



The High Street of 2030

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For BMW partnered with RMIT



Agenda

First,

We'll examine the problem, and see why our solution works.

Then,

We'll look at how Transport, Health, and Safety will improve.

Finally,

A case study of three friends will show the potential of this solution.





We were tasked with developing a set of sustainable solutions to enable the next generation of Melbourne's transportation system.

Key considerations included:

- Maximising both Public & Personal Mobility
- Ensuring adequate Planning & Infrastructure
- Increasing Efficiency using Electronic Connectivity

All while meeting the 17 UN Sustainable Development Goals



Our main streets need a revamp, but why change? It's been a long buildup ...

Increased obesity

Work from home

Supporting local

Less car reliance

Global rates are rising

Obesity, diabetes, heart attack, and cardiovascular problems are on the rise.

Effects from the pandemic

Many people have decided to remain working online from their house.

Communities focus on themselves

Recent societal attitude changes put the focus on supporting small business

For both health and environment

Walkable main streets encourage healthier lifestyles through exercise.

The Solution

The High Street of 2030

We propose a future where the High Streets of the suburbs of Melbourne are the First Choice for social, commercial and economic needs.

Local Main Streets are redeveloped to be walkable, safe, green, and inclusive for all, promoting local community engagement

Travel between suburbs will still be essential, and a diverse mix of eco-friendly options are available.

These solutions are dynamically enhanced with Modern Communication Technology



The New Network



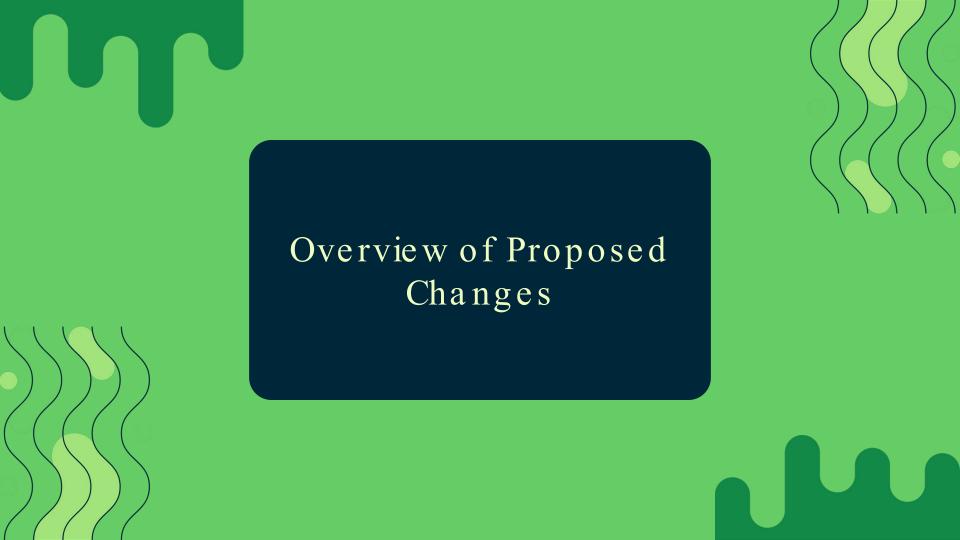
Local Focus

Melbourne has great diversity in its local High Streets, and our solution brings



Interconnected Suburbs

For the folks who need to go elsewhere, cars and public transport connect these hubs together



The High Street of 2030 Overview

Pedestrian only zones for main streets to support fitness and small business

Car parks with EV charge points to encourage the switch to electric

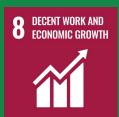


Indigenous Australian plants and artworks, cherishing our history

Well-lit areas so everybody feels safe riding or walking home

Tram stops with wheelchair accessibility, so everyone can be included





Private transport

Car parks nearby

Not everyone lives within walking distance, but they can still parking nearby and shop on foot



EV charge points

Parking options with electric vehicle solutions will accelerate Australia's change to electric



Public transport









Cheaper fares

As cost of living continues to rise, reducing the fares will engage additional passengers to hop on.





Better insulation

Double-glazed windows and rooftop air vents will improve the temperature control on public transit, creating an enjoyable experience while reducing energy costs



Electric busses

Electric busses reduce carbon emissions from public transport even further. These can be supplied by BMW, in partnership with Vic Gov.

More often

Public transport isn't a viable option for some in Melbourne due to its low frequency. If the number of services increased, so would ridership.









Health and fitness



Increased walkability

Pedestrian friendly streets result in a healthier lifestyle as shopping local and more walking becomes possible



Keeping it local

More people on foot means more traffic and profit for small businesses, a positive feedback loop

15 LIFE ON LAND



Less fumes from cars

Our lungs benefit when there are fewer cars on the road and more people walking







Supporting native Australian history



Native trees

Australian trees have evolved for millions of years to be perfect for this environment

Eucalyptus & gum



Native flowers

Australia has beautiful and unique flowers that are often overlooked by city planners

Proteaceae & wattle



Indigenous art

For generations, indigenous Australians have been creating distinct works of art

50,000+ years



Bee populations

Native flora can support our native fauna, and it's no secret that bees suffer from climate change

1700+ native species





Safety



Women's safety

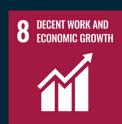
- Many women feel unsafe when alone, fearing aggression from strangers
- Well-lit and densely occupied areas can create a safer environment for women walking at night
- A stronger sense of community will create a trustworthy neighbourhood





Light-up bike lanes

- Melbourne's roads are not very bike friendly, despite our huge cycling culture.
- Light-up bike lanes can establish a safer experience for cyclists, motorists and pedestrians, especially when it gets darker



Inclusion



Indigenous artists

Diverse and strikingly individual, support of Indigenous artists helps our communities to foster a positive future together

Wheelchair access

73% of tram stops in Melbourne are currently inaccessible by wheelchair - this is a crucial step in modernising our main streets

Vision and hearing aids

Light up walkways with low-cost LED lights, plus audio announcements of upcoming trams and trains

Tourism

More frequent services and cheaper fares will make tourists and visitors feel welcome

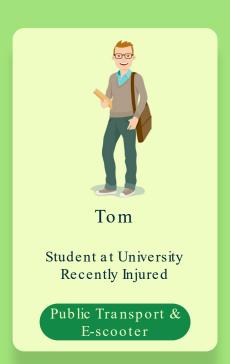




A Case Study to Highlight Solutions

Meet the Gang







Sarah's Day

Running errands





After working, Sarah rides her bike to her local High Street to run errands





Bike Lanes are Safe and Secure

Separated by a physical boundary, painted brightly, and light up at night.

That 's safety.

Sarah's Day

Running errands



Bike Storage

All streets have plenty of secure locations for people to store bicycles



Walkable High Street

Once there, Sarah enjoys freedom to take her time and can find what she needs

Tom's Day

Studying at University



Phone Integration

Tom's day starts with a notification - his usual tram is 2 minutes early, so he has to hurry!





E-scooter is ready to go

As e-scooters can plug in at any electricity pole, there 's always one nearby. They comes with seat & storage, and app integration



Tom's Day

Studying at University





Local Tram

Trams have disability access for all.

No need to "tag on " - app is GPS enabled, fare deducted automatically



Smart windows

En route to university, Tom learns about local First Nations history. Tram windows display interactive, location based information



Tom's Day

More Public Transport Features



Storage for goods

Tom keeps his bags on the racks provided. They can be used for items big & small

Allows those without cars to enjoy in person shopping experiences



Smart Insulation

Regardless of what Melbourne 's wild weather is doing, public transport stays comfy with double -glazed & transition windows, along with automatic ventilation



Healthy and Happy

Public transport is equipped with with Far UV technology, which helps to eliminate pathogens before they infect others



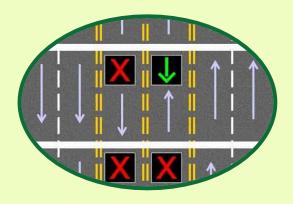
Claire's Day



Economic opportunity

Cars are a great enabler of economic opportunity, allowing people like Claire to get to jobs where they fit best





Car Smart Lanes

Traffic is practically a thing of the past with smart lanes on all roads which dynamically adjust throughput

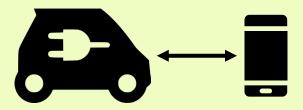
Claire's Day

Running errands



Car parks are Green now

With standardised EV chargers everywhere, stairs that charge the batteries, & solar on top, Claire knows her park is sustainable



Phone syncs with smart car

Claire receives a ping, saying her alignment is out. She learns that if she gets it serviced, her fuel efficiency will increase 5%





Dinner Together











Strong Local Community

Sarah, Tom and Claire have dinner together that night. By redeveloping local High Streets, we enable the sustainable growth of close-knit neighbourhoods

Outdoor Dining & Shopping

Parklets are a great way to use up unused road space, letting people enjoy the outdoors

Safety in a Crowd

With higher density, and plenty of well -lit areas, personal levels of safety will be higher than ever

Smart Tech Saving Lives

Sarah, Tom and Claire each receive a ping, informing them that an emergency vehicle is headed down. They scoot out of the way.



Summary

A Local Solution for a Modern Problem

With appropriate urban planning, we can redevelop each neighbourhood's High Streets to be walkable, eco-friendly, and future-focused.

Travel between suburbs is made easy with a range of sustainable personal & public transportation methods

Utilising high-tech devices and modern electronic equipment will be key to maximising efficiency for all

























