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# Smart and Integrated Ticketing in Scotland

Analysis of the results of the 2023 survey

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## **Executive Summary**

This survey was designed to understand opportunities to enhance smart and integrated ticketing, and journey-planning services in Scotland. The survey ran from 30<sup>th</sup> March 2023 to 14<sup>th</sup> May 2023. It was distributed through social media, and shared further by local news websites, community councils, schools and transport operators. Scottish Government staff were also invited to participate.

1,029 people responded to the survey. 1,011 (98%) respondents had used public transport in Scotland in the 12 months prior. The survey respondents are not a representative sample, and this should be taken into account when considering results.

## **Travel patterns**

- Walking or wheeling was the most common way to travel, with 83% of respondents travelling this way at least a few times a week.
- 62% used public transport at least a few times a week.
- Of those who had used public transport in Scotland in the year before the survey, 79% had made a multi-modal journey. The majority of these journeys included train (80%) and bus or coach (74%).
- 56% of respondents had made multi-operator journeys. Of these the majority had travelled by train (46%) or bus (45%).

## Main themes

The key findings of the survey have been split into three themes: integrated ticketing, smart ticketing and payment types, and journey planning and <u>Mobility as a Service</u>. Improved integrated ticketing was ranked the most important of the three survey themes by respondents, followed by smart ticketing and then journey planning.

### Integrated ticketing



think value for money would increase use of integrated tickets

- 14% of respondents (113 people) had used an integrated ticket in the year before the survey. Of these, 72% had used a multi-operator train ticket. This was by far the most common type of integrated used.
- Most respondents (91%) agreed that 'value for money' would be likely to increase their use of integrated tickets, while being 'readily available' and 'easy to use' were both seen as key factors by 86% of respondents.

#### Smart ticketing and payment types



- 63% had previously used a smartcard for public transport. 58% of these were not aware that any one smartcard could be used across multiple transport modes and operators.
- Bus/coach and train users were the groups most satisfied with smart ticketing. 61% of bus/coach users were satisfied with smart ticketing for that mode, while 19% were not. 60% of train users were satisfied, while 21% were not.
- Ferry users were the least satisfied with smart ticketing. 20% of ferry users were satisfied with smart ticketing for that mode, while 33% were dissatisfied. (To note: This survey was undertaken before CalMac introduced their new Ar Turas ticketing system in Summer 2023 which now offers electronic 'etickets').
- A majority of respondents would like to use Tap On (Tap Off) payments and digital ticketing in future (56% and 64%, respectively).
- 81% of National Entitlement Card users would like to keep using their smartcard for concessionary travel. 64% would like to use the service on an app or their smartphone.

• 76% of respondents would use smart ticketing in future. Key factors to increase smart-ticketing use are simplicity (88% agreed), ease of set up (86% agreed), and reliability (85% agreed).

## Journey planning and Mobility as a Service



- 82% of respondents used transport operators' apps or websites to find public transport travel information.
- 11% of respondents were aware of the Mobility as a Service pilots funded by Transport Scotland.
- The most highly-valued features of a potential journey-planning app would be real-time travel information and live disruption alerts (98% agreed).

## Introduction

### Survey purpose

Transport Scotland is refreshing its <u>2018 Smart Delivery Strategy</u>. For this, Transport Scotland is establishing what projects and programmes it should focus on over the next 5-10 years. Some potential projects are a continuation of existing projects, or part of the Programme for Government or the Transport (Scotland) Act 2019.

This survey addressed three themes to understand opportunities to enhance smart and integrated ticketing:

- 1. Integrated Ticketing: What is most important to people in relation to integrated ticketing?
- 2. Smart ticketing: Contactless, mobile payments and smartcards are all available, but what do people like using for different modes, and for concessionary travel? In addition, are people interested in Account Based Ticketing?
- 3. Journey Planning: How can we enhance Traveline Scotland to support the way people plan journeys and buy tickets? Are people aware of Transport Scotland's Mobility as a Service pilots?

## Methodology

This online survey ran from 30<sup>th</sup> March 2023 to 14<sup>th</sup> May 2023. It was distributed through social media, and shared further by local news websites, community councils, schools and transport operators. Scottish Government staff were also invited to participate in the survey.

Transport Scotland engaged with transport operators during the survey's development to ensure it met their needs as well as Transport Scotland's.

In this report, percentages are usually rounded to the nearest whole number for readability. Some questions allowed selection of multiple answers, therefore the sum of the percentages do not always equal 100%. A copy of the survey is available in Annex 1.

## **Respondent profile**

1,029 people responded to the survey. 1,011 (98%) respondents had used public transport in Scotland in the 12 months prior. One-quarter of respondents (259) were users of national concessionary travel schemes in Scotland.

Respondents were recruited through social media (28%); transport operator's own email or social media (16%); and through word of mouth, local press and local authorities (19%). Scottish Government staff were also invited to participate. Just over half of respondents (51%) identified as male, 45% as female, and 1% as non-binary. This is shown in Chart 1.

Chart 1 - Respondents' gender



The largest proportion of respondents (24%) were aged 33-42, as shown in Chart 2.

Chart 2 - Age profile of respondents

The data are also available in Annex Table 1.



Around one in 10 (11%) respondents reported having a physical health condition, with 6% reporting a mental health condition. A small number (2%) reported having both types of condition.

Responses were received from people in all 32 local authorities, as well as 14 responses from people outside Scotland. The largest proportion (35%) were based in Glasgow or Edinburgh. Information on geographical distribution of respondents is shown in Chart 3.

Chart 3 - Percentage of respondents living in each council area and outside Scotland

The data are also available in Annex Table 2.



In line with this, 65% stated that they usually travelled in the Greater Glasgow area, with 56% usually travelling in Edinburgh and the Lothians; and 19% usually travelling in the Highlands. There is more detail about respondents' areas of travel in Chart 4

which shows that the majority of respondents usually travelled in Greater Glasgow, and Edinburgh & Lothians. 65% of respondents usually travelled in the Greater Glasgow area. 55.8% travelled in Edinburgh and the Lothians.

Chart 4 - Parts of Scotland in which respondents usually travelled





### Access to payment technologies

Respondents were asked if they had access to any of three technologies that could be used for smart ticketing: 93% had smartphone access; 91% had access to contactless payments; and 90% could make online payments.

Access to these technologies varied by age and location, and to a lesser extent by disability status and gender. Chart 5 shows that, as may be expected, a higher proportion of those aged 16-32 could access these technologies than those aged 60+. Access to the technologies exceeds 80% for all age brackets, although it decreases with age.



The legend is presented in the same order as the bars in the clusters.

Chart 5 - Proportion of respondents with access to the technologies, by age

Chart 6 shows that access was highest among those in large cities, and lowest among those in remote areas.

Chart 6 - Proportion of respondents with access to the technologies, by location

The legend is presented in the same order as the bars in the clusters. The four regional classifications are based on the <u>Scottish Government Urban-Rural Classification 2020</u>



Chart 7 shows that non-disabled people had greater access to smart ticketing technologies than disabled people, especially to smartphones. The information in

charts 5, 6 and 7, and the data for gender differences, is also available in Annex Table 4.

Chart 7 - Proportion of respondents with access to the technologies, by disability status



The legend is presented in the same order as the bars in the clusters.

## Views on the themes of the survey

Respondents were asked to rank each of the three themes in order of importance to them.

Improved integrated ticketing was the most important theme to respondents, followed by improved smart ticketing, and lastly, improved journey planning.

Chart 8 highlights the most popular response at each level of importance. 49% of respondents indicated that the most important theme to them was improved integrated ticketing. The chart shows that improved smart ticketing was the second most important theme, while improved journey planning was the least important theme. These results align with many of the findings described below, where respondents emphasised the importance to them of integrated ticketing. The information in Chart 8 is also shown in Annex Table 5.

Chart 8 - Survey themes ranked by order of importance to respondents



The legend is presented in the same order as the bars in the clusters.

## **Transport use**

## Modes and frequency of use

Chart 9 shows how frequently respondents used the most popular modes of transport in the past 12 months. (For further information on lesser used modes see Annex Table 6.)

The most common way to travel was by walking or wheeling. 83% travelled this way at least a few times a week.

The proportion of people undertaking active travel at least a few times a week was 97%. The next most popular mode of transport was private vehicle, including cars, vans, motorcycles and mopeds. These were used by 62% of respondents at least a few times a week. 62% travelled by some mode of public transport at least a few times a week: the most frequently used public transport mode was bus or coach, with 29% of all respondents traveling this way at least a few times a week.

Chart 9 - Proportion of respondents travelling by walking/wheeling, private vehicle, bus/coach, and train in the previous 12 months



The legend is presented in the same order as the bars in the clusters.

## Multi-modal and multi-operator journeys

Multi-modal journeys were defined in the survey as those made using multiple types of public transport. Multi-operator journeys were defined as journeys using "the same mode, but different operators."

Of those who had used public transport in Scotland in the year before the survey, 79% had made a multi-modal journey. The majority of these journeys included train (80%) and bus or coach (74%).

Chart 10 shows the frequency with which different modes were part of a multi modal journey. The majority of respondents who made multi-modal journeys travelled by train (80%) and bus/coach (74%).

Chart 10 - Proportion of respondents who had made a multi-modal journey in the previous 12 months



The data are also available in Annex Table 7.

Evidence from around the world shows that women are more likely than men to trip chain (making several small, interconnected trips), rather than making a single trip from home to their ultimate destination (e.g. <u>National Travel Survey - Trip Chaining</u>,

<u>Women's Safety and Security: A Public Transport Priority</u>). However, 80% of male respondents had made a multi-modal journey in the year before the survey, compared with 78% of women. Men and women were equally likely to have made a multi-modal journey including buses, with 74% of each traveling this way. Women were more likely than men to have made multi-modal journeys including trams (15% of women to 13% of men), flights (11% of women to 7% of men) and taxis (16% of women to 7% of men).

56% of respondents had made multi-operator journeys. Of these the majority had travelled by train (46%) or bus (45%).

A small proportion of respondents (4%) had made a ferry-to-ferry multi-operator journey.

As with multi-modal journeys, men were more likely than women to have made a multi-operator journey: 61% of men had done so, compared with 49% of women.

## Integrated ticketing – use and views

In the survey, an integrated ticket was defined as a single ticket valid for use on all parts of a journey.

79% of all respondents would like to use integrated tickets in future.

14% of people who had made a multi-modal journey had used an integrated ticket, reflecting the current availability and access to integrated ticketing. 72% of those who had used an integrated ticket had used multi-operator train tickets, making these the most popular type of integrated ticket. Table 1 provides more detail on these results.

Table 1 – Frequency with which integrated tickets were used. Bold text identifies the most common frequency for each ticket.

	5 + days a week	Few times a week	Few times a month	Less than monthl y	1-2 times a year	Less than yearly	Total responses within the survey
Multi-operator rail ticket	0%	4%	16%	30%	41%	10%	81
Rail & Sail	3%	0%	3%	6%	18%	70%	33
SPT ZoneCard	13%	0%	0%	3%	13%	72%	32
SPT Roundabout Ticket	0%	0%	7%	3%	13%	77%	30
PlusBus	0%	0%	13%	3%	17%	67%	30
GrassHopper (Aberdeenshire)	0%	0%	3%	7%	3%	86%	29
Glasgow Tripper	0%	0%	3%	7%	7%	83%	29
Rail Rover tickets	0%	0%	3%	3%	10%	83%	29
One-Ticket	0%	4%	4%	4%	7%	82%	28
Lothian Ridacard	0%	7%	7%	4%	4%	79%	28
RailBus	0%	0%	4%	7%	4%	86%	28
Other	18%	14%	4%	4%	11%	50%	28
ABC (Dundee and East Fife)	0%	0%	0%	0%	0%	100%	27
Don't know	4%	0%	11%	15%	19%	52%	27

Although few respondents were currently using them, a large majority indicated that they would be likely to use an integrated ticket in future, given any of the suggested incentives (see Chart 11). 70% of respondents could be incentivised to use integrated ticketing in future for a range of features. 91% would be incentivised by the ticket providing good value for money. Less than half (47%) of respondents would be incentivised by a monthly subscription providing unlimited travel on all modes. More detail on responses to this question is provided in Annex Table 8.

#### Chart 11 - Likelihood that respondents could be incentivised to use integrated tickets

The legend is presented in the same order as the categories within the bars.



The results shown in Chart 11 were fairly consistent across ages, disability status and gender. Chart 12 shows that people in urban or large city areas were more favourable towards integrated tickets than those living in remote areas, although a majority of respondents from all areas were still in favour of integrated ticketing. More research is needed to understand why this is, but may be due to availability of transport and number of different operators in rural areas.

This information is also shown in Annex Table 9. The four regional classifications – accessible, large city, remote and urban – are based on the <u>Scottish Government</u> <u>Urban-Rural Classification 2020</u>, and are broken down in Annex 3 - Disaggregated data.

Chart 12 - Proportion of respondents who would (or would not) use integrated tickets in future, by location



The legend is presented in the same order as the bars in the clusters.

Those aged 60+ were less enthusiastic about integrated tickets being available as a monthly subscription than other age groups: 26% would be incentivised by this feature, compared to 58% of people aged 16-32, and 50% of those aged 33-59. Just under a third (30%) of those aged 60+ would not find this to be an incentive, compared with 16% of people aged 16-32, and 22% of those aged 33-59. This may reflect travel patterns and transport modes available, rather than differing attitudes between age groups to the idea of a subscription itself.

Respondents were also asked if there was anything else that would encourage them to use an integrated ticket. The most common response was that respondents would like to use an integrated ticket which covered different modes, and took into account discounts already in place for the user. Respondents also mentioned the need for

more flexible tickets, which covered different local authorities, times, prices and formats.

"The ability to mix between bus, train and subway without it costing a fortune. If you live on the outer edges of Glasgow/Paisley then the number of zones you pass through, makes it utterly unaffordable."

Two respondents praised the ZoneCard system in the Strathclyde Partnership for Transport (SPT) region, but suggested it should be extended.

"The SPT ZoneCard in Glasgow is excellent, but it needs to be available as a daily ticket, with choice of start date (other than a Sunday)."

A number of people highlighted the importance of continuing availability of paper tickets, for practical or personal reasons:

"Having a system that works in broadband/mobile blackspots."

*"Prefer paper tickets to be readily available (including print at home) as I do not like to rely on having a working mobile phone."* 

"NO. Tickets need to be available to buy with cash on site. Anything else should be an extra otherwise it is discriminatory."

Respondents referred to systems they had used elsewhere, including London, Hong Kong, and the Netherlands, where there are multi-modal and multi-operator tickets, and fares are capped.

"It's not simply about having one ticket, across modes; the goal should be about having properly integrated ticketing, the fares of which are calculated across modes, depending on the share of the total journey...and there is no financial detriment to taking more than one mode, which there is at present. The transport system should be experienced as a whole and tickets should be automatically calculated to be the simplest and most affordable, depending on journey length."

The ability to easily combine cycling with use of public transport was also mentioned. Some people stated that they would like bicycle hire to be included in integrated tickets.

# Smart ticketing, payment and other ticket types

63% of respondents had used a smartcard in the past. 58% of these were not aware that smartcards were interoperable.

In the survey, 'interoperable' was defined as the ability to:

"load one operator's ticket onto another smartcard. For example, a Stagecoach ticket onto your ScotRail smartcard, or Glasgow Subway ticket/Pay As You Go credit onto your National Entitlement Card."

12% of those who had used a smartcard had used them in this way. 78% of those who indicated they were not aware that smartcards were interoperable would take advantage of this ability in future.

Satisfaction with smart ticketing was high overall, especially among users of bus/coach (61%) and train (60%)

Respondents were asked how satisfied they were with smart ticketing and payments on different modes of transport. The results for people who had used each mode in the previous year are shown in Chart 13. It is important to note that the number of respondents who were users of bike hire schemes or car clubs in the previous year was very low: 69 people had used bike hire schemes, while 31 had used car clubs.

Satisfaction with smart ticketing was high overall, especially among users of bus/coach (61%) and train (60%). For most other modes, respondents were more satisfied than dissatisfied with smart ticketing. However, for ferries 33% of users were dissatisfied with smart ticketing, and 20% were satisfied, but this survey was undertaken before CalMac introduced their new Ar Turas ticketing system, which now provides electronic e-tickets. More detail on these results is available in Annex Table 10.

Chart 13 - Proportion of users of each mode who were satisfied with smart ticketing



The legend is presented in the same order as the categories within the bars.

Respondents were also asked what ticket types they had used in the year before the survey, and compared this with the ticket types they would like to use in future. Across all modes, over two-thirds (67%) had used paper tickets bought by contactless, which was the most frequently used ticket type. The least frequently used ticket type in the year before the survey was pay-as-you-go (PAYG) smartcard, used by only 13% of respondents.

In the table, "Digital ticket" refers to tickets available on an app, as an m-ticket or as an e-ticket. "Contactless – TO(TO)" refers to paying for travel using a tap-on (and in some cases, tap-off) system, where no ticket is issued, and travel is charged at the end of the day or week.

## Most people would like to use digital tickets (64%) or contactless payment Tap On (Tap off) (56%) in the next year.

28% of respondents would like to continue using paper tickets bought by contactless. For all modes apart from train, aviation and car clubs, respondents would most prefer to use a different ticket type to one they had used previously.

Table 2 - Previously used ticket types compared with types respondents would like to use, across all modes. Respondents were able to select multiple options per mode, therefore the sum of percentages does not necessarily equal 100%. "Smartcard for concessionary travel" is not available as a future preference as the question refers to future non-concessionary travel.

Ticket Type	Used in past 12 months across all modes & among all respondents	Preference for future non-concessionary travel across all modes & among all respondents
Smartcard for concessionary travel	23%	Not applicable
Smartcard - with pre-purchased ticket	25%	40%
Smartcard - pre-loaded with money (Pay As You Go)	13%	30%
Contactless - paper ticket	67%	41%
Contactless - TO(TO)	39%	56%
Digital ticket	62%	64%
Paper ticket (not bought by contactless)	47%	28%

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Table 3 - Previously used ticket types compared with types respondents would like to use, by mode. Respondents were able to select multiple options per mode, therefore the sum of percentages does not necessarily equal 100%. Respondents did not need to provide a preference for each mode. Therefore, lower usage of modes results in lower percentages. The key factor with each mode is the ranking of the preferred ticket types.

Mode	Past 12 months: Most common ticket type among users of that mode	% who had used it	Future: Preferred ticket type among all respondents	% who would like to use it	Future: 2 <sup>nd</sup> most preferred ticket type among all respondents	% who would like to use it
Bus/Coach	Contactless - paper ticket	43%	Contactless - TO(TO)	52%	Digital ticket	50%
Train	Digital ticket	50%	Digital ticket	56%	Contactless - TO(TO)	47%
Subway	Contactless - paper ticket	21%	Contactless - TO(TO)	35%	Digital ticket	30%
Tram	Contactless - paper ticket	22%	Contactless - TO(TO)	31%	Digital ticket	27%
Ferry (foot/cycle)	Paper ticket (not bought by contactless)	14%	Digital ticket	21%	Contactless - TO(TO)	16%
Ferry (vehicle user)	Paper ticket (not bought by contactless)	19%	Digital ticket	19%	Contactless - TO(TO)	13%
Aviation (within Scotland)	Digital ticket	6%	Digital ticket	16%	Contactless - TO(TO)	8%
Taxi	Contactless - paper ticket	11%	Contactless - TO(TO)	13%	Digital ticket	12%
Bike hire scheme	Digital ticket	11%	Contactless - TO(TO)	11%	Digital ticket	9%
Car club	Digital ticket	13%	Digital ticket	7%	Contactless - TO(TO)	7%

It is important to note that the people who would like to use a given payment method on a particular mode are not necessarily the people who had used that mode previously.

Table 4 compares how respondents in different regions ranked each ticket type in order of preference, where 1=most preferred and 6=least preferred. Across all modes in accessible areas, large cities and urban areas, the two most popular ticket types were contactless – TO(TO) and digital.

For remote areas, the most popular ticket type for all modes was digital, then smartcards loaded with pre-purchased tickets, with contactless – TO(TO) tickets ranking third. This may reflect that more journeys in remote areas are purchased in advance, or public transport journeys are less frequently taken, or include less stages.

Paper tickets not bought by contactless were the least popular ticket type in large cities and urban areas. PAYG smartcards were the least popular ticket type in accessible and remote areas. The proportion of respondents in each area who chose each option is also presented in Table 4. The most popular option in each region is highlighted.

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Table 4 - Order of preference for different ticket types, by region. In total, there were 6 options respondents could choose from, therefore percentages do not necessarily equal 100%.

Ticket type	Accessible rank	Accessible %	Large City rank	Large City %	Remote rank	Remote %	Urban rank	Urban %
Smartcard - loaded with pre- purchased ticket	4 <sup>th</sup>	9.8%	5 <sup>th</sup>	8%	2 <sup>nd</sup>	15%	4 <sup>th</sup>	7%
PAYG smartcard	6 <sup>th</sup>	7.6%	3 <sup>rd</sup>	9.3%	6 <sup>th</sup>	9%	5 <sup>th</sup>	6%
Contactless - paper ticket	3 <sup>rd</sup>	10.3%	4 <sup>th</sup>	8.8%	5 <sup>th</sup>	11%	3 <sup>rd</sup>	10%
Contactless - TO(TO)	2 <sup>nd</sup>	12%	1 <sup>st</sup>	18.3%	3 <sup>rd</sup>	14%	2 <sup>nd</sup>	12%
Digital ticket	1 <sup>st</sup>	19%	2 <sup>nd</sup>	17.6%	1 <sup>st</sup>	25%	1 <sup>st</sup>	18%
Paper ticket (not bought by contactless)	5 <sup>th</sup>	8.2%	6 <sup>th</sup>	5%	4 <sup>th</sup>	13%	6 <sup>th</sup>	4%

Disabled respondents were more favourable towards smartcards loaded with prepurchased tickets and PAYG smartcards, particularly for flights and taxi journeys. This is shown in Chart 14 and Annex Table 11. Revisiting the findings for modal choice, there does not appear to be any relationship between preference towards ticket types, and frequency with which disabled and non-disabled people use each of these modes.

Chart 14 - Proportion of disabled and non-disabled respondents who would like to use smartcards, by mode.



The legend is presented in the same order as the bars in the clusters.

Those aged 60+ were more favourable than other age groups towards paper tickets not bought by contactless for all modes. While paper tickets were the least popular type for people aged 16-59, PAYG smartcards were the least popular type of ticket for those aged 60+.

## Travel using the National Concessionary Scheme

The 259 respondents who used national concessionary travel schemes (NCT) were asked what devices they would like to use for this.

81% of users of national concessionary travel schemes would be satisfied to continue using their National Entitlement Card. Almost two-thirds (64%) would like to use the scheme on their phone, while 22% would like their concessionary travel to be available on wearable technology.

Disaggregating the results by age, wearable devices were much more popular among younger NCT users: 56% of those aged 16-32 would use the scheme on a

wearable device, compared with 22% of 33-59 year olds, and 13% of those aged 60+. This is shown in Chart 15. The data for charts 15-18 is also available in Annex Table 12.

Chart 15 - Proportion of respondents who would like their concessionary travel available on each format, by age. Respondents were able to select multiple options therefore the sum of the percentages does not necessarily equal 100%.



The legend is presented in the same order as the bars in the clusters.

There is more variation by region, especially for mobile apps/smartphones, as shown in Chart 17. 81% of people in urban areas would like the NCT to be available on their phones. This is compared to 71% of people in large cities, 59% of people in accessible areas, and 44% of people in remote areas. (See Chart 6 or Annex Table 4 for data on access to smartphones and other payment technologies in these areas.)

Chart 16 - Proportion of respondents who would like their concessionary travel available on each format, by location



The legend is presented in the same order as the bars in the clusters.

More disabled people would like to use their NEC and wearable technology than non-disabled people. 88% of disabled people would like to use the NEC, compared to 78% of non-disabled people. 25% of disabled people would use wearable technology to access the scheme, compared with 20% of non-disabled people. However, non-disabled people were more favourable towards using a smartphone for concessionary travel, with 67% in favour compared with 59% of disabled people. These results are shown in Chart 17.

Chart 17 - Proportion of respondents who would like their concessionary travel available on each format, by disability status



The legend is presented in the same order as the bars in the clusters.

Men were more likely than women to have stated they would like to use the three technologies in future, as shown in Chart 18.

Chart 18 - Proportion of respondents who would like their concessionary travel available on each format, by gender



The legend is presented in the same order as the bars in the clusters.

When asked for additional comments about integrated and smart ticketing, one respondent praised the concessionary travel ticketing system in Sydney:

"I would encourage you to consider the Opal system in use in Sydney by which people with concessionary discounts are given a pre-pay concession Opal card which is automatically topped up via e.g. direct debit when it runs low."

This was the only example given of concessionary travel schemes in other places. However, it is worth noting that the National Concessionary Travel Scheme in Scotland provides free travel for users on bus, as opposed to a discount, therefore, differs from the operation of the example referred to above which just provides a discount.

### Future use of smart ticketing

76% of respondents could be encouraged to use smart ticketing in future if more features were available.

Chart 19 shows that a large majority would like to use smart ticketing in future, given any of the proposed incentives. Ease of use was the most cited incentive to use smart tickets in future (88% in favour, 4% not). Just over a third (35%) said that the option of using wearable technology would encourage them to use smart ticketing, while 20% indicated that it would not. This data is also available in Annex Table 13.

#### 100% 7% 6% 7% 7% 4% 4% 5% 5% 5% 90% 5% 20% 4% 6% 5% 5% 5% 6% 12% 13% 80% 70% 25% ■ N/A or don't know 60% Unlikely Proportion of 50% respondents Neither 21% 88% 86% 85% 83% 81% 40% 77% 75% Likely 30% 20% 35% 10% 0% Easy to set up Simple to use Inclusive and One app or I do the same I could use I can see my Technology and get started journey & accessible for smartcard for thing across all wearable always works payment technology all all travel tickets operators history Incentive

The legend is presented in the same order as the categories within the bars.

Chart 19 - Likelihood that respondents could be incentivised to use smart tickets

31

As was the case for NCT users, interest in using wearable technology decreased with age, although around a quarter of 60+ respondents would still be incentivised by it. This is shown in Table 5.

Age bracket	Would be incentivised by wearable technology	Would not be incentivised by wearable technology
16-32	42%	20%
33-59	35%	25%
60+	24%	29%

Table 5 - Proportion of respondents who would (and would not) be incentivised by wearable technology as a platform for smart ticketing

Annex Table 14 show that a majority of people in all areas in Scotland would be use smart ticketing in the future, with the highest being in large city regions, and less in remote areas. This may reflect transport availability in the regions as well as digital connectivity and access.

Chart 20 – Proportion of respondents who would (or would not) use smart ticketing in future, by location.



The legend is presented in the same order as the bars in the clusters.

Respondents were asked if there was anything else that would encourage them to use smart tickets. The majority of responses fell in line with the options already presented. Responses also echoed those provided to the question, "Is there anything else that would make you use an integrated ticket more?" (see page 19). The most common response concerned value for money and/or affordability as something that would encourage respondents to use smart ticketing more. This included standardised pricing across modes, capped fares per day, and smart ticketing providing better value for money than an alternative.

## "Smart ticketing needs to be the easiest way to get the cheapest price."

A small number of respondents wanted to see integrated smart ticketing that extended across Scotland (and in one case into England), as this would allow them greater flexibility of travel. Many respondents referred to systems elsewhere (including London), stating that they would use smart ticketing more if it was integrated across modes and providers, and/or worked using contactless payments from their bank cards. "I worry that focus is being given to delivering smart ticketing platform which allows multiple tickets to be purchased across different operators and modes, when the real problem to be solved is in reducing the number of individual tickets which need to be purchased at all. Integrated ticketing, offering use of multiple modes across multiple operators with just one single ticket purchase, should be the goal."

"The model used on the Glasgow Subway is perfect (albeit could be even better if you can use bank card contactless payments at the gate I.e like TfL [Transport for London].)"

A small number of respondents stated that improved transport services more generally, including greater reliability and improved timetabling, would be an incentive for them to use smart ticketing.

## Journey planning and Mobility as a Service

## Journey planning

Chart 21 shows that most respondents found travel information in a number of places.

The majority – 82% – used transport operators' apps or websites to find public transport travel information.

Over a quarter (27%) used Traveline Scotland. None of the 12% of respondents (121 people) who used paper timetables and maps relied on these as their only source of information, with most (105 people) also using transport operators apps or websites.

Chart 21 - Proportion of respondents using a range of sources of travel information

The data is also available in Annex Table 15.



People aged 60+ were more likely to use Traveline Scotland than bus stop information (38% for Traveline Scotland, 28% for bus stop information). Chart 22 and Annex Table 16 show that people in remote areas were more likely than people living elsewhere to use paper timetables and maps. People in large cities were more likely than others to use third party travel planning apps and Google/Apple/Bing maps.

Chart 22 – Proportion of respondents using online and paper maps, and third party travel planning services, by location



The legend is presented in the same order as the bars in the clusters.

## Mobility as a Service

Mobility as a Service features in the <u>Scottish Government National Transport</u> <u>Strategy Delivery Plan (2022-2023)</u> (NTS2) as one way to increase use and availability of low carbon technologies and approaches to transport. The MaaS pilots supported by the Scottish Government

> "offer innovative digital data-driven solutions that provide people with better information, and easier access to sustainable transport options, in order to make public transport travel a viable alternative to the car. i.e., providing a 'one-stop-shop' for multimodal journey planning and tickets." (NTS2, p.20)

The pilots are briefly described on <u>Transport Scotland's website</u>. Of all respondents, 11% had heard of the Mobility as a Service pilots.

## Journey planning apps and websites

Timetables, fares and availability, real-time information, and live disruption alerts were the most popular of the proposed features of a journey-planning app or website.

98% of respondents agreed that it would be useful for journeyplanning apps or websites to show real-time information and live disruption alerts.

A very small minority (0.4 to 0.5%) stated that these features would not be useful. The least popular feature, with only 33% agreeing it would be useful and 35% stating it would be not be useful, was the ability to book non-travel elements of a journey, such as hotels or activities. The most popular response for each suggested feature is highlighted in Table 6.

Table 6 - Proportion of respondents who would find the proposed features of a journey-planning app or website useful or not useful. Bold percentages text identifies the most popular answer.

Proposed feature	Very useful	Somewhat useful	Neither	Not very useful	Not at all useful	Don't know
Assistance with journey planning	47%	35%	11%	3%	2%	3%
Timetables of services	80%	17%	2%	0%	0%	1%
Checks fares and availability	81%	16%	1%	0%	1%	1%
Realtime information	86%	12%	1%	0%	0%	2%
Live disruption alerts	84%	14%	1%	0%	0%	1%
Suggested alternative routes when disrupted	69%	26%	3%	1%	1%	1%
Ability to book & purchase tickets	75%	18%	4%	1%	1%	2%
A place where all your tickets & payments are in one place	75%	15%	6%	1%	2%	1%
Accessible travel information	50%	23%	17%	3%	2%	5%
Personalised travel information	43%	30%	18%	3%	3%	4%
Travel incentives & rewards	46%	25%	19%	4%	4%	3%
Information about emissions of different journey options	20%	26%	26%	9%	13%	5%

Proposed feature	Very useful	Somewhat useful	Neither	Not very useful	Not at all useful	Don't know
Ability to book/pay for types of transport other than bus, train and ferry: e.g. Demand Responsive Transport, car share, cycle hire, taxis.	35%	25%	18%	8%	6%	8%
Ability to book non-travel elements of your journey e.g. hotels / activities.	14%	19%	25%	18%	17%	7%
Active & leisure travel routes (i.e. walking & cycling)	29%	31%	18%	7%	9%	6%

Chart 23 shows that interest in information about active and leisure travel routes, and emissions decreased with age. There is more detail about this data in Annex Tables 17 and 18.

Chart 23 - Perceived usefulness of features of a journey-planning app or website, by age



The legend is presented in the same order as the categories within the bars.

Respondents were asked if there was anything else that would encourage them to use a journey planning app or website. Most responses were an extension of or variation on the features previously suggested, e.g.

"One stop shop for all not just the able."

Seven respondents said that the app or website should contain information for cyclists, e.g. hazards on cycle routes, and information about space for bikes on trains. Four respondents said that an app which allowed users to link public transport with active travel would be welcome.

"Sometimes planning apps find me a route that involves multiple changes. In many cases I'd rather walk a bit further and have fewer changes...An app that could prioritise walking preferences would be a game changer."

Seven respondents said that an app should have network maps, including downloadable maps, with three others saying that information on the app should be accessible offline.

## **Respondents' final thoughts**

To conclude the survey, respondents were asked if there was anything else they would like to add about smart and integrated ticketing. Many of the responses echoed previous comments, especially about integrated ticketing in other countries, mobile coverage, integration of services, and information for cyclists. Thirty-nine people said that integrated tickets in Scotland should function like those in other places.

"Something like the monthly subscription for regional transport that they have in Germany would be a brilliant idea. Why are there no zones like you get in London. It means you have some proper choice for days out that don't cost any more."

"The ideal would be an Oyster-style contactless system. Use contactless card on any mode of transport, automatic capping and cheapest fares, web portal and mobile app to see all history."

Thirty-one people stated that services themselves should be integrated, nationally and across all providers including ferries and air.

"If the services don't work well together (e.g. ferry-to-train transfers, which frequently don't work) no amount of integrated ticketing will help things."

Twenty-nine respondents said that transport services need to be reliable and high quality, across all parts of Scotland, before smart/integrated ticketing is implemented.

*"improved reliability and affordability of public transport (particularly buses) should go hand-in-hand with more integrated ticketing/payments. The lack of reliability of public transport, and the lack of coordination between different operators/modes of transport, makes getting around by public transport a real chore."* 

"Due to high costs of transport introduce a Western Isles smart card (pay lowered sum annually) for internal travelling throughout Western Isles to encourage public transport usage, and that can be also used for cheaper connecting public transport on mainland."

"Significant improvement in the transport infrastructure - not just in the Central Belt but to more rural areas. No point having a smooth ticketing solution if only the people in large cities can benefit"

Ten people stressed that all types of ticketing need to be accessible for disabled people, elderly people and people experiencing poverty. One person asked that community transport services be considered alongside those run by commercial operators.

## Issues with digital or contactless solutions

A number of respondents made the point that technology was not always the most desirable solution to ticketing or transport issues.

"I particularly resent not having paper tickets available where a smartphone or app is required (I don't have a phone and I don't want to feel like I ought to get one just to access cheaper public transport)."

"Any smart ticketing/integrated ticketing system should not disproportionally affect the elderly, poor or disabled. For example, many elderly don't have access to smartphones or internet access or just won't use them due to a lack of trust or understanding. Forcing everything online is not a great option for these groups."

One person said that they were no longer using public transport because they do not have access to a mobile or contactless payments. Twelve reiterated that cash payments should be available to those who want or need it. Five of these tied the ability to continue using cash to their right to privacy.

## Conclusion

Integrated ticketing was the most important theme to respondents. In future, 79% would like to use an integrated ticket and 76% would use smart ticketing.

The survey explored usage of and views on smart and integrated ticketing for public transport in Scotland. 1,029 people responded to the survey, and 1,011 had used public transport in Scotland in the year prior to this. The most frequently used mode of public transport was bus or coach. The survey respondents are not a representative sample, and this should be taken into account when considering results.

The results highlight the importance of ensuring that any smart or integrated ticketing is accessible to all, regardless of personal characteristics such as location or age. Those living in remote areas expressed enthusiasm for using integrated tickets and smart payments, but the response was stronger in urban, large city and accessible areas. Respondents in remote areas were also more likely to use paper timetables and maps for journey planning than people in other areas, although a majority of respondents from remote areas still preferred to use online mapping services to plan journeys.

Most respondents had made multi-modal and multi-operator journeys in Scotland in the year before the survey. The majority of those who had made a multi-modal journey (86%) but had not used an integrated ticket for these trips. A large majority expressed interest in using an integrated ticket in future, especially if they offered good value for money, and were readily available and easy to use.

The most frequently used ticket type overall was a paper ticket bought by contactless payment. In the next 12 months, respondents would like to use digital tickets and contactless payment using tap-on (tap-off) systems. People aged 60+ were more open to using paper tickets than other age groups.

Respondents were familiar with integrated and smart ticketing used in other parts of the UK and around the world. These systems appealed to them because they worked across modes and operators, and included capped or flat fares that were standardised across operators.

Less than half of those who had used a smartcard before taking the survey were aware that they were interoperable, but many people expressed an inclination to use them in this way in future. The majority of those who had used the National Concessionary Travel Scheme would be satisfied to continue using their National Entitlement Card. However, even though access to digital payment technologies decreases with age, a majority of respondents from across the age groups would also like to access the scheme via mobile apps/smartphones, particularly those from large cities and urban areas.

More disabled people would like to use wearable technology than non-disabled people to access the National Concessionary Travel Scheme, and a majority of disabled users would like to use a National Entitlement Card or mobile apps/smartphones. This result demonstrates the importance of ensuring that tickets are available in formats suitable for the range of people's requirements.

Most respondents used transport providers' websites to find public transport travel information, and 11% of respondents were aware of the MaaS pilots running in Scotland in 2023. Respondents showed interest in using journey planning websites or apps, especially if these gave timetables, information on fares and availability, real-time information and live disruption alerts.

In summary, respondents generally expressed enthusiasm for simplicity, with having one ticket or system that would work across modes and operators, and provide good value for money. They would prefer to use digital tickets, or contactless payments. Whatever the format, the tickets should be easy to use, reliable, and accessible.

## Annex 1

## Survey

1) \* Over the past 12 months have you used public transport in Scotland?

Public transport includes bus, train, ferry, subway, tram, bike hire schemes, car clubs, flights within Scotland, taxi, etc.

o Yes

• **No** 

2) \* Do you use any of the national concessionary travel schemes in Scotland?

For more info, please see - <u>A Guide to Concessionary Travel (transport.gov.scot)</u> These include, for example: 60+ and disabled, Young Persons' Free Bus Travel, Ferry concessions

- o Yes
- o No
- **3)** Roughly, how often have you used the following types of transport in the past 12 months in Scotland?

Respondents to select from one of the following for each mode:

- o 5+ days a week
- Few times a week
- Few times a month
- o Less than monthly
- o 1-2 times a year
- Less than yearly
- o Not applicable/Never

#### Modes:

- Walking/wheeling
- Private car/van/motorcycle/moped
- o Bus/coach
- o **Train**
- $\circ$  Subway
- o **Tram**
- o Ferry
- Aviation (flights within Scotland)

- o Taxi
- Private bike (including e-bike)
- o Bike hire scheme
- o Car club

4) \* In the past 12 months, have you made a multi-modal journey in Scotland?

A multi-modal journey is a journey using multiple types of public transport - i.e, bus and train, bus and tram, ferry and train, etc.

- o Yes
- **No**
- o Don't know

5) \* Thinking about your most recent multi-modal journey, which public transport modes did it include?

- o Bus / Coach
- o **Train**
- o Subway
- o **Tram**
- Ferry
- Aviation (flights within Scotland)
- o Taxi
- Bike hire scheme
- Car club
- o Other

6) In the past 12 months have you made a multi-operator journey in Scotland?

A multi-operator journey is one that uses the same mode, but different operators. (e.g. travelling on more than one bus operator such as McGills to First etc, or for rail, LNER to ScotRail etc.)

- o Yes
- o No
- o I don't know

7) \* Thinking about your most recent multi-operator journey, what mode was it on?

- o Bus to bus
- Train to train
- $\circ$  Ferry to ferry
- o Other

8) \* When undertaking your multi-operator or multi-modal journey, did you use an integrated ticket?

An integrated ticket is a single ticket that then gives you travel on all parts of your multi-operator and/or multi-modal journey

- o Yes
- o **No**
- o Don't know

9) Please indicate which integrated ticket/card you used and the frequency.

(Rail Rover tickets include include the Central Scotland Rover, Highland Rover, Scottish Grand Tour, Spirit of Scotland: <u>Scotland & Highland Rover Train Tickets |</u> <u>ScotRail | ScotRail</u>)

Participants to select from one of the following for each integrated ticket listed:

- o 5+ days a week
- Few times a week
- Few times a month
- o Less than monthly
- o 1-2 times a year
- Less than yearly

Integrated tickets:

- ABC (Dundee and East Fife)
- GrassHopper (Aberdeenshire)
- SPT ZoneCard
- o SPT Roundabout Ticket
- o One-Ticket
- o Lothian Ridacard
- o Glasgow Tripper
- PlusBus
- o Rail & Sail
- o RailBus
- Rail Rover tickets
- Rail ticket with more than one operator
- o Other

**10)** Other - please state which integrated ticket you used

11) \* Would the following encourage you to use an integrated ticket more or at all?

An integrated ticket is a single ticket that then gives you travel on all parts of your multi-operator and / or multi-modal journey.

Respondents to select from one of the following for each incentive:

- Very likely
- Somewhat likely
- Neither likely or unlikely
- Somewhat unlikely
- Very unlikely
- Not applicable/Don't know

Incentives:

- I receive only one ticket for multiple journeys (as opposed to multiple tickets from one payment)
- o It's available for more of my journeys
- It's easy to understand and use
- It's available as a monthly subscription covering unlimited travel on all modes of transport
- It's available on smart (smartphone app/contactless/smartcards)
- It provides good value for money
- It's more flexible for my needs (e.g not just day/week/month tickets)
- o It's well publicised
- o It's readily available
- More types of transport are integrated
- I receive only one ticket for multiple journeys (as opposed to multiple tickets from one payment)
- It's available for more of my journeys
- It's easy to understand and use
- It's available as a monthly subscription covering unlimited travel on all modes of transport
- 12) Is there anything else that would make you use an integrated ticket more?
- 13) For the following types of public transport in Scotland, how satisfied are you with the availability of smart ticketing and payments in Scotland?

Smart ticketing includes smartcards and smartphone apps (m-tickets/barcodes etc.)

Smart payments include contactless payments, smartphone payments, Pay As You Go on a smartcard, etc.

For more info about smart ticketing, see our smart travel website.

Respondents to select from one of the following for each mode:

- Very satisfied
- Somewhat satisfied
- Neither satisfied or dissatisfied
- Somewhat dissatisfied
- Very dissatisfied

#### Modes:

- o Bus/Coach
- o **Train**
- Subway
- o **Tram**
- o Ferry
- Flight
- o Taxi
- o Bike hire
- Car club

For the following two questions:

- Contactless payment "Tap On", no ticket, travel charged end of day/week, includes: <u>TapTapCap</u> (Lothian) / <u>Tap On, Tap Off</u> (First) / <u>Tap, Cap & Go!</u> (McGill's).
- Contactless payments include tapping a smartphone with Apple Pay / Google Pay.
- 14) During the past 12 months, which of the following have you used for journeys in Scotland?

Respondents to choose from one of the following for each payment method:

- $\circ$  Bus / Coach
- o **Train**
- Subway
- o Tram
- Ferry (foot/cycle)
- Ferry (vehicle user)
- Aviation (flights within Scotland)
- o Taxi
- Bike hire scheme

- $\circ$  Car club
- Not applicable / Don't use

Payment methods:

- Smartcard for concessionary travel (e.g NEC, Young Scot)
- o Smartcard loaded with pre-purchased ticket
- Smartcard pre-loaded with money (Pay As You Go)
- Contactless payment paper ticket
- Contactless payment "Tap On", no ticket, travel charged end of day/week
- o Digital ticket App / m-ticket / e-ticket
- Paper ticket (not bought by contactless)
- 15) Which of the following would you like to use for non-concessionary journeys in Scotland?

Non-concessionary means journeys <u>not</u> using the concessionary travel scheme (for example: 60+ and disabled, Young Persons' Free Bus Travel, Ferry concessions).

Respondents to choose from one of the following for each payment method:

- $\circ$  Bus / Coach
- o Train
- Subway
- o Tram
- Ferry (foot/cycle)
- Ferry (vehicle user)
- Aviation (flights within Scotland)
- o Taxi
- Bike hire scheme
- o Car club
- Not applicable / Don't use

#### Payment methods:

- o Smartcard loaded with pre-purchased ticket
- Smartcard pre-loaded with money (Pay As You Go)
- o Contactless payment paper ticket
- Contactless payment "Tap On", no ticket, travel charged end of day/week
- Digital ticket App / m-ticket / e-ticket
- Paper ticket (not bought by contactless)

- 16) \* Have you ever used a smartcard? (including operator's smartcards, the National Entitlement Card, Young Scot, or saltirecard)
  - o Yes
  - o No
  - o I don't know
- 17) \* Did you know that smartcards are interoperable?

Smartcard interoperability means you can load one operator's ticket onto another smartcard. For example, a Stagecoach ticket onto your ScotRail smartcard, or Glasgow Subway ticket/Pay As You Go credit onto your National Entitlement Card.

To learn more about smartcard interoperability, see our smart travel website.

- Yes and I've done this
- Yes but I haven't done this
- No but I would like to do this
- No and I wouldn't do this
- o I don't know
- 18) Which of the following would you like your concessionary travel to be available on?

This include the 60+ and disabled, Young Persons' Free Bus Travel, Ferry concessions passes.

- Mobile App / Smartphone
- o Wearable (e.g. wristband / watch / token / keyring)
- o I don't know
- Other (please state)
- **19)** \* Please rate if the following would encourage you to use smart ticketing or payments more often?

Smart ticketing includes smartcards and smartphone apps (m-tickets / barcodes etc.)

Respondents to choose from one of the following for each incentive:

- Very likely
- Somewhat likely
- Neither likely or unlikely
- Somewhat unlikely
- Very unlikely

• Not applicable/Don't know

Smart payments include contactless payments, smartphone payments, Pay As You Go on a smartcard, etc.

Incentives:

- It's easy to set up and get started
- It's simple to use
- It's inclusive and accessible for all
- I use one app or smartcard for all my travel tickets
- I do the same thing across all operators
- I could use wearable technology (e.g wristband / watch / token / keyring)
- I can see my journey & payment history
- The technology always works
- 20) Is there anything else that would encourage you to use smart ticketing or payments more?
- 21)\* Where do you generally find public transport travel information (e.g., routes, times, costs) for journeys in Scotland?
  - Traveline Scotland
  - Bus stop information
  - Paper timetables & maps (leaflets/booklets)
  - Google, Apple, Bing mapping
  - Transport operator's apps / websites (e.g. First Bus, McGill's Buses, ScotRail, CalMac, Subway)
  - Third party ticket retailer (e.g. Trainline, TrainPal, National Rail Enquiries)
  - Third party travel planning app / website (CityMapper, Moovit, GoHi, Rome2Rio)
  - Not applicable / Don't know
  - o Other
- 22)\* Are you aware of any of the following Mobility as a Service pilots being trialled in Scotland?

Mobility as a Service (MaaS) is an emerging concept aimed at providing a comprehensive package of journey planning and transport services.

For more information see our <u>smart travel website</u>.

- $\circ$  Yes
- Yes & have used it

 $\circ$  No

MaaS pilots:

- GOHI (Highlands & Islands)
- National Park Journey Planner (Loch Lomond & The Trossachs National Park)
- o GO NHS Tayside
- My D&A Travel (Dundee & Angus)
- GetGo Dundee
- GO SEStrans (south east Scotland)

23) \* Would you find any of the following useful on a journey planning website or app?

Participants to choose from one of the following for each feature:

- o Very useful
- o Somewhat
- o Neither
- o Not very useful
- o Not at all useful
- o Don't know

#### Features:

- o Assistance with journey planning
- Timetables of services
- Checks fares and availability
- Realtime information
- Live disruption alerts
- Suggested alternative routes when disrupted
- Ability to book & purchase tickets
- o A place where all your tickets & payments are in one place
- Accessible travel information
- Personalised travel information
- Travel incentives & rewards
- Information about emissions of different journey options
- Ability to book/pay for types of transport other than bus, train and ferry: e.g.
  Demand Responsive Transport, car share, cycle hire, taxis.
- o Ability to book non-travel elements of your journey e.g. hotels / activities.
- Active & leisure travel routes (i.e. walking & cycling)
- 24) Is there anything else that you would find useful on a journey planning website or app?

- 25) Thinking about the themes in this survey, please rank each the following in order of importance to you. (1st = most important)
  - o Improved integrated ticketing
  - o Improved smart ticketing (i.e. smartcards / smartphone apps / contactless
  - o Improved journey planning

26) \* How do you identify?

- o Male
- o Female
- Non-binary
- o Prefer not to say
- 27) \* Please indicate your age.
  - o **16-21**
  - o **22-32**
  - o **33-42**
  - o **43-52**
  - o **53-59**
  - o **60-69**
  - o **70-79**
  - o **80+**

28) \* What council area of Scotland do you live in?

- o Aberdeen City
- o Aberdeenshire
- $\circ$  Angus
- Argyll and Bute
- $\circ \quad \text{City of Edinburgh}$
- o Clackmannanshire
- Dumfries and Galloway
- Dundee City
- East Ayrshire
- o East Dunbartonshire
- East Lothian
- o East Renfrewshire
- o Falkirk
- $\circ$  Fife
- o Glasgow City
- o Highland
- o Inverclyde

- o Midlothian
- o Moray
- o Na h-Eileanan Siar
- North Ayrshire
- o North Lanarkshire
- o Orkney
- Outside Scotland
- Perth and Kinross
- Renfrewshire
- o Scottish Borders
- o Shetland
- South Ayrshire
- o South Lanarkshire Council
- o Stirling
- West Dunbartonshire
- West Lothian

29) \* Which general area(s) do you usually travel?

- o Argyll & Bute
- Ayrshire & Arran
- o Edinburgh & Lothians
- Forth Valley
- Greater Glasgow
- Highlands
- North East Scotland
- o Scottish Borders & South East
- South West Scotland
- Tayside & Fife
- Western Isles, Orkney & Shetland
- 30)\* Do you have a physical or mental health condition or illness lasting or expected to last 12 months or more?
  - Yes physical health condition
  - Yes mental health condition
  - Yes both
  - o No
- Prefer not to say
- 31)\* Which of the following do you have access to?
  - o Smartphone
  - Contactless payment (card or phone)

- Ability to make online payments
- $\circ$  Prefer not to say
- 32)\* Where did you come across this survey?
  - Transport Scotland social media
  - o Scottish Government/Transport Scotland corporate
  - o Transport operator social media/email
  - $\circ$  Word of mouth
  - o Other

33)Which transport operator did you hear about this survey from?

34) Is there anything else you want to add about smart and integrated ticketing that hasn't been covered?

## Annex 2

## Data tables

Annex Table 1 – Age profile of respondents

Age range	% of respondents
16-21	3.2%
22-32	17.7%
33-42	23.8%
43-52	20.4%
53-59	17.4%
60-69	14.2%
70-79	2.9%
80+	0.4%

Annex Table 2 – Percentage of respondents living in each council area and outside Scotland, by local authority

Local Authority	% of respondents
	respondents
Aberdeen City	2.3%
Aberdeenshire	0.9%
Angus	0.4%
Argyll and Bute	2.3%
City of Edinburgh	14.3%
Clackmannanshire	0.4%
Dumfries and Galloway	0.3%
Dundee City	1.2%
East Ayrshire	0.5%
East Dunbartonshire	1.8%
East Lothian	2.0%

Local Authority	% of respondents
East Renfrewshire	1.9%
Falkirk	2.0%
Fife	4.4%
Glasgow City	20.4%
Highland	2.7%
Inverclyde	0.9%
Midlothian	2.6%
Moray	0.3%
Na h-Eileanan Siar	9.3%
North Ayrshire	2.3%
North Lanarkshire	3.5%
Orkney Islands	0.2%
Outside Scotland	1.4%
Perth and Kinross	1.2%
Renfrewshire	3.0%
Scottish Borders	3.1%
Shetland Islands	4.1%
South Ayrshire	0.4%
South Lanarkshire	4.5%
Stirling	1.1%
West Dunbartonshire	0.7%
West Lothian	3.6%

Annex Table 3 - Parts of Scotland in which respondents usually travelled

Area	%
Greater Glasgow	65.0%
Edinburgh & Lothians	55.8%

Area	%
Highlands	19.4%
Western Isles, Orkney & Shetland	16.8%
Tayside & Fife	14.9%
Scottish Borders & South East	11.3%
North East Scotland	11.0%
Ayrshire & Arran	10.5%
Forth Valley	10.3%
Argyll & Bute	8.6%
South West Scotland	5.6%

Payment technology	16-32	33-59	60+	Male	Female	Disabled	Non- disabled	Accessible	Large city	Remote	Urban
Smartphone	93%	89.6%	87.2%	90.9%	90.5%	89.6%	91%	92.4%	93.1%	84.5%	89%
Contactless (card or phone)	97.7%	91.3%	80.6%	92.6%	90.5%	88.6%	92.3%	91.3%	95.7%	78.6%	91.7%
Online payments	97.2%	95%	83.3%	95.3%	93.3%	90.5%	95.7%	92.4%	96.9%	84.5%	94.5%

Annex Table 4 - Proportion of respondents with access to the technologies, disaggregated categories

Rank	Improved integrated ticketing	Improved smart ticketing	Improved journey planning
1st	48.2%	31.6%	19.3%
2nd	31.7%	45.0%	22.4%
3rd	19.2%	22.4%	57.2%

Annex Table 5 - Survey themes ranked by order of importance to respondents

Annex Table 6 - Proportion of respondents travelling by walking/wheeling, private vehicle, bus/coach, and train in the previous 12 months

Frequency	Walking or wheeling	Private vehicle	Bus or coach	Train	Subway	Tram	Ferry	Aviation (within Scotland)	Taxi	Private bike (including e-bike)	Bike hire scheme	Car club
5+ days a week	58%	29%	11%	3%	2%	0%	0%	0%	0%	6%	0%	0%
Few times a week	25%	33%	19%	17%	4%	1%	2%	0%	1%	8%	0%	0%
Few times a month	7%	18%	27%	30%	8%	3%	5%	0%	12%	10%	1%	0%
Less than monthly	3%	6%	22%	23%	15%	12%	10%	8%	32%	7%	3%	2%
1-2 times a year	1%	3%	11%	13%	17%	16%	20%	12%	23%	5%	2%	1%
Less than yearly	1%	1%	7%	6%	15%	20%	22%	16%	14%	7%	7%	3%
Not applicable/ Never	3%	10%	5%	8%	38%	46%	39%	63%	17%	56%	85%	93%

Annex Table 7 - Proportion of respondents who had made a multi-modal journey in the prev	vious 12
months, by most commonly-used mode	

Mode	% of respondents
Train	80%
Bus/Coach	74%
Subway	25%
Ferry	19%
Tram	14%
Тахі	11%
Aviation (flights within Scotland)	9%
Other	3%
Bike hire scheme	1%
Car club	0.4%

Annex Table 8 - Likelihood that respondents could be incentivised to use integrated tickets

Incentive	Very likely	Somewhat likely	Neither likely or unlikely	Somewhat unlikely	Very unlikely	Not applicable / Don't know
I receive only one ticket for multiple journeys (as opposed to multiple tickets from one payment)	50%	27%	11%	2%	4%	6%
It's available for more of my journeys	58%	25%	8%	1%	3%	5%
It's easy to understand and use	64%	22%	6%	1%	3%	4%

Incentive	Very likely	Somewhat likely	Neither likely or unlikely	Somewhat unlikely	Very unlikely	Not applicable / Don't know
It's available as a monthly subscription covering unlimited travel on all modes of transport	28%	19%	19%	10%	12%	12%
It's available on smart (smartphone app / contactless / smartcards)	52%	24%	10%	3%	6%	5%
It provides good value for money	76%	14%	3%	1%	2%	4%
It's more flexible for my needs (e.g not just day / week / month tickets)	61%	24%	6%	1%	3%	6%
It's well publicised	44%	27%	18%	2%	4%	5%
It's readily available	62%	24%	6%	1%	3%	4%
More types of transport are integrated	63%	20%	8%	2%	3%	5%

Annex Table 9 - Proportion of respondents who would (or would not) use integrated tickets in future, by location

Location	Would use an integrated ticket	Would not use an integrated ticket
Accessible	76%	9%
Large city	82%	5%
Remote	59%	16%
Urban	77%	7%

#### Annex Table 10 - Proportion of users of each mode who were satisfied with smart ticketing

Mode	Very satisfied	Somewhat satisfied	Neither	Somewhat dissatisfied	Very dissatisfied	Not applicable or don't know	Total users in previous 12 months		
Bus/Coach	26%	35%	12%	10%	9%	9%	896		
Train	21%	39%	13%	13%	7%	7%	864		
Subway	14%	25%	17%	12%	10%	22%	453		
Tram	14%	24%	16%	16%	8%	22%	327		
Ferry	6%	15%	20%	17%	16%	27%	378		
Flight	11%	19%	16%	11%	10%	33%	198		
Taxi	8%	17%	18%	12%	9%	38%	681		
Bike hire scheme	17%	26%	15%	17%	10%	15%	69		
Car club	19%	32%	19%	3%	3%	23%	31		
Regarding fer digital ticketir	Regarding ferries, this survey was carried out before the launch of CalMac's new Ar Turas ticketing system, which provides digital ticketing.								

Annex Table 11 - Proportion of disabled and non-disabled respondents who would like to use smartcards, by mode.

Aviation	Smartcard – loaded with pre-purchased tickets	PAYG smartcard	Taxi	Smartcard – loaded with pre-purchased tickets	PAYG smartcard
Disabled	11%	8%	Disabled	12%	10%
Non- disabled	6%	3.5%	Non-disabled	4.1%	5%

Annex Table 12 - Proportion of respondents who would like their concessionary travel available on each format

Payment format	All	16-32	33-59	60+	Accessible	Large city	Remote	Urban	Male	Female
Smartcard/NEC	81%	84%	68%	84%	86%	59%	21%	86%	82%	81%
Mobile app or smartphone	64%	80%	68%	59%	84%	71%	18%	84%	70%	56%
Wearable (e.g. wristband/watch/token/keyring)	22%	56%	22%	13%	79%	44%	19%	79%	25%	18%

Annex Table 13 – Likelihood that respondents could be incentivised to use smart tickets in future.

Incentive	Very likely	Somewhat likely	Neither likely or unlikely	Somewhat unlikely	Very unlikely	Not applicable or Don't know
It's easy to set up and get started	63%	24%	5%	1%	3%	5%
It's simple to use	66%	22%	4%	1%	3%	5%
It's inclusive and accessible for all	55%	20%	13%	2%	4%	7%
I use one app or smartcard for all my travel tickets	63%	18%	6%	2%	4%	7%
I do the same thing across all operators	66%	17%	5%	2%	3%	7%
I could use wearable technology (e.g. wristband/watch /token/keyring)	24%	11%	21%	9%	15%	20%
I can see my journey & payment history	52%	25%	12%	2%	4%	6%
The technology always works	70%	14%	5%	2%	3%	6%

Annex Table 14 - Proportion of respondents who would (or would not) use smart ticketing in future, by location

Location	Would use smart ticketing	Would not use smart ticketing
Accessible	82%	5%
Large city	88%	3%
Remote	66%	11%
Urban	85%	4%

Annex Table 15 – Proportion of respondents using a range of sources of travel information?

Source	% of respondents
Transport operator's apps / websites (e.g. First Bus, McGill's Buses, ScotRail, CalMac, Subway)	81.9%
Google, Apple, Bing mapping	57.3%
Third party ticket retailer (e.g. Trainline, TrainPal, National Rail Enquiries)	42%
Bus stop information	28.8%
Traveline Scotland	27%
Paper timetables & maps (leaflets/booklets)	11.8%
Third party travel planning app / website (CityMapper, Moovit, GoHi, Rome2Rio)	7.5%
Other	3.5%
Not applicable / Don't know	1.3%

Annex Table 16 - Proportion of respondents using paper timetables and maps, and third party travel planning services, by location

Location	Google/Apple/ Bing maps	Paper timetables & maps	Third party travel planning app / website
Accessible	45%	15%	4%
Large city	67%	9%	11%
Remote	54%	22%	5%
Urban	52%	8%	6%

Annex Table 17 - Perceived usefulness of seeing emissions information on journey-planning app or website, by age

Age bracket	Very useful	Somewhat useful	Neither	Not very useful	Not at all useful	Don't know
16-32	25.1%	29.3%	20.9%	10.2%	10.7%	3.7%
33-59	19.7%	26.0%	27.9%	9.3%	12.9%	4.1%
60+	15.6%	21.1%	27.2%	8.3%	17.2%	10.6%

Annex Table 18 - Perceived usefulness of seeing active or leisure travel information on journeyplanning app or website, by age

Age bracket	Very useful	Somewhat useful	Neither	Not very useful	Not at all useful	Don't know
16-32	29%	36%	7%	8%	17%	4%
33-59	31%	31%	7%	8%	19%	5%
60+	22%	24%	7%	13%	19%	14%

## Annex 3

## Disaggregated data

Some of the data was disaggregated to give greater insight into the responses provided. The characteristics of interest were age, disability status, gender and location. Where very few responses were received from people with a given characteristic, e.g. non-binary people or people aged over 80, the disaggregated results have not been reported on.

The groups were broken down as follows:

Age:

- 1. 16-32
- 2. 33-59
- 3. 60+

Disability status:

- 1. Disabled: Has a physical or mental illness or health condition lasting or expected to last more than 12 months
- 2. Non-disabled: Has no such condition

Gender:

- 1. Female
- 2. Male

Location:

We drew on the <u>Scottish Government Urban-Rural Classification 2020</u> to create four area categories for respondents' locations. These were accessible, large city, remote and urban. The local authorities falling into each of these area categories are presented below.

### Accessible

- Aberdeenshire
- Argyll and Bute
- Clackmannanshire
- Dumfries and Galloway
- East Ayrshire

- Moray
- Perth and Kinross
- Scottish Borders

### Large city

- Aberdeen City
- Dundee City
- City of Edinburgh
- Glasgow City

### Remote

- Highland
- Na h-Eileanan Siar
- Orkney Islands
- Shetland Islands

## Urban

- Angus
- East Dunbartonshire
- East Lothian
- East Renfrewshire
- Falkirk
- Fife
- Inverclyde
- Midlothian
- North Ayrshire
- North Lanarkshire
- Renfrewshire
- South Ayrshire
- South Lanarkshire
- Stirling
- West Dunbartonshire
- West Lothian



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