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Analysis of Responses to the Survey on Smart Travel

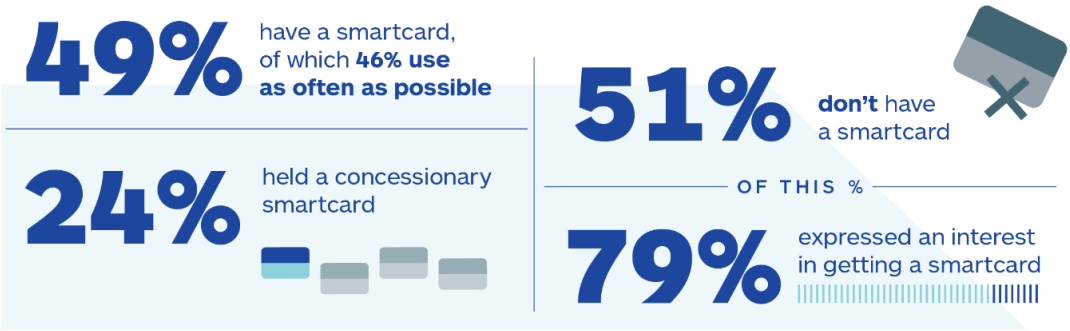
Contents

Executive summary

This survey provides findings on the use and views of smart methods of ticketing by public transport users in Scotland. The survey was designed and conducted by Transport Scotland, in collaboration with a number of public transport operators, Traveline Scotland, Young Scotland and the National Entitlement Card Programme, and involved responses from members of the public, as well as Scottish Government staff.

- 2,062 people responded to the survey online, the majority (59%) of whom were recruited via social media (e.g. Facebook, Twitter)
- 53% of respondents identified as men and 44% as women, with 0.6% identifying in another way
- nearly half (44%) of respondents were between the ages of 35-44
- 18% of respondents were Scottish Government staff, who accessed the survey via the Scottish Government's intranet
- the majority of respondents used public transport in the areas: Edinburgh, East, and Fife; and Glasgow and West Scotland (75% respectively). This was followed by Central Belt (54%), Tayside (30%), Highlands and Islands (28%), Scottish Borders (19%), North East, Shetland, and Orkney (19%), South West Scotland (19%), and North West Scotland (15%).

Findings

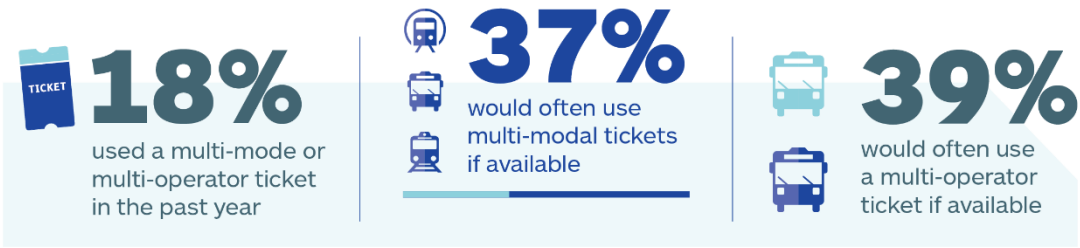


Season tickets and smart methods of ticketing

The survey showed that 46% of respondents had used a season ticket for travel by public transport in the past year. 60% of participants had travelled regularly (at least once a week) on public transport without a season ticket.

In the past year, 18% of participants reported using a multi-mode or multi-operator ticket. If available, 39% said they would often use a multi-operator ticket, while 37% of respondents said the same for multi-modal tickets.

Respondents were asked to rate smart methods of ticketing for public transport. The most popular method was smartcards, with 65% of respondents stating they would use if available. This was followed by contactless payment (58%). Almost half (46%) of respondents stated they would use the option 'Aggregated fares & best price charge using contactless payment' – a system similar to the Oyster card operated by Transport for London for example - with many also favouring this method in open-ended responses given to this question. E-purse (29%) was the least popular smart method.



Smartcards

Around half (49%) of survey participants currently held a smartcard, of which 46% used their smartcards as often as they could. For the 51% of respondents who did not currently hold smartcards, the majority (79%) expressed an interest in getting one. Around a quarter (24%) of respondents held a concessionary smartcard.

Smartcard holders were asked why they didn't use their smartcard more often. The main reason given was being unable to use the smartcard on all their transport modes (61%). This was closely followed by the wait being too long between buying tickets online and being able to collect them (57%).

Participants were also asked to rate the top benefits of smartcards:

- a large majority (84%) of participants agreed that smartcards were more durable than paper tickets
- around three quarters (74%) agreed that smartcards meant there was no longer a need to queue for tickets
- for 64% of respondents, being able to use new technology was viewed as a benefit of smartcards. The same proportion of respondents found having access to an online/account history a benefit as well
- in the open-ended responses, a large number of participants highlighted that a key benefit of smartcards were that they eliminated the need for change and having the exact fare
- further, participants suggested through the open-ended responses that smartcards make public transport more accessible and convenient, as well as increase flexibility for travellers

The survey also invited participants to share their concerns regarding smartcards:

- the most common concern was smartcards not working at barriers or on-board which respondents described led to delays, frustration, and embarrassment. This was a concern for both people who held smartcards and those who observed others struggling at gates

- a number of respondents also expressed that smartcards in their current form were not designed for use by infrequent travellers as only season tickets were offered

- data security concerns were raised by some respondents who did not feel comfortable sharing their personal data with companies

- a number of participants felt it was important paper tickets remain available for people who do not have smartphones, bank accounts, or access to the internet.

Mobile ticketing

Almost half (48%) of respondents reported they would use a mobile ticket or app for travel. When asked what modes participants used mobile tickets for, flights appeared as the most common (46%). This was followed by bus travel (35%), taxis (e.g. Uber) (32%) and train (30%). A small proportion of respondents indicated they would use mobile tickets if available for train (16%), bus (7%), flights (4%), and taxis (3%). Between 2-3% reported not knowing what a mobile ticket was.

1 Introduction

Background

1.1 Smart travel is about providing modern digital or electronic options for ticketing or payment when travelling on public transport. Our vision is 'that all journeys on Scotland's public transport networks can be made using some form of smart ticketing or payment.'

1.2 The public transport industry is seeing a number of drivers for change – evolving technology, working and shopping patterns, consumer expectations and environmental concerns - are changing the way we travel and we recognise that smart and digital solutions have a part to play in improving the passenger experience.

1.3 In July and August 2018, Transport Scotland, in collaboration with public transport operators, NECPO, Young Scot and Traveline Scotland, undertook an online survey about smart travel in Scotland.

1.4 The purpose of the survey was to find out more about public transport passengers, their travel choices, current ticket use and any smart ticketing/card preferences. It included both concessionary and non-concessionary passengers.

1.5 This survey was shared online by all major Scottish bus operators (McGills, Lothian, Stagecoach, First, National Express) as well as Transport Scotland, SPT, ScotRail, Calmac, Young Scot and Traveline Scotland social media channels. It was also available on the Scottish Government intranet and shared with Local Authorities for promotion.

1.6 This selection of organisations reflects the participants in the Transport Scotland interoperable smartcard project, as well as the Operators Smart Steering Group.

1.7 The survey ran from 01 July – 31 August 2018 and had 2062 online responses, and one offline.

1.8 The remainder of this report presents a question-by-question analysis of the responses received to the survey.

1.9 Given the level of response, this report presents a summary analysis which focuses primarily on the key themes raised but also considers the range of, and differences in, views expressed.

2 Profile of respondents

2.1 A total of 2,062 people responded to the survey. Of those, 53% identified as male, 44% as women, and 0.6% identified in another way (Chart 1).

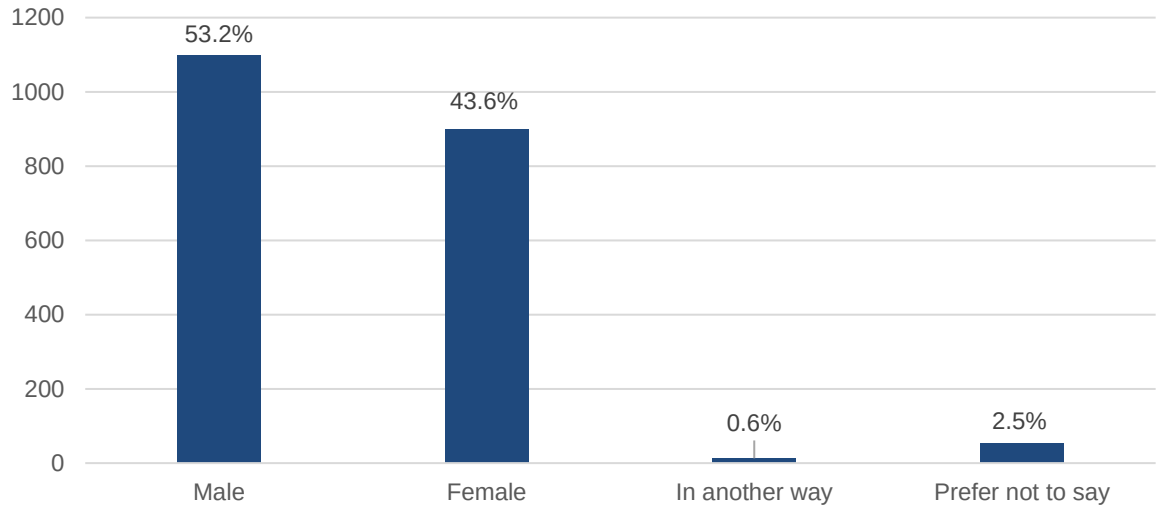


Chart 1: Gender profile of respondents

2.2 Two-thirds of respondents to the survey were aged between 26 and 55 years old. Responses from those in older age bands decreased with age (Chart 2).

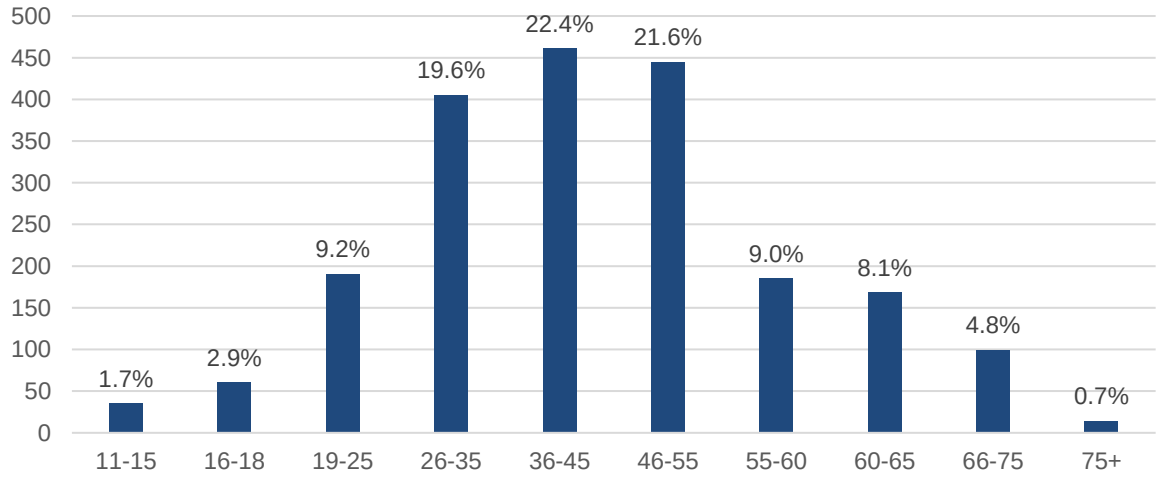


Chart 2: Age profile of respondents

2.3 The majority of respondents indicated that they used public transport in the major cities and central belt. However, the survey was able to achieve representation across all of Scotland's regions (Chart 3).

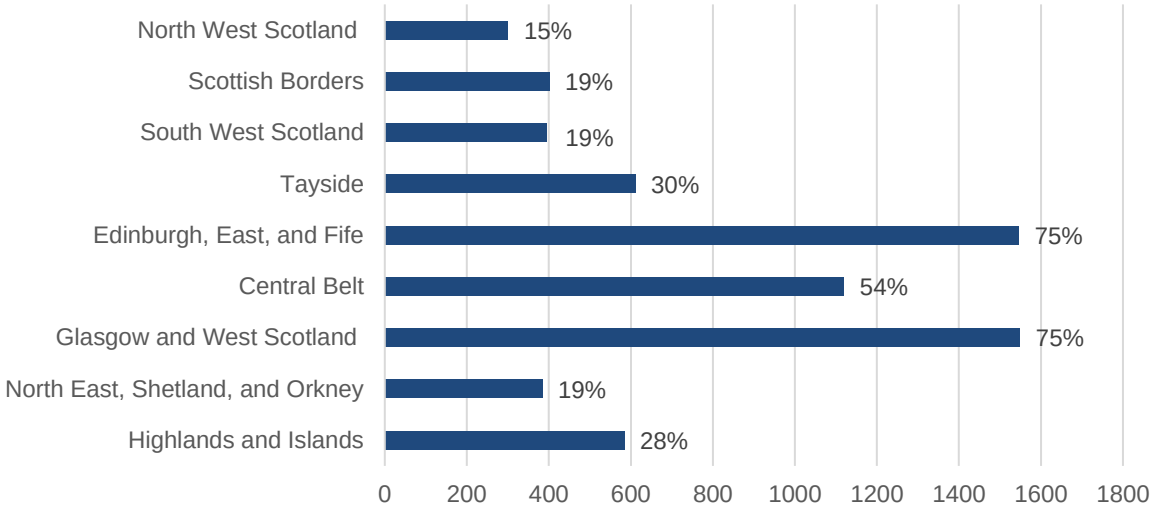


Chart 3: Use of public transport by area

3 Transport mode and season ticket use

3.1 The main modes of transport used in the past month by respondents to the survey were car, either as a driver or a passenger (80.7%), walking (74.5%), train (72%) and bus (67.7%). Around a third of respondents had also used a taxi (Chart 4).

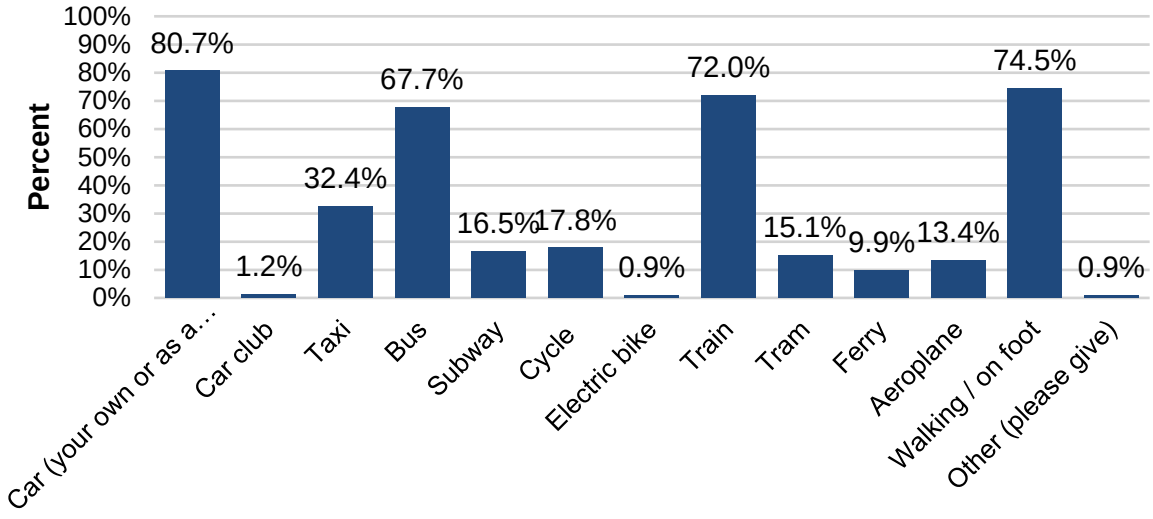


Chart 4: Modes of transport used in the past month

3.2 Looking at bus and train travel specifically, there was little variation by gender in the use of buses but more men than women had used the train in the past month. Older and younger people were also more likely to have used the bus in the past month, whereas those in the middle age ranges were more likely to have used the train.

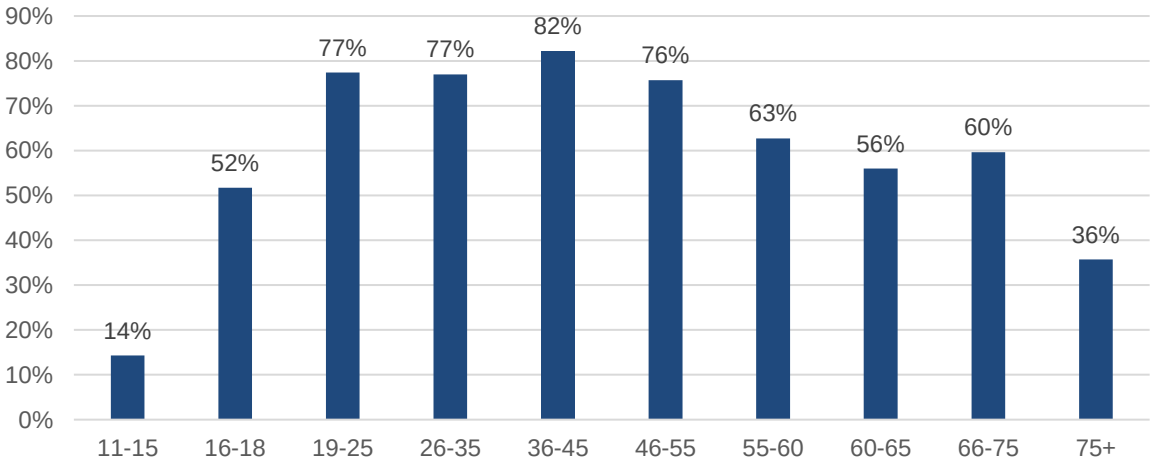


Chart 5: Train use in the past month by age

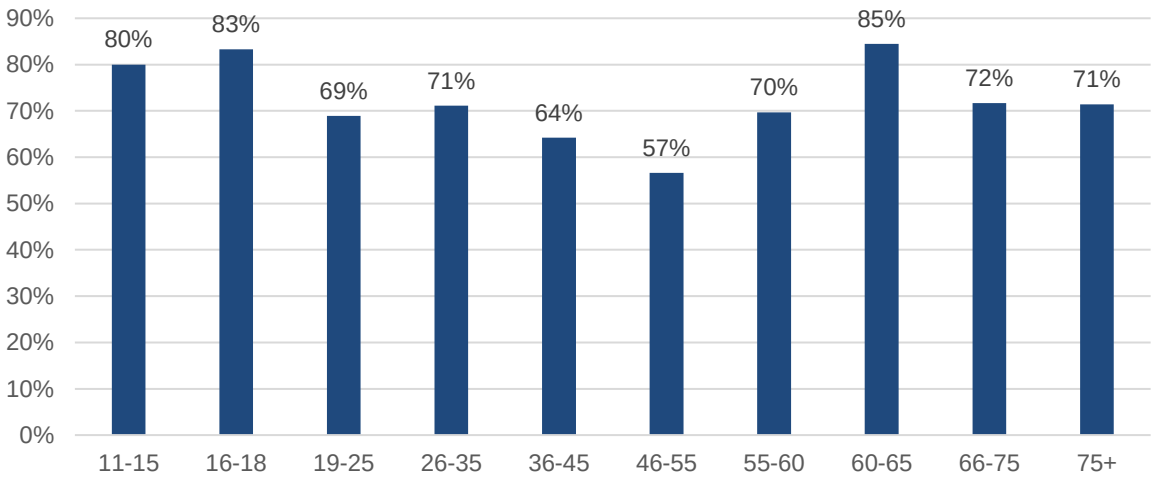


Chart 6: Bus use in the past month by age

3.3 The use of season tickets by respondents over the past year is higher for train than bus, though over half of respondents indicated that they did not hold a season ticket for travel on any mode (Chart 7).

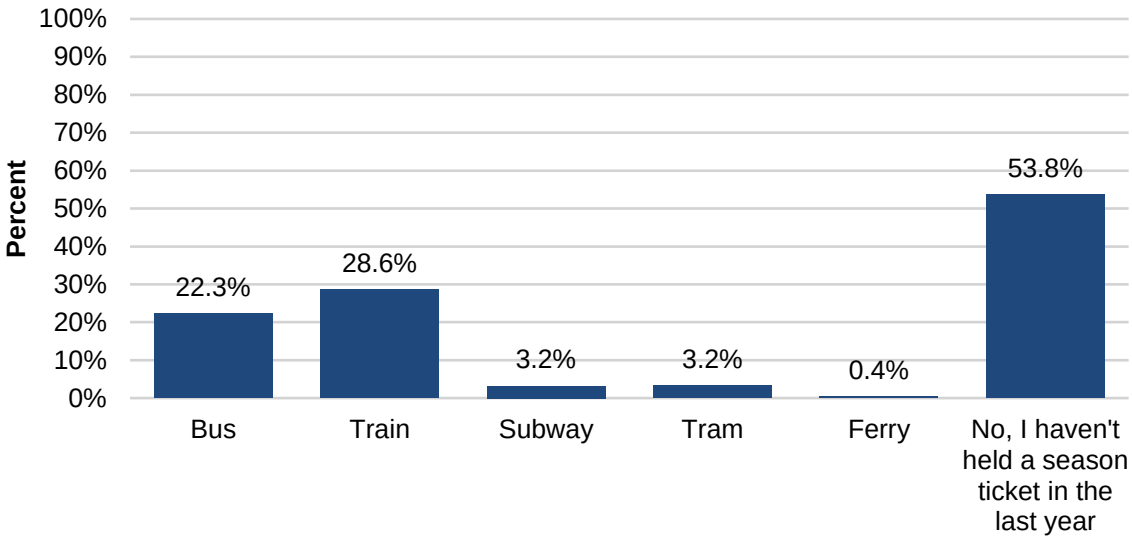


Chart 7: Season ticket use in the past year by mode

3.4 Men and women were as likely as each other to hold a season ticket. Those aged 25-55 were more likely to hold season tickets, although a third of 11-15, 16-18 and 55-60 year olds also held season tickets. Season ticket use is lower for those aged 60 and over (Charts 8 & 9).

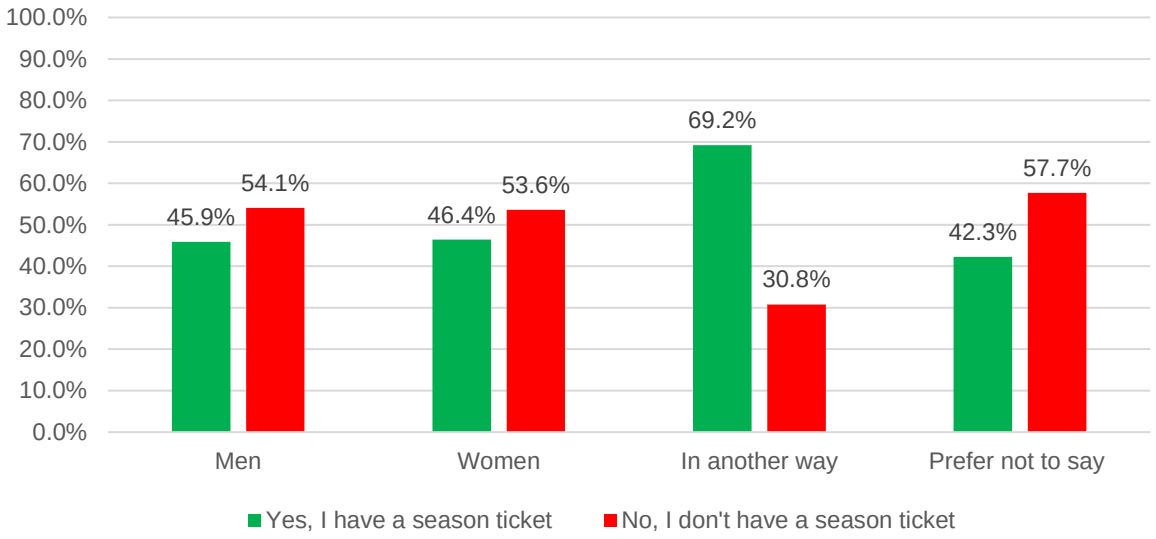


Chart 8: Season ticket holders by gender

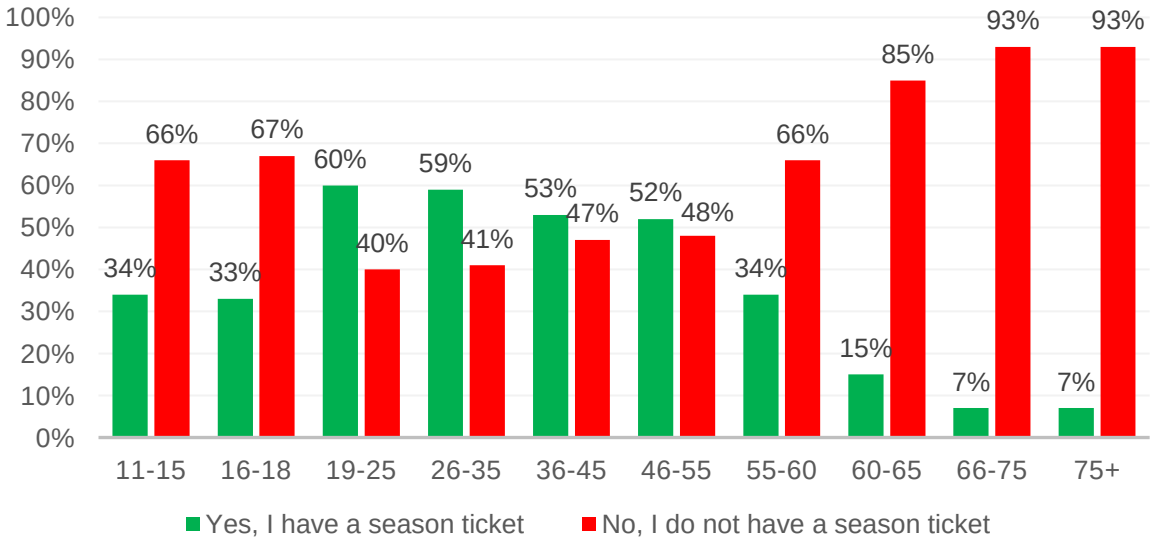


Chart 9: Season ticket holders by age

3.5 Respondents who were season ticket holders were fairly evenly spread geographically, though highest in Glasgow and Edinburgh areas and the Central Belt. Season ticket holders were less prevalent in the Highlands and Island (Chart 10).

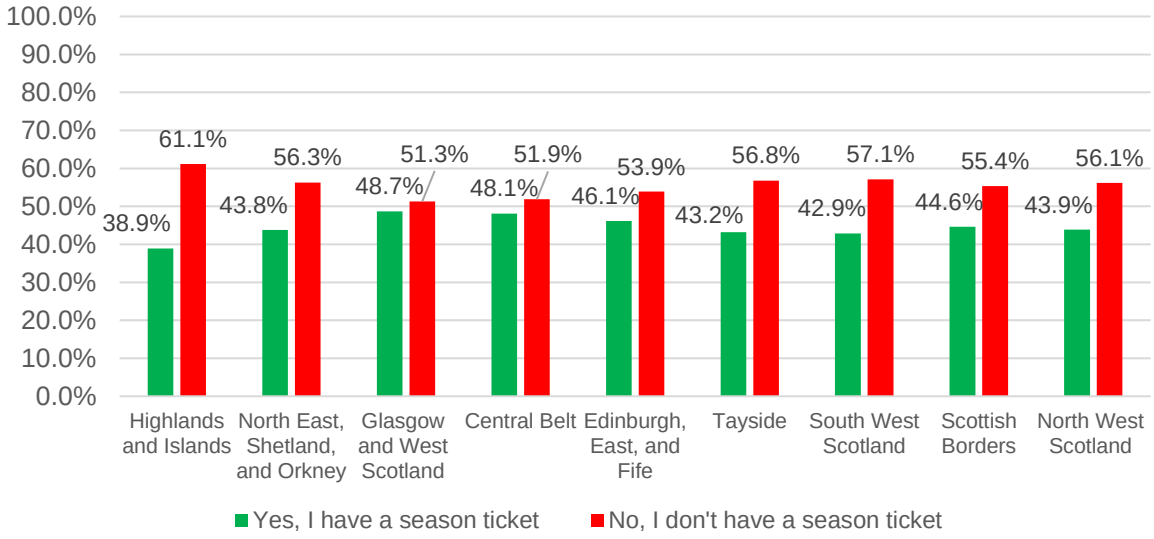


Chart 10: Season ticket holders by area

3.6 While men and women were as likely as each other to hold season tickets, women were more likely to use them for regular travel. When looking at age, although respondents in the older age bands were less likely to have season tickets, they were more likely than other age bands to travel regularly with one (Charts 11 & 12).

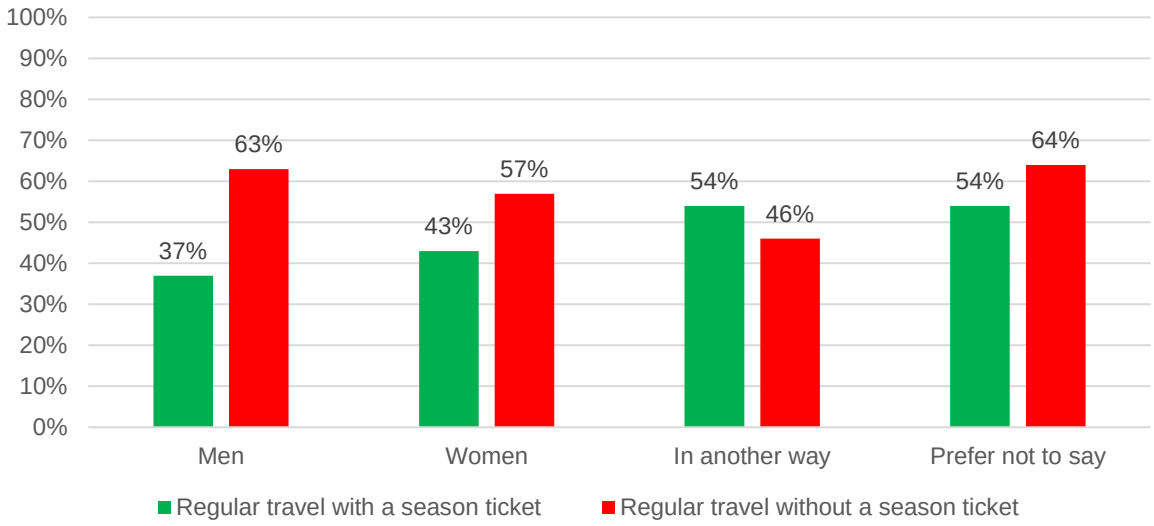


Chart 11: Regular travel with a season ticket by gender

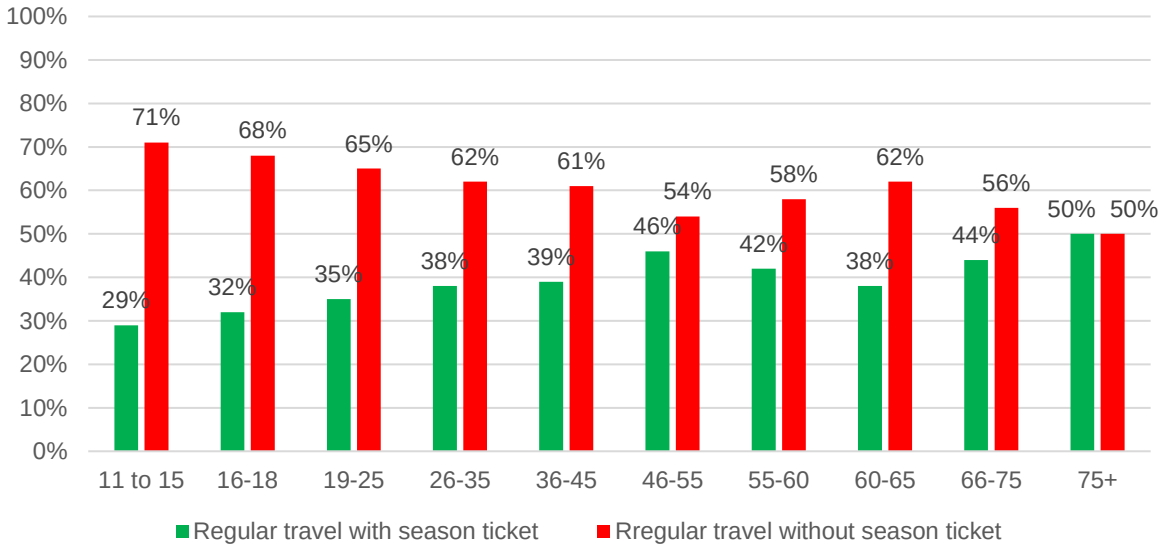


Chart 12: Regular travel with a season ticket by age

4. Smartcards

4.1 Just under half of respondents to the survey indicated that they had a commercial smartcard (49.7%). A further quarter of respondents (23.8%) indicated that they held a concessionary smartcard.

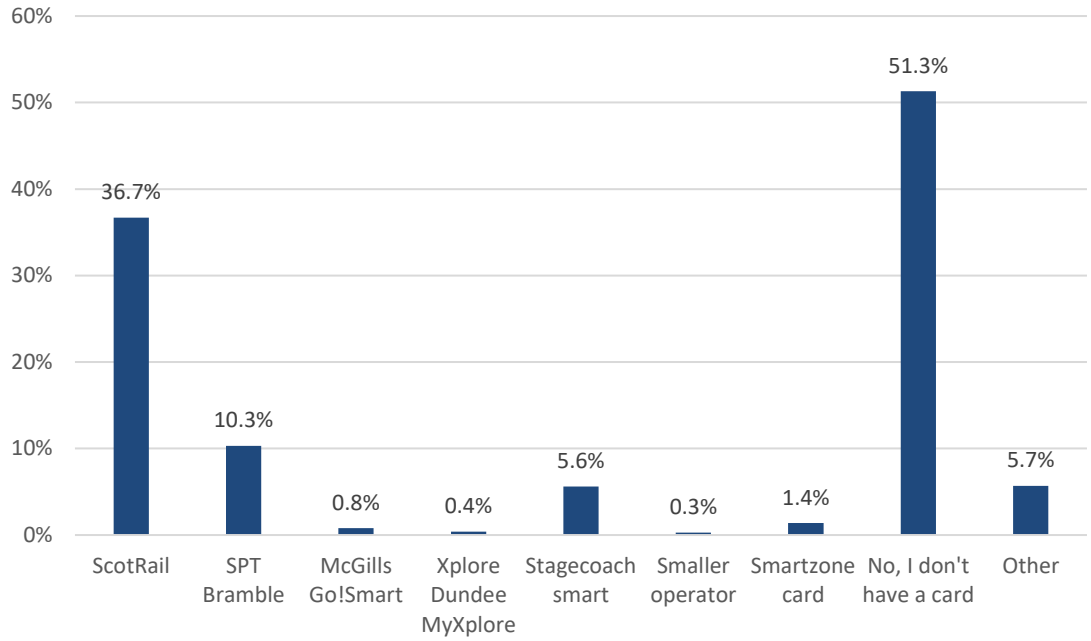


Chart 13: Smartcard holders by operator

Perceived benefits of Smartcards

4.2 Respondents were asked to consider what they felt were the main benefits of smartcards by indicating the extent to which they agreed or disagreed with a number of statements (Chart 13).

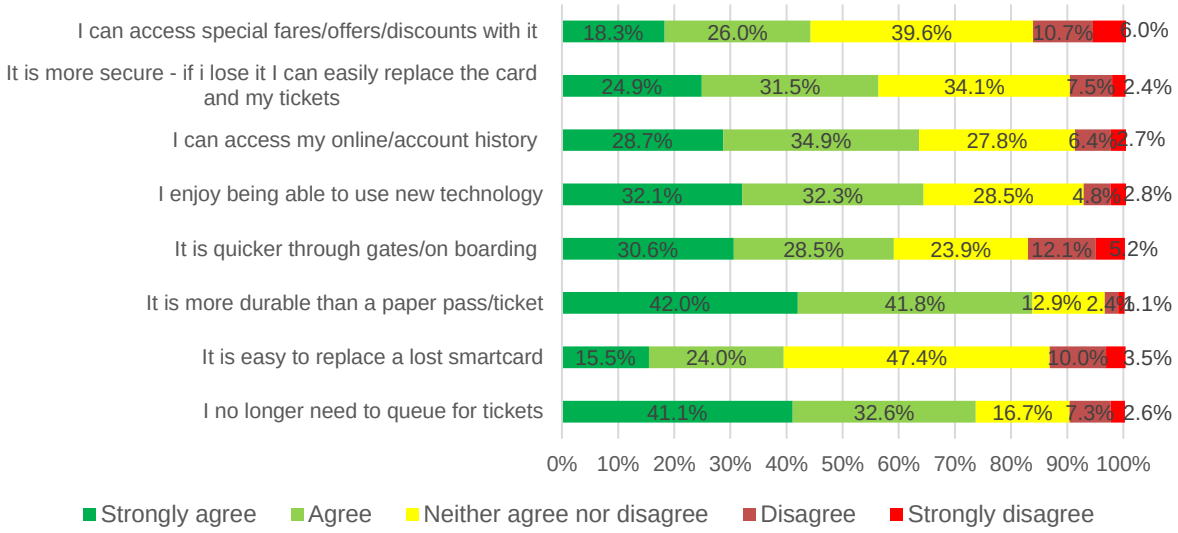


Chart 14: Perceived benefits of smartcards

4.3 'It is more durable than a paper ticket/pass' was the most agreed with response, with many respondents highlighting the environmental benefits of smartcards as the most motivating factor.

> *"Better for the environment as it will reduce the number of paper tickets I go through."*

4.4 'I no longer need to queue for tickets' was also agreed with by a large majority of respondents. However, respondents did raise issues with regard to certain smartcards (e.g. Scotrail) requiring passengers to 'load' purchased tickets onto smartcards at a machine meant that travellers still ended up queuing. This aspect was highlighted as especially problematic for public transport users in remote areas with no machines at their local stations.

4.5 Allied to this was the level of disagreement with the statement 'It is quicker to get through gates/on boarding'. Although 60% of respondents agreed that this was a perceived benefit, it had the highest disagreement rate of any of the statements at 17%, with smartcards failing at barriers a recurring theme in open-ended responses. Respondents described how this led to delays, frustration, and embarrassment, and therefore negated other benefits.

> *"Scotrail card fails to open barriers very often! I also have to queue to load my ticket onto my card at a ticket machine as I pay for my ticket daily."*

> *"It would be much better if you could buy/load your ticket and use it immediately rather than having to wait at least four hours with the current smart card system from ScotRail."*

4.6 Around two-thirds of respondents (64%) agreed that they '…enjoy being able to use new technology'. However, a common theme in open-ended responses was that smartcard technology was in fact 'outdated' and that smart ticketing be developed around contactless payment and apps.

> *"Tap and Go tech is really convenient."*

> *"There's no need for a plethora of "smart" cards especially if public transport operators accept contactless payment."*

4.7 Other perceived benefits highlighted by respondents included increased flexibility, convenience, and accessibility. Respondents praised the ability to easily travel by different modes and operators with a single ticket. This simplified travel by public transport, making it more accessible and increased the likelihood of using public transport.

> *"Shows that the transport network is integrated and successful. Streamlines and hence encourages public transport use."*

> *"Able to use different modes and operators easily."*

4.8 No need for change or exact fare. A commonly mentioned benefit was the ease of buying tickets in advance. Eliminating the need of having to carry change or exact fare, this reduced stress and increased the ability for spontaneous travel. It also made travel quicker as there was no need to arrive early to purchase tickets. In particular, this benefitted train users whose home stations were unmanned and ferry users who could avoid long queues at ports.

> *"I don't need to have change for the ticket machine each morning."*

> *"Don't need to worry about "exact fare" and having money to hand."*

4.9 A few respondents also highlighted the usefulness of smartcards in providing data for transport planning, allowing services to be tailored according to the needs of those who use them.

> *"Encourages government infrastructure projects/initiatives to be more joined up."*

> *"Much better data for transport planning purposes and accurate revenue distribution for operators - this allows services to be planned to be more useful to people on the way that they actually want to use them."*

Use of Smartcards – non-concessionary cards

4.10 Men were more likely to hold a non-concessionary smartcard than women, while those aged 19-45 were also more likely. Those aged 60 or over, were far less likely to hold smartcards (Charts 14 & 15)

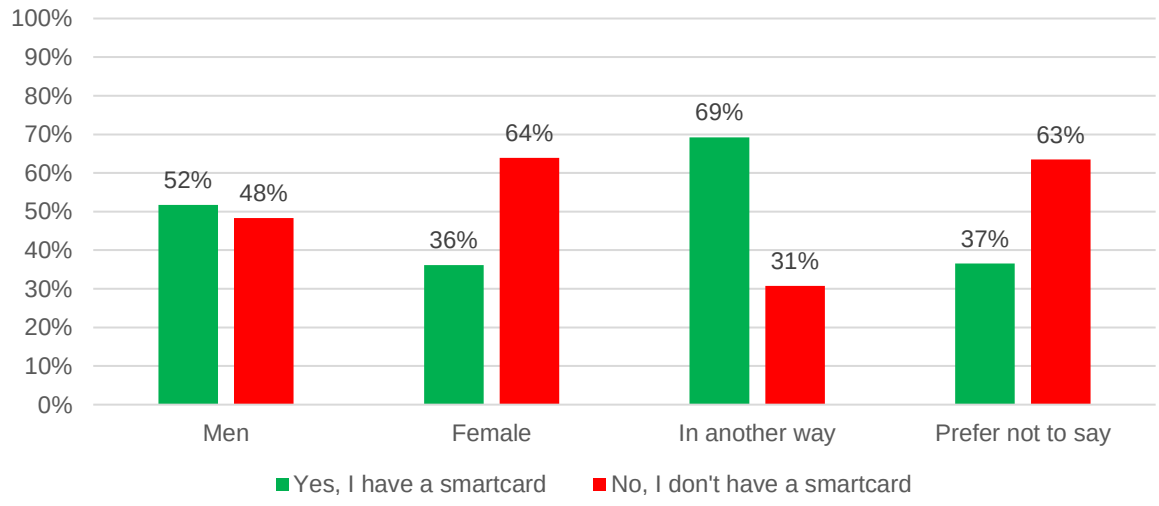


Chart 15: Non-concessionary smartcard holders by gender

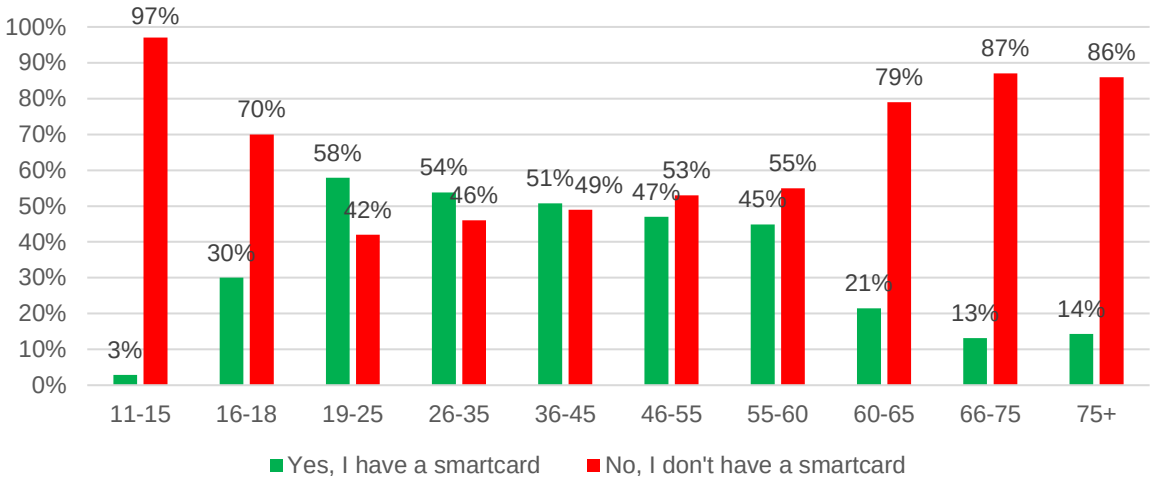


Chart 16: Non-concessionary smartcard holders by age

4.11 For smartcard holders, around two-thirds of respondents indicated that they used their smartcards whenever they could or most of the time. Just under one in five respondents said they used their smartcard rarely or never (Chart 16).

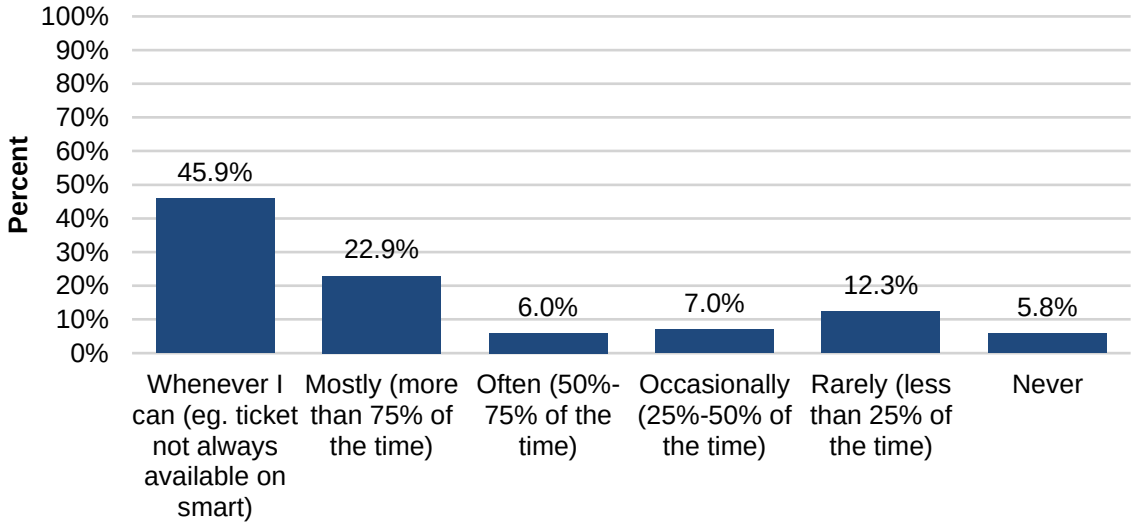


Chart 17: Frequency of use of non-concessionary smartcards

4.12 Men were slightly more likely that women to use their smartcard whenever they could or most of the time (71% vs. 67%), while those in the older age bands were more likely to have rarely or never used their smartcards (Charts 17 & 18).

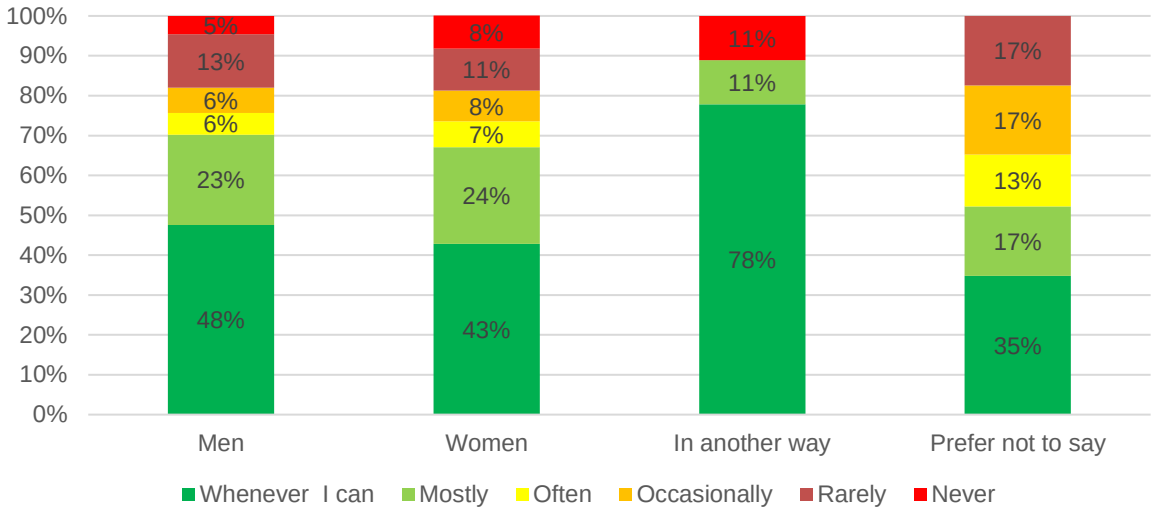


Chart 18: Smartcard use by gender

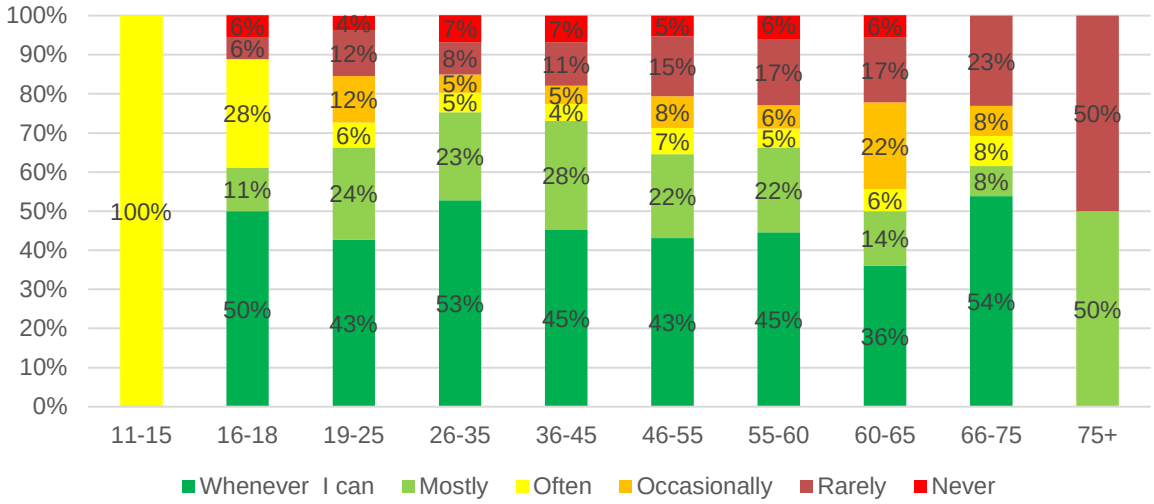
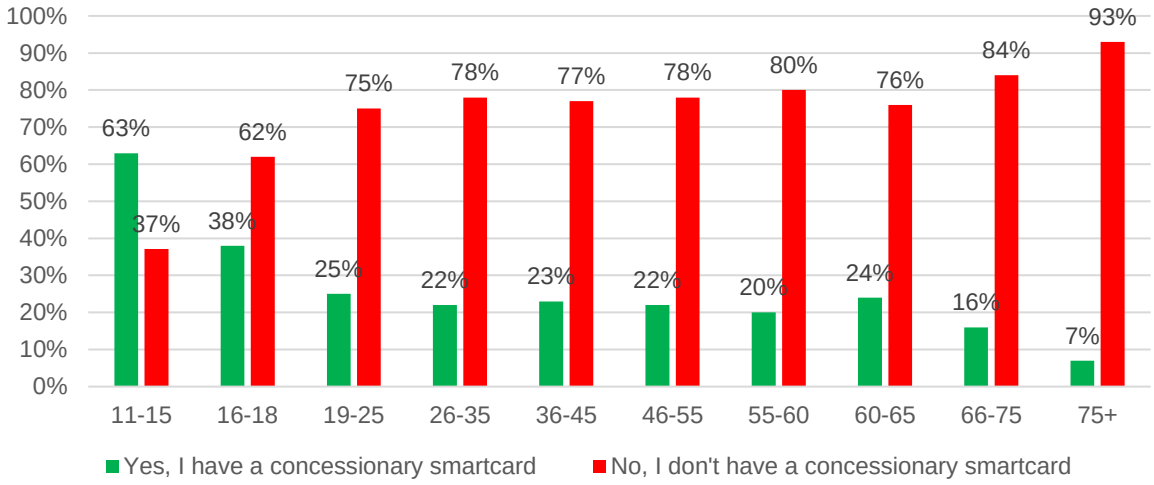


Chart 19: Smartcard use by age

Use of Smartcards – concessionary cards

4.13 Men and women were as likely as each other to hold concessionary smartcards (23% vs. 22%), but there was variation with regards to age with those in the younger age bands more likely to hold concessionary smartcards (Chart 19).



Chat 20: Concessionary smartcard holders by age

4.14 Almost two-thirds (65.6%) of concessionary smartcard holders indicated that they used their smartcards whenever they could or most of the time. Around one in five indicated that they rarely or never used their concessionary smartcards (Chart 20). This is mirrors the usage pattern for non-concessionary smartcards.

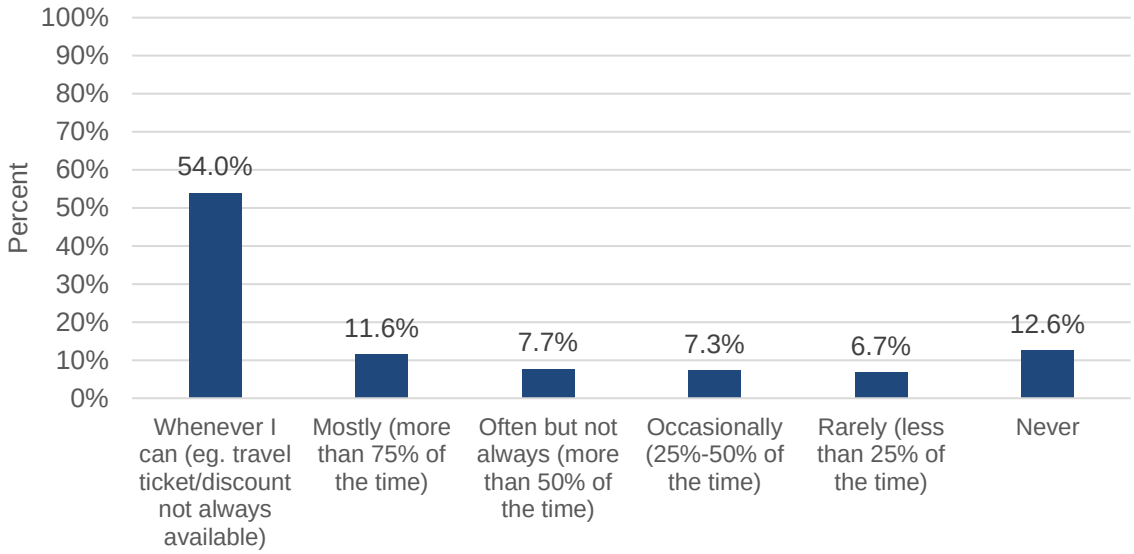


Chart 21: Frequency of use of concessionary smartcards

Reasons given as to why Smartcards aren't used more often

4.15 Non-concessionary smartcard holders who indicated that they used their smartcard occasionally, rarely or never were asked why they didn't use their cards more frequently. The most frequently given response was 'I can't use my smartcard on all my transport modes', which 61% of respondents agreed with. Respondents highlighted how train operators such as Cross Country and Virgin did not accept smartcard tickets despite accepting the same tickets in paper

format. Smartcards were therefore experienced as less flexible than paper tickets.

> *"A disadvantage of the ScotRail card is that you are not permitted on Virgin trains even though passengers with the exact same season ticket but in paper form can get on the virgin trains."*

4.16 Another frequently agreed with response was 'It takes too long between buying tickets online and being able to collect them' (57%). Respondents highlighted a several hour long wait between buying a ticket and having it appear/load on the smartcard. Respondents therefore felt it took longer to purchase a smartcard ticket online than to buy a paper ticket at a machine.

> *"Being able to buy in advance is nice. Though it takes too long for the card to update."*

> *"I would like to purchase Scotrail tickets and have them available immediately but there's a 3 hour wait, so can't use it for travel at short notice."*

4.17 Around half of non-concessionary smartcard holders agreed with the statements 'The ticket I want is not available on smartcard' (52%), and 'I'm worried it won't work at gates/on board ' (49%) as reasons for not using their smartcard more often. Respondents highlighted the lack of availability of tickets such as Zone Cards and 10 journey passes, resulting in a preference for paper tickets for infrequent travellers. A common criticism of smartcards were that they do not always work at barriers which acted as a disincentive for both people who held smartcards and those who observed others struggling at gates.

> *"I would like to use smartcard for flexi options at my chosen train station but it will not allow me to have this ticket type."*

> *"Scotrail's smart card only works 50% of the time and seems to be very random. Can be quite embarrassing being stuck at busy gates."*

4.18 Just under half (46%) of non-concessionary card holders agreed that 'I prefer to buy my tickets when I'm about to travel' as the difficulty of knowing in advance what journeys would be made the following day meant that smartcards weren't used more often by infrequent travellers. Similarly, a large number of responses indicated that smartcards in their current form had limited benefits for infrequent travellers. This was because, generally, only season tickets were offered and purchased tickets expired too soon. This meant that smartcards did not suit the travel patterns of respondents with alternative working patterns or in more rural/remote areas.

4.19 Disabled travellers reported that smartcards were incompatible with their concessions card schemes.

"The smartcard is useless for those who have a Disabled Persons Railcard. It is cheaper to buy daily tickets but to try to load a week's worth of train tickets is a tedious process. I have to do five separate ticket transactions and then the machine won't download it onto the card and keeps saying error. Less hassle to buy paper tickets."

Suggestions for improvements

4.20 Non-concessionary card holders were asked to consider a range of smart methods for use on public transport. Two-thirds (67%) of respondents indicated that they would use a smartcard ticket. Over 60% indicated they would use contactless bank or mobile payment for a one-off ticket, with just under half (49%) saying they would use the same methods for aggregated fares/best price charging (Chart 21).

4.21 Around half of respondents said they would use a mobile app/ticket (50%) or ticket in a smartphone wallet (47%). The least favoured methods were around the use of e-purse.

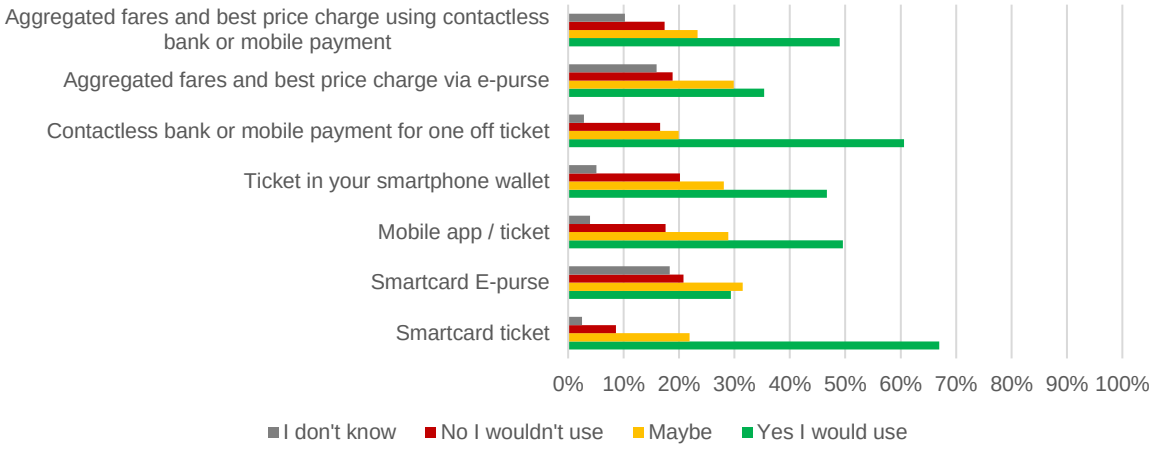


Chart 22: Preferred smart methods to use on public transport

4.22 In terms of improving the smartcard system, respondents made a number of suggestion in the survey. A very common suggestion was to develop smart ticketing based on the TfL Oyster/Contactless system. This would incorporate integrated ticketing across multiple modes (particularly ferries) and operators with zonal faring and daily caps. Daily caps in particular were heavily emphasised. Many respondents wanted to see such a system developed nationally to suit travel patterns across geographic lines and significantly simplify public transport in Scotland. Similarly, many respondents requested smart ticketing be developed around contactless payment rather than smartcards for convenience.

"I have an Oyster card and use this every time I visit London. This is very convenient and you have the comfort of knowing you are being charged the correct fare and there is a maximum cap for the day."

4.23 Another suggestion was for an app-based system, where travellers would be able to buy tickets on the move, view their account history, and use their smartphones for tickets. This was seen as having environmental benefits by reducing the use of plastic for smartcards.

> *"Whilst smartcards are useful. Use of a mobile device which encompasses a smart card, so I can access SPT and Scotrail gates, would be more beneficial. Allowing me to buy and get tickets through an app whilst on the move."*

4.24 Respondents also requested increased diversity of available tickets e.g. Zonecards to be made available on smartcards, as well as timed tickets, e.g. single tickets allowing transfers within 60 minutes. Being able to load credit onto smartcards was also desirable and, it was argued, would make smartcards more accessible to low-income groups.

4.25 Several respondents encouraged further integration of services, e.g. parking at train/subway stations, library memberships, and leisure memberships. Respondents suggested this would be more flexible and would significantly simplify travel for both locals and tourists, encouraging travel by public transport. It was also seen to have greater environmental benefits than plastic smartcards.

4.26 Further, several respondents argued that a unified and simplified system would be more accessible to disabled transport users.

5. Conclusion

5.1 The survey explored the use and views of smart ticketing of public transport users in Scotland.

5.2 Over half of respondents travelled regularly without a season ticket and less than a fifth indicated using multi-mode or –operator tickets.

5.3 Smartcards were favoured as the preferred method of smart ticketing, and was followed by contactless payment.

5.4 Half of participants held a commercial smartcard. A further quarter had a concessionary smartcard. The majority of people who did not currently hold a smartcard expressed an interest in getting one.

5.5 Not being able to use smartcards on all modes of transport was the main reason for not using smartcards more often.

5.6 The environmental benefits of smartcards was highly rated by respondents, with the vast majority of participants agreeing that smartcards were more durable than paper tickets. Respondents also highlighted that smartcards eliminated the need for change and having the exact fare.

5.7 Concerns were also raised concerning smartcards not working at barriers or on-board. Some respondents also argued that smartcards were not designed for infrequent travellers as only season tickets were offered.

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