



Active transport in an era of dramatic climate change

Sara Stace
Regional Executive, Infrastructure Advisory WSP
World Cycling Alliance, Oceania representative
Better Streets president

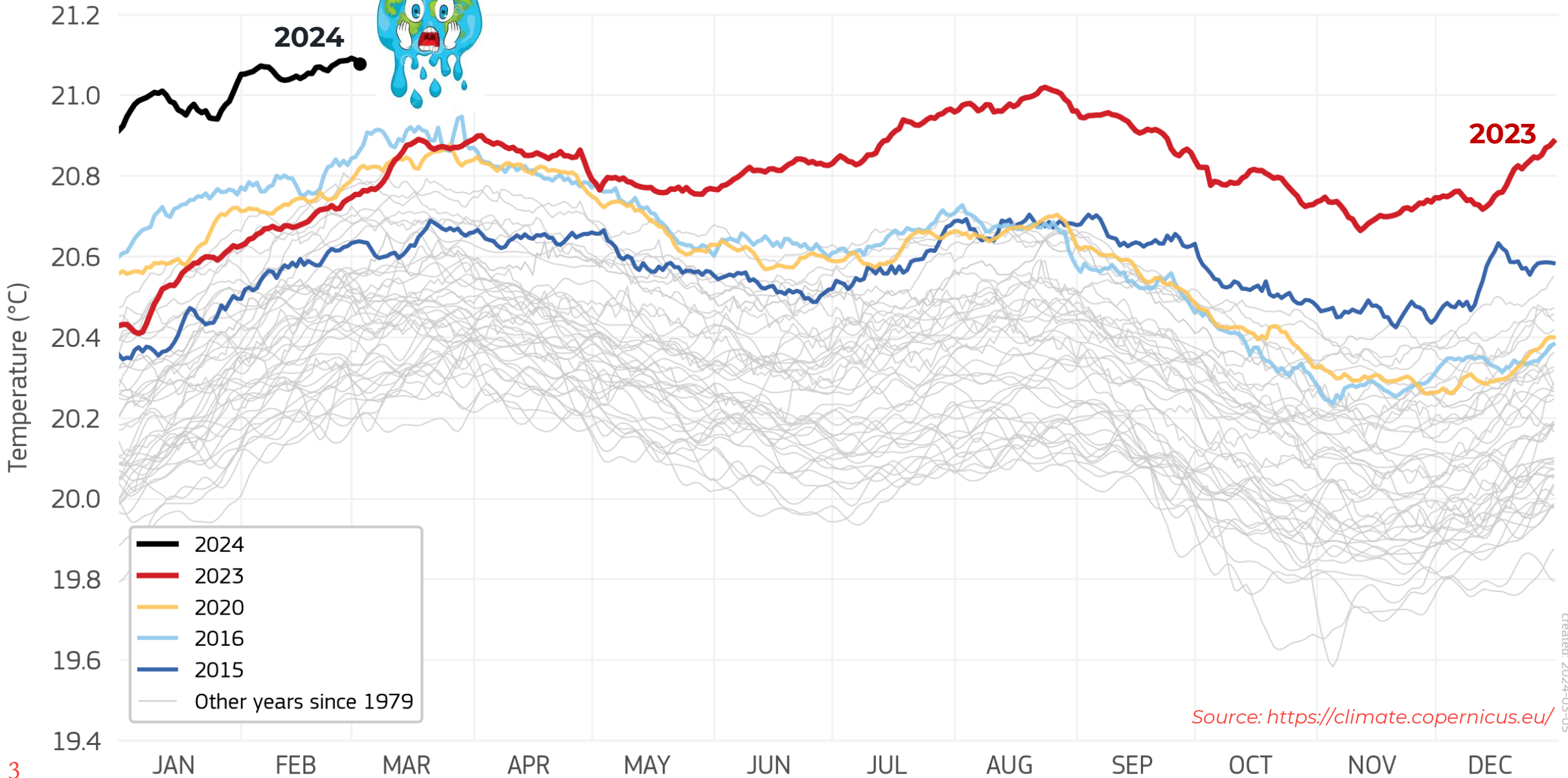
Future Mobility in Wellington

Aileen Stace's electric car, 1937

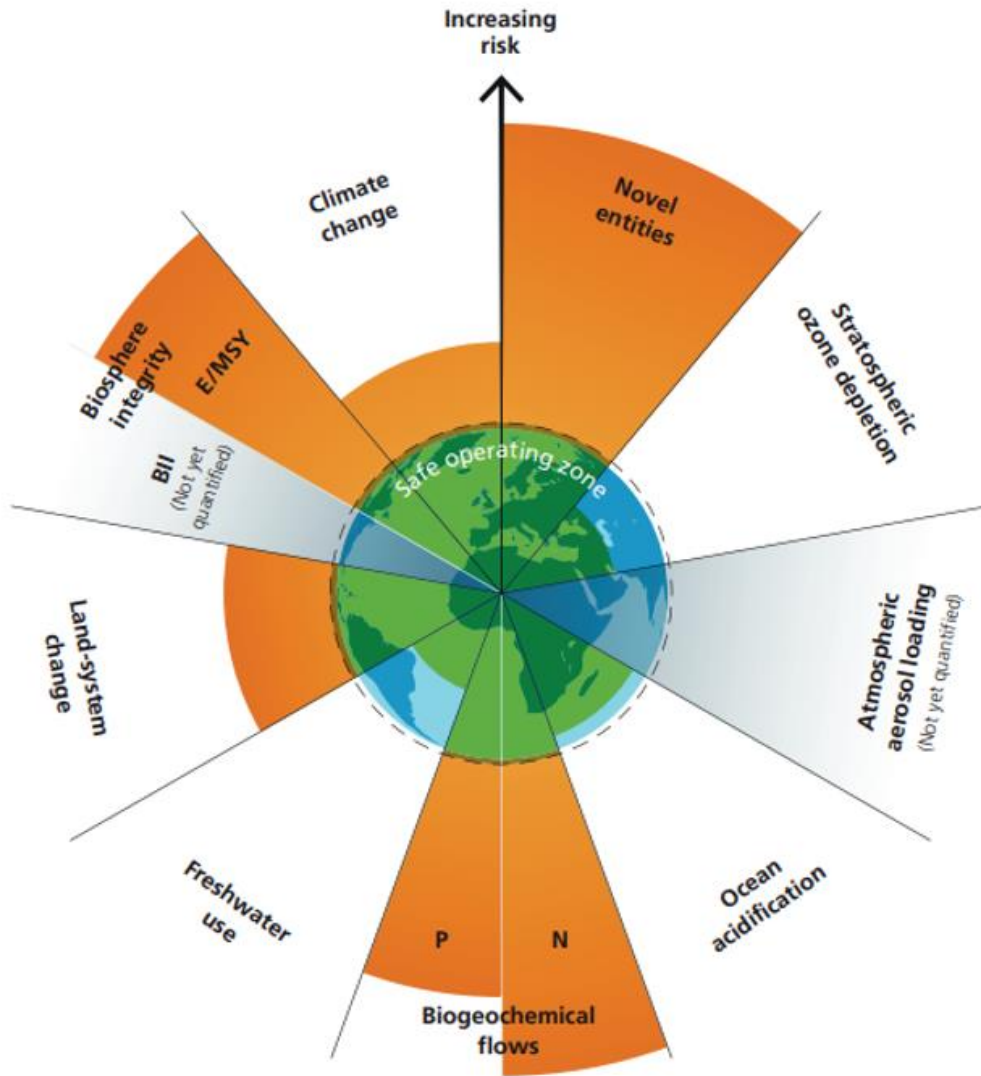


Daily Sea Surface Temperature

1979-2024

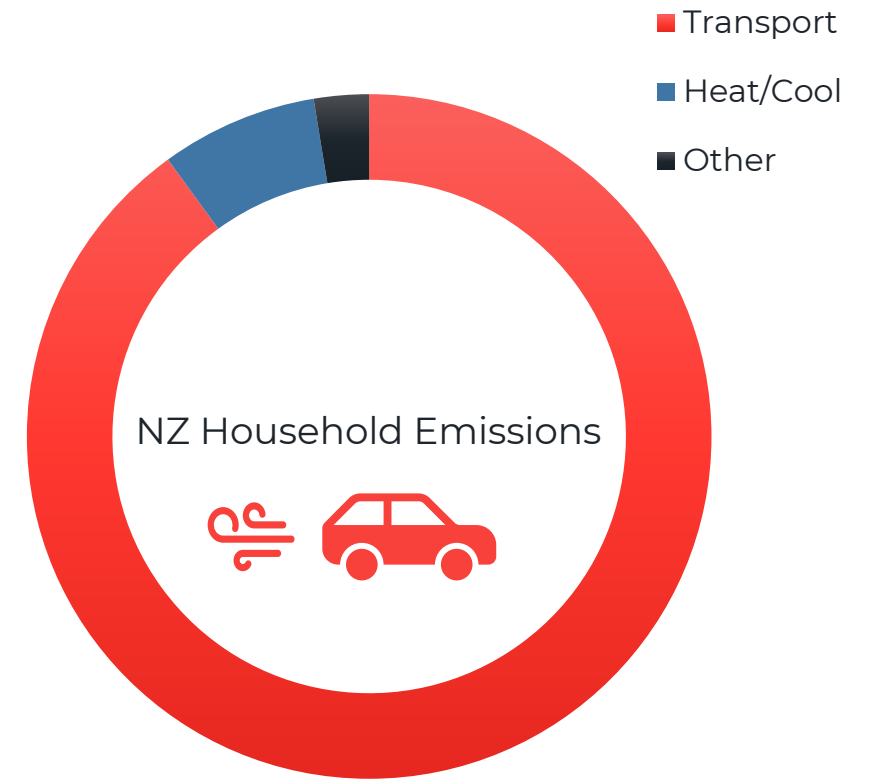


Are we responding enough?



Transport in NZ accounts for:

- **90% of household emissions**
- **17% of New Zealand's total GHG emissions**



Are we responding enough?

**Walking + Cycling + EVs
are not the full climate solution**



Housing locks citizens into lifelong climate impact

Alicia lives in the **outer suburbs** and relies on the **car**



Dependent on others

Driving age 

Dependent

Now

Paris Net Zero

Year 1990 2000 2010 2020 2030 2040 2050 2060 2070

Youth

Middle-age

Retirement

Lifetime range of options



Zara lives in a **townhouse** close to **public transport**



Future Demand 2014: Triple Access Planning

future demand

How could or should our transport system evolve in order to support mobility in the future?

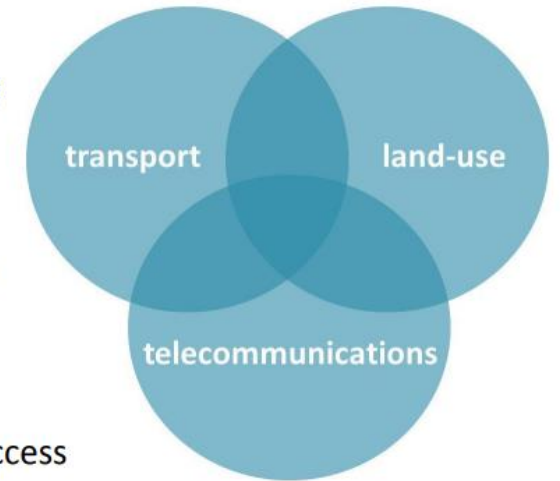


Triple-access system to help New Zealand thrive

motorised vehicles for access

physical proximity for access

digital communications for access



We must recognise it is about access not transport

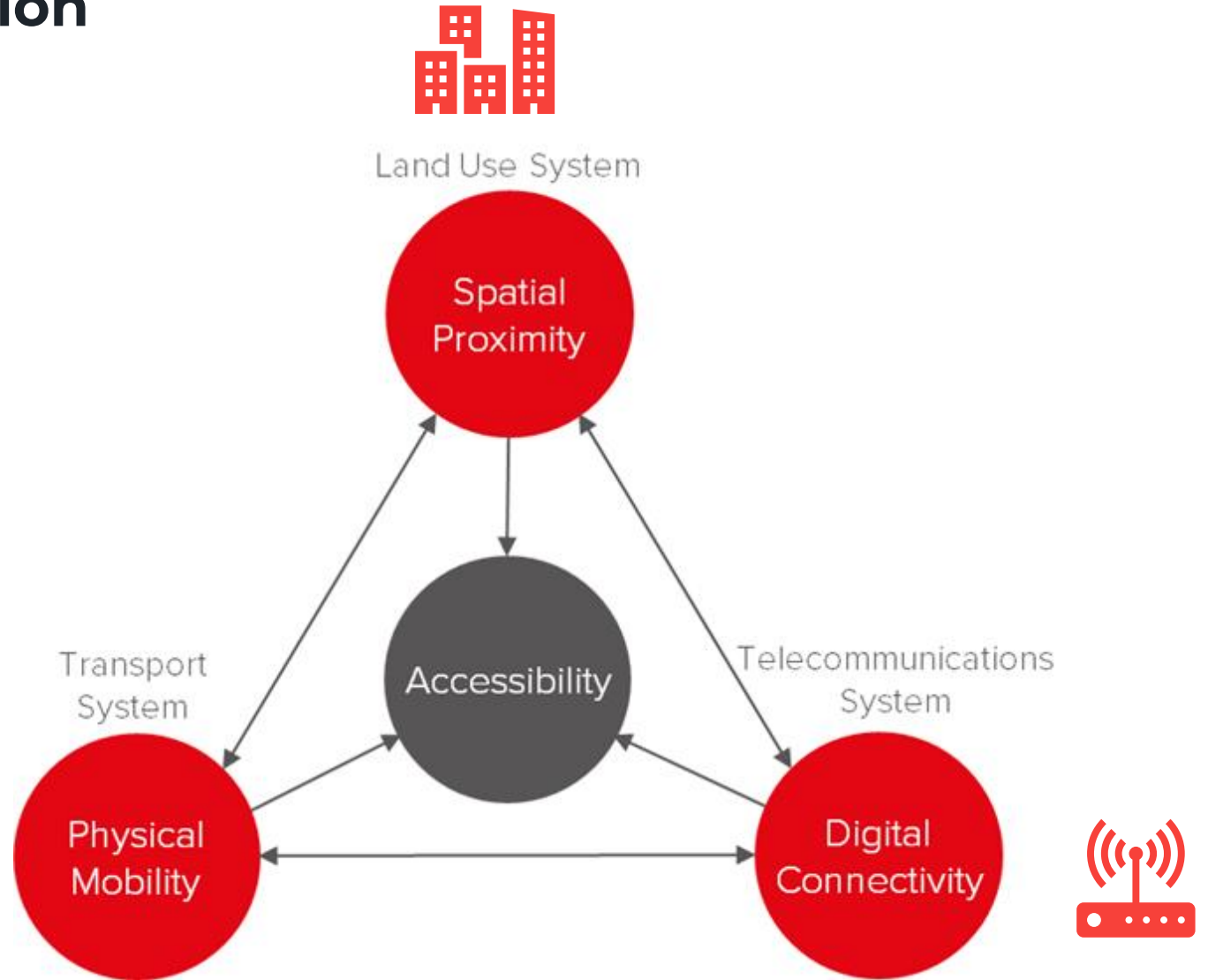
The purpose of our transport system is to allow society to access people, goods, services and opportunities. Access supports economic and social wellbeing.

Access is influenced by three interacting systems: transport, land use and telecommunications – all three are evolving and all three are relevant to policymaking and investment.

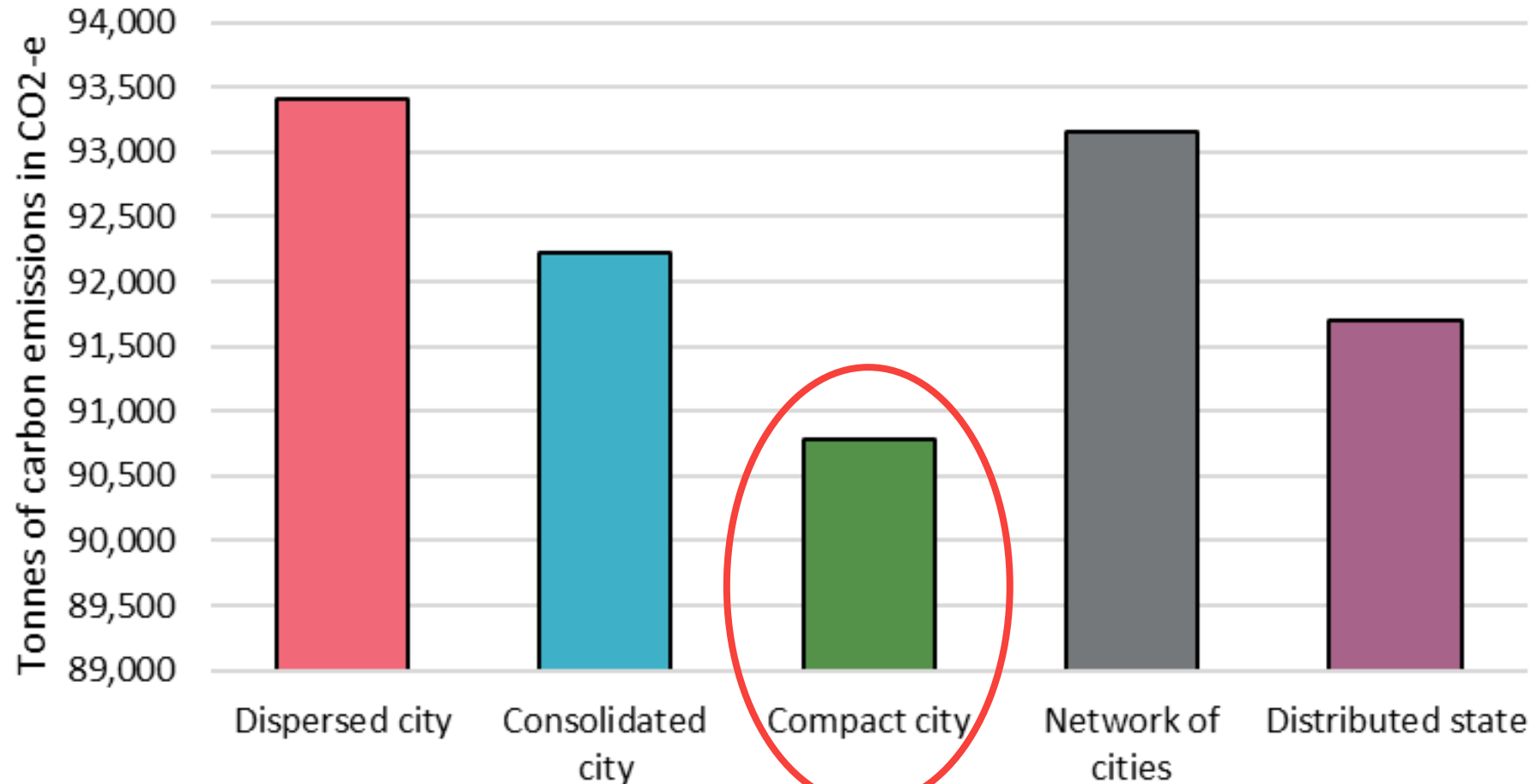
Responding to the insight

Transport policy cannot be isolated from developments in land use and digital communications. Consideration should be given to establishing an overarching body or function that considers how transport, land use and communications co-create, and can improve provision of access for a thriving New Zealand. There is a need to evolve this triple-access system to ensure resilience and flexibility in the face of uncertainty.

Triple Access Planning is a more holistic solution



GHG emissions of transport in different development types



2021–2036, Victoria, Australia

Source: Infrastructure Victoria, *Choosing Victoria's future: 5 urban development scenarios*

Compact vs Sprawl development

Compact cities have...



Fewer greenhouse gas emissions



Less use of land (which can be rewilded)



Allow people more choices to find a home, travel, and get to key destinations



Stronger, more diverse economies



More affordable infrastructure (in Victoria, \$41 billion saved)



However, it requires changing how we live as more people live in units, townhouses or apartments

Source: Infrastructure Victoria, Choosing Victoria's future: 5 urban development scenarios

Brent Toderian, former Chief Planner, City of Vancouver

“If you still have zones in your city or suburb that ONLY allow single detached homes on a lot, you’re a dinosaur”



Understanding the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021

Medium Density Residential Standards

A guide for territorial authorities



Wellington City Council officially passes an ambitious new District Plan



Wellington City Councillors celebrate the final District Plan vote.

And with that, it is finally over. Wellington City Council has voted to accept all of today's amendments, and officially passed a new District Plan.

The new District Plan enables tens of thousands of new homes. It allows apartments and townhouses across the city in suburbs where they were previously banned. It's a pathway to a far denser, more affordable city.

Key ingredients for walkability

6 out of 10 people on the street are there because of...



Density

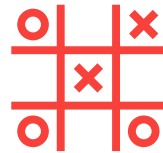
People living and working in medium density

Tipping point <30% single dwellings



Lots of things to see and do

Mixed land use, multiple destinations



Fine-grained, slower streets

Easy to cross the street and make your own pathway

Tipping point >45 intersections per square km



Quality public transport

Direct, high frequency

Recommendations

Ditch it

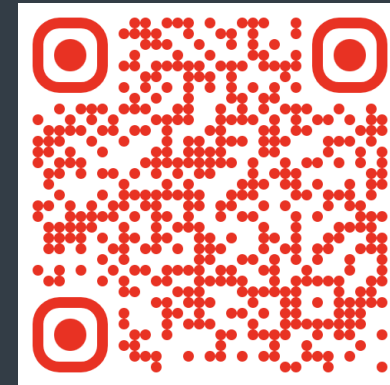
- ✗ Expanding suburbs and greenfield
- ✗ Building new roads
- ✗ Massive road spending
- ✗ Flying

Digging it

- ✓ Infill, mixed use development
- ✓ Reallocate streets to people
- ✓ 20% of transport budgets on walking and cycling
- ✓ High frequency public transport

Thank you

in LinkedIn: Sara Stace



wsp.com