Coversheet: Green Transport Card Scheme

Advising agencies	Agency responsible for this advice: Ministry of Transport (the Ministry) Agencies involved in developing this advice: Ministry of Social Development (MSD), Ministry of Health (MoH), New Zealand Transport Agency (NZTA), the Treasury.
Decision sought	To agree to establish a scheme to reduce the costs of public transport for Community Services Card (CSC) holders, and to agree in principle to implement this scheme from mid-2020 onwards.
Proposing Ministers	Hon Julie Anne Genter, Associate Minister of Transport Hon Phil Twyford, Minister of Transport

Summary: Problem and Proposed Approach

Problem Definition

What problem or opportunity does this proposal seek to address? Why is Government intervention required?

Low-income households that lack affordable access to transport have difficulty accessing social and economic opportunities that are fundamental for participating in society. The average weekly expenditure on passenger transport services among low-income households in New Zealand increased by 63% between 2013 and 2017. These costs might increase due to growing travel costs, and might perpetuate disadvantages. These low-income households might access more opportunities if transport costs were lower.

The Green Transport Card Scheme (the scheme) would help reduce transport disadvantages for many low-income households in urban areas, and counter the effects of rising transport costs for these households in the future. It will also support the Government's objective to achieve a transport mode shift in urban areas from private vehicles to public transport, and to meet the priority for improving access in Transport Outcomes Framework and Government Policy Statement on Land Transport (GPS) 2018¹.

Proposed Approach

How will Government intervention work to bring about the desired change? How is this the best option?

The scheme will make public transport more affordable for all Community Services Card (CSC) holders, by enabling them to travel with a 50% concession on base adult public transport fares. Even though there are some low-income households that may not hold a CSC, the Ministry considers CSC holders as a proxy to identify these low-income households/individuals as the best initial pathway for making public transport more affordable for the target population².

This scheme will directly benefit CSC holders financially, and increase their access to social and economic opportunities such as work, education, recreation, and health care. It will also deliver cobenefits for improving people's health, reducing greenhouse gas emissions, and managing

^{1.} Further information can be found on page 13 of this document.

^{2.} SuperGold Card holders with a CSC would not be eligible for the scheme, as they can already travel fare-free on public transport during offpeak periods.

congestion by supporting public transport as a preferred mode of urban travel.

Section B: Summary Impacts: Benefits and costs

Who are the main expected beneficiaries and what is the nature of the expected benefit?

The main beneficiaries of the scheme are CSC holders who live in urban areas with access to public transport services. CSC holders include people who receive a benefit from Work and Income, such as recipients of an accommodation supplement or a disability allowance, those without paid work, low-income families, people living in social housing, tertiary students who are eligible for a student allowance, and refugees.

Specifically, this scheme would primarily benefit CSC holders who:

- currently use public transport
- do not use public transport now, but live close to a public transport service that operates when CSC holders want to travel, to where they want/need to go3.
- do not have a disability that affects their ability to use public transport 4.

The scheme would also affect other transport users and the wider public:

- 1. Expected benefits for CSC holders who use the scheme
 - Direct financial savings and freeing up disposable income (lower public transport costs*, lower car maintenance costs, lower parking costs).
 - Higher social inclusion (improved access to social and economic opportunities). 1.2.
 - Improved health (increasing public transport use is correlated with higher levels of 1.3. walking, which supports positive physical and mental health).
- 2. Expected benefits for other transport users if it helps to drive a mode shift from private cars to public transport
 - Improved public transport services (by creating a financial incentive for councils to 2.1. increase the frequency and reach of services).
 - Improved management of traffic congestion due to mode shift to public transport.
- Expected benefits for the wider public if it helps to drive a mode shift from private cars to public transport
 - Improved health (due to lower air and noise pollution from private vehicles).
 - Reduced carbon emissions.
- * These benefits can be monetised.

Where do the costs fall?

The main costs of the scheme will be met by the Crown, with an intention to avoid cost transfers to local government.

The costs of the scheme include:

^{3.} Some CSC holders may switch from walking and cycling to use public transport more often due to the scheme, which would increase their travel costs. However, they are only likely to do this if the perceived benefits of using public transport exceed the costs of using it.

^{4.} The Ministry could explore mitigation options for these groups, which would require additional investigation.

- 1. Direct subsidy costs for CSC holders (funded by the Crown): \$20.1 million decrease in revenue per year is expected initially, decreasing to \$18.1 million by year 10⁵ for option 2. This decrease is the net impact of two components: 'lost revenue on existing trips' and 'increased revenue on new trips'. Costs would decrease slightly over time, as passengers would still contribute half the fare price on all new trips. Increasing fare revenue would help to offset additional costs.
- 2. Implementation costs (funded by the Crown): information technology systems, project management, communications, staff time, and reimbursing councils for the costs of adapting ticketing systems. These costs are yet to be negotiated and confirmed, but they are unlikely to exceed the \$4.64 million of Budget funding for 2019/20 already set aside to establish the scheme.
- 3. Ongoing administration costs (funded by the Crown and the National Land Transport Fund (NLTF): some costs will be incurred by the Ministry of Social Development (MSD) and the New Zealand Transport Agency (NZTA), and would be funded by the Crown. These costs are yet to be confirmed. Ongoing administration costs for councils would be funded by the NLTF.
- 4. Costs to provide additional public transport services (funded by the NLTF, the Crown, and councils): existing funding mechanisms would be used to fund additional public transport services. These services are currently funded 50% by fares⁶, 25% by the NLTF, and 25% by councils. Additional services driven by this scheme would be funded 25% by fares, 25% by Crown subsidies (identified above), 25% by the NLTF, and the remaining 25% to be negotiated between the Crown and councils. Additional public transport services would benefit all public transport users and the wider public, not just CSC holders, so the Crown should not be expected to cover all of councils' share of fare costs.

What are the likely risks and unintended impacts, how significant are they and how will they be minimised or mitigated?

Significant risks and unintended impacts associated with the scheme include:

- The subsidy costs could be higher (or lower) than the Ministry's estimates. There is no reliable data available on how many CSC holders currently use public transport, or where they travel to. The Ministry made assumptions on public transport use based on information from the Ministry's Household Travel Survey. The Ministry also made assumptions about how public transport use could rise when fare prices fall. To manage this risk, the costs of the scheme should be reviewed after its first year of implementation to update funding estimates.
- Councils could choose not to implement the scheme, which would make implementation difficult. Although councils were supportive of the investigation, they are concerned about the pace of implementation and costs. They are still working through the implications of recent legislative changes, such as the costs of mandatory rest and meal breaks for bus drivers associated with the Employment Relations Amendment Act 2018, and a move to an industry-wide living wage. The Ministry needs to maintain a positive working

^{5.} Lost revenue (foregone revenue) is smaller in the long-term, because in the long-term there is greater generation of new public transport trips, which brings in new revenue that offsets the discounts on existing trips.

^{6.} The Ministry has assumed approximately a 50% national farebox recovery ratio. The Ministry, however, recognises that this ratio varies in the country, is lower in some regions, and that there is a lack of national consistency in farebox recovery ratio.

relationship with councils to implement the scheme, as the scheme is likely to be voluntary for councils to implement (similar to the SuperGold Card fare concession scheme for seniors).

- 3. The scheme could cause adverse impacts on public transport users if it is implemented too quickly, or without sufficient planning. Auckland, Wellington, and Canterbury are already experiencing capacity constraints on some routes during peak travel periods. These constraints are the highest in Wellington. Additional patronage driven by the scheme could lead to overcrowding, especially at peak travel times. This overcrowding could lead to public dissatisfaction, and discourage existing passengers or people who would benefit from the scheme. To mitigate this risk, councils need to be given sufficient time to increase the capacity of their networks. Regional phasing will also be considered. This issue would need to be addressed in terms of regional needs, capacities, demographics, and equity concerns.
- 4. Some fraudulent use of the scheme is likely to be unavoidable. Some cardholders might sell or lend their concession travel cards to other people. This risk could partially be managed by requiring CSC holders to carry their CSC with them while travelling on concession fares, and by considering the appropriateness of existing penalties for fraudulent card use. These measures may require regulatory changes.
- 5. The scheme would raise equity concerns. Some CSC holders may criticise the scheme if they are unable to access public transport services. This consideration may include CSC holders living in areas without a regular public transport service (approximately 50% nationwide based on MSD estimates), and CSC holders with disabilities who have difficulty using public transport. The Ministry could explore mitigation options for these groups, which would require additional investigation.

Identify any significant incompatibility with the Government's 'Expectations for the design of regulatory systems

This scheme is compatible with the Government's 'Expectations for the design of regulatory systems'

The Ministry will need to consider the appropriateness of existing penalties for fraudulent card use within the scheme (in case people sell or lend their concession travel cards to other people). A new regulatory framework may need to be established to enforce provisions specific to the scheme, including the possibility of removing a card that has been fraudulently used.

Section C: Evidence certainty and quality assurance

Agency rating of evidence certainty?

The scheme primarily aims to improve the well-being of many low-income households, including people on a benefit by making public transport more affordable for these people. It also aims to deliver co-benefits for improving people's health, reducing greenhouse gas emissions, and managing congestion, by supporting public transport as a preferred mode of urban travel. To investigate the scheme's potential to meet the abovementioned targets, the Ministry reviewed evidence on the links between transport affordability and well-being.

Extensive research shows that people who lack affordable access to transport experience 'transport disadvantages'. They have more difficulty accessing goods, services, and opportunities that are

available to others, which are fundamental for participating in society. This includes access to education, employment, health services, and sporting, leisure, and cultural activities. While public transport is only one way of providing access, research shows that public transport can play an important role in reducing transport disadvantages and in supporting social inclusion.

Reducing public transport fares for low-income households is one approach that can be used to reduce transport disadvantages. Other approaches could include improving transport options (e.g. providing better public transport services to areas with high concentrations of low-income households), making services more accessible for people with disabilities, and increasing household incomes.

There is a lack of research and data on the extent of transport disadvantages for low-income people in New Zealand, or on the most effective ways to reduce these disadvantages. This area has received insufficient attention in the past. This issue needs to be addressed because travel costs for low-income households are increasing, which could perpetuate disadvantages. The average weekly expenditure on passenger transport services among low-income households in New Zealand increased by 63% between 2013 and 2017. Anecdotal evidence from Auckland Transport and Greater Wellington Regional Council (GWRC) also suggested that public transport costs are a barrier for many low-income households that use public transport regularly. Based on Household Travel Survey data 2015-2018, even though almost 76% of the CSC holders in Auckland and Wellington live within walking distance to a regular public transport service (as portrayed in Table 8), only 47% in Auckland and 75% in Wellington used public transport in these regions at least once in the last year.

Many CSC holders might use public transport more often if fare prices were lower⁷. However, it is unclear how much difference this intervention would make compared to other possible interventions to reduce transport disadvantages for low-income households (e.g. increasing household incomes, or increasing the reach and frequency of public transport services to economically deprived areas). The scope for this proposal was limited to addressing the affordability of public transport fares.

There is also extensive research that demonstrates the benefits of increasing public transport use. economically (by reducing/managing congestion), for public health (through increased active travel, and lower air and noise pollution), and environmentally (through lower carbon emissions and other pollutants).

Quality Assurance Reviewing Agency:
duality reductioning regardy.
Quality Assurance Assessment:
Reviewer Comments and Recommendations:

^{7.} Further explanation on the modelling of options and assumptions underpinning impact analysis is provided on pages 9-10.

RELEASE OF THE ACT OF

Impact Statement: Green Transport Card Scheme

Section 1: General information

1.1. Purpose

The Ministry of Transport (the Ministry) is solely responsible for the analysis and advice set out in this Regulatory Impact Assessment, except as otherwise explicitly indicated.

This scheme primarily aims to improve the well-being of many low-income households, including people on a benefit, by making public transport more affordable for these people. It also aims to deliver co-benefits of improving public health, reducing greenhouse gas emissions, and managing congestion, by supporting public transport as a preferred mode of urban travel.

- Key (or in-principle) policy decisions to be taken by:
 - 1. Hon Phil Twyford, Minister of Transport
 - 2. Hon Julie Anne Genter, Associate Minister of Transport
 - 3. Cabinet Economic Development Committee (DEV).
- Stakeholders consulted during the development of this proposal.
 - 1. Ministry of Social Development (MSD)
 - 2. Ministry of Health (MoH)
 - 3. New Zealand Transport Agency (NZTA)
 - 4. The Treasury
 - 5. Local Government New Zealand (LGNZ)
 - 6. Auckland Transport
 - 7. Greater Wellington Regional Council (GWRC)
 - 8. Environment Canterbury (ECan)
 - 9. Marlborough District Council
 - 10. Hawkes Bay Regional Council
 - 11. Nelson City Council
 - 12. Horizons Regional Council.
- Final decisions to proceed with a policy change to be taken by:
 - Hon Phil Twyford, Minister of Transport
 - 2. Hon Julie Anne Genter, Associate Minister of Transport
 - Cabinet Economic Development Committee (DEV).

Key Analysis Points and Constraints

Scope Limits

The scheme stemmed from an agreement in the 2017 Confidence and Supply Agreement between the Labour Party and the Green Party to "investigate a Green Transport Card as part of work to reduce the cost of public transport, prioritising people in low-income households and people on a benefit."

The scheme is targeted at CSC holders as these people have already been identified by the Government as low-income people, including people on a benefit.

The scheme is limited to improving the affordability of public transport for CSC holders, rather than addressing all transport disadvantages for low-income households.

Evidence of the Problem

Transport plays a crucial role in providing people with access to social and economic opportunities. Transport access is shaped by the availability of transport options, the affordability of those options, and peoples' abilities (including any physical/mental impairments) to use available options. People who have difficulty accessing transport due to limited income and/or a lack of available transport options are often described as 'transport disadvantaged'8.

Extensive international research demonstrates the important role of transport in creating an inclusive society. The research shows that people who lack affordable access to transport have difficulty accessing goods, services, and opportunities that are available to others as a fundamental part of belonging to society. This issue includes access to education, employment, health services, healthy food choices, and sporting, leisure, and cultural activities. An ability to be mobile is also important in the development of social networks and community strengthening 10. Strong social networks are important for personal well-being, and for growing the capacity of people to overcome adversity.

Australian research has shown that people who experience the greatest risk of social exclusion use public transport less, and own fewer cars than the rest of the population. These people travel less often, and for shorter distances than people with fewer risks of social exclusion 11. Some sub-groups of the population tend to experience more significant transport disadvantages than others, including lowincome households, solo parents, children, students, elderly people, and people with disabilities 12. Many CSC holders fit within these categories.

Research by the European Parliament has demonstrated that public transport often plays a crucial role in supporting social inclusion, particularly for those without a car or whose mobility is impaired¹³. Affordable public transport services can provide people with basic mobility, including access to essential shopping, medical services, and education or employment opportunities. The main barriers facing socially disadvantaged groups in Europe include the availability of public transport services (including frequent services, better coverage, and reliability), followed by the costs of public transport14.

As well as making transport more accessible, public transport can provide a fall-back option for lowincome commuters who usually use private vehicles if their vehicles become unavailable (e.g. due to breakdown, damage, theft)15. In addition, public transport can improve the resilience of low-income households to absorb financial shocks. These shocks can include loss of income, or experiencing higher private transport costs. These costs could be driven by rising/fluctuating oil prices, carbon

Rosier, K, McDonald, M (2011). The relationship between transport and disadvantage in Australia. Australia: Australia Institute of Family Studies.

for example Social Exclusion Unit. (2003). Making the connections: final report on transport and social exclusion. http://www.socialexclusionunit.gov.uk/publications/reports/html/transportfinal/summary and Mackett, R, & Thoreau, R (2015), Transport, social exclusion and health. Journal of Transport & Health 2 (2015) 610-617.

Stanley, J, Stanley, J, Vella-Brodrick, D & Currie, G (2010). The place of transport in facilitating social inclusion via the mediating influence of social capital. Research in Transportation Economics 29 (2010), 280-286.

Stanley, J, Stanley, J, Vella-Brodrick, D & Currie, G (2010). The place of transport in facilitating social inclusion via the mediating influence of social capital. Research in Transportation Economics 29 (2010), 280-286.

^{12.} Rosier, K, McDonald, M (2011). The relationship between transport and disadvantage in Australia. Australia: Australia Australia Institute of Family Studies.

See Directorate-General for Internal Policies of the Union (European Parliament). (2015). Social inclusion in EU public transport. https://publications.europa.eu/en/publication-detail/-/publication/40b4f6de-88dc-42ad-a869-a40b3aa64f81/language-en and Litman, T. (2011). Evaluating Public Transit Benefits and Costs, Victoria Transport Policy Institute, http://www.vtpi.org/tranben.pdf and Cats, O. and Susilo, Y, O. (2017). The prospects of fare-free public transport: evidence from Talinn. Transportation, 44, 1083-1104. See also Stanley, J, Stanley, J, Vella-Brodrick, D & Currie, G (2010). The place of transport in facilitating social inclusion via the mediating influence of social capital. Research in Transportation Economics 29 (2010), 280-286.

See Directorate-General for Internal Policies of the Union (European Parliament). (2015). Social inclusion in EU public transport. https://publications.europa.eu/en/publication-detail/-/publication/40b4f6de-88dc-42ad-a869-a40b3aa64f81/language-en

^{15.} Litman, T. (2011). Evaluating Public Transit Benefits and Costs. Victoria Transport Policy Institute, http://www.vtpi.org/tranben.pdf

charges, parking charges, or congestion charges.

Evidence of the Problem in New Zealand

There is a lack of data on transport affordability and transport disadvantaged communities in New Zealand. Nonetheless, CSC holders are likely to spend a higher proportion of their income on necessary travel than higher-income households in New Zealand, and/or choose not to travel due to transport costs. CSC holders do not currently receive concessions on most public transport services in New Zealand¹⁶. Most CSC holders pay the same fares as people from higher-income households, even though transport is essential in accessing opportunities they need, while it is unaffordable for them.

The Australian Approach

Public transport concessions are available to low-income households in most Australian cities. For example, the state of Victoria in Australia offers a 50% concession to anyone with a Health Care Card (similar to a CSC)¹⁷. Transport Canberra offers free off-peak travel to Health Care Cardholders¹⁸. Perth offers concessions of over 50% to Health Care Cardholders and their dependants listed on the card¹⁹. Brisbane offers a 50% concession to job-seekers and asylum seekers. These cities also offer similar concessions to tertiary students and seniors.

Insights from the SuperGold Card

Experience with the SuperGold Card provides a useful illustration of how lower public transport fares can drive social and economic benefits for transport disadvantaged groups. A 2009 review of the SuperGold Card found that cardholders were participating more in society, enjoying greater independence, meeting more people, enjoying more physical and mental activity, and using their cars less often as a result of the public transport concessions²⁰. This review also found that the social and economic benefits of the SuperGold Card exceeded the costs.

Broader Health Needs and Potential Benefits

The scheme could potentially improve access to health services for some low-income households. In 2017/18 transport costs prevented approximately one in five adults living in the most socioeconomically deprived areas of New Zealand from visiting a doctor. Approximately 3.2% of New Zealand's population face barriers to health due to a lack of affordable transport, with Māori and Pacific peoples experiencing higher barriers compared to non-Māori and non-Pacific communities²¹. Some district health boards have advocated for lower fares for CSC holders to make transport more affordable and inclusive²².

^{6.} CSC holders receive fare discounts of up to 30% in some regions, including Hawkes Bay, Taranaki, Horizons (Manawatu-Wanganui), Nelson, and Tasman. They do not receive CSC concessions in Auckland, Wellington, Christchurch, or other cities.

https://www.ptv.vic.gov.au/tickets/myki/concessions-and-free-travel/health-care-card/

^{18.} Canberra is currently offering fare-free travel as a trial. https://www.transport.act.gov.au/tickets-and-myway/fares/concessions.

^{19.} https://www.transperth.wa.gov.au/tickets-fares/concession-guide

^{20.} https://www.nzta.govt.nz/assets/consultation/super-gold-card/docs/survey-nov-2009.pdf

^{21.} Ministry of Health (2018). New Zealand Health Survey 2017/2018.
22. In 2017, Regional Public Health (which represents the district health boards of the greater Wellington region) supported concessionary fares for CSC holders because these people often experience transport disadvantages. See Regional Public Health (2017). Submission on Better Metlink Fares: Proposed variation to fare policies in the Regional Public Transport Plan. http://www.rph.org.nz/resources/submissions/2017-09rphsubmission-bettermetlinkfares.pdf

Range of Options Considered for the Scheme

Three policy options were developed and investigated for the scheme:

- 1. Option 1: Fare-free off-peak travel (equivalent to the SuperGold Card concessions).
- 2. Option 2: A 50% discount on base fares for CSC holders, valid for travel any time.
- 3. Option 3: A public transport allowance (a set monthly/annual value, valid any time).

Criteria Used to Assess Options

Each policy option was assessed against four main criteria:

- 1. social benefits and impacts (including health) for public transport users
- 2. cost effectiveness
- 3. transport impacts (particularly on public transport networks' performance)
- 4. ease of implementation.

Of these four criteria, social benefits and impacts have been measured through similar experiences and evidence from international examples, national literature, and from the SuperGold Card's implementation in New Zealand. The Ministry tested and confirmed the results of this analysis with agency representatives from the Governance and Working Groups. The other three criteria were assessed in different surveys shared with councils giving them three weeks to respond and give feedback to the Ministry. Each option had different benefits, costs, and challenges. Table 1 summarises the costs and benefits for each option.

Table 1: Summary of estimated benefits and subsidy costs for primary CSC holders

2	Option 1: Fare-free, off-peak	Option 2: 50% concession, any time	Option 3: Travel allowance ²³
Social benefits			
Access to employment, health, and education	Low	Medium-high	Medium
Additional health benefits (including active travel)	Low	Low-med	Low-medium
Mode shift benefits	Low	Medium	Low-medium
Annual direct monetised benefit to CSC holders (year 1)	\$24.7 million	\$29.6 million	NA
Annual direct monetised benefit to CSC holders (year 10)	\$35.9 million	\$43.8 million	NA NA
Public transport system impacts			
Increase in annual passenger trips: year 1	+3.8 million (2.5% increase)	+4.5 million (5.4% increase)	Depends on Allowance Size
Increase in annual passenger trips: year 10	+8.1 million (3.1% increase)	+10.9 million (7.3% increase)	Depends on Allowance Size
Impacts on PT capacities	Low	Moderate	Moderate
Annual revenue foregone / direct su	bsidy costs		
Foregone revenue (year 1)	\$33.9 million	\$20.1 million	0
Foregone revenue (year 10)	\$44.8 million	\$18.1 million	0
Travel allowance	0	0	\$30-60 million (\$100-\$200 allowance) ²⁴
Ease and speed of implementation			

²³. Further analysis and discussion on option 3 can be found in section 3.1 on page 18 and section 3.2 on page 23 of this document.

^{24.} MSD estimates that the total number of CSC holders, excluding the SuperGold Card holders, is approximately 652,131 people. However, the precise number is unknown. The Ministry considered 300,000 people in this modelling, because MSD estimates also show that, on average, only 50% of CSC holders are within walking distance of a public transport service, as also reflected in Table 8 on page 26. Therefore, this calculation reflects the costs for approximately 300,000 CSC holders. For the national total population of 652,131 CSC holders, these numbers will change to \$65.2 million (with \$100 allowance p.a.) and \$130.4 million (with \$200 allowance p.a.).

Local Government	Less difficult than other options	Most difficult, extra capacity needed	Quickest option
Central Government	No difference between Options 1 and 2	No difference between Options 1 and 2	Whole new system needed, unknown timeframes

Assumptions Underpinning Impact Analysis

The impacts on public transport usage and direct subsidy estimates were generated through a model developed in collaboration with councils involved in a working group to investigate the merits of the scheme. These councils are listed in sections 1.1 and 2.5.

Auckland Transport, GWRC, and ECan used this model to generate estimates using public transport data from their regions. Public transport data from NZTA on other regions was then supplemented into this model to develop national estimates.

The assumption underpinning the analysis considered an annual patronage growth rate of 2.5% for the bigger regions (Auckland, Wellington, and Canterbury), and an annual patronage growth rate of 0.5% for smaller regions (Gisborne, Invercargill, etc.)²⁵. Due to insufficient data, Northland, Horizons, Nelson, Marlborough, and Otago were not modelled in the analysis. These excluded regions only accounted for 3.5% of the nation's public transport usage, which includes 15.36% of New Zealand population and approximately 18.02% of the population of CSC holders²⁶. An annual fare (price) increase of 2% was also considered in the model. Based on these assumptions, the total patronage (trips) per year in peak and off-peak times, and the total revenue per year (trips multiplied by fares/price) were calculated.

The increase in demand brought on by the scheme discounts was estimated using elasticity coefficients (which measured the demand changes in response to price changes). The elasticity coefficients varied for peak and off-peak times, and increased in the long run (as it would take time for people to change their travel behaviour)²⁷. The model did not account for inflation (hence does not use "real" fare changes) because the model only needed the relative price difference between the base case and the intervention. Incorporating inflation (to calculate real fare changes) would not change the relative price difference, thus would not change the comparisons between options.

Consultation and Testing

Councils on the working group (identified in section 2.5) were consulted throughout the development of the model to ensure all agreed on the underlying assumptions and the formulas. The model produced point estimates (rather than range estimates); therefore, there was a degree of uncertainty around the output. This uncertainty was primarily due to the fact that the vast majority of councils do not know how many of their customers are CSC holders. The proportion of total patronage that were CSC holders was estimated through a smaller side-model. This side-model used the data from MSD and the Household Travel Survey, and was later incorporated into the main model.

During the development of the demand/revenue model, the working group (via their modellers) provided frequent feedback on both the structure and the underlying assumptions. Individual consultations were also undertaken with experts from Auckland Transport, ECan and GWRC. All were satisfied that the model provided reasonable indicative estimates of the expected changes in both

^{25.} These rates were determined in conjunction with the councils and follow recent trends.

^{26.} Data Available at:

http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7502& ga=2.11388082.762277126.1564355262-277089812.1547593032

^{27.} The price elasticity of demand was -0.28 in the short-term, and -0.55 in the long-term (both multiplied by between 75%, 110%, and 150%, to represent peak, off-peak, and weekends).

demand and revenue.

Impact Analysis of the Data

Based on this analysis of options, option 2 (a 50% concession for CSC holders, any time) offered the best balance of value and benefits. This option was also the most-preferred option of the councils involved in investigating options (with the exception of GWRC that preferred option 3). Altogether, the results of the analysis on the options are summarised below:

- Option 1: Free off-peak travel (equivalent to the SuperGold Card concessions):
- 1.1. Social Impacts: the benefits are likely to be low while the costs are likely to be higher than other options.
- 1.2. Implementation Costs: the costs are relatively lower than other options as this option aligns with the systems/ticketing processes already set up for SuperGold Card.
- 1.3. Implementation Difficulty: the implementation is less difficult and the impact on public transport capacity is lower than other options.
- Option 2: A 50% discount on base fares for CSC holders, valid for travel any time,
- 2.1. Social Impacts: the benefits are higher than option 1. Medium-level benefits are anticipated.
- 2.2. Implementation Costs: the costs are higher than other options due to the need to set up new systems and processes for a new concession. For example, Auckland provided a high-level estimate of around \$500,000 for the initial costs of ticketing changes.
- 2.3. Implementation Difficulty: the implementation is more difficult than option 1. Provisions to accommodate the increased demand for public transport should be predicted, and changes to the ticketing system need to be planned.
- Option 3: A public transport allowance (a set monthly/annual value, valid any time).
- 3.1. Social Impacts: the benefits are higher than option 1. Medium-level benefits are anticipated depending on the allowance size. Compared to option 2, the allowance would benefit irregular users of public transport more than regular users, unless the allowance is very high (which would be prohibitively costly).
- 3.2. Implementation Costs: no changes would be needed to ticketing systems on buses and trains. However, central government would need to design a new system to transfer allowances to registered travel cards. Councils could also face higher administrative burdens and costs for top-ups compared to other options.
- 3.3. Implementation Difficulty: implementation could be more or less difficult compared to other options, as a bespoke system would need to be designed and it is unclear how long this system would take to develop. Implementation issues were not fully investigated as it became apparent that option 2 offered more benefits.

1.3. Responsible Manager (signature and date):

Richard Cross

Strategic Policy and Innovation

Strategy and Investment

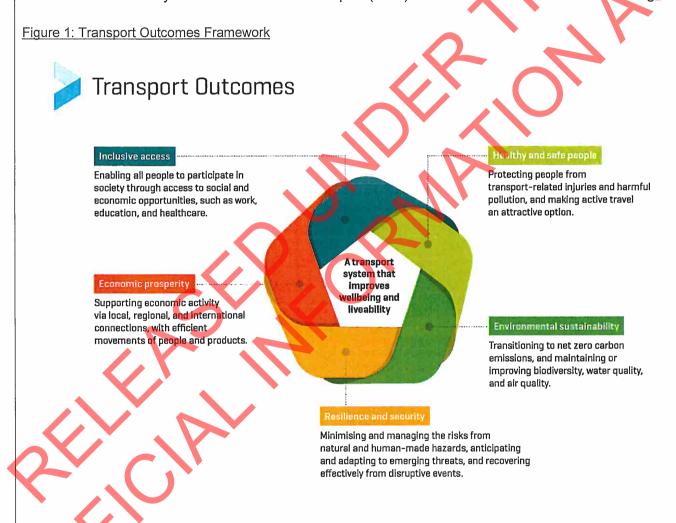
Ministry of Transport

Section 2: Problem definition and objectives

2.1 What is the context within which action is proposed?

The scheme aligns with the Government's overall objectives for the transport system, transport outcomes framework, and strategic priorities.

In 2018, the Ministry of Transport (the Ministry) worked with other central government transport agencies to develop an outcomes framework for the transport sector²⁸. This framework identifies what the Government is aiming to achieve through the transport system. The framework now guides all central government transport planning and policies, and provides a framework to help the Government develop its priorities for the Government Policy Statement on Land Transport (GPS). This framework is summarised in Figure 1.



The scheme contributes to the following outcomes of the transport outcomes framework:

- 1) Inclusive access it would make it easier for low-income people to access opportunities that improve their wellbeing by reducing/removing cost barriers to travel.
- 2. Environmental sustainability it would encourage people to travel by public transport, which is a lower carbon form of travel than using a private car.
- 3. Healthy and safe people it would encourage people to use public transport that increases physical activity levels with people walking to/from public transport stops/stations more often. Public transport is also the safest form of transport, and helps reduce harmful pollutants from private

^{28.} The framework can be downloaded from https://www.transport.govt.nz/multi-modal/keystrategiesandplans/transport-outcomes-framework/

motorised vehicles.

The scheme also aligns with the direction of the GPS 2018/19-2027/28, which includes three strategic priorities to improve access, safety, and environmental sustainability. In particular, it will help meet the following objective of the current GPS:

"Access Objective: A land transport system that enables transport choice and access:

- 93. Transport provides access to economic and social opportunities and is key to supporting social engagement and inclusion, as well as access to essential services such as education, healthcare and employment. Public transport plays an important role, not only in increasing the capacity of the network, but in enabling access for those people whose transport choices are limited.
- 94. GPS 2018 supports investment in services that make public transport more affordable for those who are reliant on it to reach social and economic opportunities (for example, people on low incomes or who do not have access to private transport options)."

Strategically, the scheme could play an important role in the Government's broader transport agenda. Urban transport costs are likely to rise further in the decades ahead due to factors such as higher oil prices, initiatives to decarbonise transport (e.g. fuel efficiency standards), and demand management initiatives to manage road congestion (e.g. road pricing). The scheme would help to counter the effects of rising transport costs for many low-income households in the future by providing an affordable alternative to private car travel.

The scheme would help balance the need for better public transport services while addressing the affordability aspect of public transport. Auckland Transport, GWRC, and Environment Canterbury are prioritising more extensive and frequent public transport services in their new networks rather than reducing public transport fares. The scheme would enable councils to target concessions at low-income people, while also increasing services.

There is a lack of data on transport affordability and transport disadvantaged communities in New Zealand. Nonetheless, CSC are likely to spend a higher proportion of their income on necessary travel than higherincome households in New Zealand, and/or reduce/abandon travel due to transport costs. CSC holders do not currently receive concessions on public transport on most of New Zealand's public transport networks²⁹ Most CSC holders pay the same fares as people from higher-income households, even though transport is essential to access the opportunities that they need.

If the scheme is not introduced, CSC holders would not use public transport as regularly as they would if the scheme exists. Instead, they would:

- avoid travelling to access some social and economic opportunities, which could limit their participation in society, and/or
- use private vehicles instead of public transport, which are often costly to run and maintain and have a higher impact on greenhouse gas emissions^{30,31}, air/noise pollution, and congestion at peak travel times in dense urban areas.

^{29.} CSC holders receive fare discounts of up to 30% in some regions, including Hawkes Bay, Taranaki, Horizons (Manawatu-Wanganui), Nelson, and Tasman. They do not receive CSC concessions in Auckland, Wellington, Christchurch, or other cities.

^{30.} Based on the data from the Ministry for the Environment, of the total 15.935.72 kilo tonnes of green house gas emissions in transport in 2017. emissions from road transport were at 14,456.73 kilo tonnes. Of this amount, 9,353.18 kilo tonnes were released by cars, while only 1,505.01 kilo tonnes were released by heavy duty trucks and buses combined. Data available at: https://emissionstracker.mfe.govt.nz/#NrAMBoCYEYF12NcAiAcgUwC7PsSVRoB2XADhR1iA

^{31. &}quot;Transport emissions increased 82% over the period 1990-2017, with emissions from road transport increasing by 93%. This compares with 23% for emissions across the economy. Light vehicles produce two-third of transport emissions and contribute to 13% of total domestic

travel via other affordable modes, such as walking and cycling. These modes are mostly suitable for short distances

It would also be more difficult to meet the Government's goals for achieving a transport mode shift from private vehicles to public transport in urban areas.

The Ministry recognises that the scheme would only improve the affordability of public transport. It would not directly improve the availability of public transport services. However, the scheme might also provide a stronger incentive for councils to improve public transport services in areas where many CSC holders live. This improvement will occur if the scheme drives up public transport patronage in these areas.

The scheme would help balance the need for improving public transport services, and for addressing affordability. Auckland Transport, GWRC, and Environment Canterbury are prioritising more extensive and frequent public transport services in their new networks, rather than reducing public transport fares. This scheme would enable councils to target concessions at low-income people, while councils continue to expand and increase services.

An alternative approach to reducing transport disadvantages could involve increasing household incomes, as proposed by some stakeholders (e.g. by increasing benefits, allowances, or the minimum wage). However, this approach would not deliver any of the anticipated co-benefits of the scheme (e.g. for health, environmental sustainability, and managing road congestion).

Another approach to reducing public transport costs, and consequently transport disadvantages, would be reducing the farebox recovery ratio across the whole country or in some regions. However, this approach could not target the low-income households and the CSC holders, and would not serve the purpose of the scheme. Furthermore, reducing the farebox recovery ratio would need to be decided through the GPS and the NLTF, which would increase other costs and complications.

The scheme would also contribute to the following indicators of well-being developed by Statistics New Zealand³².

- supporting more contact with family, whānau, and friends: through having a more affordable public transport, and encountering relevant social problems such as loneliness
- countering homelessness: by enabling low-income people to affordably travel to/from outer-urban areas where more affordable homes exist
- having quality leisure and personal time, and increasing life satisfaction: through more affordable public transport, and by freeing up disposable income for alternative uses
- creating a sense of purpose: providing more access to employment and communities through affordable public transport services
- contributing to reducing illnesses: attributable to air quality and air pollution from motor vehicles, and increasing active travel which has positive benefits for physical and mental well-being.

emissions". Ministry of Transport (July 2019), Moving the Light Vehicle Fleet to Low-Emissions: Discussion Paper on a Clean Car Standard and Clean Car Discount.

^{32.} Indicators Aotearoa New Zealand: Wellbeing Data for New Zealanders, available at: https://wellbeingindicators.stats.govt.nz/

2.2 What regulatory system, or systems, are already in place?

Regional councils are legally responsible for planning public transport systems, and for setting local public transport base fares and concessions.

Pursuant to section 35 of the Land Transport Management Act 2003, NZTA and regional councils "must consider the needs of persons who are transport-disadvantaged" when preparing any land transport management programme or plan". The scheme would assist NZTA and regional councils to meet their obligations to consider the needs of low-income households, who are often transport disadvantaged compared to other groups in society.

All regional councils in New Zealand offer public transport concessions to some of these sub-groups although the base fare and concession rates vary between councils. All regional councils offer child concessions, some councils offer tertiary student concessions, and all councils participate in the SuperGold Card scheme that enables seniors to travel fare-free during off-peak periods. In most regions, children/youth aged 5-15 receive a 40-50% concession on adult fares (although there are differences in age bands). The exceptions are Christchurch (where children receive a concession until 17 years old), Queenstown (where the concession is 25%), and Invercargill (where there are no concessions for children over 5).

Most regional councils do not offer public transport concessions to CSC holders. Only Hawkes Bay. Taranaki, Horizons (Manawatu-Wanganui), Nelson, and Tasman offer concessions to CSC holders, of up to 30%. These regions account for only 2% of all public transport passenger trips in New Zealand.

This issue is a significant gap for addressing transport disadvantages, as CSC holders include lowincome households, solo parents, people with disabilities, tertiary students from low-income families, and economically deprived seniors. As noted above, these sub-groups tend to experience more transport disadvantages than others in the society.

2.3 What is the policy problem or opportunity?

This issue has been discussed in section C of the Coversheet, and sections 1.2, 2.1, and 2.2 of the Impact Statement.

2.4 Are there any constraints on the scope for decision making?

The main constraint of this scheme is that the scope was determined by an agreement in the 2017 Confidence and Supply Agreement between the Labour Party and the Green Party to "investigate a Green Transport Card as part of work to reduce the cost of public transport, prioritising people in lowincome households and people on a benefit."

The Ministry did not investigate broader interventions to reduce transport disadvantages through other means (e.g. expanding public transport networks to low-income communities, or increasing household incomes). The Ministry's approach to these alternative interventions are reflected on page 15 of this document.

The main interdependency with the scheme is the Government Policy Statement on Land Transport (GPS). The current GPS supports investment in services that make public transport more affordable for those who are reliant on it to reach social and economic opportunities (for example, people on low incomes or those who do not have access to private transport options).

The scheme would increase the demand for public transport services, which would need to be cofunded through the National Land Transport Fund from 1 July 2021 onwards. To enable this process, the impacts of additional public transport demand would need to be factored into the next GPS 2021.

The scheme would also need to be integrated with the development of the National Integrated Ticketing System (NITS), which is scheduled for implementation from 2021 to 2026.

2.5 What do stakeholders think?

The stakeholders involved in the process of consultation, modelling of options, and decision-making are noted in sections 1.1 and 1.2.

In February 2019, the Ministry established governance and working groups for the investigation. These groups involved representatives from the Ministry of Transport (the Ministry), the Ministry of Health (MoH), the Ministry of Social Development (MSD), the Treasury, New Zealand Transport Agency (NZTA), Local Government New Zealand (LGNZ), Greater Wellington Regional Council, Auckland Transport, Environment Canterbury, Marlborough District Council, Hawkes Bay Regional Council, Nelson City Council, Horizons Regional Council, and Project NEXT. The governance group met monthly from March to June 2019, while the working group met fortnightly during this period.

It is likely that the scheme would be voluntary for councils to join, similar to the SuperGold Card scheme.

Councils were supportive of the investigation. The scheme could assist councils to better consider and address the transport needs of disadvantaged low-income people. Their main concern is that if the Government decides to implement the scheme, there would need to be sufficient time to adapt ticketing systems, and to increase the capacity of some public transport networks (particularly for peak services) with additional vehicles and drivers.

Some councils are already struggling to provide sufficient peak-hour services due to driver shortages. Councils and LGNZ also emphasised that costs of the scheme should not be transferred to local government, and that there needs to be sufficient lead-in time to prepare. For example, Auckland Transport has indicated that it would take 18 months to adapt ticketing systems after a funding agreement is in place. GWRC has indicated that it would take two years to increase network capacity. GWRC also noted that the implementation of the scheme on Wellington trains would be delayed until integrated ticketing is introduced in 2021.

Members of the governance group and the working group emphasised that a scheme to reduce the costs of public transport for CSC holders may not necessarily be the most effective intervention to reduce transport disadvantages for all low-income households. The Treasury has also raised this concern³³. However, the scope of the scheme is not intended to address all transport disadvantages. It only addresses the affordability of public transport, and lower public transport fares for CSC would reduce transport disadvantages for many CSC holders while delivering social, economic, and environmental co-benefits.

Further consultation is planned after Cabinet considers this proposal. The consultations will primarily be with councils, and if time permits, with community groups that work with CSC holders.

A privacy assessment will be conducted during the establishment of the scheme. This assessment will

^{33.} Alternative interventions and Ministry's approach to those interventions are discussed on page 15 of this document.

follow the same approach used for privacy assessments for automating the eligibility processes for SuperGold Card concessions.

Regarding the impacts of the initiative on the Māori, iwi, and hapū, the Ministry has not yet conducted an impact assessment on Māori communities. The Ministry currently has data on Māori who have CSCs. However, at this stage, the Ministry has not been able to conclude that public transport costs are a higher barrier for Māori and Pacific people compared to non-Māori and non-Pacific communities (See Ministry of Health (2018). New Zealand Health Survey 2017/2018). The Ministry also does not have data on how many Māori and Pacific people live in areas with good access to public transport.

The following government agencies were consulted on this paper: the Department of Internal Affairs (DIA), MoE, MoH, MSD, NZTA, and the Treasury. The Department of Prime Minister and Cabinet were notified. MoT and MSD support the proposed scheme. MoH supports the aims of the proposed scheme. However, it notes that there are regulations which prohibit the use of CSCs as a form of evidence of eligibility outside of the health sector. MoH is engaging with MoT on this issue, as also noted in section 5.4. NZTA supports this initiative, but shares councils' concerns around the need to allow sufficient time to implement the scheme. DIA sees benefits in the proposed scheme, and notes that it would be appropriate for the scheme to be voluntary for councils to join.

Section 3: Options identification

3.1 What options are available to address the problem?

As noted in section 1.2, three options were developed.

- 1. Option 1: Free off-peak travel (equivalent to the SuperGold Card concessions).
- 2. Option 2: A 50% discount on base fares for CSC holders, valid for travel any time³⁴.
- 3. Option 3: A public transport allowance (a set monthly/annual value, valid any time).

Initially there were two options (1 and 2) for investigation. Through the working group, option 3 emerged as a potential alternative. This option had merits – but the benefits were likely to be relatively lower than option 2 (depending on the size of the allowance) and it came with greater uncertainties and risks in particular³⁵:

- There was great ambiguity around establishment costs depending on the allowance and implementation options. A bespoke automated system would need to be designed to transfer money from central government to travel card holders every 3-6 months. It was unclear how feasible it would be to create this system with sufficient safeguards. It was also unclear what it would cost to develop and administer this system.
- This option had a higher risk of commodification and fraud. Contrary to option 2 that grants discount to those eligible, option 3 would provide CSC holders with a travel allowance that could be treated like a commodity and sold.
 - There might be no mechanism to retrieve the unspent money on travel cards in option 3, which would be an inefficient use of crown funding.
- Option 3 provided a fixed allowance, which could create uneven transport outcomes, given

^{34.} A 50% concession is selected because it strikes a fair balance between making public transport more affordable for CSC holders, and managing the costs of the scheme for the Government. Councils apply different base public transport fares across New Zealand, but the concession rate should be equal across regions. This consideration would still give councils the flexibility to set their own adult base fares. The percentage of the discount could be reconsidered after implementing and reviewing the scheme.

^{35.} Further analysis of option 3 can be found in section 1.2 on page 9 and section 3.2 on page 23 of this document.

individuals have different needs. Some CSC holders who travel long distances or regularly might exhaust their allowance quickly. This issue would not support the goals of the scheme in terms of mode shift and transport outcomes.

Before completing the investigation, the initial advice to Ministers was that option 1 was likely to be preferable, as it would be the easiest to implement and would make use of spare capacity on existing public transport services. The collaboration of the Ministry with other agencies and councils made it clear that this option would still be difficult and costly to implement in some regions and it would not provide significant social benefits compared to alternatives. The modelling work that was codeveloped with councils - also demonstrated that option 1 would significantly be more expensive than option 2. Therefore, option 2 was chosen as the preferred approach of the scheme. The working group and governance group made major contributions to develop these options.

The Ministry initially considered two possible approaches to phase the scheme to implement it more quickly or to reduce capacity pressures on the councils. These options and the relevant analysis were as follows:

- 1. Phasing implementation regionally: The scheme could be implemented in each region as soon each region is capable of joining it. However, the governance group noted that some regions would not support a region-by-region approach due to equity concerns.
- 2. Implementing off-peak concessions first, then including peak services at a later date: This approach would alleviate some concerns councils have about capacity issues. If the offpeak concessions were 50%, the scheme would have limited benefits. If the off-peak concessions enabled fare-free travel, CSC holders could resist any subsequent changes to the full off-peak entitlements at a later stage.

In late July 2019, the Ministry developed and discussed six phasing options with the members of the Governance Group. These options are summarised in the Table 2.

Table 2: Phasing Options for the Scheme

Phasing options	Description
Geographic	Some regions could proceed with the scheme first, while other regions facing capacity challenges could proceed later.
Off-peak, on-peak	The 50 percent discount could be applied during off-peak hours first, while on- peak discounts could be applied at a later date.
Percentage discount	A smaller discount (e.g. a 25 percent discount) could be applied first, while the 50 percent discount could be introduced at a later date.
Modal	In regions such as Auckland and Wellington, applying discounts to certain transport modes first could be considered first (e.g. buses before trains).
Community Services Card holder	Some CSC holders (e.g. veterans) may receive the scheme first, although this option may be difficult to implement and justify.
A combination of the above	The Ministry may also consider different types of phasing for regions, given that each region faces different challenges.

The Governance Group excluded "modal phasing", and "CSC phasing" as viable options. "Modal phasing" is unlikely to seriously address the capacity issues that councils may face as a result of additional patronage due to the green card. As for "CSC phasing", the Governance Group's view was that it would be very difficult to distinguish which types of CSC holders are "needier" and should receive the scheme first, and would be difficult to justify.

"Percentage discount" and "off-peak, on-peak" phasing are more workable for councils, although they also come with implementation challenges. The key drawback of a "percentage discount" phasing option is that councils may find it difficult to integrate new discounts into their existing systems. "Offpeak, on-peak" phasing would miss a key objective of the scheme, which is to enable CSC holders to access work opportunities during peak hours.

MoT is currently considering recommending councils that are unable to implement the scheme in mid-2020 two options for phasing:

- 1. Option A: implement the scheme in their region in 2021.
- 2. Option B: partially implement the scheme in their region in 2020 if it is necessary to address capacity concerns, and agree on when the scheme will be fully implemented. For example, a council could choose to offer a lower concession rate for CSC holders initially, or limit concessions to off-peak travel only.

The Ministry also worked with councils to investigate the card mechanism for the scheme (i.e. creating a stand-alone branded 'green transport card', using CSCs as travel cards, or using existing travel cards in each region). The most straightforward and cost-effective approach is to use existing travel cards in each region. This approach will enable cards to work with each region's existing ticketing system, and collect revenue and travel data, which is essential for planning and operating efficient public transport networks. The registration process would need to be accessible for people with disabilities and impairments, and those without internet access.

3.2 What criteria, in addition to monetary costs and benefits, have been used to assess the likely impacts of the options under consideration?

As noted in section B of the Coversheet, and section 1.2 of the Impact Statement, the cost-benefit analysis of each policy option of the scheme was conducted against four main criteria: social benefits and impacts (including health), cost effectiveness, transport impacts (particularly on public transport networks' performance), and ease of implementation. These impacts can be found in the abovementioned sections. Based on the investigation and analysis, the Ministry has concluded that option 2 is the best approach towards implementing the scheme. Table 3 depicts the annual national increase in passenger trips (patronage) and subsidy costs (to cover fare revenue forgone) for options 1 and 2:

Table 3: Changes in Passenger Trips and Revenue Forgone

		Option 1: Fre	e off-peak	Option 2: Half-price all day	
		Short term (12 months)	Long term (10 years)	Short term (12 months)	Long term (10 years)
Northland	Increase in Patronage Fare Revenue Foregone	N/A			IA.

Auckland	Increase in Patronage	2,297,342	4,719,815	2,717,366	6,209,625
	Fare Revenue Foregone	-\$19,974,601	-\$25,069,077	-\$11,437,442	-\$9,657,732
	Increase in Patronage	92,002	189,015	115,709	261,346
	Fare Revenue Foregone	-\$544,275	-\$683,929	-\$350,254	-\$315,696
Bay of Plenty	Increase in Patronage	72,511	148,972	98,365	221,819
	Fare Revenue Foregone	-\$420,188	-\$528,377	-\$285,169	-\$259,411
Gisborne	Increase in Patronage	6,936	14,251	19,668	43,884
	Fare Revenue Foregone	-\$53,637	-\$67,772	-\$49,265	-\$46,821
lawkes Bay	Increase in Patronage	38,300	78,687	54,259	122,252
-	Fare Revenue Foregone	-\$268,457	-\$337,493	-\$178,938	-\$162,443
Taranaki	Increase in Patronage	5,504	11,309	13,826	30,889
	Fare Revenue Foregone	-\$63,112	-\$79,687	-\$55,764	-\$52,896
Horizons	Increase in Patronage	1	V/A		IA
	Fare Revenue Foregone	1	7, 6		
Wellington	Increase in Patronage	846,420	2,076,374	1,046,640	2,867,794
	Fare Revenue Foregone	-\$9,206,810	-\$13,816,791	-\$5,902,561	-\$6,067,832
	Increase in Patronage			Helia Virgi	* 1 L 5 2
Nelson	Fare Revenue Foregone		N/A		IA
Marlborough	Increase in Patronage Fare Revenue Foregone		N/A	N	IA
Contoubum	Increase in Patronage	421,556	866,074	479,074	1,096,968
Canterbury	Fare Revenue Foregone	-\$3,327,982	-\$4,176,130	-\$1,876,888	-\$1,572,001
Otago	Increase in Patronage	1	N/A	N	IA .
2	Fare Revenue Foregone				
nvercargill	Increase in Patronage	3,575	7,345	4,884	11,012
	Fare Revenue Foregone	-\$16,944	-\$21,420	-\$15,938	-\$15,139
Total	Increase in Patronage	3,784,149	8,111,841	4,549,791	10,865,589
	Fare Revenue Foregone	-\$33,876,006	-\$44,780,676	-\$20,152,219	-\$18,149,971

The Ministry conducted a Benefit Cost Ratio (BCR) analysis of the direct financial benefits to CSC holders, relative to the direct subsidy costs (decrease in revenue), for options 1 and 2³⁶. The results of the estimated benefits (consumer surplus gains) are summarised in Table 4³⁷.

 $^{^{36}}$. The data represents the 'consumer surplus' that CSC holders would benefit from as a direct result of the scheme.

^{37.} The user benefits of reduced public transport prices are estimated by calculating the increase in consumer surplus. Consumer surplus represents the difference between the maximum price that consumers are prepared to pay, and the price they actually have to pay (the triangle area below the demand curve and above the price). The change in consumer surplus is essentially a proxy for the change in the economic

Table 4: Consumer Surplus Gains

	Option 1: Free off-peak		Option 2: Half-price all day	
	Short term (12 months)	Long term (10 years)	Short term (12 months)	Long term (10 years)
Auckland	15,290,877	21,274,860	16,135,496	22,488,031
Waikato	523,389	730,535	525,168	725,103
Bay of Plenty	395,140	550,535	417,974	575,995
Gisborne	45,458	62,035	63,277	86,222
Hawkes Bay	257,782	358,634	246,884	339,879
Taranaki	51,567	70,536	73,518	100,298
Wellington	5,674,124	9,359,733	9,343,019	15,590,152
Canterbury	2,487,959	3,465,742	2,756,630	3,850,488
Invercargill	11,175	15,582	30,705	42,307
Total	\$24,737,472	\$35,888,192	\$29,592,673	\$43,798,475

Based on the findings above, the Ministry calculated the economic efficiency (value for money) of the investigated options. These findings are demonstrated in Table 5 as the benefit-cost ratio (BCR). A BCR of 1.47 means for every \$1 of direct subsidy cost, \$1.47 of direct benefit would be generated for CSC holders who use public transport.

Table 5: Benefit-Cost Ratio (BCR)

	Option 1: Free off-peak		Option 2: Half-price all da	ау
	Short term (12 months)	Long term (10 years)	Short term (12 months)	Long term (10 years)
BCR	0.73	0.80	1.47	2.41

The Ministry's analysis shows that option 2 would deliver more social benefits than option 1, as many CSC holders need to travel at peak times to access work, education, and health services.

Furthermore option 2 has more potential to encourage a mode shift from private vehicles to public transport when roads are most congested at peak times, which would enhance the social, economic, and environmental benefits of the scheme.

Option 1 was less likely to support active travel modes compared to option 2. International research shows that people often switch from walking and cycling to using public transport when services are completely fare-free.

Additionally, subsidy costs for option 1 would be higher than option 2, because in option 2, CSC holders would still contribute a portion of the fare if the concession was 50%, so the subsidy for each trip would be lower. Over a decade, annual subsidy costs for option 1 could have been twice as high

as option 2.

Implementing option 3 would involve setting up a system to transfer public transport allowances to travel cards that are registered to CSC holders. Each allowance could be transferred in instalments (e.g. every 3-6 months).

The total cost of option 3 depends on the size of the allowance. For example, if the allowance was \$100 per year, it would cost \$65.2 million p.a. to provide this allowance for 652,131/CSC holders nationwide. If the allowance was \$200 allowance per year, it would cost \$130.4 million.

It is not possible to model the costs of this option using the same approaches employed in options 1 and 2. To enable a comparison of options, it is more appropriate to consider what the equivalent allowance size would be with the similar costs of options 1 and 2. Table 6 summarises this analysis:

Table 6: Amount of annual allowance for option 3 with the costs of options 1 and 2 for the total population of CSC holders

	Option 1: Fr	ee off-peak only	Option 2: 50% con	cession anytime
	Short ferm	Long term	Short term	Long term
	(1 year)	(10 years)	(1 year)	(10 years)
Estimated Costs	\$33.9 million	\$44.8 million	\$20.1 million	\$18.1 million
Equivalent Allowance per CSC Holder p.a.	\$51.98	\$68.70	\$30.82	\$27.76 ³⁸

The results of this analysis highlight that the same costs as options 1 and 2 would not produce meaningful allowances and outcomes for CSC holders. For example, to provide an allowance to 652,131 CSC holders with the same costs of option 2, the amount of the allowance in the short term would be \$30.82 annually. CSC holders might not be incentivised to receive a card with this allowance and take advantage of the scheme if the allowance was set this low.

Even if only 50% of CSC holders (who are within walking distance to a public transport service) use the allowance, and the equivalent allowance was doubled on the assumption that half the target population would not use it, the equivalent allowance would still only be \$61.64 with the same costs of option 2 in the short term.

The Crown could potentially design an allowance system that retrieves money that has not been loaded on to travel cards in each region, and reallocate those allowances to CSC holders who do take advantage of the allowance. Nevertheless, this option would be significantly more complex for central government to implement. A bespoke automated system would need to be designed, developed, tested, and implemented to transfer allowances from central government to registered travel cards in each region, and to retrieve the unused amount. It is unclear how long this system would take to develop, what it would cost, or how practical or possible it would be. Ongoing administration costs for option 3 could also be higher than other options. Once the travel allowance is loaded on to travel cards, it would also be impossible for the Crown to retrieve unspent money. This issue could result in wasteful spending. These considerations have also been reflected in sections 1.2 and 3.1.

^{38.} As explained in footnote 4 on page 3, Lost revenue (foregone revenue) in option 2 (the preferred option) is smaller in the long-term, because in the long-term there is greater generation of new public transport trips, which brings in new revenue that offsets the discounts on existing

Furthermore, CSC holders who are regular public transport users, and/or need to travel long distances could quickly exhaust the allowance in option 3. Compared to option 2, the allowance would benefit infrequent users of public transport more than frequent users, unless the allowance was very high (which would be prohibitively costly).

Even though option 3 would be easier for most regions to implement, as it would not require changes to concession profiles or ticketing systems, it would not provide the best outcomes for the scheme.

3.3 What other options have been ruled out of scope, or not considered, and why?

Besides the three options discussed previously, a fourth option could have been investigated to make public transport fare-free for CSC holders at any time of day. This option was excluded early in the process because of the significant costs for central and local government, and because it could have had detrimental impacts on the capacity of existing public transport networks to meet passenger demand.

The investigation considered including dependants of CSC holders in the scheme. MSD estimates that there are approximately 300,000 dependants of CSC holders. However, there is no data available on the names, addresses, or ages of dependants. This data would need to be collected from all CSC holders, at significant cost, before deciding whether to include them in the scheme.

Dependants of CSC holders do not have their own CSC. Providing all dependants with a CSC, if necessary, would also add significant costs.

Most dependants of CSC holders already receive child/youth concessions when travelling on public transport.

- All children under five years old can already travel for free on public transport anywhere in New Zealand.
- In most regions, children/youth aged 5-15 receive a 40-50% concession on adult fares (although there are differences in age bands).
- Auckland Transport is planning to introduce fare-free travel for children/youth 15 years and younger on weekends and public holidays. Hamilton City Council is also planning to introduce a similar scheme.

The Ministry, therefore, advised against including dependants in the scheme, as the costs are likely to outweigh the benefits significantly (given the wide-range of existing and planned child/youth concessions).

Section 4: Impact Analysis

Table 7: Impact Analysis of the Options

Table 1. Hipact, Maly Sis of the			Committee of the control of the cont	A CONTRACTOR OF THE PERSON OF
	No action	Option 1: Free off-peak	1: Free off-peak Option 2: Discounted travel (50%), Option 3: Travel allowance any time	Option 3: Travel allowance
Access to Employment	0		++	+
Access to Health	0	*	++	++
Access to Education	0	+	+++	‡
Impacts on Disposable Income	0	TBD	TBD	TBD
Improved Safety	0	+	+	+
Impacts on Active Travel	0		+	+
Impacts on General Access	0	C	***	++
Impacts on Mode-Shift	0	+		++
				August and the second

Key:

+++ Medium High: Considerably better than doing nothing/the status quo

++ Medium/Low-Medium: much better than doing nothing/the status quo

+ Low: better than doing nothing/the status quo

0 Status Quo: about the same as doing nothing/the status quo

- Low: worse than doing nothing/the status quo

-- Medium: much worse than doing nothing/the status quo

The Ministry also modelled how many CSC holders live within walking distance of a regular public transport service (i.e. a service that operates at least every 30 minutes during the day), to understand how many CSC holders might benefit from the scheme.

Table 8 summarises the findings based on the data provided by the MSD. The data is based on a walking distance of 500 meters from a bus stop or ferry terminal, and 1km from a train stop or rapid bus service. The Ministry's investigation demonstrates that more than 75% of CSC holders in the largest urban areas (Auckland, Wellington, and Canterbury), and approximately 50% of CSC holders nationwide live within walking distance of a regular public transport service. However, there are some economically deprived areas (e.g. in South Auckland) that are known to have less access to public transport.

Table 8: Number of CSC holders living within walking distance of a regular public transport service (ovaluding SuperCold Card holders with a CSC)

City or Region	CSC holders*	CSC holders in walking distance of a regular PT service	Percentage of CSC holders
		Service	in walking distance of a regular PT service
Auckland	161,577	122,063	76%
Hamilton	24,664	15,624	63%
Rotorua	9,969	7,280	73%
Tauranga	14,902	8,649	58%
Napier District	8,432	1,600	19%
Hastings District	8,082	2,532	31%
Palmerston North	11,342	Data unavailable	Data unavailable
Greater Wellington	47,367	36,039	76%
Canterbury	42,771	33,335	78%
Queenstown District	407	225	55%
Dunedin	16,030	13,315	83%
Not geocoded**	90,075	NA	NA
National Total	524,974	241,064	46-55%***

Source: Ministry of Social Development (2019), using public transport data modelled for the New Zealand Transport Agency by MR Cagney in 2018.

The scheme would likely benefit a greater number of women than men. As of January 2019, 57% (529,439) of CSC holders were classified as female, and 43% (391,994) were male.

Geocoded location data was unavailable for approximately 17% of CSC holders

^{***} The national percentage includes a range, due to the lack of some geocoded data

^{39.} Auckland refers to Auckland, Hibiscus Coast, Waiheke West, and Pukekohe urban areas. Hastings refers to Hastings and Clive urban areas. Queenstown refers to Queenstown, Arthurs Point, Lake Hayes and Jacks Point urban areas. Rotorua refers to Rotorua and Ngongotaha urban areas. Greater Wellington refers to Wellington, Paraparaumu, Porirua, Upper Hutt, Lower Hutt, Waikanae, and Paekakariki urban areas. Christchurch refers to Christchurch, Prebbleton, Kaiapoi, Lyttelton and Lincoln urban areas.

Statistics from the 2013 census show that women are more likely to use public transport to get to work: 7.1% of women used public transport to get to work, compared to 4.6% of men. Statistics from the 2018 census are not yet available. The Ministry also assessed social benefits for option 2 (as the preferred option of the scheme) against the Treasury's wellbeing domains and based on existing evidence and data in New Zealand and in international literature. The findings of the Ministry are highlighted in Table 9.

Table 9: Impact Analysis of the Scheme in Wellbeing Domains

Domains	Impact(s) description	No Action	Option 2: Discounted travel, any time
Social connections 总统	Increased access and connectivity between people, their family/whanau, and community services	0	+++
Income and consumption	Increased household disposable income	0	•
Subjective wellbeing	Improved access for low-income earners to participate in, and feel included in, society	0	++
Knowledge and skills	Cheaper access to tertiary education	0	+
Environment	Lower greenhouse gas emissions from transport	0	+
	Better local air quality, due to less vehicle pollution	0	+
Health 分	More affordable access to health services, including local GPs	0	+
~\\O.	Improved physical and mental wellbeing of people travelling	0	+
	Reduced health impacts and costs due to improved local air quality	0	. +
Safety	Reduced injuries caused by people driving light passenger vehicles	0	+

Section 5: Conclusions

5.1 What option, or combination of options, is likely best to address the problem, meet the policy objectives and deliver the highest net benefits?

On balance, the Ministry recommended pursuing option 2 (a 50% fare concession at any time), if Cabinet agrees to go ahead with the scheme. Compared to the other options investigated, option 2 would offer the best balance of value and benefits.

Councils involved in this investigation agreed that option 2 would be the preferred option, with the exception of GWRC. GWRC is understandably concerned about the difficulties it is currently facing in increasing public transport capacities at peak times. GWRC also noted that option 2 could be difficult to implement on Wellington trains until integrated ticketing is introduced in 2021. Option 3 could have been a feasible alternative, but would possibly deliver fewer benefits than option 2 (unless the allowance is set very high, which would be prohibitively expensive). The allowance option also had additional uncertainties and risks.

Option 2, as the recommended option, allows CSC holders to access work, education, and health services at peak times. Therefore, CSC holders can use public transport more often in option 2. Furthermore, option 2 encourages a mode shift from private cars to public transport when roads are most congested at peak times, which would enhance the social, economic. and environmental benefits of the scheme. As option 2 is not entirely fare-free for CSC holders, the Ministry does not expect major shifts in people using public transport instead of walking and cycling.

Additionally, subsidy costs for option 2 would be fewer than other options, because CSC holders would still contribute a portion of the fare if the concession was 50%, so the subsidy for each trip would be lower. Over a decade, annual subsidy costs for this option would be 50% less than option 1. Moreover, as option 2 does not consider a fixed allowance (considered by option 3), the risk of exhausting the allowance by CSC holders who are regular public transport users, and/or need to travel long distances would be eliminated.

5.2 Summary table of costs and benefits of the preferred approach

The tables of costs and benefits, and the relevant impact analysis have been provided in sections 1.2, 3.2, and 4.

5.3 What other impacts is this approach likely to have?

Significant risks, unintended impacts, and uncertainties of the scheme have been discussed in section B of the Coversheet. These risks include:

- 1. The subsidy costs could be higher (or lower) than Ministry's estimates: there is no reliable data available on how many CSC holders currently use public transport, or where they travel. The Ministry made assumptions on public transport use based on information from the Ministry's Household Travel Survey. The Ministry also made assumptions about how much public transport use could rise when fare prices fall. To manage this risk, the costs of the scheme should be reviewed after its first year of implementation to update funding estimates.
- 2. Councils could choose not to implement the scheme: although councils were

supportive of the investigation, they are concerned about the pace of implementation and costs. They are still working through the implications of recent legislative changes, such as the costs of mandatory rest and meal breaks for bus drivers associated with the Employment Relations Amendment Act 2018, and a move to an industry-wide living wage. The Ministry needs to maintain a positive working relationship with councils to implement the scheme, especially as the scheme is likely to be voluntary for councils to implement (similar to the SuperGold Card fare concession for seniors).

- 3. Adverse impacts on public transport users if the scheme is implemented too quickly, or without sufficient planning: Auckland, Wellington, and Canterbury are already experiencing capacity constraints on some routes during peak travel periods. These constraints are highest in Wellington. Additional patronage driven by the scheme could lead to overcrowding, especially at peak travel times. This overcrowding could lead to public dissatisfaction, and discourage existing passengers or people who would benefit from the scheme. To mitigate this risk, councils need to be given sufficient time to increase the capacity of their networks. Regional phasing will also be considered (although some councils, including GWRC, are not in favour of this option)⁴⁰. This issue needs to be addressed in terms of regional needs, capacities, demographics, and equity concerns.
- 4. Fraud: some fraudulent use of the scheme is likely to be unavoidable. Some cardholders might sell or lend their concession travel cards to other people. This risk could be managed by requiring CSC holders to carry their CSC with them while travelling on concession fares, and by considering the appropriateness of existing penalties for fraudulent card use. Managing this risk may require regulatory changes.
- 5. The scheme would raise equity concerns. Some CSC holders may criticise the scheme if they are unable to access public transport services: this issue may include CSC holders living in areas without a regular public transport service, and CSC holders with disabilities who have difficulty using public transport. The Ministry could explore mitigation options for these groups, which would require additional investigation.
- Implications of the scheme for people with disabilities: The scheme would have implications for people with disabilities. As of January 2019, 215,963 people who receive a disability allowance have a CSC. People receiving Disability Support Services funded by the Ministry of Health are also likely to be eligible for a CSC. Many people with disabilities are able to use public transport. A 2009 report by the Office for Disability Issues estimated that 26% of all disabled adults and 46% of all disabled children used public transport for short trips. Many CSC holders have disabilities that prevent them from using public transport due to the nature of their disability and/or because services are not accessible for people with disability. The scheme could, therefore, increase disparities between CSC holders who can use public transport, and those with disabilities who are unable to access public transport. The Government could explore broader initiatives to reduce transport disadvantages for low-income households in New Zealand that are unable to access public

Impact Statement Template | 29

^{40.} Implementation phasing was also agreed in the SuperGold Card scheme. However, all regions except the West Coast implemented the scheme within a period of one month.

transport, including through the Total Mobility Scheme (which provides subsidised licensed taxi services to people who have a disability).

Is the preferred option compatible with the Government's 'Expectations for the design of regulatory systems'?

The scheme is compatible with the Government's 'Expectations for the design of regulatory systems'.

The Ministry will need to consider the appropriateness of existing penalties for fraudulent card use (for example through selling or lending the card to other people) within the scheme. A new regulatory framework may need to be established to enforce provisions specific to the scheme, including the ability to remove a card that has been fraudulently used.

There is a potential regulatory barrier to the scheme in New Zealand. According to Clause 13 (3) of the Health Entitlement Cards Regulations (1993).

No person, other than an employee of the department or the Ministry of Health or a pharmacist or any person (other than the cardholder) mentioned in regulation 12(b) shall demand or request a community services card as a form of identification of the cardholder or as evidence that the cardholder is eligible for that community services card.

This regulation may need to be amended to enable CSCs to be used as a concession card on public transport. This issue is despite the fact that CSCs are routinely used to access other discounts, such as entry to council pools, discounts for home insulation, and indeed on several public transport networks. The Ministry is currently investigating with the Ministry of Health whether this regulation would need to be amended.

Section 6: Implementation and operation

6.1 How will the new arrangements work in practice?

Implementation arrangements will be confirmed through an implementation plan, after Cabinet considers the scheme and decides whether to proceed with it.

The Ministry will continue to lead policy development for the scheme, and lead negotiations with local councils.

MSD would administer data associated with CSC holders, and communicate with CSC holders, while NZTA would work with councils to administer the scheme.

Implementation timeframes would need to be agreed between relevant government agencies and councils. Councils' participation in the scheme is likely to be voluntary (the same approach as the SuperGold Card public transport concessions).

6.2 What are the implementation risks?

During the consultation, the following issues have been raised regarding the implementation:

- 1. The Ministry expects to have additional implementation and administration costs that include changes to ticketing systems, information technology, project management, communications, customer service, and staff time.
- 2. The pace and timing of the implementation is important. If central government decides to implement the scheme before councils are able to increase network capacity, councils may oppose the scheme. Existing public transport users could also be adversely affected if they are unable to use services at peak times due to over-crowding. This risk is likely to be the highest in Wellington, due to existing challenges in its public transport network.
- There are some concerns on the interaction of the scheme with current ticketing systems. It may not be possible to include Wellington train services in the scheme until 2021 (when integrated ticketing is introduced). There may also be difficulties implementing the scheme in Canterbury until its ticketing system is upgraded.
- In the implementation phase, the Ministry would needs to consider the possibility of fraudulent card use. This issue could be partially managed by requiring CSC holders to carry their CSC with them while travelling on concession fares, and by considering the appropriateness of existing penalties for fraudulent card use. As noted in section 5.4, this issue may require regulatory changes.

Before implementation begins, Cabinet would need to agree to the scheme. Cabinet would also need to agree to allocate ongoing funding for the scheme through the Budget process.

If Cabinet agrees to go ahead with the scheme, the Ministry would need to develop an implementation plan, secure ongoing funding, and negotiate funding agreements before councils commence the implementation process.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

There is currently a lack of research on transport disadvantages for low-income households/individuals, and on how frequently they would use public transport. This area has received insufficient attention in the past. The scheme will enable the Ministry to collect detailed data on public transport usage by CSC holders in each region through the card/ticketing systems. Enabling this data collection is a strength of the scheme.

The Ministry will be able to use that data to evaluate how CSC holders change public transport usage/behaviour over time, and how much they are directly saving through the scheme. This evaluation will enable the Ministry to develop more accurate funding estimates in the future. The Ministry aims to review the usage and costs of the scheme after its first year of implementation to update funding estimates.

7.2 When and how will the new arrangements be reviewed?

There will be an initial review of the scheme within a year of implementation, and a more detailed review three years after its implementation.

RELEASE INFORMATION ACT