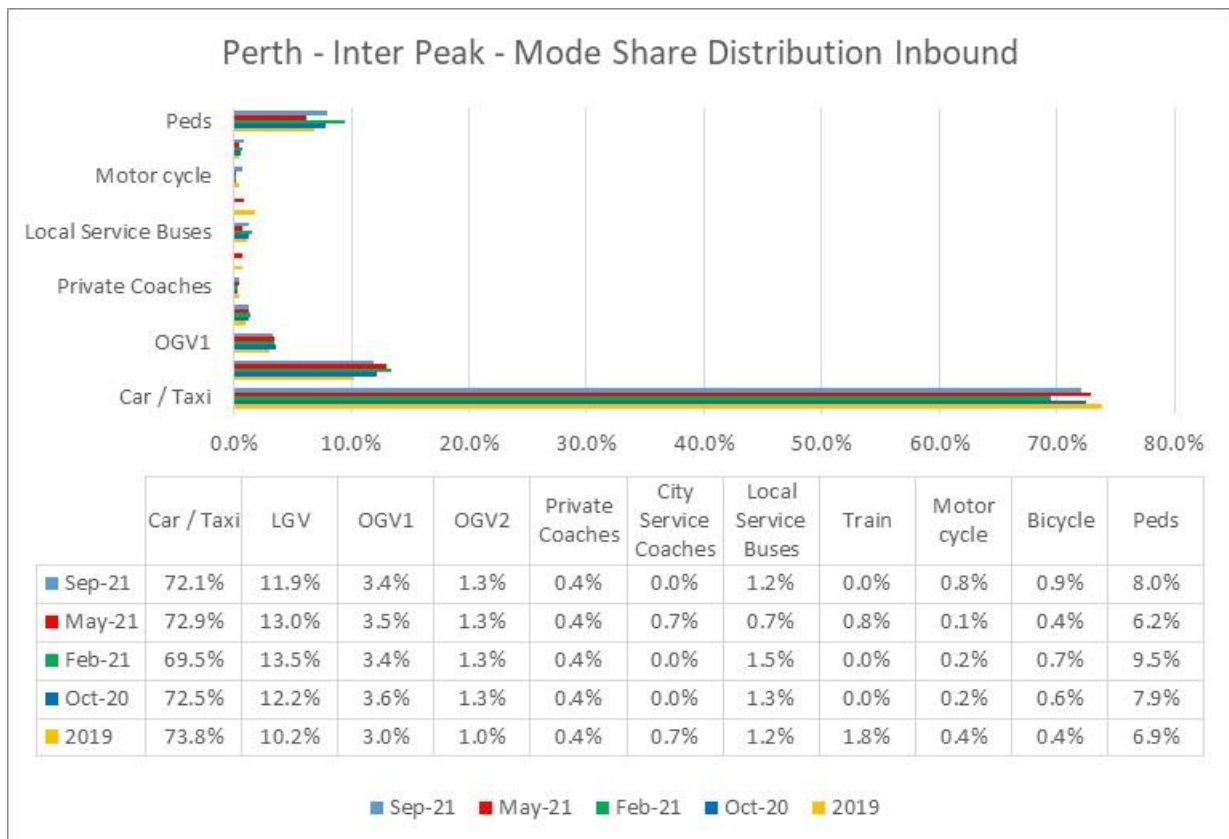


Figure 8. Perth Mode Share Distribution Inbound – Inter Peak

- 6.5.19 Figure 8 shows that the mode share of vehicles remained relatively consistent over the three survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. It should be noted that the 2019 surveys were undertaken during school holidays so no school buses were observed at that point.
- 6.5.20 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries.
- 6.5.21 The proportion of pedestrians was very similar across all of the surveys, with the exception of February 2021 when Scotland was in a period of lockdown and retail and leisure venues were closed, whilst the proportion of cyclists was also similar across all survey periods.
- 6.5.22 The total number of vehicles and pedestrians observed as part of the mode surveys inbound in the inter peak period was 42,757 in June/July 2019, 38,086 in October 2020, 32,448 in February 2021, 39,157 in May 2021 and 40,307 in September 2021.

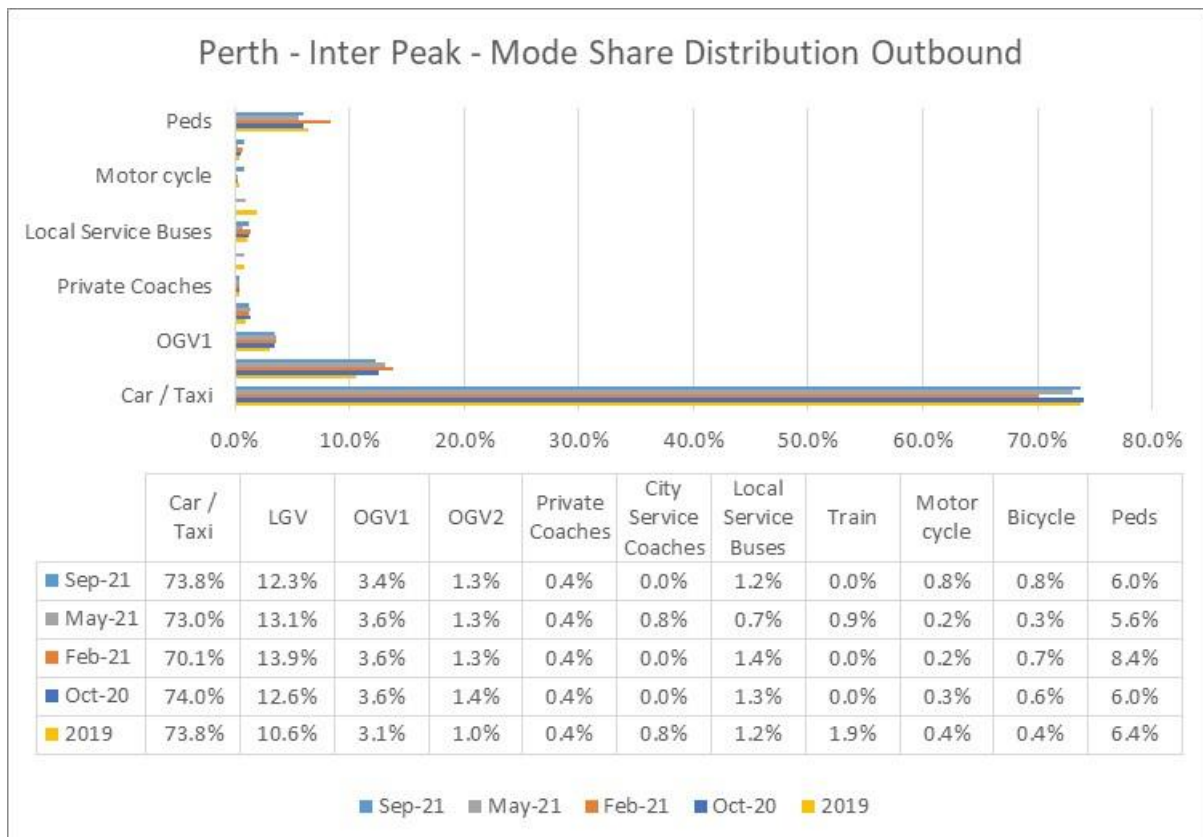


Figure 9. Perth Mode Share Distribution Outbound – Inter Peak

6.5.23 Figure 9 shows that the majority of people heading out of Perth during the inter-peak did so by car and taxi. Total bus usage was around 2% in the inter peak, rail dropped from around 2% to 1%, bicycle 0.3% to 0.8% and walking between 5% and 8%.

6.5.24 The total number of vehicles and pedestrians observed as part of the mode surveys outbound in the inter peak period was 39,878 in June/July 2019, 33,958 in October 2020, 29,731 in February 2021, 35,152 in May 2021 and 36,664 in September 2021.

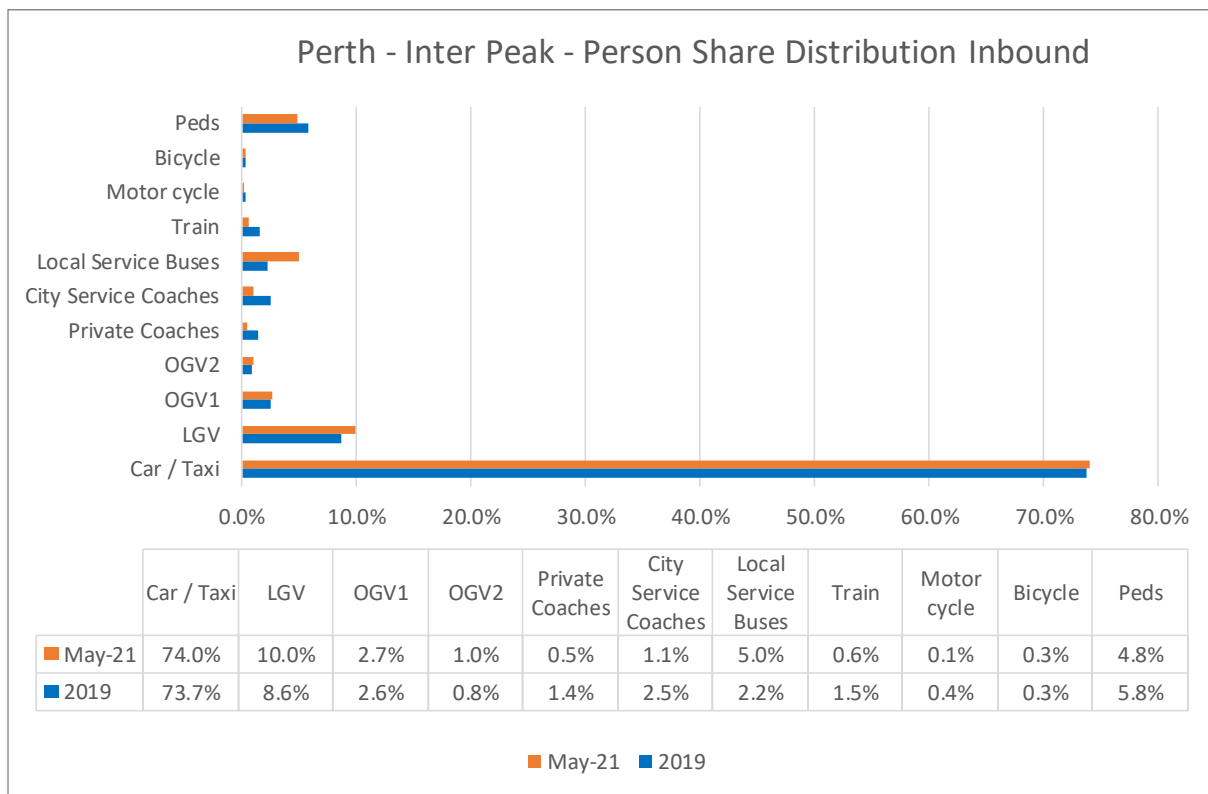


Figure 10. Perth Person Share Distribution Inbound – Inter Peak

6.5.25 Figure 10 shows that in the inter peak, the person mode share inbound remained relatively consistent over the survey periods. The results for local service buses are influenced by the 2019 surveys being undertaken during the school holidays, with rail showing a drop between 2019 and May 2021.

6.5.26 The total number of people recorded in the inter peak inbound was 50,670 in June/July 2019 and 50,915 in May 2021.

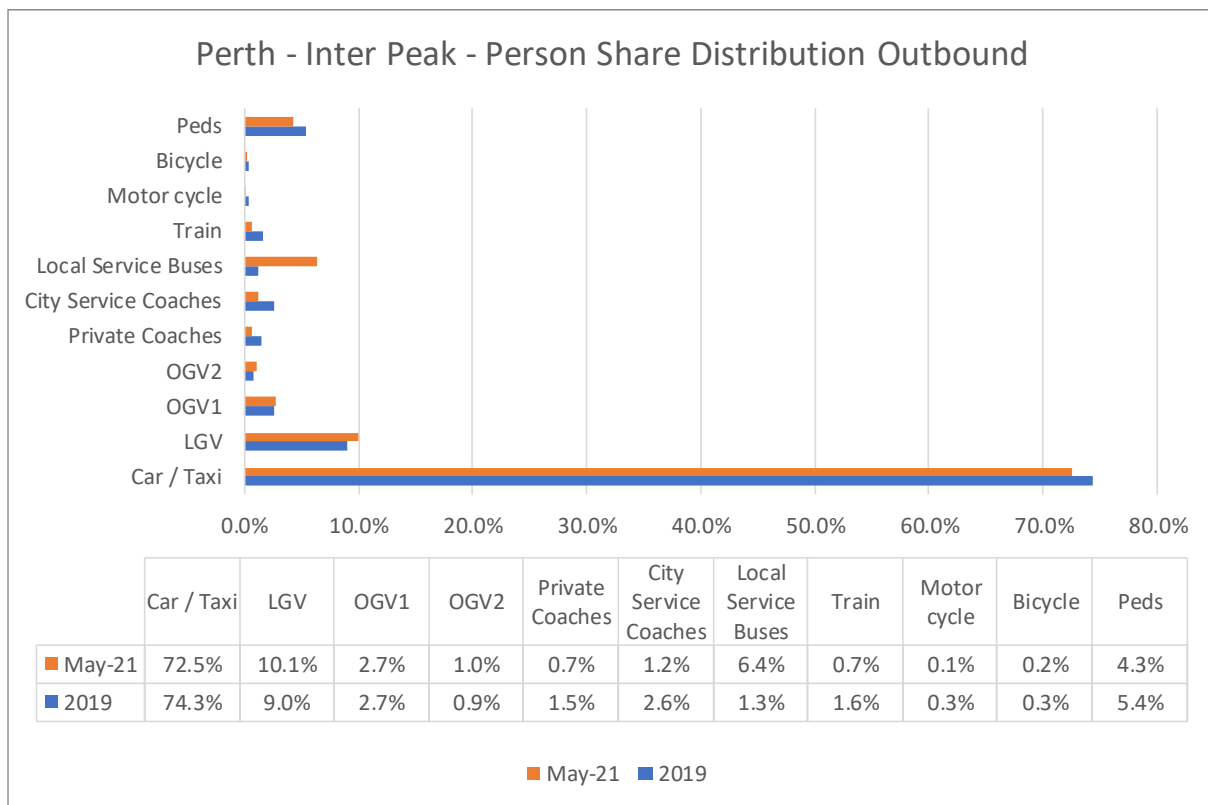


Figure 11. Perth Person Share Distribution Outbound – Inter Peak

- 6.5.27 Figure 11 shows a similar result to the inbound direction.
- 6.5.28 The total number of people recorded in the inter peak outbound was 46,873 in June/July 2019 and 45,790 in May 2021.
- 6.5.29 Figure 12 and Figure 13 present the PM peak mode share results by vehicle by direction and Figure 14 and Figure 15 present the PM Peak mode share results by person by direction.
- 6.5.30 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019. The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

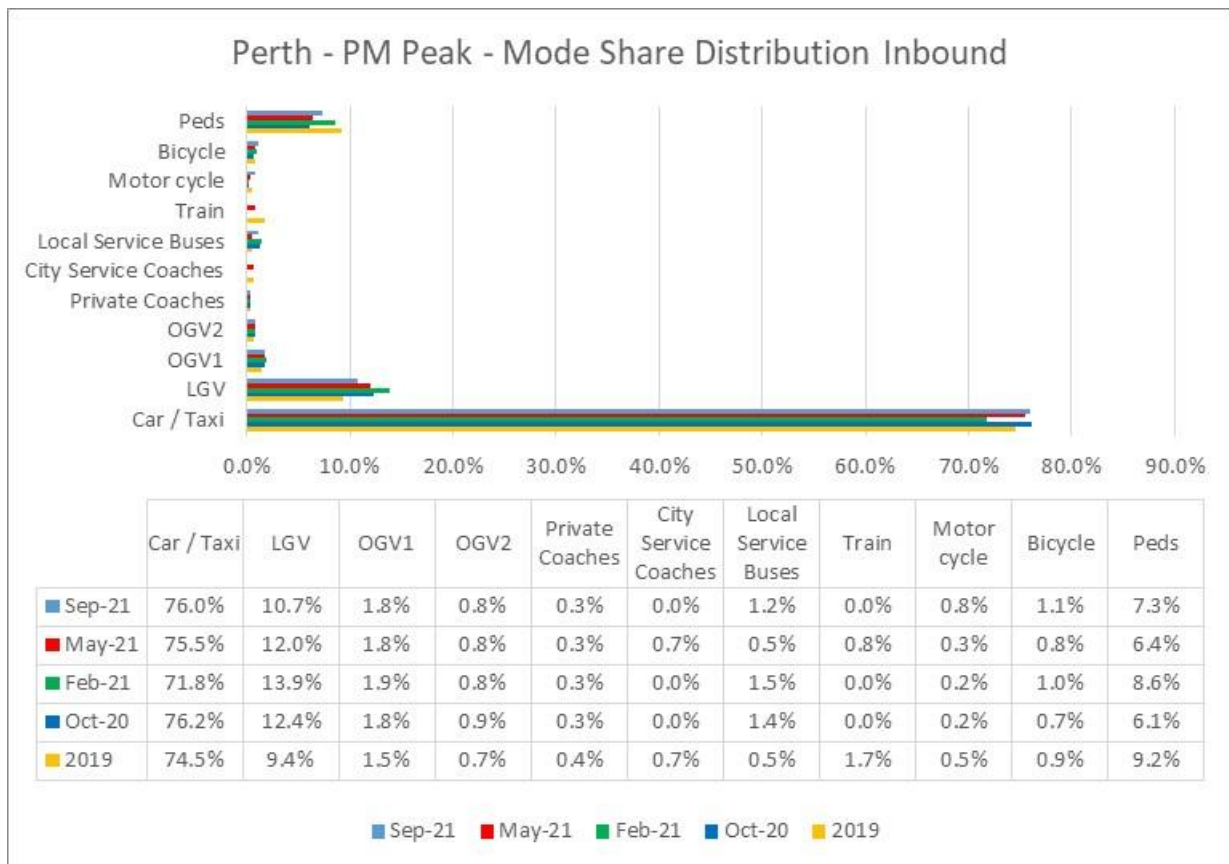


Figure 12. Perth Mode Share Distribution Inbound – PM Peak

- 6.5.31 Figure 12 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. It should be noted that the 2019 surveys were undertaken during school holidays so no school buses were observed at that point.
- 6.5.32 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries, though a reduction is noted in September 2021.
- 6.5.33 The proportion of pedestrians has remained relatively consistent across all of the surveys, whilst the proportion of cyclists was also similar across all survey periods.
- 6.5.34 The total number of vehicles and pedestrians observed as part of the mode surveys inbound in the PM peak period was 23,700 in June/July 2019, 18,902 in October 2020, 16,498 in February 2021, 20,497 in May 2021 and 22,446 in September 2021.

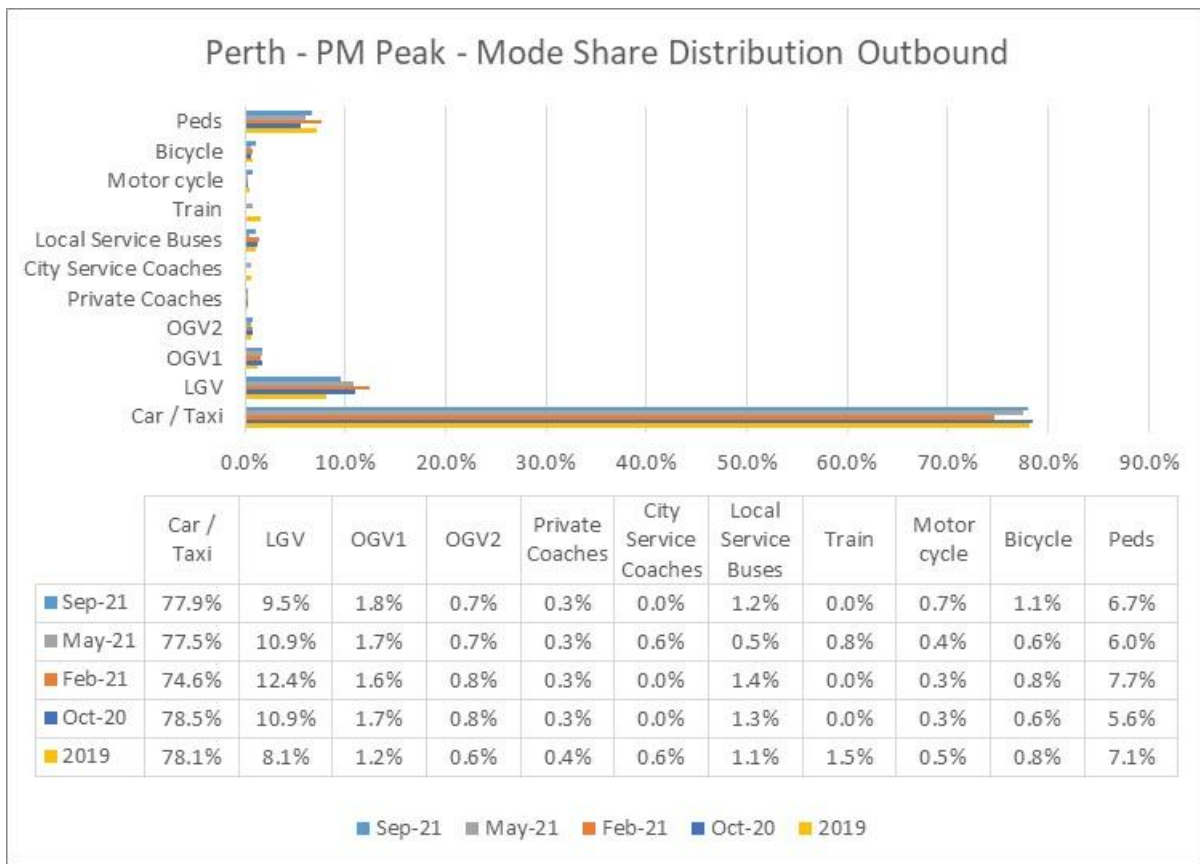


Figure 13. Perth Mode Share Distribution Outbound – PM Peak

6.5.35 Figure 13 shows that the majority of people heading out of Perth in the PM Peak did so by car and taxi. Total bus usage was around 1.5% in the PM peak in each survey period, rail has decreased from around 1.5% to around 0.8%, bicycle remained stable at between 0.6% and 0.8% until September 2021 when it increased to 1.1%, and walking between 5.6% and 7.7%.

6.5.36 The total number of vehicles and pedestrians observed as part of the mode surveys outbound in the PM peak period was 26,003 in June/July 2019, 19,597 in October 2020, 16,908 in February 2021, 21,316 in May 2021 and 22,349 in September 2021.

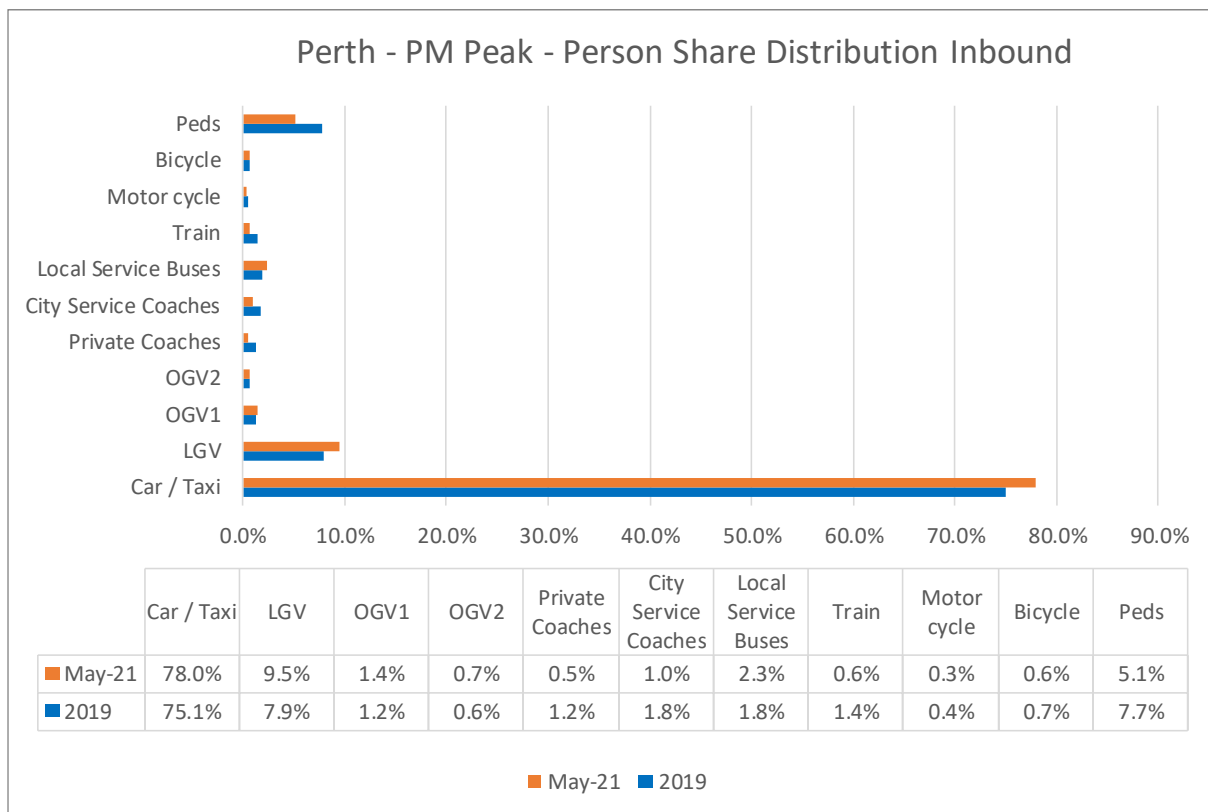


Figure 14. Perth Person Share Distribution Inbound – PM Peak

6.5.37 Figure 14 shows that in the PM peak, the person mode share inbound remained relatively consistent over the survey periods. The results for local service buses are influenced by the 2019 surveys being undertaken during the school holidays, and rail shows a drop between 2019 and May 2021.

6.5.38 The total number of people recorded in the PM peak inbound was 28,166 in June/July 2019 and 25,875 in May 2021.

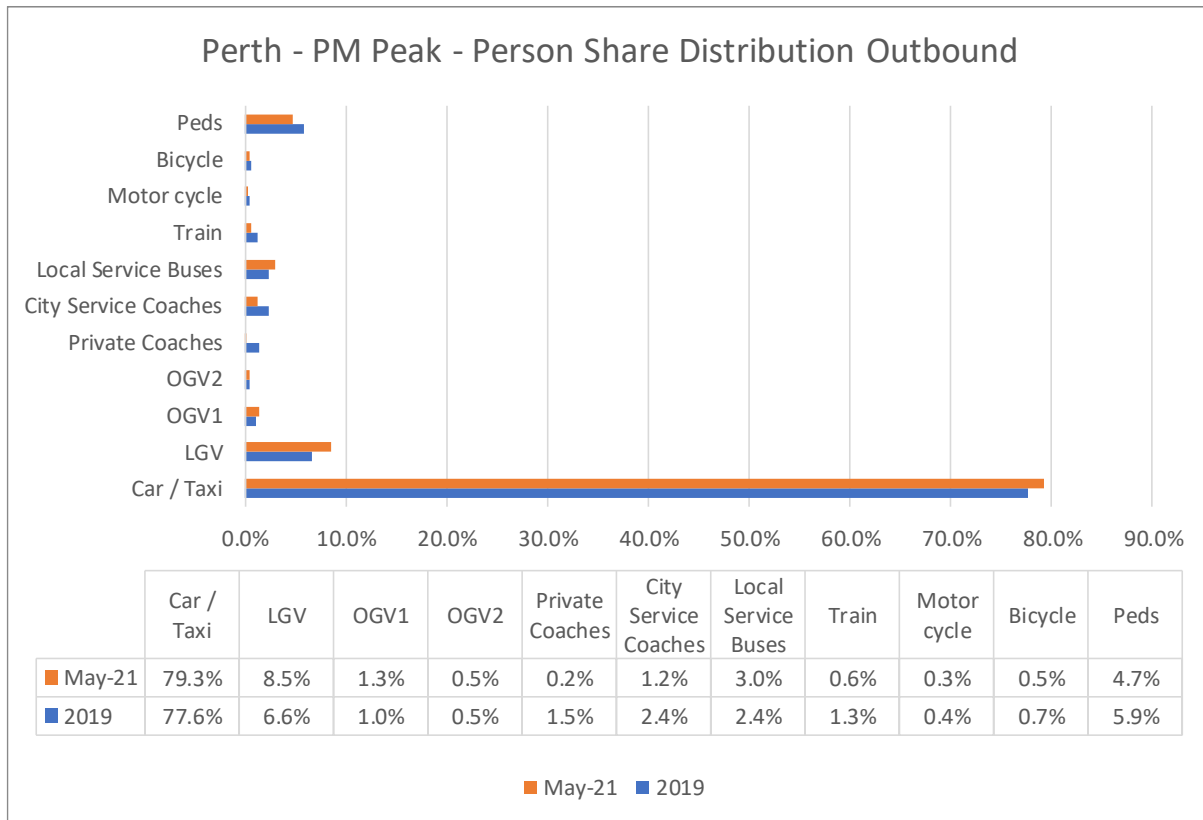


Figure 15. Perth Person Share Distribution Outbound – PM Peak

- 6.5.39 Figure 15 shows a similar result to the inbound direction.
- 6.5.40 The total number of people recorded in the PM peak outbound was 31,756 in June/July 2019 and 27,420 in May 2021
- 6.5.41 Figure 16 and Figure 17 present the full day (06:30-18:30) mode share results by vehicle by direction and Figure 18 and Figure 19 present the full day (06:30-18:30) mode share results by person by direction.
- 6.5.42 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in June/July 2019. The mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in June/July 2019.

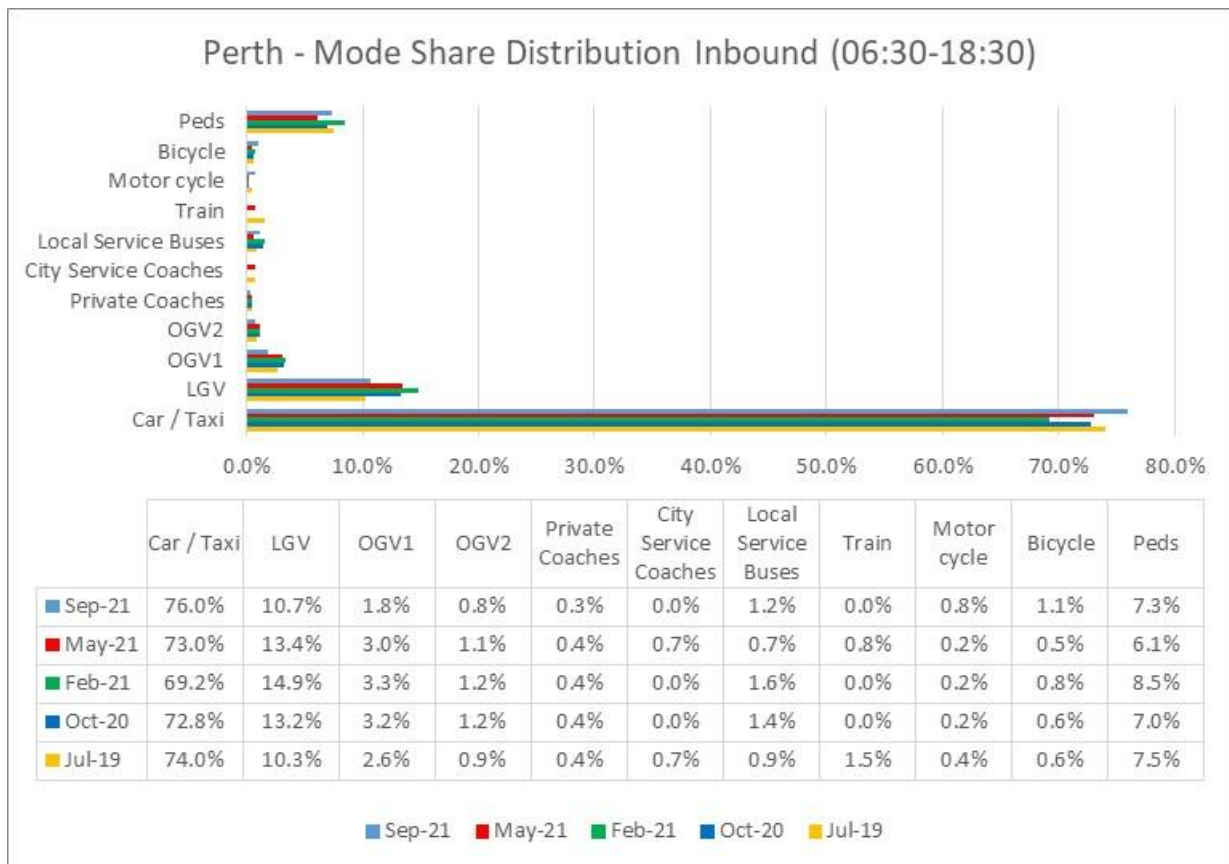


Figure 16. Perth Mode Share Distribution Inbound – Full Day

- 6.5.43 Figure 16 shows that the mode share of vehicles remained relatively consistent over the three survey periods. The results for rail are only included in May 2021 as rail station surveys were only undertaken at this point. It should be noted that the 2019 surveys were undertaken during school holidays so no school buses were observed at that point.
- 6.5.44 The proportion of LGVs has increased between 2019 and 2020/21, due to the increase in supermarket deliveries and online shopping deliveries, although the proportion observed in September 2021 was consistent with 2019.
- 6.5.45 The proportion of pedestrians has remained relatively consistent across all of the surveys, with the exception of a slight increase in February 2021, whilst the proportion of cyclists was also similar across all survey periods, with the exception of a slight increase in September 2021.
- 6.5.46 The total number of vehicles and pedestrians observed as part of the mode surveys inbound in the PM peak period was 84,981 in June/July 2019, 73,250 in October 2020, 62,732 in February 2021, 76,786 in May 2021 and 80,785 in September 2021.

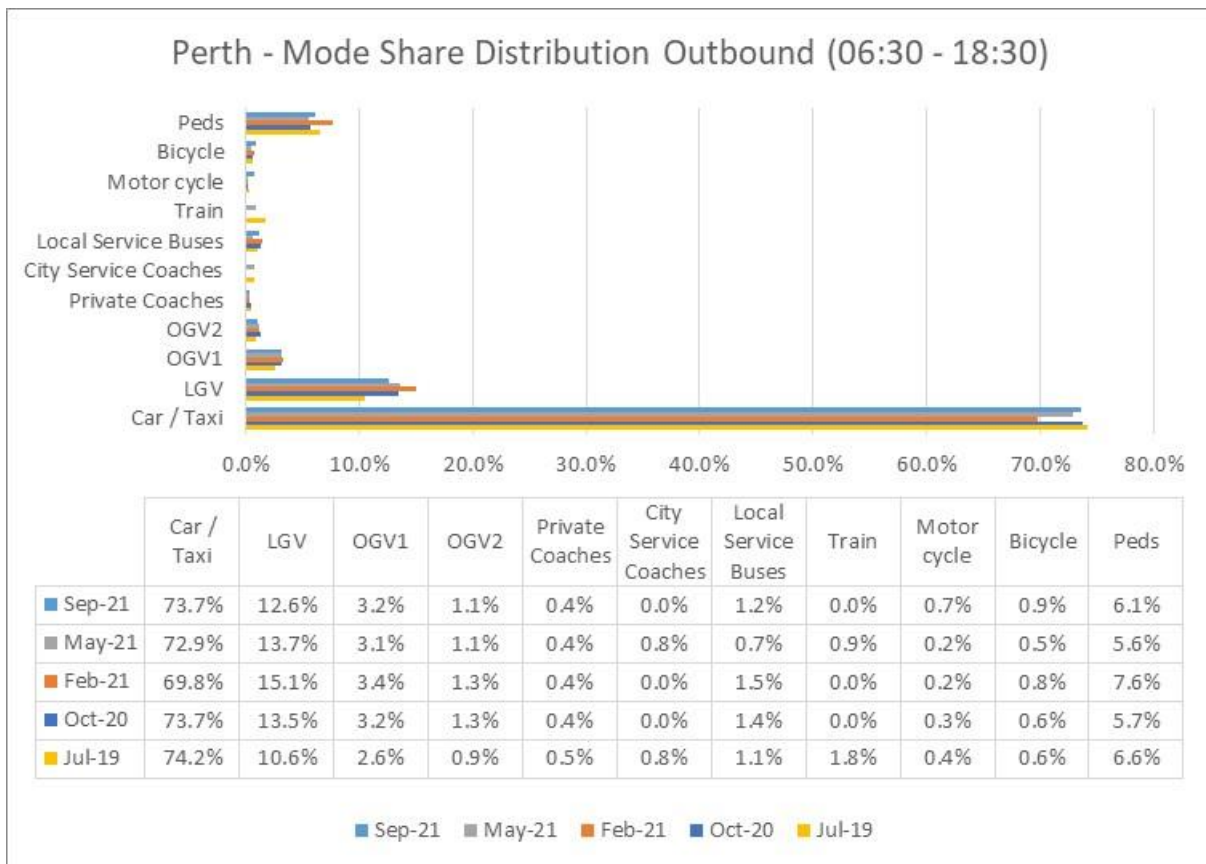


Figure 17. Perth Mode Share Distribution Outbound – Full Day

6.5.47 Figure 17 shows that the majority of people heading out of Perth across the day did so by car and taxi. Total bus usage was around 2% in each survey period, rail has decreased from around 1.8% to around 0.9%, bicycle has remained stable at between 0.5% and 0.9%, and walking between 5.6% and 7.6%.

6.5.48 The total number of vehicles and pedestrians observed as part of the mode surveys outbound across the day was 79,403 in June/July 2019, 66,282 in October 2020, 57,564 in February 2021, 69,470 in May 2021 and 73,148 in September 2021.

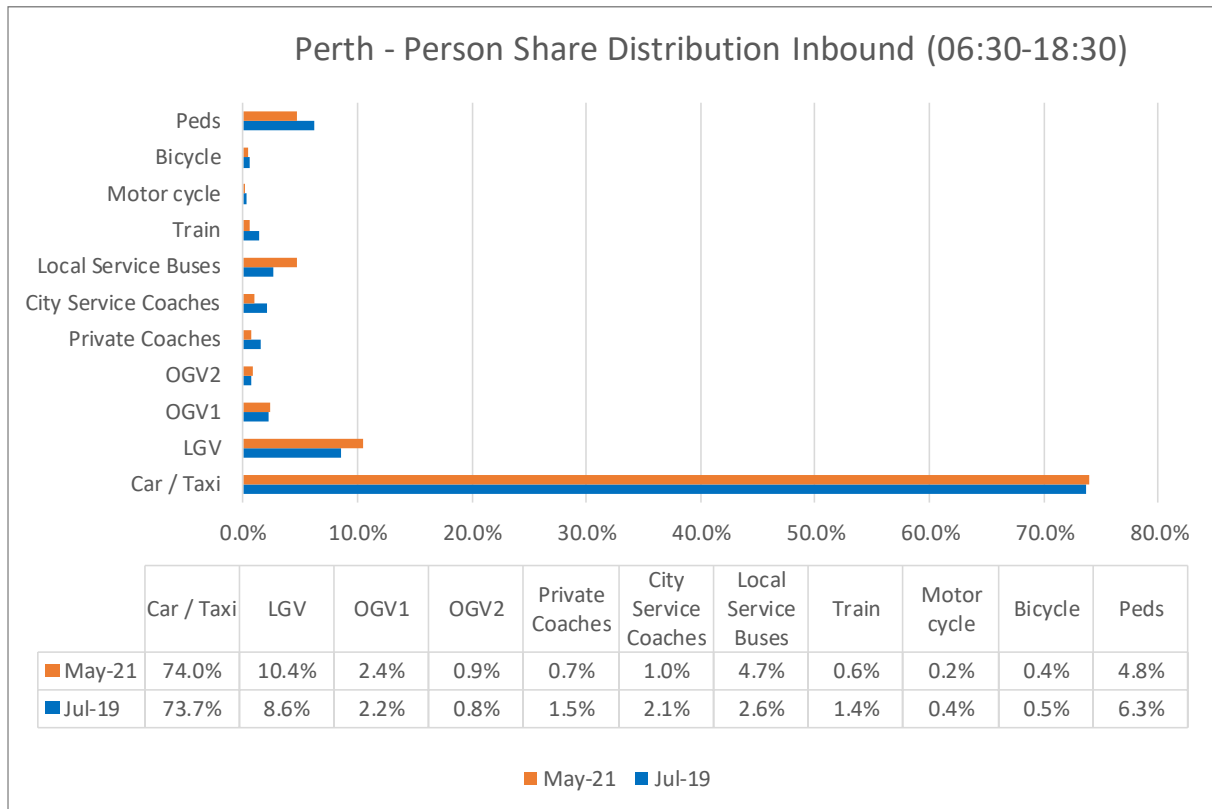


Figure 18. Perth Person Share Distribution Inbound – Full Day

6.5.49 Figure 18 shows that across the day, the person mode share inbound remained relatively consistent over the survey periods. The results for local service buses are influenced by the 2019 surveys being undertaken during the school holidays, and rail shows a drop between June/July 2019 and May 2021.

6.5.50 The total number of people recorded in the PM peak inbound was 101,912 in June/July 2019 and 98,714 in May 2021.

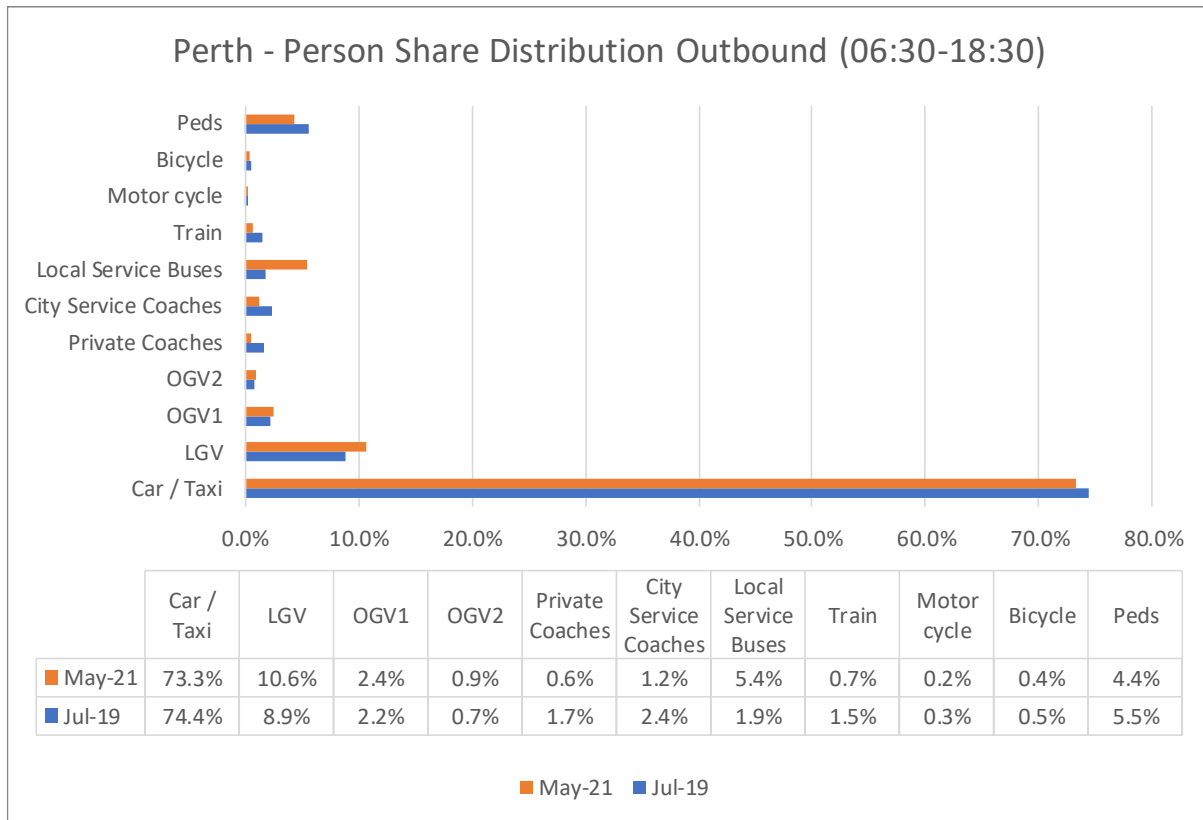


Figure 19. Perth Person Share Distribution Outbound – Full Day

6.5.51 Figure 19 shows a similar result to the inbound direction.

6.5.52 The total number of people recorded in the PM peak outbound was 94,421 in June/July 2019 and 89,373 in May 2021

7. SUMMARY & FINDINGS

7.1 Summary

7.1.1 SYSTRA Ltd (SYSTRA) was commissioned by Tactran to undertake traffic surveys through various sites in the Angus, Dundee, Perth & Kinross, & Stirling area.

7.1.2 The types of surveys undertaken for this study were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Link Counts (including cyclists & pedestrians)
- Rail Station Counts
- Bus Occupancy Counts
- Vehicle Occupancy Counts.

7.1.3 All surveys were recorded over a 16 hour period (06:00-22:00) and the analysis was split into the following time periods:

- AM Peak Period – 06:30 – 09:30
- Inter Peak Period – 09:30 – 15:30
- PM Peak Period – 15:30 – 18:30

7.1.4 The mode share data was also considered from the perspective of the share of vehicles and by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle.

7.2 Findings

Pedestrian Behaviour and Volume Counts

7.2.1 Pedestrian Behaviour on the west side footpath of Tay Street in Perth shows that, on average 89% of pedestrians did not conflict with oncoming pedestrians, whilst 11% passed on the footpath within a space of 2m or less .

7.2.2 Pedestrian Behaviour on the east side footpath of Tay Street in Perth shows that, on average 78% of pedestrians did not conflict with oncoming pedestrians, whilst 13% passed on the footpath within a space of 2m or less. The remaining 9% passed with over 2m between them.

7.2.3 The results of the pedestrian flow surveys demonstrate that flows were generally highest in February 2021 when Scotland was in a period of lockdown, or September 2021, depending upon the location.

Link Count and Speed Surveys

7.2.4 The results of the wider link counts and speed surveys indicate:

- On Tay Street, between South Street and High Street, the mean speeds remained consistent in all three survey periods, around 22mph in the northbound direction and 21mph in the southbound direction
- On Tay Street, between Marshall Place and Canal Street, the mean speeds again remained consistent in all three survey periods, around 24mph in both directions.

Mode Share Surveys

7.2.5 The results of the mode share surveys in Perth indicate that the mode share has remained consistent over the four surveys, car usage in each period has been around 70%, the volume of cyclists has remained below 1% and pedestrians have remained consistent at around 3% to 8%. The mode share by person surveys indicated:

- In the 2021 AM peak the majority of people travelling inbound were doing so by car/taxi (69.2%), LGV accounted for around 13% of people and HGV around 3%. In terms of public transport, bus accounted for around 9% of people and train under 1%. Cycling and walking accounted for just under 5%, cycling at 0.4% and walking at 4.3% of all people heading inbound towards Perth city centre.
- In the 2021 AM peak the majority of people travelling outbound were doing so by car/taxi (65.1%), LGV accounted for around 16% of people and HGV around 5%. In terms of public transport, bus accounted for around 9% of people and train under 1%. Cycling and walking accounted for just under 5%, cycling at 0.5% and walking at 3.9% of all people heading outbound from Perth city centre.
- In the 2021 inter-peak, the majority of people travelling inbound were doing so by car/taxi (74%), LGV accounted for 10% of people and HGV around 4%. In terms of public transport, bus accounted for around 7% of people and train under 1%. Cycling and walking accounted for just over 5%, cycling at 0.5% and walking at 4.8% of all people heading inbound towards Perth city centre.
- In the 2021 inter-peak, the majority of people travelling outbound were doing so by car/taxi (74%), LGV accounted for 10% of people and HGV around 4%. In terms of public transport, bus accounted for around 7% of people and train under 1%. Cycling and walking accounted for just over 5%, cycling at 0.5% and walking at 4.8% of all people heading outbound from Perth city centre.
- In the PM peak, the majority of people travelling inbound were doing so by car/taxi (78%), LGV accounted for slightly over 9% of people and HGV around 2%. In terms of public transport, bus accounted for around 4% of people and train under 1%. Cycling and walking accounted for just under 6%, cycling at 0.6% and walking at 5.1% of all people heading inbound towards Perth city centre.
- In the PM peak, the majority of people travelling outbound were doing so by car/taxi (79.3%), LGV accounted for 8.5% of people and HGV around 2%. In terms of public transport, bus accounted for around 4.4% of people and train under 1%. Cycling and walking accounted for just under 6%, cycling at 0.6% and walking at 5.1% of all people heading outbound from Perth city centre.
- Across the day, the majority of people travelling inbound were doing so by car/taxi (74%), LGV accounted for slightly over 10% of people and HGV around 3%. In terms of public transport, bus accounted for around 6% of people and train under 1%.

Cycling and walking accounted for just under 6%, cycling at 0.4% and walking at 4.8% of all people heading inbound towards Perth city centre.

- In the PM peak, the majority of people travelling outbound were doing so by car/taxi (73.3%), LGV accounted for almost 11% of people and HGV around 3%. In terms of public transport, bus accounted for around 7% of people and train 1%. Cycling and walking accounted for just under 5%, cycling at 0.4% and walking at 4.4% of all people heading outbound from Perth city centre

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Newhall Street

5th Floor, Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 393 4841

Birmingham – Edmund Gardens

1 Edmund Gardens, 121 Edmund Street,
Birmingham B3 2HJ
T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Glasgow – West George St

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1
1LE
United Kingdom
T: +44 (0)191 249 3816

Reading

Soane Point, 6-8 Market Place, Reading,
Berkshire, RG1 2EG
T: +44 (0)118 206 0220

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

SYSTRA

D APPENDIX D – STIRLING COUNCIL SURVEY REPORT

Stirling Council Area

16/12/2021

Reference number GB01T20C61/8



STIRLING SPACES FOR PEOPLE SURVEY REPORT 2020/21



SYSTRA

STIRLING COUNCIL AREA

MODE SHARE SURVEYS 2020/2021

IDENTIFICATION TABLE

Client/Project owner	Tactran
Project	Stirling Council Area
Study	Mode Share Surveys 2020/2021
Type of document	Survey Report
Date	16/12/2021
File name	Traffic Survey Report - Draft
Reference number	GB01T20C61/8

APPROVAL

Version	Name		Position	Date	Modifications
1	Author	Stuart Elder	Assistant Consultant	16/12/2021	
	Checked	Alasdair Kay	Principal Transportation Engineer	16/12/2021	
	Approved	Iain Clement	Associate Director	16/12/2021	
2	Author			DD/MM/YY	
	Checked			DD/MM/YY	
	Approved			DD/MM/YY	

TABLE OF CONTENTS

1.	INTRODUCTION	9
1.1	BACKGROUND	9
1.2	SPACES FOR PEOPLE	9
1.3	MEASURES	9
2.	DATA COLLATION	11
2.1	OVERVIEW OF TRAFFIC SURVEYS	11
2.2	PEDESTRIAN BEHAVIOUR AND VOLUME COUNTS	12
2.3	SPEED SURVEYS	13
2.5	CLASSIFIED LINK COUNTS	19
2.6	CAR PARK OCCUPANCY SURVEYS	20
2.7	SCHOOL ON STREET CAR PARKING SURVEYS	21
2.8	FOOTWAY SURVEYS	22
2.9	MODE SHARE SURVEYS	22
2.10	CAR OCCUPANCY COUNTS – DUNBLANE	23
2.11	SUMMARY	24
3.	PEDESTRIAN BEHAVIOUR AND VOLUME COUNTS	25
3.1	PEDESTRIAN BEHAVIOUR SURVEYS	25
3.2	PEDESTRIAN VOLUME SURVEYS	25
3.3	RESULTS OF PEDESTRIAN BEHAVIOUR SURVEYS	25
3.4	RESULTS OF PEDESTRIAN VOLUME SURVEYS	28
4.	SPEED SURVEYS REVIEW	39
4.1	OVERVIEW	39
4.2	RESULTS OF SPEED SURVEYS	40
5.	LINK COUNT SURVEYS REVIEW	80
5.1	OVERVIEW	80
5.3	RESULTS OF LINK COUNT SURVEYS	81
6.	CAR PARK OCCUPANCY SURVEYS	110
6.1	STIRLING PARKING	110

7.	SCHOOL PARKING	112
7.1	RIVERSIDE PRIMARY SCHOOL	112
8.	FOOTWAY SURVEYS REVIEW	115
8.1	OVERVIEW	115
8.3	RESULTS OF FOOTWAY SURVEYS	116
9.	MODE SHARE SURVEYS	122
9.1	SURVEY PERIODS	122
9.2	RAIL STATION COUNTS	122
9.3	BUS STATION COUNTS	123
9.4	BUS OCCUPANCY COUNTS	123
9.5	VEHICLE OCCUPANCY COUNTS	127
9.6	RESULTS OF MODE SHARE SURVEYS	133
9.7	DUNBLANE VEHICLE OCCUPANCY	149
10.	SUMMARY & FINDINGS	151
10.1	SUMMARY	151
10.2	FINDINGS	151

LIST OF FIGURES

Figure 1.	Pedestrian Surveys - Stirling	12
Figure 2.	Speed Surveys - Stirling	13
Figure 3.	Speed Surveys - Stirling	13
Figure 4.	Speed Surveys - Dunblane	14
Figure 5.	Speed Surveys – Bridge of Allan	15
Figure 6.	Speed Surveys – Aberfoyle	15
Figure 7.	Speed Surveys – Fallin	16
Figure 8.	Speed Surveys – Plean	16
Figure 9.	Link & Speed Surveys – Callander	17
Figure 10.	Link & Speed Surveys – Killearn	17
Figure 11.	Speed Surveys – Gargunnoch	18
Figure 12.	Classified Link Count Surveys – Stirling	19
Figure 13.	Classified Turn Count Surveys – Stirling	20
Figure 14.	Car Occupancy Surveys – Stirling	21
Figure 15.	School Car Occupancy Surveys – Stirling	22
Figure 16.	Footway Surveys – Stirling	22
Figure 17.	Occupancy Surveys - Dunblane	23
Figure 18.	Stirling Mode Share Distribution Inbound – AM Peak	134
Figure 19.	Stirling Mode Share Distribution Outbound – AM Peak	135
Figure 20.	Stirling Person Share Distribution Inbound – AM Peak	136
Figure 21.	Stirling Person Share Distribution Outbound – AM Peak	137
Figure 22.	Stirling Mode Share Distribution Inbound – Inter Peak	138
Figure 23.	Stirling Mode Share Distribution Outbound – Inter Peak	139
Figure 24.	Stirling Person Share Distribution Inbound – Inter Peak	140
Figure 25.	Stirling Person Share Distribution Outbound – Inter Peak	141
Figure 26.	Stirling Mode Share Distribution Inbound – PM Peak	142
Figure 27.	Stirling Mode Share Distribution Outbound – PM Peak	143
Figure 28.	Stirling Person Share Distribution Inbound – PM Peak	144
Figure 29.	Stirling Person Share Distribution Outbound – PM Peak	145
Figure 30.	Stirling Mode Share Distribution Inbound – Full Day	146
Figure 31.	Stirling Mode Share Distribution Outbound – Full Day	147
Figure 32.	Stirling Person Share Distribution Inbound – Full Day	148
Figure 33.	Stirling Person Share Distribution Outbound – Full Day	149

LIST OF TABLES

Table 1.	Spaces for People Measures Summary	10
Table 2.	Traffic Survey Summary	24
Table 3.	Upper Craigs, Stirling (east footpath) Pedestrian Behaviour Summary	26
Table 4.	Upper Craigs, Stirling (west footpath) Pedestrian Behaviour Summary	27
Table 5.	Murray Place, Stirling (east footpath) Pedestrian Volume Summary	29
Table 6.	Murray Place, Stirling (west footpath) Pedestrian Volume Summary	30
Table 7.	Upper Craigs, Stirling (east footpath) Pedestrian Volume Summary	32
Table 8.	Upper Craigs, Stirling (west footpath) Pedestrian Volume Summary	33

Table 9.	Murray Place, (Ian Gallacher Jewellers) Stirling (west footpath) Pedestrian Volume Summary	35
Table 10.	Murray Place, (Ian Gallacher Jewellers) Stirling (east footpath) Pedestrian Volume Summary	37
Table 11.	Site 1 Murray Place (Northbound)	40
Table 12.	Site 1 Murray Place (Southbound)	42
Table 13.	Site 2 Upper Craigs (Eastbound)	44
Table 14.	Site 2 Upper Craigs (Westbound)	46
Table 15.	Site 3 Millennium Way (Northbound)	48
Table 16.	Site 3 Millennium Way (Southbound)	49
Table 17.	Site 4 Murray Place (Southbound)	50
Table 18.	Site 5 Causewayhead Road (Northbound)	51
Table 19.	Site 5 Causewayhead Road (southbound)	52
Table 20.	Site 6 Forrest Road (Northbound)	53
Table 21.	Site 3 Forrest Road (Southbound)	54
Table 22.	Site 7 Argyll Avenue (Eastbound)	55
Table 23.	Site 7 Argyll Avenue (Westbound)	56
Table 24.	Site 1 High Street (northbound)	57
Table 25.	Site 2 Perth Road (Northbound)	58
Table 26.	Site 2 B8033 Perth Road (Southbound)	59
Table 27.	Site 3 Castle Street, Dunblane (Northbound)	60
Table 28.	Site 3 Stirling Road (Southbound)	61
Table 29.	Site 1 Henderson Street (Eastbound)	62
Table 30.	Site Henderson Street (Westbound)	63
Table 31.	Site 1 Main Street (Eastbound)	64
Table 32.	Site Main Street (Westbound)	65
Table 33.	Site 1 A905 (Eastbound)	66
Table 34.	Site 1 A905 (Westbound)	67
Table 35.	Site 1 Main Street (Northbound)	68
Table 36.	Site 1 Main Street (Southbound)	69
Table 37.	Site 2 Cadgers Loan (Eastbound)	70
Table 38.	Site 2 Cadgers Loan (Westbound)	71
Table 39.	Site Main Street (Eastbound)	72
Table 40.	Site 1 Main Street (Westbound)	73
Table 41.	Site 1 Main Street (Northbound)	74
Table 42.	Site 1 Main Street (Southbound)	75
Table 43.	Site 1 Manse Brae (Eastbound)	76
Table 44.	Manse Brae (Westbound)	77
Table 45.	Site 1 Station Road (Northbound)	78
Table 46.	Station Road (Southbound)	79
Table 47.	High Street (Northbound)	81
Table 48.	High Street Pedestrian Link Flow	82
Table 49.	Perth Road (Northbound) Link Flow	83
Table 50.	Perth Road (Southbound) Link Flow	84
Table 51.	Perth Road Pedestrian Link Flow	85
Table 52.	Stirling Road (Northbound) Link Flow	86
Table 53.	Stirling Road (Southbound) Link Flow	87
Table 54.	Stirling Road Pedestrian Link Flow	88
Table 55.	Henderson Street (Eastbound) Link Flow	89

Table 56.	Henderson Street (Westbound) Link Flow	90
Table 57.	Henderson Street Pedestrian Link Flow	91
Table 58.	Main Street (Eastbound) Link Flow	92
Table 59.	Main Street (Westbound) Link Flow	93
Table 60.	Main Street Pedestrian Link Flow	94
Table 61.	A905 (Eastbound) Link Flow	95
Table 62.	A905 (Westbound) Link Flow	96
Table 63.	A905 Pedestrian Link Flow	97
Table 64.	Main Street (Northbound) Link Flow	98
Table 65.	Main Street (Southbound) Link Flow	99
Table 66.	Main Street Pedestrian Link Flow Summary	100
Table 67.	Cadgers Loan (Eastbound) Link Flow	101
Table 68.	Cadgers Loan (Westbound) Link Flow	102
Table 69.	Cadgers Loan Pedestrian Link Flow Summary	103
Table 70.	Main Street (Eastbound) Link Flow	104
Table 71.	Main Street (Westbound) Link Flow	105
Table 72.	Main Street Pedestrian Link Flow	106
Table 73.	Main Street (Northbound) Link Flow	107
Table 74.	Main Street (Southbound) Link Flow	108
Table 75.	Main Street Pedestrian Flow Summary	109
Table 76.	Car Park Occupancy Summary	111
Table 77.	Forrest Road (east Kerbside)	113
Table 78.	Forrest Road (west Kerbside)	114
Table 79.	B8052 Signalised Crossing Footway	116
Table 80.	B8052 East-side Footway	118
Table 81.	Station Road North Kerbside Footway	119
Table 82.	Station Road South Kerbside Footway	120
Table 83.	Wellgreen Road to Upper Craigs Footway	121
Table 84.	Stirling Railway Station Entry/Exit Counts	122
Table 85.	Bus & Coach Cordon Occupancy (AM Peak 07:30 – 09:30)	124
Table 86.	Bus & Coach Cordon Occupancy (Inter Peak 11:00 – 14:00)	125
Table 87.	Bus & Coach Cordon Occupancy (PM Peak 16:00 – 18:00)	126
Table 88.	Vehicle Cordon Occupancy Inbound (AM Peak 07:30 – 09:30)	127
Table 89.	Vehicle Inbound Cordon Occupancy (Inter Peak 11:00 – 14:00)	128
Table 90.	Vehicle Inbound Cordon Occupancy (PM Peak 16:00 – 18:00)	129
Table 91.	Vehicle Cordon Occupancy Outbound (AM Peak 07:30 – 09:30)	130
Table 92.	Vehicle Inbound Cordon Occupancy (Inter Peak 11:00 – 14:00)	131
Table 93.	Vehicle Inbound Cordon Occupancy (PM Peak 16:00 – 18:00)	132
Table 94.	Dunblane Vehicle Occupancy	150

(Blank Page)

1. INTRODUCTION

1.1 Background

- 1.1.1 SYSTRA Ltd (SYSTRA) was commissioned by regional transport authority Tactran in June 2020 in response to the *Spaces for People* initiative, to undertake a comprehensive survey programme to capture changes in active travel behaviour and mode share as the people of Angus, Dundee, Perth & Kinross and Stirling change travel behaviours following the Covid-19 outbreak.
- 1.1.2 The results of the surveys will inform decisions on the benefits of the temporary infrastructure measures being brought forward by the four local authorities Dundee City Council, Perth & Kinross Council, Stirling Council and Angus Council.

1.2 Spaces for People

- 1.2.1 The *Spaces for People* programme is funded by the Scottish Government and managed by Sustrans Scotland. The aim of the initiative is to enable statutory bodies to implement measures focused on protecting public health by enabling pedestrians and cyclists to social distance safely on public roads physical distancing.
- 1.2.2 The initiative focuses on essential journeys, which might include:
- Journeys to and from hospitals and health services
 - Journeys to shops, pharmacies, schools, and other returning workplaces
 - Journeys for recommended exercise, for example neighbourhoods and local parks.
- 1.2.3 The measures being investigated by the authorities will provide temporary walking and cycling infrastructure that helps to protect public health by enabling safe physical distancing for essential journeys and exercise for everyone, in particular where there are space constraints or user safety concerns. The measures might include, but are not limited to:
- Physical interventions
 - Selective road closures using planters or cones
 - Reallocating road space for wider footway
 - Reallocating road space for cycle tracks
 - Reallocating parking and loading
 - Reduced speed limits and/or traffic calming measures
 - Removal of barriers to open up constrained spaces and remove pinch points.
- 1.2.4 This Report details the traffic surveys undertaken in the Stirling Council area in four phases between October 2020 and September 2021, and the mode share summary information for each location.

1.3 Measures

- 1.3.1 Between the 5th and 26th October 2020, Stirling Council ran a 3 week consultation with the community to direct how and where this funding should be allocated. Council Officers, along with Officers from Sustrans, assessed all responses to the consultation and have finalised the projects below for development and delivery.

Table 1. Spaces for People Measures Summary

Area	Intervention Description
Bannockburn - Stirling	- Give Space Campaign at Bannockburn Primary School
Causewayhead - Stirling	- Speed reduction to 20mph and footpath widening
Kings Parks - Stirling	- Speed reduction to 20mph in various locations & cycle parking at Kings Park
Laurelhill - Stirling	- Temporary change to road markings at Laurelhill Roundabout
Millenium Way - Stirling	- Installation of bidirectional cycle lane, including cycle defender units and installation of direction signage
Murray Place - Stirling	- Formalising signage advertising road closure and installation of cycle parking and planters
Raploch - Stirling	- Speed reduction to 20mph in various locations and temporary build outs
Riverside - Stirling	- Speed reduction to 20mph & Give Space Campaign at Riverside Primary School
Torbex - Stirling	- Speed reduction to 20mph in various locations
Upper Craigs - Stirling	- Pedestrian warning markings on carriageway and cycle parking
Whins o Milton - Stirling	- Pirnhall Rd and Glasgow Road speed reduction to 40mph
Stirling (cycle parking)	- Installation of cycle parking at Broad Street, Spittal Street and St Johns Street
Stirling (20mph zones)	- Speed reduction to 20mph at the following locations - Manse Crescent, Bellfield Road, Randolph Road, Livilands Gate, Livilands Court, Brentham Avenue, Brentham Crescent, Annfield Grove, Clifford Road, Randolph Court, Annfield Gardens, Livilands Lane
Aberfoyle	- Speed reduction to 20mph at various locations and installation of cycle parking at various locations
Bridge of Allan	- Installation of cycle parking, defender units and dropped kerbs at various locations on Henderson Street and speed reduction to 30mph, extension of cycle lane on A9 to Carse Road and speed reduction to 50mph
Callander	- Speed reduction to 20mph in various locations, installation of cycle parking at various locations on Main Street and removal of barriers/installation of shared use signs and bollards on old railway line
Cambuskenneth	- Speed reduction to 30mph on Ladysneuk Road
Dunblane	- Speed reduction to 20mph in various locations, installation of cycle parking at various locations and installation of bollards on existing build outs on Old Doune Road
Fallin	- Speed reduction to 20 mph at on Main Street, Castle View and Baxter Street, and installation of temporary zebra crossing on Main Street
Gargunnoch	- Addition of pedestrian warning markings to carriageway on Station Road, installation of gateway treatments on Station Road and Leckie Road
Killearn	- Speed reduction to 20mph and installation of cycle parking at various locations
Plean	- Give Space Campaign at East Plean Primary School, installation of cycle parking at Plean Country Park and speed reduction to 20mph at Main Street, Cadgers Loan, Stirling Place and Parkside Court

2. DATA COLLATION

2.1 Overview of Traffic Surveys

2.1.1 A programme of traffic surveys for all the locations was undertaken by specialists Nationwide Data Collection (NDC).

2.1.2 The types of surveys undertaken in the Stirling area were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Rail Station Counts*
- Bus Station Counts*
- Bus Occupancy Counts*
- Vehicle Occupancy Counts*.

2.1.3 Data was recorded over a 16 hour period (06:00-22:00) and analysis undertaken for the following time periods:

- AM Peak Period – 07:00 – 10:00
- Inter Peak Period – 10:00 – 16:00
- PM Peak Period – 16:00 – 19:00.

2.1.4 The surveys were undertaken on the following dates:

- October 2020 – Thursday 22nd to Saturday 24th October 2020
- February 2021 – Thursday 25th to Saturday 27th February 2021
- May 2021 – Thursday 11th to Saturday 13th May 2021
- September 2021 - Thursday 9th to Saturday 11th September 2021.

2.1.5 The exception to the programme were the rail, bus and car occupancy surveys informing the mode share analysis (denoted by * above). These were undertaken on Thursday 11th May 2021 only.

2.2 Pedestrian Behaviour and Volume Counts

Stirling

2.2.1 Six locations within Stirling were selected in discussion with Tactran for pedestrian volume counts and behaviour surveys. These are detailed below and in Figure 1:

- Pedestrian 1 – Murray Place (East side - McDonalds)
- Pedestrian 2 – Murray Place (West side - McDonalds)
- Pedestrian 3 – Upper Craigs North side
- Pedestrian 4 – Upper Craigs South Side
- Pedestrian 5 – Murray Place (West side Ian Gallacher Jewellers)
- Pedestrian 6 – Murray Place (East side Ian Gallacher Jewellers).

2.2.2 Two-directional classified link counts were carried out within the study section, to include both pedestrians and cyclists. Results were categorised as follows:

- Pedestrians
- Wheeled pedestrians (on scooters etc)
- Pedal Cycles
- Motorcycles
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.



Figure 1. Pedestrian Surveys - Stirling

2.3 Speed Surveys

Stirling

2.3.1 Five locations within Stirling were selected for speed surveys over a seven day period. These are detailed below and in Figures 2 and 3, and above in Figure 1:

- Speed 1 - Murray Place (McDonalds)
- Speed 2 - Upper Craigs
- Speed 3 - Millenium Way
- Speed 4 - Murray Place (Ian Gallacher Jewellers)
- Speed 5 - Causewayhead Road.

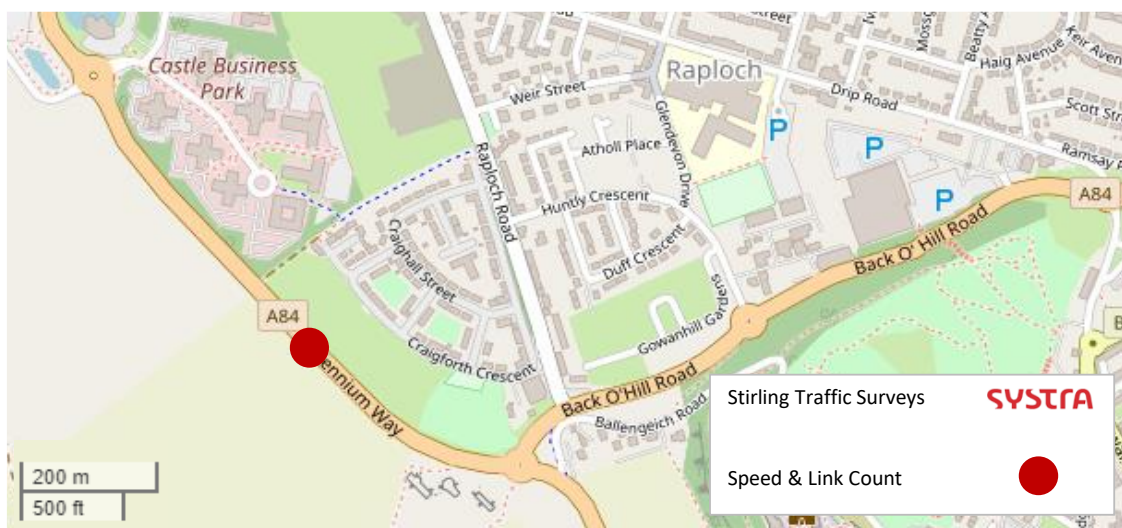


Figure 2. Speed Surveys - Stirling

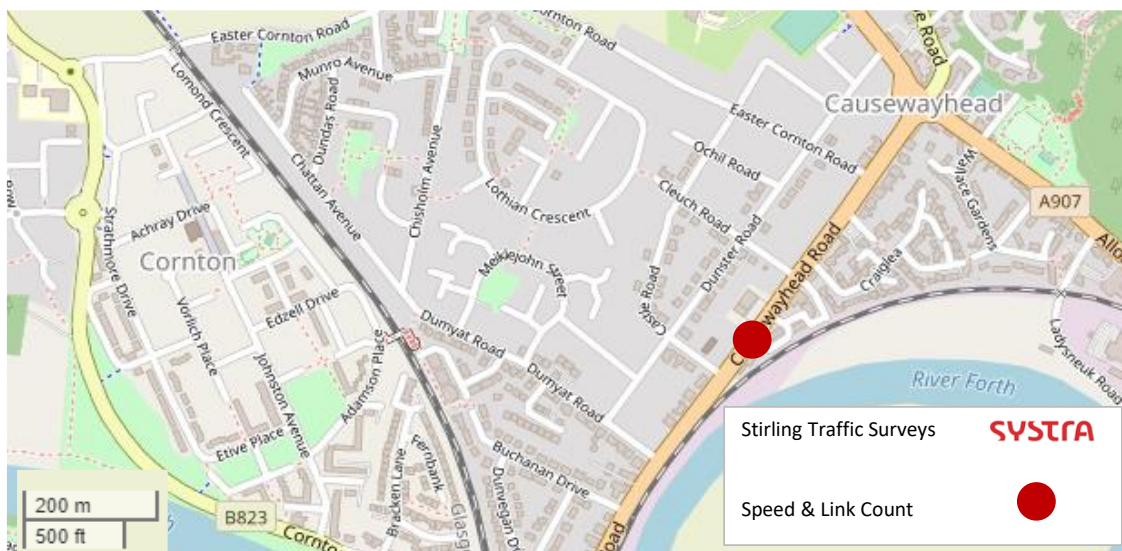


Figure 3. Speed Surveys - Stirling

Dunblane

2.3.2 Three locations within Dunblane was selected for speed surveys over a seven day period. This is detailed below in Figure 4:

- Speed 1 - High St (near gold post box)
- Speed 2 - B8033 Perth Rd (north of Bridge)
- Speed 3 - B8033 Stirling Rd (South of Central Scotland jewellery access).



Figure 4. Speed Surveys - Dunblane

Bridge of Allan

2.3.3 One location within Bridge of Allan was selected for speed surveys over a seven day period. This is detailed below in Figure 5:

- Speed 1 - Henderson St (Outside Baynes).

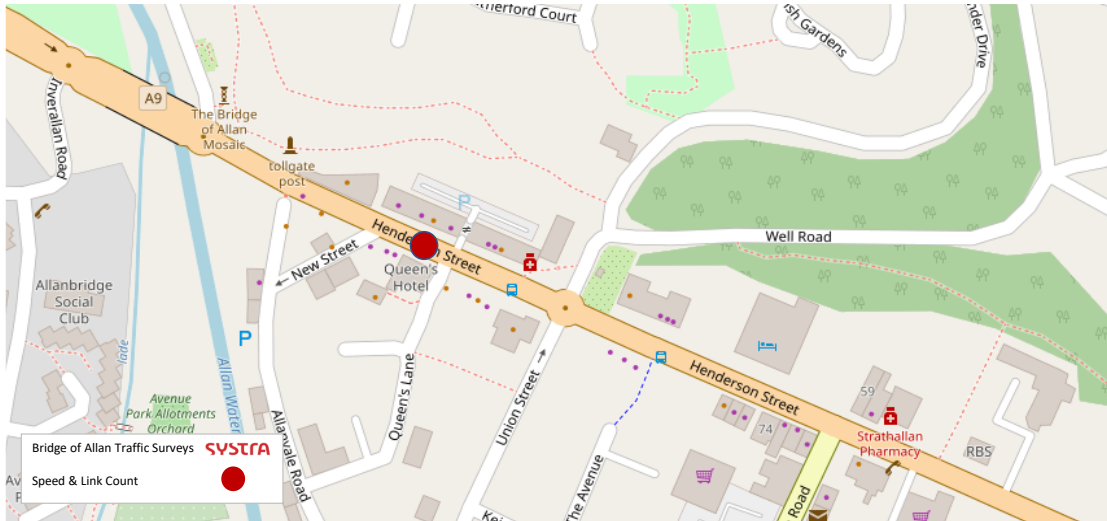


Figure 5. Speed Surveys – Bridge of Allan

Aberfoyle

2.3.4 One location within Aberfoyle was selected for speed surveys over a seven day period. This is detailed below in Figure 6:

- Speed 1 - Main St (Near Coop).

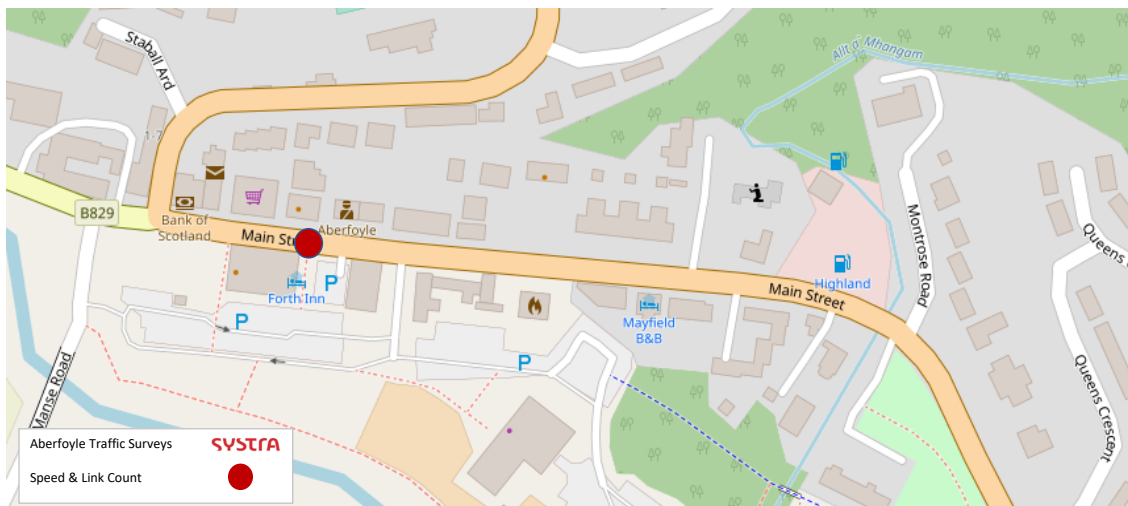


Figure 6. Speed Surveys – Aberfoyle

Fallin

2.3.5 One location within Fallin was selected for a link count and speed survey over a seven day period. This is detailed below in Figure 7:

- Speed 1 - A905 (Near library/health centre).

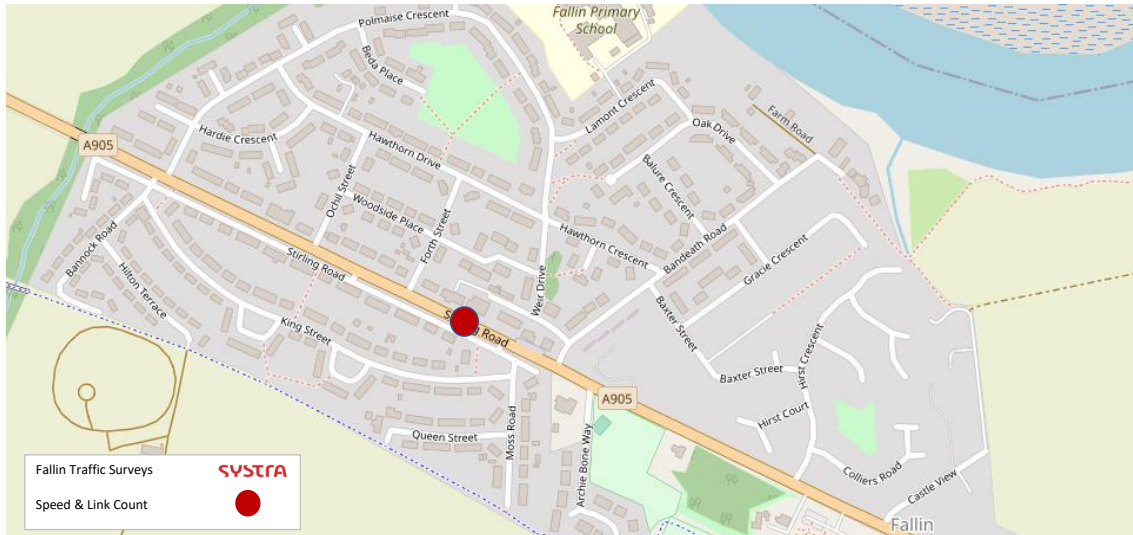


Figure 7. Speed Surveys – Fallin

Plean

2.3.6 One location within Plean was selected for speed surveys over a seven day period. This is detailed below in Figure 8:

- Speed 1 - Main St (Near Graham Bakers/Keystore Convenience shop).

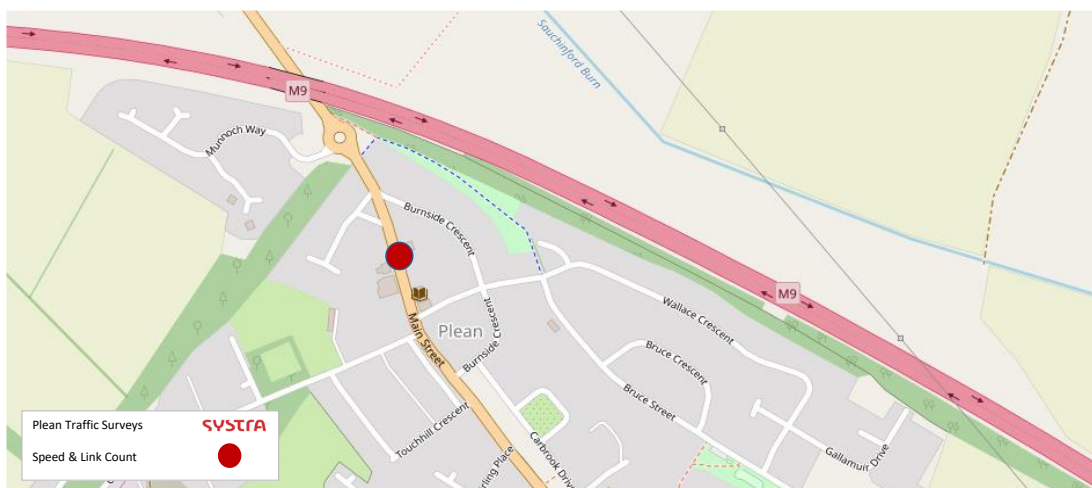


Figure 8. Speed Surveys – Plean

Callander

2.3.7 One location within Callander was selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 9:

- Speed 1 - Main St (Near Coop).

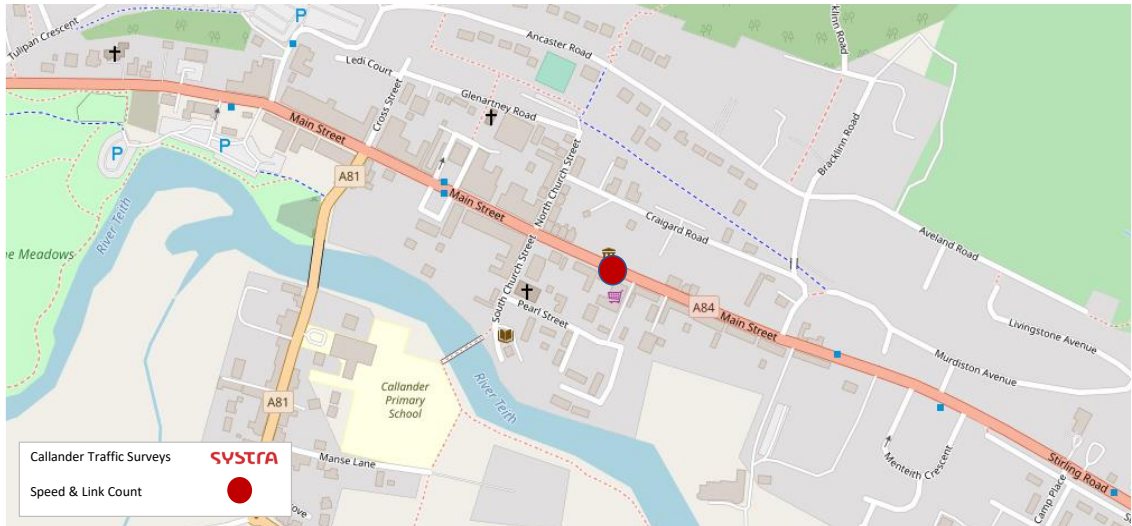


Figure 9. Link & Speed Surveys – Callander

Killearn

2.3.8 One location within Killearn was selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 10:

- Speed 1 - Main St (Near Coop).

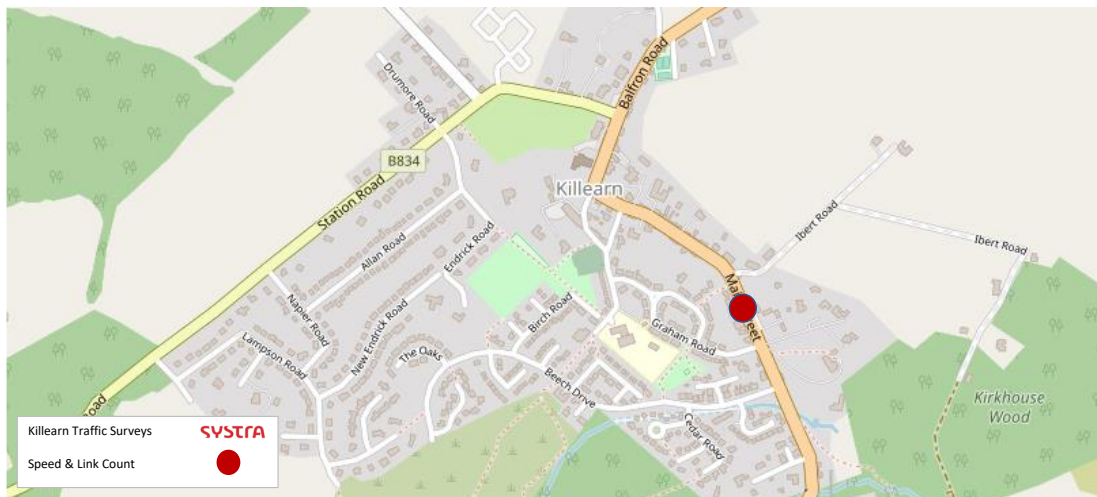


Figure 10. Link & Speed Surveys – Killearn

Gargunnock

2.3.9 One location within Gargunnock was selected for a link count and speed survey over a seven day period. This is detailed below and in Figure 11:

- Speed 1 - Manse Brae

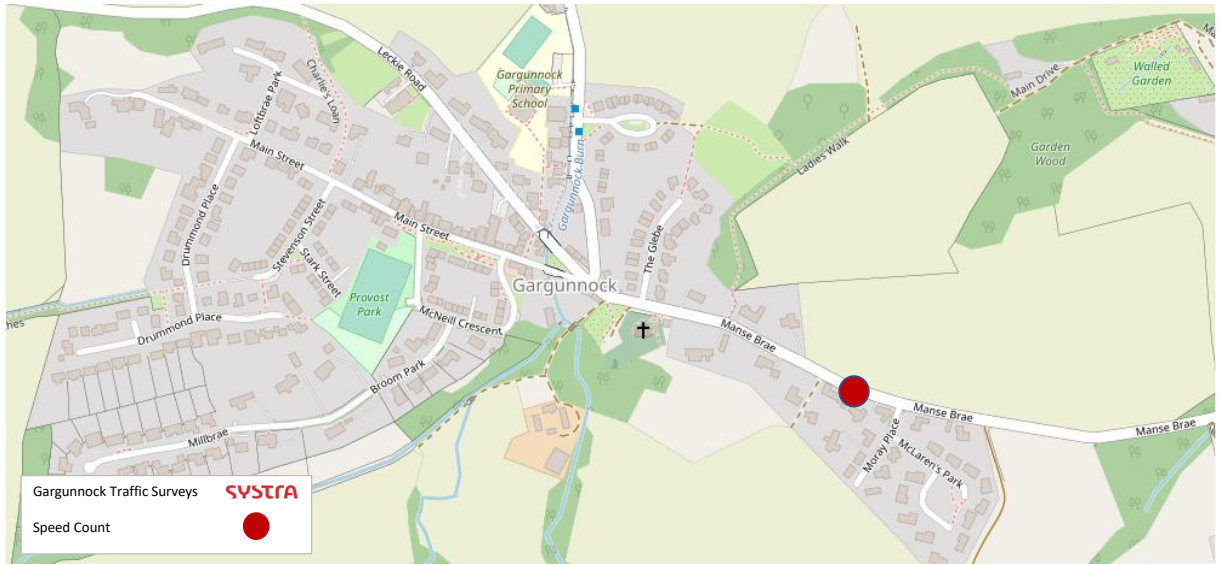


Figure 11. Speed Surveys – Gargunnock

2.5 Classified Link Counts

Stirling

2.5.1 Thirteen locations within Stirling were selected for classified link counts. These are detailed below and in Figure 12 and Figure 13. The mode share cordon counts were undertaken on the Thursday of each survey period between 06:00 and 22:00:

- COP 1 - Barnton Street
- COP 2 - Maxwell Place
- COP 3 - Station Rd (one way-east)
- COP4 - Baker Street
- COP 5 - Corn Exchange Road
- COP 6 - A811 Dumbarton Road
- COP 7 - Kings Park Road
- COP 8 - St Ninians Road
- COP 9 - Wellgreen Rd (no buses required)
- COP 10 - Goosecroft Road (buses only)
- COP 11 - Goosecroft Road (buses only)
- COP 12 - Millenium Way
- COP 13 - St John St (South West of Toolbooth access).

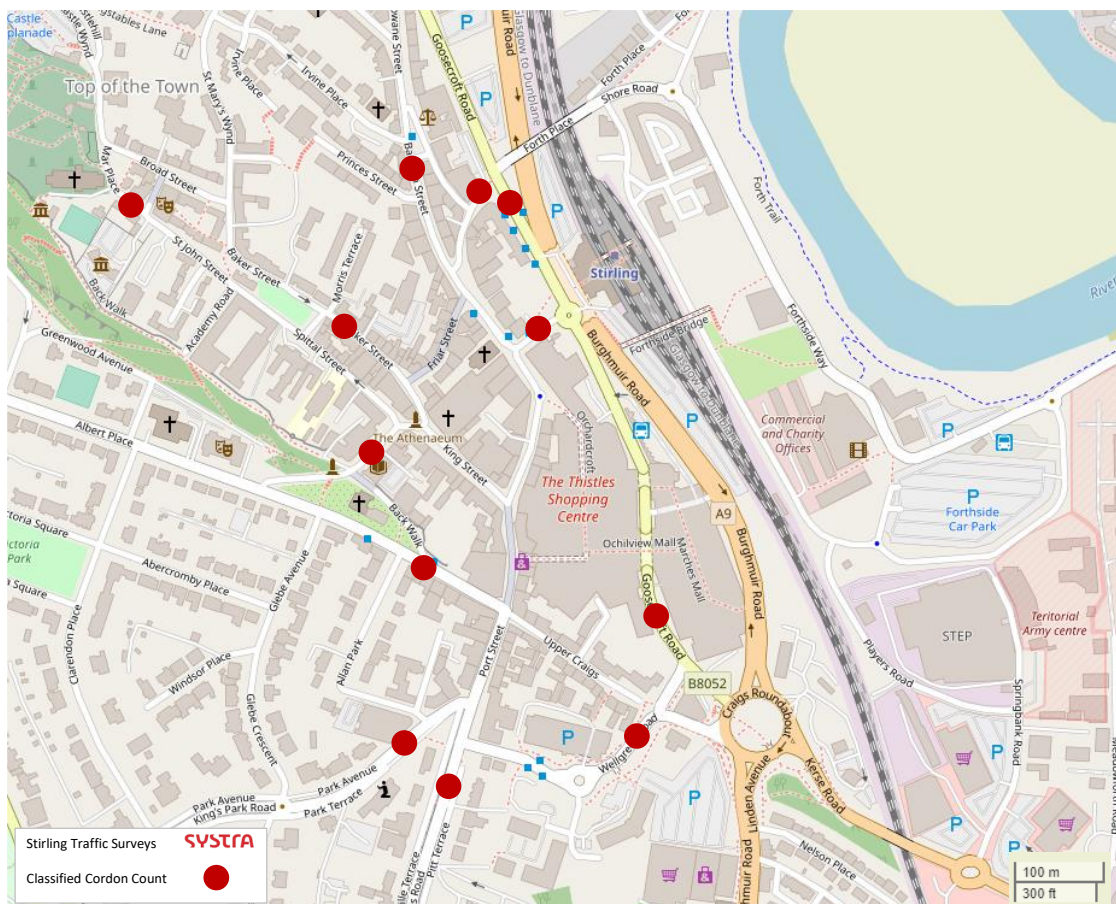


Figure 12. Classified Link Count Surveys – Stirling



Figure 13. Classified Turn Count Surveys – Stirling

2.5.2 At each site, link count data was collated into the following categories:

- Pedestrians
- Pedal Cycles
- Motorcycles
- Horses
- Cars/Taxis
- LGVs
- OGV1
- OGV2
- Service Buses
- Private Coaches.

2.6 Car Park Occupancy Surveys

Stirling

2.6.1 Six locations within Stirling were selected for car park occupancy surveys. These are detailed below in Figure 14:

- Car 1 - Dalgleish Court
- Car 2 - Wellgreen Road Multistorey
- Car 3 - Wellgreen Place
- Car 4 - Burghmuir Retail Park (Waitrose)
- Car 5 - The Marches Multistorey
- Car 6 - The Thistles Multistorey

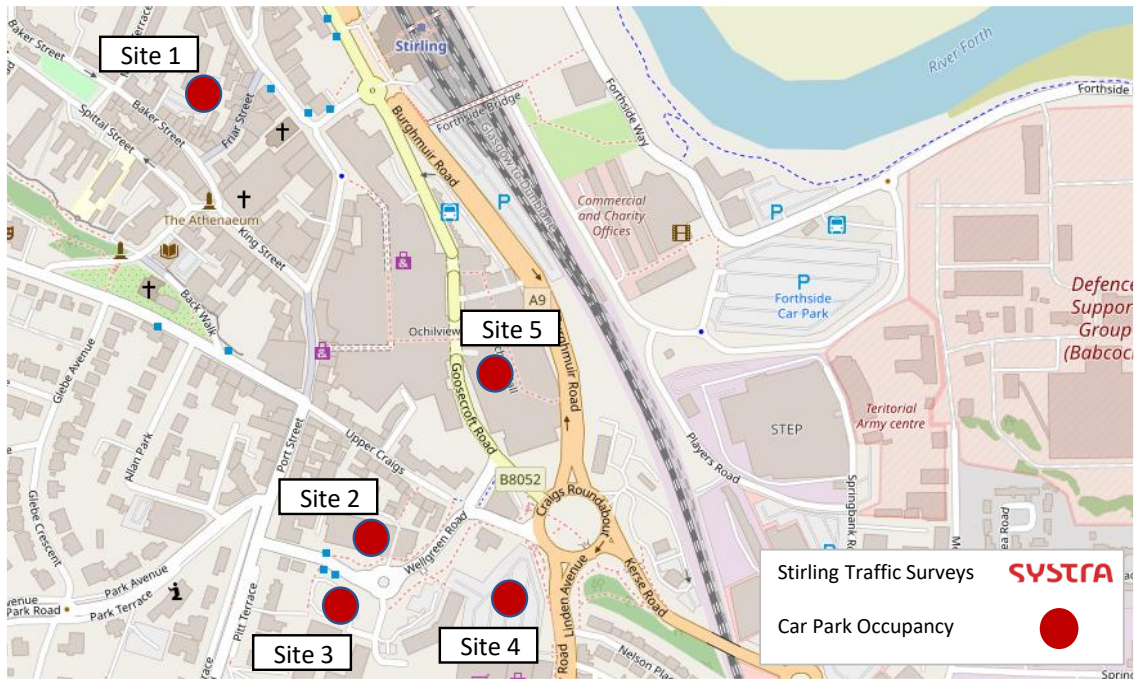


Figure 14. Car Occupancy Surveys – Stirling

2.7 School On Street Car Parking Surveys

Stirling

2.7.1 One location within Stirling was selected for on street car parking surveys. It is detailed below in Figure 15:

- Parking 1 - Riverside Primary School

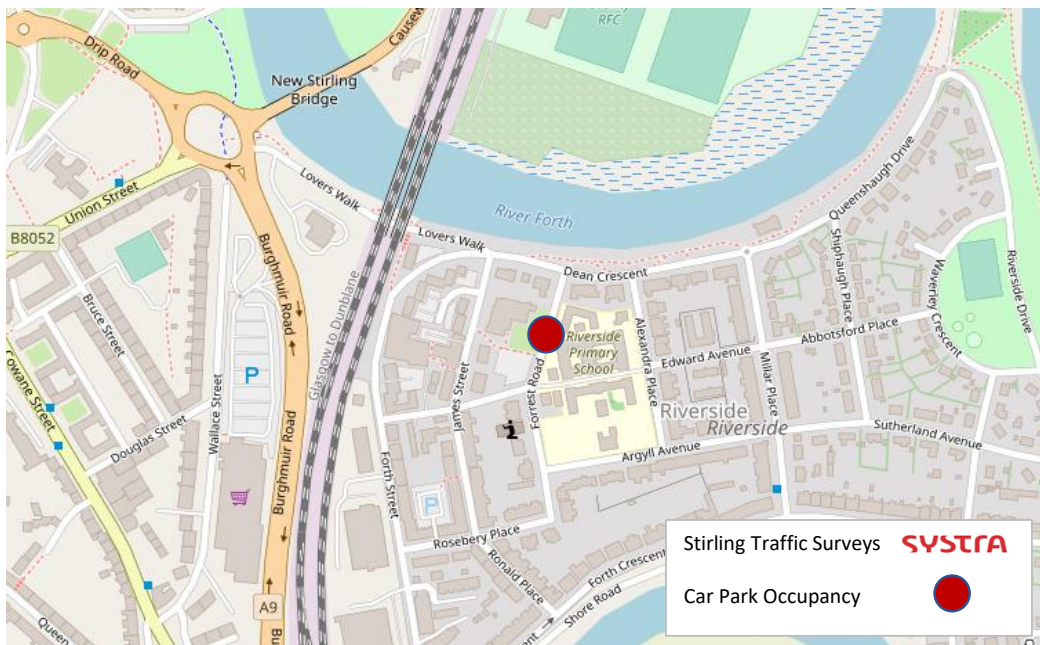


Figure 15. School Car Occupancy Surveys – Stirling

2.8 Footway Surveys

Stirling

2.8.1 Five locations within Stirling was selected for footway surveys. These are detailed below:

- Footway 1 - B8052 Signalised Pedestrian Crossing at Rail Station
- Footway 2 - B8052 Eastside footway between Rail Station and Bus Station
- Footway 3 - Station Rd between Murray Pl and Goosecroft Rd (North Side)
- Footway 4 - Station Rd between Murray Pl and Goosecroft Rd (South Side)
- Footway 5 - Wellgreen Road to Upper Craigs

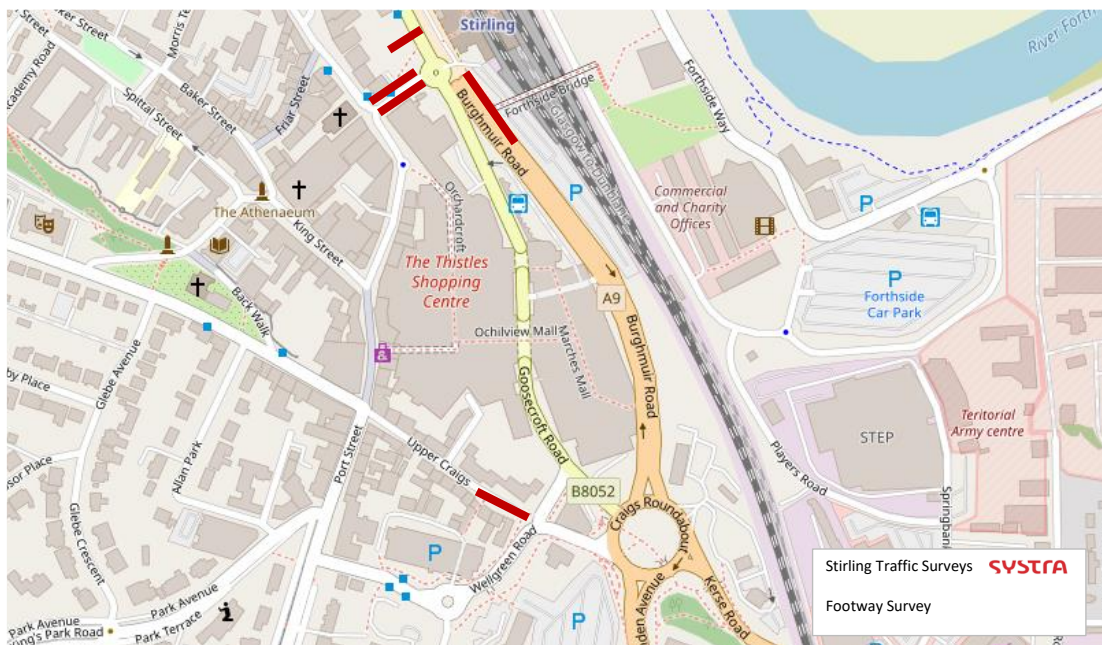


Figure 16. Footway Surveys – Stirling

2.9 Mode Share Surveys

Rail Station Barrier Counts

2.9.1 Barrier counts were conducted at Stirling rail station over the 16 hour period (06:00-22:00) on Thursday 11th May 2021 with pedestrian movements captured at both entrances/exits to the station.

Bus Occupancy Surveys

2.9.2 Bus occupancy counts were undertaken at sites COP1 to COP13 shown in Figure 12 over the 16 hour period (06:00-22:00) on Thursday 11th May 2021.

Tactran Mode Share Surveys	
Stirling Council Area	GB01T20C61
Survey Report	16/12/2021

Vehicle Occupancy Counts

2.9.3 Vehicle occupancy counts were undertaken all classified turn count sites over the 16 hour period (06:00-22:00) on Thursday 11th May 2021.

2.10 Car Occupancy Counts – Dunblane

2.10.1 Vehicle occupancy counts were undertaken at two sites in Dunblane over the 16 hour period (06:00-22:00) on Wednesday 5th May 2021 as shown in Figure 17.

2.10.2 The locations surveyed were:

- B8033 Perth Road (north of Bridge)
- B8033 Stirling Road (south of Central Scotland Jewellery access)



Figure 17. Occupancy Surveys - Dunblane

2.11 Summary

2.11.1 A summary of survey programme undertaken across the Stirling Council area is given in Table 2 below.

Table 2. Traffic Survey Summary

Survey Requirement		Nov-20	Feb-21	May-21	Sep-21
Stirling	Pedestrian Surveys	✓	✓	✓	✓
	Footway Surveys	✓	✓	✓	✓
	Car Park Surveys			✓	
	Speed Surveys	✓	✓	✓	✓
	Cordon Counts	✓	✓	✓	✓
	School Parking Monitoring			✓	✓
	Occupancy Surveys			✓	
Dunblane	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
	Occupancy Survey			✓	
Bridge of Allan	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
Aberfoyle	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
Fallin	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
Plean	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
Callander	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
Killearn	Speed Surveys		✓	✓	✓
	Classified Link Count		✓	✓	✓
Gargunnoch	Speed Surveys		✓	✓	✓

3. PEDESTRIAN BEHAVIOUR AND VOLUME COUNTS

3.1 Pedestrian Behaviour Surveys

3.1.1 Summary tables below present the results of the pedestrian behaviour surveys in the Stirling Council area.

3.1.2 Following discussion with TACTRAN analysis was undertaken for the following sites in October 2020 only:

- Pedestrian 3 – Upper Craigs North side
- Pedestrian 4 – Upper Craigs South Side

3.2 Pedestrian Volume Surveys

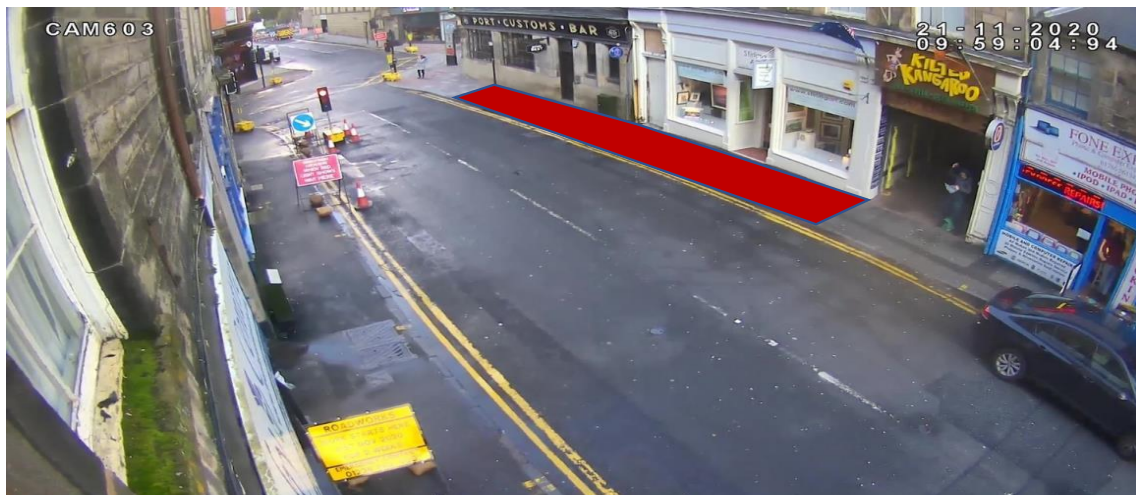
3.2.1 Six locations within Stirling were selected in discussion with Tactran for pedestrian volume counts:

- Pedestrian 1 – Murray Place (East side - McDonalds)
- Pedestrian 2 – Murray Place (West side - McDonalds)
- Pedestrian 3 – Upper Craigs North side
- Pedestrian 4 – Upper Craigs South Side
- Pedestrian 5 – Murray Place (West side Ian Gallacher Jewellers)
- Pedestrian 6 – Murray Place (East side Ian Gallacher Jewellers).

3.3 Results of Pedestrian Behaviour Surveys

3.3.1 Table 3 below presents the results of the pedestrian behaviour data on the east side of Upper Craigs in Stirling.

Table 3. Upper Craigs, Stirling (east footpath) Pedestrian Behaviour Summary



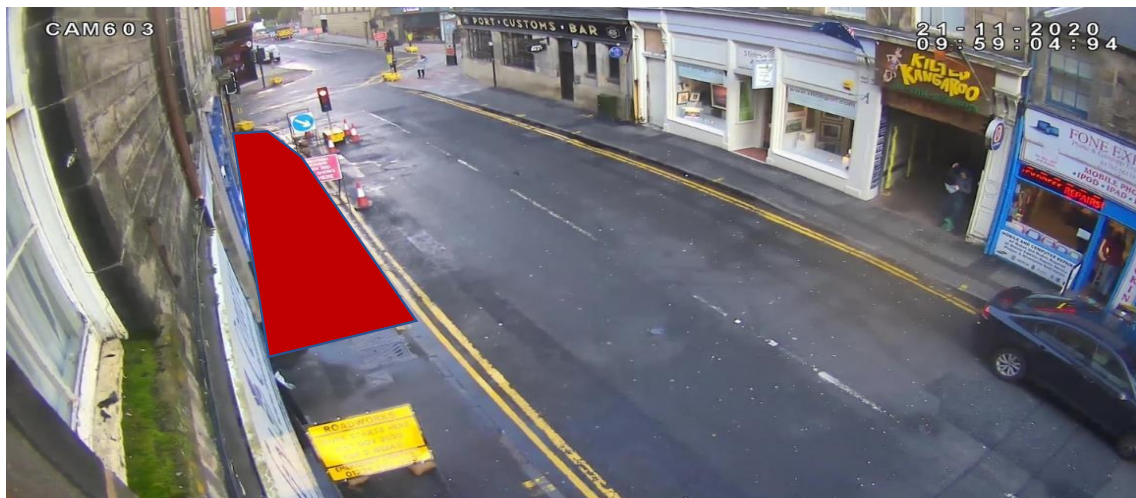
Site 3 Upper Craigs Step Out Analysis East Footpath (3 day Thur-Fri-Sat November 2020)

Thursday 19th Nov 2020	2-Way Ped Count	2 -Way Cyclist on Bike	2 -Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	4969	8	6	1005	3566	141	0	61	5
AM Peak Pd 0700-1000	528	2	0	167	287	34	0	12	4
AM Peak Hr 0800-0900	119	0	0	54	31	6	0	2	3
IP Peak Pd 1000-1600	3207	1	5	441	2772	93	0	49	1
IP Peak Hr 1200-1300	546	0	2	92	427	5	0	5	0
PM Peak Pd 1600-1900	1064	4	1	289	475	14	0	0	0
PM Peak Hr 1700-1800	323	3	0	114	106	5	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	21%	75%	3%	0%	1%	0%
Friday 20th Nov 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	4414	7	1	844	3096	122	0	57	0
AM Peak Pd 0700-1000	551	1	0	206	297	7	0	0	0
AM Peak Hr 0800-0900	155	0	0	77	94	7	0	0	0
IP Peak Pd 1000-1600	3035	4	0	357	2456	87	0	51	0
IP Peak Hr 1200-1300	536	0	0	21	1	0	0	1	0
PM Peak Pd 1600-1900	727	1	1	0	0	0	0	0	0
PM Peak Hr 1700-1800	238	0	0	0	0	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	20%	75%	3%	0%	1%	0%
Saturday 21st Nov 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1485	12	0	771	254	22	0	0	1
AM Peak Pd 0700-1000	157	1	0	105	16	1	0	0	1
AM Peak Hr 0800-0900	46	1	0	0	0	0	0	0	0
IP Peak Pd 1000-1600	964	8	0	446	214	18	0	0	0
IP Peak Hr 1200-1300	143	1	0	0	0	0	0	0	0
PM Peak Pd 1600-1900	237	3	0	0	0	0	0	0	0
PM Peak Hr 1700-1800	61	1	0	0	0	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	74%	24%	2%	0%	0%	0%

3.3.2 Table 3 shows that on average over the 3 days, 38% of pedestrians had no conflict, 58% pass within 2 metres of each other , 3% pass within a space over 2m and 1% cross the road.

3.3.3 Table 4 below presents the results of the pedestrian behaviour data on the west side of Upper Craigs in Stirling.

Table 4. Upper Craigs, Stirling (west footpath) Pedestrian Behaviour Summary



Site 4 Upper Craigs Step Out Analysis West Footpath (3 day Thur-Fri-Sat November 2020)

Thursday 19th Nov 2020	2-Way Ped Count	2 -Way Cyclist on Bike	2 -Way Cyclist on Foot	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1552	6	0	1004	237	40	0	8	2
AM Peak Pd 0700-1000	159	2	0	114	16	12	0	1	0
AM Peak Hr 0800-0900	45	0	0	34	2	2	0	0	0
IP Peak Pd 1000-1600	963	4	0	577	179	24	0	7	2
IP Peak Hr 1200-1300	185	1	0	94	50	3	0	2	0
PM Peak Pd 1600-1900	352	0	0	232	41	4	0	0	0
PM Peak Hr 1700-1800	119	0	0	71	20	2	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	78%	18%	3%	0%	1%	0%
Friday 20th Nov 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	1382	5	3	1036	227	19	0	9	0
AM Peak Pd 0700-1000	151	1	0	145	22	2	0	0	0
AM Peak Hr 0800-0900	43	1	0	90	15	0	0	0	0
IP Peak Pd 1000-1600	862	2	3	572	163	13	0	8	0
IP Peak Hr 1200-1300	168	0	0	16	0	0	0	0	0
PM Peak Pd 1600-1900	315	2	0	0	0	0	0	0	0
PM Peak Hr 1700-1800	103	0	0	0	0	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	80%	18%	1%	0%	1%	0%
Saturday 21st Nov 2020	2-Way Ped Count	No Conflict Required	OGV1	No Conflict Required	Pass with space under 2 m (on footpath)	Pass with space over 2 m (on footpath)	Build Out	Step out into live road	Cross
0600-2200	506	4	1	396	42	4	0	0	0
AM Peak Pd 0700-1000	68	0	0	60	1	0	0	0	0
AM Peak Hr 0800-0900	22	0	0	0	0	0	0	0	0
IP Peak Pd 1000-1600	268	1	1	215	17	4	0	0	0
IP Peak Hr 1200-1300	45	0	0	0	0	0	0	0	0
PM Peak Pd 1600-1900	130	3	0	0	0	0	0	0	0
PM Peak Hr 1700-1800	54	0	0	0	0	0	0	0	0
0600-2200 Behaviour Proportion (%)	-	-	-	90%	10%	1%	0%	0%	0%

3.3.4 Table 4 shows that on average over the 3 days, 83% of pedestrians had no conflict, 15% pass within 2 metres of each other and 2% pass within a space over 2m.

3.4 Results of Pedestrian Volume Surveys

- 3.4.1 Table 5 below presents the results of the pedestrian volume data on the east side of Murray Place in Stirling during each of the four survey periods.

Tactran Mode Share Surveys	
Stirling Council Area	GB01T20C61
Survey Report	16/12/2021

Table 5. Murray Place, Stirling (east footpath) Pedestrian Volume Summary

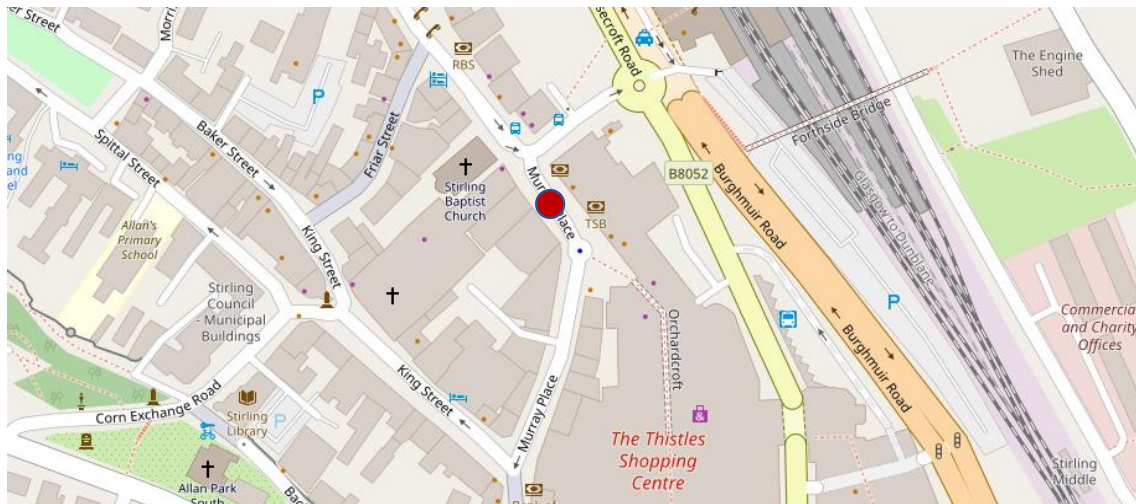


Stirling Site 1 East Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	2575	89	17	5	4	32	2	0	2724
0600 - 2200 Southbound	2622	77	20	7	8	32	3	0	2769
AM Peak Pd 0700-1000 Northbound	196	2	0	0	0	1	0	0	200
AM Peak Pd 0700-1000 Southbound	313	7	2	1	1	2	0	0	325
IP Peak Pd 1000-1600 Northbound	1600	58	15	5	4	10	2	0	1694
IP Peak Pd 1000-1600 Southbound	1735	47	9	6	7	12	2	0	1819
PM Peak Pd 1600-1900 Northbound	650	27	2	0	0	12	0	0	691
PM Peak Pd 1600-1900 Southbound	464	23	9	0	0	11	1	0	507
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1273	42	12	3	5	29	3	0	1367
0600 - 2200 Southbound	1326	40	14	3	7	35	2	0	1428
AM Peak Pd 0700-1000 Northbound	94	3	0	1	0	1	0	0	99
AM Peak Pd 0700-1000 Southbound	147	2	2	0	1	3	0	0	155
IP Peak Pd 1000-1600 Northbound	844	24	9	2	5	16	2	0	903
IP Peak Pd 1000-1600 Southbound	879	30	12	3	6	20	1	0	951
PM Peak Pd 1600-1900 Northbound	241	12	2	0	0	4	0	0	260
PM Peak Pd 1600-1900 Southbound	217	8	0	0	0	10	1	0	236
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	2803	197	40	7	7	27	6	0	3087
0600 - 2200 Southbound	3011	194	36	13	11	28	5	0	3297
AM Peak Pd 0700-1000 Northbound	171	5	1	2	0	2	0	0	181
AM Peak Pd 0700-1000 Southbound	297	8	2	3	1	4	1	0	315
IP Peak Pd 1000-1600 Northbound	1676	158	30	5	6	6	4	0	1886
IP Peak Pd 1000-1600 Southbound	1933	156	31	10	9	7	2	0	2148
PM Peak Pd 1600-1900 Northbound	702	26	10	0	1	6	1	9	755
PM Peak Pd 1600-1900 Southbound	583	25	3	0	2	9	1	18	640
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	3523	194	104	12	8	30	6	0	3876
0600 - 2200 Southbound	3729	173	80	11	10	35	11	0	4049
AM Peak Pd 0700-1000 Northbound	218	2	4	0	0	2	0	0	226
AM Peak Pd 0700-1000 Southbound	359	6	3	1	1	3	0	0	373
IP Peak Pd 1000-1600 Northbound	2039	107	42	11	6	7	2	0	2214
IP Peak Pd 1000-1600 Southbound	2262	102	39	9	8	9	5	0	2435
PM Peak Pd 1600-1900 Northbound	853	65	44	1	2	8	2	0	975
PM Peak Pd 1600-1900 Southbound	741	55	29	0	1	13	3	0	842

3.4.2 Table 5 shows that the lowest pedestrian volumes were observed in February 2021 and the highest volumes in September 2021.

3.4.3 Table 6 below presents the results of the pedestrian volume data on the west side of Murray Place in Stirling during each of the four survey periods.

Table 6. Murray Place, Stirling (west footpath) Pedestrian Volume Summary



Stirling Site 2 West Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1330	28	7	0	2	12	2	0	1382
0600 - 2200 Southbound	1220	29	2	0	2	9	1	0	1264
AM Peak Pd 0700-1000 Northbound	103	1	0	0	0	2	0	0	106
AM Peak Pd 0700-1000 Southbound	135	1	0	0	0	2	0	0	137
IP Peak Pd 1000-1600 Northbound	903	15	7	0	1	8	1	0	935
IP Peak Pd 1000-1600 Southbound	841	17	1	0	2	2	0	0	864
PM Peak Pd 1600-1900 Northbound	266	13	0	0	0	2	1	0	282
PM Peak Pd 1600-1900 Southbound	182	7	0	0	0	4	0	0	194
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	950	33	4	1	2	20	1	0	1013
0600 - 2200 Southbound	798	22	4	1	4	16	2	0	848
AM Peak Pd 0700-1000 Northbound	51	3	1	0	0	2	0	0	56
AM Peak Pd 0700-1000 Southbound	88	2	0	0	1	1	0	0	92
IP Peak Pd 1000-1600 Northbound	627	23	1	1	2	11	1	0	666
IP Peak Pd 1000-1600 Southbound	500	15	2	1	2	9	2	0	531
PM Peak Pd 1600-1900 Northbound	196	7	2	0	1	5	0	0	211
PM Peak Pd 1600-1900 Southbound	143	3	2	0	1	4	0	0	153
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1557	84	7	7	4	23	4	0	1685
0600 - 2200 Southbound	1345	57	4	5	4	9	3	0	1427
AM Peak Pd 0700-1000 Northbound	120	2	0	0	0	2	0	0	125
AM Peak Pd 0700-1000 Southbound	178	5	0	0	0	3	0	0	186
IP Peak Pd 1000-1600 Northbound	980	58	5	6	3	6	3	0	1061
IP Peak Pd 1000-1600 Southbound	849	39	2	4	3	3	3	0	904
PM Peak Pd 1600-1900 Northbound	308	22	2	1	1	8	1	9	352
PM Peak Pd 1600-1900 Southbound	211	11	2	0	0	1	0	18	243
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1935	84	23	10	8	22	3	0	2085
0600 - 2200 Southbound	1666	66	28	6	6	15	3	0	1791
AM Peak Pd 0700-1000 Northbound	114	1	1	0	1	1	0	0	118
AM Peak Pd 0700-1000 Southbound	158	1	1	0	0	2	0	0	163
IP Peak Pd 1000-1600 Northbound	1124	48	10	7	5	7	1	0	1201
IP Peak Pd 1000-1600 Southbound	1013	41	11	4	4	6	1	0	1081
PM Peak Pd 1600-1900 Northbound	445	25	9	3	1	7	1	0	491
PM Peak Pd 1600-1900 Southbound	329	18	12	1	1	6	2	0	368

- 3.4.4 Table 6 shows that again, the lowest pedestrian volumes were observed in February 2021 when Scotland was living under lockdown conditions. The highest volumes were observed in September 2021.
- 3.4.5 Table 7 below presents the results of the pedestrian volume data on the east side of Upper Craigs in Stirling during each of the four survey periods.

Table 7. Upper Craigs, Stirling (east footpath) Pedestrian Volume Summary



Stirling Site 3 East Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1761	66	15	5	3	5	2	0	1857
0600 - 2200 Southbound	1688	60	15	6	4	4	0	0	1777
AM Peak Pd 0700-1000 Northbound	261	10	5	2	0	1	0	0	279
AM Peak Pd 0700-1000 Southbound	130	2	1	1	0	0	0	0	134
IP Peak Pd 1000-1600 Northbound	1187	33	9	2	3	2	2	0	1238
IP Peak Pd 1000-1600 Southbound	1116	32	12	5	3	3	0	0	1170
PM Peak Pd 1600-1900 Northbound	258	21	1	0	0	1	0	0	282
PM Peak Pd 1600-1900 Southbound	369	23	2	1	1	1	0	0	397
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	831	49	3	7	1	3	2	0	896
0600 - 2200 Southbound	835	51	8	7	3	7	0	0	910
AM Peak Pd 0700-1000 Northbound	115	11	0	3	0	0	0	0	130
AM Peak Pd 0700-1000 Southbound	66	1	0	0	1	1	0	0	70
IP Peak Pd 1000-1600 Northbound	560	34	1	4	1	1	2	0	603
IP Peak Pd 1000-1600 Southbound	555	40	3	6	2	3	0	0	609
PM Peak Pd 1600-1900 Northbound	121	3	1	0	0	1	0	0	125
PM Peak Pd 1600-1900 Southbound	167	10	2	1	0	2	0	0	181
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1491	66	20	10	4	6	2	0	1599
0600 - 2200 Southbound	1514	67	12	9	4	7	1	0	1613
AM Peak Pd 0700-1000 Northbound	219	14	2	1	1	1	0	0	238
AM Peak Pd 0700-1000 Southbound	111	1	0	1	0	1	0	0	115
IP Peak Pd 1000-1600 Northbound	982	44	14	9	3	3	1	0	1056
IP Peak Pd 1000-1600 Southbound	993	47	7	7	3	3	0	0	1061
PM Peak Pd 1600-1900 Northbound	210	8	5	0	0	1	1	9	235
PM Peak Pd 1600-1900 Southbound	306	16	5	1	1	1	0	18	348
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	2212	99	15	16	5	5	3	0	2354
0600 - 2200 Southbound	1943	90	14	18	6	6	2	0	2079
AM Peak Pd 0700-1000 Northbound	235	16	2	1	1	0	0	0	256
AM Peak Pd 0700-1000 Southbound	107	1	1	0	0	0	0	0	109
IP Peak Pd 1000-1600 Northbound	1353	70	8	14	2	1	1	0	1450
IP Peak Pd 1000-1600 Southbound	1110	62	8	14	4	1	1	0	1200
PM Peak Pd 1600-1900 Northbound	355	12	5	1	1	2	1	0	376
PM Peak Pd 1600-1900 Southbound	452	25	4	4	2	3	1	0	491

3.4.6 Table 7 shows that the lowest pedestrian volumes were observed in February 2021 when Scotland was in lockdown and the highest volumes were observed in September 2021.

3.4.7 Table 8 below presents the results of the pedestrian volume data on the west side of Upper Craigs in Stirling during each of the four survey periods.

Table 8. Upper Craigs, Stirling (west footpath) Pedestrian Volume Summary



Stirling Site 4 West Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	466	20	1	3	1	4	1	0	497
0600 - 2200 Southbound	625	22	3	4	1	1	0	0	656
AM Peak Pd 0700-1000 Northbound	52	3	0	1	0	1	0	0	58
AM Peak Pd 0700-1000 Southbound	66	2	0	1	0	0	0	0	69
IP Peak Pd 1000-1600 Northbound	276	12	1	2	1	2	1	0	295
IP Peak Pd 1000-1600 Southbound	392	8	2	3	1	1	0	0	406
PM Peak Pd 1600-1900 Northbound	113	4	0	0	0	1	0	0	119
PM Peak Pd 1600-1900 Southbound	135	12	0	1	0	0	0	0	148
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	380	20	5	2	2	2	2	0	412
0600 - 2200 Southbound	420	18	7	5	2	1	2	0	455
AM Peak Pd 0700-1000 Northbound	44	6	1	0	0	0	0	0	51
AM Peak Pd 0700-1000 Southbound	40	1	0	1	0	0	0	0	42
IP Peak Pd 1000-1600 Northbound	234	10	1	1	2	1	1	0	251
IP Peak Pd 1000-1600 Southbound	270	11	2	4	2	0	1	0	291
PM Peak Pd 1600-1900 Northbound	68	4	2	0	0	1	1	0	75
PM Peak Pd 1600-1900 Southbound	74	6	4	0	0	0	1	0	85
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	681	49	11	10	3	5	3	0	761
0600 - 2200 Southbound	710	27	12	10	2	2	1	0	763
AM Peak Pd 0700-1000 Northbound	81	9	1	3	0	1	0	0	95
AM Peak Pd 0700-1000 Southbound	68	2	0	1	0	0	1	0	71
IP Peak Pd 1000-1600 Northbound	450	27	5	7	2	2	1	0	493
IP Peak Pd 1000-1600 Southbound	472	18	9	7	2	1	0	0	509
PM Peak Pd 1600-1900 Northbound	106	10	5	0	0	0	1	9	132
PM Peak Pd 1600-1900 Southbound	126	7	3	1	0	0	0	18	156
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	694	35	12	6	2	10	3	0	762
0600 - 2200 Southbound	990	41	11	11	3	9	1	0	1065
AM Peak Pd 0700-1000 Northbound	63	8	2	1	0	1	0	0	76
AM Peak Pd 0700-1000 Southbound	88	3	1	2	1	1	0	0	95
IP Peak Pd 1000-1600 Northbound	405	18	5	5	2	1	2	0	437
IP Peak Pd 1000-1600 Southbound	613	29	5	8	1	3	1	0	661
PM Peak Pd 1600-1900 Northbound	146	5	4	1	0	4	1	0	161
PM Peak Pd 1600-1900 Southbound	203	5	4	1	1	2	0	0	216

- 3.4.8 Table 8 shows that like other sites the lowest volumes were observed in February 2021, and the highest in September 2021. The west footpath shows significantly lower flows than the east footpath.
- 3.4.9 Table 9 below presents the results of the pedestrian volume data on the west side of Murray Place (adjacent to Ian Gallacher jewellers) in Stirling during each of the four survey periods.

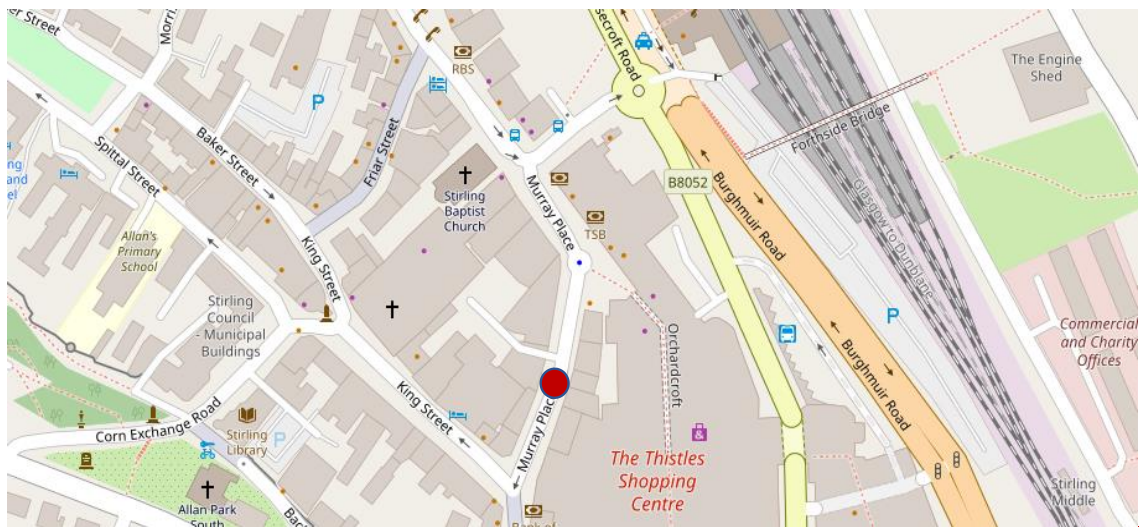
Table 9. Murray Place, (Ian Gallacher Jewellers) Stirling (west footpath) Pedestrian Volume Summary



Stirling Site 5 West Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1465	34	2	2	2	11	0	0	1515
0600 - 2200 Southbound	1407	38	4	2	2	12	2	0	1467
AM Peak Pd 0700-1000 Northbound	270	7	1	0	0	0	0	0	279
AM Peak Pd 0700-1000 Southbound	121	3	2	1	1	1	0	0	128
IP Peak Pd 1000-1600 Northbound	958	16	0	2	1	6	0	0	984
IP Peak Pd 1000-1600 Southbound	935	19	0	2	1	8	1	0	966
PM Peak Pd 1600-1900 Northbound	178	10	1	0	0	3	0	0	192
PM Peak Pd 1600-1900 Southbound	298	14	2	0	0	3	1	0	318
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1053	42	16	6	7	30	2	0	1156
0600 - 2200 Southbound	1056	56	27	4	7	43	3	0	1196
AM Peak Pd 0700-1000 Northbound	77	3	1	1	0	1	0	0	83
AM Peak Pd 0700-1000 Southbound	106	3	6	1	1	3	0	0	120
IP Peak Pd 1000-1600 Northbound	677	29	5	5	6	14	1	0	737
IP Peak Pd 1000-1600 Southbound	685	40	9	3	6	25	1	0	769
PM Peak Pd 1600-1900 Northbound	209	6	10	1	1	9	0	0	235
PM Peak Pd 1600-1900 Southbound	188	11	11	0	0	13	1	0	225
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1449	99	13	5	4	26	6	0	1602
0600 - 2200 Southbound	1298	81	7	7	3	31	6	0	1433
AM Peak Pd 0700-1000 Northbound	130	2	2	0	0	3	0	0	137
AM Peak Pd 0700-1000 Southbound	133	2	0	1	0	5	1	0	142
IP Peak Pd 1000-1600 Northbound	843	82	9	4	4	8	4	0	955
IP Peak Pd 1000-1600 Southbound	800	63	5	6	3	10	3	0	890
PM Peak Pd 1600-1900 Northbound	302	15	2	0	0	6	2	9	335
PM Peak Pd 1600-1900 Southbound	244	12	1	0	0	9	1	18	286
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1793	73	26	12	7	22	2	0	1936
0600 - 2200 Southbound	1570	52	26	9	8	21	3	0	1689
AM Peak Pd 0700-1000 Northbound	113	2	1	1	0	2	0	0	119
AM Peak Pd 0700-1000 Southbound	144	2	2	1	0	4	0	0	154
IP Peak Pd 1000-1600 Northbound	1028	41	14	10	6	5	0	0	1104
IP Peak Pd 1000-1600 Southbound	927	31	15	7	6	8	1	0	994
PM Peak Pd 1600-1900 Northbound	404	27	10	1	1	7	1	0	450
PM Peak Pd 1600-1900 Southbound	308	13	8	1	1	9	1	0	342

- 3.4.10 Table 9 shows that like other sites the lowest volumes were observed in February 2021, and the highest in September 2021.
- 3.4.11 Table 10 below presents the results of the pedestrian volume data on the east side of Murray Place (adjacent to Ian Gallacher jewellers) in Stirling during each of the four survey periods.

Table 10. Murray Place, (Ian Gallacher Jewellers) Stirling (east footpath) Pedestrian Volume Summary



Stirling Site 6 East Kerbside (3 day Average Thur-Fri-Sat)									
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1302	36	4	1	2	23	2	0	1370
0600 - 2200 Southbound	1191	29	5	2	2	27	5	0	1261
AM Peak Pd 0700-1000 Northbound	186	5	2	0	1	1	0	0	196
AM Peak Pd 0700-1000 Southbound	104	3	3	1	1	2	1	0	114
IP Peak Pd 1000-1600 Northbound	810	22	2	1	1	12	2	0	850
IP Peak Pd 1000-1600 Southbound	723	13	1	1	1	11	4	0	754
PM Peak Pd 1600-1900 Northbound	198	7	0	1	0	6	0	0	212
PM Peak Pd 1600-1900 Southbound	276	9	0	1	0	7	1	0	295
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	878	34	11	2	3	22	2	0	952
0600 - 2200 Southbound	739	23	13	3	1	19	2	0	801
AM Peak Pd 0700-1000 Northbound	58	2	2	1	0	2	0	0	65
AM Peak Pd 0700-1000 Southbound	84	2	3	2	0	1	0	0	93
IP Peak Pd 1000-1600 Northbound	572	25	7	2	2	14	2	0	623
IP Peak Pd 1000-1600 Southbound	474	17	6	1	1	11	2	0	512
PM Peak Pd 1600-1900 Northbound	186	7	2	0	1	4	0	0	200
PM Peak Pd 1600-1900 Southbound	120	3	3	0	0	4	0	0	130
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	1437	49	18	5	1	28	2	0	1541
0600 - 2200 Southbound	1257	40	9	3	2	19	1	0	1331
AM Peak Pd 0700-1000 Northbound	115	2	2	0	0	2	0	0	122
AM Peak Pd 0700-1000 Southbound	182	5	1	0	0	5	0	0	192
IP Peak Pd 1000-1600 Northbound	910	36	14	4	1	8	1	0	974
IP Peak Pd 1000-1600 Southbound	783	25	5	3	2	5	1	0	824
PM Peak Pd 1600-1900 Northbound	268	10	2	1	0	11	1	9	302
PM Peak Pd 1600-1900 Southbound	187	9	2	0	0	5	0	18	222
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Northbound	2287	131	43	15	15	29	2	0	2523
0600 - 2200 Southbound	2152	113	50	9	12	43	7	0	2387
AM Peak Pd 0700-1000 Northbound	181	0	3	1	0	4	0	0	189
AM Peak Pd 0700-1000 Southbound	180	1	4	1	1	5	0	0	191
IP Peak Pd 1000-1600 Northbound	1311	81	16	12	12	10	1	0	1443
IP Peak Pd 1000-1600 Southbound	1315	74	16	7	9	11	4	0	1435
PM Peak Pd 1600-1900 Northbound	501	44	18	1	2	8	1	0	574
PM Peak Pd 1600-1900 Southbound	399	33	27	1	2	16	2	0	481

3.4.12 Table 10 shows that like other sites the lowest volumes were observed in February 2021, and the highest in September 2021.

4. SPEED SURVEYS REVIEW

4.1 Overview

4.1.1 Summary tables below present the results of the speed surveys in the Stirling Council area (seven sites in Stirling, three sites in Dunblane, two sites in Plean and Gargunnock and one site in the remaining areas: Bridge of Allan, Aberfoyle, Fallin, Callander and Killlearn).

4.1.2 For each survey, the summary information is as follows:

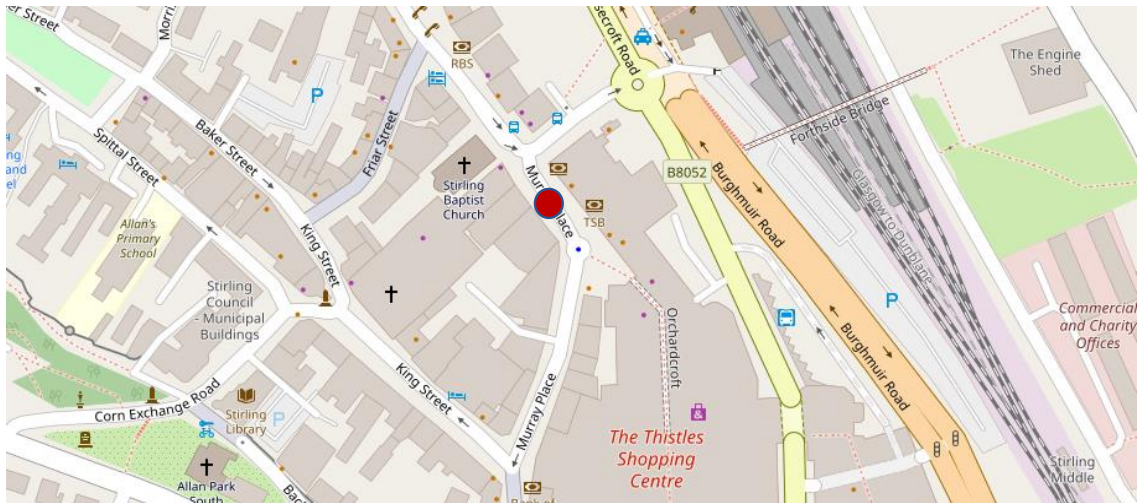
- Site Number
- Site Location
- Total Flow – Directional daily flow
- Mean Speed (mph) – Mean or average speed of all vehicles in either direction
- 85%ile Speed (mph) – Speed at, or below, which 85% of vehicles were travelling. The remaining 15% were recorded travelling at a higher speed
- Number of vehicles travelling at a speed greater than the 20mph limit
- Proportion of vehicles travelling at a speed greater than the 20mph limit
- Number of vehicles travelling at a speed greater than 35mph
- Proportion of vehicles travelling at a speed greater than 35mph.

4.2 Results of Speed Surveys

Stirling

4.2.1 Table 11 below presents a comparison of the results of the speed data on Murray Place northbound in Stirling.

Table 11. Site 1 Murray Place (Northbound)



Stirling Site 1 Murray Place Northbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	308	282	297	360	371	275	274	324	310
Mean Speed (mph)	10.1	10.1	10.2	9.6	9.9	10.5	9.9	10.0	10.0
85%ile Speed (mph)	12.8	12.1	12.7	11.9	12.7	12.7	12.2	12.4	12.4
No. Vehicles > 20 MPH Limit	0	0	1	0	0	1	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.3%	0.0%	0.0%	0.4%	0.0%	0.1%	0.1%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	297	255	294	284	376	300	256	301	295
Mean Speed (mph)	11.2	11.0	10.3	10.7	10.7	10.9	10.7	10.8	10.8
85%ile Speed (mph)	13.8	13.9	12.6	13.2	13.6	13.5	13.4	13.4	13.4
No. Vehicles > 20 MPH Limit	4	0	0	0	2	1	0	1	1
% Vehicles > 20 MPH Limit	1.3%	0.0%	0.0%	0.0%	0.5%	0.3%	0.0%	0.4%	0.3%
No. Vehicles > 35 MPH	2	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	543	507	497	532	610	605	472	538	538
Mean Speed (mph)	10.3	10.6	10.6	10.2	10.4	10.5	10.7	10.4	10.5
85%ile Speed (mph)	13.3	13.2	13.7	12.8	13.1	13.1	13.4	13.2	13.2
No. Vehicles > 20 MPH Limit	2	3	0	0	10	0	3	3	3
% Vehicles > 20 MPH Limit	0.4%	0.6%	0.0%	0.0%	1.6%	0.0%	0.6%	0.5%	0.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	340	457	434	405	499	413	418	427	424
Mean Speed (mph)	10.3	10.4	10.3	11.0	10.2	10.3	10.4	10.4	10.4
85%ile Speed (mph)	12.5	13.0	13.0	13.4	12.6	13.1	12.8	12.9	12.9
No. Vehicles > 20 MPH Limit	1	1	3	0	1	2	5	1	2
% Vehicles > 20 MPH Limit	0.3%	0.2%	0.7%	0.0%	0.2%	0.5%	1.2%	0.3%	0.4%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- 4.2.2 Table 11 indicates that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the 5-day mean speed was highest at 10.8 mph. The flows in September 2021 were lower than May 2021.
- 4.2.3 The proportion of vehicles exceeding 20mph was slightly higher in May 2021 compared with the other survey periods.

4.2.5 Table 12 presents the results for Murray Place southbound in Stirling.

Table 12. Site 1 Murray Place (Southbound)



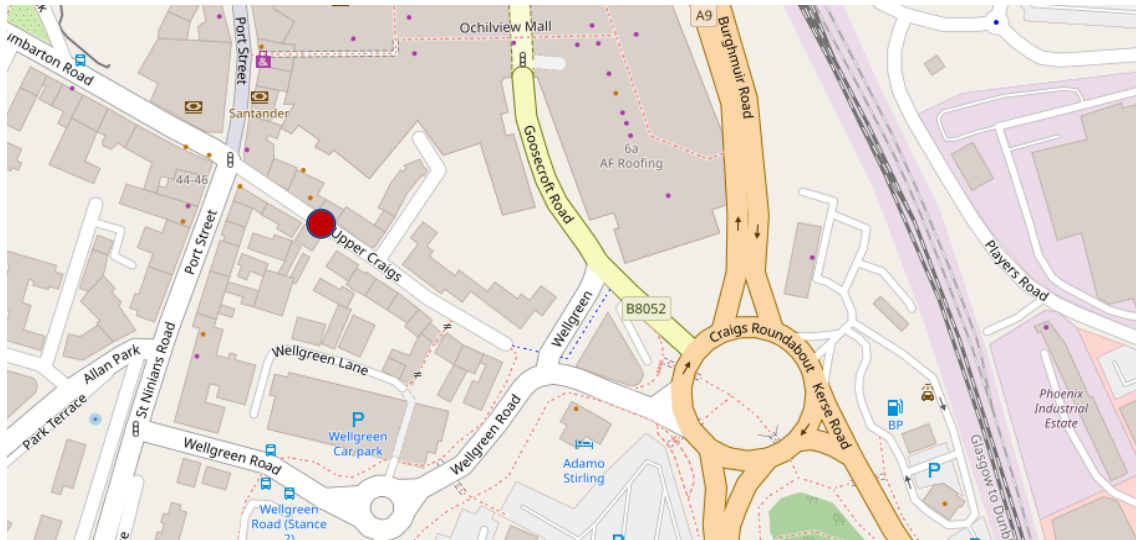
Stirling Site 1 Murray Place Southbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	787	813	828	1136	1217	845	653	956	897
Mean Speed (mph)	11.3	11.2	10.9	10.5	10.8	11.5	11.4	10.9	11.1
85%ile Speed (mph)	14.4	14.3	13.8	13.4	13.5	14.4	14.0	13.9	14.0
No. Vehicles > 20 MPH Limit	3	4	2	5	2	4	2	3	3
% Vehicles > 20 MPH Limit	0.4%	0.5%	0.2%	0.4%	0.2%	0.5%	0.3%	0.3%	0.4%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	843	814	883	866	1114	922	708	904	879
Mean Speed (mph)	12.3	12.7	12.4	12.4	12.4	13.0	12.9	12.4	12.6
85%ile Speed (mph)	15.4	16.1	15.7	15.5	15.7	16.3	16.7	15.7	15.9
No. Vehicles > 20 MPH Limit	15	14	18	15	22	23	24	17	19
% Vehicles > 20 MPH Limit	1.8%	1.7%	2.0%	1.7%	2.0%	2.5%	3.4%	1.8%	2.2%
No. Vehicles > 35 MPH	0	0	0	2	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1320	1413	1369	1415	1621	1630	1167	1428	1419
Mean Speed (mph)	11.3	11.4	11.8	11.1	11.2	11.2	11.7	11.4	11.4
85%ile Speed (mph)	14.4	14.8	15.1	14.3	14.3	14.4	14.7	14.6	14.6
No. Vehicles > 20 MPH Limit	11	10	15	21	9	11	10	13	12
% Vehicles > 20 MPH Limit	0.8%	0.7%	1.1%	1.5%	0.6%	0.7%	0.9%	0.9%	0.9%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1303	1380	1387	1499	1690	1528	1329	1452	1445
Mean Speed (mph)	11.5	11.8	12.2	11.9	11.8	12.1	11.9	11.8	11.9
85%ile Speed (mph)	14.6	14.9	15.2	14.7	14.8	15.2	15.0	14.8	14.9
No. Vehicles > 20 MPH Limit	12	14	13	7	16	17	8	12	12
% Vehicles > 20 MPH Limit	0.9%	1.0%	0.9%	0.5%	0.9%	1.1%	0.6%	0.9%	0.9%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.6 Table 12 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Again, the 5-day mean speed was highest at 12.4 mph. The September 2021 flows were the highest that were observed.

- 4.2.7 The proportion of vehicles exceeding 20mph was higher in February 2021 compared with November 2020, May 2021 and September 2021.

4.2.8 Table 13 presents the results for Upper Craigs eastbound in Stirling.

Table 13. Site 2 Upper Craigs (Eastbound)



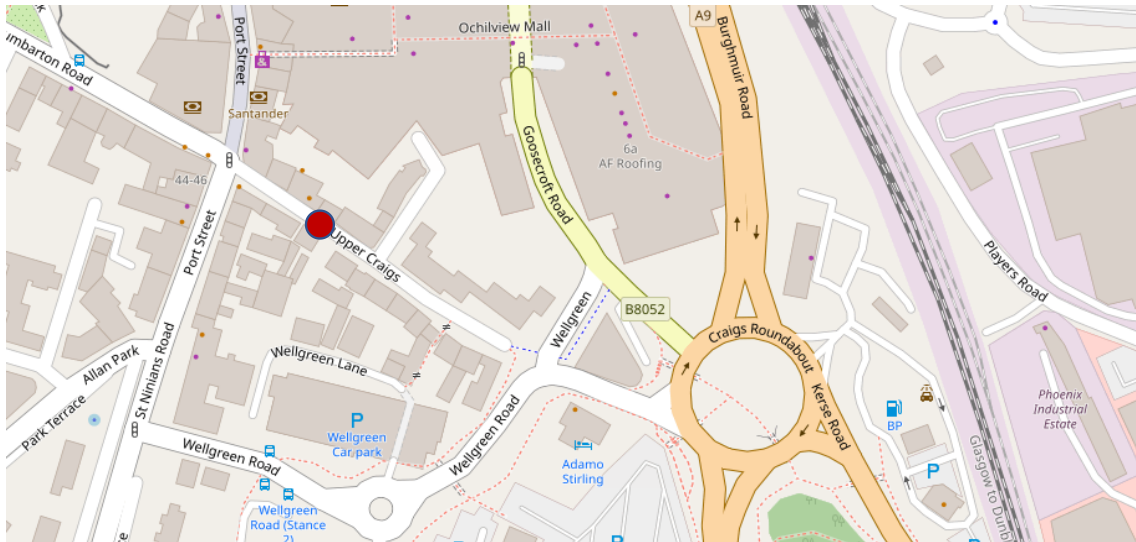
Stirling Site 2 Upper Craigs Eastbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	372	444	459	859	960	428	335	619	551
Mean Speed (mph)	12.0	12.0	12.2	11.4	11.1	12.6	13.2	11.7	12.1
85%ile Speed (mph)	16.1	15.8	15.9	14.6	14.1	15.8	16.9	15.3	15.6
No. Vehicles > 20 MPH Limit	15	8	15	17	14	10	9	14	13
% Vehicles > 20 MPH Limit	4.0%	1.8%	3.3%	2.0%	1.5%	2.3%	2.7%	2.5%	2.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	379	385	182	433	512	508	347	378	392
Mean Speed (mph)	13.4	13.5	14.9	13.4	13.6	12.9	13.9	13.8	13.7
85%ile Speed (mph)	17.6	17.9	18.8	17.7	17.8	17.3	17.8	18.0	17.8
No. Vehicles > 20 MPH Limit	21	22	16	24	33	24	24	23	23
% Vehicles > 20 MPH Limit	5.5%	5.7%	8.8%	5.5%	6.4%	4.7%	6.9%	6.4%	6.2%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	541	665	632	711	775	816	573	665	673
Mean Speed (mph)	12.9	12.0	12.6	11.9	12.3	11.9	12.9	12.3	12.4
85%ile Speed (mph)	16.5	15.9	16.7	15.7	16.1	15.5	16.2	16.2	16.1
No. Vehicles > 20 MPH Limit	0	0	0	0	1	0	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	468	571	585	594	776	490	489	599	568
Mean Speed (mph)	12.6	12.4	12.6	12.4	12.5	13.2	13.5	12.5	12.7
85%ile Speed (mph)	16.2	15.7	16.1	15.8	15.7	16.6	17.4	15.9	16.2
No. Vehicles > 20 MPH Limit	0	1	0	0	1	2	0	0	1
% Vehicles > 20 MPH Limit	0.0%	0.2%	0.0%	0.0%	0.1%	0.4%	0.0%	0.1%	0.1%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.9 Table 13 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, the mean speed being 13.8mph at this point.

4.2.10 The proportion of vehicles exceeding 20mph was lower in May 2021 and September 2021 compared with October 2020, and much lower than in February 2021.

4.2.11 Table 14 presents the results for Upper Craigs road westbound in Stirling.

Table 14. Site 2 Upper Craigs (Westbound)



Stirling Site 2 Upper Craigs Westbound									
November 2020	Monday 23 Nov 2020	Tuesday 24 Nov 2020	Wednesday 25 Nov 2020	Thursday 19 Nov 2020	Friday 20 Nov 2020	Saturday 21 Nov 2020	Sunday 22 Nov 2020	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	365	428	417	856	965	431	301	606	538
Mean Speed (mph)	10.6	10.7	10.9	11.0	10.9	11.0	11.0	10.8	10.9
85%ile Speed (mph)	12.9	13.5	14.2	14.1	13.7	14.7	14.4	13.7	13.9
No. Vehicles > 20 MPH Limit	8	5	10	8	4	10	6	7	7
% Vehicles > 20 MPH Limit	2.2%	1.2%	2.4%	0.9%	0.4%	2.3%	2.0%	1.4%	1.6%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	382	386	182	444	529	510	344	385	397
Mean Speed (mph)	12.1	12.4	13.8	12.4	12.4	11.9	12.5	12.6	12.5
85%ile Speed (mph)	15.4	15.9	16.9	15.9	15.9	15.3	15.9	16.0	15.9
No. Vehicles > 20 MPH Limit	3	3	8	7	6	7	6	5	6
% Vehicles > 20 MPH Limit	0.8%	0.8%	4.4%	1.6%	1.1%	1.4%	1.7%	1.7%	1.7%
No. Vehicles > 35 MPH	0	0	2	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	586	666	661	768	817	842	583	700	703
Mean Speed (mph)	11.9	11.6	11.9	11.6	11.6	11.9	12.2	11.7	11.8
85%ile Speed (mph)	14.9	14.7	15.0	15.1	14.9	15.3	15.5	14.9	15.1
No. Vehicles > 20 MPH Limit	0	0	1	0	0	0	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	485	568	574	603	774	502	471	601	568
Mean Speed (mph)	10.9	11.0	11.3	11.7	11.5	11.6	12.2	11.3	11.5
85%ile Speed (mph)	14.4	14.1	14.8	15.5	16.0	15.2	16.5	15.0	15.2
No. Vehicles > 20 MPH Limit	0	0	0	1	0	1	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

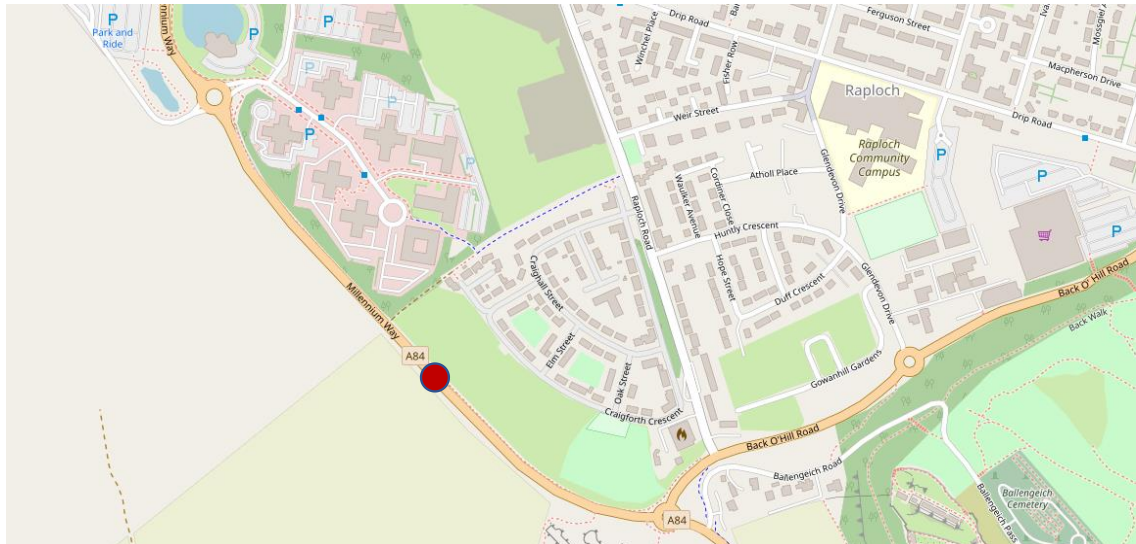
4.2.12 Table 14 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in November 2020 was lowest at 10.8 mph.

4.2.13 The proportion of vehicles exceeding 20mph was much lower in May 2021 and September 2021 compared with November 2020 and February 2021.

4.2.15 Table 15 presents the results for Millennium Way northbound in Stirling.

4.2.16 For the remaining sites, no data is available for November 2020 – Following tables only contain data for February, May and September 2021.

Table 15. Site 3 Millennium Way (Northbound)



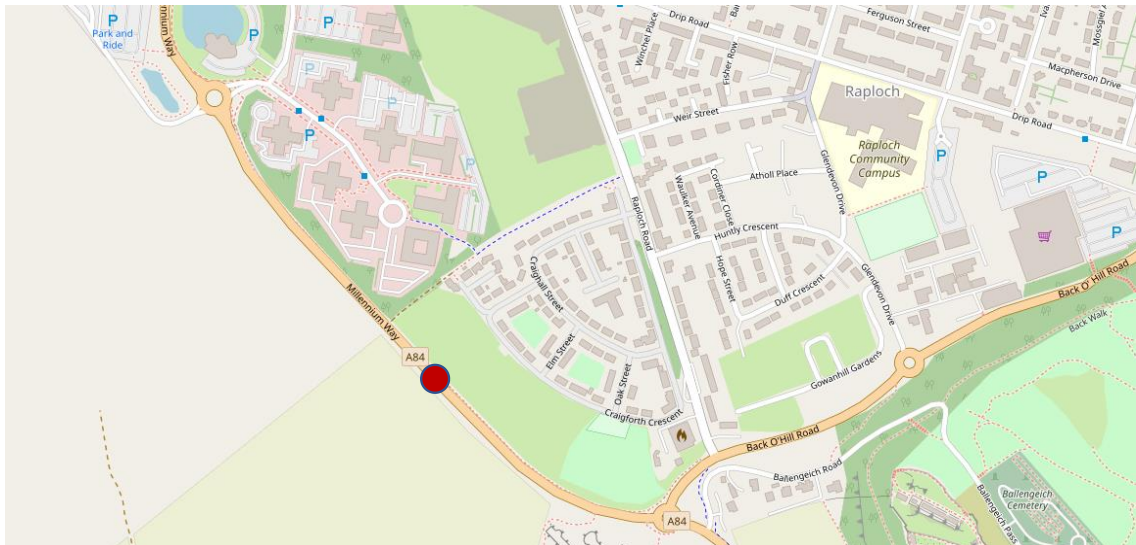
Stirling Site 3 Millennium Way Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4666	4393	4755	4984	5483	4098	3354	4856	4533
Mean Speed (mph)	43.4	43.6	43.0	43.2	43.4	43.8	43.7	43.3	43.4
85%ile Speed (mph)	48.3	48.5	48.1	48.1	48.3	49.3	49.1	48.3	48.5
No. Vehicles > 40 MPH Limit	3483	3318	3332	3713	4050	3068	2469	3579	3348
% Vehicles > 40 MPH Limit	74.6%	75.5%	70.1%	74.5%	73.9%	74.9%	73.6%	73.7%	73.9%
No. Vehicles > 55 MPH	134	140	118	113	156	160	139	132	137
% Vehicles > 55 MPH	2.9%	3.2%	2.5%	2.3%	2.8%	3.9%	4.1%	2.7%	3.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5531	5737	5853	5939	6322	5317	4687	5876	5627
Mean Speed (mph)	37.2	41.3	41.2	41.0	41.2	41.4	38.9	40.4	40.3
85%ile Speed (mph)	41.6	45.4	45.5	45.2	45.3	45.5	43.2	44.6	44.5
No. Vehicles > 40 MPH Limit	5497	5736	5851	5937	6322	5316	4685	5869	5621
% Vehicles > 40 MPH Limit	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	99.9%
No. Vehicles > 55 MPH	15	49	41	48	54	56	21	41	41
% Vehicles > 55 MPH	0.3%	0.9%	0.7%	0.8%	0.9%	1.1%	0.4%	0.7%	0.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	7441	7344	7845	7789	8139	7332	6606	7712	7499
Mean Speed (mph)	40.8	40.4	35.0	40.1	39.8	42.1	42.2	39.2	40.1
85%ile Speed (mph)	45.8	45.7	45.0	45.5	45.8	46.6	46.7	45.6	45.9
No. Vehicles > 40 MPH Limit	4139	4130	3440	4000	4501	4804	4303	4042	4188
% Vehicles > 40 MPH Limit	55.6%	56.2%	43.8%	51.4%	55.3%	65.5%	65.1%	52.5%	56.1%
No. Vehicles > 55 MPH	79	75	95	91	99	114	92	88	92
% Vehicles > 55 MPH	1.1%	1.0%	1.2%	1.2%	1.2%	1.6%	1.4%	1.1%	1.2%

4.2.17 Table 15 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The flow in September 2021 was higher than May 2021. The mean speed of traffic in February 2021 was 43.3 mph, compared with 40.4 mph in May 2021 and 39.2 mph in September 2021.

4.2.18 The proportion of vehicles exceeding 40mph was much greater in May 2021 compared with February 2021, with September 2021 being lower than both November 2020 and May 2021.

4.2.19 Table 16 presents the results for Millennium Way southbound In Stirling.

Table 16. Site 3 Millennium Way (Southbound)



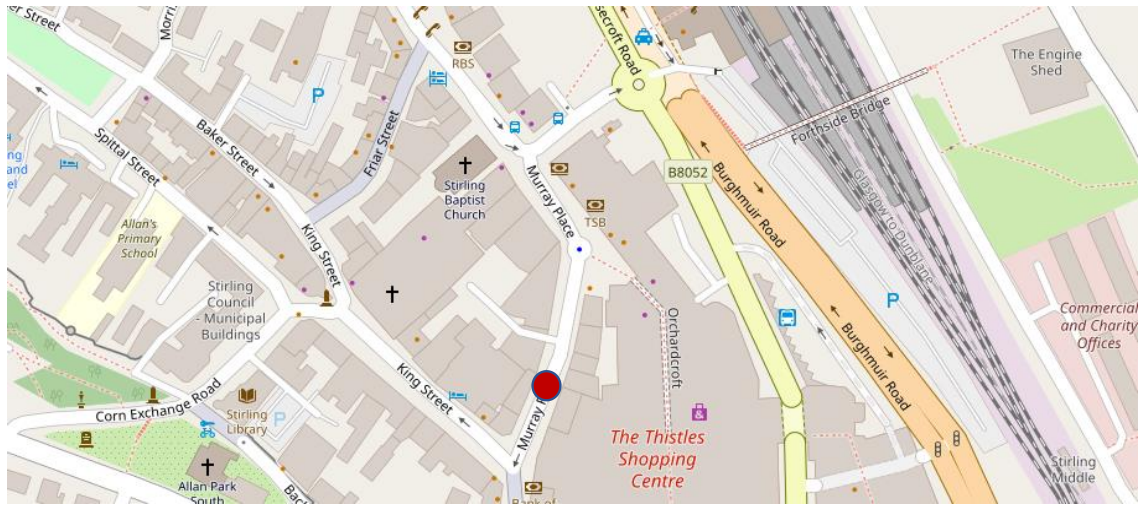
Stirling Site 3 Millennium Way Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3794	3420	3737	3948	4543	3382	2760	3888	3655
Mean Speed (mph)	43.3	42.7	42.6	42.8	43.1	43.2	43.1	42.9	43.0
85%ile Speed (mph)	48.9	47.9	48.5	48.3	48.9	48.8	48.7	48.5	48.6
No. Vehicles > 40 MPH Limit	2622	2274	2393	2646	3091	2356	1911	2605	2470
% Vehicles > 40 MPH Limit	69.1%	66.5%	64.0%	67.0%	68.0%	69.7%	69.2%	66.9%	67.7%
No. Vehicles > 55 MPH	145	112	113	101	168	116	83	128	120
% Vehicles > 55 MPH	3.8%	3.3%	3.0%	2.6%	3.7%	3.4%	3.0%	3.3%	3.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	7383	7630	7713	7835	8275	6732	6048	7767	7374
Mean Speed (mph)	37.0	37.8	38.2	37.9	38.3	38.7	37.6	37.8	37.9
85%ile Speed (mph)	41.4	42.1	42.6	42.1	42.6	43.1	41.9	42.2	42.3
No. Vehicles > 40 MPH Limit	7349	7623	7696	7827	8266	6726	6041	7752	7361
% Vehicles > 40 MPH Limit	99.5%	99.9%	99.8%	99.9%	99.9%	99.9%	99.9%	99.8%	99.8%
No. Vehicles > 55 MPH	23	32	36	19	34	42	29	29	31
% Vehicles > 55 MPH	0.3%	0.4%	0.5%	0.2%	0.4%	0.6%	0.5%	0.4%	0.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5840	5874	5713	6166	6439	5974	5127	6006	5876
Mean Speed (mph)	39.8	39.6	38.7	38.6	40.3	42.2	42.3	39.4	40.2
85%ile Speed (mph)	44.6	44.1	43.7	42.9	45.2	47.2	47.4	44.1	45.0
No. Vehicles > 40 MPH Limit	2511	2388	2202	1983	2985	3857	3359	2414	2755
% Vehicles > 40 MPH Limit	43.0%	40.7%	38.5%	32.2%	46.4%	64.6%	65.5%	40.1%	47.3%
No. Vehicles > 55 MPH	37	54	29	55	83	118	99	52	68
% Vehicles > 55 MPH	0.6%	0.9%	0.5%	0.9%	1.3%	2.0%	1.9%	0.8%	1.2%

4.2.20 Table 16 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown. The flows in September 2021 were lower than May 2021. The mean speed of traffic in February 2021 was 42.9mph, compared with 42.2 mph in May 2021 and 39.4mph in September 2021.

4.2.21 The proportion of vehicles exceeding 20mph was much higher in May 2021 compared with February 2021.

4.2.23 Table 17 presents the results for Murray Place southbound in Stirling.

Table 17. Site 4 Murray Place (Southbound)



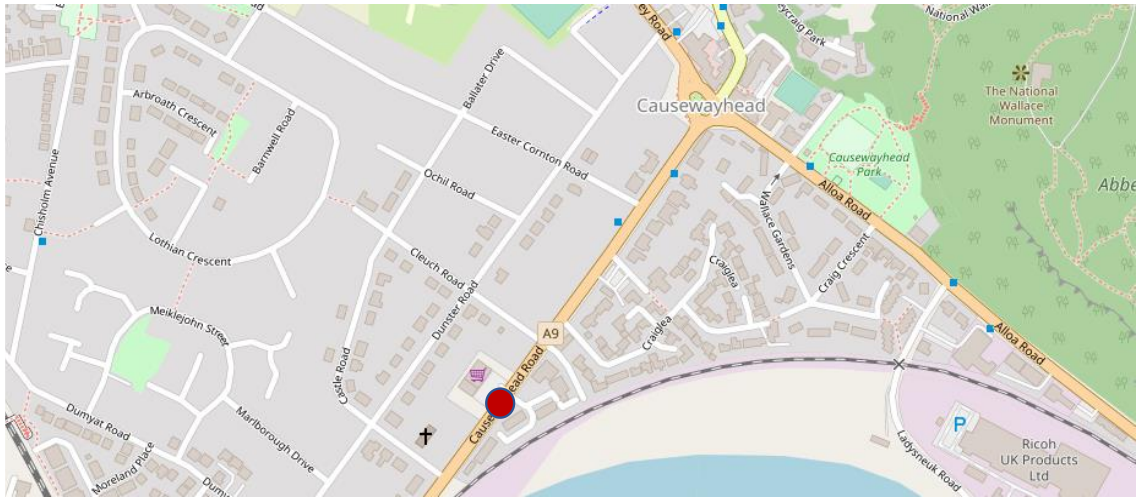
Stirling Site 4 Murray Place Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	579	573	614	603	778	668	481	629	614
Mean Speed (mph)	10.1	10.0	10.1	9.8	10.1	10.2	10.6	10.0	10.1
85%ile Speed (mph)	13.1	12.8	13.0	12.5	13.3	13.2	13.7	12.9	13.1
No. Vehicles > 20 MPH Limit	1	0	4	0	3	1	0	2	1
% Vehicles > 20 MPH Limit	0.2%	0.0%	0.7%	0.0%	0.4%	0.1%	0.0%	0.2%	0.2%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	926	990	971	1018	1223	1120	818	1026	1009
Mean Speed (mph)	9.9	9.4	9.8	9.9	9.8	9.9	9.8	9.8	9.8
85%ile Speed (mph)	12.6	12.4	12.8	12.3	12.2	12.5	12.1	12.5	12.4
No. Vehicles > 20 MPH Limit	2	3	1	1	1	2	1	2	2
% Vehicles > 20 MPH Limit	0.2%	0.3%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.2%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	954	1014	1057	1137	1246	1157	929	1082	1071
Mean Speed (mph)	9.7	9.8	10.1	10.1	10.0	10.3	10.3	9.9	10.0
85%ile Speed (mph)	12.5	12.8	13.0	13.0	12.9	13.3	13.4	12.8	13.0
No. Vehicles > 20 MPH Limit	2	0	3	2	7	6	3	3	3
% Vehicles > 20 MPH Limit	0.2%	0.0%	0.3%	0.2%	0.6%	0.5%	0.3%	0.2%	0.3%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.24 Table 17 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was only 10.0mph, 9.8mph in May 2021 and 9.9mph in September 2021.

4.2.25 The proportion of vehicles exceeding 20mph was the same throughout all survey periods.

4.2.27 Table 18 presents the results for Causewayhead Road northbound in Stirling.

Table 18. Site 5 Causewayhead Road (Northbound)



Stirling Site 5 Causewayhead Road Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4536	3977	4404	4494	4892	4174	3703	4461	4311
Mean Speed (mph)	25.9	25.9	25.7	26.1	25.3	25.2	25.8	25.8	25.7
85%ile Speed (mph)	30.5	31.0	30.6	30.8	30.4	30.3	30.5	30.7	30.6
No. Vehicles > 20 MPH Limit	3897	3326	3653	3881	4020	3424	3144	3755	3621
% Vehicles > 20 MPH Limit	85.9%	83.6%	82.9%	86.4%	82.2%	82.0%	84.9%	84.2%	84.0%
No. Vehicles > 35 MPH	11	8	8	10	8	11	12	9	10
% Vehicles > 35 MPH	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.2%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	6488	8475	8554	8620	8879	7770	6281	8203	7867
Mean Speed (mph)	23.9	23.5	23.6	23.7	23.2	23.9	24.6	23.6	23.8
85%ile Speed (mph)	28.2	28.2	28.2	28.0	28.0	28.6	28.9	28.1	28.3
No. Vehicles > 20 MPH Limit	5228	6528	6688	6973	6646	6106	5300	6413	6210
% Vehicles > 20 MPH Limit	80.6%	77.0%	78.2%	80.9%	74.9%	78.6%	84.4%	78.3%	79.2%
No. Vehicles > 35 MPH	3	7	4	3	5	9	4	4	5
% Vehicles > 35 MPH	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	6112	6334	6543	6655	6834	6432	5613	6496	6360
Mean Speed (mph)	21.1	21.0	21.2	20.9	21.1	21.6	22.1	21.1	21.3
85%ile Speed (mph)	25.4	25.7	25.8	25.4	25.8	26.4	27.0	25.6	25.9
No. Vehicles > 20 MPH Limit	3436	3523	3852	3657	3848	4000	3680	3663	3714
% Vehicles > 20 MPH Limit	56.2%	55.6%	58.9%	55.0%	56.3%	62.2%	65.6%	56.4%	58.5%
No. Vehicles > 35 MPH	5	2	10	14	10	11	9	8	9
% Vehicles > 35 MPH	0.1%	0.0%	0.2%	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%

4.2.28 Table 18 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was 25.8mph, and then 23.6mph in May 2021, reducing further to 21.1mph in September 2021.

4.2.29 The proportion of vehicles exceeding 20mph was lower in May 2021 and September 2021 compared with February 2021.

4.2.31 Table 19 presents the results for Causewayhead Road southbound in Stirling.

Table 19. Site 5 Causewayhead Road (southbound)

Stirling Site 5 Causewayhead Road Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4422	3697	4126	4471	4922	4070	3501	4328	4173
Mean Speed (mph)	27.0	26.7	26.5	26.8	26.5	26.3	25.9	26.7	26.5
85%ile Speed (mph)	30.9	30.8	30.5	31.0	30.5	30.6	30.2	30.7	30.6
No. Vehicles > 20 MPH Limit	4070	3361	3733	4096	4470	3643	3129	3946	3786
% Vehicles > 20 MPH Limit	92.0%	90.9%	90.5%	91.6%	90.8%	89.5%	89.4%	91.2%	90.7%
No. Vehicles > 35 MPH	14	7	4	3	10	12	2	8	7
% Vehicles > 35 MPH	0.3%	0.2%	0.1%	0.1%	0.2%	0.3%	0.1%	0.2%	0.2%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4315	7126	6888	6655	7020	6547	4719	6401	6181
Mean Speed (mph)	28.9	26.8	27.1	27.5	27.6	27.3	29.1	27.6	27.8
85%ile Speed (mph)	33.3	31.1	31.2	31.7	31.6	31.5	33.6	31.8	32.0
No. Vehicles > 20 MPH Limit	4093	6537	6397	6265	6556	6040	4494	5970	5769
% Vehicles > 20 MPH Limit	94.9%	91.7%	92.9%	94.1%	93.4%	92.3%	95.2%	93.4%	93.5%
No. Vehicles > 35 MPH	34	8	19	17	29	25	28	21	23
% Vehicles > 35 MPH	0.8%	0.1%	0.3%	0.3%	0.4%	0.4%	0.6%	0.4%	0.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5870	6095	6393	6318	6637	6255	5457	6263	6146
Mean Speed (mph)	22.4	22.7	22.8	22.7	22.4	23.1	23.2	22.6	22.8
85%ile Speed (mph)	26.8	27.0	27.2	26.8	26.6	27.5	27.5	26.9	27.1
No. Vehicles > 20 MPH Limit	4205	4474	4771	4638	4766	4852	4154	4571	4551
% Vehicles > 20 MPH Limit	71.6%	73.4%	74.6%	73.4%	71.8%	77.6%	76.1%	73.0%	74.1%
No. Vehicles > 35 MPH	3	12	7	6	7	3	3	7	6
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%

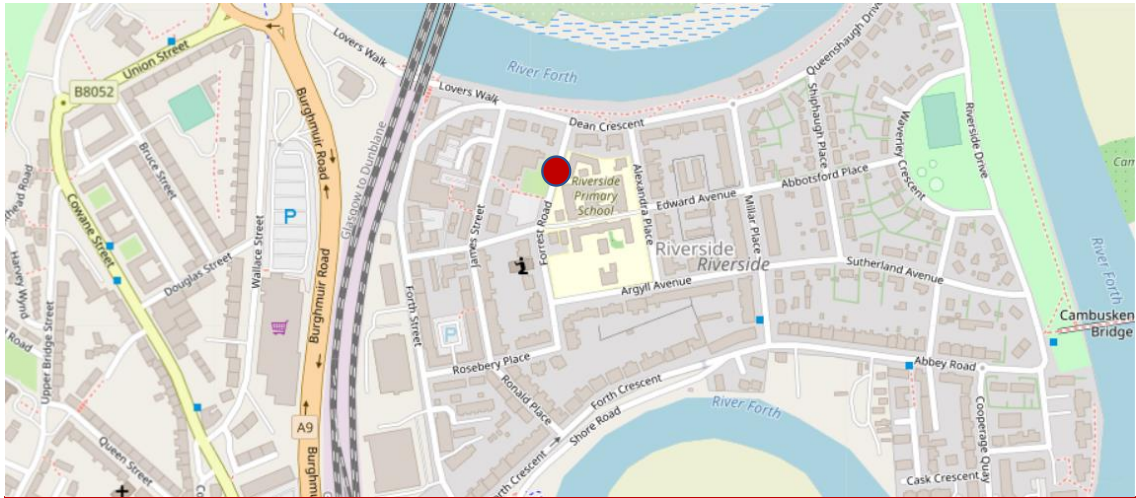
4.2.32 Table 19 shows that the 5-day average traffic flows were much lower in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in May 2021 was 27.6mph, similarly in February 2021 26.7mph, speeds were reduced in September 2021 at 22.6mph.

4.2.33 The proportion of vehicles exceeding 20mph was higher in May 2021 compared with February 2021, before reducing again in September 2021.

4.2.34 Table 20 presents the results for Forrest Road northbound in Stirling.

4.2.35 For the remaining sites, data is only available for September 2021.

Table 20. Site 6 Forrest Road (Northbound)



Stirling Site 6 Forrest Road between Edward Road & Dean Crescent Northbound

September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	259	196	306	78	92	106	80	186	160
Mean Speed (mph)	16.1	16.9	16.7	17.9	18.7	20.1	21.4	17.3	18.3
85%ile Speed (mph)	21.3	21.1	21.0	24.0	23.8	24.7	25.6	22.2	23.1
No. Vehicles > 20 MPH Limit	51	52	65	27	35	53	49	46	47
% Vehicles > 20 MPH Limit	19.7%	26.5%	21.2%	34.6%	38.0%	50.0%	61.3%	28.0%	35.9%
No. Vehicles > 35 MPH	1	0	0	0	1	0	2	0	1
% Vehicles > 35 MPH	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	2.5%	0.3%	0.6%

4.2.36 Table 20 shows that the 5-day average traffic flows was just under 200 vehicles. The mean speed of traffic in September 2021 was 17.3 mph.

4.2.37 The proportion of vehicles exceeding 20mph was 28% in September 2021.

4.2.38 Table 21 presents the results for Millennium Way southbound In Stirling.

Table 21. Site 3 Forrest Road (Southbound)



Stirling Site 6 Forrest Road between Edward Road & Dean Crescent Southbound

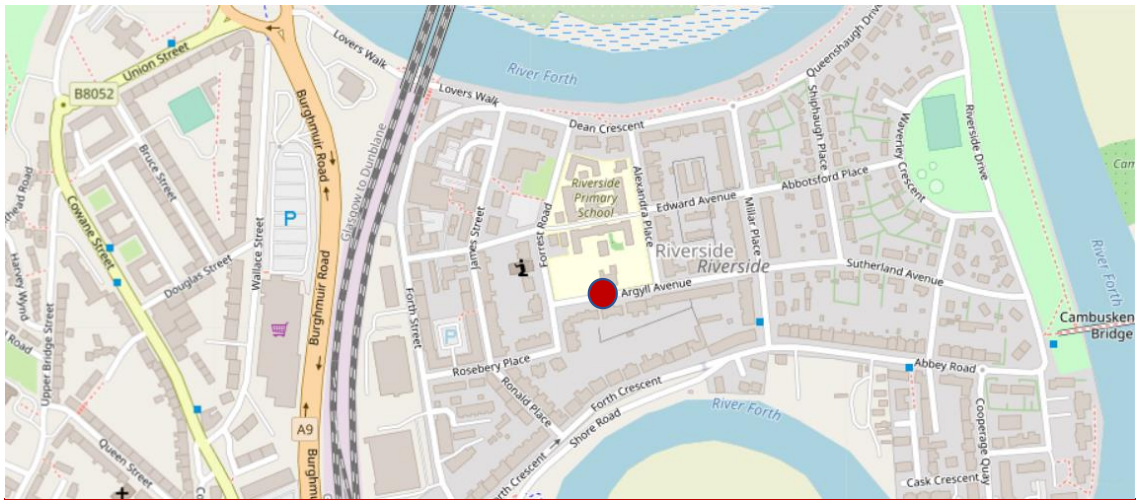
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	56	37	66	8	15	22	7	36	30
Mean Speed (mph)	12.3	12.1	12.9	15.7	14.9	16.0	16.4	13.6	14.3
85%ile Speed (mph)	15.4	15.4	18.4	-	20.0	20.3	-	17.3	17.9
No. Vehicles > 20 MPH Limit	2	2	3	1	2	3	2	2	2
% Vehicles > 20 MPH Limit	3.6%	5.4%	4.5%	12.5%	13.3%	13.6%	28.6%	7.9%	11.7%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.39 Table 21 shows that the 5-day average traffic flows was just under 50 vehicles. The mean speed of traffic in September 2021 was 13.6 mph.

4.2.40 The proportion of vehicles exceeding 20mph was 7.9% in September 2021.

4.2.42 Table 22 presents the results for Argyll Avenue eastbound in Stirling.

Table 22. Site 7 Argyll Avenue (Eastbound)



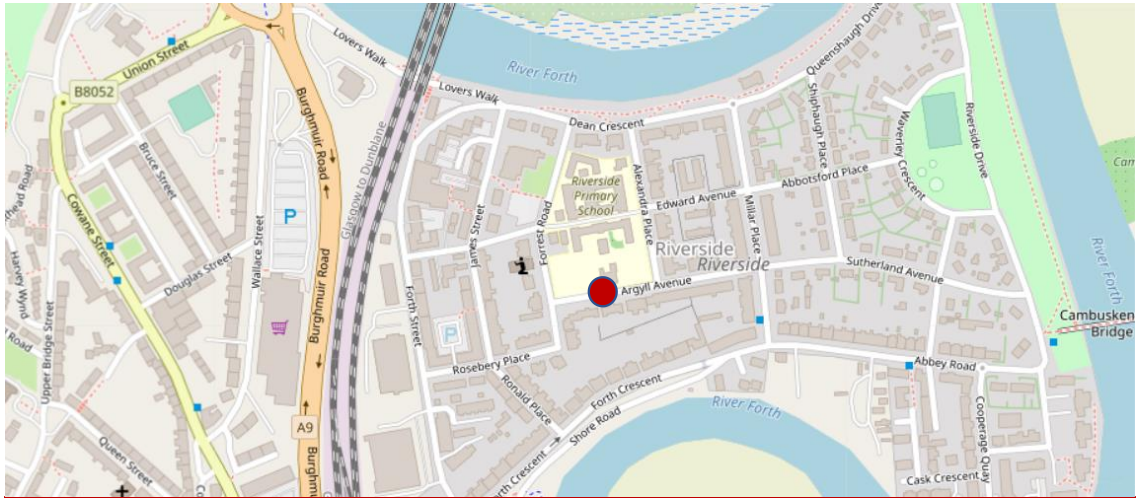
Stirling Site 7 Argyll Avenue between Forest Road & Alexandra Place Eastbound									
September 2021	Monday 13 Sep 2021	Tuesday 14 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	264	283	269	276	289	112	89	276	226
Mean Speed (mph)	15.4	15.5	16.0	16.1	16.5	17.8	16.5	15.9	16.3
85%ile Speed (mph)	20.3	20.7	20.4	21.1	21.7	21.9	21.9	20.8	21.1
No. Vehicles > 20 MPH Limit	49	50	44	63	63	32	20	54	46
% Vehicles > 20 MPH Limit	18.6%	17.7%	16.4%	22.8%	21.8%	28.6%	22.5%	19.4%	21.2%
No. Vehicles > 35 MPH	0	0	2	5	6	0	0	3	2
% Vehicles > 35 MPH	0.0%	0.0%	0.7%	1.8%	2.1%	0.0%	0.0%	0.9%	0.7%

4.2.43 Table 22 shows that the 5-day average traffic flow was just under 300 vehicles. The mean speed of traffic in September 2021 was 15.9 mph.

4.2.44 The proportion of vehicles exceeding 20mph was 19.4% in September 2021.

4.2.45 Table 23 presents the results for Argyll Avenue westbound in Stirling.

Table 23. Site 7 Argyll Avenue (Westbound)



Stirling Site 7 Argyll Avenue between Forest Road & Alexandra Place Eastbound

September 2021	Monday 13 Sep 2021	Tuesday 14 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	181	134	195	191	181	120	105	176	158
Mean Speed (mph)	17.4	16.3	17.3	20.5	28.8	20.5	16.4	20.1	19.6
85%ile Speed (mph)	21.6	21.0	21.2	27.0	41.0	25.6	21.6	26.4	25.6
No. Vehicles > 20 MPH Limit	62	25	51	82	132	55	27	70	62
% Vehicles > 20 MPH Limit	34.3%	18.7%	26.2%	42.9%	72.9%	45.8%	25.7%	39.0%	38.1%
No. Vehicles > 35 MPH	0	0	0	12	56	0	0	14	10
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	6.3%	30.9%	0.0%	0.0%	7.4%	5.3%

4.2.46 Table 23 shows that the 5-day average traffic flow was just under 200 vehicles. The mean speed of traffic in September 2021 was 20.1 mph.

4.2.47 The proportion of vehicles exceeding 20mph was 39.0% in September 2021.

Dunblane

4.2.49 Table 24 presents the results for High Street northbound in Dunblane.

Table 24. Site 1 High Street (northbound)



Dunblane Site 1 High Street Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	695	603	718	782	891	810	527	738	718
Mean Speed (mph)	13	14	13	13	13	13	14	13.1	13.2
85%ile Speed (mph)	17	17	17	16	17	16	17	16.6	16.7
No. Vehicles > 20 MPH Limit	13	19	22	13	27	14	20	19	18
% Vehicles > 20 MPH Limit	1.9%	3.2%	3.1%	1.7%	3.0%	1.7%	3.8%	2.6%	2.6%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1005	1029	1003	1125	1213	1122	686	1075	1026
Mean Speed (mph)	12.4	12.7	13.1	12.6	12.8	12.5	14.2	12.7	12.9
85%ile Speed (mph)	15.7	16.1	16.7	15.7	16.3	16.0	17.5	16.1	16.3
No. Vehicles > 20 MPH Limit	16	27	28	26	30	28	20	25	25
% Vehicles > 20 MPH Limit	1.6%	2.6%	2.8%	2.3%	2.5%	2.5%	2.9%	2.4%	2.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	952	1038	1048	1121	1282	1088	714	1088	1035
Mean Speed (mph)	12.5	12.3	12.7	12.7	12.3	12.3	13.4	12.5	12.6
85%ile Speed (mph)	15.8	15.7	16.0	15.9	15.8	15.7	16.8	15.8	16.0
No. Vehicles > 20 MPH Limit	0	1	0	0	0	0	0	0	0
% Vehicles > 20 MPH Limit	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
No. Vehicles > 35 MPH	0	1	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.50 Table 24 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in May 2021 was only 12.7mph, compared with 13.1mph in February 2021, reducing further to 12.5mph in September 2021.

4.2.51 The proportion of vehicles exceeding 20mph in February 2021 was similar in May 2021.

4.2.53 Table 25 presents the results for Perth Road northbound in Dunblane.

Table 25. Site 2 Perth Road (Northbound)



Dunblane Site 2 B8033 Perth Road Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4064	3482	3797	4228	4692	3462	3129	4053	3836
Mean Speed (mph)	27	27	28	27	27	27	28	27.2	27.4
85%ile Speed (mph)	34	34	35	34	34	35	35	34.3	34.4
No. Vehicles > 20 MPH Limit	3091	2661	2891	3196	3538	2604	2446	3075	2918
% Vehicles > 20 MPH Limit	76.1%	76.4%	76.1%	75.6%	75.4%	75.2%	78.2%	75.9%	76.1%
No. Vehicles > 35 MPH	0	1	4	1	0	0	0	1	1
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5538	5908	5784	6776	6252	5287	3786	6052	5619
Mean Speed (mph)	26.7	26.5	26.9	25.6	26.6	25.6	27.7	26.5	26.5
85%ile Speed (mph)	33.6	33.1	33.3	31.9	33.2	32.5	34.6	33.0	33.2
No. Vehicles > 20 MPH Limit	4212	4560	4515	5046	4764	3846	3004	4619	4278
% Vehicles > 20 MPH Limit	76.1%	77.2%	78.1%	74.5%	76.2%	72.7%	79.3%	76.4%	76.3%
No. Vehicles > 35 MPH	16	11	13	12	23	7	17	15	14
% Vehicles > 35 MPH	0.3%	0.2%	0.2%	0.2%	0.4%	0.1%	0.4%	0.2%	0.3%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5645	5825	6134	6133	6705	5275	4385	6088	5729
Mean Speed (mph)	24.2	24.2	23.9	24.1	24.0	24.4	24.7	24.1	24.2
85%ile Speed (mph)	30.8	30.8	30.3	30.8	30.6	31.2	31.5	30.7	30.9
No. Vehicles > 20 MPH Limit	4011	4126	4271	4294	4702	3710	3160	4281	4039
% Vehicles > 20 MPH Limit	71.1%	70.8%	69.6%	70.0%	70.1%	70.3%	72.1%	70.3%	70.6%
No. Vehicles > 35 MPH	5	13	7	8	1	2	4	7	6
% Vehicles > 35 MPH	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%

4.2.54 Table 25 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was 27.2mph. The highest flows was observed in September 2021 when the mean speed had reduced to 24.1mph.

4.2.55 The average proportion of vehicles exceeding 20mph was across all surveys.

4.2.57 Table 26 presents the results for Perth Road southbound in Dunblane.

Table 26. Site 2 B8033 Perth Road (Southbound)



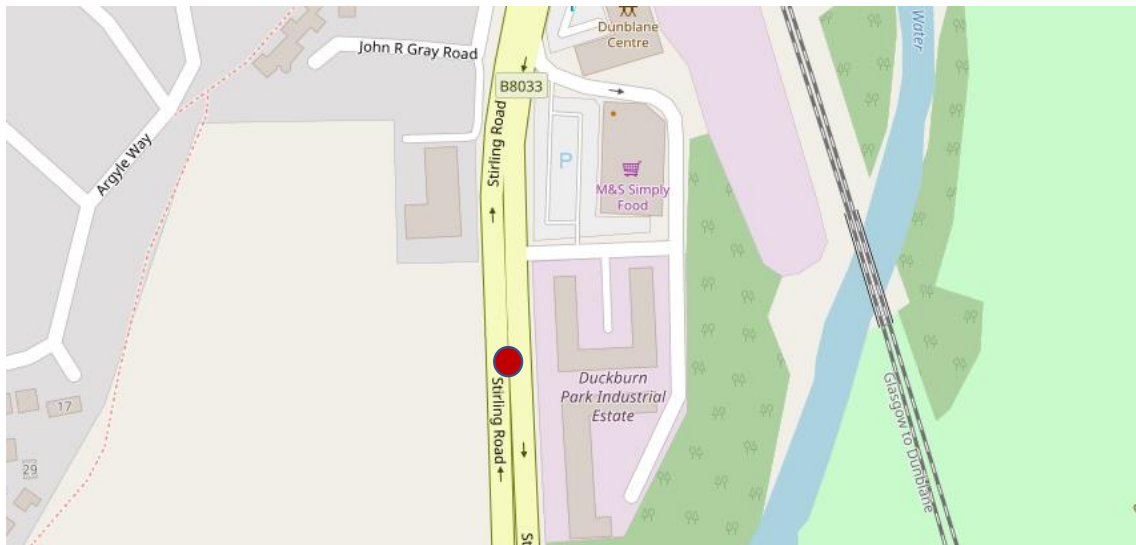
Dunblane Site 2 B8033 Perth Road Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3468	2956	3379	3714	4086	3058	2901	3521	3366
Mean Speed (mph)	31	32	31	31	31	32	32	31.4	31.5
85%ile Speed (mph)	36	36	36	36	36	36	36	35.9	36.0
No. Vehicles > 20 MPH Limit	3424	2929	3346	3668	4027	3014	2874	3479	3326
% Vehicles > 20 MPH Limit	98.7%	99.1%	99.0%	98.8%	98.6%	98.6%	99.1%	98.8%	98.8%
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4839	4968	5025	4972	5377	4417	3458	5036	4722
Mean Speed (mph)	30.0	29.9	29.9	28.7	29.9	29.0	31.3	29.7	29.8
85%ile Speed (mph)	34.3	34.2	34.0	33.2	34.2	33.6	35.7	34.0	34.2
No. Vehicles > 20 MPH Limit	4720	4858	4920	4741	5264	4185	3414	4901	4586
% Vehicles > 20 MPH Limit	97.5%	97.8%	97.9%	95.4%	97.9%	94.7%	98.7%	97.3%	97.1%
No. Vehicles > 45 MPH	14	15	15	9	17	27	20	14	17
% Vehicles > 45 MPH	0.3%	0.3%	0.3%	0.2%	0.3%	0.6%	0.6%	0.3%	0.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5032	5169	5406	5356	5926	4801	4001	5378	5099
Mean Speed (mph)	26.7	27.0	27.1	26.6	26.6	27.3	28.0	26.8	27.0
85%ile Speed (mph)	32.0	32.4	32.5	32.0	31.9	32.8	33.4	32.2	32.4
No. Vehicles > 20 MPH Limit	4566	4831	5000	4881	5448	4455	3735	4945	4702
% Vehicles > 20 MPH Limit	90.7%	93.5%	92.5%	91.1%	91.9%	92.8%	93.4%	92.0%	92.3%
No. Vehicles > 45 MPH	9	6	10	10	8	15	20	9	11
% Vehicles > 45 MPH	0.2%	0.1%	0.2%	0.2%	0.1%	0.3%	0.5%	0.2%	0.2%

4.2.58 Table 26 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was slightly higher (31.4mph) compared with May 2021 (29.7mph) and lower in September 2021 (26.8mph).

4.2.59 The average proportion of vehicles exceeding 20mph was similar across all surveys.

4.2.61 Table 27 presents the results for Stirling Road northbound in Dunblane.

Table 27. Site 3 Castle Street, Dunblane (Northbound)



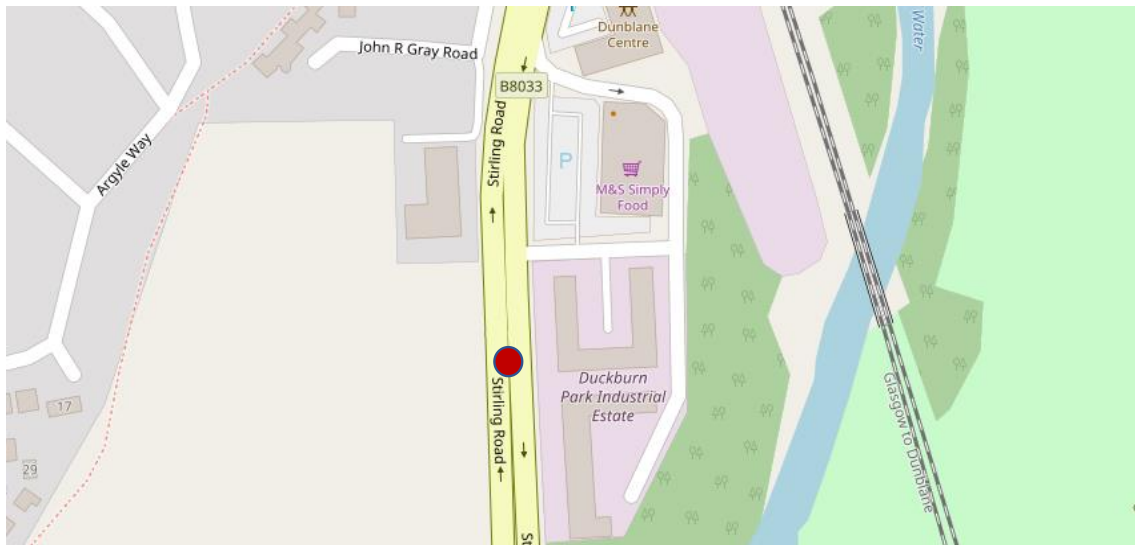
Dunblane Site 3 Stirling Road Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3992	3598	4030	4429	4855	3675	3207	4181	3969
Mean Speed (mph)	33	33	33	33	33	33	33	33.0	33.0
85%ile Speed (mph)	38	38	38	38	38	38	39	38.2	38.2
No. Vehicles > 20 MPH Limit	3978	3589	4014	4404	4832	3659	3178	4163	3951
% Vehicles > 20 MPH Limit	99.6%	99.7%	99.6%	99.4%	99.5%	99.6%	99.1%	99.6%	99.5%
No. Vehicles > 35 MPH	84	57	80	79	71	62	60	74	70
% Vehicles > 35 MPH	2.1%	1.6%	2.0%	1.8%	1.5%	1.7%	1.9%	1.8%	1.8%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5209	5244	5433	5524	6019	5050	3936	5486	5202
Mean Speed (mph)	33.0	33.2	33.0	32.8	33.1	33.3	33.9	33.0	33.2
85%ile Speed (mph)	38.4	38.2	38.1	38.0	38.4	38.4	39.2	38.2	38.4
No. Vehicles > 20 MPH Limit	5144	5231	5389	5473	5979	5033	3913	5443	5166
% Vehicles > 20 MPH Limit	98.8%	99.8%	99.2%	99.1%	99.3%	99.7%	99.4%	99.2%	99.3%
No. Vehicles > 35 MPH	88	74	83	88	91	107	88	85	88
% Vehicles > 35 MPH	1.7%	1.4%	1.5%	1.6%	1.5%	2.1%	2.2%	1.5%	1.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5197	5406	5578	5815	6169	5022	4290	5633	5354
Mean Speed (mph)	28.1	28.4	28.5	28.3	28.3	29.2	29.0	28.3	28.5
85%ile Speed (mph)	32.5	32.3	32.5	32.4	32.2	33.2	33.3	32.4	32.6
No. Vehicles > 20 MPH Limit	5047	5337	5478	5705	6100	4961	4241	5533	5267
% Vehicles > 20 MPH Limit	97.1%	98.7%	98.2%	98.1%	98.9%	98.8%	98.9%	98.2%	98.4%
No. Vehicles > 35 MPH	14	15	8	13	17	24	18	13	16
% Vehicles > 35 MPH	0.3%	0.3%	0.1%	0.2%	0.3%	0.5%	0.4%	0.2%	0.3%

4.2.62 Table 27 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February and May 2021 was 33.0mph, which reduced to 28.3mph in September 2021.

4.2.63 Therefore, the average proportion of vehicles exceeding 20mph speed was similar across all surveys.

4.2.65 Table 28 presents the results for Stirling Road southbound in Dunblane.

Table 28. Site 3 Stirling Road (Southbound)



Dunblane Site 3 Stirling Road Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3272	2847	3206	3510	3661	2760	2588	3299	3121
Mean Speed (mph)	36	35	35	35	35	35	35	35.2	35.1
85%ile Speed (mph)	40	39	40	40	40	39	40	39.7	39.6
No. Vehicles > 20 MPH Limit	3237	2842	3192	3493	3627	2747	2528	3278	3095
% Vehicles > 20 MPH Limit	98.9%	99.8%	99.6%	99.5%	99.1%	99.5%	97.7%	99.4%	99.2%
No. Vehicles > 35 MPH	106	55	76	103	101	71	91	88	86
% Vehicles > 35 MPH	3.2%	1.9%	2.4%	2.9%	2.8%	2.6%	3.5%	2.6%	2.8%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4286	4336	4472	4359	4754	3890	3198	4441	4185
Mean Speed (mph)	35.4	35.8	35.6	35.2	35.6	35.5	35.7	35.5	35.5
85%ile Speed (mph)	39.8	40.3	40.0	39.7	39.9	39.9	40.2	39.9	40.0
No. Vehicles > 20 MPH Limit	4271	4323	4452	4345	4741	3880	3168	4426	4169
% Vehicles > 20 MPH Limit	99.7%	99.7%	99.6%	99.7%	99.7%	99.7%	99.1%	99.7%	99.6%
No. Vehicles > 35 MPH	94	116	141	117	120	119	120	118	118
% Vehicles > 35 MPH	2.2%	2.7%	3.2%	2.7%	2.5%	3.1%	3.8%	2.6%	2.9%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4365	4584	4741	4789	5081	4290	3572	4712	4489
Mean Speed (mph)	30.3	30.6	30.8	29.1	28.9	29.2	28.8	29.9	29.7
85%ile Speed (mph)	35.0	35.0	35.4	33.6	33.1	33.3	33.1	34.4	34.1
No. Vehicles > 20 MPH Limit	4303	4530	4692	4702	4995	4237	3509	4644	4424
% Vehicles > 20 MPH Limit	98.6%	98.8%	99.0%	98.2%	98.3%	98.8%	98.2%	98.6%	98.6%
No. Vehicles > 35 MPH	19	11	21	9	11	12	7	14	13
% Vehicles > 35 MPH	0.4%	0.2%	0.4%	0.2%	0.2%	0.3%	0.2%	0.3%	0.3%

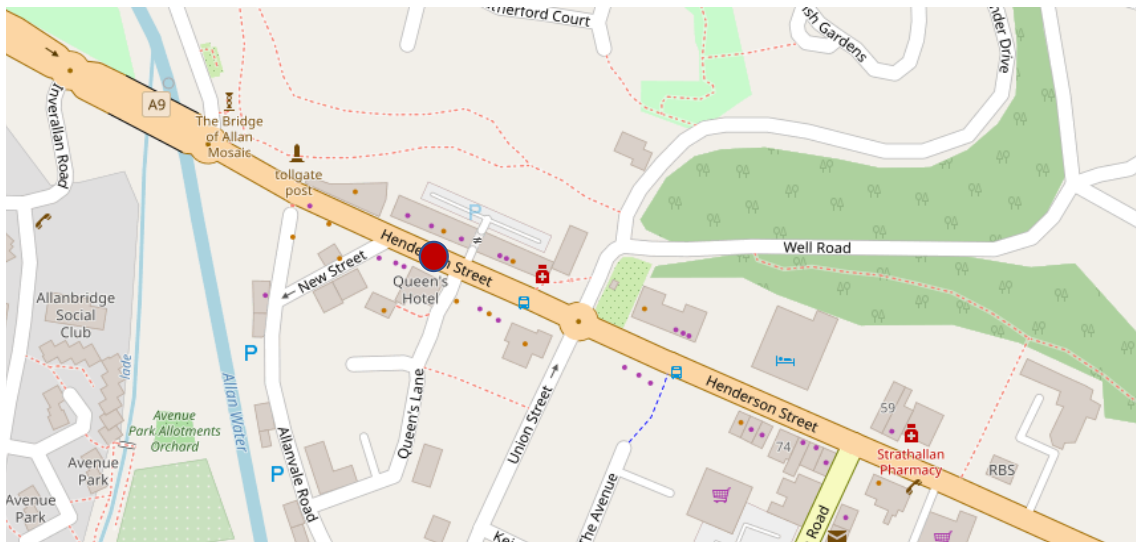
4.2.66 Table 28 shows that the 5-day average traffic flows were lower in February 2021 when Scotland was in a period of lockdown. The mean speed of traffic in February 2021 was similar to that of May 2021 (35.2mph and 35.5mph respectively), but reduced in September 2021 (29.9mph).

4.2.67 Therefore, the average proportion of vehicles exceeding 20mph speed was similar across all surveys.

Bridge of Allan

4.2.68 Table 29 presents the results for the Henderson Street eastbound in Bridge of Allan.

Table 29. Site 1 Henderson Street (Eastbound)



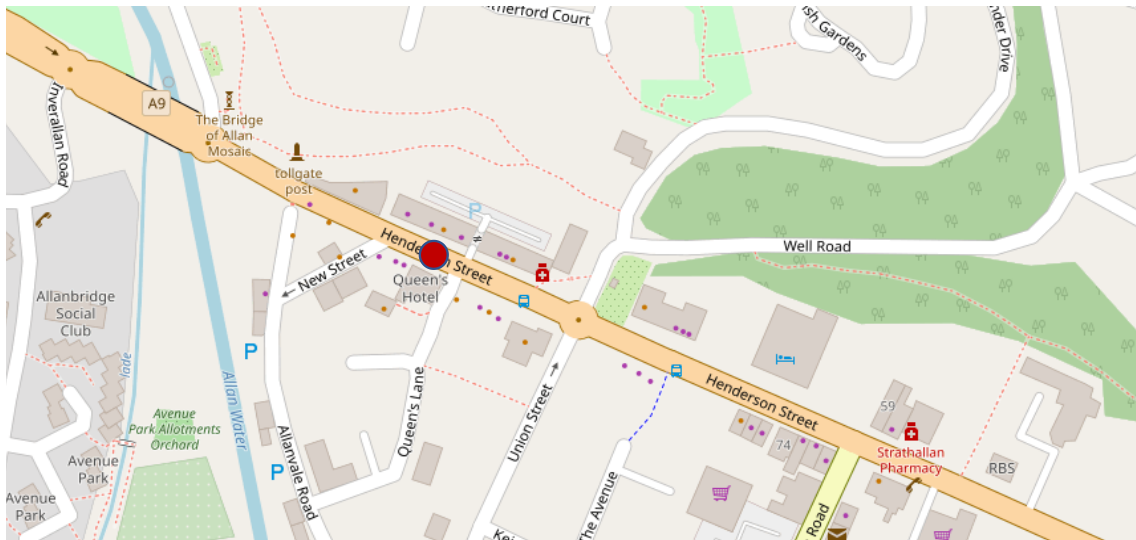
Bridge of Allan Site 1 Henderson Street Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4345	3926	4313	4505	5035	4230	3647	4425	4286
Mean Speed (mph)	20.6	21.3	20.3	20.4	19.3	18.8	19.3	20.4	20.0
85%ile Speed (mph)	24.6	25.2	24.4	24.4	23.4	23.2	23.5	24.4	24.1
No. Vehicles > 20 MPH Limit	2406	2453	2195	2326	2006	1525	1451	2277	2052
% Vehicles > 20 MPH Limit	55.4%	62.5%	50.9%	51.6%	39.8%	36.1%	39.8%	52.0%	48.0%
No. Vehicles > 35 MPH	11	22	17	13	21	20	12	17	17
% Vehicles > 35 MPH	0.3%	0.6%	0.4%	0.3%	0.4%	0.5%	0.3%	0.4%	0.4%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5477	5770	6033	5993	6423	5476	4478	5939	5664
Mean Speed (mph)	20.0	19.8	19.4	19.2	18.4	18.2	19.3	19.4	19.2
85%ile Speed (mph)	23.9	23.6	23.3	23.2	22.8	22.6	23.7	23.4	23.3
No. Vehicles > 20 MPH Limit	2795	2678	2523	2397	2193	1705	1787	2517	2297
% Vehicles > 20 MPH Limit	51.0%	46.4%	41.8%	40.0%	34.1%	31.1%	39.9%	42.7%	40.6%
No. Vehicles > 35 MPH	5	0	5	3	4	1	1	3	3
% Vehicles > 35 MPH	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5672	6024	6543	6279	6586	5959	4935	6221	6000
Mean Speed (mph)	19.7	19.0	18.5	18.7	17.9	17.7	19.0	18.8	18.6
85%ile Speed (mph)	23.6	23.2	22.8	22.8	22.1	22.0	23.1	22.9	22.8
No. Vehicles > 20 MPH Limit	2585	2412	2167	2254	1917	1632	1828	2267	2114
% Vehicles > 20 MPH Limit	45.6%	40.0%	33.1%	35.9%	29.1%	27.4%	37.0%	36.7%	35.5%
No. Vehicles > 35 MPH	28	13	19	24	23	14	20	21	20
% Vehicles > 35 MPH	0.5%	0.2%	0.3%	0.4%	0.3%	0.2%	0.4%	0.3%	0.3%

4.2.69 Table 29 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, and the mean speed was 20.4mph. Flows increased in both May and September 2021, whilst the mean speed reduced over time.

4.2.70 The proportion of vehicles exceeding 20mph in May 2021 was slightly lower than in February 2021, and continued to decline in September 2021.

4.2.71 Table 30 presents the results for the Henderson Street westbound in Bridge of Allan.

Table 30. Site Henderson Street (Westbound)



Bridge of Allan Site 1 Henderson Street Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4786	4202	4672	5101	5572	4751	3844	4867	4704
Mean Speed (mph)	21.0	21.8	20.8	20.7	19.5	18.4	19.3	20.8	20.2
85%ile Speed (mph)	24.7	25.4	24.6	24.7	24.0	22.8	23.7	24.7	24.3
No. Vehicles > 20 MPH Limit	2907	2869	2685	2917	2463	1533	1579	2768	2422
% Vehicles > 20 MPH Limit	60.7%	68.3%	57.5%	57.2%	44.2%	32.3%	41.1%	57.6%	51.6%
No. Vehicles > 35 MPH	11	19	18	21	20	15	18	18	17
% Vehicles > 35 MPH	0.2%	0.5%	0.4%	0.4%	0.4%	0.3%	0.5%	0.4%	0.4%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	5823	6170	6480	6638	7011	6108	4700	6424	6133
Mean Speed (mph)	20.9	20.3	19.7	19.4	18.7	18.1	19.5	19.8	19.5
85%ile Speed (mph)	24.7	24.6	24.2	23.8	23.5	22.9	24.0	24.2	24.0
No. Vehicles > 20 MPH Limit	3452	3286	2975	2921	2641	1958	2056	3055	2756
% Vehicles > 20 MPH Limit	59.3%	53.3%	45.9%	44.0%	37.7%	32.1%	43.7%	48.0%	45.1%
No. Vehicles > 35 MPH	0	1	6	0	5	1	5	2	3
% Vehicles > 35 MPH	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	6244	6734	7399	6989	7546	6974	5519	6982	6772
Mean Speed (mph)	19.5	18.7	17.5	18.6	17.6	16.4	18.7	18.4	18.1
85%ile Speed (mph)	23.6	23.2	22.8	23.3	22.5	21.8	23.1	23.1	22.9
No. Vehicles > 20 MPH Limit	2813	2534	2290	2647	2250	1617	2069	2507	2317
% Vehicles > 20 MPH Limit	45.1%	37.6%	31.0%	37.9%	29.8%	23.2%	37.5%	36.3%	34.6%
No. Vehicles > 35 MPH	21	16	12	17	16	20	21	16	18
% Vehicles > 35 MPH	0.3%	0.2%	0.2%	0.2%	0.2%	0.3%	0.4%	0.2%	0.3%

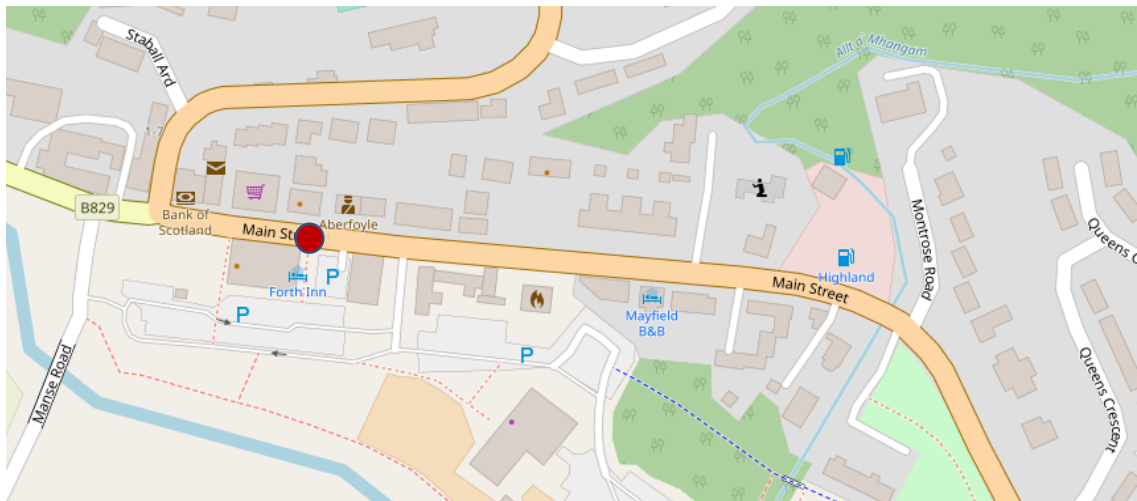
4.2.72 Table 30 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was highest at 20.8mph. Flows increased in May 2021 and continued to increase in September 2021, whilst the mean speed reduced over time.

4.2.73 The proportion of vehicles exceeding 20mph in May 2021 was slightly lower than in February 2021, and continued to decline in September 2021.

Aberfoyle

4.2.74 Table 31 presents the results for the Main Street eastbound in Aberfoyle.

Table 31. Site 1 Main Street (Eastbound)



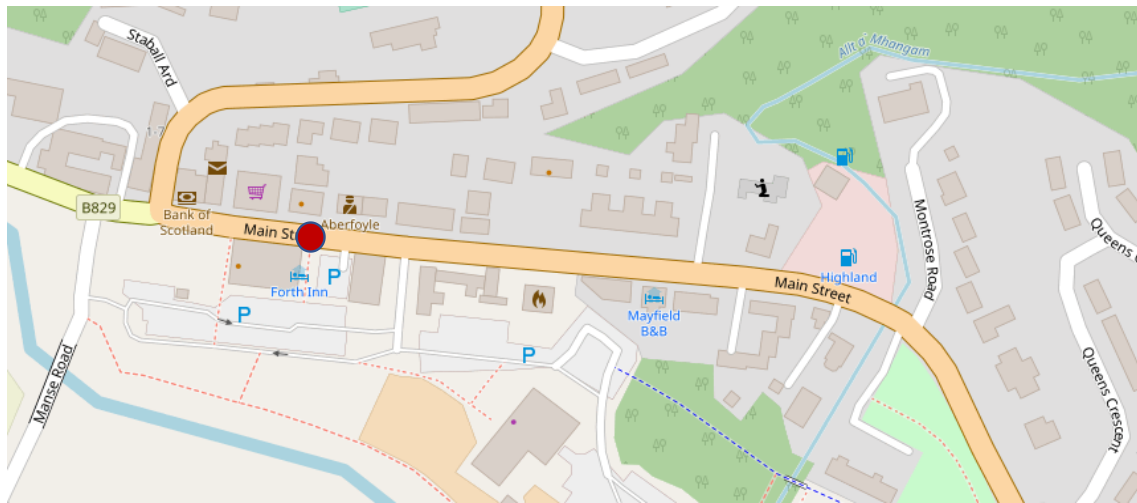
Aberfoyle Site 1 Main Street Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	708	659	742	861	940	971	958	782	834
Mean Speed (mph)	20.0	20.1	20.7	19.0	20.0	18.8	18.9	20.0	19.6
85 th ile Speed (mph)	25.6	25.4	26.0	24.4	25.3	23.5	23.7	25.3	24.8
No. Vehicles > 20 MPH Limit	347	307	380	330	439	327	360	361	356
% Vehicles > 20 MPH Limit	49.0%	46.6%	51.2%	38.3%	46.7%	33.7%	37.6%	46.4%	43.3%
No. Vehicles > 35 MPH	3	7	7	3	2	3	0	4	4
% Vehicles > 35 MPH	0.4%	1.1%	0.9%	0.3%	0.2%	0.3%	0.0%	0.6%	0.5%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	761	1019	1281	1253	1454	1421	1547	1154	1248
Mean Speed (mph)	21.1	20.5	20.6	20.6	19.4	19.3	18.9	20.4	20.1
85 th ile Speed (mph)	26.5	25.3	25.7	25.9	24.8	24.3	23.9	25.6	25.2
No. Vehicles > 20 MPH Limit	445	549	697	698	654	606	604	609	608
% Vehicles > 20 MPH Limit	58.5%	53.9%	54.4%	55.7%	45.0%	42.6%	39.0%	53.5%	49.9%
No. Vehicles > 35 MPH	2	2	5	4	2	7	3	3	4
% Vehicles > 35 MPH	0.3%	0.2%	0.4%	0.3%	0.1%	0.5%	0.2%	0.3%	0.3%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1335	1452	1821	1241	1467	508	2134	1463	1423
Mean Speed (mph)	18.2	17.9	17.8	18.9	17.7	18.8	16.3	18.1	17.9
85 th ile Speed (mph)	22.6	22.3	22.0	23.3	21.9	23.4	20.1	22.4	22.2
No. Vehicles > 20 MPH Limit	426	424	502	469	388	190	331	442	390
% Vehicles > 20 MPH Limit	31.9%	29.2%	27.6%	37.8%	26.4%	37.4%	15.5%	30.6%	29.4%
No. Vehicles > 35 MPH	4	1	1	6	3	1	1	3	2
% Vehicles > 35 MPH	0.3%	0.1%	0.1%	0.5%	0.2%	0.2%	0.0%	0.2%	0.2%

4.2.75 Table 31 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was 20.0mph. The highest flows were observed in September 2021 when the mean speed was 18.1mph

4.2.76 The proportion of vehicles exceeding 20mph was similar in February 2021 and May 2021, but decreased in September 2021.

4.2.77 Table 32 presents the results for the Main Street westbound in Main Street.

Table 32. Site Main Street (Westbound)



Aberfoyle Site 1 Main Street Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	781	733	804	907	1024	1032	1017	850	900
Mean Speed (mph)	21	21	21	21	21	20	21	21.0	20.9
85%ile Speed (mph)	27	26	27	26	27	26	27	26.6	26.6
No. Vehicles > 20 MPH Limit	470	417	494	523	635	558	573	508	524
% Vehicles > 20 MPH Limit	60.2%	56.9%	61.4%	57.7%	62.0%	54.1%	56.3%	59.6%	58.4%
No. Vehicles > 35 MPH	7	4	9	7	6	4	16	7	8
% Vehicles > 35 MPH	0.9%	0.5%	1.1%	0.8%	0.6%	0.4%	1.6%	0.8%	0.8%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	808	1028	1376	1310	1580	1435	1537	1220	1296
Mean Speed (mph)	22.6	21.6	22.6	22.2	21.5	21.4	21.5	22.1	21.9
85%ile Speed (mph)	27.5	26.5	27.5	27.0	26.9	26.9	26.5	27.1	27.0
No. Vehicles > 20 MPH Limit	573	676	991	906	1002	902	953	830	858
% Vehicles > 20 MPH Limit	70.9%	65.8%	72.0%	69.2%	63.4%	62.9%	62.0%	68.3%	66.6%
No. Vehicles > 35 MPH	14	8	8	16	12	8	15	12	12
% Vehicles > 35 MPH	1.7%	0.8%	0.6%	1.2%	0.8%	0.6%	1.0%	1.0%	0.9%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1415	1547	1883	1331	1607	653	1991	1557	1490
Mean Speed (mph)	19.7	19.4	19.3	19.9	18.9	20.0	18.0	19.4	19.3
85%ile Speed (mph)	23.9	23.9	24.0	24.5	23.8	24.8	22.5	24.0	23.9
No. Vehicles > 20 MPH Limit	659	692	849	661	659	332	626	704	640
% Vehicles > 20 MPH Limit	46.6%	44.7%	45.1%	49.7%	41.0%	50.8%	31.4%	45.4%	44.2%
No. Vehicles > 35 MPH	3	2	8	3	4	0	4	4	3
% Vehicles > 35 MPH	0.2%	0.1%	0.4%	0.2%	0.2%	0.0%	0.2%	0.2%	0.2%

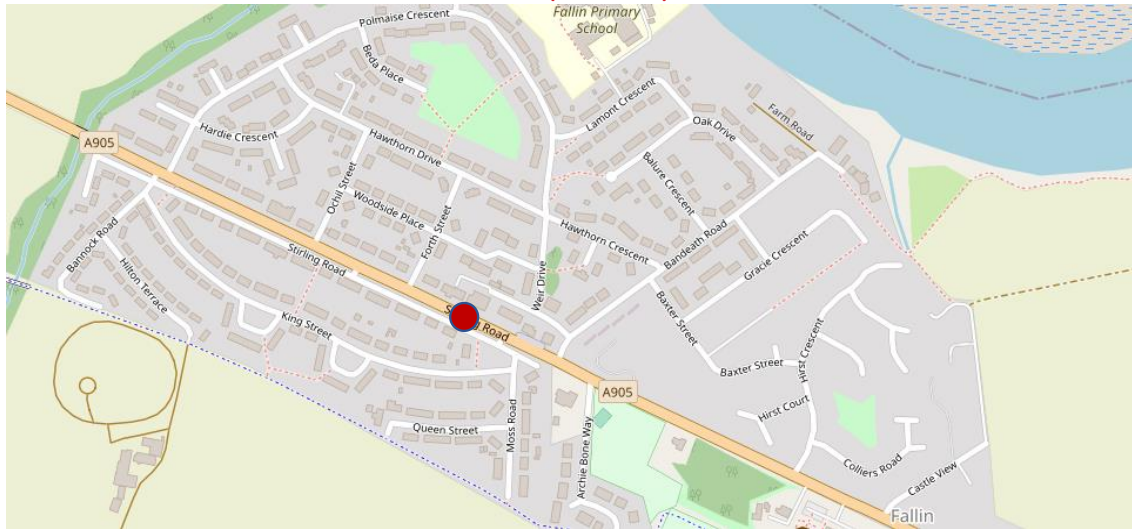
4.2.78 Table 32 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in May 2021 (22.1mph).

4.2.79 The proportion of vehicles exceeding 20mph was similar in May 2021 and February 2021, before decreasing in September 2021.

Fallin

4.2.80 Table 33 presents the results for the A905 eastbound in Fallin.

Table 33. Site 1 A905 (Eastbound)



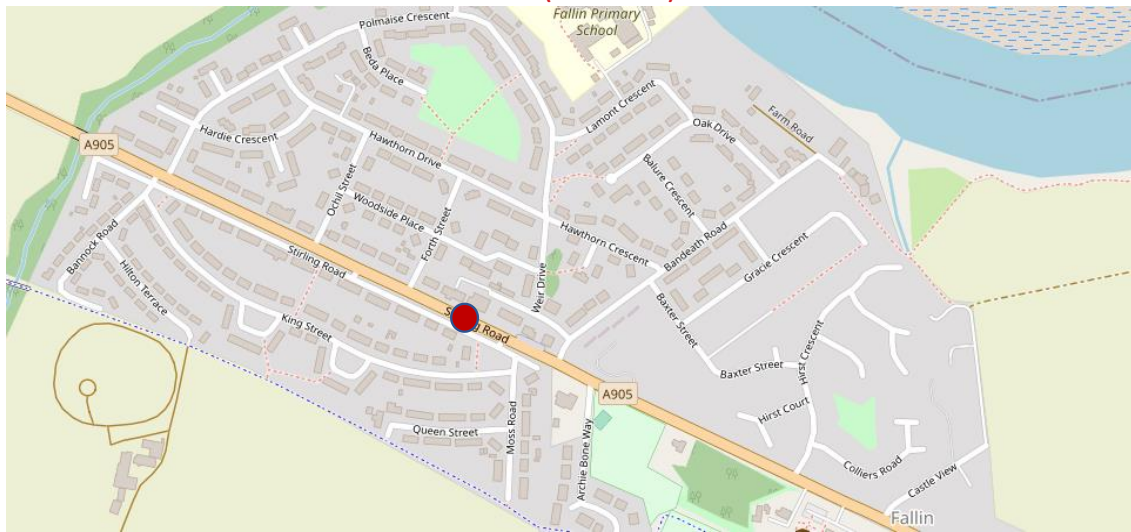
Fallin Site 1 A905 Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3442	3137	3408	3469	3926	2653	2255	3476	3184
Mean Speed (mph)	27.8	27.8	27.9	28.1	27.6	28.4	29.2	27.8	28.1
85%ile Speed (mph)	31.5	31.4	31.4	31.7	31.3	31.9	33.0	31.5	31.7
No. Vehicles > 20 MPH Limit	3304	3049	3328	3383	3800	2601	2214	3373	3097
% Vehicles > 20 MPH Limit	96.0%	97.2%	97.7%	97.5%	96.8%	98.0%	98.2%	97.0%	97.3%
No. Vehicles > 35 MPH	144	118	126	141	142	127	165	134	138
% Vehicles > 35 MPH	4.2%	3.8%	3.7%	4.1%	3.6%	4.8%	7.3%	3.9%	4.5%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4126	4379	4340	4245	4616	3476	2970	4341	4022
Mean Speed (mph)	28.7	28.7	28.2	29.0	28.3	29.4	29.8	28.6	28.9
85%ile Speed (mph)	32	32	32	33	32	33	33	32.2	32.5
No. Vehicles > 20 MPH Limit	4036	4292	4174	4182	4493	3430	2937	4235	3935
% Vehicles > 20 MPH Limit	97.8%	98.0%	96.2%	98.5%	97.3%	98.7%	98.9%	97.6%	97.9%
No. Vehicles > 35 MPH	218	191	187	224	201	249	251	204	217
% Vehicles > 35 MPH	5.3%	4.4%	4.3%	5.3%	4.4%	7.2%	8.5%	4.7%	5.6%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4022	4282	4245	4193	4483	3560	2904	4245	3956
Mean Speed (mph)	25.4	25.3	25.3	25.5	25.2	26.2	26.7	25.3	25.7
85%ile Speed (mph)	29.7	29.4	29.7	29.7	29.3	30.8	30.8	29.6	29.9
No. Vehicles > 20 MPH Limit	3713	3942	3846	3812	4088	3350	2780	3880	3647
% Vehicles > 20 MPH Limit	92.3%	92.1%	90.6%	90.9%	91.2%	94.1%	95.7%	91.4%	92.4%
No. Vehicles > 35 MPH	82	114	102	93	87	113	115	96	101
% Vehicles > 35 MPH	2.0%	2.7%	2.4%	2.2%	1.9%	3.2%	4.0%	2.3%	2.6%

4.2.81 Table 33 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in May 2021 (28.6mph), before reducing again in September 2021.

4.2.82 The proportion of vehicles exceeding 20mph was higher in May 2021 when compared to February 2021, before reducing slightly in September 2021, although was still over 90%.

4.2.83 Table 34 presents the results for the A905 westbound in Fallin.

Table 34. Site 1 A905 (Westbound)



Fallin Site 1 A905 Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3387	3081	3352	3372	3869	2598	2208	3412	3124
Mean Speed (mph)	28.2	28.3	28.4	28.3	28.3	28.8	29.4	28.3	28.5
85%ile Speed (mph)	31.8	32.2	31.9	31.8	31.9	32.5	33.2	31.9	32.2
No. Vehicles > 20 MPH Limit	3302	3000	3266	3298	3785	2560	2163	3330	3053
% Vehicles > 20 MPH Limit	97.5%	97.4%	97.4%	97.8%	97.8%	98.5%	98.0%	97.6%	97.8%
No. Vehicles > 35 MPH	132	174	170	137	178	148	172	158	159
% Vehicles > 35 MPH	3.9%	5.6%	5.1%	4.1%	4.6%	5.7%	7.8%	4.7%	5.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4123	4214	4261	4156	4411	3343	2766	4233	3896
Mean Speed (mph)	28.7	28.4	28.1	28.7	28.5	29.4	29.8	28.5	28.8
85%ile Speed (mph)	32	32	32	32	32	33	34	32.0	32.4
No. Vehicles > 20 MPH Limit	4052	4123	4094	4076	4304	3286	2732	4130	3810
% Vehicles > 20 MPH Limit	98.3%	97.8%	96.1%	98.1%	97.6%	98.3%	98.8%	97.6%	97.8%
No. Vehicles > 35 MPH	198	197	182	210	202	240	241	198	210
% Vehicles > 35 MPH	4.8%	4.7%	4.3%	5.1%	4.6%	7.2%	8.7%	4.7%	5.6%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3922	4173	4249	4049	4436	3396	2795	4166	3860
Mean Speed (mph)	25.4	25.2	25.7	25.8	25.6	26.4	26.9	25.5	25.9
85%ile Speed (mph)	29.6	29.4	29.9	29.9	29.9	30.9	31.3	29.7	30.1
No. Vehicles > 20 MPH Limit	3574	3778	3941	3750	4048	3189	2624	3818	3558
% Vehicles > 20 MPH Limit	91.1%	90.5%	92.8%	92.6%	91.3%	93.9%	93.9%	91.7%	92.3%
No. Vehicles > 35 MPH	82	74	106	97	96	120	120	91	99
% Vehicles > 35 MPH	2.1%	1.8%	2.5%	2.4%	2.2%	3.5%	4.3%	2.2%	2.7%

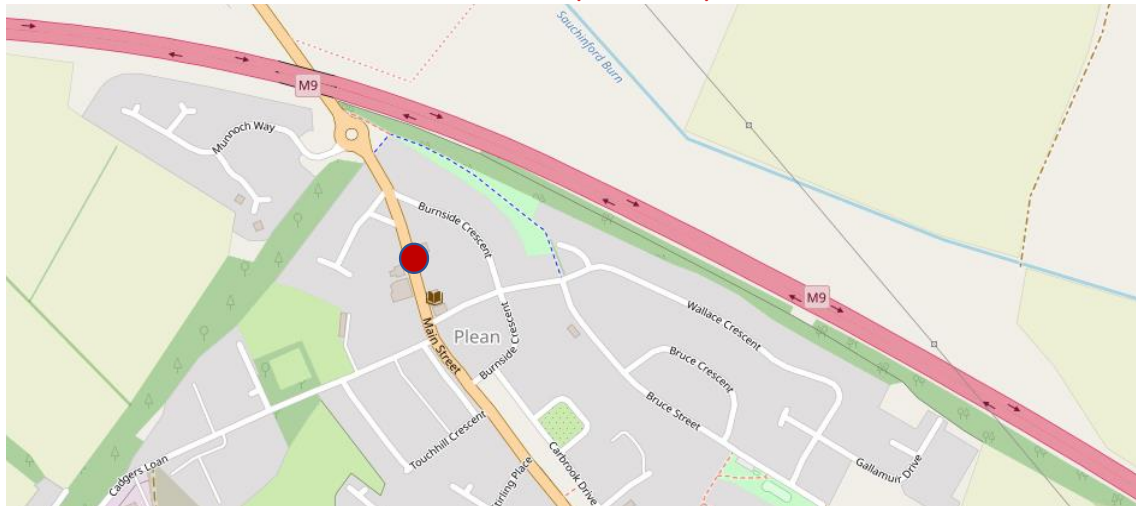
4.2.84 Table 34 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed was similar for both February and May 2021 (28.3mph and 28.5mph respectively), but reduced in September 2021 (25.5mph).

4.2.85 The proportion of vehicles exceeding 20mph in May 2021 was similar to February 2021, during a period of lockdown, but reduced slightly in September 2021 although it was over 90% in all survey periods.

Plean

4.2.86 Table 35 presents the results for the Main Street northbound in Plean.

Table 35. Site 1 Main Street (Northbound)



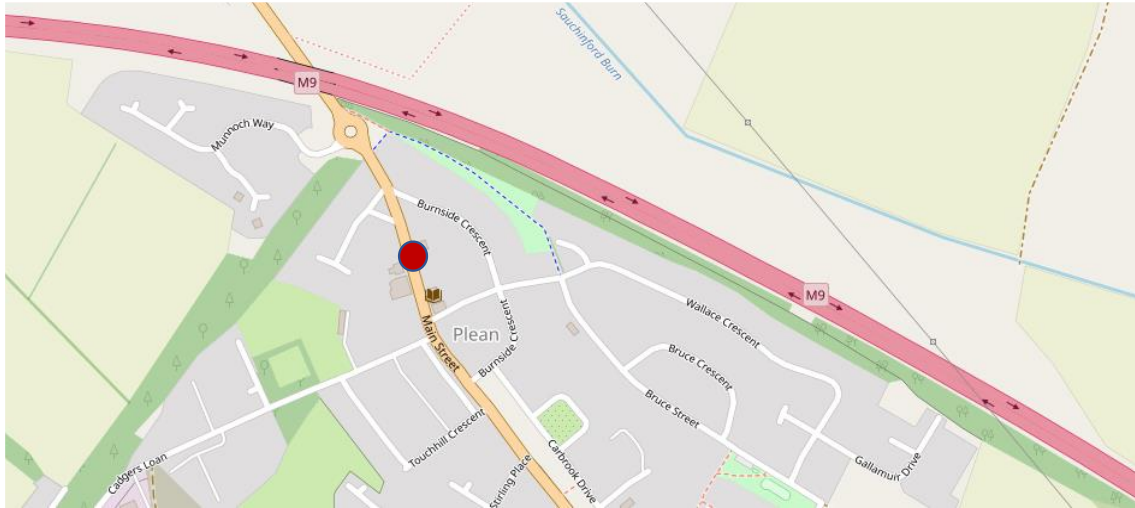
Plean Site 1 Main Street Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3914	3991	4041	4090	4240	2779	2496	4055	3650
Mean Speed (mph)	24.9	24.4	25.0	24.8	24.6	25.7	26.1	24.7	25.1
85 th ile Speed (mph)	28.5	28.1	28.5	28.3	28.5	29.8	29.9	28.4	28.8
No. Vehicles > 30 MPH Limit	310	281	326	291	343	389	360	310	329
% Vehicles > 30 MPH Limit	7.9%	7.0%	8.1%	7.1%	8.1%	14.0%	14.4%	7.6%	9.5%
No. Vehicles > 35 MPH	4	3	2	3	3	0	0	3	2
% Vehicles > 35 MPH	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4941	4948	5100	5079	5097	3826	3376	5033	4624
Mean Speed (mph)	25.4	25.2	25.2	25.1	25.1	25.9	26.6	25.2	25.5
85 th ile Speed (mph)	28.9	29.0	29.1	28.9	29.1	29.6	30.4	29.0	29.3
No. Vehicles > 30 MPH Limit	483	500	547	484	539	488	587	511	518
% Vehicles > 30 MPH Limit	9.8%	10.1%	10.7%	9.5%	10.6%	12.8%	17.4%	10.1%	11.6%
No. Vehicles > 35 MPH	3	1	2	0	1	1	5	1	2
% Vehicles > 35 MPH	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4445	4556	4683	4492	4701	3646	3147	4575	4239
Mean Speed (mph)	23.3	22.9	23.1	23.1	23.1	23.9	24.0	23.1	23.3
85 th ile Speed (mph)	27.2	26.9	27.1	27.1	27.0	27.7	28.4	27.1	27.3
No. Vehicles > 30 MPH Limit	201	199	225	194	203	225	250	204	214
% Vehicles > 30 MPH Limit	4.5%	4.4%	4.8%	4.3%	4.3%	6.2%	7.9%	4.5%	5.2%
No. Vehicles > 35 MPH	37	40	28	34	26	32	47	33	35
% Vehicles > 35 MPH	0.0%	-0.1%	0.0%	-0.1%	-0.1%	0.0%	0.1%	0.0%	0.0%

4.2.87 Table 35 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was lower than May 2021. The mean speed was lowest in September 2021.

4.2.88 The proportion of vehicles exceeding 30mph was higher in May 2021 than in February 2021, the lowest proportion was observed in September 2021.

4.2.89 Table 36 presents the results for the High Street southbound in Plean.

Table 36. Site 1 Main Street (Southbound)



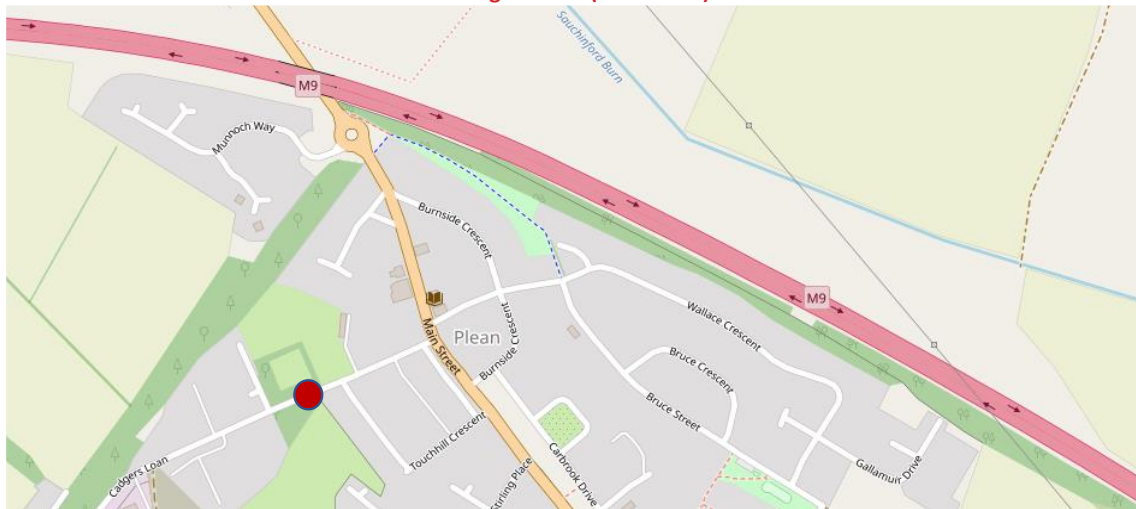
Plean Site 1 Main Street Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3947	4196	4152	4306	4314	2916	2497	4183	3761
Mean Speed (mph)	24.0	23.1	23.6	23.6	23.1	24.5	24.9	23.5	23.8
85%ile Speed (mph)	28.1	27.3	28.0	27.8	27.2	29.0	29.3	27.7	28.1
No. Vehicles > 20 MPH Limit	240	188	269	239	155	296	297	218	241
% Vehicles > 20 MPH Limit	6.1%	4.5%	6.5%	5.6%	3.6%	10.2%	11.9%	5.2%	6.9%
No. Vehicles > 35 MPH	1	0	1	0	0	4	1	0	1
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4856	5078	5187	5031	5216	4090	3308	5074	4681
Mean Speed (mph)	24.4	24.3	24.0	24.0	23.5	24.1	25.8	24.0	24.3
85%ile Speed (mph)	28.6	28.5	28.5	28.3	28.1	28.9	30.0	28.4	28.7
No. Vehicles > 20 MPH Limit	446	405	417	386	367	402	488	404	416
% Vehicles > 20 MPH Limit	9.2%	8.0%	8.0%	7.7%	7.0%	9.8%	14.8%	8.0%	9.2%
No. Vehicles > 35 MPH	9	1	1	1	1	2	4	3	3
% Vehicles > 35 MPH	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4486	4674	4928	4712	4819	3649	3146	4724	4345
Mean Speed (mph)	22.0	21.5	21.6	21.3	21.2	22.5	23.1	21.5	21.9
85%ile Speed (mph)	26.7	26.4	26.5	26.4	25.9	27.5	27.7	26.4	26.7
No. Vehicles > 30 MPH Limit	176	173	190	201	155	210	204	179	187
% Vehicles > 30 MPH Limit	3.9%	3.7%	3.9%	4.3%	3.2%	5.8%	6.5%	3.8%	4.5%
No. Vehicles > 35 MPH	24	19	25	19	23	30	36	22	25
% Vehicles > 35 MPH	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%

4.2.90 Table 36 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. The mean speed in February 2021 was 23.5mph and reduced to 21.5mph in September 2021.

4.2.91 The proportion of vehicles exceeding 20mph in May 2021 was higher than February 2021, before reducing in September 2021.

4.2.92 Table 37 presents the results for Cadgers Loan eastbound in Plean. Surveys at this location were only undertaken in September 2021.

Table 37. Site 2 Cadgers Loan (Eastbound)



Plean Site 2 Cadgers Loan east of the junction with Parkside Court Eastbound

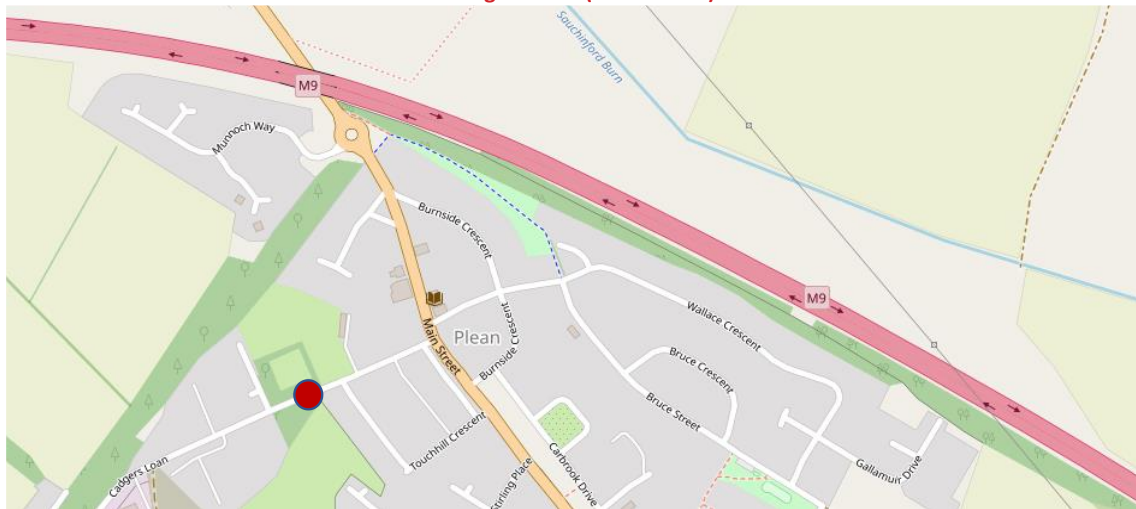
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	509	510	513	441	462	478	403	487	474
Mean Speed (mph)	29.4	29.7	29.4	29.5	28.3	28.8	28.0	29.3	29.0
85%ile Speed (mph)	35.9	36.9	35.8	36.8	35.7	35.6	34.2	36.2	35.8
No. Vehicles > 20 MPH Limit	470	474	476	408	412	433	370	448	435
% Vehicles > 20 MPH Limit	92.3%	92.9%	92.8%	92.5%	89.2%	90.6%	91.8%	92.0%	91.7%
No. Vehicles > 35 MPH	98	115	90	94	79	83	50	95	87
% Vehicles > 35 MPH	19.3%	22.5%	17.5%	21.3%	17.1%	17.4%	12.4%	19.6%	18.2%

4.2.93 Table 37 shows that the average flow was 487 vehicles and the mean speed was 29.3mph.

4.2.94 The proportion of vehicles exceeding 20mph was 92.0%.

4.2.95 Table 38 presents the results for Cadgers Loan westbound in Plean. Again, the surveys were only undertaken in September 2021.

Table 38. Site 2 Cadgers Loan (Westbound)



Plean Site 2 Cadgers Loan east of the junction with Parkside Court Westbound

September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	471	514	525	477	477	469	405	493	477
Mean Speed (mph)	28.6	29.1	29.4	28.8	28.0	28.4	28.2	28.8	28.6
85%ile Speed (mph)	34.7	35.3	35.9	35.2	34.7	34.3	34.1	35.2	34.9
No. Vehicles > 20 MPH Limit	432	475	493	437	426	425	378	453	438
% Vehicles > 20 MPH Limit	91.7%	92.4%	93.9%	91.6%	89.3%	90.6%	93.3%	91.8%	91.8%
No. Vehicles > 35 MPH	66	84	97	75	66	57	47	78	70
% Vehicles > 35 MPH	14.0%	16.3%	18.5%	15.7%	13.8%	12.2%	11.6%	15.7%	14.6%

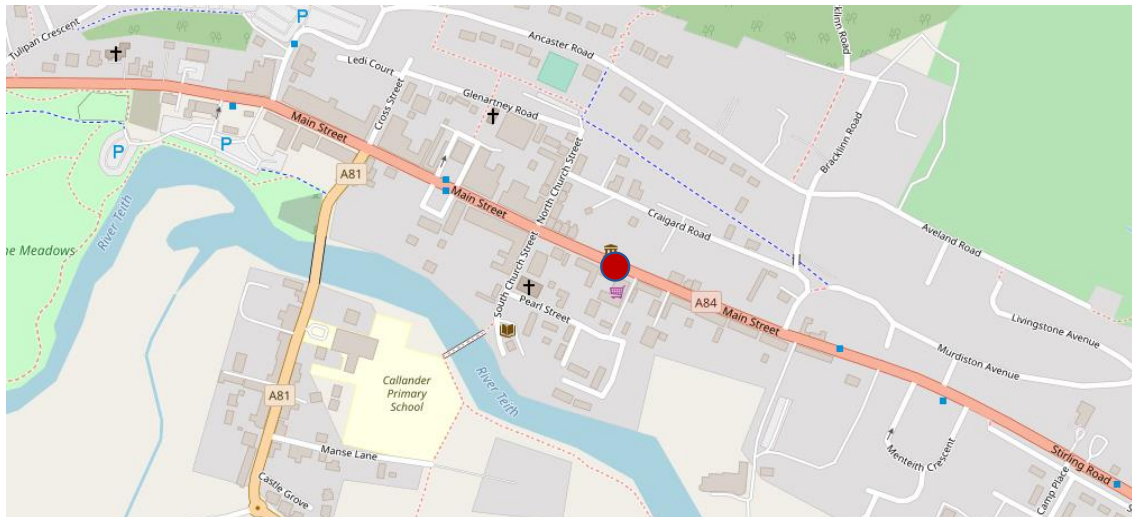
4.2.96 Table 38 shows that the average flow was 493 vehicles and the mean speed was 28.8mph.

4.2.97 The proportion of vehicles exceeding 20mph was 91.8%.

Callander

4.2.98 Table 39 presents the results for the Main Street eastbound in Callander.

Table 39. Site Main Street (Eastbound)



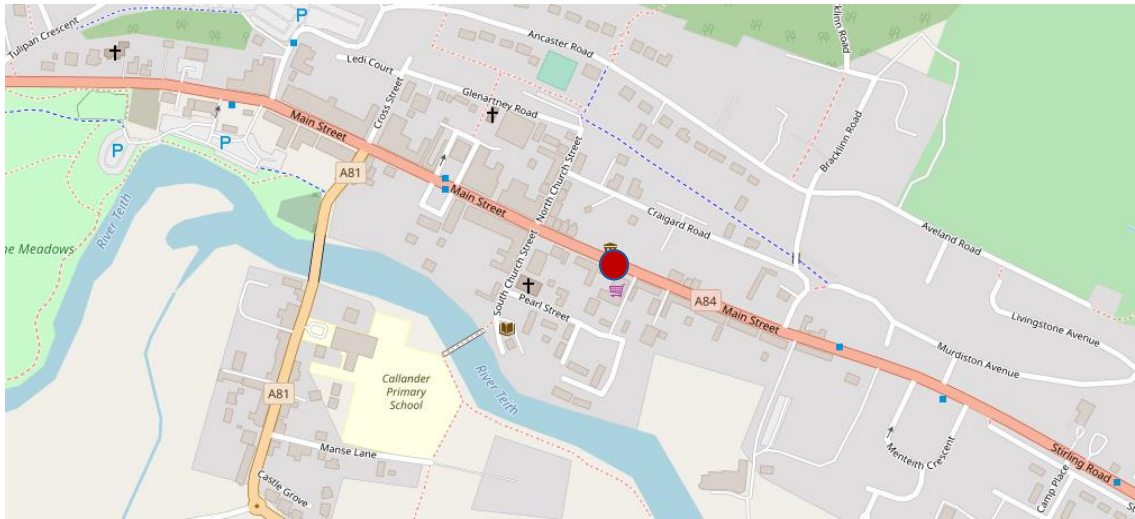
Callander Site 1 Main Street Eastbound									
February 2021	Monday 01 Mar 2021	Tuesday 02 Mar 2021	Wednesday 03 Mar 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2657	2671	2597	2835	2959	2501	2211	2744	2633
Mean Speed (mph)	24.0	24.1	23.8	24.2	24.4	23.9	24.5	24.1	24.1
85%ile Speed (mph)	28.3	28.4	28.1	28.5	28.5	28.6	29.1	28.4	28.5
No. Vehicles > 20 MPH Limit	2203	2252	2135	2400	2559	2036	1854	2310	2206
% Vehicles > 20 MPH Limit	82.9%	84.3%	82.2%	84.7%	86.5%	81.4%	83.9%	84.1%	83.7%
No. Vehicles > 35 MPH	26	19	22	26	25	16	28	24	23
% Vehicles > 35 MPH	1.0%	0.7%	0.8%	0.9%	0.8%	0.6%	1.3%	0.9%	0.9%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4122	4297	4387	4236	5006	4360	4361	4410	4396
Mean Speed (mph)	23.0	22.9	23.1	22.2	21.9	21.8	22.5	22.6	22.5
85%ile Speed (mph)	27.7	27.3	27.7	27.0	26.7	26.9	26.9	27.3	27.2
No. Vehicles > 20 MPH Limit	3159	3276	3471	3046	3350	2940	3156	3260	3200
% Vehicles > 20 MPH Limit	76.6%	76.2%	79.1%	71.9%	66.9%	67.4%	72.4%	74.2%	72.9%
No. Vehicles > 35 MPH	34	31	26	23	38	26	33	30	30
% Vehicles > 35 MPH	0.8%	0.7%	0.6%	0.5%	0.8%	0.6%	0.8%	0.7%	0.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 03 Sep 2021	Saturday 04 Sep 2021	Sunday 05 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3922	4233	5087	4387	5304	5304	5392	4587	4804
Mean Speed (mph)	21.2	20.8	21.4	21.5	20.4	20.2	20.7	21.1	20.9
85%ile Speed (mph)	25.8	25.7	25.7	25.9	25.0	24.8	25.2	25.6	25.4
No. Vehicles > 20 MPH Limit	2418	2502	3316	2809	2900	2748	3043	2789	2819
% Vehicles > 20 MPH Limit	61.7%	59.1%	65.2%	64.0%	54.7%	51.8%	56.4%	60.9%	59.0%
No. Vehicles > 35 MPH	17	23	18	30	15	22	24	21	21
% Vehicles > 35 MPH	0.4%	0.5%	0.4%	0.7%	0.3%	0.4%	0.4%	0.5%	0.5%

4.2.99 Table 39 shows that the 5-day average traffic flows were far lower in February 2021 when Scotland was in a period of lockdown. The mean speed in February 2021 was 24.1mph. The highest flows were observed in September 2021 when the mean speed had decreased to 21.1mph.

4.2.100 The proportion of vehicles exceeding 20mph was lower in May 2021 when compared to February 2021, the decline continuing in September 2021.

4.2.101 Table 40 presents the results for the Main Street westbound in Callander.

Table 40. Site 1 Main Street (Westbound)



Callander Site 1 Main Street Westbound									
February 2021	Monday 01 Mar 2021	Tuesday 02 Mar 2021	Wednesday 03 Mar 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 27 Feb 2021	Sunday 28 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	2600	2406	2260	2423	2569	2213	2028	2452	2357
Mean Speed (mph)	24.4	24.7	24.9	24.9	25.3	24.9	25.5	24.8	24.9
85%ile Speed (mph)	28.4	28.6	28.9	29.1	29.3	29.2	29.6	28.9	29.0
No. Vehicles > 20 MPH Limit	2277	2106	1993	2077	2340	1971	1848	2159	2087
% Vehicles > 20 MPH Limit	87.6%	87.5%	88.2%	85.7%	91.1%	89.1%	91.1%	88.0%	88.6%
No. Vehicles > 35 MPH	19	26	22	33	31	24	31	26	27
% Vehicles > 35 MPH	0.7%	1.1%	1.0%	1.4%	1.2%	1.1%	1.5%	1.1%	1.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	3931	3881	4000	3935	5197	3919	3340	4189	4029
Mean Speed (mph)	23.5	23.1	23.2	22.8	21.9	22.3	23.2	22.9	22.9
85%ile Speed (mph)	27.4	27.4	27.3	26.7	26.5	26.7	27.6	27.1	27.1
No. Vehicles > 20 MPH Limit	3234	3050	3131	3059	3464	2767	2607	3188	3045
% Vehicles > 20 MPH Limit	82.3%	78.6%	78.3%	77.7%	66.7%	70.6%	78.1%	76.7%	76.0%
No. Vehicles > 35 MPH	36	23	22	19	42	24	31	28	28
% Vehicles > 35 MPH	0.9%	0.6%	0.6%	0.5%	0.8%	0.6%	0.9%	0.7%	0.7%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 03 Sep 2021	Saturday 04 Sep 2021	Sunday 05 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	4071	4081	4793	3879	5639	5569	4133	4493	4595
Mean Speed (mph)	17.3	18.7	20.7	21.1	19.4	16.7	20.5	19.4	19.2
85%ile Speed (mph)	24.1	24.3	24.7	24.9	23.9	23.2	24.6	24.4	24.2
No. Vehicles > 20 MPH Limit	1697	1887	2690	2276	2611	2008	2197	2232	2195
% Vehicles > 20 MPH Limit	41.7%	46.2%	56.1%	58.7%	46.3%	36.1%	53.2%	49.8%	48.3%
No. Vehicles > 35 MPH	23	19	20	20	20	39	21	20	23
% Vehicles > 35 MPH	0.6%	0.5%	0.4%	0.5%	0.4%	0.7%	0.5%	0.5%	0.5%

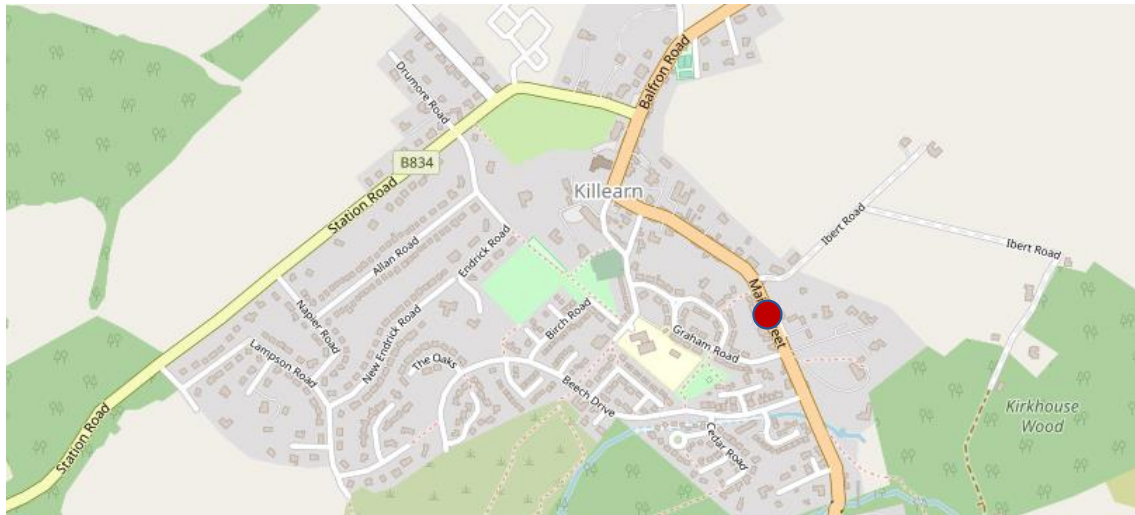
4.2.102 Table 40 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was higher at 24.8mph. Traffic flows were highest in September 2021, by which time the mean speed had decreased to 19.4mph.

4.2.103 The proportion of vehicles exceeding 20mph in May 2021 was lower than February 2021, reducing further in September 2021.

Killlearn

4.2.104 Table 41 presents the results for the Main Street northbound in Killlearn.

Table 41. Site 1 Main Street (Northbound)



Killlearn Site 1 Main Street Northbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1301	1178	1287	1255	1190	1023	970	1242	1172
Mean Speed (mph)	24.7	24.8	24.3	24.5	24.9	23.3	24.2	24.6	24.4
85%ile Speed (mph)	30.8	31.1	30.6	30.7	31.2	30.4	30.2	30.9	30.7
No. Vehicles > 30 MPH Limit	253	241	230	238	245	169	154	241	219
% Vehicles > 30 MPH Limit	19.4%	20.5%	17.9%	19.0%	20.6%	16.5%	15.9%	19.5%	18.5%
No. Vehicles > 45 MPH	3	2	1	1	0	1	1	1	1
% Vehicles > 45 MPH	0.2%	0.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1641	1545	1630	1688	1656	1229	1023	1632	1487
Mean Speed (mph)	24.8	24.9	24.6	25.0	24.9	24.4	24.9	24.8	24.8
85%ile Speed (mph)	30.3	30.5	30.5	30.8	30.9	30.7	31.2	30.6	30.7
No. Vehicles > 30 MPH Limit	274	278	297	323	337	223	215	302	278
% Vehicles > 30 MPH Limit	16.7%	18.0%	18.2%	19.1%	20.4%	18.1%	21.0%	18.5%	18.8%
No. Vehicles > 45 MPH	1	1	1	0	1	0	0	1	1
% Vehicles > 45 MPH	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1713	1859	1917	1769	1871	1547	1213	1826	1698
Mean Speed (mph)	22.5	22.6	23.3	23.4	23.0	22.9	22.8	23.0	22.9
85%ile Speed (mph)	28.1	28.1	29.3	29.2	28.9	28.7	28.9	28.7	28.7
No. Vehicles > 30 MPH Limit	138	161	237	215	194	171	141	189	180
% Vehicles > 30 MPH Limit	8.1%	8.7%	12.4%	12.2%	10.4%	11.1%	11.6%	10.3%	10.6%
No. Vehicles > 45 MPH	0	1	3	3	2	5	0	2	2
% Vehicles > 45 MPH	0.0%	0.1%	0.2%	0.2%	0.1%	0.3%	0.0%	0.1%	0.1%

4.2.105 Table 41 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown, but the mean speed was 24.6mph. Flows were highest in September 2021 when the mean speed was 23.0mph.

4.2.106 The proportion of vehicles exceeding 20mph was similar in February and May 2021, but reduced in September 2021.

4.2.107 Table 42 presents the results for the Main Street southbound in Killlearn.

Table 42. Site 1 Main Street (Southbound)

Killlearn Site 1 Main Street Southbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 19 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1095	928	1053	1037	966	824	892	1016	971
Mean Speed (mph)	27.8	28.1	27.6	28.1	28.2	26.9	26.8	28.0	27.6
85%ile Speed (mph)	32.8	32.8	32.8	33.0	33.3	32.1	32.1	32.9	32.7
No. Vehicles > 30 MPH Limit	346	311	308	329	338	213	237	326	297
% Vehicles > 30 MPH Limit	31.6%	33.5%	29.2%	31.7%	35.0%	25.8%	26.6%	32.2%	30.5%
No. Vehicles > 45 MPH	0	4	3	2	4	2	3	3	3
% Vehicles > 45 MPH	0.0%	0.4%	0.3%	0.2%	0.4%	0.2%	0.3%	0.3%	0.3%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1325	1301	1377	1421	1474	1080	929	1380	1272
Mean Speed (mph)	27.1	27.4	27.3	27.3	27.3	26.7	26.7	27.3	27.1
85%ile Speed (mph)	31.6	31.9	32.2	31.9	31.9	31.1	31.9	31.9	31.8
No. Vehicles > 30 MPH Limit	322	360	363	359	390	248	228	359	324
% Vehicles > 30 MPH Limit	24.3%	27.7%	26.4%	25.3%	26.5%	23.0%	24.5%	26.0%	25.4%
No. Vehicles > 45 MPH	2	5	3	2	1	1	1	3	2
% Vehicles > 45 MPH	0.2%	0.4%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	1345	1473	1563	1496	1557	1285	1054	1487	1396
Mean Speed (mph)	25.5	25.5	25.9	25.9	25.7	25.7	25.8	25.7	25.7
85%ile Speed (mph)	30.8	30.8	31.2	30.9	30.9	31.0	31.3	30.9	31.0
No. Vehicles > 30 MPH Limit	252	276	314	302	305	243	214	290	272
% Vehicles > 30 MPH Limit	18.7%	18.7%	20.1%	20.2%	19.6%	18.9%	20.3%	19.5%	19.5%
No. Vehicles > 45 MPH	1	2	2	2	2	4	1	2	2
% Vehicles > 45 MPH	0.1%	0.1%	0.1%	0.1%	0.1%	0.3%	0.1%	0.1%	0.1%

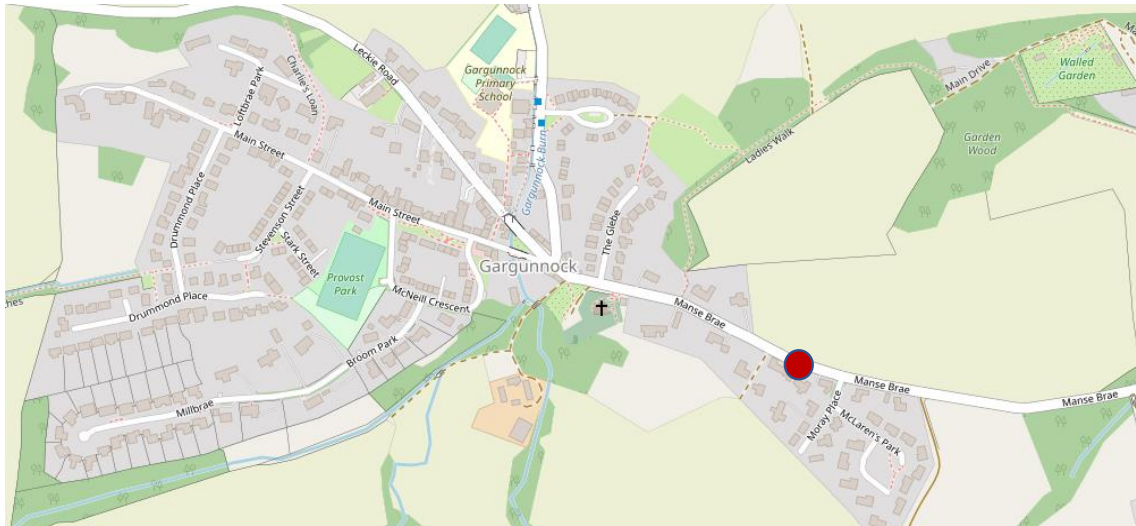
4.2.108 Table 42 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. Conversely, the mean speed was higher at 28.0mph. The highest flows were observed in September 2021 when the mean speed was lowest at 25.7mph.

4.2.109 The proportion of vehicles exceeding 20mph was lower in May 2021, when compared with February 2021, the reduction continued in September 2021.

Gargunnoch

4.2.110 Table 43 presents the results for the Manse Brae eastbound in Gargunnoch.

Table 43. Site 1 Manse Brae (Eastbound)



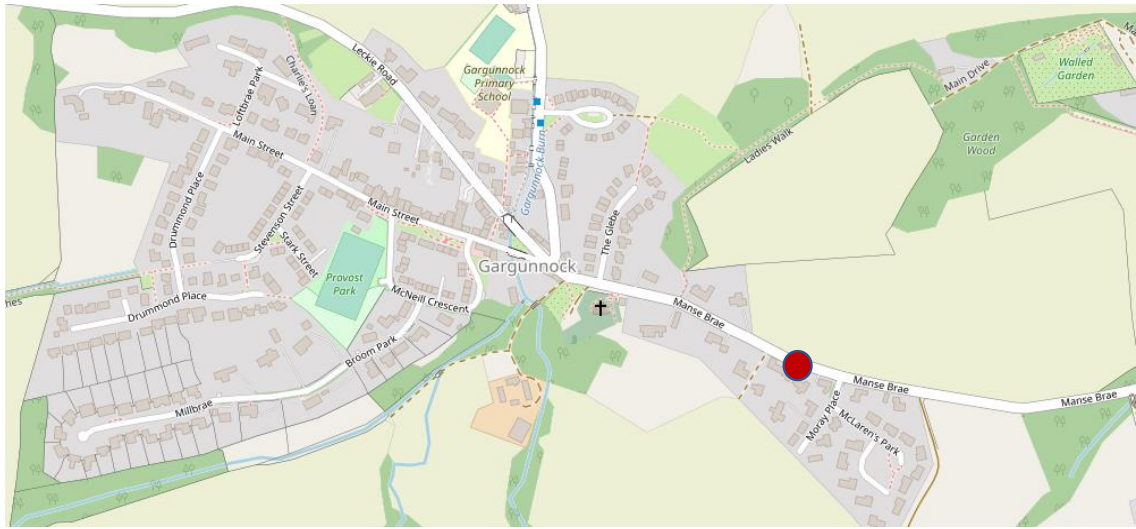
Gargunnoch Site 1 Manse Brae Eastbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	214	187	205	218	263	176	189	217	207
Mean Speed (mph)	24	25	25	25	25	24	24	24.7	24.4
85%ile Speed (mph)	29	30	30	30	30	29	29	29.6	29.4
No. Vehicles > 20 MPH Limit	175	155	169	184	212	131	153	179	168
% Vehicles > 20 MPH Limit	81.8%	82.9%	82.4%	84.4%	80.6%	74.4%	81.0%	82.4%	81.1%
No. Vehicles > 35 MPH	3	5	6	6	8	2	2	6	5
% Vehicles > 35 MPH	1.4%	2.7%	2.9%	2.8%	3.0%	1.1%	1.1%	2.6%	2.1%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	347	317	325	348	350	252	238	337	311
Mean Speed (mph)	26.1	26.0	26.2	24.5	24.9	26.0	25.5	25.5	25.6
85%ile Speed (mph)	31.4	31.4	31.6	30.2	31.0	31.2	31.1	31.1	31.1
No. Vehicles > 20 MPH Limit	298	279	284	281	284	213	204	285	263
% Vehicles > 20 MPH Limit	85.9%	88.0%	87.4%	80.7%	81.1%	84.5%	85.7%	84.6%	84.8%
No. Vehicles > 35 MPH	17	18	16	11	11	14	8	15	14
% Vehicles > 35 MPH	4.9%	5.7%	4.9%	3.2%	3.1%	5.6%	3.4%	4.4%	4.4%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	350	345	358	353	373	307	277	356	338
Mean Speed (mph)	25.9	25.9	26.0	25.6	25.3	25.8	25.1	25.7	25.7
85%ile Speed (mph)	30.7	31.6	31.2	30.9	30.6	30.6	30.9	31.0	30.9
No. Vehicles > 20 MPH Limit	311	296	321	310	327	268	231	313	295
% Vehicles > 20 MPH Limit	88.9%	85.8%	89.7%	87.8%	87.7%	87.3%	83.4%	88.0%	87.2%
No. Vehicles > 35 MPH	11	16	18	10	14	14	10	14	13
% Vehicles > 35 MPH	3.1%	4.6%	5.0%	2.8%	3.8%	4.6%	3.6%	3.9%	3.9%

4.2.111 Table 43 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in May and September 2021 (25.5mph and 25.7mph respectively).

4.2.112 The proportion of vehicles exceeding 20mph was similar in February 2021 and May 2021, but was highest in September 2021 (88.0%).

4.2.113 Table 44 presents the results for the Manse Brae westbound in Gargunnoch.

Table 44. Manse Brae (Westbound)



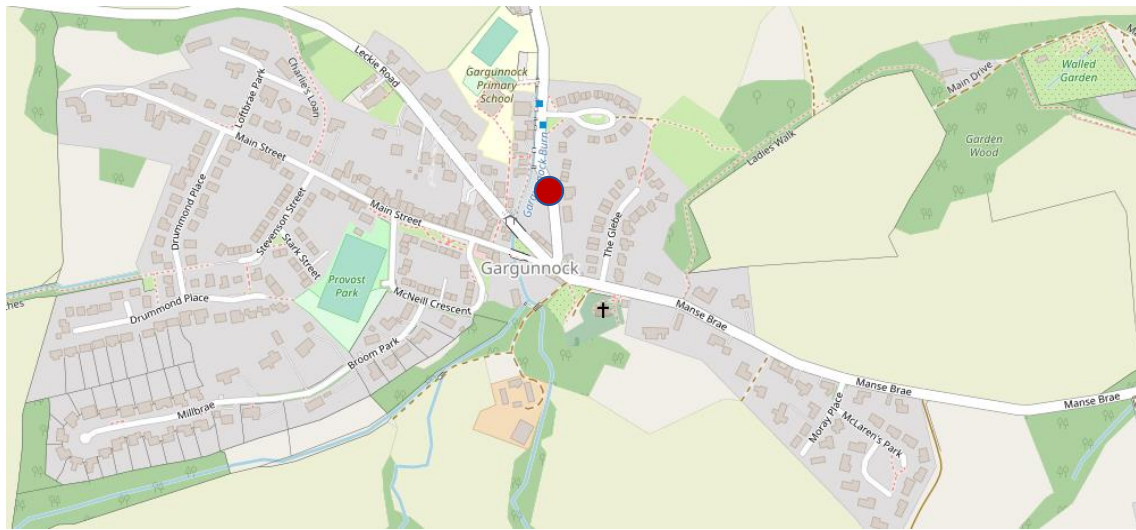
Gargunnoch Site 1 Manse Brae Westbound									
February 2021	Monday 22 Feb 2021	Tuesday 23 Feb 2021	Wednesday 24 Feb 2021	Thursday 25 Feb 2021	Friday 26 Feb 2021	Saturday 20 Feb 2021	Sunday 21 Feb 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	108	89	75	87	131	95	120	98	101
Mean Speed (mph)	21	22	22	22	21	21	21	21.7	21.3
85%ile Speed (mph)	26	28	29	29	26	26	26	27.5	27.0
No. Vehicles > 20 MPH Limit	61	56	49	51	79	51	65	59	59
% Vehicles > 20 MPH Limit	56.5%	62.9%	65.3%	58.6%	60.3%	53.7%	54.2%	60.7%	58.8%
No. Vehicles > 35 MPH	2	1	1	1	1	0	1	1	1
% Vehicles > 35 MPH	1.9%	1.1%	1.3%	1.1%	0.8%	0.0%	0.8%	1.2%	1.0%
May 2021	Monday 10 May 2021	Tuesday 04 May 2021	Wednesday 05 May 2021	Thursday 06 May 2021	Friday 07 May 2021	Saturday 08 May 2021	Sunday 09 May 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	119	113	116	165	172	89	106	137	126
Mean Speed (mph)	23.5	23.5	24.0	21.0	22.7	24.1	22.9	22.9	23.1
85%ile Speed (mph)	29.5	28.4	29.4	26.7	27.7	29.6	28.2	28.3	28.5
No. Vehicles > 20 MPH Limit	90	83	89	97	123	73	74	96	90
% Vehicles > 20 MPH Limit	75.6%	73.5%	76.7%	58.8%	71.5%	82.0%	69.8%	71.2%	72.6%
No. Vehicles > 35 MPH	3	4	4	0	3	0	2	3	2
% Vehicles > 35 MPH	2.5%	3.5%	3.4%	0.0%	1.7%	0.0%	1.9%	2.3%	1.9%
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	141	160	144	127	146	128	127	144	139
Mean Speed (mph)	24.3	23.0	24.3	23.4	22.7	23.8	23.1	23.5	23.5
85%ile Speed (mph)	28.7	27.8	30.4	28.6	29.4	29.8	28.3	29.0	29.0
No. Vehicles > 20 MPH Limit	116	119	118	98	102	99	85	111	105
% Vehicles > 20 MPH Limit	82.3%	74.4%	81.9%	77.2%	69.9%	77.3%	66.9%	77.1%	75.7%
No. Vehicles > 35 MPH	4	2	2	4	0	4	1	2	2
% Vehicles > 35 MPH	2.8%	1.3%	1.4%	3.1%	0.0%	3.1%	0.8%	1.7%	1.8%

4.2.114 Table 44 shows that the 5-day average traffic flows were lowest in February 2021 when Scotland was in a period of lockdown. However the mean speed was higher in September 2021 (23.5mph)

4.2.115 The average proportion of vehicles exceeding 20mph was highest in September 2021 (77.1%).

4.2.116 Table 45 presents the results for Station Road northbound in Gargunnoch.

Table 45. Site 1 Station Road (Northbound)



Gargunnoch Site 2 Station Road Northbound

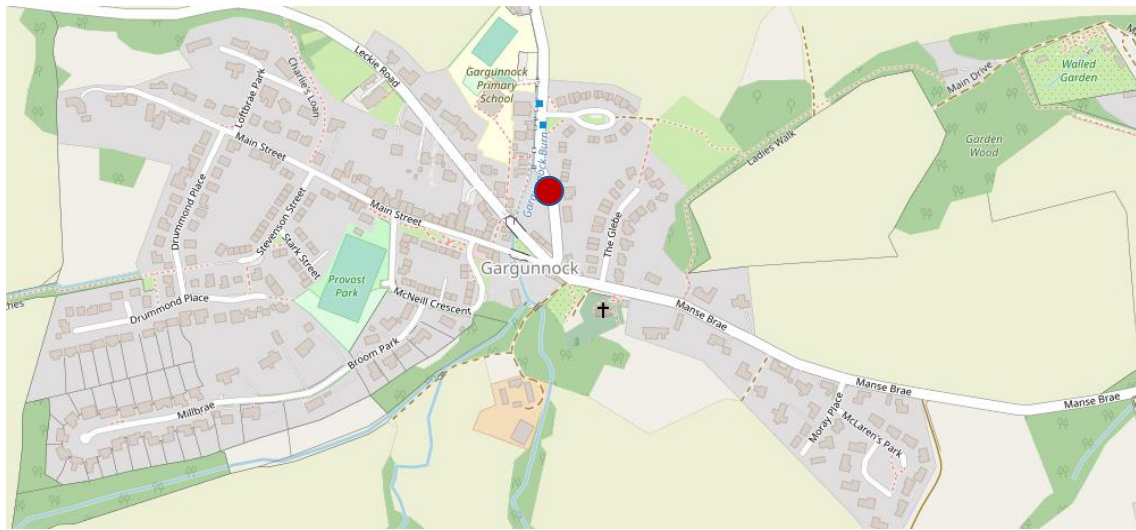
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	204	226	230	221	213	171	183	219	207
Mean Speed (mph)	18.9	18.5	18.3	18.5	18.4	18.4	18.5	18.5	18.5
85 th ile Speed (mph)	21.9	21.3	21.2	21.3	21.5	21.2	21.7	21.4	21.4
No. Vehicles > 20 MPH Limit	72	56	66	77	69	42	63	68	64
% Vehicles > 20 MPH Limit	35.3%	24.8%	28.7%	34.8%	32.4%	24.6%	34.4%	31.2%	30.7%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.117 Table 45 shows that the 5-day average traffic flows were 219 vehicles and the mean speed was 18.5mph.

4.2.118 The proportion of vehicles exceeding 20mph was 31.2%.

4.2.119 Table 46 presents the results for the Station Road southbound in Gargunnoch.

Table 46. Station Road (Southbound)



Gargunnoch Site 2 Station Road Southbound									
September 2021	Monday 06 Sep 2021	Tuesday 07 Sep 2021	Wednesday 08 Sep 2021	Thursday 09 Sep 2021	Friday 10 Sep 2021	Saturday 11 Sep 2021	Sunday 12 Sep 2021	5 Day Mean	7 Day Mean
0000-2400 Vehicle Flow	440	460	492	471	468	375	354	466	437
Mean Speed (mph)	19.1	19.0	19.3	19.1	19.4	18.7	19.2	19.2	19.1
85%ile Speed (mph)	22.4	22.7	22.2	22.5	22.6	21.9	22.4	22.5	22.4
No. Vehicles > 20 MPH Limit	157	167	193	197	184	120	136	180	165
% Vehicles > 20 MPH Limit	35.7%	36.3%	39.2%	41.8%	39.3%	32.0%	38.4%	38.5%	37.5%
No. Vehicles > 35 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 35 MPH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

4.2.120 Table 46 shows that the 5-day average traffic flows were 466 vehicles and the mean speed was 19.2mph

4.2.121 The proportion of vehicles exceeding 20mph was 38.5%.

5. LINK COUNT SURVEYS REVIEW

5.1 Overview

5.1.1 Summary tables below present the results of the link count surveys in the Stirling Council area (five sites in Stirling, three sites in Dunblane and one site in the remaining areas: Bridge of Allan, Aberfoyle, Fallin, Plean, Callander, Killlearn and Gargunnoch).

5.1.2 For each of the vehicle flow surveys, the summary information is as follows:

- Site Number
- Site Location
- Total Flow – Directional daily flow (over survey period)
- Flow by Vehicle Type (Car, LGV, OGV1, OGV2, Service Bus, Private Coach, Motor Cycle)
- AM Peak Flow – 07:00-10:00 Vehicle Flow
- AM peak Hour Flow – 08:00-09:00 Vehicle Flow
- Interpeak Flow – 10:00-16:00 Vehicle Flow
- Interpeak Peak Hour Flow – 12:00-13:00 Vehicle Flow
- PM Peak Flow – 16:00-19:00 Vehicle Flow
- PM Peak Hour Flow – 17:00-18:00 Vehicle Flow
- Proportion of each vehicle type.

5.1.3 For each of the pedestrian flow surveys, the summary information is as follows:

- Site Number
- Site Location
- Total Flow – Directional daily flow (over survey period)
- Flow by Pedestrian Type (Adult, Adult and Child, Elderly, Disabled, Cyclist, Cyclist on foot, Horse)
- AM Peak Flow – 07:00-10:00 Pedestrian Flow
- Interpeak Flow – 10:00-16:00 Pedestrian Flow
- PM Peak Flow – 16:00-19:00 Pedestrian Flow.

5.3 Results of Link Count Surveys

Dunblane

5.3.1 Table 47 presents the vehicle type breakdown for the High Street northbound in Dunblane.

Table 47. High Street (Northbound)

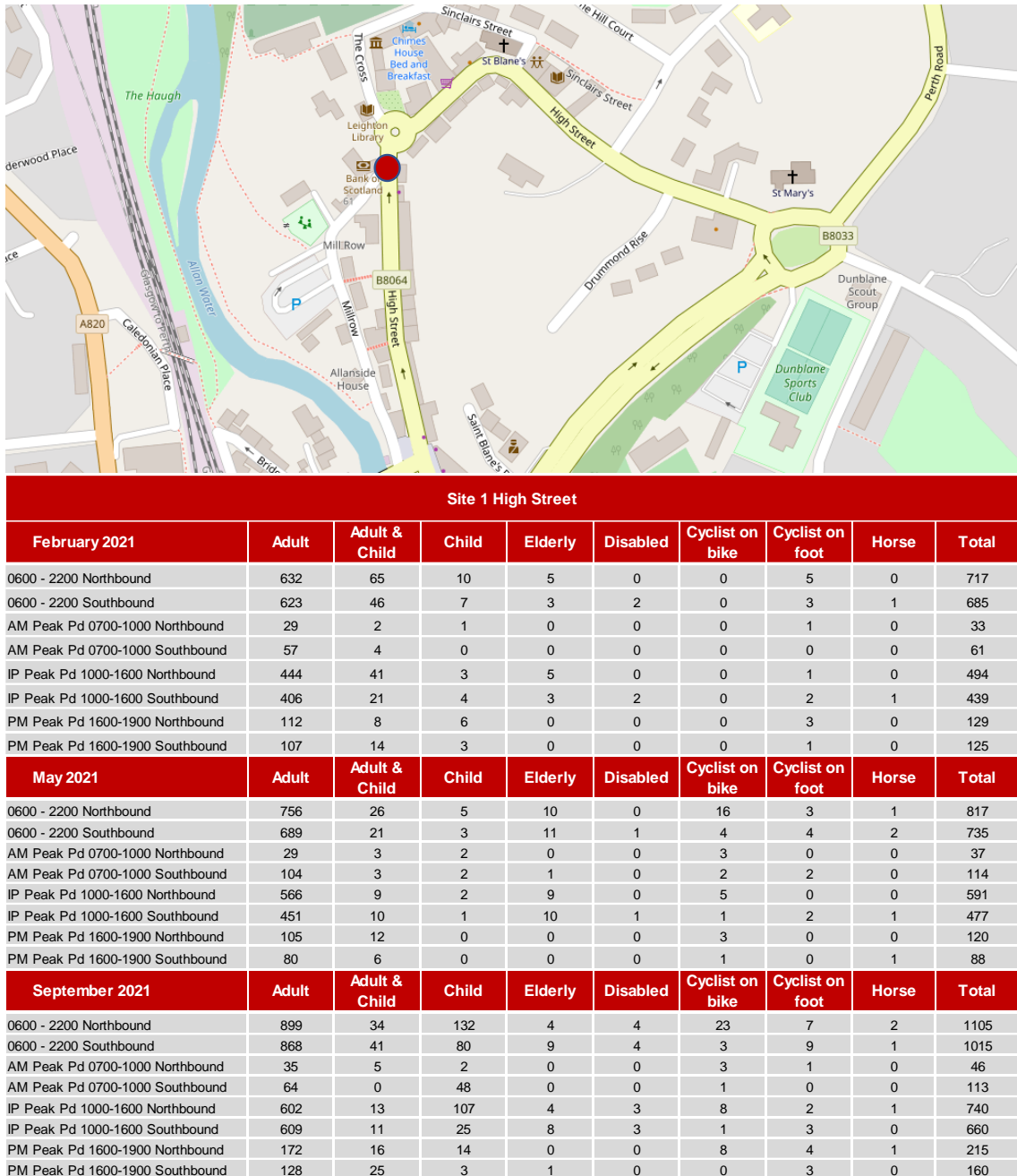


Site 1 High St Northbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	646	106	6	0	0	0	1	759
AM Peak Pd 0700-1000 Vehicle Flow	82	20	0	0	0	0	0	102
AM Peak Hr 0800-0900 Vehicle Flow	28	3	0	0	0	0	0	31
IP Peak Pd 1000-1600 Vehicle Flow	393	72	6	0	0	0	1	472
IP Peak Pd 1200-1300 Vehicle Flow	52	12	1	0	0	0	1	66
PM Peak Pd 1600-1900 Vehicle Flow	133	12	0	0	0	0	0	145
PM Peak Pd 1700-1800 Vehicle Flow	53	8	0	0	0	0	0	61
0600-2200 Vehicle Proportion	85.1%	14.0%	0.8%	0.0%	0.0%	0.0%	0.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	844	113	9	0	0	0	2	968
AM Peak Pd 0700-1000 Vehicle Flow	110	25	4	0	0	0	0	139
AM Peak Hr 0800-0900 Vehicle Flow	36	7	1	0	0	0	0	44
IP Peak Pd 1000-1600 Vehicle Flow	446	69	3	0	0	0	0	518
IP Peak Pd 1200-1300 Vehicle Flow	74	15	0	0	0	0	0	89
PM Peak Pd 1600-1900 Vehicle Flow	184	14	1	0	0	0	1	200
PM Peak Pd 1700-1800 Vehicle Flow	62	7	0	0	0	0	0	69
0600-2200 Vehicle Proportion	87.2%	11.7%	0.9%	0.0%	0.0%	0.0%	0.2%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	877	104	11	1	0	0	13	1006
AM Peak Pd 0700-1000 Vehicle Flow	117	15	5	1	0	0	0	138
AM Peak Hr 0800-0900 Vehicle Flow	42	2	1	0	0	0	0	45
IP Peak Pd 1000-1600 Vehicle Flow	453	66	5	0	0	0	4	528
IP Peak Pd 1200-1300 Vehicle Flow	68	15	1	0	0	0	0	84
PM Peak Pd 1600-1900 Vehicle Flow	199	18	1	0	0	0	5	223
PM Peak Pd 1700-1800 Vehicle Flow	73	9	0	0	0	0	2	84
0600-2200 Vehicle Proportion	87.2%	10.3%	1.1%	0.1%	0.0%	0.0%	1.3%	100.0%

5.3.2 Table 47 shows that car flows were higher in September 2021, compared to May and February 2021.

5.3.4 Table 48 presents the pedestrian flow breakdown for the High Street in Dunblane.

Table 48. High Street Pedestrian Link Flow



5.3.5 Table 48 shows that pedestrian flows have increased throughout 2021 and the highest number were observed in September 2021, the biggest increase being observed in the inter peak period.

5.3.7 Table 49 presents the vehicle type breakdown for Perth Road northbound in Dunblane.

Table 49. Perth Road (Northbound) Link Flow



Site 2 B8033 Perth Rd Northbound

February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3469	443	92	35	34	13	3	4089
AM Peak Pd 0700-1000 Vehicle Flow	527	142	30	11	6	4	2	722
AM Peak Hr 0800-0900 Vehicle Flow	210	55	10	3	1	2	0	281
IP Peak Pd 1000-1600 Vehicle Flow	1760	224	40	18	18	3	1	2064
IP Peak Pd 1200-1300 Vehicle Flow	319	37	8	5	5	1	1	376
PM Peak Pd 1600-1900 Vehicle Flow	889	63	11	4	8	4	0	979
PM Peak Pd 1700-1800 Vehicle Flow	330	27	4	2	2	1	0	366
0600-2200 Vehicle Proportion	84.8%	10.8%	2.2%	0.9%	0.8%	0.3%	0.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4865	535	79	17	36	24	3	5559
AM Peak Pd 0700-1000 Vehicle Flow	812	178	26	4	6	10	0	1036
AM Peak Hr 0800-0900 Vehicle Flow	354	75	8	1	2	6	0	446
IP Peak Pd 1000-1600 Vehicle Flow	2205	253	38	8	18	8	1	2531
IP Peak Pd 1200-1300 Vehicle Flow	344	41	4	0	5	1	0	395
PM Peak Pd 1600-1900 Vehicle Flow	1200	84	7	5	10	4	2	1312
PM Peak Pd 1700-1800 Vehicle Flow	433	30	1	2	3	1	0	470
0600-2200 Vehicle Proportion	87.5%	9.6%	1.4%	0.3%	0.6%	0.4%	0.1%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	5259	362	117	7	38	21	35	5839
AM Peak Pd 0700-1000 Vehicle Flow	850	100	37	2	6	8	4	1007
AM Peak Hr 0800-0900 Vehicle Flow	370	43	18	1	2	4	3	441
IP Peak Pd 1000-1600 Vehicle Flow	2245	188	62	2	19	5	14	2535
IP Peak Pd 1200-1300 Vehicle Flow	358	25	14	0	5	1	2	405
PM Peak Pd 1600-1900 Vehicle Flow	1447	54	14	1	10	5	15	1546
PM Peak Pd 1700-1800 Vehicle Flow	548	16	5	1	2	2	4	578
0600-2200 Vehicle Proportion	90.1%	6.2%	2.0%	0.1%	0.7%	0.4%	0.6%	100.0%

5.3.8 Table 49 shows that car flows were highest in September 2021.

5.3.10 Table 50 presents the vehicle type breakdown for Perth Road southbound in Dunblane.

Table 50. Perth Road (Southbound) Link Flow



Site 2 B8033 Perth Rd Southbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3100	376	79	34	21	18	3	3631
AM Peak Pd 0700-1000 Vehicle Flow	590	56	17	9	5	6	0	683
AM Peak Hr 0800-0900 Vehicle Flow	239	19	8	5	2	2	0	275
IP Peak Pd 1000-1600 Vehicle Flow	1573	233	44	18	10	4	1	1883
IP Peak Pd 1200-1300 Vehicle Flow	304	39	5	4	2	0	1	355
PM Peak Pd 1600-1900 Vehicle Flow	697	76	9	7	4	3	1	797
PM Peak Pd 1700-1800 Vehicle Flow	259	28	2	3	0	1	0	293
0600-2200 Vehicle Proportion	85.4%	10.4%	2.2%	0.9%	0.6%	0.5%	0.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4298	446	68	12	24	28	7	4883
AM Peak Pd 0700-1000 Vehicle Flow	853	77	12	1	6	9	2	960
AM Peak Hr 0800-0900 Vehicle Flow	364	30	6	1	2	3	1	407
IP Peak Pd 1000-1600 Vehicle Flow	1866	240	35	8	10	7	4	2170
IP Peak Pd 1200-1300 Vehicle Flow	293	30	5	3	2	0	3	336
PM Peak Pd 1600-1900 Vehicle Flow	1029	104	14	3	8	8	1	1167
PM Peak Pd 1700-1800 Vehicle Flow	366	35	5	1	0	3	0	410
0600-2200 Vehicle Proportion	88.0%	9.1%	1.4%	0.2%	0.5%	0.6%	0.1%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4696	343	83	6	24	25	40	5217
AM Peak Pd 0700-1000 Vehicle Flow	879	47	14	2	6	9	6	963
AM Peak Hr 0800-0900 Vehicle Flow	359	19	4	0	2	3	1	388
IP Peak Pd 1000-1600 Vehicle Flow	2036	180	52	2	9	6	17	2302
IP Peak Pd 1200-1300 Vehicle Flow	351	31	10	0	2	0	3	397
PM Peak Pd 1600-1900 Vehicle Flow	1169	87	13	0	8	5	11	1293
PM Peak Pd 1700-1800 Vehicle Flow	427	25	4	0	1	2	2	461
0600-2200 Vehicle Proportion	90.0%	6.6%	1.6%	0.1%	0.5%	0.5%	0.8%	100.0%

5.3.11 Table 50 shows that vehicle flows have increased throughout 2021.

5.3.13 Table 51 presents the pedestrian flow breakdown for Perth Road in Dunblane.

Table 51. Perth Road Pedestrian Link Flow

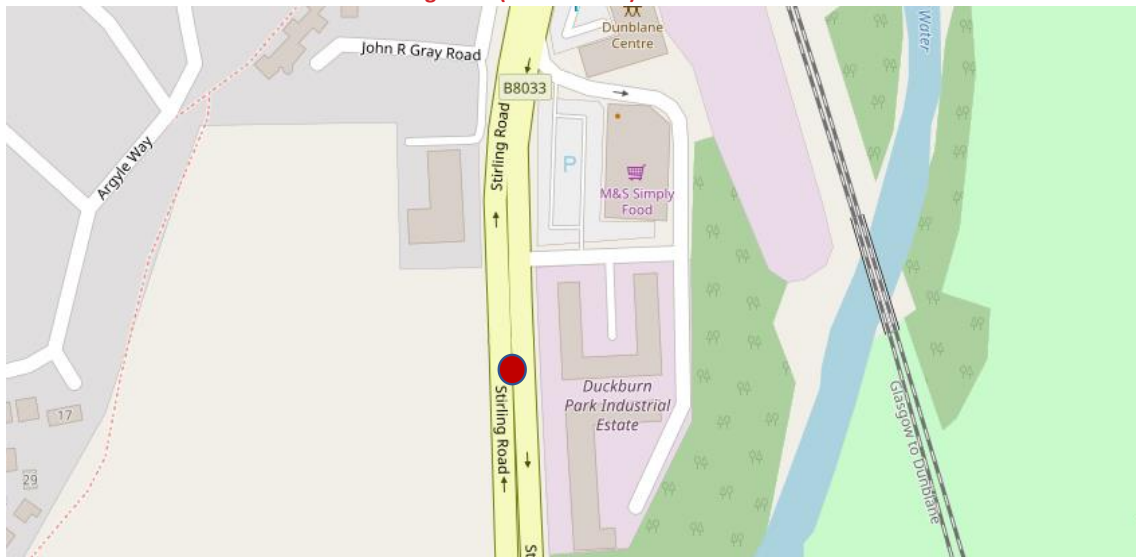


Site 2 B8033 Perth Rd									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	197	21	3	0	1	0	8	0	230
0600 - 2200 Southbound	161	6	0	0	1	0	4	0	172
AM Peak Pd 0700-1000 Northbound	32	7	3	0	0	0	0	0	42
AM Peak Pd 0700-1000 Southbound	6	0	0	0	0	0	0	0	6
IP Peak Pd 1000-1600 Northbound	106	9	0	0	1	0	3	0	119
IP Peak Pd 1000-1600 Southbound	82	6	0	0	1	0	3	0	92
PM Peak Pd 1600-1900 Northbound	41	5	0	0	0	0	2	0	48
PM Peak Pd 1600-1900 Southbound	40	0	0	0	0	0	1	0	41
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	236	7	0	5	2	41	3	0	294
0600 - 2200 Southbound	192	4	0	3	2	32	4	0	237
AM Peak Pd 0700-1000 Northbound	43	2	0	0	1	5	1	0	52
AM Peak Pd 0700-1000 Southbound	20	0	0	1	0	6	0	0	27
IP Peak Pd 1000-1600 Northbound	135	2	0	5	0	23	1	0	166
IP Peak Pd 1000-1600 Southbound	111	4	0	2	2	18	3	0	140
PM Peak Pd 1600-1900 Northbound	40	3	0	0	1	8	1	0	53
PM Peak Pd 1600-1900 Southbound	35	0	0	0	0	6	1	0	42
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	219	12	12	1	2	53	4	0	303
0600 - 2200 Southbound	172	23	26	2	1	60	1	0	285
AM Peak Pd 0700-1000 Northbound	23	4	1	0	1	3	1	0	33
AM Peak Pd 0700-1000 Southbound	12	0	6	0	0	10	0	0	28
IP Peak Pd 1000-1600 Northbound	133	0	5	1	1	23	2	0	165
IP Peak Pd 1000-1600 Southbound	96	11	11	2	1	30	1	0	152
PM Peak Pd 1600-1900 Northbound	34	5	6	0	0	25	1	0	71
PM Peak Pd 1600-1900 Southbound	48	7	9	0	0	16	0	0	80

5.3.14 Table 51 shows that pedestrian flows increased throughout 2021.

5.3.16 Table 52 presents the vehicle type breakdown for Stirling Road northbound in Dunblane.

Table 52. Stirling Road (Northbound) Link Flow



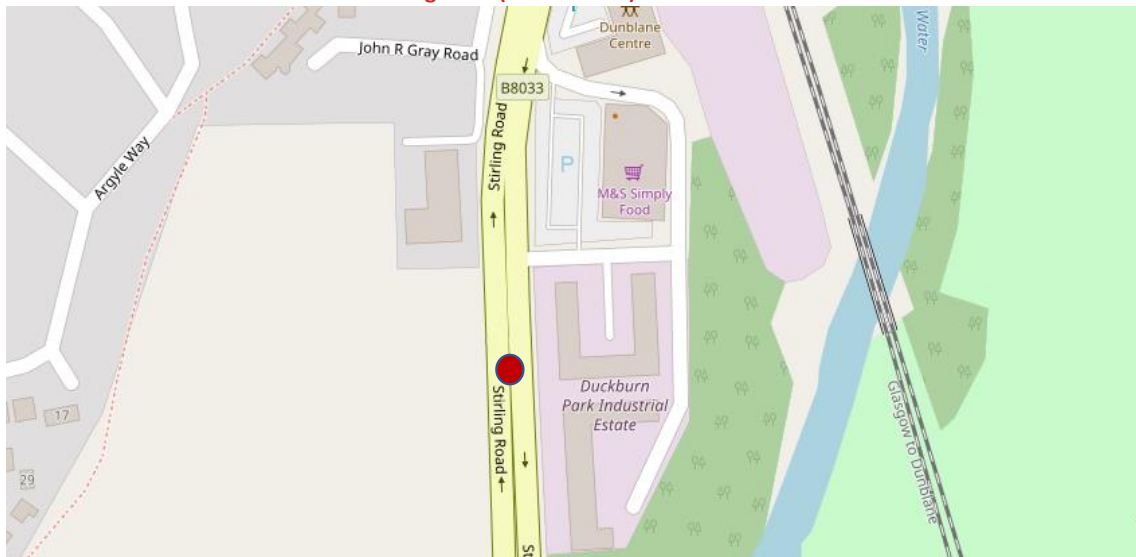
Site 3 B8033 Stirling Road Northbound

February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3596	507	106	46	20	11	7	4293
AM Peak Pd 0700-1000 Vehicle Flow	517	168	41	13	4	2	2	747
AM Peak Hr 0800-0900 Vehicle Flow	217	62	15	3	0	1	0	298
IP Peak Pd 1000-1600 Vehicle Flow	1738	247	42	21	11	3	2	2064
IP Peak Pd 1200-1300 Vehicle Flow	293	34	6	6	3	1	0	343
PM Peak Pd 1600-1900 Vehicle Flow	1032	78	12	7	4	3	3	1139
PM Peak Pd 1700-1800 Vehicle Flow	402	36	6	4	2	1	0	451
0600-2200 Vehicle Proportion	83.8%	11.8%	2.5%	1.1%	0.5%	0.3%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4565	564	76	20	24	19	3	5271
AM Peak Pd 0700-1000 Vehicle Flow	724	197	33	3	5	7	0	969
AM Peak Hr 0800-0900 Vehicle Flow	341	76	13	0	0	3	0	433
IP Peak Pd 1000-1600 Vehicle Flow	2010	248	31	11	11	7	2	2320
IP Peak Pd 1200-1300 Vehicle Flow	339	45	3	0	3	1	2	393
PM Peak Pd 1600-1900 Vehicle Flow	1260	97	5	6	7	3	1	1379
PM Peak Pd 1700-1800 Vehicle Flow	470	32	0	3	3	1	0	509
0600-2200 Vehicle Proportion	86.6%	10.7%	1.4%	0.4%	0.5%	0.4%	0.1%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4754	498	132	12	25	21	28	5470
AM Peak Pd 0700-1000 Vehicle Flow	723	138	46	2	6	6	1	922
AM Peak Hr 0800-0900 Vehicle Flow	348	52	21	1	1	2	1	426
IP Peak Pd 1000-1600 Vehicle Flow	2091	240	65	5	11	8	13	2433
IP Peak Pd 1200-1300 Vehicle Flow	354	43	18	1	2	2	2	422
PM Peak Pd 1600-1900 Vehicle Flow	1301	96	12	4	7	5	9	1434
PM Peak Pd 1700-1800 Vehicle Flow	500	33	2	3	3	1	2	544
0600-2200 Vehicle Proportion	86.9%	9.1%	2.4%	0.2%	0.5%	0.4%	0.5%	100.0%

5.3.17 Table 52 shows that car flows were highest in September 2021, steadily increasing throughout 2021.

5.3.19 Table 53 presents the vehicle type breakdown for Stirling Road southbound in Dunblane.

Table 53. Stirling Road (Southbound) Link Flow



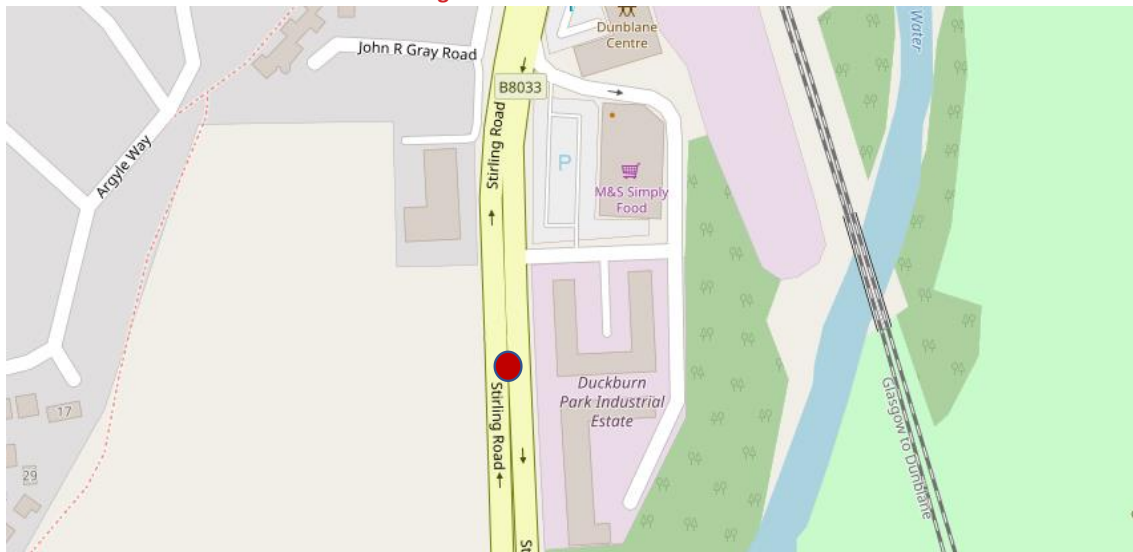
Site 3 B8033 Stirling Road Southbound

February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3765	511	102	44	14	16	4	4456
AM Peak Pd 0700-1000 Vehicle Flow	747	112	21	11	4	5	1	901
AM Peak Hr 0800-0900 Vehicle Flow	297	32	9	6	2	2	1	349
IP Peak Pd 1000-1600 Vehicle Flow	1858	273	60	24	10	5	0	2230
IP Peak Pd 1200-1300 Vehicle Flow	353	40	7	4	1	0	0	405
PM Peak Pd 1600-1900 Vehicle Flow	866	104	12	7	0	2	2	993
PM Peak Pd 1700-1800 Vehicle Flow	320	36	2	3	0	1	0	362
0600-2200 Vehicle Proportion	84.5%	11.5%	2.3%	1.0%	0.3%	0.4%	0.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4866	568	82	17	24	22	6	5585
AM Peak Pd 0700-1000 Vehicle Flow	960	124	12	3	6	6	0	1111
AM Peak Hr 0800-0900 Vehicle Flow	366	42	6	2	2	3	0	421
IP Peak Pd 1000-1600 Vehicle Flow	2167	288	43	9	10	4	6	2527
IP Peak Pd 1200-1300 Vehicle Flow	351	36	6	2	1	0	3	399
PM Peak Pd 1600-1900 Vehicle Flow	1205	115	18	5	6	8	0	1357
PM Peak Pd 1700-1800 Vehicle Flow	404	30	8	0	1	3	0	446
0600-2200 Vehicle Proportion	87.1%	10.2%	1.5%	0.3%	0.4%	0.4%	0.1%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	5064	522	141	11	24	19	47	5828
AM Peak Pd 0700-1000 Vehicle Flow	959	102	28	3	6	6	2	1106
AM Peak Hr 0800-0900 Vehicle Flow	375	31	5	0	2	3	0	416
IP Peak Pd 1000-1600 Vehicle Flow	2222	264	85	4	10	4	17	2606
IP Peak Pd 1200-1300 Vehicle Flow	374	41	15	0	1	1	0	432
PM Peak Pd 1600-1900 Vehicle Flow	1324	124	17	1	7	5	12	1490
PM Peak Pd 1700-1800 Vehicle Flow	471	36	3	0	2	1	2	515
0600-2200 Vehicle Proportion	86.9%	9.0%	2.4%	0.2%	0.4%	0.3%	0.8%	100.0%

5.3.20 Table 53 shows that vehicle flows have risen throughout 2021 and were highest in September 2021.

5.3.22 Table 54 presents the pedestrian flow breakdown Stirling Road in Dunblane.

Table 54. Stirling Road Pedestrian Link Flow



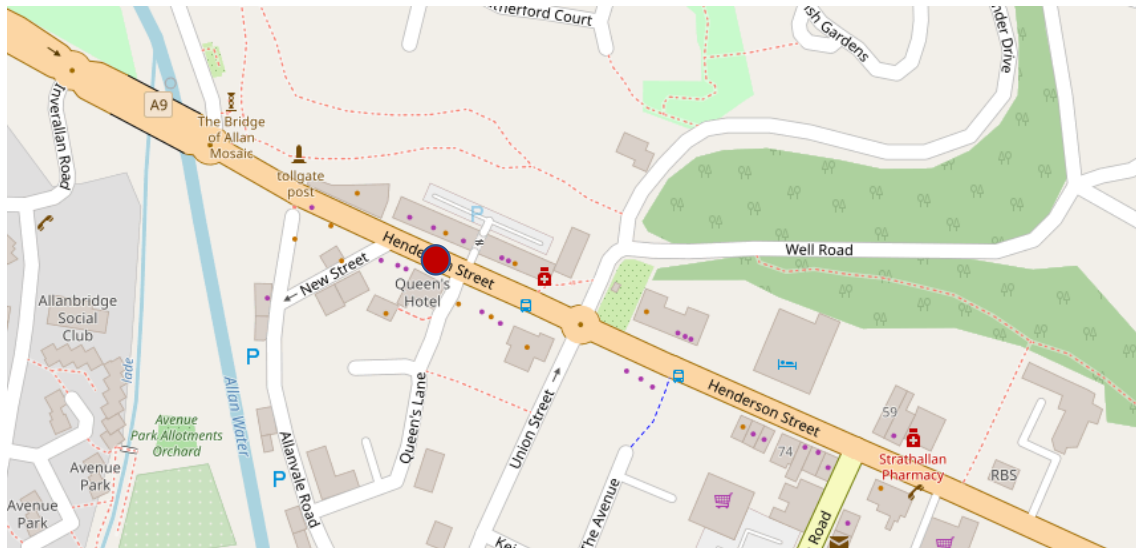
Site 3 B8033 Stirling Road									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	29	3	0	2	0	0	5	0	39
0600 - 2200 Southbound	29	0	0	1	0	0	8	0	38
AM Peak Pd 0700-1000 Northbound	7	0	0	0	0	0	0	0	7
AM Peak Pd 0700-1000 Southbound	3	0	0	0	0	0	0	0	3
IP Peak Pd 1000-1600 Northbound	14	0	0	2	0	0	2	0	18
IP Peak Pd 1000-1600 Southbound	19	0	0	1	0	0	6	0	26
PM Peak Pd 1600-1900 Northbound	7	3	0	0	0	0	3	0	13
PM Peak Pd 1600-1900 Southbound	6	0	0	0	0	0	1	0	7
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	21	0	0	0	0	31	3	0	55
0600 - 2200 Southbound	15	0	0	0	0	24	6	0	45
AM Peak Pd 0700-1000 Northbound	3	0	0	0	0	1	0	0	4
AM Peak Pd 0700-1000 Southbound	3	0	0	0	0	6	0	0	9
IP Peak Pd 1000-1600 Northbound	8	0	0	0	0	24	3	0	35
IP Peak Pd 1000-1600 Southbound	5	0	0	0	0	16	4	0	25
PM Peak Pd 1600-1900 Northbound	5	0	0	0	0	4	0	0	9
PM Peak Pd 1600-1900 Southbound	4	0	0	0	0	2	2	0	8
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	13	0	0	0	0	23	4	0	40
0600 - 2200 Southbound	11	0	0	0	0	30	14	0	55
AM Peak Pd 0700-1000 Northbound	2	0	0	0	0	2	0	0	4
AM Peak Pd 0700-1000 Southbound	0	0	0	0	0	10	1	0	11
IP Peak Pd 1000-1600 Northbound	9	0	0	0	0	5	3	0	17
IP Peak Pd 1000-1600 Southbound	7	0	0	0	0	10	6	0	23
PM Peak Pd 1600-1900 Northbound	2	0	0	0	0	13	1	0	16
PM Peak Pd 1600-1900 Southbound	4	0	0	0	0	9	6	0	19

5.3.23 Table 54 shows that pedestrian flows were relatively consistent throughout 2021.

Bridge of Allan

5.3.24 Table 55 presents the vehicle type breakdown for Henderson Street eastbound in Bridge of Allan.

Table 55. Henderson Street (Eastbound) Link Flow



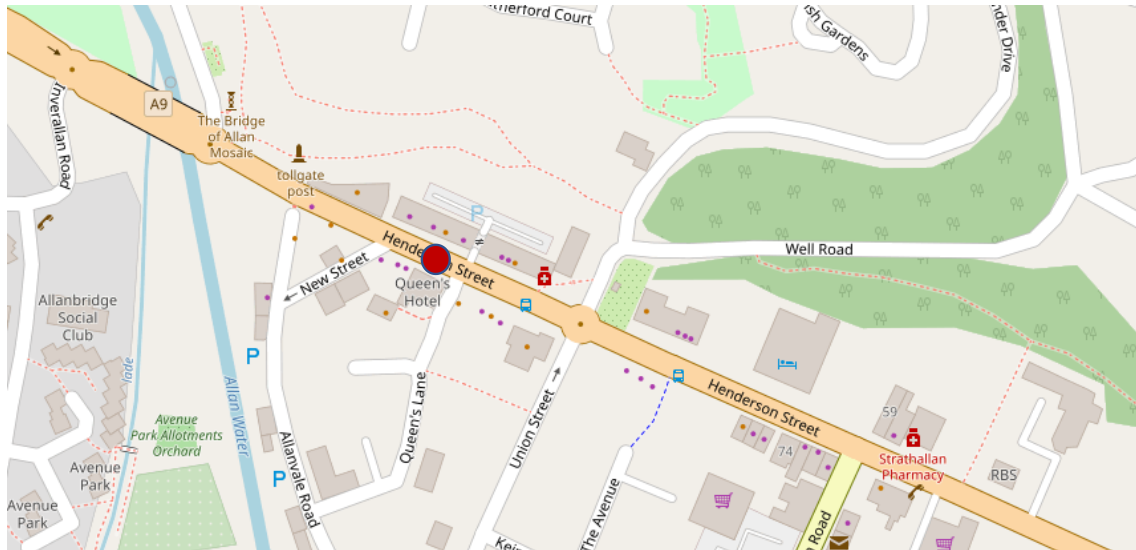
Site 1 Henderson Street Eastbound

February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3474	545	174	89	20	7	7	4316
AM Peak Pd 0700-1000 Vehicle Flow	613	128	39	23	4	2	1	810
AM Peak Hr 0800-0900 Vehicle Flow	290	34	17	8	1	1	1	352
IP Peak Pd 1000-1600 Vehicle Flow	1565	270	100	39	10	2	1	1987
IP Peak Pd 1200-1300 Vehicle Flow	242	42	16	12	1	0	0	313
PM Peak Pd 1600-1900 Vehicle Flow	928	110	23	13	4	1	3	1082
PM Peak Pd 1700-1800 Vehicle Flow	343	32	8	5	1	1	1	391
0600-2200 Vehicle Proportion	80.5%	12.6%	4.0%	2.1%	0.5%	0.2%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4821	688	166	29	24	14	18	5760
AM Peak Pd 0700-1000 Vehicle Flow	836	196	42	11	5	4	0	1094
AM Peak Hr 0800-0900 Vehicle Flow	356	65	12	4	1	2	0	440
IP Peak Pd 1000-1600 Vehicle Flow	2042	311	95	6	10	3	17	2484
IP Peak Pd 1200-1300 Vehicle Flow	348	49	16	2	1	0	4	420
PM Peak Pd 1600-1900 Vehicle Flow	1276	118	16	4	6	5	0	1425
PM Peak Pd 1700-1800 Vehicle Flow	467	31	6	0	1	2	0	507
0600-2200 Vehicle Proportion	83.7%	11.9%	2.9%	0.5%	0.4%	0.2%	0.3%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	5376	699	157	117	29	11	74	6463
AM Peak Pd 0700-1000 Vehicle Flow	981	150	26	24	7	1	8	1197
AM Peak Hr 0800-0900 Vehicle Flow	416	59	12	9	3	0	3	502
IP Peak Pd 1000-1600 Vehicle Flow	2179	338	101	55	12	1	24	2710
IP Peak Pd 1200-1300 Vehicle Flow	356	53	17	8	1	0	2	437
PM Peak Pd 1600-1900 Vehicle Flow	1441	149	22	28	8	5	29	1682
PM Peak Pd 1700-1800 Vehicle Flow	476	50	8	8	1	1	10	554
0600-2200 Vehicle Proportion	83.2%	10.8%	2.4%	1.8%	0.4%	0.2%	1.1%	100.0%

5.3.25 Table 55 shows that vehicle flows have increased throughout 2021.

5.3.27 Table 56 presents the vehicle type breakdown for Henderson Street westbound in Bridge of Allan.

Table 56. Henderson Street (Westbound) Link Flow

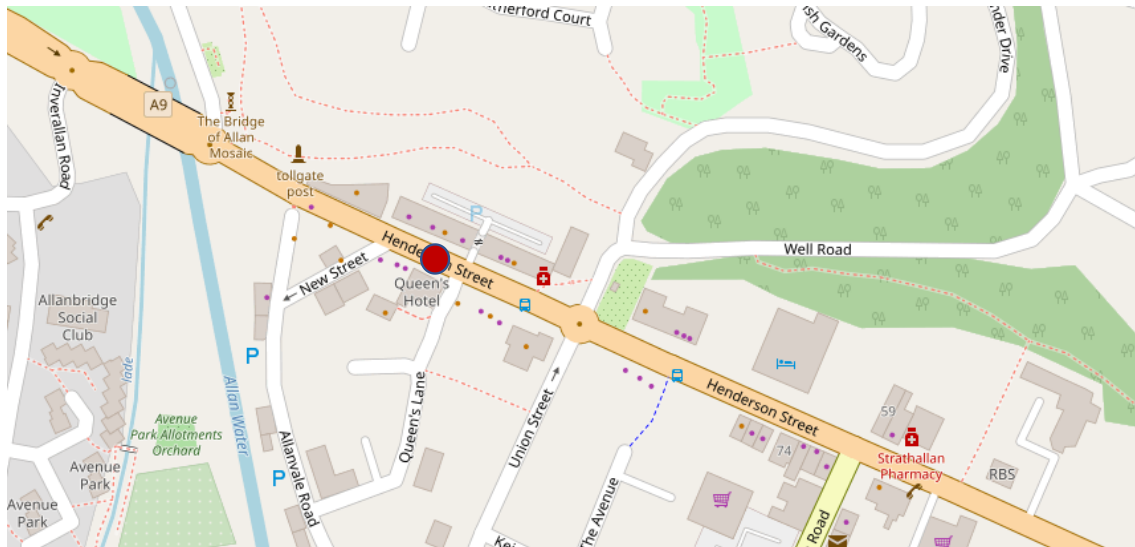


Site 1 Henderson Street Westbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3902	617	180	78	21	7	6	4811
AM Peak Pd 0700-1000 Vehicle Flow	628	154	66	25	4	3	1	881
AM Peak Hr 0800-0900 Vehicle Flow	231	56	27	13	0	2	0	329
IP Peak Pd 1000-1600 Vehicle Flow	1790	304	79	30	12	1	2	2218
IP Peak Pd 1200-1300 Vehicle Flow	298	42	12	5	2	0	0	359
PM Peak Pd 1600-1900 Vehicle Flow	1040	115	17	13	4	2	2	1193
PM Peak Pd 1700-1800 Vehicle Flow	429	47	6	3	2	1	0	488
0600-2200 Vehicle Proportion	81.1%	12.8%	3.7%	1.6%	0.4%	0.1%	0.1%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	5100	678	139	45	26	14	11	6013
AM Peak Pd 0700-1000 Vehicle Flow	884	164	46	12	5	6	1	1118
AM Peak Hr 0800-0900 Vehicle Flow	353	63	16	4	0	3	1	440
IP Peak Pd 1000-1600 Vehicle Flow	2132	317	73	19	12	5	8	2566
IP Peak Pd 1200-1300 Vehicle Flow	373	49	13	2	2	1	2	442
PM Peak Pd 1600-1900 Vehicle Flow	1315	145	14	8	7	2	1	1492
PM Peak Pd 1700-1800 Vehicle Flow	503	54	8	3	3	1	0	572
0600-2200 Vehicle Proportion	84.8%	11.3%	2.3%	0.7%	0.4%	0.2%	0.2%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	6000	673	144	116	28	12	81	7054
AM Peak Pd 0700-1000 Vehicle Flow	962	162	32	26	8	1	2	1193
AM Peak Hr 0800-0900 Vehicle Flow	362	55	15	9	2	0	1	444
IP Peak Pd 1000-1600 Vehicle Flow	2491	318	83	50	13	4	47	3006
IP Peak Pd 1200-1300 Vehicle Flow	396	46	11	8	2	1	7	471
PM Peak Pd 1600-1900 Vehicle Flow	1670	145	16	26	6	5	26	1894
PM Peak Pd 1700-1800 Vehicle Flow	643	43	6	8	3	1	6	710
0600-2200 Vehicle Proportion	85.1%	9.5%	2.0%	1.6%	0.4%	0.2%	1.1%	100.0%

5.3.28 Table 56 shows vehicle flows were highest in September 2021, the proportion of vehicles remained relatively consistent throughout the year.

5.3.30 Table 57 presents the pedestrian breakdown for Henderson Street in Dunblane.

Table 57. Henderson Street Pedestrian Link Flow



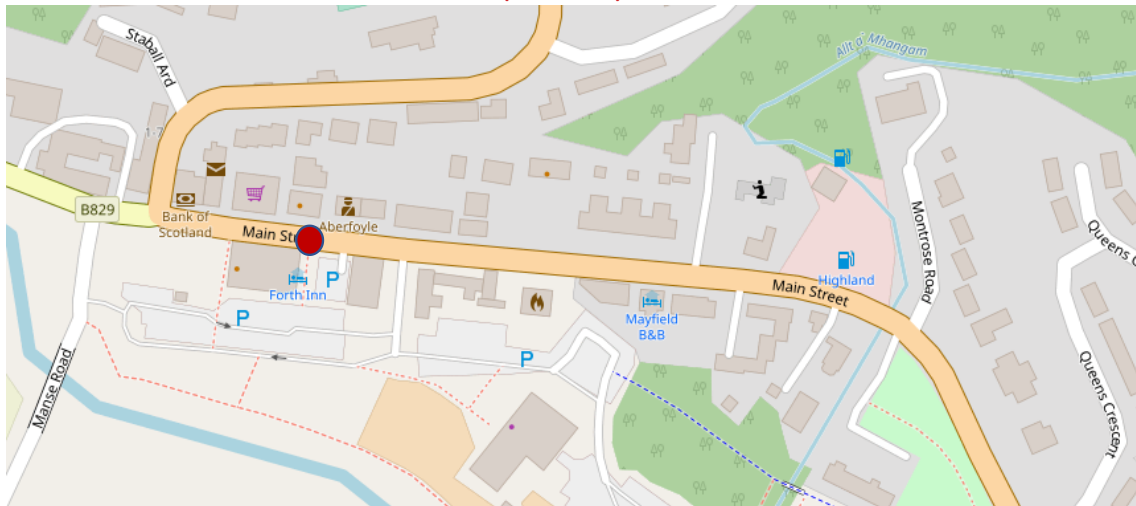
Site 1 Henderson Street									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	813	53	2	18	0	0	11	2	899
0600 - 2200 Westbound	819	47	3	18	0	0	13	2	902
AM Peak Pd 0700-1000 Eastbound	71	2	0	0	0	0	1	0	74
AM Peak Pd 0700-1000 Westbound	79	2	0	0	0	0	3	0	84
IP Peak Pd 1000-1600 Eastbound	514	36	2	18	0	0	3	1	574
IP Peak Pd 1000-1600 Westbound	515	36	3	14	0	0	1	2	571
PM Peak Pd 1600-1900 Eastbound	173	10	0	0	0	0	7	1	191
PM Peak Pd 1600-1900 Westbound	190	4	0	4	0	0	8	0	206
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	1014	35	4	24	4	67	14	8	1170
0600 - 2200 Westbound	977	24	4	24	2	89	13	1	1134
AM Peak Pd 0700-1000 Eastbound	68	0	0	1	0	9	3	0	81
AM Peak Pd 0700-1000 Westbound	66	2	0	1	0	13	0	0	82
IP Peak Pd 1000-1600 Eastbound	648	20	3	18	4	36	3	8	740
IP Peak Pd 1000-1600 Westbound	635	15	2	20	2	51	5	0	730
PM Peak Pd 1600-1900 Eastbound	193	12	1	4	0	6	4	0	220
PM Peak Pd 1600-1900 Westbound	168	7	2	2	0	17	2	1	199
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	1155	85	35	5	6	98	27	10	1421
0600 - 2200 Westbound	1213	105	24	6	6	113	29	9	1505
AM Peak Pd 0700-1000 Eastbound	44	0	5	0	0	11	8	0	68
AM Peak Pd 0700-1000 Westbound	47	0	2	0	0	5	3	0	57
IP Peak Pd 1000-1600 Eastbound	731	23	21	4	4	55	2	5	845
IP Peak Pd 1000-1600 Westbound	746	27	11	6	5	49	9	6	859
PM Peak Pd 1600-1900 Eastbound	218	43	5	1	2	15	12	5	301
PM Peak Pd 1600-1900 Westbound	284	49	3	0	1	42	10	3	392

5.3.31 Table 57 shows that the volume of pedestrians increased throughout 2021, with September 2021 having the highest volume.

Aberfoyle

5.3.32 Table 58 presents the vehicle type breakdown for Main Street eastbound in Aberfoyle.

Table 58. Main Street (Eastbound) Link Flow

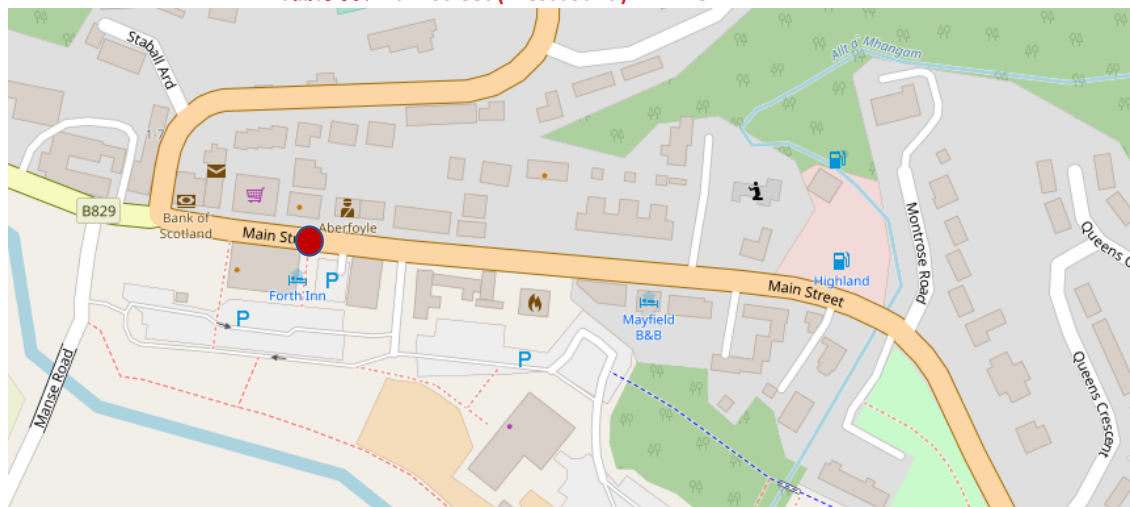


Site 1 Main Street Eastbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	660	182	41	7	1	3	0	894
AM Peak Pd 0700-1000 Vehicle Flow	108	35	9	2	0	2	0	156
AM Peak Hr 0800-0900 Vehicle Flow	47	14	2	0	0	1	0	64
IP Peak Pd 1000-1600 Vehicle Flow	362	104	25	5	1	1	0	498
IP Peak Pd 1200-1300 Vehicle Flow	67	21	1	2	0	0	0	91
PM Peak Pd 1600-1900 Vehicle Flow	142	34	7	0	0	0	0	183
PM Peak Pd 1700-1800 Vehicle Flow	59	12	2	0	0	0	0	73
0600-2200 Vehicle Proportion	73.8%	20.4%	4.6%	0.8%	0.1%	0.3%	0.0%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1028	184	44	6	0	5	9	1276
AM Peak Pd 0700-1000 Vehicle Flow	155	30	7	2	0	2	0	196
AM Peak Hr 0800-0900 Vehicle Flow	67	8	1	1	0	1	0	78
IP Peak Pd 1000-1600 Vehicle Flow	565	96	22	3	0	3	9	698
IP Peak Pd 1200-1300 Vehicle Flow	86	12	7	0	0	0	1	106
PM Peak Pd 1600-1900 Vehicle Flow	223	40	10	1	0	0	0	274
PM Peak Pd 1700-1800 Vehicle Flow	81	19	7	1	0	0	0	108
0600-2200 Vehicle Proportion	80.6%	14.4%	3.4%	0.5%	0.0%	0.4%	0.7%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1675	280	53	3	14	9	90	2124
AM Peak Pd 0700-1000 Vehicle Flow	182	43	12	1	4	2	1	245
AM Peak Hr 0800-0900 Vehicle Flow	77	13	6	0	1	1	0	98
IP Peak Pd 1000-1600 Vehicle Flow	774	143	32	1	7	4	39	1000
IP Peak Pd 1200-1300 Vehicle Flow	125	25	5	0	1	0	2	158
PM Peak Pd 1600-1900 Vehicle Flow	485	63	7	0	3	3	28	589
PM Peak Pd 1700-1800 Vehicle Flow	161	26	1	0	1	0	5	194
0600-2200 Vehicle Proportion	78.9%	13.2%	2.5%	0.1%	0.7%	0.4%	4.2%	100.0%

5.3.33 Table 58 shows that vehicle flows have increased throughout 2021.

5.3.35 Table 59 presents the vehicle type breakdown for Main Street westbound in Aberfoyle.

Table 59. Main Street (Westbound) Link Flow

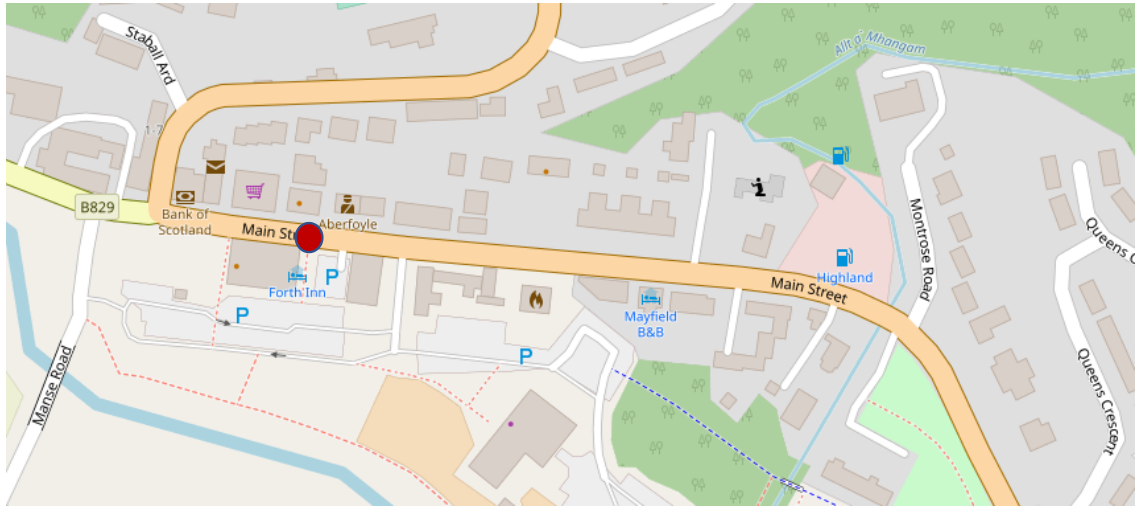


Site 1 Main Street Westbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	662	184	47	6	13	5	0	917
AM Peak Pd 0700-1000 Vehicle Flow	105	63	23	3	3	3	0	200
AM Peak Hr 0800-0900 Vehicle Flow	42	27	9	0	0	2	0	80
IP Peak Pd 1000-1600 Vehicle Flow	339	77	20	3	7	2	0	448
IP Peak Pd 1200-1300 Vehicle Flow	53	16	4	0	1	0	0	74
PM Peak Pd 1600-1900 Vehicle Flow	161	33	4	0	3	0	0	201
PM Peak Pd 1700-1800 Vehicle Flow	58	12	1	0	2	0	0	73
0600-2200 Vehicle Proportion	72.2%	20.1%	5.1%	0.7%	1.4%	0.5%	0.0%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1063	226	41	6	13	8	12	1369
AM Peak Pd 0700-1000 Vehicle Flow	167	67	14	1	4	2	0	255
AM Peak Hr 0800-0900 Vehicle Flow	59	31	5	0	1	1	0	97
IP Peak Pd 1000-1600 Vehicle Flow	551	99	19	4	6	6	9	694
IP Peak Pd 1200-1300 Vehicle Flow	83	14	2	1	1	0	1	102
PM Peak Pd 1600-1900 Vehicle Flow	249	46	4	1	3	0	3	306
PM Peak Pd 1700-1800 Vehicle Flow	101	21	2	0	2	0	0	126
0600-2200 Vehicle Proportion	77.6%	16.5%	3.0%	0.4%	0.9%	0.6%	0.9%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1703	262	73	0	14	13	103	2168
AM Peak Pd 0700-1000 Vehicle Flow	236	65	21	0	3	2	8	335
AM Peak Hr 0800-0900 Vehicle Flow	77	20	5	0	1	1	0	104
IP Peak Pd 1000-1600 Vehicle Flow	930	128	40	0	7	7	63	1175
IP Peak Pd 1200-1300 Vehicle Flow	167	18	7	0	1	0	10	203
PM Peak Pd 1600-1900 Vehicle Flow	394	50	9	0	4	4	23	484
PM Peak Pd 1700-1800 Vehicle Flow	145	18	4	0	2	1	6	176
0600-2200 Vehicle Proportion	78.6%	12.1%	3.4%	0.0%	0.6%	0.6%	4.8%	100.0%

5.3.36 Table 59 shows that vehicle flows have again increased throughout 2021.

5.3.38 Table 60 presents the pedestrian breakdown for Main Street in Aberfoyle.

Table 60. Main Street Pedestrian Link Flow



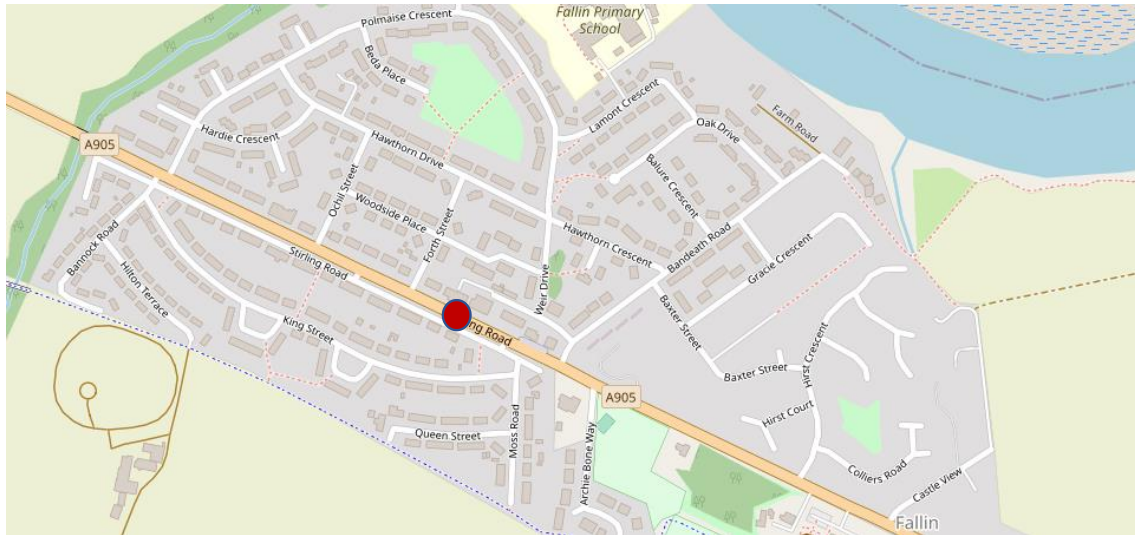
Site 1 Main Street									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	153	34	6	2	1	0	5	3	204
0600 - 2200 Westbound	168	15	5	2	0	0	5	0	195
AM Peak Pd 0700-1000 Eastbound	12	15	0	0	0	0	0	0	27
AM Peak Pd 0700-1000 Westbound	12	5	0	0	0	0	0	0	17
IP Peak Pd 1000-1600 Eastbound	101	13	3	1	1	0	5	3	127
IP Peak Pd 1000-1600 Westbound	103	6	3	1	0	0	5	0	118
PM Peak Pd 1600-1900 Eastbound	29	6	3	1	0	0	0	0	39
PM Peak Pd 1600-1900 Westbound	43	4	2	1	0	0	0	0	50
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	386	27	6	2	0	30	4	1	456
0600 - 2200 Westbound	343	21	0	3	1	31	2	1	402
AM Peak Pd 0700-1000 Eastbound	20	11	3	0	0	1	1	0	36
AM Peak Pd 0700-1000 Westbound	17	0	0	0	0	1	1	0	19
IP Peak Pd 1000-1600 Eastbound	269	13	3	2	0	22	3	0	312
IP Peak Pd 1000-1600 Westbound	253	13	0	3	1	29	1	0	300
PM Peak Pd 1600-1900 Eastbound	83	3	0	0	0	5	0	1	92
PM Peak Pd 1600-1900 Westbound	57	8	0	0	0	1	0	1	67
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	302	24	6	4	2	31	2	3	374
0600 - 2200 Westbound	337	12	11	4	2	29	3	3	401
AM Peak Pd 0700-1000 Eastbound	9	0	0	0	0	0	1	0	10
AM Peak Pd 0700-1000 Westbound	8	2	7	0	0	2	0	0	19
IP Peak Pd 1000-1600 Eastbound	226	14	5	4	2	23	1	3	278
IP Peak Pd 1000-1600 Westbound	246	7	0	4	2	22	3	3	287
PM Peak Pd 1600-1900 Eastbound	38	10	1	0	0	7	0	0	56
PM Peak Pd 1600-1900 Westbound	41	3	4	0	0	4	0	0	52

5.3.39 Table 60 shows that pedestrian flows were highest in May 2021.

Fallin

5.3.40 Table 61 presents the vehicle type breakdown for A905 eastbound in Fallin.

Table 61. A905 (Eastbound) Link Flow

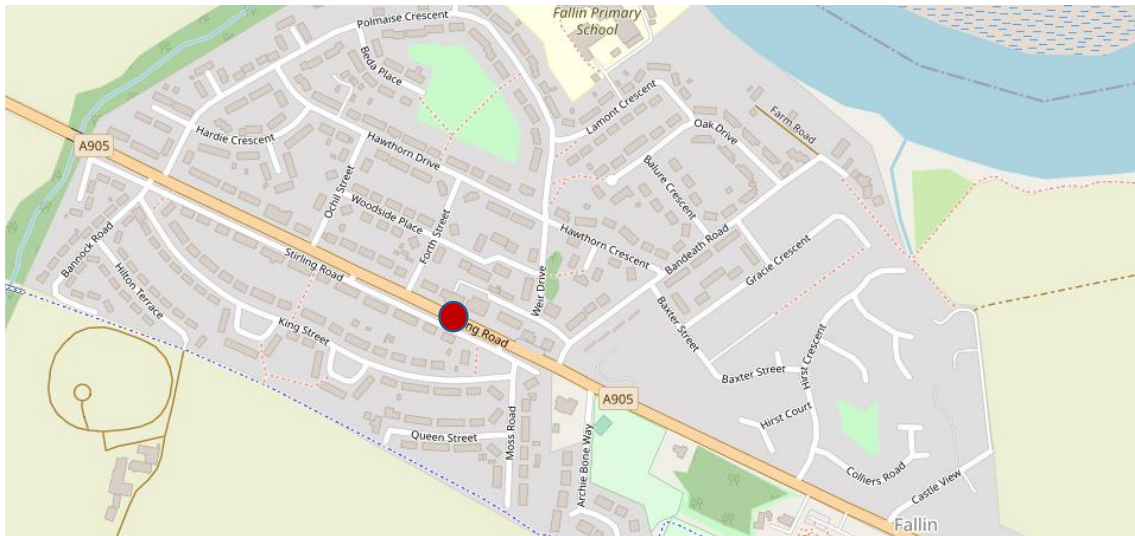


Site 1 A905 Eastbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	2433	560	216	72	16	10	8	3315
AM Peak Pd 0700-1000 Vehicle Flow	348	112	47	11	3	5	2	528
AM Peak Hr 0800-0900 Vehicle Flow	115	34	15	5	1	2	1	173
IP Peak Pd 1000-1600 Vehicle Flow	1048	298	100	42	7	5	4	1504
IP Peak Pd 1200-1300 Vehicle Flow	190	42	17	8	2	2	3	264
PM Peak Pd 1600-1900 Vehicle Flow	732	106	43	15	3	0	2	901
PM Peak Pd 1700-1800 Vehicle Flow	306	37	6	7	1	0	1	358
0600-2200 Vehicle Proportion	73.4%	16.9%	6.5%	2.2%	0.5%	0.3%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3217	655	192	71	16	23	14	4188
AM Peak Pd 0700-1000 Vehicle Flow	482	148	43	14	3	11	4	705
AM Peak Hr 0800-0900 Vehicle Flow	185	55	18	4	1	5	2	270
IP Peak Pd 1000-1600 Vehicle Flow	1307	284	84	36	7	9	7	1734
IP Peak Pd 1200-1300 Vehicle Flow	201	47	12	7	2	1	2	272
PM Peak Pd 1600-1900 Vehicle Flow	944	158	45	16	3	3	2	1171
PM Peak Pd 1700-1800 Vehicle Flow	402	48	10	7	1	2	0	470
0600-2200 Vehicle Proportion	76.8%	15.6%	4.6%	1.7%	0.4%	0.5%	0.3%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3173	543	207	73	17	21	18	4052
AM Peak Pd 0700-1000 Vehicle Flow	447	113	39	16	5	8	4	632
AM Peak Hr 0800-0900 Vehicle Flow	178	49	11	5	1	5	0	249
IP Peak Pd 1000-1600 Vehicle Flow	1174	250	89	31	7	10	7	1568
IP Peak Pd 1200-1300 Vehicle Flow	179	39	8	3	2	2	1	234
PM Peak Pd 1600-1900 Vehicle Flow	1005	111	48	23	3	3	0	1193
PM Peak Pd 1700-1800 Vehicle Flow	421	34	13	7	2	2	0	479
0600-2200 Vehicle Proportion	78.3%	13.4%	5.1%	1.8%	0.4%	0.5%	0.4%	100.0%

5.3.41 Table 61 shows that vehicle flows were highest in May 2021, compared to February and September 2021.

5.3.43 Table 62 presents the vehicle type breakdown for A905 westbound in Fallin.

Table 62. A905 (Westbound) Link Flow



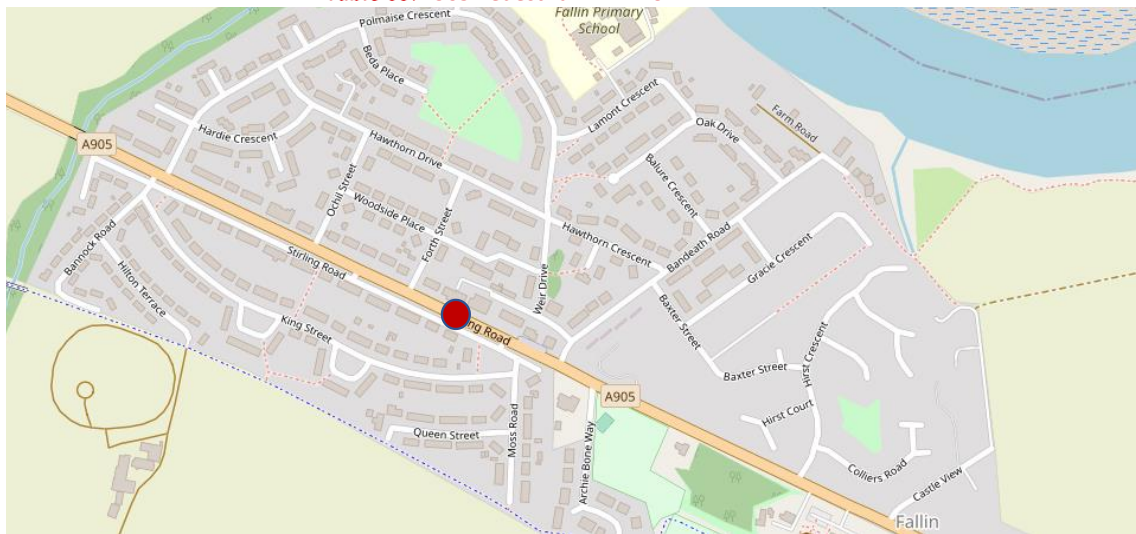
Site 1 A905 Westbound

February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	2419	533	191	65	14	17	10	3249
AM Peak Pd 0700-1000 Vehicle Flow	516	160	60	15	3	8	2	764
AM Peak Hr 0800-0900 Vehicle Flow	215	57	18	4	1	7	0	302
IP Peak Pd 1000-1600 Vehicle Flow	1049	218	76	28	5	7	5	1388
IP Peak Pd 1200-1300 Vehicle Flow	202	32	7	6	0	2	3	252
PM Peak Pd 1600-1900 Vehicle Flow	579	110	34	10	3	2	2	740
PM Peak Pd 1700-1800 Vehicle Flow	229	44	13	4	1	1	0	292
0600-2200 Vehicle Proportion	74.5%	16.4%	5.9%	2.0%	0.4%	0.5%	0.3%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3092	645	208	71	31	25	18	4090
AM Peak Pd 0700-1000 Vehicle Flow	730	186	61	23	7	11	3	1021
AM Peak Hr 0800-0900 Vehicle Flow	327	77	23	4	2	8	0	441
IP Peak Pd 1000-1600 Vehicle Flow	1167	246	79	28	17	13	11	1561
IP Peak Pd 1200-1300 Vehicle Flow	171	37	8	4	2	1	1	224
PM Peak Pd 1600-1900 Vehicle Flow	789	140	42	8	4	1	3	987
PM Peak Pd 1700-1800 Vehicle Flow	282	45	17	4	1	1	0	350
0600-2200 Vehicle Proportion	75.6%	15.8%	5.1%	1.7%	0.8%	0.6%	0.4%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3104	499	211	72	34	23	63	4006
AM Peak Pd 0700-1000 Vehicle Flow	716	137	57	21	8	8	11	958
AM Peak Hr 0800-0900 Vehicle Flow	309	55	18	9	3	6	1	401
IP Peak Pd 1000-1600 Vehicle Flow	1074	222	89	27	17	12	30	1471
IP Peak Pd 1200-1300 Vehicle Flow	160	43	9	4	1	1	4	222
PM Peak Pd 1600-1900 Vehicle Flow	865	93	43	13	5	3	15	1037
PM Peak Pd 1700-1800 Vehicle Flow	353	36	14	6	1	2	6	418
0600-2200 Vehicle Proportion	77.5%	12.5%	5.3%	1.8%	0.8%	0.6%	1.6%	100.0%

5.3.44 Table 62 shows that vehicle flows were again highest in May 2021, compared to February and September 2021.

5.3.46 Table 63 presents the pedestrian breakdown for A905 in Fallin.

Table 63. A905 Pedestrian Link Flow



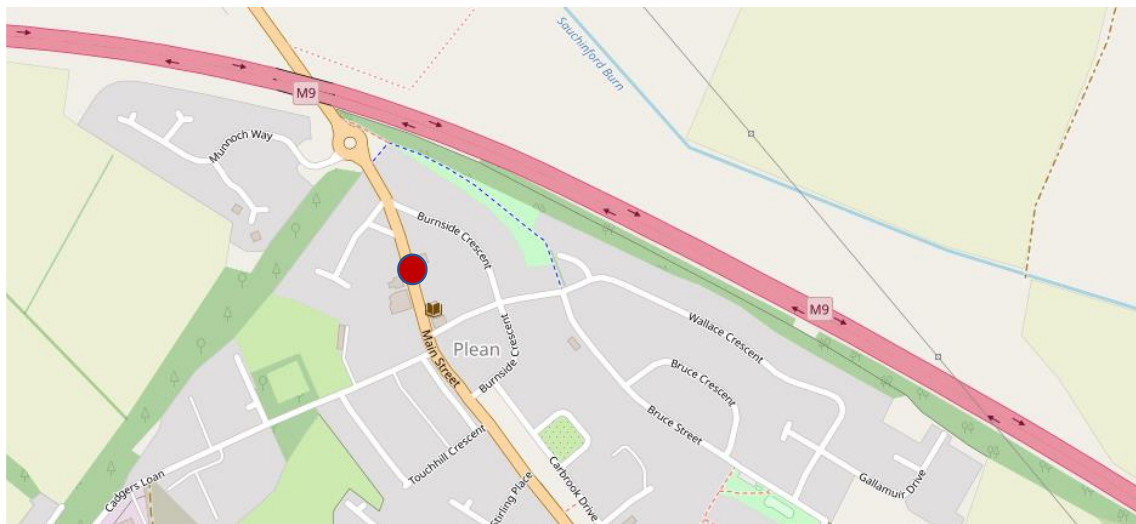
Site 1 A905									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	112	12	1	1	0	0	6	0	132
0600 - 2200 Westbound	82	4	0	2	0	0	10	1	99
AM Peak Pd 0700-1000 Eastbound	9	4	0	0	0	0	1	0	14
AM Peak Pd 0700-1000 Westbound	0	0	0	0	0	0	1	0	1
IP Peak Pd 1000-1600 Eastbound	62	8	0	1	0	0	1	0	72
IP Peak Pd 1000-1600 Westbound	46	2	0	2	0	0	5	1	56
PM Peak Pd 1600-1900 Eastbound	28	0	1	0	0	0	4	0	33
PM Peak Pd 1600-1900 Westbound	18	2	0	0	0	0	3	0	23
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	106	11	19	0	3	17	16	0	172
0600 - 2200 Westbound	77	11	3	0	2	11	8	0	112
AM Peak Pd 0700-1000 Eastbound	15	2	19	0	0	4	1	0	41
AM Peak Pd 0700-1000 Westbound	5	2	1	0	0	0	0	0	8
IP Peak Pd 1000-1600 Eastbound	54	4	0	0	3	12	8	0	81
IP Peak Pd 1000-1600 Westbound	39	4	0	0	2	9	4	0	58
PM Peak Pd 1600-1900 Eastbound	26	3	0	0	0	0	6	0	35
PM Peak Pd 1600-1900 Westbound	0	0	0	0	0	0	0	0	0
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	79	10	36	2	5	23	13	0	168
0600 - 2200 Westbound	73	9	6	2	4	23	22	1	140
AM Peak Pd 0700-1000 Eastbound	10	0	28	0	0	4	2	0	44
AM Peak Pd 0700-1000 Westbound	6	0	0	0	0	3	1	0	10
IP Peak Pd 1000-1600 Eastbound	31	1	2	2	3	9	3	0	51
IP Peak Pd 1000-1600 Westbound	33	3	3	1	3	6	6	0	55
PM Peak Pd 1600-1900 Eastbound	25	7	6	0	2	5	4	0	49
PM Peak Pd 1600-1900 Westbound	19	4	3	1	1	9	12	0	49

5.3.47 Table 63 shows that pedestrian flows were highest in May 2021, although September 2021 was very similar.

Plean

5.3.48 Table 64 presents the vehicle type breakdown for Main Street northbound in Plean.

Table 64. Main Street (Northbound) Link Flow

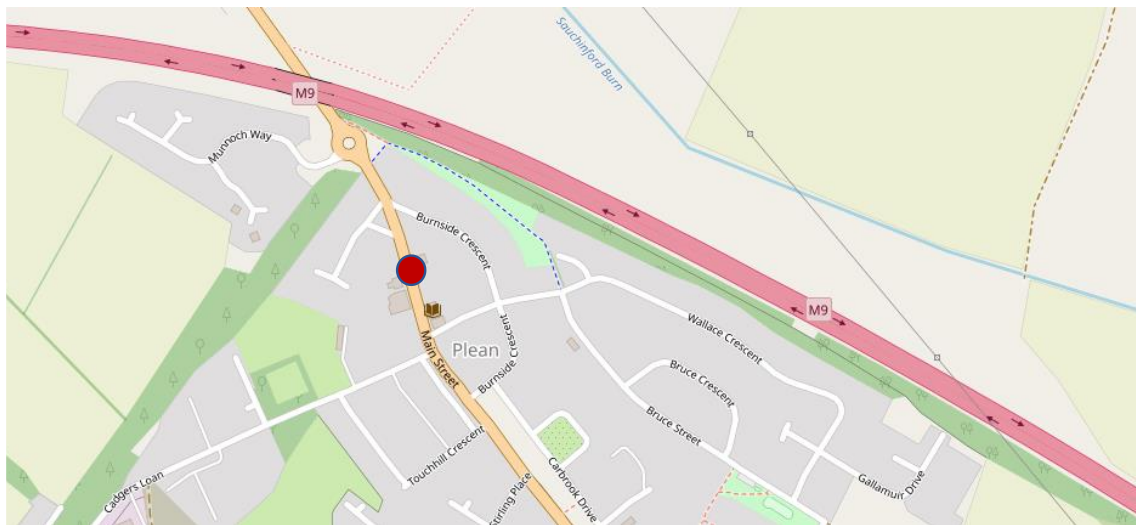


Site 1 Main St Northbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3261	465	155	53	33	11	10	3988
AM Peak Pd 0700-1000 Vehicle Flow	606	127	32	11	6	7	1	790
AM Peak Hr 0800-0900 Vehicle Flow	237	46	12	7	2	5	1	310
IP Peak Pd 1000-1600 Vehicle Flow	1331	202	88	29	14	4	7	1675
IP Peak Pd 1200-1300 Vehicle Flow	244	36	16	5	2	0	1	304
PM Peak Pd 1600-1900 Vehicle Flow	876	82	17	10	6	0	0	991
PM Peak Pd 1700-1800 Vehicle Flow	332	24	8	5	2	0	0	371
0600-2200 Vehicle Proportion	81.8%	11.7%	3.9%	1.3%	0.8%	0.3%	0.3%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3997	568	152	50	56	20	20	4863
AM Peak Pd 0700-1000 Vehicle Flow	750	150	44	10	12	10	4	980
AM Peak Hr 0800-0900 Vehicle Flow	263	53	14	3	4	6	2	345
IP Peak Pd 1000-1600 Vehicle Flow	1668	242	75	25	26	10	11	2057
IP Peak Pd 1200-1300 Vehicle Flow	292	37	9	3	6	0	3	350
PM Peak Pd 1600-1900 Vehicle Flow	999	125	22	6	11	0	4	1167
PM Peak Pd 1700-1800 Vehicle Flow	376	40	6	3	3	0	1	429
0600-2200 Vehicle Proportion	82.2%	11.7%	3.1%	1.0%	1.2%	0.4%	0.4%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3905	469	126	57	47	17	24	4645
AM Peak Pd 0700-1000 Vehicle Flow	775	103	26	16	11	6	3	940
AM Peak Hr 0800-0900 Vehicle Flow	324	29	12	6	3	3	1	378
IP Peak Pd 1000-1600 Vehicle Flow	1463	203	76	26	17	7	14	1806
IP Peak Pd 1200-1300 Vehicle Flow	217	34	17	2	3	2	3	278
PM Peak Pd 1600-1900 Vehicle Flow	1037	104	15	6	9	4	5	1180
PM Peak Pd 1700-1800 Vehicle Flow	394	33	4	1	2	3	1	438
0600-2200 Vehicle Proportion	84.1%	10.1%	2.7%	1.2%	1.0%	0.4%	0.5%	100.0%

5.3.49 Table 64 shows that vehicle flows were highest in May 2021, compared to February 2021 and September 2021.

5.3.51 Table 65 presents the vehicle type breakdown for Main Street Southbound in Plean.

Table 65. Main Street (Southbound) Link Flow

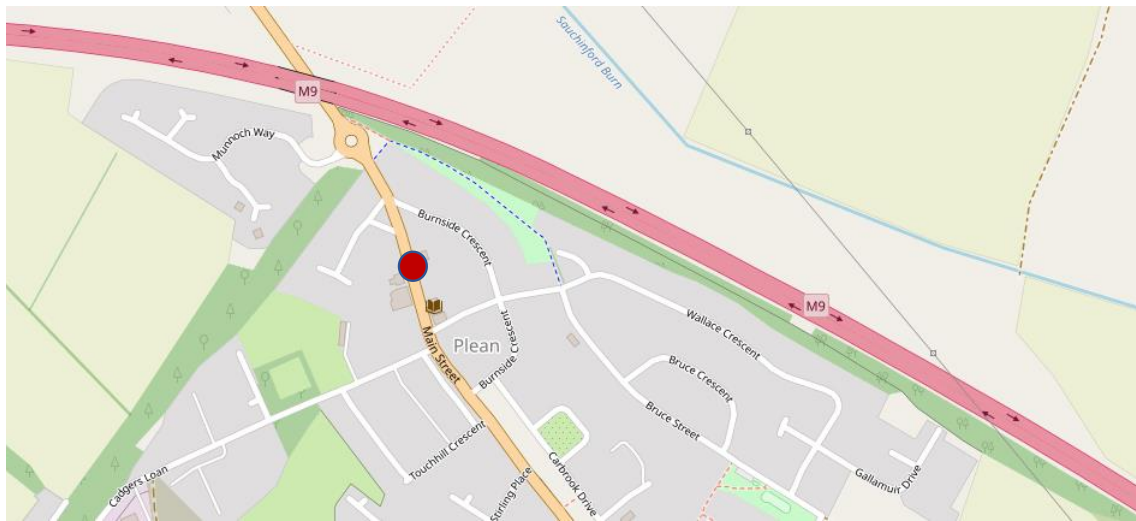


Site 1 Main St Southbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3381	449	142	69	34	13	7	4095
AM Peak Pd 0700-1000 Vehicle Flow	725	104	32	14	6	8	1	890
AM Peak Hr 0800-0900 Vehicle Flow	297	36	14	6	2	4	1	360
IP Peak Pd 1000-1600 Vehicle Flow	1307	202	71	33	14	2	3	1632
IP Peak Pd 1200-1300 Vehicle Flow	175	35	10	2	2	0	0	224
PM Peak Pd 1600-1900 Vehicle Flow	803	89	21	6	6	2	2	929
PM Peak Pd 1700-1800 Vehicle Flow	287	30	5	2	2	2	1	329
0600-2200 Vehicle Proportion	82.6%	11.0%	3.5%	1.7%	0.8%	0.3%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4159	509	147	79	62	17	17	4990
AM Peak Pd 0700-1000 Vehicle Flow	842	113	37	24	15	10	4	1045
AM Peak Hr 0800-0900 Vehicle Flow	319	47	16	8	5	3	3	401
IP Peak Pd 1000-1600 Vehicle Flow	1731	197	58	36	27	4	9	2062
IP Peak Pd 1200-1300 Vehicle Flow	307	29	11	9	4	0	3	363
PM Peak Pd 1600-1900 Vehicle Flow	964	124	30	10	11	3	3	1145
PM Peak Pd 1700-1800 Vehicle Flow	368	47	4	4	4	2	1	430
0600-2200 Vehicle Proportion	83.3%	10.2%	2.9%	1.6%	1.2%	0.3%	0.3%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3852	555	120	50	44	20	28	4669
AM Peak Pd 0700-1000 Vehicle Flow	728	148	18	15	9	8	3	929
AM Peak Hr 0800-0900 Vehicle Flow	292	47	4	5	3	3	0	354
IP Peak Pd 1000-1600 Vehicle Flow	1534	224	66	22	20	10	12	1888
IP Peak Pd 1200-1300 Vehicle Flow	245	29	13	3	2	2	4	298
PM Peak Pd 1600-1900 Vehicle Flow	967	110	23	6	7	0	8	1121
PM Peak Pd 1700-1800 Vehicle Flow	341	32	6	2	3	0	7	391
0600-2200 Vehicle Proportion	82.5%	11.9%	2.6%	1.1%	0.9%	0.4%	0.6%	100.0%

5.3.52 Table 65 shows that again, vehicle flows were highest in May 2021, compared to February 2021 and September 2021.

5.3.54 Table 66 presents the pedestrian breakdown for Main Street in Plean.

Table 66. Main Street Pedestrian Link Flow Summary

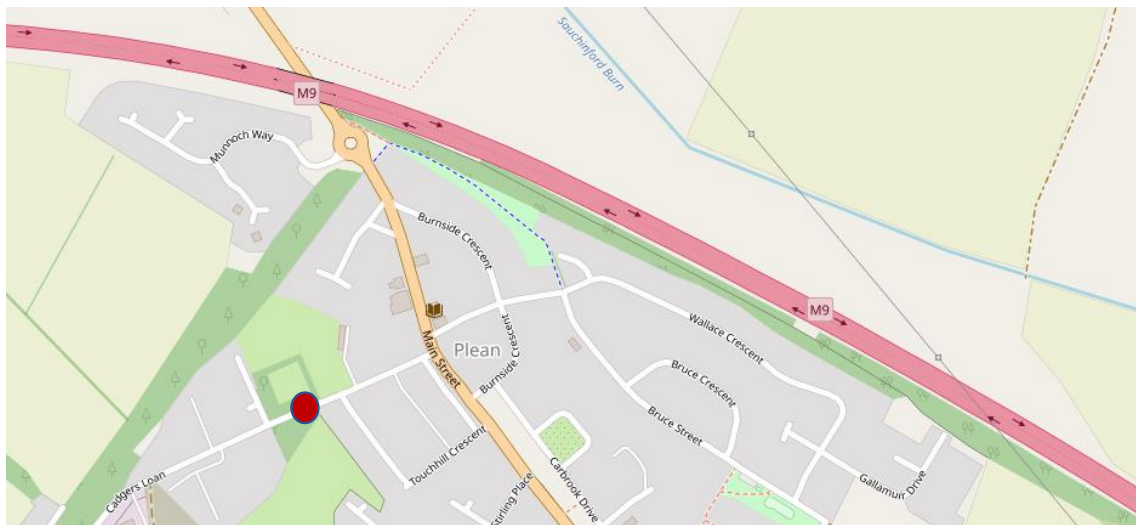


Site 1 - Main St									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	341	31	12	1	0	0	9	0	394
0600 - 2200 Southbound	298	46	10	2	0	0	7	0	363
AM Peak Pd 0700-1000 Northbound	24	0	0	0	0	0	0	0	24
AM Peak Pd 0700-1000 Southbound	21	19	0	0	0	0	0	0	40
IP Peak Pd 1000-1600 Northbound	149	27	9	1	0	0	6	0	192
IP Peak Pd 1000-1600 Southbound	118	24	4	2	0	0	1	0	149
PM Peak Pd 1600-1900 Northbound	115	4	3	0	0	0	3	0	125
PM Peak Pd 1600-1900 Southbound	109	3	6	0	0	0	5	0	123
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	478	34	48	7	2	9	28	0	606
0600 - 2200 Southbound	474	44	55	12	2	23	29	0	639
AM Peak Pd 0700-1000 Northbound	92	2	1	1	0	2	0	0	98
AM Peak Pd 0700-1000 Southbound	93	23	18	1	0	6	3	0	144
IP Peak Pd 1000-1600 Northbound	230	19	24	5	2	6	9	0	295
IP Peak Pd 1000-1600 Southbound	232	6	8	7	2	13	1	0	269
PM Peak Pd 1600-1900 Northbound	100	13	7	1	0	0	16	0	137
PM Peak Pd 1600-1900 Southbound	93	15	13	4	0	2	18	0	145
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	131	38	33	11	0	14	13	0	240
0600 - 2200 Southbound	115	44	26	8	0	7	11	2	213
AM Peak Pd 0700-1000 Northbound	17	22	14	2	0	2	0	0	57
AM Peak Pd 0700-1000 Southbound	16	2	0	2	0	0	1	0	21
IP Peak Pd 1000-1600 Northbound	56	6	3	5	0	6	2	0	78
IP Peak Pd 1000-1600 Southbound	46	32	21	2	0	2	2	2	107
PM Peak Pd 1600-1900 Northbound	25	10	13	1	0	6	3	0	58
PM Peak Pd 1600-1900 Southbound	25	8	5	2	0	5	3	0	48

5.3.55 Table 66 shows that pedestrian flows were highest in May 2021, and lowest in September 2021.

5.3.56 Table 67 presents the vehicle type breakdown for Cadgers Loan eastbound in Plean.

Table 67. Cadgers Loan (Eastbound) Link Flow

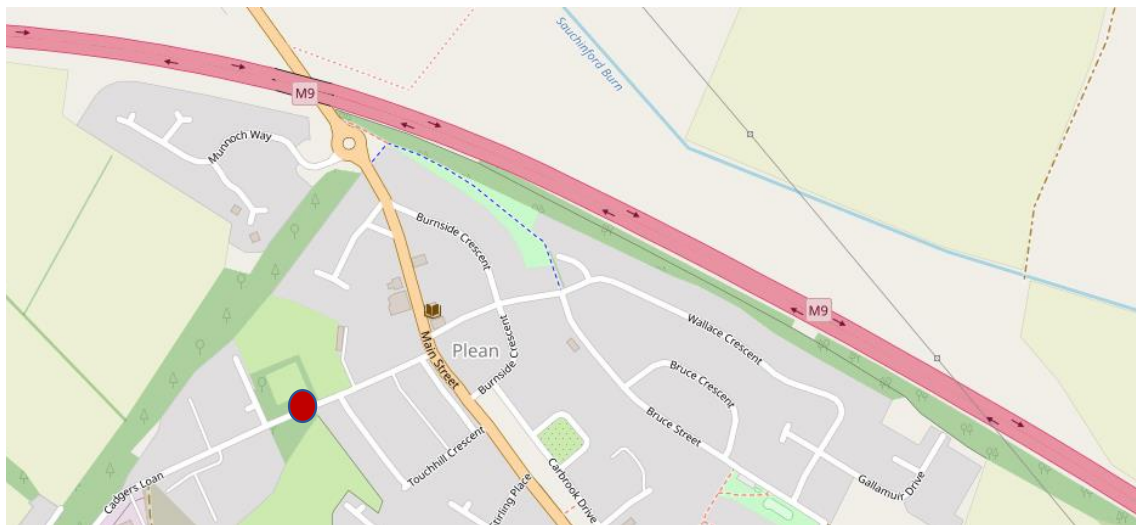


Site 2 Cadgers Loan Eastbound								
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	395	74	18	2	2	3	2	496
AM Peak Pd 0700-1000 Vehicle Flow	59	11	4	0	1	3	0	78
AM Peak Hr 0800-0900 Vehicle Flow	25	4	0	0	0	0	0	29
IP Peak Pd 1000-1600 Vehicle Flow	163	37	10	1	1	0	1	213
IP Peak Pd 1200-1300 Vehicle Flow	31	6	3	0	0	0	0	40
PM Peak Pd 1600-1900 Vehicle Flow	108	14	4	1	0	0	0	127
PM Peak Pd 1700-1800 Vehicle Flow	33	5	1	0	0	0	0	39
0600-2200 Vehicle Proportion	79.6%	14.9%	3.6%	0.4%	0.4%	0.6%	0.4%	100.0%

5.3.57 Table 67 shows that the highest proportion of vehicles were cars.

5.3.58 Table 68 presents the vehicle type breakdown for Cadgers Loan westbound in Plan.

Table 68. Cadgers Loan (Westbound) Link Flow



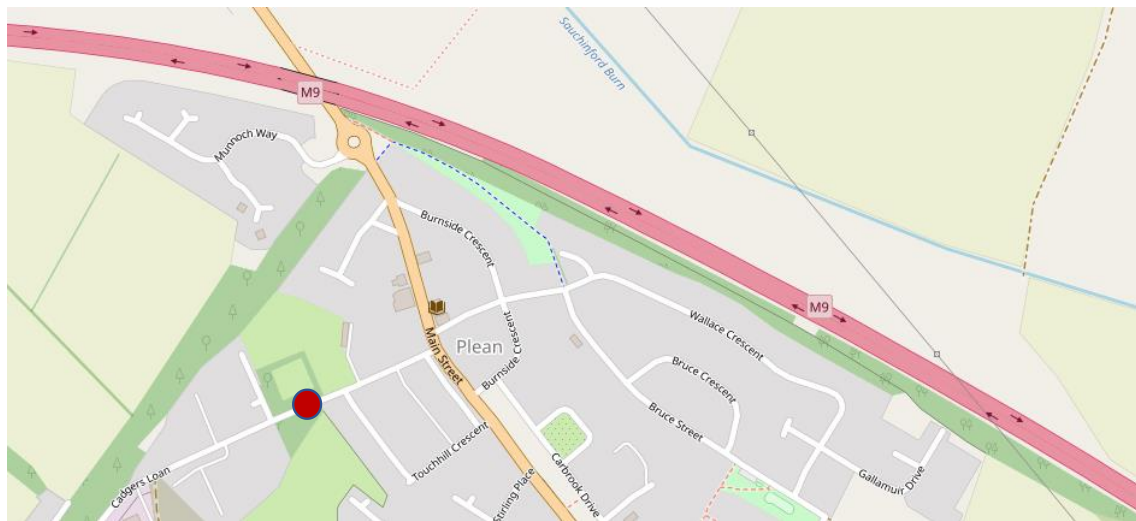
Site 2 Cadgers Loan Westbound

September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	423	69	21	3	0	5	0	521
AM Peak Pd 0700-1000 Vehicle Flow	62	16	3	1	0	2	0	84
AM Peak Hr 0800-0900 Vehicle Flow	26	3	2	0	0	0	0	31
IP Peak Pd 1000-1600 Vehicle Flow	173	29	14	1	0	0	0	217
IP Peak Pd 1200-1300 Vehicle Flow	39	9	5	0	0	0	0	53
PM Peak Pd 1600-1900 Vehicle Flow	111	19	3	1	0	3	0	137
PM Peak Pd 1700-1800 Vehicle Flow	43	10	1	0	0	2	0	56
0600-2200 Vehicle Proportion	81.2%	13.2%	4.0%	0.6%	0.0%	1.0%	0.0%	100.0%

5.3.59 Table 68 shows that again, the majority of vehicles were cars.

5.3.60 Table 69 presents the pedestrian breakdown for Cadgers Loan in Plan.

Table 69. Cadgers Loan Pedestrian Link Flow Summary



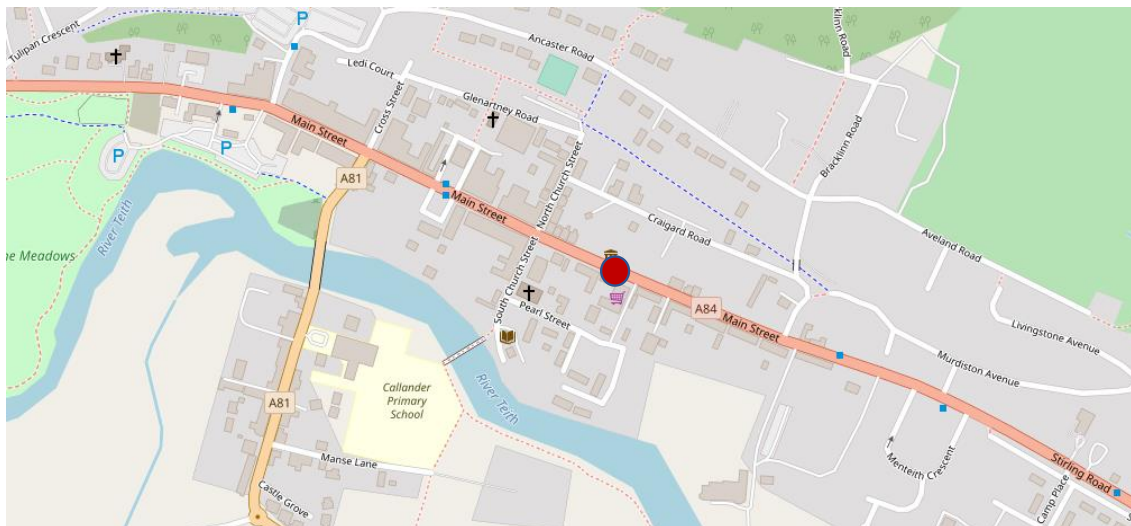
Site 2 - Cadgers Loan										
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total	
0600 - 2200 Eastbound	33	9	2	0	0	7	1	0	52	
0600 - 2200 Westbound	40	11	3	0	0	9	4	3	70	
AM Peak Pd 0700-1000 Eastbound	3	0	0	0	0	2	0	0	5	
AM Peak Pd 0700-1000 Westbound	4	0	1	0	0	0	0	1	6	
IP Peak Pd 1000-1600 Eastbound	13	7	2	0	0	0	0	0	22	
IP Peak Pd 1000-1600 Westbound	16	10	1	0	0	4	0	0	31	
PM Peak Pd 1600-1900 Eastbound	8	2	0	0	0	5	1	0	16	
PM Peak Pd 1600-1900 Westbound	11	1	1	0	0	5	4	2	24	

5.3.61 Table 69 shows that the westbound pedestrian flow was higher than the eastbound in September 2021.

Callander

5.3.62 Table 70 presents the vehicle type breakdown for Main Street eastbound in Callander.

Table 70. Main Street (Eastbound) Link Flow

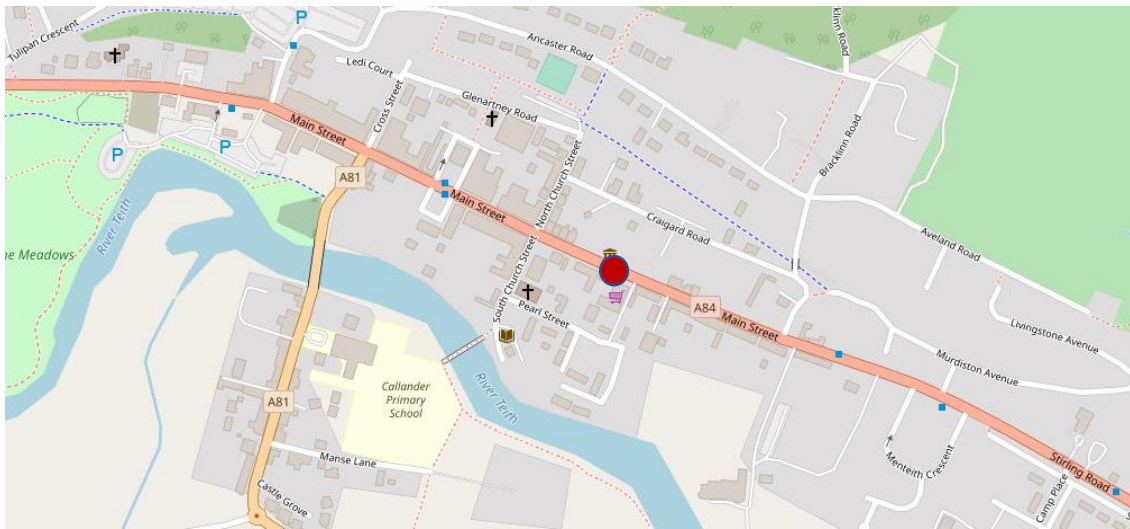


Site 1 Main Street Eastbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1717	515	124	116	13	15	6	2506
AM Peak Pd 0700-1000 Vehicle Flow	277	97	18	30	4	4	2	432
AM Peak Hr 0800-0900 Vehicle Flow	99	32	2	4	1	4	1	143
IP Peak Pd 1000-1600 Vehicle Flow	852	262	68	54	5	10	4	1255
IP Peak Pd 1200-1300 Vehicle Flow	124	42	9	6	1	0	2	184
PM Peak Pd 1600-1900 Vehicle Flow	439	120	26	20	3	1	0	609
PM Peak Pd 1700-1800 Vehicle Flow	150	41	12	7	0	1	0	211
0600-2200 Vehicle Proportion	68.5%	20.6%	4.9%	4.6%	0.5%	0.6%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3048	565	139	124	21	9	30	3936
AM Peak Pd 0700-1000 Vehicle Flow	459	93	27	27	6	1	4	617
AM Peak Hr 0800-0900 Vehicle Flow	157	21	5	6	2	1	1	193
IP Peak Pd 1000-1600 Vehicle Flow	1459	283	75	65	10	4	21	1917
IP Peak Pd 1200-1300 Vehicle Flow	197	42	12	8	1	0	8	268
PM Peak Pd 1600-1900 Vehicle Flow	794	137	28	14	4	4	3	984
PM Peak Pd 1700-1800 Vehicle Flow	267	47	11	5	1	1	1	333
0600-2200 Vehicle Proportion	77.4%	14.4%	3.5%	3.2%	0.5%	0.2%	0.8%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	4578	542	149	111	14	33	201	5628
AM Peak Pd 0700-1000 Vehicle Flow	502	81	17	18	4	6	4	632
AM Peak Hr 0800-0900 Vehicle Flow	177	26	7	4	1	4	2	221
IP Peak Pd 1000-1600 Vehicle Flow	1760	249	93	56	5	15	65	2243
IP Peak Pd 1200-1300 Vehicle Flow	240	46	18	8	1	1	11	325
PM Peak Pd 1600-1900 Vehicle Flow	1713	151	29	22	4	10	88	2017
PM Peak Pd 1700-1800 Vehicle Flow	977	49	11	6	1	3	33	1080
0600-2200 Vehicle Proportion	81.3%	9.6%	2.6%	2.0%	0.2%	0.6%	3.6%	100.0%

5.3.63 Table 70 shows that vehicle flows were significantly higher in September 2021, compared to May 2021 and February 2021.

5.3.65 Table 71 presents the vehicle type breakdown for Main Street westbound in Callander.

Table 71. Main Street (Westbound) Link Flow

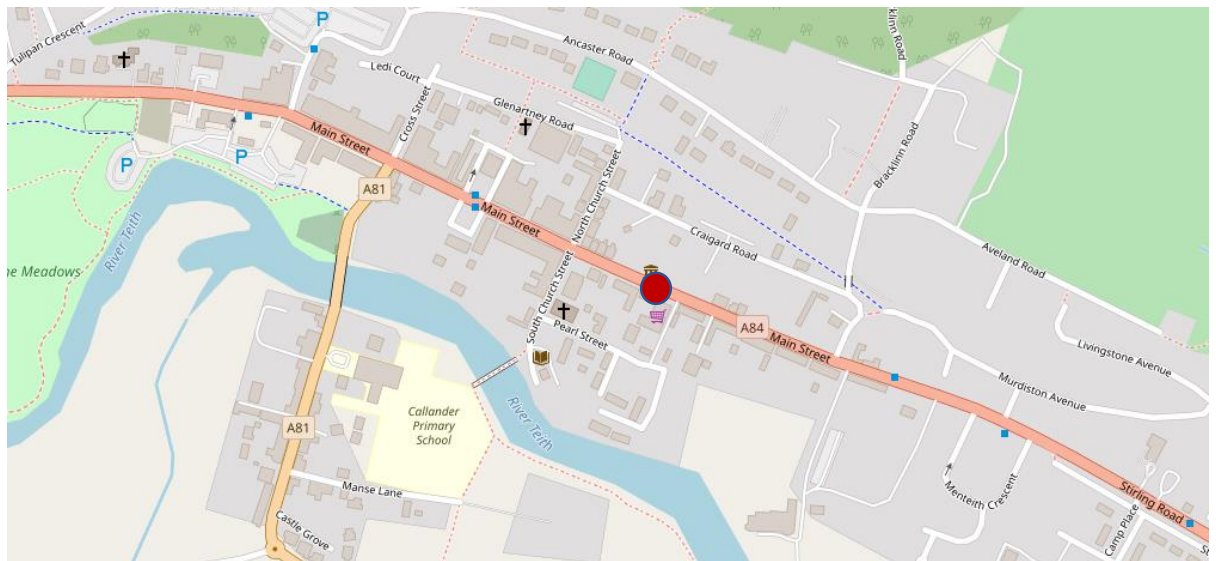


Site 1 Main Street Westbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1551	449	123	112	16	15	4	2270
AM Peak Pd 0700-1000 Vehicle Flow	300	168	50	35	4	4	0	561
AM Peak Hr 0800-0900 Vehicle Flow	135	58	21	14	1	3	0	232
IP Peak Pd 1000-1600 Vehicle Flow	735	169	43	38	6	10	3	1004
IP Peak Pd 1200-1300 Vehicle Flow	126	24	8	8	1	0	0	167
PM Peak Pd 1600-1900 Vehicle Flow	378	69	14	24	3	1	1	490
PM Peak Pd 1700-1800 Vehicle Flow	138	34	5	10	1	1	1	190
0600-2200 Vehicle Proportion	68.3%	19.8%	5.4%	4.9%	0.7%	0.7%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	2846	551	135	124	21	8	25	3710
AM Peak Pd 0700-1000 Vehicle Flow	584	191	48	37	6	4	4	874
AM Peak Hr 0800-0900 Vehicle Flow	247	72	17	20	2	2	1	361
IP Peak Pd 1000-1600 Vehicle Flow	1384	205	53	34	10	3	20	1709
IP Peak Pd 1200-1300 Vehicle Flow	238	37	4	6	1	0	3	289
PM Peak Pd 1600-1900 Vehicle Flow	583	91	17	27	4	1	1	724
PM Peak Pd 1700-1800 Vehicle Flow	214	31	7	10	2	0	1	265
0600-2200 Vehicle Proportion	76.7%	14.9%	3.6%	3.3%	0.6%	0.2%	0.7%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	3551	521	151	102	15	53	200	4593
AM Peak Pd 0700-1000 Vehicle Flow	675	179	56	36	3	18	15	982
AM Peak Hr 0800-0900 Vehicle Flow	272	64	23	11	0	3	4	377
IP Peak Pd 1000-1600 Vehicle Flow	1835	211	60	29	7	29	124	2295
IP Peak Pd 1200-1300 Vehicle Flow	312	35	15	7	1	7	23	400
PM Peak Pd 1600-1900 Vehicle Flow	709	73	15	16	4	6	41	864
PM Peak Pd 1700-1800 Vehicle Flow	254	23	7	6	2	5	11	308
0600-2200 Vehicle Proportion	77.3%	11.3%	3.3%	2.2%	0.3%	1.2%	4.4%	100.0%

5.3.66 Table 71 shows that vehicle flows were significantly higher in September 2021, compared to May and February 2021.

5.3.68 Table 72 presents the pedestrian breakdown for Main Street in Callander.

Table 72. Main Street Pedestrian Link Flow



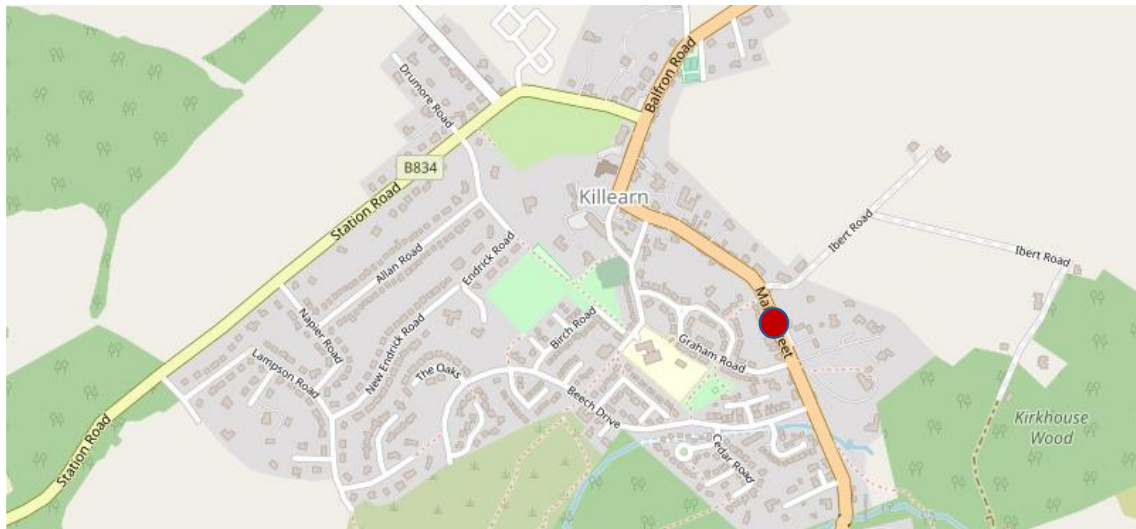
Site 1 Main Street									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	332	41	0	3	1	0	14	2	393
0600 - 2200 Westbound	319	51	3	3	2	0	12	0	390
AM Peak Pd 0700-1000 Eastbound	14	0	0	0	0	0	0	0	14
AM Peak Pd 0700-1000 Westbound	17	20	1	0	0	0	1	0	39
IP Peak Pd 1000-1600 Eastbound	187	34	0	3	1	0	1	1	227
IP Peak Pd 1000-1600 Westbound	175	27	2	3	2	0	6	0	215
PM Peak Pd 1600-1900 Eastbound	88	7	0	0	0	0	12	1	108
PM Peak Pd 1600-1900 Westbound	80	4	0	0	0	0	5	0	89
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	559	37	43	5	9	15	16	0	684
0600 - 2200 Westbound	548	57	21	7	7	18	15	0	673
AM Peak Pd 0700-1000 Eastbound	32	1	0	1	1	0	0	0	35
AM Peak Pd 0700-1000 Westbound	55	28	6	1	1	2	7	0	100
IP Peak Pd 1000-1600 Eastbound	369	30	41	4	5	12	8	0	469
IP Peak Pd 1000-1600 Westbound	348	26	13	4	5	13	2	0	411
PM Peak Pd 1600-1900 Eastbound	106	6	2	0	3	1	3	0	121
PM Peak Pd 1600-1900 Westbound	95	3	2	1	1	2	3	0	107
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Eastbound	755	71	84	7	5	24	16	4	966
0600 - 2200 Westbound	726	84	56	5	4	29	12	1	917
AM Peak Pd 0700-1000 Eastbound	33	0	3	0	0	1	0	0	37
AM Peak Pd 0700-1000 Westbound	42	31	16	0	0	3	5	0	97
IP Peak Pd 1000-1600 Eastbound	386	45	64	6	4	12	11	4	532
IP Peak Pd 1000-1600 Westbound	415	27	29	4	2	17	4	1	499
PM Peak Pd 1600-1900 Eastbound	186	18	16	1	1	9	0	0	231
PM Peak Pd 1600-1900 Westbound	160	18	10	0	1	8	3	0	200

5.3.69 Table 72 shows that pedestrian flows were significantly higher in September 2021, reflecting the seasonality of the area.

Killlearn

5.3.70 Table 73 presents the vehicle type breakdown for Main Street northbound in Killlearn.

Table 73. Main Street (Northbound) Link Flow

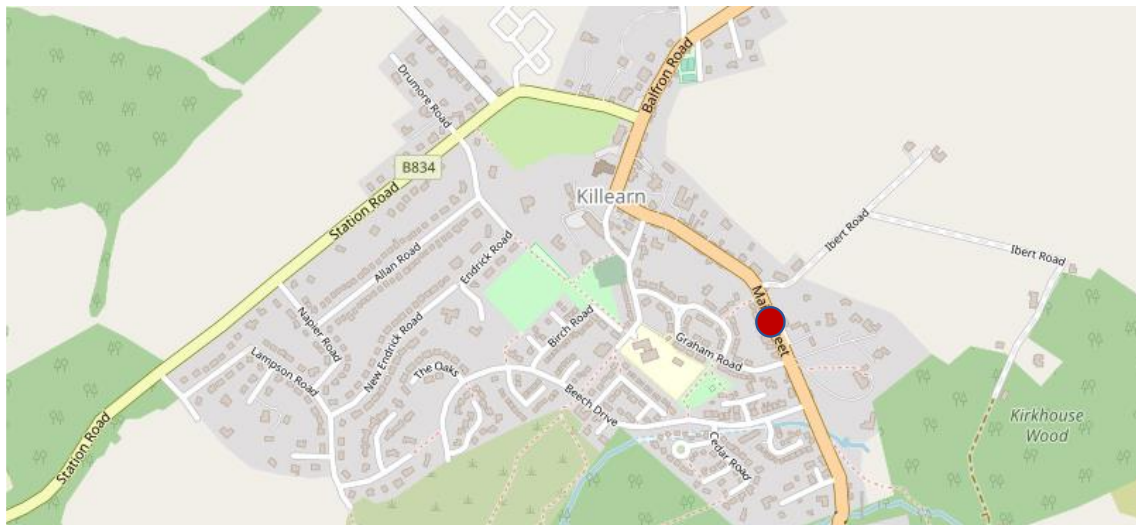


Site 1 Main Street Northbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1016	167	26	2	16	4	3	1234
AM Peak Pd 0700-1000 Vehicle Flow	221	37	5	1	3	3	1	271
AM Peak Hr 0800-0900 Vehicle Flow	82	10	1	0	1	3	0	97
IP Peak Pd 1000-1600 Vehicle Flow	436	85	18	0	6	0	1	546
IP Peak Pd 1200-1300 Vehicle Flow	69	16	3	0	1	0	0	89
PM Peak Pd 1600-1900 Vehicle Flow	287	38	1	1	4	0	0	331
PM Peak Pd 1700-1800 Vehicle Flow	126	16	0	1	1	0	0	144
0600-2200 Vehicle Proportion	82.3%	13.5%	2.1%	0.2%	1.3%	0.3%	0.2%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1328	188	27	8	16	5	3	1575
AM Peak Pd 0700-1000 Vehicle Flow	268	30	6	2	3	3	0	312
AM Peak Hr 0800-0900 Vehicle Flow	131	11	4	0	1	3	0	150
IP Peak Pd 1000-1600 Vehicle Flow	526	105	15	3	6	1	1	657
IP Peak Pd 1200-1300 Vehicle Flow	79	14	2	0	1	0	0	96
PM Peak Pd 1600-1900 Vehicle Flow	392	42	6	3	4	1	2	450
PM Peak Pd 1700-1800 Vehicle Flow	161	12	3	0	1	0	1	178
0600-2200 Vehicle Proportion	84.3%	11.9%	1.7%	0.5%	1.0%	0.3%	0.2%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1579	199	29	2	17	5	18	1849
AM Peak Pd 0700-1000 Vehicle Flow	311	62	5	0	4	3	0	385
AM Peak Hr 0800-0900 Vehicle Flow	139	27	1	0	2	3	0	172
IP Peak Pd 1000-1600 Vehicle Flow	641	84	18	2	7	0	11	763
IP Peak Pd 1200-1300 Vehicle Flow	115	13	3	1	1	0	0	133
PM Peak Pd 1600-1900 Vehicle Flow	440	34	3	0	3	1	4	485
PM Peak Pd 1700-1800 Vehicle Flow	149	11	1	0	1	0	3	165
0600-2200 Vehicle Proportion	85.4%	10.8%	1.6%	0.1%	0.9%	0.3%	1.0%	100.0%

5.3.71 Table 73 shows that vehicle flows were higher in September 2021, compared to February and May 2021.

5.3.73 Table 74 presents the vehicle type breakdown for Main Street southbound in Killearn.

Table 74. Main Street (Southbound) Link Flow

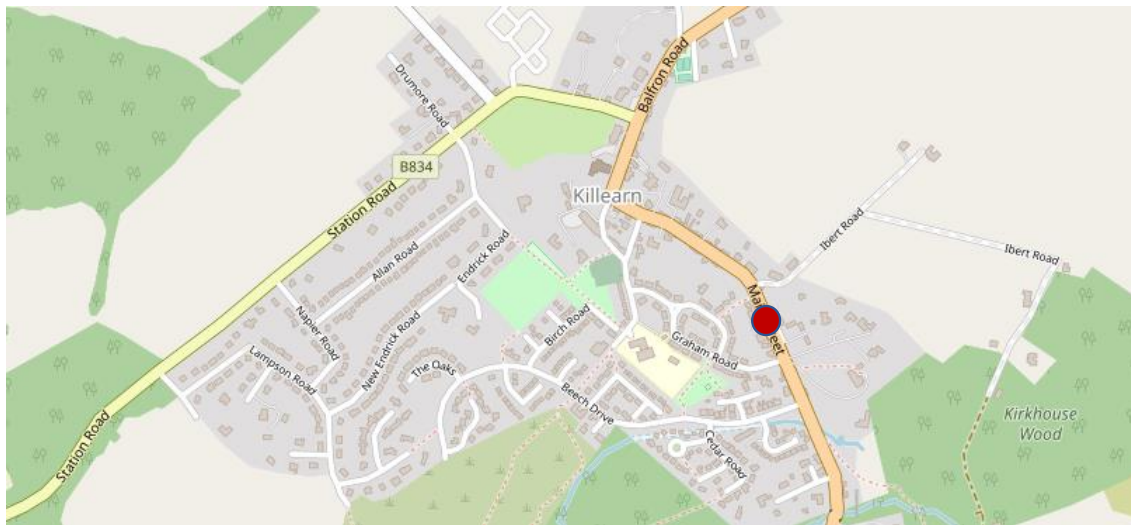


Site 1 Main Street Southbound								
February 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	821	132	38	4	17	1	7	1020
AM Peak Pd 0700-1000 Vehicle Flow	168	25	7	1	4	0	0	205
AM Peak Hr 0800-0900 Vehicle Flow	74	11	4	0	1	0	0	90
IP Peak Pd 1000-1600 Vehicle Flow	382	71	25	3	5	1	6	493
IP Peak Pd 1200-1300 Vehicle Flow	45	10	4	1	1	0	1	62
PM Peak Pd 1600-1900 Vehicle Flow	202	28	6	0	5	0	1	242
PM Peak Pd 1700-1800 Vehicle Flow	92	9	1	0	1	0	0	103
0600-2200 Vehicle Proportion	80.5%	12.9%	3.7%	0.4%	1.7%	0.1%	0.7%	100.0%
May 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1152	159	25	5	18	3	6	1368
AM Peak Pd 0700-1000 Vehicle Flow	239	24	10	3	3	1	2	282
AM Peak Hr 0800-0900 Vehicle Flow	112	11	2	0	1	1	1	128
IP Peak Pd 1000-1600 Vehicle Flow	445	76	10	2	7	1	1	542
IP Peak Pd 1200-1300 Vehicle Flow	62	12	2	1	1	0	0	78
PM Peak Pd 1600-1900 Vehicle Flow	322	40	5	0	5	1	3	376
PM Peak Pd 1700-1800 Vehicle Flow	147	17	2	0	1	0	2	169
0600-2200 Vehicle Proportion	84.2%	11.6%	1.8%	0.4%	1.3%	0.2%	0.4%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Service Bus	Private Coach	Motor Cycle	Total
0600-2200 Vehicle Flow	1273	168	24	5	18	3	14	1505
AM Peak Pd 0700-1000 Vehicle Flow	302	41	6	0	4	2	1	356
AM Peak Hr 0800-0900 Vehicle Flow	131	16	2	0	1	1	1	152
IP Peak Pd 1000-1600 Vehicle Flow	472	76	14	5	5	1	9	582
IP Peak Pd 1200-1300 Vehicle Flow	68	10	5	0	1	0	1	85
PM Peak Pd 1600-1900 Vehicle Flow	320	36	1	0	4	0	3	364
PM Peak Pd 1700-1800 Vehicle Flow	144	6	0	0	2	0	0	152
0600-2200 Vehicle Proportion	84.6%	11.2%	1.6%	0.3%	1.2%	0.2%	0.9%	100.0%

5.3.74 Table 74 shows that vehicle flows were higher in September 2021, compared to May and February 2021.

5.3.76 Table 75 presents the pedestrian breakdown for Main Street in Killearn.

Table 75. Main Street Pedestrian Flow Summary



Site 1 Main Street									
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	227	11	10	2	0	0	6	0	256
0600 - 2200 Southbound	195	9	8	1	0	0	3	0	216
AM Peak Pd 0700-1000 Northbound	22	0	0	0	0	0	1	0	23
AM Peak Pd 0700-1000 Southbound	14	0	0	0	0	0	0	0	14
IP Peak Pd 1000-1600 Northbound	105	9	9	1	0	0	5	0	129
IP Peak Pd 1000-1600 Southbound	110	9	6	0	0	0	2	0	127
PM Peak Pd 1600-1900 Northbound	65	2	1	1	0	0	0	0	69
PM Peak Pd 1600-1900 Southbound	49	0	2	1	0	0	1	0	53
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	158	14	8	3	0	18	4	0	205
0600 - 2200 Southbound	143	16	7	1	0	35	4	0	206
AM Peak Pd 0700-1000 Northbound	36	0	4	1	0	0	1	0	42
AM Peak Pd 0700-1000 Southbound	15	0	0	0	0	1	1	0	17
IP Peak Pd 1000-1600 Northbound	62	7	2	2	0	14	0	0	87
IP Peak Pd 1000-1600 Southbound	61	7	0	1	0	24	1	0	94
PM Peak Pd 1600-1900 Northbound	27	7	2	0	0	3	3	0	42
PM Peak Pd 1600-1900 Southbound	38	6	7	0	0	5	2	0	58
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on bike	Cyclist on foot	Horse	Total
0600 - 2200 Northbound	288	7	14	3	1	29	7	0	349
0600 - 2200 Southbound	258	10	20	4	1	34	2	0	329
AM Peak Pd 0700-1000 Northbound	34	0	10	0	0	2	0	0	46
AM Peak Pd 0700-1000 Southbound	24	0	0	0	0	0	0	0	24
IP Peak Pd 1000-1600 Northbound	146	3	0	2	1	17	4	0	173
IP Peak Pd 1000-1600 Southbound	118	5	2	4	0	20	1	0	150
PM Peak Pd 1600-1900 Northbound	73	2	4	1	0	9	2	0	91
PM Peak Pd 1600-1900 Southbound	71	5	18	0	0	9	1	0	104

5.3.77 Table 75 shows that pedestrian flows were highest in September 2021.

6. CAR PARK OCCUPANCY SURVEYS

6.1 Stirling Parking

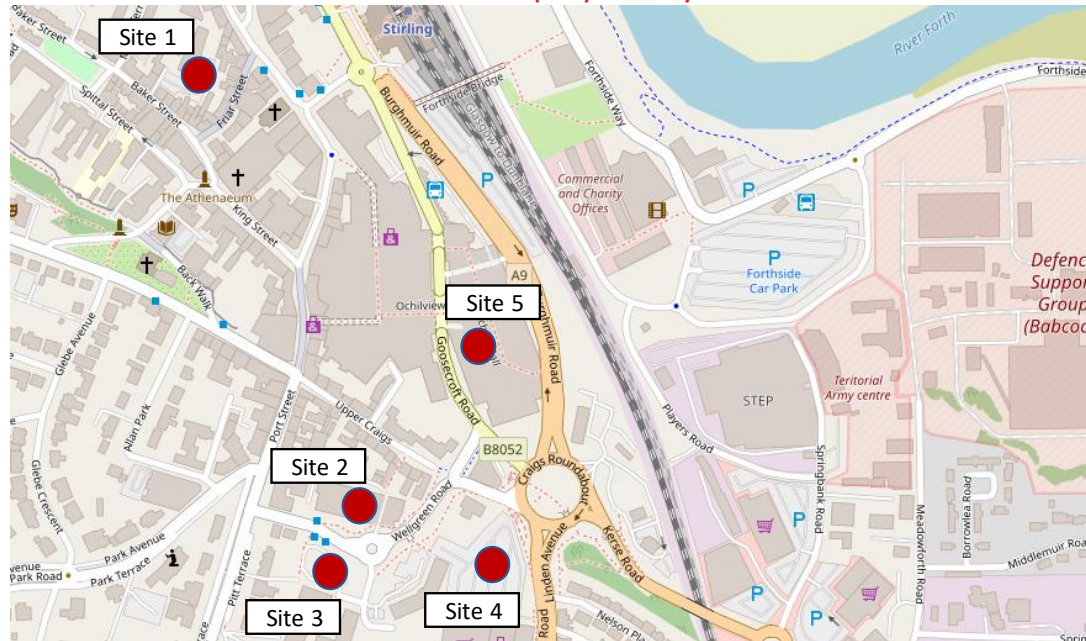
6.1.1 Five locations within Stirling were selected for car park occupancy surveys. The survey analysis is detailed below:

6.1.2 For each of the car park occupancy surveys, the summary information is as follows:

- Site Number
- Site Location
- Total Vehicle Occupancy
- AM Period Occupancy 07:00-10:00
- IP Period Occupancy 10:00-16:00
- PM Period Occupancy 16:00-19:00

6.1.3 Table 76 presents car park occupancy for the five surveyed parking areas in Stirling.

Table 76. Car Park Occupancy Summary



Wednesday 5th May 2021										
Site 1 - Dalglish Court	Car Occupancy				LGV		OGV1		OGV2	
	1	2	3	4+	Total Veh.	Total Occ.	Total Veh.	Total Occ.	Total Veh.	Total Occ.
Total	72	38	4	1	8	11	0	0	0	0
AM Period 0700-1000	10	3	1	0	3	5	0	0	0	0
IP 1000-1600	49	26	1	1	4	4	0	0	0	0
PM Period 1600-1900	7	6	1	0	0	0	0	0	0	0
Site 2 - Wellgreen Road	Car Occupancy				LGV		OGV1		OGV2	
	1	2	3	4+	Total Veh.	Total Occ.	Total Veh.	Total Occ.	Total Veh.	Total Occ.
Total	251	18	1	0	18	18	0	0	0	0
AM Period 0700-1000	143	3	0	0	13	13	0	0	0	0
IP 1000-1600	101	15	1	0	3	3	0	0	0	0
PM Period 1600-1900	4	0	0	0	1	1	0	0	0	0
Site 3 - Wellgreen Place	Car Occupancy				LGV		OGV1		OGV2	
	1	2	3	4+	Total Veh.	Total Occ.	Total Veh.	Total Occ.	Total Veh.	Total Occ.
Total	23	12	1	0	8	8	0	0	0	0
AM Period 0700-1000	5	0	1	0	2	2	0	0	0	0
IP 1000-1600	14	10	0	0	5	5	0	0	0	0
PM Period 1600-1900	3	1	0	0	1	1	0	0	0	0
Site 4 - Burghmuir Retail Park	Car Occupancy				LGV		OGV1		OGV2	
	1	2	3	4+	Total Veh.	Total Occ.	Total Veh.	Total Occ.	Total Veh.	Total Occ.
Total	1876	426	26	1	69	85	6	7	0	0
AM Period 0700-1000	302	28	0	0	10	10	2	2	0	0
IP 1000-1600	985	233	13	0	30	38	0	0	0	0
PM Period 1600-1900	260	86	10	1	16	20	1	1	0	0
Site 5 - The Marches	Car Occupancy				LGV		OGV1		OGV2	
	1	2	3	4+	Total Veh.	Total Occ.	Total Veh.	Total Occ.	Total Veh.	Total Occ.
Total	1058	293	34	5	10	13	0	0	0	0
AM Period 0700-1000	229	34	2	1	2	2	0	0	0	0
IP 1000-1600	784	233	28	3	7	10	0	0	0	0
PM Period 1600-1900	45	26	4	1	1	1	0	0	0	0

7. SCHOOL PARKING

7.1 Riverside Primary School

7.1.1 Surveys were undertaken in May 2021 and September 2021 to monitor the number of parked vehicles on Forrest Road, near to the entrance of Riverside Primary School in Stirling.

7.1.2 Table 77 below presents the cumulative parking totals for the east kerbside on Forrest Road.

Table 77. Forrest Road (east Kerbside)

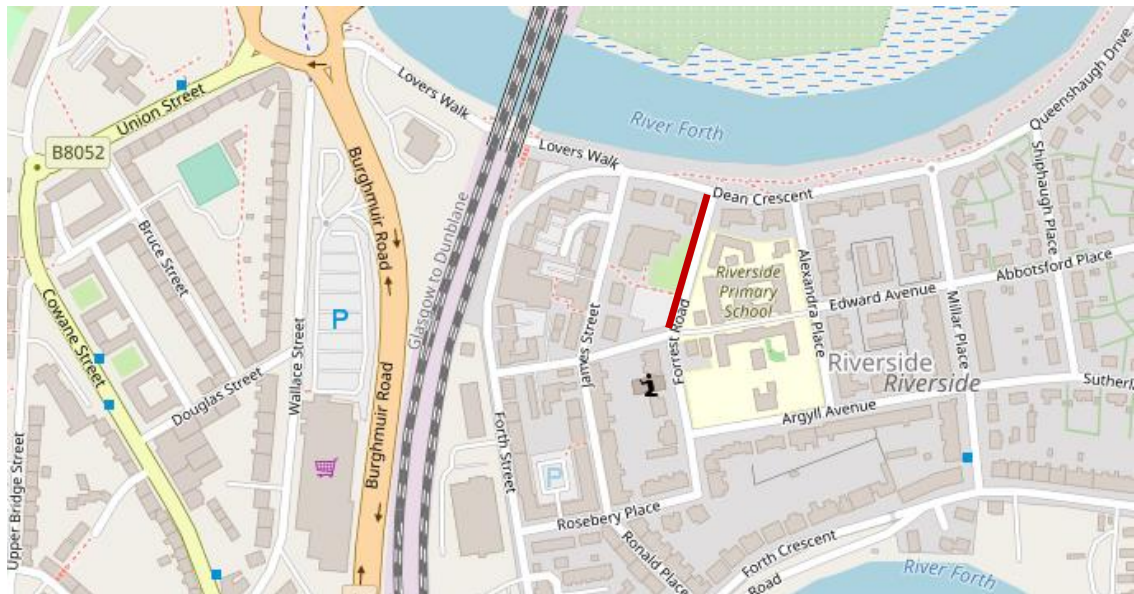


Site 1 Forrest Road around Riverside Primary School (East Kerbside)						
May 2021	Car	LGV	OGV1	OGV2	Bus/Coach	Total
0600-2200 Parking Occupancy	322	2	0	0	0	324
AM Peak Pd 0700-1000 Parking Occupancy	69	0	0	0	0	69
AM Peak Hr 0800-0900 Parking Occupancy	27	0	0	0	0	27
IP Peak Pd 1000-1600 Parking Occupancy	202	0	0	0	0	202
IP Peak Pd 1500-1600 Parking Occupancy	34	0	0	0	0	34
PM Peak Pd 1600-1900 Parking Occupancy	35	2	0	0	0	37
PM Peak Pd 1700-1800 Parking Occupancy	10	0	0	0	0	10
0600-2200 Vehicle Proportion	99.4%	0.6%	0.0%	0.0%	0.0%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Bus/Coach	Total
0600-2200 Vehicle Flow	282	64	0	0	0	346
AM Peak Pd 0700-1000 Vehicle Flow	57	12	0	0	0	69
AM Peak Hr 0800-0900 Vehicle Flow	20	4	0	0	0	24
IP Peak Pd 1000-1600 Vehicle Flow	157	24	0	0	0	181
IP Peak Pd 1200-1300 Vehicle Flow	24	4	0	0	0	28
PM Peak Pd 1600-1900 Vehicle Flow	35	12	0	0	0	47
PM Peak Pd 1700-1800 Vehicle Flow	14	4	0	0	0	18
0600-2200 Vehicle Proportion	81.5%	18.5%	0.0%	0.0%	0.0%	100.0%
Difference	Car	LGV	OGV1	OGV2	Bus/Coach	Total
0600-2200 Vehicle Flow	-40	62	0	0	0	22
AM Peak Pd 0700-1000 Vehicle Flow	-12	12	0	0	0	0
AM Peak Hr 0800-0900 Vehicle Flow	-7	4	0	0	0	-3
IP Peak Pd 1000-1600 Vehicle Flow	-45	24	0	0	0	-21
IP Peak Pd 1200-1300 Vehicle Flow	-10	4	0	0	0	-6
PM Peak Pd 1600-1900 Vehicle Flow	0	10	0	0	0	10
PM Peak Pd 1700-1800 Vehicle Flow	4	4	0	0	0	8
0600-2200 Vehicle Proportion	-17.9%	17.9%	0.0%	0.0%	0.0%	0.0%

7.1.3 Table 77 shows that there was a slight increase in parked vehicles across the day on the east side of Forrest Road in Stirling. There was a slight reduction in the number of parked cars, but an increase in parked LGV's.

7.1.4 Table 78 below presents the cumulative parking totals for the west kerbside on Forrest Road.

Table 78. Forrest Road (west Kerbside)



Site 1 Forrest Road around Riverside Primary School (West Kerbside)

May 2021	Car	LGV	OGV1	OGV2	Bus/Coach	Total
0600-2200 Parking Occupancy	529	9	0	0	0	538
AM Peak Pd 0700-1000 Parking Occupancy	117	0	0	0	0	117
AM Peak Hr 0800-0900 Parking Occupancy	42	0	0	0	0	42
IP Peak Pd 1000-1600 Parking Occupancy	307	8	0	0	0	315
IP Peak Pd 1500-1600 Parking Occupancy	46	2	0	0	0	48
PM Peak Pd 1600-1900 Parking Occupancy	70	1	0	0	0	71
PM Peak Pd 1700-1800 Parking Occupancy	25	0	0	0	0	25
0600-2200 Vehicle Proportion	98.3%	1.7%	0.0%	0.0%	0.0%	100.0%
September 2021	Car	LGV	OGV1	OGV2	Bus/Coach	Total
0600-2200 Vehicle Flow	589	2	1	0	0	592
AM Peak Pd 0700-1000 Vehicle Flow	121	0	1	0	0	122
AM Peak Hr 0800-0900 Vehicle Flow	44	0	0	0	0	44
IP Peak Pd 1000-1600 Vehicle Flow	355	1	0	0	0	356
IP Peak Pd 1200-1300 Vehicle Flow	49	0	0	0	0	49
PM Peak Pd 1600-1900 Vehicle Flow	79	1	0	0	0	80
PM Peak Pd 1700-1800 Vehicle Flow	29	0	0	0	0	29
0600-2200 Vehicle Proportion	99.5%	0.3%	0.2%	0.0%	0.0%	100.0%
Difference	Car	LGV	OGV1	OGV2	Bus/Coach	Total
0600-2200 Vehicle Flow	60	-7	1	0	0	54
AM Peak Pd 0700-1000 Vehicle Flow	4	0	1	0	0	5
AM Peak Hr 0800-0900 Vehicle Flow	2	0	0	0	0	2
IP Peak Pd 1000-1600 Vehicle Flow	48	-7	0	0	0	41
IP Peak Pd 1200-1300 Vehicle Flow	3	-2	0	0	0	1
PM Peak Pd 1600-1900 Vehicle Flow	9	0	0	0	0	9
PM Peak Pd 1700-1800 Vehicle Flow	4	0	0	0	0	4
0600-2200 Vehicle Proportion	1.2%	-1.3%	0.2%	0.0%	0.0%	0.0%

7.1.5 Table 78 shows that there was a slight increase in parked vehicles across the day on the west side of Forrest Road in Stirling.

8. FOOTWAY SURVEYS REVIEW

8.1 Overview

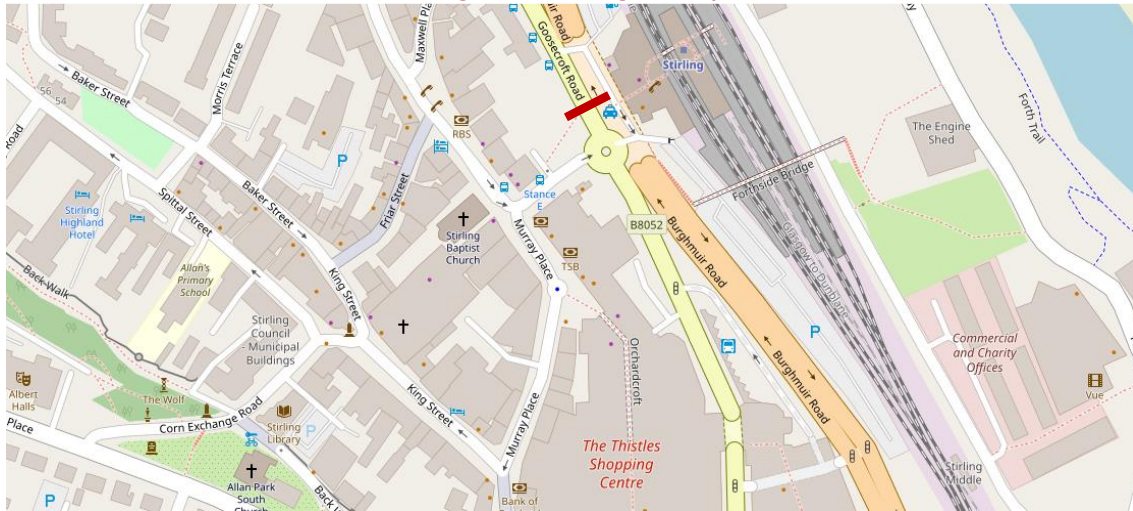
8.1.1 Five sites were surveyed within Stirling. For each of the footway surveys, the summary information is as follows:

- Site Number
- Site Location
- Total Flow – Directional daily flow (over survey period)
- Flow by Pedestrian Type (Adult, Adult and Child, Elderly, Disabled, Cyclist, Cyclist on foot, Horse)
- AM Peak Flow – 07:00-10:00 Footway Flow
- Interpeak Flow – 10:00-16:00 Footway Flow
- PM Peak Flow – 16:00-19:00 Footway Flow.

8.3 Results of Footway Surveys

8.3.1 Table 79 presents the footway survey information for B8052 signalised crossing in Stirling.

Table 79. B8052 Signalised Crossing Footway

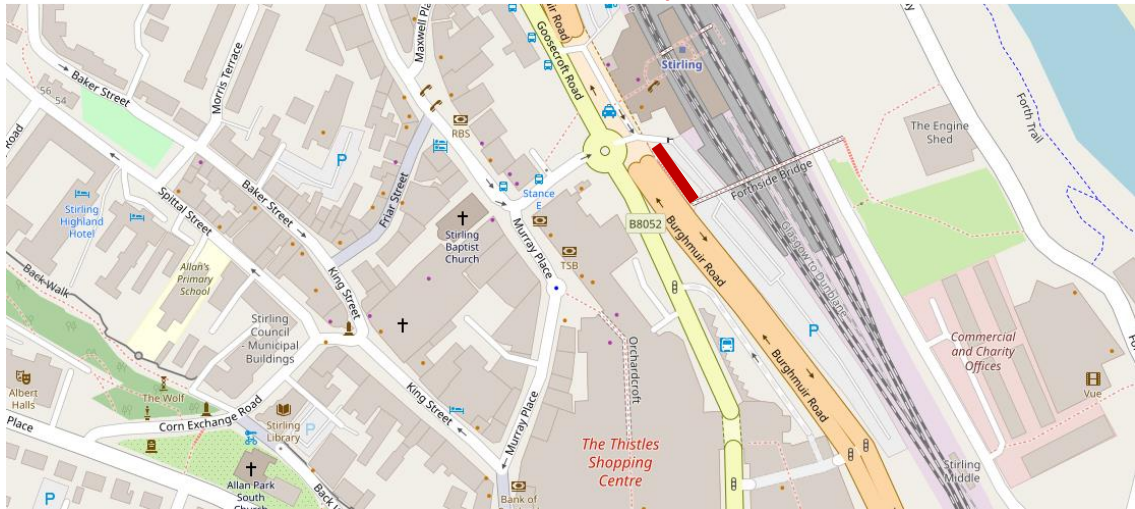


Site 1 B8052 Signalised Crossing										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	879	24	1	0	0	0	6	0	0	910
0600 - 2200 Westbound	728	21	0	1	0	0	9	3	0	762
AM Peak Pd 0700-1000 Eastbound	96	0	0	0	0	0	0	0	0	96
AM Peak Pd 0700-1000 Westbound	140	2	0	0	0	0	1	2	0	145
IP Peak Pd 1000-1600 Eastbound	416	14	1	0	0	0	2	0	0	433
IP Peak Pd 1000-1600 Westbound	407	15	0	1	0	0	1	1	0	425
PM Peak Pd 1600-1900 Eastbound	308	8	0	0	0	0	3	0	0	319
PM Peak Pd 1600-1900 Westbound	129	4	0	0	0	0	7	0	0	140
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	261	17	2	4	0	0	2	0	0	286
0600 - 2200 Westbound	221	16	0	2	0	0	7	0	0	246
AM Peak Pd 0700-1000 Eastbound	44	0	0	2	0	0	0	0	0	46
AM Peak Pd 0700-1000 Westbound	53	0	0	1	0	0	2	0	0	56
IP Peak Pd 1000-1600 Eastbound	127	12	2	2	0	0	0	0	0	143
IP Peak Pd 1000-1600 Westbound	110	10	0	1	0	0	1	0	0	122
PM Peak Pd 1600-1900 Eastbound	70	2	0	0	0	0	1	0	0	73
PM Peak Pd 1600-1900 Westbound	38	6	0	0	0	0	4	0	0	48
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	728	14	27	4	3	0	4	3	0	783
0600 - 2200 Westbound	701	19	29	2	2	0	6	12	0	771
AM Peak Pd 0700-1000 Eastbound	89	0	6	0	0	0	1	0	0	96
AM Peak Pd 0700-1000 Westbound	143	3	0	0	0	0	0	3	0	149
IP Peak Pd 1000-1600 Eastbound	360	6	10	4	2	0	0	2	0	384
IP Peak Pd 1000-1600 Westbound	360	16	26	2	2	0	2	3	0	411
PM Peak Pd 1600-1900 Eastbound	227	8	11	0	1	0	1	0	0	248
PM Peak Pd 1600-1900 Westbound	117	0	3	0	0	0	4	4	0	128
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1102	46	16	2	2	0	12	1	0	1181
0600 - 2200 Westbound	1186	29	24	2	0	0	9	10	0	1260
AM Peak Pd 0700-1000 Eastbound	122	0	8	0	0	0	2	0	0	132
AM Peak Pd 0700-1000 Westbound	201	0	7	1	0	0	0	3	0	212
IP Peak Pd 1000-1600 Eastbound	503	11	4	2	1	0	4	0	0	525
IP Peak Pd 1000-1600 Westbound	609	14	4	1	0	0	4	3	0	635
PM Peak Pd 1600-1900 Eastbound	320	23	4	0	1	0	4	1	0	353
PM Peak Pd 1600-1900 Westbound	222	13	13	0	0	0	4	3	0	255

- 8.3.2 Table 79 shows that eastbound is the dominant movement at this survey location during each of the surveyed periods, except in September 2021 when the directional surveys are relatively consistent.

8.3.4 Table 80 presents footway survey information for B8052 east-side footway (between Rail Station and pedestrian bridge) in Stirling.

Table 80. B8052 East-side Footway

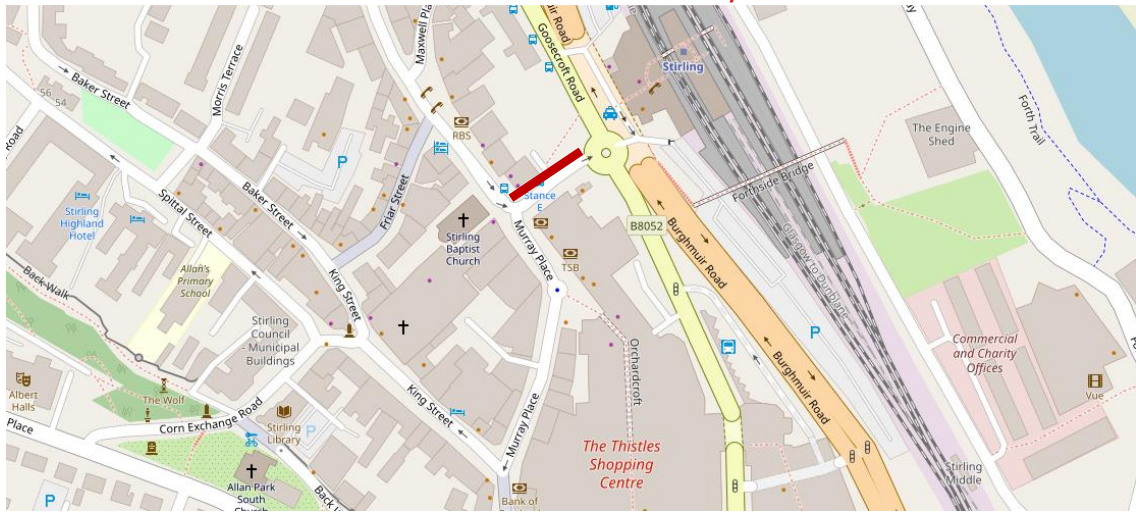


Site 2 B8052 Eastside Footway Between Rail Station and Pedestrian Bridge										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Southbound	356	5	9	3	0	0	0	3	0	376
0600 - 2200 Northbound	348	9	20	2	0	0	0	1	0	380
AM Peak Pd 0700-1000 Southbound	31	0	0	0	0	0	0	0	0	31
AM Peak Pd 0700-1000 Northbound	49	0	1	0	0	0	0	0	0	50
IP Peak Pd 1000-1600 Southbound	213	5	9	3	0	0	0	0	0	230
IP Peak Pd 1000-1600 Northbound	185	7	18	2	0	0	0	0	0	212
PM Peak Pd 1600-1900 Southbound	90	0	0	0	0	0	0	3	0	93
PM Peak Pd 1600-1900 Northbound	89	2	1	0	0	0	0	1	0	93
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Southbound	166	4	0	1	0	0	0	4	0	175
0600 - 2200 Northbound	149	6	0	0	0	0	0	4	0	159
AM Peak Pd 0700-1000 Southbound	26	0	0	0	0	0	0	2	0	28
AM Peak Pd 0700-1000 Northbound	22	0	0	0	0	0	0	0	0	22
IP Peak Pd 1000-1600 Southbound	79	0	0	0	0	0	0	0	0	79
IP Peak Pd 1000-1600 Northbound	61	0	0	0	0	0	0	1	0	62
PM Peak Pd 1600-1900 Southbound	47	2	0	1	0	0	0	1	0	51
PM Peak Pd 1600-1900 Northbound	46	2	0	0	0	0	0	3	0	51
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Southbound	372	8	6	0	0	0	0	5	0	391
0600 - 2200 Northbound	368	6	14	0	0	0	0	3	0	391
AM Peak Pd 0700-1000 Southbound	53	0	0	0	0	0	0	1	0	54
AM Peak Pd 0700-1000 Northbound	58	0	0	0	0	0	0	0	0	58
IP Peak Pd 1000-1600 Southbound	189	4	2	0	0	0	0	3	0	198
IP Peak Pd 1000-1600 Northbound	185	2	11	0	0	0	0	2	0	200
PM Peak Pd 1600-1900 Southbound	97	4	4	0	0	0	0	1	0	106
PM Peak Pd 1600-1900 Northbound	62	4	3	0	0	0	0	1	0	70
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Southbound	640	32	19	0	0	0	0	8	0	699
0600 - 2200 Northbound	641	37	15	0	1	0	0	10	0	704
AM Peak Pd 0700-1000 Southbound	55	0	7	0	0	0	0	1	0	63
AM Peak Pd 0700-1000 Northbound	81	0	6	0	0	0	0	1	0	88
IP Peak Pd 1000-1600 Southbound	272	7	0	0	0	0	0	1	0	280
IP Peak Pd 1000-1600 Northbound	259	16	6	0	1	0	0	3	0	285
PM Peak Pd 1600-1900 Southbound	193	23	12	0	0	0	0	4	0	232
PM Peak Pd 1600-1900 Northbound	156	8	3	0	0	0	0	0	0	167

8.3.5 Table 80 shows that pedestrian flows were significantly lower in February 2021.

8.3.7 Table 81 presents the footway survey information for Station Road north kerbside in Stirling.

Table 81. Station Road North Kerbside Footway

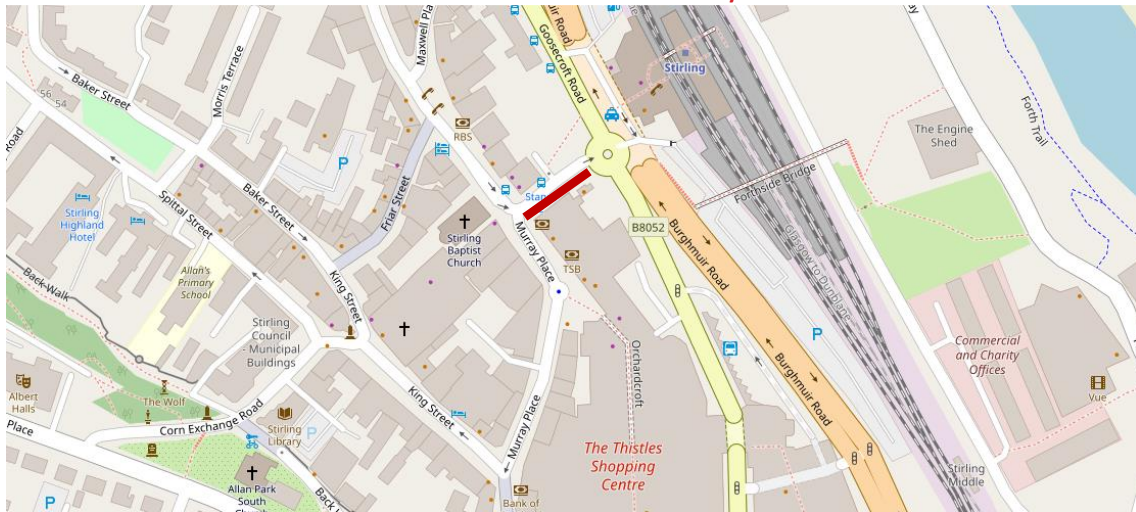


Site 3 Station Road North Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1377	52	5	4	2	0	13	0	0	1453
0600 - 2200 Westbound	699	14	14	2	0	0	5	1	0	735
AM Peak Pd 0700-1000 Eastbound	141	0	3	0	0	0	1	0	0	145
AM Peak Pd 0700-1000 Westbound	122	2	5	1	0	0	1	1	0	132
IP Peak Pd 1000-1600 Eastbound	723	27	2	3	1	0	10	0	0	766
IP Peak Pd 1000-1600 Westbound	407	12	9	1	0	0	1	0	0	430
PM Peak Pd 1600-1900 Eastbound	421	20	0	1	1	0	0	0	0	443
PM Peak Pd 1600-1900 Westbound	126	0	0	0	0	0	3	0	0	129
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	508	17	3	6	0	0	8	0	0	542
0600 - 2200 Westbound	250	15	2	2	0	0	12	0	0	281
AM Peak Pd 0700-1000 Eastbound	70	3	1	4	0	0	0	0	0	78
AM Peak Pd 0700-1000 Westbound	50	0	0	0	0	0	0	0	0	50
IP Peak Pd 1000-1600 Eastbound	263	14	2	2	0	0	6	0	0	287
IP Peak Pd 1000-1600 Westbound	118	13	0	2	0	0	3	0	0	136
PM Peak Pd 1600-1900 Eastbound	137	0	0	0	0	0	2	0	0	139
PM Peak Pd 1600-1900 Westbound	55	2	2	0	0	0	9	0	0	68
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1143	12	4	3	0	0	21	3	0	1186
0600 - 2200 Westbound	726	7	0	1	0	0	7	3	0	744
AM Peak Pd 0700-1000 Eastbound	135	0	0	0	0	0	2	0	0	137
AM Peak Pd 0700-1000 Westbound	165	0	0	0	0	0	2	1	0	168
IP Peak Pd 1000-1600 Eastbound	574	6	4	2	0	0	11	2	0	599
IP Peak Pd 1000-1600 Westbound	389	7	0	1	0	0	2	0	0	399
PM Peak Pd 1600-1900 Eastbound	337	6	0	1	0	0	4	0	0	348
PM Peak Pd 1600-1900 Westbound	115	0	0	0	0	0	1	2	0	118
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1384	35	1	2	2	0	31	1	0	1456
0600 - 2200 Westbound	1359	49	0	2	3	0	22	4	0	1439
AM Peak Pd 0700-1000 Eastbound	133	2	0	0	0	0	4	0	0	139
AM Peak Pd 0700-1000 Westbound	195	4	0	0	1	0	5	1	0	206
IP Peak Pd 1000-1600 Eastbound	654	22	1	1	2	0	11	1	0	692
IP Peak Pd 1000-1600 Westbound	726	26	0	2	2	0	6	1	0	763
PM Peak Pd 1600-1900 Eastbound	399	4	0	0	0	0	11	0	0	414
PM Peak Pd 1600-1900 Westbound	251	9	0	0	0	0	8	0	0	268

8.3.8 Table 81 shows that eastbound is the dominant movement at this survey location during each of the surveyed periods. Pedestrians flows were significantly lower in February 2021.

8.3.10 Table 82 presents the footway survey information for Station Road south kerbside in Stirling.

Table 82. Station Road South Kerbside Footway

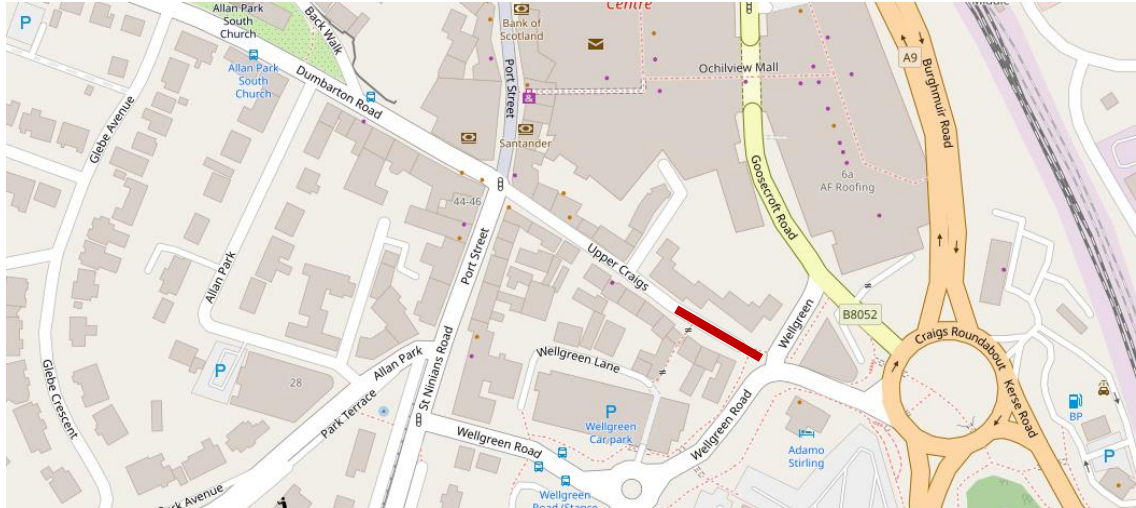


Site 4 Station Road South Kerbside										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1026	50	4	8	4	0	12	1	0	1105
0600 - 2200 Westbound	1136	27	5	6	4	0	41	1	0	1220
AM Peak Pd 0700-1000 Eastbound	99	0	4	0	0	0	1	0	0	104
AM Peak Pd 0700-1000 Westbound	223	2	1	0	0	0	9	0	0	235
IP Peak Pd 1000-1600 Eastbound	609	15	0	8	4	0	6	0	0	642
IP Peak Pd 1000-1600 Westbound	662	23	4	6	4	0	24	0	0	723
PM Peak Pd 1600-1900 Eastbound	251	32	0	0	0	0	4	1	0	288
PM Peak Pd 1600-1900 Westbound	187	2	0	0	0	0	2	1	0	192
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	500	13	1	2	1	0	8	0	0	525
0600 - 2200 Westbound	551	13	2	10	1	0	22	1	0	600
AM Peak Pd 0700-1000 Eastbound	45	0	0	0	0	0	0	0	0	45
AM Peak Pd 0700-1000 Westbound	120	0	0	3	0	0	2	0	0	125
IP Peak Pd 1000-1600 Eastbound	332	3	1	2	0	0	3	0	0	341
IP Peak Pd 1000-1600 Westbound	308	6	2	5	1	0	14	0	0	336
PM Peak Pd 1600-1900 Eastbound	93	10	0	0	1	0	3	0	0	107
PM Peak Pd 1600-1900 Westbound	76	2	0	2	0	0	6	1	0	87
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	869	20	5	4	1	0	17	1	0	917
0600 - 2200 Westbound	972	13	5	4	0	0	47	4	0	1045
AM Peak Pd 0700-1000 Eastbound	82	0	0	1	0	0	4	0	0	87
AM Peak Pd 0700-1000 Westbound	173	3	0	0	0	0	10	1	0	187
IP Peak Pd 1000-1600 Eastbound	511	10	4	3	1	0	11	0	0	540
IP Peak Pd 1000-1600 Westbound	521	8	5	4	0	0	28	1	0	567
PM Peak Pd 1600-1900 Eastbound	196	10	1	0	0	0	0	0	0	207
PM Peak Pd 1600-1900 Westbound	178	2	0	0	0	0	7	1	0	188
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1338	43	14	2	3	0	21	2	0	1423
0600 - 2200 Westbound	1419	64	11	3	6	0	50	6	0	1559
AM Peak Pd 0700-1000 Eastbound	121	0	0	0	0	0	1	0	0	122
AM Peak Pd 0700-1000 Westbound	214	0	7	0	1	0	10	0	0	232
IP Peak Pd 1000-1600 Eastbound	661	14	7	2	3	0	2	0	0	689
IP Peak Pd 1000-1600 Westbound	734	31	2	3	5	0	20	5	0	800
PM Peak Pd 1600-1900 Eastbound	400	15	7	0	0	0	12	2	0	436
PM Peak Pd 1600-1900 Westbound	272	18	2	0	0	0	15	0	0	307

8.3.11 Table 82 that southbound is the dominant movement at this survey location during each of the surveyed periods. Pedestrians flows were significantly lower in February 2021.

8.3.13 Table 83 presents the footway survey information for Wellgreen Road to Upper Craigs in Stirling.

Table 83. Wellgreen Road to Upper Craigs Footway



Site 5 Wellgreen Road to Upper Craigs										
October 2020	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1267	28	0	5	1	0	26	1	0	1328
0600 - 2200 Westbound	1250	33	0	9	1	0	15	6	0	1314
AM Peak Pd 0700-1000 Eastbound	143	3	0	2	0	0	4	0	0	152
AM Peak Pd 0700-1000 Westbound	186	6	0	4	1	0	3	0	0	200
IP Peak Pd 1000-1600 Eastbound	762	11	0	3	1	0	14	0	0	791
IP Peak Pd 1000-1600 Westbound	784	19	0	5	0	0	6	5	0	819
PM Peak Pd 1600-1900 Eastbound	289	14	0	0	0	0	6	1	0	310
PM Peak Pd 1600-1900 Westbound	209	8	0	0	0	0	6	1	0	224
February 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	500	13	1	2	1	0	8	0	0	525
0600 - 2200 Westbound	551	13	2	10	1	0	22	1	0	600
AM Peak Pd 0700-1000 Eastbound	45	0	0	0	0	0	0	0	0	45
AM Peak Pd 0700-1000 Westbound	120	0	0	3	0	0	2	0	0	125
IP Peak Pd 1000-1600 Eastbound	332	3	1	2	0	0	3	0	0	341
IP Peak Pd 1000-1600 Westbound	308	6	2	5	1	0	14	0	0	336
PM Peak Pd 1600-1900 Eastbound	93	10	0	0	1	0	3	0	0	107
PM Peak Pd 1600-1900 Westbound	76	2	0	2	0	0	6	1	0	87
May 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	869	20	5	4	1	0	17	1	0	917
0600 - 2200 Westbound	972	13	5	4	0	0	47	4	0	1045
AM Peak Pd 0700-1000 Eastbound	82	0	0	1	0	0	4	0	0	87
AM Peak Pd 0700-1000 Westbound	173	3	0	0	0	0	10	1	0	187
IP Peak Pd 1000-1600 Eastbound	511	10	4	3	1	0	11	0	0	540
IP Peak Pd 1000-1600 Westbound	521	8	5	4	0	0	28	1	0	567
PM Peak Pd 1600-1900 Eastbound	196	10	1	0	0	0	0	0	0	207
PM Peak Pd 1600-1900 Westbound	178	2	0	0	0	0	7	1	0	188
September 2021	Adult	Adult & Child	Child	Elderly	Disabled	Cyclist on Road	Pavement Cyclist on Bike	Pavement Cyclist on Foot	Horses	Total
0600 - 2200 Eastbound	1000	22	1	10	0	0	46	5	0	1084
0600 - 2200 Westbound	954	20	2	13	2	0	40	5	0	1036
AM Peak Pd 0700-1000 Eastbound	100	0	0	2	0	0	3	1	0	106
AM Peak Pd 0700-1000 Westbound	153	7	0	7	0	0	3	0	0	170
IP Peak Pd 1000-1600 Eastbound	595	14	0	7	0	0	17	1	0	634
IP Peak Pd 1000-1600 Westbound	537	10	2	6	2	0	13	1	0	571
PM Peak Pd 1600-1900 Eastbound	226	8	1	1	0	0	14	3	0	253
PM Peak Pd 1600-1900 Westbound	163	3	0	0	0	0	14	0	0	180

8.3.14 Table 83 shows that pedestrian flows were significantly lower in February 2021.

9. MODE SHARE SURVEYS

9.1 Survey Periods

9.1.1 Surveys were undertaken between 06:00 and 22:00.

9.1.2 Analysis has been undertaken for the following time periods so results are comparable with a previous study undertaken by Stirling Council in 2019.

- AM Peak – 07:30 – 09:30
- Inter Peak – 11:00 – 14:00
- PM Peak – 16:00 – 18:00

9.2 Rail Station Counts

9.2.1 Entry and exit counts were undertaken at Stirling Railway Station on Wednesday 5th May 2021. Surveys were undertaken between 06:00 and 22:00.

9.2.2 The results were classified by the following:

- Adult
- Adult & Child
- Child
- Elderly
- Disabled
- Cyclist on Bike
- Cyclist on Foot.

9.2.3 Table 84 presents a summary of the entry and exit counts.

Table 84. Stirling Railway Station Entry/Exit Counts

Stirling Rail Stn	Station Entrance	Station Exit	Total Entry	Total Exit
06:00 - 22:00	1,290	1360	1,290	1,360
07:30 - 09:30	177	171	177	171
11:00 - 14:00	292	291	292	291
16:00 - 18:00	259	274	259	274

9.2.4 Table 84 shows that over the 16 hour period (0600-2200hrs), there was a total of 1,290 pedestrians entering Stirling Railway Station and 1,360 pedestrians exiting:

- In the AM peak period (07:30 – 09:30), 177 pedestrians entered the station and 171 departed the station.
- In the Inter peak period (11:00 – 14:00), 292 pedestrians entered the station and 291 departed the station.
- In the PM peak period (16:00 – 18:00), 259 pedestrians entered the station and 274 departed the station.

9.3 Bus Station Counts

9.3.1 Bus station counts were not undertaken in Stirling.

9.4 Bus Occupancy Counts

9.4.1 Bus occupancy surveys were undertaken inbound and outbound to and from Stirling at each of the classified turning count sites COP1 to COP13, as shown in Figure 12.

9.4.2 Bus occupancy data was gathered for one day, Wednesday 5th May 2021, between 06:00 and 22:00.

9.4.3 The methodology used to gather the bus occupancy required manual enumerators to review the footage at each site – i.e. manual check and note if the bus was empty, ¼ full, ½ full, ¾ full, full or full with standing passengers.

9.4.4 The capacity of vehicles was the same as those used in a previous study for TACTRAN [*Mode Share Surveys 2019 – Draft, SYSTRA, Ref. GB01t19A57/4, 11/07/19*], namely:

○	Midi bus	15 passengers
○	Mini bus	15 passengers
○	Single decker bus	30 passengers
○	Double decker bus	72 passengers
○	Coach	55 passengers
○	Mini Coach	14 passengers
○	Midi Coach	14 passengers
○	School Bus	40 passengers

9.4.5 Vehicles where the occupancy was not visible (e.g. where coaches had dark tinted windows) were excluded from the analysis.

9.4.6 Table 85 below presents the bus occupancy at each of the cordon points around Stirling city centre in the AM peak period (07:30 – 09:30).

Table 85. Bus & Coach Cordon Occupancy (AM Peak 07:30 – 09:30)

AM Peak Period (07:30-09:30)	Inbound			Outbound				
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
COP1	Bus	38	288	8	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP2	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP3	Bus	0	0	0	Bus	33	146	4
	Coach	0	0	0	Coach	0	0	0
COP4	Bus	2	15	8	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP5	Bus	0	0	0	Bus	5	23	5
	Coach	0	0	0	Coach	0	0	0
COP6	Bus	1	18	18	Bus	1	8	8
	Coach	0	0	0	Coach	0	0	0
COP7	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	1	0	0
COP8	Bus	17	194	11	Bus	16	147	9
	Coach	1	4	4	Coach	0	0	0
COP9	Bus	19	227	12	Bus	17	188	11
	Coach	1	4	4	Coach	1	0	0
COP10	Bus	29	257	9	Bus	27	177	7
	Coach	5	59	12	Coach	3	17	6
COP11	Bus	12	71	6	Bus	42	240	6
	Coach	4	35	9	Coach	4	45	11
COP12	Bus	6	8	1	Bus	5	23	5
	Coach	3	4	1	Coach	5	21	4
COP13	Bus	0	0	0	Bus	1	8	8
	Coach	0	0	0	Coach	0	0	0

9.4.7 Table 85 shows that the corridor with the highest bus and coach occupancy was COP10, Goosecroft Road.

9.4.8 The average inbound bus occupancy in the AM peak was 6 passengers and the average coach occupancy was 3 passengers. In the outbound direction, the average bus occupancy was 5 passengers and the average coach had 2 passengers onboard.

9.4.9 Table 86 presents the same information for the Inter peak period (11:00 – 14:00).

Table 86. Bus & Coach Cordon Occupancy (Inter Peak 11:00 – 14:00)

IP Peak Period (11:00-14:00)	Inbound			Outbound				
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
COP1	Bus	55	473	9	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP2	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP3	Bus	0	0	0	Bus	48	360	8
	Coach	0	0	0	Coach	0	0	0
COP4	Bus	7	8	1	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP5	Bus	0	0	0	Bus	7	8	1
	Coach	0	0	0	Coach	0	0	0
COP6	Bus	2	0	0	Bus	2	36	18
	Coach	0	0	0	Coach	0	0	0
COP7	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	1	0	0
COP8	Bus	22	228	10	Bus	21	228	11
	Coach	0	0	0	Coach	0	0	0
COP9	Bus	25	258	10	Bus	23	309	13
	Coach	0	0	0	Coach	1	0	0
COP10	Bus	41	336	8	Bus	41	354	9
	Coach	0	0	0	Coach	0	0	0
COP11	Bus	19	164	9	Bus	65	620	10
	Coach	1	4	4	Coach	0	0	0
COP12	Bus	7	15	2	Bus	7	8	1
	Coach	3	31	10	Coach	3	0	0
COP13	Bus	0	0	0	Bus	7	23	3
	Coach	0	0	0	Coach	0	0	0

9.4.10 Table 86 shows that bus and coach occupancy was again highest on corridor COP10, Goosecroft Road in the inter peak period.

9.4.11 The average inbound bus occupancy in the inter peak was 4 passengers and the average coach occupancy was 1 passenger. In the outbound direction, the average bus occupancy was 6 passengers and the average coach had no passengers onboard.

9.4.12 Table 87 presents the same information for the PM peak (16:00 – 18:00).

Table 87. Bus & Coach Cordon Occupancy (PM Peak 16:00 – 18:00)

PM Peak Period (16:00-18:00)	Inbound				Outbound			
	Mode	Total Vehicles	Total Passengers	Average Occupancy	Mode	Total Vehicles	Total Passengers	Average Occupancy
COP1	Bus	40	324	8	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP2	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP3	Bus	0	0	0	Bus	33	257	8
	Coach	0	0	0	Coach	0	0	0
COP4	Bus	5	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP5	Bus	0	0	0	Bus	5	8	2
	Coach	0	0	0	Coach	0	0	0
COP6	Bus	2	18	9	Bus	2	36	18
	Coach	0	0	0	Coach	0	0	0
COP7	Bus	0	0	0	Bus	0	0	0
	Coach	0	0	0	Coach	0	0	0
COP8	Bus	15	150	10	Bus	17	201	12
	Coach	0	0	0	Coach	0	0	0
COP9	Bus	17	191	11	Bus	19	252	13
	Coach	0	0	0	Coach	0	0	0
COP10	Bus	27	180	7	Bus	27	303	11
	Coach	1	14	14	Coach	2	14	7
COP11	Bus	12	53	4	Bus	47	381	8
	Coach	4	55	14	Coach	3	17	6
COP12	Bus	5	23	5	Bus	4	8	2
	Coach	11	28	3	Coach	5	41	8
COP13	Bus	0	0	0	Bus	5	30	6
	Coach	0	0	0	Coach	0	0	0

9.4.13 Table 87 shows that bus occupancy during the PM Peak period was again highest on COP10 (Goosecroft Road).

9.4.14 The average inbound bus occupancy in the PM peak was 4 passengers and the average coach occupancy was 2 passengers. In the outbound direction, the average bus occupancy was 6 passengers and the average coach had 2 passengers onboard.

9.5 Vehicle Occupancy Counts

9.5.1 Vehicle occupancy counts were undertaken inbound and outbound to and from Stirling at each of the classified turning count sites COP1 to COP13, as shown in Figure 12.

9.5.2 Vehicle occupancy data was gathered for one day, Wednesday 5th May 2021, between 06:00 and 22:00.

9.5.3 Table 88 below presents the vehicle occupancy and sample rates at each of the inbound cordon points around Stirling city centre in the AM peak period (07:30 – 09:30).

Table 88. Vehicle Cordon Occupancy Inbound (AM Peak 07:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
COP1	Car	229	56	24.5%	67	1.20	COP8	Car	377	83	22.0%	106	1.28
	LGV	55	23	41.8%	27	1.17		LGV	65	22	33.8%	25	1.14
	OGV1	14	8	57.1%	9	1.13		OGV1	12	11	91.7%	11	1.00
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP2	Car	3	2	66.7%	2	1.00	COP9	Car	822	179	21.8%	212	1.18
	LGV	1	0	0.0%	0	-		LGV	195	60	30.8%	69	1.15
	OGV1	1	1	100.0%	1	1.00		OGV1	41	20	48.8%	27	1.35
	OGV2	0	0	-	0	-		OGV2	5	5	100.0%	5	1.00
COP3	Car	-	-	-	-	-	COP10	Car	527	108	20.5%	129	1.19
	LGV	-	-	-	-	-		LGV	82	32	39.0%	40	1.25
	OGV1	-	-	-	-	-		OGV1	25	17	68.0%	20	1.18
	OGV2	-	-	-	-	-		OGV2	0	0	-	0	-
COP4	Car	166	50	30.1%	81	1.62	COP11	Car	217	53	24.4%	78	1.47
	LGV	45	20	44.4%	25	1.25		LGV	32	21	65.6%	27	1.29
	OGV1	11	8	72.7%	8	1.00		OGV1	6	5	83.3%	7	1.40
	OGV2	0	0	-	0	-		OGV2	1	1	100.0%	2	2.00
COP5	Car	141	39	27.7%	47	1.21	COP12	Car	671	147	21.9%	196	1.33
	LGV	47	21	44.7%	26	1.24		LGV	139	48	34.5%	59	1.23
	OGV1	7	6	85.7%	6	1.00		OGV1	29	17	58.6%	21	1.24
	OGV2	1	0	-	0	-		OGV2	14	10	71.4%	10	1.00
COP6	Car	298	73	24.5%	91	1.25	COP13	Car	0	0	-	0	-
	LGV	76	31	40.8%	40	1.29		LGV	0	0	-	0	-
	OGV1	18	14	77.8%	17	1.21		OGV1	0	0	-	0	-
	OGV2	1	1	100.0%	1	1.00		OGV2	0	0	-	0	-
COP7	Car	135	40	29.6%	57	1.43							
	LGV	23	16	69.6%	21	1.31							
	OGV1	3	3	100.0%	5	1.67							
	OGV2	0	0	-	0	-							

9.5.4 Table 88 shows that in the AM peak period, inbound towards Stirling city centre, the average car occupancy was 1.29 persons, LGV 1.23 persons, OGV1 1.20 persons and OGV 2 1.25 persons.

9.5.5 Table 89 presents the same information for the inter peak period (11:00 – 14:00).

Table 89. Vehicle Inbound Cordon Occupancy (Inter Peak 11:00 – 14:00)

Inter Peak Period (11:00-14:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
COP1	Car	812	186	22.9%	244	1.31	COP8	Car	690	165	23.9%	224	1.36
	LGV	93	35	37.6%	39	1.11		LGV	96	37	38.5%	44	1.19
	OGV1	26	18	69.2%	22	1.22		OGV1	19	11	57.9%	13	1.18
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP2	Car	35	19	54.3%	22	1.16	COP9	Car	1271	279	22.0%	326	1.17
	LGV	9	6	66.7%	6	1.00		LGV	172	57	33.1%	75	1.32
	OGV1	1	0	-	0	-		OGV1	38	25	65.8%	31	1.24
	OGV2	0	0	-	0	-		OGV2	7	6	85.7%	6	1.00
COP3	Car	-	-	-	-	-	COP10	Car	1099	236	21.5%	322	1.36
	LGV	-	-	-	-	-		LGV	107	46	43.0%	56	1.22
	OGV1	-	-	-	-	-		OGV1	28	20	71.4%	24	1.20
	OGV2	-	-	-	-	-		OGV2	4	3	75.0%	3	1.00
COP4	Car	265	73	27.5%	103	1.41	COP11	Car	402	101	25.1%	139	1.38
	LGV	38	24	63.2%	27	1.13		LGV	47	25	53.2%	31	1.24
	OGV1	10	7	70.0%	8	1.14		OGV1	16	12	75.0%	16	1.33
	OGV2	0	0	-	0	-		OGV2	1	1	100.0%	1	1.00
COP5	Car	240	68	28.3%	92	1.35	COP12	Car	1083	227	21.0%	300	1.32
	LGV	37	24	64.9%	29	1.21		LGV	125	54	43.2%	61	1.13
	OGV1	8	6	75.0%	7	1.17		OGV1	48	25	52.1%	28	1.12
	OGV2	1	1	100.0%	1	1.00		OGV2	28	15	53.6%	15	1.00
COP6	Car	634	150	23.7%	201	1.34	COP13	Car	0	0	-	0	-
	LGV	98	34	34.7%	41	1.21		LGV	0	0	-	0	-
	OGV1	28	19	67.9%	23	1.21		OGV1	0	0	-	0	-
	OGV2	5	3	60.0%	3	1.00		OGV2	0	0	-	0	-
COP7	Car	193	61	31.6%	74	1.21							
	LGV	31	26	83.9%	37	1.42							
	OGV1	2	2	100.0%	3	1.50							
	OGV2	0	0	-	0	-							

9.5.6 Table 89 shows that in the inter peak period, inbound towards Stirling city centre, the average car occupancy was 1.31 persons, LGV 1.20 persons, OGV1 1.23 persons and OGV 2 1.0 persons.

9.5.7 Table 90 presents the same information for the PM peak period (16:00 – 18:00).

Table 90. Vehicle Inbound Cordon Occupancy (PM Peak 16:00 – 18:00)

PM Peak Period (16:00-18:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
COP1	Car	539	120	22.3%	177	1.48	COP8	Car	546	127	23.3%	158	1.24
	LGV	43	7	16.3%	10	1.43		LGV	45	31	68.9%	39	1.26
	OGV1	5	5	100.0%	5	1.00		OGV1	11	7	63.6%	8	1.14
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP2	Car	43	20	46.5%	22	1.10	COP9	Car	960	209	21.8%	259	1.24
	LGV	2	1	50.0%	1	1.00		LGV	116	41	35.3%	54	1.32
	OGV1	0	0	-	0	-		OGV1	10	9	90.0%	10	1.11
	OGV2	0	0	-	0	-		OGV2	1	1	100.0%	1	1.00
COP3	Car	-	-	-	-	-	COP10	Car	648	139	21.5%	183	1.32
	LGV	-	-	-	-	-		LGV	55	25	45.5%	32	1.28
	OGV1	-	-	-	-	-		OGV1	12	10	83.3%	14	1.40
	OGV2	-	-	-	-	-		OGV2	0	0	-	0	-
COP4	Car	249	62	24.9%	88	1.42	COP11	Car	269	68	25.3%	95	1.40
	LGV	29	18	62.1%	19	1.06		LGV	37	17	45.9%	19	1.12
	OGV1	5	4	80.0%	4	1.00		OGV1	7	6	85.7%	8	1.33
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP5	Car	190	50	26.3%	65	1.30	COP12	Car	858	185	21.6%	241	1.30
	LGV	18	15	83.3%	18	1.20		LGV	103	36	35.0%	38	1.06
	OGV1	2	2	100.0%	2	1.00		OGV1	19	11	57.9%	12	1.09
	OGV2	0	0	-	0	-		OGV2	13	9	69.2%	9	1.00
COP6	Car	421	102	24.2%	131	1.28	COP13	Car	0	0	-	0	-
	LGV	63	26	41.3%	30	1.15		LGV	0	0	-	0	-
	OGV1	13	10	76.9%	11	1.10		OGV1	0	0	-	0	-
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP7	Car	135	39	28.9%	53	1.36							
	LGV	19	13	68.4%	16	1.23							
	OGV1	1	1	100.0%	1	1.00							
	OGV2	0	0	-	0	-							

9.5.8 Table 90 shows that in the PM peak period, inbound towards Stirling city centre, the average car occupancy was 1.31 persons, LGV 1.19 persons, OGV1 1.12 persons and OGV 2 1.00 persons.

9.5.9 Table 91 below presents the vehicle occupancy and sample rates at each of the outbound cordon points around Stirling city centre in the AM peak period (07:30 – 09:30).

Table 91. Vehicle Cordon Occupancy Outbound (AM Peak 07:30 – 09:30)

AM Peak Period (06:30-09:30)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
COP1	Car	8	6	75.0%	6	1.00	COP8	Car	378	84	22.2%	97	1.15
	LGV	1	1	100.0%	1	1.00		LGV	52	24	46.2%	27	1.13
	OGV1	0	0	-	0	-		OGV1	20	10	50.0%	11	1.10
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP2	Car	27	15	55.6%	15	1.00	COP9	Car	617	132	21.4%	153	1.16
	LGV	3	2	66.7%	3	-		LGV	122	42	34.4%	53	1.26
	OGV1	1	1	100.0%	1	1.00		OGV1	24	17	70.8%	20	1.18
	OGV2	0	0	-	0	-		OGV2	1	0	0.0%	0	-
COP3	Car	136	37	27.2%	49	1.32	COP10	Car	239	72	30.1%	85	1.18
	LGV	28	19	67.9%	21	-		LGV	50	31	62.0%	36	1.16
	OGV1	6	4	66.7%	4	1.00		OGV1	14	11	78.6%	13	1.18
	OGV2	0	0	-	0	-		OGV2	1	1	100.0%	1	1.00
COP4	Car	0	0	-	0	-	COP11	Car	406	93	22.9%	110	1.18
	LGV	0	0	-	0	-		LGV	81	30	37.0%	33	1.10
	OGV1	0	0	-	0	-		OGV1	24	17	70.8%	22	1.29
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP5	Car	137	42	30.7%	53	1.26	COP12	Car	846	177	20.9%	233	1.32
	LGV	34	20	58.8%	24	1.20		LGV	216	58	26.9%	64	1.10
	OGV1	11	8	72.7%	9	1.13		OGV1	54	25	46.3%	30	1.20
	OGV2	0	0	-	0	-		OGV2	26	13	50.0%	15	1.15
COP6	Car	232	57	24.6%	68	1.19	COP13	Car	135	38	28.1%	52	1.37
	LGV	114	36	31.6%	41	1.14		LGV	43	23	53.5%	28	1.22
	OGV1	25	16	64.0%	20	1.25		OGV1	9	5	55.6%	5	1.00
	OGV2	2	1	50.0%	1	1.00		OGV2	1	1	100.0%	1	1.00
COP7	Car	150	44	29.3%	50	1.14							
	LGV	42	23	54.8%	32	1.39							
	OGV1	6	4	66.7%	6	1.50							
	OGV2	1	1	-	1	-							

9.5.10 Table 91 shows that in the AM peak period, outbound from Stirling city centre, the average car occupancy was 1.19 persons, LGV 1.17 persons, OGV1 1.17 persons and OGV 2 1.04 persons.

9.5.11 Table 92 presents the same information for the inter peak period (11:00 – 14:00).

Table 92. Vehicle Inbound Cordon Occupancy (Inter Peak 11:00 – 14:00)

Inter Peak Period (11:00-14:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
COP1	Car	18	14	77.8%	17	1.21	COP8	Car	698	158	22.6%	200	1.27
	LGV	4	3	75.0%	4	1.33		LGV	79	36	45.6%	45	1.25
	OGV1	0	0	-	0	-		OGV1	18	11	61.1%	16	1.45
	OGV2	0	0	-	0	-		OGV2	1	0	-	0	-
COP2	Car	38	24	63.2%	29	1.21	COP9	Car	1212	271	22.4%	322	1.19
	LGV	6	4	66.7%	4	1.00		LGV	192	68	35.4%	78	1.15
	OGV1	1	0	-	0	-		OGV1	42	25	59.5%	31	1.24
	OGV2	0	0	-	0	-		OGV2	7	5	71.4%	5	1.00
COP3	Car	475	114	24.0%	143	1.25	COP10	Car	1135	250	22.0%	334	1.34
	LGV	44	26	59.1%	30	1.15		LGV	85	37	43.5%	42	1.14
	OGV1	12	9	75.0%	11	1.22		OGV1	24	19	79.2%	25	1.32
	OGV2	0	0	-	0	-		OGV2	2	1	50.0%	1	1.00
COP4	Car	0	0	-	0	-	COP11	Car	919	210	22.9%	260	1.24
	LGV	0	0	-	0	-		LGV	115	45	39.1%	55	1.22
	OGV1	0	0	-	0	-		OGV1	30	19	63.3%	24	1.26
	OGV2	0	0	-	0	-		OGV2	1	0	0.0%	0	-
COP5	Car	391	101	25.8%	128	1.27	COP12	Car	1370	302	22.0%	396	1.31
	LGV	57	33	57.9%	40	1.21		LGV	199	60	30.2%	70	1.17
	OGV1	14	12	85.7%	15	1.25		OGV1	71	34	47.9%	40	1.18
	OGV2	0	0	-	0	-		OGV2	28	19	67.9%	19	1.00
COP6	Car	547	131	23.9%	169	1.29	COP13	Car	267	69	25.8%	94	1.36
	LGV	85	38	44.7%	44	1.16		LGV	40	29	72.5%	34	1.17
	OGV1	24	17	70.8%	19	1.12		OGV1	11	10	90.9%	12	1.20
	OGV2	7	5	71.4%	5	1.00		OGV2	1	1	100.0%	2	2.00
COP7	Car	330	83	25.2%	115	1.39							
	LGV	39	21	53.8%	24	1.14							
	OGV1	3	1	33.3%	1	1.00							
	OGV2	0	0	-	0	-							

9.5.12 Table 92 shows that in the inter peak period, outbound from Stirling city centre, the average car occupancy was 1.28 persons, LGV 1.17 persons, OGV1 1.22 persons and OGV 2 1.20 person.

9.5.13 Table 93 presents the same information for the PM peak period (16:00 – 18:00).

Table 93. Vehicle Inbound Cordon Occupancy (PM Peak 16:00 – 18:00)

PM Peak Period (16:00-18:00)	Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy		Mode	Vehicle Total	Observed Vehicles	Sample Rate	Number of Occupants	Average Occupancy
COP1	Car	13	9	69.2%	12	1.33	COP8	Car	563	122	21.7%	144	1.18
	LGV	1	1	100.0%	1	1.00		LGV	65	19	29.2%	23	1.21
	OGV1	0	0	-	0	-		OGV1	7	7	100.0%	7	1.00
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP2	Car	25	17	68.0%	20	1.18	COP9	Car	979	196	20.0%	263	1.34
	LGV	2	2	100.0%	2	1.00		LGV	113	44	38.9%	51	1.16
	OGV1	0	0	-	0	-		OGV1	18	12	66.7%	14	1.17
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP3	Car	350	80	22.9%	107	1.34	COP10	Car	728	160	22.0%	211	1.32
	LGV	20	9	45.0%	10	1.11		LGV	49	26	53.1%	32	1.23
	OGV1	3	2	66.7%	2	1.00		OGV1	10	6	60.0%	7	1.17
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP4	Car	0	0	-	0	-	COP11	Car	741	163	22.0%	214	1.31
	LGV	0	0	-	0	-		LGV	60	23	38.3%	26	1.13
	OGV1	0	0	-	0	-		OGV1	14	11	78.6%	14	1.27
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP5	Car	279	68	24.4%	91	1.34	COP12	Car	1066	222	20.8%	286	1.29
	LGV	36	21	58.3%	25	1.19		LGV	184	48	26.1%	52	1.08
	OGV1	6	6	100.0%	7	1.17		OGV1	25	14	56.0%	16	1.14
	OGV2	0	0	-	0	-		OGV2	10	7	70.0%	7	1.00
COP6	Car	417	96	23.0%	131	1.36	COP13	Car	183	50	27.3%	68	1.36
	LGV	51	22	43.1%	24	1.09		LGV	15	10	66.7%	12	1.20
	OGV1	4	3	75.0%	3	1.00		OGV1	2	2	100.0%	3	1.50
	OGV2	0	0	-	0	-		OGV2	0	0	-	0	-
COP7	Car	272	69	25.4%	105	1.52							
	LGV	30	18	60.0%	24	1.33							
	OGV1	1	1	100.0%	2	2.00							
	OGV2	0	0	-	0	-							

9.5.14 Table 93 shows that in the PM peak period, inbound towards Stirling city centre, the average car occupancy was 1.32 persons, LGV 1.14 persons, OGV1 1.24 persons and OGV 2 1.00 person.

9.6 Results of Mode Share Surveys

9.6.1 The results of the various mode share surveys can be analysed and presented in different ways. Through discussions previously with Tactran, the methodology developed for assessing and summarising the survey data for each site was agreed as follows:

- By Time Period
- By Mode – both by vehicle and by person.

Mode Share By Time Period

9.6.2 All traffic surveys were undertaken over a 16 hour period 06:00-22:00. The mode share data is presented into four separate time periods, namely:

- AM Peak 07:30 – 09:30
- Inter-peak 11:00 – 14:00
- PM Peak 16:00 – 18:00
- Full Day 07:30 – 09:30, 11:00 – 14:00 and 16:00 – 18:00

Mode Share By Mode

9.6.3 Mode share data can be presented from the perspective of the share of vehicles or by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle

9.6.4 Within each site assessed, traffic is analysed routing inbound and outbound to and from the town/city.

9.6.5 In order to consider the volume of inbound and outbound trips to and from Stirling, the following assumptions and data usage was applied:

- Sites COP1 to COP13 were assessed to represent the points of entry and exit to the city.
- Bus/coach passengers which entered Stirling were assumed to be destinating in Stirling

9.6.6 The following figures present the Stirling mode share distribution, calculated from the survey data as detailed above. Figure 18 and Figure 19 present the AM Peak mode share by vehicle by direction and Figure 20 and Figure 21 present the AM Peak mode share by person by direction.

9.6.7 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in April 2019. The inbound mode share by person is presented for May 2021 as this was the

only survey that captured vehicle occupancy and is compared against the previous results in April 2019.

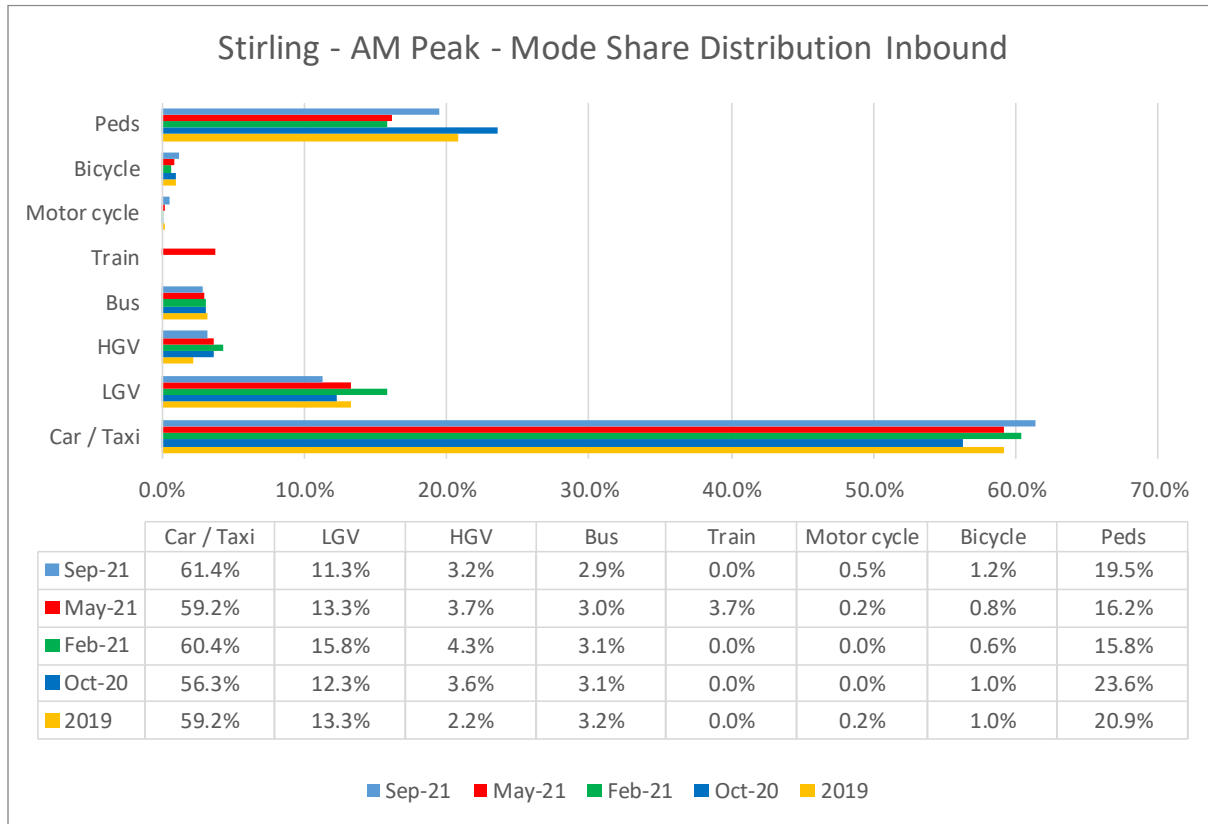


Figure 18. Stirling Mode Share Distribution Inbound – AM Peak

- 9.6.8 Figure 18 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 9.6.9 The proportion of pedestrians varied between 16% and 24% across all of the surveys, whilst the proportion of cyclists remained around 1% in all of the surveys.
- 9.6.10 The total number of vehicles and pedestrians surveyed in each year was 5,699 in April 2019, 3,344 in October 2021, 3,023 in February 2021, 4,570 in May 2021 and 4,604 in September 2021.

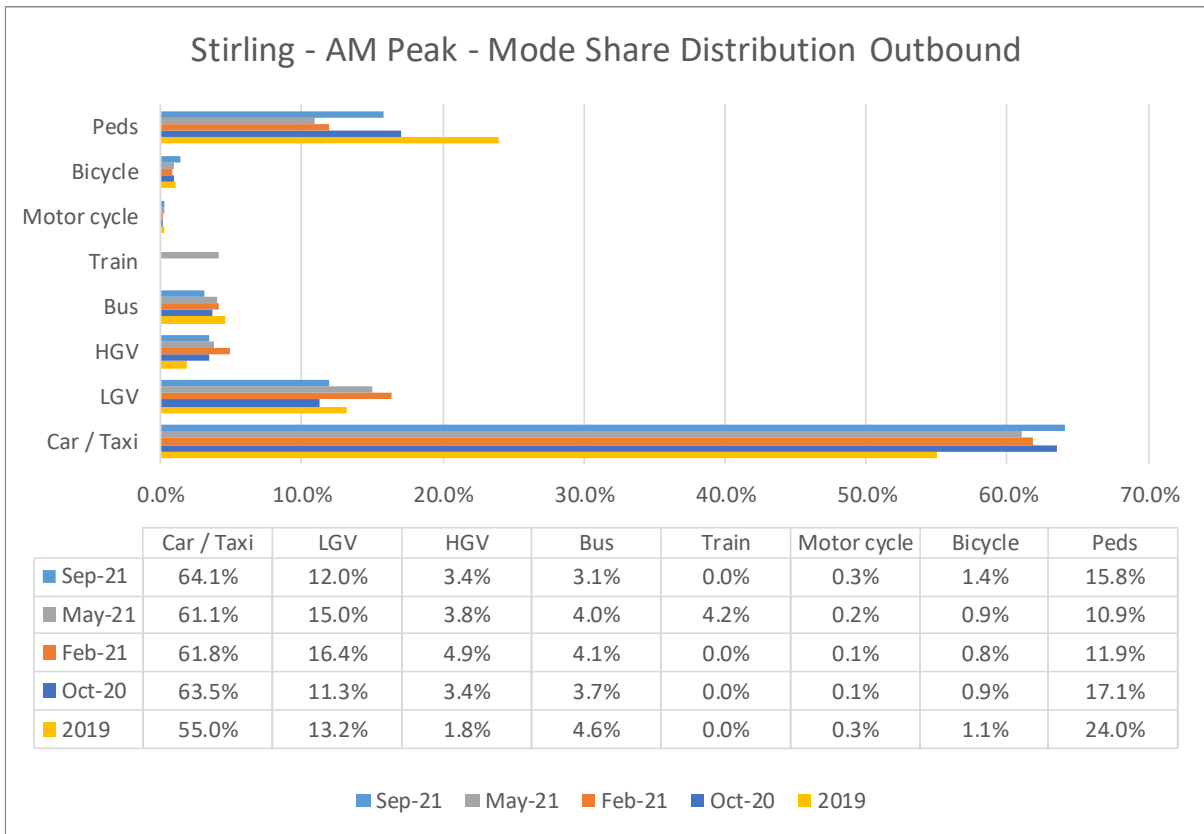


Figure 19. Stirling Mode Share Distribution Outbound – AM Peak

9.6.11 Figure 19 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage was around 4% in the AM peak, rail was around 4%, bicycle 1% and walking between 11% and 17%.

9.6.12 The total number of vehicles and pedestrians surveyed in each year was 3,836 in April 2019, 4,099 in October 2021, 3,281 in February 2021, 4,263 in May 2021 and 5,059 in September 2021.

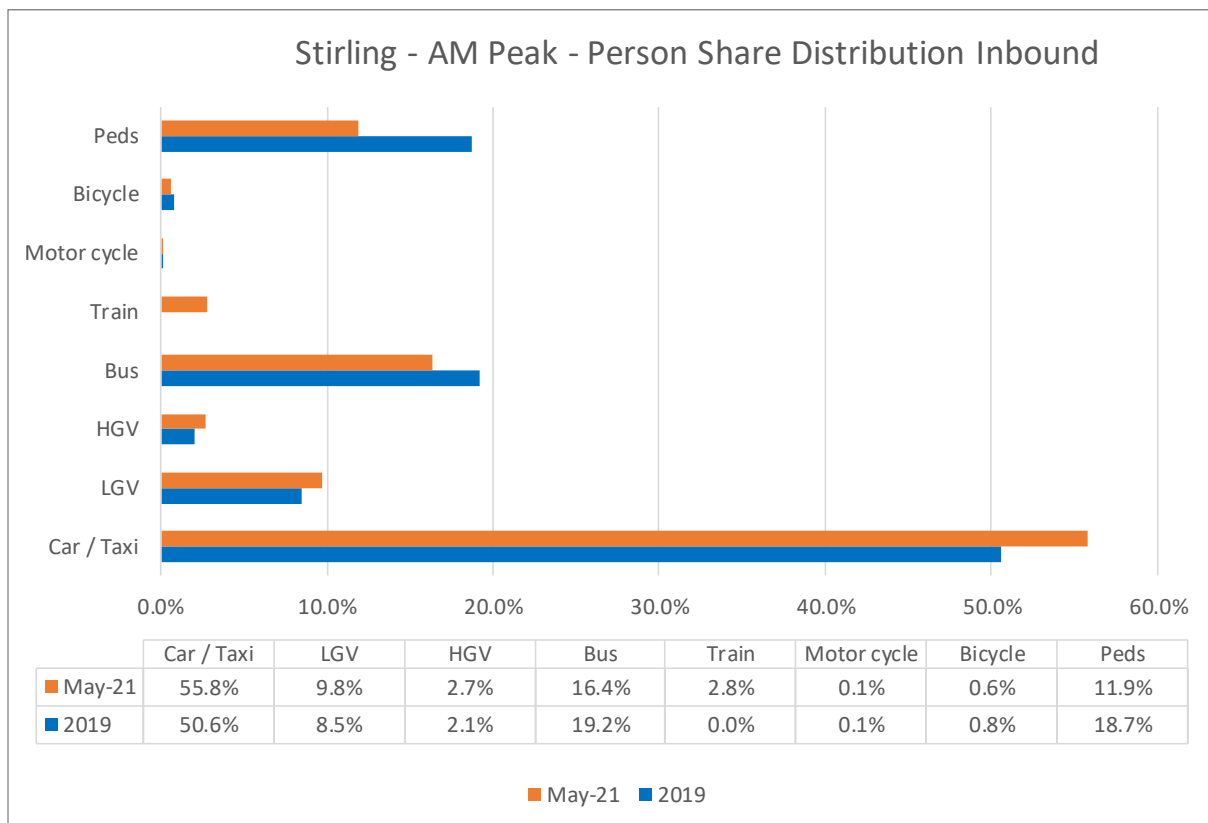


Figure 20. Stirling Person Share Distribution Inbound – AM Peak

9.6.13 Figure 20 shows that in the AM peak, the person mode share of vehicles remained relatively consistent over the survey periods. The biggest differences are seen in car usage and walking between 2019 and May 2021.

9.6.14 The total volume of people observed was 6,345 in April 2019 and 6,215 in May 2021.

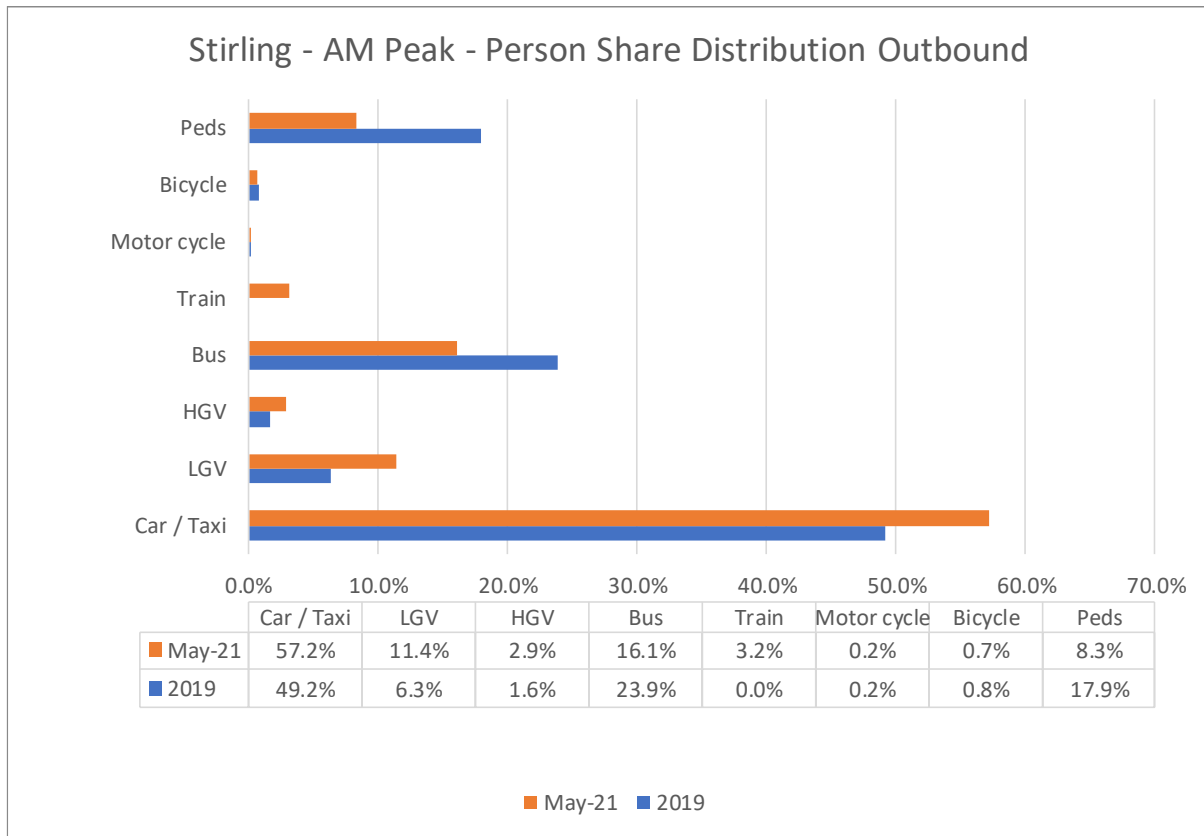


Figure 21. Stirling Person Share Distribution Outbound – AM Peak

- 9.6.15 Figure 21 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage reduced to around 16%, and walking reduced to around 8% whilst car usage increased from around 49% to 57%.
- 9.6.16 The total volume of people observed was 5,126 in April 2019 and 5,591 in May 2021.
- 9.6.17 Figure 22 and Figure 23 present the Inter Peak mode share by vehicle by direction and Figure 24 and Figure 25 present the Inter Peak mode share by person by direction.
- 9.6.18 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019. The inbound mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

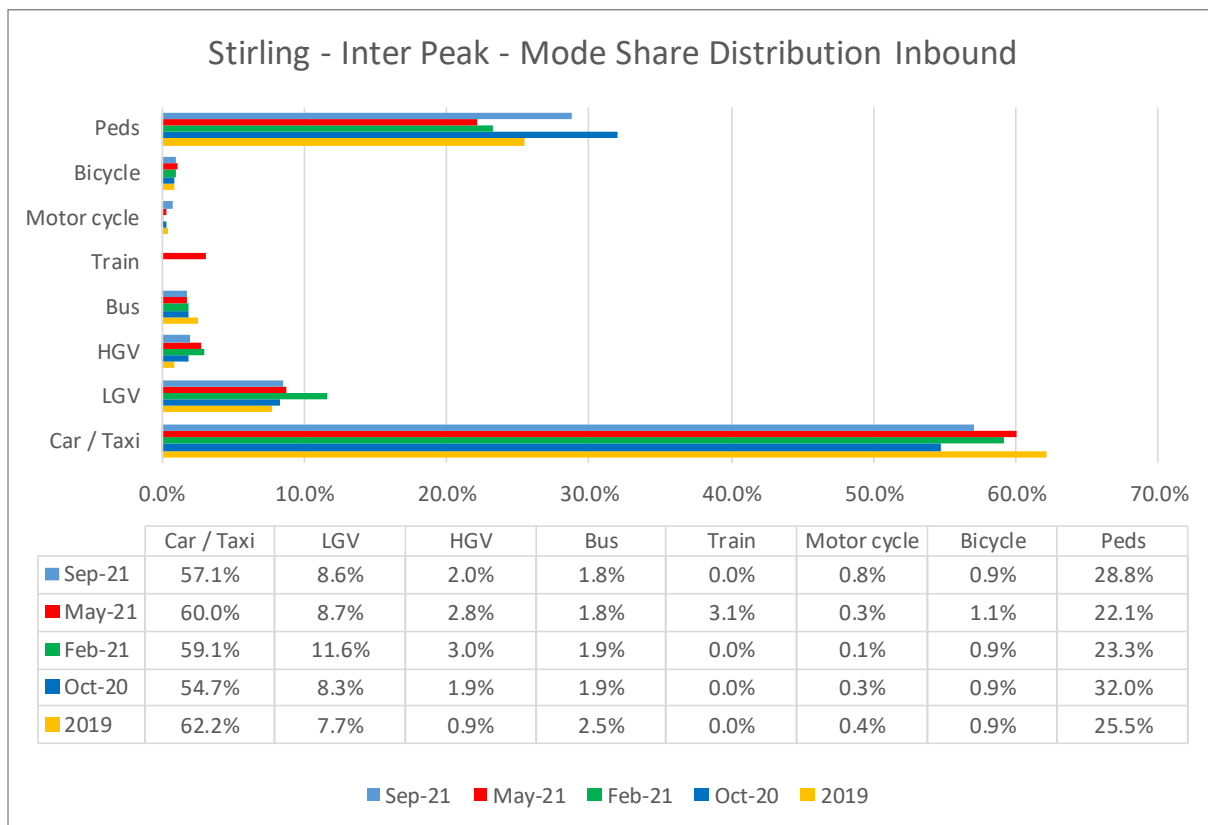


Figure 22. Stirling Mode Share Distribution Inbound – Inter Peak

- 9.6.19 Figure 22 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 9.6.20 The proportion of pedestrians varied between 22% and 32% across all of the surveys, whilst the proportion of cyclists remained around 1% in all of the surveys.
- 9.6.21 The total number of vehicles and pedestrians surveyed in each year was 7,359 in April 2019, 7,841 in October 2021, 6,290 in February 2021, 9,329 in May 2021 and 9,605 in September 2021.

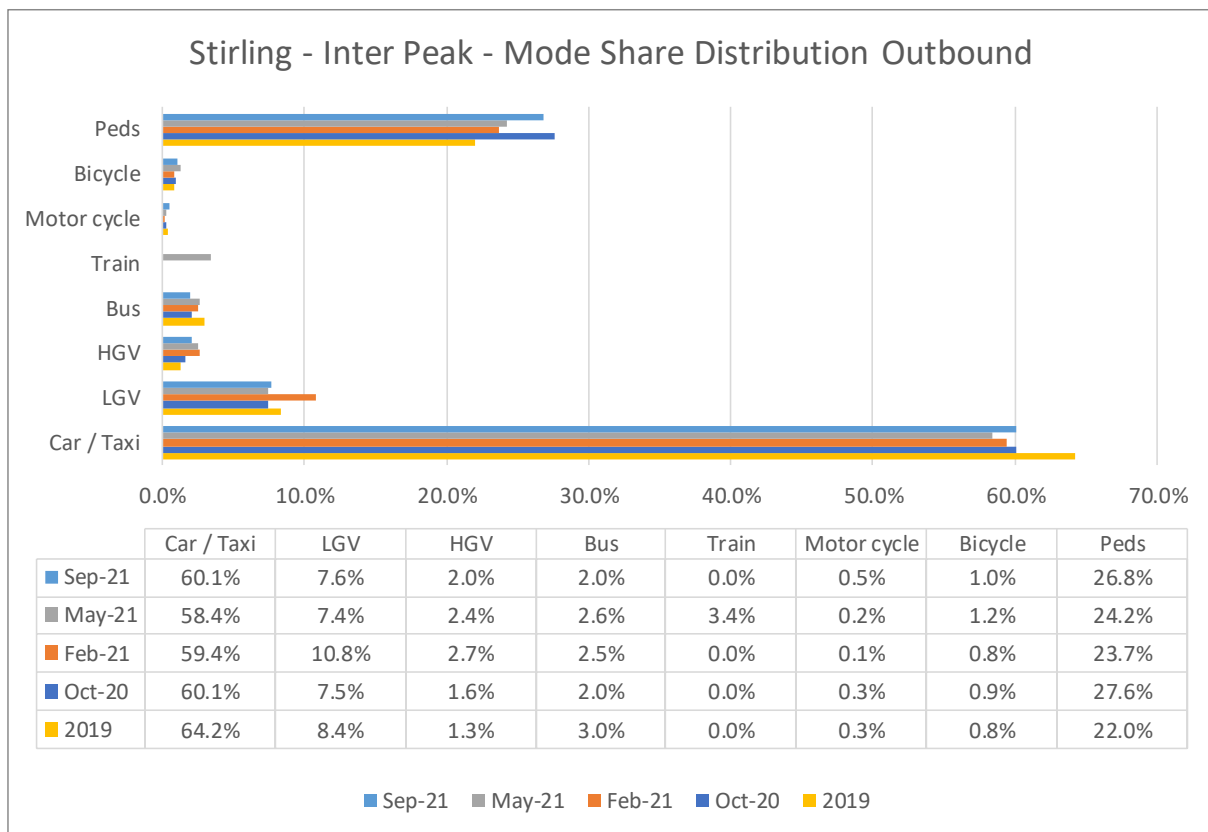


Figure 23. Stirling Mode Share Distribution Outbound – Inter Peak

9.6.22 Figure 23 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage was around 3% in the inter peak, rail was around 3%, bicycle 1% and walking around 24%.

9.6.23 The total number of vehicles and pedestrians surveyed in each year was 6,384 in April 2019, 10,681 in October 2021, 7,552 in February 202, 8,508 in May 2021 and 11,375 in September 2021.

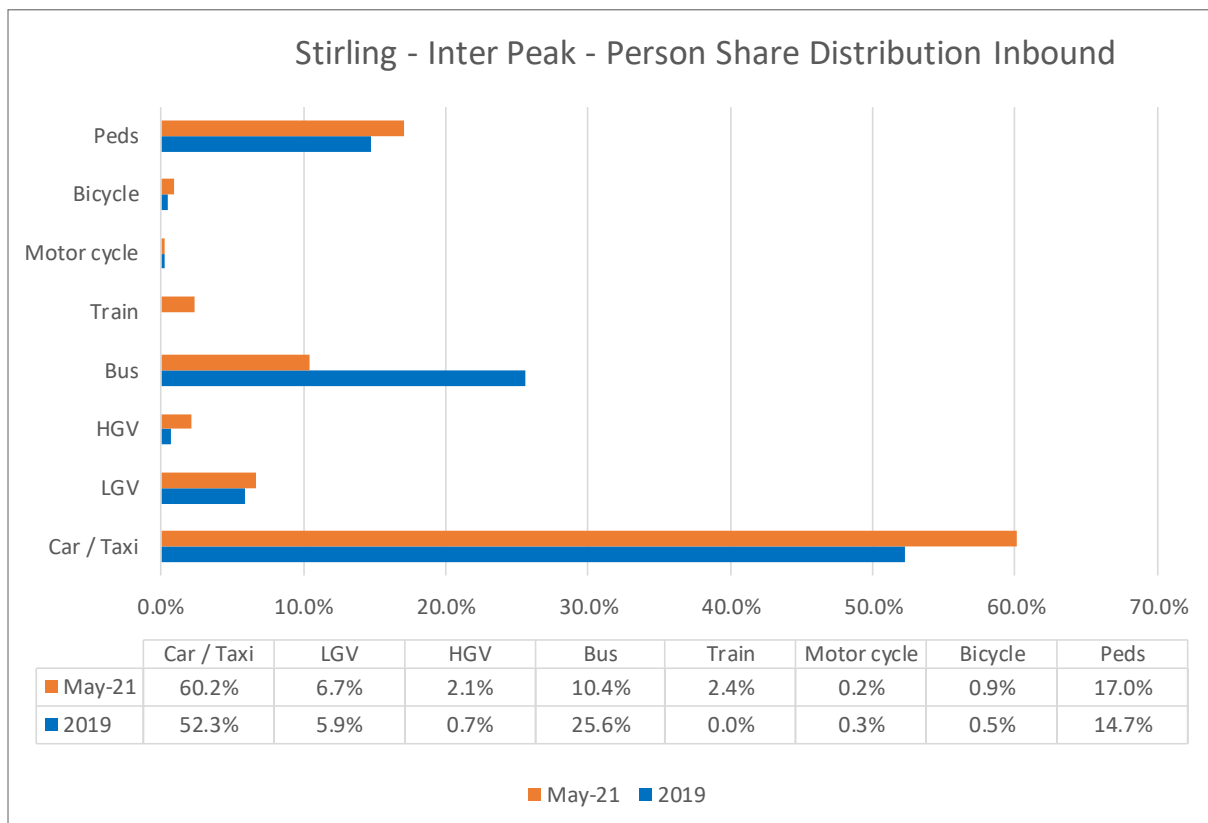


Figure 24. Stirling Person Share Distribution Inbound – Inter Peak

9.6.24 Figure 24 shows that in the Inter peak, the person mode share of vehicles remained relatively consistent over the survey periods. The biggest differences are seen in car usage and bus usage between 2019 and May 2021.

9.6.25 The total volume of people observed was 12,714 in April 2019 and 12,101 in May 2021.

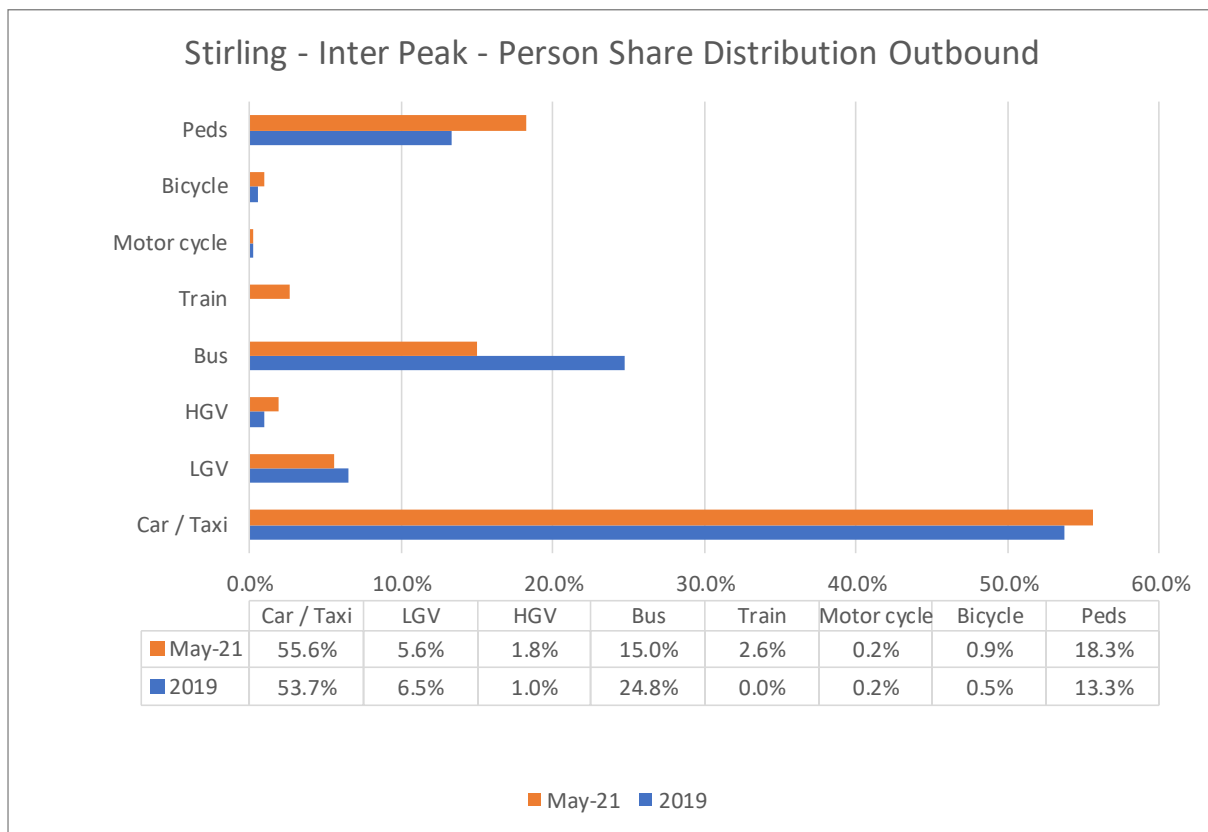


Figure 25. Stirling Person Share Distribution Outbound – Inter Peak

- 9.6.26 Figure 25 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage reduced to around 15%, and walking increased to around 18% whilst car usage remained relatively consistent.
- 9.6.27 The total volume of people observed was 10,559 in April 2019 and 11,293 in May 2021.
- 9.6.28 The following figures present the Stirling mode share distribution, calculated from the survey data as detailed above. Figure 26 and Figure 27 present the PM Peak mode share by vehicle by direction and Figure 28 and Figure 29 present the PM Peak mode share by person by direction.
- 9.6.29 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in 2019. The inbound mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in 2019.

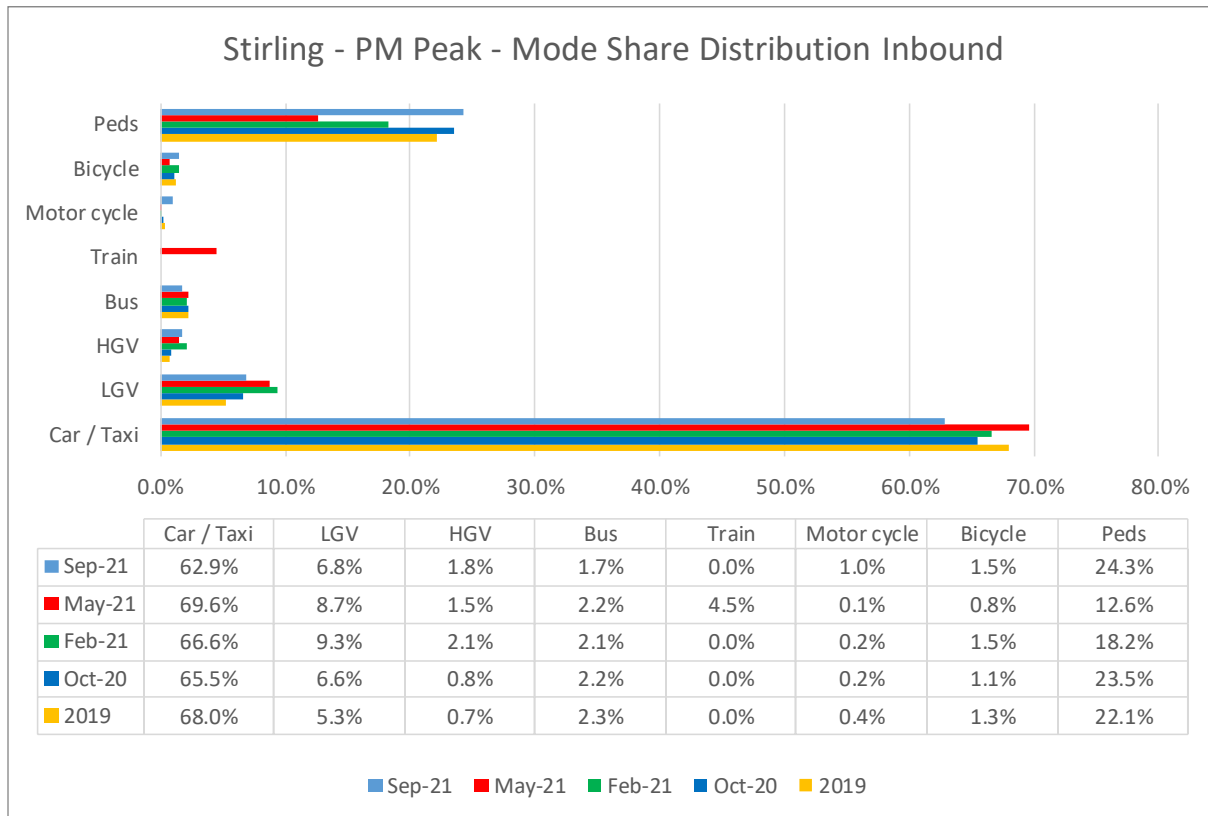


Figure 26. Stirling Mode Share Distribution Inbound – PM Peak

- 9.6.30 Figure 26 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 9.6.31 The proportion of pedestrians varied between 13% and 24% similar across all of the surveys, whilst the proportion of cyclists remained around 1% in all of the surveys.
- 9.6.32 The total number of vehicles and pedestrians surveyed in each year was 5,044 in April 2019, 5,181 in October 2021, 4,164 in February 2021, 6,120 in May 2021 and 6,899 in September 2021.

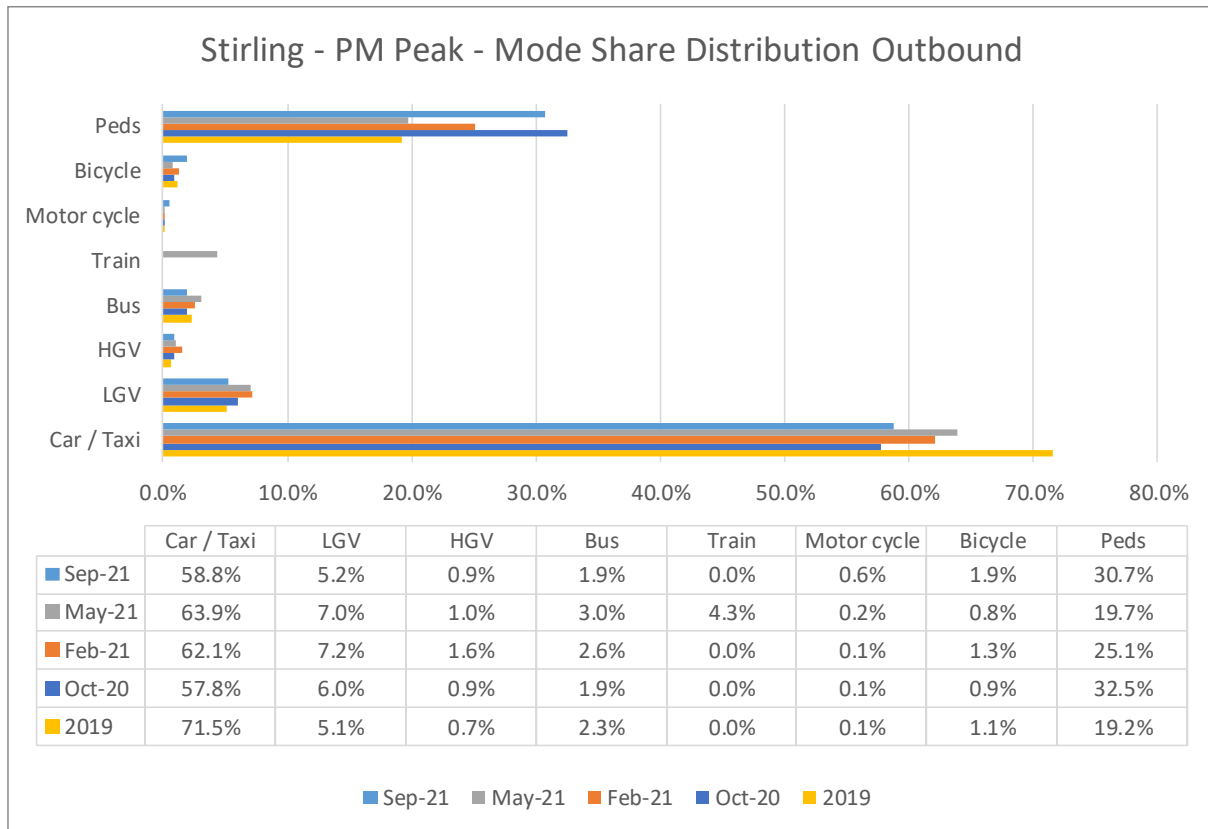


Figure 27. Stirling Mode Share Distribution Outbound – PM Peak

9.6.33 Figure 27 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage was around 3% in the PM peak, rail was around 4%, bicycle 1% and walking between 19% and 33%.

9.6.34 The total number of vehicles and pedestrians surveyed in each year was 4,741 in April 2019, 8,456 in October 2021, 5,385 in February 2021, 5,994 in May 2021 and 9,075 in September 2021.

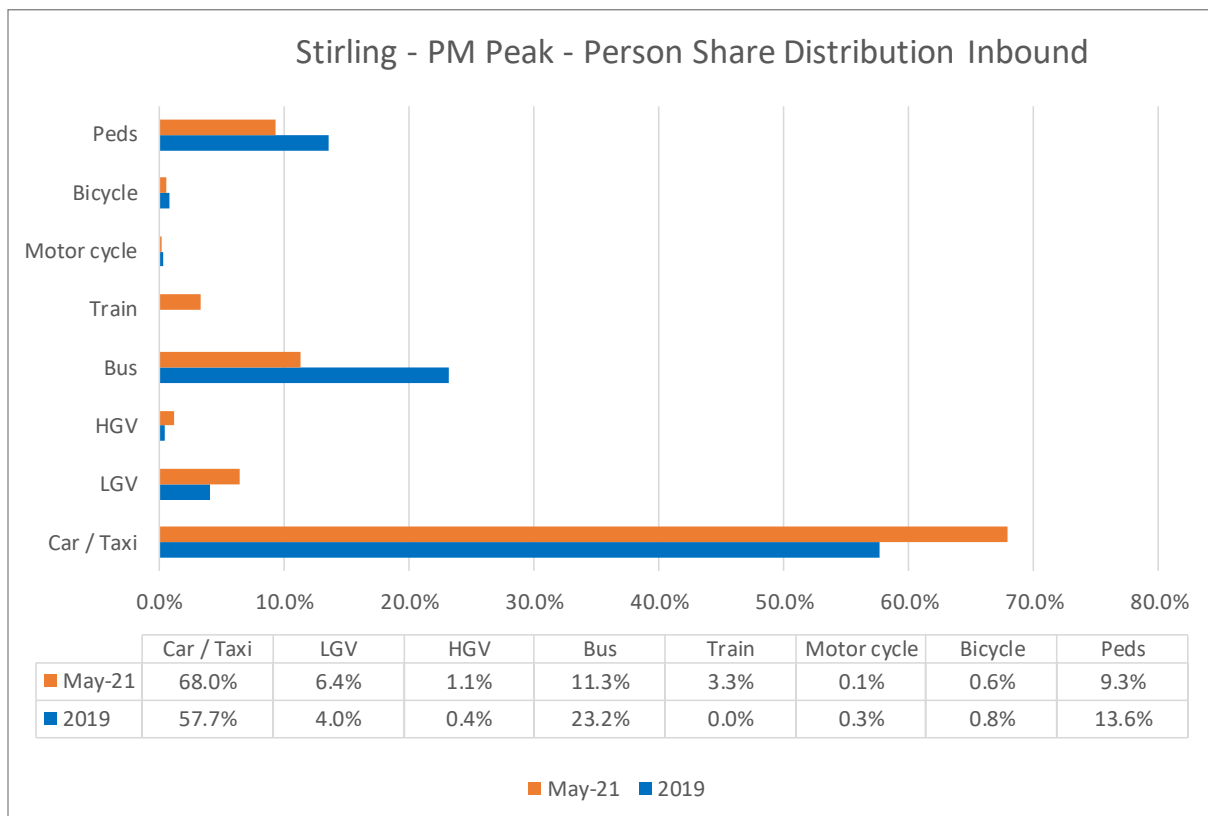


Figure 28. Stirling Person Share Distribution Inbound – PM Peak

9.6.35 Figure 28 shows that in the PM peak, the person mode share of vehicles remained relatively consistent over the survey periods. The biggest differences are seen in car usage, bus usage and walking between 2019 and May 2021.

9.6.36 The total volume of people observed was 8,233 in April 2019 and 8,332 in May 2021.

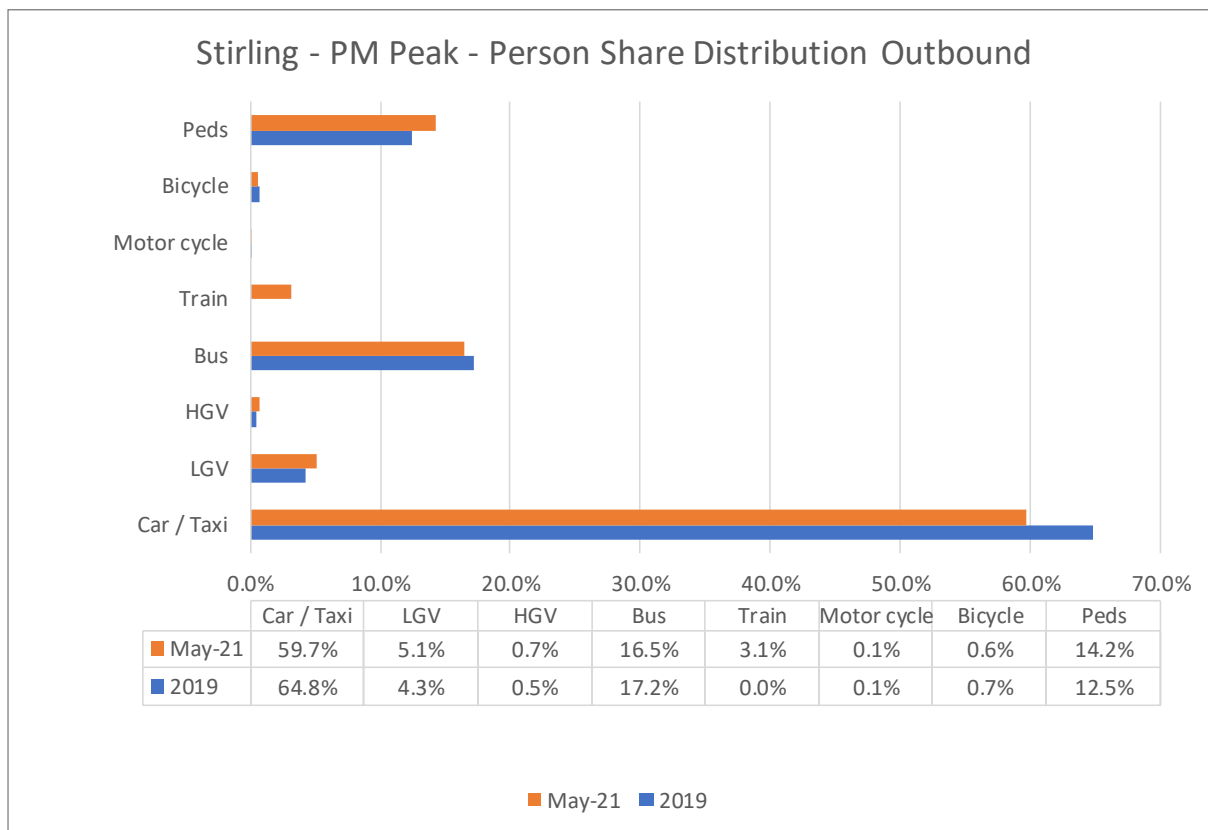


Figure 29. Stirling Person Share Distribution Outbound – PM Peak

- 9.6.37 Figure 29 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage remained around 16%, walking around 13% whilst car usage decreased from around 65% to 60%.
- 9.6.38 The total volume of people observed was 7,290 in April 2019 and 8,313 in May 2021.
- 9.6.39 The following figures present the Stirling mode share distribution, calculated from the survey data as detailed above. Figure 30 and Figure 31 present the full day mode share by vehicle by direction and Figure 32 and Figure 33 present the full day mode share by person by direction.
- 9.6.40 Each figure presents the mode share by vehicle type for the four survey periods (October 2020, February 2021, May 2021 and September 2021) and compares to the previous survey in April 2019. The inbound mode share by person is presented for May 2021 as this was the only survey that captured vehicle occupancy and is compared against the previous results in April 2019.

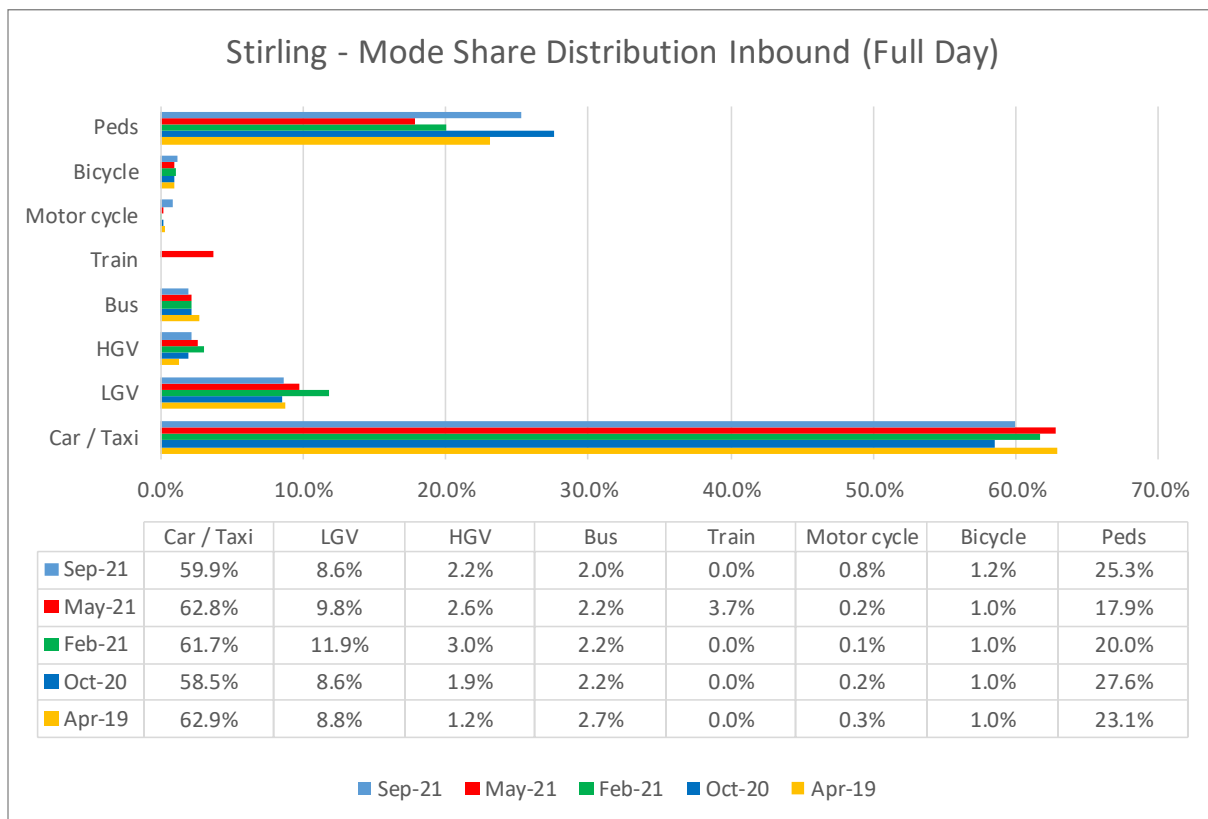


Figure 30. Stirling Mode Share Distribution Inbound – Full Day

- 9.6.41 Figure 30 shows that the mode share of vehicles remained relatively consistent over the four survey periods. The results for rail are only included in May 2021 as bus station and rail station surveys were only undertaken at this point.
- 9.6.42 The proportion of pedestrians varied between 18% and 28% similar across all of the surveys, whilst the proportion of cyclists remained around 1% in all of the surveys.
- 9.6.43 The total number of vehicles and pedestrians surveyed in each year was 18,102 in April 2019, 16,366 in October 2021, 13,477 in February 2021, 20,019 in May 2021 and 21,108 in September 2021.

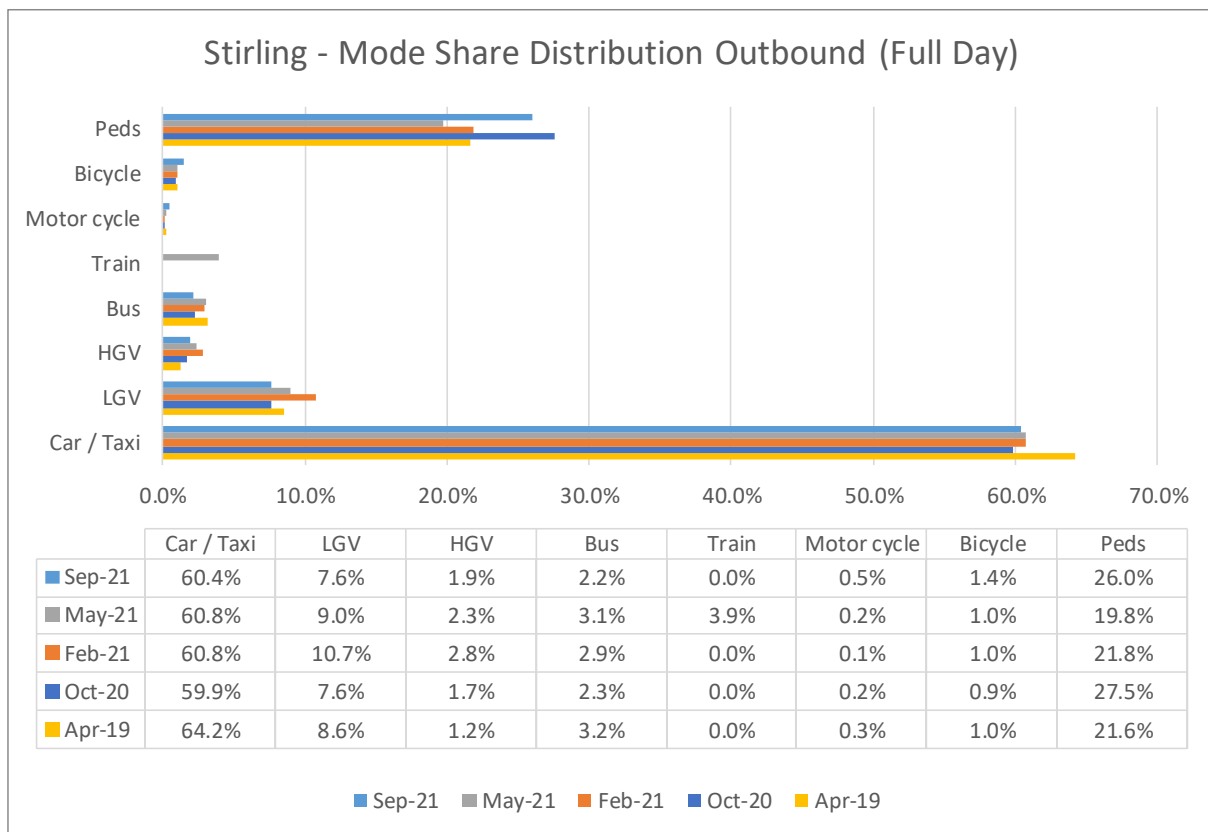


Figure 31. Stirling Mode Share Distribution Outbound – Full Day

9.6.44 Figure 31 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage was around 3% across the day, rail was around 4%, bicycle 1% and walking between 20% and 28%.

9.6.45 The total number of vehicles and pedestrians surveyed in each year was 14,961 in April 2019, 23,236 in October 2021, 16,218 in February 2021, 18,765 in May 2021 and 25,509 in September 2021.

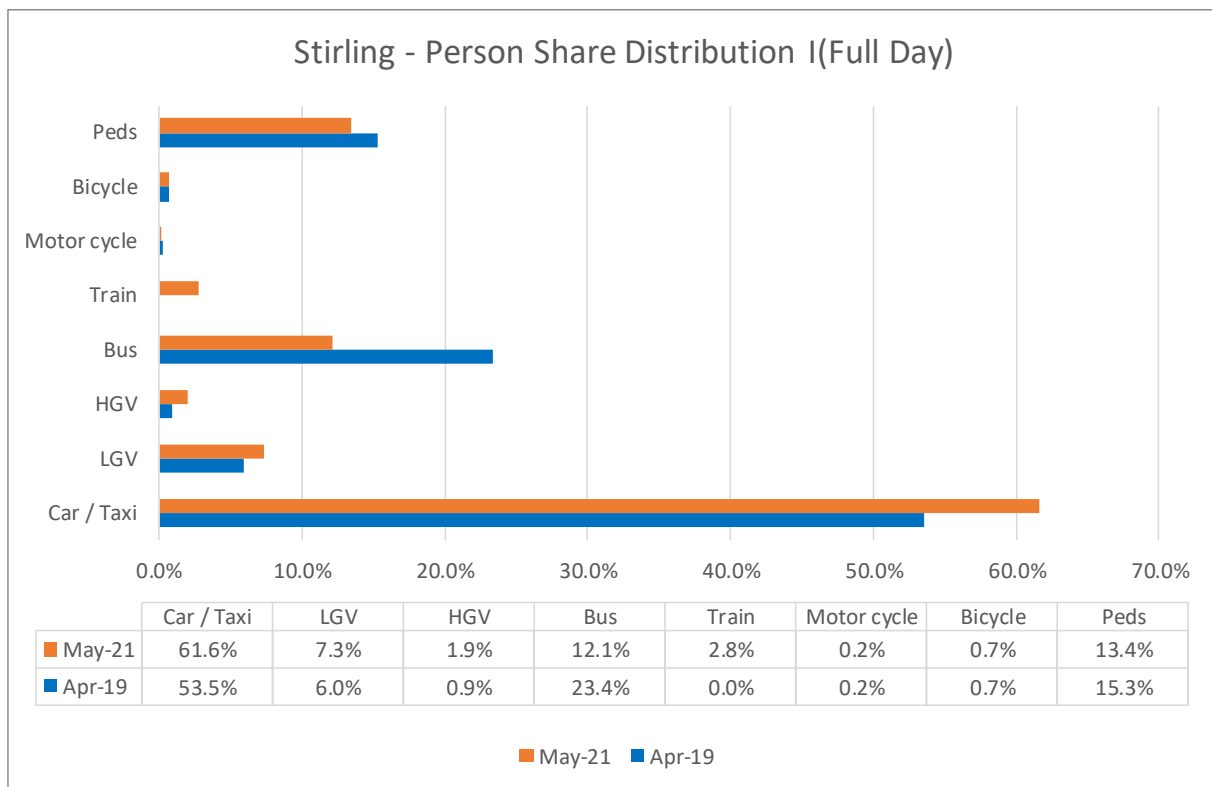


Figure 32. Stirling Person Share Distribution Inbound – Full Day

9.6.46 Figure 32 shows that across the day, the person mode share of vehicles remained relatively consistent over the survey periods. The biggest differences are seen in car usage, bus usage and walking between April 2019 and May 2021.

9.6.47 The total volume of people observed was 27,292 in April 2019 and 26,648 in May 2021.

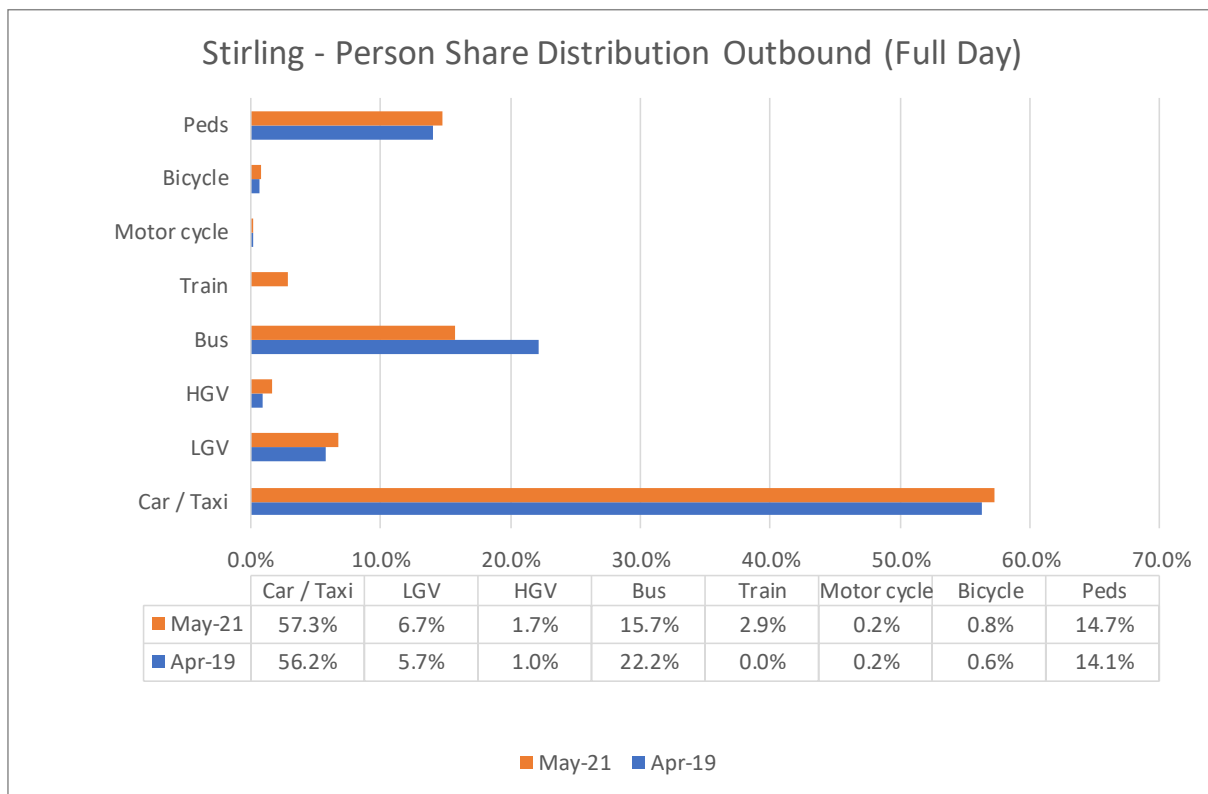


Figure 33. Stirling Person Share Distribution Outbound – Full Day

9.6.48 Figure 33 shows that the majority of people heading out of Stirling did so by car and taxi. Total bus usage dropped to around 16%, walking remained around 14% whilst car usage increased slightly from around 56% to 57%.

9.6.49 The total volume of people observed was 22,975 in April 2019 and 25,197 in May 2021

9.7 Dunblane Vehicle Occupancy

9.7.1 Vehicle occupancy surveys were undertaken in Dunblane on Wednesday 5th May 2021 between 06:00 and 22:00 at the following locations:

- Site 1 B8033 Perth Road, north of bridge
- Site 2 B8033 Stirling Road, south of bridge

9.7.2 Table 94 below presents the results of the vehicle occupancy surveys.

Table 94. Dunblane Vehicle Occupancy



Wednesday 5th May 2021														
Site 1 - B8033 Perth Rd (North of Bridge) Northbound	Car Occupancy					LGV			OGV1			OGV2		
	1	2	3	4+	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave
Total	1032	125	4	1	1.12	203	236	1.16	52	55	1.06	11	11	1.00
AM Period 0700-1000	192	30	3	0	1.16	64	72	1.13	17	18	1.06	3	3	1.00
IP 1000-1600	463	53	1	0	1.11	93	112	1.20	23	25	1.09	4	4	1.00
PM Period 1600-1900	229	28	0	0	1.11	35	41	1.17	6	6	1.00	4	4	1.00
Site 1 - B8033 Perth Rd (North of Bridge) Southbound	Car Occupancy					LGV			OGV1			OGV2		
	1	2	3	4+	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave
Total	898	65	1	0	1.07	173	197	1.14	44	45	1.02	11	11	1.00
AM Period 0700-1000	176	14	1	0	1.08	34	37	1.09	10	10	1.00	1	1	1.00
IP 1000-1600	389	28	0	0	1.07	83	91	1.10	22	23	1.05	8	8	1.00
PM Period 1600-1900	211	18	0	0	1.08	40	52	1.30	8	8	1.00	2	2	1.00
Site 2 - B8033 Stirling Rd (South of Bridge) Northbound	Car Occupancy					LGV			OGV1			OGV2		
	1	2	3	4+	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave
Total	845	180	0	0	1.18	213	238	1.12	47	48	1.02	16	16	1.00
AM Period 0700-1000	148	19	0	0	1.11	70	76	1.09	17	18	1.06	2	2	1.00
IP 1000-1600	371	71	0	0	1.16	89	99	1.11	21	21	1.00	8	8	1.00
PM Period 1600-1900	214	62	0	0	1.22	39	44	1.13	5	5	1.00	6	6	1.00
Site 2 - B8033 Stirling Rd (South of Bridge) Southbound	Car Occupancy					LGV			OGV1			OGV2		
	1	2	3	4+	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave	Total Veh.	Total Occ.	Ave
Total	874	208	2	0	1.20	219	250	1.14	56	58	1.04	13	13	1.00
AM Period 0700-1000	176	40	0	0	1.19	50	57	1.14	10	10	1.00	2	2	1.00
IP 1000-1600	381	98	2	0	1.21	101	118	1.17	28	30	1.07	8	8	1.00
PM Period 1600-1900	203	58	0	0	1.22	40	45	1.13	12	12	1.00	3	3	1.00

9.7.3 Table 94 shows that across the day, car occupancy varied between 1.07 and 1.22 occupants throughout Dunblane, LGV was between 1.09 and 1.30, OGV1 between 1.00 and 1.09 and OGV2 was 1.00 occupant at all sites throughout the day.

10. SUMMARY & FINDINGS

10.1 Summary

10.1.1 SYSTRA Ltd (SYSTRA) was commissioned by Tactran to undertake traffic surveys through various sites in the Angus, Dundee, Perth & Kinross, & Stirling area.

10.1.2 The types of surveys undertaken for this study were:

- Pedestrian Behaviour and volume counts
- Link count and speed surveys
- Classified Turning Counts (including cyclists & pedestrians)
- Rail Station Counts
- Bus Station Counts
- Bus Occupancy Counts
- Vehicle Occupancy Counts.

10.1.3 All surveys were recorded over a 16 hour period (06:00-22:00) and the analysis was split into the following time periods:

- AM Peak Period – 07:00 – 10:00
- Inter Peak Period – 10:00 – 16:00
- PM Peak Period – 16:00 – 19:00

10.1.4 The mode share data was also considered from the perspective of the share of vehicles and by the share of people. Both these methodologies are presented in this report, and are detailed as follows:

- ‘Mode Share Distribution’ – Each vehicle, including buses counts as 1 trip - this methodology does not take into account the number of people in a vehicle or a bus
- ‘Person Share Distribution’ – Each person counts as 1 trip, therefore the bus patronage and multi occupancy vehicle.

10.2 Findings

Pedestrian Behaviour and Volume Counts

10.2.1 The results of the pedestrian behaviour and volume count surveys indicate:

Stirling

- On the east side footpath of Upper Craigs, over the 3 days In October 2020, 38% of pedestrians had no conflict, 58% pass within 2 metres of each other, 3 % pass with a space over 2 metres and 1 % cross the road.
- On the west side footpath of Upper Craigs, over the 3 days In October 2020, 83% of pedestrians had no conflict, 15% pass within 2 metres of each other and 2 % pass with a space over 2 metres.
- Pedestrian volume surveys indicate that in general the lowest flows were observed in February 2021 and the highest volumes were recorded in September 2021.

Link Count and Speed Surveys

10.2.2 The results of the wider link counts and speed surveys indicate:

Stirling

- The mean speed of traffic on Murray Place (Site 1) and Upper Craigs (Site 2) went up in February 2021 and returned to November 2020 levels in May 2021 and September 2021.
- Millennium Way (Site 3) mean speeds went down in May 2021 from February 2021 and continued declining in September 2021 in a northbound direction.
- Murray Place (Site 4) average speeds remained the same in February, May and September 2021.
- Mean speeds on Causewayhead Road (Site 5) northbound went down in May and September 2021, while southbound went up in May 2021 when compared to February 2021, before showing a rapid decline in September 2021.
- The mean speed on Forrest Road (Site 6) was 17.3mph northbound and 13.6mph southbound in September 2021.
- The mean speed on Argyll Avenue (Site 7) was 15.9mph eastbound and 20.1mph westbound in September 2021

Dunblane

- Northbound directions for all three sites remained the same in February, May and September 2021
- Southbound mean speeds increased in May 2021 from February 2021 for Stirling Road (Site 3).
- Southbound mean speeds increased in May 2021 from February 2021 for the B8033 (Sites 2).

Bridge of Allan

- Mean speeds decreased in both directions on Henderson Street throughout 2021 as the traffic flow increased.

Aberfoyle

- Mean speeds on Main Street increased in the westbound direction between February and May 2021 before decreasing in September 2021, however remained the same for traffic heading eastbound in February and May 2021 before decreasing in September 2021.

Fallin

- A905 mean speeds increased for eastbound traffic from February to May 2021 but decreased in September 2021, however remained the same for traffic heading westbound before showing a decrease in September 2021.

Plean

- Mean speeds on Main Street increased in the northbound direction between February and May 2021, before decreasing in September 2021 however remained the same for traffic heading southbound between February and May 2021 before decreasing in September 2021
- The mean speed eastbound on Cadgers Loan in September 2021 was 29.3mph and 28.8mph in the westbound direction.

Callander

- In May 2021, mean speeds had decreased in both directions on Main Street, when compared to February 2021. The reduction in speeds continued in September 2021.

Killearn

- Mean speeds increased on Main Street in the northbound direction between February and May 2021 before reducing in September 2021, however decreased for traffic heading southbound, when comparing February, May and September 2021.

Gargunnoch

- Mean speeds increased in both May 2021 and September 2021 from February 2021 in both eastbound and westbound directions for Manse Brae.
- The mean speed northbound on Station Road in September 2021 was 18.5mph and 19.2mph in the southbound direction

Mode Share Surveys (Stirling)

10.2.3 The results of the mode share surveys in Stirling indicate that the mode share has remained consistent over the three surveys, car usage in each period has been around 60%, the volume of cyclists has remained below 1% and pedestrians have remained consistent at around 15% to 20%. The mode share by person surveys indicated:

- In the 2021 AM peak the majority of people travelling inbound were doing so by car/taxi (55.8%), LGV accounted for around 10% of people and HGV around 3%. In terms of public transport bus accounted for around 16% of people and train under 3%. Cycling and walking accounted for just under 13%, cycling at 0.6% and walking at 11.9% of all people heading inbound towards Stirling city centre.
- In the 2021 AM peak the majority of people travelling outbound were again doing so by car/taxi (57.2%), LGV accounted for around 11% of people and HGV around 3%. In terms of public transport bus accounted for around 16% of people and train around 3%. Cycling and walking accounted for around 9%, cycling at 0.7% and walking at 8.3% of all people heading outbound from Stirling city centre.
- In the 2021 inter-peak, the majority of people travelling inbound were doing so by car/taxi (60.2%), LGV accounted for 7% of people and HGV around 2%. In terms of public transport bus accounted for around 10% of people and train under 3%.

Cycling and walking accounted for just under 18%, cycling at 0.9% and walking at 17% of all people heading inbound towards Stirling city centre.

- In the 2021 inter-peak, the majority of people travelling outbound were again doing so by car/taxi (55.6%), LGV accounted for around 6% of people and HGV around 2%. In terms of public transport bus accounted for around 15% of people and train under 3%. Cycling and walking accounted for just under 20%, cycling at 0.9% and walking at 18.3% of all people heading outbound from Stirling city centre.
- In the 2021 PM peak, the majority of people travelling inbound were doing so by car/taxi (68.0%), LGV accounted for slightly under 7% of people and HGV around 1.1%. In terms of public transport bus accounted for around 11.3% of people and train under 4%. Cycling and walking accounted for just under 10%, cycling at 0.6% and walking at 9.3% of all people heading inbound towards Stirling city centre.
- In the 2021 PM peak, the majority of people travelling outbound were doing so by car/taxi (59.7%), LGV accounted for around 8% of people and HGV around 0.7%. In terms of public transport bus accounted for around 17% of people and train around 3%. Cycling and walking accounted for just under 15%, cycling at 0.6% and walking at 14.2% of all people heading outbound from Stirling city centre.
- Across the day in May 2021, the majority of people travelling inbound were doing so by car/taxi (61.6%), LGV accounted for slightly over 7% of people and HGV around 2%. In terms of public transport bus accounted for around 12% of people and train under 3%. Cycling and walking accounted for just over 14%, cycling at 0.7% and walking at 13.4% of all people heading inbound towards Stirling city centre.
- Across the day in 2021, the majority of people travelling outbound were doing so by car/taxi (57.3%), LGV accounted for around 7% of people and HGV almost 2%. In terms of public transport bus accounted for around 16% of people and train around 3%. Cycling and walking accounted for just over 15%, cycling at 0.8% and walking at 14.7% of all people heading outbound from Stirling city centre.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Newhall Street

5th Floor, Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 393 4841

Birmingham – Edmund Gardens

1 Edmund Gardens, 121 Edmund Street,
Birmingham B3 2HJ
T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Glasgow – West George St

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1
1LE
United Kingdom
T: +44 (0)191 249 3816

Reading

Soane Point, 6-8 Market Place, Reading,
Berkshire, RG1 2EG
T: +44 (0)118 206 0220

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

SYSTRA

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Newhall Street

Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 393 4841

Birmingham – Suffolk Street

8th Floor, Alpha Tower, Crowne Plaza, Suffolk Street
Birmingham, B1 1TT
T: +44 (0)121 393 4841

Bristol

One Temple Quay, Temple Back East
Bristol, BS1 6DZ
T: +44 118 208 0111

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

Liverpool

5th Floor, Horton House, Exchange Flags,
Liverpool, L2 3PF
T: +44 151 607 2278

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester –City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Manchester – King Street

76 King Street
Manchester, M2 4NH
T: +44 161 697 3899

Newcastle

Floor E, South Corridor, Milburn House, Dean Street,
Newcastle, NE1 1LE
T: +44 (0)191 249 3816

Perth

13 Rose Terrace, Perth PH1 5HA
T: +44 (0)131 460 1847

Reading

Davidson House, Forbury Square,
Reading, RG1 3EU
T: +44 118 208 0111

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

York

Meridian House, The Crescent
York, YO24 1AW
Tel: +44 1904 454 600

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,
Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

