# TRANSPORT AND ROADS BILL NSW YOUTH PARLIAMENT





### Future of Accessible State-wide Transport Bill 2021 (NSW)

The Hon. Cameron Last (Ryde) The Hon. Victoria Diep (Ku ring gai) The Hon. Abbey Dawson (Bega) The Hon. Zaccary Lancaster (Holsworthy) The Hon. Connor C Burke (Mulgoa) The Hon. Michael Piela (Keira) The Hon. Pedram Ali (Cabramatta)



Table of Contents	
Explanatory Notes	5
Reference list	9
Part 1: Preliminary <ol> <li>Short Title</li> <li>Commencement</li> <li>Objects</li> <li>Definitions</li> </ol>	10 10 10 10 11
<ul> <li>Part 2: Community Led Transport Initiatives in New South Wales</li> <li>5. Establishment of the NSW Transportation Access Committee</li> <li>6. Introduction of a Regional Rural Access Scheme (RRAS)</li> <li>7. Expansion of Digital Opal Card System</li> </ul>	13 13 13 13
<ul> <li>Part 3: Expansion of Light Rail Networks in Greater Sydney</li> <li>8. Expansion of Light Rail Networks within the Greater Sydney Region to service local and growing communities with the CAF 'Urbos 3' tram design unless otherwise specified.</li> </ul>	13 d 13
<ul> <li>Part 4: Road Public Transportation in New South Wales</li> <li>9. Buses in Regional Areas</li> <li>10. Redevelopment of Liverpool to Parramatta T-Way with Trolleybus Technology</li> </ul>	14 14 14
<ul> <li>Part 5: Heavy Rail Transport in New South Wales</li> <li>11. Separation of the Sydney Freight Lines from the Sydney Metropolitan Train Network</li> <li>12. Eleftrication of Suburban and Intercity Railway Lines across the Sydney Trains Network</li> <li>including but not limited to</li> <li>13. Regional Rail Realignment</li> <li>14. Very Fast Rail</li> </ul>	15 15 0rk 15 15 15
Part 6: Private Motor Vehicle Transport in New South Wales 15. M9 Outer Sydney Orbital 16. Regional Road Upgrades	16 16 17
<ul> <li>Part 7: Aquatic Transport and Infrastructure in New South Wales</li> <li>17. Introduce new ferry services within the Greater Sydney Region on existing waterways service local communities with 'river-class' vessels unless otherwise specified.</li> <li>18. Automation of Maritime Lighthouse Services in New South Wales</li> </ul>	18 s to 18 19

the	
We believe in the power of inspired young people	
Part 8: Automated Rapid Transit in Greater Sydney 19. Expansion of the Sydney Metro Network through upgrading existing Sydney Trains	19
Railway Lines 20. Creation of new stand-alone Metro Lines.	19 19
Part 9: Future Technologies in New South Wales	20
21. Implementation of atomic energy into the transport and road networks	20
22. Hyperloop Technology	20
23. Joint State/Federal Transport Authority	20
24. Introduction of Monorail in the Sydney Olympic Park Precinct	21
Amendments	19
Amendment One	22
21. Implementation of atomic energy into the transport and road networks	229
Amendment Two	24
15. M9 Outer Sydney Orbital	24
Amendment Three	26
14. Very Fast Rail	26
Results of the Vote	28



## Future of Accessible State-wide Transport (NSW) Bill 2021

### A Bill

for

An Act for the provision of Accessible State-wide Transportation Systems in New South Wales.



### **Explanatory Notes**

New South Wales currently faces disparities in public transport access. Countless people across regional and suburban NSW are often subject to either long delays (Suburban NSW) or limited access to public transport (Regional & Rural NSW). With NSW's population expected to explode to over 11 million by 2050 (Projections, 2019), these deficiencies will prove detrimental to NSW's economy. This Bill aims to provide the framework for NSW's transport and road infrastructure, ensuring the future of accessible state-wide transportation.

### **Community Led Transport Initiatives**

Regional and Rural NSW has always faced disparities in their transport infrastructure compared to their urban compatriots. This is mainly due to the sparseness and population density of the regions. By creating a Transport Access Committee comprised of Regional and Rural community leaders, we can liaise with the regional communities to provide cost-effective transportation that works in their communities.

Moreover, by utilising community vehicles and volunteers such as retirees and community groups, we can create an on-demand transport solution for the regions that provides flexible and effective solutions to regional transportation. This Regional Rural Access Scheme (RRAS) would initially be a pilot program run in several rural/regional townships.

In addition to regional improvements, this Bill would facilitate the expansion of the OPAL card system to all transport from taxis and rideshares to even share bikes, thus simplifying transport payment in NSW.

### Expansion of Light Rail networks in New South Wales

As seen with the current Sydney Light Rail project, Light Rail can be an efficient and popular mode of transport in high-density areas such as Sydney. This Bill would not only expand the



Sydney Light Rail system, but the Newcastle Light Rail system as well, in addition to creating a new loop-style Light Rail line in Wollongong. By expanding Light Rail, we create sustainable, greener, more efficient transportation, safeguarding both our states' transportation future as well as doing our part to create a greener, more sustainable NSW. In addition to creating a greener future, the busses discontinued by the use of Light Rail can be sent to areas lacking public transport, creating a cost-effective transport solution that benefits more than just the cities of Sydney, Newcastle and Wollongong.

### **Road Public Transportation in New South Wales**

Our road-using public transport in NSW needs serious attention, namely our busses. Regional NSW lags significantly behind their city dwelling cousins. By using busses displaced by Light Rail, we can provide the regions with much needed public transport infrastructure that can keep up with the ever-growing population.

Moreover, with Sydney's population projected to swell to well over 10.5 million by 2041 ("Projections", 2019), we need to address the lagging transport infrastructure, particularly in the ever-growing Southwest Sydney. With the development of the new Nancy-Bird Walton International Airport out at Badgery's Creek, and the development of the new Bradfield CBD, practical and efficient transportation needs to be created to link this area with that of Sydney's third largest population area, Liverpool. We can easily create sustainable, cost-effective and appealing public transport in the region by utilising the existing Liverpool-Parramatta T-WAY corridors. By expanding the corridors and replacing the buses with high-capacity trolleybuses, we create a flexible and practical solution for the Liverpool region that hasn't been addressed in the NSW Government's 2056 Transport Roadmap.

### Heavy Rail Transport in New South Wales

In Sydney, freight runs along the same lines as metropolitan services, this causes delays and congestion in the system, particularly since multiple services tend to run on the same stretch of track. This Bill proposes that a 15-year study be undertaken to solve this congestion issue.

Furthermore, vast swathes of NSW rail lines are still not electrified, forcing us to use slow, lowcapacity, environmentally damaging diesel trains. This Bill would initiate the electrification of several lines in NSW that see heavy use but have managed to evade electrification thus far. Not only will this make our transport more environmentally friendly, but will drastically improve commute times.



NSW's rail infrastructure has remained largely unchanged since they were laid down in the mid-1800's. This has caused significant problems not only in Sydney but across the board. This Bill would kickstart the realignment of these steam-era tracks, thereby allowing for faster, more direct commutes.

Regional NSW has suffered in terms of rural to urban transportation. By creating multiple 'Very Fast Rail' lines utilising high speed trains we can drastically improve the lives of those in the regions, thus allowing people to also live further from Sydney whilst still being able to effectively work in Sydney.

### Private Motor Vehicle Transport in New South Wales

Road freight is the lifeblood of not only NSW, but of all of Australia. Truckies often face huge delays when making cross-country trips simply because they have to pass through a congested Sydney. By creating an 'Orbital Motorway' around Sydney, we can sizably improve freight delivery times as well as relieve pressure on congestion points.

In addition to the creation of new roads, this Bill would upgrade several regional arterial roads such as the New England Highway, Pacific Highway and the Princes Highway, making them safer and more practical.

### Aquatic Transport and Infrastructure in New South Wales

New South Wales's marine transport infrastructure has been long neglected. This Bill would capitalise on NSW's many rivers, lakes and mighty coastline to create a large ferry network. By implementing ferries, we can increase the attractiveness of surrounding areas by placing an unusual but attractive and practical means of transport into those regions.

As well as creating new maritime services, this Bill aims to automate all of NSW's lighthouses, making our coastlines much safer for vessels sailing our waters.

### Automated Rapid Transport in Greater Sydney

As we've seen from the current Sydney Metro project, as well as overseas examples of automated transport such as the underground rail system in England (locally called "the Tube"), automated transport can be safer and more cost-effective compared to traditional humanoperated modes, as it eliminates human error from the equation. This Bill would see the creation of new metro lines in Sydney, as well as the eventual transformation of all current metropolitan train lines into metro, thus creating a safer, more reliable transport system.



### **Future Technologies**

As we know, technology is ever-changing, and committing ourselves to the tried-and-true transportation systems of the past could prove to be problematic in the future. This Bill aims to investigate the possible implementation of future technologies from the reasonable and tested monorail to more ambitious and exciting modes of transport such as hyperloop and nuclear-powered transport



### **Reference list**

- Abc.net.au. 2019. Sydney Light Rail open to the public on December 14, NSW Government announces. [online] <<u>https://www.abc.net.au/news/2019-12-05/sydney-light-rail-open-date-announced-by-nswgovernment/11768150</u>> [accessed 26 May 2021]
- Sydney's Light Rail Future. 2012. SYDNEY'S LIGHT RAIL FUTURE Expanding public transport, revitalising our city. [online pdf]
   <<u>https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/sydneys-light-rail-future.pdf</u>> [accessed 26 May 2021]
- Macrotrends.net. 2021. Sydney, Australia Metro Area Population 1950-2021. [online] <<u>https://www.macrotrends.net/cities/206167/sydney/population</u>> [accessed 22 May 2021]
- Rdafsc.com.au. 2018. Regional Overview. [online] <<u>https://www.rdafsc.com.au/wp-content/uploads/2018/10/regional.pdf</u>> [accessed 28 May 2021]
- 5) Transport for NSW. 2018. Older Persons Transport and Mobility Plan 2018–2022. [online] <<u>https://future.transport.nsw.gov.au/sites/default/files/media/documents/2018/Older%20Persons</u> %20Transport%20and%20Mobility%20Plan\_0.pdf?fbclid=lwAR0m8-Lw\_f5Afl0ncDOwlh\_Hex8pW0zWvGNJQVi97bEZEaXpzBOe2kdoqKo> [accessed 28 May 2021]
- Planning.nsw.gov.au. 2021. Regional City/Centre Classifications. [online]
   <<u>https://www.planning.nsw.gov.au/~/media/9249D81B6867404DB32634D222359339.ashx</u>>
   [accessed 29 May 2021]
- 7) Bitre.comau, Australian Government 2015 Statistics into Traffic Congestion Trends [online] <<u>https://www.bitre.gov.au/sites/default/files/is\_074.pdf</u>> [accessed 28 May 2021]
- 8) Trolleybus Wikipedia. (2021). Retrieved 28 September 2021, from https://en.wikipedia.org/wiki/Trolleybus
- <u>NSW Department of the Environment and Climate Change</u> 2019, *NSW emissions*, Nsw.gov.au, viewed 22 October 2021
- 10) Projections. (2019). Retrieved 3 November 2021, from https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections



The Youth Parliament of New South Wales enacts -

### **Part 1: Preliminary**

### 1. Short Title

This Bill may be cited as Future of Accessible State-wide Transport Bill 2021 (NSW).

### 2. Commencement

This Bill shall commence at the beginning of the next financial year after Royal Assent from the NSW Youth Governor.

### 3. Objects

- 1) The objects of this Bill are:
  - a) To improve the mobility of the people of the state of New South Wales.
  - b) Provide accessible and innovative community led transport initiatives.
  - c) Reduce the volume of cars in CBD areas and reduce overall carbon emissions through the expansion of Light Rail networks in Greater Sydney.
  - d) Improve bus capacity and frequency across New South Wales through introducing "trolleybus" technology and deploying additional vehicles to Regional Areas.
  - e) Enhance the capacity of the existing heavy rail network through the electrification of intercity lines, separate commuter rail from freight rail, realign steam-era tracks for efficiency, and introduce 'Very Fast Rail'.
  - f) Expand the State Road Network through constructing an M9 Outer Sydney 'Orbital Motorway' and upgrade regional roads and highways.
  - g) Ameliorate aquatic transport and maritime infrastructure through the introduction of new ferry services in Greater Sydney and the automation of navigator lighthouses.
  - h) Investigate the application of future technologies and how they can benefit the state of New South Wales and the mobility of residents.
  - i) To ensure that NSW adheres to the *Future Transport Strategy 2056*.
  - j) To create a Greener, more sustainable NSW.



### 4. Definitions

In this Bill -

- 1) **Transportation Access Committee (TAC)** shall refer to the group of diverse people advising the problems associated with the NSW public transportation system.
- 2) Major Rural/Regional Centre/Township is a large Township with 10,000 people or more, or a population centre with either cultural or economic significance to the surrounding region.
- **3) Rural Access Scheme** shall mean the scheme responsible for facilitating the creation of tailored bus transit routes between major rural townships and smaller surrounding towns.
- 4) A Light Rail is a form of passenger urban rail transit characterized by a combination of tram and metro features. They often, but not always, operate on an exclusive right-ofway.
- 5) CBD (Central Business District) is the political, economic, and cultural hub of a region.
- 6) Wheel-and-spoke System is a system of transportation whereby multiple routes originate from a terminus, then spread out, forming a pattern likened to the spokes on a bicycle wheel.
- 7) Australia, when used in a geographical sense, includes all external Territories.
- 8) Bus Driver Relocation Program is a program created to oversee and facilitate the relocation of willing bus drivers into Major regional centres.
- **9) Bus Driver Traineeship Program** is a program created to facilitate the creation of jobs within the bus driving industry in major regional areas.
- **10) Rapid Transit** is a type of high-capacity public transport system, usually found in suburban areas.
- **11) Trolleybus** is an electric bus that draws power from dual overhead wires (generally suspended from roadside posts) using spring-loaded trolley poles.
- **12) Ferry** is a boat or ship for conveying passengers and goods, especially over a relatively short distance and as a regular service.
- **13) Monorail** is a railway in which the track consists of a single rail, typically elevated and with the trains suspended from it.
- 14) Terminus refers to a transit station at which services start and/or terminate.
- **15) Motorway** is a dual-carriageway road designed for fast traffic and travel over long distances.
- **16) Heavy Rail** denotes a form of high-capacity urban rail that operates on a separated right-of-way.
- **17) Rideshare Service** refers to a company that organises arrangements in which a passenger travels in a private vehicle for a fee, especially as arranged by means of a website or app.



- 18) Airside is the side of an airport terminal beyond passport and customs control.
- **19) UAV** is the acronym for "Unmanned Aerial Vehicle(s)".
- **20) OPAL** refers to a public transportation fare system.
- 21) PPP is the acronym for "Public-Private Partnership".
- **22) Ridge Running** is a planning term that denotes construction along the ridgeline of a mountain.
- 23) River-Class Ferry is a type of maritime transportation.
- 24) Very Fast Rail (VFT) is a type of high-speed rail.
- 25) TfNSW is the acronym denoting "Transport for New South Wales".
- 26) SME is the acronym for "Small-To-Medium Enterprise".
- 27) Trunk Tunnel is a tunnel that acts as an arterial transportation corridor.
- **28) State Transit Authority (STA)** is an agency of the Government of New South Wales operating bus services in Sydney.
- 29) NSW refers to the State of New South Wales, Australia.



### Part 2: Community Led Transport Initiatives in New South Wales

### 5. Establishment of the NSW Transportation Access Committee

- 1) The NSW Transportation Access Committee (TAC) will operate under (TfNSW) and is a 15-member advisory body with individuals from rural/remote, regional, and urban settings.
- 2) The NSW TAC will be tasked with providing no less than three (3) research reports per annum with recommendations to TfNSW to address overarching state transport issues.

### 6. Introduction of a Regional Rural Access Scheme (RRAS)

- 1) Begin a pilot scheme in regional and rural areas to facilitate local transport shuttle services in locales without sufficient demand nor patronage for traditional bus options.
- TfNSW will oversee and manage the scheme which will utilise local community vehicles (i.e., not-for-profit, non-government organisations) with payment throughout the OPAL card system.
- 3) The pilot scheme will take place in no less than four (4) regional and rural centres to study the take up, and demand of the service with the resulting aim to have the scheme state-wide.

### 7. Expansion of Digital Opal Card System

1) Task TfNSW to investigate the feasibility of expanding NSW's digital OPAL card system to be compatible as payment for taxis, ride-share vehicles, and share bikes.

### Part 3: Expansion of Light Rail Networks in Greater Sydney

## 8. Expansion of Light Rail Networks within the Greater Sydney Region to service local and growing communities with the CAF 'Urbos 3' tram design unless otherwise specified.

- 1) Sydney Light Rail will be expanded into the following stages:
  - a) <u>Stage 1:</u> Extension of existing City and Southeast Light Rail to continue from Kingsford to La Perouse along ANZAC Parade with stops at - Maroubra Junction; Maroubra; Malabar; Matraville; Long Bay; Little Bay; and La Perouse.
  - b) <u>Stage 2:</u> City South Light Rail will operate as a loop service and stop at Railway Square; Broadway; University of Sydney; Camperdown; Newtown; St Peters; Alexandria; Green Square; Waterloo; Redfern Oval; and Prince Alfred Park.



- 2) Expansion of the Newcastle Light Rail with the following stages:
  - a) <u>Stage 1:</u> Newcastle Interchange; Hamilton South; Newcastle Racecourse; Broadmeadow; Newcastle Stadium; New Lambton; and John Hunter Hospital.
  - b) <u>Stage 2:</u> Newcastle Interchange; Wickham; Carrington; Kooragang; Fern Bay; Fullerton Cove; Williamtown; and Newcastle Airport.
- 3) Construction of a new 'loop style' Light Rail system in Wollongong with stops at:
  - a) Wollongong Interchange; Showground; North Beach; UOW Innovation Campus; TAFE Wollongong; Keiraville; West Wollongong; and Wollongong Hospital.

### Part 4: Road Public Transportation in New South Wales

### 9. Buses in Regional Areas

- 1) Through the implementation of Light Rail networks in Greater Sydney there will be a number of bus services which have been superseded and, as such, these vehicles will be relocated to regional centres including but not limited to:
  - Albury; Armidale; Bega; Cooma; Cowra; Deniliquin; Dubbo; Goulburn; Griffith; Lismore; Mudgee; Nowra; Orange; Port Macquarie; Tamworth; and Wagga Wagga.
  - b) Liaise with the Commonwealth Federal Government to integrate Norfolk Island into the State of NSW to introduce inter-island transport with upgraded regional transport buses through expanding the *Norfolk Island Administration Act 2016 (NSW)*.
- 2) With the relocation of buses to regional centres a program will be established and managed by TfNSW to support any bus drivers affected by the Light Rail expansion with the following opportunities available to impacted individuals:
  - a) Upskilling of former bus drivers to be trained as Light Rail operators to continue working in the same local area and community.
  - b) The offer of relocating bus drivers to the above listed regional centres in addition to a one-off monetary payment to support their relocation.
  - c) Outer-suburban reassignment will be available for affected bus drivers who still wish to drive a bus but also wish to stay within Greater Sydney, these individuals would be reassigned to other depots in outer-suburban regions.

### 10. Redevelopment of Liverpool to Parramatta T-Way with Trolleybus Technology

1) The upgrade of the Liverpool to Parramatta T-Way by the State Transit Authority (STA) with trolleybus technology. To facilitate the upgrade, STA will:



- a) Upgrade of existing T-Way system by reinforcing current T-Way corridors with new asphalt and retrofitting current corridors with Trolleybus overhead wire infrastructure.
- d) Within the Liverpool City Centre, facilitate the creation of a Pedestrian/Trolleybus only zone on Elizabeth Street between Bathurst and Bigge Streets.
- e) STA will enable the extension of Hoxton Park Road's T-Way Corridor to service the under construction Western Sydney Airport, Aerotropolis and Bradfield CBD.
- f) STA will procure no less than twenty (20) 'Exquicity 24' Type Trolleybus BRT vehicles to service the Liverpool-Parramatta T-Way.
- g) STA will also investigate an additional T-Way Corridor to connect Elizabeth Drive with the following suburbs Horsley Park, Mount Vernon and Kemps Creek.

### Part 5: Heavy Rail Transport in New South Wales

### 11. Separation of the Sydney Freight Lines from the Sydney Metropolitan Train

### Network

- 1) Under the leadership of Sydney Trains, a 15-year vision will be undertaken to study the separation of all freight lines within the Sydney Metropolitan Train Network.
- 2) TfNSW are responsible for enacting upon the final framework to disentangle the various physical railway lines within the Sydney Metropolitan Train Network.

### 12. Electrification of Suburban and Intercity Railway Lines across the Sydney Trains Network including, but not limited to:

- 1) Southern Highlands Railway Line from Campbelltown to Moss Vale taking in the population centres of the Wollondilly and Wingecarribee Local Government Areas;
- 2) South Coast Railway Line from Nowra to Bomaderry being the finishing piece to the electrification of the entire South Coast line; and
- 3) Hunter Railway Line from Hamilton Station to Maitland taking in the population centres of Maitland and Newcastle Local Government Areas.

### 13. Regional Rail Realignment

1) TfNSW to undertake the realignment of all operational railways in NSW from their steamera orientation to make the physical tracks more direct allowing for faster travel times.

### 14. Very Fast Rail

1) Task NSW TrainLink with drawing up the implementation plans for a state-wide Very Fast Rail system; these routes will commence at Central Station and follow a trunk tunnel



underground from Macdonaldtown to Chullora with the following four (4) routes then branching off:

- a) <u>North:</u> Central; Chullora; Parramatta; Gosford; Newcastle; Taree; and Port Macquarie.
- b) <u>West:</u> Central; Chullora; Cabramatta; Western Sydney Airport; Katoomba; Lithgow; Bathurst; Orange; and Parkes.
- c) <u>South (Inland)</u>: Central; Chullora; Cabramatta; Liverpool; Campbelltown; Wilton; Bowral; Moss Vale; Goulburn; and Canberra.
- d) <u>South (Coast):</u> Central; Chullora; Hurstville; Sutherland; Wollongong; and Nowra.

### Part 6: Private Motor Vehicle Transport in New South Wales

### 15. M9 Outer Sydney Orbital Motorway

- 1) The construction of the M9 Outer Orbital as a six-lane motorway as previously identified by Transport for New South Wales and as outlined in the *Stage 1 Plan*.
- 2) In order to complete the southern connection of the M9 Outer Orbital Motorway, the New South Wales Government shall facilitate the following:
  - a) Upgrade of Appin Road between the Princes Motorway and the Georges River to Dual Carriageway Standard;
  - b) The acquisition of a land corridor between the Georges River and the high-tension power cables near Wilton Road; three properties alongside Brooks Point Road;
     11 properties alongside Elladale Road; and four properties between the Nepean River and the Hume Highway along Moreton Park Road; and
  - c) The construction of a new 8.5km road connecting the Hume Motorway and Appin Road crossing both the Nepean and Georges Rivers using the above listed corridor.
- 3) In order to complete the northern connection of the M9 Outer Orbital Motorway, the New South Wales Government shall facilitate the following:
  - a) Road connection of Maraylya with the M1 Pacific Motorway at Mount White, north of the Hawkesbury River through a new high-level river crossing at Pumpkin Point;
  - b) The construction of a 3km stretch of the northern connection through Popran National Park connecting Mount White and Pumpkin Point; and
  - c) The construction of a new motorway route utilising the technique of 'ridge running' through Marramarra National Park from Pumpkin Point to the Old



Northern Road via Canoelands, and from the Old Northern Road to Maraylya via Kellys Creek, Catti Creek and Pitt Town on Dural Road.

### 16. Regional Road Upgrades

- 1) The Roads Team at TfNSW will commence a program of highway upgrades as outlined:
  - a) <u>Upgrade of Princes Highway:</u> to dual lane carriageway standard from Ulladulla to the Victorian Border, a bypass around the township of Ulladulla, investigate regional bridge renewals along the dual lane carriageway.
  - b) <u>Upgrade the Pacific Highway:</u> to dual lane carriageway standard from Renshaw Drive (Beresfield) to Tea Gardens.
  - c) <u>Upgrade the New England Highway:</u> to dual lane carriageway standard from Branxton at the M15 Hunter Expressway to Tamworth.



### Part 7: Aquatic Transport and Infrastructure in New South Wales

17. Introduce new ferry services within the Greater Sydney Region on existing waterways to service local communities with 'river-class' vessels unless otherwise specified.

- 1) Newcastle Region Ferries utilising the Hunter River with stops including:
  - a) Queens Wharf; Stockton; Carrington; Koorang; Mayfield North; Warabrook; Sandgate; Hexham; Heatherbrae; and Raymond Terrace.
- 2) Lake Macquarie Region Ferries will service the area with stops including:
  - a) Belmont; Valentine; Toronto; Coal Point; Wangi Wangi; Swansea; Cam's Wharf; Bonnells Bay; and Dora Creek Interchange.
- 3) Tuggerah Region Ferries will operate on the lake and service the following areas:
  - a) The Entrance; Killarney Vale; Chittaway Point; Wyongah; Gorokan; Toukley; and the Entrance North.
- 4) Gosford Region Ferries servicing the area with stops including:
  - a) Central Coast Stadium; Point Clare; Koolewong Station; Woy Woy; St Huberts Island; Empire Bay; Davistown; Saratoga; New Brighton; Peeks Point; and Point Frederick.
- 5) Introduce an inter-region ferry service operation in the Tasman Sea using a new fleet similar to the Manly Freshwater Class with stops including:
  - a) Umina Beach; Copacabana; Terrigal; Bateau Bay; and The Entrance.
- 6) Georges River and Botany Bay Ferry System will be a four-route system with the following stopping patterns to be used:
  - a) <u>Route 1:</u> Liverpool Interchange; Chipping Norton; Lansvale; Floyd Bay; Georges Hall; Bankstown Aerodrome; Moorebank; Milperra; East Hills Interchange; Pleasure Point; Sandy Point; Picnic Point; Revesby Heights; Illawong; Lugarno; Oatley; and Como Interchange.
  - b) <u>Route 2:</u> Como Interchange; Kyle Bay; Kangaroo Point; Blakehurst; Sylvania; Taren Point; Sans Souci; Dolls Point; Ramsgate; Monterey; Brighton le Sands; Kyeemagh; Sydney Airport Interchange; Tempe; and Wolli Creek Interchange.
  - c) <u>Route 3:</u> Woronora; Bonnet Bay; Como Interchange; Kyle Bay; Kangaroo Point; Blakehurst; Sylvania; Taren Point; Sans Souci; Caringbah; and Woolooware Bay.
  - d) <u>Route 4:</u> Carramar Interchange; Canley Vale; Lansvale East; Flinders Slopes; Garrison Point; Georges Hall; Bankstown Aerodrome; Moorebank; Milperra; and East Hills Interchange.
- 7) Wollongong Ferry System to operate on Lake Illawarra with stops including:



a) Albion Park Interchange; Oak Flats; Mount Warrigal; Kemblawarra; Lake Heights; and Koonawarra.

### 18. Automation of Maritime Lighthouse Services in New South Wales

- 1) Outline a 10-year framework to upgrade and automate all navigator lighthouses in NSW including on Lord Howe and Norfolk Islands to allow for better system safety.
- 2) Direct Transport for NSW (TfNSW) to enter a PPP with private enterprise to manage the ongoing maintenance and upkeep of the above-mentioned navigator lighthouses with the preferred contractor to be a local SME.

### Part 8: Automated Rapid Transit in Greater Sydney

### 19. Expansion of the Sydney Metro Network through upgrading existing Sydney Trains Railway Lines

- 1) Task the Sydney Metro Authority to commence upon a 40-year framework to oversee the transition of the existing Sydney Trains Network to Metro standard with the following lines targeted:
  - a) T8 Airport Line Revesby to Central; T4 Eastern Suburbs Line Bondi Junction to Hurstville; T1 North Shore Line - Hornsby to Central; and T3 Liverpool Line -Liverpool to Olympic Park via Lidcombe.
- 2) Task the Sydney Metro Authority to also conduct a scoping study regarding the feasibility of transitioning the remaining Sydney Trains network to metro standard.

### 20. Creation of new stand-alone Metro Lines.

- 1) Under the leadership of the Sydney Metro Authority (SMA), NSW tasks SMA with drawing up plans for one additional North/South standalone Metro Line to connect Sydney's Northwest with the Sutherland Shire with stops to include:
  - a) Dural; Castle Hill (Metro Interchange); Baulkham Hills; Northmead; North Parramatta Square (Metro and Train Interchange); Granville (Railway Interchange); South Granville; Birrong; Yagoona; Bankstown (Interchange); Moxon Road (Punchbowl); Padstow; Padstow Heights; Alfords Point; and Menai.
  - b) Allow for the provision of additional future East/West Metro Services.



### Part 9: Future Technologies in New South Wales

### 21. Implementation of atomic energy into the transport and road networks

- 1) Establish an Atomic Energy Electricity Commission (AEEC) to develop a proposed clean energy power plant in Jervis Bay.
  - a) The Commission will publish a report into future atomic energy outcomes and determine the most appropriate use of the Jarvis Bay site being either hydrogen or thorium power generation.
  - b) Construct the above clean energy power plant system under the AEEC to distribute power to public railway, metro, trolleybus and other transport/road networks in Greater Sydney and the New South Wales region.
- 2) The Atomic Energy Waste Management Team (AEWMT) will be formed to manage detoxification and waste management of the above power plant.

### 22. Hyperloop Technology

- 1) Form a new division within TfNSW to oversee and manage hyperloop technologies within NSW, specifically its construction and its management of:
  - a) A 45km trial route connecting Badgerys Creek Airport and Kingsford Smith Airport to assess the economic, social and practical benefits of the technology;
  - b) Connecting the hyperloop network with Newcastle and Wollongong (Stage 2); and
  - c) Expanding the hyperloop network to link Brisbane, Canberra, and Melbourne (Stage 3).

### 23. Joint State/Federal Transport Authority

- The establishment of a joint state/federal transport authority in partnership with the commonwealth government to oversee all non-airside operations at both Sydney Kingsford Smith International Airport and Western Sydney Nancy Bird Walton International Airport including items such as but not limited to:
  - a) High Speed Rail connection;
  - b) Roads/Motorway construction and maintenance; and
  - c) Movement of Goods and Freight by rail, air, road, etc.
- 2) Stage Two of said joint state/federal transport authority to oversee the introduction and regulation of unmanned (electric) aerial vehicles to be flown from designated drone ports across the Greater Sydney Region allowing better movement and accessibility of its citizens. The authority will be given shared responsibilities from:



- a) The Civil Aviation Safety Authority (CASA); AirServices Australia; and the Department of Infrastructure, Transport, and Regional Development and Communications (Commonwealth).
- 3) Stage Three is the expansion of said joint state/federal transport authority to liaise with the MOD (Ministry of Defence) regarding the introduction of an unmanned (electric) aerial vehicles infantry division within the Australian Army and Royal Australian Air Force. This group will henceforth be known as the "State Commonwealth UAV Mission" for policing and security purposes of Greater Sydney with designated drone ports at, but not limited to:
  - a) Holsworthy Army Barracks (near Liverpool); Dundas Army Barracks (near Parramatta); Royal Australian Air Force Base Glenbrook (near Penrith); and Victoria Army Barracks (near Paddington).

### 24. Introduction of Monorail in the Sydney Olympic Park Precinct

- 1) Introduction of a loop style monorail system within the Sydney Olympic Park Precinct to connect the various and assorted venues with the Olympics Park Railway Station.
  - a) The service will have the following stopping pattern and run for approximately 5km:
    - Sydney Olympic Park Terminus; Stadium Australia; Sydney Super Dome;
       Sydney Olympic Park Athletic Centre; NSW Hall of Champions; Ken Rosewall Arena; Bicentennial Park; and Australia Avenue.



### Amendments

### Amendment One

Clause 21

Amendment request (bold the appropriate option):

- AMENDMENT
- OMITTING
- NEW CLAUSE

Original clause (paste entire wording):

#### 21. Implementation of atomic energy into the transport and road networks

- 1) Establish an Atomic Energy Electricity Commission (AEEC) to develop a proposed clean energy power plant in Jervis Bay.
  - a) The Commission will publish a report into future atomic energy outcomes and determine the most appropriate use of the Jarvis Bay site being either hydrogen or thorium power generation.
  - b) Construct the above clean energy power plant system under the AEEC to distribute power to public railway, metro, trolleybus and other transport/road networks in Greater Sydney and the New South Wales region.
- 2) The Atomic Energy Waste Management Team (AEWMT) will be formed to manage detoxification and waste management of the above power plant.

#### Amendment request:

Replace clause

New clause should now read:

21. Investigation followed by implementation of renewable clean energy sources in the New South Wales transport systems.

- 1) Establish the use of renewable and clean energy in transport systems across New South Wales. These energy sources may include, but are not limited to:
  - a) Solar power.
  - b) Hydro power.
  - c) Wind power.
- 2) The investigation of atomic energy may also be permitted under these conditions:



- a) An investigation into strategies for how waste from atomic energy generation can be safely and effectively managed.
- b) Justification for the use of atomic power as an efficient and cost-effective source of energy.
- c) Prove the benefits of atomic energy in comparison to other renewable energy sources.



### Amendment Two

Clause 15

Amendment request

- AMENDMENT
- OMITTING
- NEW CLAUSE

Original clause (paste entire wording):

### 15. M9 Outer Sydney Orbital Motorway

- 1) The construction of the M9 Outer Orbital as a six-lane motorway as previously identified by Transport for New South Wales and as outlined in the *Stage 1 Plan*.
- 2) In order to complete the southern connection of the M9 Outer Orbital Motorway, the New South Wales Government shall facilitate the following:
  - a) Upgrade of Appin Road between the Princes Motorway and the Georges River to Dual Carriageway Standard;
  - b) The acquisition of a land corridor between the Georges River and the hightension power cables near Wilton Road; three properties alongside Brooks Point Road; 11 properties alongside Elladale Road; and four properties between the Nepean River and the Hume Highway along Moreton Park Road; and
  - c) The construction of a new 8.5km road connecting the Hume Motorway and Appin Road crossing both the Nepean and Georges Rivers using the above listed corridor.
- 3) In order to complete the northern connection of the M9 Outer Orbital Motorway, the New South Wales Government shall facilitate the following:
  - Road connection Maraylya with the M1 Pacific Motorway at Mount White, north of the Hawkesbury River through a new high-level river crossing at Pumpkin Point.
  - b) Construction of a 3km stretch of the northern connection through Popran National Park connecting Mount White and Pumpkin Point.
  - c) Construction of a new motorway route utilising the technique of 'ridge running' through Marramarra National Park from Pumpkin Point to the Old Northern Road via Canoelands, and from the Old Northern Road to Maraylya via Kellys Creek, Catti Creek and Pitt Town on Dural Road.



Remove whole clause

New clause should now read:

N/A



### Amendment Three

Clause 14

Amendment request (bold the appropriate option):

- AMENDMENT
- OMITTING
- NEW CLAUSE

Original clause (paste entire wording):

#### 14. Very Fast Rail

- 1) Task NSW TrainLink with drawing up the implementation plans for a state-wide Very Fast Rail system; these routes will commence at Central Station and follow a trunk tunnel underground from Macdonaldtown to Chullora with the following four routes then branching off:
  - a) <u>North:</u> Central; Chullora; Parramatta; Gosford; Newcastle; Taree; and Port Macquarie.
  - b) <u>West:</u> Central; Chullora; Cabramatta; Western Sydney Airport; Katoomba; Lithgow; Bathurst; Orange; and Parkes.
  - c) <u>South (Inland)</u>: Central; Chullora; Cabramatta; Liverpool; Campbelltown; Wilton; Bowral; Moss Vale; Goulburn; and Canberra.
  - d) <u>South (Coast):</u> Central; Chullora; Hurstville; Sutherland; Wollongong; and Nowra.

Amendment request:

Addition of a subclause and change to clause title.

New clause should now read:

#### 14. Investigation into More Efficient Very Fast Railway Lines

- 1) NSW TrainLink will investigate how we can make railway lines more efficient and faster throughout wider NSW. The investigation will include:
  - a) A judgement on the use of the lines if they are to be introduced;



- b) Research into how we can best use resources from current train lines. This may involve improving current lines or building new lines; and
- c) An investigation as to whether a Very Fast Rail system is necessary for the state of New South Wales.
- 2) Possible routes (if the investigation proves the Very Fast Rail Line is necessary) could include:
  - a) <u>North:</u> Central; Chullora; Parramatta; Gosford; Newcastle; Taree; and Port Macquarie.
  - b) <u>West:</u> Central; Chullora; Cabramatta; Western Sydney Airport; Katoomba; Lithgow; Bathurst; Orange; and Parkes.
  - c) <u>South (Inland);</u> Central; Chullora; Cabramatta; Liverpool; Campbelltown; Wilton; Bowral; Moss Vale; Goulburn; and Canberra.
  - d) <u>South (Coast)</u>: Central; Chullora; Hurstville; Sutherland; Wollongong; and Nowra.



### **Results of the Vote**

The results of the vote on the amendments were 13 Ayes, 25 Noes, and 2 Abstained. As such, the amendments were resolved in the negative.

The results of the vote on the Bill were 29 Ayes, 9 Noes, and 1 Abstained. As such, the Bill was passed.

The Future of Accessible State-wide Transport Bill 2021 (NSW) was passed unamended.