



Working with what we have

## **Resilience for the Future**

Whakamahinga ki ngā mea kei a tātou:  
He manawaroa mō ngā rā anamata  
Transportation Conference 2026

# How can shared transport enhance community wellbeing and deliver sustainable and resilient outcomes

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# Context

- Transport has significant and known associations with health and wellbeing, and environmental emissions (inc. GHGs)
- Changing the way we travel can help
  - Reducing private motor vehicle use
- But for some changing can be difficult
  - access to public and active transport infrastructure may be limited
  - and/or journeys too long to walk or cycle
- Shared mobility is a potential solution
  - With potential to enhance community and wellbeing

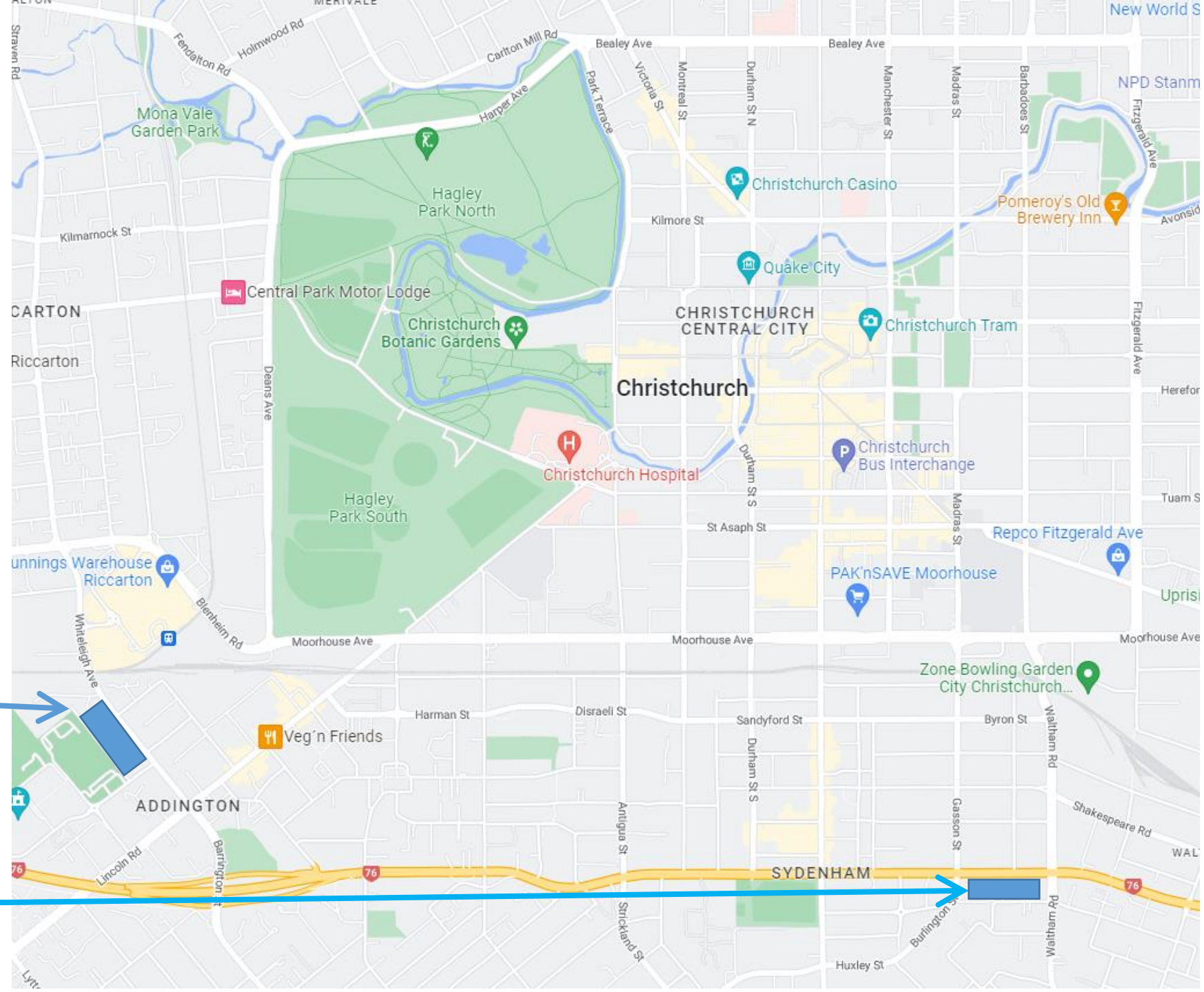
# Background

- Christchurch part of the **A**ctivating **C**hange through **I**nter**V**entions for **A**ctive **T**ravel in our **N**eighbourhoods (**ACTIVATION**) research project
- Investigating the impact of transport and community infrastructure on peoples' health and wellbeing
- Funded by the NZ Government's *Ageing Well | Kia eke kairangi ki te taikaumātuatanga* and *Healthier Lives | He Oranga Hauora* National Science Challenges

# Aim

- To investigate whether shared mobility can enhance community wellbeing and transport equity
- By analysing two schemes in two very different communities

# Study Areas



- Social housing on Brougham Street, Sydenham
- 90 homes including:
  - 70 x 1-bedroom homes
  - 3 x 3-bedroom homes
  - 14 x 2-bedroom homes
  - 3 x 4-bedroom homes
- Includes shared mobility
  - e-bikes and EVs
- Shared communal green spaces
- Opened early 2021
- 60 extra adjacent properties





ARVIDA  
Park Lane

- Life Care village in Addington
- 79 Independent living Villas & apartments
- Plus Assisted living and Full time care
- Shared spaces
  - Gardens
  - Workshop
  - lounge
- Includes shared mobility
  - EVs
- Opened 2020



# OCHT Brougham St

## Shared bikes

- Free (courtesy of Lime)
  - Up to 6 bikes
  - OCHT provide storage and power
  - No additional financial costs



## Shared EVs

- Low cost (\$5-8 per hr)
  - Charged by the minute
- Up to 2 cars (Zilch)



# ARVIDA Park Lane Life Care Village

## EVs

- Free to residents
  - Paid private car parking
- Bookable
- Various makes & models
- Up to 20
- Some backup if none available



# Research cohorts

Social housing tenants



Older adults



# Data

## Surveys

- Three annual surveys (2021, 2022, 2023)
- Case sites and control groups
  - Other OCHT social housing tenants
  - Other older city residents
- Around 1200 responses in total

## Interviews

- Social housing residents
- Older adults
- Stakeholders in urban development & shared mobility schemes

# Results

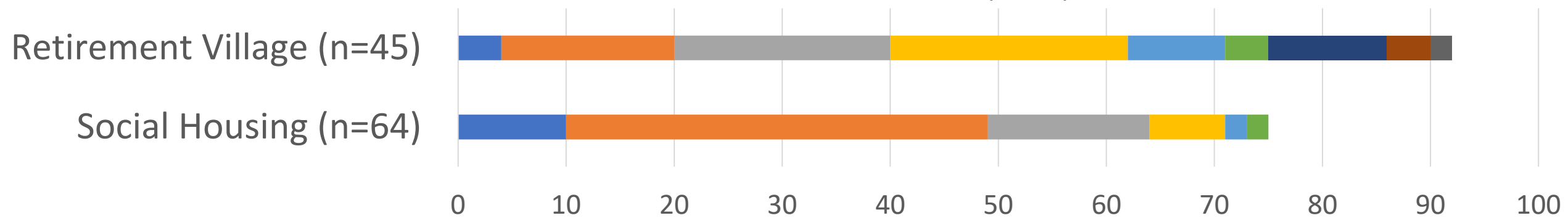


# Income

## Lower income

- Park Lane Retirement Village - 20% earn less than \$20,000 p.a
- Brougham St Social housing tenants - 49% earn less than \$20,000 p.a
- Christchurch City - 6% earn less than \$20,000 p.a

Levels of Household Income (2023)



■ < \$10K

■ >\$10K to \$20K

■ >\$20K to \$30K

■ >\$30K to \$40K

■ >\$40K to \$50K

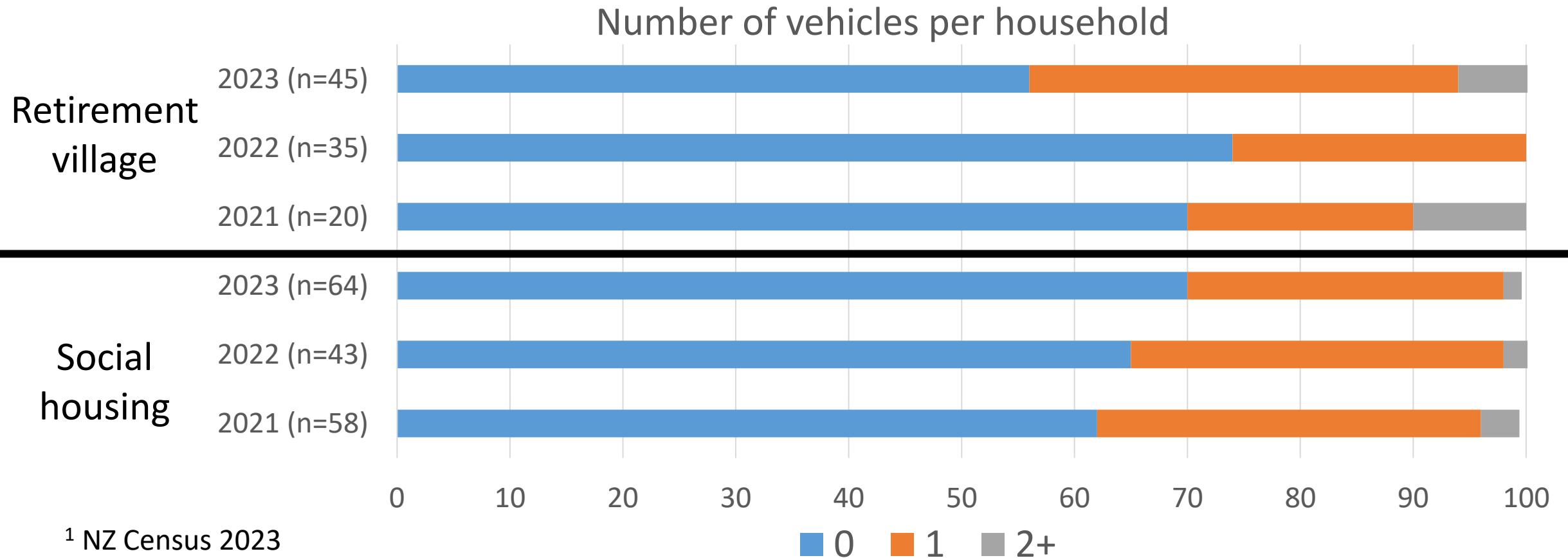
■ >\$50K to \$60K

■ >\$60K to \$70K

■ >\$70K to \$100K

# Vehicle ownership

- Low car ownership
  - Just 6% households in NZ have no car<sup>1</sup>

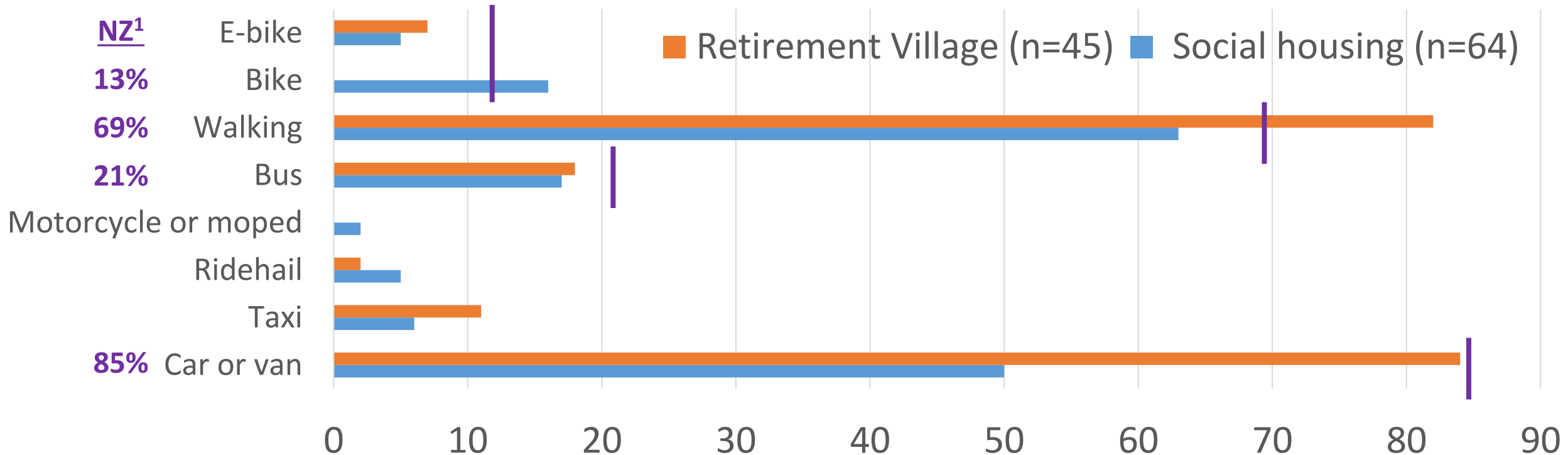


# Demographics

- The Brougham St (social housing tenants) residents have:
  - lower levels of education
  - low employment rates
  - lower income
  - lower rates of having a driving licence
- The Park Lane (retirement village) residents are:
  - older and largely retired
  - have higher rates of having a driving licence.

# Transport in previous week (2023)

- Social housing tenants less mobile, especially by car

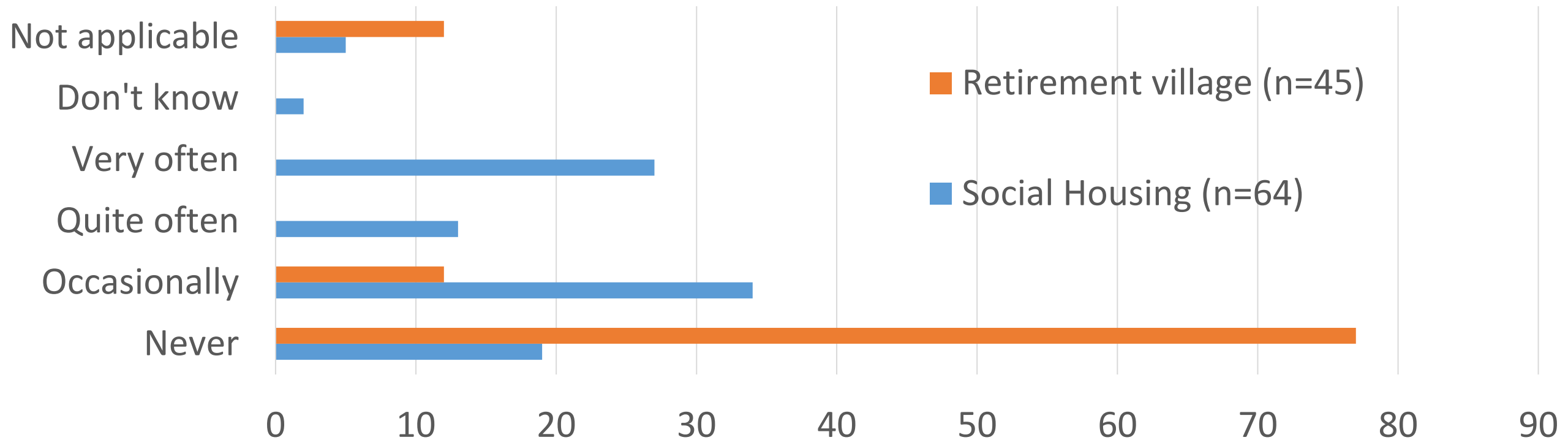


<sup>1</sup> EECA Transport Monitor. March-June 2024. <https://www.eeca.govt.nz/assets/EECA-Transport-Monitor-Mar-Jun-2024.pdf>

# Transport costs and difficulties

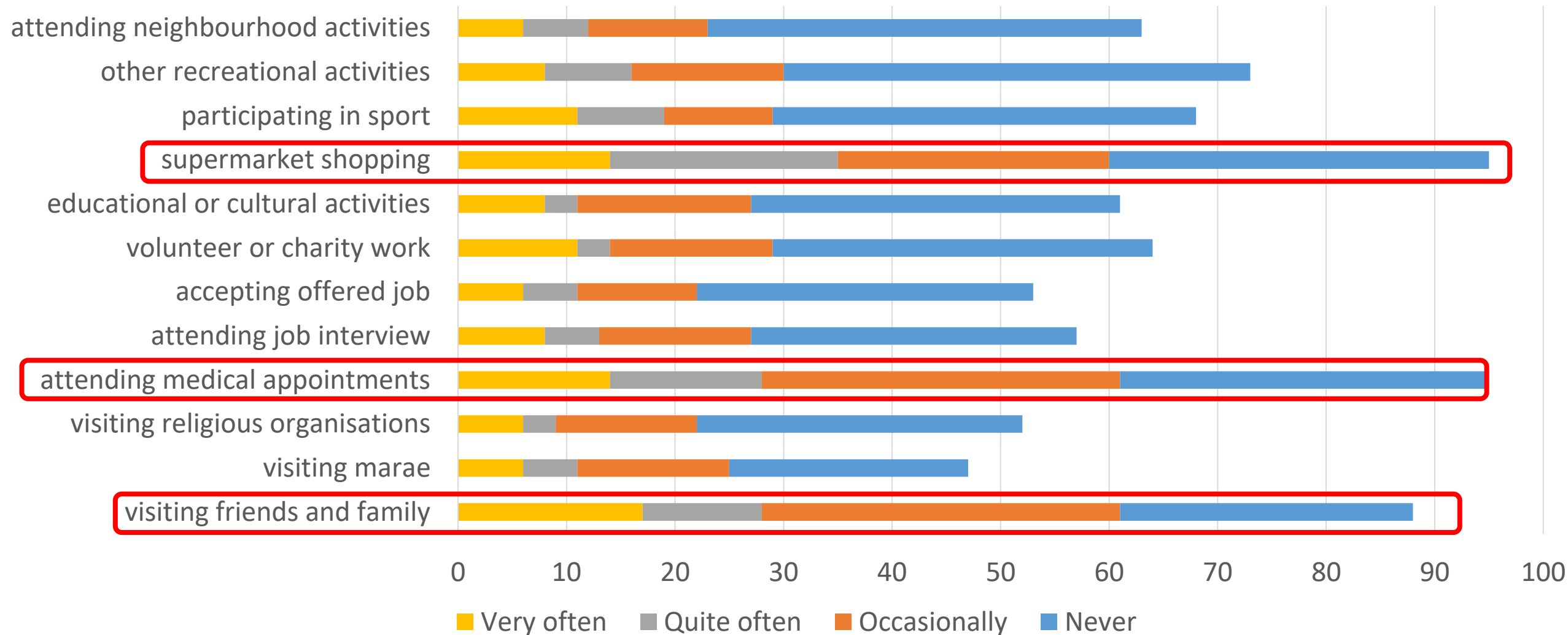
- Transport costs an issue for social housing tenants

How often it is difficult to meet the costs of transport (2023)



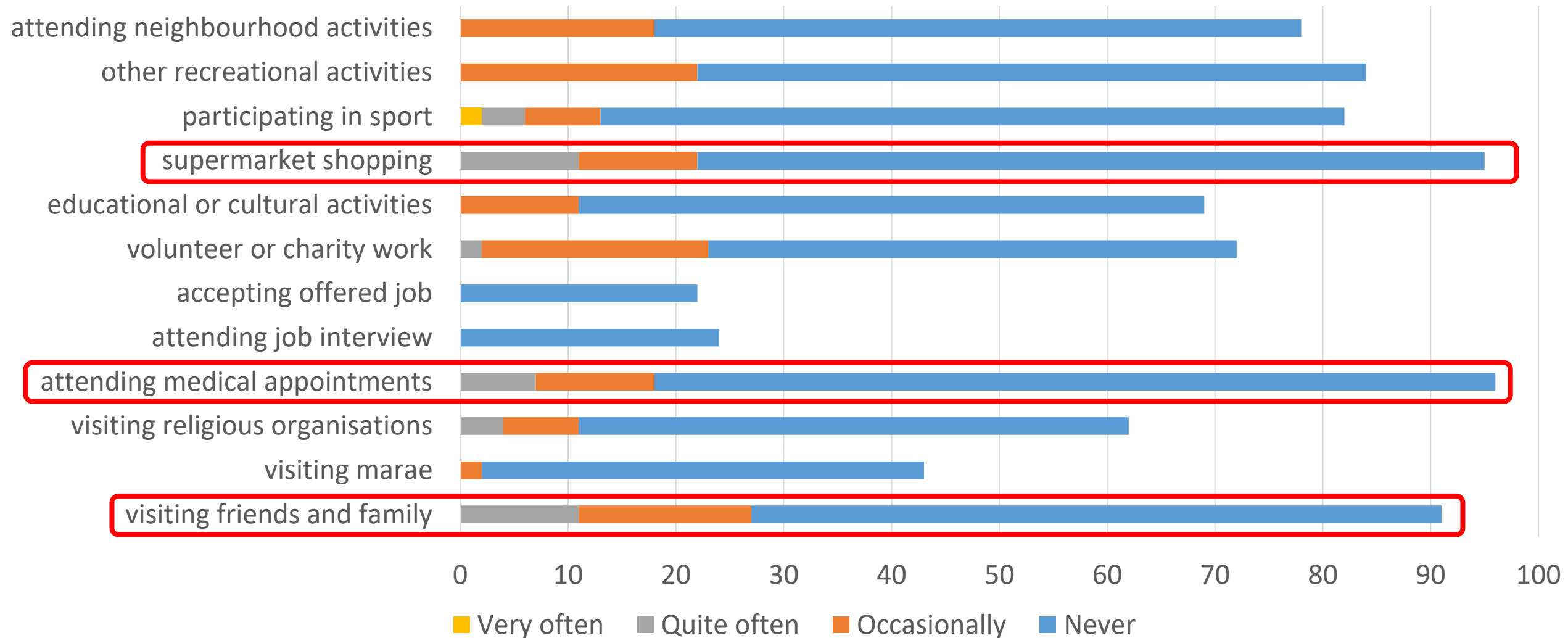
# Transport costs and difficulties

## Social housing (n-64)



# Transport costs and difficulties

Retirement Village (n=45)



# Access

*Having the e-bike is good because it'll **get you a lot of places** that I would normally have had to take a bus to in the past and you know, actually paying for **a bus fare in the past was actually quite expensive**. So, I mean it's **opened up a lot of opportunities**.*

*(Social Housing 3)*

# A brief public transport announcement

*“those experiencing transport poverty experience **improved accessibility and affordability** as a result of **half price public transport fares**”*

- Curl A, Coppens A, Dares C, Williman J, Fitt H and Kingham S, 2024, 'Accessibility and Affordability Impacts of Half Price Public Transport Fares in Aotearoa New Zealand'. Findings, February 2024, <https://doi.org/10.32866/001c.92735>

# Mental health

*...so it's me getting out on that bike because otherwise **I just sit at home and get upset.** That's why my son got me into a group ride ... he's been living with me and **if he's in a shitty mood, get him on a bike and he's okay you know.** So yeah. And with me, I love it.*

*(Social Housing 84)*

# Mental health

*Look I've met everybody because I've done the cars and so I've got...I know their history, I know the hurt they've got, like I've got, like you put on a front. They're missing their husbands, they're missing their wives. So when you go up at night if you're on your own and you're at this age and you hop into bed on your own or you're sitting up there by yourself ...Yeah you can go and see people but **people are lonely**.*

*(Retirement Village 31)*

# Community

*The **positivity and the happiness** that's come in through people having something else to talk about and something positive to talk about, and it's changed the whole village, the whole feel of the village.*

*(Retirement Village 31)*

# Community

*Participant: I'm really **keen on the bikes**.*

*Interviewer: What do you like about the bikes?*

*Participant: **Fresh air**, that you can go anywhere a car can't, you know, down the little lanes and things and there's a lot of bike ways around here which I've just been recently made aware of, you can't drive a car to, and I can't wait. **Me and my neighbours are going to hook it up** and get onto it now that the weather is getting better. I haven't yet but yeah, we're going to.*

*Interviewer: So you're going to do like group rides and stuff, all together and go explore?*

*Participant: Taking all my crackhead neighbours for a ride, get them out in **the fresh air** and show them what life is about. ... That sounds terrible I know but it **might give them some kind of inspiration to get healthy again** you know.*

*(Social Housing 76)*

# Life

- *[e-bike] has made a big difference to my life.*
- *(Social Housing 31)*

# Tensions

*I should be able to use it and it just annoys us, this one lady was saying it's their shed and it's not their shed and you know, anyone can use it and yeah, she's just making it it's their shed and it's not their shed. ... With all this **conflict** that's going on, I just don't...like I don't mind riding the bikes but I don't feel...like my neighbours, we **don't feel comfortable** going in and out of [that shed] because of what's going on.*

*(Social Housing 45)*

- Plus some observed tensions at Retirement Village

# Bike use and postscript

- In the 12 months
  - 17 unique users
  - over 2900 trips
  - totalling over 10,000 kms
  - Value of these trips, if fully paid, equates to over \$32,000
    - But provided free by Lime
- But scheme now ended
  - Power points damaged and OCHT decided not to repair
  - Lime keen to continue support

# Summary

- Social housing & retirement village residents have transport challenges
- Shared mobility (cars and e-bikes) can/do:
  - Improve accessibility
  - Benefit mental health
  - Increase community interaction, cohesion, and hopefulness
    - ‘Sharing’ can be good
- But, there can be tensions between some users
- Shared mobility needs support and ‘training’

# ACTIVATION *Christchurch the Movie*

- <https://youtu.be/yUAisY3tBZM?si=Fs-Z68XtZI5XBNQD>



# *ACTIVATION resources*

- ACTIVATION Christchurch
  - <https://youtu.be/yUAisY3tBZM?si=Fs-Z68XtZI5XBNQD>
- ACTIVATION Auckland: Māngere E-bike Trial
  - <https://youtu.be/csw5PIK76fl?si=0xZuBRiA0waxlB2Q>
- And resources
  - [https://figshare.canterbury.ac.nz/projects/ACTIVATION\\_Christchurch/224349](https://figshare.canterbury.ac.nz/projects/ACTIVATION_Christchurch/224349)

# Thanks

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