

# Re-imagining Sydney Road



A plan for this strategic corridor  
and iconic shopping strip

November 2018





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A typical scene on Sydney Road, with trams being held up by (mostly) single occupant vehicles

# 1. Introduction

**For over 50 years, Sydney Road has struggled to meet the competing demands placed upon it; as a key tram corridor, an important shopping strip and Activity Centre, a residential location to an increasing number of Melbournians and a popular cycling connection between northern suburbs and central Melbourne. Sydney Road is also used by up to 21,000 cars a day, and these competing interests and demands for space continue to place Sydney Road in the cross hairs as a street ripe for a rethink.**

On Sydney Road, tram speeds drop to 7km/h at peak times, there are a high number of crashes involving cyclists, and motor vehicle journey times are unreliable and frustrating. Sydney Road is not working. With Melbourne's population expected to reach 8m by 2050, doing nothing is simply not an option.

Several new ideas have recently been put forward by groups passionate about the future of Sydney Road. While these ideas bring a lot of excitement about the possibilities for the future of the strip, some questions remain about their viability to achieve their stated objectives. In response, the Institute for Sensible Transport together with architects Atelier Red+Black have put together a bold new vision for the future of Sydney Road. The plan outlined in this document provides the following benefits and support Victoria's *Transport Integration Act*:

- Creates dedicate space for trams, in order to carry more people, and at faster, more reliable speeds.
- Creates dedicated, full time bicycle lanes, to reduce the risk of collision that has claimed young lives, and caused serious injury to many.
- Lowers the speed to 30km/h, to support Victoria's *Vision Zero* approach to road safety.
- Creates a dedicate motor vehicle lane in each direction, to reduce driver frustration caused by driving on a tram route.

The plan detailed in this report provides the basis for enhancing the vibrancy of Sydney Road. The removal of kerbside car parking and other street clutter provides a stronger link between each side of the street, makes it easier and safer to cross and a more pleasant place to linger, shop and socialise.

Our proposal strikes a sensible balance that bolsters the safety of vulnerable road users, strengths the capacity of the tram to carrying growing numbers of people efficiently and still enables people to travel by car, in a more reliable, less frustrating context. The plan also reduces the *urban heat island effect* by injecting some much-needed greenery into the strip. Importantly, the plan outlined in this report offers a template for re-imagining how many of Melbourne's other iconic tram route shopping trips could function in a manner better aligned to Victoria's aspirations to have a more sustainable, liveable capital.



## 2. The Context

**There are several key issues that impact Sydney Road's vitality. This section identifies these issues and highlights a potential way forward.**

### Movement and Place

*Movement and Place* is a relatively new concept used by VicRoads and other agencies. The concept identifies the *movement* and *place* functions a street plays and the actions to be taken to improve its stated role as a movement or place street.

Movement and Place can help conceptualise the different roles Sydney Road and the Upfield Bike Path play. Under a Movement and Place framework, the Upfield Bike Path is seen as a movement corridor, providing a continuous commuting journey for city-bound workers living in the inner-north. Conversely, Sydney Road is a *place*, serving as a key destination for people to work, shop, and socialise. A future Sydney Road should take into account its role as a place, by making the street a more attractive place to spend time, rather than simply a thoroughfare for as many people as possible to move through.

### Cycling safety

The benefits of increasing cycling participation are well-known. Cycling is an emission-free mode of transport that is low-cost, space and energy efficient, and improves health outcomes. Increases in cycling crashes across Victoria in recent years impact on the viability for cycling to contribute to Melbourne's transport, environment, and health objectives. Sydney Road is a hotspot in Victoria for cycling crashes, in particular 'car-doorings'.

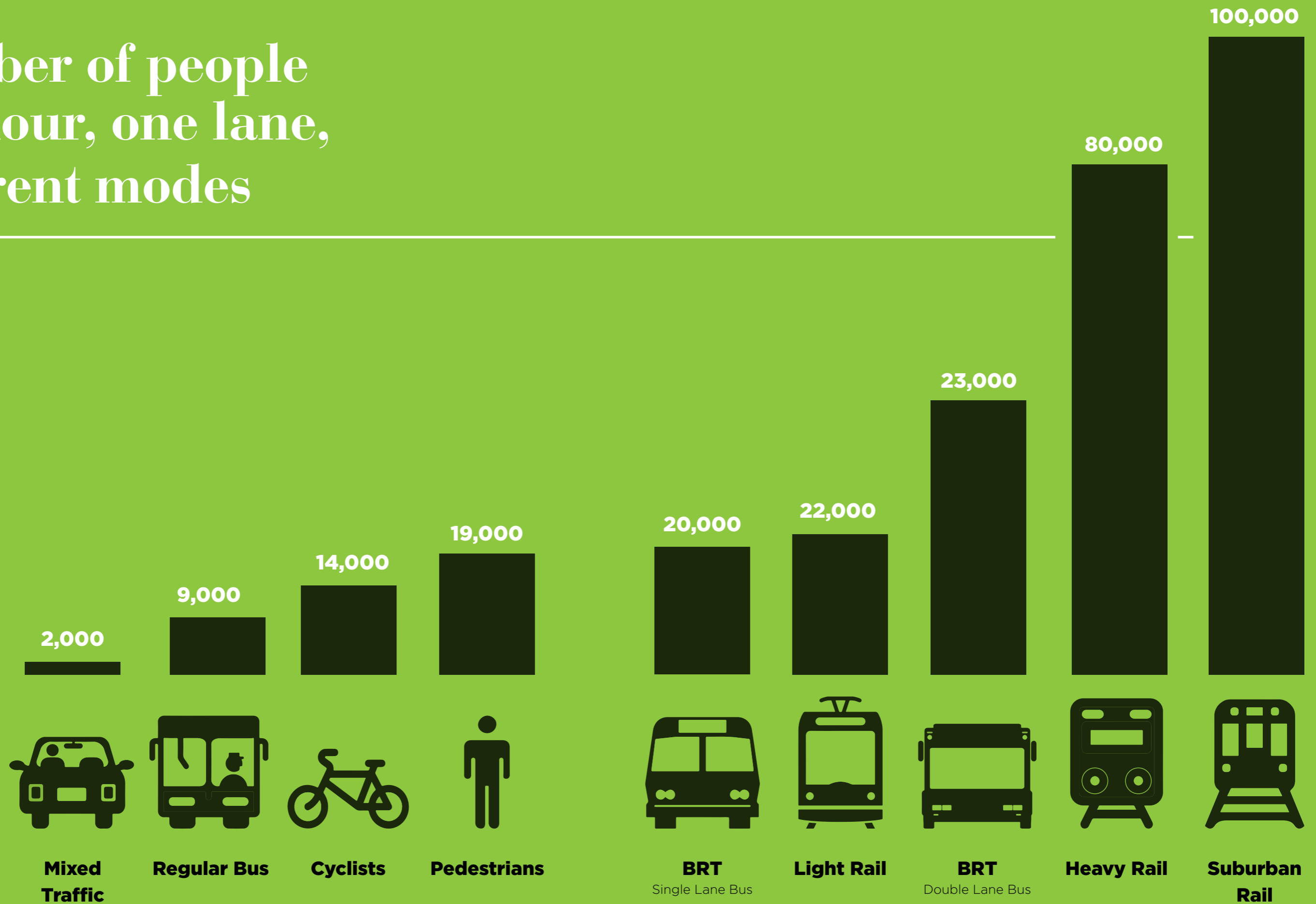
### Slow tram speed

It is well known that Melbourne has the largest tram network in the world, and also one of the slowest. This is because over 80% of the tram network operates in a mixed-environment. Sydney Road is a prime example of this, with trams forced to compete for road space with mostly single-occupant vehicles. This has significant ramifications for route 19, which travels along Sydney Road and carries tens of thousands of passengers every day. Trams travel as slow as 7km/h during congested times of the day. Additionally, traffic conditions on Sydney Road radically decrease tram reliability, leading to commuter uncertainty about how long their journey will take and can cause long delays between services.

For a city predicted to almost double in population, it must have a transport network capable of moving people around safe and efficiently. For this to be a reality, trams must be separated from motor vehicles, including along Sydney Road. Figure 1 highlights the space efficiency of different modes by showing how many people can travel on one, 3.5 metre lane over the course of an hour. It shows walking, cycling and public transport to be far more efficient than car traffic.

Figure 1.

# Number of people per hour, one lane, different modes





## Disability Access

Victoria has an obligation to provide disability accessible tram stops across the network. At present, targets set under Commonwealth legislation are not being met and a large portion of Melbourne's tram network remains inaccessible.

Sydney Road does not have any DDA compliant stops between Brunswick Road and Bell Street. This is despite low-floor trams operating along route 19 for several years. To improve the accessibility and vibrancy of Sydney Road, level-access tram stops need to be deployed.

Level-access tram stops also have benefits to the wider tram using public. They make boarding and alighting trams easier for everyone, particularly parents with prams or travellers with shopping carts. This can also reduce dwell times, by making it easier and quicker to board and alight a tram, which in turn speeds up journey times.

## Urban Heat-Island Effect

The effects of climate change are already been felt in cities, with longer and hotter summers increasing year-on-year. These effects are amplified in urban areas with insufficient greenery and tree canopies, making hot days hotter for longer. This phenomenon is known as the *Urban Heat-Island Effect*. This effect places people at risk to heat-related illnesses and can make these areas dangerous places to visit on very hot days.

Sydney Road and the Upfield Corridor are recognised as an urban heat-island. The corridor is noted for its lack of greenery and tree canopy along streets, particularly along Sydney Road. Work conducted by Moreland City Council has found many sections along Sydney Road and nearby areas reach temperatures 10°C above temperatures experienced in nearby areas which are greener.

To reduce the impact from climate change and the *Urban Heat-Island Effect*, more greenery, trees and shading structures must be injected into activity centres. For Sydney Road, this means transforming the road into a green-spine.

## Footpaths

Footpaths are the key component of a successful strip-shop activity centre. It is where people meet, eat and drink at cafes, walk between shops, and stop to socialise. Narrow, congested, and unattractive footpaths diminish the vibrancy of a street. Currently, many sections of Sydney Road could be described in this way. Greening and decluttering footpaths help improve the vibrancy of a street. This provides more space for pedestrians to move and a more attractive environment. The removal of parking signs, consolidating signage onto one pole, and relocating waste bins and bicycle parking to street corner bulb-outs can free up space for pedestrians along the corridor. This is important along narrow, built-up sections where competition between multiple uses constrains the ability to widen the footpath.

## Integrated Public Transport

Improving the connectivity of trains, trams, and buses increases the attractiveness of public transport. Doing so relieves traffic congestion and demand for parking. Sydney Road has a high-level of public transport options. In addition to route 19, there is a nearby train line, and one tram route and 14 bus routes. In practice, the connectivity between the different public transport modes is poor, rarely linking together to provide a seamless journey. Despite this, public transport remains the most popular way to access Sydney Road, with 75% of visitors arriving by active or public transport.

Improving public transport connectivity along Sydney Road will help bring more visitors to the activity centre, increasing vibrancy. While at the same time, journey times will be improved, people will have better travel choices, and the overall experience of visiting Sydney Road will be enhanced.

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## Motorists

Sydney Road also functions as a major arterial road for motorists, with 17,000 – 21,000 vehicles driving along a portion of Sydney Road each day. Research by *Revitalise Sydney Road* found that only 13% of all vehicles travel along the entirety of the route between Bell Street and Brunswick Road. Other motorists are likely to access Sydney Road at a side street before continuing along Sydney Road for part of their journey. The large number of T-intersections along Sydney Road mean that for many drivers, there are few good alternatives but to travel along Sydney Road. The high variability of travel time currently experienced along Sydney Road is a cause of frustration for motorists. This variability is increased by conflicts between parking cars and moving cars, mixing with trams, and constrained flow at intersections. Untangling these restrictions will improve the reliability of travel time for all users of Sydney Road, including motorists.

## On-street Parking

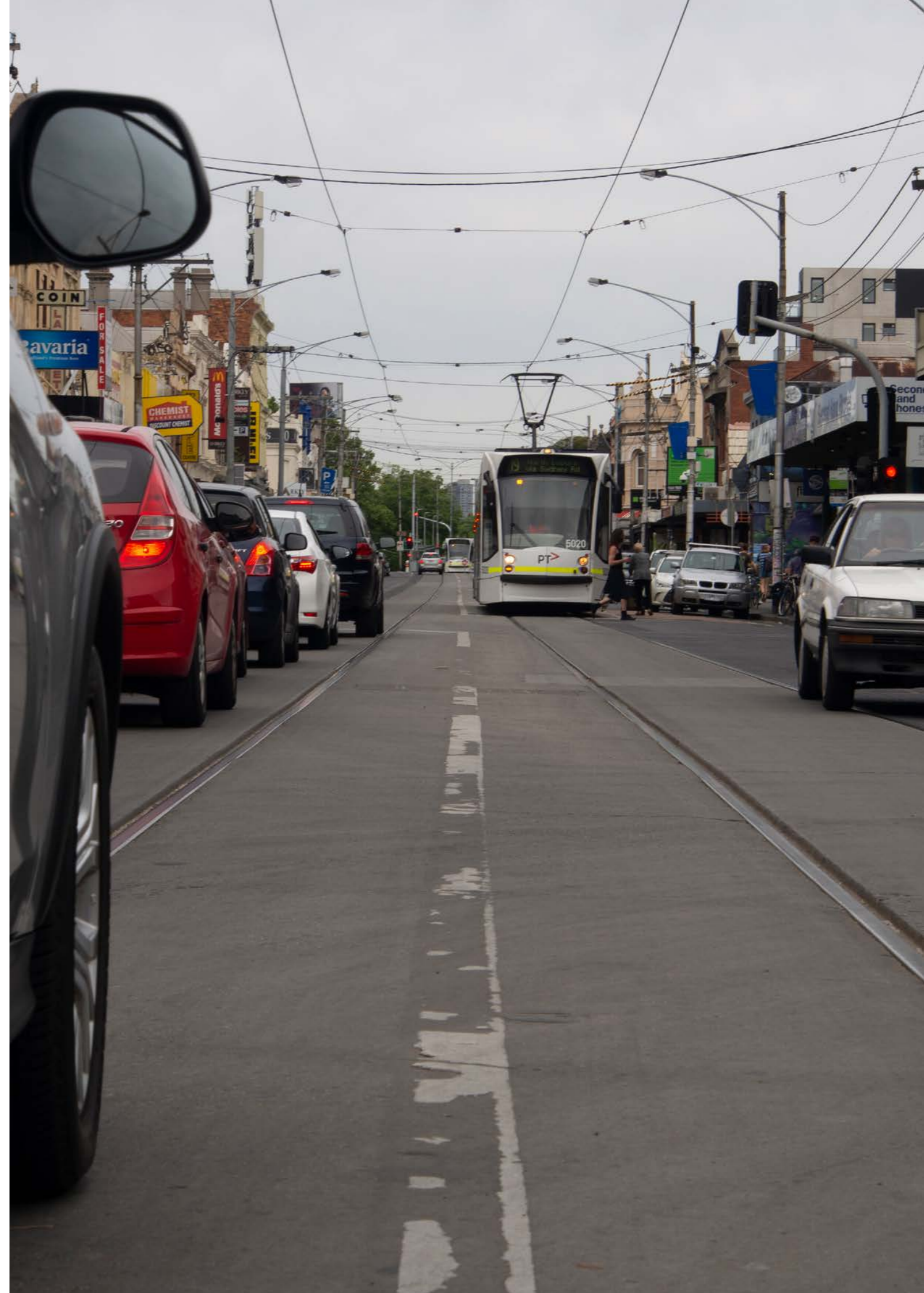
Melbourne has a legacy of providing an abundance of on-street car parking. While such a policy may have been appropriate many decades ago, when Melbourne had a much smaller population, as the city densifies and population increases, such as policy is no longer in the interests of Greater Melbourne or Moreland's ambitions. Melbourne is rapidly evolving and its streets need to evolve with it. The space consumed by allowing parking on both sides of Sydney Road comes at the cost of slower tram speeds, lower car speeds and the safety of vulnerable road users.

Cities and local governments must evaluate whether the costs for continuing to provide unmetered on-street parking outweigh the benefits for converting that space to higher value uses. Opportunities to provide parking off-street should be sought to ensure vehicle access is maintained without jeopardising the social, economic, and environmental objectives for Sydney Road. Work undertaken by *Revitalise Sydney Road* highlight significant off-street parking already exists along the Upfield Corridor. Loading and disability parking, as well as drop-off zones, should be prioritised close to Sydney Road, in adjacent streets.

## Implementation

It is important to consider the economic viability for implementing change along a strategic corridor such as Sydney Road. Undertaking change requires large capital expenditure as well as ongoing maintenance costs.

Any future vision should provide maximum value for money and ensure its implementation is feasible within an appropriate timeframe.



# 3. Other Proposals

A number of proposals have been put forward on the future of Sydney Road. While it is exciting to see new ideas presented, we have identified limitations with their ability to achieve their stated outcomes. Table 1 provides a simple review of each option and how it addresses the key issues impacting on Sydney Road. Importantly, our plan includes an upgrade to pedestrian safety by reducing vehicle speed and enabling easier, safer crossing of Sydney Road.

**Table 1**  
**Review of Sydney Road options**

Issue	Current	Revitalise Sydney Rd	Hybrid Option	Institute for Sensible Transport Proposal
Improving tram speeds	x	x	x	✓
Increasing cycling safety	x	✓	x	✓
Increasing pedestrian safety	x	✓	x	✓
Delivering disability access	x	✓	✓	✓
Providing greenery	x	✓	x	✓
Improving footpaths	x	✓	x	✓
Fixing intersections	x	x	x	✓
Reduce motorists' frustration	x	x	x	✓
Providing on-street parking	✓	x	✓	x
Increasing connectivity	x	x	x	✓
Implementation	✓	x	✓	✓





# 4. Our Proposal

Our proposal seeks to align Sydney Road's design with the objectives of the Victorian *Transport Integration Act*.

**In essence, this involves a focus on improving access, boosting outcomes for sustainable modes and minimising traffic injury risk.**

Our plan also focuses on the need to make Sydney Road a more vibrant, more attractive place to shop and socialise. In doing so, we have sought to balance the competing needs for different road users and visitors to Sydney Road while ensuring it puts people first. Key to this proposal is the removal of on-street parking and the separation of bicycles, trams, and motor vehicles. Another important element is the integration of greenery into Sydney Road. Figure 2 provides a conceptual cross section of a re-designed Sydney Road, using the same available width, with car parking removed and replaced with better outcomes for tram users, cyclists and pedestrians.

# 4.1 Public transport

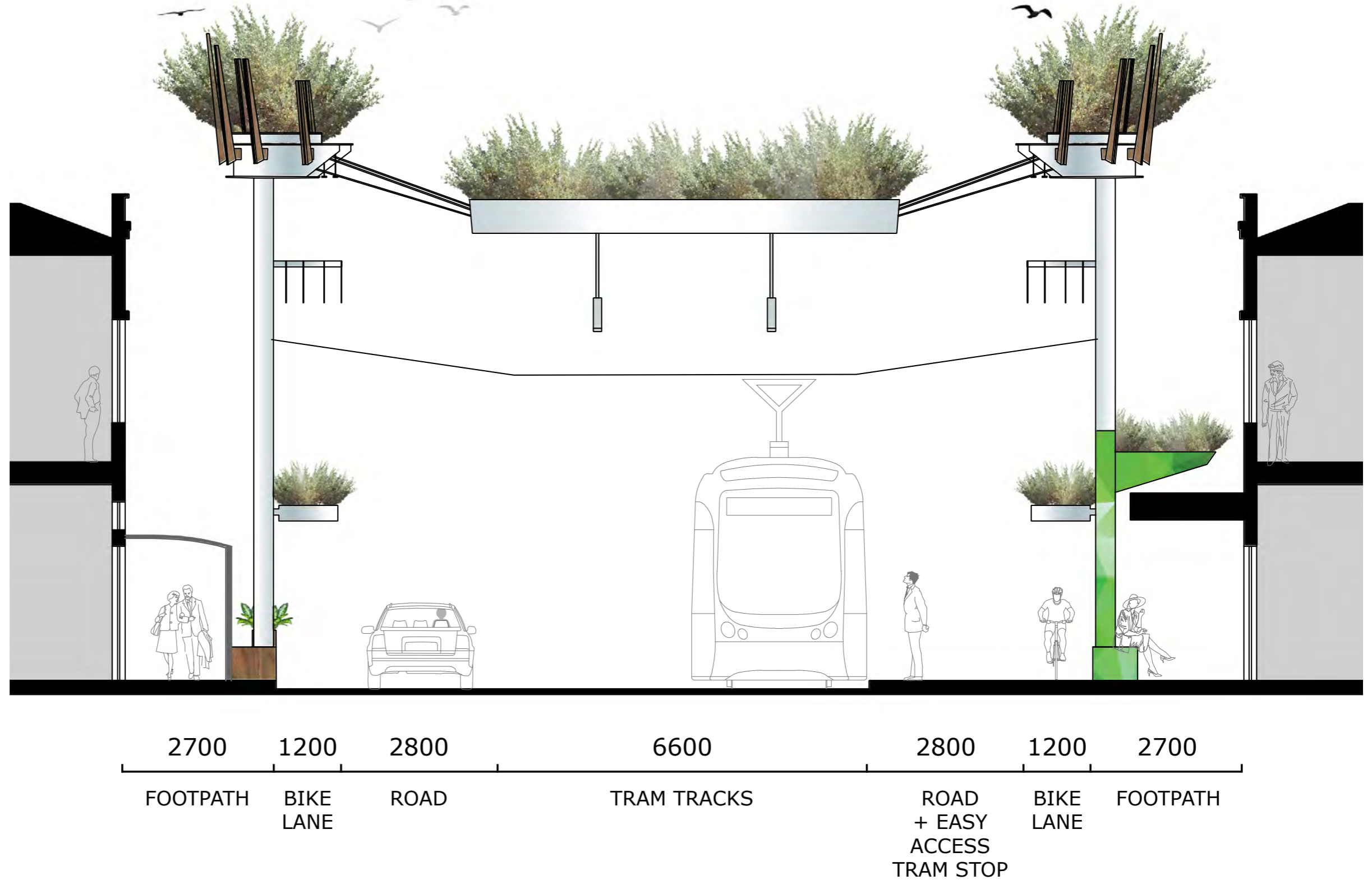
## 4.1.1 Trams

### Our proposal for Sydney Road separates tram and motor vehicle traffic between Brunswick Road and Bell Street.

By doing this, the average tram speed could increase to as much as 18km/h (a 250% improvement compared with Sydney Road's worst current travel times). This would reduce tram journeys to 13 minutes (between Bell Street and Brunswick Road) and improve tram speed and reliability along Sydney Road. Additionally, as trams will be able to complete their journeys quicker, more frequent service would be possible with the same number of trams.

Vehicles will be allowed onto tram tracks at key intersections to undertake right-hand turns. In-ground sensors would detect approaching trams and change the traffic sequences to clear the turning lane, allowing trams to continue uninterrupted.

Figure 2.  
Proposed re-design of Sydney Road



All dimensions in millimetres

## 4.2 Bicycle Lanes

### 4.1.2 Easy-Access Stops

**We have identified easy-access stops as the preferred design option for Sydney Road.**

These stops provide universal access for people with mobility needs and maintains tram and vehicle separation. An existing example of this style of stop can be found on MacArthur Street, outside Parliament Station, shown in Figure 3.

Easy-access stops will be located in ways to improve interactions between public transport and private vehicles at intersections. In some locations tram stops would be placed on the far side of intersections, existing traffic lights can be used to provide protected tram alighting. In other locations, tram stops would act a 'traffic gate' metering the number of cars able to enter the tram lane to perform a right hand turn; at these locations tram transponder technology would be used to activate a right hand turn light, so that trams would be able to pick up and drop off passengers at a tram stop while the traffic ahead of them cleared the intersection.

Figure 3. Current Easy Access Stop at Macarthur Place, Melbourne



### 4.1.3 Bus Integration

**Several bus routes run along Sydney Road for a portion of their trip.**

These buses will run along the tram lane, providing bus separation from vehicular traffic. Buses will share tram stops along Sydney Road, improving integration between tram and bus services and leverage universal access stops. Intersections would also have Easy Access Stops and kerbside bus stops located to maximise interconnectivity between modes. An example of how the intersection between Sydney Road and Glenlyon Road is provided in figure 4. Stops are located close to the intersection, to promote connections between modes.

Figure 4. Allowing buses to use tram lines will speed up public transport



**A 1.2 metre on-road bicycle lane will be provided along the entirety of Sydney Road.**

Setting speed limits to 30km/h along the street, would bring the road in line with international best practice in road safety and risk minimisation. When a pedestrian is hit by a vehicle travelling at 40km/h, they have twice the chance of death compared to a vehicle at 30km/h. Further, the removal of parking eliminates car dooring risk.

Maintaining bicycle lanes through intersections and providing bicycle lantern priority will improve bicycle safety at intersections. Hook-turn lanes are provided for bicycles at each intersection, providing safe turning and connections with connecting streets.

The current gutters along Sydney Road can be uneven, and potentially dangerous to cyclists. Upgrading the gutters to a smooth bluestone material will improve safety and the riding experience for bicyclists. The upgraded gutter along the Coburg end of Sydney Road would be replicated along the entire corridor. Figure 5, at the intersection of Sydney Road and Blyth Street, provided dedicated bicycle lanes and a special waiting bay to perform hook turns safely, as well as improved pedestrian crossing points.

Figure 5. A hook turn bay allows cyclists seeking to turn right to safely wait for a dedicated green bike lantern sequence



## 4.3 Motor Vehicles

A travel lane, of at least 2.8 metres, will be provided along Sydney Road, separated from tram and bicycle users. This will improve reliability for motorists and reduce the frustration of driving behind a tram. Dynamic, real-time signage will be provided to direct drivers to available off-street parking spaces. The speed limit will be set at 30km/h to ensure Sydney Road is safe for all road users.

### 4.3.1 Parking

#### The car will continue to be an important way for some visitors to access Sydney Road.

However, on-street parking is not the best use of space along Sydney Road. We propose the removal of all parking along Sydney Road. A large number of off-street car parking already exists along the Sydney Road corridor and should continue to provide motorists with parking. Loading, disability, and drop-off zones would be prioritised on side streets close to Sydney Road.

Opportunities may exist to alter the layouts of some side streets to accommodate some of the lost on-street parking. This should only be done in circumstances where it does not impact on the amenity of local residents or safety of other road users.

## 4.4 Greenery

To reduce the Urban Heat-Island Effect and increase the amenity of Sydney Road, we propose a significant increase in greenery along the corridor. This will be done by integrating plantings onto remaining street poles and seating. Overhead plantings will be used to provide additional shading and a sense of green enclosure. Native grasses and other hardy plants will be used that require minimal maintenance and infrastructure while providing a distinct Australian greenery along the corridor.

## 4.5 Footpaths

Maintaining existing footpath widths eliminates the need for expensive capital works while allowing separate cycling, motor vehicle, and tram lanes along the carriageway. To improve pedestrian amenity, we propose to 'declutter' the footpath space. This includes:

- Relocating rubbish bins and bicycle parking to site street bulb-outs
- Removing parking signs (which currently reduce the usable width of the footpath by ~40cm)
- Consolidating remaining signage
- Restricting the use of sandwich boards and other advertising.

Decluttering the existing footpath space will provide more space for pedestrians and provide opportunities to increase greenery and seating into the space.

## 4.6 A template for other streets

While this proposal focuses on Sydney Road, the issues it faces are not unique. Many streets in Melbourne face similar challenges as Sydney Road. While each of these streets has its own unique characteristics, our proposal could be replicated to other strip-shop activity centres along tram routes.













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