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Social Impact Assessment Summary

Time of Use Charging Programme

19/11/2026

Purpose, scope and context

This assessment provides an initial estimate of the scale and distribution of potential social impacts associated with the three Time of Use Charging options. It is intended to support comparison between options rather than provide a complete assessment of a final scheme.

What this assessment covers

Potential exposure
Identify potentially charged journeys across the three options

Financial pressure
Identify journeys originating in areas of high deprivation

Ability to respond
Assess journey flexibility and the attractiveness of public transport alternatives

Additional considerations
Consider disability and healthcare-related constraints using available evidence and stakeholder engagement

Why this assessment is needed

Time of Use Charging will affect Aucklanders differently depending on their financial circumstances and ability to change how, when or where they travel.

People from areas of high deprivation make up 23% of Auckland's population, but account for 18% of potentially charged trips into the city centre, suggesting they are less exposed to the charge.

However, lower exposure does not mean lower impact. This assessment identifies where limited financial resilience, journey flexibility and transport alternatives may overlap.

How this assessment informs the wider programme

This assessment contributes to the wider legislative and policy assessment of Time of Use Charging by identifying groups and areas of Auckland potentially facing disproportionate impacts due to limited ability to respond to charging.

Findings will inform further assessment and scheme design, including opportunities to avoid or mitigate disproportionate impacts through targeted measures as the preferred option is developed.

5–6% of potentially charged journeys have fewer alternatives

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Analysis undertaken estimates that 5 - 6% of potentially charged morning journeys by car drivers and passengers are made from areas of high deprivation, are less flexible to change and have a less attractive public transport alternative. However, charging will also deliver benefits through reduced congestion and more reliable journeys, including for people who do not pay the charge.

Potentially charged journeys with fewer practical alternatives from areas of high deprivation

Option 1a

Indicative charge: $4 AM | $2 PM

Illustrative regular return journey: up to $30 per five day week

1,600 out of 34,400
potentially charged journeys with fewer practical alternatives made from areas of high deprivation

5%
of potentially charged morning journeys by car drivers and passengers

Option 1c

Indicative charge: $5 AM | $2 PM

Illustrative regular return journey: up to $35 per five day week

3,100 out of 65,200
potentially charged journeys with fewer practical alternatives made from areas of high deprivation

5%
of potentially charged morning journeys by car drivers and passengers

Option 3c

Indicative charge: $5 AM | $5 PM

Illustrative regular return journey: up to $50 per five day week

5,200 out of 89,100
potentially charged journeys with fewer practical alternatives made from areas of high deprivation

6%
of potentially charged morning journeys by car drivers and passengers

Although the proportion of potentially impacted journeys is similar across the options, the number of journeys and potential weekly cost increase as scheme coverage and charge rates increase

Materiality for some households

A regular return journey could cost up to $30–$50 per five-day week. Households with limited financial resilience will likely find this harder to absorb, especially given transport typically makes up 16% of average household expenditure.

Further assessment and mitigation

Some impacts, particularly those related to disability, remain unquantified. Further assessment and scheme design should focus on understanding these impacts and identifying opportunities to mitigate or avoid them.

How potentially impacted trips were identified

Time of Use Charging will not impact every charged journey in the same way. Potential impacts depend on why the journey is being made, whether the cost can be absorbed, and whether there are attractive alternatives to travelling by car at the charged time.

These factors are layered to identify journeys where people may have fewer options to avoid/absorb the charge. The appendix contains more detail on the methodology.

1



Does the journey originate in an area potentially facing greater financial pressure?

Consider car journeys from areas of high deprivation that could pass through a charged location during the charging period.

+

2



How difficult is the journey to change?

Work, education and healthcare journeys may have fixed timing, destinations or attendance requirements, which can make them harder to change or avoid.

+

3



Are attractive alternatives available?

The ability to change mode depends on whether public transport or active modes can provide a practical and attractive alternative to driving.

The assessment progressively filters journeys to identify where potential financial pressure, limited journey flexibility and a less attractive public transport alternative overlap.

Disability, caring responsibilities and other individual barriers may constrain travel independently of area-level deprivation and are not comprehensively represented in these estimates, but are considered qualitatively.

Stakeholder engagement

This work has been informed by targeted stakeholder engagement to complement the analysis and inform the groups and journeys considered. Relevant insights are included in the assessment.

Who may face greater financial pressure?

The ability to absorb or avoid an additional transport cost will vary across Auckland. The New Zealand Deprivation Index (NZDep) provides a consistent starting point for identifying areas where households may experience greater financial pressure and have fewer resources available to respond.

What does the NZDep mean?

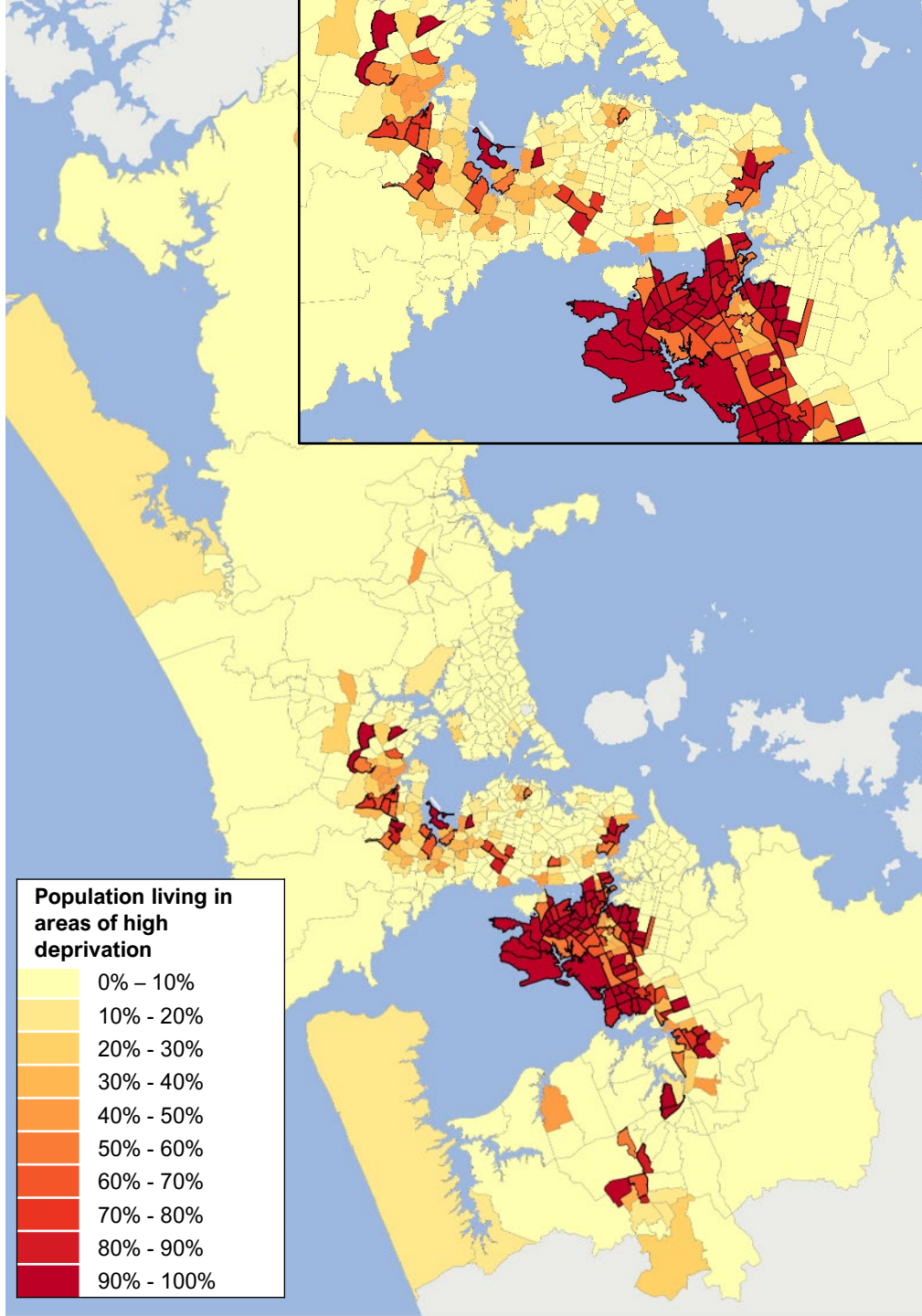
NZDep measures relative socioeconomic deprivation across small geographic areas, rather than the circumstances of individual people or households. It combines Census information on income, employment, housing, qualifications, internet access and other household characteristics.

Areas are ranked from decile 1 to 10. Decile 1 represents the least deprived areas and decile 10 the most deprived.

	Number of trips		
Option	**1A**	**1C**	**3C**
All potentially charged car person trips	**34,400**	**65,200**	**89,100**
Potentially charged car-person trips from areas of high deprivation	6,300 *(18%)*	11,200 *(17%)*	15,400 *(17%)*

Why have we used NZDep?

- For this assessment, areas of high deprivation are defined as NZDep deciles 9–10. This is a commonly applied grouping for representing the areas experiencing the highest relative deprivation *(see EHINZ, Socioeconomic deprivation profile, NZDep2023).*
- Around 23% of Auckland's population lives in these areas, compared with 17-18% of potentially charged trips across the three options. This indicates lower overall exposure but does not mean the effect will be less significant for those who are charged.
- A regular return journey could add $30–$50 a week, or approximately $1,500–$2,500 a year. This repeated cost may be material for households with limited financial resilience or few practical alternatives.
- NZDep is used to screen for areas where exposure to charging and limited capacity to absorb the cost may overlap.



Which journey types may be less flexible to change

Not all charged journeys will be impacted in the same way. We have considered journey purpose alongside the level of deprivation where journeys originate and the availability of an attractive public transport alternative to identify journeys where people may have less flexibility to avoid or absorb the charge.

Journeys to work



Work journeys are often regular and difficult to change. The impact of charging is greater for workers with fixed hours, repeated exposure and limited public transport alternatives. *For example, a construction worker travelling to a construction site.*

Journeys to healthcare



Healthcare journeys may be less frequent than work or education trips, but the consequences of being unable to make the journey can be greater. Potential impacts may be greater where appointment times are fixed, patients have mobility or health constraints, or public transport is not an attractive alternative. *For example, a disabled person travelling to an appointment at a fixed time.*

Journeys to education



Education journeys often have fixed start and finish times, making them difficult to retime. The impact of charging is likely to be greater for students, particularly where public transport or active travel is not an attractive alternative. *For example, a student travelling to a fixed class or course start time where no attractive public transport alternative is available.*

Potentially charged journeys from areas of high deprivation

		Number of trips			Proportion of all possibly charged car person trips		
Option		**1A**	**1C**	**3C**	**1A**	**1C**	**3C**
All potentially charged car person trips		**34,400**	**65,200**	**89,100**			
Potentially charged car person trips made from high deprivation areas		6,300	11,200	15,400	*18%*	*17%*	*17%*
Less-flexible journeys originating in higher-deprivation areas	**All less-flexible trips***	**4,200**	**7,400**	**9,400**	***12%***	***11%***	***11%***
	Work trips	2,400	5,000	6,000	*7%*	*8%*	*7%*
	Healthcare trips	<50	200	200	*<1%*	*<1%*	*<1%*
	Education trips**	1,200	1,300	1,600	*3%*	*2%*	*2%*
	Primary/secondary education trips**	<50	100	300	*<1%*	*<1%*	*<1%*

**Other critical appointments and escort trips (e.g., taking children to school) are included in the less-flexible trip total, but are not captured within the work, healthcare, or education trip numbers.*
***Primary/secondary trips are included within the education trip totals*

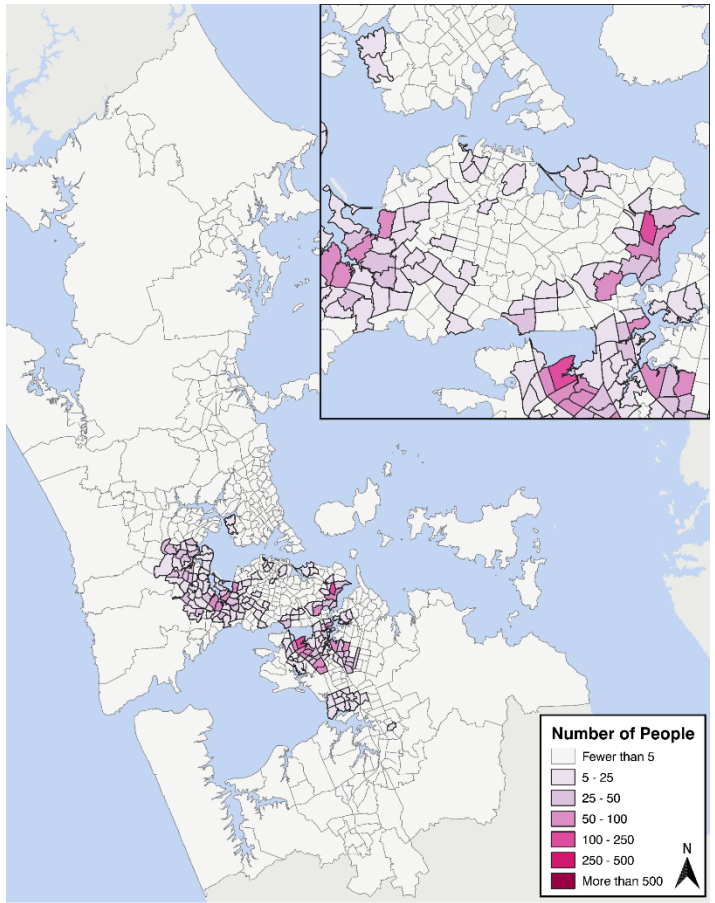
What we heard - Hospital appointments are often allocated rather than chosen, while some specialist services and procedures are only available at particular hospitals. Lower-income patients with regular appointments may be particularly sensitive to the combined cost of charging and hospital parking, creating concern about deferred or missed appointments.

Where are potentially charged journeys from vulnerable communities concentrated?

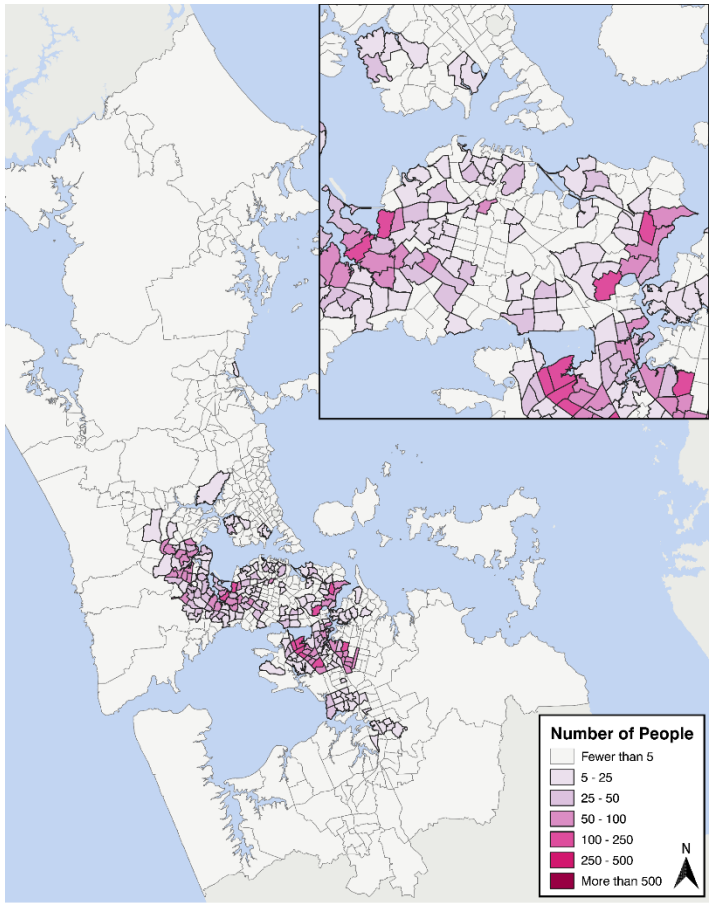
Potentially charged, less flexible journeys from high deprivation areas	1a	1c	3c
No. of trips	4,200	7,400	9,400
% of possibly charged AM car-person trips	*12%*	*11%*	*11%*

These maps show the origins of potentially charged work, education, healthcare and other time-sensitive appointment journeys from higher-deprivation areas. Darker shades show a higher number of journeys travelling from areas of higher-deprivation.

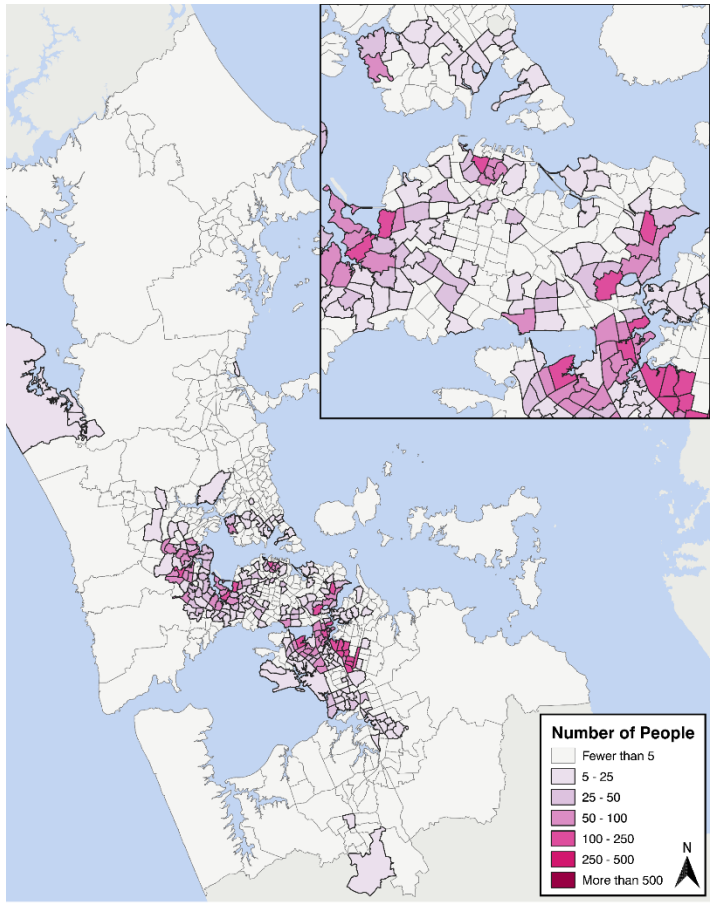
→ **Where less-flexible journeys begin, illustrated for each Time of Use option**



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with Option 1A
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with Option 1C
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with Option 3C
AM Peak Car Person Trips

Key findings

The number of potentially charged, less-flexible journeys increases as scheme coverage expands, from an estimated 4,200 journeys under Option 1a to 9,400 journeys under Option 3c.

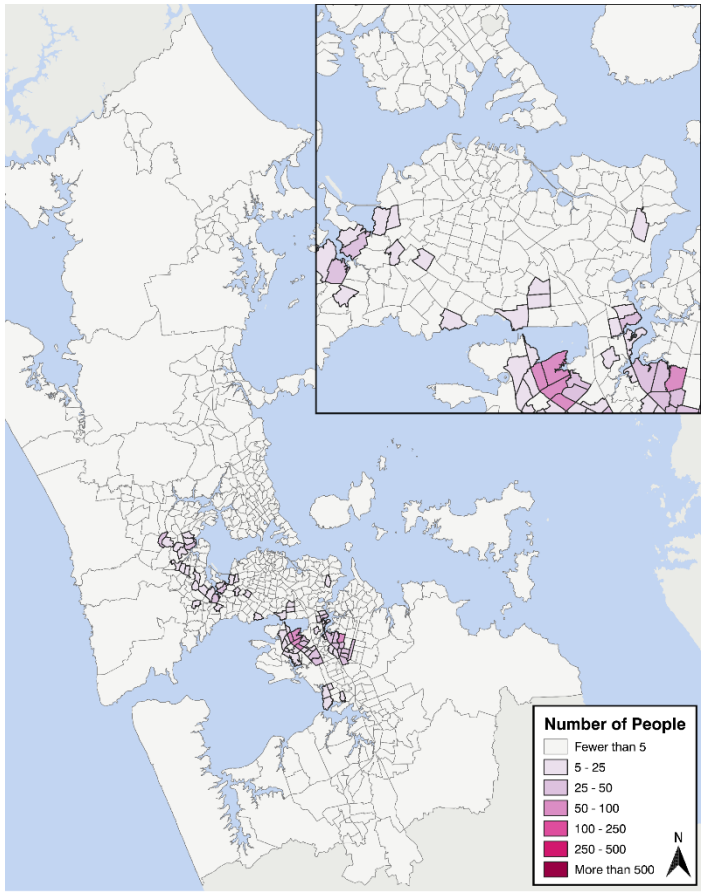
These journeys are not evenly distributed across Auckland, with concentrations particularly evident in parts of West and South Auckland.

Which journeys have a less attractive public transport alternative

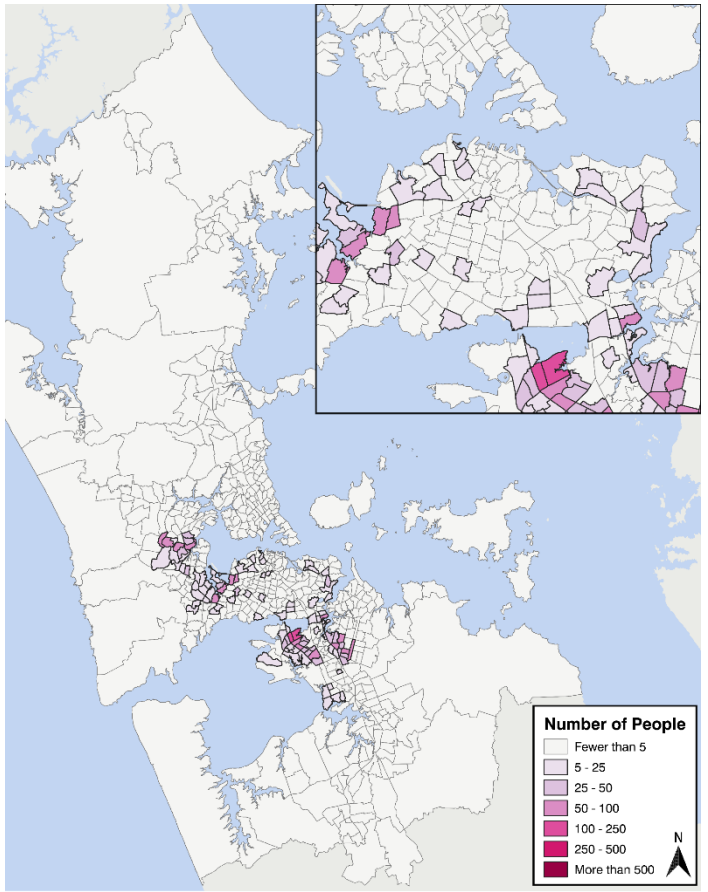
Potentially charged journeys with fewer practical alternatives from areas of high deprivation	1a	1c	3c
No. of trips	1,600	3,100	5,200
% of possibly charged AM car-person trips	*5%*	*5%*	*6%*

These maps show which of the work, education, healthcare and other time-sensitive appointments journeys mapped on the previous slide have a less attractive public transport alternative (comparing how much longer public transport takes compared with driving using modelled journey times. See Appendix – Methodology for further detail). Darker shades show a higher number of people travelling from areas of higher deprivation.

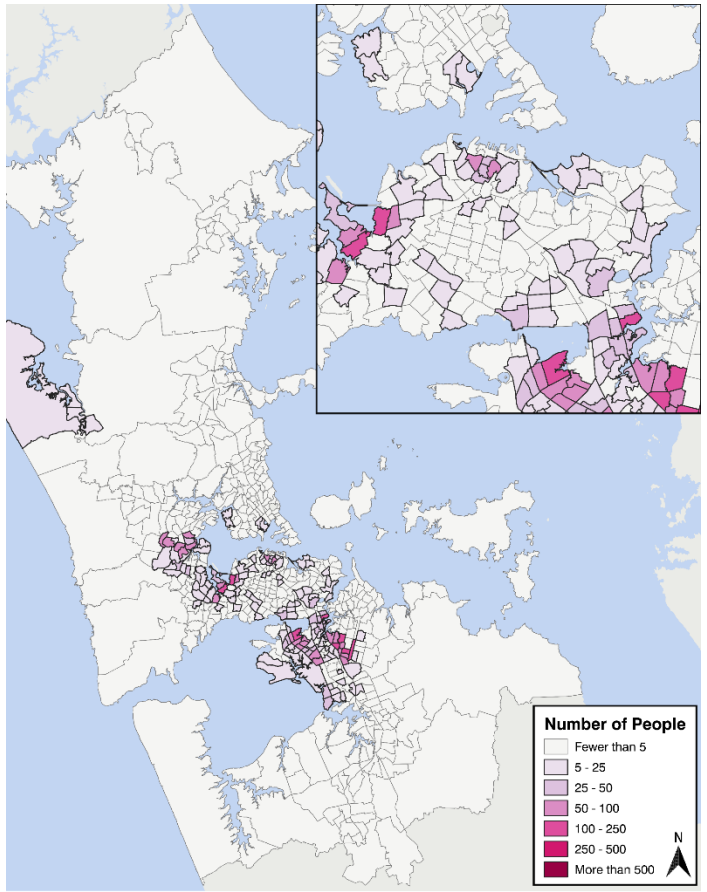
Which potentially charged journeys from high deprivation areas have less attractive public transport options



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with low PT attractiveness with Option 1A
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with low PT attractiveness with Option 1C
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with low PT attractiveness with Option 3C
AM Peak Car Person Trips

Key findings

Applying the public transport test narrows this group to around 5% to 6% of potentially charged morning car journeys.

These journeys are concentrated particularly in West and South Auckland, highlighting where people may have fewer practical alternatives to paying the charge.

Additional public transport improvements funded by each option, particularly Option 3c, are likely to improve these results including in West Auckland and Māngere.

Disability can limit transport choices in different ways

Different disabilities create different transport constraints

Disabled people are not a homogeneous group. The nature and extent of transport constraints vary depending on the type of impairment, individual circumstances and the purpose of the journey.



Disability does not materially constrain transport choice

- Disability does not materially limit available modes, routes or travel times.
- May respond to charge similarly to the wider population.



Alternative modes available, but constrained

- May be able to use public transport, but distance to stops, transfers, accessibility, service availability or journey complexity can make it harder.
- Changing mode may involve greater time and effort than for other travellers.



Vehicle-dependent or reliant on supported travel

- Includes some people with mobility impairments, people travelling with mobility equipment, those unable to readily access public transport, and people dependent on carers, family members, or the Total Mobility scheme.
- May have few realistic alternatives to travelling by vehicle.

What the data and stakeholder engagement tells us about disability

Census data has been used to estimate the number of trips to work and education made by disabled people in Auckland. However, given the modelling does not directly identify disability-related constraints, the full extent of potentially charged journeys made by disabled people remains uncertain.

Car trips to work

16,900

all-day car trips to work made by disabled Aucklanders

3.3%

of Auckland's car trips to work

Car trips to education

1,800

all-day car trips to education made by disabled Aucklanders

4.5%

of Auckland's car trips to education

What we heard

Disabled people have diverse travel needs and constraints. For some, accessing specialist healthcare, appropriately resourced education or daily support can require travel across Auckland. Carers and support workers may also need to travel at specific times and often use private vehicles, meaning the impact of charging can extend beyond the disabled person making the journey.

Some disabled people may have fewer realistic ways to respond to charging

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The assessment indicates that some disabled people may find it more difficult to change how, when and where they travel in response to a Time of Use Charge

Response to charging	Potential capacity to respond	Why
Exposure to charging	Material exposure	54% of disabled New Zealanders regularly drive themselves and 43% regularly travel as vehicle passengers.
Change mode	Low capacity	Public transport may be physically available, but not practically accessible due to stop access, transfers, service availability, accessibility or journey complexity.
Change travel time	Limited capacity	Work, education, healthcare, care and support commitments may have fixed or limited timing flexibility.
Avoid the journey	Low capacity	Forgoing travel may reduce access to employment, healthcare, education and social participation.
Afford the charge	Limited ability to absorb cost	53% of disabled New Zealanders report having insufficient or only just enough income to meet basic needs, compared with 31% of non-disabled people.

Key findings

1. Exposure is mixed
Disabled people are not uniformly more car-dependent. Census data shows different patterns across disability groups and trip purposes.

2. Capacity to respond is the central issue
Where disability constrains transport choices, changing mode, travel time or destination may be less practical, while paying the charge may place additional pressure on household budgets.

3. Reduced congestion may provide benefits
Vehicle-dependent disabled people may benefit from shorter and more reliable journeys, particularly where travel times are important for accessing care, support or essential activities.

Area for further investigation
Disabled people may have fewer practical alternatives to private vehicle travel and less flexibility to adapt their journeys. Further assessment should identify where impacts could be avoided or mitigated through scheme design, mitigations and complementary measures.

Impacts on healthcare trips

Healthcare trips may be difficult to change even where trip volumes are low

Healthcare trips account for a small proportion of potentially charged journeys, but the consequences may be greater where patients or staff cannot readily change when, where or how they travel.

What we heard - patients have limited control over their journey

Appointments are generally allocated rather than chosen, and specialist services or procedures may only be available at particular hospital sites. Patients may therefore have limited ability to change their destination or avoid travelling during a charged period.

The combined cost of the charge, fuel and hospital parking may place greater pressure on low-income patients, particularly those attending repeated appointments. This creates a concern that some people could defer care or miss appointments because of the additional cost, which requires further investigation.

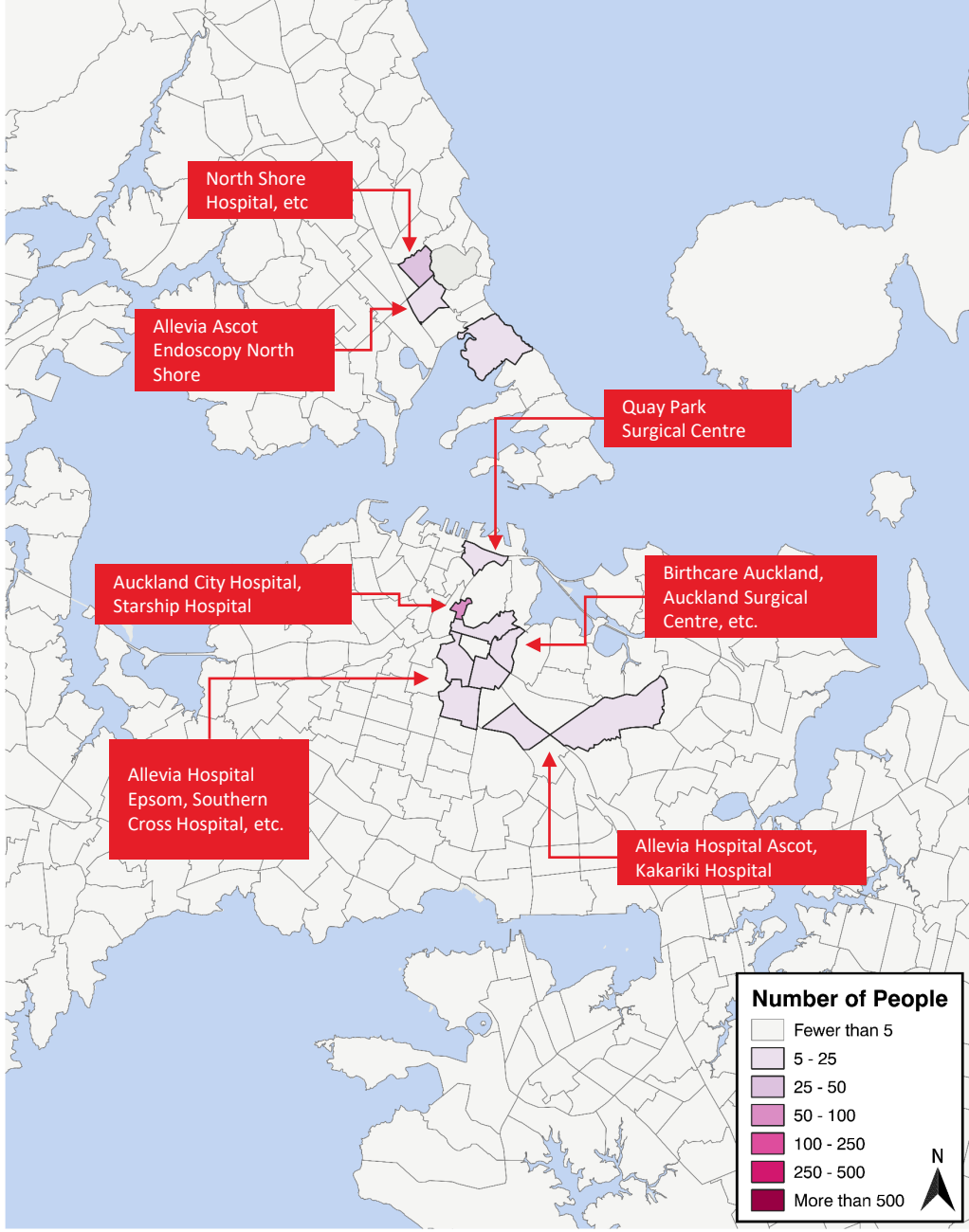
What we heard - hospital staff may have limited ability to retime travel

Healthcare workers must be physically present at specific times. Hospital staff often work fixed shifts, noting that many shift start and finish times will fall outside the charged periods. The effect may be greater for lower-income nurses, security and support staff who regularly drive, live in South or West Auckland, or have limited public transport options at shift-change times.

Key findings

The number of potentially charged healthcare trips from areas of high deprivation is relatively small, but patients and staff have limited control over location and timing. This especially applies to those making regular healthcare visits (i.e. dialysis or chemotherapy).

While all trips in the peak period into Auckland City Hospital/Starship are charged in Option 1c, only a proportion of these trips are affected in Option 3c as many of these journeys are made using arterials by residents in central Auckland. Further analysis is required to identify which staff journeys would be exposed under each option.



Destination of car person trips made from areas of high deprivation that are possibly charged that are making journeys to healthcare with Option 3C

AM Peak Car Person Trips

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Appendix

Methodology

Methodology

This assessment identifies people and journeys that may experience greater impacts from Time of Use Charging by considering both people's circumstances and the journeys they need to make.

The approach draws on international evidence and targeted engagement, with particular attention to groups who may have fewer reasonable ways to respond to a charge.

The assessment considered how easily different groups could **respond to the charge**, including whether they could realistically change how they travel. This helped identify the groups who may face the greatest impacts because they have fewer practical alternatives available.

What is a car person trip? One person making one journey by car, whether as the driver or a passenger. Four people in a car (one driver, three passengers) represents one car trip and four car person trips.

What are potentially charged trips? These are trips that currently pass through the proposed charged locations in an uncharged scenario – these are not representative of actual trips charged as the number of charged trips would likely be lower due to a range of factors including people changing transport mode, re-timing or rerouting their trip, choosing an alternative uncharged destination or cancelling trips.

What do the numbers represent? These results are modelled estimates for the 2026 do-minimum scenario. Figures represent an indicative order of magnitude and may change as a result of refinements in scheme design, charge levels, mitigation measures, behavioural responses and modelling assumptions.

Whose circumstances may make it harder to respond?

People whose circumstances may make it harder to absorb the cost or change how they travel, such as people on low incomes or people with disabilities.

What types of journeys are we interested in?

Journeys that may be harder to change, including travel to work, education, healthcare and other time-sensitive appointments.

How does this translate into groups of interest?

By considering people's circumstances alongside journeys that may be difficult to change, we can focus on groups identified through international benchmarking, for example:

- Low-income shift workers travelling to work
- Low-income households dropping children at school
- Disabled people travelling to work

Stakeholder engagement

Targeted engagement with relevant stakeholders was undertaken to understand lived experience, and identify practical barriers to changing how, when or where people travel. These insights complement the analysis and helped inform the groups and journey types considered in the assessment.

Methodology

The following steps were used to progressively filter and identify journeys where potential financial pressure, limited journey flexibility and a less attractive public transport alternative overlap. These journey groups are then aggregated by Macro Strategic Model (MSM) zone and local board area of origin to identify where travelers are likely more exposed to the impacts of the Time of Use charge.

1. Identification of potentially charged journeys

Select-link analysis from 2026 MSM runs provided by Auckland Forecasting Centre identified existing car-person trips passing through each proposed charged location during the charging morning peak period.

The 2026 Do Minimum scenario was used to show current travel patterns before people change route, mode or travel time in response to charging. Outputs identified each journey's origin, destination and modelled purpose.

2. Identification of journeys from high deprivation areas

For each model zone, the proportion of residents living in areas of high deprivation, taken to be NZDep 9-10 from the 2023 dataset, was applied to the potentially charged trips originating from that zone.

For example, if 15% of a zone's population lives in NZDep 9–10 areas, 15% of its potentially charged trips were attributed to higher-deprivation areas.

3. Identification of less-flexible journeys

Modelled trip purposes and supporting datasets were used to identify journeys that may be harder to retime, redirect or avoid:

- *Work:* Trips between home and a workplace
- *Education:* Trips between home and school, split by primary, secondary, and tertiary education using enrolment data
- *Healthcare:* Trips between home and zones where healthcare facilities (e.g. hospitals, clinics) are located, proportioned according to healthcare employment as a share of total employment using 2023 NZ Census data
- *Other time-sensitive purposes:* 30% of trips between home and other facilities and non-home-based trips, based on NZ Household Travel Survey data

4. Testing public transport alternative practicality (see following slide for supporting analysis)

Public transport and car travel times were compared for each origin-destination (OD) trip. An OD trip was considered to have a practical public transport (PT) alternative if:

- The PT journey is under 45 minutes
- A PT journey of 45–60 minutes which is less than twice the car travel time
- A PT journey over 60 minutes which less than 1.5 times the car travel time

Journeys which did not fall within these thresholds were considered to have a less attractive public transport alternative. These thresholds reflect the 75th percentile of travel-time ratios between PT journey time and car journey time for existing PT demand, as illustrated on the following slide.

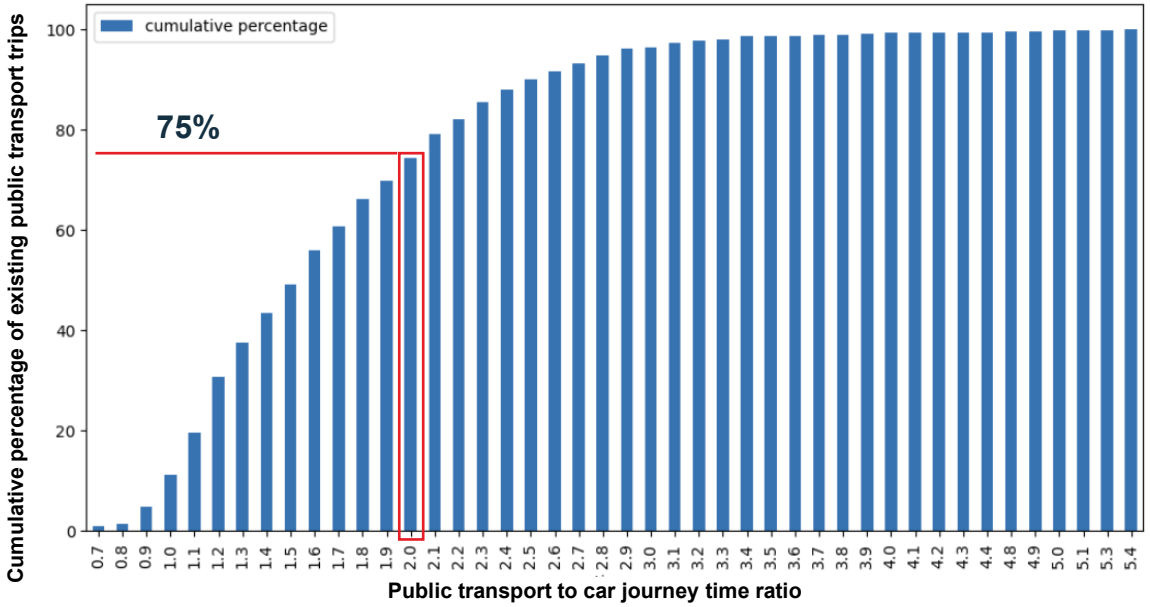
Methodology – comparison of car and public transport travel time

The graphs below compare modelled public transport and car travel time ratios for the same origin-destination movements passing through the Option 3c charged links in the do-minimum scenario. This shows the distribution of the PT-to-car travel-time ratio for journeys currently made by public transport using modelled data.

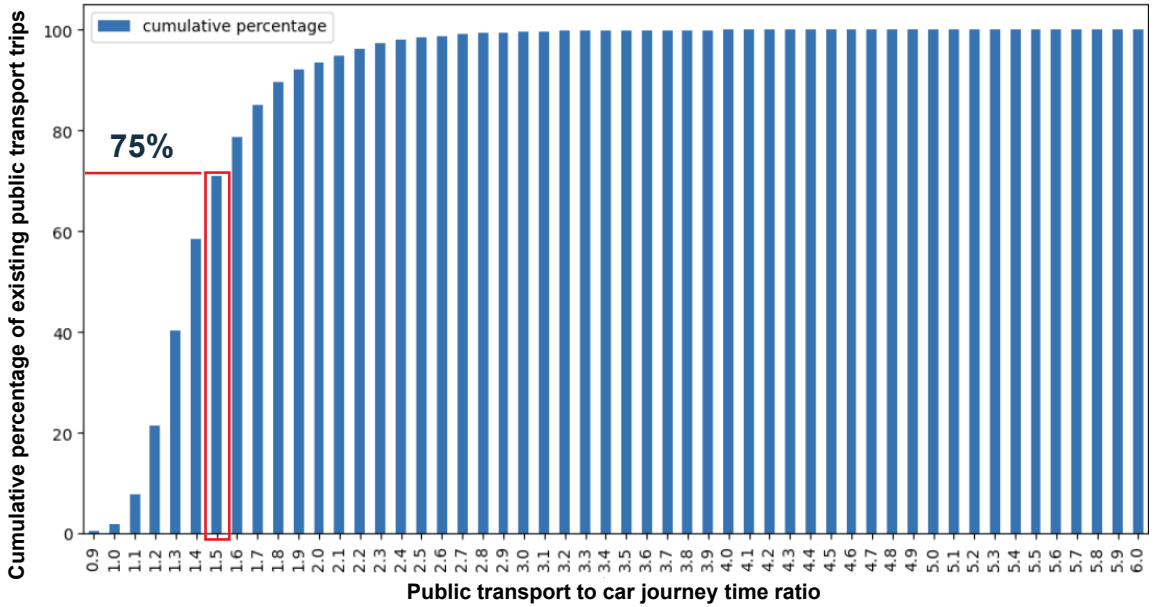
The analysis shows that the PT-to-car travel time ratio at which the 75th percentile of all public transport trips is made reduces, from approximately 2.0 for journeys under 45 minutes, to 1.8 for journeys of 45–60 minutes, and to 1.5 for journeys over 60 minutes. This indicates that as the overall journey time increases, the tolerance for longer public transport journey times decreases.

For the assessment, simplified thresholds of 2.0 and 1.5 were adopted to provide a clear and consistent approach.

Cumulative proportion of existing PT demand vs PT/Car travel-time ratio
PT travel-time < 45 mins



Cumulative proportion of existing PT demand vs PT/Car travel-time ratio
PT travel-time > 60 mins

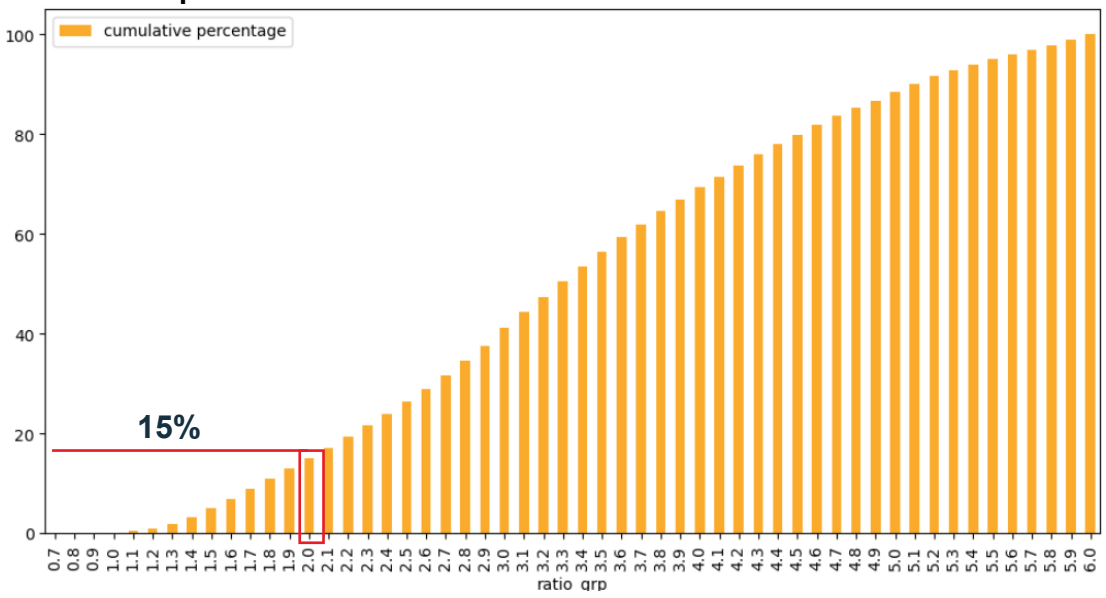


Methodology – example application

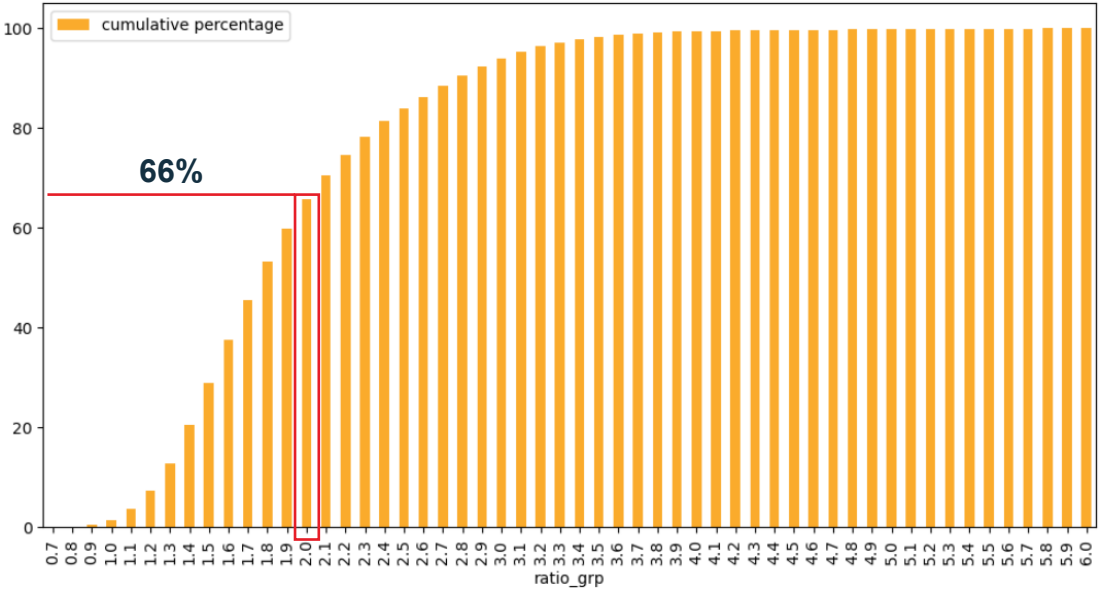
The graphs below show the proportion of car journeys for which public transport provides a broadly comparable alternative (i.e. proportion of car trips where the PT/Car travel-time ratio is less than 2) as an example of how the methodology is applied in practice.

Approximately 15% of all modelled Auckland car journeys have a PT-to-car travel-time ratio below 2, compared with approximately 66% of journeys passing through Option 3c charged roads. This indicates that journeys that would potentially be charged in Option 3c have significantly better modelled public transport alternatives than the Auckland average.

Cumulative proportion of existing car demand vs PT/Car travel-time ratio
All car trips



Cumulative proportion of existing car demand vs PT/Car travel-time ratio
All car trips that pass through the Option 3c charged roads



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Appendix

Results

Results

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In a 2026 do-minimum scenario:

- **There are a total of 729,500** car person trips in the morning (two-hour) peak
- 23% of population reside in high deprivation areas*

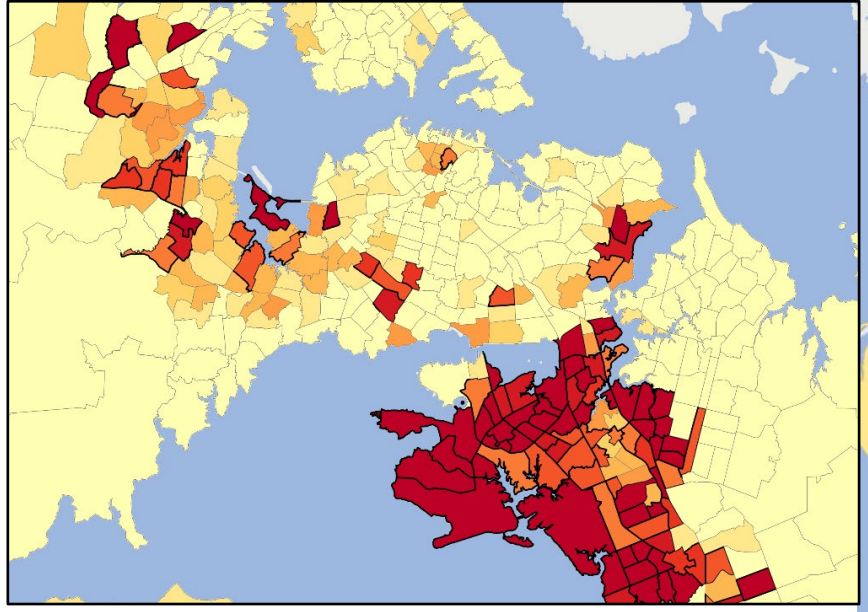
		Absolute number			Proportion of all car person trips			Proportion of all possibly charged car person trips		
Option		**1A**	**1C**	**3C**	**1A**	**1C**	**3C**	**1A**	**1C**	**3C**
All possibly charged car person trips		**34,400**	**65,200**	**89,100**	**5%**	**9%**	**12%**	***100%***	***100%***	***100%***
Possibly charged car person trips made from high deprivation areas		6,300	11,200	15,400	1%	2%	2%	*18%*	*17%*	*17%*
Possibly charged, less-flexible car person trips made from high deprivation areas	**All trips**	**4,200**	**7,400**	**9,400**	**0.6%**	**1.0%**	**1.3%**	***12%***	***11%***	***11%***
	Work trips	2,400	5,000	6,000	0.3%	0.7%	0.8%	*7%*	*8%*	*7%*
	Education trips	1,200	1,300	1,600	0.2%	0.2%	0.2%	*3%*	*2%*	*2%*
	Primary/Secondary Education trips	<50	100	300	<0.1%	<0.1%	<0.1%	*<1%*	*<1%*	*<1%*
	Health care trips	<50	200	200	<0.1%	<0.1%	<0.1%	*<1%*	*<1%*	*<1%*
Possibly charged, less-flexible car person trips with low PT attractiveness made from high deprivation areas	**All trips**	**1,600**	**3,100**	**5,200**	**0.2%**	**0.4%**	**0.7%**	***5%***	***5%***	***6%***
	Work trips	700	1,900	3,100	0.1%	0.3%	0.4%	*2%*	*3%*	*3%*
	Education trips	700	700	1,000	0.1%	0.1%	0.1%	*2%*	*1%*	*1%*
	Primary/Secondary Education trips	<50	<50	200	<0.1%	<0.1%	<0.1%	*<1%*	*<1%*	*<1%*
	Health care trips	<50	100	200	<0.1%	<0.1%	<0.1%	*<1%*	*<1%*	*<1%*

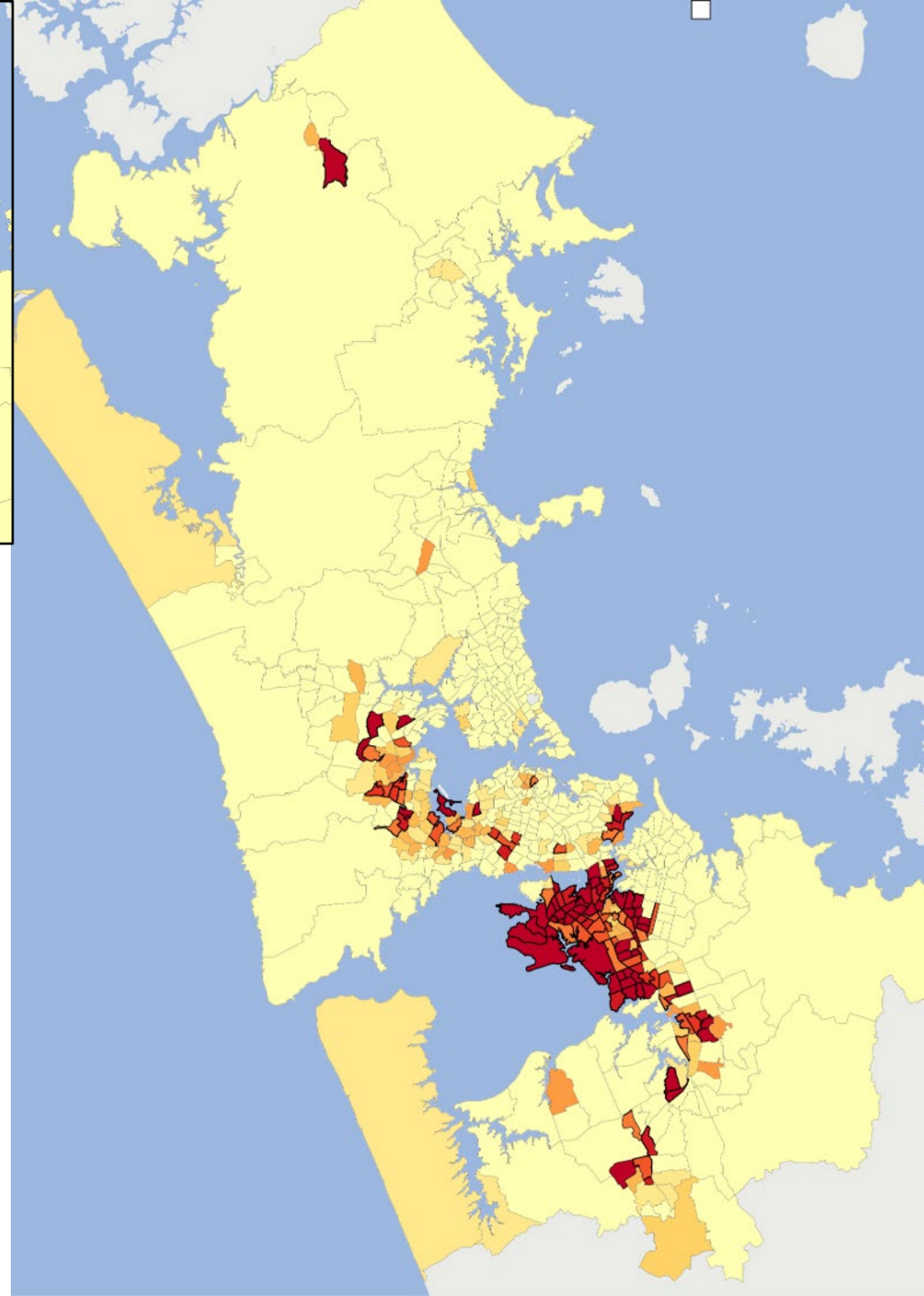
**Based on the 2023 New Zealand Census*

Deprivation

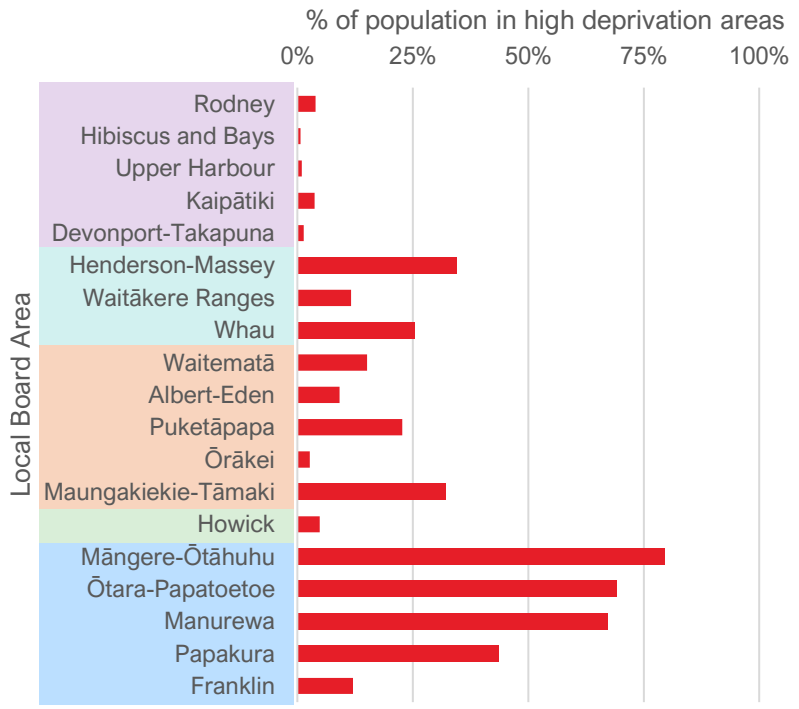
Most MSM zones with greater proportions of high deprivation SA1s (i.e. NZDep of 9-10) are located in:

- **South Auckland** (e.g. Otara-Papatoetoe, Mangere-Otahuhu, Manurewa, Papakura) and
- **West Auckland** (e.g. Henderson-Massey, Whau)





% population in high deprivation areas



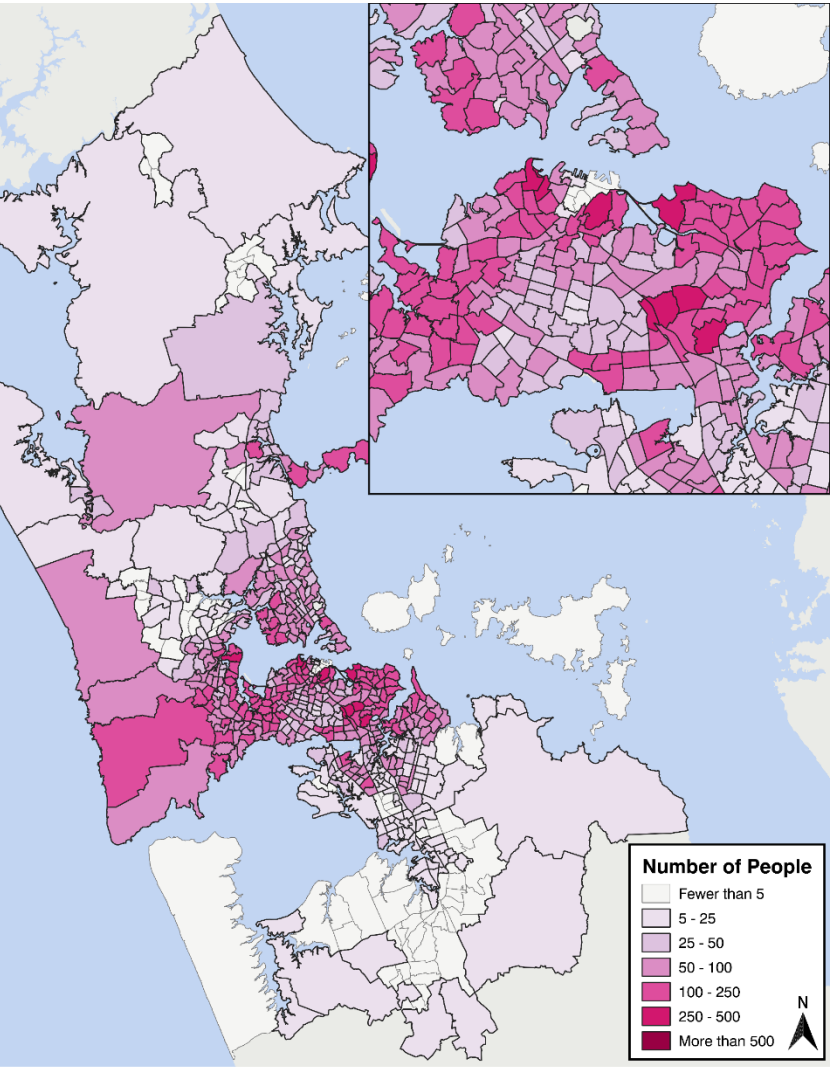
Local board area by regions of Auckland

- Rodney and North Shore
- West Auckland
- Isthmus
- East Auckland
- South Auckland

Distribution of all possibly charged trips

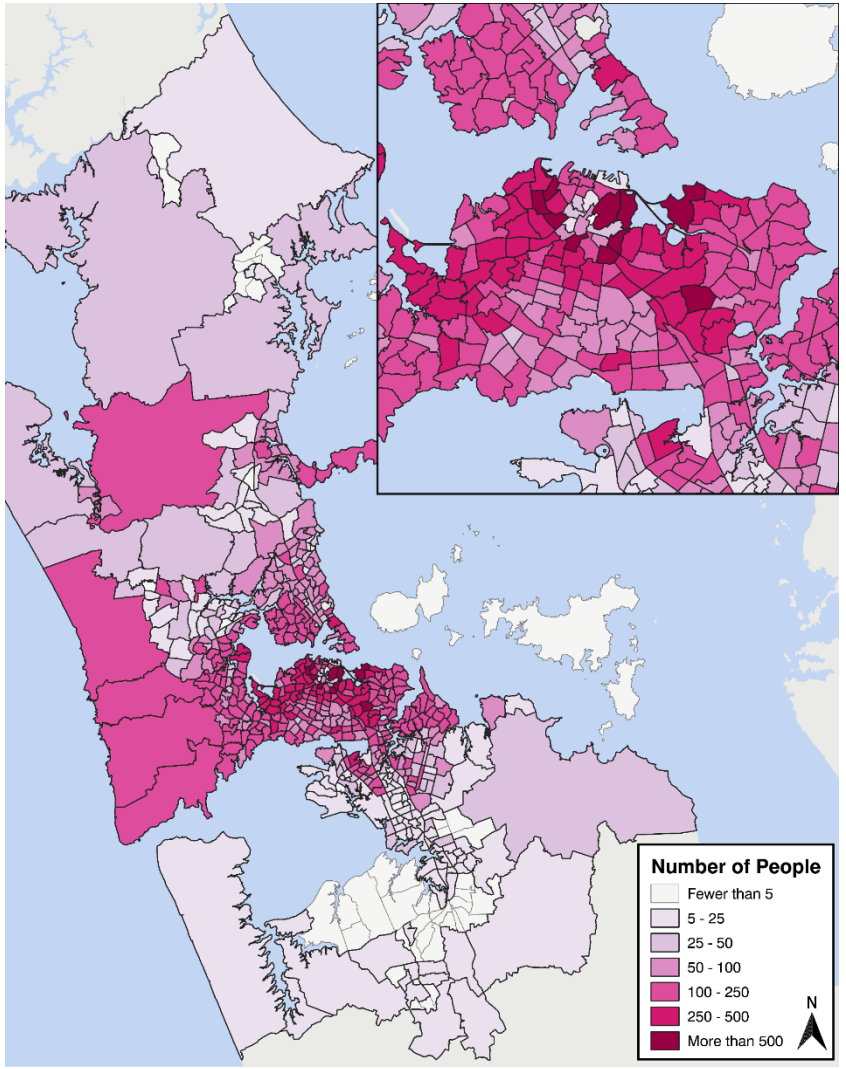
- Majority of impacted trips in Options 1a and 1c are within the Isthmus and West Auckland
- Trips from North Shore and East/South Auckland are more likely impacted in Option 3c

	1a	1c	3c
No. of charged car person trips	34,400	65,200	89,100
% of region-wide car person trips	5%	9%	12%



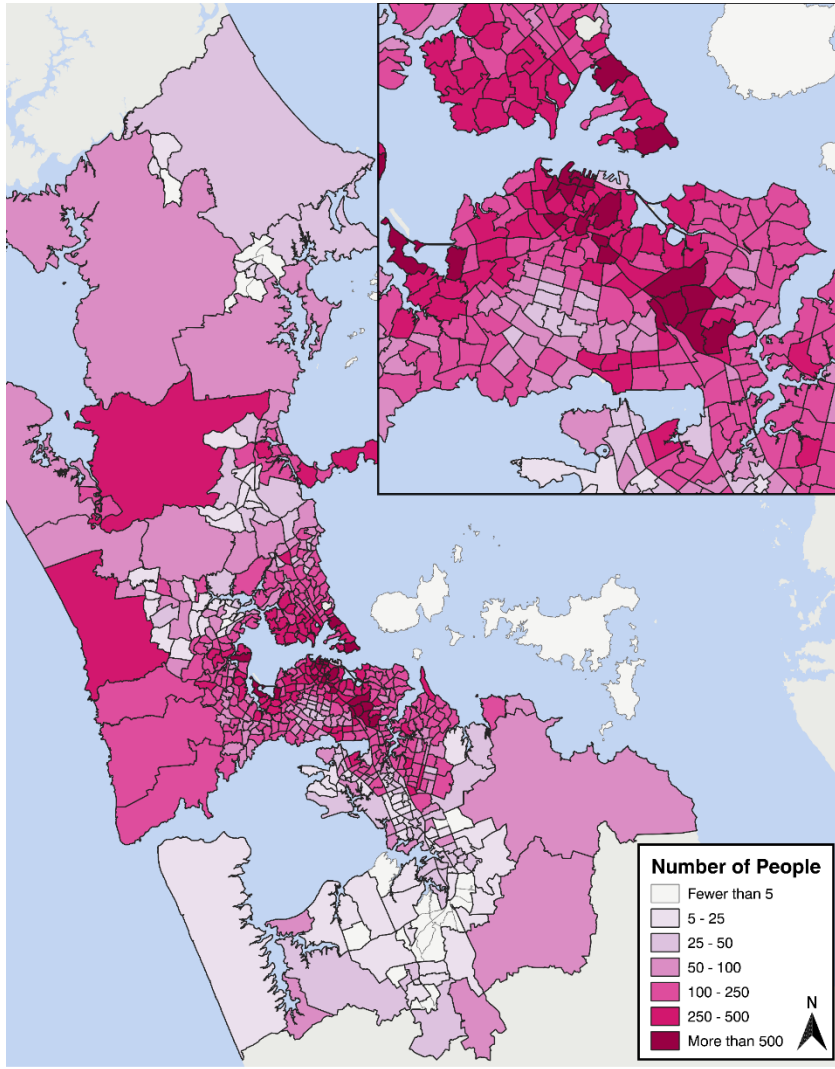
Number of Potentially Charged Trips with Option 1A

AM Peak Car Person Trips



Number of Potentially Charged Trips with Option 1C

AM Peak Car Person Trips



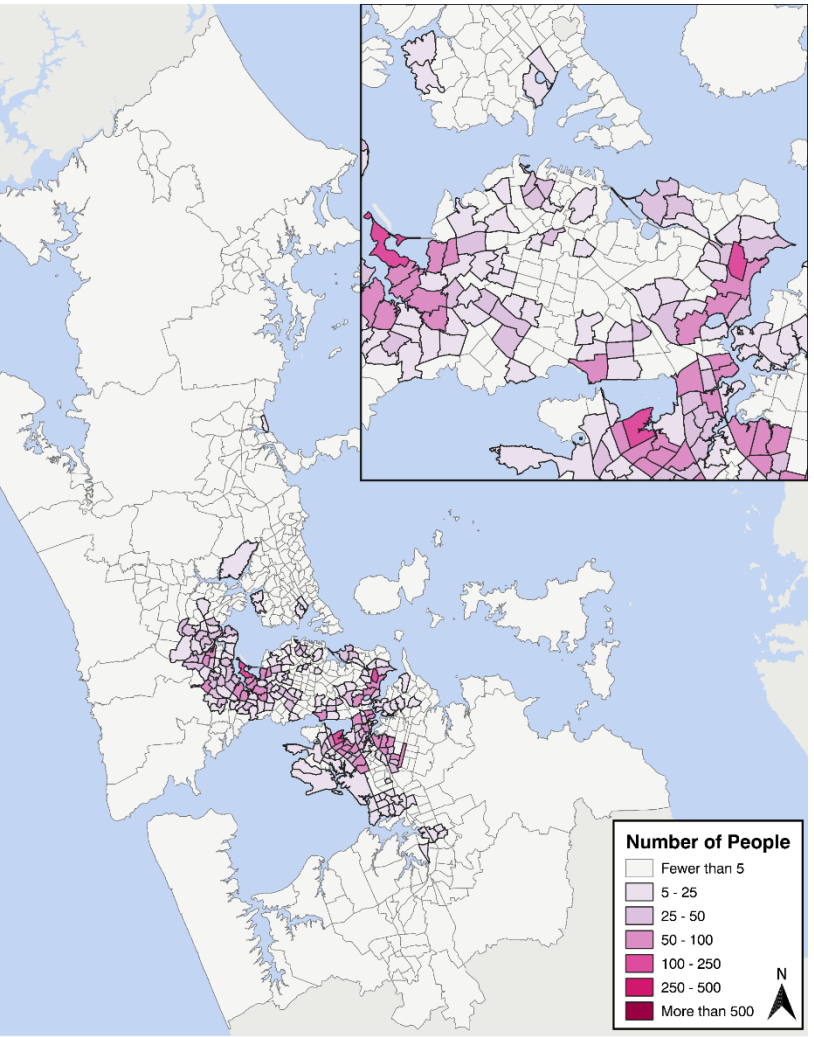
Number of Potentially Charged Trips with Option 3C

AM Peak Car Person Trips

Distribution of possibly charged trips made from high deprivation areas

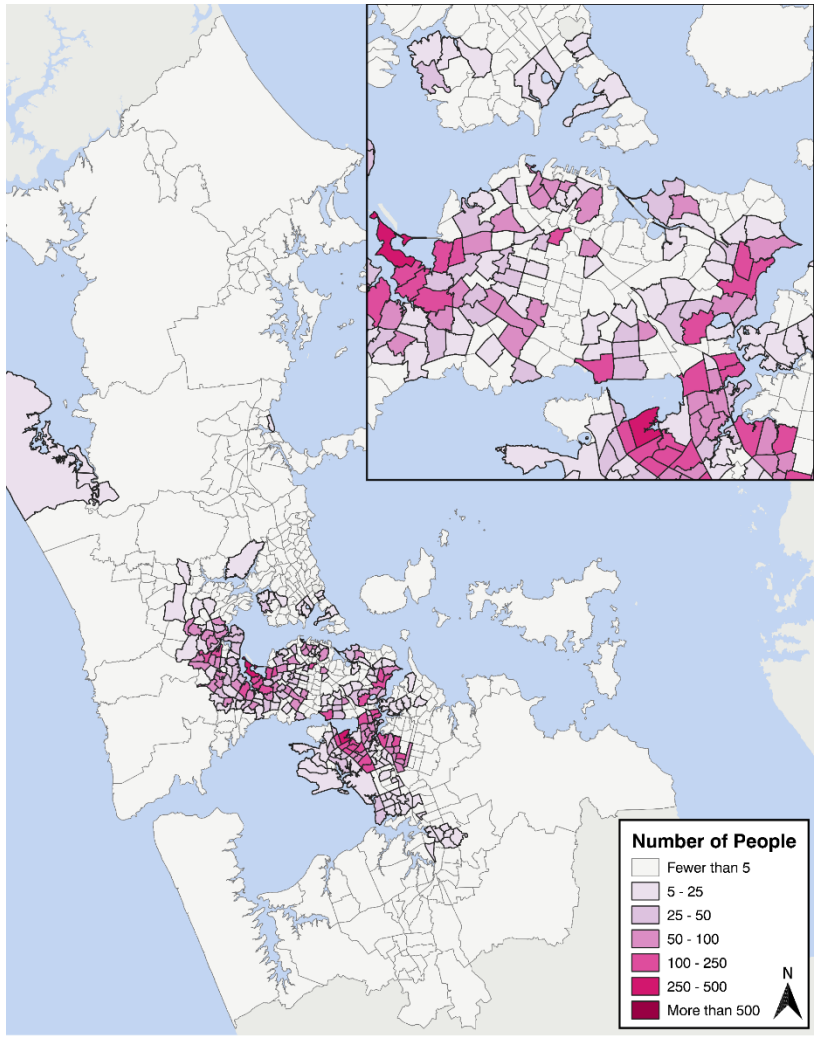
High deprivation areas *- SA1s where deprivation index is 9 or 10.*

Possibly charged car person trips from high deprivation areas	1a	1c	3c
No. of trips	6,300	11,200	15,400
% of region-wide car person trips	1%	2%	2%



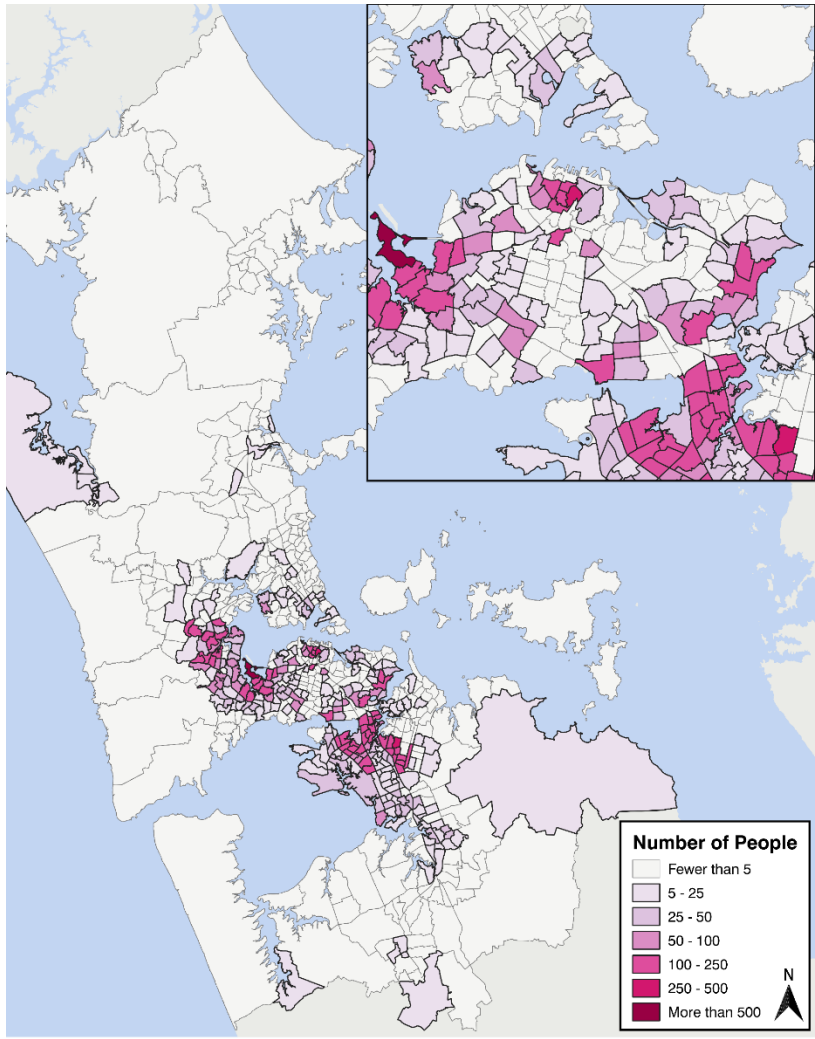
Car person trips in Auckland made from areas of high deprivation that are possibly charged with Option 1A

AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged with Option 1C

AM Peak Car Person Trips

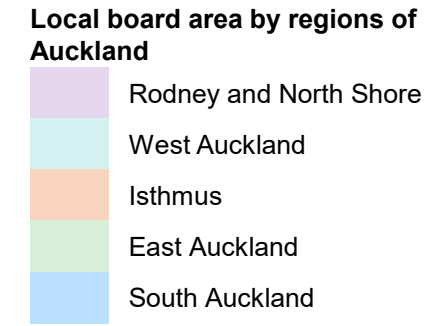


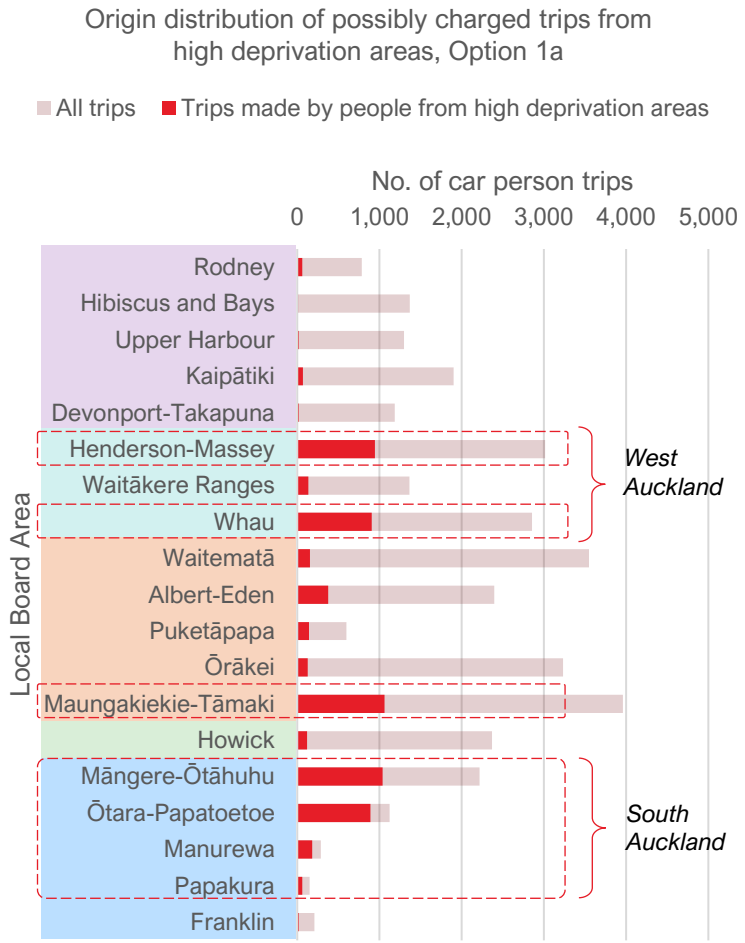
Car person trips in Auckland made from areas of high deprivation that are possibly charged with Option 3C

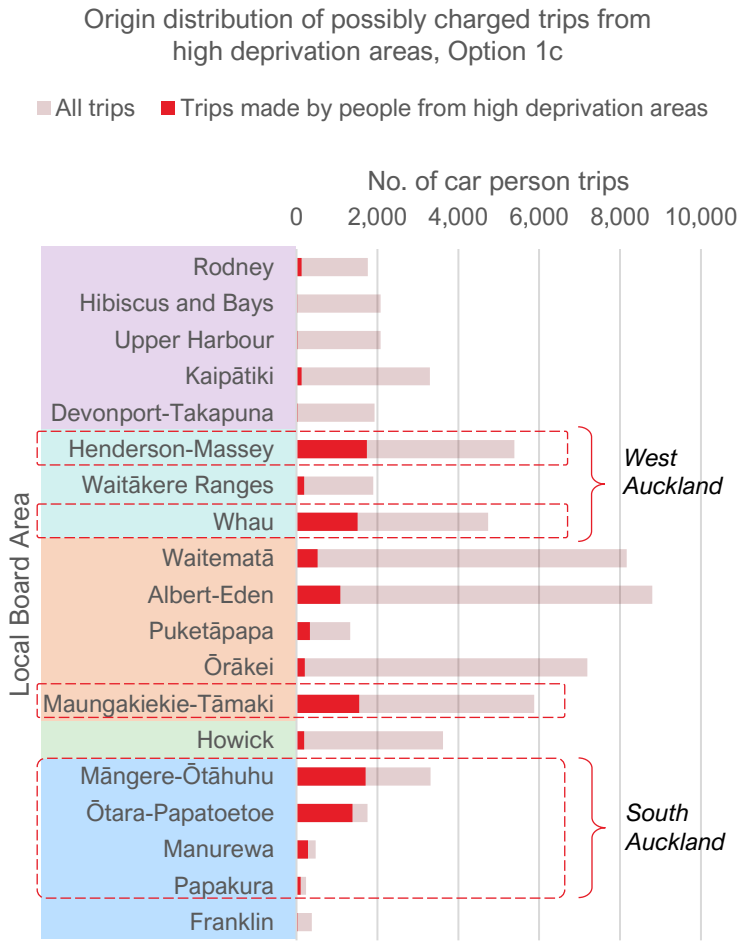
AM Peak Car Person Trips

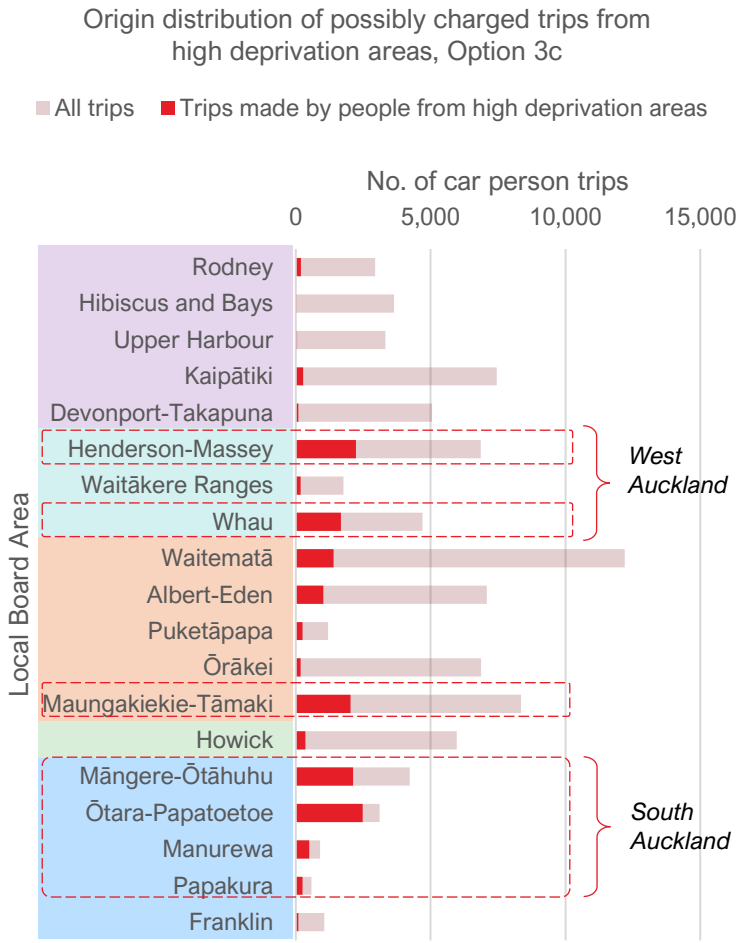
Distribution of possibly charged trips made from high deprivation areas

- As expected, the greatest number of potentially charged trips from high deprivation areas originate from West Auckland and South Auckland under all options.
- There are notably more impacted trips from Albert-Eden under Option 1c since expansion of charged cordon to city fringe impacts more local/shorter trips within the Inner Isthmus area
- There are notably more impacted trips from Waitemata under Option 3c since expansion of charged area to core motorways impact trips leaving from the city centre.





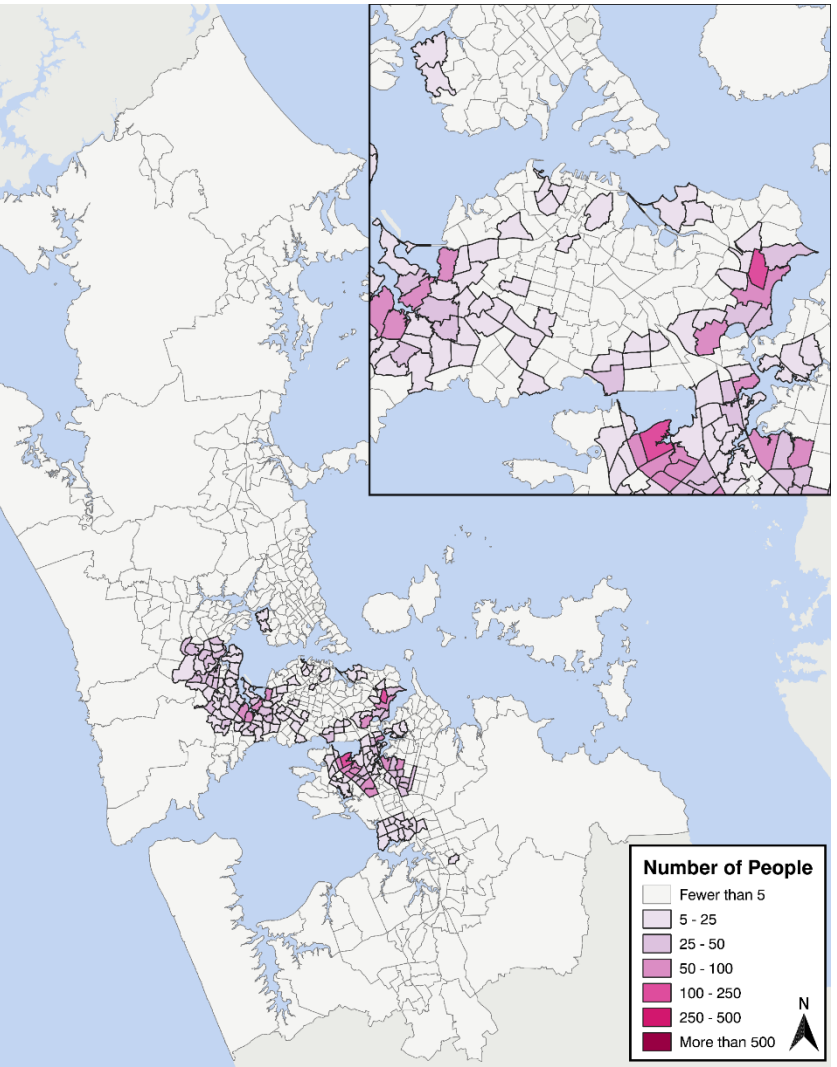




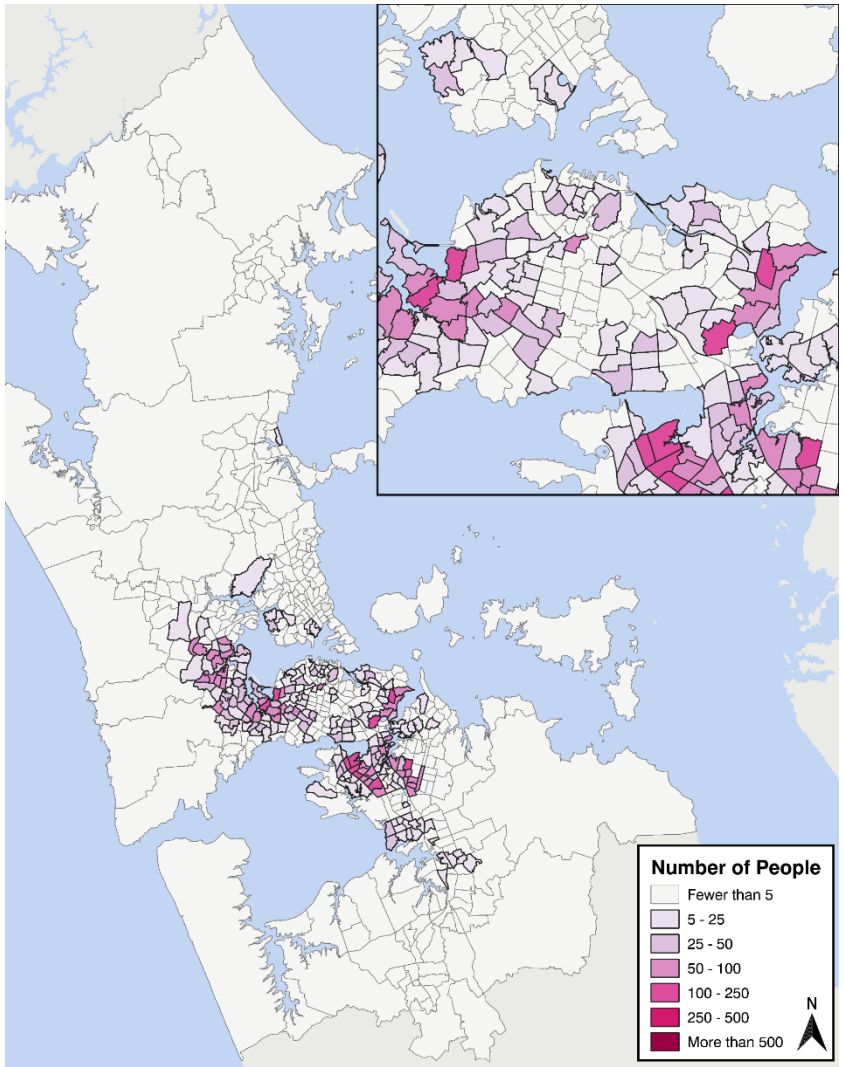
Distribution of possibly charged, less-flexible trips from high deprivation areas

High deprivation areas *- SA1s where deprivation index is 9 or 10.*
Less-flexible trips *– HBW, all HBE, health care, and 30% of HBO/NHBO trips*

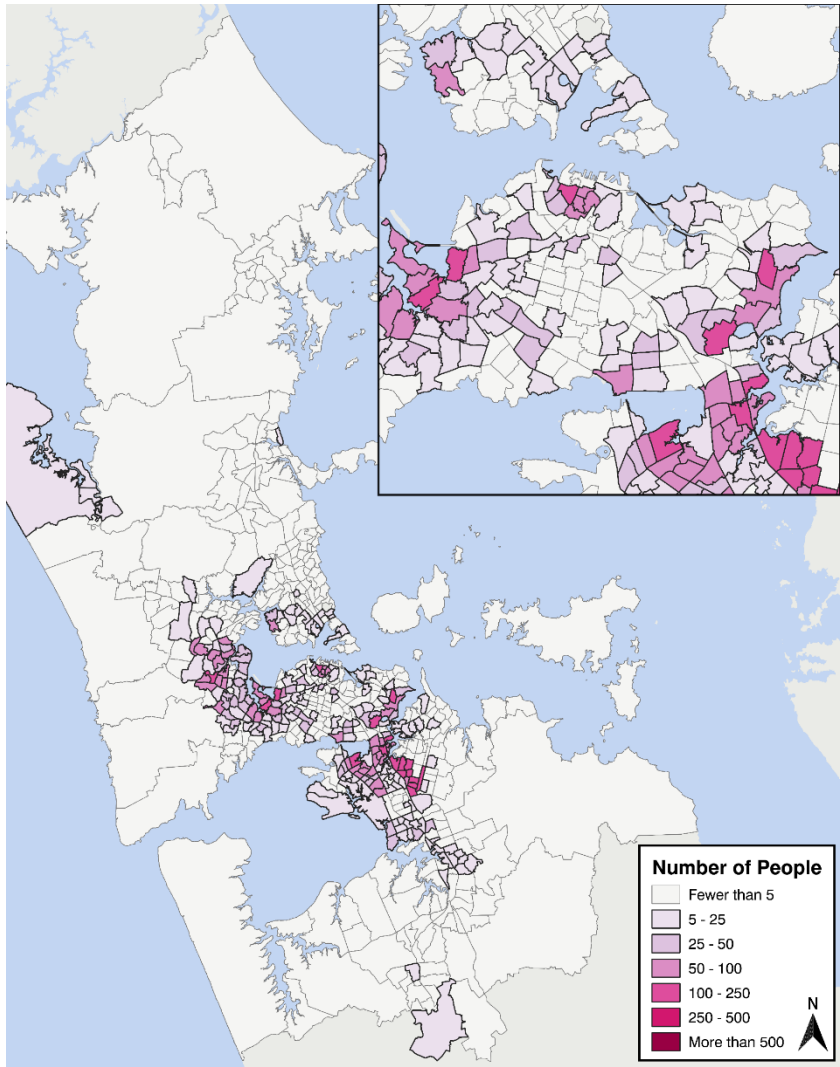
Possibly charged car person less-flexible trips from high deprivation areas	1a	1c	3c
No. of charged car person trips	4,200	7,400	9,400
% of region-wide car person trips	0.6%	1.0%	1.3%



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with Option 1A
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with Option 1C
AM Peak Car Person Trips

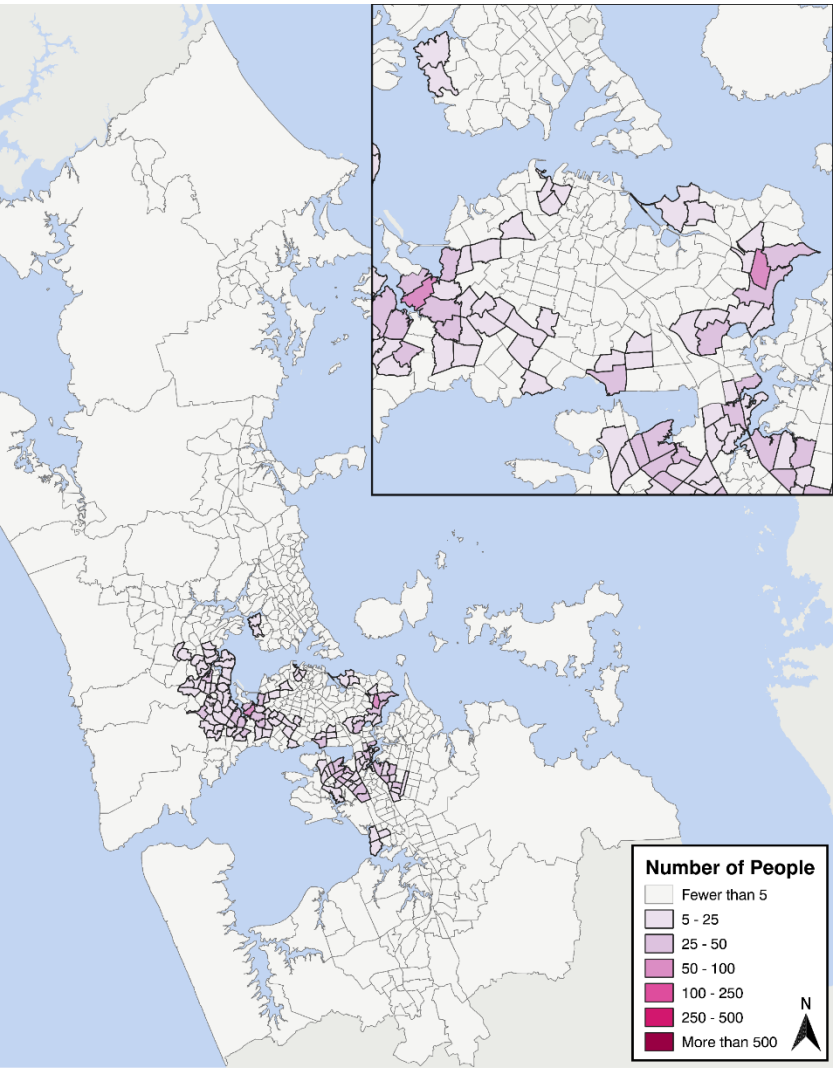


Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with Option 3C
AM Peak Car Person Trips

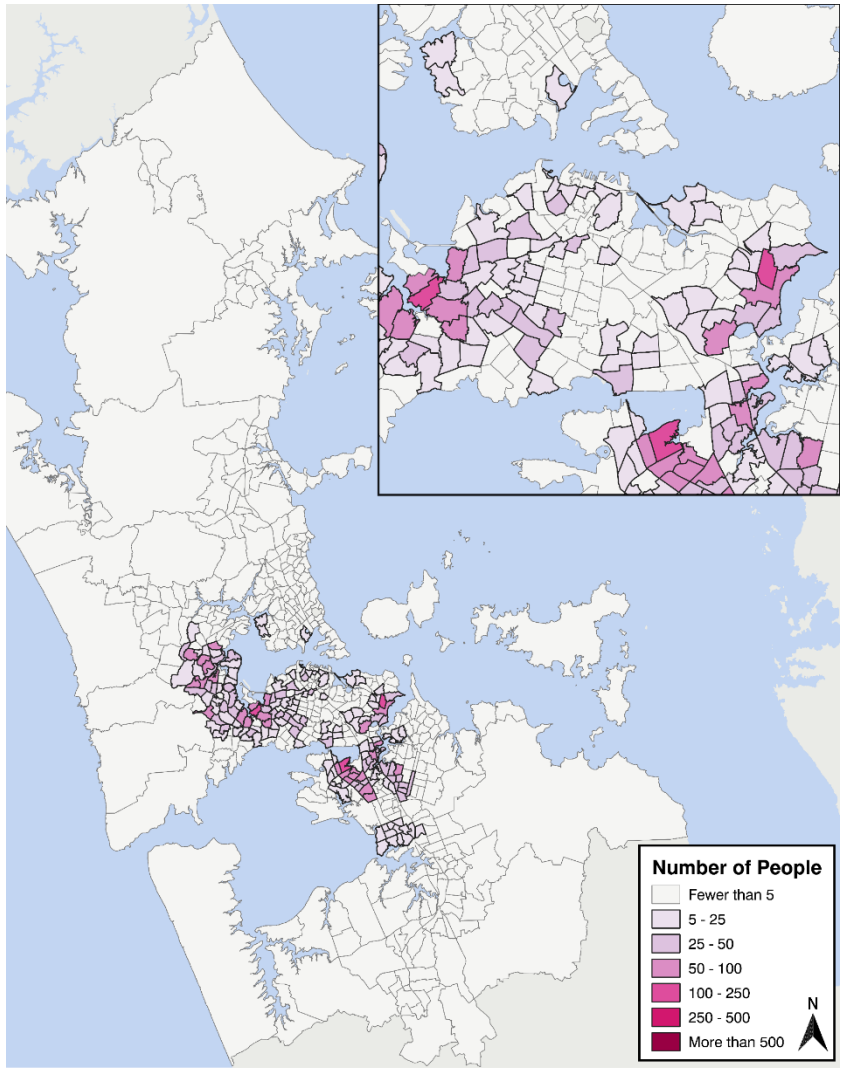
Distribution of possibly charged work trips from high deprivation areas

High deprivation areas *- SA1s where deprivation index is 9 or 10.*

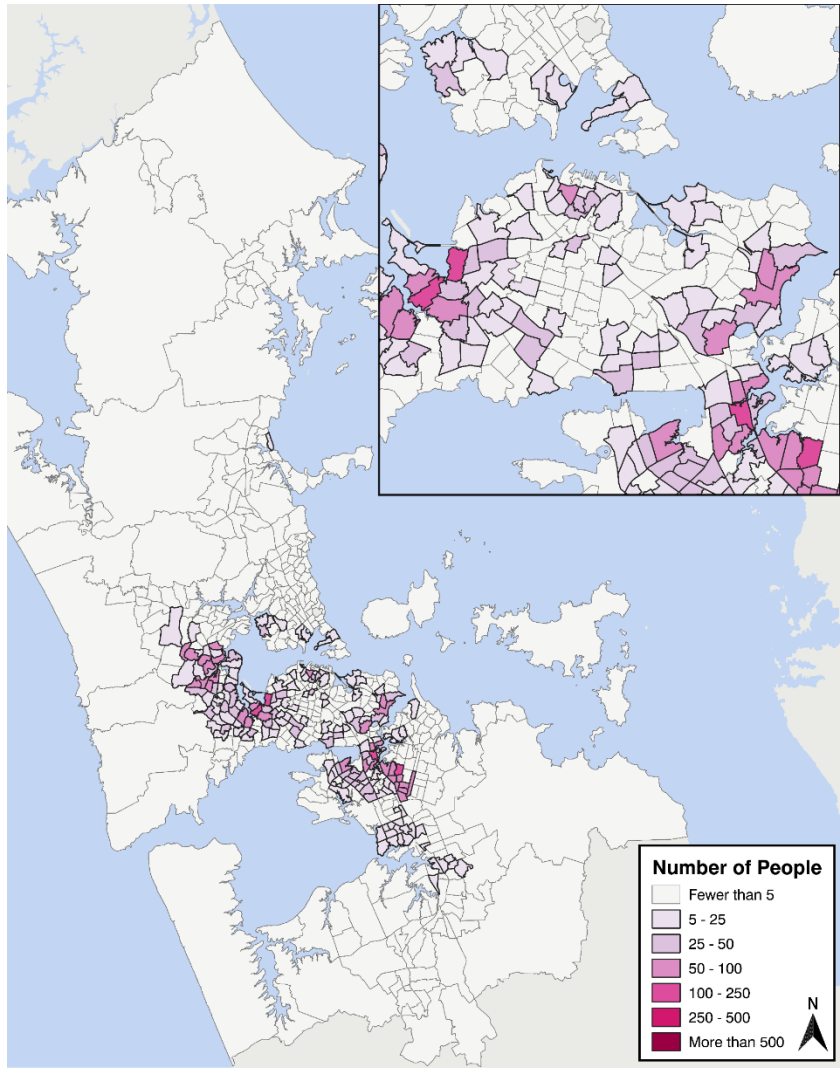
Possibly charged car person work trips from high deprivation areas	1a	1c	3c
No. of charged car person trips	2,400	5,000	6,000
% of region-wide car person trips	0.3%	0.7%	0.8%



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making work journeys with Option 1A
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making work journeys with Option 1C
AM Peak Car Person Trips

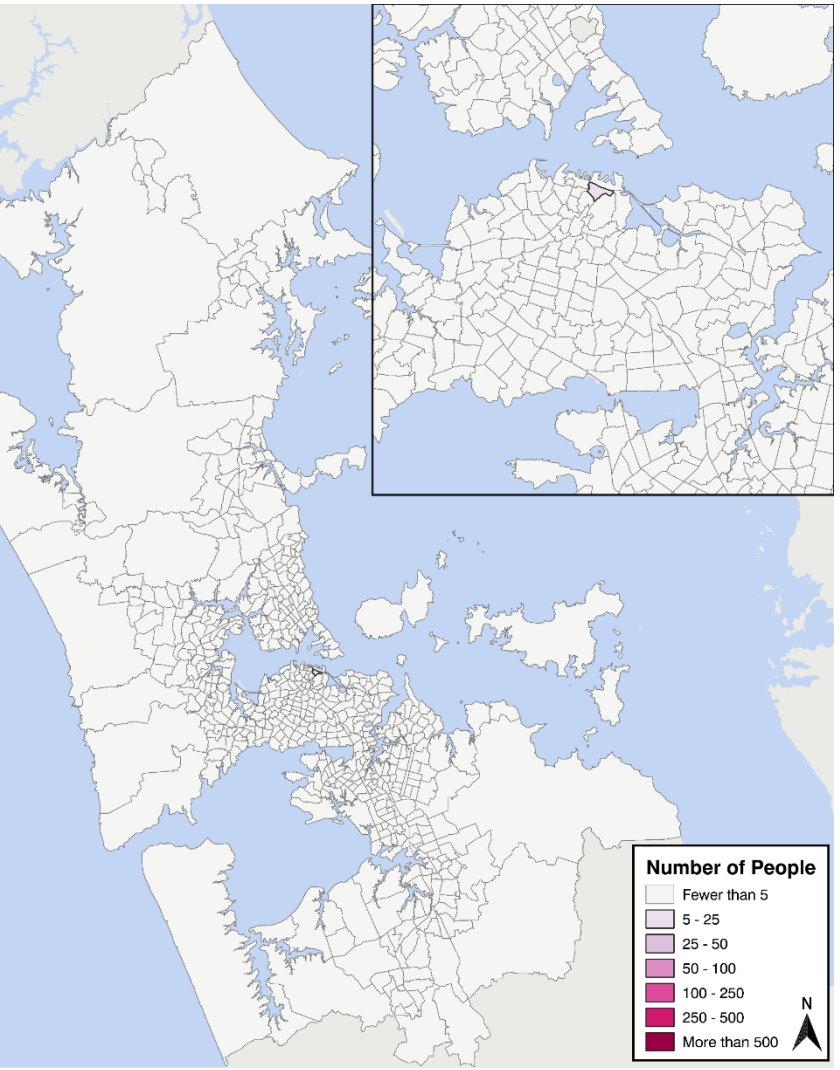


Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making work journeys with Option 3C
AM Peak Car Person Trips

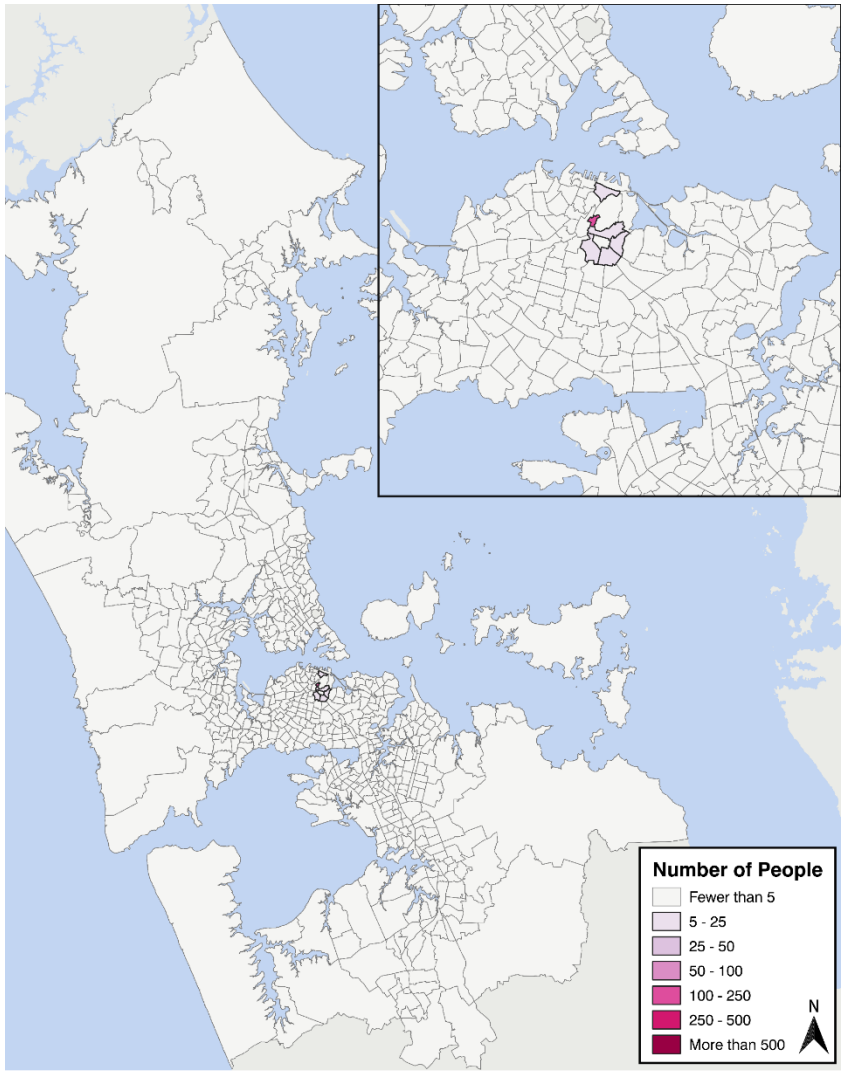
Distribution of possibly charged healthcare trips from high deprivation areas

High deprivation areas *- SA1s where deprivation index is 9 or 10.*

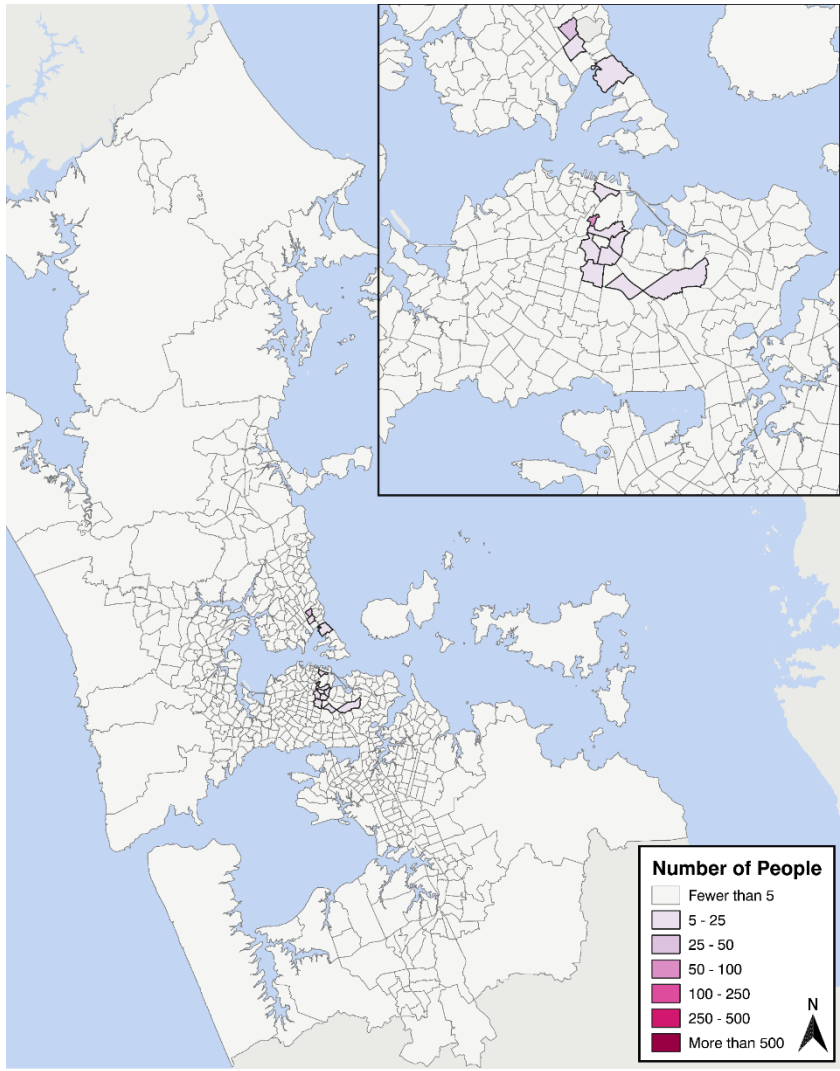
Possibly charged car person healthcare trips from high deprivation areas	1a	1c	3c
No. of charged car person trips	<50	200	200
% of region-wide car person trips	<0.1%	<0.1%	<0.1%



Destination of car person trips in Auckland made from areas of high deprivation making healthcare journeys that are possibly charged with Option 1A
AM Peak Car Person Trips



Destination of car person trips in Auckland made from areas of high deprivation making healthcare journeys that are possibly charged with Option 1C
AM Peak Car Person Trips

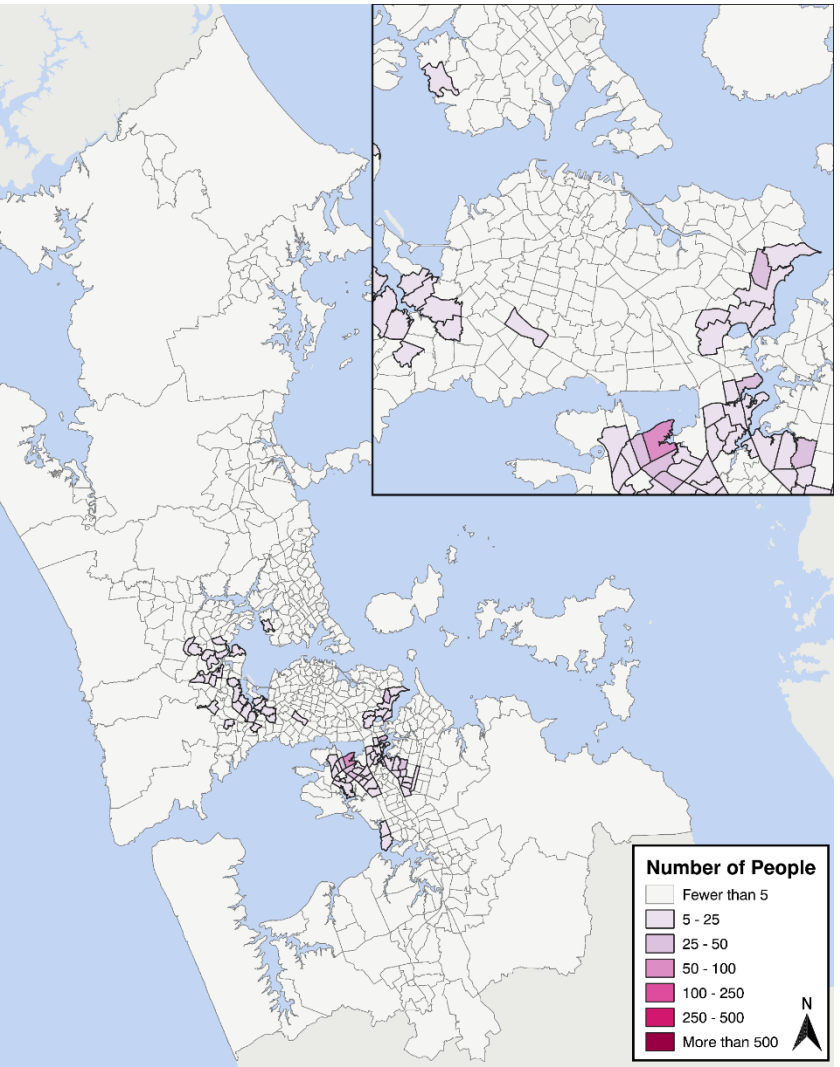


Destination of car person trips in Auckland made from areas of high deprivation making healthcare journeys that are possibly charged with Option 3C
AM Peak Car Person Trips

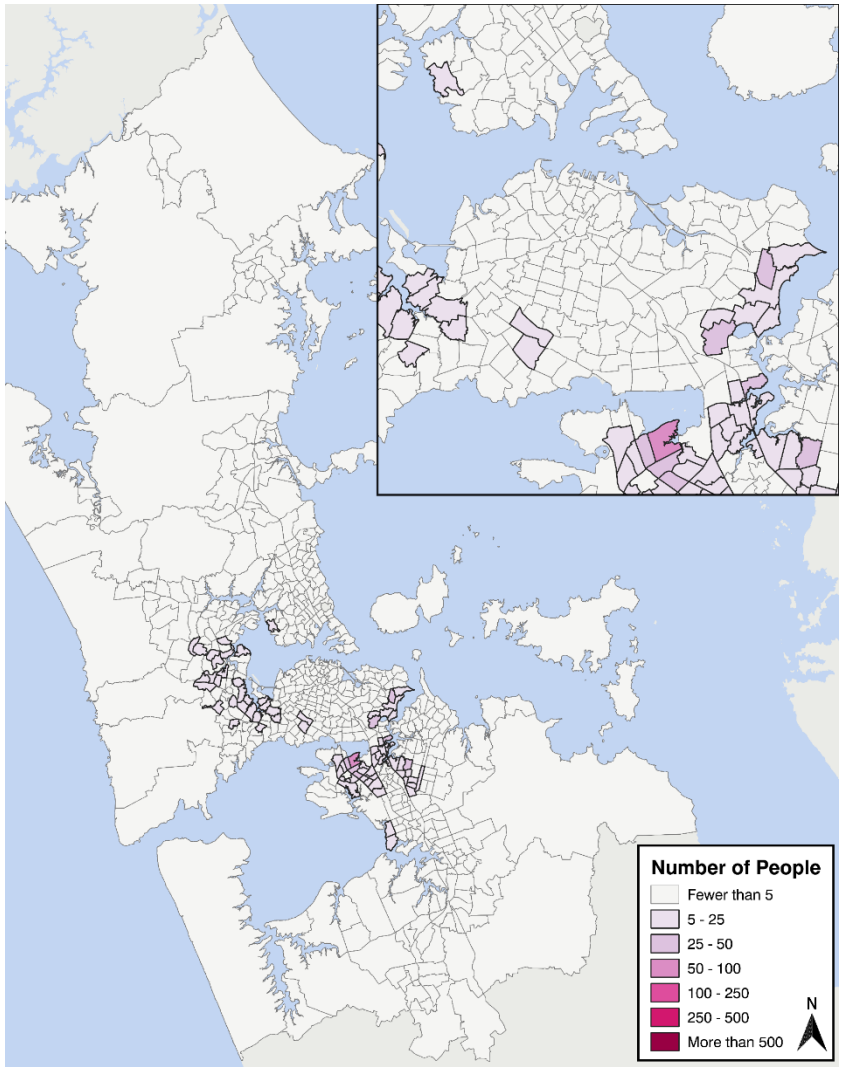
Distribution of possibly charged all education trips from high deprivation areas

High deprivation areas *- SA1s where deprivation index is 9 or 10.*
Education trips *– all HBE (primary, secondary, and tertiary) trips*

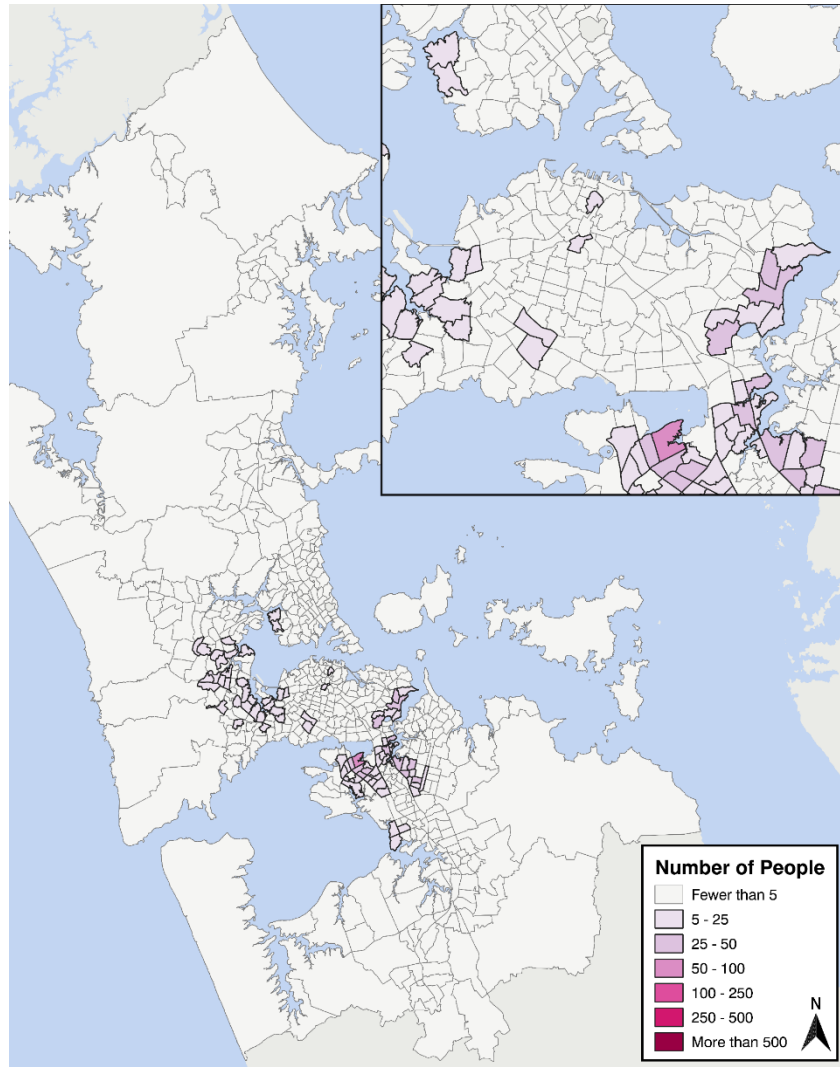
Possibly charged car person education trips from high deprivation areas	1a	1c	3c
No. of charged car person trips	1,200	1,300	1,600
% of region-wide car person trips	0.2%	0.2%	0.2%



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making education journeys with Option 1A
AM Peak Car Person Trips



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making education journeys with Option 1C
AM Peak Car Person Trips

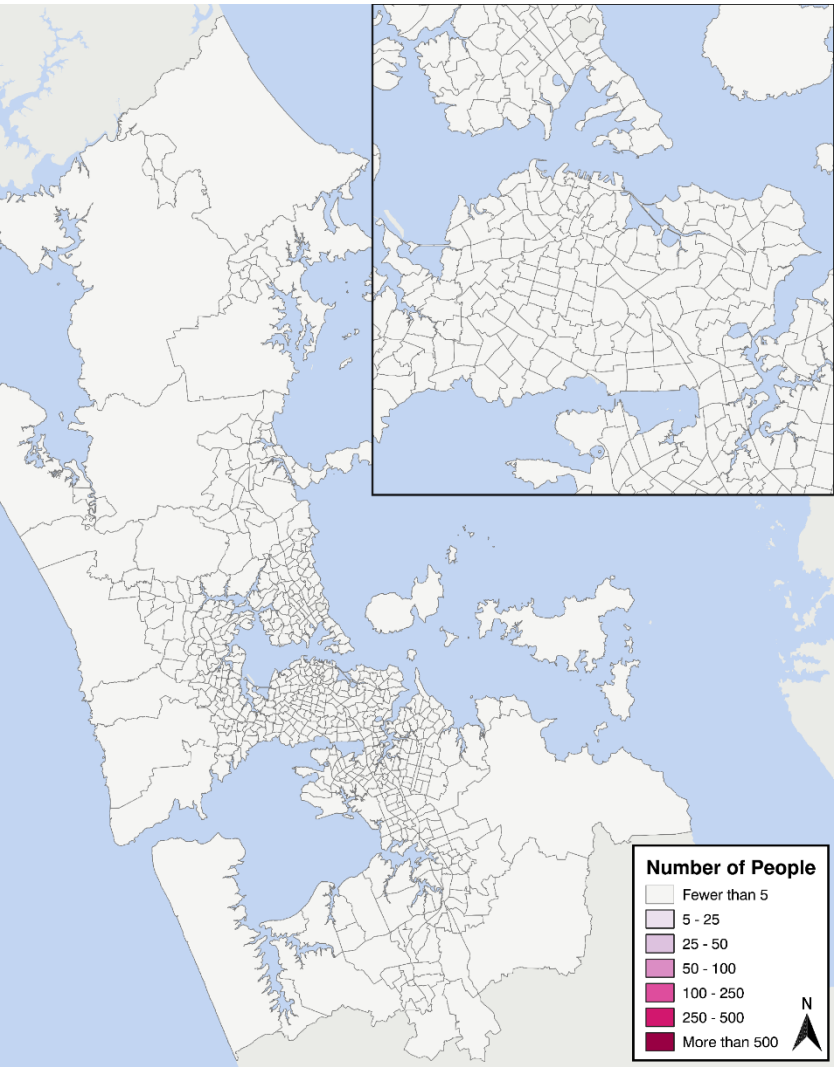


Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making education journeys with Option 3C
AM Peak Car Person Trips

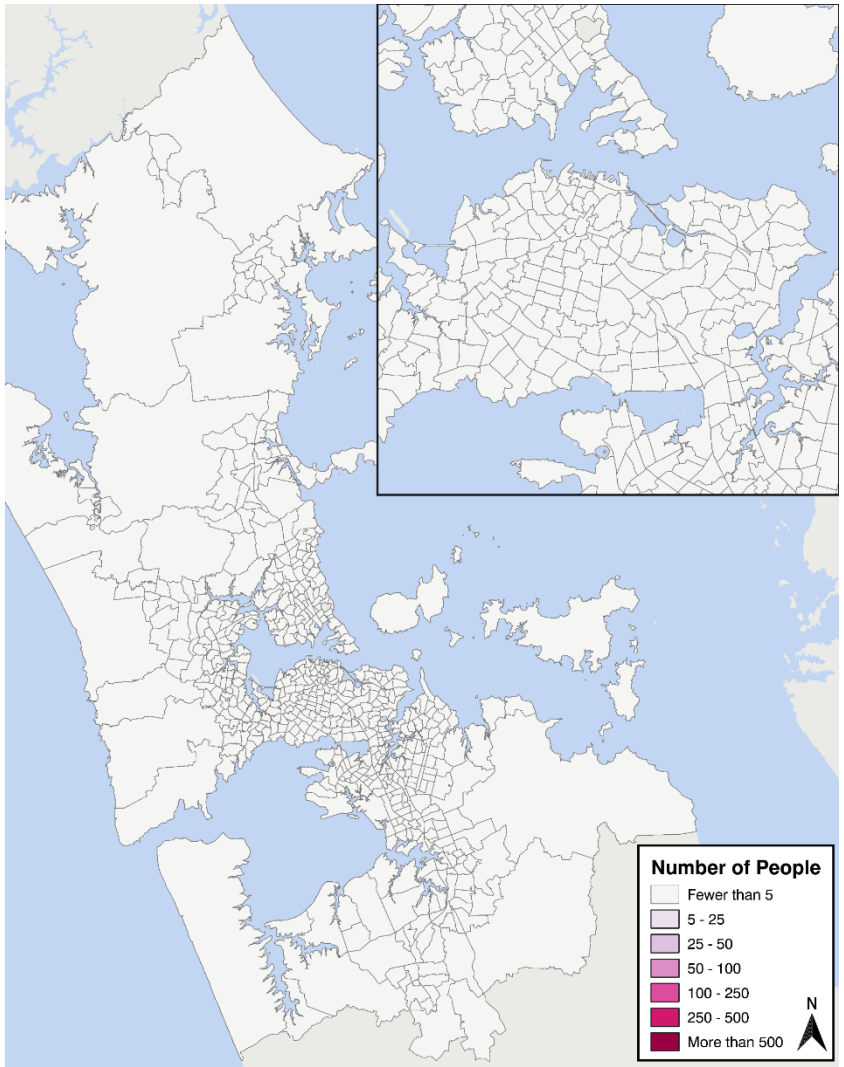
Distribution of possibly charged primary and secondary education trips from high deprivation areas

High deprivation areas *- SA1s where deprivation index is 9 or 10.*

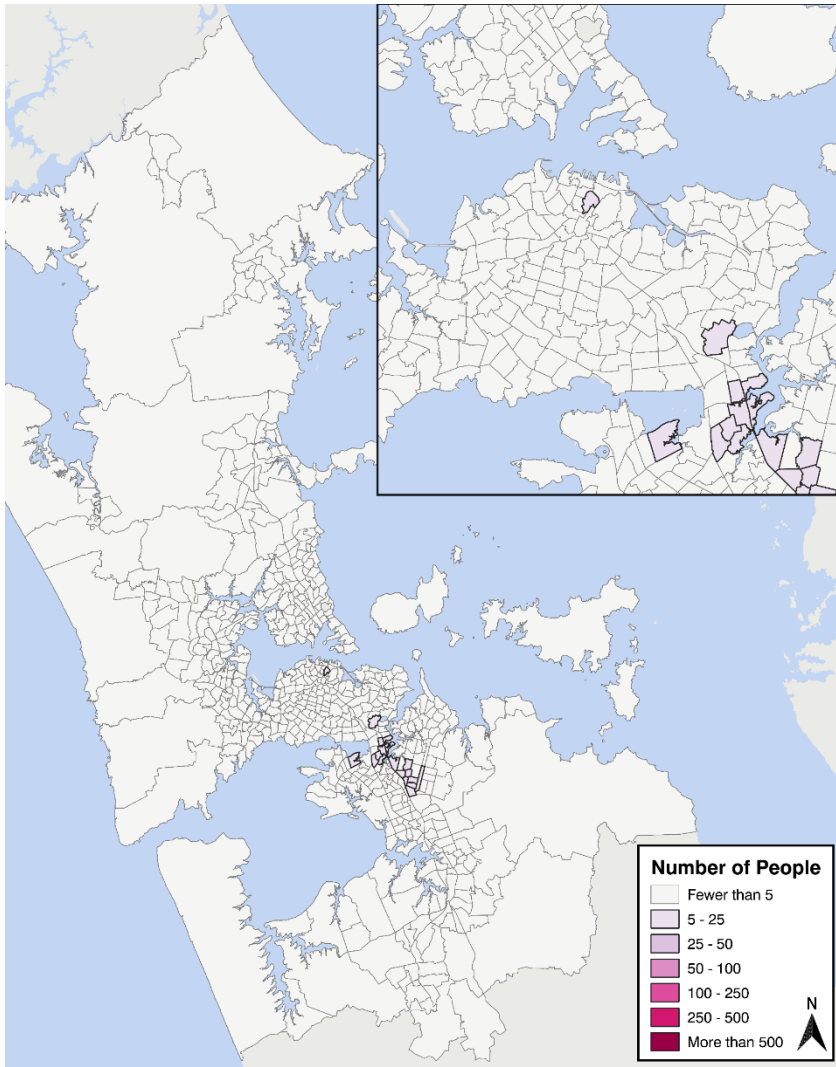
Possibly charged car person primary and secondary education trips from high deprivation areas	1a	1c	3c
No. of charged car person trips	<50	100	300
% of region-wide car person trips	<0.1%	<0.1%	<0.1%



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making journeys to primary and secondary education with Option 1A
AM Peak Car Person Trips



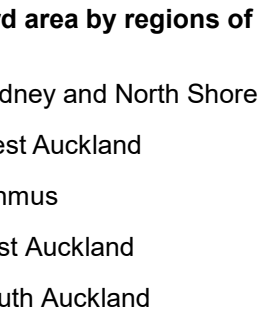
Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making journeys to primary and secondary education with Option 1C
AM Peak Car Person Trips

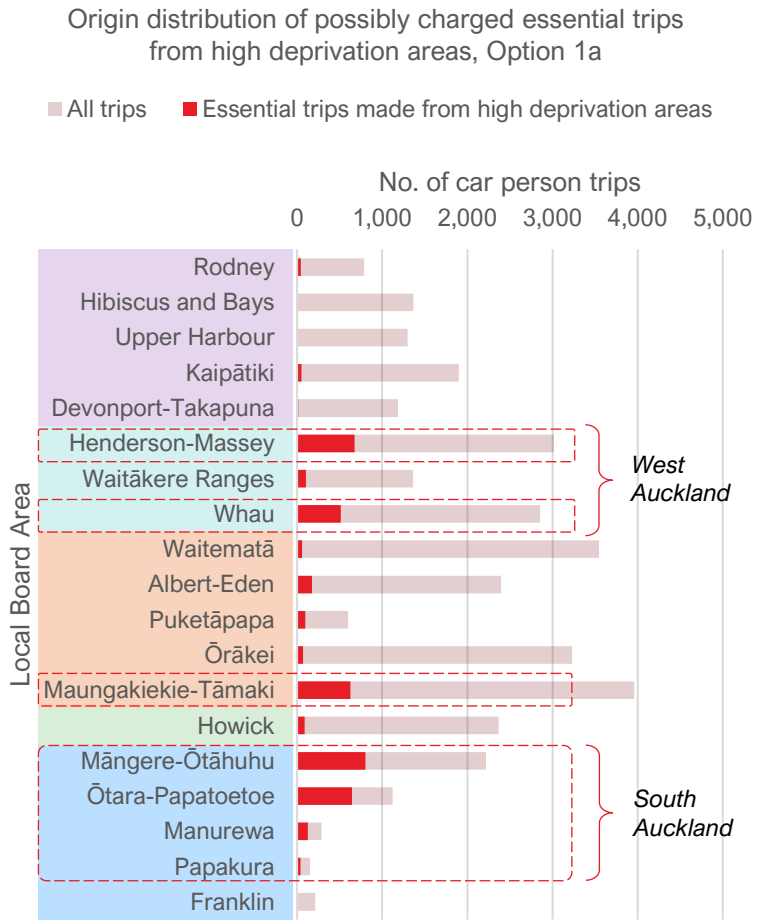


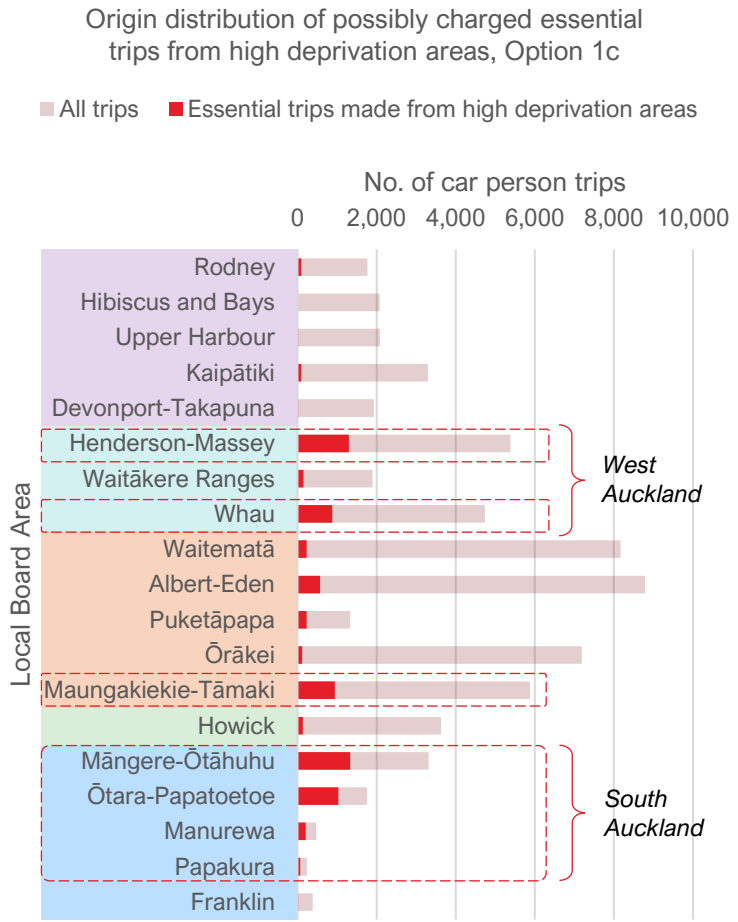
Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making journeys to primary and secondary education with Option 3C
AM Peak Car Person Trips

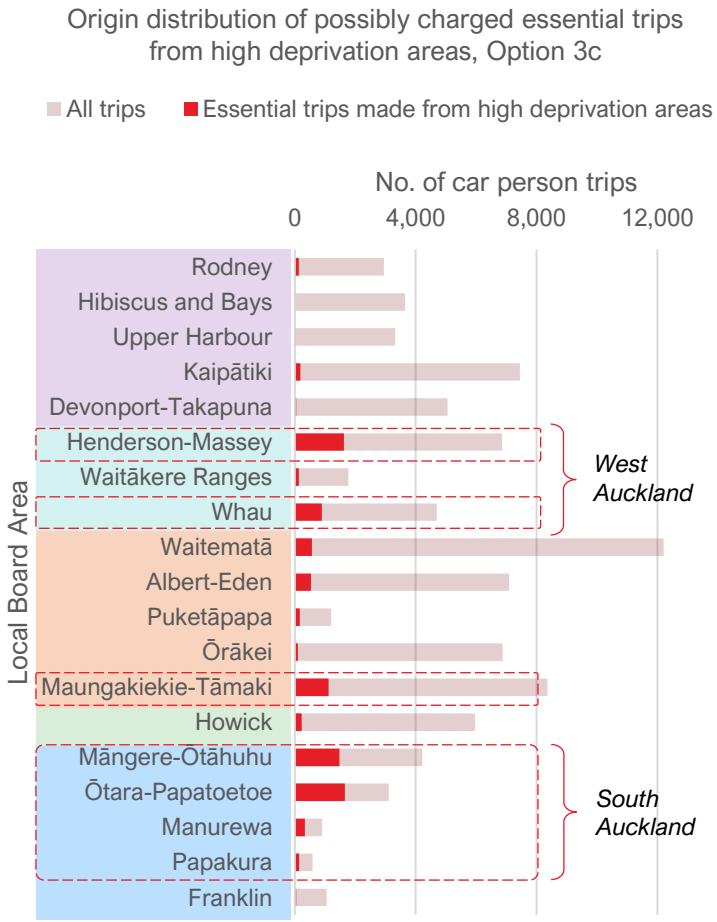
Distribution of possibly charged, less-flexible trips made from high deprivation areas

- As expected, the greatest number of potentially charged, less-flexible trips from high deprivation areas originate from West Auckland and South Auckland under all options.
- There are notably more impacted trips from Albert-Eden under Option 1c since expansion of charged cordon to city fringe impacts more local/shorter trips within the Inner Isthmus area
- There are notably more impacted trips from Waitemata under Option 3c since expansion of charged area to core motorways impact trips leaving from the city centre.





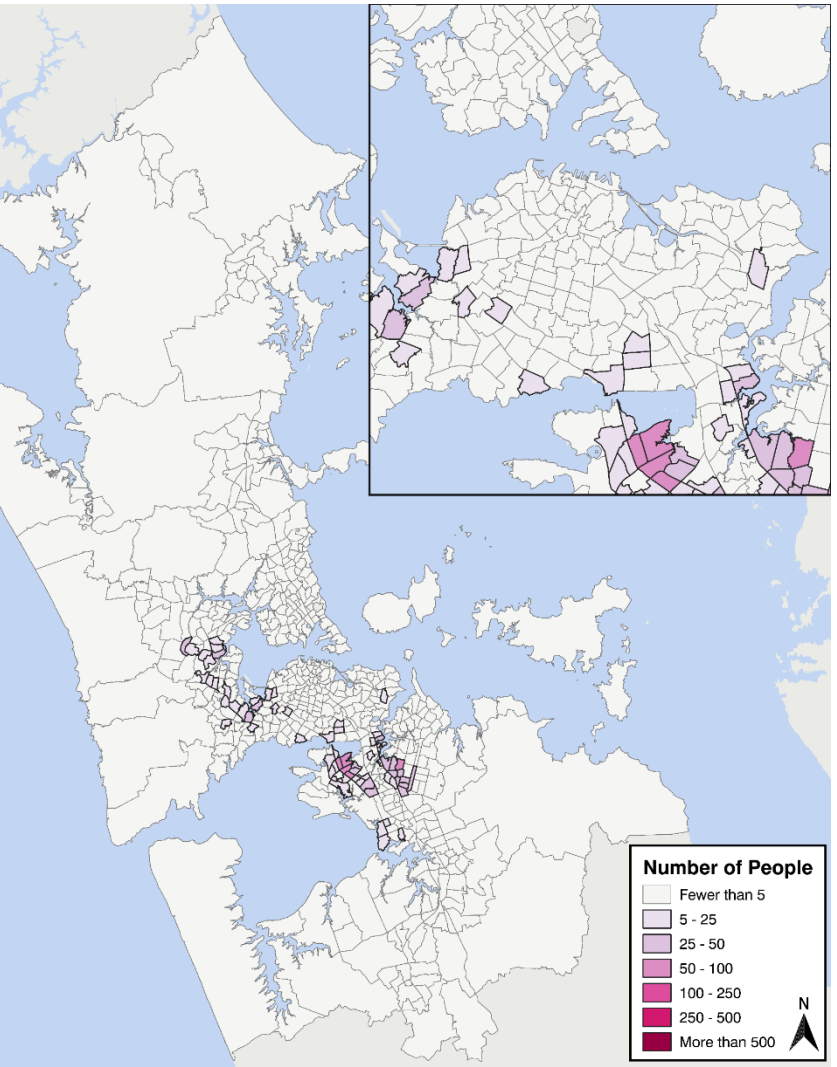




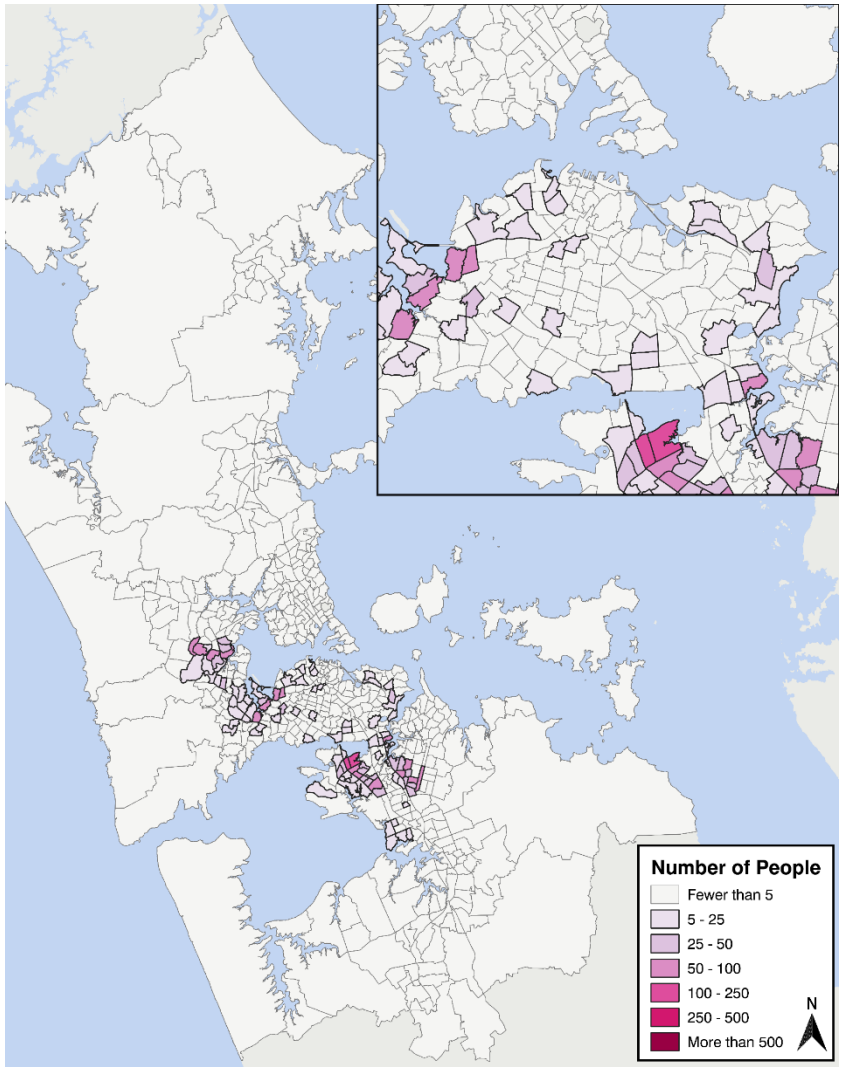
Distribution of possibly charged, less-flexible trips with low PT attractiveness from high deprivation areas

High deprivation areas *- SA1s where deprivation index is 9 or 10.*
Less-flexible trips *– HBW, all HBE, health care, and 30% of HBO/NHBO trips*

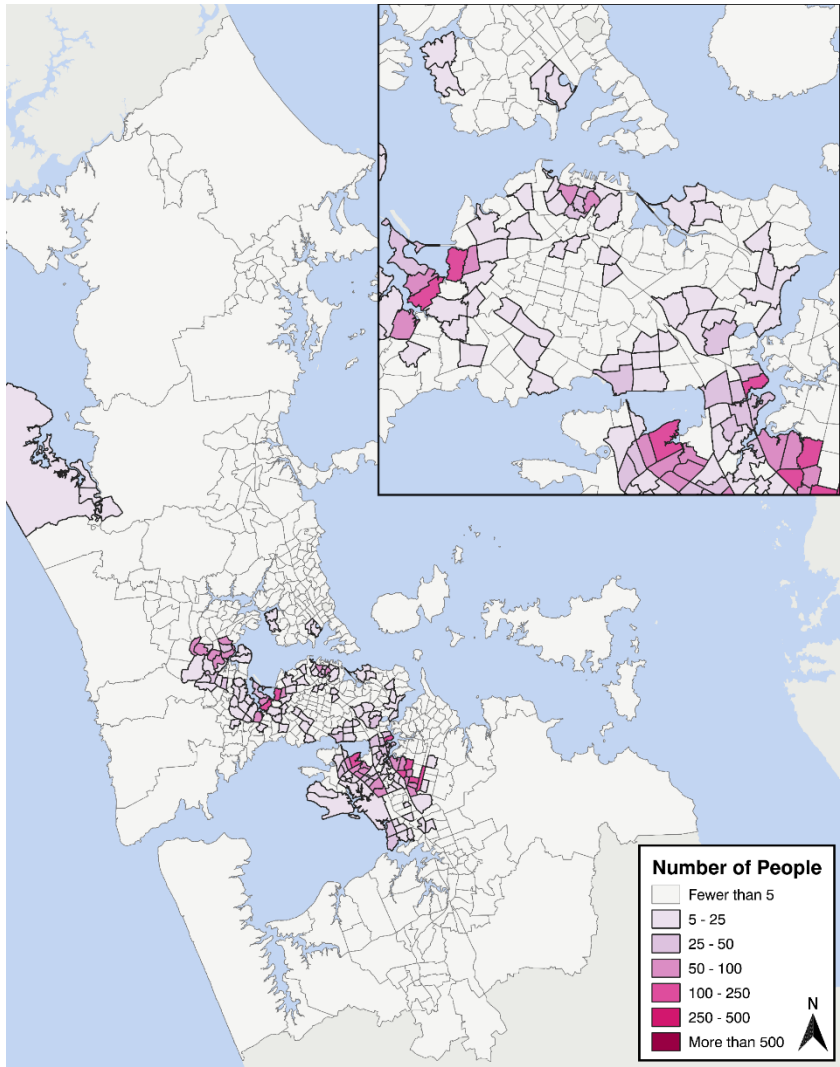
Possibly charged car person less-flexible trips from high deprivation areas	1a	1c	3c
No. of charged car person trips	1,600	3,100	5,200
% of region-wide car person trips	0.2%	0.4%	0.7%



Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with low PT attractiveness with Option 1A
AM Peak Car Person Trips



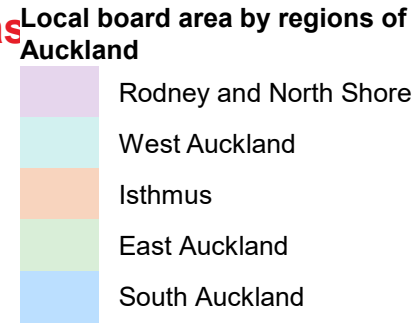
Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with low PT attractiveness with Option 1C
AM Peak Car Person Trips



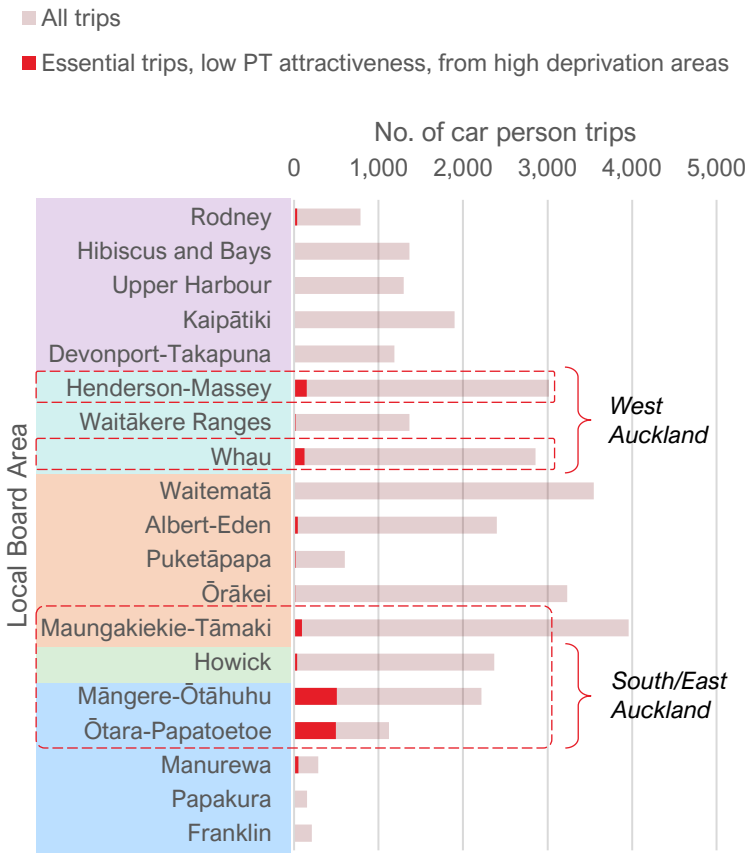
Car person trips in Auckland made from areas of high deprivation that are possibly charged that are making essential journeys with low PT attractiveness with Option 3C
AM Peak Car Person Trips

Distribution of possibly charged trips with low PT attractiveness made from high deprivation areas

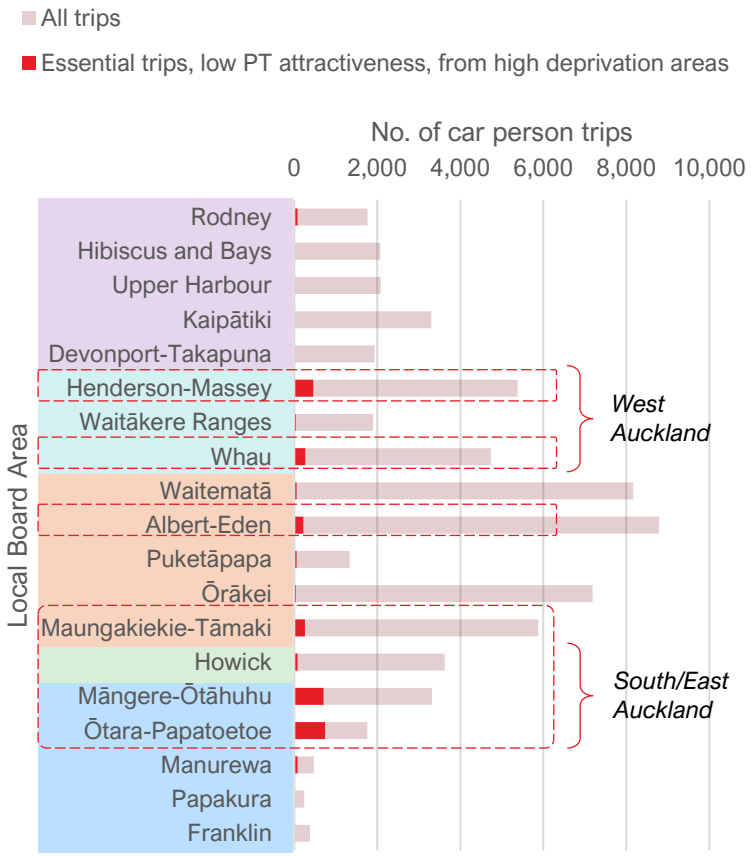
- As expected, the highest number of potentially charged, less-flexible trips with less attractive PT options from high deprivation areas are likely to be from West Auckland and South Auckland under all options.
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- There are notably more impacted trips from Waitemata under Option 3c since expansion of charged area to core motorways impact trips leaving from the city centre.



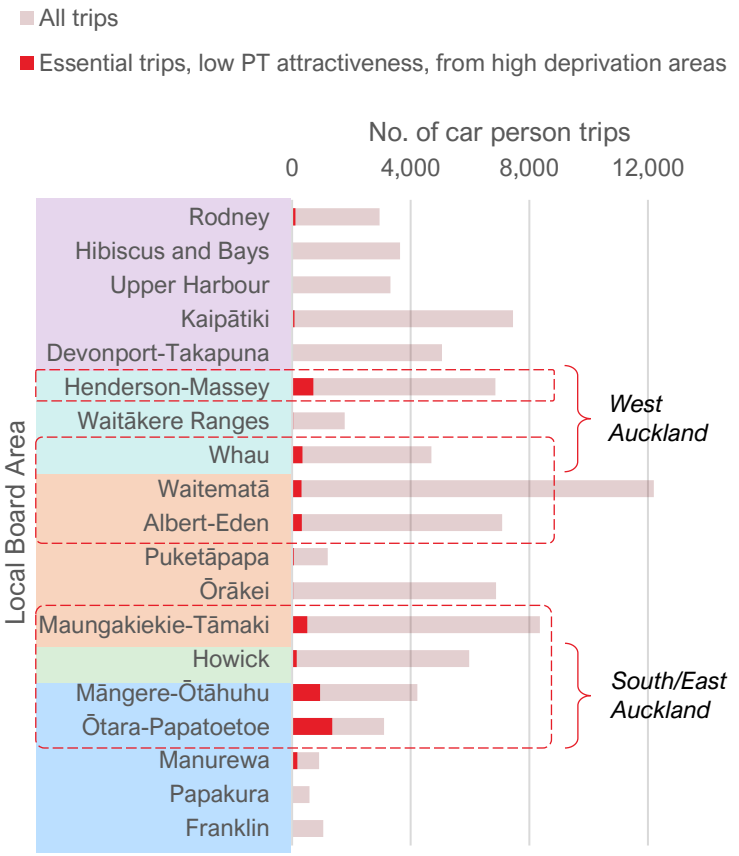
Origin distribution of possibly charged essential trips with low PT attractiveness from high deprivation areas, Option 1a



Origin distribution of possibly charged essential trips with low PT attractiveness from high deprivation areas, Option 1c



Origin distribution of possibly charged essential trips with low PT attractiveness from high deprivation areas, Option 3c



ARUP