National Transport Strategy (NTS2)

Monitoring and Evaluation 2019 Baseline Report

(Published 2022)

Contents

Introduction

Scotland's National Transport Strategy (NTS2) sets out an ambitious and compelling vision for our transport system for the next 20 years and outlines the four priorities for our transport system: Reduces Inequalities; Takes Climate Action; Helps Deliver Inclusive Economic Growth; and Improves our Health and Wellbeing. To ensure we deliver progress against these goals it is necessary to routinely monitor and report on progress towards these outcomes.

What does this report do?

In order to support the monitoring and evaluation described above, this report provides a baseline report on the key indicators that underpin NTS2. In doing so, it outlines 'where we were' in 2019 and the recent context surrounding the various findings. As the report focuses on data, it largely omits discussion of transport policy.

The second NTS2 Delivery Plan (for 2022 to 2023) has also been produced and will be published at the same time as the current report.

What data is provided?

This report provides data on the statistical indicators outlined in the Monitoring and Evaluation strategy that was published in 2021, where it is possible to do so. The data it provided for 2019, with some limited exceptions that are noted throughout, which will provide the baseline year against which subsequent progress will be monitored. For a few indicators outlined in this strategy, data is not currently available and, for more detail on these, see the section of the report on missing indicators. For a full list of the indicators, sources and relevant baseline years of the indicators used here, see Annex A of this document.

The data in this report is also accompanied by a dataset that contains data for all of the relevant indicators, alongside the available demographic breakdowns.

Reduces Inequalities

Walking

- In 2019, 67% of people reported walking as a means of transport in the last seven days, while 62% reported walking just for pleasure/to keep fit in the same period.
- Walking just for pleasure/to keep fit was most common among those in the least deprived areas and on higher incomes. Comparing by rurality, walking as a means of transport was most common among those in large urban areas.
- Over half the respondents (55%) said that they faced no barrier to walking more often, while 16% emphasised health reasons as barriers.

Cycling

- In 2019, 5% of people reported cycling as a means of transport and 6% reported cycling just for pleasure/to keep fit in the last seven days. It was more common among men than women, and most common among those on higher incomes and in the least deprived areas.
- 40% of respondents reported that it was 'too far to cycle' to commute to work while 21% reported that there were 'concerns about cycling and traffic' and another 21% reported that the weather was too cold/wet/windy.

On the Bus

- In 2019, 39% of people had used the bus in the last month. Bus journeys declined from 484 million to 375 million between 2008-09 and 2018-19
- Bus use was most common among those in large urban areas, those who didn't have a driving license, those on lower incomes and those in the most deprived areas. It was more common among women than among men.
- Overall, 68% were satisfied with public transport with 16% dissatisfied
- The most commonly cited barrier to bus use was 'using my own car' (26%)
- Only 55% agreed that bus fares were good value

On the Train

- In 2019, 30% of people had used the train in the last month. ScotRail passenger journeys increased from 76 million in 2008-09 to 98 million in 2018-19

- Train use was most common among those on higher incomes and those in the least deprived areas. It was less common among disabled people, people on lower incomes and those in remote rural areas.
- 34% of those who hadn't used the train in the last month reported 'no need' as the main barrier to use
- Only 48% thought that train fares were good value

Further data on satisfaction with buses and trains, barriers to modes and demographic breakdowns are available in the main report.

Takes Climate Action

Greenhouse Gas Emissions

- Greenhouse gas emissions from transport have fallen from 14.88 megatonnes (mt) in 1990 of CO_2 equivalent to 13.95 mt in 2019
- In 2019, passenger cars represented 38% of the total, with overall road transport accounting for around two thirds of the total.
- By comparison, 17% of emissions comes from shipping while 15% comes from aviation

Sustainable Mode Share

- In 2019, 33% of journeys were made using sustainable modes. Between 2009 and 2019, sustainable modes peaked in 2014 at 38%
- Under two miles, 54% of journeys were made using sustainable modes, i.e. walking, cycling, buses and trains. Under five miles, 43% of journeys were made using sustainable modes
- Sustainable modes tended to be more common in urban areas as opposed to rural areas, and tended to be more common among those in the lowest 30% of incomes compared to those in the highest 30% of incomes

Freight by Mode

- The most substantial share of freight is via road, followed, in order, by water, rail, and air freight
- Most road freight is inter-Scottish, with origins and destinations in Scotland. Inter-Scottish freight has declined from 2004 to 2019
- Road based exports to the UK increased between 2004 and 2019, as have imports from the rest of the UK. Exports to countries outside the UK have declined in the same period, as have imports from these destinations

- Water based freight also declined between 2004 and 2019. Air freight declined during the same period
- While comparisons are complex, data indicates that air freight has the highest carbon intensity per kilometre tonne, followed by road, followed by rail and water based freight

Ultra-Low Emissions Vehicles

- In Quarter 4 of 2019, Ultra Low Emissions Vehicles (ULEV) cars were 4.1% of new car registrations and ULEVs overall were 3.6% of overall new vehicle registrations
- During 2019 as a whole, ULEV cars were 2.6% of all new car registrations and ULEVs overall were 2.3% of overall new vehicle registrations

For more information, data about freight, comparisons by groups and discussions of trends, see the main report.

Helps Deliver Inclusive Economic Growth

Access to Services

- From the data zones, within 20 minutes, via public transport in specified time-limits, mostly between three and four hours on Tuesday morning:
  - 91% of all data zones could access a primary school
  - 88% could access a large food outlet (between 10am and 2pm)
  - 84% could access a GP while 24% could access a hospital
  - 58% could access a secondary school
  - 55% could access a train station and 1% could access an airport
  - 31% could access further education
  - 19% could access higher education
- By contrast, 5% of data zones could not access public transport within 800 metres of the population weighted centre

Access to Employment

- Between 6am and 10am, an average of 115,797 jobs within key employment sites were available from the centre of a data zone within one hour via public transport across Scotland as a whole. In large urban areas, this was a mean of 202,614 jobs within one hour compared to 3,272 in remote rural areas

Satisfaction with public transport by geography

- Satisfaction ranged between 88% in Edinburgh to 44% in South Ayrshire
- Satisfaction was 77% in large urban areas and 48% in remote rural areas

Barriers to public transport by geography

- Barriers varied by geography. In rural areas, 22% reported a 'lack of service' on the bus compared to 4% of those in of urban areas
- Among those who'd recently used the train, 22% of those in rural areas and 11% of those in urban areas reported 'no nearby station'

Tourism and Visitors

- Overseas visits grew from 2.6 million to 3.5 million between 2009 and 2019.
- In 2019 there were 17.5 million overnight visits to Scotland, around two thirds of which were in Glasgow, Edinburgh and the Highlands
- For visitors from the rest of the world and the UK, Edinburgh and the Lothians received the most visitors and had the most spending. The Highlands had the most visitors and spending from those from within Scotland

For more breakdowns of variation between locations and analysis of the data about journey times to services and employment, see the main report.

Improves our Health and Wellbeing

Active Travel

- Almost half of journey under two miles are made by active modes (walking, wheeling and cycling), as are a third of trips under five miles
- Journeys by active modes were, in both cases, more common among those on lower incomes than those on higher incomes and, for trips under five miles, more common in urban than rural areas

Traffic Casualties

- There were 7,745 overall casualties in 2019, including 166 deaths and 1,930 serious injuries.
- Overall casualties were highest in Glasgow while deaths were highest in the Highlands (21). Per population, casualties were highest in Argyll and Bute

- Casualties increased overall with the deprivation decile of the address of the person involved.
- Casualties were more common among men than women and were most common in cars. By distance travelled, motorcycles had the highest number of serious injuries (0.85) and fatalities (0.08) per million kilometres.

Perceptions of Safety

- On the bus, 69% agreed that they felt safe during the evening while 76% agreed that they felt safe and secure on the train in the evening.
- On both modes, disagreement with feeling safe and secure in the evening was higher among women (12% on the bus, 14% on the train) than men (5%). It was also higher among disabled people (14% on the bus, 15% on the train) compared to non-disabled people (9% on the train, 7% on the bus). On buses, it was higher among those in the lower 30% of incomes (11%) than among those in the higher 30% of incomes (6%).

Air Pollution

- Transport related Nitrogen Oxide emissions fell from 150.5 thousand tonnes in 1990 to 47.8 thousand tonnes in 2019
- Particulate Matter (PM) 10 from transport fell from 7 thousand tonnes in 1990 to 2.5 thousand tonnes in 2019. PM 2.5 from transport fell from 6.4 thousand tonnes in 1990 to 1.8 thousand tonnes in 2019.

Reasons for Travel

- 27% of journeys were for leisure, while 72% were for non-leisure reasons.

For further analysis, discussion and comparisons between groups, see the main report.

Missing Indicators and Data Gaps

There are several indicators where data is in the process of being collected or developed and that we intend to publish in the future when data is available. These are:

- Spend on transport – individual and household (headline indicator). However, data about expenditure on transport and fuel costs by household is provided.
- Perception of affordability of transport (primary indicator)

- Journey times to and connectivity between transport modes (primary indicator)
- Use of smart/integrated technology in public transport (TBC) (primary indicator)
- Proximity to segregated walking, wheeling and cycling infrastructure (primary indicator)

Reduces Inequalities

This chapter reviews the data on the following indicators:
- Indicator 1A: Sustainable Mode Share by Individuals (primary indicator)
- Indicator 1B: Performance Measures of Public Transport Mode (secondary indicator)
- Indicator 1C: Barriers to Active Modes – Access and Self-reported (secondary indicator)
- Indicator 1D: Barriers to public transport use and access (secondary indicator)

Geographic inequalities are discussed in the Chapter on Inclusive Growth.

Indicator 1A: Sustainable Mode Share by Individuals

- **Use of transport modes varies across equality groups and by socioeconomic factors.**

Sustainable mode share refers to travel using buses, trains, cycling, walking and wheeling. This section uses data from the Scottish Household Survey to examine differences between groups in the use of these modes. In terms of the numbers below, the results that have been selected reflect those where samples sizes are the largest and we are, as a result, most confident in the results. This means that certain demographic breakdowns are not highlighted, but are available within the full breakdown of the available data that can be found in the accompanying dataset.

Additional data on comparisons of modal share by disability has also been published. However, this report pools data across multiple years and so does not refer to an individual year in the same way that the Scottish Household Survey does.

Walking

Walking as a means of transport

- In the last week, was reported by 67% of the population in 2019. It is most common among those in large urban areas (78%), those on higher incomes (70% among those earning between £40,000 p.a. and £50,000 p.a. and 71% of those earning over £50,000 p.a.) and living in the least deprived areas (71%). It is less common among those earning between £15,000 and £20,000 p.a. (61%, compared to 68% among those earning under £10,000 p.a.) and the those in the middle of deprivation distribution (63%, compared to 68% in

the most deprived 20% of areas). It is more common among men (68%) than women (65%). Comparing by age, the highest rate is amongst those aged 16-19, at 78% of those aged 16-19 having walked as a mode of transport in the last week, compared to 40% of those over 80. It is less common among those in remote rural areas (45%) and those in accessible rural areas (53%).

- It is more common among non-disabled people than disabled people, with 73% of non-disabled people doing this in the last week, compared to 48% of disabled people.

Walking just for pleasure/to keep fit

- In the last week, was reported by 62% of the population in 2019. It is most common among people on higher incomes (75% of those earning over £50,000 p.a.) and in the least deprived areas (70%). It is more common among men (64%) than among women (60%). Comparing by deprivation, it is least common among those in most deprived areas (51%).
- It is more common among non-disabled people than disabled people, with 69% of non-disabled people doing this in the last week, compared to 41% of disabled people.

Walking as a means of transport has changed little over time, with 67% of respondents doing this in the last week in both 2014 and 2019. **Walking just for pleasure/to keep fit** appears to have increased slightly, to 62% of respondents in 2019 from 55% in 2012.

Cycling

Cycling as a means of transport

- In the last week, was reported by 5% of all people in 2019. It is most common among men (7%) than women (3%), those on higher incomes (6% of those earning between 40,000 p.a. and 50,000 p.a. and 7% of those earning over £50,000 p.a.) and those in the least deprived areas (8%). The relationship to rurality is ambiguous, with 5% of those in remote rural areas and 6% of those in large urban areas reporting cycling in the last week.
- It is less common among those on lower incomes (2% of those earning up to £10,000 p.a.) and those in the most deprived areas (3%).
- It is more common among non-disabled people (6%) than among disabled people (2%).

Cycling just for pleasure/to keep fit

- In the last week, was reported by 6% of the population in 2019. It is more common among men (8%) than women (4%), those on higher incomes (10% of those earning over £50,000) and those in least deprived areas (10%). It is more common in remote rural areas, at 10%.
- It is less common among those in more deprived areas (3% in most deprived areas) and those on low incomes (2% of those earning up to £10,000 p.a. and 3% of those earning between £10,000 p.a. and £15,000 p.a.).
- It is more common among non-disabled people (7%) than among disabled people (2%).

We also have data for how these trends have changed over time. **Cycling as a means of transport** has remained relatively unchanged over time: 6% of respondents did this at least once a week in 2012, 2014 and 2016, compared to 5% in 2019. The situation with **cycling just for pleasure/to keep fit** is similar. This activity remained at around 6% between 2016 and 2019.

Bus use

- Among the population as a whole, in 2019, 39% reported using the bus in the last month, with 8% using it every day or almost every day. It is more common among people who do not possess a driving licence (62% having used it in the last month), those in large urban areas (54%), those on lower incomes (51% of those earning less than £10,000 p.a. and 50% of those earning between £10,000 p.a. and £15,000 p.a.) and those in the most deprived areas (49%). Bus use is slightly higher among women than men, with 40% of women travelling by bus in the last month, compared to 37% of men.
- It was less common among those who hold a full driving license (29% having used it in the last month), those aged 50-59 (29%) those on higher incomes (27% of those earning over £50,000 p.a.), those in small remote towns (19%), accessible rural areas (22%) and remote rural areas (20%). Comparing across deprivation quintiles, 40% of those in the least deprived quintile had used the bus in the past month, while 30% of those in the fourth quintile - the least deprived 40% to 20% - had done so.
- Bus use was slightly more common among disabled people, with 41% having used it in the last month, compared to non-disabled people, with 38% having used it in the last month.
- Bus use has fallen overall in the last ten years, with journeys declining by from 484 million in 2008-09 to 375 million in 2018-19. Similarly, journey kilometres from 386 million in 2008-09 to 331 million in 2018-19. Overall proportions of those using the bus in the last month have declined slightly between 2014 and

2019, with 61% of people having not used the bus in the last month in 2014 compared to 58% in 2019.

Train use

- In 2019, 30% of the population reported using the train in the last month, with 9% using it once a week or more. It is more common among those on higher incomes (43% of those earning over £50,000 p.a.), those in 'other' urban areas (34%), those aged 20-29 (41%) and those in the least deprived areas (36% among those in the least deprived areas). Train use did not differ between men and women in a statistically significant way, with 29% of men and 30% of women having used it in the last month.

- It was less common among those in remote rural areas (12%), accessible rural areas (24%) and small remote towns (18%). It was also lower among those on lower incomes (23% of those earning less than £10,000 p. a. and 22% of those earning between £10,000 and £20,000 p.a.). It also tended to be lower among older age groups, with 24% of those aged 60-69 reporting using in the last month, along with 16% of those aged 70-79 and 8% of those aged over 80.

- Train use in the last month was less common among disabled people, with 17% having used it in the last month, compared to non-disabled people, 34% of whom had used it in the last month.

- Train use has slightly increased over time. Between 2008-09 and 2018-19, ScotRail passenger journeys increased from 76 million to 98 million, as reported in Scottish Transport Statistics. Overall, the number of people that report using the train in the last month has remained relatively unchanged, with 31% using the train in the last month in 2014 and 30% doing so in 2019.

Indicator 1B: Performance Measures of Public Transport Modes

- **Overall satisfaction with public transport is 68%. Satisfaction is lowest regarding fares.**

Data on satisfaction with public transport in general and with the specific components of buses and trains is provided by the Scottish Household Survey, with bespoke breakdowns provided by Transport Scotland for the purposes of this analysis. Specific data is collected on the following aspects of buses and trains: the bus/train runs to timetable, the bus/train is stable and not regularly changing, the bus/train is clean, buses are environmentally friendly (only asked for buses), the bus/train feels safe/secure on bus during the day, It is simple deciding what type of ticket I need on the bus/train, finding out about routes and times on the bus/train is

easy, easy to change from buses/trains to other forms of transport, bus/train fares are good value and feel safe/secure on bus/train during the evening. Additional data reported below comes from Public Performance Monitoring as reported in Scottish Transport Statistics.

In addition to the data published here, further data about satisfaction with public transport modes among those using the services for the UK as a whole and in relation to specific Scottish services can also be sourced from Transport Focus – an independent user watchdog – for both rail services and bus services. In addition, data on the views of those living on Scotland's islands about ferries has been collected in the National Islands Survey, which took place in late 2020. Detailed results can be accessed via the results explorer published alongside the survey.

Additional data on comparisons of modal share by disability has also been published. However, as this report pools data across multiple years, it does not refer to an individual year in the same way that the Scottish Household Survey data does.

Satisfaction with Public Transport

- In 2019, **overall satisfaction** with public transport was 68%, compared to 75% in 2009. Overall satisfaction has changed over time, as displayed in Table 1 below.

Table 1: Overall Satisfaction and Dissatisfaction with Public Transport, by year.

Year	All Satisfied	All Dissatisfied
2009	75%	14%
2010	74%	14%
2011	76%	14%
2012	72%	14%
2013	71%	17%
2014	75%	12%
2015	74%	14%
2016	72%	13%
2017	69%	16%
2018	65%	20%
2019	68%	16%

Source: Scottish Household Survey

- Looking at satisfaction by group, in 2019, satisfaction was comparable between men (67%) and women (68%) and between disabled people (69%) and non-disabled people (68%). Comparing across income groups,

satisfaction was higher among those in the lowest 30% of incomes (72%) compared to those in the highest 30% of incomes (64%).

Specific Components of Satisfaction

- Looking at **specific components of the services**, satisfaction is lowest regarding fares. Overall, 55% of respondents agreed that bus fares were good value, as did 48% regarding trains.
- Comparing across groups on buses, differences related to feeling safe and secure in the evening are mainly discussed in section four of this report.
- In terms of value of fares, agreement that bus fares were good value was most common among people aged over 60 – who are entitled to free bus travel – when compared to those in younger age groups.
- Those in the lowest income group were less likely to agree that it was 'easy to change from buses to other forms of transport' (66%) than those in the highest income group (76%).
- Looking at variation between disabled and non-disabled passengers in 2019, on buses, disabled passengers were less likely to agree that they feel safe and secure in the evening (58%) compared to non-disabled passengers (72%). Disabled passengers were also less likely to agree that they found it easy to change from one service to other transport (60%) compared to non-disabled passengers (74%).
- Comparing across groups on trains, differences related to feeling safe and secure in the evening are mainly discussed in section four of this report.
- In terms of views on the value of fares on trains, agreement that fares were good value was higher among those in urban areas (49%) than those in rural areas (42%) and among those in lower income groups (56% among the lowest 30% of incomes) compared to those with higher incomes (40% of those among the highest 30% of incomes).
- Agreement that trains ran to timetable was higher in urban areas (75%) compared to rural areas (69%) and higher among those on the lowest 30% of incomes (78%) compared to those in the middle 40% or higher 30% (73% and 72%, respectively).
- **On trains**, in 2019, disabled people were less likely to agree that they feel safe and secure in the evening (64%) compared to non-disabled passengers (78%).

Punctuality of Trains

- During the year 2018-19, data sourced from the Office of Rail and Road and published in Scottish Transport Statistics shows that 87.4% of ScotRail services arrived within five minutes of the planned arrival time, while 94.2%

arrived within ten minutes. By comparison, 1.6% of the services in 2018-19 were twenty minutes or more over their scheduled arrival time and 2.4% of services were cancelled.

Indicator 1C: Barriers to Active Travel – Access and Self-reported

- Barriers to walking were limited, while the most prominent barrier to cycling to work related to distance.

Data for this section comes from the Scottish Household Survey and uses a breakdown of the statistics specifically developed for this analysis.

Barriers to Cycling to Work

- The most prominent barrier to cycling to work was 'too far to cycle', reported by 40% of respondents. An additional 21% reported that there were 'concerns about cycling in traffic', and that the weather was too cold/wet/windy. In addition, 19% reported it would be inconvenient.
- The biggest differences in barriers related to the answer 'too far to cycle'. This was reported by only 21% of those aged 16-19, but was between 36% and 45% for all other age groups. It was also higher in rural areas, at 52%, compared to urban areas, at 38%.
- Lack of access to bikes – reported by 14% overall – was higher among the lowest income group, at 24%, compared to 10% of the highest income group. This was also higher for women, at 18%, compared to men, at 9%.
- Concerns about cycling in traffic were higher among women (24%) compared to men (17%) and highest among those aged over 60 (32%). They were also higher in urban areas (23%) than in rural areas (13%). Women were also more likely to be concerned about personal safety on dark/lonely roads (16%) compared to men (8%)

Barriers to Walking

- Over half of respondents (55%) said there was no barrier to walking. Health reasons were mentioned by 16% and the weather was mentioned by 13%.
- Comparing across groups, the biggest differences were among those answering 'Health reasons/unable to walk far'. This was higher among disabled people, at 53%, compared to 4% of non-disabled people. This also increased with age, from 2% of those aged 16-19 to 61% of those aged over 80. In addition, more women (18%) reported this than men (13%).

- Answering 'Nothing' was highest among those aged 20-29, at 64%. By comparison, it was 45% among those aged 70-79 and 27% among those aged over 80. It was also higher among non-disabled people, at 62%, compared to 31% of disabled people and higher among those in the lowest 30% of incomes, at 50%, compared to those in the highest 30% income group, at 40%. More men gave this answer (58%) than women (52%).

Indicator 1D: Barriers to public transport use and access

Data for this section comes from the Scottish Household Survey, with a breakdown of the statistics specifically developed for this analysis. Owing to the structure of data collection, data about barriers to bus use is from 2018 as 2019 data is not available.

Barriers to Bus Use

- Regarding data on barriers, it should be noted that many participants only choose one response, although they had the option to choose more. Therefore, a participant may select the barrier that is most relevant to them to the exclusion of others. For example, a participant for whom buses are 'inconvenient' but also experiences 'cost' as a barrier may have chosen the former and excluded the latter. The statistics below should be interpreted in this context.
- The data indicates that 'use my own car' is the most common reported reason for not using the bus more often, at 26%. The reasons 'no need' and 'nothing discourages' were chosen by 20% and 13% respectively. The reasons 'inconvenient' and 'takes too long' were reported by 10% of the respondents each respectively, while 'cost' was a barrier for 7% of respondents,
- As a barrier, health reasons were more common among older age groups and less common among younger ones. They were least common, at 1%, among those aged 16-19. By comparison they were reported by 9% of those aged 60-69 and 32% of those over 80. This barrier was more common among women (8%) than men (5%) and those in the lowest 30% of incomes (13%) compared to the highest 30% of incomes (2%). In addition, health reasons were reported as a barrier by 27% of disabled people compared to 1% of those who were not disabled.
- The barrier 'Lack of service' varied by location, with 22% of those in rural areas saying this relative to 4% of those in urban areas. This was also the case for the barrier 'Too infrequent', which was reported by 12% of those in rural areas, compared to 4% of those in urban areas.

Barriers to Train Use:

- Among those who had used the train in the last month, over a third of respondents (37%) said that nothing discouraged them from using the train more often. A further 20% in this group reported 'no need' to use the train. With regard to specific barriers, 15% reported cost and 13% reported 'no nearby station' as things which discouraged them from using the train more often. No other reason was reported by more than 6% of respondents.
- Among those who had not used the train in the last month, 34% reported 'no need', while 22% reported 'nothing' as things which discouraged them from using it more often. However, 24% of this group reported 'no nearby station' as a reason, compared to 13% of those in the group who had used the train in the last month.
- Among those who had used the train in the last month, the biggest differences were associated with having 'No Nearby Station'. Here, 22% of those in rural areas reported this as a barrier compared to 11% of those in urban areas. Among those who had not used the train in the last month, 41% of those in rural areas reported this barrier compared to 20% of those in urban areas.
- Among those who had not used the train in the last month, health reasons were reported as a barrier by 15% of disabled people, compared to 0% of non-disabled people.

Note on Transport Spending Household and Individual

- Data from Scottish Transport Statistics indicates that, averaged across 2017-2019, 14.3% of weekly household expenditure in Scotland was on transport (Table 10.8 of the linked report). This equates to £72.80 per household. Of this, an estimated £19.90 was on transport services, compared to £28.80 on the operation of personal transport and an average of £24 on the purchase of vehicles.

Takes Climate Action

This chapter provides baseline data on four key indicators:

- Indicator 2A: Transport Emissions (primary indicator)
- Indicator 2B: Sustainable Mode Share (primary indicator)
- Indicator 2C: Movement of Freight by Mode (primary indicator)
- Indicator 2D: Registrations of Ultra-Low Emission Vehicles (secondary indicator)

In 2019, transport accounted for 29% of Scotland's total greenhouse gas emissions, and emitted a total of 13.9 megatonnes (mt) of carbon dioxide equivalent (CO_2e). The Scottish Government has set targets to reduce greenhouse gas emissions, measured as CO_2e, by 75% by 2030 and to reach net-zero by 2045, on a 1990 baseline. The Climate Change Plan Update requires the transport sector to reduce emissions by 56% by 2030 on the 1990 baseline, to 6.5 megatonnes of CO_2e.

Indicator 2A: Transport Emissions

- **Greenhouse Gas Emissions from Transport are declining overall, but at a slow rate.**

Data for this section comes from the Scottish Greenhouse Gas statistics. The data shows that:

- Transport emissions have fallen from 14.88 mt of CO_2e in 1990 to 13.95 mt in 2019, although there have been fluctuations in overall emissions since 1990. Since 2017, transport emissions have declined for two consecutive years.
- In 2019, cars represented 38% of the total of transport emissions, followed by domestic shipping at 14%. Heavy Goods Vehicles (HGVs) and Lights Good Vehicles (LGVs) both contributed 12% of overall emissions. In the context of transport, overall road transport accounts for 66% of emissions.
- A full breakdown of transport emissions, by source and how these have changed over time, can be found in the accompanying dataset.

Indicator 2B: Sustainable Mode Share

- **Around a third of journeys are made using sustainable modes, while over half of journeys under two miles were made in this way.**

Data on sustainable mode share comes from the Scottish Household Survey (2019). The breakdown by group is a product of bespoke statistical analysis undertaken by

Transport Scotland. Sustainable modes refer to walking, bicycling, using the bus or using rail.

Overall

- In 2019, 33% of journeys were made using sustainable modes. Other modes, by contrast, were used in 67% of journeys.
- By journey length, 70% of journeys under 1 km were made by sustainable modes, while 48% of journeys between 1 km and 2 km were made in this way. By comparison, 18% of journeys between 5 km and 10 km were made sustainably while 13% of journeys over 40 km were made in this way.
- The median journey length in 2019 was 4.3 km, as reported in Transport and Travel in Scotland, 2019 using data from the Scottish Household Survey. Overall, most journeys are short, with 17% of journeys under 1 km and 54% under 5 km.

Journeys under two miles

- Under two miles, 54% of journeys were made using sustainable modes.
- The percentage of sustainable journeys varied by group. For those in urban areas, 54% of these journeys were sustainable, compared to 48% of these journeys in rural areas. Sustainable journeys are also more common among younger people, with 66% of the journeys of those aged 16-19 and 70% of these journeys of those aged 20-29 being made in this way. By comparison, 47% of these journeys among those aged 50-59 were made using sustainable modes. Journey modes also varied by income, with those in the lowest 30% of incomes making 62% of these journeys in this way, compared to 46% of these journeys made by those in the highest 30% of incomes.

Journeys under five miles

- Under five miles, 43% of journeys were made using sustainable modes.
- The percentage of sustainable journeys varied by group. For those in urban areas, 44% of journeys under five miles were sustainable, compared to 33% of journeys of this length in rural areas. Sustainable journeys are also more common among younger people, with 55% of the journeys made by those aged 16-19 and 56% of the journeys among those aged 20-29 being made in this way. The lowest level of sustainable journeys was among those aged 50-59, at 35%. Journey modes also varied by income, with those in the lowest 30% of incomes making 54% of their journeys under five miles in this way, compared to 34% of the journeys made by those in the highest 30% of incomes.

Indicator 2C: Movement of Freight by Mode

- **Overall freight appears to falling across modes**

The statistics for road, water and air freight can be found in Scottish Transport Statistics. Statistics for rail are from Transporting Scotland's Trade. Analysis of the carbon intensity of freight modes has been produced by the UK Government (in the 'Freighting Goods' tab of the Conversion Factors dataset). Owing to changes in data collection, road freight data 2004 and post-2004 figures are not comparable with pre-2004 figures. For this reason, 2004 is used as the baseline year for the analysis below to provide comparisons across modes. Longer term trends can be found in the original sources for these figures, and water and air freight figures going back to 2000 are available in the dataset accompanying this report.

Road freight

- Road freight is divided into inter-Scottish freight, imports and exports.
- Inter-Scottish freight – freight with both an origin and a destination in Scotland - declined from 158.7 million tonnes in 2004 to 103.2 million tonnes in 2019.
- Scottish exports to the rest of the UK increased from 14.5 million tonnes in 2004 to 15.5 million tonnes in 2019.
- Scottish exports to outwith the UK have declined from 0.5 million tonnes to 0.4 million tonnes over the same period.
- Scottish imports from the rest of the UK have increased from 17.9 million in 2004 tonnes to 18.7 million tonnes in 2019, while imports from the rest of the world have gone from 0.3 million tonnes to 0.2 million tonnes over the same period.

Water freight

- Water freight has declined from approximately 110.4 million tonnes in 2004 to 66.8 million tonnes in 2019. This includes inbound and outbound freight. More specifically, outbound freight declined from 77 million tonnes to 46 million tonnes, while inbound freight declined from 33.4 million tonnes to 20.7 million tonnes over the same period.

Air freight

- Air freight has fallen from 80,956 tonnes in 2004 to 58,914 tonnes in 2019.

Rail freight

- In Scotland, total freight lifted by rail between April 2019 and March 2020 was 4.3 million tonnes, a fall of 3.7% (167,000 tonnes) compared to the previous financial year. While this data refers to a distinct timeframe and is therefore not strictly comparable to the statistics above, it should indicate the relative scale of rail freight compared to other modes.

Carbon Intensity of Modes

- A full breakdown of the carbon intensity of different modes of freight has been published by the UK Government's Department for Business, Energy and Industrial Strategy. The following section provides some selected examples to demonstrate the relative differences between modes.
  - The highest carbon intensity is associated with refrigerated domestic cargo flights to and from the UK, which emit 4.49 kg of CO_2e per tonne kilometre.
  - There is considerable variation by road vehicles. Across all diesel HGVs, averagely laden HGVs have a carbon intensity of 0.11 kilograms of CO_2e per tonne kilometre. By comparison, an average petrol van has a carbon intensity of 0.72 kilograms of CO_2e per tonne kilometre (for diesel vans, this is 0.60 kilograms of CO_2e per tonne kilometre).
  - There is an wide range of water based freight transport vehicles, with differing carbon intensities. As an example, an average general cargo ship has a carbon intensity of 0.013 CO_2e per tonne kilometre.
  - Rail, by contrast, has a carbon intensity of 0.028 kilograms of CO_2e per tonne kilometre.

Indicator 2D: Ultra-Low Emissions Vehicles (ULEV)

- **ULEV registrations increased between 2010 and 2019.**

As reported in Scottish Transport Statistics, ULEVs are vehicles that emit less than 75g of CO_2 per kilometre. This compares to average petrol cars emissions of 168g of CO_2 per kilometre and 103g for buses. The data for this section comes from data provided to the Scottish Government by the Department for Transport.

- In 2019, there were 5,066 ULEV registrations in Scotland. In this year, ULEV cars were 2.6% of all new car registrations and ULEVs overall were 2.3% of overall new vehicle registrations. In Quarter 4 2019, ULEV car registrations

were 4.1% of new car registrations and ULEVs overall were 3.6% of overall new vehicle registrations.

- By contrast, in 2010, there were 41 ULEV registrations (11 of which were cars). The number of overall ULEV registrations between 2010 and 2019 is displayed in Figure 1, below. A full breakdown of the data can be found in the accompanying dataset.

Figure 1: ULEV Registrations in Scotland, 2010-2019
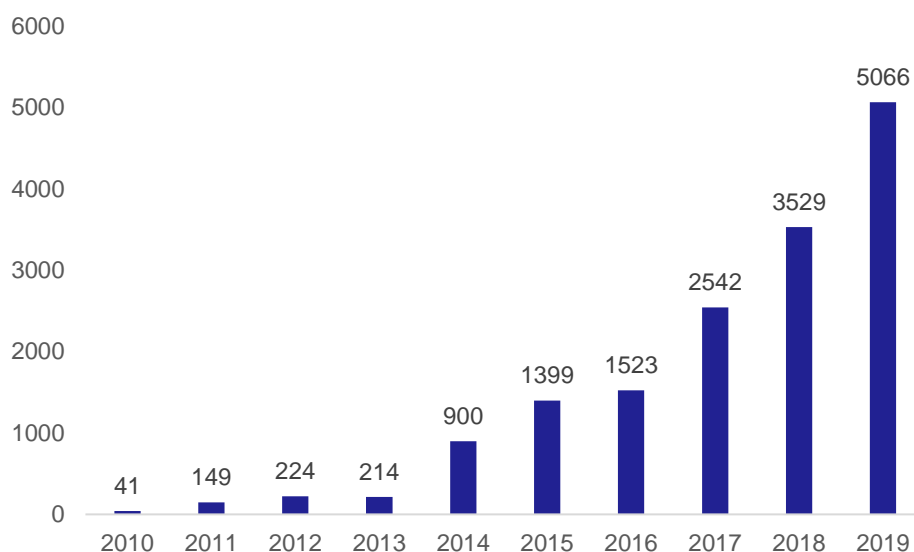
Helps Deliver Inclusive Economic Growth

This chapter considers the following indicators:

- Indicator 3A: Journey Times to Basic Services
- Indicator 3B: Journey times to areas of employment and education for individuals
- Indicator 3C: Performance Measures of Public Transport Modes
- Indicator 3D: Barriers to Public Transport Use and Access
- Indicator 3E: Tourism/Visitor Numbers

Indicator 3A: Journey Times to Basic Services for individuals

To demonstrate journey times – via walking and public transport – to basic services, Transport Scotland commissioned analysis to determine the fastest available journey time from the population weighted centroid (PWC) of each data zone to the closest example of a key service within specific time periods on a weekday. Data zones, of which there are 6,976 in Scotland, are the small area geography used by the Scottish Government to allow statistics to be available across a number of policy areas, and represent areas with populations of between 500 and 1,000 household residents. The data zones used in this report are based on the small area statistics from the 2011 census. This dataset was developed using the TRACC software, which uses public transport timetables to make journey time estimations.

Public transport is defined here as trains, buses, coaches, trams (Edinburgh Tram and Glasgow Subway) and ferries, using pre-pandemic data on service timetables (from January 2020). The time periods in question were as follows, on a Tuesday:

- GP – between 6:30am and 10:30am
- Hospital – between 6:30am and 10:30am
- Primary school – between 6:00am and 9:00am
- Secondary school – between 6:00am and 9:00am
- Further education – between 6:00am and 9:00am
- Higher education – between 6:00am and 9:00am
- Large food outlets – between 10:00am and 2:00pm
- Train stations – between 9:00am and 1:00pm
- Airports – between 6:00am and 10:00am

The analysis either returned a single result for the length of the time this journey would take or received a null result in the event that the journey was not possible or the PWC could not reach public transport within 800 metres and did not permit

walking to the destination. These estimates represent the first iteration of this sort of analysis, and it should be emphasised that there are a number of important caveats to this work, discussed in <u>Annex B</u> of this report. In short, they include:

- Only one result is needed to return a result within the time frame, so the volume of available journeys is not reflected in the results
- The analysis returns the fastest available journey time available, so may not represent all journeys
- The nearest destination is not necessarily the preferred or required version of the service in question, and
- The services included here do not exhaust the number of services that could conceivably be analysed using this method

Approaches to address these limitations will be considered and developed as the analysis proceeds over subsequent monitoring and evaluation reports.

Results

For the purposes of analysis and presentation, the findings were grouped into the following accessibility tiers:

- Within twenty minutes
- Twenty to forty minutes
- Forty minutes to an hour
- One to two hours
- Two to three hours
- Three to four hours
- Public Transport Access but Limited Access
- No Public Transport Access and not Walkable

For clarity, the tier of 'Within twenty minutes' includes journey times up to and including 20 minutes, but no journey times that are longer than this. For example, a journey calculated as exactly 20 minutes would be included in 'within twenty minutes', but a journey time equal to 20 minutes and 2 seconds would be contained in "twenty and forty minutes". Similarly, "twenty to forty minutes" includes any journey time over twenty minutes but up to and equal to forty minutes, and so on.

The 'Public Transport Access but Limited Access' tier refers to areas with access to public transport but that did not have a route to a key service within the allotted time period. The 'No Public Transport Access and not Walkable' tier refers to data zones where there was not access to public transport within 800 metres of the population weighted centre of the data zone and the service could not be accessed via walking.

While this does not mean that no residents within these data zones could or do access public transport, it highlights areas where accessibility is more limited.

In the entire dataset, there were 30 data zones that had access to public transport could not access any of the above essential services within two hours (0.4% of the dataset) and nine that could not do so during the allocated periods (0.1%). By comparison, 5.2% of data zones did not have access to public transport in the terms described above. Of these, 4.7% could not access any of the services listed above, compared to 0.6% that could access at least one (via walking). A list of these data zones is provided in the accompanying dataset.

Overall

- Looking at key services, the most accessible are primary schools. These are accessible by public transport within 20 minutes by 91% of data zones (between 6:00am and 9:00am), followed by large food outlets, which 88% of data zones could access within 20 minutes (between 10:00am and 14:00pm).
- Airports were the least accessible, with 8% of data zones not being able to access these within four hours even when public transport links were available. This was followed by higher education facilities, with 4% of data zones being unable to access a facility within four hours even when public transport was available. By contrast, 19% of data zones could access higher education within 20 minutes.
- A graph of these results is provided in Figure 2. A copy of this table and a table of these results by local authority is provided in the accompanying dataset.

SIMD

- More deprived areas had slightly better access to public transport than less deprived areas. In the most deprived 20% of areas, only 0.2% of the data zones had no access to public transport, which was the lowest of all the quintiles. The most deprived 20% of data zones had the highest percentage that could access primary schools (99%), GPs (96%), food outlets (97%), secondary schools (71%), railway stations (71%) and further education (43%) within twenty minutes.
- A copy of the SIMD data is provided in the accompanying dataset. The [data that was used on the SIMD ranking of datasets](#) is available.

Figure 2: Accessibility Tier by Destination
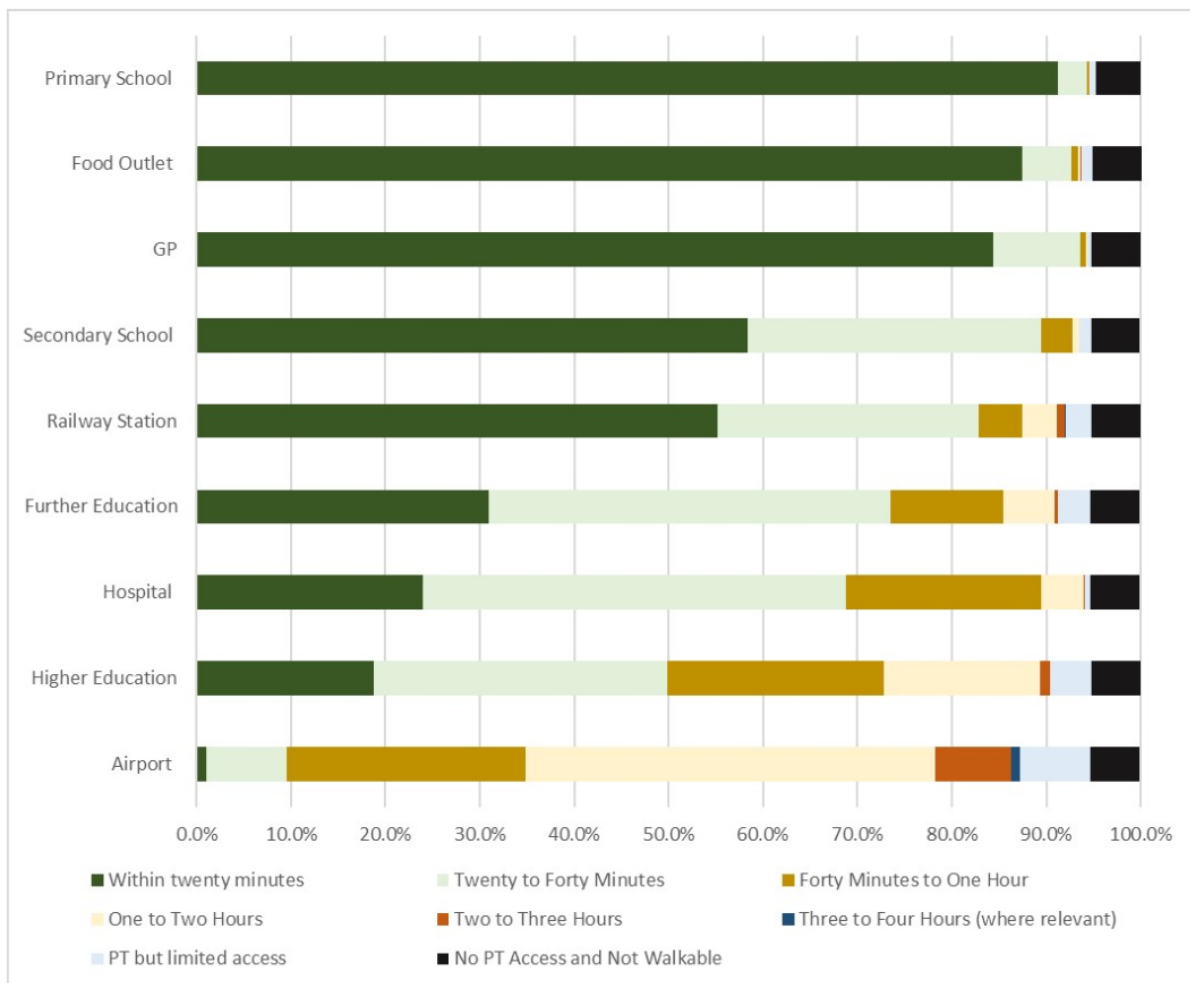
Rurality

- Urban areas, and large urban areas in particular, tended to have better access to services than rural areas. In around 24% of remote rural areas, there was no access to public transport, as was the case in around 18% of accessible rural areas (compared to around 1% of data zones in large urban areas).
- For instance, while 95% of the data zones in large urban areas could access a GP within 20 minutes via walking or public transport, this was only the case for 45% of remote rural areas (although it was the case for 91% of accessible rural areas). While 97% of data zones in large urban areas could access a hospital within an hour via walking or public transport, this was only the case for 51% of data zones in remote rural areas (within the time bands outlined above).
- A copy of the rurality data is provided in the accompanying dataset.

Data zones with limited access

In total, there were 365 data zones – 95% of the total – that could access a public transport hub within an 800 metre walk from the PWC of the data zone. Across all Scotland's data zones:

- 6,606 (94.7%) could access a bus stop within 800m
- 34 (0.5%) could access a coach stop within 800m
- 681 (9.8%) could access rail within 800m
- 29 (0.5%) could access a ferry within 800m
- 89 (1.3%) could access a tram or subway within 800m

Of the 5% remaining data zones that could not access public transport within this period, the largest number of data zones that could not access a public transport hub in any local authority was in Aberdeenshire, at 60, while the lowest was in Glasgow City, at two.

Rural areas had more areas like this, with 140 in accessible rural areas (18% of the total) and 104 in remote rural areas (24% of the total), compared to 29 in large urban areas (1% of the total). Ranking by SIMD, areas in quintile 1 – the most deprived – had the fewest areas like this, at 0.2%, compared to a high of 10% in areas in the less deprived 60-80%.

Indicator 3B: Journey times to areas of employment and education for individuals

Data has been provided on the number of jobs in and journey times to key employment destinations via public transport from the PWC of each data zone in Scotland. This indicator also uses data specifically developed for this report. To provide an estimate of access to employment, jobs have been identified via the Business Register and Employment Survey (BRES) from 2018 and journey times have been calculated using pre-pandemic data on service timetables (from January 2020). Then, data zones which contain 50% of the total employment have been identified as the key employment destinations within each local authority.
Using this criteria, 417 core employment sites have been identified. To ensure the accuracy of the time estimates, the destination points have been moved to the industry reporting the highest number of jobs. So, for example, in the event that healthcare was the largest employer in a zone, the marker has been moved to a hospital or a health centre. The number of data zones within each local authority that comprise 50% of the jobs destinations varies. For example, the selected 50% of jobs in Dundee City are located across 8 data zones. However, in comparison, the selected 50% of jobs in Aberdeenshire are located across 32 data zones.

This approach was adopted for feasibility: given the wide range of employment locations across the country as a whole, manually incorporating all of them the model would be extremely labour intensive and could not be done at this time. It should be noted that, because the destinations represent 50% of the total jobs, the figures should be treated as indicative estimates of the availability of jobs, rather than exhaustively reflecting all available jobs.

Two separate datasets have been developed, one for the four hour period between 6:00am and 10:00am (the AM window) and one for between 10:00am and 2:00pm (the PM window). As above, the times below relate to Tuesday.

In this section, data on access to further and higher education is discussed in detail.

Overall

- Within the four hour AM slot, a mean of 27,387 jobs were available via employment sites across all data zones within half an hour via public transport. A mean of 115,797 jobs were available within one hour via public transport.
- Within the four hour PM slot, a mean of 22,834 jobs were available via employment sites in employment destinations across all data zones within half an hour via public transport. A mean of 108,750 jobs were available within one hour via public transport.
- Within the four hour AM slot, a mean of 427,704 jobs were available via employment sites across all data zones within two hours via public transport. Within the four hour PM slot, a mean of 426,145 jobs were available within two hours via public transport.

Local Authority

- Looking at the mean jobs available via employment sites within each data zone within the AM timeslot, grouped by local authority, Glasgow City has both the highest mean of jobs within thirty minutes (92,485) and within one hour (277,649). This was also the case in the PM slot, although the overall averages were slightly lower (79,658 and 264,586).
- By comparison, the islands tended to have the lowest mean numbers of jobs accessible via employment sites within the PM time frames. Six local authorities had an average lower than 3000: Aberdeenshire (2,970), Scottish Borders (2,762), Shetland Islands (2,658), Orkney Islands (2,396), Argyll and Bute (2,007) and Na h-Eileanan Siar (1,867). Looking at jobs available within an hour, the lowest number was Na h-Eileanan Siar, at 3,274. The distribution was the same in the PM slot, although the volumes varied slightly (slightly higher in some cases and slightly lower in other cases).

- A full breakdown of the average jobs in data zones, grouped by local authority in the AM slot can be seen in Figure 3. As this demonstrates, there are substantial differences between local authorities and there is substantial variation in the number of jobs available within the time bands. A full list is available in the accompanying dataset.

Figure 3: Mean number of jobs via employment sites available by local authority within 30 minutes, one hour and two hours, AM slot
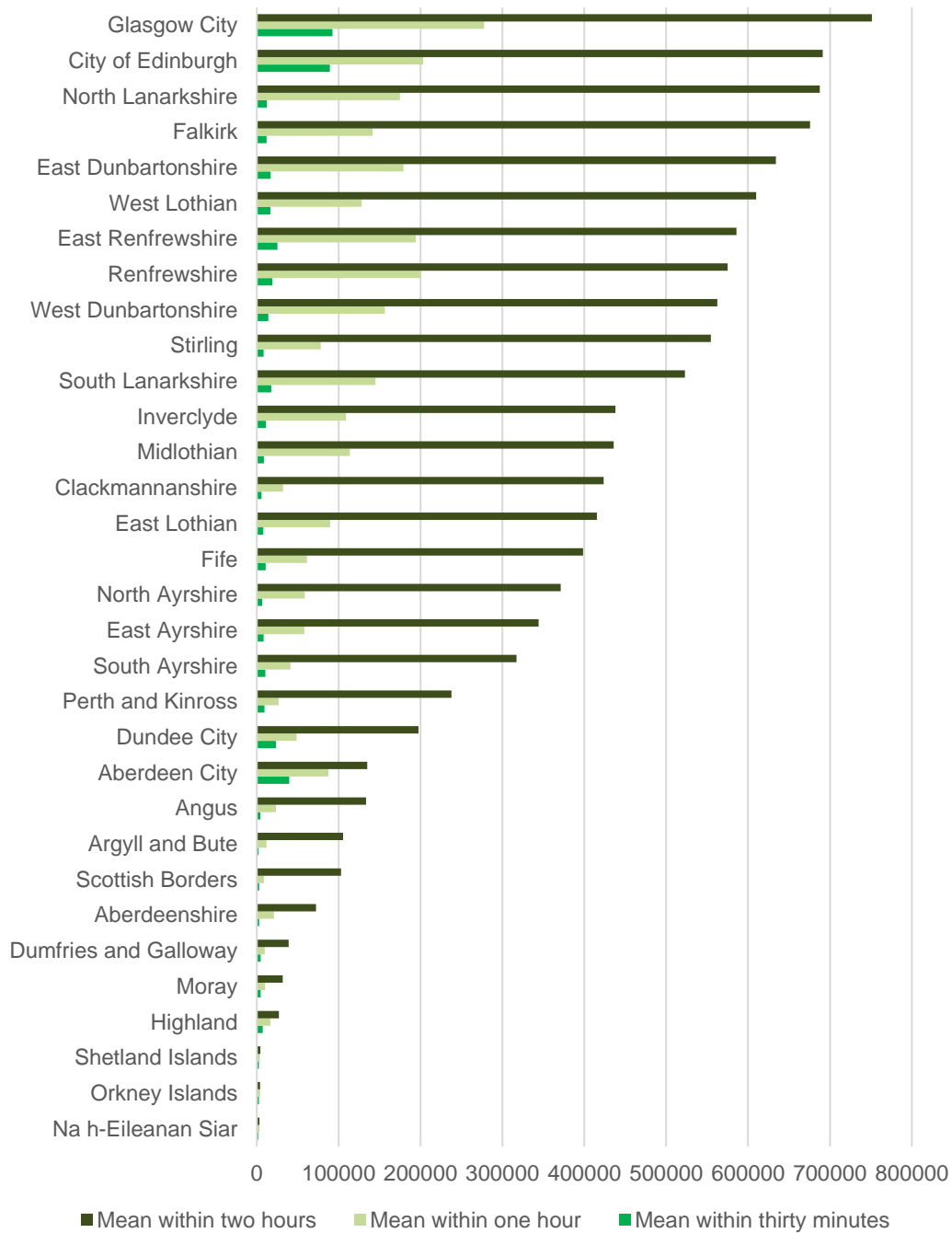
SIMD

- In terms of the mean jobs available via employment sites per data zone using public transport, the average number of jobs varied by SIMD quintile.
- For example, in the AM slot, in the most deprived quintile there were 36,617 jobs via employment sites within thirty minutes, 156,993 available within an hour and 547,509 jobs within two hours. By comparison, in the least deprived quintile, there were 33,073 jobs on average within thirty minutes, 125,182 jobs within an hour and 449,343 jobs within two hours.
- A full list is available in the accompanying dataset.

Rurality

- Data zones in urban areas, on average, had better access to jobs via employment sites using public transport than rural areas. Rurality here is calculated on the basis of the Scottish Government sixfold urban-rural classification. Areas are classified here into 'large urban areas', 'other urban areas', 'accessible small towns', 'remote small towns', 'accessible rural areas' and 'remote rural areas'. Further information on the classification scheme and the data used for this analysis has been published by the Scottish Government.
- In the AM slot, in large urban areas via employment sites using public transport, there was an average of 65,569 jobs available within thirty minutes, 202,614 within one hour and 589,887 jobs available within two hours. By comparison, in remote rural areas, there was an average of 662 jobs available within thirty minutes, 3,272 within one hour and 28,383 within two hours. Accessible small towns had fewer jobs within these time slots when compared to accessible rural areas (2,023 compared to 4,396, 11,902 compared to 26,820 and 75,528 compared to 226,464). The pattern within the PM slot was comparable, although the absolute numbers were slightly lower.
- A full list is available in the accompanying dataset.

Data zones with No Access

In the four hour AM window between 6am and 10am, there were 424 data zones (6% of the total) that could not access any jobs via employment sites via public transport within four hours. By contrast, in the PM window, where 453 data zones (7% of the total) were in this position (an additional 29 data zones). There was also two data zones which could not access a public transport stop within 800 metres but could walk to an employment destination.

More specifically:

- There were 33 with access to public transport but that the model could not access any jobs via employment sites within either window using public transport
- There were 61 data zones with access to public transport that could not access any jobs via employment sites within the four hour AM window
- There were 90 data zones with access to public transport that could not access any jobs via employment sites within the four hour PM window

In addition, in terms of the contrasts between data-zone access:

- There were 28 with access to public transport where the individual data zone could not access any jobs via employment sites using public transport within the earlier window, but could access at least one in the later window.
- There were 57 where there opposite was true, i.e. there was access jobs via employment sites using public transport in the earlier window but not in the later window.

In cases where a data zone could access jobs in one window but not the other, this is likely to reflect public transport scheduling.

Access to Education: Further Education and Higher Education

This section discusses data from the previous section in more detail, specifically with regard to further education and higher education. Further education refers to post-secondary school education that is not undergraduate or postgraduate in nature. Higher education, by contrast, refers to undergraduate and postgraduate education. The timeslots for Further and Higher education were as follows:

- Further education – between 6:00am and 9:00am
- Higher education – between 6:00am and 9:00am

Further Education

- Across all data zones, 31% could access further education via public transport within twenty minutes in these periods, which increased to 74% within forty minutes. For 6%, however, access took between one hour and three hours, while a further 4%, despite having transport links, could not get there within the allocated timeslot. By contrast, 65% of the data zones in Glasgow City had access within twenty minutes, the highest of any local authority.

SIMD

- In the most deprived areas, 43% of the data zones could access further education within twenty minutes, increasing to 90% within forty minutes and 97% could do within one hour. By contrast, 2% took between one and two hours and 0.6% had access to public transport but had no access within the allocated three hour timeslot. This was higher than within the least deprived areas, where 28% could access it within twenty minutes, 74% within forty minutes and 87% within one hour.

Rurality

- In large urban areas, 47% of the data zones could access further education by public transport within twenty minutes, and 95% could do so within forty minutes. In these areas, 98% could do within one hour, while only 0.5% had links but no access within the allocated time period. In accessible rural areas, 7% could access it within twenty minutes, 40% within forty minutes and 64% could access it within one hour. In remote rural areas, 22% could reach further education within an hour.

Higher Education

- Across all data zones, 19% could access these sites within twenty minutes using public transport, which increased to 50% within forty minutes. For 18% of the data zones, however, access took between one hour and three hours, with a further 4%, despite having transport links, not having access to a Higher Education facility within the allocated timeslot. By contrast, 46% of the data zones in Dundee City could reach Higher Education within this twenty minutes, the highest of any local authority.

SIMD

- In the most deprived areas, 20% of the data zones could access higher education with twenty minutes, and 57% could do this within forty minutes. This increased to 81% within one hour, although for 17% of data zones it took between one and three hours. Around 2% had access to public transport but could not reach it within the allotted three hour timeslot.
- By contrast, 23% of the data zones in least deprived areas could access higher education in twenty minutes, with 56% able to do so in forty minutes and 79% able to do within an hour. For 12% it took between one and three hours. 3% had access to public transport but could not reach it within the allotted three hour timeslot.

Rurality

- In large urban areas, 42% of the data zones could access higher education within twenty minutes, increasing to 92% within forty minutes. 98% could do within one hour, while only 0.5% had links but no access within the period. In accessible rural areas, 2% could access it within twenty minutes, 23% within forty minutes and 47% could do so within one hour. In remote rural areas, 18% could reach higher education within an hour.

Indicator 3C: Performance Measures of Public Transport Modes

- **Urban areas tended be more satisfied than rural areas.**

This section examines overall satisfaction with public transport by local authority. The data for this section comes from the Local Authority Tables of Transport and Travel in Scotland (TATIS), based on data from the Scottish Household Survey. Results comparing local authorities should be treated with caution given the small sample sizes recorded for individual local authority satisfaction scores.

Responses to specific questions are compared by rurality and by Regional Transport Partnership (RTP), given the relatively low sample sizes for the local authority tables in TATIS in relation to these questions. The section on specific satisfaction questions considers:
- whether services run to timetable,
- whether the service is stable and not regularly changing,
- whether the services are clean,
- whether buses are environmentally friendly (only for buses),
- whether it is simple deciding what type of ticket is needed,
- whether finding out about routes and times is easy,
- whether it is easy to change from buses to other forms of transport,
- whether bus fares are good value, and;
- whether people feel safe/secure on bus during the evening/during the day.

Overall Satisfaction

- Looking at variation within local authorities, the highest satisfaction with public transport can be found in the City of Edinburgh, at 88%. By comparison, the lowest satisfaction is found in South Ayrshire, at 44%. However, in South Ayrshire, dissatisfaction was also low, at 6% (the second lowest, after Edinburgh at 4%), with 51% neither satisfied nor dissatisfied. Dissatisfaction

was highest in Aberdeenshire, at 35%, followed by Highland at 33%. Highland also had the second lowest satisfaction, after South Ayrshire, at 48%.

- Looking at satisfaction across rurality, this was highest in large urban areas, at 77%, and lowest in remote rural areas, at 48%. The highest dissatisfaction, was also in remote rural areas, 36%, while the lowest dissatisfaction was in large urban areas, at 11%.
- Looking at Regional Transport Partnerships (RTPs), the highest satisfaction with public transport was in the South East Scotland RTP, at 75%, and lowest in the Highlands and Islands RTP, at 53%. In terms of dissatisfaction, this was lowest in the South East Scotland RTP, at 10%, and the joint highest in the Highlands and Islands RTP and North East RTP, at 29% in both.

Buses

In terms of responses to specific questions, this section highlights the statistically significant differences between urban and rural classification.

- 'Buses are environmentally friendly': 57% of those in urban areas agreed with this, compared to 47% of those in rural areas.
- 'I feel personally safe and secure on the bus during the evening': 68% of those in urban areas agreed with this, compared to 74% of those in rural areas.
- 'It's easy changing to other forms of transport': 71% of those in urban areas agreed with this, compared to 65% of those in rural areas.
- Further breakdowns are available in the accompanying dataset.

Trains

In terms of responses to specific questions, this section highlights the statistically significant differences between urban and rural classification.

- 'Fares are good value': 49% of those in urban areas agreed with this, compared to 42% of those in rural areas.
- Further breakdowns are available in the accompanying dataset.

Indicator 3D: Barriers to Public Transport Use and Access

Given the emphasis on geography, the barriers considered here are those which relate most directly to geography, i.e. inconvenient, no direct route, lack of service, too infrequent and long walk to bus stop (for buses) and no nearby station, inconvenient and no direct route (for trains). This section highlights the statistically

significant differences between urban and rural classification. Further breakdowns are available in the accompanying dataset.

It should be noted that, when choosing barriers, many respondents only chose one key barrier (although they had the option to choose more than one). For example, a respondent who experienced 'lack of service' as well as 'no nearby station', may have chosen the former to the exclusion of the latter. The statistics below should be interpreted in this context.

Buses

- 'Lack of service': 4% of those in urban areas reported this as a barrier, compared to 22% of those in rural areas.
- 'No direct route': 6% of those in urban areas reported this as a barrier, compared to 10% of those in rural areas.

Trains

- 'No nearby station': among those who hadn't used the train the last month, this was reported by 20% of those in urban areas, compared to 41% of those in rural areas. Among those that had used the train in the last month, the numbers were 11% and 22% respectively
- 'Lack of service': among those who hadn't used the train in the last month, this was reported by 1% of those in urban areas, compared to 3% of those in rural areas.
- 'No direct route': among those who hadn't used the train in the last month, this was reported by 3% of those in urban areas, compared to 5% of those in rural areas.

Indicator 3E: Tourism/Visitor Numbers

- **Edinburgh and the Lothians, Glasgow and Highlands are the most prominent tourist destinations in Scotland.**

The data in this section comes from two primary sources. These include the national and regional statistics available from Visit Scotland and data from the Office of National Statistics. The tourism figures from Visit Scotland combine averaged figures for 2017-19 for some locations, while for others provide figures for 2019. This was done to reflect the fact that, for some locations, this was done to reduce error margins for regions where sample sizes were relatively small. The areas for which 2017-19 average figures were used included Argyll and the Isles, Ayrshire and Arran, Dumfries & Galloway, Dundee & Argus, Fife, Loch Lomond, The Trossachs,

Stirling & Forth Valley and the Scottish Borders. For ease, 2019 will be used in the discussion below in both cases. Several tourist destinations – namely Shetland, Orkney and the Scottish National Parks - did not have comparable statistics and so are not included here in the following area comparisons.

Overall Visits and Spending

- Data from the ONS indicates that overseas visits to Scotland increased from 2.6 million in 2009 to 3.5 million in 2019.
- Overall, in 2019, including trips from the UK and Scotland, Visit Scotland estimates that there were 151 million trips to Scotland. There were also 75 million nights spent in Scotland by tourists (including those visiting from other parts of Scotland) and a total of £11.6 billion spent. These figures include both day visits and overnight trips.

Overnight Visits and Stays

- In terms of overnight visits, in 2019 there were a total of 17.5 million overnight visits to Scotland. Of these, 5.3 million were to Edinburgh and the Lothians, 3.1 million were to Glasgow and 2.9 million were to the Highlands. These destinations represent almost two-thirds of the total (64%).
- Looking again at overnight stays, Edinburgh and the Lothians had the most international visitors, at 2.3 million for a total of 12.8 million nights. Edinburgh also had the most visits from the rest of the UK at 1.9 million, for 5.3 million nights. By contrast, the Highlands had the most visitors from Scotland at 1.5 million over 4.9 million nights. Looking at spending on overnight visits in 2019, the Highlands attracted the most spending from Scottish visitors, at £291 million. In terms of spending from visitors from the UK and the rest of the world, both were highest in Edinburgh and the Lothians, at £499 million and £1.2 billion, respectively.

Day Trips

- In terms of day trips, Glasgow received the most, with 29.7 million trips in 2019. In terms of spending, however, the highest spending from day trips was in Edinburgh and the Lothians, at £1.31 billion, closely followed by Glasgow at £1.25 billion.

Improves our Health and Wellbeing

This section provides data on:

- Indicator 4A: Proportion of Short Journeys Made by Active Travel (primary indicator)
- Indicator 4B: Transport Casualties and Accidents by Exposure or by km Travelled by Mode (primary indicator)
- Indicator 4C: Perceptions of Safety Travelling by Public Transport and Active Modes (primary indicator)
- Indicator 4D: Air Quality Measure (primary indicator)
- Indicator 4E: Travel for Recreation/Leisure (secondary indicator)

Indicator 4A: Proportion of Short Journeys Made by Active Travel

- **Almost half of journeys under two miles are made by active modes, as are around a third of journeys under five miles.**

Data on travel by active modes (walking, wheeling and cycling) comes from the Scottish Household Survey. The data for this indicator and the specific breakdowns by group provided here is a product of bespoke statistical analysis undertaken by Transport Scotland. Components of the data used for this indicator is also used as a National Indicator within the National Performance Framework (NPF). Active modes here refers to walking, wheeling or cycling. Additional data, including a breakdown of journeys by length, can be found in the accompanying dataset.

Journeys under two miles

- Looking at journeys under two miles, 49% of all trips are by active modes. Of all journeys made under two miles, 48% are by walking and 2% are by cycling. Looking at walking, data from the NPF shows that, in 2012, the proportion of journeys under 2 miles made by walking was 49%.
- Men made 51% of trips under two miles by active modes, compared to 48% of the trips taken by women. Among those on the 30% of lowest incomes, 56% of journeys were made in this way, compared to 44% of those in the highest 30%. Among the younger age groups, 20-29 year olds made 65% of their trips by active modes, compared to 44% of those aged 50-59.

Journeys under five miles

- Looking at journeys under 5 miles, 35% of all trips are by active modes. Of these trips, 33% were by walking while 2% were by cycling. Looking at the data from the NPF, in 2012 the proportion of journeys of this length made by cycling was similar, at 2%.
- A higher percentage of journeys were made using active travel modes in urban areas (36%) compared to rural areas (31%), and by people in the lowest 30% of the income distribution (41%) compared to the highest 30% (30%). Among men, 36% of the journeys under five miles were made by active modes, compared to 34% of the journeys made by women. Travel by active travel modes also varies in terms of age, with those aged 20-29 took 46% of their journeys by active methods, compared to 29% of those aged 50-59.

Indicator 4B: Transport Casualties and Accidents by Exposure and by km Travelled by Mode

- **Traffic Casualties vary by gender, deprivation, location and mode.**

This data comes from the Reported Road Casualties in Scotland report, specifically the 2019 and 2020 editions. The specific statistical breakdowns by SIMD deciles was produced by bespoke analysis for the purposes of this report.

In terms of the SIMD figures, it should be noted that the figures relating to the address of the person exclude cases where the address is not known and these figures, on the whole, exclude casualties where the age of the person is not known.

Overall Casualties

- In 2019, there were 7,745 overall casualties. These included:
  - 5,649 slight injuries;
  - 1,930 serious injuries, and
  - 166 deaths
- Among adults (aged 16 and over), this was 6958 overall. This included:
  - 5,042 slight injuries
  - 1,752 serious injuries
  - 164 deaths
- Among children (aged 0-15) this was 773 overall. This included:
  - 595 slight injuries
 - 176 serious injuries
  - 2 deaths

By Geography

- Overall casualties in 2019 were highest in Glasgow City, at 1,100, and lowest in both the Orkney and Shetland Islands, at 27. Deaths, however, were highest in Highland, at 21, followed by Fife, at 15.
- However, there is a slightly different pattern per capita. Here:
  - Overall, casualties in 2019 were highest in Argyll & Bute, at 2.46 casualties per 1,000 people (211 total casualties from 85,870 people). Fatalities were also highest in this area, at 0.1 fatalities per capita (9 fatalities out of the population above).

By SIMD decile of the person involved

- The general trend is that casualties increase with the deprivation decile of the address of the person involved. Overall casualties were highest, at 838, among those in the most deprived 10% of addresses and were lowest, at 467, among those in the least deprived 10% of addresses. This can be seen in Figure 3. It should be noted that these figures exclude those casualties where the address of the person involved was not known, as well as those where the age of the person involved is unknown. Overall casualties in this context is the combined figures from the distinct modes listed below, i.e. child and adult pedestrians, child and adult motor vehicle drivers, child and adult passengers and child and adult pedal cyclists

Figure 4 Casualties by Deprivation Decile of the person involved, 2019
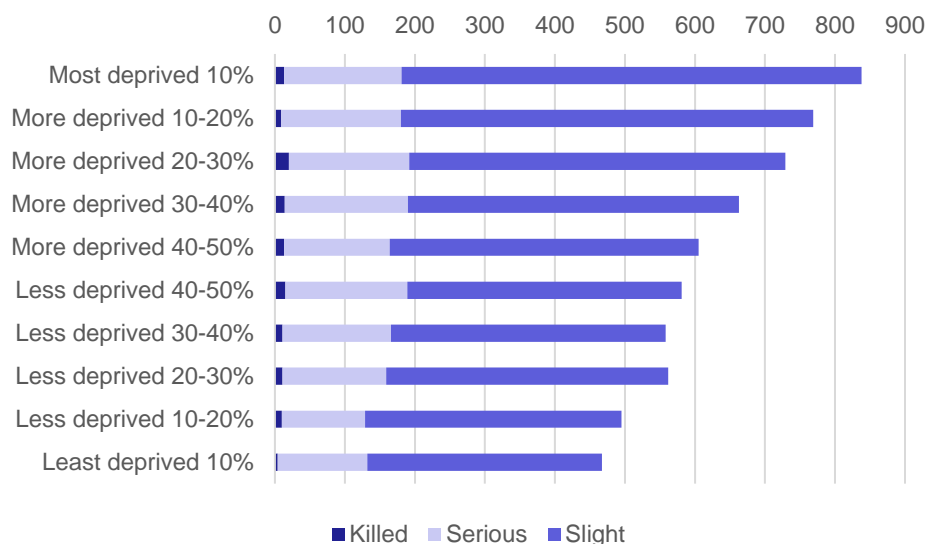
- In terms of adult casualties (16 and over) and specific modes, in 2019:
  - Among **adult pedestrians**, overall casualties peaked among those in the most deprived 10% of addresses, at 145, compared to 56 in the

least deprived 10% of addresses. The lowest number of casualties was among the less deprived 10-20% of addresses, at 45.

- o Among **adult motor vehicle driver**s, overall casualties peaked among those in the more deprived 20-30% of addresses, at 365. This is compared to 221 in the least deprived 10% of addresses. There were 352 casualties among the those in the most deprived 10% of addresses.
- o Among **adult passengers**, overall casualties peaked at 181 among those in the most deprived 10% of addresses, compared to 70 among the least deprived 10% of addresses.
- o Among **adult pedal cyclists,** the trends reversed, with a peak of 88 casualties among those in the least deprived 10% of addresses, compared to 39 among those in the most deprived 10% of addresses. However, the lowest number was 26, among those in the more deprived 40-50% of addresses.
- Among children (aged 0-15) and specific modes, in 2019:
  - o Among **child pedestrians,** casualties peaked at 63 among those in the most deprived 10% of addresses, compared to 8 among those in the least deprived 10% of addresses.
  - o Among **child passengers**, casualties peaked among those in the most deprived 10% of addresses, at 49, compared to 17 in the least deprived 10%. The lowest number, however, was 12 among those in the less deprived 10-20% of addresses, respectively.
  - o Among **child pedal cyclists,** casualties peaked at 9 among those in the more deprived 20-30% of addresses (with 8 among those in the most deprived 10% of addresses). The lowest number was 2, among those in the less deprived 10-20% of addresses.
  - o Overall, there were 4 casualties associated with child vehicle drivers, so trends cannot be extrapolated from these numbers.

By SIMD decile of the location of the accident

- Here, when looking at the SIMD decile of the location where the accident occurred, the trend is more complex. When looking at pedestrians, there appears to be a consistent association between deprivation and volume of casualties. However, when it comes to casualties associated with motor vehicle drivers/passengers, the link between the deprivation of the location and the volume of casualties is less clear, and the most deprived locations are not always those associated with the greatest number of casualties. these figures exclude those casualties where the age of the person involved is unknown.

Figure 5 Casualties by Deprivation Decile of the Location of the Accident
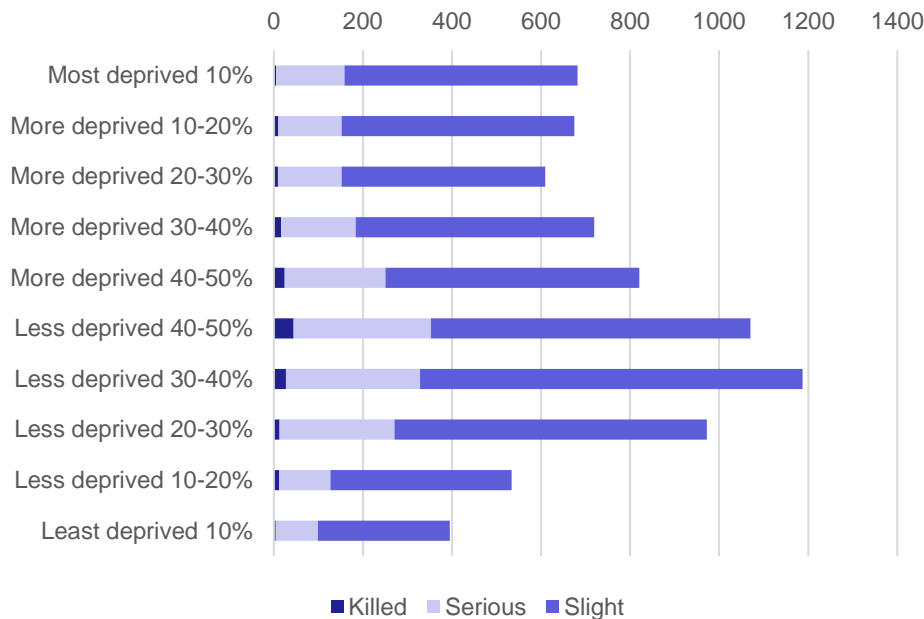
- In terms of adult casualties (16 and over) among specific modes, in 2019:
    - Among **adult pedestrians,** casualties peaked at 141 in the most deprived 10% of areas, compared to 55 in the least deprived 10% of areas.
    - Among **adult drivers of motor vehicles**, casualties peaked at 664 in the less deprived 30-40% of areas, with the lowest number of casualties at 177 in the least deprived 10% of areas, followed by 281 in the most deprived 10% of areas.
    - Among **adult passengers,** casualties peaked at 286 in the less deprived 30-40% of areas, with the lowest number of casualties at 61 in the least deprived 10% of areas, followed by 98 in the more deprived 20-30% of areas and in the less deprived 10-20% of areas.
    - Among **adult pedal cyclists,** casualties peaked at 74 in the less deprived 30-40% of areas (with 73 in the least deprived 10% of areas) while the lowest number of casualties was 40 in the more deprived 10-20% of areas (with 43 in the most deprived 10% of areas).
- In terms of child casualties (0-15), in 2019:
    - Among **child pedestrians,** casualties peaked at 65 in the most deprived 10% of areas, while the lowest number was 14 in the least deprived 10% of areas.
    - Among **child passengers**, casualties peaked in the less deprived 30-40% of areas and 20-30% of areas, at 66. The lowest number of casualties was 13, in the least deprived 10% of areas.
    - Among **child pedal cyclists,** casualties peaked at 11 in both the more deprived 20-30% of areas and in the more deprived 10-20% of areas.

The lowest number of casualties was 2, in the least deprived 10% of areas.

  o Overall, there were 8 casualties associated with child vehicle drivers where the location is known, so trends cannot be extrapolated.

By Demographic

- Casualties are more common among men then among women. In 2019, there were 1,340 killed or seriously injured casualties among men and 754 among women. Looking at deaths specifically, in 2019, 109 men died compared to 57 women.

- In 2019, casualties for all severities peaked among those aged 30-39, at 756 men and 508 women.

By Mode

- In 2019, the greatest number of casualties was experienced by those in cars (4,626 casualties overall). In this year, there were 3,668 slightly injured, 882 seriously injured and 76 killed using this mode.

- By contrast, among pedestrians, there were 1,265 casualties overall, with 758 slight injuries, 463 serious injuries and 44 fatalities. Among pedal cyclists, there were 592 overall casualties, with 399 slight injuries, 183 serious injuries and 10 fatalities.

By Distance

- Using distance travelled by modes in Scotland, provided by the Department for Transport, we can estimate the number of accidents by kilometre travelled on each mode. However, it should be noted that, given the nature of the data collection, the figures for pedal cycles are unlikely to be as precise as those for motor vehicles. As a result, statistics should be treated with caution.

- This demonstrates that, per million kilometres travelled in a car, there are 0.12 casualties, which includes 0.002 fatalities. By contrast, the highest number of casualties is associated with motorcycles (1.62 per million kilometres) and pedal cycles (1.61 per million kilometres).

- Regarding fatalities, these are highest on motorcycles, at 0.08 per million kilometres. Motorcycles also have the highest rate of serious injuries per million kilometres, at 0.85.

Indicator 4C: Perceptions of Safety of Public Transport and Active Modes

- **More than one in ten women and disabled people disagreed that they felt safe and secure on the bus or the train in the evening.**

Data on perceptions of safety buses and trains is provided by the Scottish Household Survey. This section contains some bespoke breakdowns specifically developed for this report. In terms of Active Modes, this section uses data already referenced above on the barriers to cycling to work and data on reasons for not walking more often, sourced from the Scottish Household Survey and, in the case of cycling, data broken down specifically for this report.

Walking

- Within the data provided by the Scottish Household Survey, 1% of the population cited 'not safe' as a barrier to walking more frequently than they do. This proportion has remained consistent since 2012, with the question being asked in 2012, 2013, 2014, 2015 and 2019. Because the sample size of the those providing this answer was so low, a breakdown by demographics is not available.
- However, it is worth noting that the Scottish Crime and Justice Survey collects data on the proportion of adults that felt safe walking alone in their local area. This survey notes that, in 2019-20, 77% of respondents felt safe in this context. More specifically, 65% of women felt safe, compared to 90% of men. In addition, 63% of those in the 15% most deprived areas felt safe compared to 79% of those in the rest of Scotland (reported in the data tables accompanying the survey).
  The overall proportion of those feeling safe has increased over time and is 11 percentage points higher than it was in 2008/09.
- While this data is not strictly comparable to the survey data above, it provides some additional context for understanding perceptions of safety while walking.

Cycling to work

- Within the data provided by the Scottish Household Survey, there were two answers to the question asking for 'Reasons why do not cycle to work' that relate to personal safety. These are 'Concerns about cycling in traffic' and 'Concerns for personal safety on dark/lonely roads'. This data has been disaggregated in a bespoke breakdown provided for this report.

- In relation to concerns about traffic, this was reported by 21% of respondents. It was higher among women (24%) than among men (17%). It was also higher in urban areas (23%) than in rural areas (13%).
- In relation to concerns about personal safety on dark/lonely roads, this was reported by 13% of respondents overall. This was higher among women (16%) than among men (8%).

Bus

- Perceptions of safety were higher during the day than in the evening. During the day, 93% agreed they felt safe and secure using the bus. By contrast, 69% agreed that they felt this way using the bus in the evening while 9% disagreed. Looking at specific groups:
  - Disagreement with feeling safe and secure during the evening was higher among women, at 12%, compared to 5% among men. It was also higher among disabled people (at 14%) compared non-disabled people (at 7%).
  - Disagreement was also higher among those in the lowest 30% of incomes, at 11%, compared to those in the highest 30% of incomes, at 6%.

Train

- Among those who had used the train in the last month, 95% agreed that they felt safe and secure using the train during the day. By contrast, 76% agreed that they felt this way during the evening while 10% disagreed.
  - Disagreement was higher among women compared to men (14% compared to 5%) and among disabled people compared to non-disabled people (15% compared to 9%).

Indicator 4D: Air Quality

- **Air pollution from Nitrous Oxide and PM10/PM 2.5. is decreasing, but transport remains a significant contribution.**

This section considers the two primary air pollutants referenced in the National Transport Strategy, Nitrous Oxide (NOx) and Particulate Matter (primarily PM 10 and PM 2.5). The data comes from the 'Environment and Emissions' chapter of the Scottish Transport Statistics Report no. 40 (2021 edition). The difference between PM 10 and PM 2.5 relates to their size, with PM 10 being sized 10 microns and below and PM 2.5 being 2.5 microns and below.

It should be noted that the data does not exhaust the available data on air pollution and air quality monitoring. Further data on these can be found in the links above.

Nitrogen oxides (NO$_x$)

- In 2019, 57% of all NO$_x$ emissions were from transport, which is an increase from 1990 when transport comprised 45% of overall emissions. However, this is in a context where both overall and transport related emissions have declined considerably overall. In absolute terms, NO$_x$ emitted from Transport has fallen by from 150.5 thousand tonnes in 1990 to 47.8 thousand tonnes (a fall of around 68%).
- Looking at road transport, the relative components of this have changed over time. In 1990, road transport represented 70% of transport emissions, while shipping represented 26%. In 2019, road transport constituted 49% of all transport emissions, while shipping constituted 43%.
- In terms of road transport, in 2019, diesel passenger vehicles accounted for 43% of these emissions, while 37% of this came from diesel light goods vehicles. HGVs accounted for 9% of these emissions.

Particulate Matter (PM 10)

- Overall transport related PM 10 emissions have fallen from 7 thousand tonnes in 1990 to 2.5 thousand tonnes in 2019. In 2019, transport related emissions related to 17% of all PM 10 emissions, the same number that was reported in 1990.
- Emissions associated with road transport, as a percentage of emissions associated with total transport, increased from 43% in 1990 (when shipping was 53%) to 69% in 2019 (when shipping was 28%). In 2019, in terms of specific components of road transport, 51% was related to tyre and brake wear and 27% was related to road abrasion.

Particulate Matter (PM 2.5)

- In 2019, 21% of total PM 2.5 emissions came from transport, compared to 23% in 1990. In absolute terms, however, transport related PM 2.5 emissions fell from 6.4 thousand tonnes in 1990 to 1.8 thousand tonnes in 2019.
- Road transport as a component of transport emissions increased from 40% in 1990 - when shipping was 56% - to 60% in 2019, when shipping was 36%. In terms of the specific components of road transport, in 2019, 44% of the total was a result of tyre and brake wear and 23% was a result of road abrasion.

Indicator 4E: Travel for Recreation/Leisure

- **Just over a quarter of travel is for leisure.**

Data in this section comes from the Travel Diaries published as part of the Scottish Household Survey. The breakdown by group by provided via bespoke analysis by Transport Scotland. The distinction between leisure and non-leisure has been made for the purposes of addressing the indicator, as above, and is not reflected in the original statistics.

- Looking at journeys by purpose, 27% of travel is for recreation/leisure, compared to 72% of travel that be characterised as non-leisure. Leisure travel here includes visiting friends or relatives (10%), going for a walk (7%), sports/entertainment (6%), eating/drinking (3%) and holidays/days trips (1%).
- By contrast, non-leisure activities include shopping (24%), commuting (23%), going home (7%), education (6%), other personal business (5%), business (2%), visiting hospital or other health reasons (2%) or 'other' journeys (1%). In total, these comprised 72% of all journeys.
- There are a range differences by group. Some of the most prominent included:
    - Looking at gender, a larger percentage of men's trips involved commuting (26%), business (4%) and entertainment/sports (7%), compared to women (21% of which were commuting, 1% of which were for business and 5% of which were for entertainment/sports, respectively). A larger percentage of women's trips were to education (7%) compared to men (4%) and a greater percentage were concerned with visiting friends or relatives (11% compared to 9% of men's trips).
    - Looking at age, commuting is highest among 20-29 year olds, at 32% of journeys, and is lower among those over 60 (13% of those aged 60-69, 2% of those aged 70-79). Education trips are most common among those aged 16-19, at 20%.
    - Looking at disability, a lower proportion of the trips of disabled people involved commuting (13% compared to 26% of non-disabled people).
    - Looking at income, a higher proportion of trips of those in the highest 30% of incomes involved commuting (28%) compared to those in the lowest 30% of incomes (15%). By contrast, a higher proportion of those in the lowest 30% of incomes involved shopping (29%) compared to those in the higher 30% of incomes (19%).
    - Looking at geography, a higher proportion of the trips of those in urban areas involved commuting (24%, compared to 20% of trips of those in rural areas).

Annex A: Indicators, Sources and Time Periods

Indicator	Source(s)	Year used as baseline
Sustainable Mode Share by Individuals	Scottish Household Survey	2019
Performance measures of public transport mode	Scottish Household Survey	2019
Performance measures of public transport mode	Scottish Transport Statistics – original source: Office of Rail and Road	2019
Barriers to Active Modes – Access and Self-Reported	Scottish Household Survey	2019
Barriers to Public Transport Use and Access	Scottish Household Survey	2019, 2018 in the case of buses
Transport Emissions	Scottish Greenhouse Gas statistics: 1990-2019	2019
Sustainable Mode Share	Scottish Household Survey	2019
Movement of Freight by Mode	Scottish Transport Statistics	2019
Registrations of Ultra-Low Emission Vehicles	Department for Transport Vehicle Registration Data	2019
Journey Times to Basic Services	See Annex B	
Journey Times to Areas of Employment	See Annex B	
Performance Measures of Public Transport Modes	Scottish Household Survey	2019
Barriers to Public Transport Use and Access	Scottish Household Survey	2019
Tourism/Visitor Numbers	Visit Scotland and ONS	2019
Proportion of short journeys made by active travel	Scottish Household Survey	2019

Transport casualties	Reported Road Casualties in Scotland 2019	2019
Perceptions of safety travelling by public transport and active modes	Scottish Household Survey	2019
Air Quality Measure	Scottish Transport Statistics	2019
Travel for Recreation/Leisure	Scottish Household Survey	2019

Annex B: Technical Discussion of the Data in Indicator 3A

This section emphasises the necessary caveats for interpreted the journey time data.

Caveats for Regarding Journey Time Calculations

Several caveats need to be emphasised in the context of the journey times data.

In the first instance, while the analysis measures the fastest available journey, the analysis does not say anything about how frequently journeys can be made within these time periods. This is to say, it might be the case that, within the time parameters, there is only one journey available from a given data zone to the location in question within the given period. This journey will be returned by the analysis and indicate that the route is available within the available timeframe, but this will not reflect the limited accessibility that results from infrequent journeys.

Second, the model calculates the *fastest* available route. This should be distinguished from the *average* journey time, or the journey time available to participants from any starting period. For example, if a given shortest journey time is 11 minutes, this does not mean that an individual could travel to the given destination within 11 minutes at any point from the PWC of the data zone, but simply that there is a journey that lasts that long that is available.

Third, the model calculates the nearest location that fits the description of the essential service in question. This means that, for example, it might be the case that a data zone can access the nearest hospital within an acceptable time period but, in practice, the nearest hospital service for an individual lacks capacity to provide particular services required by that individual in that data zone. Therefore, caution should be taken when making extrapolations from these results.

Finally, the locations chosen in this first iteration do not exhaust the list of essential services that an individual may need to access. As this is the first time this analysis has been attempted, a short list of services concerned with health, access to other transport modes, education and food was selected for analysis. However, as this analysis develops over time and is repeated in the future, further locations will be added through ongoing consultation and discussion with stakeholders.

Data Sources

Public transport timetable data was downloaded from Basemap Datacutter service, which provides quarterly 'snapshots' of UK public transport timetables for use in software such as TRACC. The data is collected from Traveline National Dataset (TNDS) and Association of Train Operating Companies (ATOC) as well as NAPTAN stop references.

The public transport timetable data obtained for this task was 2020 Q1 – representing the 2nd week January 2020 – and covers the extents of Scotland. This is the last available public transport network dataset pre Covid-19 pandemic. The modes available and used in the calculations are:

- Bus
- Coach
- National Rail
- Tram (this refers to both Edinburgh Trams and Glasgow Subway); and
- Ferry

Scheduled air services are not included in the timetable dataset. As for the location data, these were sourced in the following ways:

- GP - NHS Open Data
- Hospitals - Information Services Division (ISD)
- Primary School - 'Scottish School Roll and Locations' (2021)
- Secondary School - 'Scottish School Roll and Locations' (2021)
- Further Education - Universities Scotland, Colleges Scotland, and UCAS.
- Higher Education - Universities Scotland, Colleges Scotland, and UCAS.
- Food Outlets - GEOLYTIX Retail Points (2018)
- Train stations - All National Rail train stations as at February 2022
- Airports - Main commercial airports: Aberdeen, Edinburgh, Glasgow, Glasgow Prestwick and Inverness.

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