

INQUIRY INTO ROAD TOLLING

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1 Executive summary

NSW has a considerable backlog of infrastructure investment that the Government is working towards delivering. In addition, the State has a fast-growing population, meaning more jobs, and more demand for the movement of people and goods on the State's transport system.

This is leading to growing congestion on the current road network which is frustrating commuters and reducing productivity. The Bureau of Infrastructure, Transport and Regional Economics (BITRE) estimated that Sydney's congestion costs the economy \$6.1 billion in 2015 and is expected to rise to \$12.6 billion by 2030. NSW needs ongoing infrastructure investment to address this cost and that investment cannot be solely provided by the Government.

The community has many years of experience with toll roads and has shown an acceptance of tolls when they provide the immediate benefit of reduced travel times. Road users have told us that they want more motorways built to reduce congestion and to complete Sydney's motorway network.

The NSW Government has a long history of providing road infrastructure that is funded through tolling, including the Sydney Harbour Bridge itself.

A number of different tolling approaches exist in NSW and are specified in tolling agreements that in some cases have been in place for several decades. The terms of these agreements include the toll levels, escalation and length of the concession period reflecting a number of factors such as the costs of construction, and the funding and financing needs of the project.

Tolls are fair in that they apply the principle of user pays meaning that those who benefit most from the toll road pay. Additionally, toll roads free up capacity in the road network which benefits all motorists and public transport customers who rely on the road network. Importantly it is an underlying principle that in all instances an un-tolled alternate route remains available, ensuring commuters have greater choice when determining their travelled route.

Tolls allow motorway corridors to be built faster. This directly benefits drivers by delivering new infrastructure and journey time savings sooner. Communities benefit through the reduction of traffic on local roads. Taxpayers benefit by reducing the upfront contribution of Government. This in turn enables Government to deliver more of the infrastructure the state needs. Industry benefits from reduced travel times and lower operating costs boosting productivity which in turns leads to higher rates of economic growth.

2 Tolling on current NSW motorways

2.1 Types of tolls

Several different forms of toll already exist on the Sydney motorway network, including:

- **A flat rate toll** - traditional tolling method where there is a fixed toll for use of the motorway, regardless of the distance or time travelled. There is currently a flat rate toll on the M5.
- **A distance based toll** - calculated based on the amount of travel undertaken. Toll gantries are located at entry and exit points on the motorway and record a vehicle's electronic tag or number plate details to calculate the applicable toll. Currently, Westlink M7 is the only Sydney motorway to have distance based tolling.
- **Variable time of day tolls** – calculated based on the time of travel. Often used as a form of congestion management. Vehicles travelling outside of the peak period pay a lower toll than vehicles travelling during peak hour. There is currently variable time of day tolling on the Sydney Harbour Bridge.

2.2 Current toll charges (1 January 2017)

Sydney's motorway network includes both public and private toll roads. Further detail on the private roads and their respective Public Private Partnership agreements, including contract summaries, can be found at <http://www.treasury.nsw.gov.au/ppp>.

The following is a summary of each of the tolling regimes across NSW.

2.2.1 Sydney Harbour Bridge

Direction charges / Tolling method	Southbound / Time of day
Cost - Class A (cars)	\$2.50 – \$4 depending on time of day
Cost - Class B (trucks)	\$2.50 – \$4 depending on time of day
Escalation rate	None
Contract date	Government owned
Concession term	N/A Government owned

2.2.2 Sydney Harbour Tunnel

Direction charges / Tolling method	Southbound / Time of day
Cost - Class A (cars)	\$2.50 – \$4 depending on time of day
Cost - Class B (trucks)	\$2.50 – \$4 depending on time of day
Escalation rate	None
Contract date	June 1987
Concession term	June 2023

2.2.3 M5 South-West Motorway (subject to M5 cashback scheme)

Direction charges / Tolling method	Each direction / Fixed
Cost - Class A (cars)	\$4.57
Cost - Class B (trucks)	\$13.70
Escalation rate	CPI or 1% per quarter (whichever is greater)
Contract date	February 1991
Concession term	December 2026 (originally 2014, extended as part of upgrade arrangements)

2.2.4 Hills M2 Motorway

Direction charges / Tolling method	Each direction / Fixed
Cost - Class A (cars)	\$6.89 (North Ryde) \$3.44 (Pennant Hills Rd) \$2.43 (Windsor Rd) \$2.04 (Lane Cove Rd) \$3.44 (Herring & Christie Rd)
Cost - Class B (trucks)	\$20.65 (North Ryde) \$10.32 (Pennant Hills Rd) \$7.30 (Windsor Rd) \$6.11 (Lane Cove Rd) \$10.32 (Herring & Christie Rd)
Escalation rate	CPI or 1% per quarter (whichever is greater)
Contract date	August 1994
Concession term	June 2048 (originally May 2042, extended as part of upgrade arrangements)

2.2.5 Eastern Distributor

Direction charges / Tolling method	Northbound / Fixed
Cost - Class A (cars)	\$6.95
Cost - Class B (trucks)	\$13.90
Escalation rate	37.5% CPI + 63.5% Average Weekly Earnings (AWE) or 1% per quarter (whichever is greater)
Contract date	August 1996
Concession term	December 2048

2.2.6 Cross City Tunnel

Direction charges / Tolling method	Each direction / Fixed
Cost - Class A (cars)	\$5.47 (Main tunnel) \$2.58 (Sir John Young Cres)
Cost - Class B (trucks)	\$10.93 (Main tunnel) \$5.16 (Sir John Young Cres)
Escalation rate	CPI per quarter
Contract date	December 2002
Concession term	December 2035

2.2.7 Westlink M7 Motorway

Direction charges / Tolling method	Each direction / Distance based
Cost - Class A (cars)	39.24 cents/km capped at \$7.85
Cost - Class B (trucks)	\$1.1772/km capped at \$23.55
Escalation rate	CPI per quarter
Contract date	February 2003
Concession term	June 2048 (originally February 2037, extended as part of NorthConnex financing)

2.2.8 Lane Cove Tunnel

Direction charges / Tolling method	Each direction / Fixed
Cost - Class A (cars)	\$3.21 (Main tunnel) \$1.61 (Military Rd E-Ramp)
Cost - Class B (trucks)	\$9.67 (Main tunnel) \$4.83 (Military Rd E-Ramp)
Escalation rate	CPI per quarter
Contract date	December 2003
Concession term	June 2048 (originally January 2037, extended as part of NorthConnex financing)

2.3 Motorways under construction

The NSW Government is investing in Sydney's road infrastructure with two key projects NorthConnex and WestConnex – closing gaps in the existing motorway network. These projects could not be delivered without tolls to support their financing arrangements.

2.3.1 NorthConnex

NorthConnex will be a new tolled motorway linking the M1 Pacific Motorway (formerly F3 Freeway) at Wahroonga to the Hills M2 Motorway at the Pennant Hills Road interchange at West Pennant Hills.

NorthConnex meets a strategic need for the NSW Government in completing a motorway grade bypass of the Sydney CBD. This is important for freight traffic and wider connectivity within NSW and along the eastern seaboard.

NorthConnex will also return local streets to local communities. Heavy vehicles will be required to use the NorthConnex tunnel. This will redirect around 5,000 heavy vehicles each day off Pennant Hills Road which will improve air quality and reduce traffic noise. It will also ease traffic congestion to improve local amenity and connectivity for people living and working in the area.

The \$3 billion project is being funded through:

- Toll charges paid by the users who benefit from the road.
- Contributions from the NSW and Commonwealth Governments.
- A variation to the M7 Concession Deed. This includes increasing the truck toll to three times that of a light motor vehicle (consistent with the M2) and an extension of the term of the concession. There is no change to the provisions for car tolls on the M7.

Car and truck tolls for NorthConnex will be aligned with the M2 pricing. The concession for the tunnel will continue until 2048.

2.3.2 WestConnex

WestConnex is one of the largest infrastructure projects in NSW. When completed WestConnex will enable significant improvements in travel times, productivity,

reliability and accessibility for the community and businesses. The new motorway will also provide crucial support for Sydney's long-term economic and population growth.

WestConnex will provide high quality, motorway standard connections from western Sydney to Sydney Airport and Port Botany. WestConnex will transform urban travel, providing better connectivity between key employment hubs and local communities. By removing traffic from surface roads and local streets, WestConnex will provide a catalyst for urban transformation.

Tolls will be charged on WestConnex to reduce the overall burden on the taxpayer – so that there are funds available for other projects such as hospital, schools, and public transport.

The 2012 Infrastructure NSW State Infrastructure Strategy recommended: *“the tolling arrangements for WestConnex... be based on experience on other roads, in particular the M7. It is proposed that WestConnex's tolls will comprise a distance based charge, a flagfall charge and a maximum toll cap”*.

The arrangements adopted for WestConnex are:

- WestConnex will use distance based tolling, similar to the M7. This means motorists will pay tolls only for the sections of motorway they use.
- Tolls will be capped at a maximum amount, for fairness. Free alternative routes will be available for those not wanting to pay a toll.
- Trucks will pay more than cars — reflecting the greater wear and tear trucks have on the motorway.

Key components of WestConnex tolling and their rationale are set out below.

Element	Rationale
Distance-based tolling	This approach has been successfully used on the M7 since its opening and is accepted as an equitable approach that reflects appropriate charges for journeys of different lengths.
Higher tolls for heavy vehicles	Most Sydney toll roads charge heavy vehicles a multiple of two to three times the charge for light vehicles. This reflects the additional wear and tear caused by heavy vehicles and the fact that freight transport is a significant driver for the WestConnex project itself.
Minimum charge - flagfall or connection charge	A charge at particular access/exit points on WestConnex reflects the high cost of providing motorway connections and better reflects the true cost and value of short trips on WestConnex.
Maximum charge - toll cap	As on the M7, the total toll will be capped at a certain level to provide certainty to users and improve the overall value for money to the community.

The *WestConnex Updated Strategic Business Case (2015)* sets out key considerations in arriving at the above elements:

- Affordability and equity principles by providing:
 - Tolling proposition tailored to usage.
 - Mechanisms to limit the total cost of a trip.
- Wider road impacts, by:
 - Minimising diversion (for example, by setting toll levels at appropriate levels).
- Contribution of WestConnex to wider transport planning objectives:
 - Supporting public transport use.

- Ensuring freight efficiency outcomes.
- A tolling proposition which is efficient to administer and straightforward to understand.
- Alignment with the WestConnex financing and procurement strategy to provide a basis for private sector involvement for the relevant WestConnex stages.
- Alignment with NSW and Australian government policy frameworks.

3 The current traffic mix

- Passenger vehicles are the major users of toll roads and hold the vast majority of electronic toll accounts. It is estimated that nearly 60% of trips on toll roads can be attributed to passenger vehicles being used for private use.
- There are 1.9 million Class 2 (passenger vehicles) listed on RMS active E-Toll tag accounts and 6,600 Class 4 (heavy vehicles) listed on active RMS E-Toll tag accounts.
- There are 2.2 million Class 2 (active) and 50,000 (active) Class 4 tags associated these with accounts.
- However, commercial vehicles are comparatively heavy users of toll roads when it is taken into account that they hold considerably less electronic accounts and are a smaller percentage of the total vehicle fleet. For example, while heavy vehicles hold only 2.2% of active tags registered with RMS, they account for 7.8% of money spent on all tags.
- In 2015-16, the average daily tolled trips for commercial vehicles was around 40% of total trips. Light vehicles registered for commercial use (including light commercial vehicles and cars) account for around three quarters of total commercial vehicle trips, with the remaining quarter attributable to heavy vehicles. However as heavy vehicles are generally at least three times bigger than private passenger vehicles they currently take up approximately 22% of motorway capacity.

4 Government policy on tolling

The Australian Government's *National Public Private Partnership Guidelines (2015)* sets out the basic case for user charging such as tolls:

"Unless the infrastructure generates sufficient third party revenue through user charges, the cost will impact on net debt and rating agency metrics regardless of how the project is financed.

Broader use of specific revenue raising measures such as direct user charges and value capture opportunities may help to provide alternative funding sources for suitable infrastructure projects.

Continued use of direct user charges such as toll roads can also assist with funding infrastructure investment by alleviating the pressure on general government revenue sources and can enable infrastructure investment to be brought forward."

Along these lines, in NSW, the primary objective of tolling is to provide a revenue stream that enables much needed investment in extending and enhancing the current motorway network, delivering new segments of motorway earlier than would otherwise be possible given the State's capacity to finance the community's needs for economic and social infrastructure.

It is important to note that the funds raised from tolls on new public motorways will be invested back into the transport network. This benefits drivers by enabling new projects to be built faster and completing the missing links in the motorway network. It also benefits businesses by delivering an improved transport network, increasing productivity through reduced travel times and operating costs.

In October 2014, the NSW Government approved a broad set of principles for tolling for Sydney's motorways that will be used to guide future tolling decisions on Sydney's motorway network.

The NSW Government's tolling principles

- 1) New tolls are applied only where users receive a direct benefit.
- 2) Tolls can continue while they provide broader network benefits or fund ongoing costs.
- 3) Distance-based tolling for all new motorways.
- 4) Tolls charged for both directions of travel on all motorways.
- 5) Tolls charged reflect the cost of delivering the motorway network.
- 6) Tolls take account of increases in expenses, income and comparable toll roads.
- 7) Tolls will be applied consistently across different motorways, to the extent practicable, taking into account existing concessions and tolls.
- 8) Truck tolls at least three times higher than car tolls.
- 9) Regulations could be used so trucks use new motorway segments.
- 10) Untolled alternative arterial roads remain available for customers.

5 Tolling research

Transport for NSW has conducted research on customer values and attitudes to tolling arrangements in NSW. The research found that there is strong support among regular motorway drivers for improvements to the motorway network and the construction of more motorways to complete the motorway network.

Key findings indicate strong community support for extension of the current motorway network. Survey evidence indicates that:

- 66% believe that Sydney's motorways do not currently link up as an effective network.
- 72% agree that Sydney needs more motorways to improve traffic flow and congestion.
- 59% are in favour of new toll roads to make getting around Sydney easier.
- 84% of customers use a toll road to save time.

Research indicates the toll road price level is not a strong determinant of usage or satisfaction. In particular:

- Current users are highly insensitive to changes in toll charges (elasticity of -0.2 to -0.4) and have a strong preference for toll roads.
- It can be concluded from the above research that once it has been determined that a road toll should apply, users are not sensitive to the particular level of the toll within a given price band, as long as the travel time savings are delivered. The toll road price level is not a strong determinant of usage or satisfaction. Rather it is the travel time saving.

BITRE research on toll roads supports customer perceptions of their benefits. Some of the benefits BITRE outlined include reduced travel time and vehicle operating costs, and improved safety¹.

¹ BITRE, Toll Roads in Australia, 2016 https://bitre.gov.au/publications/2016/files/is_081.pdf

6 Attracting investment in NSW motorways

Maintaining and growing the NSW transport system requires significant ongoing investment. There are a number of different ways motorway projects can be funded, which will normally include both public and private investment as well as toll revenue.

Therefore, attracting investment is important for the provision of transport infrastructure and is a key element in the NSW Government's long term plans for improving and expanding the motorway network.

Public private partnerships (PPPs) have now been used successfully in every State in Australia as a means of procuring infrastructure for roads and for a range of infrastructure in other sectors including public transport, health, water and justice.

The use of PPPs as a procurement method has delivered value-for-money outcomes to governments by enabling the market to bring global leading practice and innovation to the design, construction, operation and whole-of-life asset management. It has also provided governments with efficient risk allocation and capital structuring.

Tolls allow motorway corridors to be built faster as the investment is initially absorbed by the private sector and recouped through tolls over time. This directly benefits drivers by delivering new infrastructure. This benefits taxpayers who are getting much needed infrastructure for a relatively small initial outlay.

By adopting this approach, the people of NSW reap the economic and social benefits.

It is also worth noting that toll roads are not 'risk free' for the private sector. The Cross City Tunnel and Lane Cove Tunnel are two examples of this given the financial distress their owners experienced following their openings.

6.1 Limiting price rises to CPI

The escalation rates on private tolled motorways are outlined in detail in section 2.2 of this submission. Some private roads such as the Lane Cove Tunnel and Westlink M7 Motorway are calculated at CPI per quarter. Others such as Hills M2 Motorway and the Eastern Distributor are calculated at CPI (or a combination of CPI and AWE) or 1% per quarter, whichever is greater.

Government needs flexibility when negotiating Public Private Partnerships and the escalation rates on toll roads to ensure the best overall outcome for NSW and the taxpayer are achieved. Placing a blanket limit of CPI to escalation rates could have the effect of pushing up the initial price on future toll roads. A CPI cap would also make it more difficult to attract private investment; reduce competition in the market; and would be likely to increase costs for Government, taxpayers and road users.

7 Existing oversight and public disclosure of information

Major infrastructure projects in NSW, including toll roads, are already subject to rigorous oversight. There are well established processes that assist Government in making balanced assessments and decisions in the public interest regarding toll roads, based on objective evidence, analysis and advice, supported by appropriate consultation. A range of agencies such as Transport for NSW, Roads and Maritime Services, NSW Treasury, Infrastructure NSW and the Department of Planning and Environment are routinely involved to ensure adequate independent checks and balances.

Such processes include the development of strategic plans and application of merits tests, preparation of detailed businesses cases, independent assurance, competitive tendering to ensure value for money, as well as formal planning approvals (including environment impact assessment) under the *Environment Planning and Assessment Act 1979*.

In addition, under the *Public Authorities (Financial Arrangements) Act 1987*, the Treasurer must also approve all tolling agreements before they are granted.

Tolling agreements are already subject to clear public disclosure requirements. For example, under the NSW PPP guidelines, contracts are audited by the Auditor-General and tabled in Parliament. A contract summary is then prepared and published on the NSW Treasury website.

Transparency is also protected within the existing regulatory framework. In particular, tollway concession agreements are Class 3 contracts for the purposes of the *Government Information (Public Access) Act 2009* (GIPA) and must be published accordingly.

8 The role of the Independent Pricing and Regulatory Tribunal (IPART)

IPART is an independent authority which provides regulatory advice and decisions to the NSW Government. IPART is the price regulator for government monopoly services such as water, public transport and electricity.

For public transport, IPART determines the maximum fare increases for buses, trains, light rail and ferry services for metropolitan, regional and some rural transport. However it is the NSW Government that determines the fare price either at or below the IPART determination.

The NSW Government would not recommend extending IPART's role to also determine maximum prices and their escalation rates for toll roads for three reasons:

- It is not consistent with IPART's core function of regulating government monopoly services². Unlike electricity and water networks, toll roads are not monopoly services as there is always a free alternative.
- The NSW Government has already entered into long-term commercial arrangements with toll road operators that take into account toll prices, escalation rates and projected revenues. IPART determinations of toll road pricing would undermine these commercial arrangements and potential future negotiations.
- The NSW Government is unaware of any other Australian jurisdiction using a regulator like IPART to set road toll prices and escalation rates.

²*Independent Pricing and Regulatory Tribunal Act 1992 (IPART Act)*

9 Tolling approaches used overseas

Overseas tolling arrangements vary considerably, ranging from flat tolls, distance based tolls to dynamic pricing.

Option	Description	Objectives	Sub-Options	Example(s)
Area-based Charging	Charges for access to a specific area	<ul style="list-style-type: none"> Raise revenue Reduce congestion Fund public transport 	<ul style="list-style-type: none"> Area-based licenses Cordon charging or toll ring 	<ul style="list-style-type: none"> UK Singapore Norway
Point charges	Charges at fixed points on the network	<ul style="list-style-type: none"> Reduce congestion Fund infrastructure 	<ul style="list-style-type: none"> Tolls High Occupancy/Toll (HOT) Lanes 	<ul style="list-style-type: none"> Sydney US
Distance based charges	Charges based on the distance travelled by the vehicle Includes mass, distance, location variations	<ul style="list-style-type: none"> Fund infrastructure Improve efficiency through price signals 	<ul style="list-style-type: none"> Vehicle Class options (eg. heavy vehicle only) Periodic distance charge Mass distance location Road corridor Fuel excise Whole of network charging 	<ul style="list-style-type: none"> France Germany US
Parking charges	Charges for parking in an area	<ul style="list-style-type: none"> Reduce congestion 	<ul style="list-style-type: none"> Parking levies On-street parking fees Off-street parking fees Performance parking Parking meters Parking station 	<ul style="list-style-type: none"> Worldwide
Heavy vehicle priority routes	Heavy vehicle route. Light vehicles charged to use/banned	<ul style="list-style-type: none"> Assist freight task Raise revenue 		<ul style="list-style-type: none"> Ireland
Fixed access charges (Standing charges)	One-off periodic charges for access to the network	<ul style="list-style-type: none"> Fund infrastructure Fund regulation 	<ul style="list-style-type: none"> Driver licensing Vehicle inspection fees Purchase charges Stamp Duty, GST, etc Vignette 	<ul style="list-style-type: none"> Worldwide
Non-price initiatives	Rationing and other non-price measures for reducing congestion	<ul style="list-style-type: none"> Reduce congestion 	<ul style="list-style-type: none"> Registration Restricted registration Car park space rationing Fuel rationing Road access rationing 	<ul style="list-style-type: none"> Worldwide Singapore (weekend use)