INFRASTRUCTURE VICTORIA

GOOD MOVE

FIXING TRANSPORT CONGESTION

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AGENDA

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03 What our research shows
- New modelling
- International case studies
- Community opinion

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01

INTRODUCTION

WHAT IS TRANSPORT NETWORK PRICING?

- Comprehensive, network wide change to the pricing of roads, public transport and parking is required to get the most out of Victoria's transport system
- A shift away from traditional fixed upfront charges (like registration and uniform fares) – towards flexible charging based on time of day, mode and location
- Prices are set to influence how, when and where people use the transport system
- IV has identified a number of options for the Victorian Government to consider ahead of long-term change.

WHAT'S NEW ABOUT OUR WORK

- We believe the best approach to Victoria's transport pressures is to integrate roads, public transport and parking through a single transport network pricing solution
- Strong Victorian focus of work – making better use of our existing and currently planned infrastructure
- We present new transport modelling results demonstrating illustrative scenarios
- Community consultation and a focus on what needs to be done to make transport network pricing socially acceptable

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OUR TRANSPORT NETWORK IS UNDER PRESSURE

THREE BIG PROBLEMS THAT ARE GETTING WORSE

- Roads and public transport problems are likely to get worse as Victoria and Melbourne continue to grow rapidly.

- **Problem 1:** Longer and more variable travel times due to congestion and crowding
- **Problem 2:** Traditional solutions are not enough
- **Problem 3:** The current system doesn’t provide incentives and isn't fair

IF WE DON'T CHANGE…

Congestion will increase, with an extra 3.5 million trips being made every day across the city's roads and public transport networks **by 2030.**

Congestion and travel time variability on key freight routes around Melbourne will make it **more expensive for businesses to move goods to customers, suppliers and export gateways**. By 2046, around **one third of all freight** transport in Victoria is expected to **occur in congested conditions.**

Train, tram and bus trips will grow by 76%, which means 878,000 extra public transport trips each day. Despite this, **Melbourne will still be a car-dominated city.** More than **70% of trips in 2030 will be by car.**

The proportion of Melburnians **living within 30 minutes of their place of work will continue to decline**, as increasing congestion makes it **harder to access jobs and services** across the city and **increases travel time variability.**

The cost of congestion, including time, operating costs and extra pollution, will escalate to **$10.2 billion in 2030 – up from $4.6 billion in 2015**. On average, congestion is expected to **cost Melburnians an extra $1,700** per year by 2030.

In some city areas, amenity and livability will decline due to **congestion on arterial roads or truck traffic through local streets**, making these areas **less attractive to live or invest in.**

Sources: Infrastructure Victoria (2016, 2018)

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WHAT OUR RESEARCH SHOWS

THE ILLUSTRATIVE SCENARIO

- We have **removed** all existing transport charges:
  - current myki fares
  - registration
  - stamp duty
  - compulsory TAC
  - fuel excise (although this requires some Federal coordination)
- **These prices are illustrative only.** We have presented two examples of how pricing could work – base TNP, and TNP with discounts which includes safety net measures for vulnerable Victorians.

TRANSPORT NETWORK PRICING EXAMPLES

TNP scenario

- *Public transport*
  - Each mode has different price
  - Flagfall + per kilometre charge (with peak pricing)
  - Station parking charged based on two zones
- *Cars*
  - Distance-based charge
  - Additional cordon charge during peak

This scenario is revenue neutral

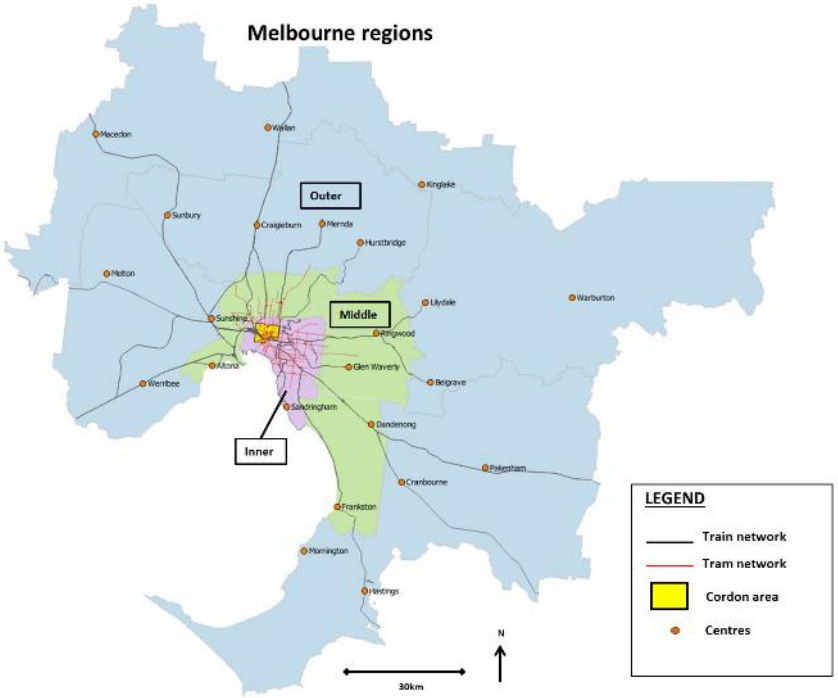
TNP with discounts scenario

- *Follows same TNP structure, with additional equity measures:*
  - Quantity discounting – discount applied to per-kilometre charge for total expenditure > $10
  - Cap on daily spending for concession holders of $5
  - 20 free travel days a year per person (for all Victorians)
  - All discounts apply to both public transport and cars

This scenario is not revenue neutral

NEW TRANSPORT PRICES OF OUR ILLUSTRATIVE SCENARIOS

Mode/service	Price
Cars	• All day: $0.155 per kilometre • Additional AM & PM peak cordon charge: $1.00 per kilometre (within the cordon)
Trains	• Peak: $1.70 flagfall and $0.09 per kilometre • Off-peak: $1.50 flagfall and $0.07 per kilometre
Trams	• Peak: $0.90 flagfall and $0.06 per kilometre • Off-peak: $0.70 flagfall and $0.04 per kilometre
Buses	• Peak: $0.50 flagfall and $0.06 per kilometre • Off-peak: $0.30 flagfall and $0.04 per kilometre
Train station and Doncaster Park-and-Ride parking charges	• Zone 1 stations: $3.00 flagfall • Zone 2 stations: $1.00 flagfall

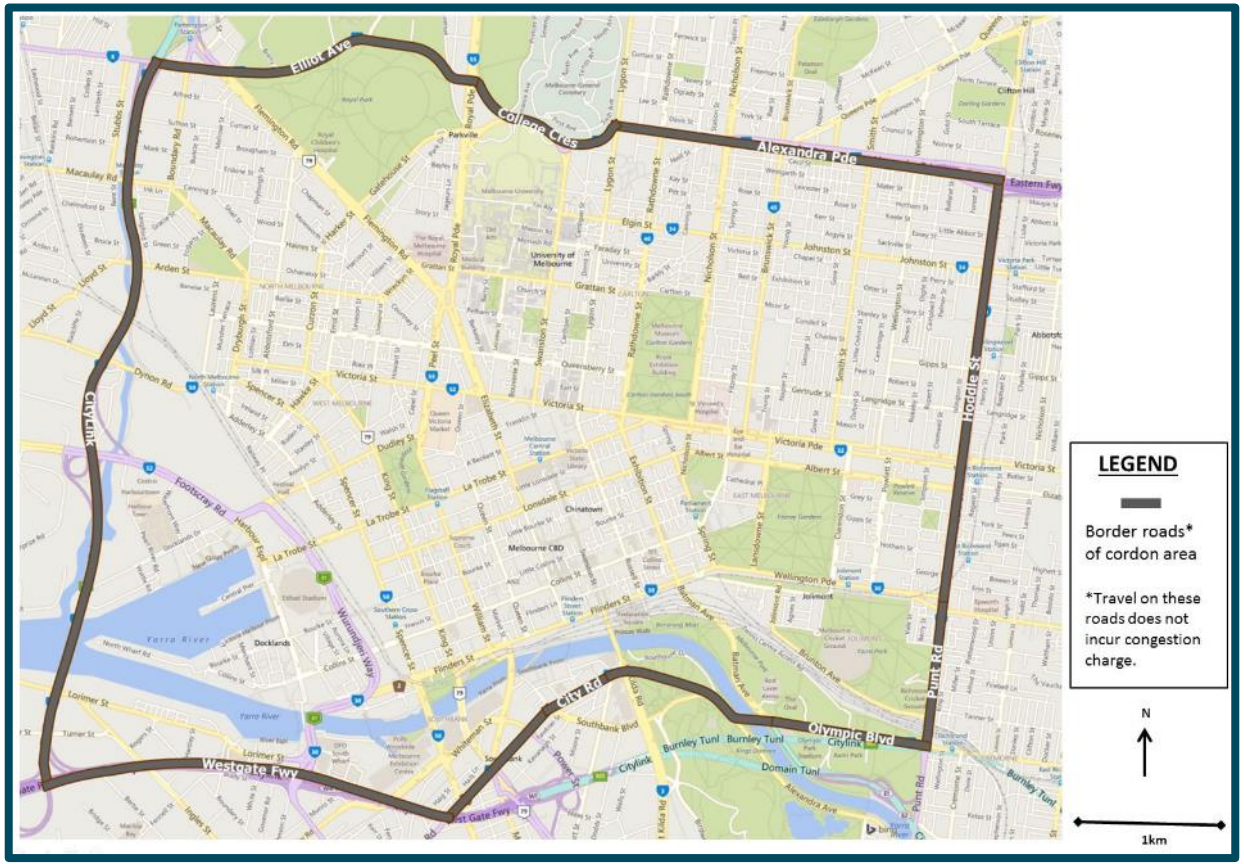


Note: Distance-based pricing applies across the entire network for all modes.

CORDON AREA

Inner Melbourne cordon, as modelled.

Cars are charged an additional $1.00/km travelled within the cordon.



IF WE ARE WILLING TO MAKE A CHANGE…

Under transport network pricing with discounts –

up to 85% of people pay less

Up to 85% of Victorians better off – most Victorians will be paying less than they do today for transport

Majority of users will experience

lower costs

While some travellers who travel long distance from Outer Melbourne might pay more, they are from the high-income bracket – the majority of middle- and low-income experience cheaper transport costs

Removing 168,000 trips a day

Up to 168,000 car trips taken off Victorian roads every day – reducing pressure on the road network

Over 40% of the original drivers stop driving into the inner cordon – shifting to public transport

Almost 110,000 new bus boardings

Almost 110,000 people shift to buses – influenced by the fact that buses are no the cheapest form of public transport

up to 25% speed increase

Up to 25% speed increase – within the inner Melbourne cordon

8% reduction of time in peak congestion

Around 8% reduction of time Victorians spend in congestion in our busiest peak periods

INTERNATIONAL EXPERIENCE

- Many cities around the world have implemented various forms of transport pricing and experienced:
  - Reduced congestion
  - Improved average car speeds
  - Decreased emissions
- Successful reform requires increased investment in public transport services

Scheme	Main features
Road usage charges implemented	
Singapore Electronic Road Pricing	Major roads tolled to achieve congestion targets Tolls regularly revised to match outcomes to targets
London Congestion Charge	Area charge for central London Applies weekdays during the day (a single charge)
Stockholm Congestion Tax	Cordon charge for central Stockholm Applies during the day (different charges at different times)
Milan Area C Charge	Cordon charge for central Milan Single charge upon entry during the day
OReGO (Oregon)	Pilot of whole-of-network distance-based charging
I-95 HOT Lanes (Florida)	Some lanes of the I-95 highway feature dynamic pricing set to manage congestion based on speeds and density
Road usage charge proposals not (yet) implemented	
Edinburgh	Cordon scheme – not implemented after rejected in referendum
Manchester	Cordon scheme – not implemented after rejected in referendum
Netherlands	Nationwide pricing dropped after change of government
New York City	Cordon charge for lower Manhattan – still to be introduced
Hong Kong	Cordon scheme for Hong Kong island – still to be introduced
Parking charges	
Melbourne Congestion Levy	Parking levy in central Melbourne
SFpark (San Francisco)	Demand-responsive pricing of on-street parking
Perth station parking	Priced parking at railway stations

COMMUNITY PANEL

“Under what conditions, if any, would the community accept a change in the way Victorians pay for roads and public transport?”

38 panelists deliberated over a four week period

Panel would accept a change to the way we pay for roads and public transport and outlined 8 conditions

EIGHT CONDITIONS

- Locality must not be a disadvantage
- Network pricing needs to come with service improvements
- Transparency of both revenue and expenditure
- Pricing must be transparent, simple and provide options
- Open and transparent change
- Trial introduction
- Equity and social inclusion
- Establish and independent regulator for pricing.

04

IMPLEMENTATION PATHWAY & OPTIONS FOR GOVERNMENT

IMPLEMENTATION PATHWAY

- Specify objective of reform – reducing congestion in Melbourne
- Building infrastructure is necessary but not enough – we need complementary TNP reform to reduce congestion
  - Evidence shows trials are helpful in demonstrating benefits
- Credibly deliver the benefits from the reform
  - Expand and reform public transport
  - Package with other reforms and additional benefits through reforming existing charges
  - Important broader community doesn't perceive to be worse off; consider opt-in approach to early implementation

OPTIONS FOR GOVERNMENT

Public Transport

01.

Commence randomised control trials of changes to public transport fares

- Specify public transport fares that vary by time, location and mode.
- Sample of treatment and control groups of travellers selected and treatment group travel according to new fares.
- Sample includes variety of income groups including low income and vulnerable Victorians.

02.

Introduce variable pricing for all public transport trips

- Fares draw on results of randomised control trials.
- Public transport fares that vary by time, location and mode applied to all public transport.
- Fares designed to encourage efficient use of the network while meeting equity objectives.

Roads

03.

Conduct a randomised control trial of a large sample of motorists including different types of road pricing options targeting congestion across Melbourne

- Specify a set of road pricing options that operate differently across Melbourne.
- Sample of treatment and control groups of drivers selected with the treatment group driving based on the new prices.
- Sample includes variety of income groups including low income and vulnerable Victorians.

04.

Apply demand managing tolls to all new freeways, bridges and tunnels

- Tolls applied to new freeways, bridges and tunnels that manage demand.
- Tolls set to achieve a congestion target and periodically/regularly revised to achieve and maintain the target congestion rate.

05.

Introduce distance-based road user charge for electric vehicles

- Distance based charge, in comparison with fuel excise, should recognise health and environmental benefits from electric vehicles.
- Registration and stamp duty costs should be reduced or removed to support efficient use and adoption of electric vehicles.

06.

Conduct a full-scale trial of cordon charging in inner Melbourne and other congestion hot spots

- Trial would reflect learnings from trial and implementation on new major road infrastructure (options 3 and 4).

07.

Price the use of all roads in the Melbourne Metropolitan area

- Extension of road pricing with a main aim to reduce congestion applied across all roads.

Parking

08.

Expand and increase the existing car parking congestion levy

- Expansion of Category 2 levy area to include Prahran, Richmond, South Yarra and Windsor.
- Revenue sharing arrangements with each local council covered by the levy.
- Regular review and revision of levy dependent upon level of congestion.

09.

Trial dynamic pricing of selected areas of on-street and off-street council parking

- Dynamic pricing features prices that vary by time and across the sample locations aiming for a certain number of spots in the sample areas to remain vacant at all times.
- Time restrictions relaxed on parking spots in the sample area.
- Prices regularly reviewed and revised to achieve and maintain the targeted vacancy rates.

10.

Trial dynamic pricing for a selection of new and existing carparks at railway stations and park and rides

- Dynamic pricing of parking spots, as described in option 9 applied to a sample of new and existing carparks at railway stations and park and rides – the sample should first include carparks at stations that already have good public transport connections to them (or additional station connections) like buses and/or on-demand services.

11.

Apply dynamic pricing to all on-street and council controlled parking with prices set to target a certain number of places remaining vacant at all time.

- Dynamic pricing as described in option 9 applied to all council controlled parking spots.

12.

Apply dynamic pricing to all parking at all railway station and park and ride carparks

- Dynamic pricing as described in option 9 applied to parking at all railway stations and park-and-ride facilities.


thank you

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