

## Kent Road, Pascoe Vale Trial Bike Lanes

#### Trial bike lanes in Pascoe vale

In June 2021, we installed trial separated bike lanes in Kent Road and Northumberland Road, Pascoe Vale. A new shared path in KW Joyce Reserve links these two bike lanes. This route is part of the "Coburg to Glenroy Bicycle Link".

#### What's happening now?

At a <u>Council Meeting in September 2021</u>, Council resolved to explore more design options for the Kent Road, Pascoe Vale Trial Bike Lane project in consultation with the community.

We have engaged an independent community engagement specialist, Max Hardy Consulting to provide a range of opportunities for the community to contribute.

Anyone with an interest in the Kent Road separated trial bike lane can get involved in the following ways:

- View a recording of an online presentation by Max Hardy Consulting and council officers on Kent Road, held on Thursday 28 October 2021.
- Providing feedback via an online survey, available for contributions from Friday 29 October, closing 10 November 2021.
- Nominating for involvement in the Community Representative Review Panel.

In addition to community engagement, Council is investigating the technical viability of six potential design options for the Kent Road trial bike lane.

#### What is this booklet?

Since installing the trial bike lanes in June 2021, we have heard feedback from our community about the lack of community engagement before the trial bike lanes were constructed and the need for transparency in Council and council officer decision making.

We have also heard our community want to have a meaningful and informed contribution in any future engagement on this project.

We have prepared this booklet to help address this feedback for the next phase of engagement.

### What information will I find?

This booklet is a summary of the Kent Road Trial Bike Lane project and the engagement process underway.

We acknowledge this booklet is just a starting point and it may not include everything you want to know. If this is the case, we would like to hear from you.

We will respond to your questions and periodically update the Frequently Asked Questions (FAQs) on the Kent Road Conversations Moreland page.

Please submit your questions via the contact information found at the QR code or on the last page of this booklet.





#### Why is bike riding important?

Melbourne is forecast to overtake Sydney to become Australia's most populous city by the 2030s. Moreland's population is expected to exceed 200,000 in the next five years and is projected to grow by over 40,000 by 2036. The way we travel will need to adapt to ensure we can continue to move around efficiently and preserve the liveability of the city.

Across all of Melbourne, including Moreland, the highest level of car use occurs during the morning and afternoon peak hours. This means at the same times of day we have the highest demand for travel, our roads are filled with private vehicles which take up most of the available road space, causing congestion for both private and public transport.

Providing active transport alternatives for people who choose not to travel by car, want to reduce their reliance on cars, or can't afford to travel by car will ensure our neighbourhoods remain liveable by easing congestion during peak hours, reducing pollution and encouraging exercise to stay healthy as part of everyday travel.

Bike riding is just one of many ways to get around that offers the benefits above.

## What has been the impact of the Victorian Covid-19 lockdown?

At the July 2020 Council meeting, Council allocated an additional \$1.68 million in the 2020/21 budget for walking and cycling trial projects in response to the COVID-19 State of Emergency in Victoria. This investment aimed to encourage as many people as possible to walk or ride a bike particularly for shorter trips to local shops, parks and amenities. This was particularly relevant as social distancing requirements would lead to a significant decrease in public transport use.

Council constructed trial bike lanes on Dawson Street, Northumberland Road, Albion Street and Kent Road to fill key gaps in our cycling network.

Since then, the ongoing impact of the lockdowns on our travel patterns across Melbourne has become more apparent. <u>Infrastructure Victoria</u> (IV) estimates that public transport use has decreased by 50% compared to before the pandemic, and private vehicle use has increased by 13%.

Without government intervention to encourage more active transport use, IV found that there will be a significant increase in the number of private vehicle commuter trips as Melbourne and Victoria reopens.

In Moreland, this would likely lead to significant congestion challenges for the movement of people and significantly compromise our sustainable transport and zero-carbon objectives.

By providing bike lanes, we are offering a genuine alternative to get around, and therefore reducing number of cars on our roads - this could benefit all.



Figure 1: Cyclist using the current Kent Road trial separated bike lane

## Why do we need separated bike lanes?

In 2020, VicHealth and Monash University surveyed over 4,000 people across 37 local government areas in Greater Melbourne and regional Victoria. In Moreland, the <u>research</u> found that 83 per cent of people are "interested in cycling but concerned".

These are people who would consider cycling as an option in some instances but are often afraid to do so if required to ride among vehicles and pedestrians.

To encourage these people to ride a bike we need to provide physical separated bike lanes.

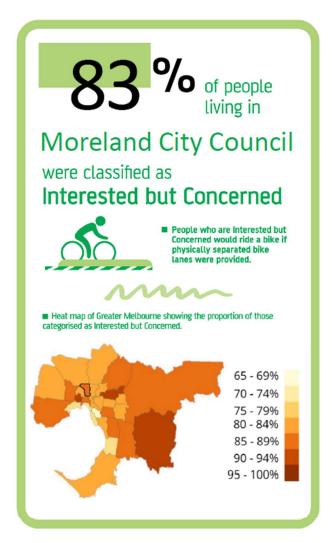


Figure 2: VicHealth and Monash University findings for Moreland.

## What effect has investment in cycling had elsewhere?

Across Melbourne and Australia, investment in separated bike lanes can encourage these people to start riding bikes.

This trend can even be seen locally in Brunswick. Bike riding investments by Council 15 to 20 years ago continue to increase cycling rates. In recent census surveys for Brunswick in 2011 and 2016, journey to work data by bike increased from 9.3 per cent to 12.1 per cent (source: Australian Bureau of Statistics, Census data, 2011 and 2016). Brunswick currently has the highest journey to work cycling rate in Victoria.

Separated bike lanes do not remove the need for cars entirely but are a step in a positive direction where more people, who are interested and able to, can choose to ride rather than drive for certain trips.

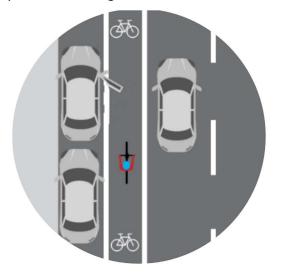
Fewer cars on the road also means less congestion for the people who need to drive.

## What are some of the on-road risks for bike riders?

Normal road conditions such as the examples shown below often put bike riders in higher risk environments, such as car-dooring, being 'squeezed' by a passing vehicle in a narrow road space or being 'cut-off' by a turning vehicle.

Bike riders with low experience, such as children, are particularly at risk in on-road environments as they are not familiar with road rules.

#### Example of car dooring



#### Example of being 'cut off' by a turning vehicle



Figure 3: Conceptual diagrams of some of the higher risk situations for bike riders on everyday streets (not to scale).

## What are separated bike lanes and why are they safer?

A separated bike lane provides dedicated road space to bike riders. Also known as protected bike lanes, the separation is achieved by having a physical barrier between the bike lane and all other road users.

Bike riders are vulnerable road users. As an example, the impact force of a vehicle colliding with a bike rider at 30 km/h is enough to be fatal, with the risk of injury or death rapidly increasing with higher speeds. So even on 40 km/h speed roads, bike riders are at a high risk of serious injury including death if struck by a vehicle.

Shared paths, where bike riders and pedestrians share a dedicated off-road path, are typically not the preferred design intervention in Moreland. One of the most common complaints Council receives from bike riders and pedestrians is the conflict that occurs on shared paths. Bike riders tend to travel at much faster speeds than pedestrians, making it an uncomfortable experience to walk on a path. Pedestrians are also more likely to stop suddenly or wander across a path which can increase risk of collision with cyclists.

Separated bike lanes are a necessary treatment to help address bike safety issues in the area and to encourage these more vulnerable users to feel safe to ride a bike.

# What are the design considerations for separated bike lanes?

Like all types of transport, there are operating requirements to be met for bike riding infrastructure.

Bike riding operational requirements have been developed and used by Austroads and other agencies for many years and are regularly reviewed.

<u>Austroads</u> is the peak organisation of Australasian road transport and traffic agencies. This includes membership from the Victorian Government's Department of Transport (DoT) and the Australian Local Government Association.

#### **Physical separation**

Separation from moving and parked vehicles is an important consideration for vulnerable bike riders when considering 'how safe' it is to ride a bike.

Painted lanes are no longer the preferred design for on-street bike paths in Moreland as they do not provide protected road space for bike riders.

Table 1: Physical barrier requirements. Source: City of Melbourne (2019), <u>Bike Lane Design Guidelines</u>

Road environment	Design requirements	
Adjacent to on-street parking*	0.8m to 1.0m raised kerb barrier	0.8m to 1.0m painted marking with temporary traffic bollard
Adjacent to vehicle lane (no on-street parking)	0.4m to 1.0m raised kerb barrier	0.4m to 1.0m painted marking with temporary traffic bollard

<sup>\*</sup>A wider barrier is required adjacent to on-street parking to be wide enough to cater for a car door to open without intruding into the bike lane.

#### Bike lane width

Austroads (2017), <u>Guide to road design part 6A:</u>
Paths for Walking and Cycling provides guidance for the design standards for separated bike lanes.

The minimum desirable standard for a bike lane is 1.5m. This is for bike lanes where cyclists travel in one direction. This considers the actual bike dimensions, the movement of a bike from side to side as the rider pedals and steers and safe separation from barriers, see figure 2.

Bi-directional cycle lanes are where cyclists can travel in both directions. These lanes can offer some design efficiencies compared to single direction lanes due to clearances from walls/fences. The minimum desirable width of a bi-direction bike lane is 2.5m.

On Kent Road, alternative designs show 2.6m bidirectional bike lanes to account for the kerb and gutters.

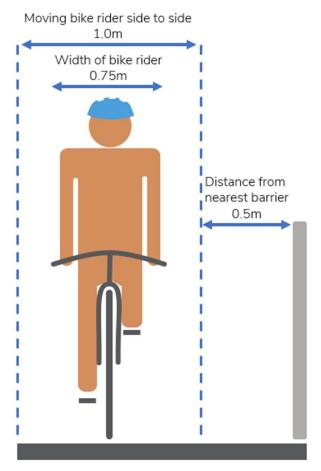


Figure 4: Bike lane design operating standards width for cyclist travelling in one direction.

## What are the design considerations for vehicle lanes?

Vehicle lane widths vary throughout Moreland.

Victorian road rules specify minimum 3 metre clearance between obstacles (such as between parked cars)

It is common practice for local streets to be narrow and not allow for continuous two-way traffic flow. This helps manage speed and make the environment safer for vulnerable users.

Design considerations for moving vehicles on Local Streets such as Kent Road are as follows:

Table 2: Physical barrier requirements. Source: City of Melbourne (2019), <u>Bike Lane Design Guidelines</u>

Road	Vehicle lane widths	
environment	Minimum	Maximum
One-way flow	3.0m	3.5m
Two-way flow	2.8m each way (low speed and low volume)	3.5m each way
Pull-in/passing spots are needed	3.0m minimum	5.6m (road travel lanes greater than 5.6m do not require pull- in/passing spots

## How is road safety considered for all users?

Improving road safety for all users is the highest priority when undertaking works within the road reserve. Safety is considered in terms of level of risk.

Measured risk is how risk is calculated and assessed. Perceived risk is how a person reacts to and feels in different conditions.

It is important to highlight the difference between measured risk and perceived risk and note that both are important especially when the aim is to encourage people to use different modes of transport.

#### Measured risk

Measured risk is a technical methodology that calculates the risk level by undertaking a Road Safety Audit (RSA).

An RSA is always completed by a qualified and accredited RSA team, and can be done at any stage of the project.

#### Perceived risk

The perception of risk is how a person feels when using the road network. People's perceptions of risk vary, and it is important to understand the range of differing views that people have when they are a pedestrian, bike rider or in a vehicle.

Risk perception is important to analyse as it affects how people behave.

While driving, an increased perception of risk (feeling something is unsafe or feeling cautious) heightens the driver's awareness and results in driving behaviour to match the conditions. For example, slowing down to give way to oncoming vehicles or to look out for pedestrians. Over confidence or complacency are factors that can result in people making mistakes that cause a crash.

Perception of risk can stop people choosing to walk or ride a bicycle. Vulnerable road users (pedestrians and cyclists) are at a greater risk of being injured if involved in a crash, so are unlikely to choose to walk or ride if they feel unsafe.

#### Where is Kent Road?

Kent Road is in Pascoe Vale. The trial separated bike lanes are installed on Kent Road between Cumberland Road and Cornwall Road, bordering the northern side of Cole Reserve.

In addition to local residents, this part of Kent Road is accessed by a church and the PVH Medical practice.

## What is the Coburg to Glenroy bike route?

The Coburg to Glenroy Bike route is envisioned to be a connected, safe and efficient route suitable for bike riders of all confidence levels.

The Coburg to Glenroy Bicycle Link was first identified as part of Council's Bicycle Plan in 2009. This included Kent Road in Pascoe Vale. Following the adoption of MITS (2019), this bike plan was replaced by a 10-year capital works program that is reviewed and adopted by Council annually.

In addition to providing a high-quality link between the two-activity centre, the Coburg to Glenroy Bicycle Link connects many major and local destinations including:

- Local shopping centres
- Pascoe Vale Girls Secondary College
- Open spaces

Planning for the Coburg to Glenroy bike link is occurring in stages. As shown in Figure 6, key links along this route that have already been constructed, as shown by the solid green lines.

There is existing infrastructure as part of this link on Rhodes Parade

The solid orange line represented the path through KW Joyce reserve and the current trials on Northumberland Road and Kent Road in Pascoe Vale.



Figure 5: Cyclist using the current Kent Road trial separated bike lane

## Completing the Coburg to Glenroy bike route

The Victorian Government is investing \$4.48 million to provide a cycle link east of Cumberland Road via Kent Road and Derby Street to OHea Street This link is shown in the blue dashed lines in Figure 6.

Council has provisionally endorsed the design as an interim solution which includes a mix of traffic cushions, speed limit reductions, painted bike lanes and speed humps.

Council will undertake further technical investigations to upgrade this infrastructure periodically in line with the refresh of our capital works program.

Options for investigation could include standard or bidirectional separated bike lanes on Kent Road and Derby Street, which may require some loss of parking. This will be subject to separate community engagement.

The dashed green line is a potential connection to extend the current OHea Street bike path to the cycle link being delivered by the Victorian Government.

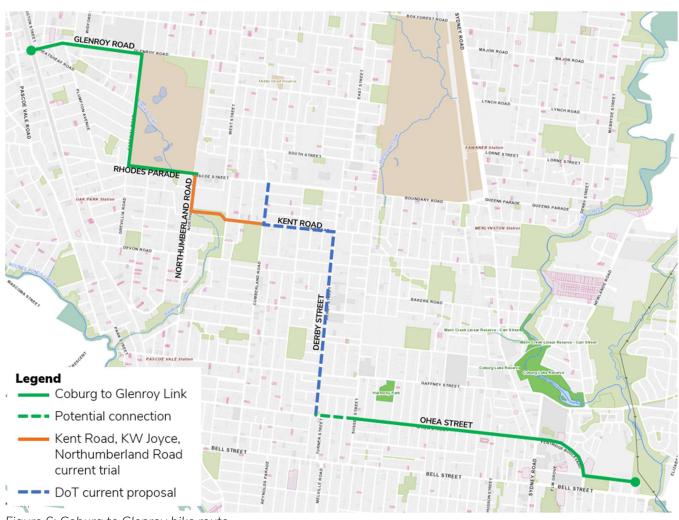


Figure 6: Coburg to Glenroy bike route

### Alternative designs for Kent Road separated bike lane

At a <u>Council Meeting in September 2021</u>, Council resolved to explore more design options for the Kent Road, Pascoe Vale Trial Bike Lane project in consultation with the community.

Officers prepared alternative designs for Kent Road that were informed by the design considerations on earlier pages.

The alternative designs are shown on pages 10 to 15.

#### **Evaluation of alternative options**

A range of criteria has been identified including community feedback in July 2021; alignment with Council policy; meeting design standards or having practical implementation and operational considerations.

Since September, the initial evaluation of the alternative designs endorsed by council for community engagement consider new technical findings, design refinement and additional options proposed by council for consideration.

The evaluation considers criteria for:

#### Cycling

- Perceived safety
- Level of accessibility
- Quality of infrastructure
- Direction of travel and integration at intersections

#### **Vehicles**

- Perceived safety
- Traffic flow
- Sight lines to oncoming cyclists
- On street parking

#### **Pedestrian**

- Perceived safety
- Pedestrian network impact

#### Implementation and operational criteria

- Suitable for trial
- Time to construct
- External approvals required
- Tree removal
- Intersection design
- Street waste collection

Each design option was reviewed against the criteria and allocated a ranking as one of the following:

- High Achieves a positive outcome from the perspective of the user group or requires minimal change to implement
- Moderate Achieves a compromised outcome from the perspective of the user group or requires some change
- Poor Achieves a negative outcome from the perspective of the user group or requires significant change
- Very poor Achieves an unsafe outcome from the perspective of the user group or requires significant and impractical change to implement. Unsafe outcomes are not supported by council officers.

# Engagement on the six potential design options

Council is now currently engaging on six potential options, presented on pages 8 to 13. We are seeking to understand:

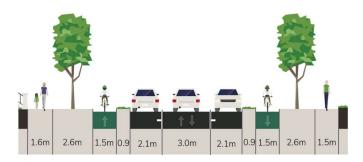
- What conditions and or criteria (in addition to technical requirements) should be considered to create a functional and safe road design for Kent Road, that addresses the needs of residents, pedestrians, visitors, motorists, cyclists, and other users?
- 2. Considering the criteria, how supportive are you of each of the options identified by Council for Kent Road?
- 3. Are there any changes that would make you more supportive of each of the options identified?



# Option 1 – current trial design minimum width separated bike lanes

The current design includes 1.5m separated bike lanes on both sides of the street with raised physical barriers. There is parking on both sides of the street.

On balance, this design is considered by Council to be a well-performing option across the evaluation criteria.



#### Impacts to future bike lane connections

Separated bike lanes on each side of Kent Road allow for the greatest flexibility for Council to design the next stage in the network further along Kent Road and east of the Cumberland Road roundabout (see page 7 and 8).

In this option, cyclists can merge in and out of the onroad network as necessary without complicated movements along footpaths and crossings.

Cycling		
Cyclist perceived	<b>High</b> : Physical separation from both cars and	
safety	pedestrians	
Level of cycling	High: Caters for "interested but concerned	
accessibility	about cycling safety" (see page 3)	
Quality of cycling	High: Achieves bike lane and physical	
infrastructure	separator design standards	
Direction of travel	<b>High</b> : Cyclist travel with expected traffic flow,	
and integration at	integrate with expected traffic flow at	
intersections	intersections	
Vehicles		
Vehicular perceived	<b>Poor</b> : Narrow lane widths and give-way	
safety	locations require vehicles to slow down	
Continuous traffic	<b>Poor</b> : Vehicles required to give-way and	
flow	negotiate between parked cars	
Vehicle sight lines to	<b>High</b> : Cyclists on inside of parked vehicles	
on-coming cyclists		
On street parking	<b>Moderate</b> : 5 removed for bike lane allocation. 7	
	removed for give-way spots	
Pedestrians		
Pedestrian perceived	, , , , , , , , , , , , , , , , , , , ,	
safety	Pedestrians exiting parked vehicles required to	
	cross bike lane on both sides of street	
Pedestrian network	Moderate: Raised barriers restrict mid-block	
impact	crossing. Refuge island at Cornwall Road	
	reduces crossing distances for pedestrians.	
Implementation and o		
Temporary or	High: No change	
permanent		
infrastructure		
Time to construct	High: No change	
External approvals	<b>High</b> : Local road, Department of Transport	
required	approval not required	
Tree removal and	High: No trees removed	
urban heat island		
Intersection design	<b>High</b> : All modes integrate with traffic flow at	
	intersections. Safe alternatives for less	
	confident bike riders before entering on-street	
_	network	
Street waste	Poor: Bins required to be placed on physical	
collection	separators. Under review	



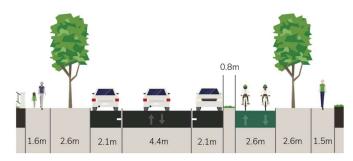
### Option 2 – Minimum width bidirectional separated bike lane

Option 2 is a bi-directional, 2.6m bike lane on the southern side of Kent Road.

This option involves the removal of northern barrier and a reduction of southern barrier to 0.8m.

An additional 1.4m is reallocated to the driving lane, making this slightly narrower than the current vehicle carriage way on Kent Road east of Cumberland Road (8.6 metres compared to 9 metres).

The pedestrian refuge island at Cornwall Road will need to be removed for this option.



#### Impacts to future bike lane connections

It is possible to construct a bi-directional bike lane on the southern side of Kent Road.

When Council considers plans to complete the Coburg to Glenroy Bike route (see page 7 and 8) a bidirectional lane design on Kent Road will limit the design options along Kent Road to the east of Cumberland Road.

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Vehicular perceived safety  Continuous traffic flow  Continuous traffic flow  Continuous traffic flow  Continuous traffic flow  Moderate Vehicles required to give way and negotiate between parked cars. Vehicle carriageway wider than current design.  Vehicle sight lines to on-coming cyclists  On street parking  Pedestrians  Pedestrian  Pedestrian  Perceived safety  Poor Pedestrians and cyclists have potential conflict at intersection of Cumberland Road (see page 15). Pedestrians exiting vehicles required to cross bike lanes on southern side  Pedestrian  network impact  Poor Raised barriers restrict mid-block crossing. Removal of refuge island at Cornwall Road = no safe resting spot for pedestrians.  Implementation and operation  Temporary or permanent infrastructure  Time to construct  External approvals required  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line		vehicles at Cumberland road roundabout		
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Vehicle sight lines to on-coming cyclists  On street parking  Pedestrians  Pedestrian perceived safety  Pedestrian perceived safety  Pedestrian perceived safety  Poor Pedestrians and cyclists have potential conflict at intersection of Cumberland Road (see page 15). Pedestrians exiting vehicles required to cross bike lanes on southern side  Pedestrian petwork impact  Poor Raised barriers restrict mid-block crossing. Removal of refuge island at Cornwall Road = no safe resting spot for pedestrians.  Implementation and operation  Temporary or permanent infrastructure  Time to construct  External approvals required  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Moderate Bins to be placed on hatched line	flow	-		
to on-coming cyclists  On street parking  Pedestrians  Pedestrian perceived safety  Poor Raised barriers restrict mid-block crossing. Removal of refuge island at Cornwall Road = no safe resting spot for pedestrians.  Implementation and operation  Temporary or permanent required at intersections  Infrastructure  Time to construct  Poor Significant, detailed plans and scope  External approvals required  Cumberland Road intersection  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Moderate Bins to be placed on hatched line				
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permanent infrastructure  Time to construct  External approvals required  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Poor Significant, detailed plans and scope  Poor DoT approval and works required at Cumberland Road intersection  High No trees removed  Live Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Moderate Bins to be placed on hatched line	•			
infrastructure  Time to construct  Poor Significant, detailed plans and scope  External approvals required  Poor DoT approval and works required at Cumberland Road intersection  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line				
Time to construct  External approvals required  Poor DoT approval and works required at Cumberland Road intersection  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Poor DoT approval and works required at Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.	1.	required at intersections		
External approvals required  Poor DoT approval and works required at Cumberland Road intersection  High No trees removed urban heat island  Intersection design Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line		Poor Significant detailed plans and scope		
required Cumberland Road intersection  Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line				
Tree removal and urban heat island  Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line				
urban heat island Intersection design Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line	<u>'</u>			
Intersection design  Poor Cornwall Rd: KW Joyce shared path realignment required. Cumberland Rd: Significant works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line		riigir to dees femoved		
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works to redesign roundabout. No safe point to re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line	croccaon acoign			
re-enter on-street network, see page 15.  Street waste  Moderate Bins to be placed on hatched line				
collection marking adjacent to driveways.	Street waste			



# Option 3 – Change kerb alignment to widen road space

Option 3 is a 2.6m bi-directional cycle lane and 1.5m footpath on south side. The physical barrier on the northern side is removed and the southern barrier is reduced to 0.8m.

Since September, Council identified drainage constraints with widening the kerb to create a level surface between the footpath and bike lanes (as shown in the cross section below).

Council proposes to realign the southern kerb closer to the footpath. This will mean bins are to be places on the hatched line marking rather than kerbs as proposed in September.



#### Impacts to future bike lane connections

It is possible to construct a bi-directional bike lane on the southern side of Kent Road.

When Council considers plans to complete the Coburg to Glenroy Bike route (see page 7 and 8) a bidirectional lane design on Kent Road will limit the design options along Kent Road to the east of Cumberland Road.

Cycling	
Cyclist perceived	<b>High</b> Physical separation from both cars and
safety	pedestrians.
Level of cycling	<b>High</b> Caters for "interested but concerned about
accessibility	cycling safety" (see page 3)
Quality of cycling	<b>High</b> Achieves bike lane and physical separator
infrastructure	design standards
Direction of travel	<b>Poor</b> Eastbound cyclists do not travel in expected
and integration at	direction, can conflict with pedestrians and
intersections	vehicles at Cumberland road roundabout
Vehicles	
Vehicular	Moderate Narrow lane widths may require
perceived safety	vehicles to slow down
Continuous traffic	<b>High</b> Continuous flow of vehicles facilitated at
flow	slow speed
Vehicle sight lines	<b>High</b> Cyclists on inside of parked vehicles
to on-coming	
cyclists	
On street parking	<b>High</b> Return of 7 on-street parking bays that
	were removed for give-way spots
Pedestrians	
Pedestrian	Poor Pedestrians and cyclists have potential
perceived safety	conflict at intersections. Pedestrians exiting cars
	required to cross bike lanes on southern side
Pedestrian	<b>Poor</b> Removal of refuge island at Cornwall Road
network impact	= no safe resting spot for pedestrians.
Implementation and	l operation
Temporary or	<b>Very poor</b> Not suitable for trial. Significant and
permanent	permanent infrastructure changes required along
infrastructure	street
Time to construct	<b>Very poor</b> Permanent works required exceeding trial period
External approvals	Poor DoT approval and works required at
required	Cumberland Road intersection. Approval required
required	from utility provider
Tree removal and	<b>Poor</b> Potential trees removed south side.
urban heat island	
Intersection design	Poor Cornwall Rd: KW Joyce shared path
	realignment required. Cumberland Rd: Significant
	works to redesign roundabout. No safe point to
	re-enter on-street network, see page 15.
Street waste	Moderate Bins to be placed on hatched line
collection	marking adjacent to driveways.



# Option 4 – Minimum width separated bike lanes with traffic bollards

Option 4 is the removal of the raised concrete barriers and replacing these with traffic bollards. The traffic bollards and line marking are 0.8m wide.

0.2m is given back to vehicle carriageway. It is expected the traffic bollards will help improve pedestrian access across the street.



#### Impacts to future bike lane connections

Separated bike lanes on each side of Kent Road allow for the greatest flexibility for Council to design the next stage in the network further along Kent Road and east of the Cumberland Road roundabout (see page 7 and 8).

In this option, cyclists can merge in and out of the onroad network as necessary without complicated movements along footpaths and crossings.

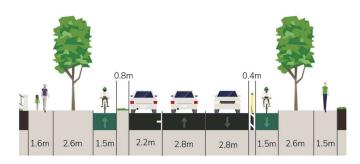
Cycling			
Cyclist perceived	<b>High</b> Physical separation from both cars and		
safety	pedestrians		
Level of cycling	High Caters for "interested but concerned about		
accessibility	cycling safety" (see page 3)		
Quality of cycling	<b>High</b> Achieves bike lane and physical separator		
infrastructure	design standards		
Direction of travel	<b>High</b> Cyclist travel with expected traffic flow,		
and integration at	integrate with expected traffic flow at		
intersections	intersections		
Vehicles			
Vehicular	<b>Poor</b> Narrow lane widths and give-way locations		
perceived safety	require vehicles to slow down		
Continuous traffic	Poor Vehicles required to yield and negotiate		
flow	between parked cars		
Vehicle sight lines	<b>High</b> Cyclists on inside of parked vehicles		
to on-coming			
cyclists			
On Street parking	Moderate No further change to option 1.		
Pedestrians			
Pedestrian	Moderate Pedestrians and cyclists separated.		
perceived safety	Pedestrians exiting vehicles required to cross		
	bike lane on both sides of street		
Pedestrian	<b>High</b> Temporary traffic bollards allow easier mid-		
network impact	block crossing. Refuge island at Cornwall Road		
,	reduces crossing distances for pedestrians.		
Implementation and			
Temporary or	High Limited, temporary works required		
permanent	, , , , ,		
infrastructure			
Time to construct	Moderate Limited, temporary works required		
External approvals	<b>High</b> Local road, Department of Transport		
required	approval not required		
Tree removal and	High No trees removed		
urban heat island			
Intersection design	<b>High</b> All modes integrate with traffic flow at		
9	intersections. Safe alternatives for less confident		
	bike riders before entering on-street network		
C+	Moderate Bins to be placed on hatched line		
Street waste	marking adjacent to driveways or between traffic		
collection	bollards		



# Option 5 – Minimum width separated bike lanes; parking removed on southern side

Option 5 requires removing all parking on the southern side of the street. The northern physical separator will be reduced to 0.8m and the southern physical separator will be reduced to 0.4m.

0.6m will be given back to the vehicle lanes, which, with the removal of parking will allow for two-way vehicle traffic.



#### Impacts to future bike lane connections

Separated bike lanes on each side of Kent Road allow for the greatest flexibility for Council to design the next stage in the network further along Kent Road and east of the Cumberland Road roundabout (see page 7 and 8).

In this option, cyclists can merge in and out of the onroad network as necessary without complicated movements along footpaths and crossings.

Cycling			
Cyclist perceived	<b>High</b> Physical separation from both cars and		
safety	pedestrians		
Level of cycling	<b>High</b> Caters for "interested but concerned about		
accessibility	cycling safety" (see page 3)		
Quality of cycling	<b>High</b> Achieves bike lane and physical separator		
infrastructure	design standards		
Direction of travel	<b>High</b> Cyclist travel with expected traffic flow,		
and integration at	integrate with expected traffic flow at		
intersections	intersections		
Vehicles			
Vehicular	Moderate Narrow lane widths may require		
perceived safety	vehicles to slow down		
Continuous traffic flow	<b>High</b> Continuous flow of vehicles facilitated at slow speed		
Vehicle sight lines	High Cyclists on inside of parked vehicles on		
to on-coming	north side and clearly visible on south side		
cyclists			
On Street parking	<b>Very poor</b> Removal of additional parking spaces		
	on southern side (approx. 40 on-street spaces)		
Pedestrians			
Pedestrian	<b>High</b> Pedestrians and cyclists separated.		
perceived safety	Pedestrians exiting vehicles required to cross		
	bike lane on northern side		
Pedestrian	<b>High</b> Temporary traffic bollards allow easier mid-		
Pedestrian network impact	<b>High</b> Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road		
network impact	<b>High</b> Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.		
network impact Implementation and	High Temporary traffic bollards allow easier mid- block crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.		
network impact Implementation and Temporary or	<b>High</b> Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.		
network impact Implementation and Temporary or permanent	High Temporary traffic bollards allow easier mid- block crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.		
network impact Implementation and Temporary or permanent infrastructure	High Temporary traffic bollards allow easier mid- block crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance. l operation High Limited, temporary works required		
network impact Implementation and Temporary or permanent infrastructure Time to construct	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required		
Implementation and Temporary or permanent infrastructure Time to construct External approvals	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport		
network impact  Implementation and Temporary or permanent infrastructure Time to construct External approvals required	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and urban heat island	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required  High No trees removed		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required  High No trees removed  High All modes integrate with traffic flow at		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and urban heat island	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required  High No trees removed  High All modes integrate with traffic flow at intersections. Safe alternatives for less confident		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and urban heat island Intersection design	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required  High No trees removed  High All modes integrate with traffic flow at intersections. Safe alternatives for less confident bike riders before entering on-street network		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and urban heat island Intersection design Street waste	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required  High No trees removed  High All modes integrate with traffic flow at intersections. Safe alternatives for less confident		
Implementation and Temporary or permanent infrastructure Time to construct External approvals required Tree removal and urban heat island Intersection design	High Temporary traffic bollards allow easier midblock crossing. Refuge island at Cornwall Road reduces pedestrians crossing distance.  I operation  High Limited, temporary works required  Moderate Limited, temporary works required  High Local road, Department of Transport approval not required  High No trees removed  High All modes integrate with traffic flow at intersections. Safe alternatives for less confident bike riders before entering on-street network  Moderate Bins to be placed on hatched line		



### Option 6 – 3 metre shared path; Kent Road as before trial

Option 6 requires significant construction works to create a 3-metre-wide shared path that replaces the current 1.5m footpath on southern side of street.

Utility poles will be relocated and trees on the southern side of the street would be removed.

This option is subject to approval from utility providers.



#### Impacts to future bike lane connections

When Council considers plans to complete the Coburg to Glenroy Bike route (see page 7 and 8) a bidirectional lane design on Kent Road will limit the design options along Kent Road to the east of Cumberland Road.

Cyclist perceived safety  Poor Cyclists conflict with pedestrians on shapeth  Poor Cyclists and pedestrians not separated.  Poor Cyclists and pedestrians not separated.	ared
,	
Level of cycling Poor Cyclists and pedestrians not separated	
	l.
accessibility	
Quality of cycling Poor shared path with pedestrians	
infrastructure	
Direction of travel Poor Eastbound cyclists do not travel in exp	ected
and integration at direction, can conflict with pedestrians and	
intersections vehicles at the Cumberland Road roundabout	ut
Vehicles	
Vehicular High Wider lane widths allow vehicles to tra	avel
perceived safety safely under normal conditions	
Continuous traffic High Continuous flow of vehicles facilitated	
flow	
Vehicle sight lines  Poor Potential conflict with driveways on	
to on-coming southern side. Cyclists on inside of parked	
cyclists vehicles.	
On Street parking High Return of all on-street parking as per p	rior
to June 2021.	
Pedestrians	
Pedestrians conflict with cyclists on sh	ared
perceived safety path.	
Pedestrians conflict with cyclists on sh	ared
network impact path.	
Implementation and operation	
Temporary or Very poor Not suitable for trial. Significant a	nd
permanent infrastructure changes required a	along
infrastructure street	
Time to construct  Very poor Permanent works required exceed	ding
trial period	
External approvals  Poor Department of Transport approval and	
required works required at Cumberland Road Interse	ction.
Approval required from utility provider	
Tree removal and Poor Potential trees removed south side	
urban heat island	
Intersection design Poor Cornwall Rd: KW Joyce shared path	
realignment required. Cumberland Rd: Signi	
works to redesign roundabout. No safe poin	t to
re-enter on-street network, see page 15.	
Street waste High Bins placed on kerb.	
collection	



#### **Cumberland Road Roundabout**

Cumberland Road is a state arterial road. This means that approval for any works related to this road or its roundabout with Kent Road require approval and detailed design consideration with the Victorian Government's Department of Transport (DoT).

For all single lane design options 1, 4 and 5, council would consider the installation of treatments such as small speed bumps known as "speed cushions" on the approaches to the roundabout as we do for other roundabouts to make them safer for cyclists in normal situations.

For alternative design options 2, 3 and 6, cyclists are on the south side of the road. When they arrive at the roundabout, the eastbound cyclists are on the opposite side of the road in order to travel safely through the roundabout.

Figure 7 below shows what how council could redesign the footpaths around the roundabout to help cyclists get back onto the correct side of the road.

The design would need to accommodate cyclists exiting the road, enough space for both pedestrians and cyclists to cross Cumberland Road and maintain bus movements through the roundabout.

Tree protection and porous paving are also key considerations of the design in Cole Reserve.



Figure 7: Kent Road and Cumberland Road roundabout

#### **Next steps**

Following the recent community walks held in July and August 2021 we have developed an engagement plan to provide a range of opportunities for targeted groups and the community to contribute to what should happen to the Kent Road bike lanes.

## View a recording of the webinar held on 28 October

We held an hour-long discussion facilitated by an independent consultant where we presented on the project background, rationale, the 6 potential design options and the new engagement program.

#### Share your thoughts in a community survey

We invite you to answer a survey on the Kent Road separated bike lane project available from 29 October to 10 November at the website linked below.

The survey will be used to identify broader community views on the project as it currently stands and considerations on the potential design options.

## Register your interest for the Community Representative Review Panel

We invite you to register your interest to participate in a Community Representative Review Panel.

The panel will meet on Sunday 14 November and Sunday 21 November.

Selection for the panel will be made by the independent engagement specialist to ensure the panel appropriately represents the full range of opinions associated with this project.

Community members selected for the panel will be tasked with answering our three engagement questions through an open, constructive and respectful discussion. The Independent engagement specialist will facilitate input and conversation from across the panel, and council staff will be available to answer technical and strategic questions.

# What happens after the engagement has finished?

Council will receive a report in February 2022 on the Kent Road Trial Bike Lanes. The report will consider the technical viability, research and data analysis and the outcomes of the community engagement to inform a Council decision on next steps for the Kent Road trial. Council may decide to continue the trial as is, continue the trial with alterations, or implement a permanent solution.

In doing so, Council will consider and respond to the Representative Community Review Panel's recommendations and findings from the broader community engagement activities, including reasons for their decision, in early 2022.

#### To find out more:

This booklet is a summary of information to date related to the Kent Road Trial Bike Lane project and the engagement process underway.

If you would like further information on the project or the engagement process underway, please:

#### Visit our website:

conversations.moreland.vic.gov.au/transport-projects/kent-road-trial

#### **Email**

covidtransport@moreland.vic.gov.au

Call us 9240 1111

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