

Thought Leadership

Fuel insecurity as a catalyst: *moving Australia beyond car dependence*

Fuel insecurity is no longer a future risk – **it is a present constraint**

Acknowledgement of Country

Urbis acknowledges the Traditional Custodians of the lands we operate on. We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years. We pay our respects to First Nations Elders, past and present.

Why now? Australia's structural fuel vulnerability

Australia's transport system is confronting a reality it has long deferred. With around **90 per cent of liquid fuels imported,** households, businesses and freight are acutely exposed to global disruption. When international instability pushes prices higher, the impacts are immediate and unavoidable. Fuel price volatility is no longer a cyclical shock to absorb; it has become a structural feature of the system, and households are carrying the cost.



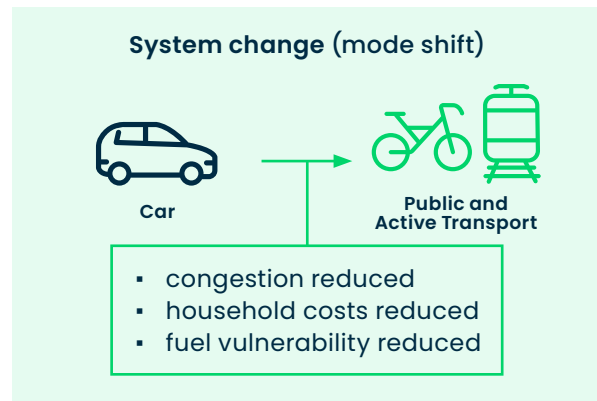
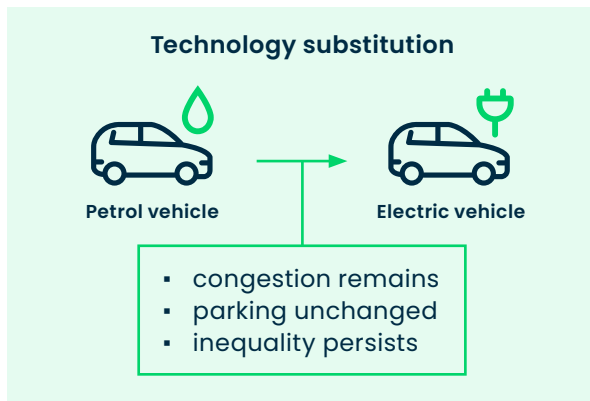
Ongoing instability in the Middle East has kept diesel prices **above \$2.00 per litre**, with petrol prices also elevated. Media coverage continues to link local price increases to global supply shocks. These impacts fall hardest on lower income households and those with limited transport choice. Together, these pressures point to a long deferred reckoning for Australia's transport system.



Consumers are already responding. Electric vehicle sales **increased by 41 per cent** in Q1 2026 compared with the previous year, with EVs accounting for 12 per cent of new vehicle sales. Over half of Australians are now considering an EV, driven less by climate policy but reflecting anxiety about petrol prices.

Yet recent experience has exposed clear limits. Charging infrastructure has not kept pace with uptake, with the national rollout sitting at roughly three EVs for every new public charger. This reinforces a critical lesson: technology substitution alone does not resolve congestion, affordability or inequity. Swapping petrol vehicles for electric ones simply shifts dependence from one constrained system to another.

Technology substitution vs system change



Why behaviour change must happen before the crisis intensifies

Behaviour change is hardest when it is forced.

When fuel prices spike suddenly, households default to short term coping strategies: cancelling trips, absorbing higher costs, or cutting back elsewhere. Those with the least flexibility bear the greatest burden.

Periods of heightened awareness — like now — create a narrow but powerful window for action. People are already reconsidering car

ownership and travel habits, and sustained media attention is reinforcing public understanding of fuel vulnerability. Importantly, policy responses can be framed around resilience and cost of living relief, rather than sacrifice.

This is the moment to normalise alternatives before fuel scarcity or price shocks make them unavoidable.

CASE STUDY

Reframing active travel through customer insight Customer Behaviour Research Strategy: Illawarra–Shoalhaven Region

Transport for NSW, 2023–24
Illawarra–Shoalhaven, NSW

Why it matters

Fuel insecurity highlights the risk of relying on behaviour change only after a crisis hits.

What Urbis did

Urbis undertook research with community members and business owners across the region to understand the current experience of transport and what barriers or enablers there were to using public and active transport.

Impact

- Provided a multifaceted view on transport infrastructure in the region as well as community attitude and behaviours.
- Delivered an evidence base to help support future efforts across the transport system – from service design to behaviour change.
- Identified several key moves that could help move public and active transport forward in the region.

Key learning

There is a need to understand and address all components of the transport system in order to support meaningful behaviour change.

Lessons from the 1970s oil shocks: diverging paths

The oil shocks of the 1970s exposed the vulnerability of car dependent economies. While all countries introduced short term measures, the decisive difference was whether governments treated the crisis as a temporary disruption or as a structural warning.

In the **United States**, policy focused on vehicle efficiency and domestic oil production while doubling down on car centric planning. Car dependence deepened, emissions remained high, and exposure to fuel shocks persisted.

The **United Kingdom** made a partial course correction through public transport investment and urban regeneration. Outcomes improved, but decades of car oriented planning constrained the pace and scale of change.

By contrast, **Denmark** and **Japan** used the crisis as a catalyst for systemic reform. Denmark invested heavily in cycling infrastructure, public transport and compact urban development, reinforced by fuel pricing and land use policy. Japan paired energy efficiency with major rail investment and transit oriented development. Both countries now enjoy high public and active transport use, lower emissions, and strong resilience to fuel price volatility.

In **Australia**, short term rationing and controls were followed by a return to business as usual. Low density growth and road investment entrenched car dependence, resulting in high household transport costs and ongoing exposure to fuel price and supply shocks. Deferring structural change has made today's vulnerability both costly and complex to unwind.

How national responses shaped long-term transport outcomes

	USA	UK	Denmark	Japan	Australia
Response type	Short-term adjustment	Mixed adjustment	Structural change	Structural change	Short-term adjustment
Investment type	 Road-led	 Rail, Road	 Transit, Cycling	 Rail, Density	 Road-led
Urban form	 Low	 Mixed	 Compact	 Compact	 Low
Long-term outcome	High oil exposure	Reduced oil exposure	Low oil exposure	Low oil exposure	High oil exposure

The opportunity: capitalising on the current crisis

Periods of heightened fuel insecurity create a powerful opportunity for change. The challenge is not convincing people that the system is vulnerable, but making alternatives easier, cheaper and permanent.

Journey to work data from 2021 highlights the scale of the opportunity. In cities such as Newcastle and the Gold Coast, 90–92 per cent of trips are made by private vehicle. Yet more than half of work trips are under 10 kilometres – distances that are often suitable for walking, cycling or e bikes with the right infrastructure. The constraint is not geography, but infrastructure quality, safety, comfort and convenience.

The City of Gold Coast's Draft Transport Strategy 2041 consultation results reinforce this insight. Residents identified safety and connectivity as the primary barriers to cycling and scooting, with more than 70 per cent calling for better connected paths. Distance and utility challenges limit walking, often reflecting urban form and access to local destinations. Public transport travel time, coverage and requirement to interchange remain key deterrents, despite strong

community support for public transport as a future priority. Cost and convenience continue to constrain electric vehicle uptake, alongside persistent concerns about congestion and car dependence.

Crucially, the data also shows willingness to change. Nearly 38 per cent of participants would consider switching to public transport for some trips to reduce congestion, and a similar proportion see improvements to public transport as the most important lever for behaviour change. This trend was also apparent in the customer behaviour research Urbis has completed for Transport for New South Wales (TfNSW): people are willing to consider modes of transport other than cars if these modes are reliable, convenient, and easy to access.

Supporting even a modest shift – 10 to 15 per cent of short car trips – would deliver immediate household cost savings, reduce exposure to fuel price volatility, ease congestion and improve public health outcomes. These benefits can be realised far faster, and at lower cost, than expanding road capacity or relying solely on large scale EV infrastructure rollout.

Barriers vs willingness to change – Gold Coast consultation findings

Barriers



Safety –
perceived risk



Upfront and
ongoing cost



Connectivity
– gaps in
networks



Travel time
and indirect
routes

Willingness



38% willing
to switch trips



Support for
PT priority



Openness to
alternatives



Desire for
safer options

Source: City of Gold Coast Community Engagement Summary Report

Progress to date –and why it’s not enough

Australia has made genuine progress in addressing car dependence. Over the past two decades, governments have increasingly prioritised compact urban form, 20 minute neighbourhoods and better integration of land use and transport planning. Major cities have expanded rail and metro networks, reformed bus services, and improved fare integration and reduced fares to strengthen public transport competitiveness.

Active transport has also gained traction. Walking and cycling strategies are now standard across jurisdictions, supported by growing investment in shared paths, protected cycleways and end of trip facilities. E-bikes and micro mobility is extending the feasible distance of non-car trips and broadening travel choice.

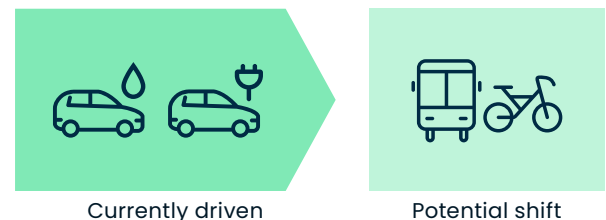
These initiatives matter and provide a strong foundation for change. However, the scale and pace of reform remains misaligned with the challenge. Road investment continues to outweigh spending on public and active transport, particularly in outer urban areas. Networks remain fragmented, and sustainable

travel options are too often treated as complementary rather than essential. In research undertaken by Urbis for TfNSW, community generally acknowledge road crowding as an issue but highlight there are often no viable alternative modes of transportation.

Fuel insecurity exposes the limits of incrementalism. While current strategies point in the right direction, they do not yet provide households with reliable, affordable and convenient alternatives to driving at a system-wide level. A more decisive shift is now required.

The short-trip opportunity

Trips under 10km



CASE STUDY

Embedding mode shift into everyday neighbourhoods Our Fairer Future Plan – Inner West (Stage 1)

**Inner West Council, 2024
Sydney, NSW**

Why it matters

Reducing car dependence depends on making alternatives work for daily, local trips.

What Urbis did

Urbis developed transport-led masterplans integrating sustainable travel into neighbourhood growth. Ten targeted interventions were identified, from walking and cycling upgrades to bus priority, parking reform, car share and e-mobility.

Impact

- Practical, costed actions to support everyday mode shift.
- Carbon reduction potential quantified to inform investment decisions.
- Clear pathways linking transport, land use and housing outcomes.

Key learning

The fastest gains in fuel resilience come from shifting short, local trips — not from large scale infrastructure alone.

From strategy to delivery: why projects matter – and where Urbis contributes

Reducing car dependence depends less on new strategies and more on delivery. Policies set direction, but projects determine whether people actually have viable alternatives to driving. Compact centres only reduce car use if they provide walkable access to daily needs. Public transport investment only shifts behaviour if services are frequent, reliable and well connected. Active transport only becomes a default choice when routes feel safe, continuous and convenient.

Urbis works at this point of delivery. Our projects align land use, transport and economic outcomes to support more sustainable and resilient travel patterns—shaping city and transport strategies, prioritising investment, planning centres and corridors around public transport, and embedding active and micromobility into precincts and growth areas.

As fuel volatility becomes a structural condition, the next phase of reform will be defined by projects that deliver real choice. Urbis' role is to help turn today's fuel insecurity challenge into lasting improvements in affordability, resilience and liveability.

“We need to tackle human behaviour from multiple angles if we are to see positive change. We can change behaviour through planning reforms, placemaking efforts and strategic infrastructure planning as much as more traditional approaches. I like to think about this as ‘stealth behaviour change’ – the change happens simply because it is the most desirable or convenient option”

Dr Caroline Tomiczek

CASE STUDY

Designing streets for liveability, not just throughput Northshore Hamilton Priority Development Area

**Economic Development Queensland
2022–current, Hamilton, QLD**

Why it matters

Fuel insecurity challenges cities to rebalance street space away from traffic dominance.

What Urbis did

Urbis supported transport planning, design and staging from masterplanning through to delivery, including public transport planning, e-mobility strategies, cycling innovation and liveability focused street renewal.

Impact

- Streets designed to balance movement, safety and place.
- Active transport embedded as core infrastructure.
- Growth supported without locking in car dependence.

Key learning

Urban design decisions lock in travel behaviour — resilience is built into streets, not retrofitted later.



CASE STUDY

Breaking the 'predict and provide' cycle in growth areas Joyner Emerging Community Transport Plan

**City of Moreton Bay, 2024
Joyner, QLD**

Why it matters

Emerging communities face the greatest risk of future fuel vulnerability

What Urbis did

Urbis applied a 'Vision and Validate' approach, setting a preferred transport future and using data and community feedback to test and refine it — avoiding demand led planning that reinforces car reliance.

Impact

- A validated transport vision with measurable network improvements.
- Clear identification of infrastructure required for non car travel.
- A framework supporting choice, resilience and place making.

Key learning

Planning for behaviour change upfront is the most effective way to avoid locking households into long term fuel risk.

Incrementalism vs system shift

Incremental path (fragmented investment)



System shift path (coordinated investment)



How Urbis can support: aligning people, places and activities

Responding to fuel insecurity requires more than infrastructure investment or standalone behaviour change programs. Lasting change occurs when people, places and activities are aligned—when sustainable travel is not just available, but genuinely the easiest and most natural choice.

At Urbis, we support transport authorities and councils to respond to fuel security and cost-of-living pressures with practical, evidence-led action that improves everyday liveability. Our work recognises that mode shift happens through the combined effect of human behaviour, urban form and the way cities function day to day.

People

We help agencies understand how and why people travel, and what actually enables change. Our work focuses on:

- Behaviour change strategy and social marketing grounded in real travel decisions
- Understanding travel needs across life stages, including ageing populations
- Evaluating policy and programs to identify what genuinely shifts behaviour, not just intent

Places

We shape places that support choice and reduce the need to drive. This includes:

- Transport and infrastructure planning that prioritises short trips and last-mile connections
- Placemaking and master planning that turn stations, centres and streets into destinations
- Transit-oriented development and planning approaches that put public and active transport first

Activities

We support actions and decisions that turn strategy into reality. This includes:

- Transport and planning policy that supports everyday travel, not just peak demand
- Organisational and stakeholder alignment to enable coordinated decision-making
- Testing and piloting small, high-impact interventions that can be scaled quickly

Taken together, this approach allows behaviour change to occur without being forced. The shift happens because sustainable travel becomes more convenient, more attractive and more intuitive—a form of “stealth behaviour change” embedded in how places are planned and how systems operate.



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