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New Zealand Transport Agency

***Review of the SuperGold Card
Free Public Transport Travel Scheme:
Social and Economic benefits
to users and the wider economy***

***Final Report and Technical Annexes
McDermott Miller Limited
14 January 2010***

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1. REVIEW OF THE SUPERGOLD CARD FREE PUBLIC TRANSPORT TRAVEL SCHEME SOCIAL AND ECONOMIC BENEFITS

1.1 REPORT PURPOSE AND OUTLINE

Report Purpose

The New Zealand Transport Agency ("NZTA") is undertaking a review of the *SuperGold card free public transport travel scheme* ("the Scheme"). The review's first objective, as stated in NZTA's Request for Quotation 174/09 ("RFQ"), is:

- a. *Identify the social and economic benefits provided by the Scheme;*

As part of this review, McDermott Miller was commissioned by NZTA to:

- *formulate additional questions for the survey of SuperGold Card holders that will enable information to be collected on the social and economic benefits of the SuperGold free travel on public transport scheme;*
- *advise on the overall survey methodology; and,*
- *analyse survey results identifying the social and economic benefits derived from the free off-peak public transport provided from the Scheme to SuperGold Card holders and wider economy/society.*

McDermott Miller was not required to value the non-transport concessions and benefits available to SuperGold Card holders.

Report Outline

The following section summarises our key findings and draws conclusions.

Technical documentation follows the report of findings and covers:

Annex A: Purpose and Methodology which discusses the purposes of the assessment of economic and social benefits of the Scheme and outlines our approach;

Annex B: Economic and Social Benefits Assessment sets out methodology and results in detail; and,

Annex C: Tabulated Survey Results presents tabulated results from the *SuperGold Card Free Public Transport Scheme Survey 2009*.

2. KEY FINDINGS

2.1 TRIPS AND JOURNEYS

NZTA recorded that some 7.4 million trips were made under the Scheme in its first year of operation. However, some of these trips comprise stages of overall journeys involving changes (i.e. between buses on different routes or between different modes). As discussed in **Annex B, Section B.5** we estimate that, when such changes are accounted for, the 7.4 million trips correspond to around 5.8 million one-way journeys. That is, a one-way "journey" can consist of one, two, or occasionally three, "trips" as recorded in NZTA's statistics. We use the terms "trip" and "journey" in these senses in this report.

2.2 MOST RECENT JOURNEY ON PUBLIC TRANSPORT USING SUPERGOLD CARD

Respondents were asked about the benefits of the most recent journey made on public transport using the SuperGold Card:

- The most common main purpose of this journey is shopping and other home maintenance activities (36%), followed by recreation/cultural activities (24%), and medical/health purposes (11%). Social activities with friends account for 11% of journeys, and family activities 9%. Work (paid or voluntary) accounted for 6% of journeys, and other purposes 3%.
- On this most recent journey, in some 84% of cases the SuperGold Card was used on both legs of the journey; in 8% of journeys it was used for the outward leg only; and, in 7% for the homeward leg only.
- Of those using their SuperGold cards on their outward leg, only 27% had to pay a fare on their return leg due to travelling at peak times. The most common way of returning was getting a lift home (50%).

2.3 GENERATED AND INDUCED TRAVEL

- If the SuperGold Card public transport scheme did not exist, around 58% would still have travelled by public transport.

- A further 39% would have changed their travel pattern in some way if the Scheme did not exist.
- Some 3% responded "Don't Know" to this question.
- Among the 39% who would have changed their travel pattern without the card, some 62% of them would have made the journey by car; while some 28% said they would not have made the journey at all.
- That is, around 27% of journeys under the Scheme are "generated travel", i.e. journeys that would have been made by another mode if the card did not exist.
- Around 11% of journeys made by SuperGold Card holders would not have been made at all if the Scheme did not exist.
- Therefore, there were around 800,000 "induced travel" trips (out of the 7.4 million total) under the Scheme in its first year.

2.4

VALUE OF TRAVEL TIME

While travelling off-peak on public transport using SuperGold Card is free in cash terms, each journey still involves a cost to the card holder in terms of the time committed to the journey. Including the value of travel time is a standard component of economic evaluation of transport projects as stipulated in NZTA's Economic Evaluation Manual.

The "Other non-work travel purpose" value for seated bus and train transport user time coefficients in Table A4.1 of the NZTA's Economic Evaluation Manual is \$3.05/hour in 2002 terms, or \$3.63 in 2008 dollars.

- The survey data indicates average time spent on buses or trains is 23 minutes. With total trips by SuperGold Card holder in its first year of operation at 7.4 million (source NZTA spreadsheet *national SuperGold data (Final).xls*), this implies a total of 2.9 million hours are spent on the transport.
- The total value of this time on public transport therefore is around \$11 million per annum.

However, the actual time on the bus or train is only part of the time committed by the card-holder to the journey. Respondents were therefore asked to estimate the total time the journey took, including walking time at both ends, and waiting time.

- Weighted survey data indicates that around 22% of trips made under the Scheme are second and third stages of overall journeys involving changes;

- Adjusting for this, the 7.4 million trips made under the Scheme correspond to around 5.8 million one-way journeys;
- Including walking and waiting time the time of the average journey is around 52 minutes, i.e. a total of 5.0 million hours are committed to journeys involving the use of a SuperGold Card;
- Valuing walking and waiting time at the same rate of \$3.63/hour gives a total time value of \$18.3 million.

We conclude that the **value of journeys involving the SuperGold Card to public transport users as revealed by the commitment of time to travel is around \$18.3 million per annum.**

2.5

FINANCIAL SAVINGS TO SUPERGOLD CARD GOLD HOLDERS.

Estimated Journeys, Fares and Travel Time

The questionnaire asked respondents for information on the origin and destination of their most recent journey on public transport using their SuperGold Card. On the basis of the information provided, McDermott Miller estimated the number of fares zones/stages covered by each journey, time spent travelling and the distance covered. This enabled us to estimate the fare cost saved by using the SuperGold Card, and also all the costs of driving a car on the trip, using standard parameters.

Savings on Cost of Public Transport

NZTA data indicates that the average adult fare for trips under the Scheme is \$3.11.

- Applying the 58% figure of **Annex B, Table B5** to the total trips made under Scheme (7.4 million) indicates that around 4.2 million trips would have been made on public transport anyway, in the absence of the Scheme.
- Applying the NZTA average value of \$3.11/trip, the total saving in public transport fares to SuperGold Card holders on these 4.2 million trips is around \$13.1 million per annum.

Savings on Cost of Car Travel

Some 24% of journeys would have been made by car if the SuperGold Card off-peak public transport scheme was not available. Applying this to the 5.8 million journeys (i.e.

adjusting for journeys involving changes) indicates around 1.4 million journeys would otherwise have been made by car.

- This means the Scheme has been effective in causing a modal shift away from travel by car amongst card holders.
- Analysis of the data gathered on the respondents' most recent journey under the Scheme shows the average length of journey which would otherwise have been made by car is 11 km.
- Table A5.7 of the NZTA's Economic Evaluation Manual gives a Vehicle Operating Cost coefficient of some 30c/km at urban travel speeds. Applying this, card holders save some \$4.7 million in motor vehicle operating costs per year under the Scheme.
- The AA's averaged cost of running a compact car up to five years old in the 1500cc-2000cc size range (which, unlike the Economic Evaluation Manual figure, includes fixed costs) is 57c/km. Using the AA's cost per km indicates that SuperGold Card holders save \$9.0 million per year in vehicle ownership costs under the Scheme.
- We have adopted the \$4.7 million and \$9.0 million figures as the lower and upper bounds of the financial cost saving to card holders who, without the Scheme, would have travelled by car.
- Some 34% of those who would have otherwise made their journey by car would have had to pay parking costs. This applies to an estimated 240,000 journeys per year
- The saving in parking charges by those would otherwise have travelled by car is estimated to be around \$1 million annually.

Combined Financial Savings

Combining the financial savings of those who would have used public transport anyway and those that would have travelled by car, we get a total financial saving of around \$19-23 million.

2.6

ECONOMIC VALUE OF THE SUPERGOLD CARD PUBLIC TRANSPORT CONCESSION

The questionnaire includes a series of contingent valuation questions to estimate the overall utility of the SuperGold Card Scheme to public transport users age 65 and over.

This utility is not just the money saved by card holders; rather it is the benefits derived from the purpose of the travel. For example, a public transport using card-holder

may feel that card has helped them be more independent, and socially, physically or mentally active. They may feel better off because they have the option of travelling without worrying about the financial consequences to them.

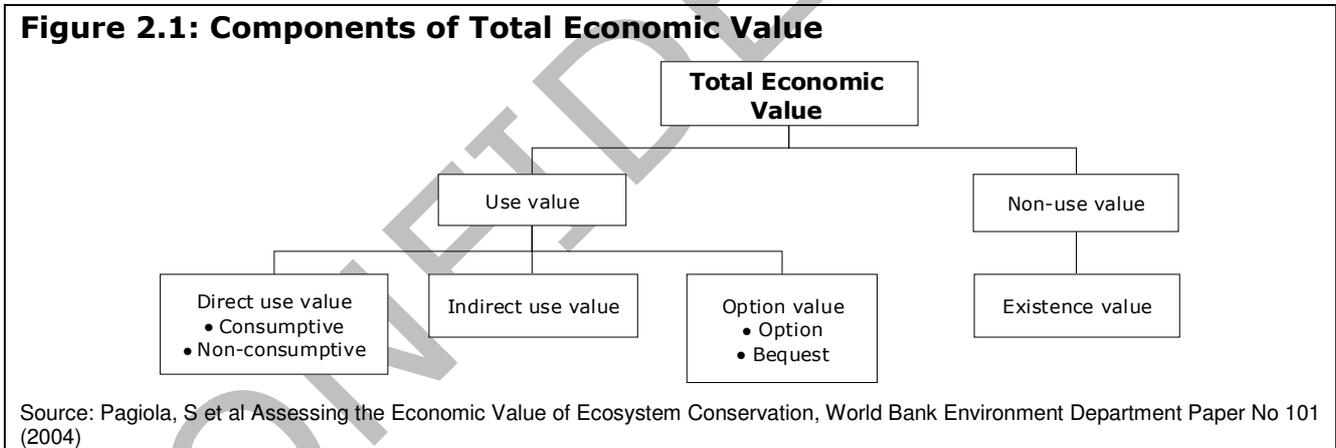
The contingent valuation questions are therefore intended to estimate how the Scheme has increased the respondent's welfare, and by scaling up, for estimating the welfare benefit of the Scheme to society as a whole.

The contingent valuation questions consist of a series of questions of the following form to allow us to estimate the users "consumer's surplus":

If someone offered you \$XX in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

The values asked in the questions ranged from \$50 to \$1000.

Figure 2.1 below illustrates the components of total economic value of a resource; through the contingent valuation we estimate the overall "use value".



- Our preliminary estimate is that the average SuperGold Card holder who uses public transport values the card's transport benefits at \$552 a year.
- We estimate that there are 138,000 SuperGold Card holders in the cities and towns covered by the survey who use public transport. This amounts to around 39% of the total 354,000 card holders in these areas.
- **Scaling up the \$552 average using the 138,000 users indicates the total "use value" of the SuperGold Card public transport scheme is around \$76 million a year.**

2.7

SUMMARY

Government Investment

According to NZTA's advice the cost of free access to public transport services under the SuperGold Card Scheme was approximately \$18million over the last twelve months.

Benefits derived by card holders from this expenditure are as follows:

Financial Benefits

- The total direct financial saving to card holders who are public transport users through not having to pay full fares, car travel costs or car parking is around \$19-23 million per annum.

Travel Time Benefits

- The value of journeys involving the SuperGold Card to public transport users as revealed by the commitment of travel time to travel is around \$18 million per annum.

Greater Use of Public Transport

- The Scheme has been effective in causing a modal shift away from travel by car. An estimated 1.4 million fewer car journeys per year are made because of the Scheme; and,
- The Scheme's "induced travel effect" is around 11% of trips made under the Scheme (i.e. around 800,000 trips of the 7.4 million total trips). Of these trips it can be said the Scheme has generated social benefits such as maintaining card holders' independence and involvement in their communities. The value of these trips to users is subsumed in the indicated consumers' surplus figure of \$76 million reported below.

Total Benefits

- It is clear the SuperGold Card free public transport travel scheme is valued even more highly than this by SuperGold Card holders who are public transport users. Their individual consumer surplus (including values of travel time saved, direct financial costs otherwise incurred by using car or public transport, together with social

benefits of greater independence, and higher levels of activity) averages at around \$550 per year;

- Collectively, these card holding public transport users value the Scheme in total (including all financial, travel time and social benefits outlined above) at around \$76 million a year.

2.8

CONCLUSION

We conclude that the public transport concessions under the SuperGold Card Scheme yield net financial and economic benefits to both users and the nation.

The Government's investment in free access to public transport under the SuperGold Card programme, costing around \$18 million per annum (that is, Government expenditure over the last twelve months), has generated benefits of around \$76 million per annum (including all personal financial savings and social benefits) to card holders using public transport.

These results indicate an approximate benefit-cost ratio of around 4:1 for the Government's investment in public transport access in the SuperGold Card scheme.

McDermott Miller Limited, Strategy Consultants

14 January 2010

TECHNICAL ANNEXURES

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ANNEX A: PURPOSE AND APPROACH

A.1 REVIEW OBJECTIVE AND PURPOSES OF RFQ 174/09

The first objective of the review of NZTA's review of the SuperGold Card free public transport travel scheme ("the Scheme") is stated in its RFQ as:

- a. *Identify the social and economic benefits provided by the Scheme;*

In order to achieve this objective, NZTA sought a consultant:

- *for assistance to formulate additional questions for the survey that will enable information to be collected on the social and economic benefits of the SuperGold free travel on public transport scheme and,*
- *to analyse how those benefits accrue to both the users of the scheme and the wider local and regional economies.*

In this Annex we outline the approach and methodology McDermott Miller used to determine the social and economic benefits ("for both users and for wider society and the regional/national economy") of the Scheme.

A.2 APPRECIATION OF THE BRIEF

The purpose of the SuperGold Card is expressed in NZ Transport Agency General Circular Policy: No 08/09 (18 September 2008) as:

The card aims to lower the cost of living for seniors and veterans, and provide a greater recognition of the contribution they have made, and continue to make, to New Zealand society.

The public transport travel scheme (the Scheme), introduced in late 2008, extended the discounts offered by the Card under a wide range of services to include free off-peak travel on most public transport.

The circular noted that *The initiative will be reviewed at the end of the 2008/09 financial year (July 2009)*. The present report forms part of this review process.

There are concerns in Government that because the population aged 65+ is projected to grow substantially the SuperGold Card as it stands may not be financially sustainable. The free public transport scheme will contribute to this cost growth, particularly if it results in a shift by card holders from peak to off-peak public transport travel, or causes a modal shift from car to public transport, or stimulates substantial trip-making that would not otherwise have occurred.

The issue under review then is: whether the increasing cost of the SuperGold Card public transport scheme is justified by the social and economic benefits that users, and society as a whole, derive from it. McDermott Miller devised a survey-based evaluation approach and methodology to address this issue.

A.3

APPROACH

Personal and Social Benefits of Transport

McDermott Miller’s view on valuation of personal and social benefits of transport was formed during a project for Wellington Regional Council on the *Social Benefits of Transport: Research Findings* (1997). There we distinguished between

- **Personal Benefits of Transport** “a set of established personal, or individual user, objectives for the transport system which, when aggregated for all individuals, amount to overall community social objectives” and
- **Community Wide Social Benefits of Transport:** “Most people are concerned about the economic, environmental and social welfare of the community as a whole (as well as personal interests and benefits). They recognise that decisions must be made to reflect the broader social need not just their own narrow self interest. Even if they don’t like this state of affairs, many people pay more through taxes than they draw in services and would like their preferences to be taken into account when taxes are spent.”

Among the community objectives identified was “increased mobility of disabled”, an objective which was considered important and worth paying for by all sectors, in particular by the retired. We would now rephrase that community objective more generally as “increased mobility of transport disadvantaged”.

McDermott Miller recognised this distinction in its design and analysis of Social and Economic Benefits questions for the *SuperGold Card Free Public Transport Travel Scheme Survey 2009* delivered by Key Research.

Examples of Benefits

Identifying and valuing the personal and social benefits of the Scheme required much more precise identification of journey purpose and frequency of travel than was achieved in the 2008 SuperGold Card holder questionnaire and its report *Public Transportation Survey:- SuperGold Card Free Public Travel Initiative* (Key Research, December 2008).

For example we had to identify whether journeys using the SuperGold Card generate social benefits through being made for purposes such as:

- Paid work;
- Voluntary work;
- Family work e.g. caring for sick grandchildren to allow adult children to go to work, or otherwise support them in child rearing;
- Visiting/supporting elderly friends and relatives;
- Clubs/organisations are more vital as people don’t have to consider cost when participating in their activities;

Or personal benefits such as:

- Accessing Health services
- Maintaining independence for longer – consistent with Governments “aging in place” policy;
- Maintaining contacts/social/community involvement for longer.

Need to identify life stage

Users of the Scheme are not a homogenous segment; a useful distinction was made between the benefits generated by the Scheme for the:

- “young – old” (when an over 65 person is still able to drive and probably be a net contributor in terms of voluntary and paid work and support given to family); and,
- the “old-old” – where an over 65 aged person is no longer able to drive and is a net recipient of care/support from family and the community – but still requires transport to live independently & be involved with family and community.

Inform Subsequent Trade Offs

This report provides the information necessary for NZTA to analyse the trade-offs between intangible personal and social benefits, on the one hand, and the financial cost to the Government of funding the Scheme on the other. We have not been able to assign economic values to all the personal and social benefits generated by the Scheme, due to the resource and time constraints of the project. But we have valued the Scheme to its users, quantified other social benefits even if not in monetary terms, and provided a foundation for a more comprehensive evaluation of the Scheme in future.

Survey Technique

An ideal approach to determining the social and economic benefits of the SuperGold Card Free Public Transport Travel Scheme would involve:

- A telephone household survey to:
 - gather quantitative and qualitative information on trip-making by both segments of SuperGold Card holders – both on public transport and other modes
 - recruit participants for the follow-up stated preference survey

- A web-based stated preference survey and subsequent preference simulation modelling using the SP survey data, to measure in monetary terms the utility that SuperGold Card holders derive from free off-peak trips on public transport.

However, the time available for the project made this approach impractical. We therefore designed and applied a survey methodology that could be delivered by telephone only as a component of a longer questionnaire. This involves a contingent valuation approach to estimating the personal utility generated by the SuperGold Card public transport concession Scheme (see **Annex B, Section B.7** for details).

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ANNEX B: ECONOMIC AND SOCIAL BENEFITS ASSESSMENT

B.1 CAVEAT

McDermott Miller was commissioned by NZTA to formulate and analyse questions for the *SuperGold Card Free Public Transport Scheme Survey 2009*. We were not responsible for delivery of the Survey (it was delivered by Key Research) nor were we responsible for setting regional sampling quotas. Sampling was only undertaken in the principal urban centres of each region. Sample sizes in the three metropolitan centres were not sufficient to support statistically reliable comparison of the benefits of the Scheme between them.

McDermott Miller calculated regional weights and applied them in the tables presented in **Annex B** and **Annex C**. We understand the weights used in NZTA’s report on the whole Survey are different. To ensure a comprehensive set of survey results is available using McDermott Miller’s weights and segmentation, **Annex C** presents results for most survey questions, not just those designed by McDermott Miller.

B.2 CALCULATION OF WEIGHTS

Table B1 below shows how regional weights were calculated to correct the effects of a constant sample size irrespective of population size. These weights are used in the tables in **Annex B** and **Annex C** of this report. As noted in **Section B. 1** above, McDermott Miller was not responsible for setting regional sampling quotas.

Table B1. Calculation of Weights

Region	Supergold card holders	% of regional population aged 65+ in sampled areas	Est Survey Population	Sample Size	Weight
Northland	22,819	51.2%	11,700	150	78
Auckland	136,378	100.0%	136,400	150	909
Waikato	50,974	27.1%	13,800	150	92
Bay of Plenty	40,736	65.7%	26,700	150	178
Hawkes Bay	22,065	86.2%	19,000	150	127
Taranaki	16,138	68.9%	11,100	150	74
Wellington	55,060	87.7%	48,300	150	322
Christchurch	76,322	83.0%	63,400	150	422
Otago	27,914	56.8%	15,900	150	106
Southland	13,281	57.1%	7,600	150	51
TOTAL	461,687	76.7%	353,900		

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B.3

PURPOSE AND BENEFITS OF TRAVEL ON PUBLIC TRANSPORT USING SUPERGOLD CARD

The following tables (**B2 to B4**) examine the purposes of travel and the qualitative benefits derived from travel under the SuperGold Card free off-peak transport provisions. The tables include only public transport users (i.e. respondents to the *SuperGold Card Free Public Transport Scheme Survey 2009* survey who have used public transport in the past year). Public transport users are segmented by age (up to and including 75, and 76 and over), in order to compare responses of the “young old” with those of the “old old” – although this distinction is more a function of health than age.

Table B2, on the main purpose of respondents’ most recent free journey on public transport using their SuperGold Card shows:

- The most common main purpose of this journey is shopping and other home maintenance activities (36%) followed by recreation/cultural activities (24%), and medical/health purposes (11%). Social activities with friends account for 11% of journeys, and family activities 9%.
- Comparing the up to 75 and over 76 segments, the percentage of journeys for shopping/home maintenance purpose is higher (44% compared to 31%), and for recreational/cultural activities is lower (15% compared to 29%). The percentage of journeys for medical/health purposes is higher for the older group (13% vs. 10%).



Table B2. What was the MAIN purpose of most recent journey on public transport using your SuperGold Card? (Weighted)

	Up to 75 incl (%)	76 plus (%)	Total (%)
Shopping/Household maintenance	31	44	36
Medical/Health etc	10	13	11
Family Activities	9	10	9
Social Activities	10	12	11
Recreational/Cultural Activities	29	15	24
Work - Paid/Voluntary	9	2	6
Other	1	5	3
Total	100	100	100
Est. Population	79,600	50,900	133,000
n=	236	145	388

Base: Public transport users
 Note: Age not known for 7 public transport users
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Respondents were asked an open-ended question on the benefits they got from making their most recent journey using their SuperGold Card. Responses were coded by Key Research and are shown in **Table B3** for the two age segments.

- The most frequently cited benefit was to visit friends or family (18%); this was given more frequently by the up to 75 age group (20%) than the over 76 segment (16%).
- Some 15% gave has a benefit that using public transport is a more relaxed or enjoyable method of travelling; this was given as a reason by 20% of the up to 75 group but only 9% of the over 75 group.
- “Shopping” was given as a benefit by 16% of the over 76 group, and 9% of the under 75 group.

Table B3. What benefits did you get from making this journey? (Weighted)

	Up to 75 incl (%)	76 plus (%)	Total (%)
Saved money on petrol	5	4	4
Saved money on parking	5	3	4
Saved money (general)	16	6	12
Visited friends or family	20	16	18
Meet new people	3	4	3
Fitness/ physical activity	5	0	3
Leisure activities	2	0	1
A day out/ general day out	4	3	4
A more relaxed/ enjoyable method of travelling	20	9	15
Didnt have to walk	0	4	2
Shopping/ to do shopping	9	16	11
Conduct errands (bank library etc)	2	6	4
Medical appointments/ treatment	3	5	4
Enjoyment/ fun	6	9	7
Travel to paid or voluntary work	5	0	3
No hassles having to park car	7	5	6
Other	12	14	13
Dont Know	2	7	5
Est. Population	79,600	50,900	133,000
n=	236	145	388

Multiple choices allowed
 Base: Public transport users
 Note: Age not known for 7 public transport users
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Respondents were asked a series of statements on the ways, if any, that SuperGold Card free off-peak public transport scheme has changed their travel patterns. The percentage responding “Often True” is given in **Table B4** below. See also **Table C32** in **Annex C**.

- The statement with most “often true” responses is “I spend less money on public transport each month” (60%);
- Some 47% of the aged over 76 segment responded “often true” to “I try to schedule appointments in the off peak times so I can use my SuperGold Card”, compared to 39% of the under 75 group;
- Some 35% of the aged over 76 group responded “often true” to “I also use public transport for trips I used to use the car for”, compared to 45% of the under 75 age group.

Table B4. % Responding "Often True" to statements on ways, if any, the SuperGold Card may have changed their travel patterns? (Weighted)

	Up to 75 incl (%)	76 plus (%)	Total (%)
I spend less money on public transport each month	60	63	60
I choose activities that are in off peak times so I can use my SuperGold card	52	48	50
Because of SuperGold card I use public transport for trips I used to use the car for	51	40	47
I am getting out and about more so enjoy life more	47	46	46
I spend less money on petrol every month	43	45	44
I try to leave the car at home and take public transport with my SuperGold card	45	41	44
I try to schedule appointments in the off peak times so I can use my SuperGold card	39	47	42
I encourage others to leave their car at home and use their SuperGold card	43	40	41
I also use public transport for trips I used to use the car for	45	35	41
I participate in activities that keep my mind active more often	38	30	35
I don't try to do so much in each trip out	30	32	31
I'm getting more exercise now I have a Supergold Card	27	25	26
I'm meeting more people now that I have a SuperGold card	28	23	26
I use public transport more now	26	21	24
I see more of my friends	27	20	24
I go to more events that I have to pay for as I can use my SuperGold card to get there	26	20	24
As well as walking to the bus stop	24	17	21
I still prefer to take the car	22	16	20
I spend more money on refreshments when I got out as I haven't had to pay for transport	19	11	16
I don't have to ask for lifts as much	12	13	13
I am helping with care of grandchildren more	16	8	13
I see more of my family	18	7	13
I use public transport for trips I used to walk	11	14	12
I participate in community political or environmental affairs more often	18	3	12
I am doing more voluntary work	7	10	8
I am doing more paid work	4	1	3
Est. Population	79,600	50,900	133,000
n=	236	145	388

Base: Public transport users

Note: Age not known for 7 public transport users

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Conclusion on benefits derived from the Scheme

Comparing the purposes and benefits of free-off peak travel using the SuperGold Card in the above **Tables B3** and **B4**, indicates that for the older, over 76 group, use of public transport is more of a necessity and it is used more for essential tasks such as shopping and medical purposes. Travel under the Scheme appears to be more discretionary for the under 75 group - they travel for recreation purpose more than the older group, and the option of travelling by car is more frequently available to the younger than the older group.

B.4

GENERATED AND INDUCED TRAVEL

Table B5 below shows responses to questions on whether respondents' travel pattern on their most recent journey would have been different, had free off-peak travel under the Scheme not been available to them.

- If the SuperGold Card public transport scheme did not exist around 58% would still have travelled by public transport.

- A further 39% would have changed their travel pattern in some way if the Scheme did not exist.
- Some 3% responded "Don't Know" to this question.

Table B5. Would have changed travel pattern on most recent journey or not without SuperGold Card (Weighted)

	% of Public Transport Users
Yes my travel pattern would have changed	39.4%
No my travel pattern would not have changed	57.8%
Don't Know	2.8%
Total	100.0%
Est. Population	133,000
n=	388

Note: This table pools responses in Tables C24 and C27 of **Annex C**
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The first results column in **Table B6** below shows that, among the 39% who would have changed their travel pattern without the card, some 62% would have made the journey by car; some 28% said they would not have made the journey at all.

The second results column in **Table B6** shows the percent responses on how travel patterns would have changed with the same base as **Table B4**, i.e. SuperGold Card holders who are public transport users. This shows that:

- around 27% of journeys under the Scheme are "generated travel", i.e. would have been made by another mode if the card did not exist.
- around 24% of journeys would have otherwise been made by car, and 2% by walking or cycling.
- around 11% of journeys made by SuperGold Card holders would not have been made at all if the Scheme did not exist.
- Therefore there were around 800,000 "induced travel" trips (out of the 7.4 million total) under the Scheme in its first year.

Table B6. How travel patterns would have changed (Weighted)

	% of those that would have changed travel	% of Public Transport Users
Would have driven myself	57.4%	22.6%
Would have been driven by someone else	4.5%	1.8%
<i>Subtotal would have made trip by car</i>	<i>61.9%</i>	<i>24.4%</i>
Taxi	0.8%	0.3%
Community transport	0.6%	0.2%
Would have walked or cycled	5.5%	2.2%
Other (specify)	0.0%	0.0%
Would not have made the trip at all	27.9%	11.0%
Would make this type of trip less often	3.0%	1.2%
Don't know	0.2%	0.1%
Total	100.0%	39.4%
Est. Population	52,400	133,000
n=	142	388

Note: this table pools responses in Tables C25 and C28 of **Annex C**
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B.5

VALUE OF TRAVEL TIME

While travelling off-peak on public transport using SuperGold Card is free in cash terms, each journey still involves a cost to the card holder in terms of the time committed to the journey. Including the value of travel time is a standard component of economic evaluation of transport projects as stipulated in NZTA’s Economic Evaluation Manual.

Value of time spent on buses, trains and harbour ferries

The value of time actually spent on buses, trains and harbour ferries is estimated in **Table B7** below.

The “Other non-work travel purpose” value for Seated bus and train transport user time coefficients in Table A4.1 of the NZTA’s Economic Evaluation Manual is \$3.05/hour in 2002 terms, or \$3.63 in 2008 dollars.

- The survey data indicates average time spent on buses or trains is 23 minutes. With total trips by SuperGold Card holder in its first year of operation at 7.39 million (source NZTA spreadsheet *national SuperGold data (Final).xls*), this implies at total of 2.9 million hours are spent on the transport.
- The total value of this time on public transport is around \$11 million.

Table B7. Value of travel time : Time on Buses or Trains

Total Number of SuperGold Card Trips (NZTA)	7,390,444
Average time per on bus/train per leg (minutes)	23.4
Average time per on bus/train per leg (hours)	0.39
Total time on SuperGold Transport Trips (Hours)	2,882,273
Value of Travel time (Seated bus passenger 2002 EEM Section A4.2)	3.05
Inflation adjustment (Table A12.3 EEM Vol 1, Sept 2008)	1.19
Value of travel time after inflation adjustment (\$/hour)	3.63
Value of time spent on travelling using SG Card (\$million)	\$10.5

Source: SuperGold Card Free Public Transport Scheme Survey 2009 unless otherwise specified
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Value of time spent on whole journey

However, the actual time on the bus or train is only part of the time committed by the card-holder to the journey; respondents were asked to estimate the total time the journey took, including walking time at both ends, and waiting time. The value of this total journey time is estimated in **Table B8** below.

- Weighted survey data indicates that around 22% of trips made under the Scheme are second and third stages of overall journeys involving changes;
- Adjusting for this, the 7.4 million trips made under the Scheme correspond to around 5.8 million one-way journeys;
- Including walking and waiting time the time of the average journey is around 52 minutes, i.e. a total of 5.0 million hours are committed to journeys involving the use of a SuperGold Card;
- Valuing walking and waiting time at the same rate of \$3.63/hour gives a total time value of \$18.3 million.

We conclude that the **value of journeys involving the SuperGold Card to public transport users as revealed by the commitment of time to travel is around \$18.3 million per annum**

Table B8. Value of travel time : Complete journey

Total Number of SuperGold Card Trips (NZTA)	7,390,444
% of trips that are second or third legs of overall journey	21.6%
Est. number of journeys	5,793,585
Average time for whole journey including walking and waiting (minutes)	52.2
Average time for journey including walking and waiting (hours)	0.87
Total time on journeys (Hours)	5,040,419
Value of Travel time (Seated bus passenger 2002 EEM Section A4.2)	3.05
Inflation adjustment (Table A12.3 EEM Vol 1, Sept 2008)	1.19
Value of travel time after inflation adjustment (\$/hour)	3.63
Value of time spent on travelling using SG Card (\$million)	\$18.3

Source: SuperGold Card Free Public Transport Scheme Survey 2009 unless otherwise specified
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B.6

FINANCIAL SAVINGS TO SUPERGOLD CARD HOLDERS.

The survey questionnaire asked respondents for information on the origin and destination of their most recent journey on public transport using their SuperGold Card. On the basis of the information provided, McDermott Miller estimated the number of fares zones/stages covered by each journey, time spent travelling and the distance covered. This enabled us to estimate the fare cost saved by using the Gold Card, and also all the cost of driving a car on the journey, using standard parameters.

Savings on Cost of Public Transport

As shown in **Table B5** above, some 58% of respondents would have made their most recent journey the same way, if they did not have the free off-peak travel using their SuperGold Card.

Table B9. Fares that would have been paid by those who would have made their journey by public transport anyway (Weighted)

Estimated Adult Fare	Unweighted	Weighted
0-\$2	13%	15%
\$2.01-\$3.00	52%	32%
\$3.01-\$5.00	14%	23%
\$5.01-\$10.00	10%	20%
\$10.00+	6%	8%
N/A	4%	1%
TOTAL	100%	100%
n=	235	76,800

Source: SuperGold Card Free Public Transport Scheme Survey 2009 unless otherwise specified
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- Based on the survey data underlying **Table B9**, the (unweighted) average fare cost of this group for their complete journey would have been \$4.12, or \$3.48 per stage.
- The weighted average fare cost of this group for their complete journey would have been \$5.05, or \$4.03 per stage.

NZTA data indicates that the average adult fare for trips under the Scheme is \$3.11; this is less than the \$3.48 (unweighted) and \$4.03 (weighted) figures calculated from our sample.

Applying the 58% figure of **Table B5** to the total trips made under Scheme (7.39 million) indicates that around 4.2 million trips would have been made on public transport anyway, in the absence of the Scheme. Applying the NZTA average value of \$3.11/trip, the total saving in public transport fares to SuperGold Card holders is around \$13.1 million.

Savings on Cost of Car Travel

As noted in **Section B4** above, some 24% of journeys would have been made by car if the SuperGold Card off-peak public transport scheme was not available. Applying this to the 5.8 million journeys (i.e. adjusting for journeys involving changes) **Table B8** indicates around 1.4 million journeys would otherwise have been made by car.

Analysis of the data gathered on the respondents' most recent journey under the Scheme shows the average length of journey which would otherwise have been made by car is 11 km.

Table A5.7 of the NZTA's Economic Evaluation manual gives a Vehicle Operating Cost coefficient of some 30c/km at urban travel speeds. Applying this, card holders save some **\$4.7 million** in motor vehicle operating costs per year under the Scheme.

However, if card holders paid full adult fares on public transport instead of using their cars, they would pay around **\$4.4 million** – only 6% less than the vehicle operating cost using NZTA coefficients.

The difference between travel by car and public transport is much greater when we instead use the New Zealand Automobile Associations' averaged cost of running a car, which includes fixed costs in its calculation. In 2009 for a compact vehicle up to five years old in the 1500cc-2000 cc size range this amounts to 57c/km. Using this coefficient suggests that SuperGold Card holders save **\$9.0 million per year** in vehicle ownership costs under the Scheme.

We have therefore adopted the \$4.7 million and \$9.0 million figures as the lower and upper bounds of the financial cost saving to card holders who, without the Scheme, would have travelled by car.

Some 34% of those who would have otherwise made their journey by car would have had to pay parking costs. This applies to an estimated 240,000 journeys per year (34% of 1.4 million journeys is 480,000, then dividing by 2 as return journeys are counted as two separate trips). Assuming an average parking cost of around \$4.00, the total saving in parking charges would be around \$1 million annually.

Combined Financial Savings

Combining the financial savings of those who would have used public transport anyway and those that would have travelled by car, we get a total financial savings in the range around \$19-23 million. This comprises:

- Public transport fare savings of \$13.1 million;
- car operating costs in the range \$ 4.7-9.0 million
- and car parking cost saving of around \$1 million.

B.7 ECONOMIC VALUE OF THE SUPERGOLD CARD PUBLIC TRANSPORT CONCESSION

The survey questionnaire includes a series of contingent valuation questions to estimate the overall utility of the SGC Scheme to public transport users age 65 and over.

This utility is not just the money saved; rather it is the benefits derived from the purpose of the journey. For example, a public transport using card-holder may feel that card has helped them be more independent and socially, physically or mentally active. They may feel better off because they have the option of travelling without worrying about the financial consequences to them. The contingent valuation questions are intended to estimate how the Scheme has increased the respondent's welfare, and by scaling up, for estimating the welfare benefit of the Scheme to society as a whole.

B.7.1 Selection of Methodology for valuing intangible benefits

There is well established academic literature concerning the range of methodologies that may be employed for the purposes of determining the value of intangible benefits. Three principal quantitative approaches are:

- The **Travel Cost Method** (a revealed preference method) has potential for valuing user benefits. It assumes that the costs of visiting a site or facility reflect the value put on it and that value can therefore be calculated by adding together the costs incurred by visitors. This is a combination of direct financial costs, plus travel time cost (see Appendix A4 to NZTA's *Economic Evaluation Manual – Volume 1*).
- **Conjoint Analysis and related Stated Choice methods** are based on the evaluation of a set of *independent* attributes which can be arbitrarily combined and recombined into "profiles" for products, for which respondents can then express their preferences (either through ratings or making choices, depending on the variant of the method being employed).
- **Contingent Valuation** (another Stated Preference method) requires individuals to place a value upon an unpriced service or resource in a hypothetical contingency, often associated with circumstances that foreshadow the removal, destruction or substantial modification of the resource/service.

The **Travel Cost Method** has potential for valuing direct use benefits but not option benefits. We therefore applied it in this assessment as a way of estimating a "lower bound" on the value of benefits derived from the Scheme by its users.

Conjoint Analysis is usually McDermott Miller's preferred stated preference technique for estimating consumers' surplus. However, conjoint analysis questionnaires must be delivered by personal interview (usually computer-assisted) or web-based interview – not by telephone. Due to the stipulation that the survey in the current

study be delivered by telephone, conjoint analysis was ruled out. There are precedents for use of contingent valuation in transport studies, including McDermott Miller's Kerikeri Heritage Park and Bypass Development, 2002, which involved using contingent valuation to value the intangible benefits arising from roading changes in Kerikeri Basin as input to a benefit-cost analysis of roading options.

Both contingent valuation and conjoint analysis are acceptable methods for consumer preference surveys for evaluating roading packages in NZTA's Economic Evaluation Manual (Volume 2, Section 3.2).

Form of the Contingent Valuation Questions

During development of the economic benefits questions to be inserted in the survey questionnaire, a number of variants of contingent valuation questions were tested.

First, we tested two formulations involving asking respondents to nominate values without prompting them with any suggested values. The "willingness to accept compensation" and alternative "willingness to pay" formulations of these questions are set out in the box below; both values were trialled.

Trial forms of Contingent Valuation Questions

"Willingness to Accept Compensation" unbounded version

- What is the highest cash offer at which you would definitely leave the cash and instead choose free off-peak public transport for a year using your SuperGold Card?
- At what level of cash offer would you think the cash is getting attractive, but you would still consider taking free off-peak public transport for a year using your SuperGold Card?
- What is the lowest cash offer that would be so generous you would definitely take it rather than free off-peak public transport for a year using your SuperGold Card?

"Willingness to Pay" unbounded version

- What is the highest annual price at which you would think free off-peak public transport for a year using your SuperGold Card is a bargain – a great buy for the money?
- At what annual price would you begin to think free off-peak public transport for a year using your SuperGold Card is getting expensive, but you still might consider it?
- And what is the lowest annual price at which you would think free off-peak public transport for a year using your SuperGold Card would be too expensive to consider?

We found that, when tested in a telephone interview situation, these unbounded questions were not easy for respondents to understand. We also found that respondents had difficulty with the concept of "paying", even in theory, to obtain "free" travel.

We therefore developed and tested the following "multiple bound choice" question format, using a "Willingness to Accept compensation" concept:

**Final Version of Contingent Valuation Questions:
"Multiple bound choice", "Willingness to Accept Compensation", formulation**

A If someone offered you \$500 in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

If answer to A is travel ask B:
B If someone offered you \$750 in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

If answer to B is travel ask C:
C If someone offered you \$1000 in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

If answer to A is Cash ask D:
D If someone offered you \$250 in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

If answer to D is Cash, ask E:
E If someone offered you \$100 in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

If answer to E is Cash ask F:
F If someone offered you \$50 in cash to give up free off-peak travel on public transport for a year, offered on the SuperGold Card, would you take the money or the travel?

We found in testing that these questions could be conveyed successfully by telephone.

B.7.2 Contingent Valuation Analysis

Results of Contingent Analysis questions

The results of the above multiple-bounded "Willingness to Accept Compensation" questions are given in **Table B10** below.

Table B10. Response to Contingent Valuation Questions (Weighted)

	Sum Offered					
	\$50	\$100	\$250	\$500	\$750	\$1,000
Cash	49%	59%	58%	33%	5%	23%
Year's off-peak travel with SuperGold Card	41%	28%	28%	60%	88%	70%
Don't Know	10%	13%	14%	7%	7%	7%
Total	100%	100%	100%	100%	100%	100%
n=	65	88	139	388	224	194

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Average Willing to Accept Per Year

The data in **Table B11** below is derived from responses to the results in **Table B10** above.

- Some 21% of the SuperGold Card holder population who are public transport users place a low value on the free public transport provided by their card, or responded "Don't Know" to all the contingent valuation questions put to them (in order to be conservative in our estimates, we treat these "Don't Know" responses as zero-value responses).
- At the other extreme, an estimated 37% of the population places a minimum value of \$1000 per year on the free off-peak travel service provided by their SuperGold Card.
- We estimate that there are 138,000 SuperGold Card holders in the cities and towns covered by the survey who use public transport. This amounts to around 39% of the total 354,000 card holders in these areas.
- Applying the coefficients in the "Value used in calculation" column of **Table B11** to the estimated population who value their free off-peak travel in each range in the "minimum amount willing to accept per year" gives the results in the "Total WTA" column of the table
- In total, we estimate that SuperGold Card holder who use public transport, value all the benefits the card provides **at \$76.2 million** per annum.
- The average value across the population of 138,000 SuperGold Card holders who use public transport is **\$552** per annum.

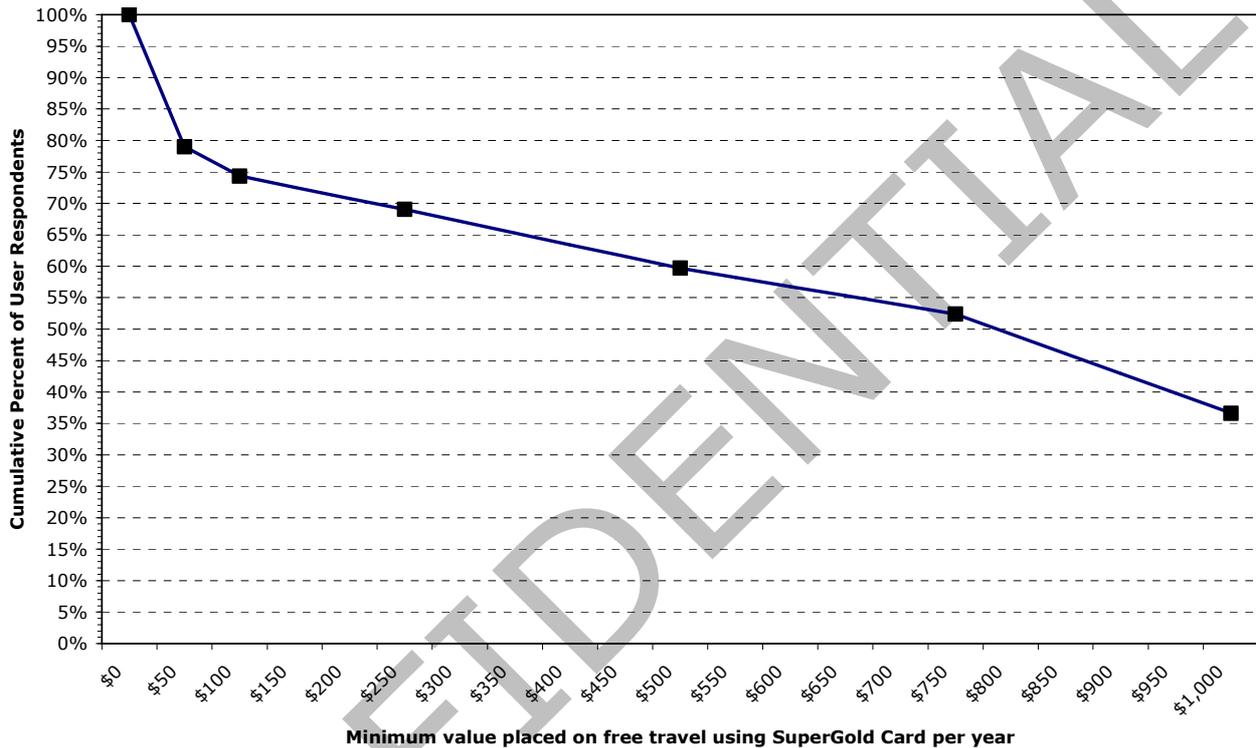
Table B11. Calculation of Minimum Amount Willing to Accept per year

Minimum amount willing to accept per year	Value used in calculation	Est. Public Transport User Population	% of Public Transport User Population	Total WTA (\$million)
\$0-\$50+D.K.	\$0	28,900	21%	\$0.0
\$51-\$100	\$51	6,500	5%	\$0.3
\$101-\$250	\$101	7,300	5%	\$0.7
\$251-\$500	\$251	12,900	9%	\$3.2
\$501-\$750	\$501	10,100	7%	\$5.0
\$751-\$1000	\$751	21,700	16%	\$16.3
Over \$1000	\$1,000	50,500	37%	\$50.5
Total		138,000	100%	\$76.2
n=		388		
Average Willing To Accept Per Year				\$552

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Figure B1 below presents the figures in **Table B11** as a quasi-demand curve showing the cumulative percentage of public transport-using SuperGold Card holders who value their free-off peak travel using the Card at the value shown on the X-axis (at least). For example, 53% of these value their annual use of the card at a minimum of \$751 (see the fourth column of **Table B11** above, 53%=16%+37%).

Figure B1: Minimum Value of Off-Peak Public Transport to SuperGold Card holders who use public transport (cumulative percent).



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Table C1. How often do you usually use local public transport? (local buses, local trains, and harbour ferries)

	Public Transport Users (%)	Non-Users (%)	Total (%)
Everyday	6	0	2
Two to three days per week	23	0	9
Once a week	14	0	6
Several times a month	17	0	7
Once a month	13	0	5
Less often than once a month	26	0	11
Don't know	0	0	0
Other (specify)	0	0	0
Never (not used for more than 12 months) GO TO QUEST	0	100	60
Total	100	100	100
Est. Population	142,400	211,500	353,900
n=	426	1074	1500

Base: All

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Table C2. Compared with a year ago, before the free off peak travel with the SuperGold Card, are you now using public transport more often, less often or about the same as before?

	Public Transport Users (%)
More	6
Less	37
About the same	57
Total	100
Est. Population	140,900
n=	421

Base: Respondents who used public transport in last year

N.B. Question not used in McDermott Miller's analysis

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Table C3. What types of local public transport do you usually use?

	Public Transport Users (%)
Bus	89
Train	30
Ferry	20
Other (please specify)	1
Total	
Est. Population	142,400
n=	426
Multiple responses allowed	

Base: Respondents who used public transport in last year
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Table C4. Why do you not use public transport?

	Non-Users (%)
Cost/too expensive	0
Inconvenience	6
Inappropriate timetable	1
Doesn't go where I need to go	2
Prefer own transport (PROBE: WHY IS THAT?)	59
Stops too far from my house	5
Stops too far from my destination	1
Infrequent service	1
Prefer to walk/cycle	2
Disability/access issues	11
No need	7
No service available	8
Timetable doesn't suit	2
Don't know	1
Other (please specify)	8
Total	
Est. Population	211,500
n=	1074
Multiple responses allowed	

Base: Respondents who have not used public transport in last year
 N.B. Question not used in McDermott Miller's analysis
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Table C5. How many public transport journeys have you made using your Super Gold Card over the last month?

	Public Transport Users (%)
0	23
1-2	21
3-6	28
7-10	12
11-16	8
17-20	3
21-30	4
31+	2
Total	100
Est. Population	142,400
n=	426

Base: Respondents who used public transport in last year
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Table C6. Please think about the most recent journey you made by Public Transport using your SuperGold Card. When was this journey made?

	Public Transport Users (%)
Yesterday	8
2 days ago	4
3 days ago	3
4 days ago	6
5 days ago	3
6 days ago	2
A week ago	13
Today	5
2 weeks ago	18
3 weeks ago	7
a month ago	6
2 months ago	4
3 months ago	3
4 to 6 months ago	5
More than 6 months ago	5
Never used SGC on public transport	7
Other (Specify)	0
Don't Know	0
Total	100
Est. Population	142,400
n=	426

Base: Respondents who used public transport in last year
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Table C7. What day of the week was this?

	Public Transport Users (%)
Monday	8
Tuesday	15
Wednesday	15
Thursday	11
Friday	12
Saturday	8
Sunday	5
Don't Know	25
Total	100
Est. Population	133,000
n=	388

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C8. What was the MAIN purpose of this journey?

	Public Transport Users (%)
Other Shopping	22
Entertainment	12
Medical/Health/Dental/Physio etc	11
Food Shopping	8
Visit family for other reasons	8
Visit friends	6
Caf,/Restaurant/Pub/RSA etc	5
Banking/Post Office/Paying bills	4
Other recreation/cultural (Specify)	3
Journey to Paid Work	3
Other (specify)	3
Library	2
Physical Activity	2
Serious Leisure	2
Journey to Voluntary Work	2
Hair/Beauty etc	1
Help with family's childcare	1
Museum/Art Gallery	1
Church/Other religious	1
Public affairs	1
Travel on Paid Work Business	1
Drop off/pick up car for/from service	1
Help with friend's childcare	0
Travel on Voluntary Work Business	0
Total	100
Est. Population	133,000
n=	388

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C9. What was the MAIN purpose of this journey? (Grouped Purposes)

	Public Transport Users (%)
Shopping/Household maintenance	36
Medical/Health etc	11
Family Activities	9
Social Activities	11
Recreational/Cultural Activities	24
Work - Paid/Voluntary	6
Other	3
Total	100
Est. Population	133,000
n=	388

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C10. What were the other purposes of the journey if any?

	Public Transport Users (%)
Other Shopping	35
Caf./Restaurant/Pub/RSA etc	19
Visit family for other reasons	11
Visit friends	7
Entertainment	7
Banking/Post Office/Paying bills	6
Other (specify)	6
Food Shopping	5
Medical/Health/Dental/Physio etc	4
Library	3
Serious Leisure	3
Journey to Voluntary Work	3
Help with family's childcare	2
Church/Other religious	2
Public affairs	2
Hair/Beauty etc	1
Physical Activity	1
Other recreation/cultural	1
Journey to Paid Work	1
Help with friend's childcare	0
Museum/Art Gallery	0
Travel on Paid Work Business	0
Travel on Voluntary Work Business	0
Est. Population	59,800
n=	157
Multiple responses allowed	

Base: Those whose journey had more than one purpose

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Table C11. Did you use your Super Gold Card to get both to and from your destination?

	Public Transport Users (%)
Both legs (going to your destination and returning)	84
Outward leg only	9
Homeward leg only	7
Don't Know	0
Total	100
Est. Population	130,300
n=	383

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C12. How did you travel on your homeward leg?

	Public Transport Users (%)
Returned on public transport during peak so had to pay	27
Got a lift home on homeward leg	49
Took a taxi to home	10
Convenience	0
Other (specify)	1
Walked	7
Drove Self	5
Don't Know	1
Total	100
Est. Population	11,500
n=	38

Base: Those who only used SGS on outward leg
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Table C13. How did you travel on your outward leg?

	Public Transport Users (%)
Travelled on public transport during peak so had to pay	26
Got a lift to my destination	27
Took a taxi to my destination	5
Convenience	0
Other (Specify)	14
Walked	20
Drove Self	7
Don't Know	1
Total	100
Est. Population	9,600
n=	34

Base: Those who only used SGS on homeward leg

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Table C14. Did the journey involve any changes (from bus to bus, bus to train, train to train or bus to ferry etc)

	Public Transport Users (%)
Yes	24
No	76
Don't Know	0
Total	100
Est. Population	133,000
n=	388

Base: Respondents who used their SuperGold Card on public transport in last year

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Table C15. About how long were you actually travelling on the bus, train or ferry? (actually on the bus or train or ferry)

	Public Transport Users (%)
1-5 minutes	5
6-10 minutes	14
11-15 minutes	16
16-20 minutes	16
21-25 minutes	5
26-30 minutes	12
31-35 minutes	4
36-40 minutes	9
41-45 minutes	3
46-50 minutes	0
51-55 minutes	1
56-1 hour	6
More than 1 hour up to 1 → hours inclusive	4
More than 1 → hours up to 1 « hours inclusive	1
More than 1 « hours	1
Don't Know	1
Total	100
Est. Population	100,800
n=	313

Base: Those whose most recent SGC journey involved no changes.
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Table C16. How many changes did you make to get to your destination? (one-way journey only)

	Public Transport Users (%)
1 (i.e. travelled on two bus/trains altogether in one direction)	81
2 (travelled on three bus/trains altogether in one direction)	19
Total	100
Est. Population	31,800
n=	73

Base: Those whose most recent SGC journey involved changes.
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**Table C17. About how long were you actually travelling on your first bus or train or ferry?
(actually on the bus or train or ferry)**

	Public Transport Users (%)
1-5 minutes	5
6-10 minutes	16
11-15 minutes	13
16-20 minutes	33
21-25 minutes	4
26-30 minutes	17
31-35 minutes	6
36-40 minutes	1
41-45 minutes	1
46-50 minutes	0
51-55 minutes	0
56-1 hour	2
More than 1 hour up to 1 → hours inclusive	1
More than 1 → hours up to 1 « hours inclusive	0
More than 1 « hours	0
Don't Know	1
Total	100
Est. Population	32,200
n=	75

Base: Those whose most recent SGC journey involved changes
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**Table C18. About how long were you actually travelling on your second bus or train or ferry?
(actually on the bus or train or ferry)**

	Public Transport Users (%)
1-5 minutes	4
6-10 minutes	24
11-15 minutes	17
16-20 minutes	18
21-25 minutes	7
26-30 minutes	8
31-35 minutes	3
36-40 minutes	3
41-45 minutes	5
46-50 minutes	0
51-55 minutes	3
56-1 hour	2
More than 1 hour up to 1 → hours inclusive	2
More than 1 → hours up to 1 « hours inclusive	0
More than 1 « hours	1
Don't Know	3
Total	100
Est. Population	32,200
n=	75

Base: Those whose most recent SGC journey involved changes
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Table C19. About how long were you actually travelling on your third bus or train or ferry? (actually on the bus, train or ferry)

	Public Transport Users (%)
1-5 minutes	5
6-10 minutes	20
11-15 minutes	10
16-20 minutes	30
21-25 minutes	0
26-30 minutes	1
31-35 minutes	15
36-40 minutes	0
41-45 minutes	0
46-50 minutes	0
51-55 minutes	0
56-1 hour	1
More than 1 hour up to 1 → hours inclusive	0
More than 1 → hours up to 1 « hours inclusive	0
More than 1 « hours	2
Don't Know	15
Total	100
Est. Population	6,000
n=	16

Base: Those whose most recent SGC journey involved two changes
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Table C20. About how long did the journey take altogether, including all walking and waiting time, from leaving the place you started to arriving at your final destination?

	Public Transport Users (%)
1-5 minutes	1
6-10 minutes	2
11-15 minutes	4
16-20 minutes	9
21-25 minutes	6
26-30 minutes	9
31-35 minutes	3
36-40 minutes	5
41-45 minutes	7
46-50 minutes	4
51-55 minutes	1
56-1 hour	12
More than 1 hour up to 1 → hours inclusive	4
More than 1 → hours up to 1 « hours inclusive	8
More than 1 « hours	24
Don't Know	3
Total	100
Est. Population	133,000
n=	388

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C21. Who did you make this journey with?

	Public Transport Users (%)
By yourself	65
With spouse/partner	21
Other Family	4
Friend/s	8
Social/Recreation/Church group you are a member of	2
Other (Specify)	0
Total	100
Est. Population	132,300
n=	385

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C22. How did you get to the bus stop/train station you started your journey from?

	Public Transport Users (%)
Walked	82
Drove self	15
Given a lift	3
Don't know	0
Total	100
Est. Population	132,200
n=	384

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C23. Do you know what the adult fare for this journey is?

	Public Transport Users (%)
Yes: Go to number 25	41
No: Go to question number 28.	59
Total	100
Est. Population	133,000
n=	388

Base: Respondents who used their SuperGold Card on public transport in last year
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Table C24. If you had had to pay the full adult fare for this journey, would your travel pattern have changed?

	Public Transport Users (%)
Yes my travel pattern would have changed	30
No my travel pattern would not have changed	70
Don't Know	1
Total	100
Est. Population	54,800
n=	174

Base: Those who know the adult fare for the journey on which they used their SGC.
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Table C25. How would it have changed?

	Public Transport Users (%)
Would have driven myself	63
Would have been driven by someone else	6
Taxi	0
Community transport	0
Would have walked or cycled	7
Other (specify)	0
Would not have made the trip at all	20
Don't know	0
Would make this type of trip less often	3
Total	100
Est. Population	16,300
n=	52

Base: Those who know the adult fare for the journey on which they used their SGC and would have changed their travel pattern without their SGC.
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Table C26. If you had had to pay the half the adult fare for your most recent journey on public transport, would you have still made this journey?

	Public Transport Users (%)
Yes my travel pattern would have changed	64
No my travel pattern would not have changed	32
Don't Know	4
Total	100
Est. Population	16,300
n=	52

Base: Those who know the adult fare for the journey on which they used their SGC and would have changed their travel pattern without their SGC.

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Table C27. If you did not have a SuperGold Card, would your travel pattern have changed?

	Public Transport Users (%)
Yes my travel pattern would have changed	46
No my travel pattern would not have changed	49
Don't Know	4
Total	100
Est. Population	78,200
n=	214

Base: Those who do not know the adult fare for the journey on which they used their SGC.

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Table C28. How would it have changed?

	Public Transport Users (%)
Would have driven myself	55
Would have been driven by someone else	4
Taxi	1
Community transport	1
Would have walked or cycled	5
Other (specify)	0
Would not have made the trip at all	31
Don't know	0
Would make this type of trip less often	3
Total	100
Est. Population	36,200
n=	90

Base: Those who do not know the adult fare for the journey on which they used their SGC and would have changed their travel pattern without their SGC

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Table C29. Would you have had to pay for parking?

	Public Transport Users (%)
Yes	34
Possibly	16
No	46
Don't Know	4
Total	100
Est. Population	38,000
n=	104

Base: Those who would have used a car if they did not have a SGC
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Table C30. Would your driver have been:

	Public Transport Users (%)
Your spouse	25
Someone else who lives with you	15
Other family member	51
A friend	7
Other (Specify)	2
Total	100
Est. Population	8,100
n=	29

Base: Those who would have been driven by someone else if they did not have a SGC
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Table C31. What benefits did you get from making this journey?

	Public Transport Users (%)
Saved money on petrol	4
Saved money on parking	4
Saved money (general)	12
Visited friends or family	18
Meet new people	3
Fitness/ physical activity	3
Leisure activities	1
A day out/ general day out	4
A more relaxed/ enjoyable method of travelling	15
Didnt have to walk	2
Shopping/ to do shopping	11
Conduct errands (bank library etc)	4
Medical appointments/ treatment	4
Enjoyment/ fun	7
Travel to paid or voluntary work	3
No hassles having to park car	6
Other	13
Dont Know	5
Est. Population	133,000
n=	388
Multiple responses allowed	

Base: Respondents who used their SuperGold Card on public transport in last year
 N.B. Question not used in McDermott Miller's analysis
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Table C32. In what ways, if any, the SuperGold Card has changed your travel patterns?

	Often True (%)	Sometimes True (%)	Not true at all (%)	Total (%)
I choose activities that are in off peak times so I can use my SuperGold card	50	20	31	100
I try to schedule appointments in the off peak times so I can use my SuperGold card	42	20	37	100
I try to leave the car at home and take public transport with my SuperGold card	44	23	34	100
I encourage others to leave their car at home and use their SuperGold card	41	19	40	100
I don't try to do so much in each trip out	31	19	50	100
I go to more events that I have to pay for as I can use my SuperGold card to get the	24	16	60	100
I spend more money on refreshments when I got out as I haven't had to pay for traf	16	18	67	100
I spend less money on petrol every month	44	18	38	100
I spend less money on public transport each month	60	16	23	100
I'm meeting more people now that I have a SuperGold card	26	14	60	100
Because of SuperGold card I use public transport for trips I used to use the car for	47	22	32	100
I use public transport for trips I used to walk	12	19	68	100
I also use public transport for trips I used to use the car for	41	23	36	100
I use public transport more now	24	22	54	100
I still prefer to take the car	20	24	55	100
I'm getting more exercise now I have a Supergold Card	26	20	54	100
I am helping with care of grandchildren more	13	4	84	100
I am doing more voluntary work	8	8	84	100
I don't have to ask for lifts as much	13	8	80	100
I am doing more paid work	3	5	92	100
I see more of my family	13	8	79	100
I see more of my friends	24	16	60	100
As well as walking to the bus stop	21	16	64	100
I participate in activities that keep my mind active more often	35	18	47	100
I participate in community political or environmental affairs more often	12	9	79	100
I am getting out and about more so enjoy life more	46	17	37	100
Est. Population	133,000			
n=	388			

Base: Respondents who used their SuperGold Card on public transport in last year

N.B. Question not used in McDermott Miller's analysis

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Table C33. Which of the following best describes your total HOUSEHOLD annual income before tax? Please stop me when I reach the correct one.

	Public Transport Users (%)	Non-Users (%)	Total (%)
Under \$19999	18	18	18
\$20000 - \$29999	30	34	32
\$30000 - \$39999	14	12	13
\$40000 - \$49999	10	5	7
\$50000 to \$59999	7	3	4
\$60000 to \$69999	2	1	1
\$70000 - \$79999	1	0	0
\$80000 - \$89999	2	1	1
\$90000 - \$99999	0	0	0
\$100000 - \$109999	1	1	1
\$110000 - \$119999	0	0	0
\$120000 or above	1	1	1
Refused (DON'T READ)	10	15	13
Other	5	9	8
Total	100	100	100
Est. Population	142,400	211,500	353,900
n=	426	1074	1500

Base: All

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Table C34. And may I ask what age you are?

	Public Transport Users (%)	Non-Users (%)	Total (%)
Up to 75 incl	60	54	56
76 plus	39	43	41
N/A	2	3	2
Total	100	100	100
Est. Population	142,400	211,500	353,900
n=	426	1074	1500

Base: All

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Table C35. And is there a motor vehicle in your household?

	Public Transport Users (%)	Non-Users (%)	Total (%)
Yes	82	91	88
No	18	9	12
Total	100	100	100
Est. Population	142,400	211,500	353,900
n=	426	1074	1500

Base: All

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Table C36. And are you currently a licensed driver?

	Public Transport Users (%)	Non-Users (%)	Total (%)
Yes	78	88	84
No	22	12	16
Total	100	100	100
Est. Population	142,400	211,500	353,900
n=	426	1074	1500

Base: All

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Table C37. Is there another person in your household who is a licensed driver?

	Public Transport Users (%)	Non-Users (%)	Total (%)
Yes	54	47	50
No	46	53	50
Total	100	100	100
Est. Population	141,500	206,700	348,200
n=	425	1066	1491

Base: All

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Table C38. Do you have any public transport stops or stations within 10 minutes walk of your house?

	Public Transport Users (%)	Non-Users (%)	Total (%)
Yes	91	72	80
No	3	16	10
Further than 10 minutes away	7	8	7
No public transport in the area	0	4	3
Total	100	100	100
Est. Population	142,400	204,800	347,200
n=	426	1033	1459

Base: All

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Table C39. Are you engaged in paid work?

	Public Transport Users (%)	Non-Users (%)	Total (%)
Yes	17	11	14
No	83	87	85
DON'T KNOW	0	0	0
REFUSED	1	1	1
Total	100	100	100
Est. Population	142,400	211,500	353,900
n=	426	1074	1500

Base: All

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Table C40. Is your paid work

	Public Transport Users (%)	Non-Users (%)	Total (%)
Full time (i.e. greater than 30 hours per week)	25	28	26
Part time	53	51	52
Casual	16	15	15
Other (specify) [Respondent Specify]	4	4	4
DON'T KNOW	0	0	0
REFUSED	3	2	2
Total	100	100	100
Est. Population	23,600	24,200	47,900
n=	61	133	194

Base: All

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