MISSION ZERO

Low-carbon Commute Initiative Consolidated results

Prepared by Mission Zero, November 2024

Funded by:









introduction

MISSION ZERO's Low-carbon Commute Initiative is a Nelson City Council funded project.

It aims to help selected businesses in Te Tauihu drive an employee shift towards the use of low-emissions commute-to-work transport.



why run this project?

Based on NCC reporting it is our understanding that transport contributes around 60% of Nelson's GHG emissions (over 200,000 TCO2e) per year.

We estimate that **commuting to work accounts for between 10-25% of this output** (20,000 to 50,000 TCO2e per year).

We are working to support Nelson City Council's goal to reduce these emissions.





who's involved

- Port Nelson
- Health New Zealand Nelson Marlborough (includes Nelson Hospital)
- Sealord
- Cawthron Institute
- Nelmac Kūmānu
- Nelson Airport
- Bowater Motors Group
- Tonkin + Taylor
- Pic's Peanut Butter

Totaling 3,289 employees.



what's involved

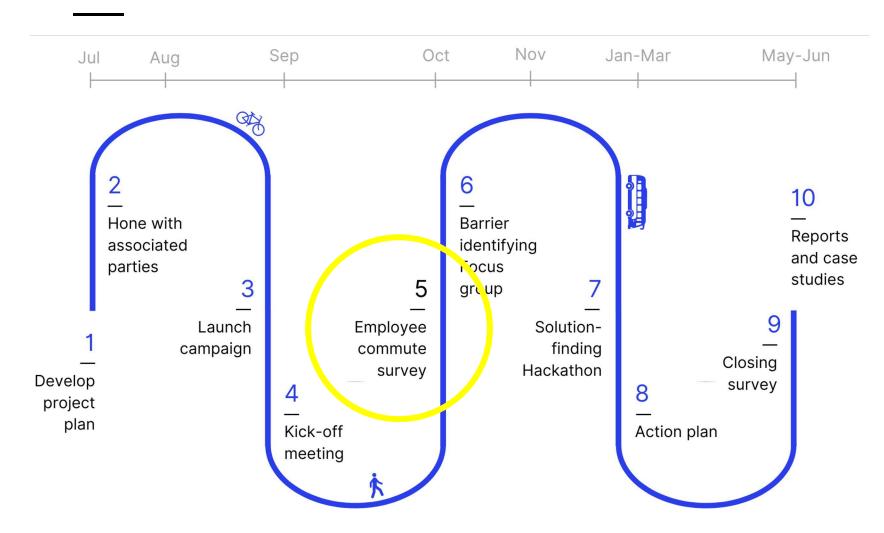
The project runs from July 2024 – June 2025 and brings nine businesses together to understand barriers to low-carbon commuting, find solutions and implement these.

We have just completed the surveying aspect of this project and are now running focus groups and sharing survey reports with participating businesses.



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project plan





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survey overview

The employee commute survey ran for two weeks in October this year, reaching 3,289 employees with 669 responses.



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reimagine your journey

Start by letting us know more about your commute to work

Take our survey

Project funder:



Te Kaunihera o Whakatū

Engagement partner:

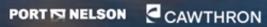


Project participants:















questions

The survey asked for:

- Mode of transport used to commute (Mon-Sun)
- Distance of the commute
- Type of vehicle used by drivers
- What respondents liked about their commute
- Barriers to a low-carbon commute
- Solutions to help them switch to a low-carbon commute



executive summary

The median commuting distance for employees is **7.5 km**.

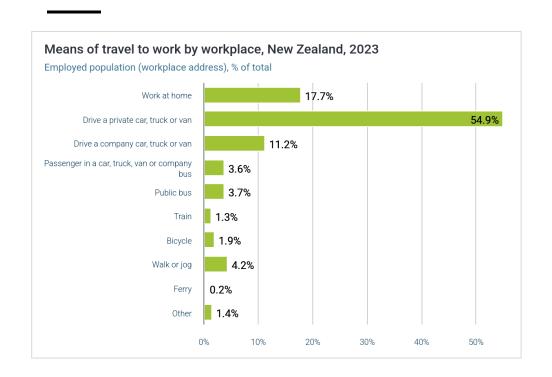
The estimated annual carbon footprint from commuting across 10 organisations is **3,040 TCO₂e**.

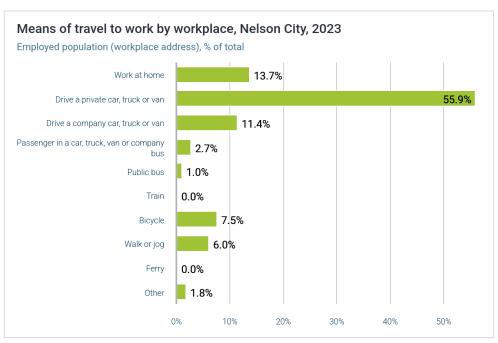
The carbon emissions per full-time equivalent (FTE) employee stands at **0.92 TCO₂e/FTE**.

35% of our trips to work are already low carbon and employees are saving **774 TCO₂e** carbon emissions a year by working from home, biking, or walking.



Stats NZ 2023 Census data: how we travel to work



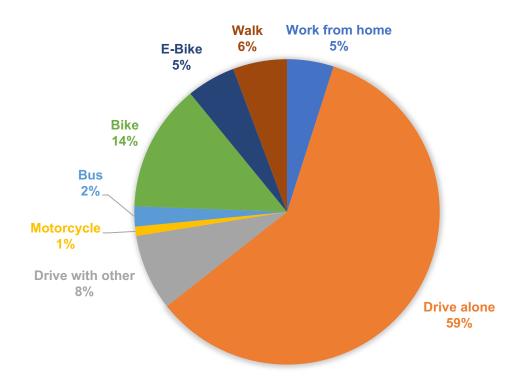


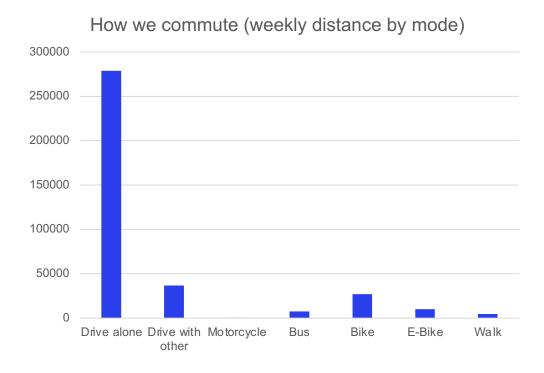


^{*} Graphs listed on infometrics.co.nz

MZ survey: how we get to work

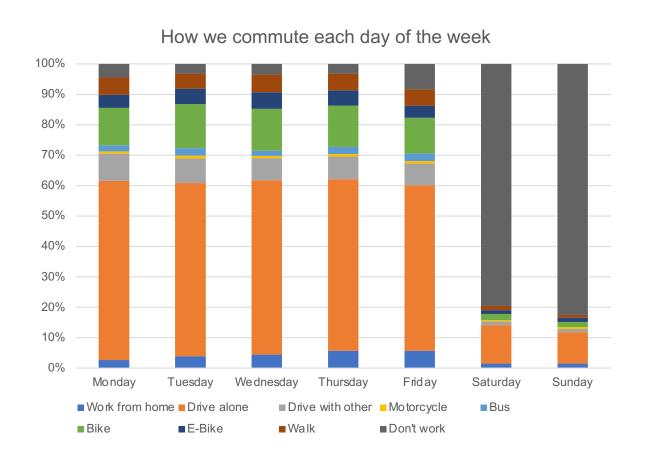
HOW WE COMMUTE (TRIPS TO WORK BY MODE)



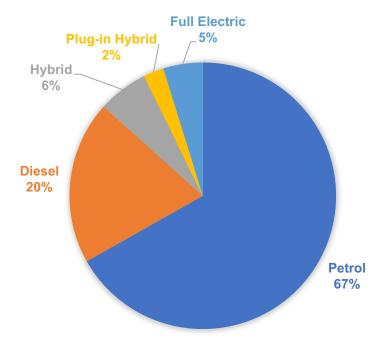




how we get to work



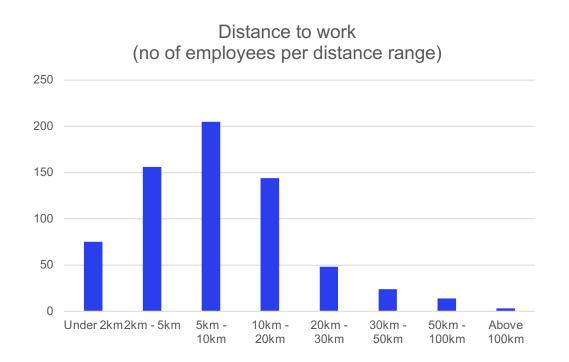
DRIVING TRIPS PER ENGINE TYPE



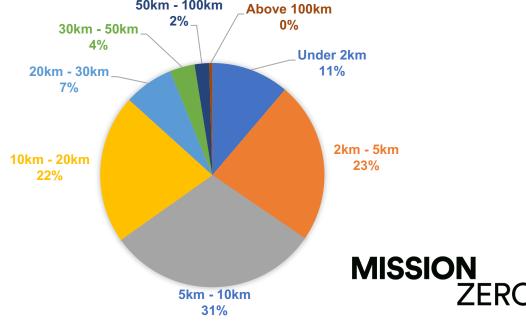


how far we travel

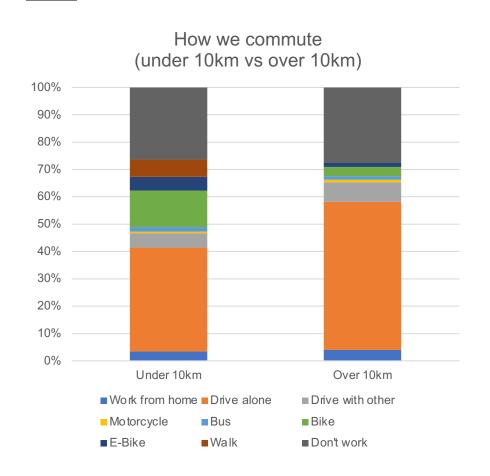
- Weekly distance travelled per employee: 108km
- Typical distance (median): **7.5km**

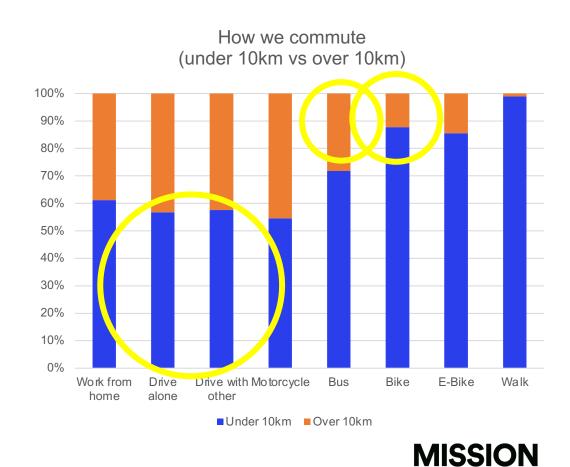






where is the opportunity?





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does it cost the Earth?

- Total annual commute carbon footprint and cost: 3,040 TCO₂e (\$3,456,542)
- Annual commute carbon footprint and cost per person: 0.92 TCO₂e (\$1,051)
- Already saving by working from home, biking or walking: 774 TCO₂e (\$514,013)
- 35% of trips using low-carbon mode or working from home



commute mode – what we like about it

- Driving: Convenience and Flexibility, Solitude and Relaxation, Scenic, Efficiency
- Biking and E-Biking: Physical and Mental Health, Connection to Nature, Environmental Benefits, Cost Savings
- Walking: Exercise and Well-being, Convenience, Nature Enjoyment
- Public Transport (Bus): Relaxation and Multitasking, Stress-Free Travel, Opportunity for Exercise
- Carpooling (Driving with Others): Social Connection, Convenience



barriers – what stops us from walking, cycling or busing?

- Cycle Path Safety: Several individuals expressed frustration about the lack of safe cycling infrastructure, indicating that even dedicated cyclists feel deterred by the risk of accidents on poorly designed routes.
- Desire for Better Cycling Infrastructure: Some respondents
 highlighted the need for improved cycle lanes to enhance safety,
 indicating that current conditions deter them from biking.
- Inflexible Work Hours: Many employees work shifts or have irregular schedules, making it challenging to use public transport or carpool.



barriers – what stops us from walking, cycling or busing?

- Distance from Work: Long distances and inconvenient bus routes make biking or walking unfeasible for many.
- Family and Childcare Responsibilities: Dropping off or picking up children and handling other family commitments often necessitate driving.
- Limited Public Transport Options: Infrequent and misaligned bus schedules reduce the viability of public transport as an option.
- Weather: Adverse weather.



solutions

- Financial Incentives
 "Subsidize e-bikes to make them more accessible for employees."
- Flexible Work Arrangements
 "Flexible work hours would help me avoid traffic and allow for personal tasks."
- Enhanced Bike and EV charging Facilities
 "Provide free bus passes and charge for car parking."
 "If I could charge an electric car at work I would consider buying an electric car when I replace my current hybrid."
- Support for Public Transport
- Promote Carpooling



thank you